#### ADDENDUM NO. 1

May 26th, 2023

#### **Carmel High School Stadium South Support Building**

E. 136<sup>th</sup> Street Carmel, IN 46032

#### TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, Specifications, and Drawings dated December 13, 2022, by Fanning Howey. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD. 1-1 through 1-2 and attached Fanning Howey Associates, Inc. Addendum No. 1 dated May 25, 2023 consisting of 1 page, revised Specification Section 10 82 13 – Rooftop Equipment Screens, and revised drawings M5.01 and E1.1.

#### A. SPECIFICATION SECTION 00 00 10 - TITLE PAGE

a. Replace sheet in its entirety

#### B. SPECIFICATION SECTION 01 12 00 - MULTIPLE CONTRACT SUMMARY

1. Paragraph 3.03 Bid Categories

#### A. Bid Category No. 1 – General Trades

#### Add the following Clarifications

- 21. All top of wall mineral insulation around steel joist or beams at masonry walls by the Bid Category No. 1 General Trades contractor
- 22. All work shown in the west parking lot on sheet GD1.6 and sheet G1.06. Reference the attached sheet.

#### B. Bid Category No. 2 – Masonry

#### Add the following Clarifications

- 7. All CMU to be Normal Weight regardless of being below grade or above grade
- 8. All top of wall mineral insulation around steel joist or beams at masonry walls is by the Bid Category No. 1 General Trades contractor
- 9. All air barrier is by Bid Category No. 2 Masonry contractor.
- 10. All masonry wall panels not called out on sheet S1.02 are to be "P1"

#### F. Bid Category No. 6 – Electrical and Technology

#### Add the following Clarifications

12. Utilize existing underground conduit back to

#### C. SPECIFICATION SECTION 01 21 00 -ALLOWANCES

1. Paragraph 3.01 Product Allowance

#### Add the following Product Allowances

- A. Bid Category No. 1 General Trades Exterior Signage \$120,000
- B. Bid Category No. 1 General Trades Interior Signage \$5,000

#### PROJECT MANUAL

#### **VOLUME I**

**PROJECT:** Carmel High School Stadium South Support

Building

East 136<sup>th</sup> Street Carmel, IN 46032

**TSC PROJECT NO.:** 220120.04 **A/E PROJECT NO.:** 220136.00

OWNER: Carmel Clay Schools

5201 E. Main Street Carmel, IN 46033

**ARCHITECT/ENGINEER:** Fanning Howey Associates

**DATED:** May 8, 2023

**PRE-BID CONFERENCE/SITE EXAMINATION:**May 23, 2023
9:00 a.m.

Microsoft TEAMS

BIDS RECEIVED:

June 6, 2023

3:00 p.m.

BIDDERS' CONTACTS: ARCHITECT/ENGINEER:

Fanning Howey Associates 350 East New York Street Indianapolis, In 46204

Mary Krupinski

Phone: 317-848-0966 ex: 10317

**CONSTRUCTION MANAGER:** 

The Skillman Corporation

3834 S. Emerson Ave Building A

Indianapolis, In 46203

Project Manager: Tyler Barker

Phone: 317-474-2288

TSC 220120.04 Title Page 00 00 10

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## CARMEL STADIUM SOUTH SUPPORT BUILDING

E 136th St, Carmel, IN 46032

CARMEL CLAY SCHOOLS



## FANNING **HOWEY**

## PROPOSED SITE LEGEND

APPROXIMATE LIMITS OF CONSTRUCTION

**GENERAL NOTES** 

2. TOPOGRAPHIC CONDITIONS AND EXISTING UTILITIES SHOWN WERE PROVIDED BY CEC CIVIL & ENVIRONMENTAL CONSULTANTS DATED MAY 17, 2022. THE ENGINEER MAKES NO

GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED.

3. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE

CONDITIONS, LOCATION AND DEPTH PRIOR TO ANY OTHER SITE CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE

SITE KEYNOTES (SOUTH BUILDING)

4" WIDE WHITE PAVEMENT MARKING - PER SPECIFICATIONS

4" WIDE WHITE PAVEMENT STRIPE AT 3'-0" O.C. AT 45° ANGLE

ADA ACCESSIBLE PARKING SIGN - SEE DETAIL P/G4.11

CONCRETE STRAIGHT CURB - SEE DETAIL H/G4.11

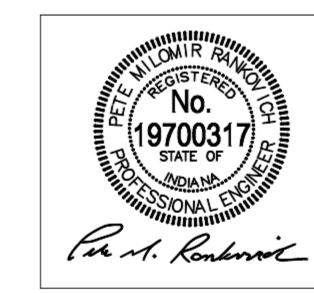
SPHALT PAVEMENT - PER DETAIL L/G4.11

PROJECT AREA INCLUDING UNDERGROUND UTILITY

CONCRETE SIDEWALK/PAVEMENT

SEEDED LAWN

CONSTRUCTION DOCUMENTS



PROJECT NUMBER: 220136.00 PROJECT ISSUE DATE: 04.26.2023

DESCRIPTION

SITE PLAN - WEST

**CAUTION!!** 

Call 811 or 1-800-382-5544 Before You Begin Any Digging Proj Call 48 hours or 2 working days before you dig. It's Fast, it's Easy and it's the Law in the state of Indianal

SHALL BE VERIFIED BY CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

ZONE AE SMOKEY ROW ROAD / E 136TH STREET (PUBLIC RIGHT-OF-WAY) **LEGEND** 

#### ADDENDUM NO.1

#### Carmel Stadium South Support Building

Project No. 220136.00

Carmel Clay Schools Carmel, Indiana

#### **Index of Contents**

Addendum No. 1, 4 items, 1 page Revised Project Manual Sections: 10 82 13 – Rooftop Equipment Screens Revised Drawing Sheets: M5.01 and E1.1

Date: May 25, 2023

### FANNING/HOWEY ASSOCIATES, INC. ARCHITECTS/ENGINEERS/CONSULTANTS



Paul A. Miller, License No. AR10800161 Expiration Date: 12/31/2023

#### TO: ALL BIDDERS OF RECORD

ADDENDUM NO. 1 to Drawings and Project Manual, dated April 26, 2023 for Carmel High School South Support Building for Carmel Clay Schools, 5201 East Main Street, Carmel, Indiana 46033; as prepared by Fanning/Howey Associates, Inc., Indianapolis, Indiana.

This Addendum shall hereby be and become a part of the Contract Documents the same as if originally bound thereto.

The following clarifications, amendments, additions, revisions, changes, and modifications change the original Contract Documents only in the amount and to the extent hereinafter specified in this Addendum.

Each bidder shall acknowledge receipt of this Addendum in his proposal or bid.

NOTE: Bidders are responsible for becoming familiar with every item of this Addendum. (This includes miscellaneous items at the very end of this Addendum.)

#### RE: ALL BIDDERS

#### ITEM NO. 1. REVISED PROJECT MANUAL SECTIONS

A. Section 10 82 13 – Rooftop Equipment Screens has been revised, dated 5/25/23, and is included with and hereby made a part of this Addendum.

#### ITEM NO. 2. PROJECT MANUAL, SECTION 07 54 00 - THERMOPLASTIC MEMBRANE ROOFING

- A. Add 2.4, K., as follows:
  - "K. Square PVC Roof Flashing: Fabricated from manufacturer's standard single ply PVC sheet flashing. Provide with base flange that extends a minimum of 5 inches onto the main roof membrane on all four sides.
    - 1. Location: Rooftop Equipment Screen support structure."

#### ITEM NO. 3. ACCEPTABLE MANUFACTURERS

The following manufacturers are to be considered acceptable manufacturers (suppliers and fabricators) for the Sections of the Specifications listed. Listed manufacturers are required to bid on products equal in type and design, size, function, and quality to that originally specified. Final decision as to equality of products specified versus those proposed shall be made by the Architect.

Section 09 67 23 – Decorative Resinous Flooring - APF Polymer Surfaces, Phoenix, Arizona

#### ITEM NO. 4. REVISED DRAWING SHEETS

A. Drawing Sheets: M5.01 and E1.1 have been revised, dated 5/25/23, and are included with and hereby made a part of this Addendum. These Drawings supersede the original documents.

#### **END OF ADDENDUM**

#### **SECTION 10 82 13 – ROOFTOP EQUIPMENT SCREENS**

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes: Stand-alone rooftop equipment screens and supporting steel framework.
  - Screens shall be designed to attach to the roof structure and not the equipment being screened.

#### 1.2 COORDINATION

A. Coordinate work with other trades and installation of roofing materials to avoid damage to installed insulation and membrane materials.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product specified.
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - Installation methods.
- B. Shop Drawings: For screen units and accessories. Include plans; elevations; sections; and details showing profiles, angles, and spacing of elements. Indicate layout heights, component connection details, and details of interface with adjacent construction.
- C. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors available for units with factory-applied color finishes.
- D. Delegated-Design Submittal: For installed products indicated to comply with performance requirements and design criteria, including structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

#### 1.4 QUALITY ASSURANCE

- A. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of kind indicated. Engineering services are defined as those performed for installations of grilles and screens that are similar to those indicated for this Project in material, design, and extent.
- B. Welding Standards: As follows:
  - 1. Comply with AWS D1.2, "Structural Welding Code--Aluminum."
  - 2. Comply with AWS D1.1, "Structural Welding Code Steel".
  - 3. Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone recertification.
- C. Pre-Installation Meeting: Conduct meeting at Project site.
  - 1. Review structural load limitations.

#### 1.5 DELIVER, STORAGE, AND HANDLING

A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly indicating manufacturer and material.

- B. Storage and Handling: Protect materials and finishes during handling and installation to prevent damage.
  - 1. Handling: Use a forklift or crane to move material. Do not lift the bundles by metal bands.
    - a. Fork Lift: Spread the forks as far as possible to balance the load. Drive slowly when moving long bundles over uneven surfaces to avoid tipping the load.
    - b. Crane: Position the canvas sling straps so that the space between the straps is at least 1/3 the length of the bundle. Use sling straps with looped ends running one end of the strap through the loop at the other end to cinch the bundle when lifted. When setting the load on the roof, put wood blocks under to protect the roof and allow space to remove the sling straps.
    - c. Roof Placement: Spread the bundles and crates out as much as possible to avoid overloading the roof structure. Place the material directly over major supports such as beams or trusses.
    - d. Position bundles of tubing parallel to the slope of the roof and block prior to opening to prevent the tubing from rolling down the roof slope when unbundled.

#### 1.6 FIELD CONDITIONS

- A. Field Measurements: Verify supports and adjoining construction by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
  - Established Dimensions: Where field measurements cannot be made without delaying the Work, guarantee dimensions and proceed with fabricating grilles and screens without field measurements. Coordinate construction to ensure that actual opening dimensions correspond to established dimensions.

#### 1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of framing system assemblies that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Structural failures, including rupturing, cracking, or puncturing.
    - b. Deterioration of metals and other materials beyond normal weathering.
  - 2. Warranty Period: Twenty (20) years from date of Substantial Completion.
- B. Special Warranty on Panel Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace wall panels that show evidence of deterioration of factory-applied finishes within specified warranty period.
  - 1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:
    - a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
    - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
    - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
  - 2. Finish Warranty Period: 10 years from date of Substantial Completion.

#### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.
  - 2. Basis-of-Design Product: The design for equipment screens is based on products named. Subject to compliance with requirements, provide either the named product or a comparable product by one of the other manufacturers specified.

B. Products of other manufacturers will be considered for acceptance provided they equal or exceed the material requirements and functional qualities of the specified product. The "Substitution Request Form" Sample sign, and complete technical data for evaluation must accompany requests for A/E's approval. All materials for evaluation must be received by the Project Manager and Specification Department at least 10 days prior to bid due date. Additional approved manufacturers will be issued by Addendum.

#### 2.2 PERFORMANCE REQUIREMENTS

A. Delegated Design: Design screens and attachment, including comprehensive engineering analysis by a qualified professional engineer, using structural performance requirements and design criteria indicated.

#### B. Design Criteria

- 1. Manufacturer is responsible for the structural design of all materials, assembly and attachments to resist snow, wind, suction and uplift loading at any point without damage or permanent set.
- 2. Design loads complying with Building Code for site location and building height.
- 3. Design to resist ASCE-7 Minimum Design Loads for Buildings and Other Structures, using the latest published ASCE version applicable in jurisdiction.
- 4. Design all materials, assembly, and attachments to resist snow, wind, suction, and uplift loading at any point without damage or permanent set.
- C. All welds to be performed by an AWS certified welder.

#### 2.3 ROOFTOP EQUIPMENT SCREEN ASSEMBLY

A. Basis-of-Design: RoofScreen Manufacturing.

#### B. Materials:

- Square Base Supports: Weldments fabricated from cold rolled steel conforming to ASTM A 1008, fabricated with pre-punched holes in base plate for fastening to roof structure. After fabrication, apply minimum 2 to 4 mil baked on powder coat primer.
  - a. Height of post supports to maintain 12 inch clearance from finished surface of roof, provide base support extensions as required.
- 2. Square Base Cap: Weldments fabricated from AISI Type 304 stainless steel with mill finish, and fabricated to overlap base support and flashing boot a minimum of 2 inches. Provide moment resisting adjustable connection to attach framing to base cap.
  - a. Base Cap Gasket: EPDM with self-adhesive closed cell foam.
- 3. Square PVC Roof Flashing: Fabricated from 60 mil, white, singly ply PVC sheet conforming to ASTM D 4434. Provide with base flange that extends a minimum of 5 inches onto the roof surface on all four sides.
  - a. Riser shall be tapered to allow easy fit over square base supports with minimal gap at top of flashing.
  - b. Hot weld all seams for watertight installation.
- 4. Framing: Carbon steel structural tubing in manufacturer's standard sizes as required to meet performance and structural requirements.
  - a. Provide galvanized coating conforming to ASTM A 1057.
  - b. Provide wall thickness as determined by structural calculations.
  - c. Connectors for round tube steel fabricated from AISI Type 304 stainless steel with mill finish. Connectors for square tube steel fabricated from ASTM A36 Mild Steel, G90 Hot Dipped Galvanized.
- 5. Steel Z Sections: Steel sheet conforming to ASTM A653, Class SS, with a G90 hot-dip galvanized coating.
- 6. Steel Hat Channel: Steel sheet conforming to ASTM A653, Class SS, with a G90 hot-dip galvanized coating.
- 7. Hardware:
  - a. Bolts, nuts, and washers: 18-8 stainless steel.
  - b. Self-Drilling Screws: Carbon steel with factory applied protective coating conforming to ASTM B117 salt spray testing.

#### C. Screen Panel:

- Basis of Design: VisionGuard L20 Slatted Louver by RoofScreen Manufacturing.
  - a. Flat face blades, 90 degrees, continuous in horizontal orientation.
  - b. Louver Blade: 0.100 inch thick extruded aluminum, ASTM B 221, Alloy 6063-T6.
    - 1) Height: 5-1/2 inches.
    - 2) Spacing: 6 inches on center with a 1/2 inch gap.
  - c. Louver Clip: 0.125 thick extruded aluminum, ASTM B 221, Alloy 6063-T6.
  - d. Vertical Framing: 3 inch by 3 inch x 0.188 inch thick extruded aluminum, ASTM B 221, Alloy 6061-T6.
  - e. Self-Drilling screws and stainless steel rivets as required by manufacturer for assembly.
  - f. Mount vertical framing and screen panel assembly to roof mounted frame units.
    - 1) Blades shall be horizontally oriented and along angle.
  - g. Trim: Same material and finish as panel. Manufacturer's standard configuration for joints, seams, and terminations.
  - h. Provide inside and outside corners fabricated from 6 inch by 6 inch by 0.100 inch thick aluminum trim, painted to match louver blades with exposed fasteners.

#### 2. Finish:

- a. Two-Coat Fluoropolymer: AAMA 2605. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
  - 1) Color: As selected by Architect from PPG Coraflon solid color color options.

#### D. Fabrication

- 1. Fit and shop assemble items in largest practical sections.
- 2. Fabricate items with joints tightly fitted and secured.
  - a. Fabricate louver blades with close fitting, field-made splice joints in blades designed to permit expansion and contraction without deforming blades or framework.
- 3. Supply all components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted.
  - a. All components for anchorage and assembly of screen system are the responsibility of this Section. Specific components are not being supplied by others beyond the building roof and wall structure.
- 4. Fabricate system components so that portions of screen can be dismantled for repairs to equipment and for future roof material replacement.
- 5. Trim and Closures: Fabricated from 24 gauge metal and finished with manufacturer's standard coating system.

#### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 PREPARATION

- A. Coordinate Setting Drawings, diagrams, templates, instructions, and directions for installation of anchorages that are to be embedded in concrete or masonry construction. Coordinate delivery of such items to Project site.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best results for the substrate under the project conditions.

#### 3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions. Provide brackets, anchors, and accessories necessary for a complete installation.
- B. Anchor fabrications to building structure as indicated on manufacturer's shop drawings.
- C. Locate and place screen units level, plumb, and at indicated alignment with adjacent work.
- D. Form closely fitted joints with exposed connections accurately located and secured.
- E. Provide for erection loads, and for sufficient temporary bracing to maintain indicated alignment until completion of erection and installation of permanent attachments.
- F. Repair finishes damaged by cutting, welding, soldering, and grinding. Restore finishes so no evidence remains of corrective work. Return items that cannot be refinished in the field to the factory, make required alterations, and refinish entire unit or provide new units.
  - 1. Do not cut or abrade finishes which cannot be restored. Return items with such finishes to shop for required alterations.
- G. Protect galvanized and nonferrous-metal surfaces from corrosion or galvanic action by applying a heavy coating of bituminous paint on surfaces that will be in contact with concrete, masonry, or dissimilar metals.
- H. Install flashing boots at base supports as required to provide a watertight connection and installation.

#### 3.4 ADJUSTING, CLEANING, AND PROTECTING

- A. Periodically clean exposed surfaces of screens that are not protected by temporary covering to remove fingerprints and soil during construction period. Do not let soil accumulate until final cleaning.
- B. Before final inspection, clean exposed surfaces with water and a mild soap or detergent not harmful to finishes. Thoroughly rinse surfaces and dry.
- C. Protect screens from damage during construction. Use temporary protective coverings where needed and approved by screen manufacturer. Remove protective covering at the time of Substantial Completion.
- D. Restore screens damaged during installation and construction so no evidence remains of corrective work. If results of restoration are unsuccessful, as determined by A/E, remove damaged units and replace with new units.
  - 1. Clean and touch up minor abrasions in finishes with air-dried coating that matches color and gloss of, and is compatible with, factory-applied finish coating.

END OF SECTION 10 82 13

			PACKAGED AII	R HANDLING UNIT SCHEDULE				
		FA	ANS	DX COOLING COIL DATA (95 DEGREE AMBIENT)	COOLING HOT GAS REHI	EAT COIL	GAS FIRED HEATING ELECTRICA	XL
MARK	MARK MANUFACTURER DAIKIN	SUPPLY	EXHAUST/RELIEF UNIT	UNIT EAT, DB °F LAT, DB °F MAX. ROWS	507 107	FAT LAT	UNIT CUIDLIT MODULATING	PRE FINAL WEIGHT,
	DAIKIN	CFM OA EXT. TOTAL BHP HP RPM	CFM EXT. HP MBH	SENS.  MBH  EAT, WB °F  LAT, WB °F  FPM  FIN/IN.	PD EER/IEER EAT LAT DB °F DB °F	MBH APD EAT LAT DB °F DB °F	MBH MBH STAGES APD MCA MOP	SERV FILTERS LBS NOTES
RTU-1	DPS018A	3,300 2,220 0.75 1.20 0.99 1-3.0 827	0-3,300 0.50 (1) 4.0 198.90	115.73     85.9     53.8     175     4     0.150       72.2     53.8     15     15	150 11.4/20.3 53.8 70.0	58.02 0.02 24.4 91.4	300.0 240.0 12:1 TURNDOWN 0.14 94.2 125	208/3 2"-MERV 8 4"-MERV 14 3,934 1,2,3,4,5,6,7,8,9,10,11,13,14,15,17,18,19,20
RTU-2	DPS015A	3,800 1,500 0.75 1.60 1.47 1-4.0 1,113	0-3,800 0.50 (1) 4.0 171.92	117.44     81.4     53.1     246     6     0.280       67.8     53.1     15     0.280	280 10.8/17.5 53.1 70.0	69.53 0.06 42.2 100.4	300.0 240.0 10:1 TURNDOWN 0.07 77.5 100	208/3 2"-MERV 8 4"-MERV 14 2,676 1,2,3,4,5,7,8,9,10,12,13,14,15,16,17,18,19,20

<u>NOTES</u>

1. REFER TO SPECIFICATION SECTION 230993 AND 237413. 2. VARIABLE FREQUENCY CONTROLLER PROVIDED AND

MOUNTED FOR SUPPLY FAN(S), AND RELIEF FAN(S) BY THE UNIT MANUFACTURER. 3. UNIT SHALL HAVE FACTORY MOUNTED CONTROLS WITH LCD DISPLAY.

4. UNIT TO BE FURNISHED WITH 14" (MIN.) INSULATED ROOF CURB. SUPPLIED BY THE UNIT MANUFACTURER. COORDINATE CURB HEIGHT AND PITCH, DUCT CONNECTIONS AND ROOF PENETRATIONS. ROOF CURB TO BE PAINTED TO MATCH ROOF COLOR.

5. SINGLE POINT POWER WITH NON-FUSED FACTORY MOUNTED DISCONNECT,

6. UNIT SCCR RATING TO BE 10 KAIC MINIMUM.

PRESSURE SENSOR CONTROL.

7. UNIT PROVIDED WITH FACTORY MOUNTED OUTSIDE AIR CONTROL DAMPER(S), RETURN AIR CONTROL DAMPER(S) AND RELIEF FAN OUTLET BACK DRAFT DAMPER(S). 8. RELIEF AIRFLOW TO BE VARIABLE VOLUME AIRFLOW WITH REMOTE SPACE

9. ECM MOTORS FOR SUPPLY FAN(S), RELIEF FAN(S) AND CONDENSER FAN(S) BY UNIT MANUFACTURER.

10. REMOTE DISPLAY CONTROL PANEL BY THE UNIT MANUFACTURER.

11. CONDENSING/COMPRESSOR(S) MODULATING CONTROL WITH 1 INVERTER COMPRESSOR. 12. CONDENSING/COMPRESSOR MODULATING CONTROL WITH 1 INVERTER COMPRESSOR AND 1 FIXED COMPRESSOR.

13. FIELD POWERED, UNIT PROVIDED GFI OUTLET. 14. UNIT SCHEDULED AS MANUFACTURED BY DAIKIN.

15. TOTAL UNIT STATIC PRESSURE REFLECTS AVERAGE DIRTY FILTERS.

16. UNIT SCCR RATING TO BE 5 KAIC MINIMUM.

17. OUTSIDE AIR HOOD PROVIDED BY UNIT MANUFACTURER.

18. UNIT PROVIDED WITH BACNET CARD FACTORY INSTALLED. 19. UNIT PROVDIED WITH STAINLESS STEEL GAS HEAT EXCHANGER.

INDOOR: 72° db/50% RH OUTDOOR: 91.3° db/75.0° wb WINTER: INDOOR: 70.0° db OUTDOOR: 2.6° db

20. SUMMER:

			D	IFFUSER. REG	ISTER, AND GRILLE S	CHEDULE			
MARK	TYPE	EXAMPLE MANUFACTUER MODEL NO.	NECK SIZE	OVERALL SIZE L"xW"	MAX CORE/ NECK VEL.(FPM)	MAX. CFM	MAX. NOISE CRITERIA	FRAME/ MOUNTING	REMARKS
А	RETURN/AIR TRANSFER GRILLE	TITUS 355-FL	6"x6"	8"x8"	500	100	20	REFER TO REFLECTED CEILING PLAN	PROVIDE ALUMINUM SURFACE MOUNT BORDER FOR DUCTED INSTALLATIONS.
В	RETURN/AIR TRANSFER GRILLE	TITUS 355-FL	10"x10"	12"x12"	500	300	20	REFER TO REFLECTED CEILING PLAN	PROVIDE ALUMINUM SURFACE MOUNT BORDER FOR DUCTED INSTALLATIONS.
С	RETURN/AIR TRANSFER GRILLE	TITUS 355-FL	12"x12"	14"x14"	500	425	20	REFER TO REFLECTED CEILING PLAN	PROVIDE ALUMINUM SURFACE MOUNT BORDER FOR DUCTED INSTALLATIONS.
D	RETURN/AIR TRANSFER GRILLE	TITUS 355-FL	14"x14"	16"x16"	500	600	20	REFER TO REFLECTED CEILING PLAN	PROVIDE ALUMINUM SURFACE MOUNT BORDER FOR DUCTED INSTALLATIONS.
E	RETURN/AIR TRANSFER GRILLE	TITUS 355-FL	16"x16"	18"x18"	500	800	20	REFER TO REFLECTED CEILING PLAN	PROVIDE ALUMINUM SURFACE MOUNT BORDER FOR DUCTED INSTALLATIONS.
F	RETURN/AIR TRANSFER GRILLE	TITUS 355-FL	22"x22"	24"x24"	500	1250	20	REFER TO REFLECTED CEILING PLAN	PROVIDE ALUMINUM SURFACE MOUNT BORDER FOR DUCTED INSTALLATIONS.
G	SQUARE PLAQUE CEILING DIFFUSER	TITUS OMNI	5"	12"x12"	800	100	18	REFER TO REFLECTED CEILING PLAN	4-WAY BLOW DIFFUSERS, UNLESS INDICATED OTHERWISE ON DRAWINGS.
Н	SQUARE PLAQUE CEILING DIFFUSER	TITUS OMNI	6"	12"x12"	800	150	21	REFER TO REFLECTED CEILING PLAN	4-WAY BLOW DIFFUSERS, UNLESS INDICATED OTHERWISE ON DRAWINGS.
I	SQUARE PLAQUE CEILING DIFFUSER	TITUS OMNI	6"	24"x24"	900	175	17	REFER TO REFLECTED CEILING PLAN	4-WAY BLOW DIFFUSERS, UNLESS INDICATED OTHERWISE ON DRAWINGS.
J	SQUARE PLAQUE CEILING DIFFUSER	TITUS OMNI	8"	24"x24"	900	300	20	REFER TO REFLECTED CEILING PLAN	4-WAY BLOW DIFFUSERS, UNLESS INDICATED OTHERWISE ON DRAWINGS.
К	SQUARE PLAQUE CEILING DIFFUSER	TITUS OMNI	10"	24"x24"	800	425	20	REFER TO REFLECTED CEILING PLAN	4-WAY BLOW DIFFUSERS, UNLESS INDICATED OTHERWISE ON DRAWINGS.
L	SQUARE PLAQUE CEILING DIFFUSER	TITUS OMNI	12"	24"x24"	800	625	23	REFER TO REFLECTED CEILING PLAN	4-WAY BLOW DIFFUSERS, UNLESS INDICATED OTHERWISE ON DRAWINGS.
M	SQUARE PLAQUE CEILING DIFFUSER	TITUS OMNI	14"	24"x24"	700	750	20	REFER TO REFLECTED CEILING PLAN	4-WAY BLOW DIFFUSERS, UNLESS INDICATED OTHERWISE ON DRAWINGS.
N	RETURN/AIR TRANSFER GRILLE	TITUS 355-FL	SEE FLOOR PLANS FOR SIZE	-	500	PER PLANS	20	DUCT OR SIDEWALL	FIXED 35(DEGREE), 1/2" SPACING DEFLECTION BLADES
0	HEAVY DUTY RETURN GRILLE	TITUS 33-RL	SEE FLOOR PLANS FOR SIZE	-		PER PLANS	20	DUCT OR SIDEWALL	FIXED 38(DEGREE), 1/2" SPACING DEFLECTION BLADES
Р	SIDEWALL SUPPLY DIFFUSER	TITUS 300-FL	SEE FLOOR PLANS FOR SIZE	-	300	PER PLANS	20	DUCT OR SIDEWALL	DOUBLE DEFLECTION, ADJUSTABLE BLADES 1/2" FRONT SPACING, 3/4" REAR SPACING
Q	HEAVY DUTY SUPPLY DIFFUSER	TITUS 300RL-HD	SEE FLOOR PLANS FOR SIZE	-	400	PER PLANS	20	DUCT OR SIDEWALL	DOUBLE DEFLECTION, ADJUSTABLE BLADES 1/2" FRONT SPACING, 3/4" REAR SPACING
R	LINEAR SLOT DIFFUSER	TITUS FL-20-HT	SEE FLOOR PLANS FOR SIZE	2-SLOT X 48"L		PER PLANS	20	REFER TO REFLECTED CEILING PLAN	HIGH THROW WITH INSULATED PLENUM 2-2" SLOT WITH DIA." INLET
S	LINEAR SLOT DIFFUSER	TITUS FL-10-JT	SEE FLOOR PLANS FOR SIZE	1-SLOT X 48"L		PER PLANS	20	REFER TO REFLECTED CEILING PLAN	JET THROW WITH INSULATED PLENUM 1-1" SLOT WITH DIA." INLET
Т	SUPPLY DIFFUSER	TITUS 300-FS	SEE FLOOR PLANS FOR SIZE	-	450	PER PLANS	25	DUCT OR SIDEWALL	DOUBLE DEFLECTION, ADJUSTABLE BLADES 1/2" FRONT SPACING, 3/4" REAR SPACING
U	LINEAR SLOT DIFFUSER	TITUS FL-15-JT	SEE FLOOR PLANS FOR SIZE	1-SLOT X 48"L		PER PLANS	20	REFER TO REFLECTED CEILING PLAN	JET THROW WITH INSULATED PLENUM 1-1.5" SLOT WITH DIA." INLET
V	SPIRAL SUPPLY DUCT GRILLE	TITUS S300-FL	SEE FLOOR PLANS FOR SIZE	-	450	PER PLANS	20	DUCT	DOUBLE DEFLECTION, ADJUSTABLE BLADES 3/4" SPACING, AIR SCOOP DEVICE
W	ROUND SUPPLY DIFFUSER	AIR CONCEPTS RDDW & RDDW-RD	SEE FLOOR PLANS FOR SIZE	-	550	PER PLANS	15	CEILING AND DUCT	ADJUSTABLE DOUBLE DEFLECTION VERTICAL AND HORIZONTAL
Х	LINEAR SLOT DIFFUSER	TITUS FL-10-HT	SEE FLOOR PLANS FOR SIZE	1-SLOT X 48"L		PER PLANS	20	REFER TO REFLECTED CEILING PLAN	HIGH THROW WITH INSULATED PLENUM 1-1.0" SLOT WITH DIA." INLET

		AHU/RT	U MAXIMI	JM ALLOV	VABLE SC	OUND LEV	ELS			
MARK	UNIT SOUND	63Hz	125Hz	250Hz	500Hz	1KHz	2KHz	4KHz	8KHz	
RTU-1	UNIT SUPPLY DISCHARGE	71	73	72	70	68	65	60	55	
RTU-2	UNIT SUPPLY DISCHARGE	75	79	75	78	74	71	67	62	<u>_</u>
			<b>✓</b> ✓	1						

ELECTRIC CEILING MOUNTED UNIT HEATER SCHEDULE													
ELECTRIC HEATING ELEC													
MARK	CFM	BTUH EAT		LAT	KW	SERV	MODEL NO.	NOTES					
ECLH-1	600	10,200	60	82	3.0	208/3	RCH 3480 SERIES	1,2,3,4,5,6					
ECLH-2	600	10,200	60	82	3.0	208/3	RCH 3480 SERIES	1,2,3,4,5,6					
ECLH-3	600	10,200	60	82	3.0	208/3	RCH 3480 SERIES	1,2,3,4,5,6					
ECLH-4	600	6,826	60	75	2.0	208/3	RCH 3480 SERIES	1,2,3,4,5,6					
ECLH-5	600	6,826	60	75	2.0	208/3	RCH 3480 SERIES	1,2,3,4,5,6					

## NOTES

1. UNITS SCHEDULED ARE AS MANUFACTURED BY RAYWALL.

2. RECESSED CEILING MOUNTED. 3. REFER TO SPECIFICATION SECTION 238239.

4. LOW VOLTAGE WALL MOUNTED TEMPERATURE SENSOR BY THE TCC.

FACTORY DISCONNECT SWITCH.

6. WHITE POWDER COATED GRILLE.

AND VIBRATION ISOLATORS.

		E	LECTRIC	PROPE	LLER UN	IIT HEATE	ER SCHEDU	JLE			
		FAN	EED ELEC MODEL NO								
MARK	CFM	(RPM)	MBH	EAT	LAT	ESP	MAX KW	SERV	MODEL NO.	NOTES	
EPUH-1	400	HIGH	11.20	60	86		3.3	208/3	5100 SERIES	1,2,3,4,5,6,7	
NOTES	_										
1. UNITS	S SCHEDUL	ED ARE AS I	MANUFACTU	JRED BY R	AYWALL.	_					
2. HORI	ZONTAL DI	SCHARGE.				_		OUR-DIRECTION AI	R		
3. REFE	EFER TO SPECIFICATION SECTION 238239.  FLOW CONTROL.										
1. UNITS SCHEDULED ARE AS MANUFACTURED BY RAYWALL. 2. HORIZONTAL DISCHARGE. 5. UNIT FURNISHED WITH ADJUDITED BY RAYWALL. DIFFUSERS TO PROVIDE FOR								INTED TEMPERATU	RE		

					EXHAUST	FAN SCI	HEDULE				
MADIC	7.05	0514	55514	EXT.	MAX.	EL	.EC	CONTROL	MODEL	DRIVE	NOTES
MARK TYPE  EF-1 ROOF  EF-2 ROOF  EF-3 ROOF  EF-4 IN-LINE		CFM	FRPM S.P. SON		SONES	HP	SERV	CONTROL	WODEL	DRIVE	NOTES
EF-1	ROOF	2,100	1,311	0.450	12.5	1.0	115/1	A	G-140-VG	DIRECT	1,2,4,5,6,7,8
EF-2	ROOF	700	1,476	0.350	7.9	1/6	115/1	B.1	G-095-VG	DIRECT	1,2,4,5,6,7,8
EF-3	ROOF	1,350	1,336	0.450	11.1	1/2	115/1	A	G-120-VG	DIRECT	1,2,4,5,6,7,8
EF-4	IN-LINE	200	1,673	0.300	5.7	1/15	115/1	С	SQ-70-VG	DIRECT	1,2,3,4,6,7

## NOTES

1. INCLUDE DISCONNECT SWITCH.

2. INCLUDE BACKDRAFT DAMPER. 3. SUPPORT FROM STRUCTURE ABOVE WITH VIBRATION ISOLATORS.

4. REFER TO SPECIFICATION SECTION 233423 FOR ADDITIONAL REQUIREMENTS.

5. MOUNT ON 12" HIGH ROOF CURB. 6. ALL FAN MODELS SPECIFIED AS MANUFACTURED BY GREENHECK.

7. INCLUDE FIELD MOUNTED AND WIRED SPEED CONTROL.

8. COLOR(S) TO BE SELECTED BY ARCHITECT/ENGINEER. 9. INSTALL DRIP PAN UNDER UNIT. 10. ALUMINUM WHITE ENAMEL GRILLE, ISOLATION KIT AND HOODED WALL CAP.

CONTROL KEY:

A. AUTOMATIC OCCUPIED OPERATION BY LOCAL TEMPERATURE CONTROL ZONE.

B. MANUAL CONTROLS BY DIVISION 26. .1 WITH TIMER SWITCH. .2 WITH ON/OFF SWITCH.

.3 WITH ROOM LIGHT SWITCH. C. AUTOMATIC OPERATION BY REVERSE-ACTING THERMOSTAT.

D. 24 HOUR CONTINUOUS OPERATION.

E. ON/OFF CONTROL WITH FUME HOOD. F. CONTROLS BY DISHWASHER HOOD MANUFACTURER.

G. ON/OFF CONTROL WITH KITCHEN HOOD EXHAUST FAN OPERATION. 11. HI-PRO POLYESTER FINISH FOR HOUSING, FAN WHEEL, BACK DRAFT DAMPER AND ACCESSORIES..

			El	LECTRIC (	CABINET UNI	Г НЕАТЕ	R SCHEDULE	Ξ		
MARK	HIGH CFM	LOW CFM	HIGH KW	LOW KW	HIGH/LOW MBH	EAT	HIGH/LOW AMPS	ELEC. SERV	MODEL NO.	NOTES
ECUH-1	500	460	10.0	6.0	34.13/20.47	60	35.1/18.4	208/3	T46	1,2,3,5,6,7,8,9
ECUH-2	250	230	5.0	3.0	17.06/10.23	60	17.6/9.2	208/3	T33	1,2,3,5,6,7,8,9
ECUH-3	250	230	5.0	3.0	17.06/10.23	60	17.6/9.2	208/3	T33	1,2,3,5,6,7,8,9

7. UNITS SCHEDULED ARE AS MANUFACTURED BY RAYWALL.

9. SUPPORT HEATER FROM STRUCTURE ABOVE WITH MINIMUM OF

FOUR (4), 3/8" DIAMETER THREADED RODS AND VIBRATION ISOLATORS.

8. REFER TO SPECIFICATION SECTION 238239.

1. COLOR TO BE SELECTED BY ARCHITECT.

2. PROVIDE FACTORY DISCONNECT. 3. HORIZONTAL CEILING RECESSED UNIT.

4. HORIZONTAL EXPOSED UNIT.

5. UNIT SCHEDULED WITH BOTTOM SUPPLY AND BOTTOM RETURN.

6. LOW VOLTAGE WALL MOUNTED 2-STAGE TEMPERATURE SENSOR BY THE TCC.

7. FACTORY DISCONNECT SWITCH.

KEY PLAN

350 E NEW YORK ST #300 INDIANAPOLIS, IN 46202



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CARMEL STADIUM

SOUTH SUPPORT

BUILDING

E 136th St, Carmel, IN 46032

CARMEL CLAY SCHOOLS



DRAWN BY: DRV PROJECT NUMBER: 220136 PROJECT ISSUE DATE: 04-26-2023

REV. No. $\triangle$	DESCRIPTION	DATE
1	ADDENDUM 1	05-25-23

MECHANICAL SCHEDULES

SYMBOL	DESCRIPTION	МН
AID	ADDRESSABLE INTERFACE DEVICE	-
$oldsymbol{H}$	HEAT DETECTOR, 190 DEGREES F FIXED TEMPERATURE (UNO), CEILING MOUNTED	CLG
P D	ROUND INDICATES CEILING MOUNTED, SQUARE INDICATES DUCT MOUNTED, PHOTOELECTRIC SMOKE DETECTOR	
FAA	FIRE ALARM ANNUNCIATION PANEL	56"
FAP	FIRE ALARM CONTROL PANEL	-
F <u>F</u>	AUDIBLE AND VISIBLE NOTIFICATION APPLIANCE (HORN/STROBE), CEILING MOUNTED, EXTRA LINE INDICATES WALL MOUNTING AT 80" AFF	CLG
<u>s</u> <u>s</u>	VOICE/ALARM COMMUNICATION AUDIBLE AND VISIBLE NOTIFICATION DEVICE (SPEAKER/STROBE), CEILING MOUNTED, EXTRA LINE INDICATES WALL MOUNTING AT 80" AFF	CLG
<u>v</u> <u>v</u>	VISIBLE NOTIFICATION APPLIANCE (STROBE), CEILING MOUNTED, EXTRA LINE INDICATES WALL MOUNTING AT 80" AFF	CLG
<u>u</u> <u>u</u>	VOICE/ALARM COMMUNICATIONS LOUDSPEAKER, CEILING MOUNTED, EXTRA LINE INDICATES WALL MOUNTING AT 96" AFF	CLG
F	MANUAL FIRE ALARM PULL STATION, AND AUDIBLE AND VISIBLE NOTIFICATION APPLIANCE ABOVE (HORN/STROBE), WALL MOUNTED	44"/80"
F	MANUAL FIRE ALARM PULL STATION, WALL MOUNTED	44"
S S	VOICE/ALARM COMMUNICATIONS HORN TYPE LOUDSPEAKER, CEILING MOUNTED, EXTRA LINE INDICATES WALL MOUNTING AT 96" AFF	CLG
FH	SURFACE FIRE ALARM MAGNETIC DOOR HOLDER	6" BELOW TOP OF DOOR
SH	SURFACE SECURITY ALARM MAGNETIC DOOR HOLDER	6" BELOW TOP OF DOOR
S	ELECTRONIC RELEASE DOOR CLOSER	-
В	FIRE ALARM BELL, WALL MOUNTED, WEATHERPROOF WHERE EXTERIOR MOUNTED	96"
PV	POST INDICATOR VALVE TAMPER SWITCH	

	POWER SYMBOLS			
•	DESCRIPTION	MOUNTING HEIGHT TO BOTTOM	SYMBOL	
-	CONDUIT CONCEALED ABOVE CEILING OR IN WALL			SI
_	CONDUIT CONCEALED IN OR BELOW FLOOR, OR UNDER GROUND		<u> </u>	FL
	20 AMP, 125 VOLT, NEMA 5-20R DUPLEX RECEPTACLE WITH COMMON COVER PLATE MOUNTED VERTICALLY +16" TO BOTTOM. LETTER(S) IN FRONT INDICATES LOAD TYPE, SEE BELOW. SINGLE LINE INDICATES HORIZONTAL MOUNTING, DOUBLE LINE INDICATE QUAD, DARK CENTER INDICATES ABOVE COUNTERTOP MOUNTING (44") NEMA 5-20R, UNO. CIRCUIT NUMBER (e.g. "1AL1-1") ADJACENT TO THE		H•	Pl
1	SYMBOL ON PLANS INDICATES PANELBOARD/CIRCUIT NUMBER SERVING RECEPTACLE, UNO.  CO COPY MACHINE		H••	Pl
	CM COFFEE MAKER GF GROUND FAULT CIRCUIT INTERRUPTING TYPE M MONITOR - 60" AFF		H•••	Pl
	MW MICROWAVE, GFCI RECEPTACLE R REFRIGERATOR - 48" AFF TL TWIST LOCK TR TAMPER RESISTANT		<b>1</b>	RI DI
	U DUPLEX RECEPTACLE WITH (2) USB PORTS UR UNDER COUNTER REFRIGERATOR V VENDING MACHINE, FEED FROM 30 MA GFCI BREAKER IN PANELBOARD.		4	RI IN
	VP		台	RI
	WP WEATHER RESISTANT GFCI WITH IN-USE TYPE WEATHERPROOF COVER HINGED AT TOP	01.0	⟨ <b>H</b> ⟩	RE
	20 AMP DUPLEX RECEPTACLE FLUSH CEILING MOUNTED , NEMA 5-20R	CLG		N( -V
	SINGLE FLUSH BOX WITH FOUR USB CHARGING PORTS, WITH DECORA STYLE COVER PLATE; MOUNTED ABOVE COUNTERTOP HEIGHT, UNO	44"	FH	-V
	SPECIAL POWER RECEPTACLE, AMPS, VOLTS AND NEMA CONFIGURATION AS DEFINED ON PLANS BY CODED NOTE	16"	100A-3P	-V -V
	SINGLE STRAIGHT BLADE, SPECIAL RECEPTACLE, 20A, 125/250 VOLT, 3P, 4W, NEMA 14-20R	16"	<del>-⊘-</del> MP	M. FL
	30 AMP, 120 VOLT, SINGLE TWIST LOCK RECEPTACLE, UNO, NEMA L5-30R	16"	<del>-∽</del> M	M. FL
	20 AMP DUPLEX RECEPTACLE IN FLUSH FLOOR MOUNTED BOX,NEMA 5-20R. USE A CAST BOX AT GRADE LEVEL, USE A STAMPED STEEL BOX FOR UPPER FLOORS. REFER TO SPECIFICATIONS FOR	-	<del>∽</del> F	M
	20 AMP DUPLEX RECEPTACLE IN FIRE RATED POKE-THRU FLOOR DEVICE, NEMA 5-20R. REFER TO	-	<del>∙o-</del> T	SI
	SPECIFICATIONS FOR REQUIREMENTS.  HIGH CAPACITY FLOOR BOX WITH 4 DUPLEX RECEPTACLES, NEMA 5-20R, UNO FOR POWER	-	<del>ω</del> C	C(
	AND DATA. REFER TO SPECIFICATIONS FOR REQUIREMENTS.  COMMUNICATIONS/POWER POLE PRE-WIRED WITH 2 DUPLEX RECEPTACLES, WITH TWO J BOX		ТС	DI
	ABOVE CEILING. REFER TO SPECIFICATIONS FOR REQUIREMENTS.	-	VFC	V/ DI
	TWO 20 AMP DUPLEX RECEPTACLES IN BOX WITH COVER PLATE, PENDANT MOUNTED	84"		+

Branch Panel: L2	
Location: RM B101	
Supply From: L1	
Mounting: Recessed	
Enclosure: Type 1	
Notes: INTEGRAL SURGE PROTECTION	

Volts: 208/120 Wye Wires: 4

A.I.C. Rating: 10 kA Mains Type: M.C.B Mains Rating: 100 A MCB Rating: 100 A

---- CONDUIT CONCEALED IN OR BELOW FLOOR, OR UNDER GROUND

WITH 3/C, SJO CORD AND STRAIN RELIEF GRIPS.

CKT	Circuit Description	Trip	Poles	Α(	VA)	В(	VA)	C (	VA)	Poles	Trip	Circuit Description	CKT
1	Island Receptacle #1 - RM B101 (NOTE 1)	20 A	1	180	500					1	20 A	Coffee Maker - RM B101	2
3	Cooler #1 - RM B101 (NOTE 1)	20 A	1			1000	1000			1	20 A	Cooler #1 - RM B107 (NOTE 1)	4
5	Cooler #2 - RM B101 (NOTE 1)	20 A	1					1000	1000	1	20 A	Cooler #2 - RM B107 (NOTE 1)	6
7	Microwave - RM B120	20 A	1	1500	180					1	20 A	Receptacle #4 - RM B101	8
9	Receptacle #5 - RM B101	20 A	1			180	180			1	20 A	Pretzel Maker - RM B101	10
11	Receptacle #6 - RM B101	20 A	1					180	180	1	20 A	Receptacle #3 - RM B101	12
13	Island Receptacle #4 - RM B101 (NOTE 1)	20 A	1	180	1127					1	20 A	Exhaust Fan - EF-3	14
15	Island Receptacle #3 - RM B101 (NOTE 1)	20 A	1			180	180			1	20 A	Island Receptacle #2 - RM B101 (NOTE 1)	16
17	Nacho Cheese - RM B101	20 A	1					180	0	1	20 A	Spare	18
19	Island Receptacle #5 - RM B101 (NOTE 1)	20 A	1	180	1000					1	20 A	Cooler #3 - RM B101 (NOTE 1)	20
21	Ice Maker - RM B101 (NOTE 1)	20 A	1			1000	540			1	20 A	Receptacles - North countertop	22
23	Refrigerator - RM B101 (NOTE 1)	20 A	1					1000	0	1	20 A	Spare	24
25	Spare	20 A	1	0	0					1	20 A	Spare	26
27	Spare	20 A	1			0	0			1	20 A	Spare	28
29	Spare	20 A	1					0	0	1	20 A	Spare	30
31	Spare	20 A	1	0	0					1	20 A	Spare	32
33	Spare	20 A	1			0	0			1	20 A	Spare	34
35	Spare	20 A	1					0	0	1	20 A	Spare	36
37	Spare	20 A	1	0	0					1	20 A	Spare	38
39	Spare	20 A	1			0	0			1	20 A	Spare	40
													-

41 Spare

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Motor	1127 VA	125.00%	1409 VA	
Receptacle	11520 VA	93.40%	10760 VA	Total Conn. Load: 12647 VA
				Total Est. Demand: 12169 VA
				Total Conn.: 35 A
				Total Est. Demand: 34 A

Total Amps: 41 A

20 A 1 0 0 1 20 A Spare

36 A

NOTE 1: PROVIDE WITH 5mA GFCI BREAKER.

							LUMINA	AIRE SCHEDULE	
PLAN TYPE	MANUFACTURER/CATALOG	MOUNTING	NO	L WATTS	LAMPS	LUMENS	APPLIED VOLTAGE	DESCRIPTION	VA LOAD
LD61	PORTFOLIO LD6A SERIES PHILIPS LIGHTOLIER C6L SERIES GOTHAM EVO SERIES PRESCOLITE LF6LED SERIES	RECESSED	1	22 W	LED	1500 lm	120 V	6-INCH ROUND APERTURE OPEN REFLECTOR LED DOWNLIGHT, MEDIUM DISTRIBUTION, CLEAR SPECULAR FINISH, SELF-FLANGED 4000K, 80+ CRI, 0-10VDC DIMMING, BAR HANGER ACCESSORY.	19 VA
LDW61	GOTHAM EVO SHOWER SERIES PRESCOLITE LTR-6RD SERIES H.E. WILLIAMS 6DR SERIES PORTFOLIO LD6B SERIES	RECESSED	1	15 W	LED	1000 lm	120 V	6-INCH ROUND APERTURE LED SHOWER LIGHT WITH REGRESSED LENS REFLECTOR, WHITE REFLECTOR AND TRIM, SELF-FLANGED, IP65 WET LOCATION LISTED.	15 VA
LDW61X	GOTHAM EVO SHOWER SERIES PRESCOLITE LTR-6RD SERIES H.E. WILLIAMS 6DR SERIES PORTFOLIO LD6B SERIES	RECESSED	1	15 W	LED	1000 lm	120 V	6-INCH ROUND APERTURE LED SHOWER LIGHT WITH REGRESSED LENS REFLECTOR, WHITE REFLECTOR AND TRIM, SELF-FLANGED, IP65 WET LOCATION LISTED. WITH EMERGENCY BATTERY INVERTER.	15 VA
LDW81	GOTHAM EVO SHOWER SERIES PRESCOLITE LTR-8RD SERIES H.E. WILLIAMS 8DR SERIES PORTFOLIO LD8B SERIES	RECESSED	1	30 W	LED	3000 lm	120 V	8-INCH ROUND APERTURE LED SHOWER LIGHT WITH REGRESSED LENS REFLECTOR, WHITE REFLECTOR AND TRIM, SELF-FLANGED, IP65 WET LOCATION LISTED.	30 VA
LDW81X	GOTHAM EVO SHOWER SERIES PRESCOLITE LTR-8RD SERIES H.E. WILLIAMS 8DR SERIES PORTFOLIO LD8B SERIES	RECESSED	1	30 W	LED	3000 lm	120 V	8-INCH ROUND APERTURE LED SHOWER LIGHT WITH REGRESSED LENS REFLECTOR, WHITE REFLECTOR AND TRIM, SELF-FLANGED, IP65 WET LOCATION LISTED. PROVIDE WITH EMERGENCY BATTERY INVERTER.	30 VA
LE1X	LITHONIA AFB SERIES EVENLITE WEATHERWAY SERIES COMPASS CUW SERIES	SURFACE WALL	1	11 W	LED	1000 lm	120 V	OUTDOOR EMERGENCY LIGHT FIXTURE, DIE-CAST ALUMINUM HOUSING, SELF-DIAGNOSTICS, INTEGRAL PHOTOCELL, WIRED NORMALLY ON, PROVIDE WITH EMERGENCY BATTERY INVERTER, WET LOCATION, 3200K, DARK BRONZE.	11 VA
LF1	LITHONIA CPX SERIES EATON METALUX CGT SERIES COLUMBIA CBT SERIES DAYBRITE 2FPZ SERIES	RECESSED	1	32 W	LED	4000 lm	120 V	1 BY 4-FOOT BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 4000K, 80+ CRI, 10% DIMMING.	32 VA
LF1X	LITHONIA CPX SERIES EATON MÉTALUX CGT SERIES COLUMBIA CBT SERIES DAYBRITE 2FPZ SERIES	RECESSED	1	32 W	LED	4000 lm	120 V	1 BY 4-FOOT BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 4000K, 80+ CRI, 10% DIMMING WITH EMERGENCY BATTERY INVERTER.	32 VA
LF5	LITHONIA CPX SERIES EATON MÉTALUX CGT SERIES COLUMBIA CBT SERIES CREE C-LITE-SERIES	RECESSED	1	48 W	LED	5400 lm	120 V	2 BY 4-FOOT BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 4000K, 80+ CRI, 0-10V 1% DIMMING	48 VA
LF5X	LITHONIA CPX SERIES EATON MÉTALUX CGT SERIES COLUMBIA CBT SERIES CREE C-LITE-SERIES	RECESSED	1	53 W	LED	6000 lm	120 V	2 BY 4-FOOT, BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 4000K, 80+ CRI, 0-10V 1% DIMMING WITH EMERGENCY BATTERY INVERTER.	53 VA
LR2	METALUX WNLED SERIES DAY-BRITE OWL SERIES LITHONIA SBL SERIES COLUMBIA LAW SERIES	SUSPENDED	1	48 W	LED	4000 lm	120 V	4-FOOT LED WRAP AROUND FIXTURE, ACRYLIC PRISMATIC DIFFUSER, 0-10VDC DIMMING. IF SUSPENDED, INSTALL AT 8-FOOT AFF WITH CONDUIT STEMS (UNO).	27 VA
LR2X	METALUX WNLED SERIES DAY-BRITE OWL SERIES LITHONIA SBL SERIES COLUMBIA LAW SERIES	SUSPENDED	1	48 W	LED	4000 lm	120 V	4-FOOT LED WRAP AROUND FIXTURE, ACRYLIC PRISMATIC DIFFUSER, 0-10VDC DIMMING, WITH EMERGENCY BATTERY INVERTER. IF SUSPENDED, INSTALL AT 8-FOOT AFF WITH CONDUIT STEMS (UNO).	27 VA
LS1	COOPER INVUE MESA SERIES	20'-0" ROUND ALUM. POLE	1	171 W	LED	19000 lm	120 V	FULL CUT-OFF LED AREA LIGHT. TYPE T3 DISTRIBUTION. 4000K, 80+ CRI, BLACK FINISH.	171 VA
XC	SURE-LITES CX SERIES CHLORIDE 55 LINE SERIES LITHONIA SIGNATURE SERIES DUAL-LITE SEMPRA SERIES	SURFACE CEILING	1	3 W	RED LED	0 lm	120 V	VANDAL RESISTANT, CAST ALUMINUM EXIT SIGN, SINGLE FACE, DIRECTIONAL ARROWS INDICATED, WHITE HOUSING, WITH EMERGENCY BATTERY INVERTER. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.	3 VA

		POWER SYMBOLS			LIGHTING SYMBOLS
NG TO	SYMBOL	DESCRIPTION	МН	SYMBOL	DESCRIPTION
M		SURFACE CIRCUIT BREAKER PANELBOARD, SEE ONE LINE DIAGRAM	-	ĈŢ	OCCUPANCY SENSOR - CEILING MOUNTED, DUAL TECHNOLOGY, 360 DEGREE PATTERN, 200 S.F. COVERAGE. PROVIDE WITH RELAY OPTION. "A" PORTION OF SYMBOL INDICATES AIMING OF ULTRASONIC SENSORS.
		FLUSH MOUNTED CIRCUIT BREAKER PANELBOARD, SEE ONE LINE DIAGRAM	-	€Û	OCCUPANCY SENSOR - CEILING MOUNTED, ULTRASONIC, 360 DEGREE PATTERN, 2000 S.F. C PROVIDE WITH RELAY OPTION. "A" PORTION OF SYMBOL INDICATES AIMING OF ULTRASONIC SENSORS.
	H•	PUSH BUTTON STATION, TYPE INDICATED	44"	€T)	OCCUPANCY SENSOR - CEILING MOUNTED, DUAL TECHNOLOGY, DIRECTIONAL/180 DEGREE 1200 S.F. COVERAGE (MIN.). PROVIDE WITH RELAY OPTION. PROVIDE WITH CEILINGMOUNTII ACCESSORY IF NOT SUPPLIED AS STANDARD WITH SENSOR. "A" PORTION OF SYMBOL INDIC
	H••	PUSH BUTTON STATION, ON/OFF	44"	\$T	OCCUPANCY SENSOR - WALL SWITCH TYPE, DUAL TECHNOLOGY WITH MANUAL OVERRIDE SWITCH
	H•••	PUSH BUTTON STATION, UP/DOWN/STOP	44"	\$I>	OCCUPANCY SENSOR - WALL SWITCH TYPE, INFRARED WITH MANUAL OVERRIDE SWITCH
	<b>±</b>	RECESSED ADA PUSH BUTTON FOR AUTOMATIC DOOR OPERATOR, FURNISHED BY OTHERS, INSTALLED BY DIV. 26	44"	<del>-                                    </del>	KEY OPERATED SWITCH, NUMBER INDICATES NUMBER OF POLES, 277V, 20A, FLUSH UNO
	<b>1</b>	RECESSED ADA DOUBLE PUSH BUTTON FOR DUAL AUTOMATIC DOOR OPERATORS, FURNISHED BY OTHERS, INSTALLED BY DIV. 26	44"	<del> </del>	SWITCH, NUMBER INDICATES NUMBER OF POLES, 277V, 20A, FLUSH UNO  SINGLE POLE SWITCH, 277V, 20A, FLUSH UNO TYPICAL, SUBSCRIPT a, b, c INDICATES WHICH LUMINAIRE THAT WILL BE CONTROLLED VIA SWITCH LEG
	音	RED MUSHROOM ABORT SWITCH, WALL MOUNTED			WALL BOX DIMMER 277V, 1200 WATT MINIMUM, FLUSH, UNO. PROVIDE WATTAGE SIZE TO EXCEED CIRCUIT LOAD
	(H)	RECESSED WALL BOX FOR HAND DRYER. CIRCUIT WITH 2#10, #10G IN 3/4" C TO PANEL INDICATED	-	LC	LIGHTING CONTACTOR, MECHANICALLY HELD, 30A - 3P WITH H-O-A SWITCH, UNO
		NON-FUSED DISCONNECT, 3 POLE, NEMA 1, UNO. 30 AMP UNOWP SUFFIX DESIGNATES NEMA 3R ENCLOSURE.			DOWNLIGHT LUMINAIRE, APPROXIMATE SIZE INDICATED  DOWNLIGHT LUMINAIRE CONNECTED TO EMERGENCY SYSTEM AS INDICATED
	F	-WP4X SUFFIX DESIGNATES NEMA 4X STAINLESS STEEL ENCLOSURE.  FUSED DISCONNECT, 3 POLE, NEMA 1, UNO. 30 AMP UNO.  -WP SUFFIX DESIGNATES NEMA 3R ENCLOSURE.		$\Box$	WALL SCONCE LUMINAIRE
	100A-3P - <del>ω</del> -MP	-WP4X SUFFIX DESIGNATES NEMA 4X STAINLESS STEEL ENCLOSURE.  MANUAL MOTOR STARTER WITH THERMAL OVERLOAD PROTECTION AND PILOT LIGHT, UNO.	44"	$\bigcirc$	WALL MOUNTED EXIT SIGN, DIRECTIONAL ARROWS AS SHOWN
		FLUSH MOUNTED IN FINISH SPACES.	44"		CEILING MOUNTED EXIT SIGN, SHADED PORTION(S) INDICATES SINGLE OR DOUBLE FACE
	<del>∽</del> M	MANUAL MOTOR STARTER WITH THERMAL OVERLOAD PROTECTION, UNO. FLUSH MOUNTED IN FINISH SPACES.			TRACK HEAD LUMINAIRE
	<del>∽</del> F	MANUAL MOTOR STARTER, NO OVERLOADS. FLUSH MOUNTED IN FINISH SPACES.	44"		EMERGENCY LIGHTING UNIT WITH 2 HEADS AND BATTERY
	<del>∽</del> T	SPRING WOUND TIMER, HP RATED	44"		WALL-BRACKET LUMINAIRE, APPROXIMATE SIZE INDICATED
	<del>∽</del> C	CONTROL SWITCH FOR DEVICES SUCH AS MOTORIZED SHADES, SOLAR LIGHT TUBES, PROJECTION SCREENS, ETC. FURNISHED BY OTHERS, INSTALLED FLUSH MOUNTED WITH	44"		WALL-BRACKET LUMINAIRE CONNECTED TO EMERGENCY SYSTEM AS INDICATED
	TC	COVER PLATE AND WIRED BY DIV. 26  DIGITAL TIME CLOCK SWITCH			RECESSED LUMINAIRE, APPROXIMATE SIZE INDICATED. ("NL", INDICATES NIGHT LIGHT FIXTURES)
	VFC	VARIABLE FREQUENCY CONTROLLER, FURNISHED BY DIV. 23 CONTRACTOR, INSTALLED BY DIV. 26 CONTRACTOR, UNO. COORDINATE FINAL MOUNTING HEIGHT.			RECESSED LUMINAIRE CONNECTED TO EMERGENCY SYSTEM AS INDICATED
	T	THERMOSTAT	-		SURFACE OR PENDANT MOUNTED LUMINAIRE, APPROXIMATE SIZE INDICATED
	9	MOTOR	-		SURFACE OR PENDANT MOUNTED LUMINAIRE CONNECTED TO EMERGENCY SYSTEM AS IND
	T	DRY TYPE TRANSFORMER	-	•	PENDANT LUMINAIRE, APPROXIMATE SIZE INDICATED
	SPD	SURGE PROTECTIVE DEVICE. REFER TO SPECIFICATION FOR REQUIREMENTS.	-		PENDANT LUMINAIRE CONNECTED TO EMERGENCY SYSTEM AS INDICATED
(T					AIMABLE LUMINAIRE, CARROT INDICATING DIRECTION OF AIMING

	Mounting: Surface Enclosure: Type 1 INTEGRAL SURGE PROTECTION /ICE ENTRANCE RATED PANELBOARD	RANSFORMER	R		!	Volts: Phases: Wires:		Wye				A.I.C. Rating: 10 kA Mains Type: M.C.B Mains Rating: 400 A MCB Rating: 400 A		
CKT	Circuit Description	Trip	Poles		4	E	3	(		Poles	Trip	Circuit De	escription	CK
1	Fire Alarm Panel	20 A	1	50	1308					1		West Buidling - East Light	<u> </u>	2
3	Countertop Recept #1 - RM B107	20 A	1			180	720			1	20 A	Outdoor Receptacles - We	est Building	4
5	Door Power Supplies	20 A	1					400	720	1	20 A	Technology Receptacles -		6
7	Exterior Lighting	20 A	1	1346	1080					1	20 A	Outdoor Receptacles - Ea		8
9	Monitors - RM A102, A109	20 A	1			900	1356			1		West Buidling - West Ligh		10
11	Monitors - RM B118	20 A	1					900	1173	1	20 A	East Building - Meeting Ha	all Lighting	12
13	Receptacles - Locker Rooms	20 A	1	1800	1840					1	20 A	Exhaust Fan - EF-1		14
15	East Building - Support Spaces Lighting	20 A	1			1689	1500			1	20 A	Microwave - RM B107		16
17	Monitors - RM 111	20 A	1					1350	736	1	20 A	Exhaust Fans - EF-2 & E		18
19	Panel L2 (NOTE 3)	100 A	3	4847	180					1	20 A	Temperature Control Pane	el	20
21						4260	180			1	20 A	Water Cooler - RM C103	·	22
23	<u></u>							3540	180	1	20 A	Water Cooler - RM C107	· ,	24
25	Countertop Recept #3 - RM B107	20 A	1	180	540					1	20 A	East Wall Receptacles - R	RM B107	26
27	Countertop Recept #4 - RM B107	20 A	1			180	540			1	20 A	Receptacles - RM B102 &	B103	28
29	Countertop Recept. #2 - RM B107	20 A	1					180	540	1	20 A	Receptacles - RM A103		30
31	Receptacles - Office 114	20 A	1	900	1000					3	20 A	Ceiling Heater ECLH-1		32
33	Receptacles - RM A102	20 A	1			540	1000							34
35	Restroom Receptacles - East Building	20 A	1					900	1000					30
37	Ceiling Heater ECLH-2	20 A	3	1000	1000					3	20 A	Ceiling Heater ECLH-3		38
39						1000	1000							40
41								1000	1000					42
43	Propeller Unit Heater EPUH-1	20 A	3	1100	1333					3	20 A	Ceiling Heaters ECLH-4 8	k 5	44
45						1100	1333							46
47								1100	1333					48
49	Cabinet Unit Heater - ECUH-2	20 A	3	1667	1667					3	20 A	Cabinet Unit Heater - ECL	JH-3	50
51						1667	1667					<b></b> ^		52
53								1667	1667	/	<u></u>		1	54
55	Cabinet Unit Heater - ECUH-1 (NOTE 2)	40 A	3	3333	8243					3 {	100 A	Roof Top Unit RTU-2 (NO	TE 5)\	56
57						3333	8243			1	/~			58
59								3333	8243					60
61	Roof Top Unit RTU-1 (NOTE 1)	125 A	3	9529	720					1	20 A	Receptacles - Coaches O	ffices, Bathrooms	62
63						9529	684			1	20 A	Site Light Poles	·	64
65								9529	360	1		Future Game Clocks - RM	1 A103 & A107	60
67	Coiling Door - RM A107	20 A	1	1127	1380					1	20 A	Roller Shades - RM B107		68
69	Heat Trace (30 mA GFCI)	20 A	1			500	0			1	-	Spare		70
71	Spare	20 A	1					0	0	1		Spare		7:
73	Spare	20 A	1	0	0					1		Spare		7.
75	Spare	20 A	1			0	0			1		Spare		70
77	Spare	20 A	1					0	0	1		Spare		78
79	Spare	20 A	1	0	0					1		Spare		80
81	Spare	20 A	1			0	0			1		Spare		82
83	Spare	20 A	1					0	0	1	20 A	·		84
egend	:		al Load: I Amps:	4717 39	6 A	4310 362	1 VA 2 A	4085 340						
ad C	assification	Con	nected L	_oad	Der	nand Fa	ctor	Estim	ated De	mand		Panel <sup>1</sup>	Totals	
ghting			7556 VA			100.00%			7556 VA	- · <del>-</del>				
otor			6210 VA			107.41%			6670 VA			Total Conn. Load:	131122 VA	
Electric Heat HVAC Receptacle		36400 VA				90.00%			32760 VA	١		Total Est. Demand:		
			53316 VA			90.00%			47984 VA			Total Conn.:		
			27640 V			68.09%			18820 VA			Total Est. Demand:		
2.010 //				00.03 /0 1002U VA										

## **LUMINAIRE SCHEDULE - GENERAL NOTES** FOR ALL DOWNLIGHTING FIXTURES, PROVIDE REQUIRED

MOUNTING HARDWARE FOR MOUNTING IN LAY-IN TYPE CEILINGS. CONTRACTOR TO VERIFY TYPES AND QUANTITY OF LIGHT FIXTURES REQUIRING EMERGENCY BATTERY INVERTERS AND PROVIDE REQUIRED QUANTITY OF EMERGENCY BATTERY INVERTERS, LABOR, MATERIAL, ETC. IN THE PROJECT BID FOR FIELD INSTALLATION OF EMERGENCY BATTERY INVERTERS. LIGHT FIXTURE SUBMITTALS TO INCLUDE DATA SHEETS FOR ALL FIXTURE TYPES, INCLUDING ADDITIONAL DATA SHEETS FOR DRIVER COMBINATIONS REQUIRED TO MEET THE INSTALLATION REQUIREMENTS OF THE VARIOUS FIXTURE TYPES INDICATED IN THE REMARKS COLUMN OF THE FIXTURE SCHEDULES OR ON THE DRAWINGS. SUBMITTALS SHALL ALSO INDICATE COLOR FOR ANY CUSTOM COLOR LIGHT FIXTURES.

## ELECTRICAL GENERAL NOTES

CLG

44"

48"

CLG

CLG

CLG

CLG

CLG

OCCUPANCY SENSOR - CEILING MOUNTED, ULTRASONIC, 360 DEGREE PATTERN, 2000 S.F. COVERAGE.

OCCUPANCY SENSOR - CEILING MOUNTED, DUAL TECHNOLOGY, DIRECTIONAL/180 DEGREE PATTERN,

ACCESSORY IF NOT SUPPLIED AS STANDARD WITH SENSOR. "A" PORTION OF SYMBOL INDICATES AIMING.

1200 S.F. COVERAGE (MIN.). PROVIDE WITH RELAY OPTION. PROVIDE WITH CEILINGMOUNTING BRACKET CLG

SURFACE OR PENDANT MOUNTED LUMINAIRE CONNECTED TO EMERGENCY SYSTEM AS INDICATED

THE TERM "PROVIDE" INDICATES CONTRACTOR SHALL FURNISH AND INSTALL ITEMS AND CONNECT AS REQUIRED TO OBTAIN A COMPLETE AND OPERABLE SYSTEM. COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL PLANS, CASEWORK, WINDOWS, WALL FINISHES, EQUIPMENT, AND OTHER TRADES PRIOR TO ROUGH IN. DEVICES ARE INTENDED TO BE ACCESSIBLE, DO NOT INSTALL BEHIND CASEWORK, DOORS OR EQUIPMENT UNLESS INDICATED ON PLANS. NOTIFY ARCHITECT IN WRITING OF CONFLICTS PRIOR TO PROCEEDING WITH WORK. WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ALL LOCAL, STATE AND NATIONAL CODES INCLUDING, BUT NOT LIMITED TO NFPA 70 (NATIONAL ELECTRIC CODE), NFPA 72, NFPA 101, INTERNATIONAL BUILDING CODE, ETC. CONFLICTS BETWEEN THE APPLICABLE CODES, STANDARDS, AND THE PLANS AND SPECIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT IN WRITING PRIOR TO PROCEEDING WITH WORK. E3 SERIES DRAWINGS ARE FOR TECHNOLOGY ROUGH-INS

REFER TO TECHNOLOGY PLANS. T SERIES FOR COMMUNICATIONS. SECURITY AND ACCESS CONTROL CONTRACTOR SHALL FOLLOW SEISMIC RESTRANT AND DESIGN REQUIREMENTS CONTAINED IN LATEST ADOPTED STATE AND INTERNATIONAL BUILDING CODES WITH ALL AMENDMENTS AS ADOPTE ADDITIONAL ELECTRICAL REQUIREMENTS MAY BE SHOWN ON PLANS FROM OTHER DISCIPLINES IN THIS SET. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL PLANS AND SPECIFICATIONS FOR A COMPLETE UNDERSTANDING OF THE PROJECT REQUIREMENTS. WHERE CONFLICTS ARE FOUND BETWEEN DRAWINGS, DETAILS, OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL APPLY. NOTIFY ARCHITECT OF DISCREPANCY IN WRITING. INITIATING WORK CONSTITUTES CONTRACTOR ACCEPTANCE OF THE EXISTING CONDITIONS

CONTRACTOR SHALL CONTACT UTILITIES AND VERIFY UTILITY REQUIREMENTS PRIOR TO COMMENCING CONSTRUCTION. CONFLICTS BETWEEN UTILITY REQUIREMENTS AND THE PLANS OR SPECIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT IN WRITING PRIOR TO PROCEEDING WITH WORK. CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION MEETING WITH THE UTILITY COMPANY TO REVIEW REQUIREMENTS. INCOMING SERVICE CONDUITS AND SUBSTRUCTURES SHALL BE INSTALLED PER UTILITY COMPANY STANDARDS.

ASSOCIATED WITH THE WORK IN QUESTION.

THESE DRAWINGS AND SPECIFICATIONS DO NOT INDICATE METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND IS RESPONSIBLE FOR CONSTRUCTION 

E 136th St, Carmel, IN 46032 MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFE PRACTICES. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND CANNOT SHOW EVERY CONNECTION, JUNCTION BOX, WIRE, AND CONDUIT, ETC. THE EXACT LOCATIONS AND ARRANGEMENT OF PARTS SHALL BE DETERMINED AS THE WORK PROGRESSES. ITEMS NOT INDICATED ON DRAWINGS REASONABLY INFERRED TO BELONG TO THE WORK DESCRIBED SHALL BE FURNISHED AND INSTALLED TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM. WORK SHALL BE COORDINATED WITH EXISTING CONDITIONS, NEW CONSTRUCTION, OWNER'S

VENDORS, OTHER TRADES, AND THEIR DOCUMENTS. THE CONTRACTOR SHALL VISIT THE SITE BEFORE SUBMITTING HIS BID. CONTRACTOR SHALL CONTACT OWNER FOR AN APPOINTMENT TO VISIT THE SITE AN INSULATED GROUND CONDUCTOR SIZED PER NEC SHALL BE PROVIDED WITH EACH FEEDER AND PROVIDE A DEDICATED NEUTRAL FOR EACH LINE TO NEUTRAL CIRCUIT. MULTI-WIRE BRANCH CIRCUITS ARE NOT PERMITTED UNLESS SPECIFICALLY INDICATED ON PLANS. MINIMUM WIRE SIZE IS #12 AWG. SEE SPECIFICATIONS FOR MINIMUM CONDUIT SIZE. CONDUIT SHALL BE CONCEALED WHEREVER POSSIBLE ABOVE CEILINGS, INSIDE WALLS, OR UNDER

FLOOR SLAB WHERE SHOWN ON DRAWINGS. IN AREAS WITH NO CEILING, RUN EXPOSED CONDUIT AS HIGH AS POSSIBLE AND PARALLEL TO NEARBY SURFACES OR EXISTING RACEWAYS. CONDUIT SHALL

NOT BE INSTALLED IN FLOOR SLAB UNLESS SPECIFICALLY INDICATED ON PLANS AND WHERE

APPROVED BY STRUCTURAL ENGINEER. DO NOT INSTALL MC CABLE IN EXPOSED LOCATIONS. CONTRACTOR SHALL PROVIDE RIGID METAL SLEEVES TO FACILITATE PATHWAYS THROUGH FULL HEIGHT WALLS FOR ELECTRICAL AND TELECOMMUNICATION WIRING. PROVIDE TEMPORARY OR PERMANENT END CAPS FOR STUBBED CONDUITS. PROVIDE INSULATED THROAT BUSHINGS FOR CONDUITS INTENDED TO REMAIN OPEN ENDED. SEE ARCHITECTURAL PLANS FOR LOCATIONS OF FIRE RATED ASSEMBLIES AND SMOKE BARRIERS. SEAL PENETRATIONS IN ACCORDANCE WITH UL AND PROJECT SPECIFICATIONS. MOUNTING HEIGHTS FOR WALL MOUNTED DEVICES INDICATED ABOVE FINISHED FLOOR ARE TO BOTTOM OF DEVICE UNO. MOUNTING HEIGHTS TO CEILING SUSPENDED DEVICES ARE TO BOTTOM OF

PROVIDE SOUND INSULATING PUTTY AROUND DEVICES INSTALLED ON OPPOSITE SIDES OF A WALL IN THE SAME VERTICAL CHANNEL. IF DEVICES ARE LOCATED AT LEAST 8" HORIZONTALLY APART NO SOUND INSULATING PUTTY IS REQUIRED. COORDINATE CEILING MOUNTED DEVICES WITH MECHANICAL AND ARCHITECTURAL REFLECTED CEILING PLANS. NOTIFY ARCHITECT IN WRITING OF CONFLICTS PRIOR TO PROCEEDING WITH WORK. JUNCTION BOXES LOCATED ABOVE ACCESSIBLE CEILINGS SHALL BE LOCATED NO MORE THAN 36" ABOVE CEILING LEVEL. LABEL EACH BOX IN AREA OF WORK WITH A PERMANENT MARKER OR IN ACCORDANCE WITH SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.

CONDUITS DESIGNATED AS EMPTY OR FUTURE SHALL BE PROVIDED WITH A #12 PULL LINE. OPEN ENDED CONDUITS SHALL BE PROVIDED WITH INSULATED THROAT BUSHINGS. FOR LUMINAIRES, CIRCUIT NUMBER IS SHOWN ONLY ONCE IN EVERY ROOM. PROVIDE CIRCUIT INDICATED TO EVERY LIGHT FIXTURE INDICATED IN SAME ROOM UNLESS OTHERWISE INDICATED. QUANTITY AND LOCATION OF TAMPER AND FLOW SWITCHES IS FOR BIDDING PURPOSES ONLY. VERIFY EXACT QUANTITY AND LOCATIONS WITH SPRINKLER CONTRACTOR PRIOR TO FIRE ALARM SHOP DRAWING SUBMITTAL ELECTRICAL PANELS INCLUDING BUT NOT LIMITED TO FIRE ALARM CONTROL PANELS, LIGHTING CONTROL PANELS, POWER DISTRIBUTION WILL HAVE A MAX DEVICE HEIGHT OF 72" AFF. PROVIDE GROUNDING TYPE EXPANSION FITTINGS OR OTHER APPROVED METHODS TO ALLOW FOR

EXPANSION, CONTRACTION, AND DEFLECTION WHERE CONDUITS CROSS BUILDING EXPANSION PROVIDE SEPARATE RACEWAY FOR EMERGENCY SYSTEM WIRING PER NEC ARTICLE 700. MINIMUM WIRE SIZE #10AWG. ALL CONDUITS SHALL INCLUDE AN INSULATED GROUND WIRE, SIZED PER N.E.C. AUTODOORS AND WHEELCHAIR LIFT PROVIDED AND INSTALLED BY OTHERS. PROVIDE CONDUIT AND BOX ROUGH-INS FOR MOTORS AND PUSHBUTTONS. MAKE FINAL POWER CONNECTIONS. ALL CONTROL WIRING BY OTHERS. MASONRY LOAD-BEARING WALLS AND MASONRY SHEAR WALLS: DO NOT PENETRATE CMU WALLS INDICATED AS BEARING WALLS AND SHEAR WALLS ON STRUCTURAL DRAWINGS UNLESS NOTED

OTHERWISE ON PLAN. DO NOT CORE THROUGH CMU BOND BEAMS OR LINTELS. DO NOT CUT ANY

VERTICAL REINFORCING IN CMU WALLS. OBTAIN PRIOR APPROVAL FROM ENGINEER BEFORE PENETRATING ANY OF THE STRUCTURAL ELEMENTS LISTED ABOVE. CONCRETE BEARING WALLS AND BEAMS: DO NOT PENETRATE CONCRETE WALLS INDICATED AS BEARING WALLS AND SHEAR WALLS ON STRUCTURAL DRAWINGS UNLESS NOTED OTHERWISE ON PLAN. DO NOT CORE THROUGH CONCRETE BEAMS, GIRDERS, OR COLUMNS. DO NOT CUT ANY VERTICAL REINFORCING IN CONCRETE WALLS, OBTAIN PRIOR APPROVAL FROM STRUCTURAL ENGINEER BEFORE PENETRATING ANY OF THE STRUCTURAL ELEMENTS LISTED ABOVE. 36. STEEL FRAMING: DO NOT CUT OR CORE THROUGH ANY STRUCTURAL STEEL BEAMS, GIRDERS, OR COLUMNS UNLESS NOTED OTHERWISE ON PLAN. NOTIFY ENGINEER OF POTENTIAL CONFLICTS BETWEEN FRAMING AND ELECTRICAL WORK.

CONCRETE FLOOR SYSTEMS (APPLIES TO CONCRETE BLDG. OR STEEL WITH CONCRETE DECK, MASONRY W/ CONC. FLOOR): DO NOT CUT HOLES OR CORE THROUGH CONCRETE FLOOR SLAB UNLESS NOTED OTHERWISE ON PLAN OR IN TYPICAL STRUCTURAL DETAILS. PENETRATIONS THROUGH EXISTING SLABS SHALL BE X-RAYED PRIOR TO CORING HOLES. NO EXISTING REINFORCEMENT SHALL BE CUT WITHOUT PERMISSION OF THE STRUCTURAL ENGINEER. PENETRATIONS THROUGH EXISTING BEAMS AND COLUMNS IS NOT PERMITTED.

## **ELECTRICAL ABBREVIATIONS**

	<u>-CINICAL A</u>	DDIVE	<u>. VIATIONO</u>
	ABBREVIATIONS USED ON T	HE CONTRACT D	OCUMENTS,
	INCLUDE BUT ARE NOT LIMIT	ED TO THOSE LIS	STED BELOW
	NUMBER	MLO	MAIN LUGS ONLY
(N)W	NUMBER OF POLES,	MOCP	MAXIMUM OVER-CURRENT
(14)**	NUMBER OF WIRES	WOOI	PROTECTION
	NOMBER OF WIRES	MTD	MOUNTED
ı	AIR CONDITIONING UNIT	MTG	MOUNTING
,	AMP FRAME	MV	MEDIUM VOLTAGE
	ABOVE FINISHED COUNTERTOP	IVI V	MEDIOW VOETAGE
•	ABOVE FINISHED FLOOR	N	GROUNDED CIRCUIT CONDUCTOR
	ABOVE FINISHED GRADE	14	(NEUTRAL)
•	AMPERE INTERRUPTING	+N	INDICATES MOUNTING HEIGHT (N) TO
	CAPACITY		BOTTOM OF DEVICE FROM FINISH
	ADDRESSABLE INTERFACE		FLOOR, UNO
	DEVICE	N/A	NOT APPLICABLE
	AS REQUIRED	NC	NORMALLY CLOSED
	AMP TRIP	NFS	NONFUSIBLE SWITCH
3	AMERICAN WIRE GAUGE	NIC	NOT IN CONTRACT
	AUDIO VISUAL	NL	NIGHT LIGHT
	ACDIO VICONE	NM	NONMETALLIC SHEATHED CABLE
	BLANK	NO	NORMALLY OPEN
	<i>52,</i> 1111	NRTL	NATIONALLY RECOGNIZED TESTING
	CONDUIT (GENERIC TERM FOR		LAB
	RACEWAY, PROVIDE AS	NTS	NOT TO SCALE
	SPECIFIED)		
	CANDELA	OC	ON CENTER
<b>ì</b>	CEILING MOUNTED	OCPD	OVER-CURRENT PROTECTIVE DEVICE
1	CAMERA	00.5	
•	LIGHTING CONTACTOR	PA	PUBLIC ADDRESS SYSTEM
_	COLUMN	PB	PULL BOX
ı	CABINET UNIT HEATER	PH	PROPELLER HEATER
•	ONDINE! ON THE TEXT	PIV	POST INDICATING VALVE
	DIRECT CURRENT	PR	PAIR
)	DEDICATED DEVICE ON	PUH	PROPELLER UNIT HEATER
	INDIVIDUAL BRANCH CIRCUIT		
	DUAL FACE	R	RELEASE
	DIAMETER	RAF	RETURN AIR FAN
ΓR	DISTRIBUTION	RT	RAIN-TIGHT
	EQUIPMENT BONDING JUMPER	S	SURFACE
	LOAD SIDE OF AN OVER-	SBJ	SYSTEM BONDING JUMPER
	RRENT DEVICE	SN	SOLID NEUTRAL
	ELECTRICAL CONTRACTOR	SP	SPARE
	WIRED ON EMERGENCY	SPL	SPLICE
	CIRCUIT	SS	STAINLESS STEEL
	END OF LINE	SSBJ	SUPPLY-SIDE BONDING JUMPER
	EXISTING TO REMAIN	ST	SHUNT TRIP
2	ELECTRIC WATER COOLER	STP	SHIELDED TWISTED PAIR
	EXISTING	STL	CARBON STEEL
		SUSP	SUSPENDED
	FLUSH	SW	SWITCH
	FUSED AT		
	FIRE ALARM	TC	TELEPHONE CABINET
)	FURNISHED BY OTHERS	TCP	TEMPERATURE CONTROL PANEL
l	FAN COIL UNIT	TEL/DATA	TELEPHONE/DATA
l	FOUNDATION	TEL	TELEPHONE
1	FAN POWERED BOX	TERM	TERMINAL(S)
		TGB	TELECOMMUNICATIONS GROUNDING
	KNOCK-OUT		BUSBAR
		TMGB	TELECOMMUNICATIONS MAIN
r	LIQUIDTIGHT ELEXIBLE		CDOLINDING BLICEAD

LIQUIDTIGHT FLEXIBLE

LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT

MAIN BONDING JUMPER

MAIN CIRCUIT BREAKER

MANHOLE (ON SITE PLAN)

MOUNTING HEIGHT (ON PLAN),

ALL MOUNTING HEIGHTS FOR

FINISHED FLOOR TO BOTTOM

DEVICE BOXES ARE FROM

OF BOX, UNO. VERIFY OUTLET

TRADES BEFORE ROUGH-IN

LOCATIONS WITH OTHER

MAIN CROSS-CONNECT

/EQUIPMENT ROOM

METALLIC CONDUIT

LIMIT SWITCH

LOW VOLTAGE

# CARMEL STADIUM

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CARMEL CLAY SCHOOLS



WWW.FHAI.COM 350 E NEW YORK ST #300 INDIANAPOLIS, IN 46202

CONSULTANT

GROUNDING BUSBAR

UNDERGROUND

UNIT VENTILATOR

VANDAL GUARD

VERIFY IN FIELD

VAPOR-TIGHT

WIRE GUARD

WALL MOUNTED

WEATHERPROOF

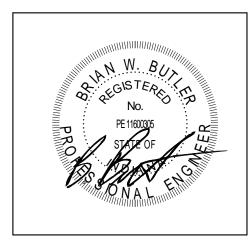
WATER-TIGHT

WATTHOUR

TELEPHONE TERMINATION BOARD

UNLESS NOTED OTHERWISE

CONSTRUCTION DOCUMENTS



DRAWN BY: AMN PROJECT NUMBER: 220136.00 PROJECT ISSUE DATE: 04-26-2023

NO. $\triangle$	DESCRIPTION	DATE
1	ADDENDUM 1	05-25-23
-		

**ELECTRICAL SYMBOL LEGEND &** SCHEDULES