# Addendum #1



To: Construction Documents dated February 6, 2025

Project IN203 Academic Health Center Med Ed Research Bldg. Café

IU 20241022

Date: March 14, 2025

This Addendum, issued prior to bidding, alters, amends, corrects, or clarifies the Proposal Documents to the extent stated herein and does thereby become a part of the Proposal Documents and will become part of the Contract Documents of the successful bidder(s).

# ITEMS INCLUDED IN THIS ADDENDUM

- 1. Changes to the Project Manual
- 2. Changes to the Drawings
- 3. Pre-Bid Meeting Notes
- 4. Pre-Bid Sign-In Sheet
- 5. Food Service Equipment Schedule

# **PROJECT MANUAL**

- A. Specification Section 233600 "AIR TERMINAL UNITS":
  - 1. Add specification section in its entirety.
- B. Specification Section 233713 "DIFFUSERS, REGISTERS, AND GRILLES":
  - 1. Add subparagraph 2.1 A 7 as follows:
    - 7. Metalaire.

# **DRAWINGS**

# **'A' SERIES DRAWINGS**

- A. Sheet A5.10 Interior Elevations
  - 1. Revise Elevation 6 to add two additional shelves.

# KITCHEN EQUIPMENT DRAWINGS

- A. Sheet E1-K1.0 Kitchen Equipment Plan
  - 1. Equipment List: Change quantity of Item 40 to four (4).

# **'E' SERIES DRAWINGS**

- A. Sheet E1.01-A1 ELECTRICAL CAFÉ PLANS:
  - 1. Deleted (10) type 'L-14' light fixtures
  - 2. Added (10) type 'L34' light fixtures.
  - 3. Revised (4) type 'L32' light fixtures.
- B. Sheet E60-03 ELECTRICAL LIGHTING SCHEDULES
  - 1. Revised Luminaire Schedule.

# FOOD SERVICE EQUIPMENT SCHEDULE

A. Schedule is available for download from the job posting and must be submitted in Excel format on bid day.

END OF ADDENDUM 1

SECTION 23 36 00 - AIR TERMINAL UNITS

PART 1 - GENERAL

# 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

# 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Shutoff single-duct air terminal units.
- B. Related sections include Division 23 Section "HVAC Instrumentation and Controls" for control devices and installation associated with air terminals.

# 1.3 SUBMITTALS

- A. Product Data: For each type of product indicated, include rated capacities; furnished specialties and accessories; shipping, installed, and operating weights; and sound-power ratings for each model indicated. Detail equipment assemblies and indicate dimensions, required clearances, method of field assembly, components, and location and size of each field connection. Include a schedule showing unique model designation, room location, model number, size, and accessories furnished.
- B. Shop Drawings: For air terminal units. Include plans, elevations, sections, details, and attachments to other work. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection. Hangers and supports, including methods for duct and building attachment and vibration isolation.
- C. Wiring Diagrams: Detail wiring for power, signal, and control wiring and differentiate between manufacturer-installed and field-installed wiring.
- D. Field quality-control reports.
- E. Operation and Maintenance Data: For air terminal units to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 01.

include instructions for resetting minimum and maximum air volumes and for adjusting software set points.

# 1.4 QUALITY ASSURANCE

- A. Product Options: Drawings indicate size, profiles, and dimensional requirements of air terminal units and are based on the specific system indicated. Refer to Division 23 Section "Basic Mechanical Requirements."
- B. NFPA Compliance: Install air terminal units according to NFPA 90A, "Standard for the Installation of Air Conditioning and Ventilating Systems."
- C. AHRI Certification: Only air terminals that are certified under the AHRI Standard 880 Certification Program and carry the AHRI Seal will be accepted.
- D. ASHRAE Compliance: Meet applicable requirements in ASHRAE 62.1-2007, Section 5 "Systems and Equipment" and Section 7 "Construction and System Start-Up."

# 1.5 COORDINATION

A. Coordinate layout and installation of air terminal units and suspension system with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system, and partition assemblies.

# PART 2 - PRODUCTS

# 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide Air Terminal Units by one of the following:
  - 1. Anemostat; a Mestek Company.
  - 2. Carnes Co., Inc.
  - 3. Krueger.
  - 4. Metalaire.
  - 5. Nailor Industries, Inc.
  - 6. Price Industries; E.H. Price Co.
  - 7. Titus.

# 2.2 AIR TERMINAL UNITS, GENERAL

- A. Configuration: Pressure independent terminal unit as scheduled; including volume-damper assembly inside unit casing with control components located inside a protective metal shroud. Unit sizes, capacities, maximum and minimum airflows, maximum noise ratings, and maximum air pressure drops shall be as scheduled on the Drawings.
- B. Casing: Minimum 22-gage steel or 0.032-inch aluminum.
  - 1. Air Inlets: Beaded round stub connection of length at least 2-inches beyond airflow sensor taps for inlet duct attachment.
  - 2. Air Outlets: Rectangular S-slip and drive connections.
  - Access: Insulated removable panels or insulated access door for access to damper, heating coil, and other parts requiring service, adjustment, or maintenance; with airtight gasket.
- C. Volume Damper: Minimum 22-gage galvanized steel with peripheral edge gasket and self-lubricating bearings. Include a mechanical hard stop to prevent over-stroking. Include permanent markings on damper shaft to indicate damper position by simple visual inspection.
- D. Maximum Damper Leakage: AHRI 880 rated, 2 percent of nominal airflow at 3-inch wg inlet static pressure.
- E. Maximum allowable casing leakage is given below, when tested according to AHRI 880-2017, based on 3-inch wg (750-Pa) differential static pressure (inlet to outlet) and 2500 fpm (12.7 m/s) air velocity at nominal box inlet diameter.
  - 1. 3% for nominal size 4-inch (100 mm).
  - 2. 2% for nominal sizes 5-inch (125 mm) through 9-inch (225 mm).
  - 3. 1% for nominal sizes 10-inch (250 mm) and larger.
- F. Airflow Sensor: Multipoint, multi-axis inlet velocity sensor with center averaging feature, factory installed and connected to the controller with UL-listed fire-retardant pneumatic tubing.

# 2.3 UNIT INSULATION

- A. Flexible Elastomeric Liner: Comply with NFPA 90A.
  - 1. Materials: Fiberglass batt thermal insulation; 1.5-pound density glass fibers bonded with a thermosetting resin and faced on airstream side with fire-resistive, reinforced, foil-scrim-kraft barrier. Comply with ASTM C553, Type II. All cut edges or exposed fibers not encapsulated by the foil scrim surface shall be sealed from the airstream by mechanically bonded metal edge strips or nosings.

- 2. Thickness: 1/2 inch minimum; thicker if required to meet specified or scheduled values for thermal and/or acoustic performance.
- 3. Thermal Conductivity (k-Value): 0.24 at 75°F mean temperature.
- 4. Fire-Hazard Classification: Maximum flame-spread index of 25 and smoke-developed index of 50 when tested according to ASTM C411.
- 5. Liner Adhesive: As recommended by insulation manufacturer and complying with NFPA 90A.

# 2.4 INTEGRAL ACCESSORIES

A. Multi-outlet Discharge Section: With duct collars as indicated on drawings; each with locking butterfly balancing damper.

# 2.5 INTEGRAL HYDRONIC HEATING COILS

- A. Casing: Minimum 20-gauge galvanized steel, factory-installed, with flanged connection for ductwork.
- B. Pressure Rating: Leak test to 300 psi air under water; minimum burst pressure of 2000 psi.
- C. Performance Ratings: As scheduled on Drawings. Coils shall be designed, tested and rated according to AHRI 410.
- D. Tube Construction: Copper, ½-inch O.D. with 0.016-inch minimum wall.
- E. Fin Construction: Aluminum, 0.006-inch minimum thickness, not more than 12 per inch, mechanically-bonded to tubes.
- F. Piping Connections: Male solder header. Coil connections shall be on the side of the unit indicated on the Drawings.

# 2.6 AIR TERMINAL UNIT CONTROLS

- A. DDC Controller, differential pressure sensor and damper motor, shall be furnished by the BAS manufacturer and shipped to the terminal unit manufacturer for factory mounting.
- B. Terminal unit manufacturer shall provide the unit-mounted enclosure to accommodate all control components.
- C. Damper Actuator: 24-Volt, powered closed, powered open, fail in last position unless noted otherwise. Suitable for operation with duct pressures between 0.25- and 3.0-inch wg (60- and 750-Pa) inlet static pressure.

# 2.7 HANGERS AND SUPPORTS

- A. Hanger Rods for Non-corrosive Environments: Cadmium-plated steel rods and nuts.
- B. Steel Cables: Galvanized steel complying with ASTM A603.
- C. Steel Cable End Connections: Cadmium-plated steel assemblies with brackets, swivel, and bolts designed for duct hanger service; with an automatic-locking and clamping device.
- D. Air Terminal Unit Attachments: Sheet metal screws, blind rivets, or self-tapping metal screws; compatible with duct materials.
- E. Trapeze and Riser Supports: Steel shapes and plates for units with steel casings; aluminum for units with aluminum casings.

# 2.8 SOURCE QUALITY CONTROL

- A. Identification: Label each air terminal unit with plan number, nominal airflow, maximum and minimum factory-set airflows, coil type, and AHRI certification seal.
- B. Verification of Performance: Test and rate air terminal units according to AHRI 880 "Industry Standard for Air Terminals."

# PART 3 - EXECUTION

# 3.1 INSTALLATION

- A. Install air terminal units level and plumb, according to manufacturer's written instructions, rough-in drawings, original design, and referenced standards. Maintain sufficient clearance for normal service and maintenance.
- B. Protect all openings of air terminal units with filters or temporary covers throughout project storage, handling, and placement, to keep clean the interiors of air terminal units.
- C. Terminal units shall be continuously insulated with thermal insulation and vapor barrier, in unbroken path from inlet duct through to outlet duct, so that no bare metal surfaces are left uninsulated. Field-insulate any portions of terminal unit if not factory-insulated, including but not limited to heating coil casing and duct inlet collar. Field insulation and vapor barrier are specified in Division 23 Section "Mechanical Insulation."

D. After completing system installation, inspect exposed finish. Remove burrs, dirt, and construction debris, and repair damaged finishes. Vacuum clean the interior of air terminals if the openings were not protected during construction.

# 3.2 HANGER AND SUPPORT INSTALLATION

- A. Comply with SMACNA's "HVAC Duct Construction Standards Metal and Flexible," Chapter 4, "Hangers and Supports."
- B. Building Attachments: Concrete inserts, powder-actuated fasteners, or structural-steel fasteners appropriate for construction materials to which hangers are being attached.
  - 1. Where practical, install concrete inserts before placing concrete.
  - 2. Install powder-actuated concrete fasteners after concrete is placed and completely cured.
  - 3. Use powder-actuated concrete fasteners for standard-weight aggregate concretes and for slabs more than 4 inches thick.
  - 4. Do not use powder-actuated concrete fasteners for lightweight-aggregate concretes and for slabs less than 4 inches thick.
- C. Hangers Exposed to View: Threaded rod and angle or channel supports.
- D. Install upper attachments to structures. Select and size upper attachments with pullout, tension, and shear capacities appropriate for supported loads and building materials where used.

# 3.3 CONNECTIONS

- A. Ductwork: Connect ductwork to air terminals according to Division 23 ductwork Sections and Details on Drawings.
- B. Hot Water Piping: Connect heating coils to supply with shutoff valve, strainer, and union or flange; and to return with shutoff valve, control valve, balancing valve, and union or flange. Install piping adjacent to air terminal units to allow service and maintenance. Piping installation requirements are specified Division 23 Section "Hydronic Piping." Drawings indicate general arrangement of piping, fittings, and specialties.

# 3.4 ELECTRICAL CONNECTIONS

A. Power, signal, and control wiring for cooling-only Air Terminal Units and/or Air Terminal Units with hydronic heating coils is the work of Division 23 Section "HVAC Instrumentation and Controls."

# 3.5 IDENTIFICATION

A. Label each air terminal unit with plan number, area served (room name and number) nominal airflow, and maximum and minimum factory-set airflows. Comply with requirements in Division 23 Section "Basic Mechanical Materials and Methods" for equipment labels and warning signs and labels.

# 3.6 FIELD QUALITY CONTROL

- A. Complete installation and startup checks according to manufacturer's written instructions, and perform the following field tests and inspections:
  - 1. Verify that inlet duct connections are as recommended by air terminal unit manufacturer to achieve proper performance.
  - 2. Verify that controls and control enclosure are accessible.
  - 3. Verify that control connections are complete.
  - 4. Verify that nameplate and identification tag are visible.
  - 5. Verify that controls respond to inputs as specified.
  - 6. After installing air terminal units, and after electrical circuitry (where applicable) has been energized, test for compliance with requirements.
  - 7. Leak Test: After installation, fill water coils and test for leaks. Repair leaks and retest until no leaks exist.
  - 8. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
  - 9. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- B. Remove and replace malfunctioning units and retest as specified above.

# 3.7 CLEANING

- A. After completing system installation, inspect exposed finish. Remove burrs, dirt, and construction debris, and repair damaged finishes.
- B. Vacuum clean the interior of air terminals if the openings were not protected during construction.

IN203 – IU School of Medicine Medical Education and Research Building Café Buildout Indiana University – Indianapolis IU 20241022 Introba Addendum 1 March 13, 2025

# 3.8 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel in proper adjustment, operation, troubleshooting, and maintenance of air terminal units. Refer to Division 01 for requirements.

**END OF SECTION** 

# **Pre-Bid Notes**



**Project** IN203 Medical Education and Research Building

Café Buildout IU 20241011

Indiana University - Indianapolis

Purpose Pre-Bid Meeting

**Date** March 11, 2025 **Time** 2:00 p.m.

**Location** Medical Education and Research Building

# 1. TEAM INTRODUCTIONS

A. Indiana University Capital Planning and Facilities

B. IU School of Medicine

C. Architect: Browning Day

D. Food Service Design: C-T Design and Equipment Co.

E. MEP Engineer: Introba

# 2. SIGN-IN

# 3. PROJECT INFORMATION

A. Project Description

a) Access above ceilings in finished spaces

b) Floor opening for grease interceptor

#### 4. ALTERNATES

A. Mandatory Alternate 1: Food Service Equipment

a) Bidders will receive a link from the IU Planroom to an Excel spreadsheet where the equipment costs must be entered and returned with the bid.

# 5. BIDDING PROCEDURES

- A. Electronic bids are due by 2:00 pm (local time) on March 25, 2025, at <a href="www.iuplanroom.com">www.iuplanroom.com</a>. Instructions are included in the Project Manual.
- B. Single unified bid is required.
- C. Bid Opening is via Zoom only. Link is provided in the Notice to Bidders.
- D. In addition to the Bid Form and State Form 96, submit Bid Security and all required supplemental documentation as noted in Division 00 Procurement and Contracting Requirements, Section 00 43 00 Procurement Form Supplements and Appendix A.

# 6. QUESTIONS PRIOR TO BID

- A. Questions and requests for clarification must be submitted in writing to Browning Day to the attention of David Long <a href="mailto:dlong@browningday.com">dlong@browningday.com</a>
- B. No questions / clarifications will be accepted after 12:00 pm on March 19, 2025.
- C. Questions are only responded to via addendum. No individual answers will be provided.

### 7. INSURANCE AND BONDS

A. Contractor will be required to provide insurance and bonds as required in Division 00 Appendix C – 00 73 16 Insurance Requirements

#### 8. PROJECT SCHEDULE

- A. Project begins upon receipt of the Notice to Proceed
- B. Project is to be substantially complete by June 30, 2025

# 9. PROJECT SITE REQUIREMENTS

- A. Reference Division 00 Procurement and Contracting Requirements.
  - 1) Trailer for the Owner is not required for this project.
- B. There is no parking on the site. IU has paid permit parking available at 1302 N. Indiana Avenue, but no shuttle service to this building. Paid parking is also available on Levels 3 through 6 in the adjacent IU Health Neuroscience Center Garage. Do not park on adjacent drives, walks, or in the Service Yard.
- C. Deliveries and load-in will occur at the north Service Yard. Deliveries will need to be coordinated with other contractors and vendors.
- D. Owner will begin partial occupancy of the project in May 2025.
- E. There is concurrent construction ongoing on Levels 8, 9, and 10.
- F. Art installation will be occurring in the Lobby outside of the Café space.
- G. Furniture and technology installation will be occurring in the building.
- H. One elevator will be designated for moving materials to the Basement. We anticipate this will be the north elevator.
- Path from the Service Yard to the project area will be through finished corridors. Finishes must be protected. The repair of any damage caused by the Contractor on this project will be at the Contractor's expense.

# 10. PROJECT DELIVERABLES

- A. Reference Division 00-Procurement and Contracting Requirements, Section 01 78 00
  - 1) Project Category is dependent on bid amount.

# 11. PROJECT CONSTRUCTION MANAGEMENT SOFTWARE

A. Project will be managed through Indiana University 'e-Builder' software (Trimble Unity Connect)

# 12. QUESTIONS

# 13. SITE VISIT

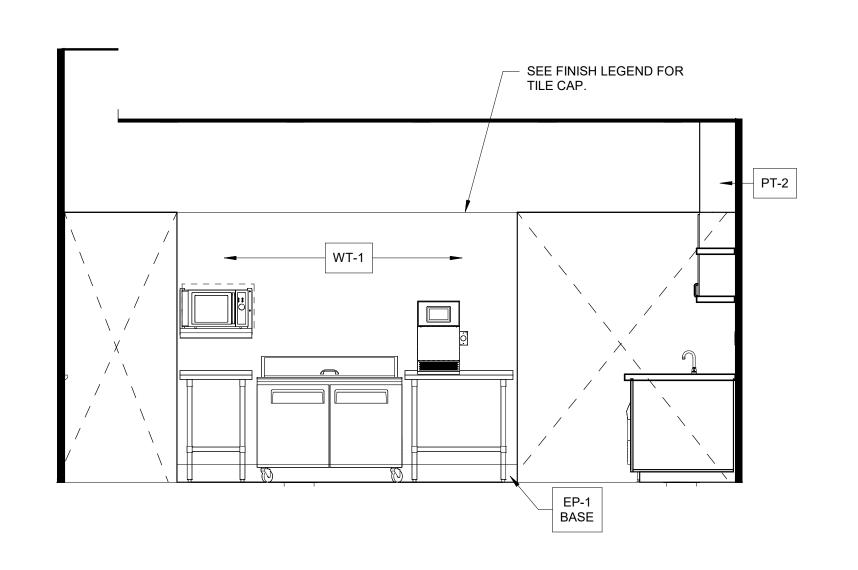
PHONE NUMBER	EMAIL ADDRESS	COMPANY	NAME
317-440-0935	bhayes@rigdonconstruction.com	Rigdon	Bryan Hayes
317-446-2199	spalmer@rigdonconstruction.com	Rigdon	Shane Palmer
317-760-7599	andy@embreyconstruction.net	Embrey Construction	Andy Embrey
317-294-9785	jboner@irishmechanicalservices.com	Irish Mechanical	Jeremey Boner
317-519-4496	davtosch@iu.edu	Indiana University	David Toschlog
	bhatchet@iu.edu	Indiana University	Brett Hatchett
317-635-5030	dlong@browningday.com	Browning Day	Dave Long

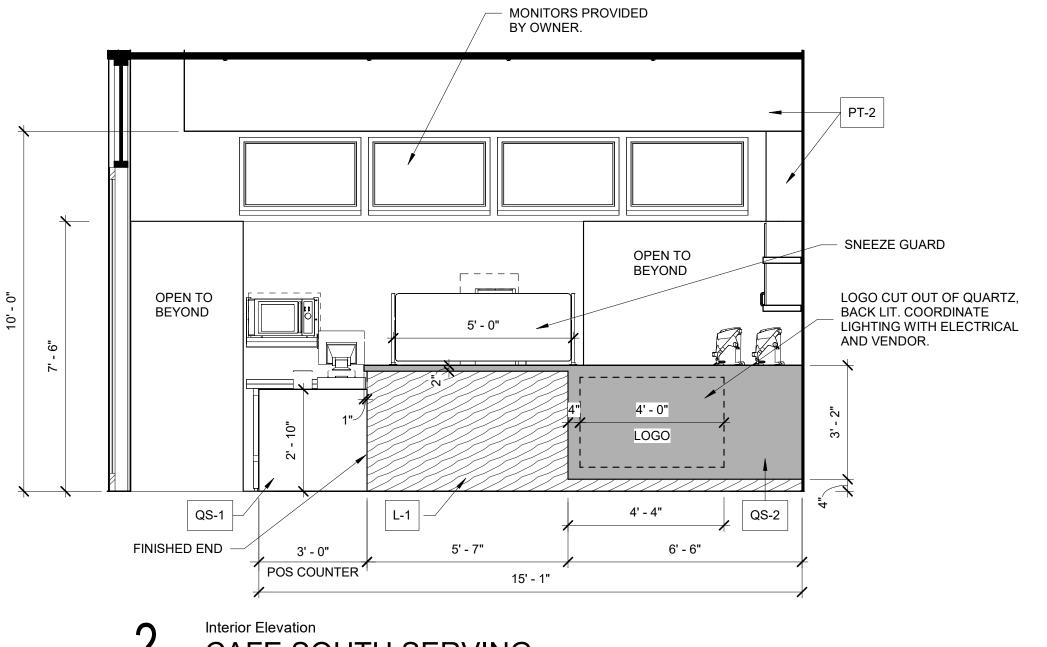
# 20241022 - IN203 Academic Health Center - Med Ed Research Building Café Buildout Food Service Equipment Schedule

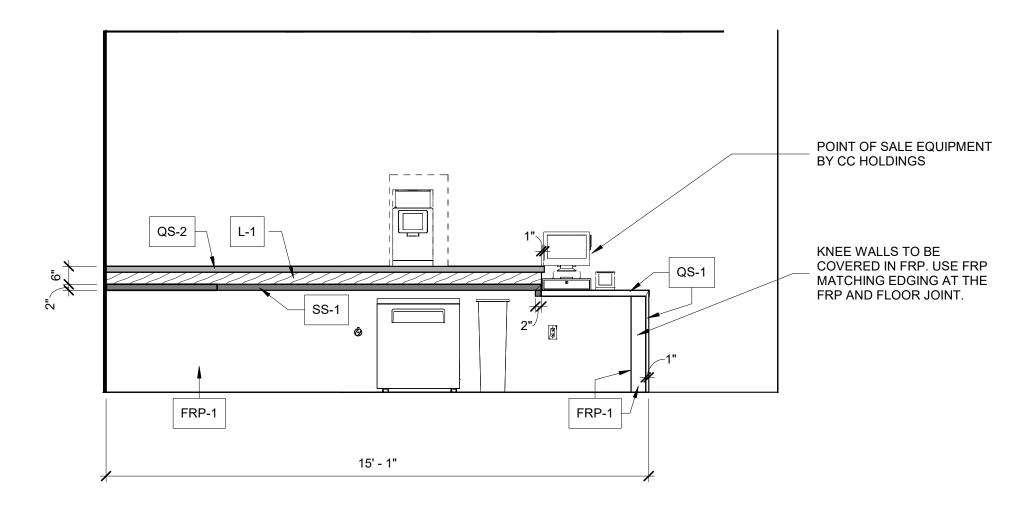
Note: Bid shall include all equipment and accessories required for installation of the equipment, as noted in the specifications

Item	Manufacturer	Model	Description	Qty Unit Price	Extended Price	Room/Location
1	Federal Industries	RSSL478SC	Display case, refrigerated, self-serve	2	\$0.00	Med Ed Café
2	FETCO	D449TLA	Coffee Dispenser	8	\$0.00	Med Ed Café
6	Winco	PTC-23K	Trash Receptable, Indoor	4	\$0.00	Med Ed Café
11	Simon Cabinets	Custom	Glass and aluminum framed pastry display case with shelves and lights.	1	\$0.00	Med Ed Café
17	Turbo Air	MUR-28-N	Undercounter Refrigerator	1	\$0.00	Med Ed Café
18	Schaerer	040381-00090EUS	Espresso Cappuccino Machine and filtration system	1	\$0.00	Med Ed Café
20	Cambro	ICS100L4S110	Ice Bin/Ice Caddy	1	\$0.00	Med Ed Café
22	John Boos	PB-DISINK101410-P-SSLR-X	Drop-in Sink with faucet and mounting kit	1	\$0.00	Med Ed Café
23	Scotsman	CU3030SA-1	Ice Maker with bin, mounting kit, and filtration system	1	\$0.00	Med Ed Café
24	Hatco	CWB-2	Drop-in Refrigerated Well	1	\$0.00	Med Ed Café
25	Vitamix	036019-ABAB	Blender, bar	2	\$0.00	Med Ed Café
26	John Boos	PB-DISINK201608-X	Drop-in Sink with faucet, mounting kit, and Krome rinser	1	\$0.00	Med Ed Café
28	John Boos	ST6R5-3072SSK-X	Stainless steel work table	1	\$0.00	Med Ed Café
29	John Boos	EWS8	Stainless steel shelf	1	\$0.00	
30	Fetco	GR-2.2	Coffee Grinder	2	\$0.00	Med Ed Café
31	Fetco	CBS-2252-NG	Coffee brewer with in-line water filtration system	2	\$0.00	Med Ed Café
33	Turbo Air	M3F47-2-N(-AL)(-AR)	Reach-in freezer	1	\$0.00	Med Ed Café
35	Turbo Air	M3R47-2-N(-AL)(-AR)	Reach-in refrigerator	2	\$0.00	Med Ed Café
38	John Boos	3B16204-2D24-X	Three compartment sink	1	\$0.00	Med Ed Café
40	Olympic	J1436K	Wire shelving	4	\$0.00	Med Ed Café
42	John Boos	ST6R1.5-3036SSK-X	Stainless steel work table	1	\$0.00	Med Ed Café
44	Merrychef USA	conneX 12	Rapid cook oven	1	\$0.00	Med Ed Café
46	Turbo Air	MST-48-N	Sandwich/salad preparation refrigerator	1	\$0.00	Med Ed Café
49	John Boos	ST6R5-3024SSK-X	Stainless steel work table	1	\$0.00	Med Ed Café
50	ACP	RMS10DSA	Microwave Oven and stainless wall shelf	1	\$0.00	Med Ed Café
				Equipment Tota		
				Labor and Installation		
				Grand Total (Tay Evennt	.)	

Grand Total (Tax Exempt)

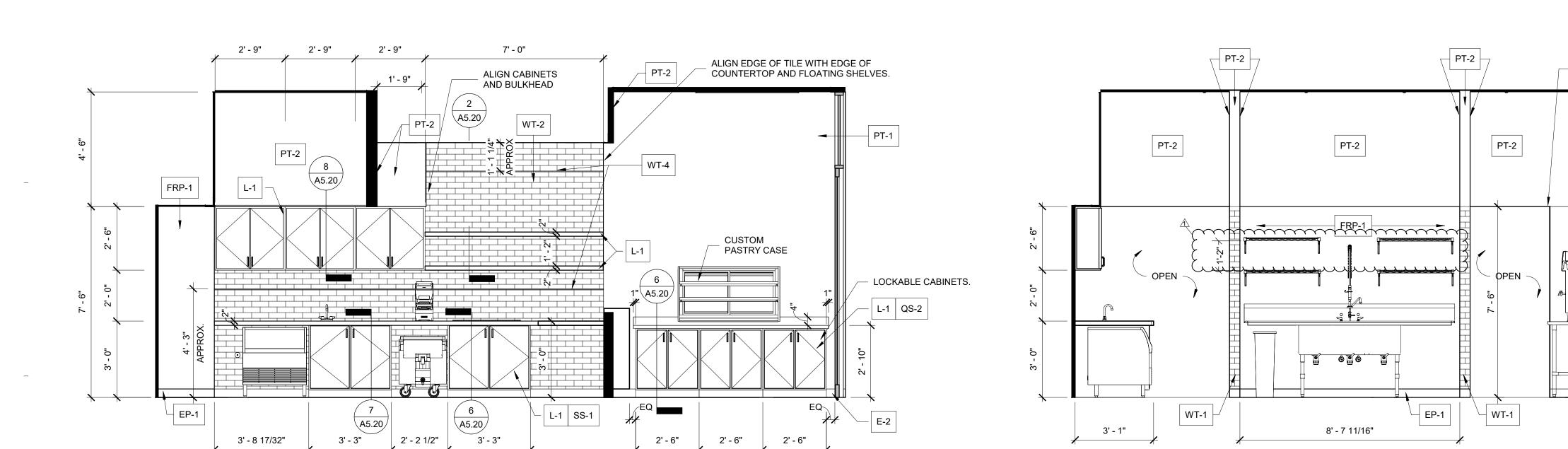






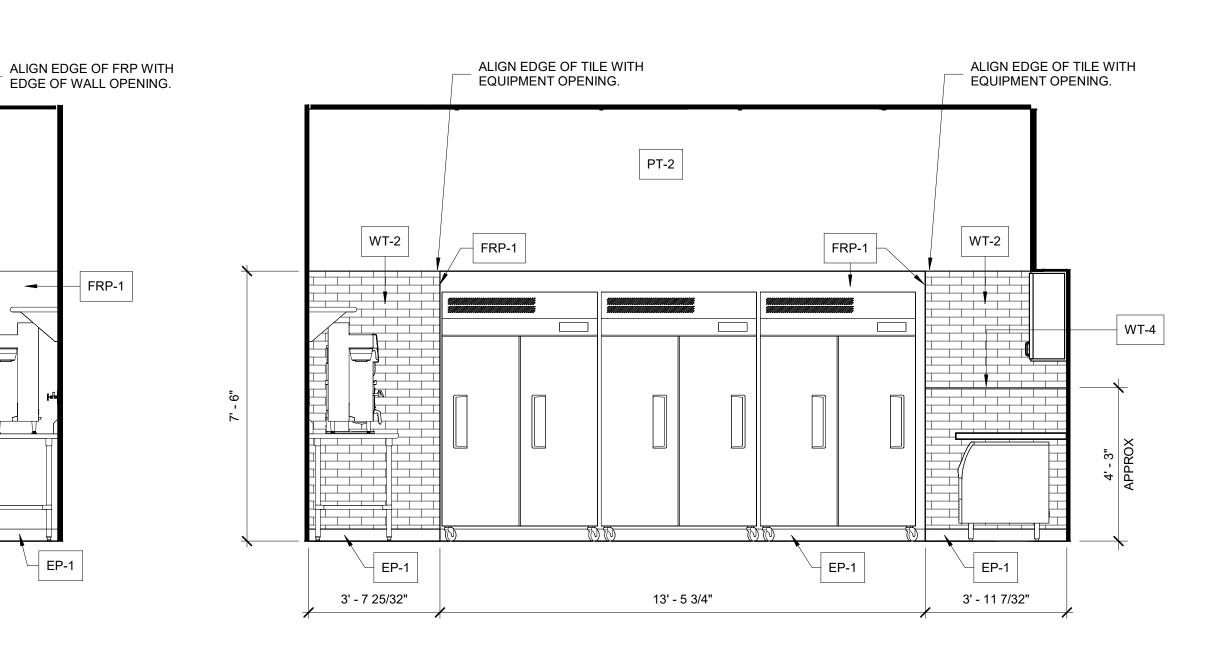
SERVING COUNTER BACKSIDE





2' - 6" 2' - 6"

2' - 6"





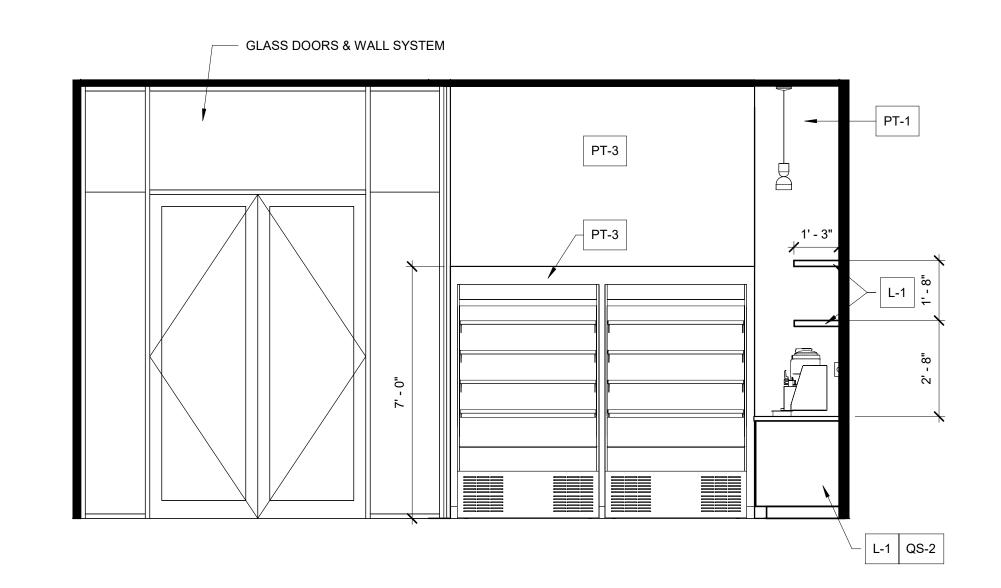
3' - 8 17/32"

Interior Elevation

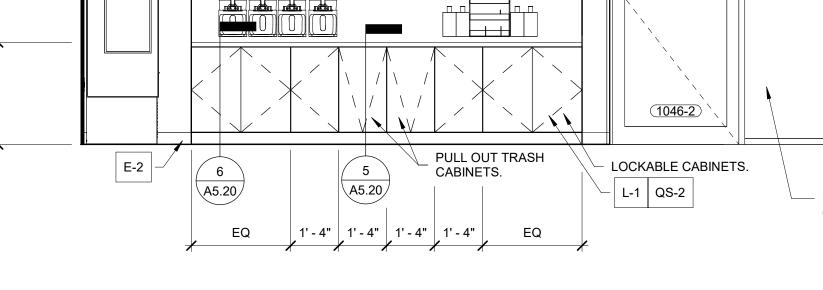
SERVING SOUTH WALL

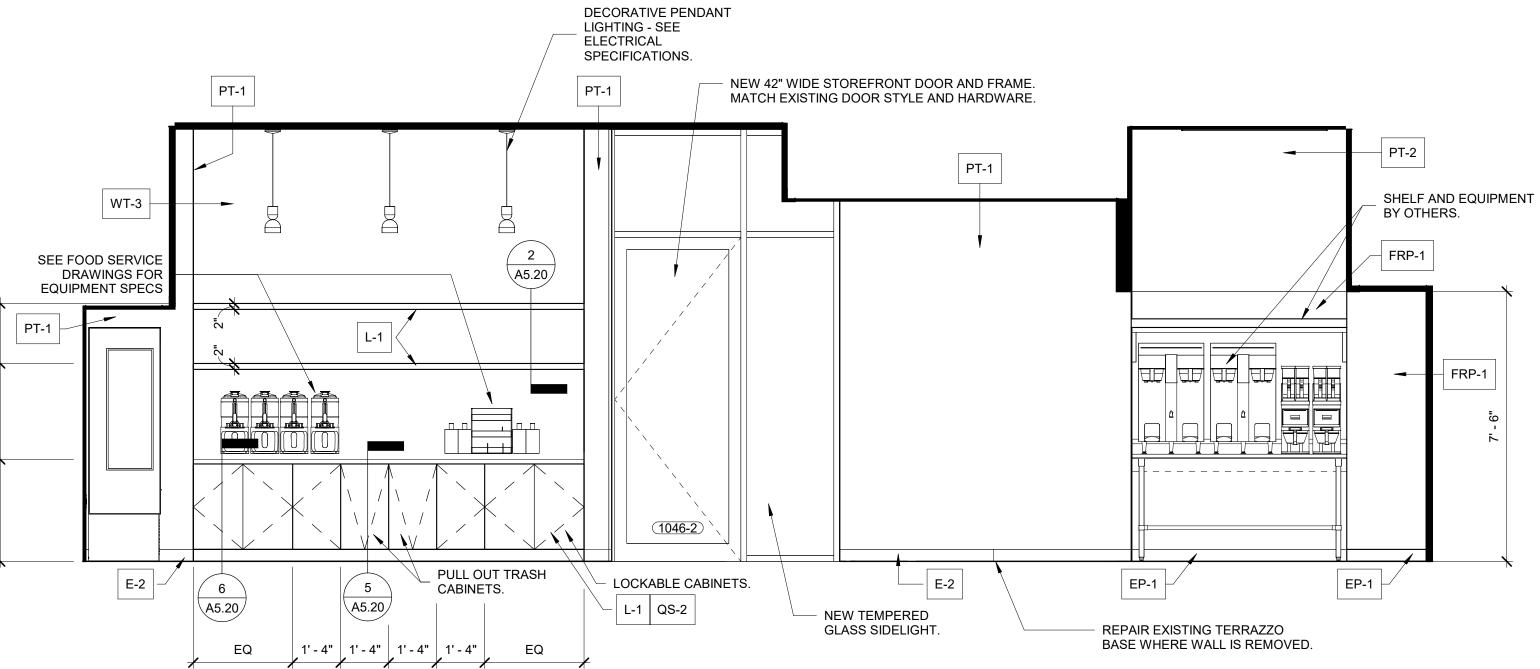


Interior Elevation STORAGE SOUTH A5.10 3/8" = 1'-0"



2' - 2 1/2"





Interior Elevation
CAFE NORTH WALL

Interior Elevation
CAFE EAST WALL

browning day

626 North Illinois Street Indianapolis, Indiana 46204 Phone: (317) 635-5030 Website: www.browningday.com

Indiana University Board of Trustees

2901 East Discovery Parkway Bloomington, IN 47408 Phone: (812) 855-1692 Website: www.indiana.edu

C&T Design & Equipment Co.

Food Service Consultant 2750 Tobey Drive Indianapolis, IN 46219 Phone: (800) 966-3374

Website: www.c-tdesign.com

Introba MEP Engineer

8250 Haverstick Road Suite 285 Indianapolis, IN 46240 Phone: (800) 404-7677 Website: www.introba.com

**Construction Documents** 

IN203 Academic Health Center Med Ed Research Bldg Cafe Build Out IU 20241022

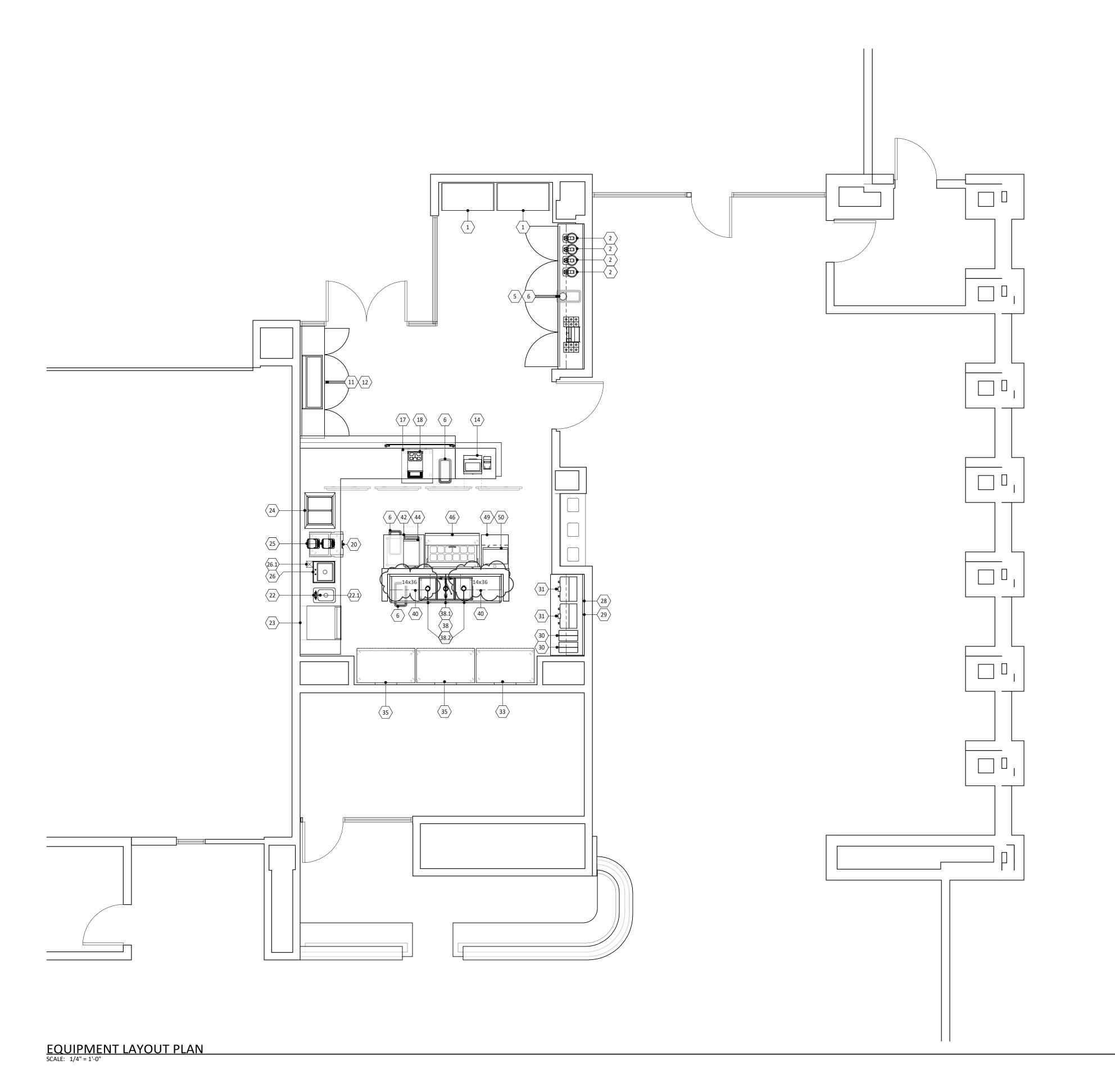
350 West 14th Street Indianapolis, IN 46202

Project No.: 24I031
Drawn By: Author
Checked By: Checker
Scale: See Drawing Issue Date: February 6, 2025

REVISION SCHEDULE Rev. # Revision Description Issue Date ADDENDUM 1

INTERIOR ELEVATIONS

A5.10



		EQUIPMENT LIS	ST
ITEM			
NO.	QTY.	ITEM DESCRIPTION	ITEM REMARKS
1	2	OPEN DISPLAY MERCHANDISER	
2	4	COFFEE DISPENSER	
5	1	TABLETOP WASTE BIN	
6	1 LOT	SLIM JIM TRASH CAN	
11	1	PASTRY DISPLAY CASE	
12	1	ENCLOSED BASE WORK TABLE	BY OTHERS
14	1	POS STATION	BY OTHERS
17	1	UNDERCOUNTER REFRIGERATOR	
18	1	ESPRESSO MACHINE	
20	1	ICE CADDY	
22	1	DROP IN SINK	
22.1	1	FAUCET, DECK MOUNT	
23	1	ICE MAKER WITH BIN	
24	1	DROP IN, COLD WELL	
25	2	BAR BLENDER	
26	1	SINK, DROP-IN, 1 COMP	
26.1	1	BLENDER CONTAINER RINSER	
28	1	WORK TABLE	
29	1	WALL SHELF	
30	2	COFFEE GRINDER	
31	2	COFFEE MAKER	
33	1	REACH-IN FREEZER	
35	2	REACH-IN REFRIGERATOR	
38	1	SINK, 3 COMPARTMENT	
38.1	1	PRE-RINSE UNIT	
38.2	~	WASTE DRAIN VALVE	
40 (	4	WIRE WALL SHELF	
42	\J\-	WORK TABLE	
44	1	RAPID COOK OVEN	
46	1	SANDWICH/SALAD PREP REFRIGERATOR	
49	1	WORK TABLE	
50	1	MICROWAVE OVEN	

# browning day

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Indiana University Board of Trustees

2901 East Discovery Parkway Bloomington, IN 47408 Phone: (812) 855-1692 Website: www.indiana.edu

C&T Design & Equipment Co.

Food Service Consultant

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Website: www.c-tdesign.com

Introba
MEP Engineer
8250 Haverstick Road
Suite 285
Indianapolis, IN 46240
Phone: (800) 404-7677
Website: www.introba.com

CERTIFICATION

**Construction Documents** 

IUH Medical- Fuzion

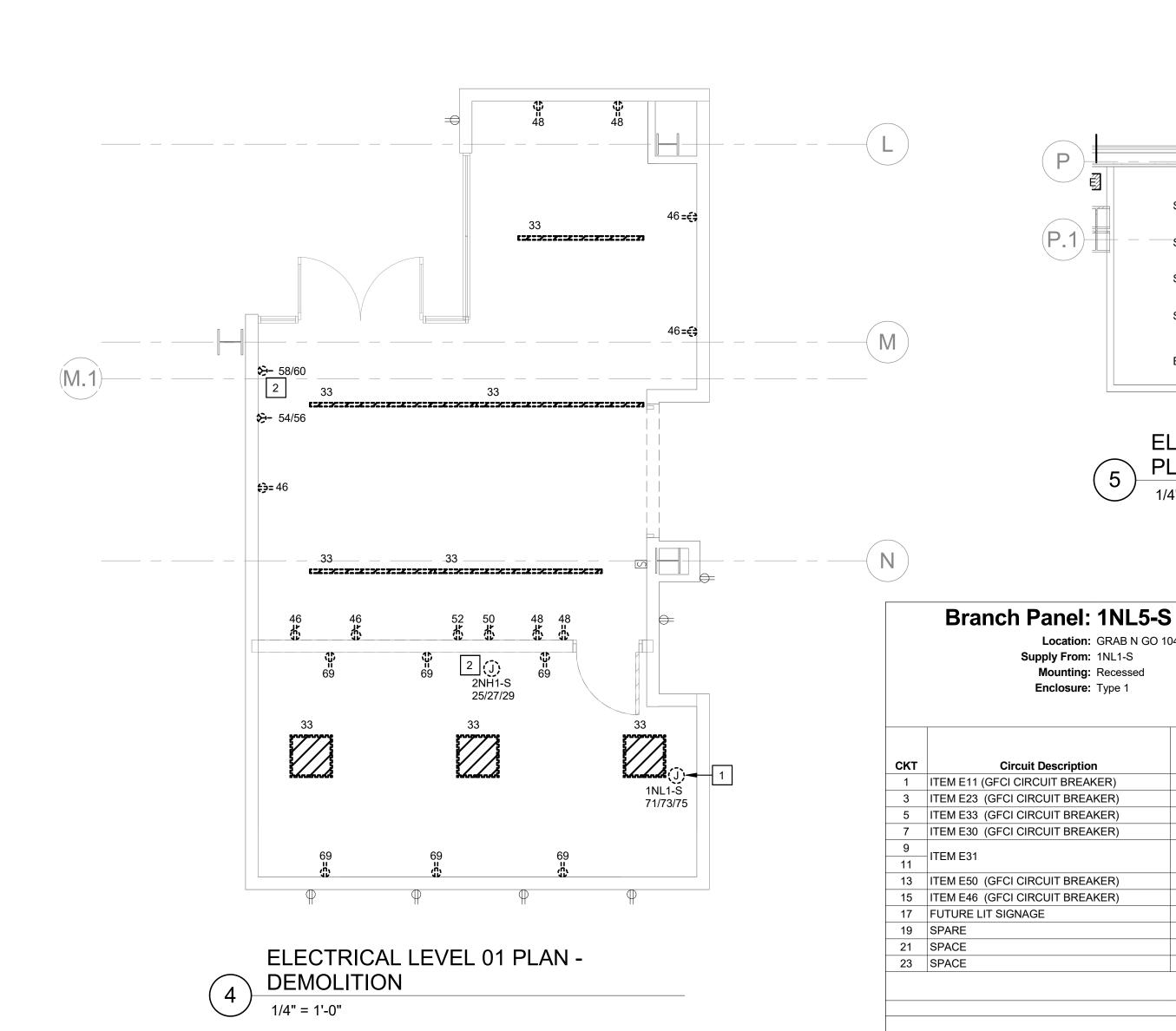
350 West 14th Street Indianapolis, IN 46202

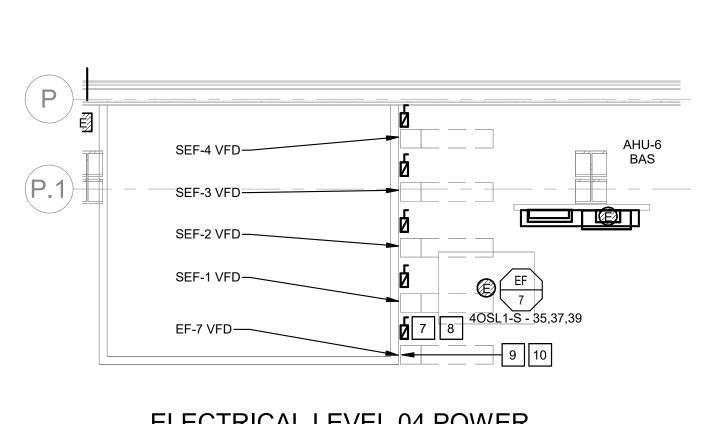
Project No.: 2021-39
Drawn By: Author
Checked By: Checker
Scale: See Drawing
Issue Date: Issue Date

REVISION SCHEDULE

Rev. #Revision DescriptionIssue Date1ADDENDUM 103/14/25

KITCHEN EQUIPMENT PLAN
E1-K1.0





Volts: 120/208 Wye

1536... 336 VA

528 VA 1850...

101 A

**Total Load:** 7870 VA 11850 VA 9612 VA

756 VA 336 VA

3800... 3800...

82 A

b □ ---13

L32-4 a (LC03)

GRAB N GO

L34 b [13]

14 L32-4

ELECTRICAL LEVEL 04 POWER

20 A 1 1 180 VA 1800...

20 A 1 1 1500... 1850...

20 A 1 0 VA 1800..

Total Amps: 66 A

20 A 1 370 VA 370 VA

20 A 1

20 A 1

20 A 1

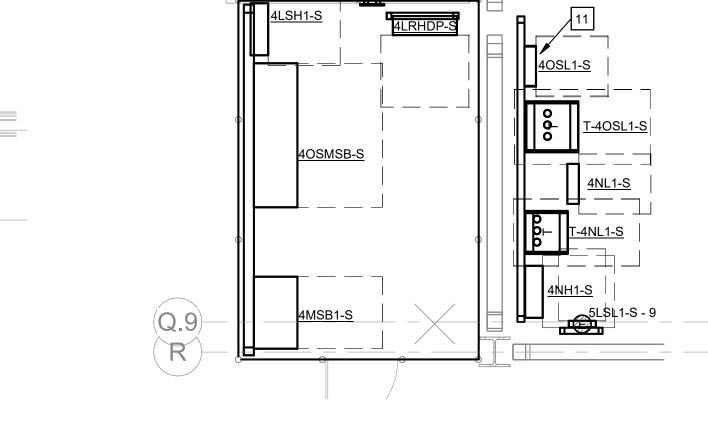
Location: GRAB N GO 1046

Supply From: 1NL1-S

Enclosure: Type 1

Circuit Description

Mounting: Recessed



LEVEL 04 ELECTRICAL **EQUIPMENT** 

CKT

A.I.C. Rating:

Mains Type:

Mains Rating: 100 A

MCB Rating: 100 A

1 20 A ITEM E25 (GFCI CIRCUIT BREAKER)

1 20 A ITEM E35 (GFCI CIRCUIT BREAKER)

1 20 A ITEM E25 (GFCI CIRCUIT BREAKER)

50 A | ITEM E31

200 VA 720 VA 1 20 A MENU SCREENS

-- - 1 -- SPACE

1 -- SPACE

20 A ITEM E35 (GFCI CIRCUIT BREAKER)

20 A ITEM E30 (GFCI CIRCUIT BREAKER)

Circuit Description

Panel Totals

Total Conn. Load: 29332 VA

Total Conn.: 81 A

Total Est. Demand: 27366 VA

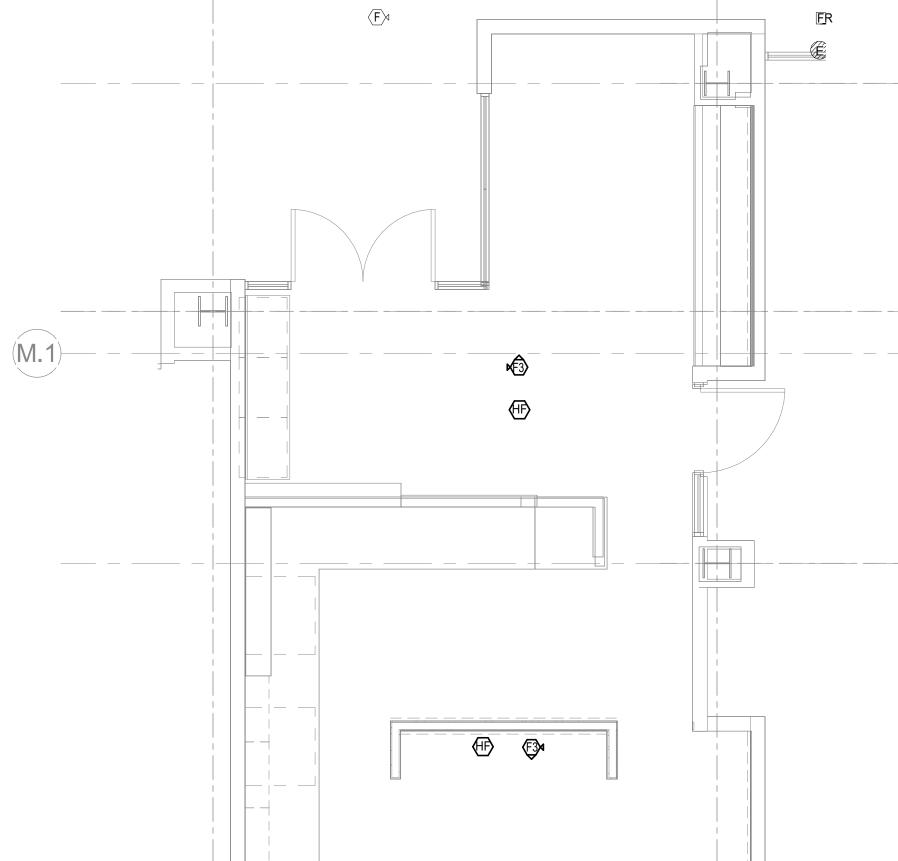
Total Est. Demand: 76 A

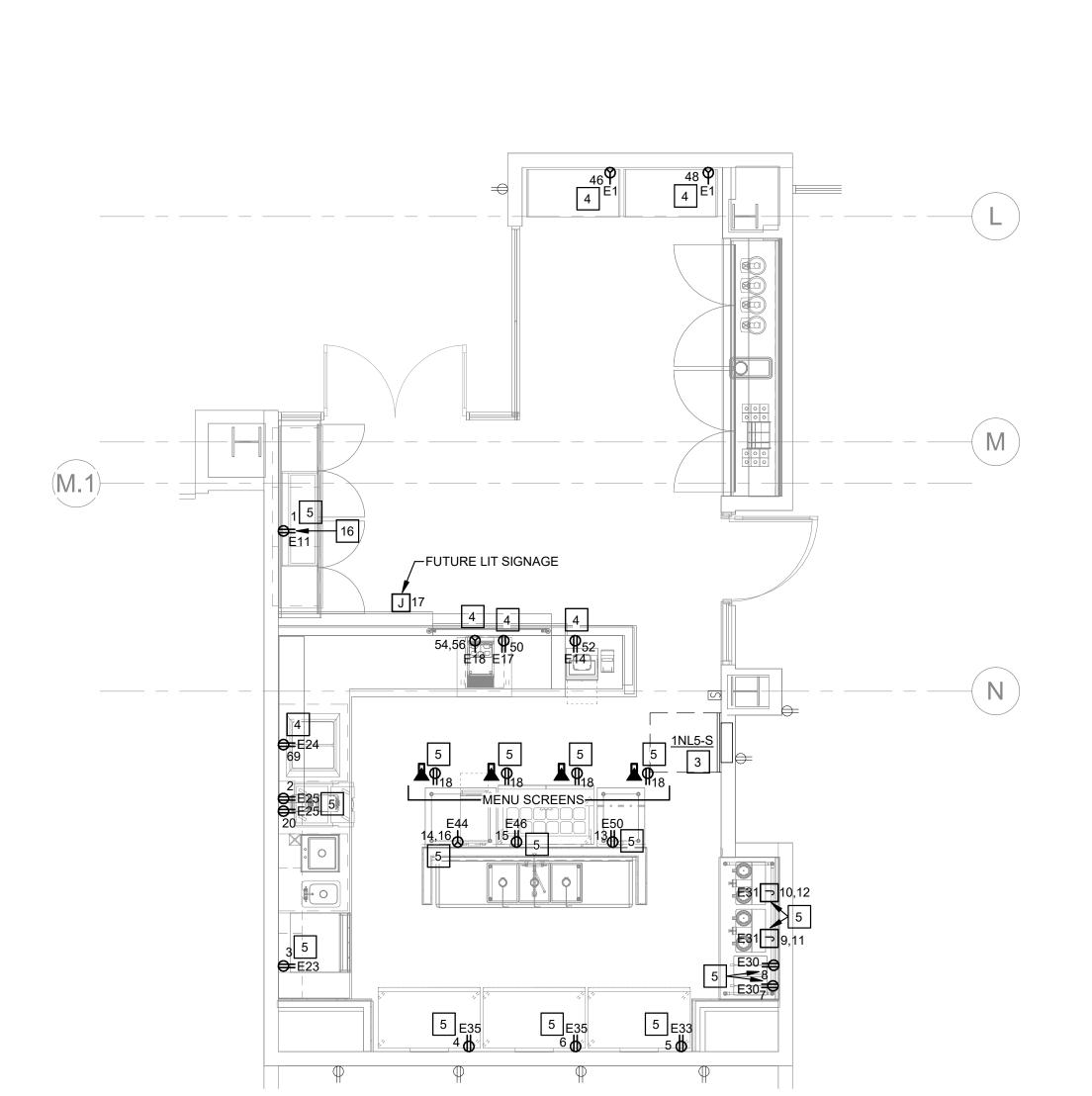
# GENERAL SHEET NOTES

- UNLESS OTHERWISE NOTED. ALL ELECTRICAL DEVICE CIRCUIT NUMBERS SHOWN ARE ASSOCIATED WITH PANEL 1NL1-S.
- ALL DEVICES SHOWN DARK DASHED ARE TO BE DISCONNECTED AND REMOVED. SALVAGE EXISTING CIRCUITING FOR EXTENSION/RECONNECTION TO NEW ELECTRICAL DEVICES. REFER TO NEW WORK PLANS FOR MORE INFORMATION.
- REFER TO FOOD SERVICE CONSULTANT PLANS TO COORDINATE ELECTRICAL CONNECTION REQUIREMENTS, DEVICE LOCATIONS AND MOUNTING HEIGHTS.

# SHEET KEYNOTE:

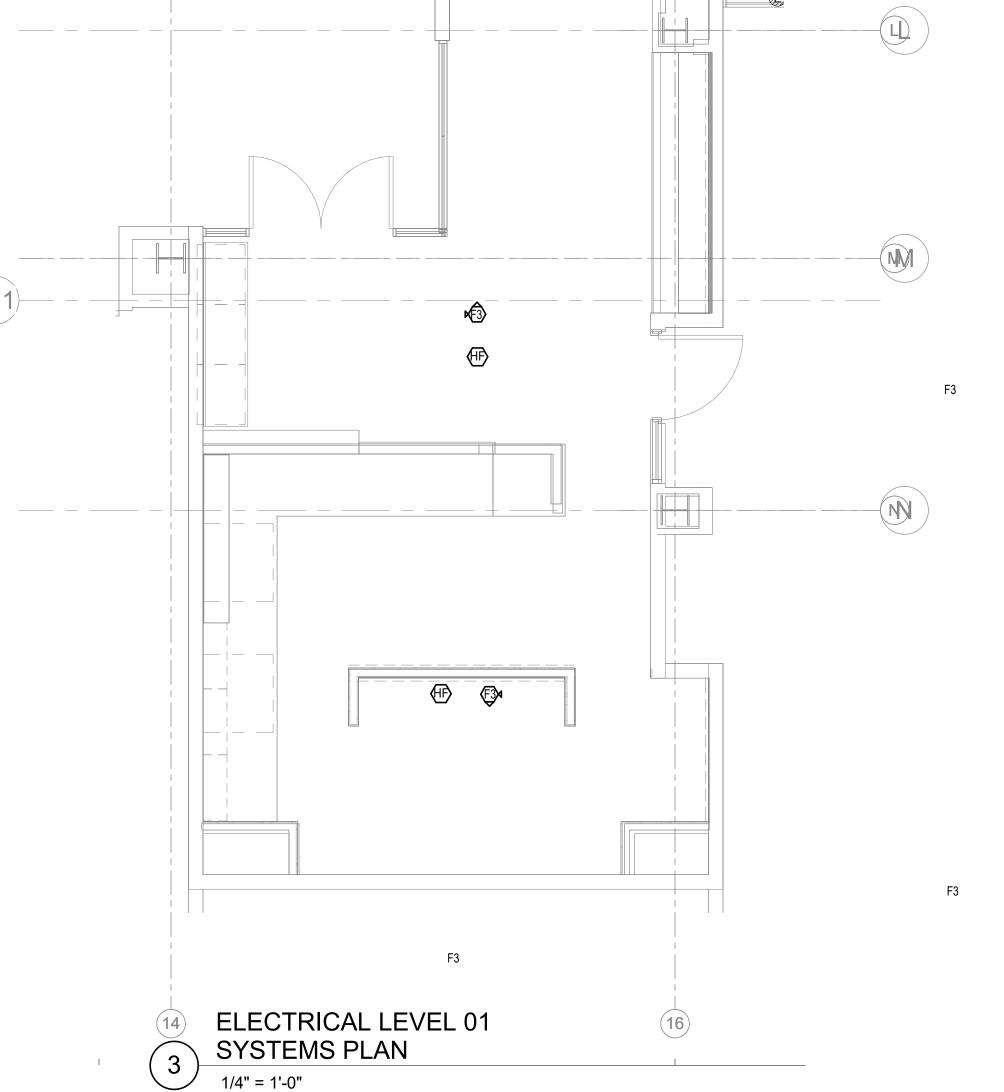
- PREPARE EXISTING CIRCUITING FOR EXTENSION TO NEW PANEL LOCATION. REFER TO NEW WORK POWER PLAN FOR MORE INFORMATION.
- REMOVE EXISTING DEVICE/CONNECTION. DISCONNECT EXISTING CIRCUITING. REMOVE IN-WALL CONDUCTORS AND MAKE SAFE WITHIN JUNCTION BOX ABOVE ACCESSIBLE CEILING. MARK EXISTING CIRCUIT BREAKER AS "SPARE" AND IDENTIFY LOCATION OF ABOVE CEILING JUNCTION BOX WHERE CONDUCTORS HAVE BEEN MADE SAFE FOR FUTURE USE. IDENTIFY ACCESSIBLE JUNCTION BOX COVERPLATE WITH SERVING PANELBOARD AND CIRCUIT NUMBER.
- . NEW 100A, 208/120V, 3-PHASE, 24 POLE CIRCUIT BREAKER PANEL WITH 100A MAIN CIRCUIT BREAKER. EXTEND EXISTING CIRCUITING SALVAGED DURING DEMOLITION TO THIS LOCATION. SERVING CIRCUIT IS 1NL1-S-71/73/75.
- 4. CONNECT NEW ELECTRICAL DEVICE TO EXISTING CIRCUITING MADE AVAILABLE BY DEMOLITION FROM PANEL 1NL1-S. PANEL 1NLS-1 LOCATED IN ROOM 1086 ON LEVEL ONE SOUTH.
- 5. CIRCUIT TO NEW PANEL 1NL5-S.
- 6. CONNECT NEW LIGHTING IN THIS AREA TO EXISTING CIRCUITING SALVAGED DURING DEMOLITION. CONNECT TO EXISTING CONTROLS.
- 7. DISCONNECT AND SALVAGE EXISTING DISCONNECT SWITCH SERVING VFD EF-7. REMOVE EXISTING WIRING FROM DISCONNECT SWITCH TO SUPPLYING PANEL 40SL1-S AND DISCONNECT SWITCH TO EXISTING VFD EF-7 LOCATION. SALVAGE AND PREPARE EXISTING 3/4" CONDUIT FOR RECONNECTION AND INSTALLATION OF NEW DISCONNECT SWITCH AND WIRING. RETURN SALVAGED DEMOLISHED DISCONNECT SWITCH TO
- PROVIDE NEW 208 VOLT, 3-PHASE, 60A FUSED DISCONNECT SWITCH, FUSED WITH (3)35A FUSES TO SERVE NEW VFD EF-7. PROVIDE NEW (4)#8, #10G. IN EXISTING SALVAGED 3/4"C. FROM NEW DISCONNECT SWITCH TO SERVING PANEL 40SL1-S AND FROM DISCONNECT SWITCH TO NEW VFD EF-7. PROVIDE ALL MOUNTING HARDWARE AND DEVICES AS REQUIRED.
- DISCONNECT AND SALVAGE EXISTING VFD EF-7. REMOVE EXISTING WIRING FROM VFD TO DISCONNECT SWITCH. SALVAGE AND PREPARE EXISTING 3/4" CONDUIT FOR RECONNECTION AND INSTALLATION OF NEW VFD AND WIRING. COORDINATE WORK WITH MECHANICAL CONTRACTOR. RETURN EXISTING SALVAGED VFD TO OWNER.
- 10. PROVIDE NEW 208 VOLT, 3-PHASE, 7.5 HP RATED VFD TO SERVE NEW EF-7. PROVIDE: NEW (4)#8, #10G. IN EXISTING SALVAGED 3/4"C. TO NEW EF-7. PROVIDE ALL MOUNTING HARDWARE AND DEVICES AS NEEDED. COORDINATE WORK WITH MECHANICAL CONTRACTOR.
- 11. DISCONNECT AND REMOVE EXISTING 30A, 3-POLE CIRCUIT BREAKER SERVING DEMOLISHED EXHAUST FAN EF-7. INSTALL NEW 50A, 3-POLE CIRCUIT BREAKER AT SAME POSITION IN PANEL. MATCH EXISTING.
- 12. L2.4: PROVIDE STARTEK, RSLIM-4-500-SD-35K-90-PW-(1)-U-DT1 LIGHT FIXTURE. PROVIDE ALL MOUNTING HARDWARE AND DEVICES. CONNECT TO EXISTING LIGHTING CIRCUITING MADE AVAILABLE BY
- 3. L34: PROVIDE FAIL-SAFE FLSSQ4C-SM-20-D2W-ID010-FEU4C-120-90-35-F4LC-CSSQ-SM-2-H LIGHT FIXTURE (C APPROVED EQUAL). PROVIDE ALL MOUNTING 1 HARDWARE AND DEVICES. CONNECT TO EXISTING LIGHTING CIRCUITING MADE AVAILABLE BY
- 14. **₹** L32-4" PROVIDE FAIL-SAFE 4FSN6-100D0CP125-UNV-L835-90-A3/8-4/18GDIM-FPEQ LIGHT FIXTURE (OR APPROVED EQUAL). PROVIDE ALL MOUNTING
  HARDWARE AND DEVICES. CONNECT TO EXISTING LIGHTING CIRCUITING MADE AVAILABLE BY
- 15. FOR LIGHTING SEQUENCING. MATCH SEQUENCE ID LC03. MANUAL ON (VIA DIMMER SWITCHES, AUTOMATIC OFF (VIA CEILING MOUNTED OCCUPANCY SENSORS) TO MATCH EXISTING BUILDINGS LIGHTING CONTROL SEQUENCE SCHEDULE.
- 16. OUTLET TO BE MOUNTED 30" A.F.F. INSIDE CABINET.





**ELECTRICAL LEVEL 01 POWER** \ PLAN 1/4" = 1'-0"

**ELECTRICAL LEVEL 01** LIGHTING PLAN 1/4" = 1'-0"



browning day

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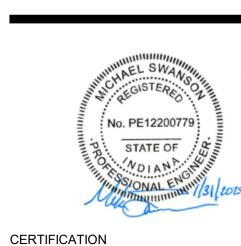
2901 East Discovery Parkway Bloomington, IN 47408 Phone: (812) 855-1692 Website: www.indiana.edu

C&T Design & Equipment Co. Food Service Consultant

2750 Tobey Drive Indianapolis, IN 46219 Phone: (800) 966-3374 Website: www.c-tdesign.com

Introba MEP Engineer

8250 Haverstick Road Indianapolis, IN 46240 Phone: (800) 404-7677 Website: www.introba.com



**Construction Documents** 

IN203 Academic Health Center Med Ed Research Bldg Cafe Build Out IU 20241022

350 West 14th Street Indianapolis, IN 46202

Drawn By: TM Checked By: MS Issue Date: February 6, 2025 ADDENDUM #1

ELECTRICAL CAFE PLANS

E1.01-A1

# LUMINAIRE SCHEDULE

# LUMINAIRE SCHEDULE GENERAL NOTES: ALL LUMINAIRES SHOWN ON THIS SCHEDULE MAY NOT BE USED ON THE VARIOUS PLANS. ALSO, THE USE OF ONLY CERTAIN NUMERICAL SUBSCRIPTS FOR LUMINAIRE TYPES (e.g. H2, H3, A2, A3, etc.) ON THIS PROJECT DOES NOT NECESSARILY MEAN THAT ON H1 OR A1 IS USED OR MISSING.

CONTRACTOR IS RESPONSIBLE FOR ALL MISCELLANEOUS HARDWARE, CLIPS, ANGLES, FRAMES, ETC. AS REQUIRED TO MOUNT THE LUMINAIRES IN OR ON THE SURFACES THEY ARE TO BE INSTALLED. REFER TO ARCHITECTURAL DOCUMENTS FOR EXACT MOUNTING LOCATIONS OF LUMINAIRES AND CEILING TYPES.

WHEN INSTALLING LUMINAIRES, THE CONTRACTOR SHALL USE THE LUMINAIRE MANUFACTURER'S MOUNTING HARDWARE AND FOLLOW ALL MANUFACTURER'S INSTALLATION DIRECTIONS.

ALL LUMINAIRES SHALL HAVE A U.L. LABEL.

ALL RECESSED DOWNLIGHTS SHALL HAVE SELF-FLANGED REFLECTORS U.O.N. AND SHALL BE INSTALLED SO THAT THE BOTTOM OF THE THROAT IS EVEN WITH THE FINISHED CEILING PLANE TO ACCOMPLISH THE ABOVE SHALL BE INCLUDED IN THE BASE BID. IN ALL MECHANICAL ELECTRICAL EQUIPMENT AREAS, CONTRACTOR TO COORDINATE LUMINAIRE LOCATIONS SUCH THAT LIGHT LUMINAIRES RUN PARALLEL TO THE FACE OF THE EQUIPMENT. INSTALL AT EXACT HEIGHT TO ILLUMINATE ALL GAGES, PANELS, CONTROLS, VALVES, ETC. CHAIN HANGING, STEM HANGING, UNISTRUT HANGING, ETC. ARE ACCEPTABLE METHODS. ALL LUMINAIRES SHALL OPERATE AT 120 OR 277 VOLTS OR OTHER VOLTAGE AS REQUIRED BY THE CIRCUITS AND/OR PANELS TO WHICH THEY ARE CONNECTED.

WHEN LUMINAIRES ARE INSTALLED IN CONTINUOUS ROWS TWO (2) OR MORE, LUMINAIRES SHALL BE APPROVED FOR USE AS WIREWAY.

REFER TO SPECIFICATION SECTION 265100 LIGHTING FOR ADDITIONAL INFORMATION CONCERNING LUMINAIRES, FINISHES, DRIVERS, LAMPS, ETC. COMPLETE CATALOG NUMBER MAY NOT BE LISTED. ORDER LUMINAIRE BASED ON DESCRIPTION, PARTIAL CATALOG NUMBER AND SPECIFICATIONS. THE FIRST MANUFACTURER LISTED IS THE BASIS-OF-DESIGN.

WHEN VARYING FROM BASIS-OF-DESIGN LUMINAIRE, PROVIDE A LUMINAIRE UTILIZING ±10% OF THE LED LUMENS INDICATED IN LUMINAIRE SCHEDULE. 13. VERIFY COMPATIBILITY OF ALL DIMMING DRIVER WITH SPECIFIED DIMMING CONTROLS PRIOR TO ORDERING AND PROVIDE APPROPRIATE COMPONENTS TO CREATE A COMPLETE AND FULLY FUNCTIONAL INSTALLATION.

14. PROVIDE AND INSTALL ALL FIXTURES AND LEDS SHALL HAVE A MINIMUM COLOR RENDERING INDEX (CRI) OF 90 AND SHALL HAVE COLOR TEMPERATURE OF 3500K, U.O.N.

# **GENERAL NOTES:**

REFER TO LIGHTING PLANS FOR NUMBER OF EXIT SIGN FACES AND DIRECTIONS.

EMERGENCY LIGHT FIXTURE POWERED VIA EMERGENCY CONNECTION DURING REGULAR POWER FAILURE. CONNECT TO AN UL924 EMERGENCY TRANSFER DEVICE (ETD).

REFER TO SPECIFICATION SECTION 265100 FOR SPARE PARTS/ATTIC STOCK REQUIREMENT. COORDINATE FINAL FINISHES WITH ARCHITECT/INTERIOR DESINGER PRIOR TO PROVIDING SUBMITTALS AND ORDERING.

PERIMETER LIGHTS SHALL BE INSTALLED FROM WALL TO WALL. USE END SLEEVE IF MANUFACTURER IS LIMITED WITH MINIMUM ILLUMINATED PART. REFER TO COORDINATED CEILING PLANS FOR FINAL LENGTH. LINEAR FIXTURE SHOWN INSTALLED AROUND CORNER SHALL BE PROVIDED WITH INNER LID SECTION, FOR A CONTINOUS RUN.

# SCHEDULE NOTES:

REFER TO FINAL ARCHITECTURAL CEILING PLANS TO PROVIDE APPROPRIATE MOUNTING HARDWARE.

REFER TO LIGHTING PLANS, ENLARGED PLANS AND SECTIONS TO VERIFY FINAL LIGHT FIXTURE LENGTH. COORDINATE WITH ARCHITECT AND ENGINEER PRIOR TO ORDERING. LIGHT FIXTURE SHALL BE CONTROLLED BY INTEGRAL OCCUPANCY.

PROVIDE A FULLY FUNCTIONAL SYSTEM INCLUDING, BUT NOT LIMITED, DRIVER, MOUNTING, EXTRUSION, LENS, LEAD-WIRING ETC.

OWNER SELECTED AREA LIGHT.

PROVIDE BLACK FINISH IN METAL CEILINGS AND WHITE FINISH IN GYPSUM CEILINGS.

7. REMOTE DRIVER SHALL CONTROL MAX. (3) LIGHTS. EACH LIGHT SHALL BE CONNECTED TO THE DRIVER DIRECTLY. MAXIMUM CORD LENGTH SHALL NOT EXCEED THE 50FT.

AC POWERED HIGH EFFICIENCY EDGE LIT LED EXIT SIGN, HIGH-IMPACT ACRYLIC PANEL, GREEN LETTERS WITH MIRRORED BACKGROUND, RECESSED MOUNTING IN WALLS AND CEILINGS WHERE APPLICABLE.

AC POWERED LED EXIT SIGN, DIE-CAST ALUMINUM HOUSING WITH HIGH-IMPACT POLYCARBONATE PANEL, GREEN LETTERS, WET LOCATION LISTED.

Type Mark	DESCRIPTION	MANUFACTURER	SPECIFICATION NUMBER	OTHER ACCEPTED MANUFACTURER	LUMENS	WATTAGE	VOLTAGE	REMARKS
L1.5		STARTEK	RSLIM-6-350-SD-35K-90-PW-(1)-U-DT1	MARK LIGHTING, LITECONTROL	2100	21 W	UNV	NOTE 1.
L1.8		STARTEK	RSLIM-8-350-SD-35K-90-PW-(1)-U-DT1	MARK LIGHTING, LITECONTROL	2800	27 W	UNV	NOTE 1.
L1.12 L2.2		STARTEK STARTEK	RSLIM-12-350-SD-35K-90-PW-(1)-U-DT1 RSLIM-2-500-SD-35K-90-PW-(1)-U-DT1	MARK LIGHTING, LITECONTROL  MARK LIGHTING, LITECONTROL	4200 1000	40 W 9 W	UNV	NOTE 1. NOTE 1.
L2.4	AS BEFORE BUT 4FT LONG.	STARTEK	<varies></varies>	MARK LIGHTING, LITECONTROL	2000	19 W	UNV	NOTE 1.
L2.4E		STARTEK STARTEK	RSLIM-4-500-SD-35K-90-PW-(1)-U-DT1-GTD RSLIM-6-500-SD-35K-90-PW-(1)-U-DT1	MARK LIGHTING, LITECONTROL  MARK LIGHTING, LITECONTROL	2000 3000	19 W 29 W	UNV	NOTE 1. NOTE 1.
L2.6E		STARTEK	RSLIM-6-500-SD-35K-90-PW-(1)-U-DT1-GTD	MARK LIGHTING, LITECONTROL	3000	29 W	UNV	NOTE 1.
L2.8	AS BEFORE BUT 8FT LONG.	STARTEK	RSLIM-8-500-SD-35K-90-PW-(1)-U-DT1	MARK LIGHTING, LITECONTROL	4000	38 W	UNV	NOTE 1.
L2.8E		STARTEK STARTEK	RSLIM-8-500-SD-35K-90-PW-(1)-U-DT1-GTD <a href="mailto:varies"></a>	MARK LIGHTING, LITECONTROL MARK LIGHTING, LITECONTROL	4000 5000	38 W 48 W	UNV	NOTE 1. NOTE 1.
L2.10 EM		STARTEK	RSLIM-10-500-SD-35K-90-PW-(1)-U-DT1	MARK LIGHTING, LITECONTROL	5000	48 W	UNV	NOTE 1.
L2.12		STARTEK	RSLIM-12-500-SD-35K-90-PW-(1)-U-DT1	MARK LIGHTING, LITECONTROL	6000	58 W	UNV	NOTE 1.
L2.12E		STARTEK STARTEK	RSLIM-12-500-SD-35K-90-PW-(1)-U-DT1-GTD RSLIM-4-750-SD-35K-90-PW-(1)-U-DT1	MARK LIGHTING, LITECONTROL  MARK LIGHTING, LITECONTROL	6000 3000	58 W 29 W	UNV	NOTE 1.
L3.4E		STARTEK	RSLIM-4-750-SD-35K-90-PW-(1)-U-DT1-GTD	MARK LIGHTING, LITECONTROL	6000	29 W	UNV	NOTE 1.
L3.6		STARTEK	RSLIM-6-750-SD-35K-90-PW-(1)-U-DT1	MARK LIGHTING, LITECONTROL	4500	44 W	UNV	NOTE 1.
L3.6E		STARTEK STARTEK	RSLIM-6-750-SD-35K-90-PW-(1)-U-DT1 RSLIM-8-750-SD-35K-90-PW-(1)-U-DT1	MARK LIGHTING, LITECONTROL  MARK LIGHTING, LITECONTROL	4500 6000	44 W 58 W	UNV	NOTE 1.
L3.8E		STARTEK	RSLIM-8-750-SD-35K-90-PW-(1)-U-DT1-GTD	MARK LIGHTING, LITECONTROL	6000	58 W	UNV	NOTE 1.
L3.10		STARTEK	RSLIM-10-750-SD-35K-90-PW-(1)-U-DT1	MARK LIGHTING, LITECONTROL	7500	73 W	UNV	NOTE 1.
L3.12		STARTEK STARTEK	RSLIM-12-750-SD-35K-90-PW-(1)-U-DT1 RSLIM-12-750-SD-35K-90-PW-(1)-U-DT1	MARK LIGHTING, LITECONTROL  MARK LIGHTING, LITECONTROL	9000	88 W 88 W	UNV	NOTE 1.
L3.12E		STARTEK	RSLIM-6-1000-SD-35K-90-PW-(1)-U-DT1	MARK LIGHTING, LITECONTROL	6000	59 W	UNV	NOTE 1.
L4.8	AS BEFORE BUT 8FT LONG.	STARTEK	RSLIM-8-1000-SD-35K-90-PW-(1)-U-DT1	MARK LIGHTING, LITECONTROL	8000	78 W	UNV	NOTE 1.
L4.12		STARTEK STARTEK	RSLIM-12-1000-SD-35K-90-PW-(1)-U-DT1	MARK LIGHTING, LITECONTROL	12000	117 W	UNV	NOTE 1.
L5.4E	' \ \ /	STARTEK STARTEK	RBEAM-4-500-SD-35K-90-PW-(1)-U-1C-DT1 RBEAM-4-500-SD-35K-90-PW-(1)-U-1C-GTD-DT1	MARK LIGHTING, LITECONTROL  MARK LIGHTING, LITECONTROL	2000	17 W	UNV	NOTE 1.
L5.5	AS BEFORE BUT 5FT LONG.	STARTEK	RBEAM-5-500-SD-35K-90-PW-(1)-U-1C-DT1	MARK LIGHTING, LITECONTROL	2500	21 W	UNV	NOTE 1.
L5.6		STARTEK STARTEK	RBEAM-6-500-SD-35K-90-PW-(1)-U-1C-DT1	MARK LIGHTING, LITECONTROL	3000 3500	26 W 30 W	UNV	NOTE 1.
L5.7		STARTEK STARTEK	RBEAM-7-500-SD-35K-90-PW-(1)-U-1C-DT1 RBEAM-8-500-SD-35K-90-PW-(1)-U-1C-DT1	MARK LIGHTING, LITECONTROL  MARK LIGHTING, LITECONTROL	3500 4000	30 W 34 W	UNV	NOTE 1. NOTE 1.
L5.8 EM	AS BEFORE BUT 8FT LONG.	STARTEK	RBEAM-8-500-SD-35K-90-PW-(1)-U-1C-DT1	MARK LIGHTING, LITECONTROL	4000	34 W	UNV	NOTE 1.
L5.10		STARTEK	RBEAM-10-500-SD-35K-90-PW-(1)-U-1C-DT1	MARK LIGHTING, LITECONTROL	5000	42 W	UNV	NOTE 1.
L5.12		STARTEK STARTEK	RBEAM-12-500-SD-35K-90-PW-(1)-U-1C-DT1 BEAMD-6-750-SD-35K-90-PW-SM-U-DT1	MARK LIGHTING, LITECONTROL  MARK LIGHTING. LITECONTROL	4500	52 W 39 W	UNV	NOTE 1.
L6.11	' ' '	STARTEK	BEAMD-12-750-SD-35K-90-PW-SM-U-DT1	MARK LIGHTING, LITECONTROL	9000	72 W	UNV	
L6.11 EM		STARTEK	BEAMD-12-750-SD-35K-90-PW-SM-U-DT1	MARK LIGHTING, LITECONTROL	9000	72 W	UNV	
L6.12		STARTEK LUMENWERX	BEAMD-12-750-SD-35K-90-PW-SM-U-DT1  VIA3R-D-ARO2-FH-SW-90-500-35-3-UNV-D1-1C-(2)-W	MARK LIGHTING, LITECONTROL  MARK LIGHTING, LITECONTROL	9000	72 W	UNV	NOTE 2.
L7.4E		LUMENWERX	VIA3R-D-ARO2-FH-SW-90-500-35-3-0NV-D1-1C-(2)-W	MARK LIGHTING, LITECONTROL	2000	18 W	UNV	NOTE 2.
L7.5		LUMENWERX	VIA3R-D-ARO2-FH-SW-90-500-35-5-UNV-D1-1C-(2)-W	MARK LIGHTING, LITECONTROL	2500	23 W	UNV	NOTE 2.
L7.6		LIMENWERX	VIA3R-D-ARO2-FH-SW-90-500-35-6-UNV-D1-1C-(2)-W	MARK LIGHTING, LITECONTROL	3000	27 W	UNV	NOTE 2.
L7.8		LUMENWERX LUMENWERX	VIA3R-D-ARO2-FH-SW-90-500-35-8-UNV-D1-1C-(2)-W VIA3R-D-ARO2-FH-SW-90-500-35-10-UNV-D1-1C-(2)-W	MARK LIGHTING, LITECONTROL  MARK LIGHTING, LITECONTROL	5000	36 VV 46 W	UNV	NOTE 2.
L7.12		LUMENWERX	VIA3R-D-ARO2-FH-SW-90-500-35-12-UNV-D1-1C-(2)-W	MARK LIGHTING, LITECONTROL	6000	54 W	UNV	NOTE 2.
L8.16		LUMENWERX	VIA3R-D-WRO2-FH-SW-90-750-35-16-UNV-D1-1C- GTD-(2)-W	MARK LIGHTING, AXIS LIGHTING	9000	80 W	UNV	NOTE 2.
L9.3		LUMENWERX LUMENWERX	V2PERS-HLO-SW-90-750-35-12-UNV-D1-1-DTR-W V2PERS-HLO-SW-90-750-35-6-UNV-D1-1-DTR-W	MARK LIGHTING, LITECONTROL  MARK LIGHTING, LITECONTROL	4500 4500	45 W	UNV	NOTE E.
L9.10		LUMENWERX	V2PERS-HLO-SW-90-750-35-10-UNV-D1-1-DTR-W	MARK LIGHTING, LITECONTROL	7500	75 W	UNV	NOTE E.
L9.12		LUMENWERX	V2PERS-HLO-SW-90-750-35-12-UNV-D1-1-DTR-W	MARK LIGHTING, LITECONTROL	9000	90 W	UNV	NOTE E.
L10E		STARTEK METALUX	SLIMD-6-750-SD-35K-90-PW-SM-U-1C-DMXX% 4RCG-100D-A-UNV-L935	MARK LIGHTING, LITECONTROL  MARK LIGHTING, LITECONTROL	3000 4000	36 V/ FT	UNV	NOTE 3.
L12		BEULUX	FL780IP00CT35-53' – 2XDTR 240-IP67-XT02-Xt99-SLS	Q-TRAN, KLUS	780LMF	300 W	24 VDC	NOTE 4.
L13		METALUX	<varies></varies>	LITHONIA, COLUMBIA	3000	21 W	UNV	NOTE 1.
L13E		METALUX PORTFOLIO	<varies></varies>	LITHONIA, COLUMBIA LITHONIA, PRESCOLITE	3000 2000	21 W	UNV	NOTE 1.
L14E		PORTFOLIO	LDSQ4B-20-D010-EMBOD / EU4B-1020-90-35 / 4LB-SQ-1-H	LITHONIA, PRESCOLITE	2000	21 W	UNV	
L16		METALUX	22FP2135C	LITHONIA, COLUMBIA	2000	21 W	UNV	
L16E		METALUX METALUX	22FP2135C 22FP4235C	LITHONIA, COLUMBIA LITHONIA, COLUMBIA	2000	21 W 38 W	UNV	
L17E		METALUX	22FP4235C 22FP4235C	LITHONIA, COLUMBIA	4000	38 W	UNV	
L18	2' X 2' ARCHITECTURAL TROFFER, SMOOTH SQUARE LENS, LATCHLESS DESIGN, 1% DIMMING (0-10V). WHITE POWDER COATING.	METALUX	22CZ2-24HE-S-UNV-L935-HCD-1-U	LITHONIA, COLUMBIA	2400	18 W	UNV	
L18E		METALUX METALUX	22CZ2-24HE-S-UNV-L935-HCD-1-U 22CZ2-44HE-S-UNV-L935-HCD-1-U	LITHONIA, COLUMBIA LITHONIA, COLUMBIA	2400 4500	18 W 33 W	UNV	
L19 L20A				LITHONIA, COLUMBIA	4500	11 W	12-18VDC	NOTE 7, RAL7022
L20AE	5" MICRO-LINEAR MULTI DOWNLIGHT, SELF FLANGED, 40 DEGREE FLOOD, CUSTOM RAL COLOR FOR TRIM AND REFLECTOR, 1% DIMMING (0-10V). UL924 EMERGENCY TRANSFER DEVICE (ETD).	VEROZZA FUSION	<varies></varies>			11 W	12-18VDC	NOTE 7, RAL7022
L20B		VEROZZA FUSION VEROZZA FUSION	FUS-F5-2L-FL-930-NF-WH-WH / FUS-F5-NF-2L-REM-010UNV FUS-F5-2L-FL-930-NF-WH-WH / FUS-F5-NF-2L-REM-010UNV			11 W	12-18VDC 12-18VDC	NOTE 7. NOTE 7.
L20BE		FAILSAFE	UCL-(2)-LD4-35-A12125-EDC1-UNV	KENALL, AIREY-THOMPSON	700 LMF	11 W 10 W	12-18VDC UNV	NOTE 2.
L23	2.5" RECESSED LIGHT FIXTURE WITH 90 DEGREE CURVED PORTION, WHITE TRIM, 1% DIMMING (0-10V). REFER TO LIGHTING PLANS.	XAL LIGHTING	BASO_2.5-RTR-WH-OP-35K-C90-UNV-010V-0455LF-XX-(2)/	MARK LIGHTING, FORUM LIGHTIUNG	455 LMF	5 W	UNV	NOTE 2.
1 24	LED DOUBLE OBSTRUCTION LIGHTS, SURFACE INSTALLED, RED LED, THREADED BOTTOM HUB FOR MOUNTING, NATURAL ALUMINUM HOUSING, GASKETED, CLEAR GLASS, WET LABEL, BRACKET FOR WALL MOUNT, PHOTOELECTRIC AND POC CONTROLLERS.	POINT LTG	CURVE_2.5 RTR-WH-OP-35K-C90-UNV-010V-0455LF-SC-18"-A90 POL-21006-1F-R-34B-D2-BKTU			10 W	24 VDC	
L25		METALUX	<pre>POL-21000-1F-R-34B-D2-BK10</pre>	LITHONIA, COLUMBIA	4000	31 W	UNV	NOTE 1.
L25E	4FT LED STRIP LIGHT, COLD ROLLED STEEL CONSTRUCTION, SQUARE SEMI-FROSTED LENS, WIDE DISTRIBUTION, CHAIN HUNG OR SURFACE MOUNTED (REFER TO LIGHTING PLANS). UL924 EMERGENCY TRANSFER DEVICE (ETD).	METALUX	4SNLED-LD5-41SL-SLW-UNV-L935-CD-1-U-(1)-ETRD	LITHONIA, COLUMBIA	4000	31 W	UNV	NOTE 1.
L26	, , , , , , , , , , , , , , , , , , ,	METALUX LUMENWERX	4VT3-LD5-4-W-UNV-L835-SSL-U-VT3-SS-SBK VIA1.5R-D-HLO-FH-SW-90-500-35-4-UNV-D1-1-DTR-W	LITHONIA, COLUMBIA  MARK LIGHTING, LITECONTROL	4000 2000	32 W	UNV	NOTE 1.
L27.4E L27.10		LUMENWERX	VIA1.5R-D-HLO-FH-SW-90-500-35-4-UNV-D1-1-DTR-W VIA1.5R-D-HLO-FH-SW-90-500-35-10-UNV-D1-1-DTR-W	MARK LIGHTING, LITECONTROL  MARK LIGHTING, LITECONTROL	5000	28 W 70 W	UNV	NOTE 1.
L27.12	AS BEFORE BUT 12FT LONG.	LUMENWERX	VIA1.5R-D-HLO-FH-SW-90-500-35-12-UNV-D1-1-DTR-W	MARK LIGHTING, LITECONTROL	6000	83 W	UNV	NOTE 1.
L28		PORTFOLIO	LDSSQ6C-20-D010-EU6C-1025-9035	LITHONIA, PRESCOLITE	2000	23 W	UNV	
L28E L29		PORTFOLIO VEROZZA FUSION	LDSSQ6C-20-D010-EU6C-1025-9035-ETRD FUS-F1-2L-FL-935-SF-CF-CF-WET / FUS-F1-SF-2L-REM-010UNV	LITHONIA, PRESCOLITE	2000	23 W 3 W	UNV	
L30						0 W		
\		LUMICREST	<pre><varies></varies></pre>		050	100 W	120V	
→ L32-4	16" WIDE, 4" SPERATURE, SEALED, 4FT, NSF RATED LIGHT FIXTURE.	-AILSAFE	4FSN6-100D-CP125-UNV-L835-90-A3/8-4/18GDIM-FPEQ	LITHONIA. COLUMBIA	4000	36 W	UNV	NOTE 1. ☐
ستتنس		OR FOLO				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		manage de la constant
<b>V</b> 134	4" SQUARE DOWNLIGHT, SEALED, NSF RATED LIGHT FIXTURE.	FAII SAFF	FLDSO4C-SM-20-D2W-1D010-FFLI4C-120-90-35-F4LC-CSSO-SM-2-H	LITHONIA PRESCOLITE	2000	23 \//	LINIV	2
L წ.12 EM S1	AS BEFORE BUT 12FT LONG.	STARTEK	BEAMD-12-750-SD-35K-90-PW-SM-U-DT1  ARO-S-32-70-3-T5-1-LT-SLV	MARK LIGHTING, LITECONTROL SCHREDER HESTIA, RAGNI ATINIA	9000 8500	72 W 69 W	UNV	NOTE 5.
S2		RAGNI LIGHTING	ARO-S-32-70-3-T3-1-LT-SLV	SCHREDER HESTIA, RAGNI ATINIA	8500	69 W	UNV	NOTE 5.
S3		RAGNI LIGHTING	ARO-M-48-70-3-T5-1-LT-SLV	SCHREDER HESTIA, RAGNI ATINIA	13000	103 W	UNV	NOTE 5.
W1F		RAGNI LIGHTING VISTA	ARO-M-32-70-3-T4-1-LT-SLV FCSL-UNV-3K-CRI-8L-BZ/A2000-BB-ETL	SCHREDER HESTIA, RAGNI ATINIA BEGA, WE-EF	9000 450	69 W	UNV	NOTE 5.
W2E	WALLPACK WITH DIE-CAST ALUMINUM HOUSING AND POWDER COAT FINISH, DARK BRONZE, FORWARD THROW DISTRIBUTION, GASKETED.	MCGRAW EDISON		LITHONIA, BEACON	5000	150 W	UNV	
W3E		LITHONIA EVENLITE	<varies></varies>	LUMARK CROSSTOUR LITHONIA.BEGHELLI	1650	13 W <varies></varies>	UNV	NOTE A.

EVENLITE

CDW-AC-G-(A)-WW-(1)

LITHONIA,BEGHELLI

LITHONIA,BEGHELLI

LIGHTING CONTROL SEQUENCE SCHEDULE								
S - "INDIVIDUAL ZONE WALL CONTROLLER". REFER TO FLOOR PLAN FOR QUANTITY OF ZONES SHOWN IN THE AREA. EACH ZONE SHALL HAVE A ITS OWN INDEPENDENT CONTROLLER.								
D - "INDIVIDUAL DIMMING ZONE WALL CONTROLLER". EACH ZONE SHALL HAVE ITS OWN INDEPENDENT CONTROL	ER CAPABLE OF ON, OFF AND DIMMING WITIN THE WALL CONTROLL	LER. REFER 1	TO FLOOR PLAN FOR (	QUANTITY OF ZO	NES SHO	OWN IN THE AREA.		
P - "PRESET SCENE CONTROLLER". NUMBER INDICATES QUANTITY OF PRESET SCENE CONTROLS. EACH PRESET	SCENE SHALL EACH BE CAPABLE OF TURNING SCENE ON, OFF AND	DIM.						
DL Ft. Cd "DAY LIGHT PHOTO SENSOR". MUST AUTOMATICALLY DIM INDICATED LUMNINAIRES SHOWN ON FLOO	PLANS WITH DAY LIGHT ZONES. MAINTAIN MAXIMUM FOOT CANDLE	E RATING INDI	CATED AS MEASURED	FROM +30" AFF				
MAN - MANUAL CONTROL. OCC - OCCUPANCY ON AND / OR VACANCY OFF. PC - PHOTOCELL. ETD - EMERGENCY TRANSFER DEVICE.								
	WALL	AUTO	OMATIC CONTROLS					
	CONTROLLER	ON (X=100%	%) OFF (X=0	0%) DL				
SEQUENCE ID AREA DESCRIPTION	S D P N	MAN OCC	PC MAN OCC	PC Ft. Cd.	ETD	REMARKS		
					_			
LC01 EXTERIOR LIGHTING - PHOTOCELL			X	X				
LC02 EXAM ROOMS, LABORATORIES, PREPERATION & SIMULATION ROOMS, BREAK ROOMS	X	X	X			FULL SHUT OFF AFTER 20MINS.		
LC03 VENDING, STORAGES, CUSTODIAL	X	X	X			REFER TO LIGHTING PLANS FOR SENSOR TO BE CEILING OR WALL-MOUNTED INSTALLATION. FULL SHUT OFF AFTER 15MINS.		
LC04 OFFICES, RECEPTION, WELLNESS, CONTROL ROOMS, MEETING ROOMS	X	X	X	X		FULL SHUT OFF AFTER 30MINS.		
LC04a HELP/SECURITY DESK	X	X	50%			LIGHTING SHALL BE DIMMED TO 50% AFTER AFTER 30MINS DURING OCCUPIED HOURS. FULL SHUT OFF AFTER 30MIN DURING UNOCCUPIED HOURS.		
LC05 ATRIUM	X	X X	X X	X	X	EACH FLOOR SHALL BE (1) ZONE CONTROLLED BY ALL OCCUPANCY SENSORS IN THIS SPACE. DAYLIGHT ZONES SHOWN SHEETS E13-03.		
LC06 BATHROOMS	X	100%	X		X	REFER TO LIGHTING PLANS FOR EMERGENCY LIGHTING. FULL SHUT OFF AFTER 20MINS.		
LC07 CORRIDORS, LOBBIES	X	100%	30%		X	LIGHTS SHALL BE OFF TO 30%. DURING UNOCCUPIED HOURS LIGHTS SHALL BE FULL OFF. MAIN CONTROL STATION AT HELP/SECURITY DESK 1002.		
LC08 STAIRS		100%	30%		X	REFER TO SHEETS E13-12 AND E13-13 FOR FURTHER INFORMATION. SHUT OFF AFER 15MINS.		
LC09 CHEMICAL STORAGES		X	X			MANUAL OVERRIDE W/ SENSOR/SWITCH COMBINATION. FULL SHUT OFF AFTER 15MINS.		
LC10 CLASSROOMS	X	50%	X			DIMMING ZONE SHOWN ON PLANS. REFER TO DETAIL 6 ON SHEET E13-16 FOR A/V INTEGRATION. FULL SHUT OFF AFTER 20MINS.		
LC11 LARGE LECTURE HALL/TIERED CLASSROOM/GROSS ANATOMIE	X	50%	X		Χ	REFER TO DETAIL 6 ON SHEET E13-16 FOR A/V INTEGRATION. FULL SHUT OFF AFTER 30MINS.		
LC12 SKYLIGHT		X	X			(2) ZONES, ON/OFF/DIM TO BE CONTROLLED BY MAIN CONTROL STATION AT HELP/SECURITY DESK 1002.		

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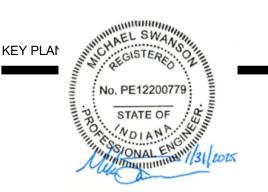
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**Construction Documents** 

IN203 Academic Health Center Med Ed Research Bldg Cafe Build Out IU 20241022

350 West 14th Street Indianapolis, IN 46202

Project No.: 24I031 Drawn By: Author Checked By: Checker Scale: See Drawing Issue Date: February 6, 2025

ADDENDUM #1

NOTE A.

NOTE A., NOTE 1.

<varies>

E60-03

SCHEDULES

ELECTRICAL LIGHTING