

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.
 - 3. 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, 1/2-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 pull-out, 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.

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 www.iuplanroom.com. 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 – dlong@browningday.com
- 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.
- I. 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**

**IN203 Medical Education and Research Building Cafe Buildout
IU 20241022**

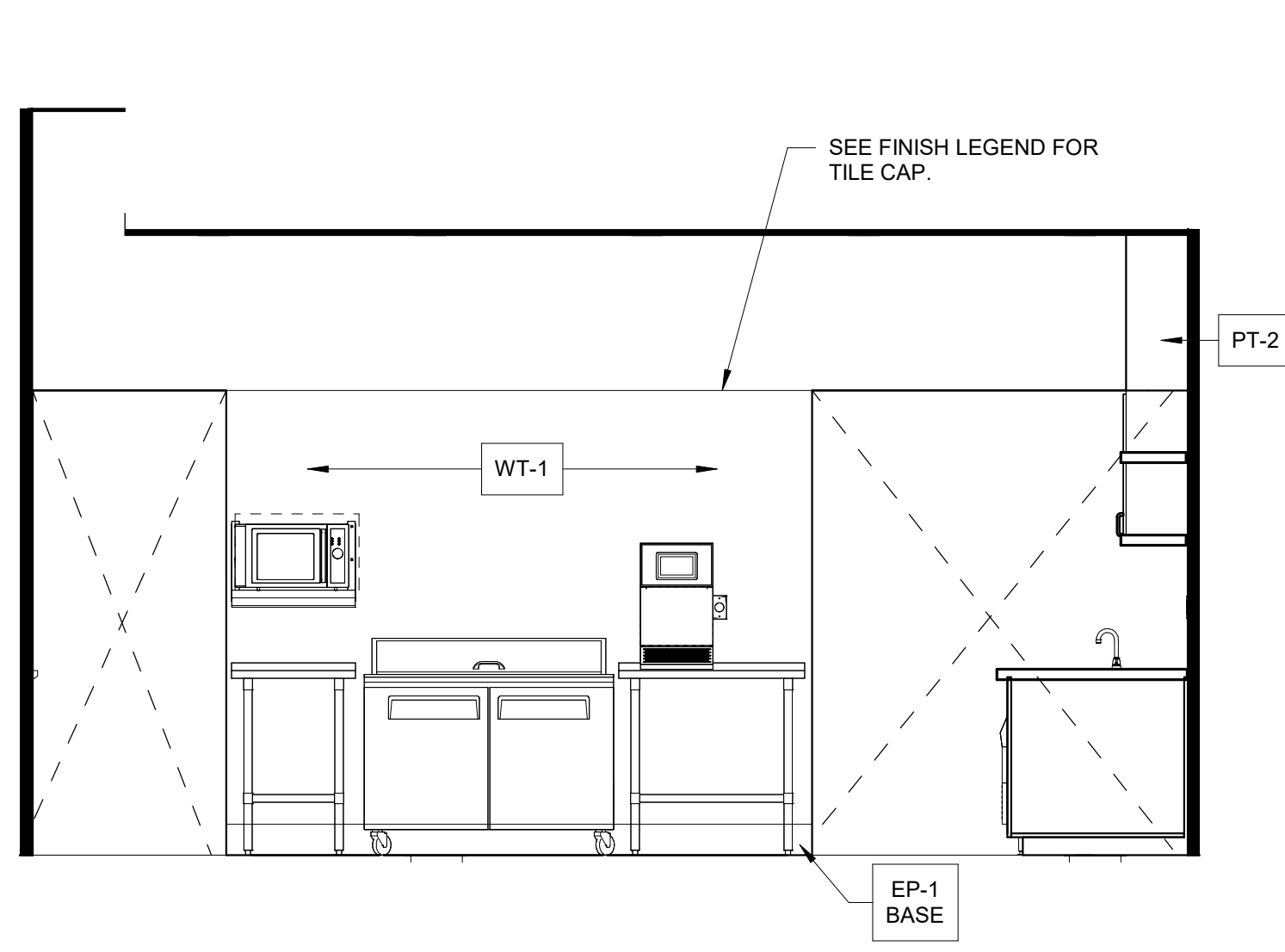
*Pre-Bid Meeting
Sign-In Sheet
March 11, 2025*

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

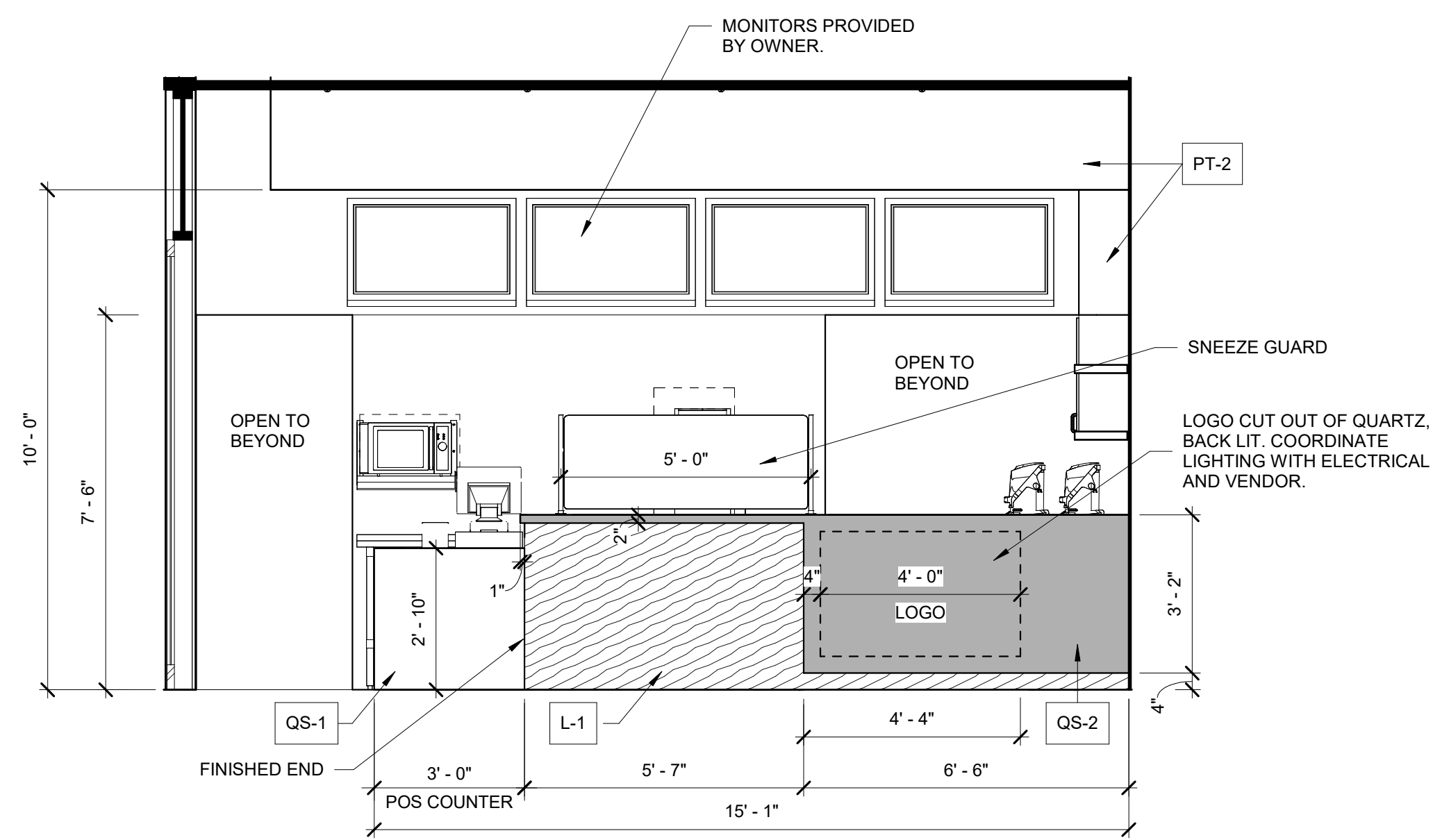
20241022 - IN203 Academic Health Center - Med Ed Research Building Caf  Buildout
Food Service Equipment Schedule

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

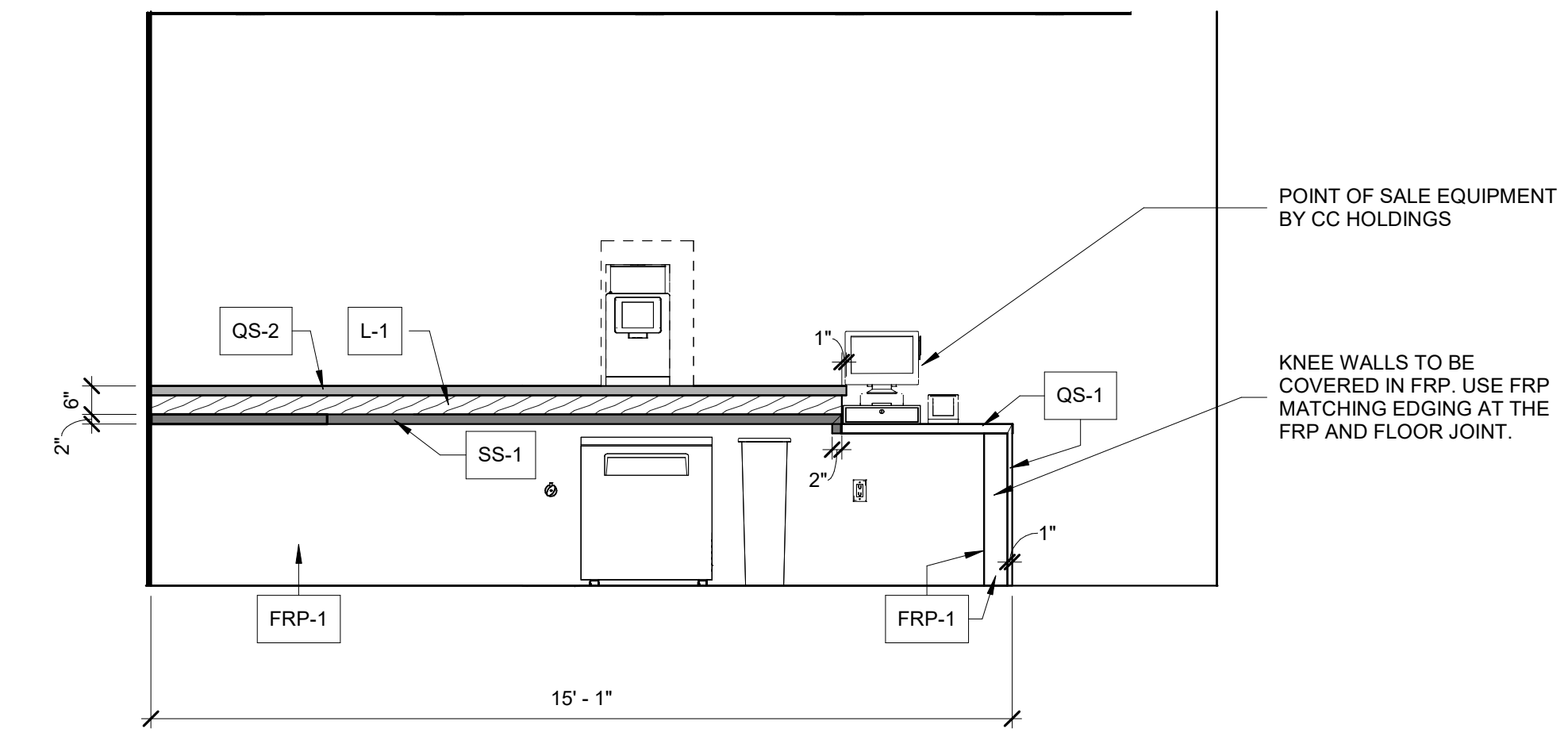
Item	Manufacturer	Model	Description	Qty	Unit Price	Extended Price	Room/Location
1	Federal Industries	RSSL478SC	Display case, refrigerated, self-serve	2		\$0.00	Med Ed Caf�
2	FETCO	D449TLA	Coffee Dispenser	8		\$0.00	Med Ed Caf�
6	Winco	PTC-23K	Trash Receptable, Indoor	4		\$0.00	Med Ed Caf�
11	Simon Cabinets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



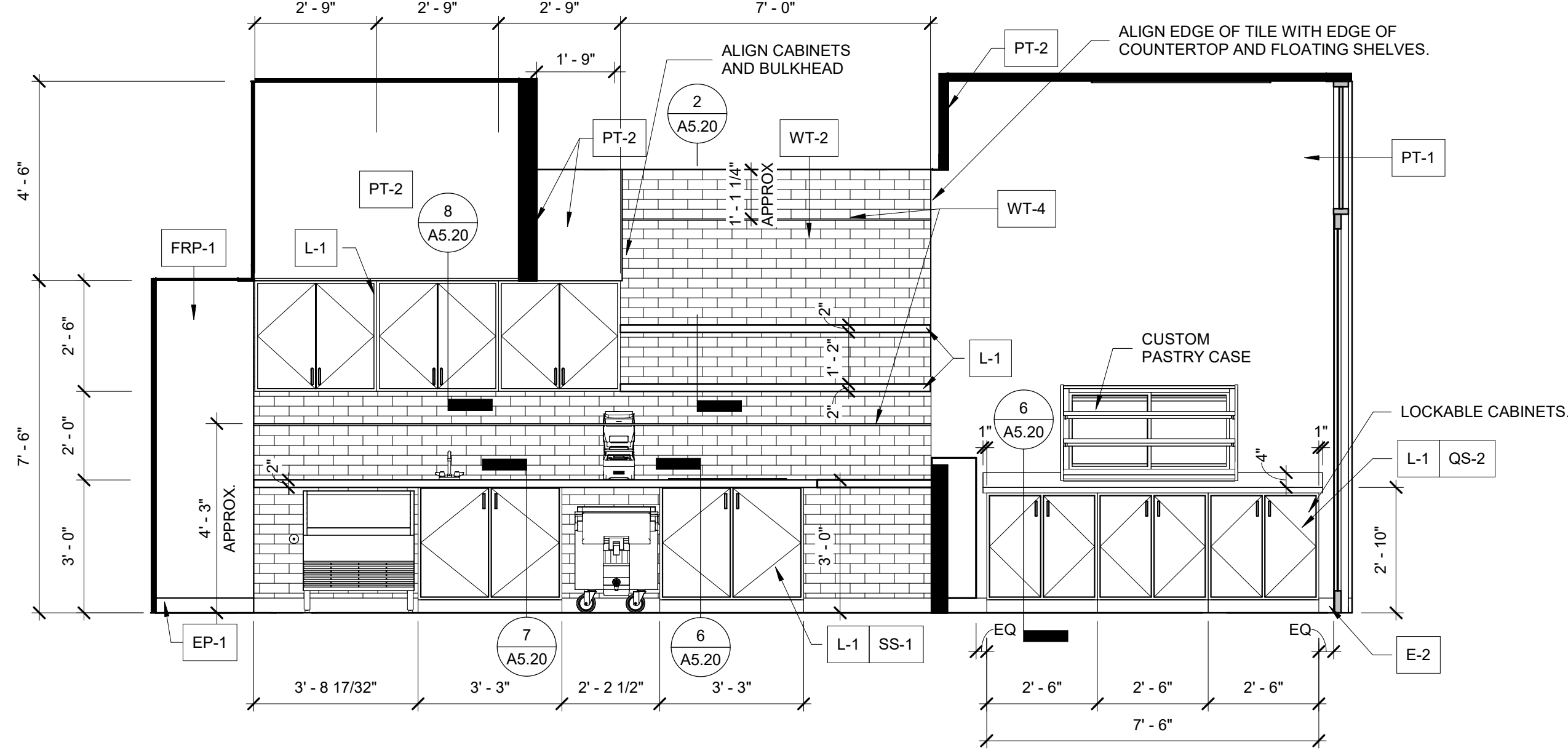
1 Interior Elevation
SERVING SOUTH WALL
A5.10 3/8" = 1'-0"



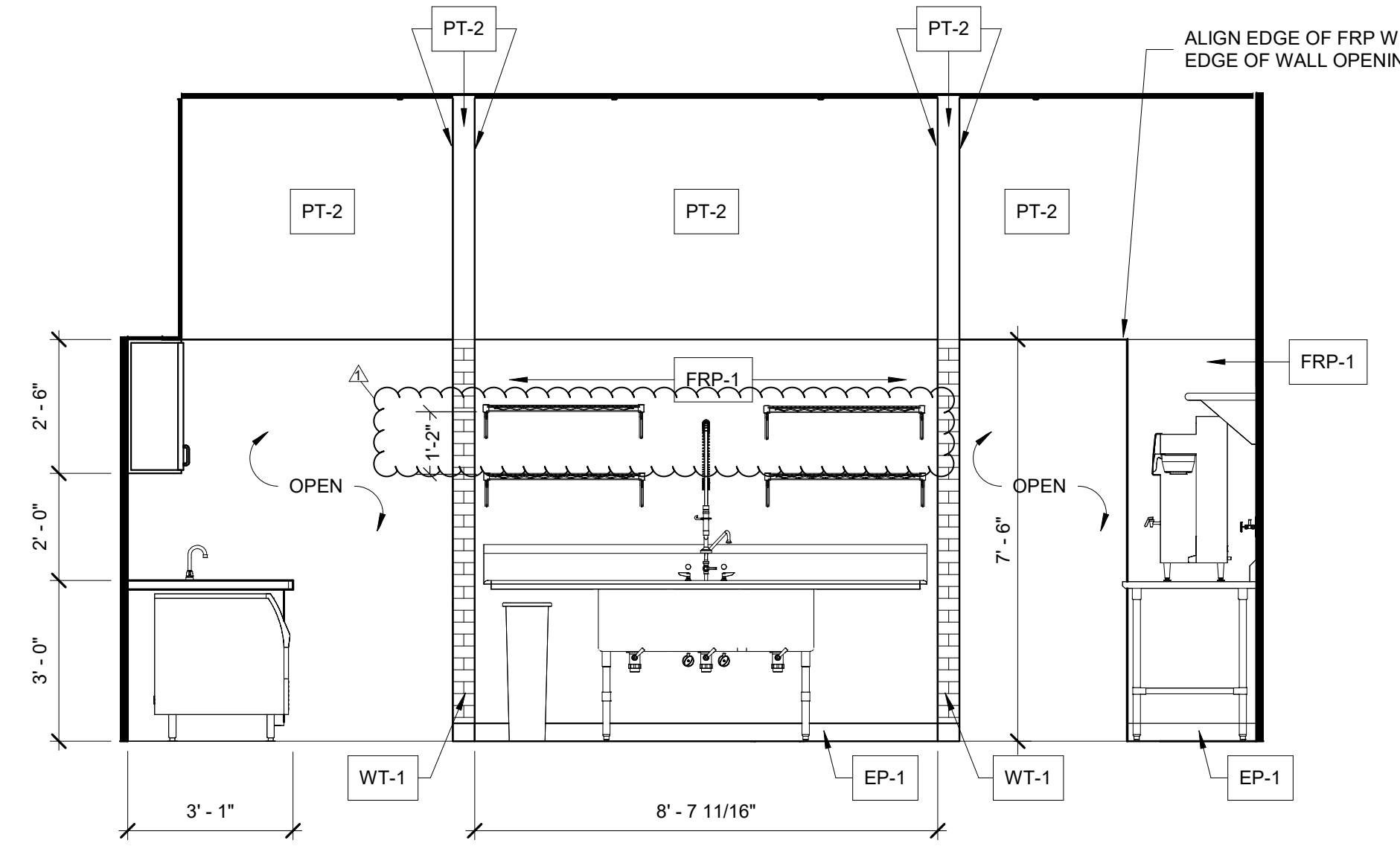
2 Interior Elevation
CAFE SOUTH SERVING
A5.10 3/8" = 1'-0"



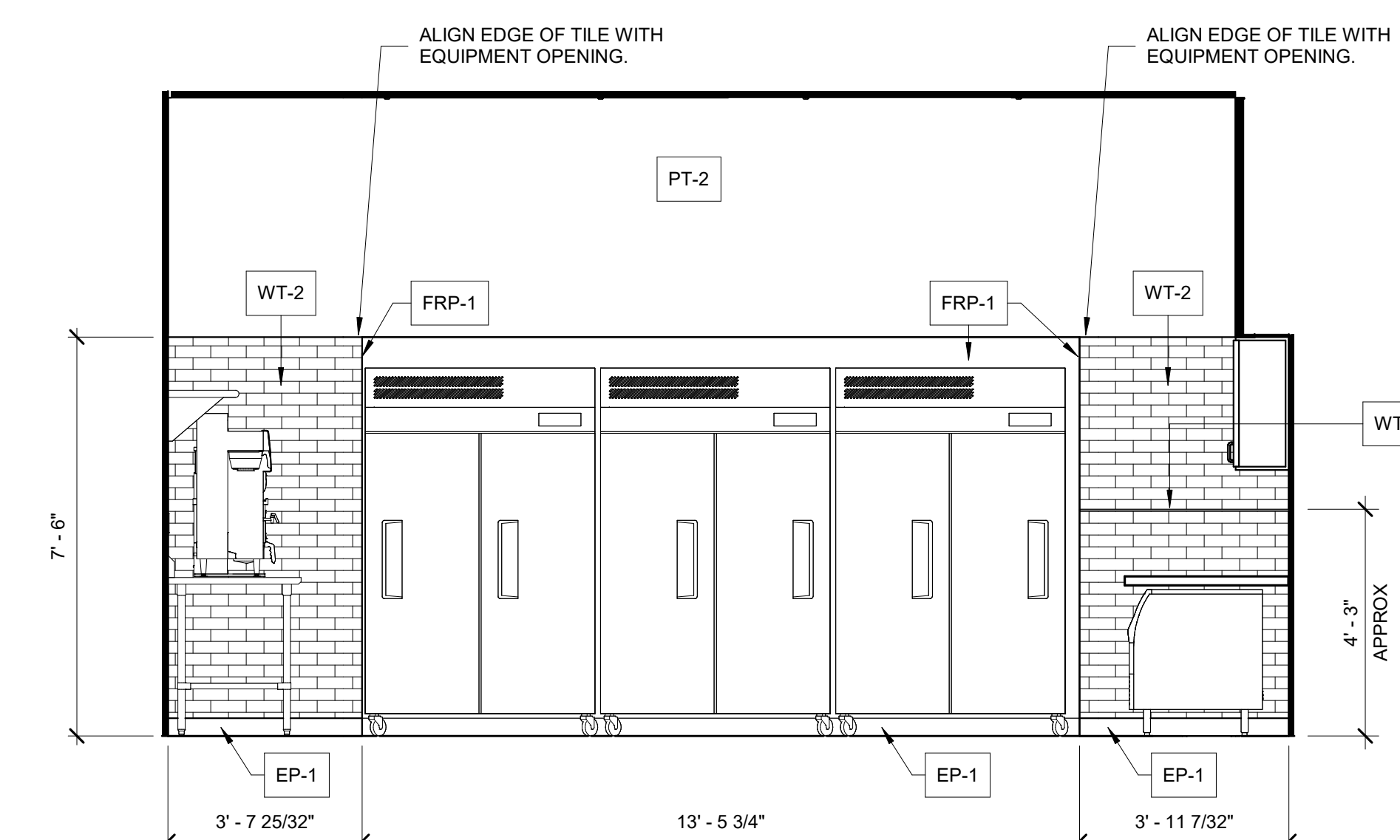
3 Interior Elevation
SERVING COUNTER BACKSIDE
A5.10 3/8" = 1'-0"



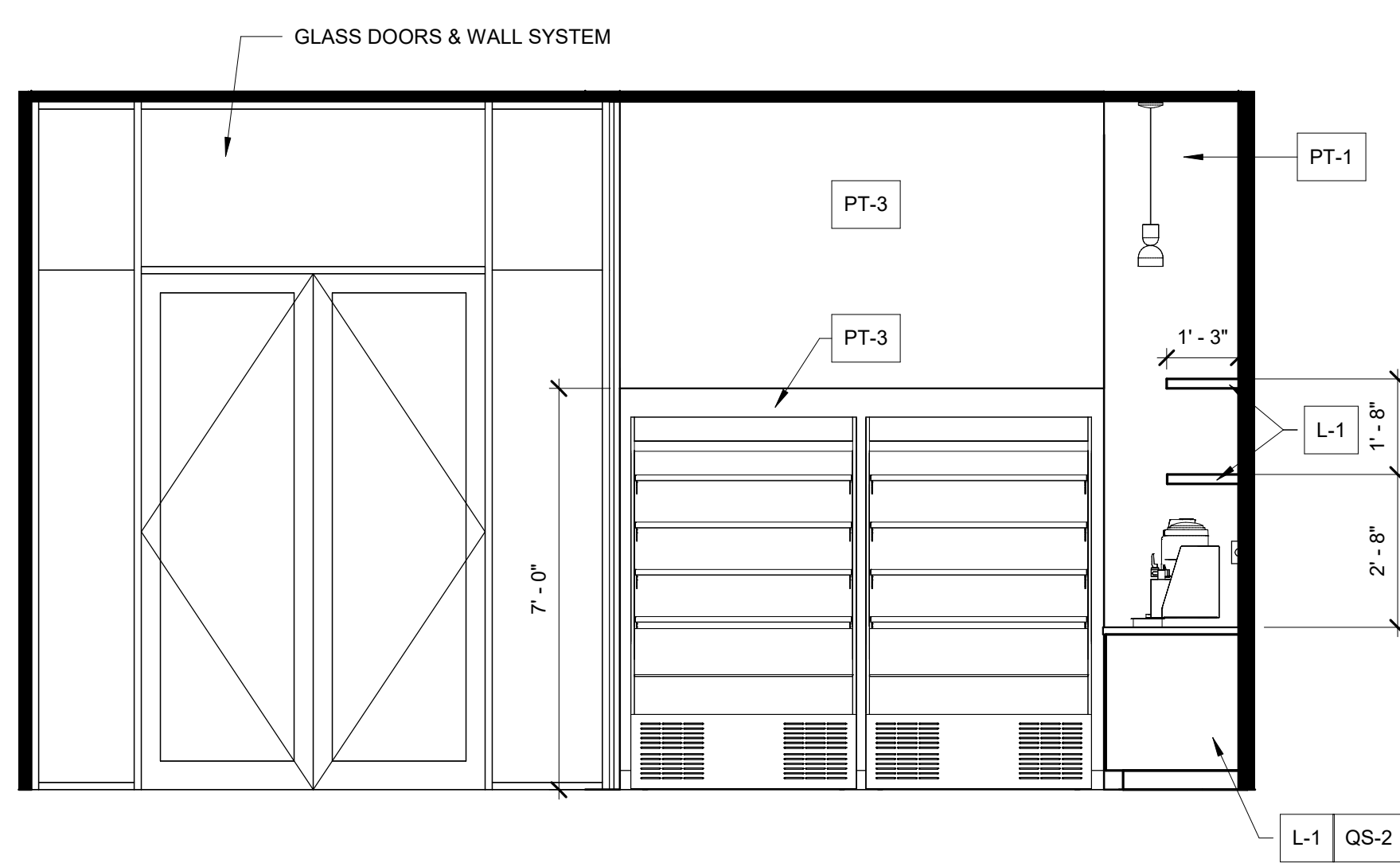
4 Interior Elevation
STORAGE WEST
A5.10 3/8" = 1'-0"



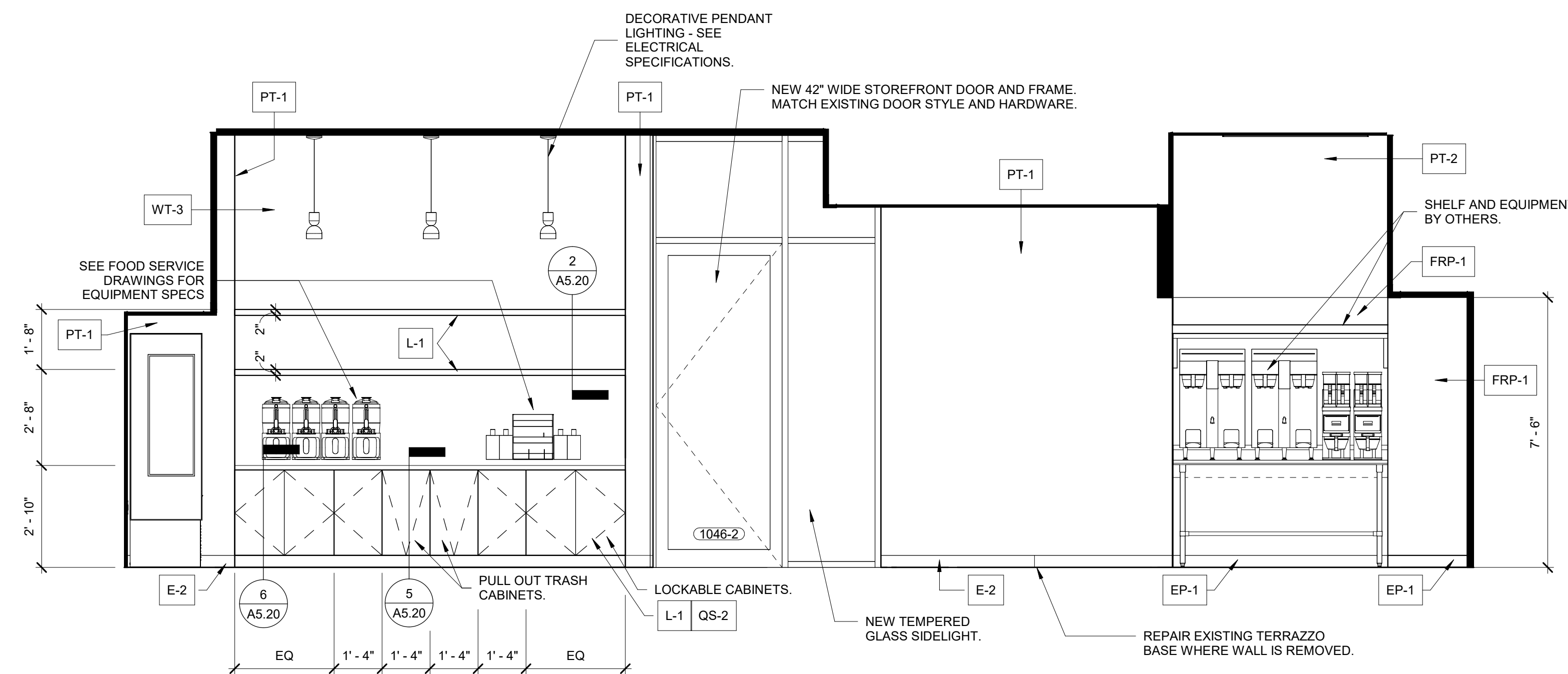
6 Interior Elevation
STORAGE NORTH
A5.10 3/8" = 1'-0"



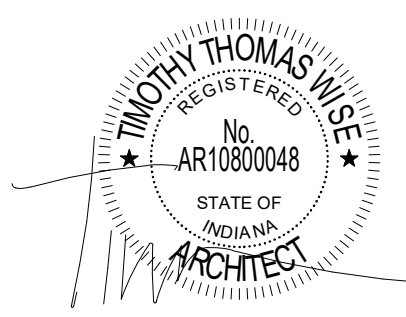
7 Interior Elevation
STORAGE SOUTH
A5.10 3/8" = 1'-0"



5 Interior Elevation
CAFE NORTH WALL
A5.10 3/8" = 1'-0"



8 Interior Elevation
CAFE EAST WALL
A5.10 3/8" = 1'-0"



CERTIFICATION
Construction Documents

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

350 West 14th Street
Indianapolis, IN 46202

Project No.: 241031
Drawn By: Author
Checked By: Checker
Scale: See Drawing
Issue Date: February 8, 2025

REVISION SCHEDULE		
Rev. #	Revision Description	Issue Date
1	ADDENDUM 1	3/14/2025

EQUIPMENT LIST			
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	1	WASTE DRAIN VALVE	
40	4	WIRE WALL SHELF	
42	1	WORK TABLE	
44	1	RAPID COOK OVEN	
46	1	SANDWICH/SALAD PREP REFRIGERATOR	
49	1	WORK TABLE	
50	1	MICROWAVE OVEN	



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

Indiana University Board of Trustees

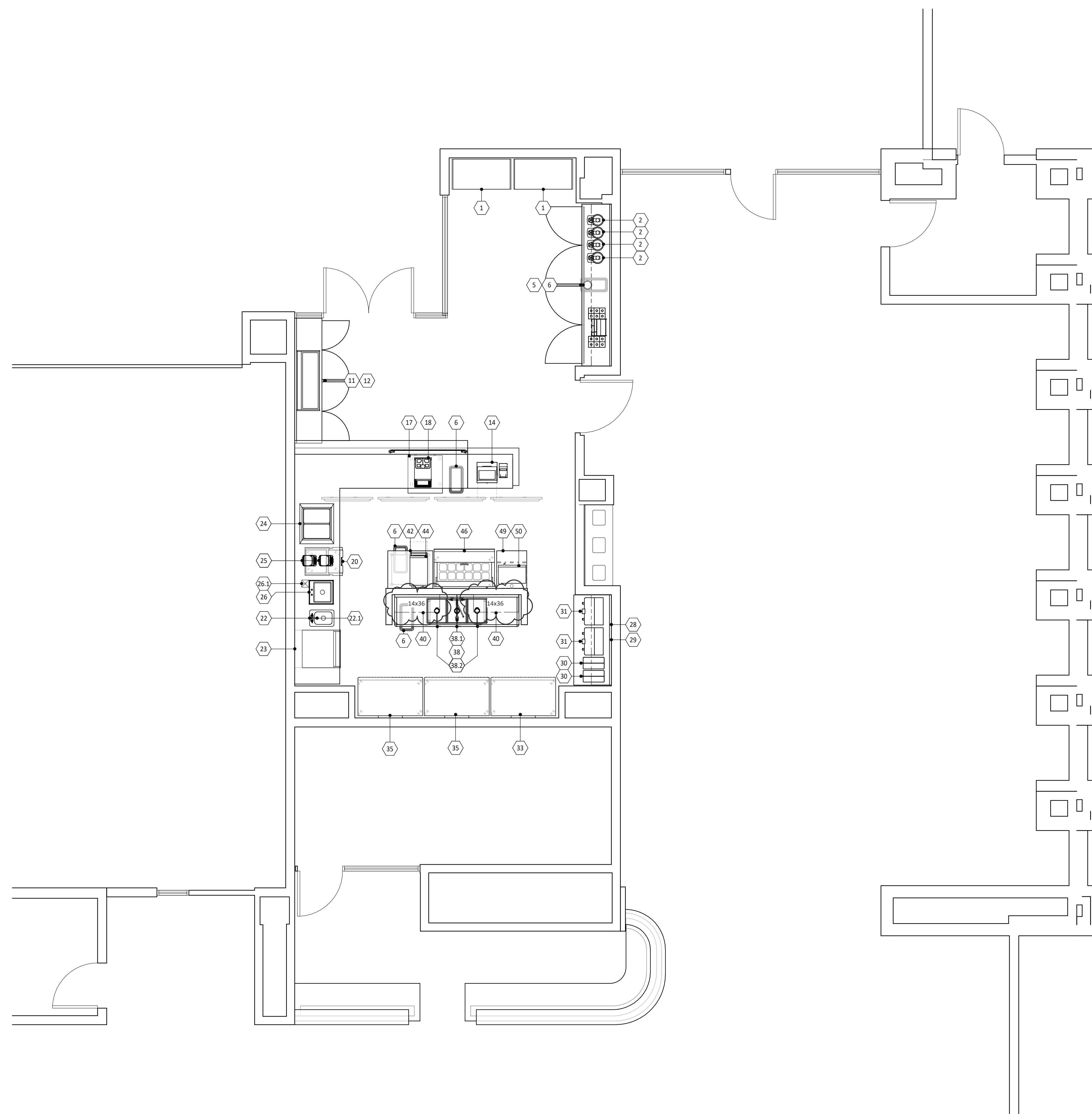
Owner
2901 East Discovery Parkway
Bloomington, IN 47408
Phone: (812) 855-1692
Website: www.indiana.edu

C&T Design & Equipment Co.

Food Service Consultant
2750 Tobey Drive
Indianapolis, IN 46219
Phone: (800) 986-3374
Website: www.c-t-design.com

Introba

MEP Engineer
8250 Haverstick Road
Suite 285
Indianapolis, IN 46240
Phone: (800) 404-7877
Website: www.introba.com



EQUIPMENT LAYOUT PLAN
SCALE: 1/4" = 1'-0"

CERTIFICATION

Construction Documents

IUH Medical- Fuzion

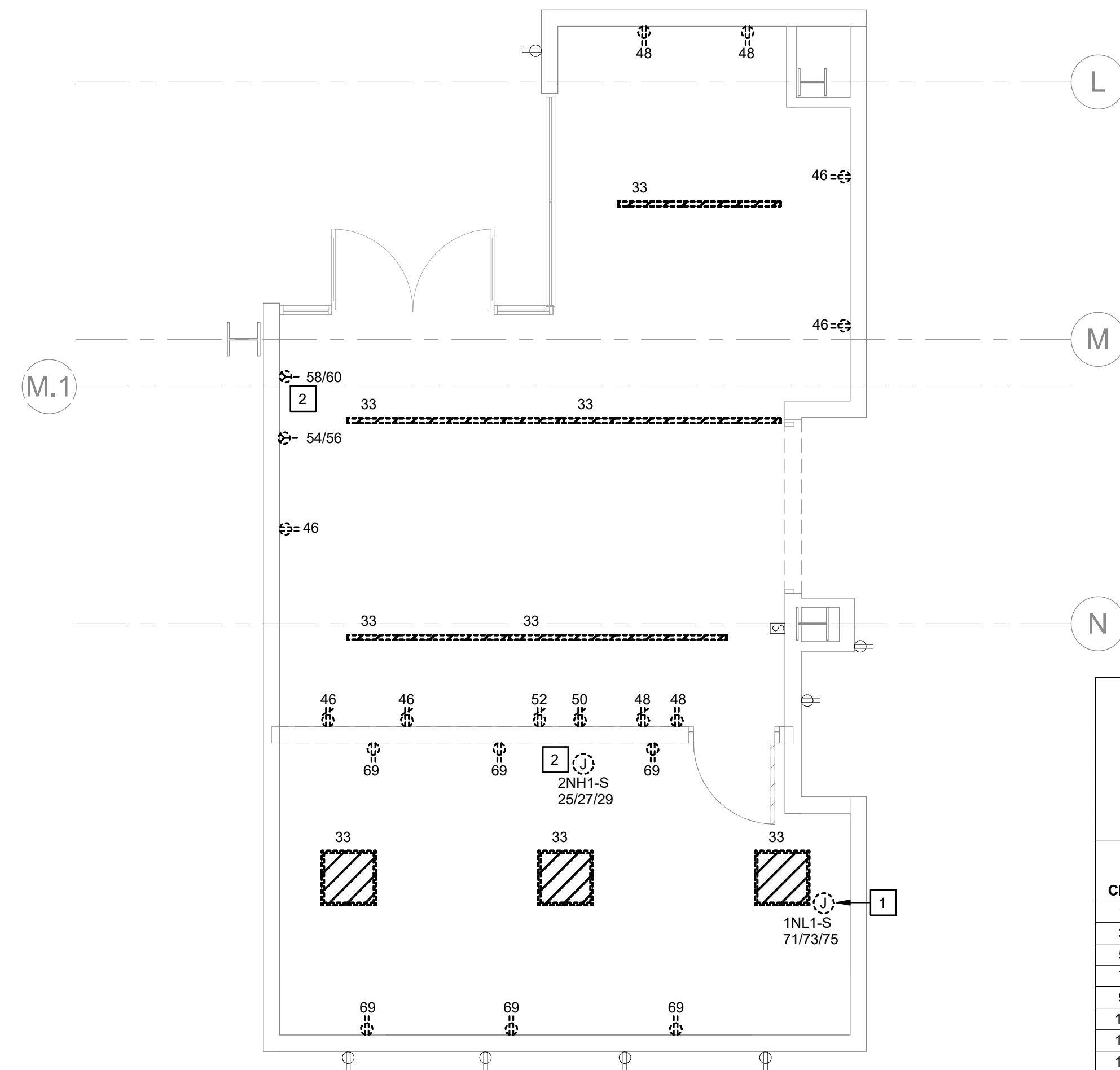
350 West 14th Street
Indianapolis, IN 46202

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

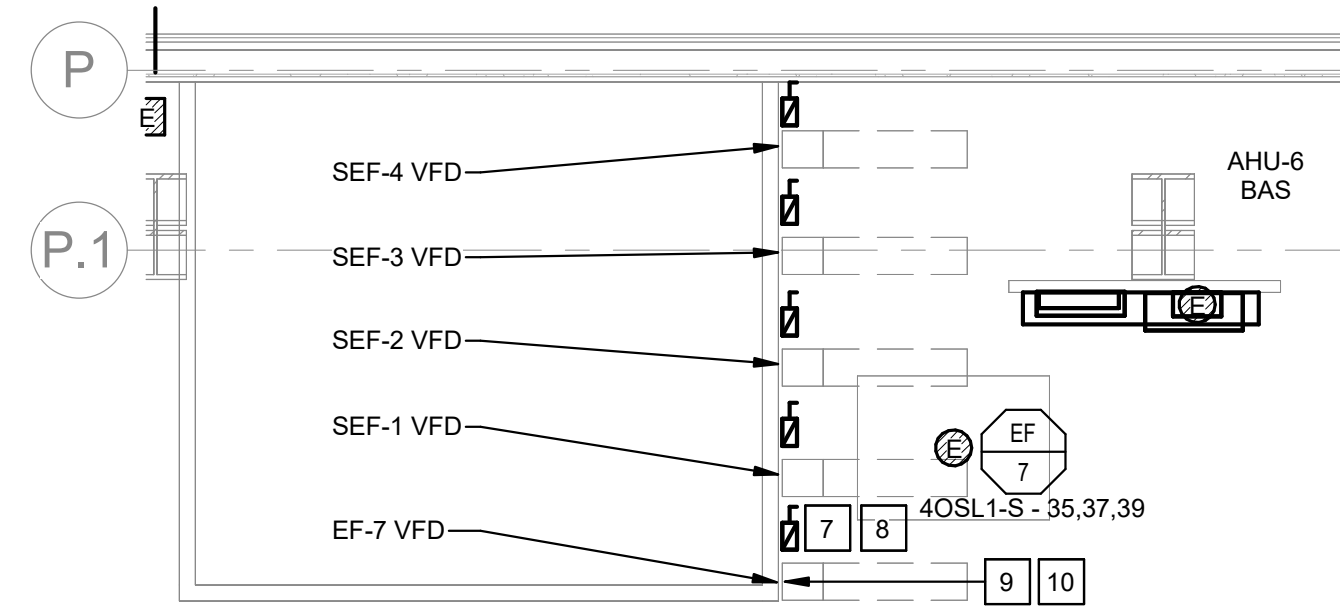
REVISION SCHEDULE		
Rev. #	Revision Description	Issue Date
1	ADDENDUM 1	03/14/25

KITCHEN EQUIPMENT PLAN

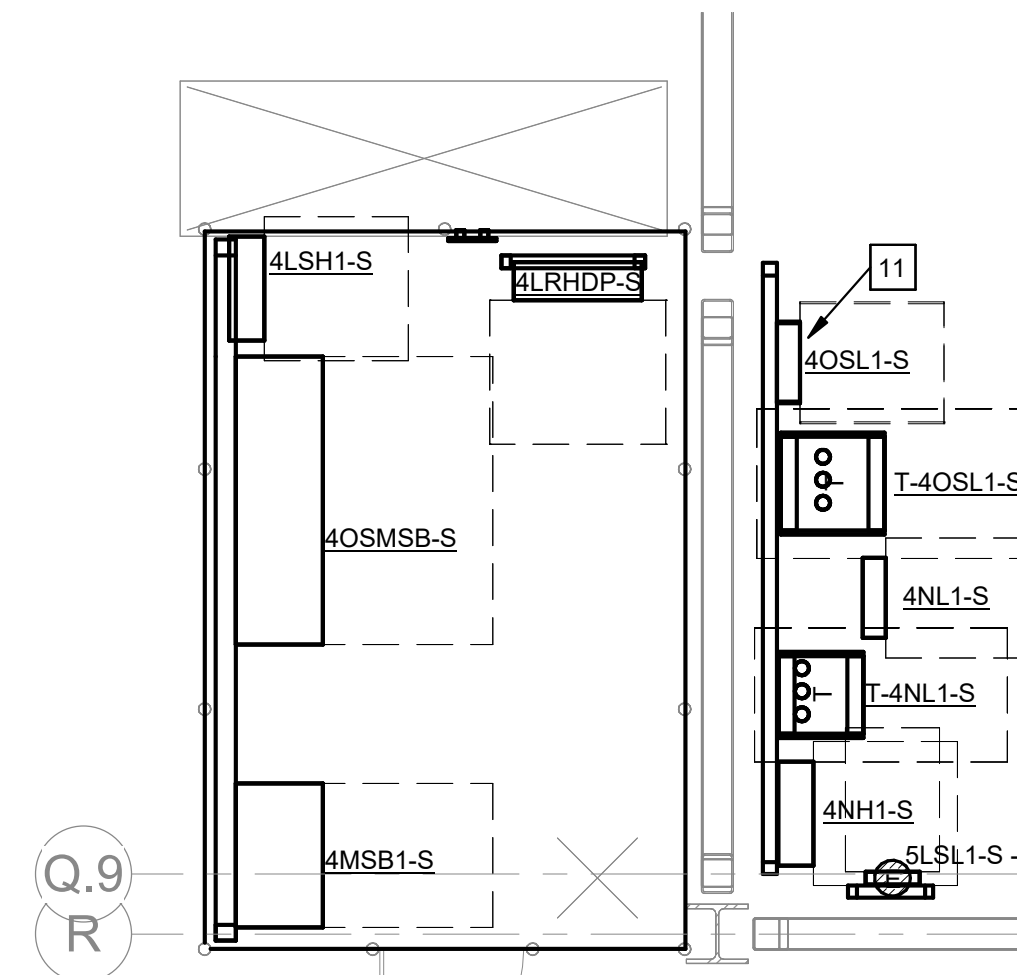
E1-K1.0



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



5 ELECTRICAL LEVEL 04 POWER PLAN
1/4" = 1'-0"



6 LEVEL 04 ELECTRICAL EQUIPMENT
1/4" = 1'-0"

Branch Panel: 1NL5-S
 Location: GRAB N GO 1046
 Supply From: 1NL1-S
 Mounting: Recessed
 Enclosure: Type 1

Volts: 120/208 Wye
 Phases: 3
 Wires: 4

A.I.C. Rating:
 Mains Type:
 Mains Rating: 100 A
 MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	ITEM E11 (GFCI CIRCUIT BREAKER)	20 A	1	180 VA	1800...		1	20 A	ITEM E25 (GFCI CIRCUIT BREAKER)	2
3	ITEM E23 (GFCI CIRCUIT BREAKER)	20 A	1		1536... 336 VA		1	20 A	ITEM E35 (GFCI CIRCUIT BREAKER)	4
5	ITEM E33 (GFCI CIRCUIT BREAKER)	20 A	1			756 VA 336 VA	1	20 A	ITEM E35 (GFCI CIRCUIT BREAKER)	6
7	ITEM E30 (GFCI CIRCUIT BREAKER)	20 A	1	370 VA	370 VA		1	20 A	ITEM E30 (GFCI CIRCUIT BREAKER)	8
9	ITEM E31	50 A	2		3800... 3800...		2	50 A	ITEM E31	10
11						3800... 3800...				12
13	ITEM E50 (GFCI CIRCUIT BREAKER)	20 A	1	1500... 1850...			2	30 A	ITEM E44	14
15	ITEM E46 (GFCI CIRCUIT BREAKER)	20 A	1		528 VA 1850...					16
17	FUTURE LIT SIGNAGE	20 A	1			200 VA 720 VA	1	20 A	MENU SCREENS	18
19	SPACE	20 A	1	0 VA	1800...		1	20 A	ITEM E25 (GFCI CIRCUIT BREAKER)	20
21	SPACE	--	1		--	--	1	--	SPACE	22
23	SPACE	--	1		--	--	1	--	SPACE	24
				Total Load:	7870 VA	11550 VA				
				Total Amps:	66 A	101 A				

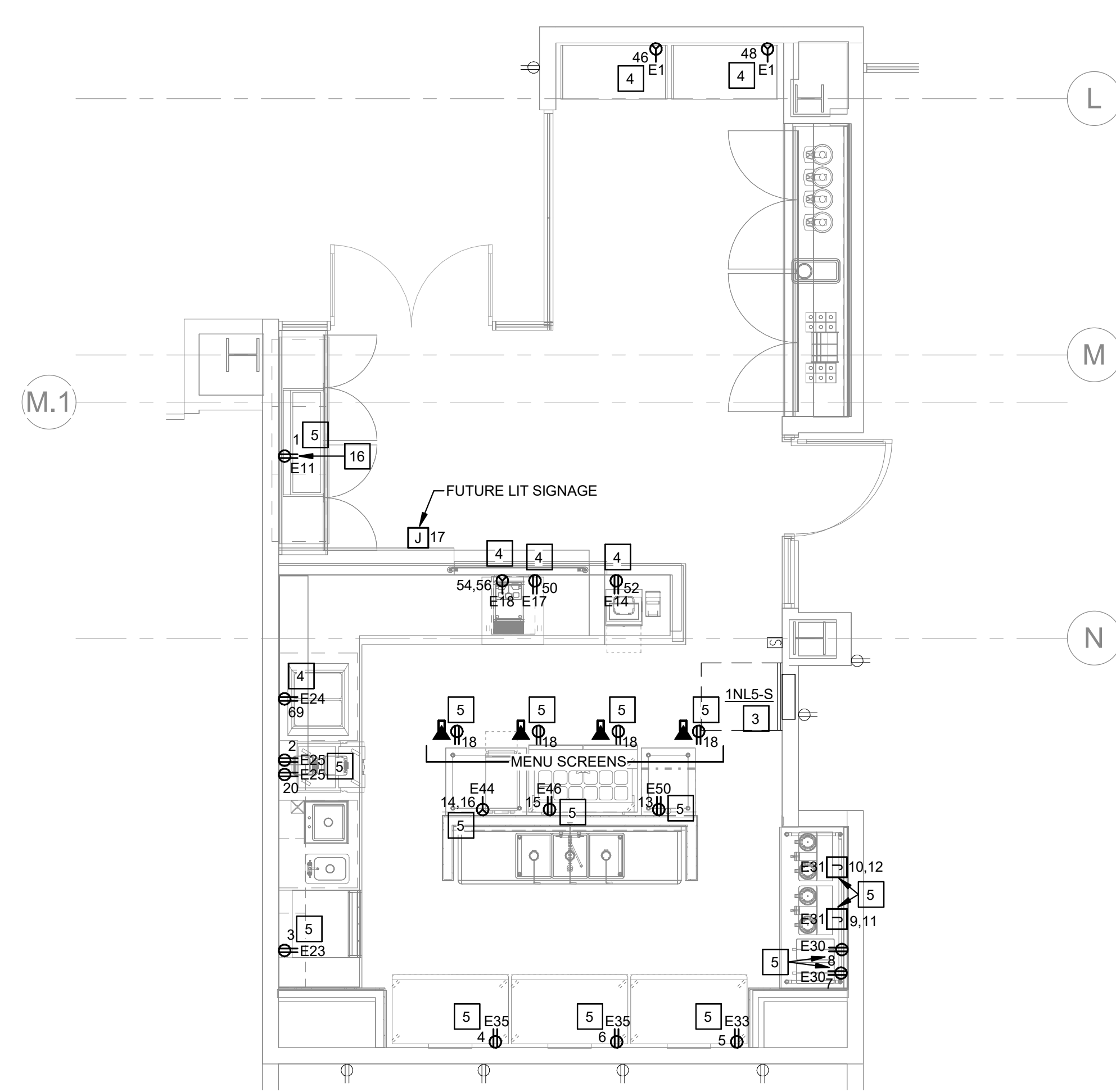
Panel Totals
 Total Conn. Load: 29332 VA
 Total Est. Demand: 27366 VA
 Total Conn.: 81 A
 Total Est. Demand: 76 A

GENERAL SHEET NOTES

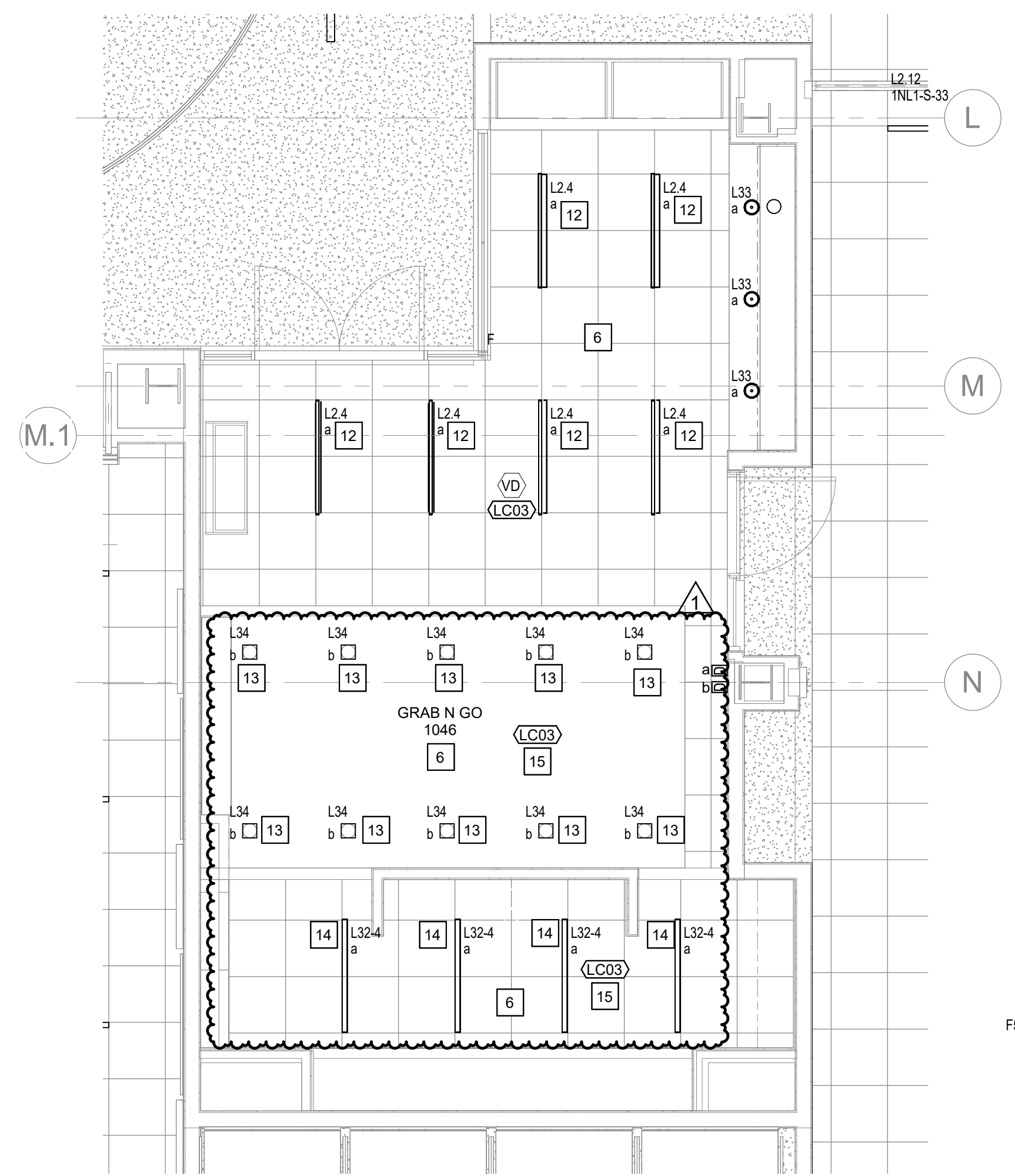
- UNLESS OTHERWISE NOTED, ALL ELECTRICAL DEVICE CIRCUIT NUMBERS SHOWN ARE ASSOCIATED WITH PANEL 1NL1-S.
- ALL DEVICES SHOWN DARK DASHED ARE TO BE DISCONNECTED AND REMOVED. SALVAGE EXISTING CIRCUITING FOR EXTENSION/RECONNECTION TO NEW ELECTRICAL DEVICES. REFER TO NEW WORK PLANS FOR MORE INFORMATION.
-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

SHEET KEYNOTE:

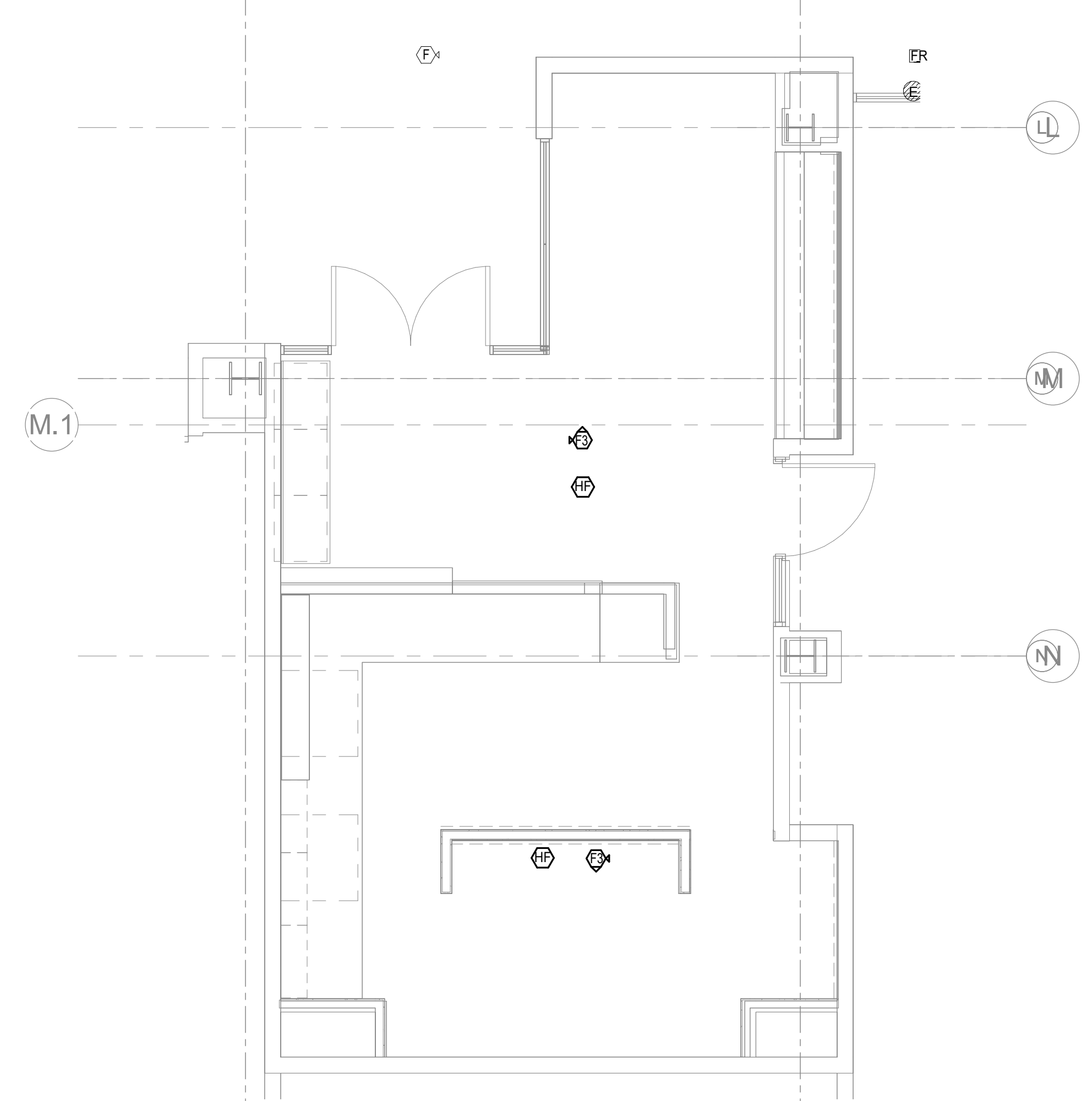
- PREPARE EXISTING CIRCUITING FOR EXTENSION TO NEW PANEL LOCATION. REFER TO NEW WORK POWER PLAN FOR MORE INFORMATION.
- REMOVE EXISTING DEVICE CONNECTION. DISCONNECT EXISTING CIRCUITING. REMOVE IN-WALL CONDUCTORS AND MAKE SAFE WITHIN JUNCTION BOX ABOVE ACCESSIBLE CEILING. MARK EXISTING CIRCUIT BREAKER 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-7/17/75.
- CONNECT NEW ELECTRICAL DEVICE TO EXISTING CIRCUITING MADE AVAILABLE BY DEMOLITION FROM PANEL 1NL1-S. PANEL 1NL1-S LOCATED IN ROOM 1086 ON LEVEL ONE SOUTH.
- CIRCUIT TO NEW PANEL 1NL5-S.
- CONNECT NEW LIGHTING IN THIS AREA TO EXISTING CIRCUITING SALVAGED DURING DEMOLITION. CONNECT TO EXISTING CONTROLS.
- DISCONNECT AND SALVAGE EXISTING DISCONNECT SWITCH SERVING VFD EF-7. REMOVE EXISTING WIRING FROM DISCONNECT SWITCH TO SUPPLYING PANEL 4OSL1-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 OWNER.
- PROVIDE NEW 208 VOLT, 3-PHASE, 60A FUSED DISCONNECT SWITCH, FUSED WITH (3)38A FUSES TO SERVE NEW VFD EF-7. PROVIDE NEW (4)8, #10G, IN EXISTING SALVAGED 3/4" FROM NEW DISCONNECT SWITCH TO SERVING PANEL 4OSL1-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.
- 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" TO NEW EF-7. PROVIDE ALL MOUNTING HARDWARE AND DEVICES AS NEEDED. COORDINATE WORK WITH MECHANICAL CONTRACTOR.
- DISCONNECT AND REMOVE EXISTING 30A, 3-POLE CIRCUIT BREAKER SERVING DEMOLISHED EXHAUST FAN EF-7. INSTALL NEW 60A, 3-POLE CIRCUIT BREAKER AT SAME POSITION IN PANEL. MATCH EXISTING.
- 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 DEMOLITION.
- L3.4: PROVIDE FAIL-SAFE FLSOQC-SM-20-DW-0010-FEUA-C-120-90-35-FALC-CSSQ-SM-2-H LIGHT FIXTURE (OR APPROVED EQUAL). PROVIDE ALL MOUNTING HARDWARE AND DEVICES. CONNECT TO EXISTING LIGHTING CIRCUITING MADE AVAILABLE BY DEMOLITION.
- L3.2-4: PROVIDE FAIL-SAFE 4FSN6-1000DCP125-UNV-1835-90-A338-418GDM-FRED LIGHT FIXTURE (OR APPROVED EQUAL). PROVIDE ALL MOUNTING HARDWARE AND DEVICES. CONNECT TO EXISTING LIGHTING CIRCUITING MADE AVAILABLE BY DEMOLITION.
- FOR LIGHTING SEQUENCING, MATCH SEQUENCE ID L033. MANUAL ON VIA DIMMER SWITCHES; AUTOMATIC OFF (VIA CEILING MOUNTED OCCUPANCY SENSORS) TO MATCH EXISTING BUILDINGS LIGHTING CONTROL SEQUENCE SCHEDULE.
- OUTLET TO BE MOUNTED 30" A.F.F. INSIDE CABINET.



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



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



3 ELECTRICAL LEVEL 01 SYSTEMS PLAN
1/4" = 1'-0"



