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ARCHITECTS  
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ADDENDUM NO. TWO  
FERNDAL PUBLIC SCHOOLS  
2017 SINKING FUND PROJECTS  
FERNDAL H.S. – KITCHEN / SERVING  
AND CAFETERIA RENOVATION  
Page 1 of 3 (write up only)

February 9, 2018

ADDENDUM NO. TWO to the plans and specifications for the FERNDAL PUBLIC SCHOOLS, 2017 SINKING FUND PROJECTS; FERNDAL H.S. – KITCHEN/ SERVING AND CAFETERIA RENOVATION, Ferndale, MI, Architect's Project No. 171745, dated January 15, 2018.

The above plans and specifications are modified, supplemented or augmented as follows, and this ADDENDUM NO. TWO, is hereby made a part of the contract documents.

**Spec Sections 15410 -Plumbing Fixtures is being issued with this Addendum.**

**Drawings: Sketch SK-1, AD1.1H, A1.1H, A3.1H, A5.1H, E0.2, E2.1, E3.1 and Spec Section 15410 are being issued with this Addendum.**

**SPECIFICATION ITEMS:**

**ITEM NO. AS1:** Refer to Spec Section 15410-“Plumbing Fixtures” (Issued)  
A. Added Specification Section 15410 in its entirety

**ARCHITECTURAL DRAWING ITEMS**

**ITEM NO. A1:** Refer to drawing AD1.1 (issued):

A. Revised drawings as noted

**ITEM NO. A2:** Refer to drawing A1.1 (issued):

A. Revised drawings as noted

**ITEM NO. A3:** Refer to drawing A3.1 (issued):

A. Revised drawings as noted

**ITEM NO. A4:** Refer to drawing A5.1 (issued):

A. Revised drawings as noted

## **FOOD SERVICE EQUIPMENT DRAWING ITEMS**

**ITEM NO. FS1:** Refer to drawing FSE-2 (not issued) and sketch FSA-1 (issued)

- A. Revised drawings as noted

## **MECHANICAL DRAWING ITEMS**

**ITEM NO. M1:** Refer to M2.0 and M2.1 (Not Re-Issued).

- A. Revised Construction Note 11 to read "4 inch high concrete pad for water heater".
- B. Revised CW and HW pipe sizes, in Construction Note 12, from 1 to 1-1/4 inches, to correspond with the pipe sizes indicated on the plan.
- C. Revise Construction Note 14 to read "3 gas down within metal stud wall, down to tunnel/basement. All gas pipe fittings within the stud wall shall be welded, no threaded or flanged fittings will be acceptable."
- D. Revise Construction Note 154 to read "Gas header located in stud wall. All gas pipe fittings within the stud wall shall be welded, no threaded or flanged fittings will be acceptable."

**ITEM NO. M2:** Refer to M4.1 (Not Re-Issued).

- A. Revised Construction Note 8 to read "Abandon existing inoperable temperature gauge."

## **ELECTRICAL DRAWING ITEMS**

**ITEM NO. E1** Refer to E0.2 (Re-Issued).

- A. Revised fixture type L1 to be 4' diameter with a minimum output of 6000 lumens.

**ITEM NO. E2** Refer to E2.1 (Re-Issued).

- A. Revised layout and quantity of L1 light fixtures as indicated.

**ITEM NO. E3:** Refer to E3.1 (Re-Issued).

- A. Revised location of new cafeteria sound system rack as indicated.

**END OF ADDENDUM NO. 2**

Cc: Jamie Stottlemeyer, Ferndale Public School  
File

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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.
- B. Related Sections include the following:
  1. Division 10 Section "Toilet and Bath Accessories."
  2. Division 15 Section "Mechanical General Requirements."
  3. Division 15 Section "Basic Mechanical Materials and Methods."
  4. Division 15 Section "Domestic Water Piping Specialties" for backflow preventers; individual-fixture, water tempering valves; and specialty fixtures not included in this Section.
  5. Division 15 Section "Drainage Piping Specialties" for floor drains, and specialty fixtures not included in this Section.

## 1.2 DEFINITIONS

- A. ABS: Acrylonitrile-butadiene-styrene plastic.
- B. Accessible Fixture: Plumbing fixture that can be approached, entered, and used by people with disabilities.
- C. Cast Polymer: Cast-filled-polymer-plastic material. This material includes cultured-marble and solid-surface materials.
- D. Cultured Marble: Cast-filled-polymer-plastic material with surface coating.
- E. Fitting: Device that controls the flow of water into or out of the plumbing fixture. Fittings specified in this Section include supplies and stops, faucets and spouts, shower heads and tub spouts, drains and tailpieces, and traps and waste pipes. Piping and general-duty valves are included where indicated.
- F. FRP: Fiberglass-reinforced plastic.
- G. PMMA: Polymethyl methacrylate (acrylic) plastic.
- H. PVC: Polyvinyl chloride plastic.
- I. Solid Surface: Nonporous, homogeneous, cast-polymer-plastic material with heat-, impact-, scratch-, and stain-resistance qualities.

## 1.3 SUBMITTALS

- A. Product Data: For each type of plumbing fixture indicated. Include selected fixture and trim, fittings, accessories, appliances, appurtenances, equipment, and supports. Indicate materials and finishes, dimensions, construction details, and flow-control rates.
- B. Operation and Maintenance Data: For plumbing fixtures and trim to include in operation and maintenance manuals.

#### 1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain plumbing fixtures, faucets, and other components of each category through one source from a single manufacturer.
  - 1. Exception: If fixtures, faucets, or other components are not available from a single manufacturer, obtain similar products from other manufacturers specified for that category.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by an NRTL acceptable to authorities having jurisdiction, and marked for intended use.
- C. Regulatory Requirements: Comply with requirements in ICC A117.1, "Accessible and Usable Buildings and Facilities for plumbing fixtures for people with disabilities.
- D. Regulatory Requirements: Comply with requirements in Public Law 102-486, "Energy Policy Act," about water flow and consumption rates for plumbing fixtures.
- E. Regulatory Requirements: Comply with requirements in Public Law 111-380, "Reduction of Lead in Drinking Water Act," about lead content in materials that will be in contact with potable water for human consumption.
- F. Comply with NSF 61, "Drinking Water System Components - Health Effects; Sections 1 through 9," and NSF 372 Drinking Water System Components - Lead Content for potable domestic water piping and components.
- G. Select combinations of fixtures and trim, faucets, fittings, and other components that are compatible.
- H. Comply with applicable ANSI, ASME, ASSE, ASTM, ICC, NSF, and UL standards and other requirements specified for plumbing fixtures, trim, fittings, components, and features.

## PART 2 - PRODUCTS

### 2.1 SERVICE BASINS

#### A. Service Basins, SS-1:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - a. Crane Plumbing, LLC; Fiat Products; an American Standard Brand.
  - b. Ferguson Enterprises, Inc.; ProFlo.
  - c. Florestone Products Co., Inc.
  - d. Mustee, E. L. & Sons, Inc.
  - e. Swan Corporation (The).
  - f. Zurn Plumbing Products Group; Light Commercial Operation.
2. Description: Flush-to-wall, floor-mounting, cast-polymer fixture with rim guard.
  - a. Shape: Square.
  - b. Size: 24 by 24 inches (610 by 610 mm).
  - c. Height: 10 inches (255 mm) with dropped front.
  - d. Tiling Flange: Not required.
  - e. Rim Guard: On all top surfaces.
  - f. Color: To be selected by the Architect.
  - g. Faucet: SF-1.
  - h. Drain: Grid with NPS 3 (DN 80) outlet.

### 2.2 SINK FAUCETS

#### A. Sink Faucets, SF-1:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - a. American Standard Companies, Inc.
  - b. Chicago Faucets; Model 897.
  - c. Delta Faucet Company; Model 28C2383.
  - d. Ferguson Enterprises, Inc.; ProFlo PF1118.
  - e. Kohler Co.

- f. Moen Commercial.
  - g. Speakman Company; SC5811-RCP-LEV-5H-WHK.
  - h. Symmons Industries, Inc.
  - i. T & S Brass and Bronze Works, Inc.
  - j. Zurn Plumbing Products Group.
2. Description: Service sink faucet with stops in shanks, vacuum breaker, hose-thread outlet, and pail hook. Include hot- and cold-water indicators; coordinate faucet inlets with supplies and fixture holes; coordinate outlet with spout and fixture receptor. Include 5 foot rubber hose and wall mounted hose clamp.
- a. Body Material: Commercial, solid brass.
  - b. Finish: Polished chrome plate.
  - c. Maximum Flow Rate: 2.5 gpm (9.5 L/min.), unless otherwise indicated.
  - d. Mixing Valve: Two handle.
  - e. Centers: 8 inches (203 mm).
  - f. Mounting: Back/wall.
  - g. Handle(s): Lever.
  - h. Inlet(s): NPS 1/2 (DN 15).
  - i. Spout Type: Rigid, solid brass with wall brace and pail hook.
  - j. Spout Outlet: Hose thread.
  - k. Vacuum Breaker: Required.
  - l. Operation: Noncompression, manual.

## 2.3 FIXTURE SUPPLIES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
- 1. BrassCraft; a Masco Company.
  - 2. McGuire Mfg. Co., Inc.
  - 3. Any of the approved plumbing fixture manufacturers.
- B. Description: Chrome-plated brass, loose-key or screwdriver angle stops with brass stems; rigid, chrome-plated copper risers; and chrome-plated wall flanges.



## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine roughing-in of water supply and sanitary drainage and vent piping systems to verify actual locations of piping connections before plumbing fixture installation.
- B. Examine cabinets, counters, floors, and walls for suitable conditions where fixtures will be installed.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. Assemble plumbing fixtures, trim, fittings, and other components according to manufacturers' written instructions.
- B. Install off-floor supports, affixed to building substrate, for wall-mounting fixtures.
  - 1. Use carrier supports with waste fitting and seal for back-outlet fixtures.
  - 2. Use carrier supports without waste fitting for fixtures with tubular waste piping.
  - 3. Use chair-type carrier supports with rectangular steel uprights for accessible fixtures.
- C. Install floor-mounting fixtures on closet flanges or other attachments to piping or building substrate.
- D. Install fixtures level and plumb according to roughing-in drawings. Install accessible fixtures at heights required by local codes.
- E. Install water-supply piping with stop on each supply to each fixture to be connected to water distribution piping. Attach supplies to supports or substrate within pipe spaces behind fixtures. Install stops in locations where they can be easily reached for operation.

1. Exception: Fixtures with flushometer valves, and faucets or valves with integral stops.
- F. Install trap and tubular waste piping on drain outlet of each fixture to be directly connected to sanitary drainage system.
- G. Install tubular waste piping on drain outlet of each fixture to be indirectly connected to drainage system.
- H. Install faucet-spout fittings with specified flow rates and patterns in faucet spouts if faucets are not available with required rates and patterns. Include adapters if required.
- I. Install water-supply flow-control fittings with specified flow rates in fixture supplies at stop valves.
- J. Install faucet flow-control fittings with specified flow rates and patterns in faucet spouts if faucets are not available with required rates and patterns. Include adapters if required.
- K. Install traps on fixture outlets.
  1. Exception: Omit trap on fixtures with integral traps.
  2. Exception: Omit trap on indirect wastes, unless otherwise indicated.
- L. Install escutcheons at piping wall ceiling penetrations in exposed, finished locations and within cabinets and millwork. Use deep-pattern escutcheons if required to conceal protruding fittings. Escutcheons are specified in Division 15 Section "Basic Mechanical Materials and Methods."
- M. Set service basins in leveling bed of cement grout. Grout is specified in Division 15 Section "Basic Mechanical Materials and Methods."
- N. Seal joints between fixtures and walls, floors, and countertops using sanitary-type, one-part, mildew-resistant silicone sealant. Match sealant color to fixture color. Sealants are specified in Division 7 Section "Joint Sealants."

### 3.3 CONNECTIONS

- A. Piping installation requirements are specified in other Division 15 Sections. Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Connect fixtures with water supplies, stops, and risers, and with traps, soil, waste, and vent piping. Use size fittings required to match fixtures.
- C. Individual water line branches, waste lines, vents, and traps for connection to individual fixtures, fixture fittings and specialties shall be in accordance with the schedule on the Drawings.

### 3.4 FIELD QUALITY CONTROL

- A. Verify that installed plumbing fixtures are categories and types specified for locations where installed.
- B. Check that plumbing fixtures are complete with trim, faucets, fittings, and other specified components.
- C. Inspect installed plumbing fixtures for damage. Replace damaged fixtures and components.
- D. Test installed fixtures after water systems are pressurized for proper operation. Replace malfunctioning fixtures and components, then retest. Repeat procedure until units operate properly.

### 3.5 ADJUSTING

- A. Operate and adjust faucets and controls. Replace damaged and malfunctioning fixtures, fittings, and controls.
- B. Replace washers and seals, or cartridges of leaking and dripping faucets and stops.

### 3.6 CLEANING

- A. Clean fixtures, faucets, and other fittings with manufacturers' recommended cleaning methods and materials. Do the following:

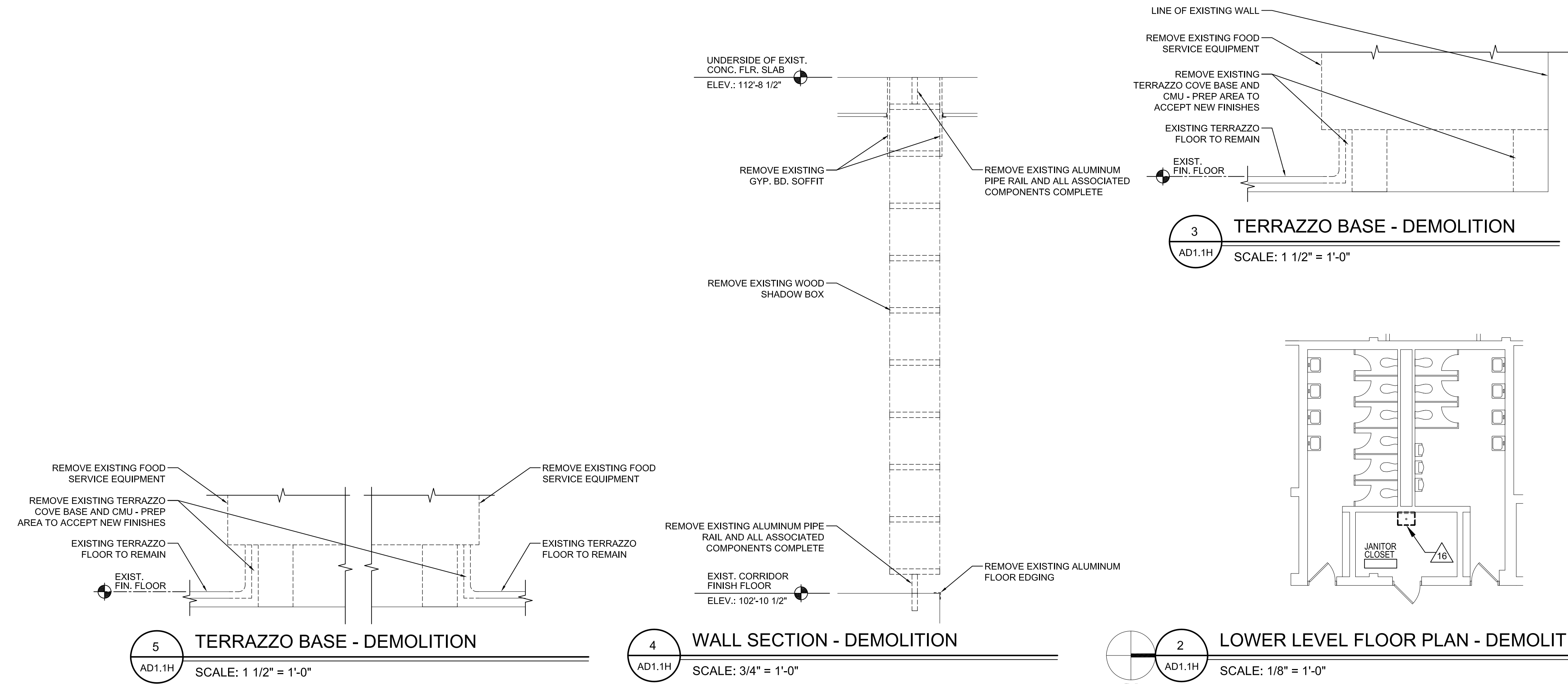
1. Remove faucet spouts and strainers, remove sediment and debris, and reinstall strainers and spouts.
2. Remove sediment and debris from drains.

- B. After completing installation of exposed, factory-finished fixtures, faucets, and fittings, inspect exposed finishes and repair damaged finishes.

### 3.7 PROTECTION

- A. Provide protective covering for installed fixtures and fittings.
- B. Do not allow use of plumbing fixtures for temporary facilities unless approved in writing by Owner.

END OF SECTION 15410



#### DEMOLITION PLAN KEYNOTES:

- 1 REMOVE EXISTING FOLDING PARTITION FROM WALL - SALVAGE TO RE-FASTEN TO NEW WALL FINISH
- 2 REMOVE EXISTING STAINLESS STEEL GUARDRAIL COMPLETE - PATCH TERRAZZO FLOOR TO MATCH EXISTING.
- 3 REMOVE EXISTING STAINLESS STEEL FOOD SERVICE EQUIPMENT COMPLETE - PATCH TERRAZZO FLOOR TO MATCH EXISTING (V.I.F.)
- 4 REMOVE EXISTING COUNTER/CABINET COMPLETE
- 5 REMOVE EXISTING RAISED TERRAZZO CURB COMPLETE - PATCH TERRAZZO FLOOR TO MATCH EXISTING (V.I.F.)
- 6 REMOVE EXISTING WOOD SHADOWBOX WALL - FULL HEIGHT AND WIDTH (V.I.F.) - REFER TO DETAIL 4/AD1.1H
- 7 REMOVE EXISTING STEEL SECURITY GRILLE, TRACK ASSEMBLY AND ALL COMPONENTS COMPLETE - PATCH WALLS, FLOOR AND CEILING FLUSH AND LEVEL (V.I.F.) TO ACCEPT NEW FINISHES
- 8 REMOVE EXIST. DOORS AND ALL ASSOCIATED HARDWARE - FRAME TO REMAIN
- 9 REMOVE EXISTING WALL SHOWN DASHED (FULL HEIGHT) - PATCH FLOOR LEVEL
- 10 EXISTING ELECTRICAL PANEL TO REMAIN
- 11 REMOVE EXISTING STEEL HANDRAILS COMPLETE
- 12 REMOVE EXISTING DRINKING FOUNTAIN - COORDINATE W/MECH.
- 13 REMOVE EXISTING H.M. DOOR AND FRAME FROM GYP. BD. WALL - DISPOSE OF FRAME AND TURN DOORS AND HARDWARE OVER TO OWNER
- 14 REMOVE H.M. DOOR FRAME - PATCH WALLS, HEAD AND FLOOR FLUSH TO MATCH ADJACENT FINISHES
- 15 REMOVE FRICTION STRIPS FROM THE ENTIRE LENGTH OF RAMP SURFACE
- 16 REMOVE WALL MTD. SLOP SINK PREP SANITARY FOR NEW FLOOR MTD. SLOP SINK - COORDINATE WITH MECHANICAL - PATCH HOLES IN WALLS FLUSH
- 17 REMOVE RAMP HANDRAIL - WOOD BACK-UP TO REMAIN
- 18 REMOVE EXIST. H.M. DOOR AND FRAMING FROM GYP. BD. WALL - DISPOSE OF FRAME AND SALVAGE DOORS AND HDWR FOR INSTALLATION AT OPENING No. 05
- 19 REMOVE ENTIRE PLASTER CEILING, CARRYING CHANNELS AND ALL ASSOCIATED COMPONENTS COMPLETE - COORD. W/NEW WORK
- 20 EXIST. DEPRESSED STAINLESS STEEL BASIN TO REMAIN
- 21 EXIST. RAISED TERRAZZO BASE TO REMAIN
- 22 REMOVE ICE MACHINE / INSTALLATION - SEE FSE DRAWINGS
- 23 REMOVE PORTION OF EXIST. ACOUSTICAL LAY-IN CEILING TILE AND METAL GRID SYSTEM TO ACCOMMODATE WALL CONSTRUCTION - COORDINATE W/NEW WORK
- 24 EXIST. VCT AND RESILIENT BASE FROM RAMP SURFACE - PREP AREA TO ACCEPT NEW FINISHES
- 25 REMOVE EXIST. GYP. BD. SOFFIT COMPLETE TO REMOVE EXIST. WALL CONSTRUCTION AS INDICATED
- 26 REMOVE EXIST. GREASE TRAP COMPLETE AND CAP UTILITIES - INFILL FLOOR LEVEL WITH ADJACENT FINISHES
- 27 REMOVE PORTION OF EXIST. STAINLESS STEEL PREP TABLE - COORDINATE W/ FOOD SERVICE EQUIPMENT DRAWINGS

#### DEMOLITION PLAN GENERAL NOTES:

ALL DEMOLITION NECESSARY FOR THE INSTALLATION OF NEW CONSTRUCTION IS PART OF THE CONTRACT ISSUED FOR THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL DEMOLITION, CUTTING AND PATCHING, SHORING AND BRACING AS REQUIRED TO COMPLETE THE WORK SHOWN/DESCRIBED IN THE CONSTRUCTION DOCUMENTS OR AS REQUIRED TO COMPLETE THE WORK.

PROVIDE PROTECTION FOR EXISTING CONSTRUCTION TO REMAIN. PATCH AND REPAIR ALL AREAS DAMAGED DURING DEMOLITION / CONSTRUCTION. MATCH EXISTING CONSTRUCTION, MATERIALS AND FINISHES. TYPICAL ALL LOCATIONS.

SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR RELATED AND ADDITIONAL DEMOLITION AND PATCHING WORK BY MECHANICAL AND ELECTRICAL TRADES.

SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR REMOVAL AND/OR CAPPING OF UTILITIES WHERE EQUIPMENT IS REMOVED.

COORDINATE PHASING AND SEQUENCING OF DEMOLITION AND PATCHING WORK WITH CONSTRUCTION MANAGER.

DO NOT REMOVE ANY INDICATED OR NOTED BEAMS, COLUMNS, OR MASONRY BEARING WALLS WITHOUT OBSERVING THE EFFECT UPON THE STRUCTURAL INTEGRITY OF CONSTRUCTION TO REMAIN. ALL QUESTIONABLE CONDITIONS SHALL BE BROUGHT TO ARCHITECT'S ATTENTION PRIOR TO REMOVAL OF SUCH ITEMS.

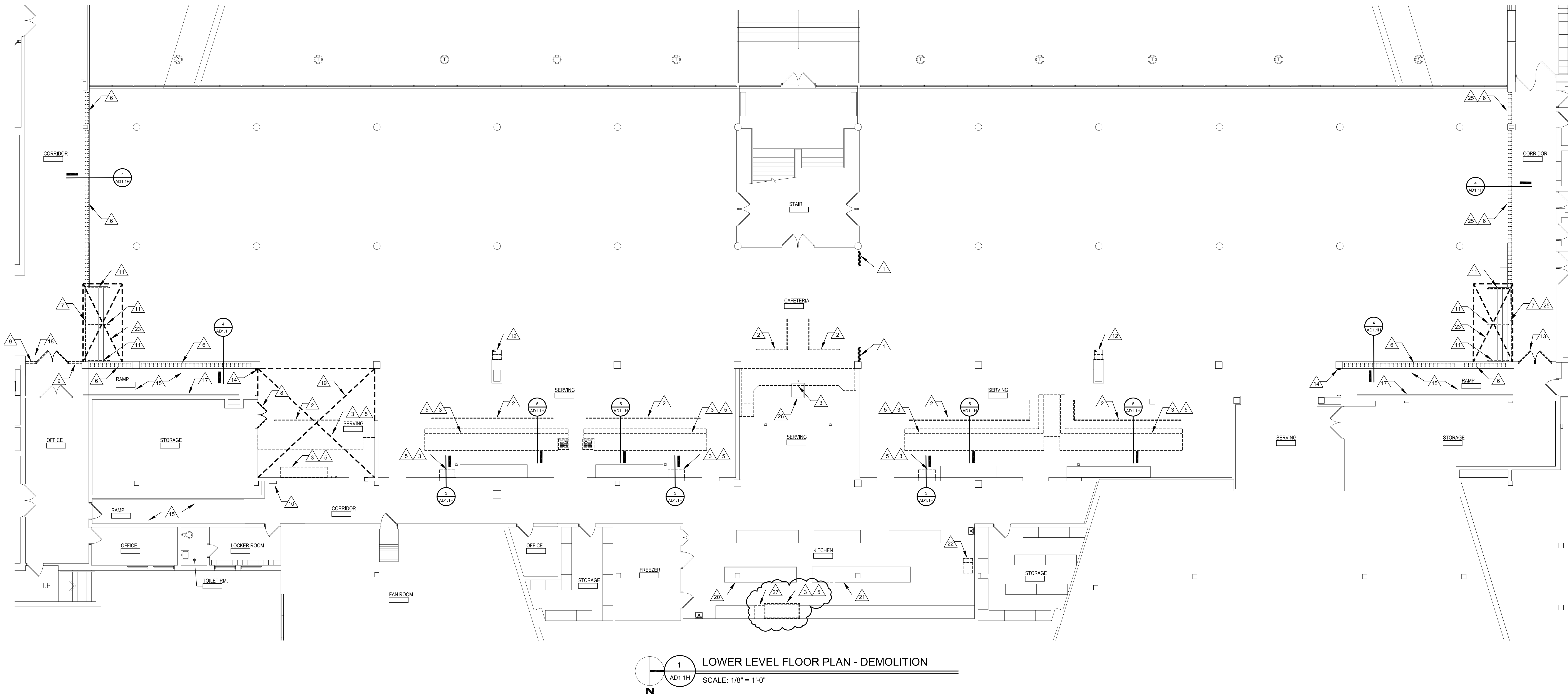
WHERE EXISTING MASONRY WALLS INDICATED TO BE REMOVED EXTEND BELOW FLOOR SLAB. REMOVE MATERIAL TO 8" MIN. BELOW FINISH FLOOR TO ALLOW FOR TIE-IN OF NEW CONCRETE SLAB (U.N.O.)

PATCH EXPOSED FACES OF EXISTING WALLS AND CEILINGS TO REMAIN ADJACENT TO LOCATIONS WHERE EXISTING WALLS ARE INDICATED TO BE REMOVED. FILL AND PATCH SUBFLOORS TO RECEIVE NEW FLOOR COVERING. PATCH BASE TO MATCH ADJACENT WHERE ENTIRE AREA IS NOT SCHEDULED TO RECEIVE NEW BASES. TOOTH-IN NEW MASONRY AT REMOVED WALLS TO MATCH COURSING OF EXISTING WALLS.

WHERE REMOVAL OF CASEWORK, MILLWORK, CHALKBOARD, TACKBOARD, EQUIPMENT OR EDUCATIONAL SPECIALTY EQUIPMENT IS INDICATED, FILL HOLES AND PATCH EXISTING WALLS, BASES, AND CEILINGS WHICH ARE TO REMAIN EXPOSED.

WHERE REMOVAL OF PORTIONS OF SUBFLOORS IS INDICATED OR IS REQUIRED TO PERFORM INDICATED WORK, PATCH AND REPLACE FLUSH WITH EXISTING UPON COMPLETION OF RELATED WORK.

UNLESS OTHERWISE INDICATED, TOOTH NEW MASONRY MATERIAL INTO EXISTING WALLS WHEREVER MASONRY PATCHING IS EXPOSED. MATCH COURSING AND WALL THICKNESS.



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FERDALE PUBLIC SCHOOLS  
FERDALE HIGH SCHOOL  
KITCHEN / SERVING LINE AND CAFETERIA RENOVATION

HIGH SCHOOL  
LOWER LEVEL FLOOR PLAN -  
DEMOLITION

PRELIMINARY ☐  
DESIGN DEVELOPMENT ☐  
CONSTRUCTION ☒  
FINAL RECORD ☐

DRAWN BY: JTS  
CHECKED BY: BJS

REVISIONS:  
ADDENDUM No.2 2-9-18

DATE: JANUARY 15, 2018  
SHEET NO.:

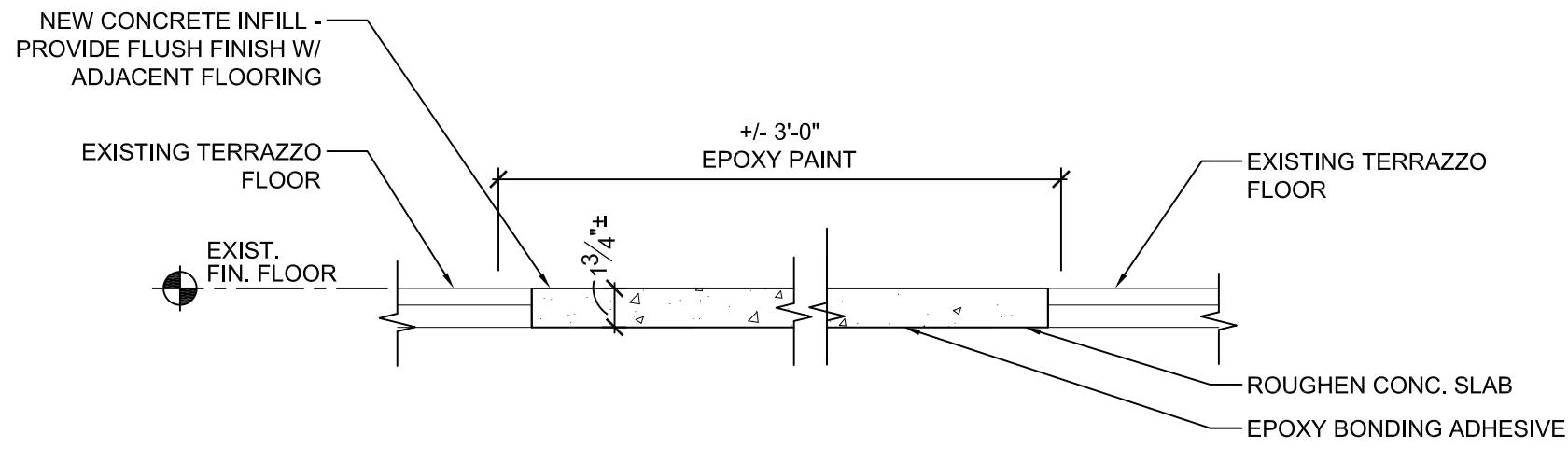
AD1.1H

JOB NO.: 171745

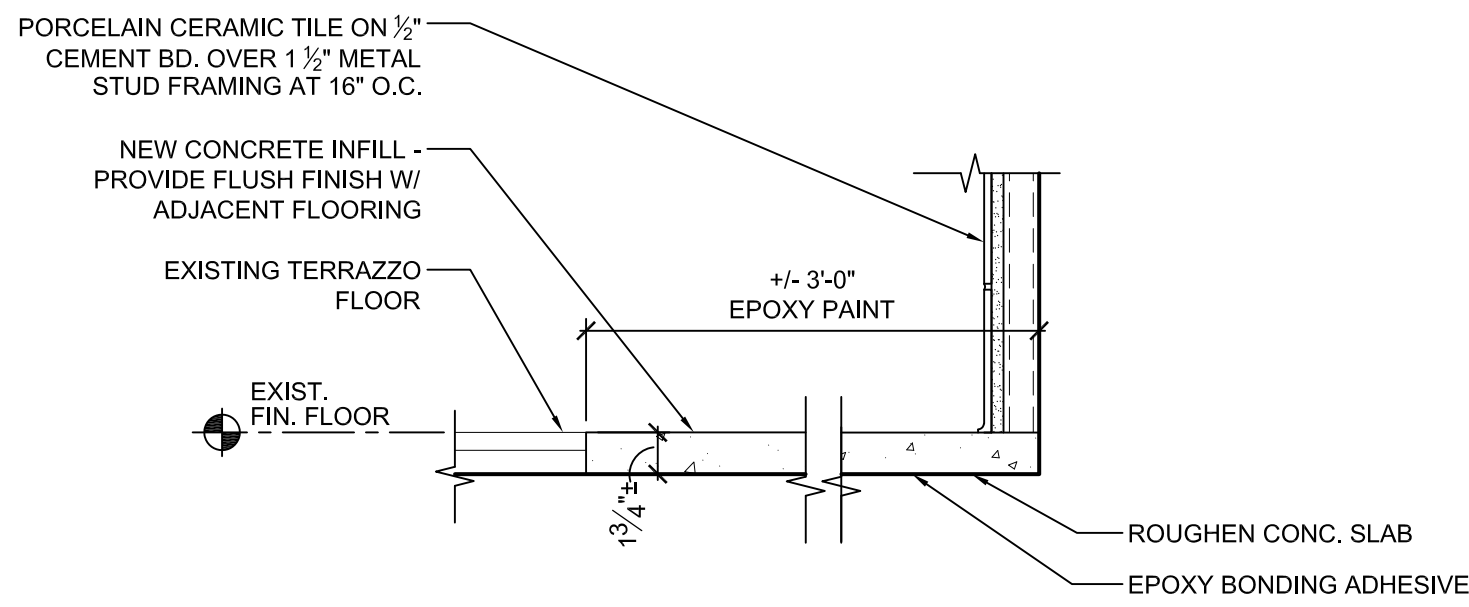
NOTES:  
1. NOT ALL WALL TYPES ARE USED ON EACH FLOOR.  
2. EXTEND WALLS UP FULL HEIGHT TO DECK ABOVE (U.N.O.)  
3. DO NOT FASTEN VERTICAL STUDS TO TOP RUNNER TRACK @ SECOND FLOOR ASSEMBLIES. USE SLIP TRACK TO ALLOW FOR DEFLECTION OF STRUCTURE WITHOUT COMPROMISING WALL INTEGRITY.

WALL TYPES:

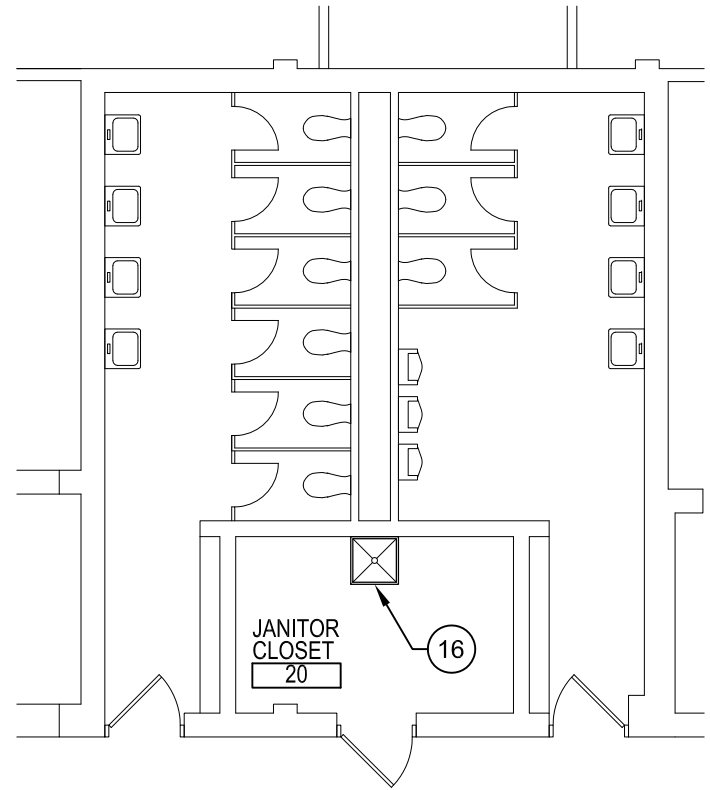
- 2-8" CMU  
2-8" CMU: 1 HOUR FIRE RATING  
8" CMU  
8" CMU: 1 HOUR FIRE RATING  
5/8" HH-IMPACT GYP. BD. ON 3 5/8" METAL FRAMING @ 12" O.C. (MAX.)  
1/2" CEMENT BD. ON 1 1/2" METAL FURRING @ 16" O.C. (MAX.) ON EXISTING WALL  
1/2" CEMENT BD. (BOTH SIDES) ON 6" METAL FURRING @ 16" O.C. (ALTERNATE No.1)  
1/2" CEMENT BD. ON 7/8" METAL FURRING @ 16" O.C. (MAX.) ON EXISTING WALL



4 TYPICAL FLOOR INFILL  
SCALE: 1 1/2" = 1'-0"



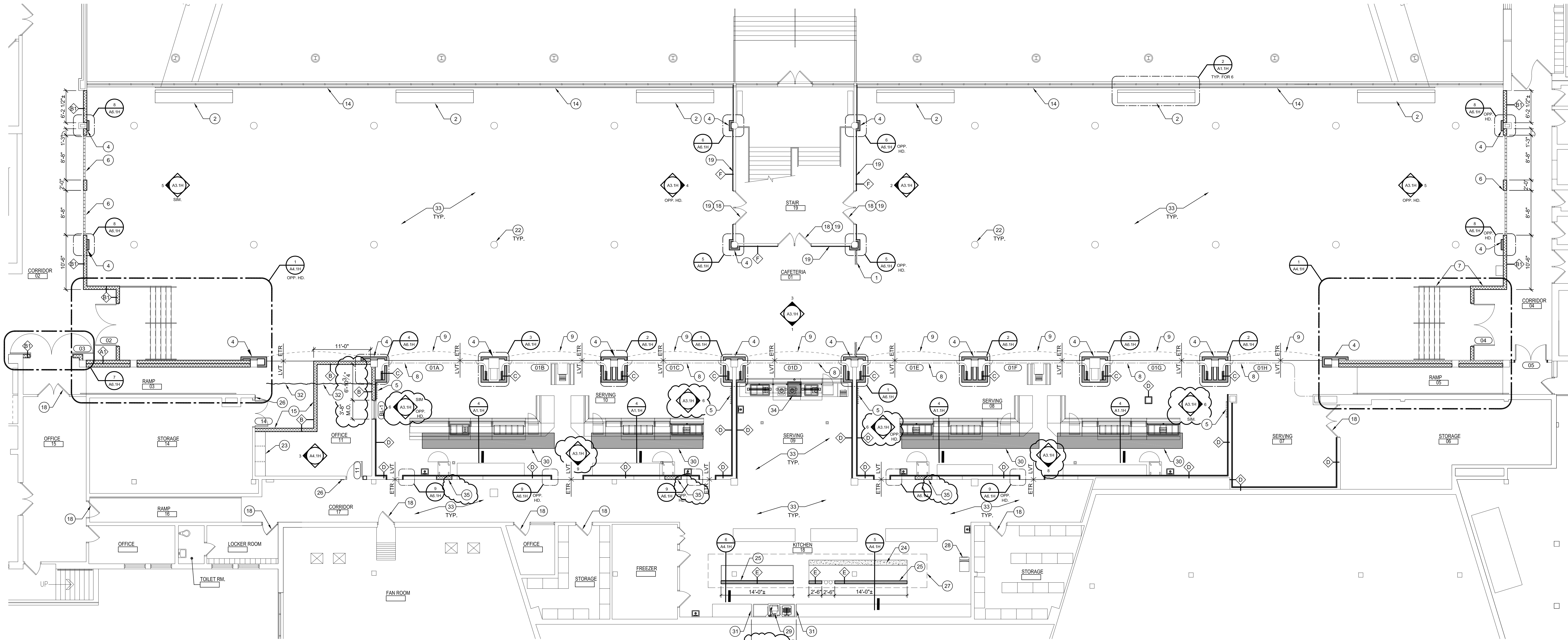
3 TYPICAL FLOOR INFILL AT WALL  
SCALE: 1 1/2" = 1'-0"



2 LOWER LEVEL FLOOR PLAN - NEW WORK  
SCALE: 1/8" = 1'-0"

NEW WORK PLAN KEYNOTES:

- RE-FASTEN FOLDING WALL TO NEW WALL PARTITION
- NEW TABLE CONSTRUCTION - REFER TO DETAIL 4/A4H
- NEW SECURITY GATE COLUMN ENCLOSURE - REFER TO DWG A5.1H
- NEW THIN-BRICK SYSTEM PIER - REFER TO INTERIOR ELEVATIONS
- NEW WALL MOUNTED TV MONITOR (BY OWNER)
- NEW FIRE-RATED GLASS BLOCK WINDOW SYSTEM IN NEW WALL CONSTRUCTION - REFER TO INTERIOR ELEVATIONS
- NEW WALL CONSTRUCTION WITH HARD TILE FINISH (FULL HEIGHT)
- NEW TRACK FOR NEW SECURITY GRILL IN SOFFIT
- LINE OF NEW ROUND SOFFIT CONSTRUCTION - REFER TO DETAIL 2/A4.1H - REMOVE AND RELOCATE ALL FIRE ALARM, ETC TO FACE OF NEW ROUND SOFFIT (V.I.F.) COORDINATE WITH ELECTRICAL
- NEW CONCRETE STEPS WITH RUBBER TREAD NOSINGS AND RISERS
- NEW STEEL HANDRAIL / GUARDRAIL (PAINT)
- NEW STEEL HANDRAIL (PAINT)
- NEW CONCRETE LANDING OVER EXISTING STEPS
- NEW 1/4000 RACEWAY ALONG WALL @ 45" A.F.F. TO BOTTOM OF RACEWAY - SEE ELECTRICAL
- PROVIDE 48" HIGH ACROVYN WALL PROTECTION PANEL WITH ACROVYN CHAIR RAIL
- NEW FLOOR MOUNTED SLOP SINK - SEE MECHANICAL
- NEW 1 1/2" METAL HANDRAIL @ 36" CONT. ABOVE RAMP (PAINT)
- PAINT EXISTING H.M. DOOR AND FRAME (BOTH SIDES) COLORS T.B.D.
- PROVIDE STAINLESS STEEL SCHLUTER STRIPS AROUND ALL DOOR FRAME AND WINDOW FRAMES TO FINISH OFF NEW HARD TILE EDGE (V.I.F.)
- RADIUS TRACK TO ALLOW FOR 5'-0" CLEARANCE AT BASE OF RAMP
- NEW RUBBER RAMP SURFACE
- EXISTING CONCRETE COLUMN - EPOXY PAINT (FULL HEIGHT)
- NEW 24" DEEP PLASTIC LAMINATE COUNTERTOP - REFER TO DETAIL 7/A4.1H
- PROVIDE NEW CONCRETE CURB EXTENSION ALONG EXIST. RAISED TERRAZZO BASE (EPOXY PAINT)
- PROVIDE NEW 48" HIGH WALL ALONG DEPRESSED BASIN AND RAISED BASE - REFER TO DETAILS 5/A4.1H AND 6/A4.1H (ALTERNATE No. 1)
- ROOM IDENTIFICATION SIGNAGE - REFER TO SIGNAGE SCHEDULE AND DETAILS
- LINE OF EXHAUST HOOD ABOVE
- NEW ICE MACHINE - REFER TO FOOD SERVICE EQUIPMENT DRAWINGS
- NEW DISHWASHER - REFER TO FOOD SERVICE EQUIPMENT DRAWINGS
- PATCH AND REPAIR EXIST. FLOOR WITH NEW CONCRETE INFILL - PROVIDE FLUSH FINISH TO ADJACENT FLOOR AND EPOXY PAINT WHERE BASE WAS REMOVED
- FINISH ENDS OF SMOOTH WITH NO SHARP EDGES OF EXIST. STAINLESS STEEL TABLE WHERE PORTION WAS REMOVED
- PROVIDE ARDEX SELF LEVELING PRODUCT TO FILL CRACK IN
- GRIND AND POLISH EXIST. TERRAZZO FLOOR AND BASE IN THIS AREA - REFER TO ROOM FINISH SCHEDULE - ALTERNATE No. 2
- PATCH AND REPAIR EXIST. FLOOR WITH NEW CONCRETE INFILL - PROVIDE FLUSH FINISH TO ADJACENT FLOOR AND EPOXY PAINT WHERE GREASE TRAP AND EXPOSED PIPE WAS REMOVED
- INFILL OPENING (3'-2 1/2" x 3'-8") WITH 8" C.M.U. - EPOXY PAINT WHERE FOOD STORAGE EQUIPMENT WAS REMOVED



1 LOWER LEVEL FLOOR PLAN - NEW WORK  
SCALE: 1/8" = 1'-0"

WA

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FERNDAL PUBLIC SCHOOLS  
FERNDAL HIGH SCHOOL  
KITCHEN / SERVING LINE AND CAFETERIA RENOVATION

HIGH SCHOOL  
LOWER LEVEL FLOOR PLAN -  
NEW WORK

PRELIMINARY ☐  
DESIGN DEVELOPMENT ☐  
CONSTRUCTION ☒  
FINAL RECORD ☐

DRAWN BY: JTS  
CHECKED BY: BJS

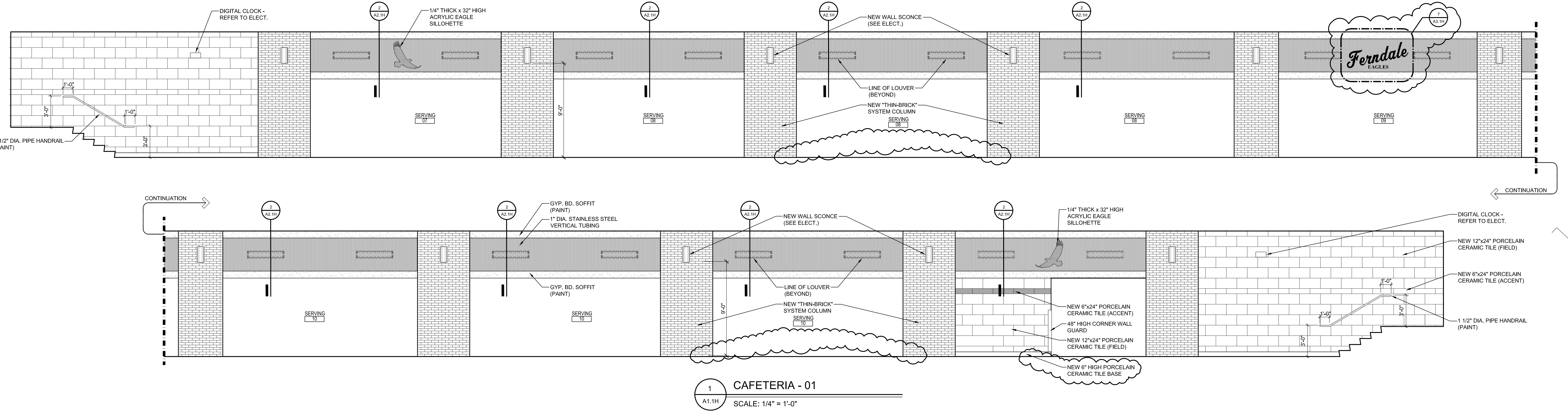
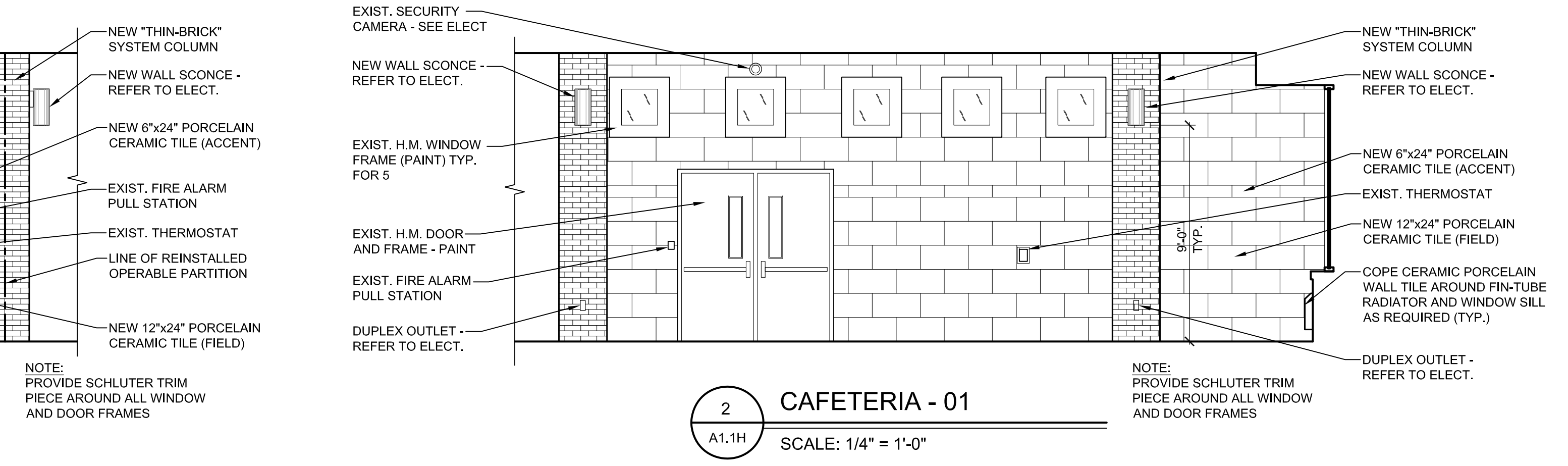
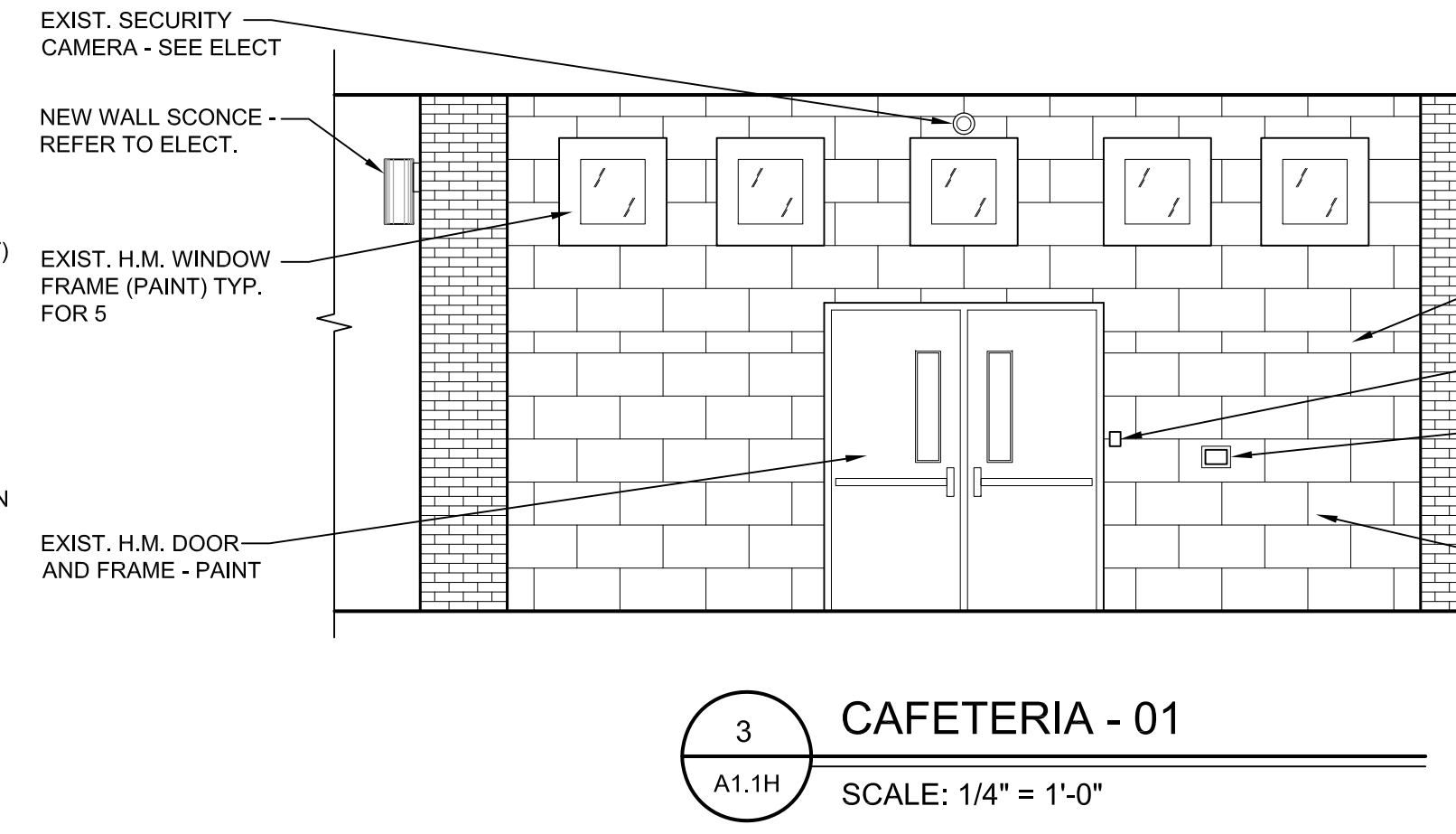
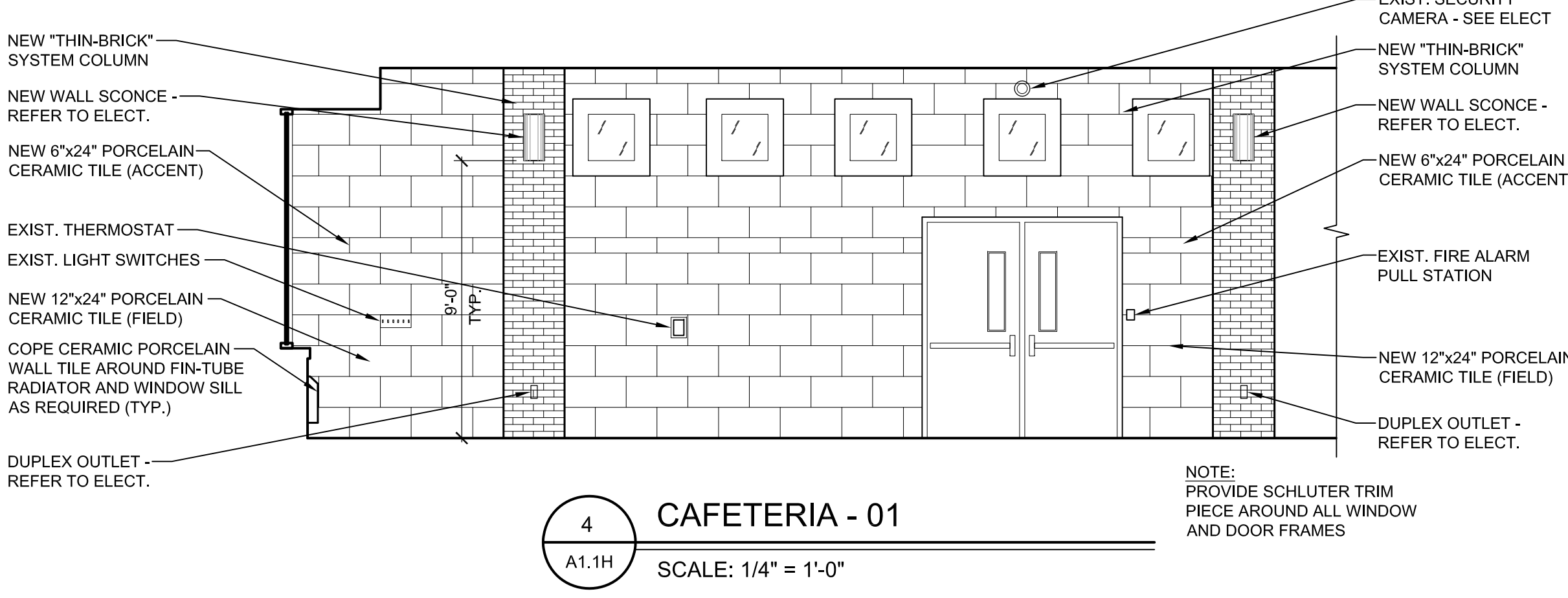
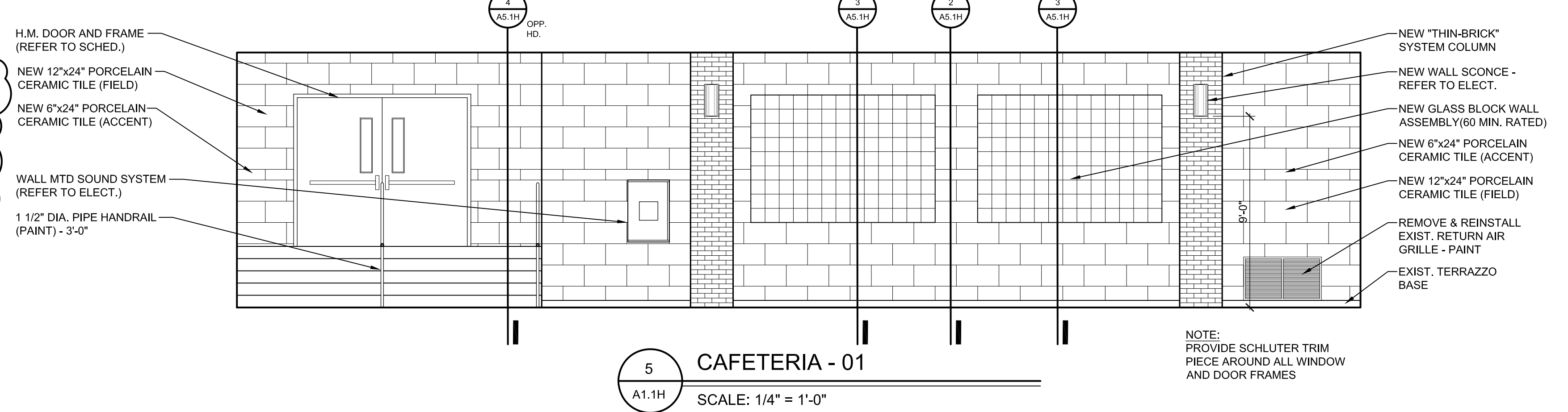
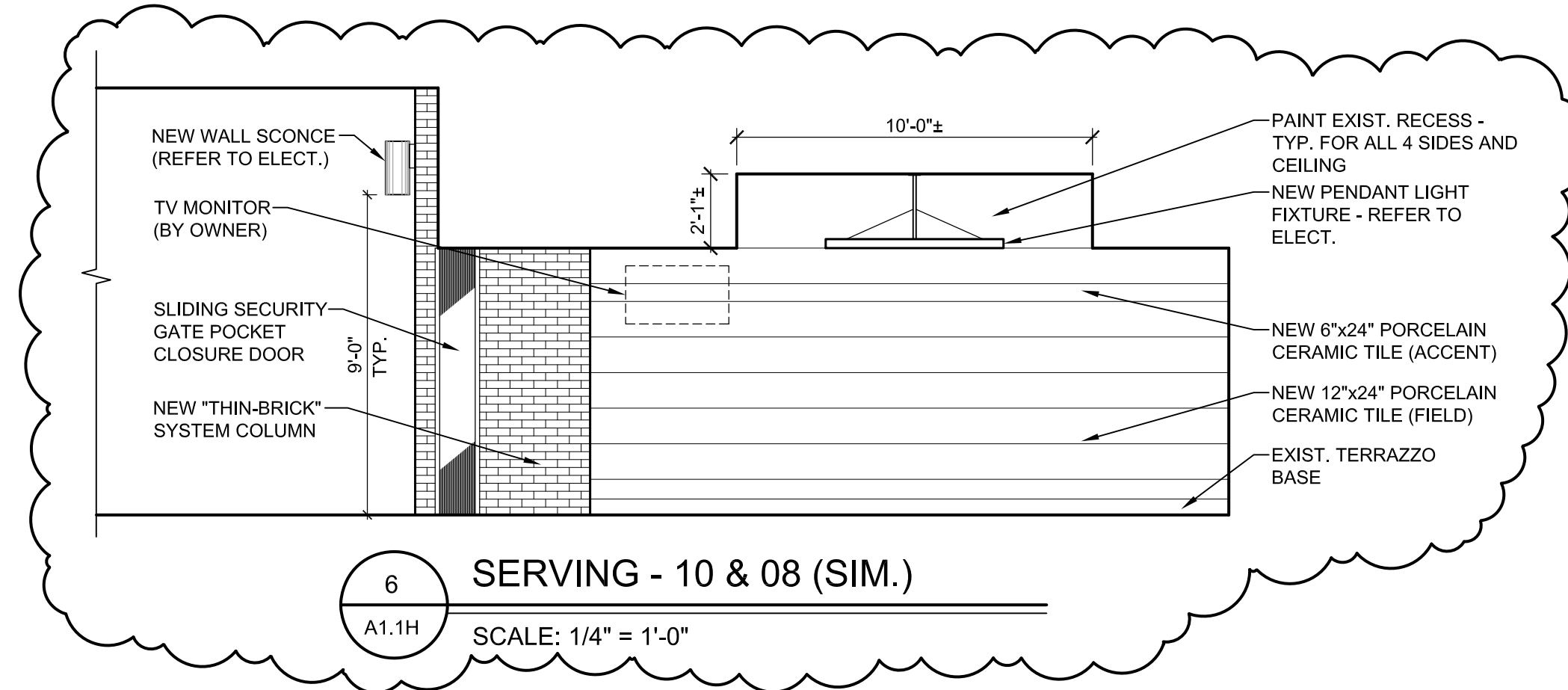
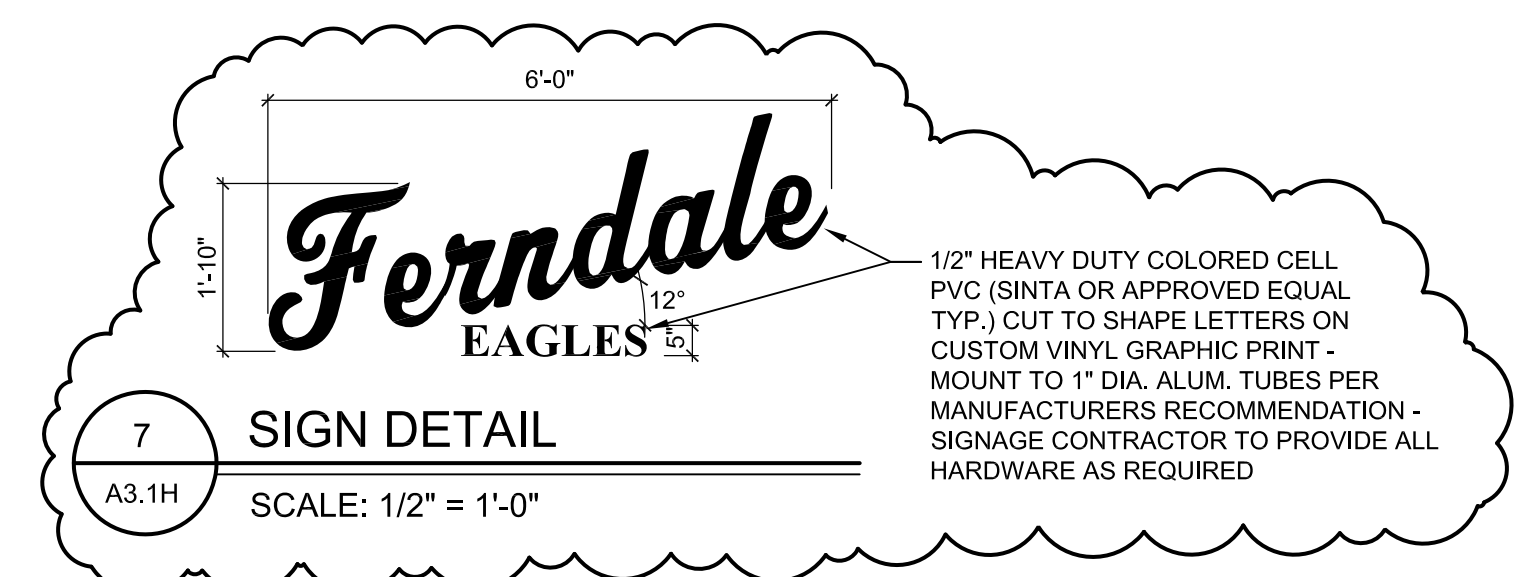
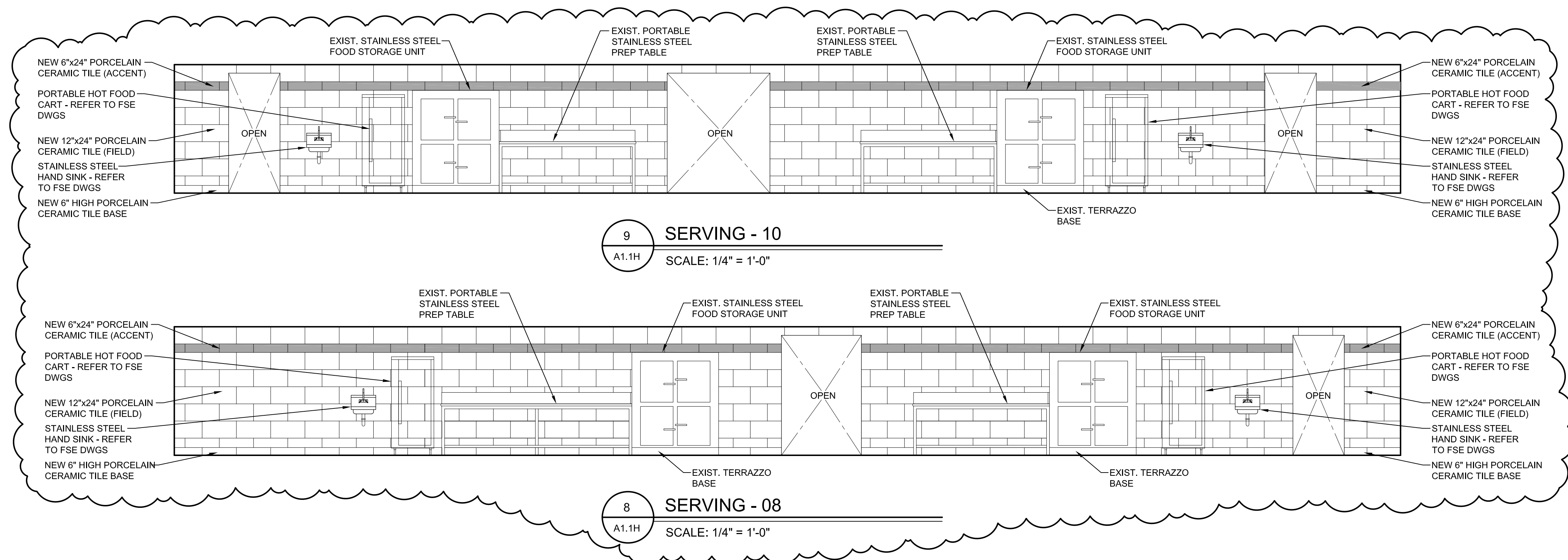
REVISIONS:  
APPENDUM No.2 2-8-18

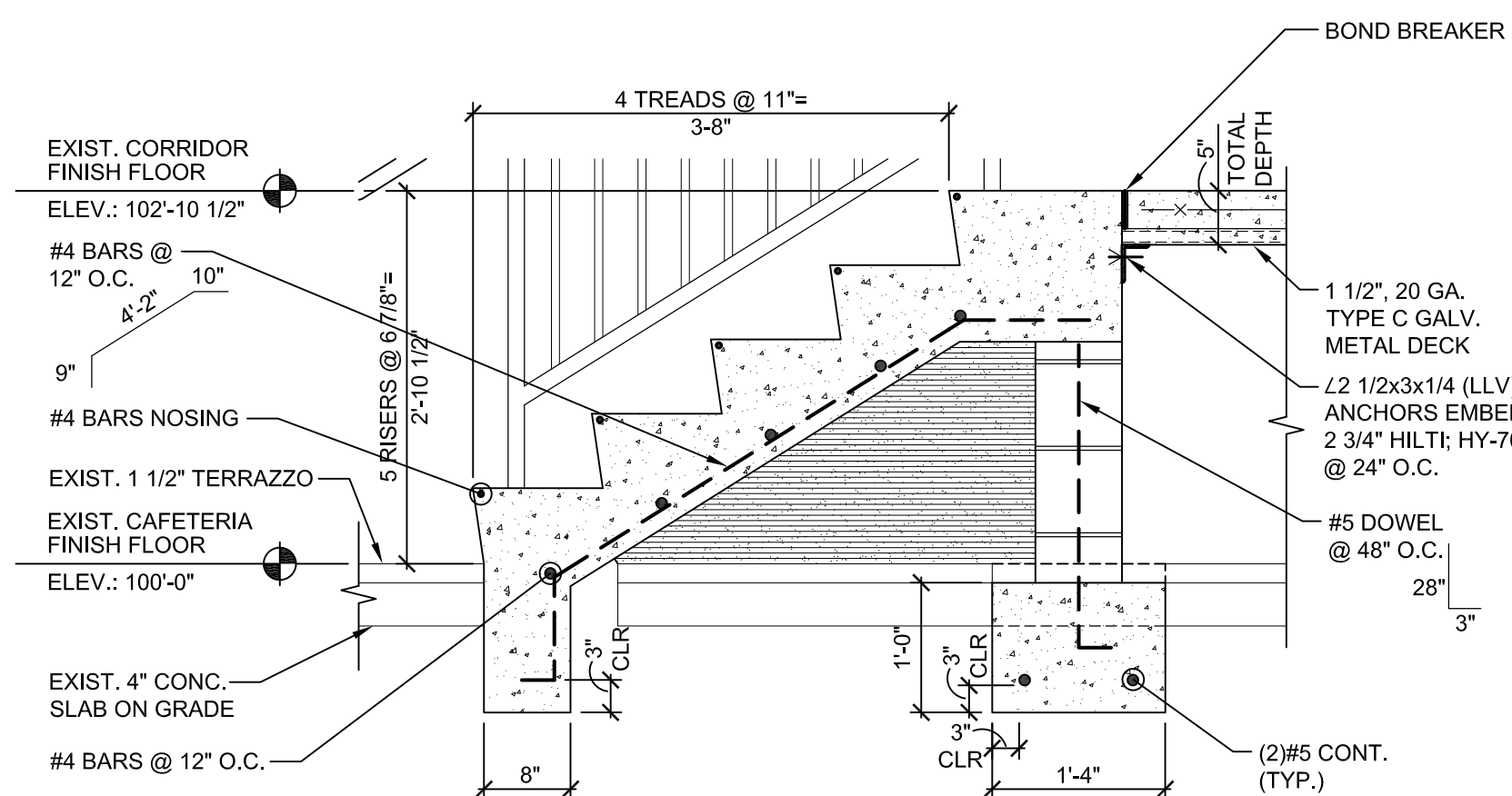
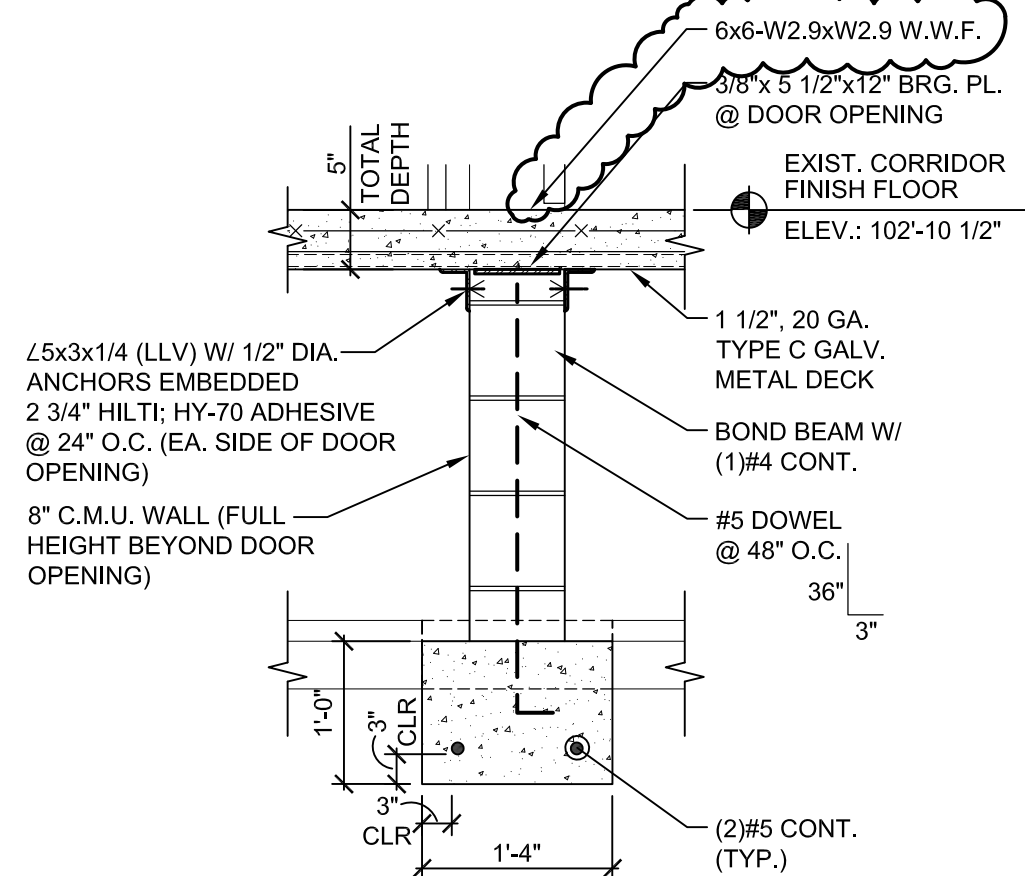
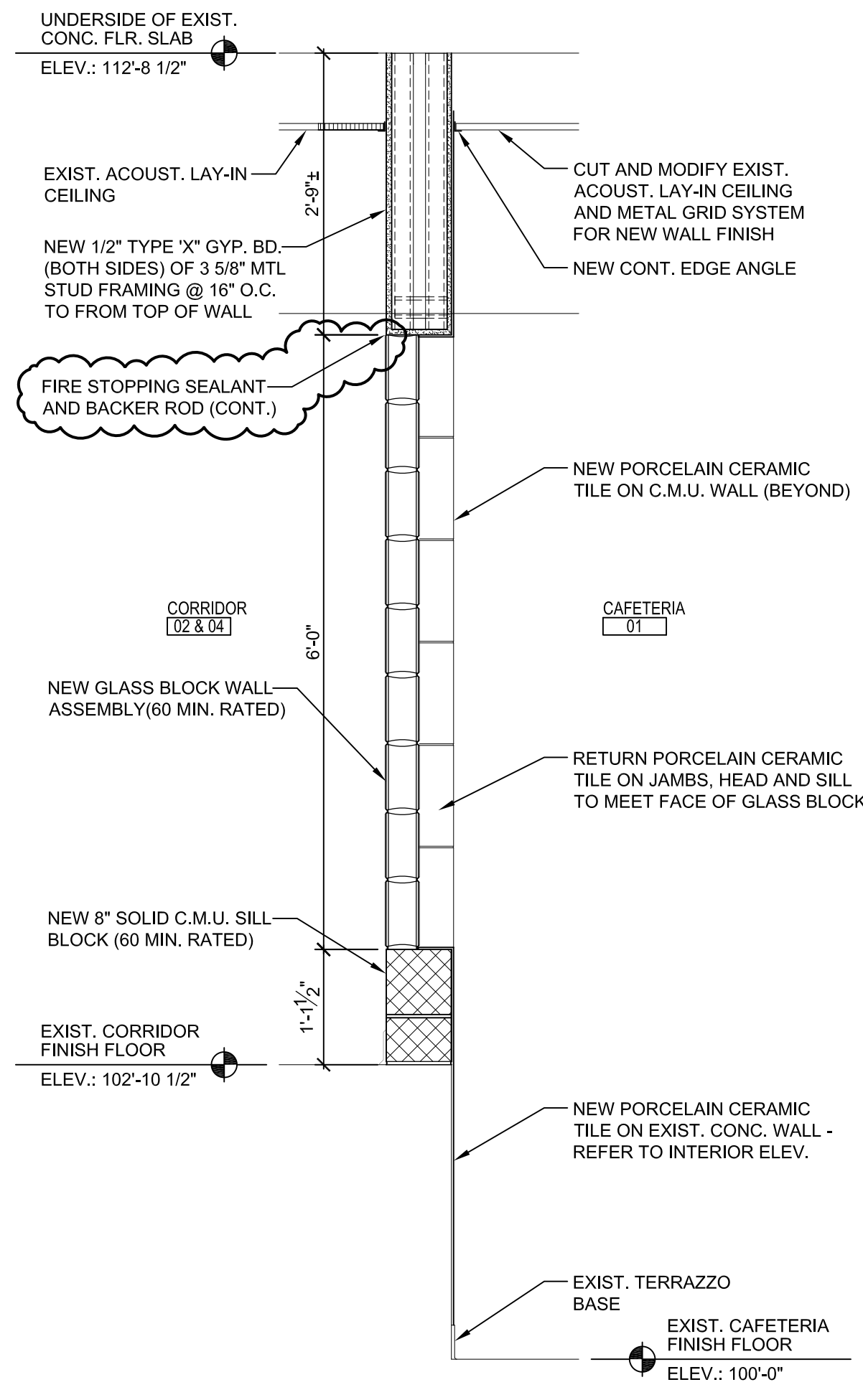
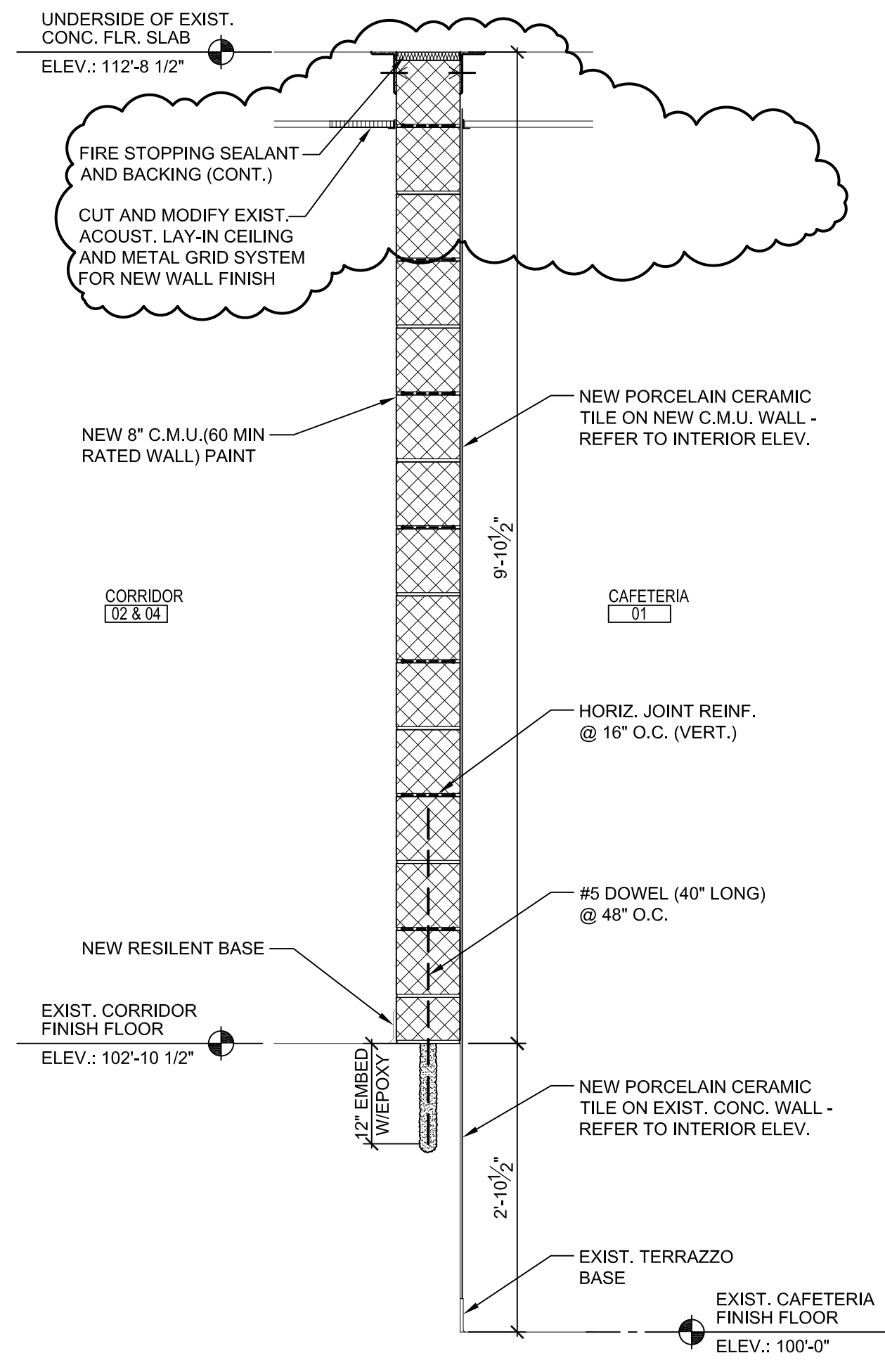
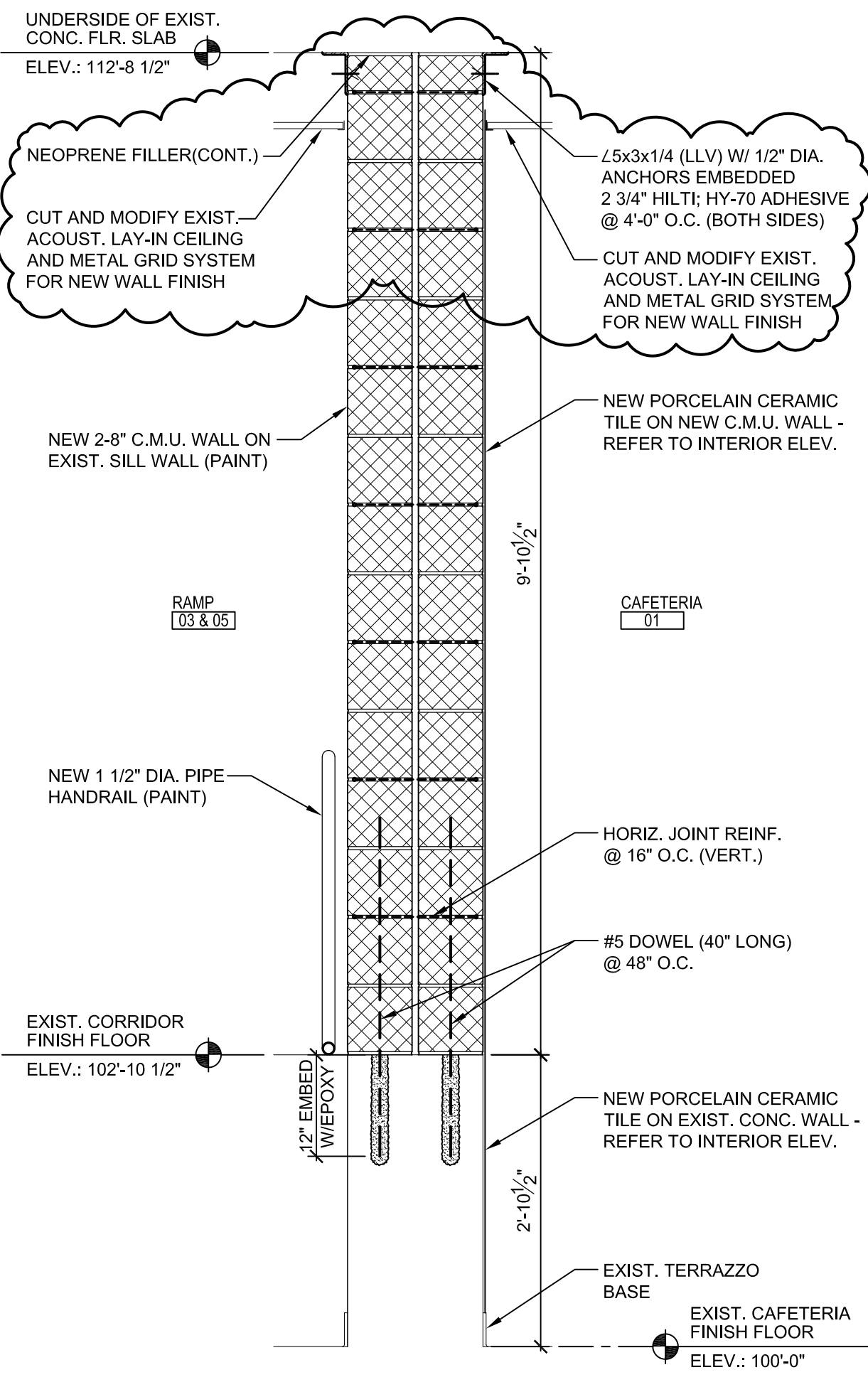
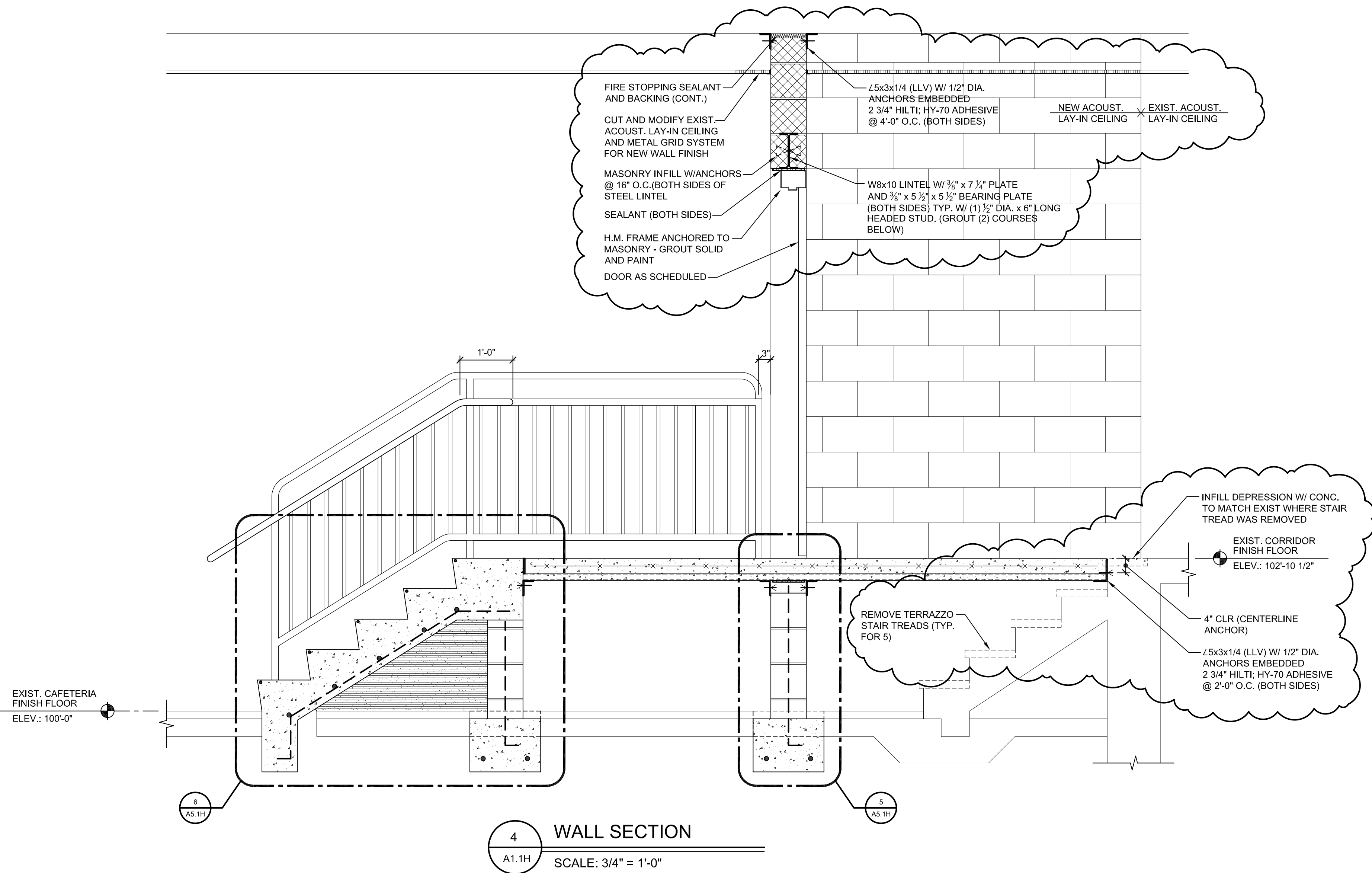
DATE: JANUARY 15, 2018  
SHEET NO.:

A1.1H

JOB NO.: 171745





6 SECTION  
A1.1H SCALE: 3/4" = 1'-0"5 SECTION  
A1.1H SCALE: 3/4" = 1'-0"3 WALL SECTION  
A1.1H SCALE: 3/4" = 1'-0"2 WALL SECTION  
A1.1H SCALE: 3/4" = 1'-0"1 WALL SECTION  
A1.1H SCALE: 3/4" = 1'-0"4 WALL SECTION  
A1.1H SCALE: 3/4" = 1'-0"



POKE-THROUGH ASSEMBLY SCHEDULE								
TYPE	DESCRIPTION	MANUFACTURER (SEE NOTE #2)	DEVICE CONFIGURATION	BOTTOM HOUSING	FLANGE/COVER MATERIAL & COLOR	SERVICE PLATE TYPE	MAXIMUM CONDUIT	CORE SIZE MIN/MAX
[P1]	POWER POKE-THROUGH WITH 1 DUPLEX RECEPTACLE FOR CARPET/TILE	WIREMOLD FIT SERIES	1D	1/2" FOR POWER	AL	FIT 200	1/2"	2 1/32 2 1/8"
[P12]	POWER POKE-THROUGH WITH 1 DUPLEX RECEPTACLE AND 1 DATA OUTLET FOR CARPET/TILE	WIREMOLD RC9 SERIES	1D / 1T	1/2" FOR POWER 1 1/4" FOR DATA	AL	292 SERIES HEAD	1/2" POWER 1 1/4"	3 1/16 3 1/8"

NOTES:

1. PROVIDE 1 1/4" C. FROM EACH TELECOM FLOOR BOX (GANG) TO ACCESSIBLE LOCATION IN CEILING.
2. OTHER ACCEPTABLE MANUFACTURERS ARE STEEL CITY, OR HUBBELL-RACO.
3. ALL PRODUCTS IN THIS SCHEDULE SHALL MEET AND EXCEED THE UL SCRUB WATER EXCLUSION REQUIREMENT.
4. COORDINATE ALL TELECOM AND A/V OUTLETS WITH COMMUNICATIONS AND A/V CONTRACTORS.
5. CORE MIN/MAX SIZES LISTED ARE FOR BARE CONCRETE OR TERRAZZO FLOORS.

ABBREVIATIONS:

PF = PARTITION FEED      BS = BRASS      FR = FLIP LID/RECTANGULAR  
D = DUPLEX RECEPTACLE      AL = ALUMINUM      SL = SLIDES  
T = 2 TELECOM OPENINGS      BK = BLACK      FC = FLIP COVER

GY = GRAY (CONCRETE)  
BZ = BRONZE  
NK = NICKEL

LIGHTING FIXTURE SCHEDULE				
TYPE	DESCRIPTION	VOLTAGE	OUTPUT	MANUFACTURERS
L1	4" DIAMETER DIRECT/INDIRECT ROUND LED PENDANT FIXTURE: ALUMINUM BODY AND TRIM WITH POWDER COATED METALLIC SILVER FINISH; DRIVER INTEGRAL TO FIXTURE.	MULTI	6000 LUMENS Ø4000K COLOR TEMP, 80CRI MIN.	1. BETACALCO MICRO RING DE 2. LUMES LIGHTING 3. LIGHTNET RINGO STAR P1
L2	LED 6 INCH APERTURE RECESSED DOWN LIGHT FIXTURE: WARM WHITE LED SOURCE WITH MAXIMUM COLOR TEMPERATURE DIFFERENTIATION OF ± 100K; VENTILATED DIE CAST ALUMINUM HEAT SINK, SELF FLANGED REFLECTOR WITH MATTE FINISH, MULTI VOLT DRIVER, AC INPUT, CLASS P, SOLID STATE, RATED FOR MINIMUM 50,000 HOURS OF OPERATION, 5 YEAR WARRANTY.	MULTI	1400 LUMENS Ø4000K COLOR TEMP, 80CRI MIN.	1. GOTHAM EVO SERIES 2. ALPHABET NUBS SERIES 3. MAXILUME HH6-LED SERIES
L2E	SAME AS FIXTURE TYPE "L2" EXCEPT WITH INTEGRAL EMERGENCY BATTERY BACKUP CAPABLE OF PRODUCING A MINIMUM OF 700 LUMENS FOR 90 MINUTES.			
L3	LED 2X4 RECESSED LAY IN LIGHT FIXTURE: 3-1/4" DEEP HOUSING, DIE CAST ALUMINUM HEAT SINK MULTI VOLT DRIVER AC INPUT, CLASS P SOLID STATE, RATED FOR A MINIMUM OF 50,000 HOURS OF OPERATION, 5 YEAR FULL COVER WARRANTY.	MULTI	4000 LUMENS Ø4000K COLOR TEMP, 80CRI MIN.	1. METALUX GRLED SERIES 2. LITHONIA ZGLT SERIES 3. VISIONEERING LR1A SERIES
L3E	SAME AS FIXTURE TYPE "L3" EXCEPT WITH INTEGRAL EMERGENCY BATTERY BACKUP CAPABLE OF PRODUCING A MINIMUM OF 1300 LUMENS FOR 90 MINUTES.			
L4	LED DIRECT/INDIRECT WALL MOUNTED CYLINDER: 8" DIAMETER, 18" TALL; ALUMINUM HOUSING WITH INTEGRAL LED DRIVER, CLEAR GLASS LENS, BLACK COLOR.	MULTI	1700 LUMENS UP/1700 LUMENS DOWN Ø4000K COLOR TEMP, 80CRI MIN.	1. LUMENALPHA LACYL SERIES 2. LUMINS S1802 SERIES 3. MAXILUME SOH-LED SERIES
X	EXIT LIGHT WITH WHITE DIE CAST ALUMINUM HOUSING. PROVIDE DIRECTIONAL ARROW(S) AND FACING AS INDICATED ON PLAN. PROVIDE WITH INTEGRAL BATTERY BACKUP WITH SELF-TEST DIAGNOSTICS	MULTI	RED LED	1. SURE-LITES CAX SERIES 2. LITHONIA SIGNATURE SERIES 3. CHLORIDE CX SERIES

FEEDER AND BRANCH CIRCUIT SIZING SCHEDULE - GENERAL PURPOSE						
COPPER CONDUCTORS						
OVERCURRENT DEVICE RATING (AMPERES)	WIRE SIZE (AWG OR KCMIL)		CONDUIT SIZE			
	PHASE & NEUTRAL	GROUND	SINGLE PHASE 2 WIRE+G (GPH, IN, KG)	SINGLE PHASE 3 WIRE+G (GPH, IN, KG)	THREE PHASE 3 WIRE+G (GPH, IN, KG)	THREE PHASE & NEUTRAL 4 WIRE+G (GPH, IN, KG)
15-20	12	12	3/4"	3/4"	3/4"	3/4"
25-30	10	10	3/4"	3/4"	3/4"	3/4"
35-40	8	10	3/4"	3/4"	3/4"	3/4"
45-50	8 (6)	10	3/4"	3/4"	3/4"	3/4"
60	6 (4)	10	3/4" (1")	3/4" (1")	3/4" (1")	1" (1 1/4")
70	4	8	1 1/4"	1 1/4"	1 1/4"	1 1/4"
80	4 (3)	8	1"	1 1/4"	1 1/4"	1 1/4"
90-100	3 (2)	8	1 1/4"	1 1/4"	1 1/4"	1 1/4"
110	2 (1)	6	1"	1 1/4"	1 1/4"	1 1/4" (1 1/2")
125	1 (1/2)	6	-	1 1/4" (1 1/2")	1 1/4" (1 1/2")	1 1/2"
150	1/0	6	-	1 1/2"	1 1/2"	1 1/2"
175	2/0	6	-	2"	2"	2"
200	3/0	6	-	2"	2"	2 1/2"
225	4/0	4	-	2"	2"	2 1/2"
250	250	4	-	2 1/2"	2 1/2"	2 1/2"
300	350	4	-	2 1/2"	2 1/2"	3"
350	500	3	-	3"	3"	3"
400	500	3	-	3"	3"	3"

\* = SEE NOTE 4









NOTES:

1. CONTRACTOR TO SIZE FEEDERS AND BRANCH CIRCUITS BASED ON THIS SCHEDULE AND OVER CURRENT DEVICE SIZE, UNLESS NOTED OTHERWISE.
2. CONTRACTOR MAY COMBINE 2/0 CIRCuits AS NOTED IN SPECIFICATION.
3. ALL FEEDERS AND BRANCH CIRCUITS SHALL BE 75°C OR 90°C (INCLUDING 60/75°C AND 75/90°C) LARGER THAN 4/0 ARE BASED ON TYPE XHHW.
4. CONDUCTORS ARE BASED ON 90°C, 600V, INSULATED COPPER WIRE APPLIED AT 75°C FOR TERMINATION RATE 60/75°C OR 75°C FOR TERMINATION RATE AT 60°C; USE CONDUCTORS AND CONDUIT SIZES INDICATED IN PARENTHESES.
5. ALL FEEDERS AND BRANCH CIRCUITS SHALL BE 1/2" LARGER THAN 4/0 FOR OTHER TYPES OF CONDUIT.
6. ELECTRICAL CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR AND PROVIDE REQUIRED WIRE SIZES TO ACCOMMODATE MECHANICAL EQUIPMENT.
7. SIZE OF DISCONNECT SWITCH LOCATED AT EQUIPMENT SHALL BE SIZED BASED UPON OVERCURRENT PROTECTION OF THAT DEVICE.
8. OBTAIN APPROVAL FROM ENGINEER PRIOR TO INSTALLING DIFFERENT SIZE/QUANTITY OF CONDUCTORS TO OBTAIN AN EQUIVALENT AMPACITY.
9. ALL FEEDERS AND BRANCH CIRCUITS SHALL BE SIZED BASED ON EQUIPMENT LISTED FOR USE WITH COPPER CONDUCTORS ONLY OR USE COPPER CONDUCTORS FOR THE ENTIRE LENGTH OF FEEDER.

BRANCH CIRCUIT VOLTAGE DROP WIRING SCHEDULE FOR SINGLE PHASE CIRCUITS						
BRANCH CIRCUIT RATING (A)	WIRE SIZE (AWG)	MAXIMUM BRANCH CIRCUIT LENGTH (IN FEET)				
		120V	208V	240V	277V	480V
20A	12	83	143	165	191	331
	10	128	222	256	295	511
	8	201	348	402	464	804
	6	313	542	625	721	1250
	4	85	148	170	197	341
30A	8	134	232	268	309	536
	6	208	361	417	481	833
	4	313	542	625	721	1250

**NOTES:**

1. ABOVE THE ABOVE TABLES ARE BASED ON COPPER CONDUCTORS, IN STEEL CONDUIT, WITH A LOAD POWER FACTOR OF 0.85 PER NEC CHAPTER 9, TABLE 9.
2. PROTECTIVE DEVICES, AS INDICATED IN THE TABLE ABOVE FOR ALL LIGHTING AND RECEPTACLE BRANCH CIRCUITS, WHERE BRANCH CIRCUITS SERVE DEDICATED EQUIPMENT, THE CONTRACTOR MAY PERFORM VOLTAGE DROP CALCULATIONS BASED ON ACTUAL EQUIPMENT CONNECTED LOAD AND PROVIDE CONDUCTORS APPROPRIATELY.
3. LIMITS TO LIMIT VOLTAGE DROP SIZES ARE BASED ON MAXIMUM OF 3% CURRENT CARRYING CONDUCTORS IN A SINGLE CONDUIT.
4. LIMITS FOR CONDUCTOR LENGTHS SHOWN ARE BASED ON A MAXIMUM BRANCH CIRCUIT LOAD OF 64% OF THE BRANCH BREAKER RATING AND A MAXIMUM OF 3% VOLTAGE DROP TO COMPLY WITH ASHRAE 90.1 AND THE NATIONAL ELECTRICAL CODE (NEC) REQUIREMENTS. FOR OVERCURRENT RATING, THE CONTRACTOR SHALL PROVIDE CONDUCTORS APPROPRIATELY SIZED TO LIMIT VOLTAGE DROP TO 3%.

SPECIAL RECEPTACLES	
TYPE	DESCRIPTION
	125V, 30A, SINGLE PHASE, LOCKING RECEPTACLE, 2 POLE, 3 WIRE (NEMA L5-30R)
	250V, 20A, SINGLE PHASE, LOCKING RECEPTACLE, 2 POLE, 3 WIRE (NEMA L6-20R)
	250V, 30A, SINGLE PHASE, LOCKING RECEPTACLE, 2 POLE, 3 WIRE (NEMA L6-30R)
	250V, 20A, THREE PHASE, LOCKING RECEPTACLE, 3 POLE, 4 WIRE (NEMA L15-20R)
	250V, 30A, THREE PHASE, LOCKING RECEPTACLE, 3 POLE, 4 WIRE (NEMA L15-30R)
	208Y/120V, 30A, THREE PHASE, LOCKING RECEPTACLE, 4 POLE, 5 WIRE (NEMA L21-30R)
	125/ 250V SINGLE PHASE RECEPTACLE, 3 POLE, 4 WIRE (NEMA 14-30R)
	250V, 60A THREE PHASE RECEPTACLE, 3 POLE, 4 WIRE (NEMA 15-60R)

		RACEWAY / CONDUCTOR / CABLE APPLICATION SCHEDULE																						
		WIRE		RACEWAY													CABLE/CORD							
		COPPER, TYPE THHN/THWN-2	COPPER, TYPE XHHW-2	ALUMINUM, TYPE XHHW-2 (100A AND ABOVE ONLY)	ALUMINUM RIGID CONDUIT	ELECTRICAL METALLIC TUBING (EMT)	INTERMEDIATE METAL CONDUIT (IMC)	RIGID STEEL CONDUIT (RSC)	PVC COATED RIGID STEEL CONDUIT	RIGID NON-METALLIC CONDUIT (RNC) TYPE EPC-40	RIGID NON-METALLIC CONDUIT (RNC) TYPE EPC-80	HIGH DENSITY POLYETHYLENE (HDPE) SCHEDULE 40	HIGH DENSITY POLYETHYLENE (HDPE) SCHEDULE 80	REINFORCED THERMOSET RESIN CONDUIT (RTRC) TYPE A0	REINFORCED THERMOSET RESIN CONDUIT (RTRC) TYPE B0	FLEXIBLE METAL CONDUIT (FMC)	LIQUID TIGHT FLEXIBLE METAL CONDUIT (LFMC)	SURFACE RACEWAY	METAL CLAD TYPE CABLE WITH INSULATED GROUND WIRE (TYPE MC)	ARMOR CLAD TYPE CABLE WITH INSULATED GROUND WIRE (TYPE AC)	UNDERGROUND FEED CABLE (TYPE UF)	TYPE SO	VFC CABLE	
FEEDERS - EXTERIOR	EXPOSED, SURFACE MOUNTED TO STRUCTURE	X	X			X	X	X	X						X									
	EXPOSED, WITH FREESTANDING SUPPORT	X	X			X	X	X	X					X										
	CONCEALED IN RETAINING WALL OR SIMILAR ELEMENT	X	X						X	X	X													
	BELOW PARKING LOTS AND ROADWAYS (NOTE 1)	X	X						X	X	X		X		X									
	BELOW GREEN SPACE (NOTE 1)	X	X						X	X	X		X		X									
	WITHIN 5' OF FOUNDATION WALL	X	X						X	X					X									
	ROOFTOPS (WHEN APPROVED BY ENGINEER)	X	X		X	X																		
FEEDERS - INTERIOR	BELOW SLAB ON GRADE (NOTE 1)	X	X			X	X	X																
	EXPOSED, BELOW 10' AFF AND SUBJECT TO DAMAGE	X	X			X	X																	
	EXPOSED, ABOVE 10' AFF UNFINISHED SPACES	X	X	X																				
	EXPOSED, FINISHED SPACES	X	X																X					
	DAMP AND WET LOCATIONS	X	X			X	X		X															
	CONCEALED, ACCESSIBLE CEILINGS	X	X	X																X	X			
	CONCEALED, INACCESSIBLE CEILINGS	X	X	X																				
	CONCEALED IN GYPSUM BOARD PARTITION WALLS	X	X	X																X	X			
BRANCH CIRCUITS - EXTERIOR	CONCEALED IN CMU WALLS	X	X	X																				
	EXPOSED, SURFACE MOUNTED TO STRUCTURE	X				X	X	X	X		X													
	EXPOSED, WITH FREESTANDING SUPPORT	X				X	X	X	X															
	CONCEALED IN RETAINING WALL OR SIMILAR ELEMENT	X						X	X															
	BELOW PARKING LOTS AND ROADWAYS (NOTE 1)	X						X	X	X	X													
	BELOW GREEN SPACE	X							X															
	WITHIN 5' OF FOUNDATION WALL	X					X																	
	ROOFTOPS (WHEN APPROVED BY ENGINEER)	X	X			X	X																	
BRANCH CIRCUITS - INTERIOR	BELOW SLAB ON GRADE (NOTE 1)	X								X														
	EMBEDDED IN ELEVATED CONCRETE SLAB (NOTE 1)	X								X														
	EXPOSED, BELOW 10' AFF AND SUBJECT TO DAMAGE	X					X	X																
	EXPOSED, ABOVE 10' AFF UNFINISHED SPACES	X				X		X																
	CONCEALED, ACCESSIBLE CEILINGS (NOTE 2)	X			X	X														X				
	CONCEALED, INACCESSIBLE CEILINGS	X			X	X																		
	CONCEALED IN GYPSUM BOARD PARTITION WALLS	X			X	X										X				X				
	CONCEALED IN CMU WALLS	X			X	X																		
	EXPOSED, FINISHED SPACES	X																						
	EXPOSED, UNFINISHED SPACES	X				X																		
	EXPOSED, EXISTING CONSTRUCTION	X																		X				
SPECIAL APPLICATIONS	DAMP AND WET LOCATIONS	X							X	X	X	X			X									
	SERVICE ENTRANCE	X	X						X	X	X	X	X	X	X									
	CONNECTION BETWEEN VFC AND MOTORS, DISTANCE> 50'								X	X	X	X												X
	CLASS 1 CONTROL CIRCUITS	X			X																			
	CLASS 2 CONTROL CIRCUITS	X			X																			
	FIRE PUMP FEEDERS (NOTE 3)	X							X	X	X	X	X	X	X									
	EMERGENCY FEEDERS	X	X			X	X	X	X	X	X	X	X	X										
	CONNECTIONS TO TRANSFORMERS, MOTORS AND VIBRATING EQUIPMENT															X	X							
	NATATORIUMS AND POOLS, PUBLIC SPACES	X	X							X	X	X								X				
	POOL AND FOUNTAIN EQUIPMENT ROOMS	X	X							X	X	X												
	FOUNTAINS									X	X								X					
MRI			X																					
HAZARDOUS LOCATIONS																								

1. PROVIDE RIGID STEEL SWEEPS WHERE CONDUITS PENETRATE WALLS, CONCRETE SLABS, AND CONCRETE BASES.
2. REFER TO SPECIFICATIONS FOR RESTRICTIONS ON MC CABLE INSTALLATION.
3. CONDUIT AND WIRE ALLOWED WHEN ENCASED IN MINIMUM 2" CONCRETE.

NOTE: SOME SYMBOLS AND ABBREVIATIONS SHOWN MAY NOT APPLY TO THIS PROJECT.

PRELIMINARY ☐

DESIGN DEVELOPMENT ☐

CONSTRUCTION ☒

FINAL RECORD ☐

DRAWN BY: JRD  
CHECKED BY: JJ

REVISIONS:  
ADDENDUM NO. 2 - 02/09/201

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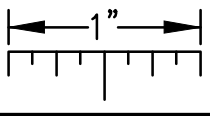
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DATE: JANUARY 15, 2018

## E0.2

THE FOLLOWING DIMENSION EQUALS  
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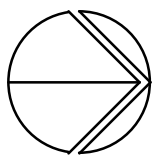
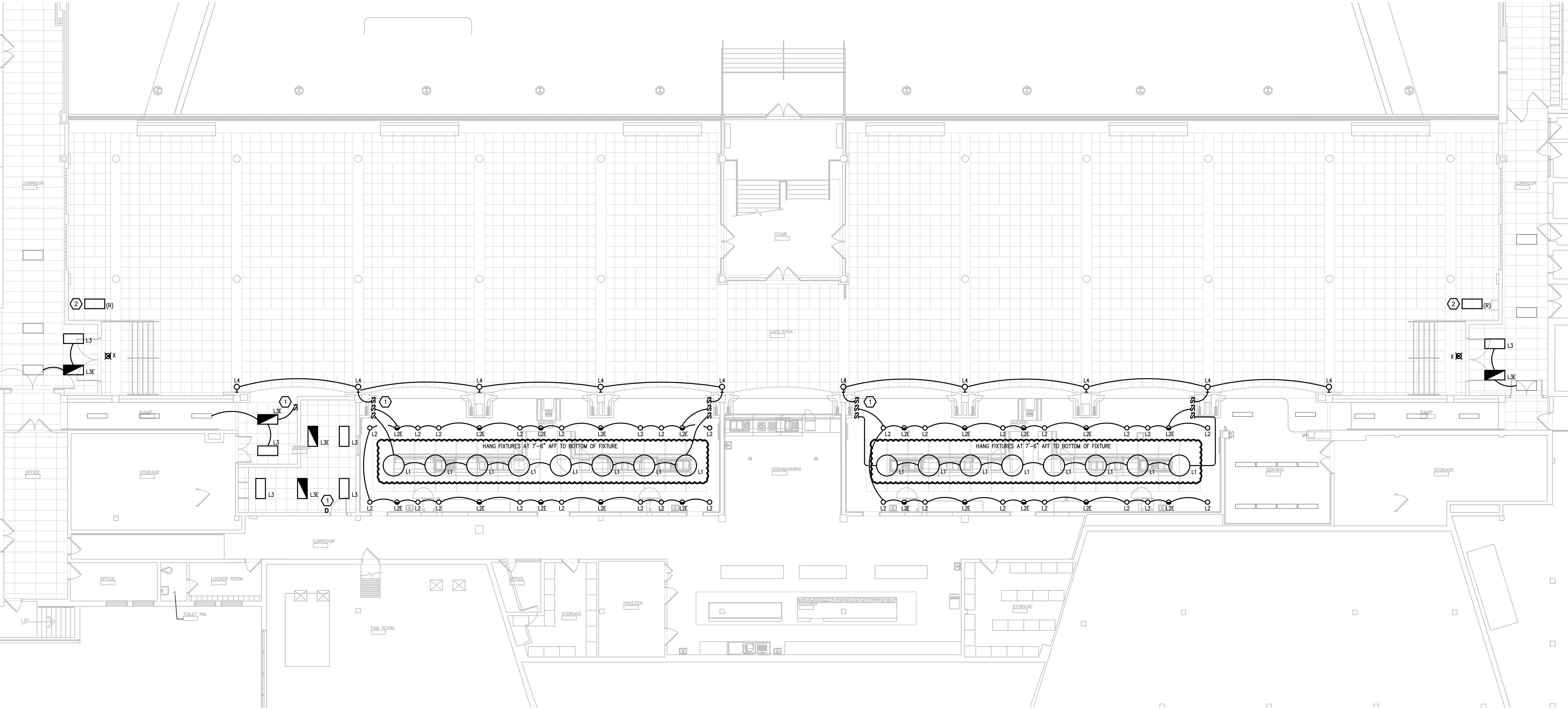


GENERAL NOTES:

1. THESE DRAWINGS REPRESENT THE GENERAL EXTENT AND ARRANGEMENT OF SYSTEMS, BUT ARE NOT TO BE CONSIDERED FABRICATION DRAWINGS. COORDINATE WITH OTHER TRADES, AND PROVIDE EACH SYSTEM COMPLETE, INCLUDING ALL NECESSARY COMPONENTS, FITTINGS, AND OFFSETS.
2. INSTALL SYSTEMS SUCH THAT REQUIRED CLEARANCE AND SERVICE ACCESS SPACE IS PROVIDED AROUND ALL MECHANICAL AND ELECTRICAL EQUIPMENT, AND AROUND ANY COMPONENTS WHICH REQUIRE SERVICE ACCESS.
3. COORDINATE AND PROVIDE ACCESS DOORS WITHIN INACCESSIBLE CEILING, SHAFT, AND CHASE AREAS FOR ALL COMPONENTS WHICH REQUIRE SERVICE ACCESS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
4. PROVIDE SUPPLEMENTARY STEEL AS REQUIRED FOR THE PROPER SUPPORT OF ALL SYSTEMS.
5. TRANSFORMER SECONDARY CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH TRANSFORMER CIRCUIT SIZING SCHEDULE SHOWN ON "ELECTRICAL STANDARD SCHEDULES DRAWING" UNLESS OTHERWISE NOTED.
6. MOTOR CIRCUIT PROTECTION SHALL BE SIZED IN ACCORDANCE WITH MOTOR CIRCUIT SIZING SCHEDULES SHOWN ON "ELECTRICAL STANDARD SCHEDULES DRAWING" UNLESS OTHERWISE NOTED.
7. COORDINATE THE MOUNTING HEIGHTS OF DEVICES WITH ARCHITECTURAL ELEVATIONS AND THE TRADES INSTALLING THE WORK.
8. COORDINATE EXACT LOCATIONS OF ALL FLOOR BOXES WITH FINAL FURNITURE LAYOUT DRAWINGS.
9. REFER TO MECHANICAL SCHEDULE SHEETS FOR ELECTRICAL REQUIREMENTS FOR MECHANICAL EQUIPMENT. PROVIDE ALL CONNECTIONS, STARTERS, DISCONNECTS, ETC. AS REQUIRED BY SCHEDULES AND WHERE NOTED ELSEWHERE. VERIFY REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH SHOP DRAWINGS SUBMITTALS. NOTIFY ENGINEER OF ANY CONFLICTS BETWEEN EQUIPMENT SUBMITTALS AND ELECTRICAL DRAWINGS. WHERE CIRCUIT SIZES ARE SHOWN ON THE ELECTRICAL DRAWINGS THAT DIFFER FROM WHAT IS INDICATED ON THE MECHANICAL SCHEDULES, PROVIDE THE CIRCUIT OF HIGHER AMPACITY.
10. REFER TO TEMPERATURE CONTROLS SHEETS FOR REQUIRED MOTOR CONTROLLERS. PROVIDE ALL ACCESSORIES INDICATED.
11. ALL FIRE ALARM DEVICES SHALL BE COMPATIBLE WITH EXISTING NATIONAL TIME AND SIGNAL 902 SERIES FIRE ALARM SYSTEM. PROVIDE NECESSARY COMPONENTS, MODULES, ETC. AS REQUIRED FOR A FULLY FUNCTIONAL SYSTEM. RE-TEST AND CERTIFY EXISTING FIRE ALARM SYSTEM AT COMPLETION OF PROJECT.

CONSTRUCTION KEY NOTES:

1. CIRCUIT LIGHT FIXTURES TO EXISTING LIGHTING BRANCH CIRCUIT SERVING SPACE. EXTEND CONDUIT AND WIRE AS REQUIRED. REWORK SWITCHED LEG OF BRANCH CIRCUIT AS REQUIRED FOR NEW LIGHT FIXTURE LAYOUT. WHERE DIMMING IS INDICATED, PROVIDE NEW 0-10V DIMMING CABLEING. COORDINATE CABLEING REQUIREMENTS WITH DIMMER SWITCH AND LIGHT FIXTURE DRIVER MANUFACTURER.
2. RELOCATED LIGHT FIXTURE. CIRCUIT TO EXISTING BRANCH CIRCUIT SERVING SPACE. EXTEND CONDUIT AND WIRE AS REQUIRED.



LOWER LEVEL LIGHTING PLAN  
SCALE: 1/8" = 1' - 0"

FERNDALDE PUBLIC SCHOOLS  
FERNDALDE HIGH SCHOOL  
KITCHEN / SERVING LINE AND CAFETERIA RENOVATION

LOWER LEVEL LI - HTIN - PLAN

PRELIMINARY ☐  
DESIGN DEVELOPMENT ☐  
CONSTRUCTION ☒  
FINAL RECORD ☐

DRAWN BY: JRD  
CHECKED BY: JJD

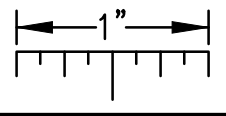
REVISIONS:  
ADDENDUM NO. 2 - 02/09/2018

DATE: JANUARY 15, 2018  
SHEET NO.:

E2.1

JOB NO.: 171745

THE FOLLOWING DIMENSION EQUALS  
ONE INCH WHEN PRINTED TO SCALE.

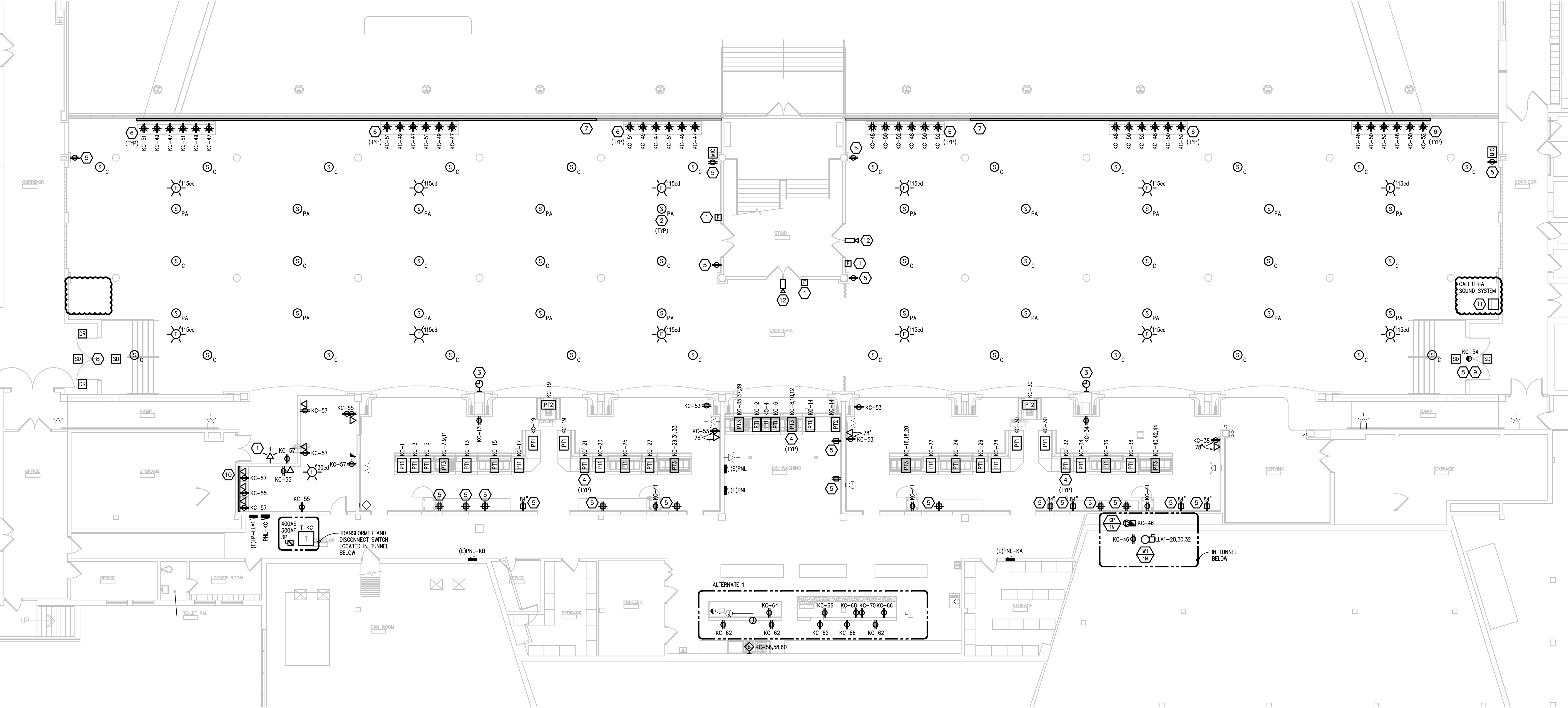


GENERAL NOTES:

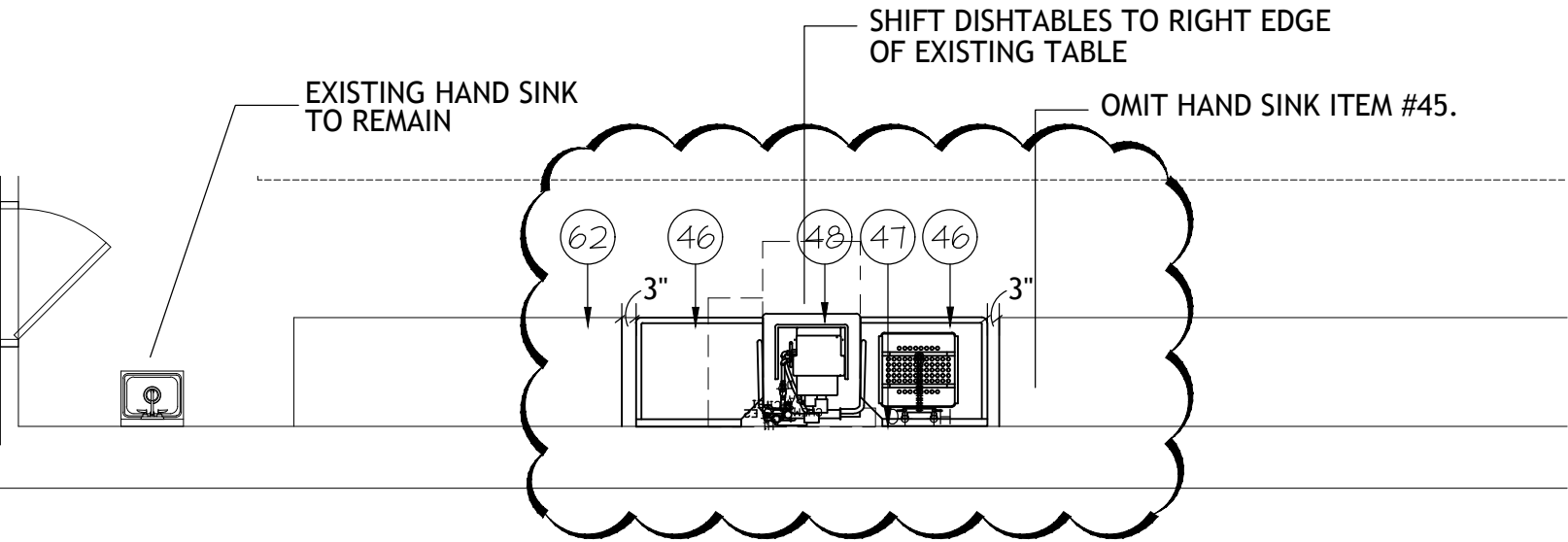
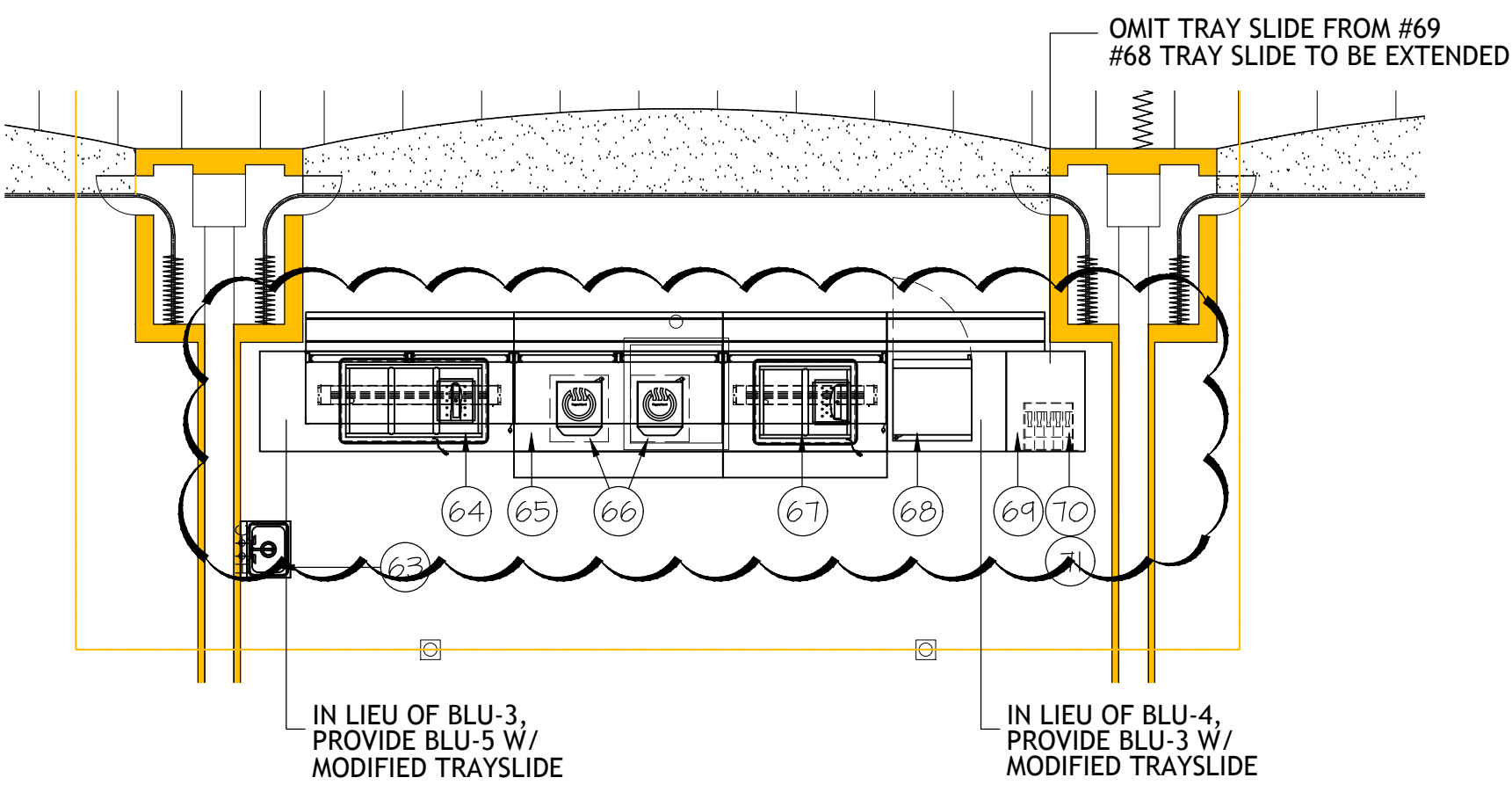
- THESE DRAWINGS REPRESENT THE GENERAL EXTENT AND ARRANGEMENT OF SYSTEMS, BUT ARE NOT TO BE CONSIDERED FABRICATION DRAWINGS. COORDINATE WITH OTHER TRADES, AND PROVIDE EACH SYSTEM COMPLETE, INCLUDING ALL NECESSARY COMPONENTS, FITTINGS, AND OFFSETS.
- INSTALL SYSTEMS SUCH THAT REQUIRED CLEARANCE AND SERVICE ACCESS SPACE IS PROVIDED AROUND ALL MECHANICAL AND ELECTRICAL EQUIPMENT, AND AROUND ANY COMPONENTS WHICH REQUIRE SERVICE ACCESS.
- COORDINATE AND PROVIDE ACCESS DOORS WITHIN INACCESSIBLE CEILING, SHAFT, AND CHASE AREAS FOR ALL COMPONENTS WHICH REQUIRE SERVICE ACCESS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
- PROVIDE SUPPLEMENTARY STEEL AS REQUIRED FOR THE PROPER SUPPORT OF ALL SYSTEMS.
- TRANSFORMER SECONDARY CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH TRANSFORMER CIRCUIT SIZING SCHEDULE SHOWN ON "ELECTRICAL STANDARD SCHEDULES DRAWING" UNLESS OTHERWISE NOTED.
- MOTOR CIRCUIT PROTECTION SHALL BE SIZED IN ACCORDANCE WITH MOTOR CIRCUIT SIZING SCHEDULES SHOWN ON "ELECTRICAL STANDARD SCHEDULES DRAWING" UNLESS OTHERWISE NOTED.
- COORDINATE THE MOUNTING HEIGHTS OF DEVICES WITH ARCHITECTURAL ELEVATIONS AND THE TRADES INSTALLING THE WORK.
- COORDINATE EXACT LOCATIONS OF ALL FLOOR BOXES WITH FINAL FURNITURE LAYOUT DRAWINGS.
- REFER TO MECHANICAL SCHEDULE SHEETS FOR ELECTRICAL REQUIREMENTS FOR MECHANICAL EQUIPMENT. PROVIDE ALL CONNECTIONS, STARTERS, DISCONNECTS, ETC. AS REQUIRED BY SCHEDULES AND WHERE NOTED ELSEWHERE. VERIFY REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH SHOP DRAWINGS SUBMITTALS. NOTIFY ENGINEERS OF ANY CONFLICTS BETWEEN EQUIPMENT SUBMITTALS AND ELECTRICAL DRAWINGS. WHERE CIRCUIT SIZES ARE SHOWN ON THE ELECTRICAL DRAWINGS THAT DIFFER FROM WHAT IS INDICATED ON THE MECHANICAL SCHEDULES, PROVIDE THE CIRCUIT OF HIGHER AMPACITY.
- REFER TO TEMPERATURE CONTROLS SHEETS FOR REQUIRED MOTOR CONTROLLERS. PROVIDE ALL ACCESSORIES INDICATED.
- ALL FIRE ALARM DEVICES SHALL BE COMPATIBLE WITH EXISTING NATIONAL TIME AND SIGNAL 902 SERIES FIRE ALARM SYSTEM. PROVIDE NECESSARY COMPONENTS, MODULES, ETC. AS REQUIRED FOR A FULLY FUNCTIONAL SYSTEM. RE-TEST AND CERTIFY EXISTING FIRE ALARM SYSTEM AT COMPLETION OF PROJECT.

CONSTRUCTION KEY NOTES:

- RELOCATED FIRE ALARM DEVICE. EXTEND EXISTING CABLE TO NEW LOCATION. ADJUST CANDLE RATING OF DEVICE TO MATCH RATING INDICATED AS REQUIRED. TEST AND RE-CERTIFY FIRE ALARM SYSTEM ONCE INSTALLATION OF ALL DEVICES IS COMPLETE.
- CONNECT NEW CEILING MOUNTED PA SYSTEM SPEAKER TO EXISTING PA SYSTEM. EXTEND CONDUIT AND WIRE AS REQUIRED. CONTACT JOE SAMBORSKI WITH SOUNDCOMM AT 248-690-3700 FOR REQUIREMENTS.
- RELOCATED WALL CLOCK. EXTEND EXISTING CABLE/BRANCH CIRCUIT TO NEW LOCATION.
- CORE FLOOR AS REQUIRED FOR NEW POKE THROUGH DEVICE. REFER TO SCHEDULE ON SHEET E0.2 FOR CORE SIZE REQUIREMENTS. CIRCUIT AS INDICATED.
- PROVIDE NEW RECEPTACLE AND COVERPLATE AT EXISTING BACKBOX. EXTEND BOX OUT TO BE FLUSH WITH NEW WALL AS REQUIRED. CIRCUIT RECEPTACLE TO EXISTING BRANCH CIRCUIT. EXTEND CONDUIT AND WIRE AS REQUIRED.
- NEW USB RECEPTACLE TO BE MOUNTED IN BACKSLASH OF NEW COUNTER. COORDINATE EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS. CIRCUIT AS INDICATED.
- EXTEND EXISTING SURFACE MOUNTED DUAL CHANNEL RACEWAY AS INDICATED TO ALLOW FOR CIRCUITING OF NEW RECEPTABLES. NEW RACEWAY SHALL MATCH EXISTING IN ALL RESPECTS.
- ELECTRICAL CONTRACTOR SHALL PROVIDE FIRE ALARM CONTROL MODULE AND SMOKE DETECTORS FOR DOOR RELEASE. COORDINATE MOUNTING WITH DOOR CONTRACTOR. ALL RELATED DOOR HARDWARE IS PROVIDED BY OTHERS. WIRE TO FIRE ALARM PANEL SO THAT UPON DETECTION OF SMOKE AT ASSOCIATED DOOR SMOKE DETECTORS, DOOR WILL RELEASE AND FIRE ALARM SYSTEM WILL BE ACTIVATED. ELECTRICAL SHALL PROVIDE 120V POWER (FROM DEDICATED CIRCUIT) OR 24V POWER (FROM NEAREST FIRE ALARM SYSTEM) AS REQUIRED. PROVIDE (2) 4" CONDUITS STUBBED THROUGH SMOKE PARTITION, EXTENDING 4" FROM EACH SIDE OF THE PARTITION. PROVIDE REMOVABLE/RESEALABLE FIRE STOPPING FOR EACH CONDUIT.
- PROVIDE 120V CIRCUIT IN CEILING SPACE FOR DOOR SECURITY AND CONTROLS AS INDICATED. REFER TO ARCHITECTURAL FLOOR PLANS, DOOR HARDWARE SCHEDULE ON ARCHITECTURAL DRAWINGS, ACCESS CONTROL SYSTEM SPECIFICATION SECTION, AND ACCESS CONTROL DOOR DIAGRAM(S) ON E7 SERIES DRAWINGS FOR RACEWAY AND BACK BOX REQUIREMENTS FOR DOOR OR BANK OF DOORS INDICATED. PROVIDE ALL RACEWAYS AND BACK BOXES REQUIRED. COORDINATE WITH DOOR HARDWARE CONTRACTOR.
- PROVIDE NEW WIREMOLD V4000 SERIES OR EQUIVALENT DUAL CHANNEL RACEWAY WITH RECEPTABLES AND TELECOMMUNICATIONS OUTLETS AS INDICATED. PROVIDE ALL ACCESSORIES AND COMPONENTS AS REQUIRED FOR A COMPLETE SYSTEM. ELECTRICAL CONTRACTOR SHALL PROVIDE BLANK INSERTS FOR TECHNOLOGY OUTLETS.
- PROVIDE NEW CAFETERIA SOUND SYSTEM IN WALL MOUNTED RACK. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS. PROVIDE DUPLEX RECEPTACLE AND TELECOMMUNICATIONS OUTLET IN WALL CENTERED BEHIND CABINET. PROVIDE 1 1/4" C. FROM ABOVE ACCESSIBLE CAFETERIA CEILING TO TELECOMMUNICATIONS OUTLET. PROVIDE CONDUIT WITH PLASTIC END BUSHING AND NYLON PULLSTRING. REFER TO CAFETERIA SOUND SYSTEM DETAIL ON E7 SERIES DRAWINGS FOR SYSTEM REQUIREMENTS. CIRCUIT RECEPTACLE TO PNL-KC-59. MOUNT RACK AT 24" AFF TO BOTTOM OF RACK.
- RELOCATED SECURITY CAMERA. PROVIDE NEW JUNCTION BOX AT WALL AS REQUIRED. CONNECT TO EXISTING SECURITY CABLE. EXTEND CABLE AS REQUIRED.







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ADDENDUM NO. 1  
FERNDAL PUBLIC SCHOOLS  
FERNDAL HIGH SCHOOL  
KITCHEN/SERVERY RENOVATION  
SCALE: 1/4" = 1'-0"

DRAWN BY: ESW	PROJECT NO.: XXX
APPROVED BY: XXX	REFERENCE SHEET: FSE-2
DATE: 2-9-2018	SHEET NO.: FSA-1