



Addendum 02 for RFB 943600-01

Project Name: Terrace Hill Elevator Replacement
DAS RFB #: 943600-01
DAS Project #: 9436.00
Date: 1/30/2025

Bids Due: February 04, 2025 at 2:00 PM CST

Contents:

- Cover Page – Revisions, Clarifications, and Questions (2 pages)
- KCL Mechanical and Electrical Addendum Narrative (1 page)
- 1/21/25 Pre-Bid Meeting Minutes and Sign-In (6 pages)
- **REVISED** Section 00 4116 – Bid Form (5 pages)
- **REVISED** E101 (1 page)
- **REVISED** E401 (1 page)

1. Revisions and Clarifications:

1.1. **REVISE** Drawing A1/A102 as follows: Revise elevation of the “Back Wall” of the elevator cab to remove the second card access location. Only (1) card access location will be required located on the main elevator control panel. Travel cable requirements for number of wires as called for in the spec will remain.

1.2. **DELETE** Specification Section 01 1200 1.09.E.3.

1.3. Bid Package #01

1.3.1. Specification 01 1200 1.09.A.4 **ADD** “h. This contractor shall be responsible for drywall cutting, blocking, and patching at elevator lobbies to accommodate removed and new elevator hall stations. Coordinate with Bid Package #02 on location, size, and blocking requirements. Contractor shall assume painting the entire wall where removals and new installations take place at elevator lobbies. Coordinate with Owner on existing paint selections.”

1.3.2. Specification 01 1200 1.09.A.4 **ADD** “i. This contractor shall be responsible for procuring and installing specialized adhered wood grain vinyl film over existing hollow metal frame at Level 2. This shall include reworking wood trim as necessary to tuck vinyl under existing wood trim. Removal of existing elevator signage on frame to be by this contractor. New signage by Bid Package 02.”

1.4. Bid Package #02

1.4.1. Specification 01 1200 1.09.B.6.e **REVISE** to read “e. This contractor will provide new hall fixtures and signals with custom-sized backplate that covers the existing openings completely where required. Where existing frames are to remain, this contractor shall be responsible for coordinating new installation requirements with existing frame and backbox sizes. Infill panels as required. Custom wood surround at Level 1 hall controls shall be the responsibility of this contractor. Cutting openings, blocking, and patching drywall where required for removed and new hall stations to be the responsibility of Bid Package #01. This contractor shall coordinate with Bid Package #01 on requirements.”

1.5. Bid Package #03

1.5.1. Specification 01 1200 1.09.C.5. **ADD** "o. This contractor shall be responsible for pathways, rough-ins, cabling, and device installation for fire alarm revisions. This shall include, but not be limited to, fire and smoke damper fire alarm connections, relocation of fire alarm wiring and horn/strobe wiring out of elevator shaft, replacement of smoke heads with heat heads during construction, replacing temporary heat heads with smoke head replacement towards end of construction, and fire alarm requirements per plan page E401 detail 1 and 6 Elevator System Detail. Fire alarm devices to be provided by State of Iowa fire alarm vendor JCI, including programming and testing. Electrical contractor shall be in attendance for troubleshooting during testing. Bidders shall coordinate with JCI on scope prior to bid. Jason Trumbo, Jason.ray.trumbo@jci.com (515) 300-7374. Tagging out the system and providing monitoring of the fire alarm panel or fire watch as needed when the system is disabled will be the responsibility of this contractor."

2. Questions and Answers:

2.1. Would it be acceptable to replace just the piston in lieu of replacing the entire jack assembly. We have concerns with the small working area, protecting the existing finishes and potential for the hole to cave in and require re-drilling.

2.1.1. Replacing the piston only would not be acceptable. Each bidder must fully inform his/her-self of the conditions under which the work is to be performed at the site of the work, the obstacles which may be encountered, and all other relevant matters concerning the work to be performed. Failure to do so will not relieve a successful bidder of the obligation to furnish all material and labor necessary to carry out the provisions of the contract.

2.2. The bid form has unit price #1 listed under bid package #1. Should this be under bid package #2?

2.2.1. Yes, this should have been under Bid Package #02. A revised Bid Form is included with this addendum. Bid shall be submitted on this revised form.

2.3. The plans have specific areas called out to be patched in the elevator shaft. Are these areas included in the \$5,000 allowance for "misc. patching of the elevator shaft wall" or should these areas be figured in addition to the allowance?

2.3.1. Patching of the following within the elevator shaft shall be included in the bid:

2.3.1.1. Patching where existing duct and damper is removed

2.3.1.2. Removal and patching of access panels at each level

2.3.1.3. Patching where specifically called out on Existing Image 10, 11, 13, and 19 on plan page AD103

2.3.2. Other areas not identified in the plans that will require elevator shaft patching will be billed against the \$5,000 allowance.

State of Iowa
Terrace Hills Elevator Replacement
Addendum #2
01/29/2025

This addendum is issued to modify, clarify, or amend the original Project Drawings and Specifications and is hereby made part of the Contract Documents. The Contractor shall be responsible for incorporating items in this Addendum to the Work. The following shall take precedence over anything to the contrary in the Drawings or Specifications.

Electrical Drawings:

1. Drawing E101 – ELECTRICAL SHEET
 - a. CLARIFY IDF location in basement for installation of the new data cabling.
 - b. REVISE circuit for the lighting in the elevator shaft to the attic panelboard 401.
 - c. REMOVE additional card reader in the elevator cab. Only (1) card access location will be required located on the main elevator control panel.
 - d. Refer to attached full size sheet E101.

2. Drawing E401 – ELECTRICAL SCHEDULES & DETAILS
 - a. REVISE description of F1 and F2 lights.
 - b. CLARIFY that the tape lighting in the shaft will need leads installed in the shaft that extend to drivers.
 - c. CLARIFY the fire alarm panel is being replaced by the owner.
 - d. Refer to attached full size sheet E401.

Electrical – Approved Manufacturers:

The following shall be added to specifications as approved manufacturers:

<u>Light Fixture Type</u>	<u>Manufacturer</u>
E1	Evenlite
F2	Kelvix, Luminii

End of Mechanical and Electrical Addendum.

RFB Pre-Bid Minutes: Meeting #1

Meeting Date	Jan 21, 2025	Meeting Time	2:00 PM - 3:30 PM Central Time (US & Canada)
Meeting Location	2300 Grand Avenue, Des Moines, IA 50312		
Overview	Meeting to allow prospective bidders to visit the site, when possible, and learn more about the project.		
Notes			
Attachments	003113R.1 - Preliminary Schedule.pdf		

Scheduled Attendees

Name	Company	Phone Number	Email	Attendance
Jarrad Boever	DCI Group	P: (515) 244-5043	jarradb@dcigroup-us.com	For Distribution Only
Kurt Fisher	DCI Group	P: (515) 244-5043	kurtf@dcigroup-us.com	Present
Michael Steen	DCI Group	P: (515) 244-5043	michaels@dcigroup-us.com	Present
Aaron Twedt	OPN Architects	P: (515) 309-6862	atwedt@opnarchitects.com	Present
James Trower	State of Iowa - Department of Administrative Services		james.trower@iowa.gov	Present
Molly Thompson	Terrace Hill	P: (515) 242-5841	molly.thompson@governor.iowa.gov	Present

Introduction

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
1.1	1	Introductions				Open
<p>Description Attendees - Please sign in</p> <p>Molly Thompson - Administrator and Assistant to the First Gentleman James Trower - DAS Owners Representative Michael Steen - DCI Group Aaron Twedt - OPN Architects Scott Ayotte - Lerch Bates Eric Heynen - KCL Chad Bass - KCL</p> <p>Official Documented Meeting Minutes</p> <ul style="list-style-type: none"> See attached sign-in sheet 						

Project Overview

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
2.1	1	Project Description				Open
<p>Description</p> <ul style="list-style-type: none"> • Replacement of the existing four stop hydraulic elevator, including hydraulic jack. Scope includes: <ul style="list-style-type: none"> ◦ New elevator equipment ◦ New elevator doors ◦ New elevator jack ◦ Elevator cab finishes ◦ Incorporation of access controls provided by Owner's third-party vendor ◦ Mechanical modifications to elevator machine room to accommodate exhaust ◦ Electrical modifications ◦ Elevator pit and shaft improvements ◦ General construction for temporary protection • Base bid <ul style="list-style-type: none"> ◦ Bid Package #01 - General Construction ◦ Bid Package #02 - Elevator Equipment <ul style="list-style-type: none"> ▪ Unit Price #01 -Operation of the Elevator (Will be moved via Addendum) ◦ Bid Package #03 - Electrical and Low Voltage ◦ Bid Package #04 - Mechanical • Alternates <ul style="list-style-type: none"> ◦ None at this time • Unit prices <ul style="list-style-type: none"> ◦ Operation of the elevator for other trades • Owner provided scope: <ul style="list-style-type: none"> ◦ Access controls ◦ Fire sprinkler and fire alarm 						

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
2.2	1	Project Schedule				Open
<p>Description</p> <ul style="list-style-type: none"> • Contract(s) Issued: Week of February 3rd • Submittals: February 19 - March 25 • Construction: February - September 2025 • Closeout: September 2025 <p>It is the intent of the project to minimize the total duration that the elevator is out of service while the residence is occupied. The contractors shall anticipate phased construction and multiple mobilizations to take advantage of opportunities when the Terrace Hill Residence may be unoccupied. A separate scheduling meeting will be conducted with all trades to identify scopes of work that can take place prior to the elevator equipment arriving and taking the elevators out of services for a prolonged duration. This may include scopes such as in shaft lighting, access panels removal and patching, in shaft duct removal, fire sprinkler and fire alarm work, electrical modifications, new mechanical installations, and hydraulic jack replacement. All contractors shall include temporary measures to accommodate this phased work.</p> <p>A pull-plan session will be held with the successful bid package contractors to finalize the construction schedule.</p>						

State Holidays: New Year's Day, Martin Luther King Day, Memorial Day, 4th of July, Labor Day, Veterans Day, Thanksgiving and day after Thanksgiving, Christmas Day

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
2.3	1	Site Rules				Open
<p>Description</p> <ul style="list-style-type: none"> Onsite supervision by Prime Contractor is required at all times when work by that contractor or their subcontractors/suppliers is taking place. Contractors shall provide daily logs for each day they are on site. Construction progress meeting will be established once construction starts. It is of the utmost importance to show respect and courtesy to all staff at all times. Clean all debris, materials, and bring all finishes back to existing conditions in the area they were working in prior to moving to the next area. No smoking, vaping or smokeless tobacco use onsite. Temporary storage - Minimal storage will be provided in the North most stall of the garage. Storage will be limited and prioritized for elevator equipment. Demolished equipment shall not be stored onsite Tool control No radios No access, unless previously scheduled, to areas outside of our construction zones and temporary protection on floors 1-3. All construction workers must have a background check completed prior to entering the campus to perform work. Name, birth date, gender, and social security numbers will be required for these background checks. Contractors will be responsible for the cost associated with the background checks which is \$15.00 per request. Work hours: 7:00 AM to 5:00 PM View Specification 01 1200 - Contract Summary for more information. 						

RFB Overview

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
3.1	1	Bid Submission				Open
<p>Description</p> <ul style="list-style-type: none"> Bids are due 02/04/2025 at 2:00 PM The Bid shall be submitted to the Issuing Officer through the IMPACS Electronic Procurement System. <ul style="list-style-type: none"> Link and information is in the project manual Contractors will need to register prior to bidding Bidders will need to register regardless of whether it has already done business with the State of Iowa. Bidders should complete the registration process and ensure the ability to log in as soon as possible to ensure Bids can be submitted on the due date. Please make sure the electronic documents submitted contain any required signatures. Digital signatures will be accepted. Bid Opening will be held via conference call on 02/04/2025 at 3:00 PM Contractor shall reference section 00 0116 for the bid submittal checklist <ul style="list-style-type: none"> Bid Proposal Information Non Discrimination Clause Information Contractor Targeted Small Business Enterprise Pre-Bid Contract Information Bid Security – 5% of total Bid amount Apparent low bidder will be required to submit subcontractor/supplier list 48hrs after the bid opening 						

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
3.2	1	Bid Schedule				Open
Description <ul style="list-style-type: none"> • Questions/Substitutions Due in Writing to Construction.Procurement@iowa.gov: 01/28/2025 • Addendum Issued: Final addendum by 01/31/2025 • Bids Due: 02/04/2025 at 2:00 PM • Tentative NOI Issued:02/05/2025 						

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
3.3	1	Administrative Details				Open
Description <ul style="list-style-type: none"> • Contractors will sign a modified ConsensusDocs 802. Example in the project manual. • Project-specific Certificate of Insurance must be provided prior to contract execution. Follow example in the project manual and limits in the 802. • Project-specific P&P bonds must be provided prior to contract execution. • Successful contractor must turn in their list of subcontractors and suppliers within 48 hours of the bid. • DAS will provide tax exempt certificates upon request. • Procure will be used for all project management, at no cost to the trade contractor. <ul style="list-style-type: none"> ◦ Submittals, Invoicing, RFIs, ASIs, PRs, RFQs ◦ Contracts, Change Orders and Certificates of Substantial and Final Completion will also use DocuSign • Contractor Schedule of Values shall be broken out as specified in the project manual. <ul style="list-style-type: none"> ◦ SOV must contain a closeout line item for at least 1% of the total contract value. ◦ This line item can only be invoiced once the certificate of final completion has been signed by all parties. 						

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
3.4	1	Pre-Bid Site Visits				Open
Description We will walk the elevator spaces following this meeting. We will minimize the time we are impacting the elevators and we will not be able to access 3rd floor at this time. All attendees shall remain together.						

Questions

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
4.1	1	Questions				Open
Description <ul style="list-style-type: none"> • Submit all questions in writing to construction.procurement@iowa.gov. • The plans have specific areas called out to be patched in the elevator shaft. Are these areas included in the \$5,000 allowance for "misc. patching of the elevator shaft wall" or should these areas be figured in addition to the allowance? <ul style="list-style-type: none"> ◦ This is intended to address the general keynotes of "misc. patching of the elevator shaft wall". Areas specifically called for for patching should be included and not considered part of this allowance. • The Unit Price for Bid Package #01 will be moved to Bid Package #02. 						

These meeting minutes are believed to be an accurate reflection of those items discussed and the conclusions that were reached during the referenced meeting.
Please contact State of Iowa - Department of Administrative Services if there are any discrepancies or questions with the content of these minutes.

SECTION 00 4116

BID FORM
(REVISED- ADDENDUM 02)

The Bid Form must be submitted online through the State's [IMPACS Electronic Procurement System](#).

RFB #943600-01

BID FORM for CONSTRUCTION CONTRACT
for
Terrace Hill Elevator Replacement
2300 Grand Avenue, Des Moines, Iowa
Project 9436.00

Iowa Department of Administrative Services
Hoover State Office Building, Level 3
1305 East Walnut Street
Des Moines, Iowa 50319-0105

The following information is to be completed and submitted with your bid..

1. Bid Form - Completed and Signed (to be uploaded with bid submission)
2. Non Discrimination Clause Information
3. Contractor Targeted Small Business Enterprise Pre-Bid Contract Information
4. Bid Security – 5% of total Bid amount (to be uploaded with bid submission)

Authorized Representative:

The undersigned Bidder, in response to your Request for Bid for construction of the above project, having examined the Drawings, Specifications, and other Bidding Documents dated January 03, 2025, and Addenda issued and acknowledged below as received and being familiar with all the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials, equipment and supplies to perform all work to construct the project in strict accordance with the proposed Contract Documents, within the time and at the prices stated below. Prices are to cover all expenses incurred in performing the work required under the proposed Contract Documents, of which this bid is a part.

Bidder acknowledges receipt of the following Addenda which are a part of the Bidding Documents and for which any effect on cost of the Work is included in the bid amounts indicated:

Number _____

Dated _____

Note that the State of Iowa is exempt from State and Local sales and use taxes (including local option and school option) for this project. Taxes on construction materials shall NOT be included in the bid amounts.

Amounts shall be indicated in both words and figures. In case of discrepancy, the amount indicated in words shall govern.

BID PACKAGES:

BP 01

Description: General Construction

Bidder proposes and agrees to perform all work as described in the Construction Documents for the sum of:

_____ Dollars
(\$_____).

BP 02

Description: Elevator Equipment

Bidder proposes and agrees to perform all work as described in the Construction Documents for the sum of:

_____ Dollars
(\$_____).

UNIT PRICES:

BP 02 - UNIT 01

Description: Hourly rate for operation and lock out of the elevators to allow work to be performed in the elevator pit, car top, and hoist way by other trades. If multiple personnel are required for this operation, the unit cost shall reflect the total sum of the cost per hour.

_____ Dollars
(\$_____) per hour.

BP 03

Description: Electrical & Low Voltage

Bidder proposes and agrees to perform all work as described in the Construction Documents for the sum of:

_____ Dollars

(\$_____).

BP 04

Description: Mechanical

Bidder proposes and agrees to perform all work as described in the Construction Documents for the sum of:

_____ Dollars

(\$_____).

ALTERNATES:

NO ALTERNATE

Bidder hereby certifies that:

1. This bid is genuine and is not made in the interest of or on behalf of any undisclosed person, firm or corporation;
2. Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid; Bidder has not solicited or induced any person, firm or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain any advantage over any other bidder or over the Owner.
3. Bidder hereby certifies that the Bidder is registered with the Iowa Labor Commissioner as a Contractor as required by Chapter 91C, Code of Iowa.
4. Bidder agrees to comply with all Federal and State Affirmative Action/Equal Employment Opportunity requirements concerning fair employment and will not discriminate between or among them by reason of race, color, religion, sex, national origin or physical handicap.
5. All construction under this Contract shall conform to the requirements of the *Iowa State Building Code*.
6. Bidder agrees that this bid shall remain valid and shall not be withdrawn for a period of thirty (30) calendar days after the date for receipt of bids.
7. Bidder agrees that if written notice of acceptance of this bid is mailed, emailed, or delivered to the undersigned within thirty (30) days after the date in which bids are due, or at any time thereafter before it is withdrawn, the undersigned will sign and return the Contract Agreement, prepared in accord with the Bidding Documents and this bid as accepted; and will also provide proof of insurance coverage and required surety bonds.
8. Bidder understands that the Owner reserves the right to reject any and all bids, and to waive irregularities or informalities and enter into a contract for the work, as the Owner deems to be in the best interest of the State.
9. Bidder understands that the Owner reserves the right to accept any, or no, Alternate Bid, if requested, and that the Alternate Bids may be considered in any order or combination, and the low Bidder shall be determined on the basis of the sum of the base bid and any Alternate(s) accepted.

Subcontractors:

The Trade Contractor must identify all Subcontractors and Suppliers within 48 hours of the published date and time for which bids must be submitted, in accordance with Iowa Code Section 8A311, as amended by House File 646 in 2011. Subcontractors and suppliers may not be changed without the approval of the Owner. Requests for changing a Subcontractor or supplier must identify the reason for the proposed change, the name of the new Subcontractor or supplier, and the change in the subcontractor or supplier price as a result of the change. Any reduction in subcontractor or supplier price as a result of the change, if the change is approved by the Owner, shall be deducted from the Trade Contract Price via a deductive Change Order. Any such changes, if approved by the Owner, which result in an increase in the Trade Contract Price shall be borne by the Trade Contractor.

Enforcement of Reciprocal Resident Bidder Preference, per Iowa Code 73A.21.

All bidders shall either check the box next to "Resident Bidder" or check the box next to "Nonresident Bidder" and by doing so and signing thereafter certifies and attests to the same. All information requested must be provided. Seek out the advice of an attorney if you have questions.

"Resident Bidder" means a person or entity authorized to transact business in of the State of Iowa and having a place of business for transacting business within the State of Iowa at which it is conducting and has conducted business for at least three years prior to the date of the first advertisement for the public improvement. Note, however, that if a nonresident bidder's state or foreign country has a more stringent definition of a resident bidder, the more stringent definition is applicable as to bidders from that state or foreign country.

Resident Bidder

Name of Resident Bidder: _____

By: _____
Authorized Agent and Signatory of Resident Bidder

OR:

Nonresident Bidder

Name of Nonresident Bidder: _____

Name of State or Foreign Country of Nonresident Bidder: _____

Particularly identify and describe any preference, labor preference, or any other type of preferential treatment, in effect in the nonresident bidder's state or foreign country at the time of this bid:

NOTICE: Nonresident Bidders domiciled in a state or country with a resident labor force preference shall make and keep, for a period of not less than three years, accurate records of all workers employed on the public improvement. The records shall include each worker's name, address, telephone number when available, social security number, trade classification, and the starting ending time of employment.

By: _____
Authorized Agent and Signatory of Nonresident Bidder

Bid Form shall be signed by an officer of the company with authority to bind in a contract.

Notice of acceptance of this bid, or request for additional information by the Department of Administrative Services, may be addressed to the undersigned at the address set forth below:

Legal Name of Firm: _____

Date: _____

Signature of Bidder: _____

Title: _____

Typed Name of Signatory: _____

Email: _____

Business Address:

Telephone Number: _____ Fax Number: _____

Federal Tax Identification Number: _____

Iowa Contractor Registration Number: _____

Bidder Safety Manager Name: _____

For an out-of-state Bidder, Bidder certifies that the Resident Preference given by the State or Foreign Country of Bidder's residence, _____, is _____ %.

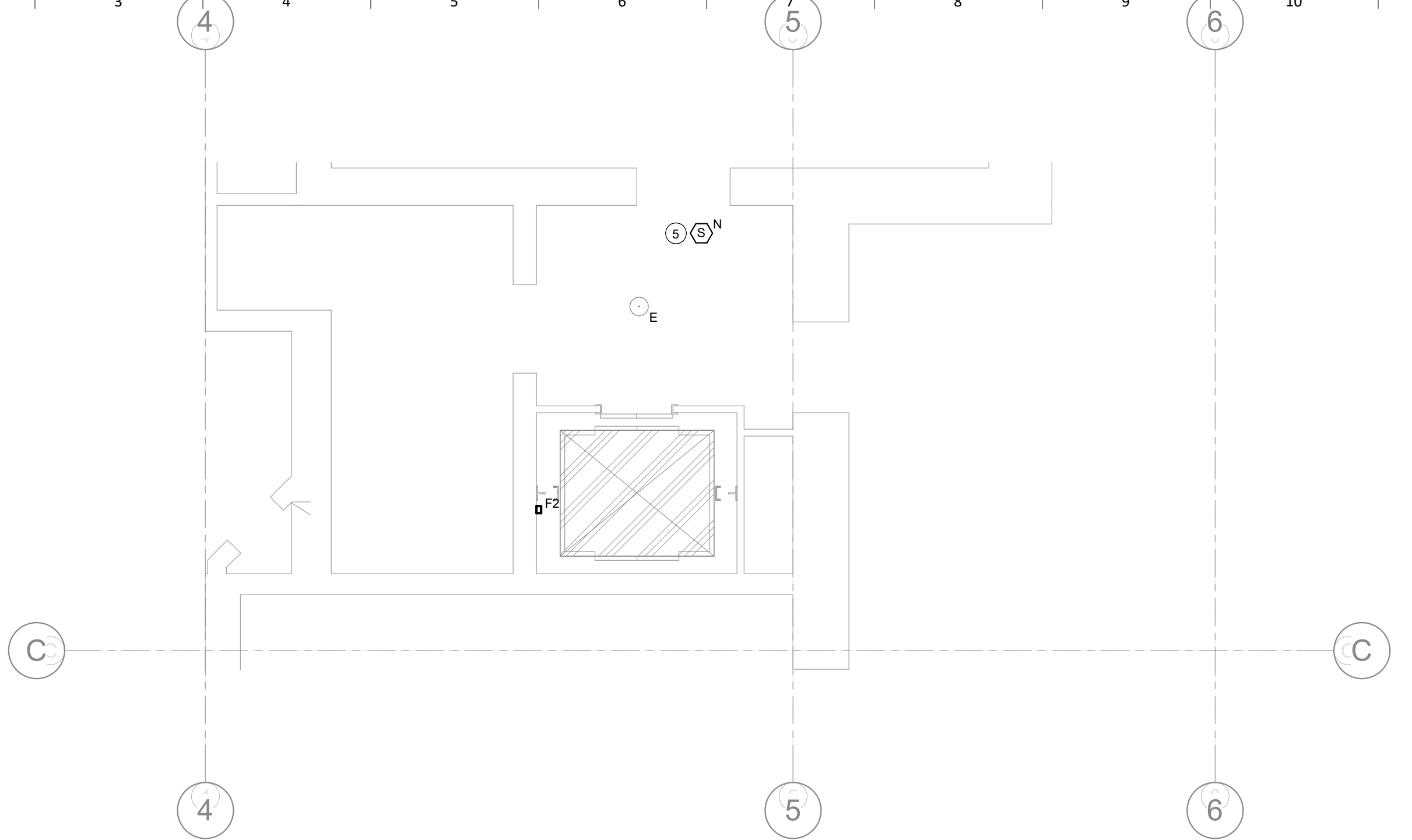
END OF SECTION

POWER GENERAL NOTES

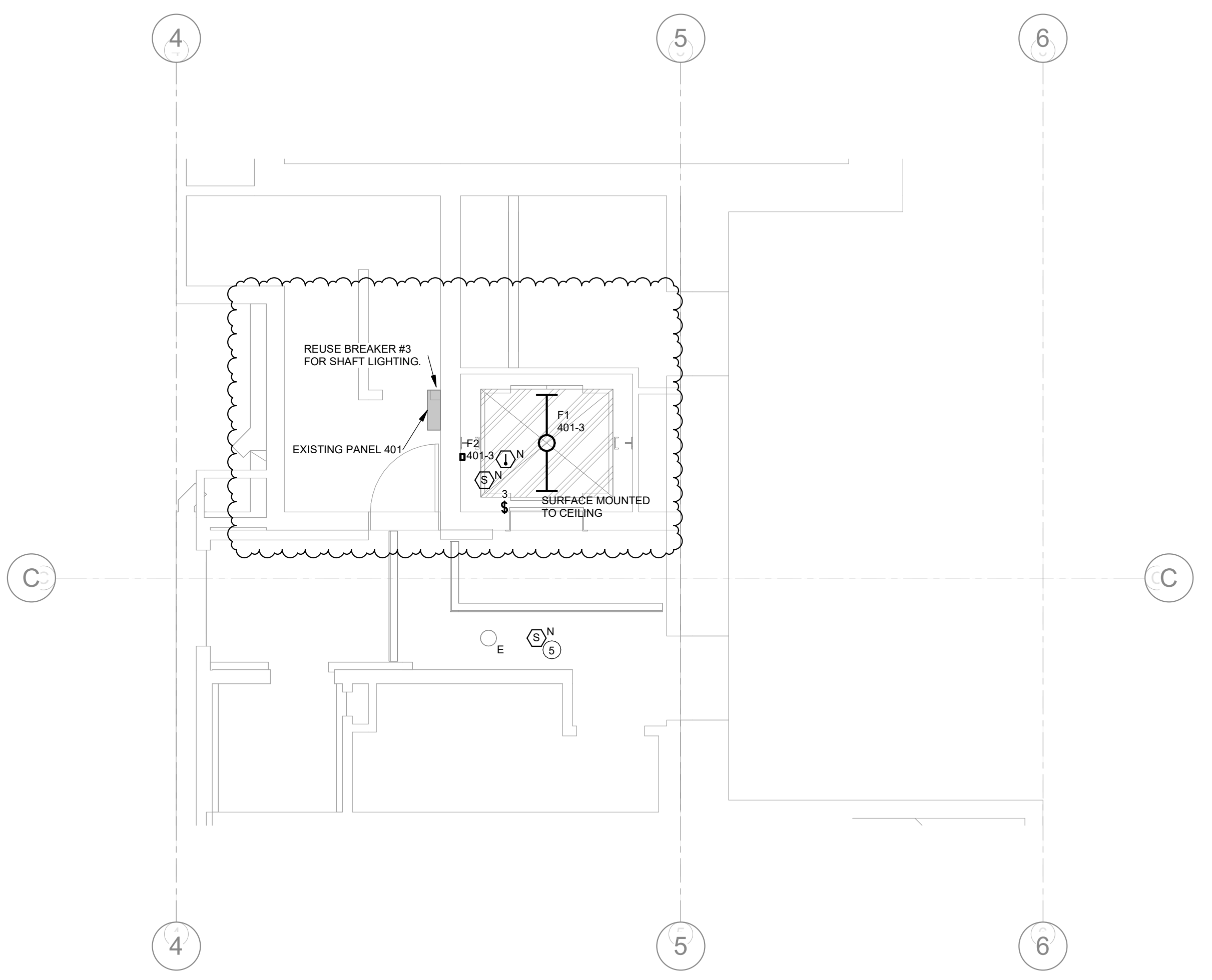
- A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
- B. COORDINATE ELECTRICAL REQUIREMENTS FOR MECHANICAL UNITS WITH MECHANICAL CONTRACTOR AND FINAL MECHANICAL SHOP DRAWINGS.
- C. PROVIDE PENETRATIONS REQUIRED FOR ROUTING RACEWAYS THROUGH THE BUILDING. COORDINATE FIRE RATED WALL PENETRATIONS AND PROVIDE CONDUIT SLEEVES AND FIRE STOPPING TO MAINTAIN RATING.

KEYNOTES

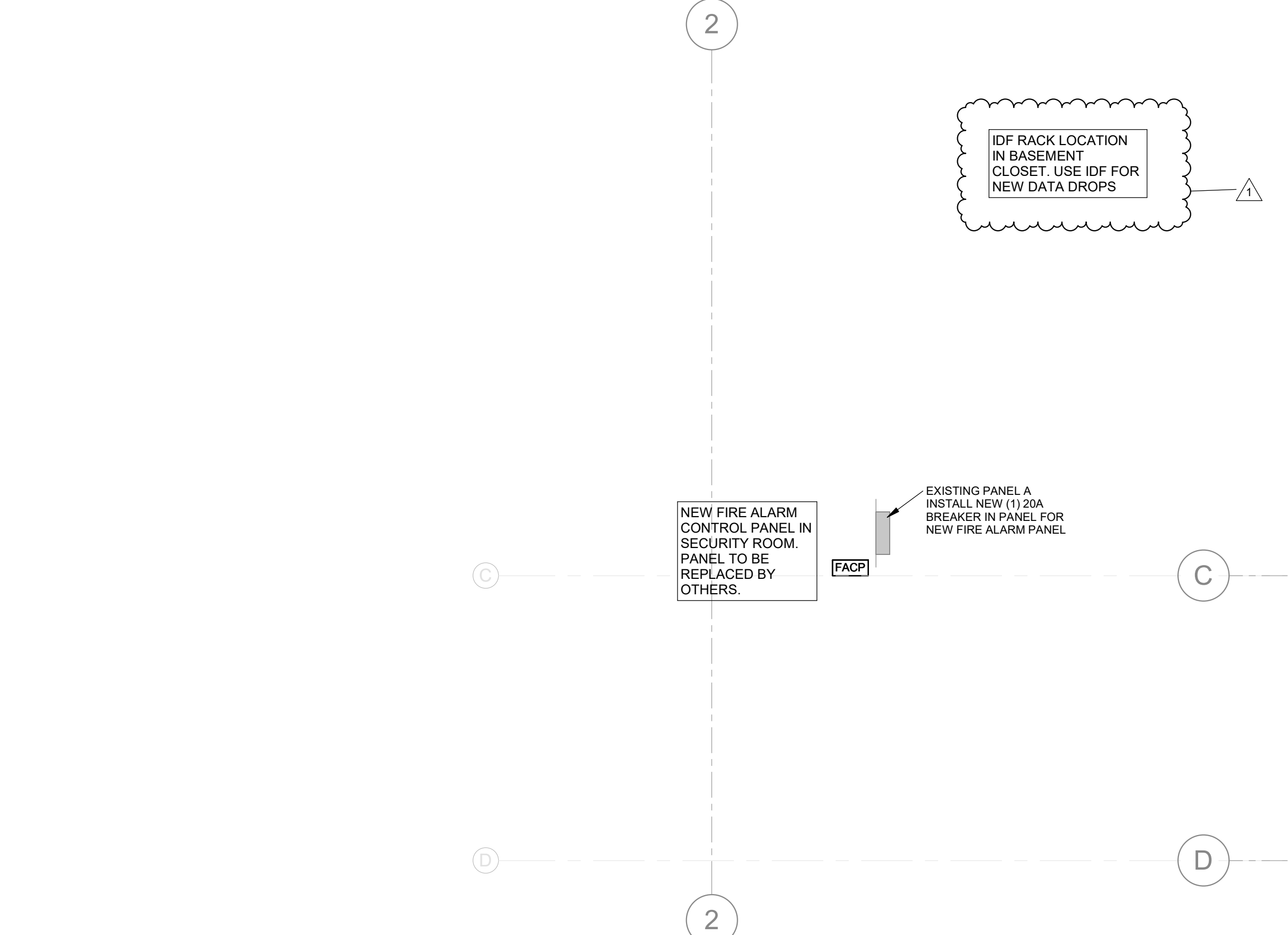
- 1 EXISTING PANEL B-10H. INSTALL NEW 3P BREAKER IN EXISTING 400A GE MHB PANELBOARD FOR ELEVATOR. VERIFY BREAKER SIZE FOR ELEVATOR. ASSUME 100A BREAKER AND (3) 1/2" RIGID IN 1/2" CONDUIT FOR BIDDING PURPOSES. INSTALL (1) 20A 1P BREAKER FOR LIGHTING IN THE ELEVATOR MACHINE ROOM.
- 2 REUSE EXISTING CONDUIT FOR ELEVATOR FEEDER IF FEASIBLE. INSTALL NEW CONDUIT VERTICALLY UP WALL AND CORNER THROUGH WALL TO INSTALL NEW CONDUIT/CONDUCTORS.
- 3 INSTALL NEW 120V FUSED DISCONNECT WITH 20A FUSES FOR ELEVATOR LIGHTING AND AUX. POWER. REUSE EXISTING CIRCUIT FROM CAR LIGHTS IN PANEL B01.
- 4 INSTALL (3) NEW 120V 20A 1P BREAKER IN EXISTING GE PANEL FOR NEW DEDICATED CIRCUIT IN THE ELEVATOR MACHINE ROOM. VERIFY EXISTING LOADS ON PANELBOARD AND COMBINE LEAST LOADED CIRCUIT INTO A SINGLE 20A BREAKER. ADDITIONALLY TANDEM BREAKERS MAY BE USED IF POSSIBLE WITH PANEL. NEW BREAKERS TO BE THQL TYPE. COORDINATE FINAL COMBINATION WITH OWNER AND ARCHITECT.
- 5 REPLACE HEAT DETECTORS FROM CONSTRUCTION WITH NEW FIRE ALARM SMOKE DETECTORS AT COMPLETION OF CONSTRUCTION. PROGRAM DETECTORS FOR ELEVATOR RECALL FUNCTION.
- 6 NEW MODULE FOR FIRE ALARM TIE IN. PRIMARY RECALL, SECONDARY RECALL, FIRE HAT, AND SHUNT TRIP



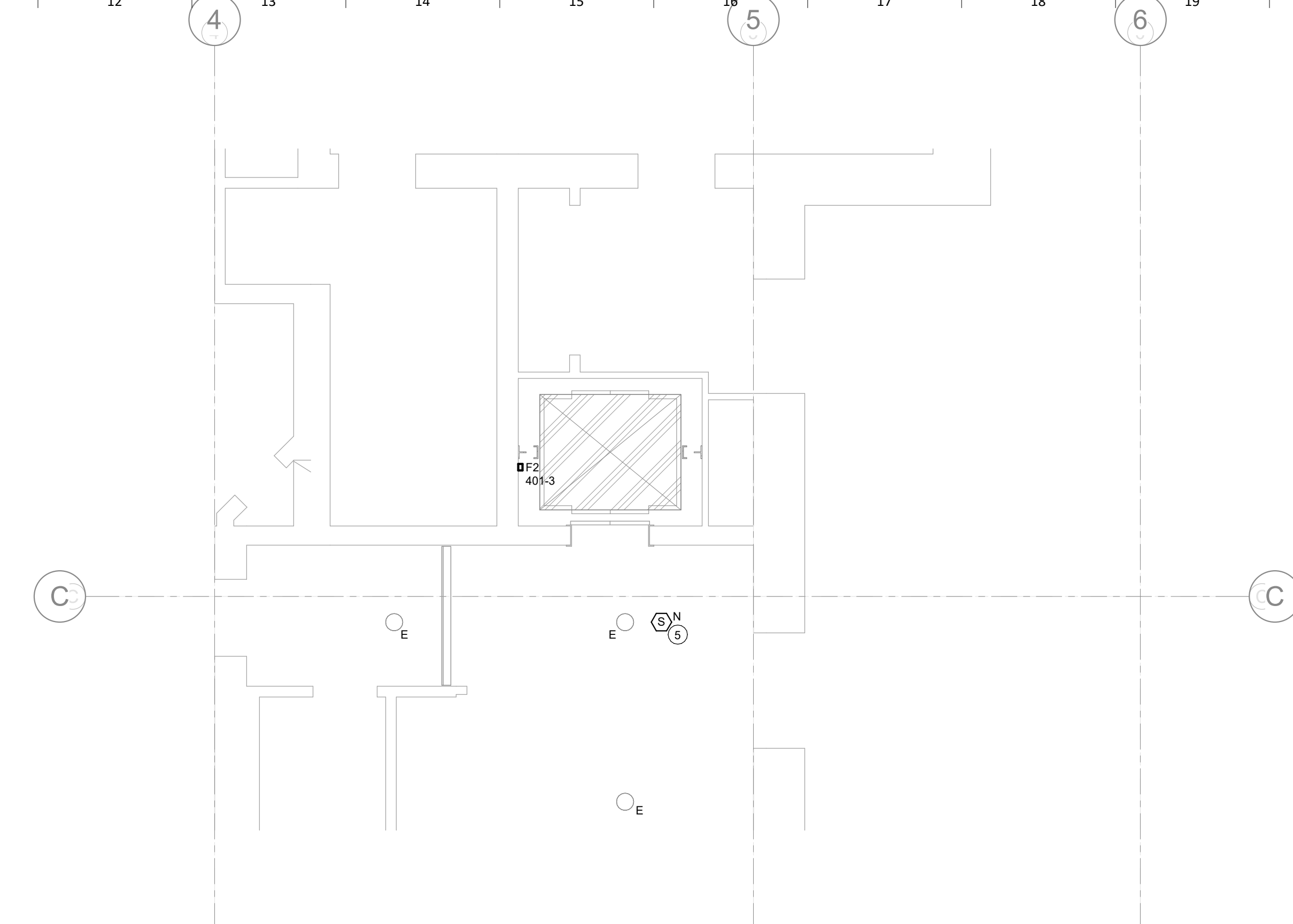
ELECTRICAL - LEVEL 1
1/4" = 1'-0"



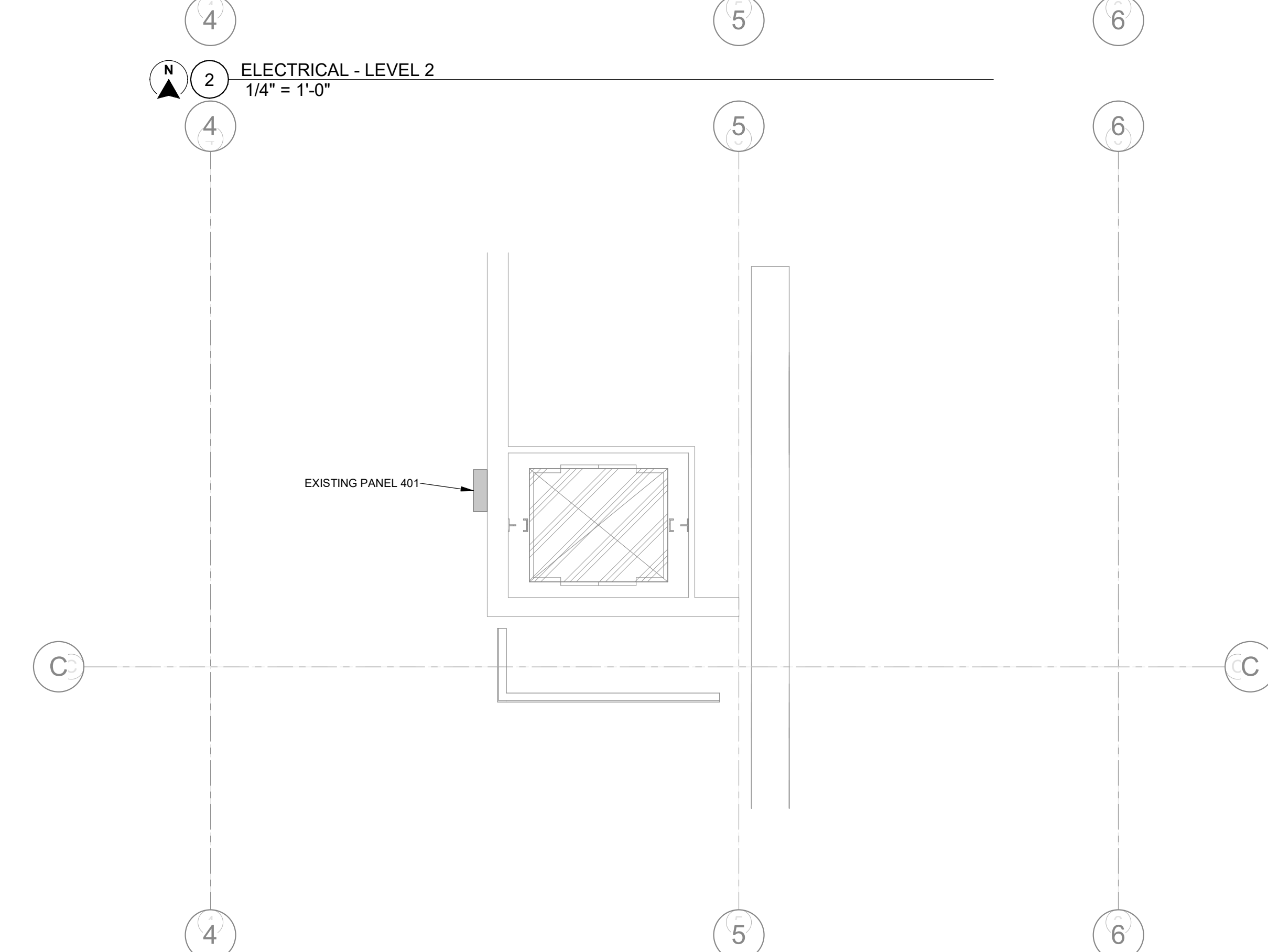
ELECTRICAL - LEVEL 3
1/4" = 1'-0"



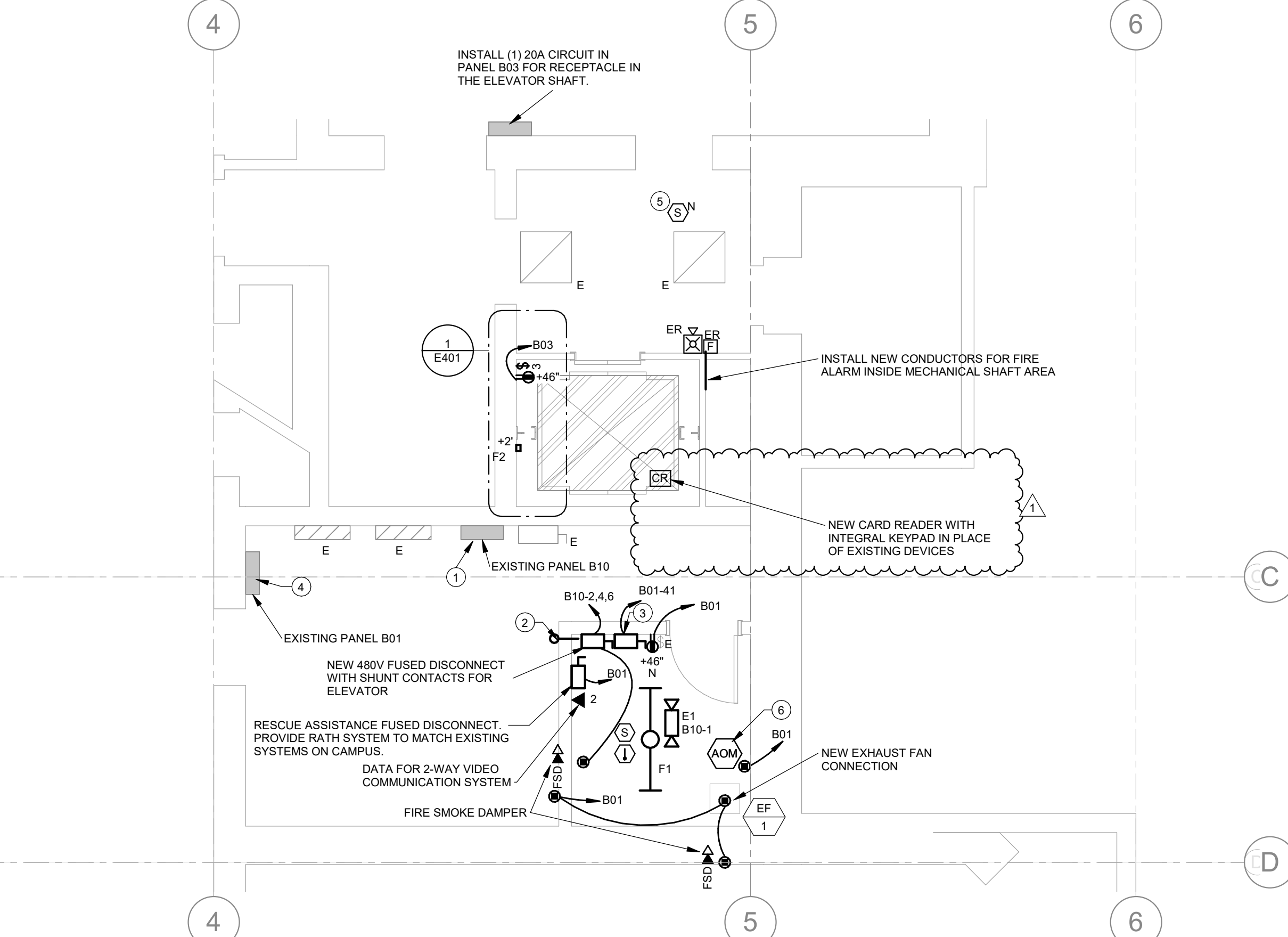
ELECTRICAL - BASEMENT
1/4" = 1'-0"

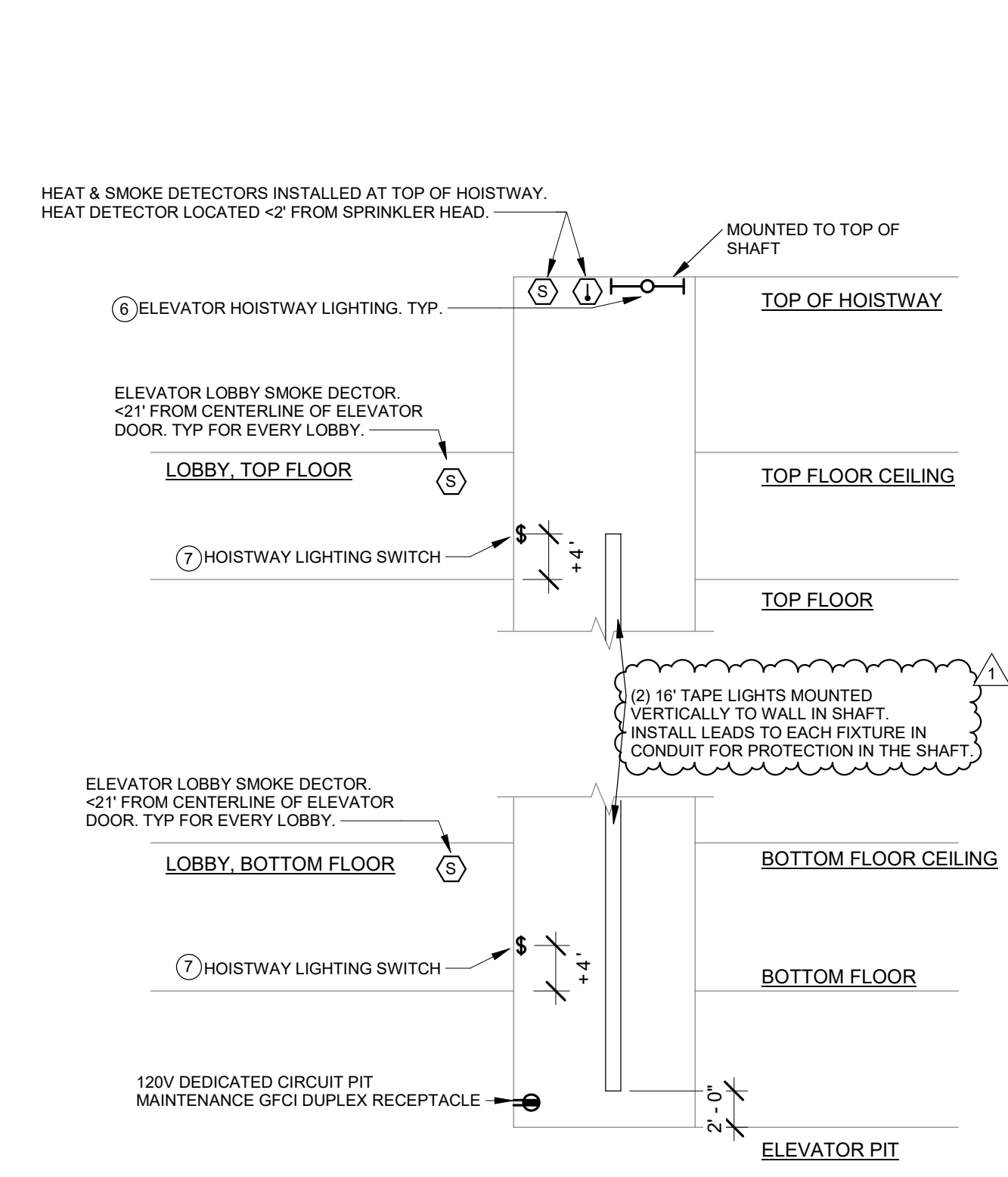


ELECTRICAL - LEVEL 2
1/4" = 1'-0"

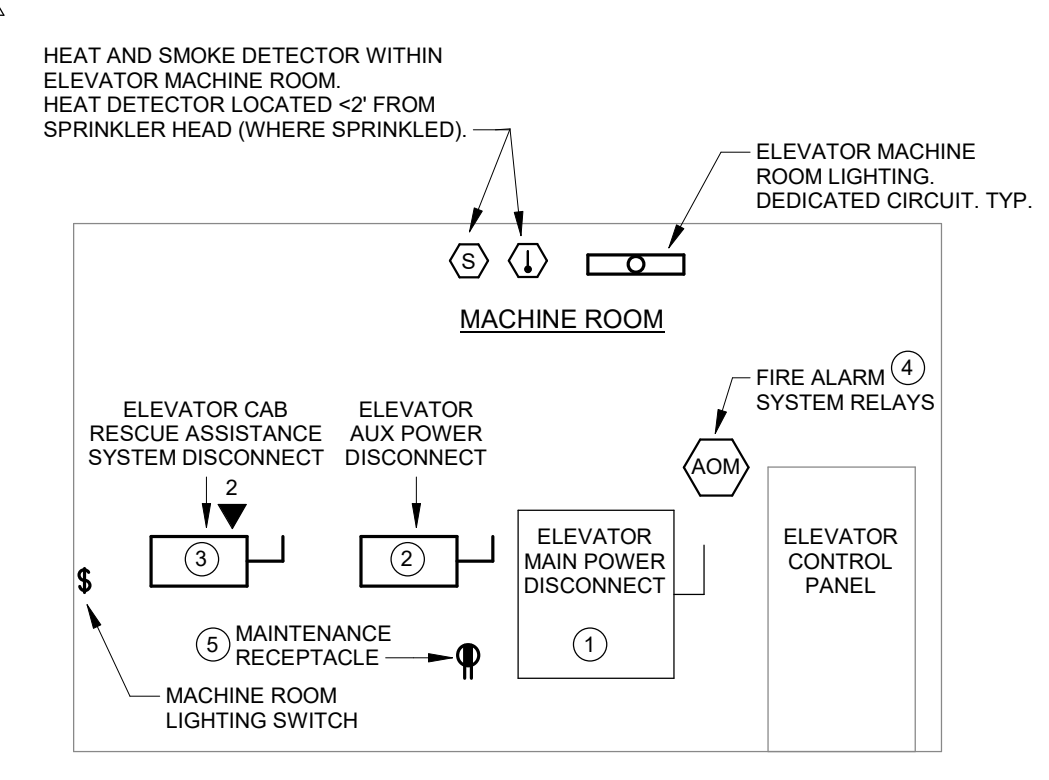


ELECTRICAL - ATTIC
1/4" = 1'-0"





- KEY NOTES:**
- FUSED, LOCKABLE MAIN DISCONNECT SWITCH. PROVIDED WITH NOINC LOW VOLTAGE CONTACTS.
 - FUSED, LOCKABLE 120V/1POLE DISCONNECT SWITCH TO SERVE ELEVATOR AUXILIARY LIGHTING/VENTILATION.
 - FUSED, LOCKABLE 120V/1POLE DISCONNECT SWITCH AND DEDICATED CAT6 DATA TERMINATION TO SERVE ELEVATOR CAB INTERNAL RESCUE ASSISTANCE SYSTEM.
 - FIRE ALARM SYSTEM HAT FLASH, PRIMARY RECALL, SECONDARY RECALL, SHUNT TRIP, AND SHUNT TRIP MONITOR RELAYS.
 - DEDICATED CIRCUIT 120V DUPLEX GFCI MAINTENANCE RECEPTACLE WITH MACHINE ROOM SPACE ADJACENT TO DISCONNECTS.
 - ELEVATOR HOISTWAY LIGHTING POWERED BY DEDICATED CIRCUIT. FOR EACH CAR, PROVIDE LIGHT FIXTURE AT TOP OF HOISTWAY, PIT, AND AT EACH FLOOR. FIXTURES ABOVE PIT LOCATED TO ILLUMINATE TOP OF CAR AT EACH STOP. TYPICAL 10' ABOVE EACH LEVEL.
 - PROVIDE HOISTWAY LIGHTING CONTROLS THREE WAY SWITCHES AT BOTTOM AND TOP FLOOR HOISTWAY ENTRIES. WHERE MULTIPLE CARS SHARE A COMMON HOISTWAY, PROVIDE 4 WAY SWITCHES AND PROVIDE SWITCH AT EACH CARS BOTTOM AND TOP FLOORS. SWITCH SHALL CONTROLS ALL LIGHTING IN HOISTWAY AND PIT



EQUIPMENT CONNECTION SCHEDULE

ABBREVIATIONS:

1 NEMA 1 ENCLOSURE	INT INTEGRAL WITH EQUIPMENT FROM FACTORY	NOTES:
3R NEMA 3R ENCLOSURE	MMS MANUAL MOTOR STARTER W/ THERMAL...	1. PROVIDE AND INSTALL ELECTRICAL SYSTEMS MEETING THE REQUIREMENTS OF THE SPECIFIED MECHANICAL, FIRE PROTECTION, PLUMBING AND BUILDING SYSTEMS. REFERENCE THE ENTIRE PROJECT DOCUMENTS, MANUALS, SCHEDULES, DETAILS, AND NOTES
4 NEMA 4 ENCLOSURE	NFD NON-FUSED DISCONNECT SWITCH, HEAVY DUTY	2. PROVIDE CONNECTIONS AND ACCESSORIES INCLUDING STARTERS, DISCONNECTS, CONTROL WIRING, ETC. AS REQUIRED FOR THE BUILDING EQUIPMENT. INFORMATION HEREIN AND ON THE DRAWINGS IS FOR GENERAL DESCRIPTION AND ESTIMATING PURPOSES ONLY. VERIFY VOLTAGE, AMPERAGE, PHASE, INRUSH, ETC. FOR EACH ITEM OF EQUIPMENT BEFORE PROCEEDING WITH INSTALLATION. INSTALL PER MANUFACTURERS INSTRUCTIONS.
4X NEMA 4X ENCLOSURE	PFS PLUG FUSE WITH INTEGRATED SWITCH	3. REVIEW EQUIPMENT SHOP DRAWINGS FOR COMPLIANCE AND COORDINATION WITH ELECTRICAL CONNECTIONS. NOTIFY ENGINEER IF CHANGES TO ELECTRICAL CONNECTIONS, WIRING, AND BREAKER REQUIREMENTS ARE NECESSARY.
BO PROVIDED BY OTHERS	RF RETURN AIR DUCT DETECTOR	4. DO NOT RELEASE ELECTRICAL DISTRIBUTION EQUIPMENT UNTIL ALL EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS HAVE BEEN SUBMITTED AND APPROVED. MAKE MINOR ADJUSTMENTS TO BREAKER SIZES, DISCONNECT SIZES, ETC PRIOR TO SUBMITTAL RELEASE.
CB CIRCUIT BREAKER IN PANEL	RSR RUN STATUS RELAY, NORMALLY OPEN	5. INSTALL DISCONNECTS TO ALLOW EQUIPMENT REMOVAL WITHOUT DISCONNECT REMOVAL AND TO MINIMIZE WIRE LENGTH.
CSD COMBINATION STARTER/DISCONNECT	SD SUPPLY AIR DUCT DETECTOR	6. PROVIDE HEAVY DUTY DISCONNECTS RATED FOR THE INSTALLED ENVIRONMENT; NEMA 1 INDOORS, MINIMUM NEMA 3R OUTDOORS.
CP CORD AND PLUG PROVIDED WITH UNIT	SSP START/STOP PUSHBUTTON WITH PILOT	7. VERIFY ALL EQUIPMENT LOCATIONS WITH THE ASSOCIATED SUB-CONTRACTOR.
ECB ENCLOSED CIRCUIT BREAKER	SS START/STOP PUSHBUTTON	8. INCLUDE AUXILIARY CONTACTS AND LOW-VOLTAGE WIRING TO AUXILIARY EQUIPMENT THAT RUNS IN TANDEM WITH EQUIPMENT, (I.E. 120V DAMPERS WITH 480V MOTORS).
FAR FIRE ALARM SHUTDOWN RELAY	ST SHUNT TRIP	
FDS FUSED DISCONNECT SWITCH, HEAVY...	TOR TIME DELAY OFF RELAY	
GF GROUND FAULT CIRCUIT...	TS TOGGLE SWITCH	
HOA HAND-OFF-AUTO	VFD VARIABLE FREQUENCY DRIVE	

TAG	ELECTRICAL CHARACTERISTICS		ELECTRICAL CHARACTERISTICS		DISCONNECT		CONTROLS		REMARKS			
	VOLTAGE	PHASE	MOTOR HP	KW	MCA	TYPE	SIZE (AMPS)	NEMA RATING		FUSE SIZE (AMPS)	STARTER	DESCRIPTION
EF-1	120 V				5	INT						CONNECT TO DAMPER PER MC SCHEDULE AND COORDINATE THERMOSTAT AND WIRE WITH MC.

LIGHTING FIXTURE SCHEDULE

NOTES:

- ALL FIXTURES SHALL BE U.L. OR SIMILARLY LISTED.
- INCLUDE A MINIMUM 1 YEAR WARRANTY FOR LIGHTING FIXTURES, WHERE NOT OTHERWISE SPECIFIED.
- REFER TO ARCHITECTURAL DOCUMENTS FOR EXACT MOUNTING LOCATIONS, DETAILS, AND CONFIGURATIONS OF ALL LUMINAIRES. IF ARCHITECTURAL DRAWINGS DO NOT CLARIFY EXACT MOUNTING LOCATION OR DETAIL, ISSUE AN RFI FOR ARCHITECT TO SPECIFICALLY CLARIFY PRIOR TO FIXTURE ROUGH-IN.
- VERIFY COMPATIBILITY OF LIGHT FIXTURES WITH ARCHITECTURAL CEILING PLAN, MATERIALS, ADJACENT CONSTRUCTION, AND ADJACENT FINISHES PRIOR TO SHOP DRAWINGS SUBMITTAL. ADJUST FIXTURE TYPE, CONSTRUCTION, FLANGE...
- CONTRACTOR IS RESPONSIBLE FOR ALL MISCELLANEOUS HARDWARE NECESSARY TO INSTALL AND SUPPORT THE LUMINAIRES.
- AIM AND TARGET ADJUSTABLE INTERIOR AND EXTERIOR LIGHT FIXTURES UNDER THE OBSERVATION AND IN COMPLIANCE WITH RECOMMENDATIONS OF THE ARCHITECT. INCLUDE LABOR AND MATERIAL COSTS MADE NECESSARY BY THIS REQUIREMENT.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND FILLING OUT ALL UTILITY REBATE FORMS FOR OWNER.

TYPE	MANUFACTURER	MODEL	DESCRIPTION	FINISH	LUMENS	CRI	DRIVE R TYPE	SOURCE-CCT	VOLTAGE	LOAD-VA	APPROVED EQUALS
E1	HUBBELL DUAL-LITE	LZ-2-1-03L	EMERGENCY LIGHT, WALL OR CEILING MOUNTED, THERMOPLASTIC HOUSING, 2 LED ADJUSTABLE LAMP HEADS, LEAD-CALCIUM MAINTENANCE FREE BATTERY, SELF-DIAGNOSTICS					LED	277 V	2 VA	SURE-LITES, LIGHTALARMS, EVENLITE
F1	LITHONIA	CSVT 148 500/ML MVOLT 40K 90CRI	UTILITY STRIP FIXTURE 4' WET LISTED, GASKETED, POLY-CARB LENS, MULTIVOLT FOR 120V AND 277V USE	WHITE	4800	80	LED	LED - 4000K	120 V	45 VA	COOPER, CURRENT
F2	OMNI-LIGHT	GENWP-41-HO-16"	(2) 16" LENGTH TAPE LIGHT, IP66+ LISTED, CONTINUOUS RUN, LESS THAN 2" DEPTH TO FIT BEHIND ELEVATOR TRAILS. INSTALL 6" JUMPER IN MIDDLE OF SHAFT. INSTALL TAPE CLIPS EVERY 2'-3". PROVIDE WITH APPLICABLE DRIVER AND EXTENSION CABLES. INSTALL DRIVER IN ATTIC NEAR PANEL 401. PROVIDE LEADS LONG ENOUGH FOR BOTH FEEDS IN ELEVATOR SHAFT. 120V COMPATIBLE.	WHITE	450/FT	80	LED	LED - 4000K	120 V	160 VA	KELVIX LUMINIX

