

STATE OF IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES

9360.00 IOWA PBS FIRE ALARM REPLACEMENT

CONSTRUCTION DOCUMENTS

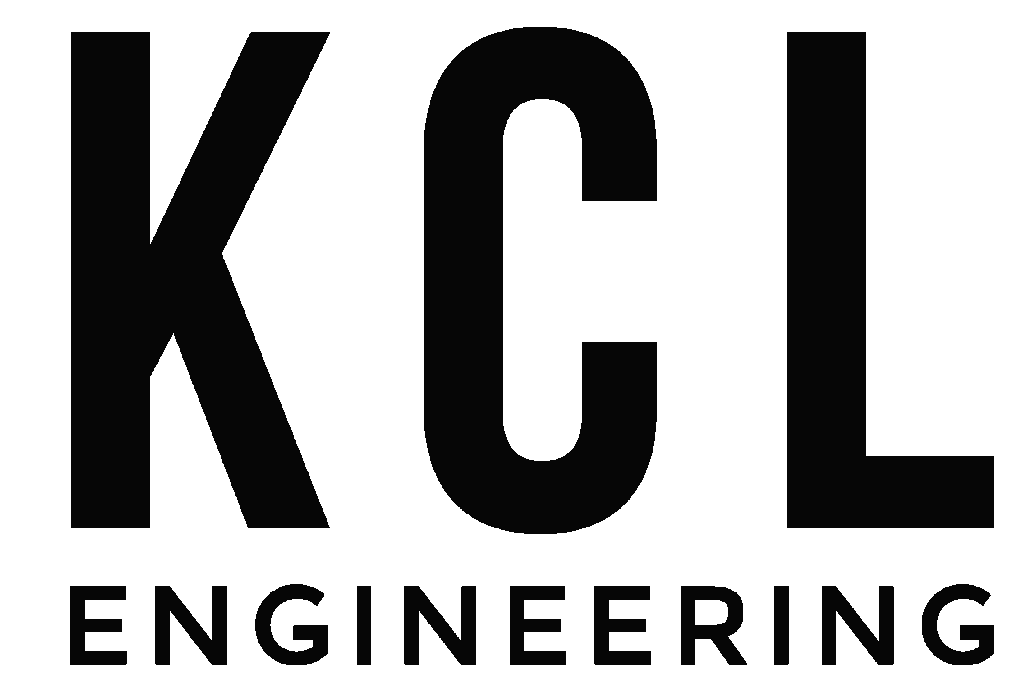
2/1/2024



OWNER
IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
109 SE 13TH STREET
DES MOINES, IA 50319
OWNER PROJECT NUMBER: 9360.00



CONSTRUCTION MANAGER
ADAM DOUGLAS - PROJECT EXECUTIVE
MCGOUGH
217 E 2ND STREET, SUITE 120
DES MOINES, IOWA 50309



ENGINEER
ERIC HEYNEN, PE
KCL ENGINEERING
eheynden@kclengineering.com
515-300-8092
ENGINEER PROJECT NUMBER: 23249

VICINITY MAP:
6450 CORPORATE DRIVE
JOHNSTON, IOWA 50131



SHEET LIST	
G001	LIFE SAFETY AND CODE SUMMARY
E000	ELECTRICAL GENERAL NOTES & SYMBOLS
ED101	FIRE ALARM DEMOLITION - WEST
ED102	FIRE ALARM DEMOLITION - EAST
ED103	FIRE ALARM DEMO AND NEW - MEZZANINE
E101	FIRE DETECTION & ALARM PLANS - WEST
E102	FIRE DETECTION & ALARM PLANS - EAST

	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.	
	<i>Eric Heynen</i> (signature)	2/1/2024 (date)
	ERIC HEYNEN, P.E.	
	License Number : P24706	
	My license renewal date is December 31, 2025	

Pages or sheets covered by this seal: E. Sheets

APPLICABLE CODE INFORMATION

The project shall comply with the following codes:

2015 International Building Code
2015 International Mechanical Code
2015 International Fire Code
2017 National Electrical Code
2015 Uniform Plumbing Code and the Iowa State Plumbing Code
2015 International Energy Conservation Code
Iowa State Energy Code, 2015 International Energy Conservation Code
Accessibility - Division 7 of Iowa State Building Code, Iowa State Accessibility Code, 2015 IBC and ANSI A117.1 - 2009 Edition

Building Characteristics

Project description: Project involves the update to the existing fire alarm system in the building. No other modifications to the building configuration to be done.
Building Area: 56,823 SF
Building Height: 33'-0"
Number of Stories: 2 (see below for detailed information)
Fully Sprinkled: Partial
Fire Alarm: Yes - Project specific to update fire alarm system throughout the building.

IBC Chapter 3 - Use and Occupancy Classification

Occupancy Group: A-1, B (Nonseparated occupancy use)

IBC Chapter 4 - Special Detailed Requirements Based on Use and Occupancy

No changes to existing building.
Building will continue to comply with applicable requirements of Section 410.

IBC Chapter 5 - General Building Heights and Areas

Occupancy Group B
Building Height: 33'-0"
Number of Stories: 2
Building Area: 48,782 SF

Occupancy Group A-1
Building Height: 33'-0"
Number of Stories: 1
Building Area: 8,041 SF

507 Unlimited Area Buildings

No changes to existing building.

IBC Chapter 6 - Types of Construction

Construction Classification: Type IIB - No changes to existing building.

Table 601 Fire Resistance Rating Required

Primary Structural Frame 0 HR
Bearing Walls 0 HR
Nonbearing Wall and Partition (Exterior) 0 HR
Nonbearing Wall and Partitions (Interior) 1 HR - Corridor Construction
Floor Construction and Secondary Members 0 HR
Roof Construction and Secondary Members 0 HR

IBC Chapter 7 - Fire and Smoke Protection Features

705 Exterior Walls

No changes to existing building.

713 Shaft Enclosures

No changes to existing building.

IBC Chapter 9 - Fire Protection Systems

903 Automatic Sprinkler Systems Partial
-Partial coverage provided at Studio B and Scene shop only. No changes to existing building.
906 Portable Fire Extinguishers Required/Provided - No changes to existing building.

IBC Chapter 10 - Means of Egress

No changes to existing building.

2015 International Energy Conservation Code

No changes to existing building.

Iowa Administrative Code, Chapter 16, Division VII - Accessibility Requirements For Facilities Used by the General Public:

No changes to existing building.
Accessibility within the building will be maintained.

Plumbing Fixture Requirements per 2015 Uniform Plumbing Code (UPC)

No changes to existing building.

BUILDING OCCUPANCY COUNT						
Level	Number	Name	Area	Occupancy	OLF	Occupant Load
USE TYPE: (TYP.)						
Level 1	1179	MAYTAG AUDITORIUM	4962.48 SF	A-1	15	340
OLF TYPE TOTAL: (TYP.)						
Level 1	1177	STUDIO 3	3078.39 SF	A-1	35	90
35: 1			3078.39 SF		90	
TOTAL SF OF A-1 USE: 8040.87 SF						
B						
Level 1	1118	MENS	105.05 SF	B	0	
Level 1	1119	WOMEN	106.14 SF	B	0	
Level 1	1159	MENS	196.95 SF	B	0	
Level 1	1161	WOMENS	198.36 SF	B	0	
Level 1	1193	MENS	134.63 SF	B	0	
Level 1	1196	MENS	76.37 SF	B	0	
Level 1	1200	WOMEN	77.89 SF	B	0	
0: 7			895.39 SF		0	
Level 1	1104	CONFERENCE ROOM	737.68 SF	B	15	
Level 1	1116	BOARDROOM	683.08 SF	B	15	
Level 1	1117	CONF. ROOM	204.84 SF	B	15	
Level 1	1125	SOUTH CONF. ROOM	317.91 SF	B	15	130
15: 4			1943.50 SF		130	
Level 1	1151	STUDIO 2	434.84 SF	B	35	
Level 1	1171	STUDIO 1	3462.59 SF	B	35	112
35: 2			3897.43 SF		112	
Level 1	1101	VEST.	66.04 SF	B	150	
Level 1	1102	MAIN LOBBY	1690.67 SF	B	150	
Level 1	1103	CORRIDOR	751.02 SF	B	150	
Level 1	1107	FINAL CUT 3	122.29 SF	B	150	
Level 1	1108	COMMUNICATIONS	2072.33 SF	B	150	
Level 1	1109	ADMINISTRATION	1183.59 SF	B	150	
Level 1	1110	OFFICE	184.60 SF	B	150	
Level 1	1111	OFFICE	185.20 SF	B	150	
Level 1	1112	OFFICE	185.79 SF	B	150	
Level 1	1114	OFFICE	206.38 SF	B	150	
Level 1	1115	OFFICE	275.72 SF	B	150	
Level 1	1120	PRODUCTION	4690.51 SF	B	150	
Level 1	1121	GRAPHICS & DESIGN	567.53 SF	B	150	
Level 1	1123	DARK RM.	82.57 SF	B	150	
Level 1	1126	OFFICE	206.93 SF	B	150	
Level 1	1126A	MEETING ROOM	155.44 SF	B	150	
Level 1	1127	EDUCATION	3022.01 SF	B	150	
Level 1	1129	NETWORK VIDEO CENTER	1550.28 SF	B	150	
Level 1	1129	VEST.	50.65 SF	B	150	
Level 1	1130	CC "A"	42.32 SF	B	150	
Level 1	1131	AVID 2	88.06 SF	B	150	
Level 1	1134	AVID 1	95.88 SF	B	150	
Level 1	1135	AVID 6	96.69 SF	B	150	
Level 1	1136	AVID 3	74.12 SF	B	150	
Level 1	1137	AVID 4	74.74 SF	B	150	
Level 1	1138	EDIT SERVER	132.71 SF	B	150	
Level 1	1138A	FINAL CUT 5	84.67 SF	B	150	
Level 1	1139	FINAL CUT 4	86.76 SF	B	150	
Level 1	1140	AVID 5	412.09 SF	B	150	
Level 1	1141	NETWORK CONTROL CENTER	242.23 SF	B	150	
Level 1	1142	TECH EQUIP. CENTER	682.07 SF	B	150	
Level 1	1143	VIDEO CONTROL 1	330.63 SF	B	150	
Level 1	1143	CORRIDOR	98.13 SF	B	150	
Level 1	1144	AUDIO CONTROL 1	198.23 SF	B	150	
Level 1	1145	CORR.	147.92 SF	B	150	
Level 1	1146	CORR.	185.97 SF	B	150	
Level 1	1147	VEST	97.56 SF	B	150	
Level 1	1148	CC "B"	139.37 SF	B	150	

THIS TOTAL BASED ON FIXED SEATING CAPACITY OF AUDITORIUM.

OCCUPANT COUNT OF ALL 35 OLF SPACES.

TOTAL OCCUPANT LOAD FOR A SPACES.

OCCUPANT COUNT OF ALL 15 OLF SPACES.

OCCUPANT COUNT OF ALL 35 OLF SPACES.

BUILDING OCCUPANCY COUNT						
Level	Number	Name	Area	Occupancy	OLF	Occupant Load
Level 1	1149	AUDIO PROD.	113.00 SF	B	150	
Level 1	1153	CORR.	409.95 SF	B	150	
Level 1	1154	TECHNICAL SHOP	505.86 SF	B	150	
Level 1	1155A	VEST.	90.05 SF	B	150	
Level 1	1157	LUNCH ROOM	462.04 SF	B	150	
Level 1	1158	VENDING	145.63 SF	B	150	
Level 1	1160	JAN.	42.45 SF	B	150	
Level 1	1162	STORAGE ROOM	974.09 SF	B	150	
Level 1	1167	CORRIDOR	282.85 SF	B	150	
Level 1	1167A	VEST.	84.51 SF	B	150	
Level 1	1168	RECEIVING	349.95 SF	B	150	
Level 1	1169	EFP	345.93 SF	B	150	
Level 1	1169A	FIBER	248.61 SF	B	150	
Level 1	1174	DESIGN	145.59 SF	B	150	
Level 1	1175	DIMMER ROOM	101.93 SF	B	150	
Level 1	1176	VEST.	56.34 SF	B	150	
Level 1	1177A	VEST	83.43 SF	B	150	
Level 1	1178	VEST.	116.85 SF	B	150	
Level 1	1180	AUDIO ROOM	263.08 SF	B	150	
Level 1	1181	VIDEO ROOM	231.19 SF	B	150	
Level 1	1182	SERVING	97.29 SF	B	150	
Level 1	1183	VEST	131.65 SF	B	150	
Level 1	1184	ACCESS	10.71 SF	B	150	
Level 1	1185	VEST	122.02 SF	B	150	
Level 1	1186	MAYTAG LOBBY	1160.88 SF	B	150	
Level 1	1188	DRESSING	141.41 SF	B	150	
Level 1	1189	CORRIDOR	403.10 SF	B	150	
Level 1	1190	DRESSING	148.66 SF	B	150	
Level 1	1192	COAT CLOSET	236.16 SF	B	150	
Level 1	1194	WOMEN	146.54 SF	B	150	
Level 1	1195	DRESS.	77.41 SF	B	150	
Level 1	1197	OFFICE	165.39 SF	B	150	
Level 1	1198	OFFICE	182.00 SF	B	150	
Level 1	1199	ENGINEERING	773.40 SF	B	150	
Level 1	1201	DRESS.	72.19 SF	B	150	
Level 1	1202	JAN	57.66 SF	B	150	
Level 1	1203	CORRIDOR	534.56 SF	B	150	
Level 1	1206	OFFICE	185.08 SF	B	150	
Level 1	1207	OFFICE	250.61 SF	B	150	
Level 1	1210	GREEN ROOM	121.48 SF	B	150	205
150: 78			30631.24 SF		205	
Level 2	1	MECHANICAL / EQUIP.	708.37 SF	B	300	
Level 2	2	CONDENSERS	834.46 SF	B	300	
Level 2	3	EMERGENCY GENERATOR	218.06 SF	B	300	
Level 2	4	MECHANICAL / EQUIP.	1395.83 SF	B	300	
Level 2	5	CONTROL	48.25 SF	B	300	
Level 2	6	EQUIP. ROOM	994.75 SF	B	300	
Level 1	1104A	STOR.	36.78 SF	B	300	
Level 1	1104B	STOR.	20.65 SF	B	300	
Level 1	1105	FINAL CUT 1	148.99 SF	B	300	
Level 1	1106	FINAL CUT 2	94.37 SF	B	300	
Level 1	1113	STORAGE	29.95 SF	B	300	
Level 1	1122	MOTION GRAPHICS	96.53 SF	B	300	
Level 1	1128	VIDEO TAPE LIBRARY	1995.93 SF	B	300	
Level 1	1156	TECHNICAL STORAGE	528.94 SF	B	300	
Level 1	1163	MECH RM.	309.96 SF	B	300	
Level 1	1164	ELEC. RM.	192.91 SF	B	300	
Level 1	1165	CLOSET	30.06 SF	B	300	
Level 1	1166	CLOSET	102.69 SF	B	300	
Level 1	1170	GENERAL SERVICES	662.05 SF	B	300	
Level 1	1170A	COMP. ROOM	264.02 SF	B	300	
Level 1	1173	PRODUCTION SHOP	2318.56 SF	B	300	
Level 1	1207A	STOR.	26.91 SF	B	300	
Level 1	1209	STOR.	50.74 SF	B	300	
Level 1	2000	UPS RM.	304.16 SF	B	300	38
300: 24			11413.91 SF		38	
TOTAL SF OF B USE: 48781.47 SF						
TOTAL SF OF BUILDING: 56822.34 SF						
OCCUPANT COUNT OF ALL 300 OLF SPACES:						
TOTAL OCCUPANT LOAD FOR B SPACES:						
TOTAL OCCUPANT BUILDING:						

TOTAL NUMBER OF ROOMS: Grand total: 117

TOTAL SF OF B USE: 48781.47 SF

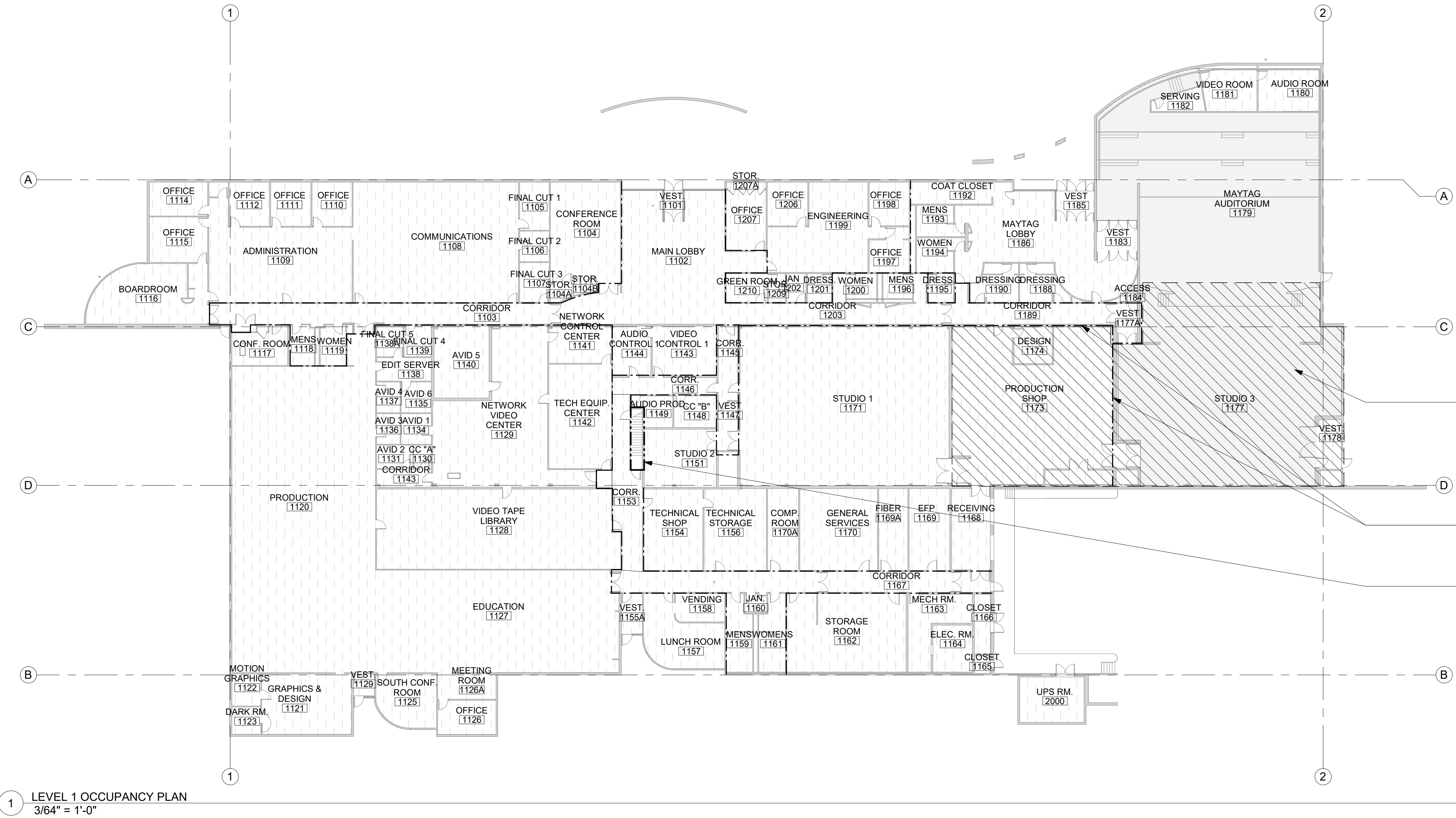
TOTAL SF OF BUILDING: 56822.34 SF

OCCUPANT COUNT OF ALL 150 OLF SPACES.

OCCUPANT COUNT OF ALL 300 OLF SPACES:

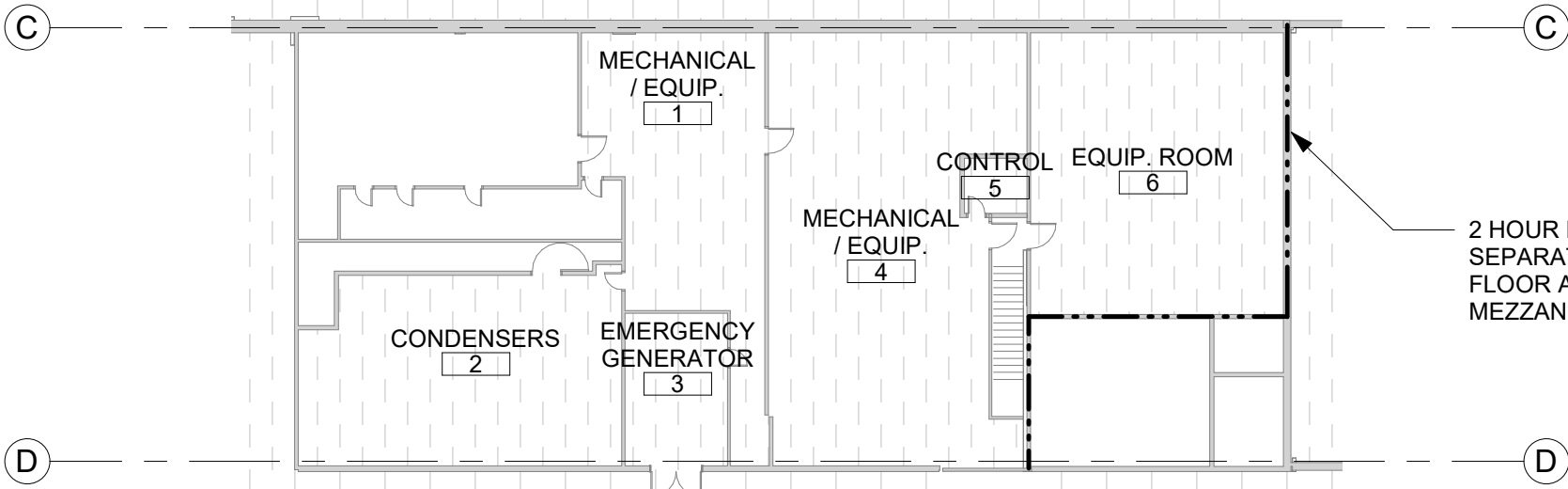
TOTAL OCCUPANT LOAD FOR B SPACES:

TOTAL OCCUPANT BUILDING.



1 LEVEL 1 OCCUPANCY PLAN
3/64" = 1'-0"

2 Level 2
3/64" = 1'-0"



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STATE OF IOWA - DAS
IPBS FIRE ALARM REPLACEMENT

Project No: 23844000

Date: 2/1/2024

CONSTRUCTION DOCUMENTS

Revision Date

Drawing Name:
LIFE SAFETY AND
CODE SUMMARY

Drawing #:

G001

Rev Date: Rev: 12/20/2019 9:27:08 AM

ALTERNATES

1.

PROVIDE A COMPLETE REPLACEMENT OF THE EXISTING CONDUCTORS. CONTRACTORS MAY REUSE PATHWAYS. THE EXISTING CONDUCTORS ARE NOTED TO BE 18/2 FOR DETECTION DEVICES AND 14/2 FOR NOTIFICATION DEVICES. THE EXISTING SYSTEM IS A SIEMENS APOSEE SYSTEM. IF THE SELECTED SYSTEM CANNOT UTILIZE EXISTING CONDUCTORS, LEAVE THIS LINE BLANK AND INCLUDE ALL NEW CONDUCTORS IN THE BASE BID.
2.

REUSE EXISTING NOTIFICATION DEVICES. EXISTING DEVICES WILL REMAIN INTACT AND BE RECONNECTED TO THE NEW SYSTEM. PROVIDE DEDUCT ALTERNATE PRICING ON BID FORM.

FIRE DETECTION & ALARM NOTES

1.

EXISTING FIRE DETECTION AND ALARM SYSTEM MUST REMAIN OPERATIONAL UNTIL NEW FIRE ALARM PANEL IS FUNCTIONAL. COORDINATE EXISTING ZONES IN USE AND PHASE REPLACEMENT OF SYSTEM TO MINIMIZE DOWNTIME.
2.

METHODICALLY, AND IN CLOSE COORDINATION WITH THE OWNER, ROUTE NEW FIELD WIRING TO ANTICIPATED DEVICE LOCATIONS. TAKE NO MORE THAN ONE EXISTING SIGNAL LINE CIRCUIT OFFLINE AT ANY ONE TIME TO ENSURE A GRACEFUL MIGRATION OCCURS FROM THE EXISTING SYSTEM TO THE NEW.
3.

BIDDING CONTRACTOR IS ENCOURAGED TO RE-USE EXISTING PATHWAYS AND BOXES WHERE IT IS APPROPRIATE. PROVIDE NEW PENETRATIONS AND SLEEVES WHERE NECESSARY FOR DEVICE INSTALLATION. REFER TO PLAN SHEETS FOR NEW DEVICE LOCATIONS AND WHERE EXISTING LOCATIONS CAN BE REUSED.
4.

INTERFACE NEW DEVICES WITH NEW AND/OR EXISTING MECHANICAL EQUIPMENT FOR FAN SHUT DOWN, SMOKE DAMPER AND COMBINATION FIRE/SMOKE DAMPER PURPOSES.
5.

NEW FIRE ALARM DEVICES FOR NOTIFICATION OR DETECTION SHALL BE INSTALLED IN THE MIDDLE OF CEILING TILES. EXISTING TILE SIZE IS APPROXIMATELY 20" X 60". INSTALL APPROPRIATE BRACKETS SO DEVICES ARE SUPPORTED FROM THE GRID OR STRUCTURE ABOVE. TILES CANNOT BE USED FOR SUPPORT.
6.

FIRE ALARM ITEMS AND DEVICES ARE SHOWN IN SUGGESTED LOCATIONS. FINAL LAYOUTS, LOCATIONS, AND QUANTITIES SHALL BE IN ACCORDANCE WITH APPLICABLE CODES, MANUFACTURER'S RECOMMENDATIONS, AND EQUIPMENT LISTINGS. COORDINATE LOCATIONS WITH LIGHTING AND AIR HANDLING SYSTEMS.
7.

ALL FIRE ALARM CIRCUITRY IN EXPOSED CEILING SPACES SHALL BE IN ¾" CONDUIT PER SPECIFICATIONS. EXPOSED CABLING SHALL NOT BE ACCEPTED.
8.

ALL CONCEALED, ACCESSIBLE CEILING TILE LOCATIONS SHALL BE ALLOWED TO HAVE OPEN AIR CABLING INSTALLED. PROVIDE J-HOOKS, BRIDLE RINGS AND ASSOCIATED CABLE SUPPORTS TO KEEP INFRASTRUCTURE MANAGED AND OFF OF THE CEILING TILE.
9.

ELECTRICAL CONTRACTOR SHALL PROVIDE FIRESTOPPING AT ALL PENETRATIONS PER SPECIFICATION.
10.

DEVICES SHALL BE WHITE UNLESS OTHERWISE NOTED.

DEMOLITION AND RENOVATION NOTES - ELECTRICAL

1.

ELECTRICAL DEMOLITION DRAWINGS SHOWING EXISTING CONDITIONS HAVE BEEN PREPARED BASED ON FIELD OBSERVATION AND ORIGINAL DRAWINGS. FIELD VERIFY EXISTING CONDITIONS BEFORE WORK BEGINS. ADDITIONAL COMPONENTS MAY EXIST WHICH ARE NOT SHOWN. BECOME FAMILIAR WITH EXISTING ELECTRICAL SYSTEM WHICH WILL BE AFFECTED BY THE DEMOLITION WORK.
2.

PROVIDE EQUIPMENT, LABOR, AND MATERIALS TO REMOVE ELECTRICAL FACILITIES AND CLEAR THE AREA TO RECEIVE THE NEW WORK PROVIDED UNDER THIS CONTRACT.
3.

IN OCCUPIED AREAS BEYOND THE DEMOLITION SCOPE, KEEP EXISTING SYSTEMS NOT AFFECTED BY PROJECT SCOPE OPERATIONAL THROUGH THE DURATION OF THE PROJECT. OBTAIN PERMISSION FROM OWNER'S REPRESENTATIVE TO SHUT OFF SERVICES OR SYSTEMS WHICH MAY AFFECT OTHER AREAS BEYOND THE LIMITS OF THE DEMOLITION AREA. INFORM OWNER'S REPRESENTATIVE OF THE REASON FOR AND DURATION OF THE SHUTDOWN AND ENSURE THAT THE SHUTDOWN IS MADE WITH AS LITTLE INCONVENIENCE TO OTHER AREAS AS POSSIBLE.
4.

INSTALL NEW CONDUCTORS FOR NEW DEVICES UNLESS SPECIFICALLY NOTED OTHERWISE. RETAIN EXISTING CONDUITS IN GOOD CONDITION WHERE APPROVED BY ENGINEER OR AS INDICATED.
5.

KEEP EXISTING SYSTEMS OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. DO NOT CUT EXISTING TELECOMMUNICATION WIRING, CABLES OR CONDUIT. CONTRACTORS WHO CUT IN-SERVICE CABLES ARE RESPONSIBLE FOR ALL DOWNTIME AND COSTS TO REPAIR.
6.

INSTALL BLANK COVER PLATES OVER OPENING AT REMOVED DEVICE LOCATIONS. THIS INCLUDES BUT IS NOT LIMITED TO, CLOCKS, RECEPTACLES, SWITCHES, JUNCTION BOXES, ETC.
7.

PROVIDE CUTTING AND PATCHING OF EXISTING MATERIALS AS REQUIRED FOR THE PROPER COMPLETION OF THE DEMOLITION WORK AND THE INSTALLATION OF THE NEW WORK.
8.

MAINTAIN FULL FUNCTIONAL AND AESTHETIC INTEGRITY OF DEVICES IDENTIFIED TO BE REMOVED AND RELOCATED, AND HANDLE WITH APPROPRIATE CARE TO ALLOW FOR REINSTALLATION. REPLACE DEVICES DAMAGED DURING DEMOLITION WITH NEW AT CONTRACTOR'S EXPENSE.
9.

EQUIPMENT AND SYSTEM THAT ARE REMOVED REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE NOTED. DISPOSE OF ALL MATERIALS NOT SALVAGED BY THE OWNER.
10.

REMOVE AND REINSTALL CEILING TILES REQUIRED FOR THE WORK BEING DONE UNDER THIS CONTRACT. REPLACE CEILING TILES DAMAGED DURING CONSTRUCTION TO MATCH EXISTING.

ELECTRICAL ABBREVIATIONS			
A	DEVICE MOUNTED +8" ABOVE COUNTER TOP (VERIFY LOCATION)	NIC	NOT IN CONTRACT
AF	ABOVE FINISHED FLOOR	NM	NONMETALLIC
ATS	AUTOMATIC TRANSFER SWITCH	NTS	NOT TO SCALE
C	CEILING	OC	ON CENTER
CB	CIRCUIT BREAKER	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
CT	CURRENT TRANSFORMER	OFOI	OWNER FURNISHED, OWNER INSTALLED
E	EXISTING ITEM TO REMAIN	R	EXISTING ITEM TO BE REMOVED
EC	ELECTRICAL CONTRACTOR	RR	EXISTING ITEM TO BE REMOVED AND RELOCATED
EM	EMERGENCY LIGHT FIXTURE	RN	EXISTING ITEM TO BE REMOVED AND REPLACED WITH NEW
ER	NEW LOCATION OF EXISTING ITEM	SCCR	SHORT CIRCUIT CURRENT RATING
F	FIRE ALARM ANNUNCIATOR PANEL	T	TAMPER PROOF DEVICE
FAAP	FIRE ALARM CONTROL PANEL	TCC	TEMPERATURE CONTROL CONTRACTOR TYPICAL
FSD	FIRE SMOKE DAMPER	TV	TELEVISION
G	GROUND FAULT CIRCUIT INTERRUPTER	UPS	UNINTERRUPTIBLE POWER SUPPLY
GND	GROUND	V	VOLTS
KVA	KILO-VOLT-AMPERES	VA	VOLT-AMPERES
KW	KILOWATTS	WR	WEATHERPROOF DEVICE
MC	MECHANICAL CONTRACTOR	W	WEATHER RESISTANT DEVICE
MCB	MAIN CIRCUIT BREAKER	+24"	INDICATES MOUNTING HEIGHT CENTER LINE OF DEVICE TO FINISHED FLOOR
MDP	MAIN DISTRIBUTION PANEL		
MLO	MAIN LUGS ONLY		
N	NEW DEVICE IN EXISTING LOCATION		

INSTALLATION NOTES - ELECTRICAL

1.

BECOME FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BID.
2.

INCREASE CONDUCTOR SIZES ON 20A 120V-1 PHASE CIRCUITS EXCEEDING 100 FEET TO CENTER OF LOAD TO ACCOUNT FOR VOLTAGE DROP.
3.

PROVIDE A DEDICATED GREEN INSULATED GROUND CONDUCTOR TO ALL DEVICES. DO NOT USE CONDUIT SYSTEM AS THE ONLY EQUIPMENT GROUNDING METHOD.
4.

CONTRACTOR IS RESPONSIBLE FOR OPENINGS IN WALLS, FLOORS, AND CEILINGS THAT ARE REQUIRED TO COMPLETE THEIR SCOPE OF WORK. SEAL PENETRATIONS IN ACCORDANCE WITH THE RATING OF THE AFFECTED ASSEMBLY. REFER TO OCCUPANCY PLAN FOR RATED WALLS, FLOORS, AND CEILINGS.

CODE NOTES - ELECTRICAL

1.

PROVIDE ELECTRICAL INSTALLATION IN ACCORDANCE WITH ALL STATE CODES.
2.

THE CURRENT ADOPTED EDITION OF THE ELECTRICAL CODE IS THE STANDARD FOR THE ELECTRICAL INSTALLATION. VERIFY WITH STATE OFFICIALS WHEN PERMITS ARE OBTAINED. NOTIFY DESIGN TEAM OF ANY DISCREPANCIES BETWEEN THE PROJECT MANUAL OR DRAWINGS AND THE GOVERNING CODE.
3.

INSTALLATION SHALL FOLLOW REQUIREMENTS OF THE ADAAG - AMERICANS WITH DISABILITIES ACT.
4.

REFER TO PROJECT MANUAL AND PROJECT CODE REVIEW SHEET FOR LIST OF APPLICABLE CODES.

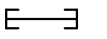




GENERAL PROJECT INTENT




1.


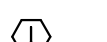
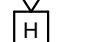
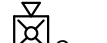

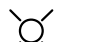



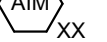

PROVIDE NEW FULLY FUNCTIONAL AND CODE COMPLIANT FIRE ALARM SYSTEM.
2.

THE STATE FIRE MARSHAL HAS APPROVED THE USE OF DETECTION ON A ROOM-BY-ROOM BASIS. DETECTION IS SHOWN IN SPACES THAT THE OWNER WOULD LIKE DETECTION WITHIN THE SPACE. BIOS AND DESIGN SHALL INCLUDE COVERAGE OF ALL THE SPACES SHOWN IN THE CURRENT DESIGN.

TECHNOLOGY RESPONSIBILITY MATRIX				
PROVISION RESPONSIBILITIES DEFINED				
	OFOI	OFCI	OFCI	OFOI
COMMUNICATIONS - TELECOM SYSTEMS:				
ROUGH-IN, PATHWAYS AND SLEEVES			●	
COPPER HORIZONTAL CABLING, EXTENDED PHONE LINES			●	
SAFETY - FIRE DETECTION AND ALARM:				
ROUGH-IN, PATHWAYS AND SLEEVES			●	
INITIATING FIELD DEVICES (SMOKE, MANUAL PULL, MONITOR MODULES)			●	
NOTIFICATION APPLIANCES (HORNS, STROBES, SPEAKERS)			●	
MISCELLANEOUS DEVICES (RELAYS, TEST STATION, ANNUNCIATOR)			●	
GENERAL NOTE:				
A. MATRIX IS NOT INTENDED TO BE EXHAUSTIVE TO COVER ALL MATERIALS NECESSARY FOR SCOPE AND SHOULD ONLY BE USED TO QUICKLY IDENTIFY SYSTEMS AND RELATED INFRASTRUCTURE INSIDE AND OUTSIDE THE BID OF THIS PROJECT. ANY ITEMS FURNISHED OR INSTALLED BY THE BIDDING CONTRACTOR SHALL COVER ALL REQUIRED APPURTENANCES NECESSARY FOR A COMPLETE SYSTEM. THIS SHALL INCLUDE BUT NOT BE LIMITED TO, EQUIPMENT, ACCESSORIES, TERMINATIONS, TERMINATION COMPONENTS, ALL FINAL CORDAGE CONNECTIVITY, SOFTWARE, PROGRAMMING, AND THE LABOR TO INSTALL.				

GENERAL SYMBOLS	
	CONDUIT SLEEVE
	JUNCTION BOX, CEILING OR FLOOR MOUNTED.
	JUNCTION BOX, WALL MOUNTED, ELEVATION AS NOTED.
	KEYNOTE
	EQUIPMENT IDENTIFICATION TAG. REFER TO EQUIPMENT CONNECTION SCHEDULE

POWER SYMBOLS	
	DUPLEX RECEPTACLE, TAMPER-RESISTANT, WALL MOUNT +18", OR AS NOTED
	EQUIPMENT CONNECTION, WALL MOUNT +18", OR AS NOTED. REFER TO ELECTRICAL EQUIPMENT CONNECTION SCHEDULE FOR CONNECTION TYPE
	PANELBOARD - SURFACE MOUNTED

FIRE DETECTION AND ALARM SYMBOLS	
	MANUAL FIRE ALARM PULL STATION
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM CONTROL PANEL + EMERGENCY COMMUNICATIONS PANEL
	CARBON MONOXIDE DETECTOR
	COMBINATION CARBON MONOXIDE / SMOKE DETECTOR
	HEAT DETECTOR
	SMOKE DETECTOR
	SMOKE DETECTOR WITH 520HZ SOUNDER BASE
	DUCT SMOKE DETECTOR
	HORN
	WALL MOUNTED COMBINATION HORN WITH STROBE
	CEILING MOUNTED COMBINATION HORN WITH STROBE
	WALL MOUNTED WEATHERPROOF COMBINATION HORN WITH STROBE
	CEILING MOUNTED STROBE
	WALL MOUNTED STROBE
	SPEAKER
	FIRE FIGHTER TELEPHONE STATION
	MAGNETIC DOOR HOLD
	SMOKE DAMPER
	COMBINATION FIRE/SMOKE DAMPER
	ADDRESSABLE INPUT MODULE; FS - SPRINKLER WATER FLOW SWITCH, TS - TAMPER SWITCH, PIV - POST INDICATOR VALVE
	ADDRESSABLE OUTPUT MODULE; SD - FAN SHUT DOWN RELAY, AM - AUDIO MUTE

ACCESS CONTROL SYMBOLS	
	MAGNETIC LOCK

NOTE: ALL SYMBOLS MAY NOT APPLY TO THIS PROJECT

Project No: 9360.00

Date: 2/1/2024

CONSTRUCTION DOCUMENTS

Revision Date

Drawing Name:
ELECTRICAL GENERAL
NOTES & SYMBOLS

Drawing #:

E000

STATE OF IOWA - DAS
IPBS FIRE ALARM REPLACEMENT
6450 CORPORATE DRIVE
JOHNSTON, IOWA 50131

Project No: 9360.00

Date: 2/1/2024

CONSTRUCTION
DOCUMENTS

Revision Date

Drawing Name:
FIRE ALARM
DEMOLITION - WEST

Drawing #:

ED101



Project No:	9360.00
Date:	2/1/2024

Date: 2/1/2024

CONSTRUCTION

CONSTRUCTION
DOCUMENTS

#	Revision	Date
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Drawing Name:
**FIRE ALARM
DEMOLITION - EAST**

Drawing #:

ED102



ELECTRICAL DEMOLITION NOTES

1. DEMOLITION DRAWINGS PRESENT LAYOUT OF EXISTING CONDITIONS AND MAJOR ITEMS. THEY ARE NOT TO BE CONSTRUED AS COMPLETE IN REPRESENTATION OF ACCESSORIES AND INCIDENTS TO BE REMOVED, REPLACED OR REWORKED. NOR SHOULD ACCESSIBILITY BE INFERRED. THE CONTRACTOR IS RESPONSIBLE TO FAMILIARIZE THEMSELVES WITH THE BUILDING AND EXISTING CONDITIONS PRIOR TO THE SUBMITTAL OF A BID FOR THIS PROJECT.
2. REMOVE ELECTRICAL FIXTURES AND CLEAR THE AREA TO RECEIVE THE NEW WORK TO BE PROVIDED UNDER THIS CONTRACT.
3. THIS ELECTRICAL DEMOLITION DRAWING SHOWING EXISTING CONDITIONS HAS BEEN PREPARED BASED ON FIELD OBSERVATION. ADDITIONAL COMPONENTS MAY EXIST WHICH ARE NOT SHOWN, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MATCH SIMILAR ITEMS WHICH DO SHOW. CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS.
4. ABBREVIATIONS:
 E - EXISTING ITEM TO REMAIN
 ER - NEW LOCATION OF EXISTING ITEM
 N - NEW ITEM IN EXISTING LOCATION
 R - EXISTING ITEM TO BE REMOVED, PATCH AND/OR COVER
 RN - REPLACE EXISTING WITH NEW
 RR - EXISTING ITEM TO BE REMOVED AND RELOCATED

KEYNOTES

1. EXISTING SIEMENS FIRE ALARM APOGEE PANEL SURFACE MOUNTED TO WALL. REMOVE EXISTING SYSTEM. REUSE EXISTING CONDUIT IF DEEMED IN GOOD CONDITION. REUSE PANEL ENCLOSURE IF NECESSARY AS A JUNCTION BOX TO EXTEND WITHIN WALL TO NEW PANEL. SEE SHEET PER ALTERNATE #2. EXTEND CONDUCTORS TO NEW FIRE ALARM PANEL TO REUSE FOR NOTIFICATION DEVICES.
2. EXISTING NOTIFICATION DEVICES CAN BE REUSED AS A DEDUCT ALTERNATE. EXISTING DEVICES APPEAR TO BE EDWARDS EST PRODUCTS. SEE DESCRIPTION OF ALTERNATE ON SHEET E000 FOR MORE INFORMATION.
3. EXISTING FIRE ALARM NEW PANEL ENCLOSURE WITH CONDUCTORS. REMOVE EXISTING CONDUCTORS AND ENCLOSURE UPON COMPLETION OF NEW SYSTEM.

STATE OF IOWA - DAS
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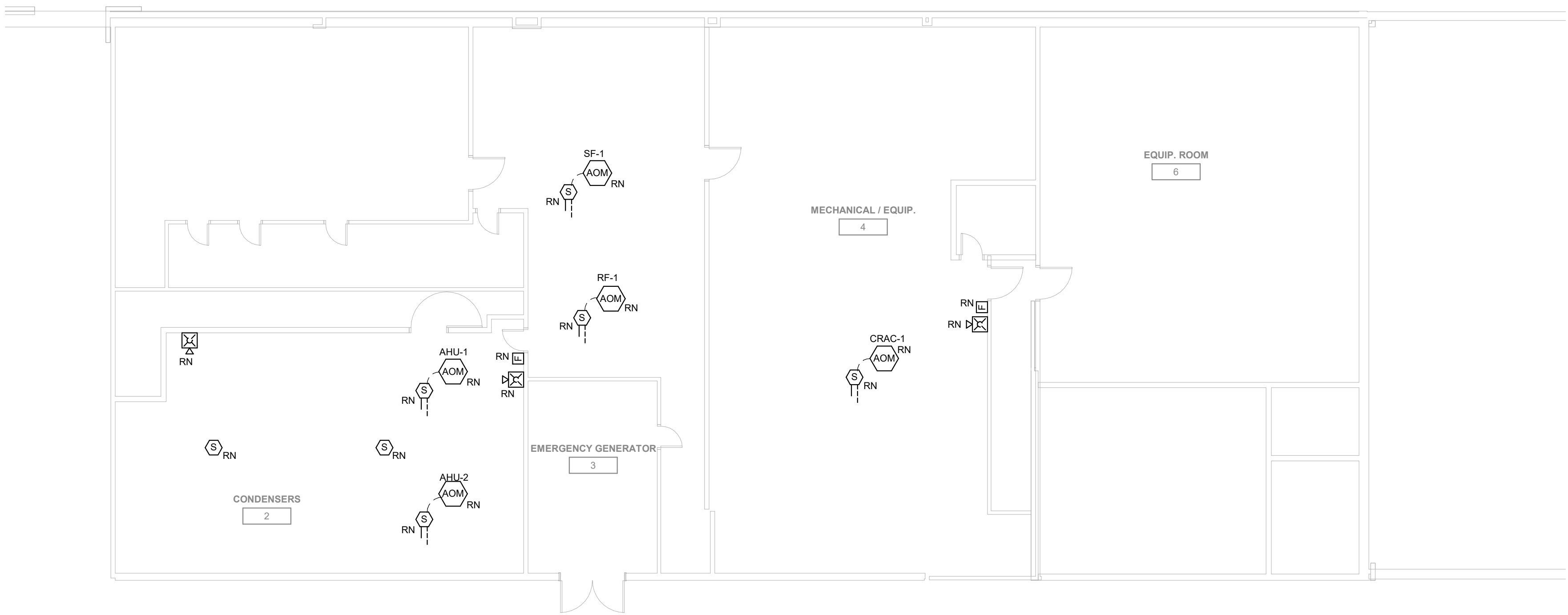
CONSTRUCTION
DOCUMENTS

Revision Date

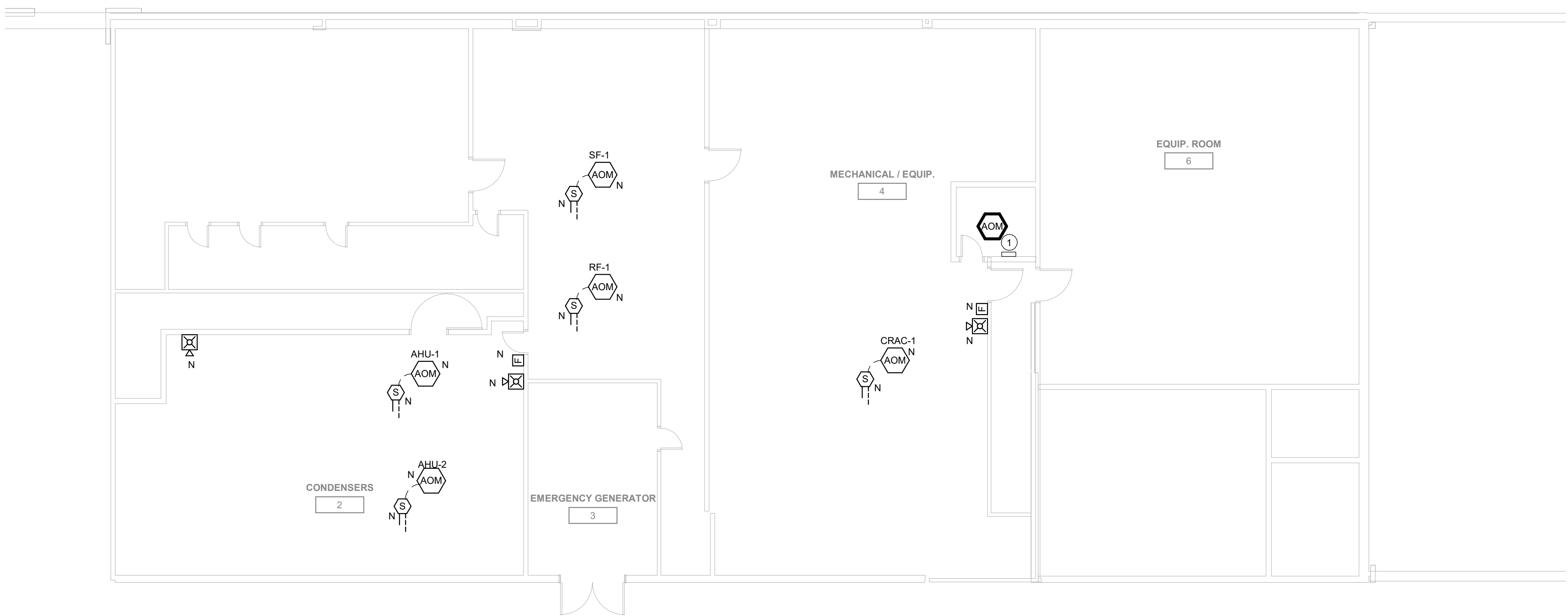
Drawing Name:
FIRE ALARM DEMO
AND NEW - MEZZANINE

Drawing #:

ED103



2 FIRE ALARM DEMO FLOOR PLAN - MEZZANINE
1/8" = 1'-0"



1 FIRE ALARM FLOOR PLAN - MEZZANINE
1/8" = 1'-0"

ELECTRICAL DEMOLITION NOTES

- DEMOLITION DRAWINGS PRESENT LAYOUT OF EXISTING CONDITIONS AND MAJOR ITEMS. THEY ARE NOT TO BE CONSTRUED AS COMPLETE IN REPRESENTATION OF ACCESSORIES AND INCIDENTALS TO BE REMOVED, REPLACED, OR REWORKED. NOR SHOULD ACCESSIBILITY BE INFERRED. THE CONTRACTOR IS RESPONSIBLE TO FAMILIARIZE THEMSELVES WITH THE BUILDING AND EXISTING CONDITIONS, PRIOR TO THE SUBMITTING OF A BID FOR THIS PROJECT. REMOVE ELECTRICAL FACILITIES AND CLEAR THE AREA TO RECEIVE THE NEW WORK TO BE PROVIDED UNDER THIS CONTRACT.
- THIS ELECTRICAL DEMOLITION DRAWING SHOWING EXISTING CONDITIONS HAS BEEN PREPARED BASED ON FIELD OBSERVATION. ADDITIONAL COMPONENTS MAY EXIST WHICH DO NOT SHOW, AND SUCH ITEMS SHALL BE REMOVED TO MATCH SIMILAR ITEMS WHICH DO SHOW. CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS.
- ABBREVIATIONS:
 - E - EXISTING ITEM TO REMAIN
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KEYNOTES

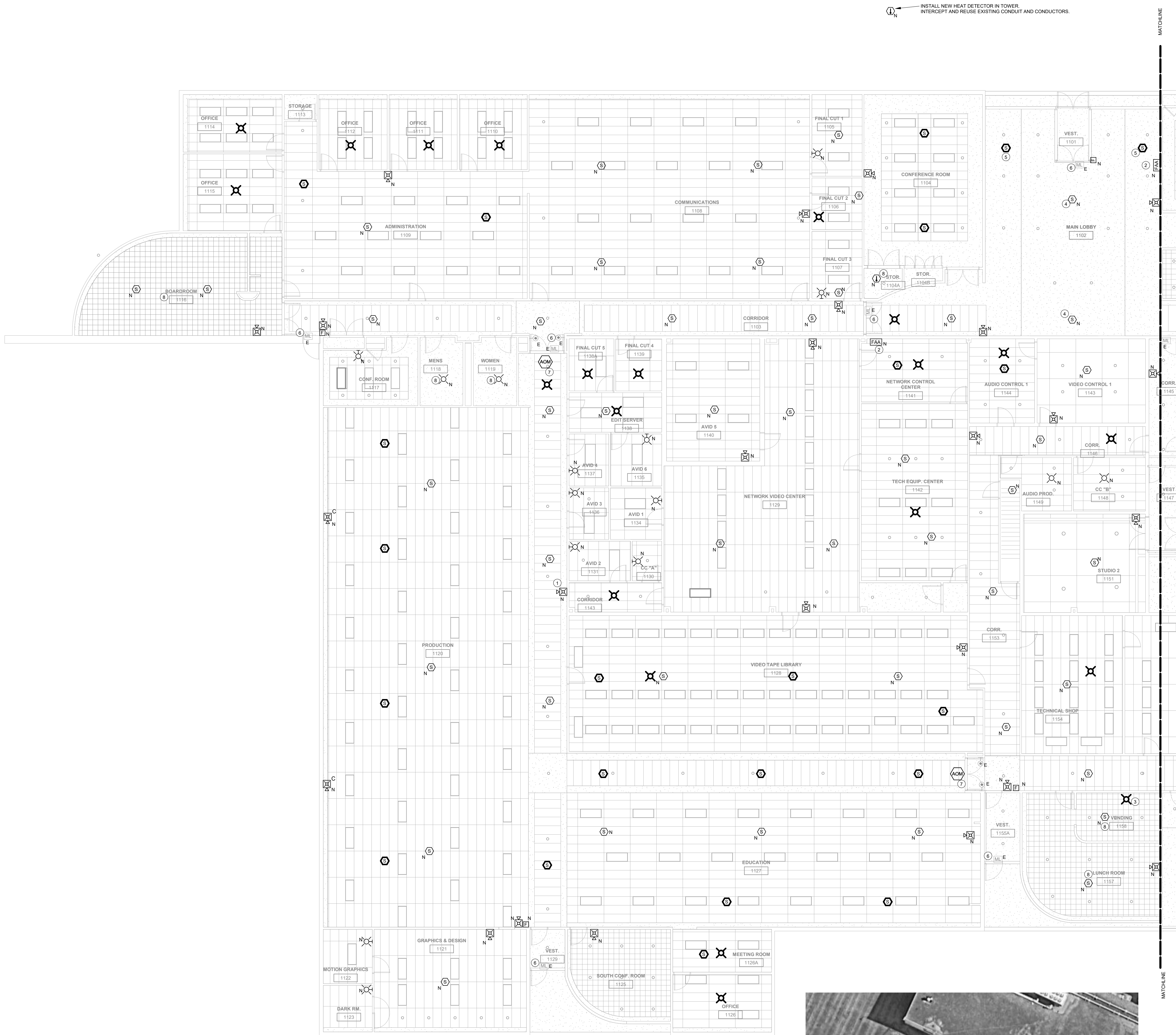
- EXISTING ACCESS CONTROL PANEL LOCATION. INSTALL MODULE TO PROVIDE OUTPUT TO PANEL AND OPEN MAGNETICALLY HELD DOORS UPON FIRE ALARM ACTIVATION.

PHASE LEGEND

- EXISTING DEVICE TO REMAIN
- REPLACE EXISTING DEVICE WITH NEW, SAME LOCATION
- NEW DEVICE, NEW LOCATION

GENERAL NOTES

- COORDINATE LOCATION/INSTALLATION OF WORK WITH CM/OWNER. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION HAS TRANSPIRED.
- PROVIDE PENETRATIONS REQUIRED FOR ROUTING RACEWAYS THROUGH THE BUILDING. REVIEW FIRE RATED WALL PENETRATIONS ON OCCUPANCY PLAN AND PROVIDE CONDUIT SLEEVES AND FIRE STOPPING TO MAINTAIN RATINGS.
- ABBREVIATIONS:
 - E - EXISTING ITEM TO REMAIN
 - ER - NEW LOCATION OF EXISTING ITEM
 - N - NEW ITEM IN EXISTING LOCATION
 - R - EXISTING ITEM TO BE REMOVED, PATCH AND/OR COVER
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KEYNOTES

- EXISTING STROBE IS BELOW CODE REQUIRED MINIMUM HEIGHT. EXTEND CONDUIT/CONDUCTOR VERTICALLY UP WALL FOR NEW DEVICE. INSTALL BLANK COVERPLATE ON REMOVED DEVICE LOCATION.
- EXISTING FIRE ALARM ANNUNCIATOR PANEL IN LOCATION. INSTALL NEW ANNUNCIATOR PANEL ON WALL. REUSE EXISTING BACKBOX AND PROVIDE SKIRT AS REQUIRED FOR SEMI-RECESSED INSTALLATION.
- INSTALL CONDUIT ABOVE CEILING AND NEW RECESSED BOX IN CEILING FOR PATHWAYS TO NEW DEVICE. IF ADJACENT CEILING AND WALLS ARE NOT ACCESSIBLE, INSTALL SURFACE MOUNTED RACEWAY TO DEVICE TO INSTALL NEW DEVICE ON CEILING.
- EXISTING DEVICES IN LOBBY APPEARED TO BE HEAT DETECTORS. INSTALL NEW SMOKE DETECTORS IN SPACE. REUSE PATHWAYS IF DEEMED IN GOOD CONDITION FOR NEW CONDUCTORS TO DETECTORS.
- INSTALL NEW SMOKE DETECTORS IN SPACE TO PROVIDE FULL COVERAGE. SURFACE RACEWAY WILL NOT BE ACCEPTABLE IN THIS SPACE. USE ACCESS HATCHES AND ADJACENT ACCESSIBLE CEILINGS TO GAIN ACCESS TO INSTALL ABOVE CEILING. INSTALL NEW DEVICES IN BEST LOCATION TO PROVIDE CODE COMPLIANT COVERAGE.
- EXISTING MAGNETIC LOCK ON DOOR. INSTALL NEW RELAY DEVICE AT ACCESS CONTROL PANEL SUCH THAT DOORS WILL RELEASE MAGNET UPON FIRE ALARM ACTIVATION. TYPICAL FOR ALL MAGNETIC LOCKS IN BUILDING.
- EXISTING HOLD OPEN DOORS TO REMAIN INTACT. INSTALL NEW MODULE TO PROVIDE CONTACT CLOSURE TO DOOR HOLDS.
- EXISTING HARD LID CEILING AREA. REUSE CONDUCTORS FOR DEVICES. ALTERNATE #1 PRICING SHALL NOT BE INCLUDED FOR THE DEVICES IN THIS SPACE.



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Revision Date

Drawing Name:
FIRE DETECTION &
ALARM PLANS - EAST

Drawing #:

E102

