

ABBREVIATIONS:	
A	AMPERE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ANN	ANNUNCIATOR
AP	ACCESS POINT
BFF	BELOW FINISHED FLOOR
BFG	BELOW FINISHED GRADE
BICSI	BUILDING INDUSTRY CONSTRUCTION SERVICE INTERNATIONAL
BLDG	BUILDING
C	CONDUIT
CAB	CABINET
CAT	CATEGORY
CATV	CABLE TELEVISION
CD	CANDELA
CFCI	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED
CL	CENTER LINE
CO	CARBON MONOXIDE
DN	DOWN
(E)	EXISTING
EMT	ELECTRICAL METALLIC TUBING
EOL	END OF LINE
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FTC	FIRE TERMINAL CABINET
GRC	GALVANIZED RIGID CONDUIT
G OR GB	GROUND BOX
IACP	INTRUSION ALARM CONTROL PANEL
IDF	INTERMEDIATE DISTRIBUTION FRAME
IMC	INTERMEDIATE METAL CONDUIT
J OR JB	JUNCTION BOX
MEP	MECHANICAL / ELECTRICAL / PLUMBING
MDP	MAIN DISTRIBUTION FRAME
MPOE	MINIMUM PONT OF ENTRY
(N)	NEW
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NTS	NOT TO SCALE
N/A	NOT APPLICABLE
OFE	OWNER FURNISHED EQUIPMENT
OFCI	OWNER FURNISHED/CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED/OWNER INSTALLED
OSP	OUTSIDE PLANT
PVC	POLYVINYL CHLORIDE
RCDD	REGISTERED COMMUNICATION DISTRIBUTION DESIGNER
RCWY	RACEWAY
RM	ROOM
SR	SURFACE RACEWAY
TYP	TYPICAL
UG	UNDERGROUND
UL	UNDERWRIGHTERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
V	VOLTS
W	WATT
WP	WEATHERPROOF

TECHNOLOGY SYMBOL LEGEND:				
ALL EQUIPMENT AND MATERIALS ARE CONTRACTOR FURNISHED, INSTALLED AND CONFIGURED (UNO)				
SYMBOL	DESCRIPTION	MANUFACTURER	PART NUMBER	NOTES / DETAIL REFERENCES
	(E) SURFACE MOUNTED CONDUIT	N/A	N/A	N/A
	(E) UNDERGROUND CONDUIT	N/A	N/A	N/A
	(N) MEDIUM CAPACITY SURFACE MOUNTED CABLE RACEWAY	WIREMOLD	WM2300	GREY = EXISTING
	(N) J-HOOK PATHWAY	COMMERCIAL GENERIC	N/A	GREY = EXISTING
	(N) CONDUIT STUB	COMMERCIAL GENERIC	N/A	GREY = EXISTING
	(E) DATA RACK	N/A	SEE SHEET T400	N/A
	(E) GROUND BOX	N/A	N/A	N/A
	(E) JUNCTION BOX	N/A	N/A	N/A
	(E) SURFACE MOUNTED 4-SQUARE JUNCTION BOX, WALL / CEILING	N/A	N/A	N/A
	(E) ELECTRICAL OUTLET	N/A	N/A	N/A
	(E) MINIMAL POINT OF ENTRY	EXISTING	EXISTING	N/A
	(E) INTRUSION KEYPAD	EXISTING	EXISTING	N/A
	(E) ADMIN. PHONE HANDSET	EXISTING	EXISTING	N/A
	(E) CCTV CAMERA	EXISTING	EXISTING	N/A
	(E) EXTERIOR INTERCOM SPEAKER	EXISTING	EXISTING	N/A
	(N) CAT6A DATA DROP LOCATION - IP CLOCK	RAULAND & SAPLING	SEE SHEET T400	16" = 16" CLOCK
	(N) CAT6A DATA DROP LOCATION - DROP CEILING INTERCOM SPKR/IP MOD	RAULAND	SEE SHEET T400	N/A
	(N) CAT6A DATA DROP LOCATION (QTY = 1) - IP CLOCK/SPEAKER/IP MODULE COMBO BOX	RAULAND	SEE SHEET T400	GREY = EXISTING
	(N) CAT6A DATA DROP LOCATION - WALL MOUNTED SPEAKER/IP MODULE	RAULAND	SEE SHEET T400	"CM" = CEILING MOUNTED
	(N) CAT6A DATA DROP LOCATION - EXTERIOR INTERCOM SPEAKER/IP MODULE	RAULAND & LOWELL	SEE SHEET T400	N/A
	(N) CAT6A DATA DROP LOCATION - LARGE MESSAGE BOARD	RAULAND	SEE SHEET T400	N/A
	(N) ADMIN. CONSOLE PHONE	RAULAND	SEE SHEET T400	N/A

CONTRACTOR FURNISHED DOCUMENTS:	
(SHOP DRAWINGS / PRODUCT SUBMITTALS / QUALIFICATIONS)	
1. ORDERING AND INSTALLATION OF THE SYSTEMS SHALL NOT BE STARTED UNTIL THE FOLLOWING:	
1.1. CONTRACTOR FURNISHED SHOP DRAWINGS ARE RECEIVED AND APPROVED BY THE DESIGNER.	
1.2. PRODUCT SUBMITTAL DOCUMENTS ARE RECEIVED AND APPROVED BY THE DESIGNER.	
1.3. APPLICABLE QUALIFICATION DOCUMENTATION ARE RECEIVED AND APPROVED BY THE DESIGNER.	
2. ANY DESIGN AND/OR INSTALLATION DISCREPANCIES/CHANGE ORDER REQUESTS ARE TO BE ADDRESSED AT TIME OF SHOP DRAWING CREATION. CHANGE ORDERS AFTER APPROVED SHOP DRAWINGS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.	
3. ALTERNATIVE PRODUCTS ARE TO SUBMITTED WITH A FORMAL SUBSTITUTION REQUEST AND THE CONTRACTOR IS RESPONSIBLE FOR DEMONSTRATING PRODUCT FULL EQUIVALENCY.	
4. IT SHALL BE UNDERSTOOD THAT THE DRAWINGS, DETAILS, AND ONE-LINES PROVIDED WITH THE DESIGN PACKAGE ARE DIAGRAMMATIC. INFORMATION PRESENTED IN DESIGN DRAWINGS ARE AS ACCURATE AS POSSIBLE, BUT ACCURACY IS NOT GUARANTEED AND FIELD VERIFICATION OF ALL DIMENSIONS, ROUTING, ETC., BY THE CONTRACTOR IS REQUIRED.	
5. DRAWINGS AND SPECIFICATIONS ARE PROVIDED TO SHOW THE INTENT OF THE DESIGN TO ASSIST THE CONTRACTOR IN SUBMITTING AN ACCURATE BID. CONTRACTOR IS DIRECTED TO MAKE FIELD SURVEYS AS PART OF THEIR WORK PRIOR TO SUBMITTING SYSTEM LAYOUT DRAWINGS (SHOP DRAWINGS). THE CONTRACTOR SHALL MAKE ALLOWANCE IN THE PROPOSAL TO COMPLY WITH THE INTENT OF THE DESIGN.	
6. IN CASE OF DOUBT OF WORK INTENDED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REQUEST INSTRUCTIONS FROM THE DESIGNER OR OWNER PRIOR TO BID.	
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING A COMPLETE, OPERABLE, AND FULLY FUNCTIONING SYSTEM.	

TECHNOLOGY GENERAL PROJECT NOTES:	
1. UPON COMPLETION OF THE INSTALLATION OF THE SYSTEMS, THE CONTRACTOR SHALL PROVIDE A SATISFACTORY TEST OF THE ENTIRE SYSTEMS IN THE PRESENCE OF THE ARCHITECT/DESIGNER, INSPECTOR, AND THE OWNER.	
2. A STAMPED SET OF APPROVED SYSTEM DESIGN DOCUMENTS, AND CONTRACTOR FURNISHED SHOP DRAWINGS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION. THE CONTRACTOR SHALL INCORPORATE ANY AND ALL REVISIONS TO DRAWINGS SETS AS REQUIRED. ANY DEVIATION FROM APPROVED DESIGN DOCUMENTS, INCLUDING THE SUBSTITUTION OF DEVICES, SHALL BE APPROVED BY THE ARCHITECT/DESIGNER AND THE OWNER PRIOR TO INSTALLATION.	
3. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGNER PRIOR TO INSTALLATION.	
4. ALL PENETRATIONS THROUGH RATED ASSEMBLIES REQUIRING OPENING PROTECTION SHALL BE PROVIDED WITH THROUGH PENETRATION FIRST STOP SYSTEMS WITH A "T" RATING EQUAL TO THE ASSEMBLY PENETRATED. SEE DETAILS ON SHEET T801 FOR MORE INFORMATION.	
5. PER CEC STANDARDS, ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECTED DIRECTLY TO EACH DEVICE. DO NOT SPLICE THE WIRE. THERE MUST BE AT LEAST 6" OF LEAD WIRE FROM THE BOX TO THE DEVICE.	
6. ALL CLOCK, BELL, AND INTERCOM CIRCUITS SHALL BE IN CONDUIT, SURFACE RACEWAY, OR OPEN RUN ABOVE CEILINGS, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANNER AS INDICATED ON DESIGN DOCUMENTS. EXPOSED CABLES ARE ONLY PERMITTED IF INDICATED ON DESIGN DOCUMENTS AS "EXPOSED".	
7. LOW VOLTAGE PANELS, REMOTES, AND COMPONENTS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURER'S SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED THE WEIGHT FOR 20 lbs., WITHOUT SPECIAL MOUNTING DETAILS.	
8. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/DESIGNER AT A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO FINAL INSPECTION FOR FINAL PUNCH ALL ITEMS ON PUNCH LIST MUST BE COMPLETE FOR JOB TO FINAL.	
9. PRIOR TO FINAL INSPECTION, THE CONTRACTOR SHALL PROVIDE ALL PROJECT AS-BUILT DRAWINGS AND MANUALS PER SPECIFICATIONS.	
10. THE CONTRACTOR SHALL ALSO PROVIDE A TYPED RECORD OF COMPLETION. A FINAL WILL NOT BE GRANTED UNTIL THE ABOVE IS APPROVED BY THE OWNER.	
11. THE TERM "PROVIDE" SHALL MEAN TO FURNISH, INSTALL AND MAKE FULLY OPERATIONAL.	

SCOPE OF WORK:	
1. THE CONTRACTOR SHALL PROVIDE ALL CLOCK, BELL AND INTERCOM EQUIPMENT, LICENSES, SOFTWARE AND ACCESSORIES FOR COMPLETE AND FULLY OPERATIONAL SYSTEMS.	
2. THE CONTRACTOR SHALL PROVIDE ALL DATA NETWORK EQUIPMENT, LICENSES, SOFTWARE AND ACCESSORIES FOR COMPLETE AND FULLY OPERATIONAL DATA NETWORK SYSTEM.	
3. THE CONTRACTOR SHALL REMOVE OLD OR ABANDONED CLOCK, BELL AND INTERCOM COMPONENTS (INCLUDING WIRE AND PATHWAY) AND PLATE OVER ANY OPENINGS.	
4. THE CONTRACTOR SHALL TOUCH UP PAINT TO MATCH EXISTING CONDITIONS FOR NEW LOCATIONS FOR INSTALL OR AREAS OF DEMOLITION.	
5. THE CONTRACTOR SHALL COORDINATE CUTOVERS AND ACTIVATION/COMMISSIONING OF NEW SYSTEM WITH DISTRICT REPRESENTATIVE AND DISTRICT STAFF.	

PROJECT CODES AND STANDARDS:	
PARTIAL LIST OF APPLICABLE CODES AND STANDARDS EFFECTIVE : JANUARY 1, 2023:	
2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), CCR, TITLE 24, PART 1	
2022 CALIFORNIA BUILDING CODE (CBC), CCR, TITLE 24, PART 2 (2018 INTERNATIONAL BUILDING CODE WITH CALIFORNIA AMENDMENTS)	
2022 CALIFORNIA ELECTRICAL CODE (CEC), CCR, TITLE 24, PART 3 (2017 NATIONAL ELECTRICAL CODE WITH CALIFORNIA AMENDMENTS)	
2022 CALIFORNIA MECHANICAL CODE (CMC), CCR, TITLE 24, PART 4 (2018 UNIFORM MECHANICAL CODE, WITH CALIFORNIA AMENDMENTS)	
2022 CALIFORNIA ENERGY CODE, CCR, TITLE 24, PART 6	
2022 CALIFORNIA FIRE CODE (CFC), CCR, TITLE 24, PART 9 (2018 INTERNATIONAL FIRE CODE WITH CALIFORNIA AMENDMENTS)	
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, CCR, TITLE 24, PART 11	
2022 CALIFORNIA REFERENCED STANDARDS CODE, CCR, TITLE 24, PART 12	
2022 NFPA 72, NATIONAL FIRE ALARM AND SIGNALING CODE, NATIONAL FIRE PROTECTION ASSOCIATION	

ANCHORAGE AND BRACING NOTES:	
APPLICABLE CODE: 2019 CBC	REVISED: 02/14/2020
MEP COMPONENT ANCHORAGE NOTE:	
ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE USA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2019 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 THRU 30:	
1. ALL PERMANENT EQUIPMENT AND COMPONENTS.	
2. TEMPORARY, MOVEABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.	
3. TEMPORARY, MOVEABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.	
THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS.	
A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENTS.	
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTION SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.	
THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.	
PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE:	
PIPING, DUCTWORK AND ELECTRICAL SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTIONS 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2019 CBC SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26	
THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTIONS SYSTEM ARE A NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.	
MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPES (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):	
MP : MD : PP : E X OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS	
MP : MD : PP : E OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVED (OPM #)	

SHEET INDEX:	
SHEET	DESCRIPTION
T000	TECHNOLOGY COVER SHEET
T050	TECHNOLOGY DEMO SITE PLAN
T100	TECHNOLOGY SITE PLAN
T100	TECHNOLOGY SITE PLAN - EXTERIOR INTERCOM SPEAKERS
T200	TECHNOLOGY FLOOR PLANS - MDF AND IDF 01 - FIRST AND SECOND FLOORS
T201	TECHNOLOGY FLOOR PLANS - IDF 02 - SECOND FLOOR
T202	TECHNOLOGY FLOOR PLANS - IDF 03 AND 04 - SECOND FLOOR
T203	TECHNOLOGY FLOOR PLANS - IDF 05
T204	TECHNOLOGY FLOOR PLANS - IDF 06
T205	TECHNOLOGY FLOOR PLANS - IDF 07 AND 08
T206	TECHNOLOGY FLOOR PLANS - IDF 09
T207	TECHNOLOGY FLOOR PLANS - IDF 10 AND 12 - FIRST AND SECOND FLOORS
T208	TECHNOLOGY FLOOR PLANS - IDF 13 AND 14 - FIRST AND SECOND FLOORS
T209	TECHNOLOGY FLOOR PLANS - IDF 17 AND CONCESSION 1 AND 2
T210	TECHNOLOGY FLOOR PLANS - PARTIAL IDF 18
T211	TECHNOLOGY FLOOR PLANS - PARTIAL IDF 18
T212	TECHNOLOGY FLOOR PLANS - IDF 19 - THEATER
T213	TECHNOLOGY FLOOR PLANS - IDF 19 - CAFETERIA
T214	TECHNOLOGY FLOOR PLANS - IDF 20 AND 21
T215	TECHNOLOGY FLOOR PLANS - IDF 22
T216	TECHNOLOGY FLOOR PLANS - IDF 23, 24, 25 AND 26
T400	TECHNOLOGY SINGLE LINE DIAGRAM
T401	TECHNOLOGY SINGLE LINE DIAGRAM
T402	TECHNOLOGY SINGLE LINE DIAGRAM
T403	TECHNOLOGY SINGLE LINE DIAGRAM
T800	TECHNOLOGY DETAILS
T801	TECHNOLOGY DETAILS



KMM SERVICES, INC  
TECHNOLOGY & FIRE LIFE SAFETY

5433 El Camino Ave., Suite 5  
Carmichael, CA 95608  
Office: (916) 359-4000 www.kmmsservices.com



Copyright © 2023  
These drawings and specifications and the ideas, designs and arrangements represented thereby are and shall remain the property of KMM Services, Inc. and no part thereof shall be copied, disclosed to others, or used in connection with any other work or project other than the specific project for which they have been prepared and developed without the written consent of KMM Services, Inc. Visual contact with these drawings or specifications shall constitute conclusive evidence of these restrictions.

IF DRAWING IS NOT 30"x42" IT IS A REDUCED PRINT

SHEET REVISIONS		
DELTA	DESCRIPTION	DATE

SITE KEY PLAN	

PROJECT  
SACRAMENTO CITY USD  
HIRAM JOHNSON HS  
TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.  
SACRAMENTO, CA. 95820

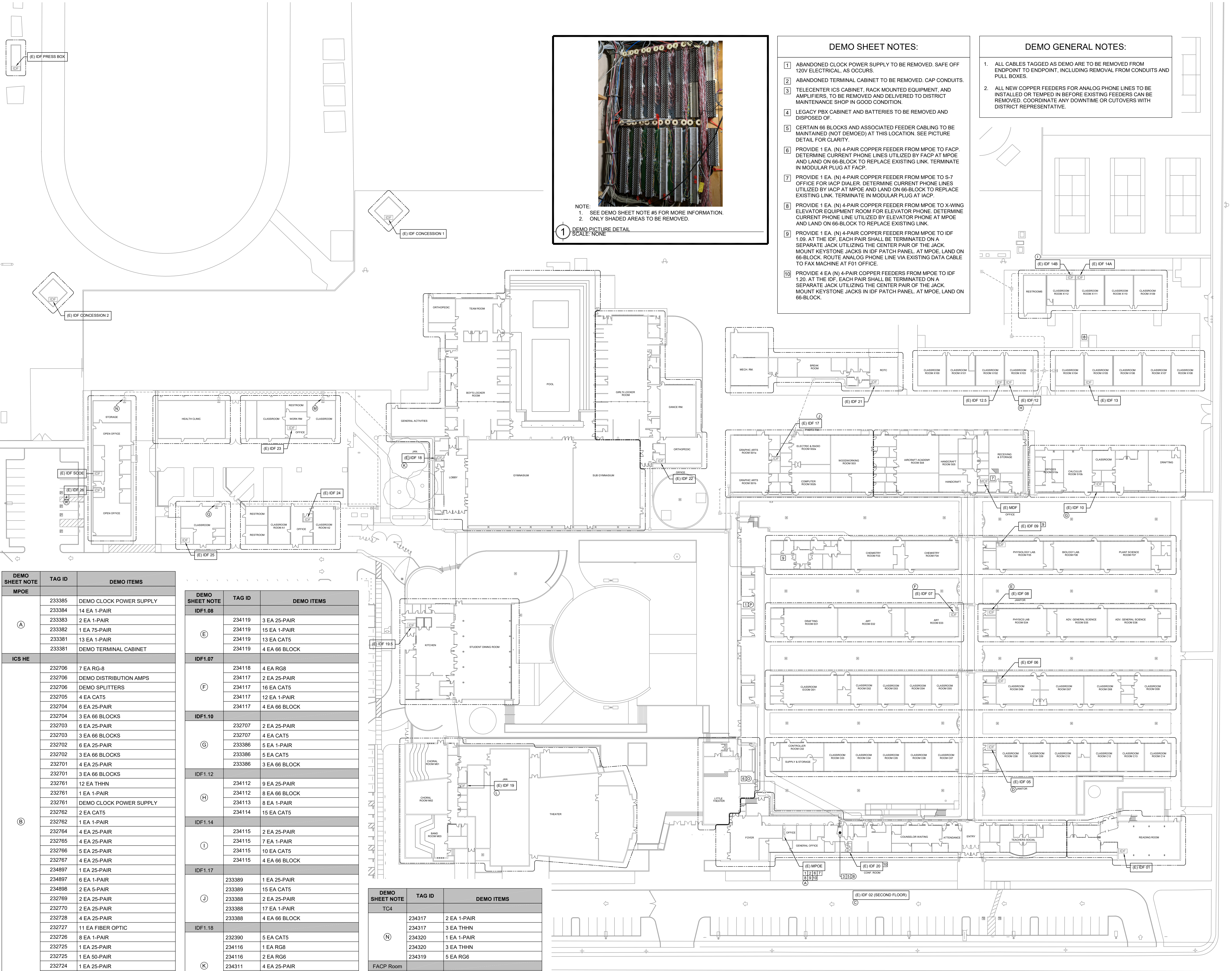
SHEET TITLE  
TECHNOLOGY  
COVER SHEET

DRAWING STATUS  
CONSTRUCTION DOCUMENTS

PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-25

REVISION

SHEET  
T000



DEMO SHEET NOTE	TAG ID	DEMO ITEMS
A	MPOE	
	233385	DEMO CLOCK POWER SUPPLY
	233384	14 EA 1-PAIR
	233383	2 EA 1-PAIR
	233382	1 EA 75-PAIR
ICS HE	233381	13 EA 1-PAIR
	233381	DEMO TERMINAL CABINET
	232706	7 EA RG-8
	232706	DEMO DISTRIBUTION AMPS
	232706	DEMO SPLITTERS
B	232705	4 EA CAT5
	232704	6 EA 25-PAIR
	232704	3 EA 66 BLOCKS
	232703	6 EA 25-PAIR
	232703	3 EA 66 BLOCKS
	232702	6 EA 25-PAIR
	232702	3 EA 66 BLOCKS
	232701	4 EA 25-PAIR
	232701	3 EA 66 BLOCKS
	232761	12 EA THHN
	232761	1 EA 1-PAIR
	232761	DEMO CLOCK POWER SUPPLY
	232762	2 EA CAT5
	232762	1 EA 1-PAIR
	232764	4 EA 25-PAIR
	232765	4 EA 25-PAIR
	232766	5 EA 25-PAIR
	232767	4 EA 25-PAIR
	234897	1 EA 25-PAIR
	234897	6 EA 1-PAIR
	234898	2 EA 5-PAIR
	232769	2 EA 25-PAIR
	232770	2 EA 25-PAIR
	232728	4 EA 25-PAIR
	232727	11 EA FIBER OPTIC
	232726	8 EA 1-PAIR
C	232725	1 EA 25-PAIR
	232725	1 EA 50-PAIR
	232724	1 EA 25-PAIR
	233781	Telecenter ICS Cabinet
	234331	2 EA 25-PAIR
IDF1.02	234331	20 EA 1-PAIR
	234331	14 EA CAT5
	234331	4 EA 66 BLOCK
	234331	4 EA 66 BLOCK
IDF1.05	234111	3 EA 25-PAIR
	234111	14 EA 1-PAIR
	234111	4 EA 66 BLOCK
	234120	10 EA CAT5
	234120	10 EA CAT5

DEMO SHEET NOTE	TAG ID	DEMO ITEMS
IDF1.08		
	234119	3 EA 25-PAIR
	234119	15 EA 1-PAIR
	234119	13 EA CAT5
	234119	4 EA 66 BLOCK
E		
	234118	4 EA RG8
	234117	2 EA 25-PAIR
	234117	16 EA CAT5
	234117	12 EA 1-PAIR
F	234117	4 EA 66 BLOCK
IDF1.10		
	232707	2 EA 25-PAIR
	232707	4 EA CAT5
	233386	5 EA 1-PAIR
	233386	5 EA CAT5
G	233386	3 EA 66 BLOCK
IDF1.12		
	234112	9 EA 25-PAIR
	234112	8 EA 66 BLOCK
	234113	8 EA 1-PAIR
	234114	15 EA CAT5
H		
IDF1.14		
	234115	2 EA 25-PAIR
	234115	7 EA 1-PAIR
	234115	10 EA CAT5
	234115	4 EA 66 BLOCK
I		
IDF1.17		
	233389	1 EA 25-PAIR
	233389	15 EA CAT5
	233388	2 EA 25-PAIR
	233388	17 EA 1-PAIR
J	233388	4 EA 66 BLOCK
IDF1.18		
	232390	5 EA CAT5
	234116	1 EA RG8
	234116	2 EA RG6
	234311	4 EA 25-PAIR
K	234312	15 EA 1-PAIR
	234312	15 EA CAT5
	234312	4 EA 66 BLOCK
IDF1.19		
	234313	2 EA 25-PAIR
	234314	14 EA 1-PAIR
	234314	4 EA 66 BLOCK
L		
TC3		
M		
	232710	2 EA 1-PAIR
	234315	2 EA 1-PAIR
	234316	3 EA THHN

DEMO SHEET NOTE	TAG ID	DEMO ITEMS
TC4		
	234317	2 EA 1-PAIR
	234317	3 EA THHN
	234320	1 EA 1-PAIR
	234319	5 EA RG6
N		
	234318	10 EA 1-PAIR
	232721	5 EA 1-PAIR
	232722	1 EA 50-PAIR
	232723	1 EA 50-PAIR
FACP Room	234131	3 EA THHN
O		
Utility "B"		
P		
	234132	DEMO CLOCK POWER SUPPLY
	234133	25 EA THHN
	234134	1 EA 50-PAIR
	234135	25 EA 1-PAIR
	234136	25 EA 1-PAIR

DEMO SHEET NOTE	TAG ID	DEMO ITEMS
TC5		
	232708	3 EA THHN
	232709	1 EA 2-PAIR
IDF "SCOE"		
	234137	DEMO ABANDONED PBX
	234138	29 EA CAT5
	234139	32 EA CAT5
	234140	10 EA 66 BLOCK

- DEMO SHEET NOTES:
- ABANDONED CLOCK POWER SUPPLY TO BE REMOVED. SAFE OFF 120V ELECTRICAL. AS OCCURS.
  - ABANDONED TERMINAL CABINET TO BE REMOVED. CAP CONDUITS.
  - TELECENTER ICS CABINET. RACK MOUNTED EQUIPMENT. AND AMPLIFIERS. TO BE REMOVED AND DELIVERED TO DISTRICT MAINTENANCE SHOP IN GOOD CONDITION.
  - LEGACY PBX CABINET AND BATTERIES TO BE REMOVED AND DISPOSED OF.
  - CERTAIN 66 BLOCKS AND ASSOCIATED FEEDER CABLE TO BE MAINTAINED (NOT DEMOED) AT THIS LOCATION. SEE PICTURE DETAIL FOR CLARITY.
  - PROVIDE 1 EA. (N) 4-PAIR COPPER FEEDER FROM MPOE TO FACP. DETERMINE CURRENT PHONE LINES UTILIZED BY FACP AT MPOE AND LAND ON 66-BLOCK TO REPLACE EXISTING LINK. TERMINATE IN MODULAR PLUG AT FACP.
  - PROVIDE 1 EA. (N) 4-PAIR COPPER FEEDER FROM MPOE TO S-7 OFFICE FOR IACP DIALER. DETERMINE CURRENT PHONE LINES UTILIZED BY IACP AT MPOE AND LAND ON 66-BLOCK TO REPLACE EXISTING LINK. TERMINATE IN MODULAR PLUG AT IACP.
  - PROVIDE 1 EA. (N) 4-PAIR COPPER FEEDER FROM MPOE TO X-WING ELEVATOR EQUIPMENT ROOM FOR ELEVATOR PHONE. DETERMINE CURRENT PHONE LINE UTILIZED BY ELEVATOR PHONE AT MPOE AND LAND ON 66-BLOCK TO REPLACE EXISTING LINK.
  - PROVIDE 1 EA. (N) 4-PAIR COPPER FEEDER FROM MPOE TO IDF 1.09. AT THE IDF, EACH PAIR SHALL BE TERMINATED ON A SEPARATE JACK UTILIZING THE CENTER PAIR OF THE JACK. MOUNT KEYSTONE JACKS IN IDF PATCH PANEL. AT MPOE, LAND ON 66-BLOCK. ROUTE ANALOG PHONE LINE VIA EXISTING DATA CABLE TO FAX MACHINE AT F01 OFFICE.
  - PROVIDE 4 EA (N) 4-PAIR COPPER FEEDERS FROM MPOE TO IDF 1.20. AT THE IDF, EACH PAIR SHALL BE TERMINATED ON A SEPARATE JACK UTILIZING THE CENTER PAIR OF THE JACK. MOUNT KEYSTONE JACKS IN IDF PATCH PANEL. AT MPOE, LAND ON 66-BLOCK.

- DEMO GENERAL NOTES:
- ALL CABLES TAGGED AS DEMO ARE TO BE REMOVED FROM ENDPOINT TO ENDPOINT, INCLUDING REMOVAL FROM CONDUITS AND PULL BOXES.
  - ALL NEW COPPER FEEDERS FOR ANALOG PHONE LINES TO BE INSTALLED OR TEMPED IN BEFORE EXISTING FEEDERS CAN BE REMOVED. COORDINATE ANY DOWNTIME OR CUTOVERS WITH DISTRICT REPRESENTATIVE.



KMM SERVICES, INC  
TECHNOLOGY & FIRE LIFE SAFETY

5433 El Camino Ave. Suite 5  
Carmichael, CA 95608  
Office: (916) 359-4000 www.kmm-services.com



Copyright © 2023  
These drawings and specifications and the ideas, designs and arrangements represented thereby are not shall remain the property of KMM Services, Inc. and no part thereof shall be copied, disclosed to others, or used in connection with any other work or project other than the specific project for which they have been prepared and developed without the written consent of KMM Services, Inc. Visual contact with these drawings or specifications shall constitute conclusive evidence of these restrictions.

IF DRAWING IS NOT 30"x42" IT IS A REDUCED PRINT

SHEET REVISIONS		
DELTA	DESCRIPTION	DATE

SITE KEY PLAN

PROJECT  
SACRAMENTO CITY USD  
HIRAM JOHNSON HS  
TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.  
SACRAMENTO, CA. 95820

SHEET TITLE  
TECHNOLOGY  
DEMO SITE PLAN

DRAWING STATUS  
CONSTRUCTION DOCUMENTS

PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-25

REVISION  
SHEET  
T050

14th AVENUE

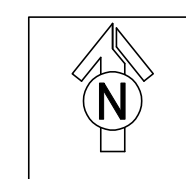
CONDUIT QUANTITY AND SIZE:

- ① (E) 1 EA. 1" CONDUIT.
- ② (E) 1 EA. 1-1/2" CONDUIT.
- ③ (E) 2 EA. 1-1/2" CONDUITS.
- ④ (E) 1 EA. 2" CONDUIT.
- ⑤ (E) 2 EA. 2" CONDUITS.
- ⑥ (E) 2 EA. 2" AND 1 EA. 1-1/2" CONDUITS
- ⑦ (E) 3 EA. 2" CONDUITS.
- ⑧ (E) 3 EA. 2" AND 1 EA. 1" CONDUITS.
- ⑨ (E) 4 EA. 2" CONDUITS.

GENERAL NOTES:

1. NO STRUCTURAL BEAMS SHALL BE PENETRATED OR ALTERED.

REDDING AVENUE



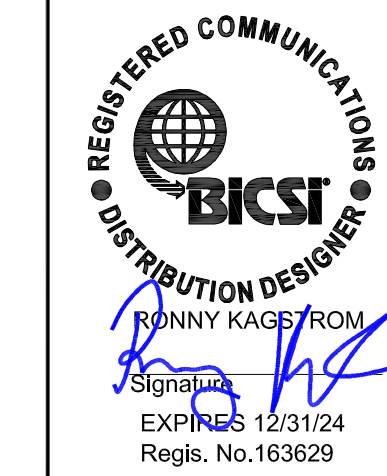
## TECHNOLOGY SITE PLAN

SCALE: 1"=40'



**KMM SERVICES, INC**  
TECHNOLOGY & FIRE LIFE SAFETY

5433 El Camino Ave. Suite 5  
Carmichael, CA 95608  
Office: (916) 359-4000 [www.kmmservices.com](http://www.kmmservices.com)



Copyright © 2023

These drawings and specifications and the ideas, designs and arrangements represented thereby are and shall remain the property of KMM Services, Inc. and no part thereof shall be copied, disclosed to others, or used in connection with any other work or project other than the specific project for which they have been prepared and developed without the written consent of KMM Services, Inc. Visual contact with these drawings or specifications shall constitute conclusive evidence of these restrictions.

IF DRAWING IS NOT 30"X42" IT IS A REDUCED PRINT

#### SHEET REVISIONS

[illegible]

## SITE KEY PLAN

PROJECT  
SACRAMENTO CITY USD  
HIRAM JOHNSON HS  
TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.  
SACRAMENTO, CA. 95820

SHEET TITLE

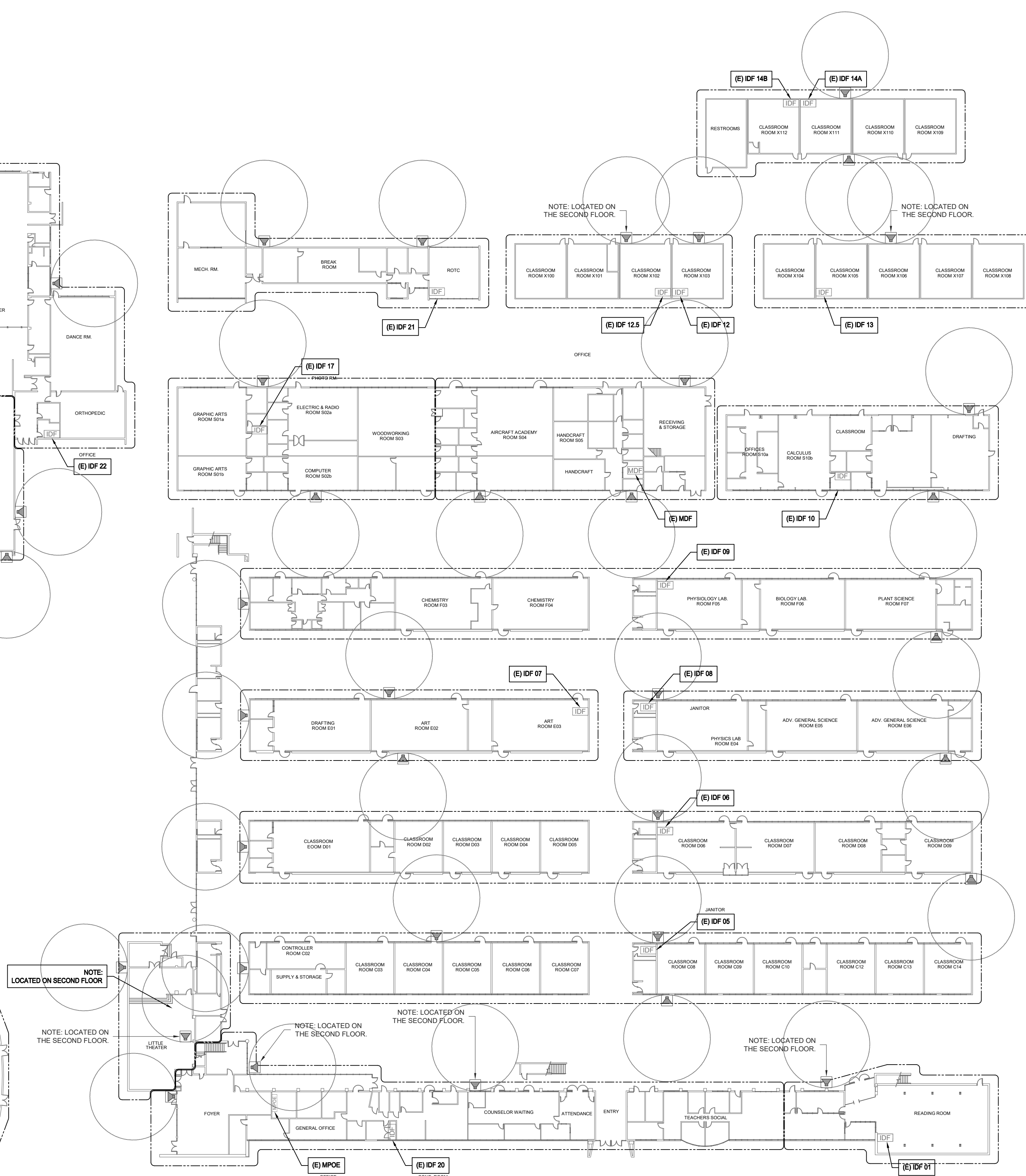
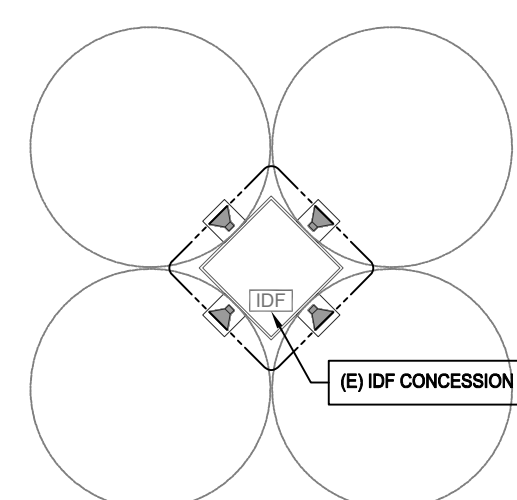
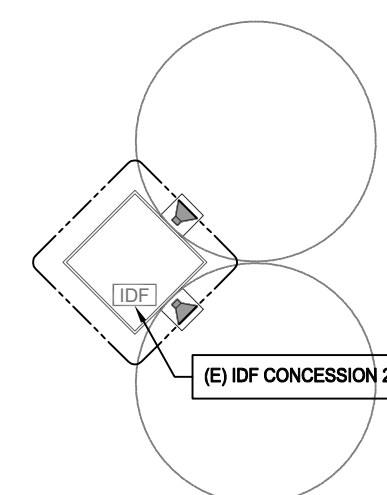
## TECHNOLOGY SITE PLAN

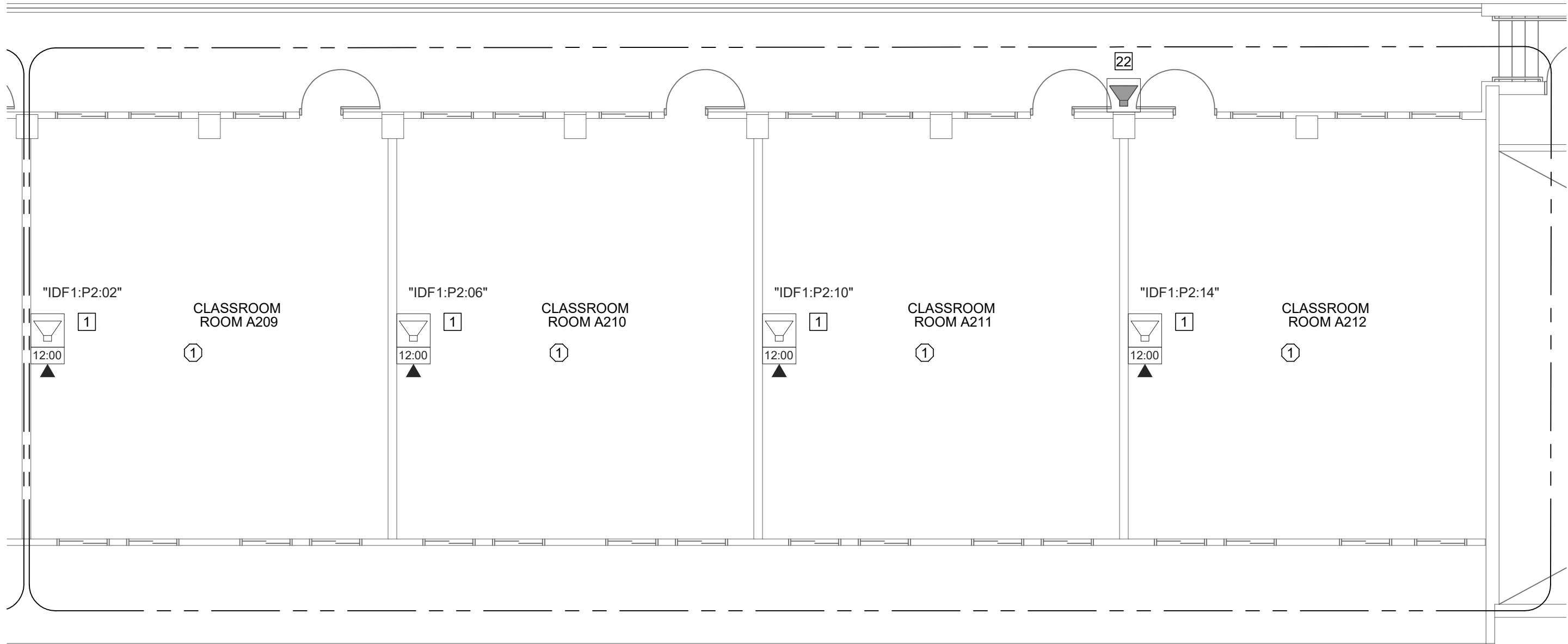
### DRAWING STATUS

CONSTRUCTION DOCUMENTS

PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-25

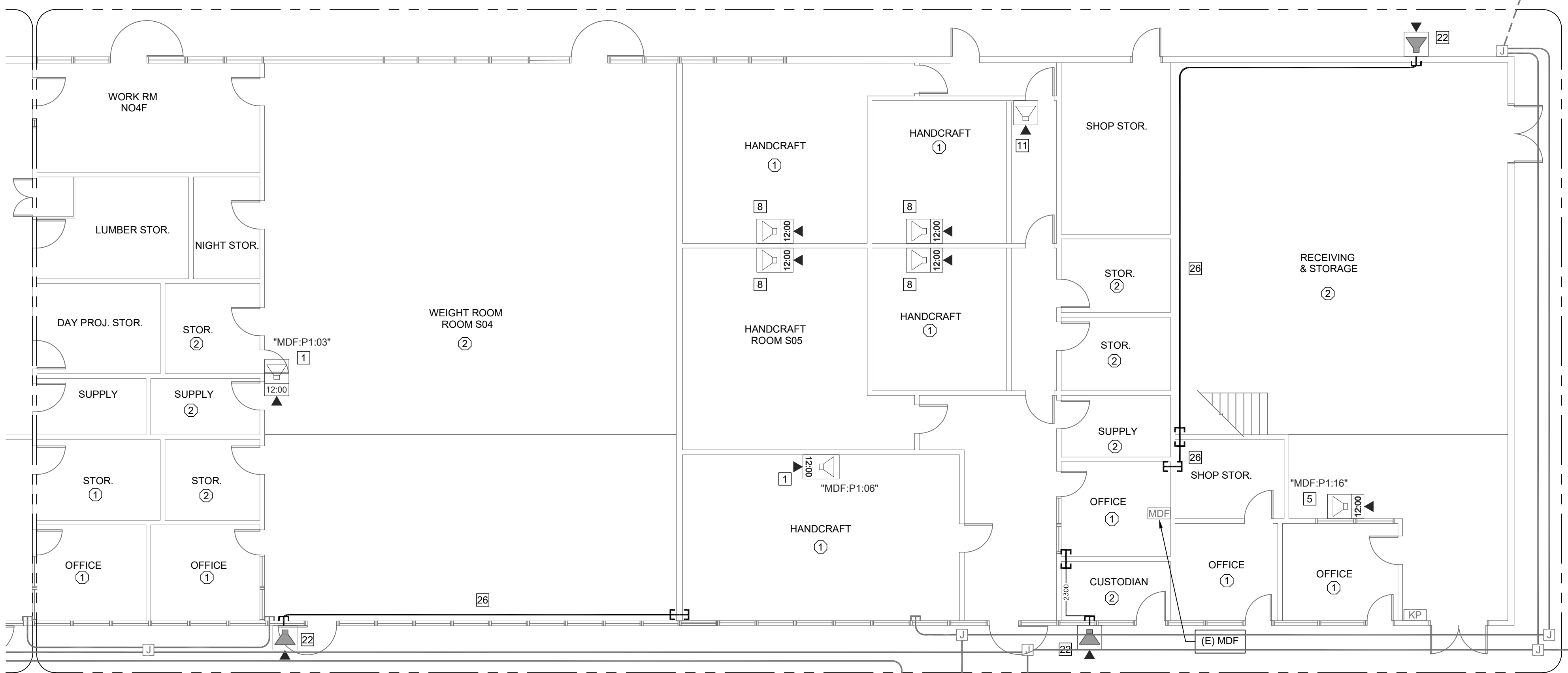
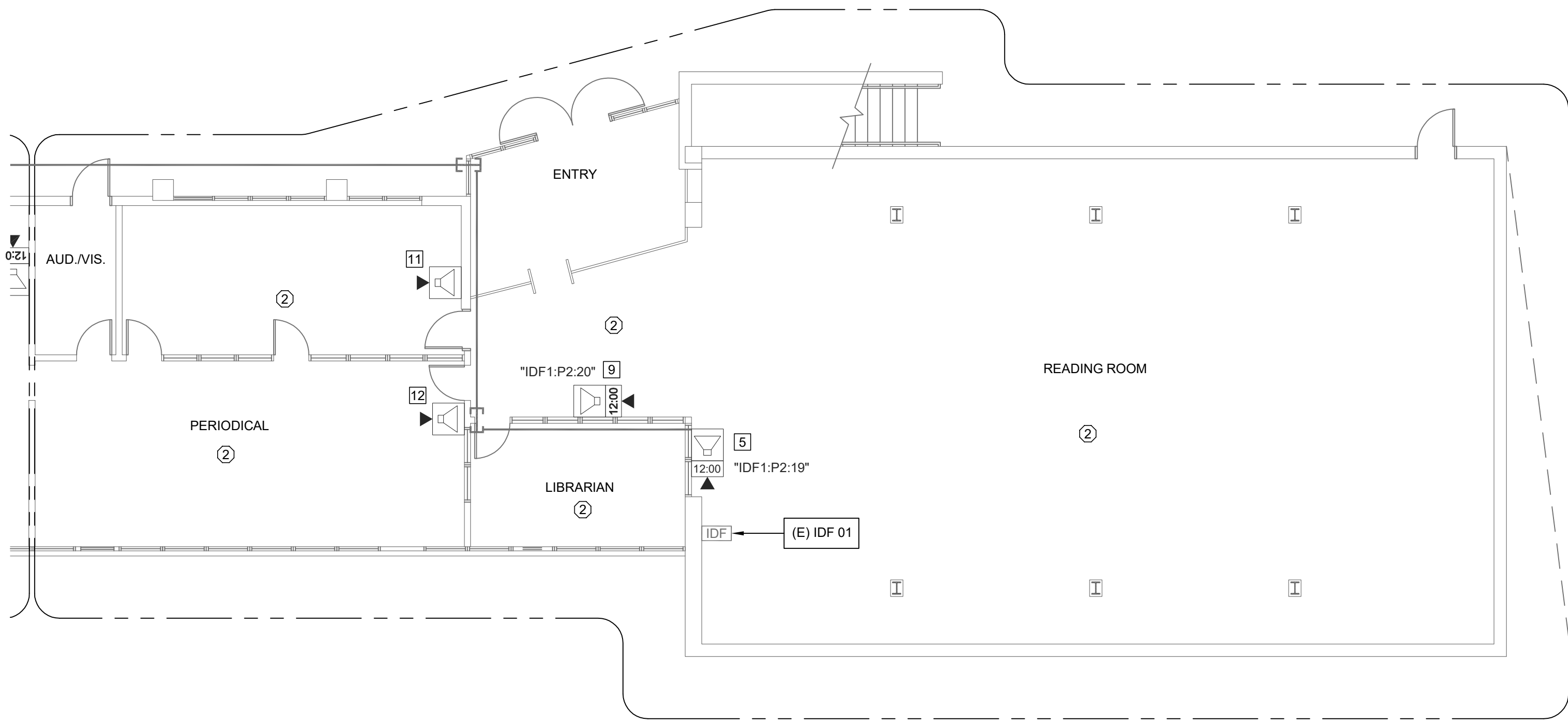
SHEET **T100**



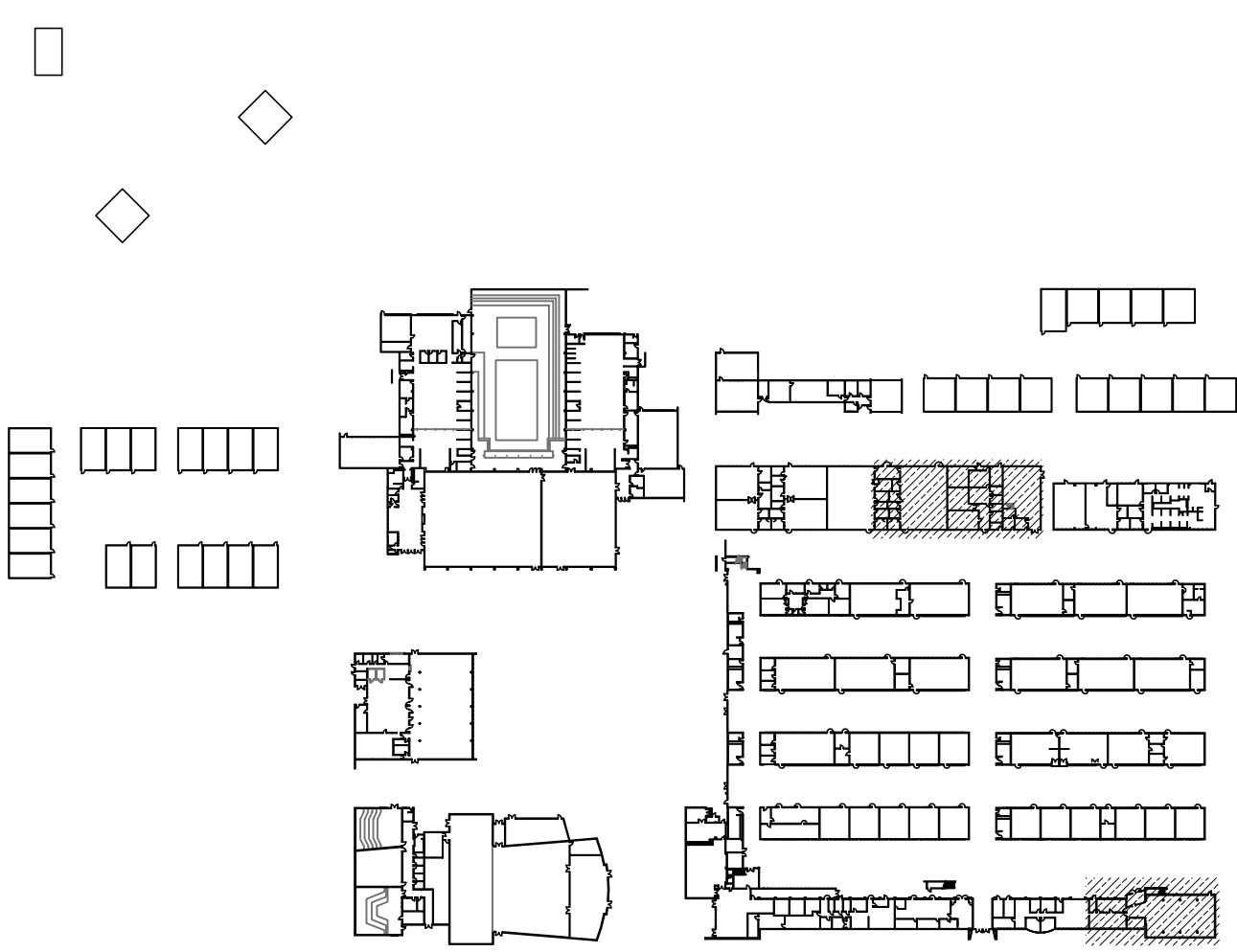


- GENERAL NOTES:**
- NO STRUCTURAL BEAMS SHALL BE PENETRATED OR ALTERED.
  - ALL WIRELESS SYSTEM CLOCKS REMOVED SHALL BE BOXED AND DELIVERED IN GOOD CONDITION TO DISTRICT MAINTENANCE WAREHOUSE.
- CEILING CONDITION CHART:**
- |   |                        |
|---|------------------------|
| 1 | DROP IN CEILING TILES. |
| 2 | HARD LID CEILING.      |

- SHEET NOTES:**
- REMOVE (E) SPEAKER. INSTALL (N) COMBO BOX OVER (E) SPEAKER LOCATION WITH (N) SPEAKER. (N) CLASSROOM IP MODULE. AND (N) CLOCK. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
  - REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (E) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING. SEE DETAIL SHEET T800.
  - PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
  - REMOVE (E) SPEAKER AND BLANK OVER AS REQUIRED.
  - REMOVE (E) SPEAKER AND (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER. (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
  - REMOVE (E) SPEAKER. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER. (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
  - REMOVE (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER. (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
  - PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
  - PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
  - REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (E) COMBO BOX. SEE DETAIL SHEET T800.
  - REMOVE (E) SPEAKER AND BACKBOX, PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
  - PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
  - REMOVE (E) CLOCK, AND BLANK OVER AS REQUIRED.
  - REMOVE (E) SPEAKER, PROVIDE (N) LAY-IN SPEAKER AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
  - PROVIDE (N) WALL MOUNTED BACK BOX AND (N) 16" IP CLOCK AND (N) PROTECTIVE CAGE. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK BACKBOX.
  - REMOVE (E) SPEAKER AND BACKBOX, PROVIDE (N) SPEAKER MOUNTED IN (N) BACKBOX AND (N) CLASSROOM IP MODULE. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO SPEAKER BACKBOX.
  - REMOVE (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER. (N) CLASSROOM IP MODULE, AND (N) CLOCK. PROVIDE ONE (1) (N) CAT6A DATA DROP.
  - PROVIDE (N) CONDUIT CLOSELY FOLLOWING ROOF TRUSS. PAINT TO MATCH.
  - PROVIDE (N) CONDUIT VERTICAL TRANSITION TO/FROM ATTIC ABOVE THEATRICAL RIGGING GRID.
  - PROVIDE (N) CONDUIT ACROSS HIGHEST ATTIC ABOVE THEATRICAL RIGGING GRID.
  - ROUTE VIA ACCESSIBLE CRAWLSPACES BEHIND ARCHITECTURE. FISH FROM ACCESSIBLE SPACE TO SPEAKER LOCATION AS NECESSARY. NO CONDUIT OR WIREMOLD SHALL BE VISIBLE FROM SEATING AREA.
  - REPLACE (E) EXTERIOR SPEAKER WITH (N) EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
  - PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
  - (E) TELECENTER ICS TO BE REMOVED AFTER CUTOVER TO (N) SYSTEM. REMOVE ALL (E) CABLES, 66-BLOCKS, AND CABINET.
  - REMOVE (E) TELECENTER ICS INPUT PLATE, PROVIDE (N) TELECENTER U PROGRAM LINE INPUT MODULE AND ONE (1) (N) CAT6A DATA DROP.
  - (N) 1 EA. 1" GRC/EMT.
  - RELOCATE (E) DATA DROP NOTED TO NEW LOCATION.
  - (N) 1 EA. 2" GRC/EMT.
  - REPLACE (E) OR PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. CABLE TO ZONE PAGE AMP IN NEAREST IDF.



**KEY PLAN**



**KMM SERVICES, INC**  
TECHNOLOGY & FIRE LIFE SAFETY

5433 El Camino Ave. Suite 5  
Carmichael, CA 95608  
Office: (916) 359-4000 www.kmmsservices.com



RONNY KAGEFROM  
Signature  
EXP. 12/31/24  
Regis. No. 163629

Copyright © 2023  
These drawings and specifications and the ideas, designs and arrangements represented thereby are and shall remain the property of KMM Services, Inc. and no part thereof shall be copied, disclosed to others, or used in connection with any other work or project other than the specific project for which they have been prepared and developed without the written consent of KMM Services, Inc. Visual contact with these drawings or specifications shall constitute conclusive evidence of these restrictions.

IF DRAWING IS NOT 30"X42" IT IS A REDUCED PRINT

SHEET REVISIONS		
DELTA	DESCRIPTION	DATE

**SITE KEY PLAN**

PROJECT  
**SACRAMENTO CITY USD  
HIRAM JOHNSON HS**  
TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.  
SACRAMENTO, CA. 95820

SHEET TITLE  
**TECHNOLOGY  
FLOOR PLANS  
- MDF AND IDF 01 - FIRST  
AND SECOND FLOORS**

DRAWING STATUS  
**CONSTRUCTION DOCUMENTS**

PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-31

REVISION  
SHEET **T200**



GENERAL NOTES:		
1.	NO STRUCTURAL BEAMS SHALL BE PENETRATED OR ALTERED.	
2.	ALL WIRELESS SYSTEM CLOCKS REMOVED SHALL BE BOXED AND DELIVERED IN GOOD CONDITION TO DISTRICT MAINTENANCE WAREHOUSE.	

CEILING CONDITION CHART:		
1	DROP IN CEILING TILES.	
2	HARD LID CEILING.	

SHEET NOTES:		
1	REMOVE (E) SPEAKER. INSTALL (N) COMBO BOX OVER (E) SPEAKER LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.	
2	REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (E) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING. SEE DETAIL SHEET T800.	
3	PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.	
4	REMOVE (E) SPEAKER AND BLANK OVER AS REQUIRED.	
5	REMOVE (E) SPEAKER AND (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.	
6	REMOVE (E) SPEAKER. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.	
7	REMOVE (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.	
8	PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.	
9	PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.	
10	REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (E) COMBO BOX. SEE DETAIL SHEET T800.	
11	REMOVE (E) SPEAKER AND BACKBOX, PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.	
12	PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.	
13	REMOVE (E) CLOCK, AND BLANK OVER AS REQUIRED.	
14	REMOVE (E) SPEAKER, PROVIDE (N) LAY-IN SPEAKER AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.	
15	PROVIDE (N) WALL MOUNTED BACK BOX AND (N) 16\"/>	
16	REMOVE (E) SPEAKER AND BACKBOX, PROVIDE (N) SPEAKER MOUNTED IN (N) BACKBOX AND (N) CLASSROOM IP MODULE. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO SPEAKER BACKBOX.	
17	REMOVE (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. PROVIDE ONE (1) (N) CAT6A DATA DROP.	
18	PROVIDE (N) CONDUIT CLOSELY FOLLOWING ROOF TRUSS. PAINT TO MATCH.	
19	PROVIDE (N) CONDUIT VERTICAL TRANSITION TO/FROM ATTIC ABOVE THEATRICAL RIGGING GRID.	
20	PROVIDE (N) CONDUIT ACROSS HIGHEST ATTIC ABOVE THEATRICAL RIGGING GRID.	
21	ROUTE VIA ACCESSIBLE CRAWL SPACES BEHIND ARCHITECTURE. FISH FROM ACCESSIBLE SPACE TO SPEAKER LOCATION AS NECESSARY. NO CONDUIT OR WIREMOLD SHALL BE VISIBLE FROM SEATING AREA.	
22	REPLACE (E) EXTERIOR SPEAKER WITH (N) EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.	
23	PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.	
24	(E) TELECENTER ICS TO BE REMOVED AFTER CUTOVER TO (N) SYSTEM. REMOVE ALL (E) CABLES, 66-BLOCKS, AND CABINET.	
25	REMOVE (E) TELECENTER ICS INPUT PLATE, PROVIDE (N) TELECENTER U PROGRAM LINE INPUT MODULE AND ONE (1) (N) CAT6A DATA DROP.	
26	(N) 1 EA. 1\"/>	
27	RELOCATE (E) DATA DROP NOTED TO NEW LOCATION.	
28	(N) 1 EA. 2\"/>	
29	REPLACE (E) OR PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. CABLE TO ZONE PAGE AMP IN NEAREST IDF.	





[illegible]

## SITE KEY PLAN

PROJECT  
SACRAMENTO CITY USD  
HIRAM JOHNSON HS  
TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.  
SACRAMENTO, CA. 95820

SHEET TITLE  
TECHNOLOGY  
FLOOR PLANS  
- IDF 05

DRAWING STATUS

CONSTRUCTION DOCUMENTS

PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-31

REVISION

SHEET **T203**

GENERAL NOTES:

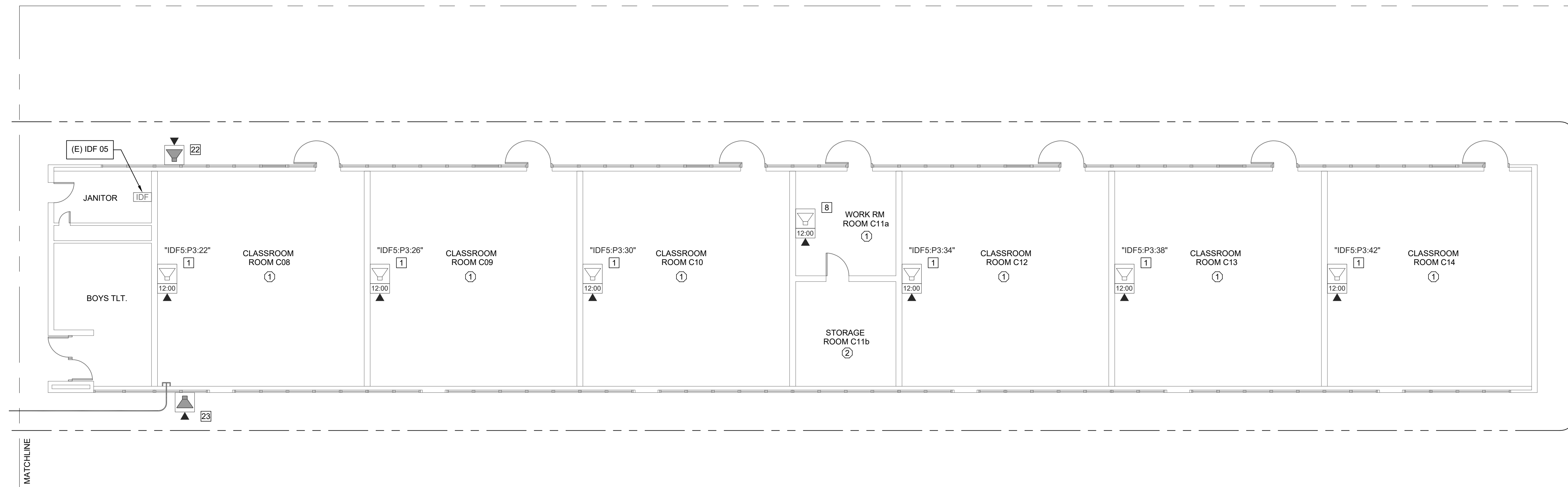
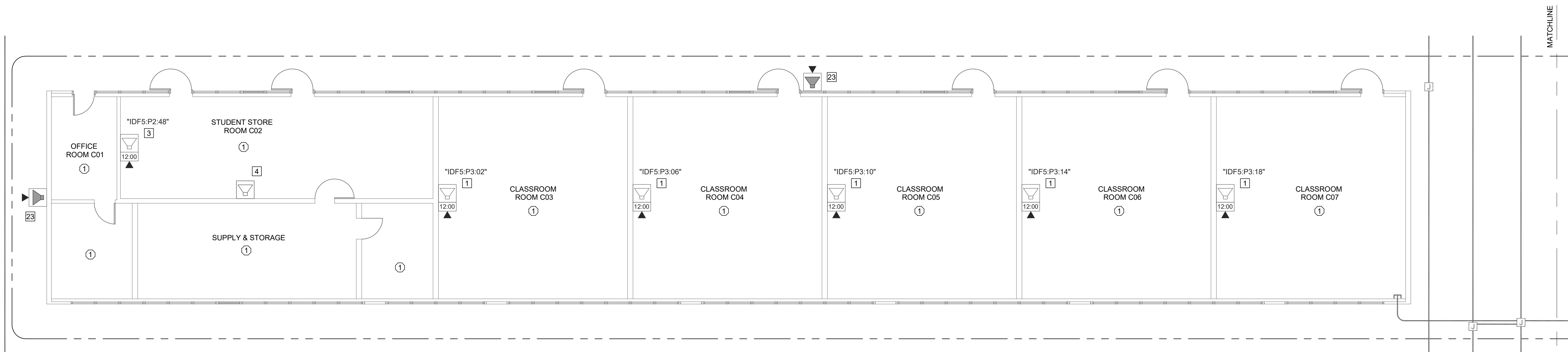
1. NO STRUCTURAL BEAMS SHALL BE PENETRATED OR ALTERED.
2. ALL WIRELESS SYSTEM CLOCKS REMOVED SHALL BE BOXED AND DELIVERED IN GOOD CONDITION TO DISTRICT MAINTENANCE WAREHOUSE.

CEILING CONDITION CHART:

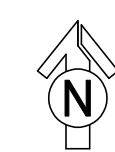
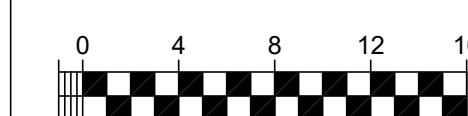
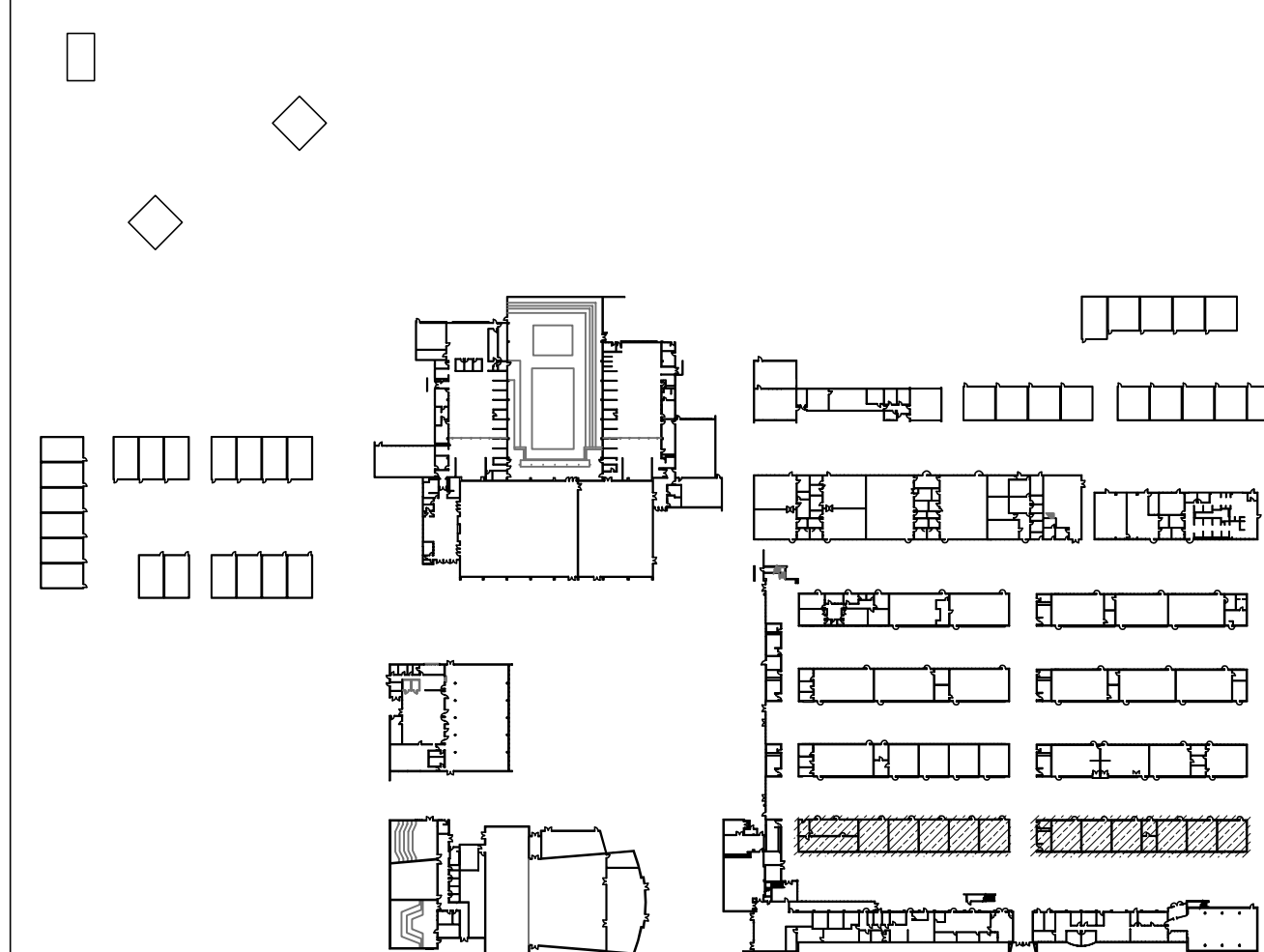
- ① DROP IN CEILING TILES.  
② HARD LID CEILING.

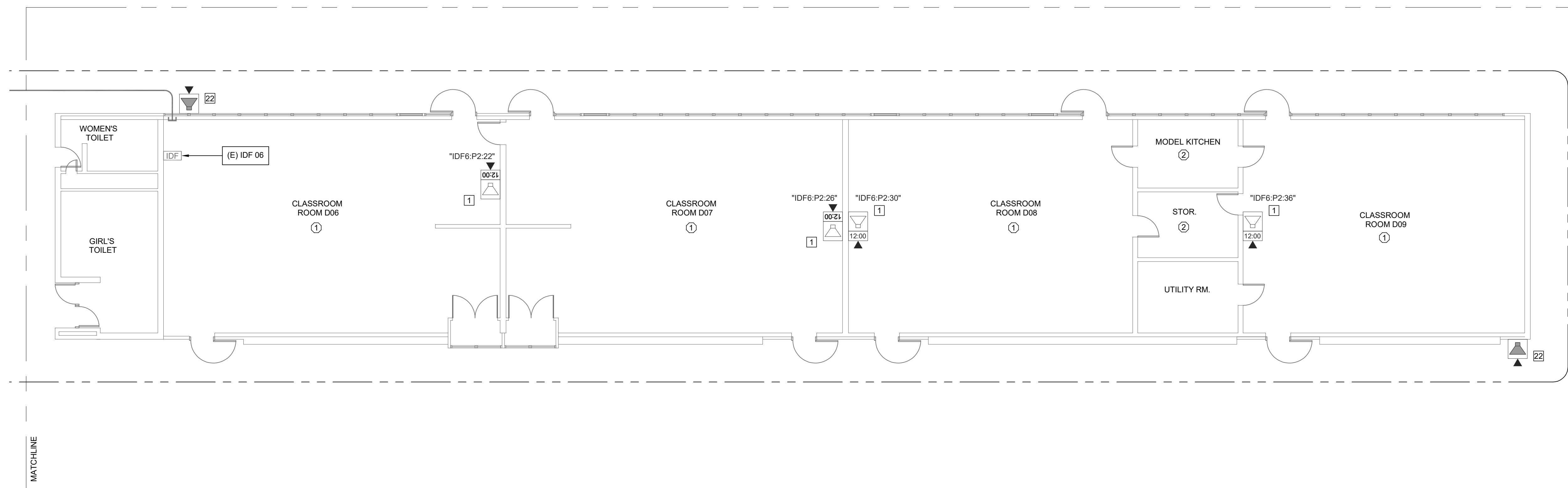
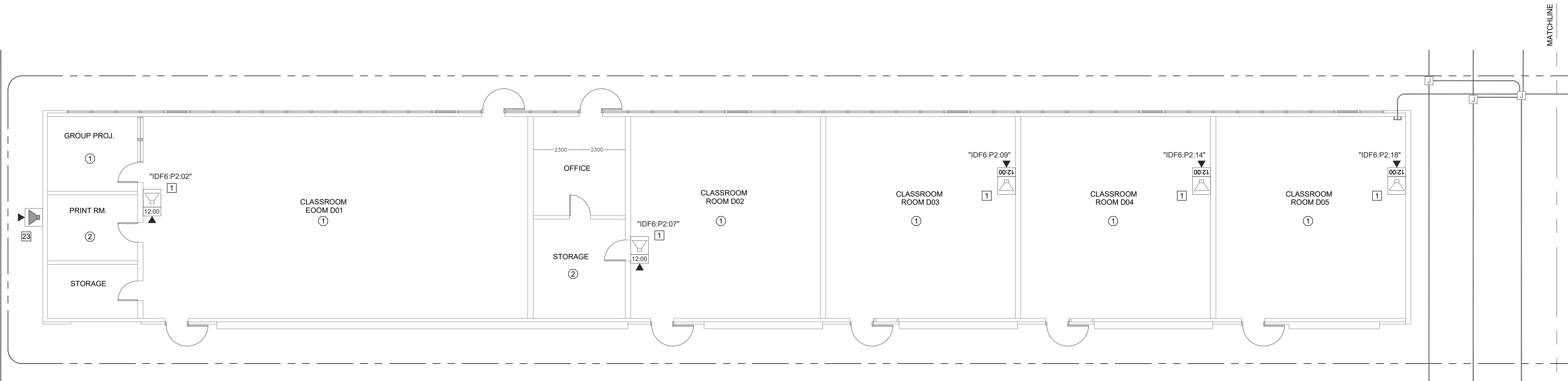
SHEET NOTES:

- 1 REMOVE (E) SPEAKER. INSTALL (N) COMBO BOX OVER (E) SPEAKER LOCATION WITH (N) SPEAKER. (N) CLASSROOM IP MODULE, AND (N) CLOCK. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR. FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
- 2 REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND (N) MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLANT. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (E) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR. FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
- 3 PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND (N) IP CLOCK MOUNTED IN (N) CLOCK/SPEAKER COMBO BOX. PROVIDE (N) CAT6A DATA DROP INTO (N) COMBO BOX. REMOVE (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- 4 REMOVE (E) SPEAKER AND BLANK OVER AS REQUIRED.
- 5 REMOVE (E) SPEAKER AND (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER. (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX. REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- 6 REMOVE (E) SPEAKER. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER. (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX. REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- 7 REMOVE (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER. (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX. REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- 8 PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND (N) IP CLOCK MOUNTED IN (N) CLOCK/SPEAKER COMBO BOX. PROVIDE (N) CAT6A DATA DROP INTO (N) COMBO BOX. REMOVE (E) DATA DROP FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
- 9 PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND (N) IP CLOCK MOUNTED IN (N) CLOCK/SPEAKER COMBO BOX. REMOVE (E) WIREMOLD DUPLEX BOX. REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- 10 REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLANT. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR. FISH FROM CEILING TO (E) COMBO BOX. SEE DETAIL SHEET T800.
- 11 REMOVE (E) SPEAKER AND BACKBOX. PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE MOUNTED IN (N) SURFACE BACKBOX.
- 12 PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- 13 REMOVE (E) CLOCK AND BLANK OVER AS REQUIRED.
- 14 REMOVE (E) SPEAKER. PROVIDE (N) LAY-IN SPEAKER AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- 15 PROVIDE (N) WALL MOUNTED BACK BOX AND (N) 16" IP CLOCK AND (N) PROTECTIVE CAGE. REMOVE (E) WIREMOLD DUPLEX BOX. REWORK (E) DATA DROP INTO (N) BACKBOX.
- 16 REMOVE (E) SPEAKER AND BACKBOX. PROVIDE (N) SPEAKER MOUNTED IN (N) BACKBOX AND (N) CLASSROOM IP MODULE. REMOVE (E) WIREMOLD DUPLEX BOX. REWORK (E) DATA DROP INTO (N) BACKBOX.
- 17 REMOVE (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER. (N) CLASSROOM IP MODULE, AND (N) CLOCK. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- 18 PROVIDE (N) CONDUIT CLOSELY FOLLOWING ROOF TRUSS. PLANT TO MATCH.
- 19 PROVIDE (N) CONDUIT VERTICAL TRANSITION TO/FROM ATTIC ABOVE THEATRICAL RIGGING GRID.
- 20 PROVIDE (N) CONDUIT ACROSS HIGHEST ATTIC ABOVE THEATRICAL RIGGING GRID.
- 21 ROUTE VIA ACCESSIBLE CRAWLSPACES BEHIND ARCHITECTURE. FISH FROM ACCESSIBLE SPACE TO SPEAKER LOCATION AS NECESSARY. NO CONDUIT OR WIREMOLD SHALL BE VISIBLE FROM STAGE AREA.
- 22 REPLACE (E) EXTERIOR SPEAKER WITH (N) EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) EXTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- 23 PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) EXTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- 24 (E) TELECENTER ICS TO BE REMOVED AFTER CUTOVER TO (N) SYSTEM. REMOVE ALL (E) CABLES, 66-BLOCKS, AND CABINET.
- 25 REMOVE (E) TELECENTER ICS INPUT PLANT. PROVIDE (N) TELECENTER U PROGRAM LINE INPUT MODULE AND ONE (1) (N) CAT6A DATA DROP.
- 26 (N) 1 EA. GRCENT.
- 27 RELOCATE (E) DATA DROP NOTED TO NEW LOCATION.
- 28 (N) 1 EA. 2" GRCENT.
- 29 REPLACE (E) OR PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. CABLE TO ZONE PAGE AMP IN NEARBY AREA.



## KEY PLAN





## TECHNOLOGY FLOOR PLANS - IDF 06

SCALE: 1/8"=1'

### GENERAL NOTES:

- NO STRUCTURAL BEAMS SHALL BE PENETRATED OR ALTERED.
- ALL WIRELESS SYSTEM CLOCKS REMOVED SHALL BE BOXED AND DELIVERED IN GOOD CONDITION TO DISTRICT MAINTENANCE WAREHOUSE.

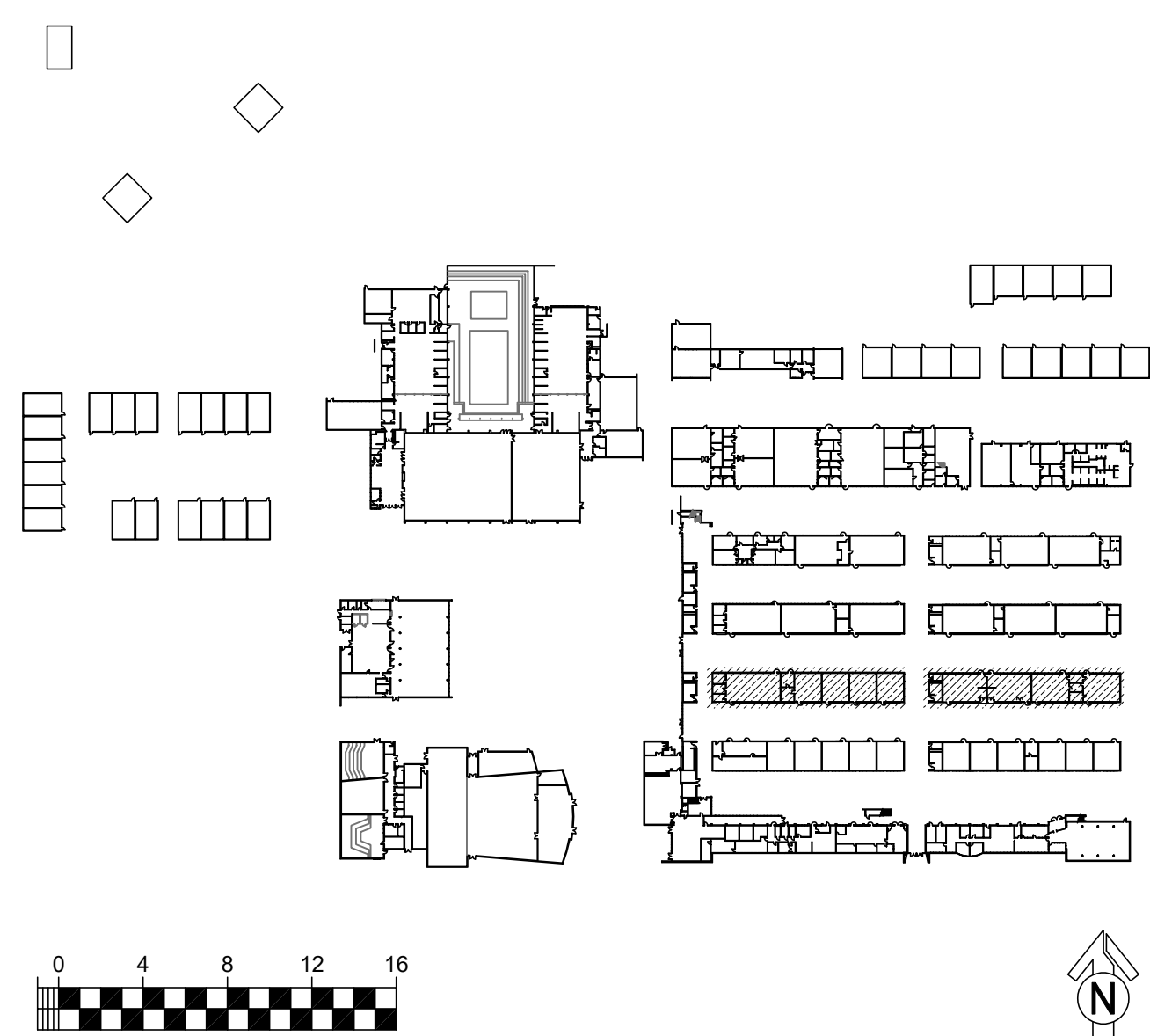
### CEILING CONDITION CHART:

- DROP IN CEILING TILES.
- HARD LID CEILING.

### SHEET NOTES:

- REMOVE (E) SPEAKER, INSTALL (N) COMBO BOX OVER (E) SPEAKER LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
- REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (E) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING. SEE DETAIL SHEET T800.
- PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
- REMOVE (E) SPEAKER AND BLANK OVER AS REQUIRED.
- REMOVE (E) SPEAKER AND (E) CLOCK, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- REMOVE (E) SPEAKER, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- REMOVE (E) CLOCK, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
- PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (E) COMBO BOX. SEE DETAIL SHEET T800.
- REMOVE (E) SPEAKER AND BACKBOX, PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- REMOVE (E) CLOCK, AND BLANK OVER AS REQUIRED.
- REMOVE (E) SPEAKER, PROVIDE (N) LAY-IN SPEAKER AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- PROVIDE (N) WALL MOUNTED BACK BOX AND (N) 16" IP CLOCK AND (N) PROTECTIVE CAGE. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK BACKBOX.
- REMOVE (E) SPEAKER AND BACKBOX, PROVIDE (N) SPEAKER MOUNTED IN (N) BACKBOX AND (N) CLASSROOM IP MODULE. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO SPEAKER BACKBOX.
- REMOVE (E) CLOCK, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- PROVIDE (N) CONDUIT CLOSELY FOLLOWING ROOF TRUSS. PAINT TO MATCH.
- PROVIDE (N) CONDUIT VERTICAL TRANSITION TO/FROM ATTIC ABOVE THEATRICAL RIGGING GRID.
- PROVIDE (N) CONDUIT ACROSS HIGHEST ATTIC ABOVE THEATRICAL RIGGING GRID.
- ROUTE VIA ACCESSIBLE CRAWL SPACES BEHIND ARCHITECTURE. FISH FROM ACCESSIBLE SPACE TO SPEAKER LOCATION AS NECESSARY. NO CONDUIT OR WIREMOLD SHALL BE VISIBLE FROM SEATING AREA.
- REPLACE (E) EXTERIOR SPEAKER WITH (N) EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- (E) TELECENTER ICS TO BE REMOVED AFTER CUTOVER TO (N) SYSTEM. REMOVE ALL (E) CABLES, 66-BLOCKS, AND CABINET.
- REMOVE (E) TELECENTER ICS INPUT PLATE, PROVIDE (N) TELECENTER U PROGRAM LINE INPUT MODULE AND ONE (1) (N) CAT6A DATA DROP.
- (N) 1 EA. 1" GRC/EMT.
- RELOCATE (E) DATA DROP NOTED TO NEW LOCATION.
- (N) 1 EA. 2" GRC/EMT.
- REPLACE (E) OR PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. CABLE TO ZONE PAGE AMP IN NEAREST IDF.

### KEY PLAN



**KMM SERVICES, INC**  
TECHNOLOGY & FIRE LIFE SAFETY

5433 El Camino Ave., Suite 5  
Carmichael, CA 95608  
Office: (916) 359-4000 www.kmm-services.com



RONNY KAGEFROM  
Signature  
EXP. 12/31/24  
Regis. No. 163629

Copyright © 2023

These drawings and specifications and the ideas, designs and arrangements represented thereby are and shall remain the property of KMM Services, Inc. and no part thereof shall be copied, disclosed to others, or used in connection with any other work or project other than the specific project for which they have been prepared and developed without the written consent of KMM Services, Inc. Visual contact with these drawings or specifications shall constitute conclusive evidence of these restrictions.

IF DRAWING IS NOT 30"x42" IT IS A REDUCED PRINT

### SHEET REVISIONS

DELTA	DESCRIPTION	DATE

### SITE KEY PLAN

PROJECT  
**SACRAMENTO CITY USD  
HIRAM JOHNSON HS**  
TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.  
SACRAMENTO, CA. 95820

SHEET TITLE  
**TECHNOLOGY  
FLOOR PLANS  
- IDF 06**

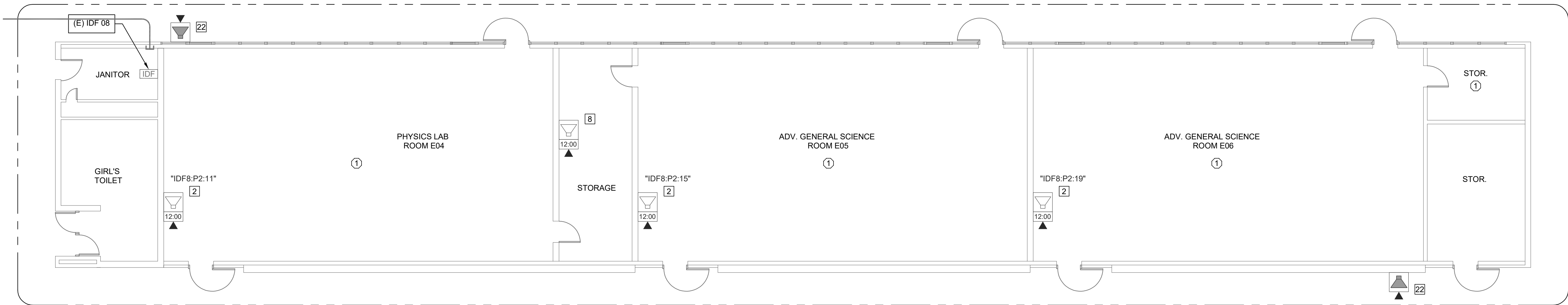
DRAWING STATUS  
**CONSTRUCTION DOCUMENTS**

PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-31

REVISION

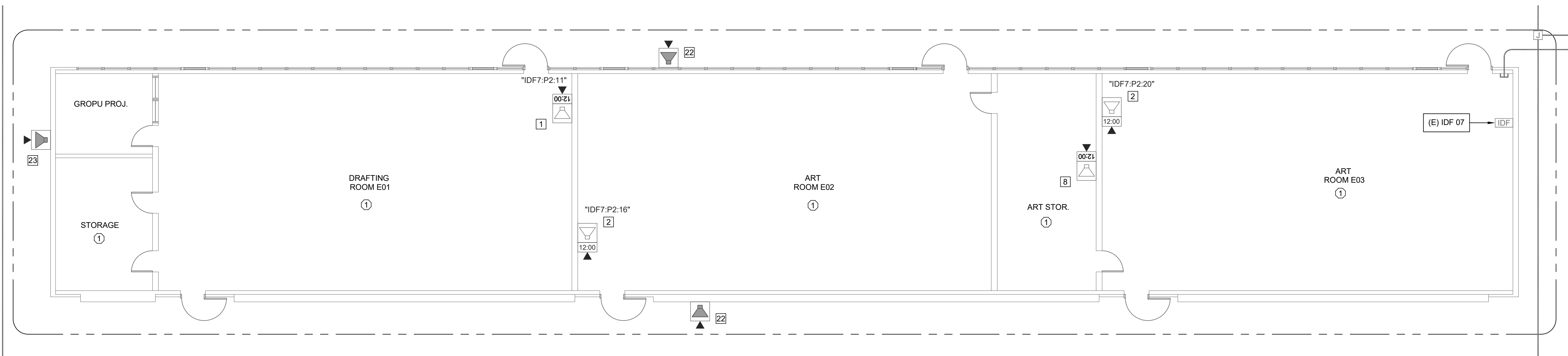
SHEET

**T204**



## TECHNOLOGY FLOOR PLANS - IDF 08

SCALE: 1/8"=1'



## TECHNOLOGY FLOOR PLANS - IDF 07

SCALE: 1/8"=1'

### GENERAL NOTES:

1. NO STRUCTURAL BEAMS SHALL BE PENETRATED OR ALTERED.
2. ALL WIRELESS SYSTEM CLOCKS REMOVED SHALL BE BOXED AND DELIVERED IN GOOD CONDITION TO DISTRICT MAINTENANCE WAREHOUSE.

### CEILING CONDITION CHART:

- 1 DROP IN CEILING TILES.
- 2 HARD LID CEILING.

### SHEET NOTES:

- 1 REMOVE (E) SPEAKER, INSTALL (N) COMBO BOX OVER (E) SPEAKER LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
- 2 REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (E) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING. SEE DETAIL SHEET T800.
- 3 PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
- 4 REMOVE (E) SPEAKER AND BLANK OVER AS REQUIRED.
- 5 REMOVE (E) SPEAKER AND (E) CLOCK, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- 6 REMOVE (E) SPEAKER, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- 7 REMOVE (E) CLOCK, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- 8 PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
- 9 PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- 10 REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (E) COMBO BOX. SEE DETAIL SHEET T800.
- 11 REMOVE (E) SPEAKER AND BACKBOX, PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- 12 PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- 13 REMOVE (E) CLOCK, AND BLANK OVER AS REQUIRED.
- 14 REMOVE (E) SPEAKER, PROVIDE (N) LAY-IN SPEAKER AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- 15 PROVIDE (N) WALL MOUNTED BACK BOX AND (N) 16" IP CLOCK AND (N) PROTECTIVE CAGE. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK BACKBOX.
- 16 REMOVE (E) SPEAKER AND BACKBOX, PROVIDE (N) SPEAKER MOUNTED IN (N) BACKBOX AND (N) CLASSROOM IP MODULE. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO SPEAKER BACKBOX.
- 17 REMOVE (E) CLOCK, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- 18 PROVIDE (N) CONDUIT CLOSELY FOLLOWING ROOF TRUSS. PAINT TO MATCH.
- 19 PROVIDE (N) CONDUIT VERTICAL TRANSITION TO/FROM ATTIC ABOVE THEATRICAL RIGGING GRID.
- 20 PROVIDE (N) CONDUIT ACROSS HIGHEST ATTIC ABOVE THEATRICAL RIGGING GRID.
- 21 ROUTE VIA ACCESSIBLE CRAWL SPACES BEHIND ARCHITECTURE. FISH FROM ACCESSIBLE SPACE TO SPEAKER LOCATION AS NECESSARY. NO CONDUIT OR WIREMOLD SHALL BE VISIBLE FROM SEATING AREA.
- 22 REPLACE (E) EXTERIOR SPEAKER WITH (N) EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- 23 PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- 24 (E) TELECENTER ICS TO BE REMOVED AFTER CUTOVER TO (N) SYSTEM. REMOVE ALL (E) CABLES, 66-BLOCKS, AND CABINET.
- 25 REMOVE (E) TELECENTER ICS INPUT PLATE, PROVIDE (N) TELECENTER U PROGRAM LINE INPUT MODULE AND ONE (1) (N) CAT6A DATA DROP.
- 26 (N) 1 EA. 1" GRC/EMT.
- 27 RELOCATE (E) DATA DROP NOTED TO NEW LOCATION.
- 28 (N) 1 EA. 2" GRC/EMT.
- 29 REPLACE (E) OR PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. CABLE TO ZONE PAGE AMP IN NEAREST IDF.



**KMM SERVICES, INC**  
TECHNOLOGY & FIRE LIFE SAFETY

5433 El Camino Ave., Suite 5  
Carmichael, CA 95608  
Office: (916) 359-4000 www.kmmsservices.com



RONNY KAGEFROM  
Signature  
EXP. 12/31/24  
Regis. No. 163629

Copyright © 2023

These drawings and specifications and the ideas, designs and arrangements represented thereby are and shall remain the property of KMM Services, Inc. and no part thereof shall be copied, disclosed, or used in connection with any other work or project other than the specific project for which they have been prepared and developed without the written consent of KMM Services, Inc. Visual contact with these drawings or specifications shall constitute conclusive evidence of these restrictions.

IF DRAWING IS NOT 30"x42" IT IS A REDUCED PRINT

### SHEET REVISIONS

DELTA	DESCRIPTION	DATE

### SITE KEY PLAN

PROJECT  
**SACRAMENTO CITY USD  
HIRAM JOHNSON HS**  
TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.  
SACRAMENTO, CA. 95820

### SHEET TITLE

**TECHNOLOGY  
FLOOR PLANS  
- IDF 07 AND 08**

### DRAWING STATUS

### CONSTRUCTION DOCUMENTS

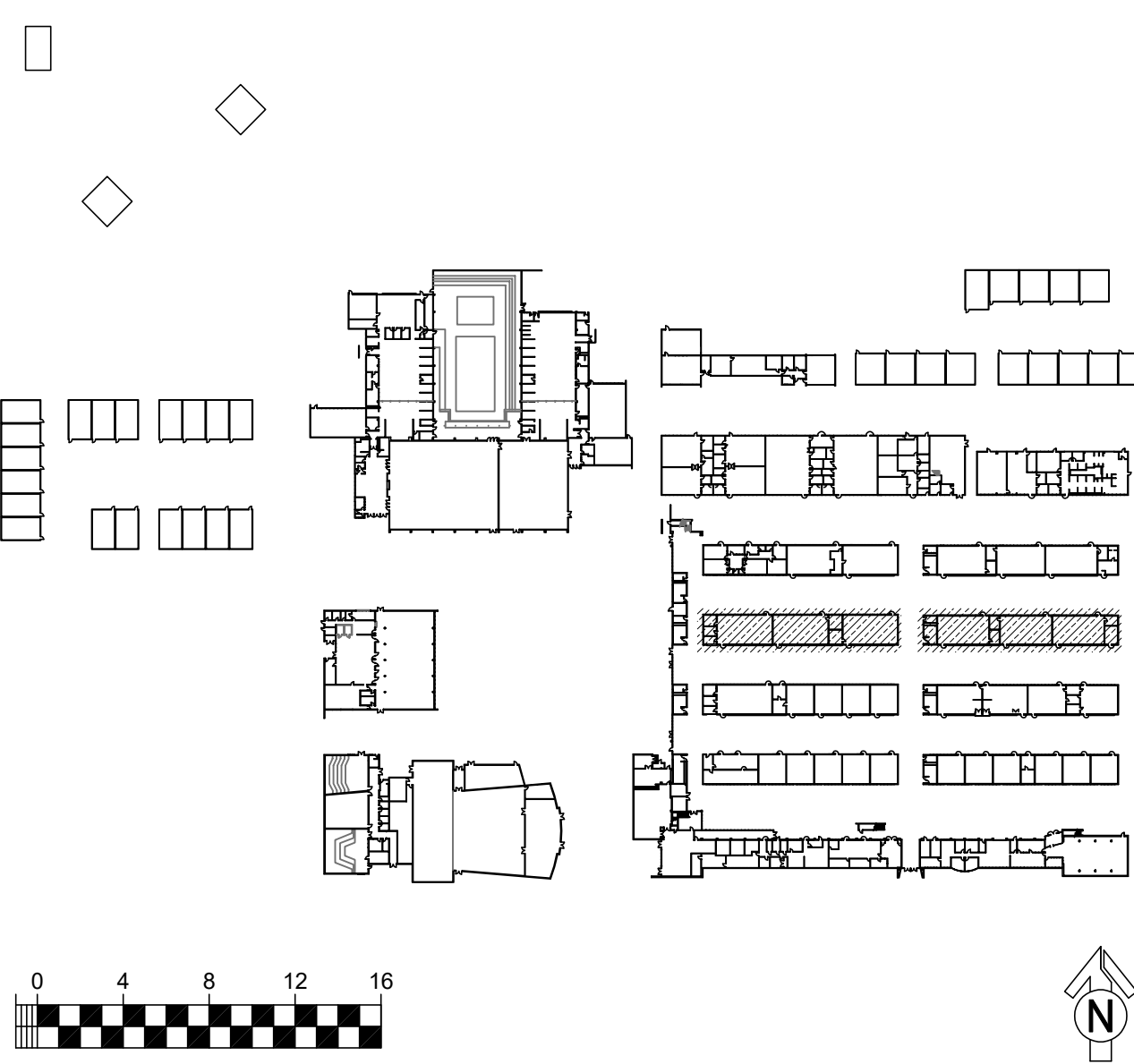
PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-31

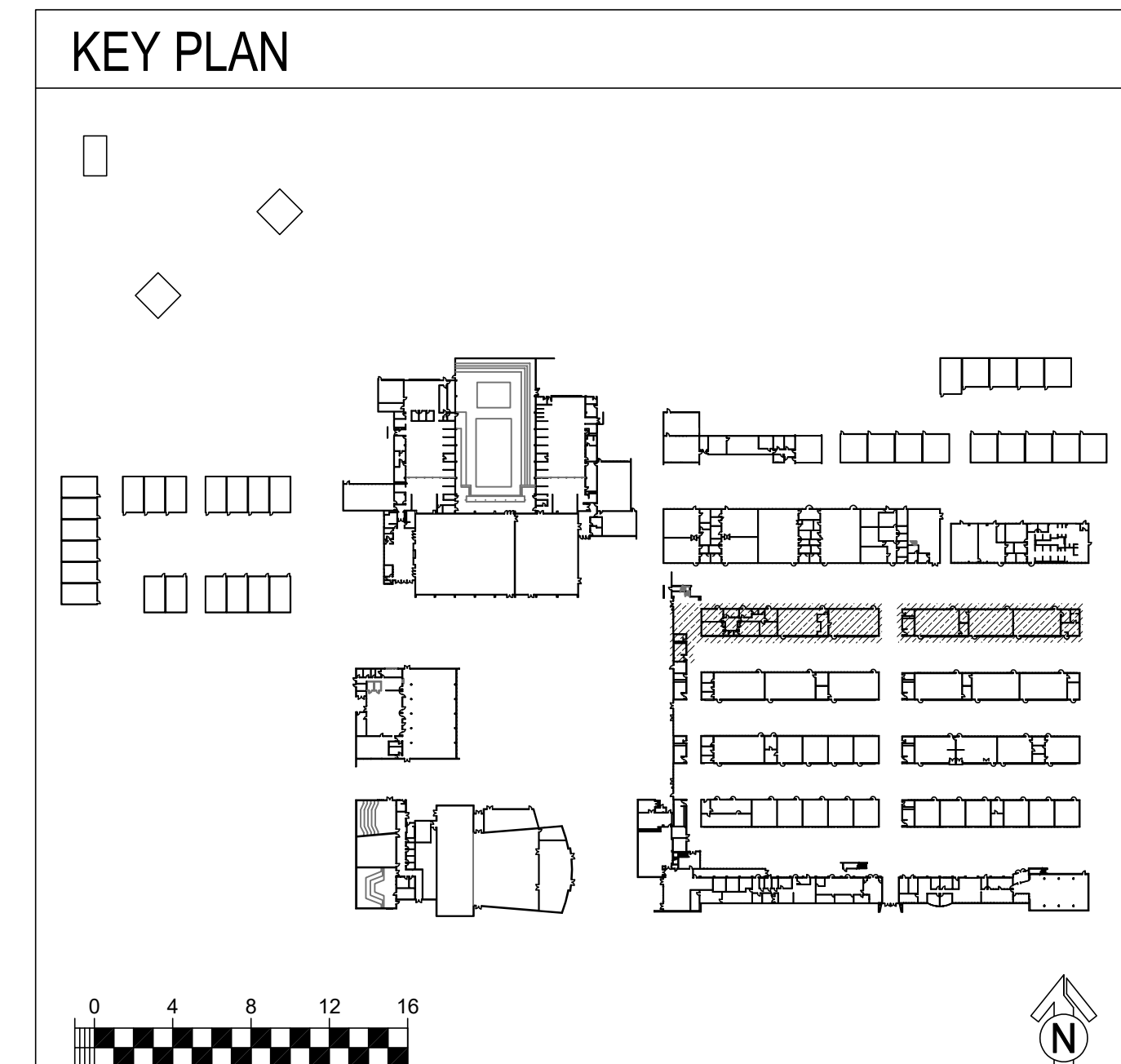
### REVISION

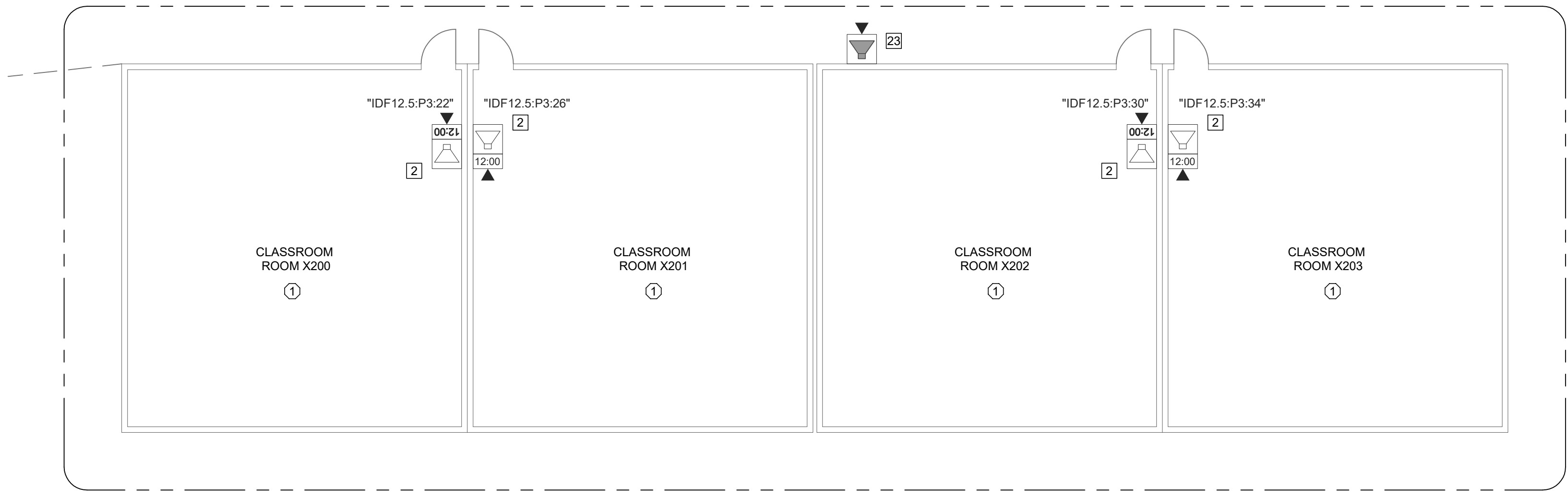
SHEET

**T205**

### KEY PLAN

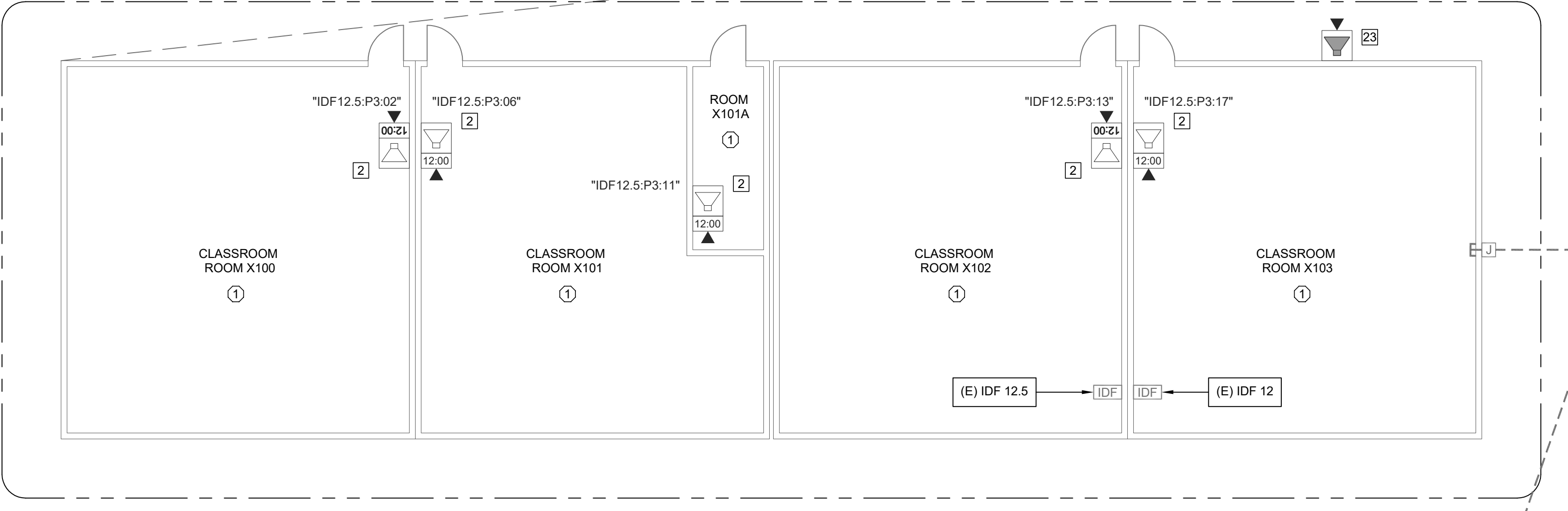






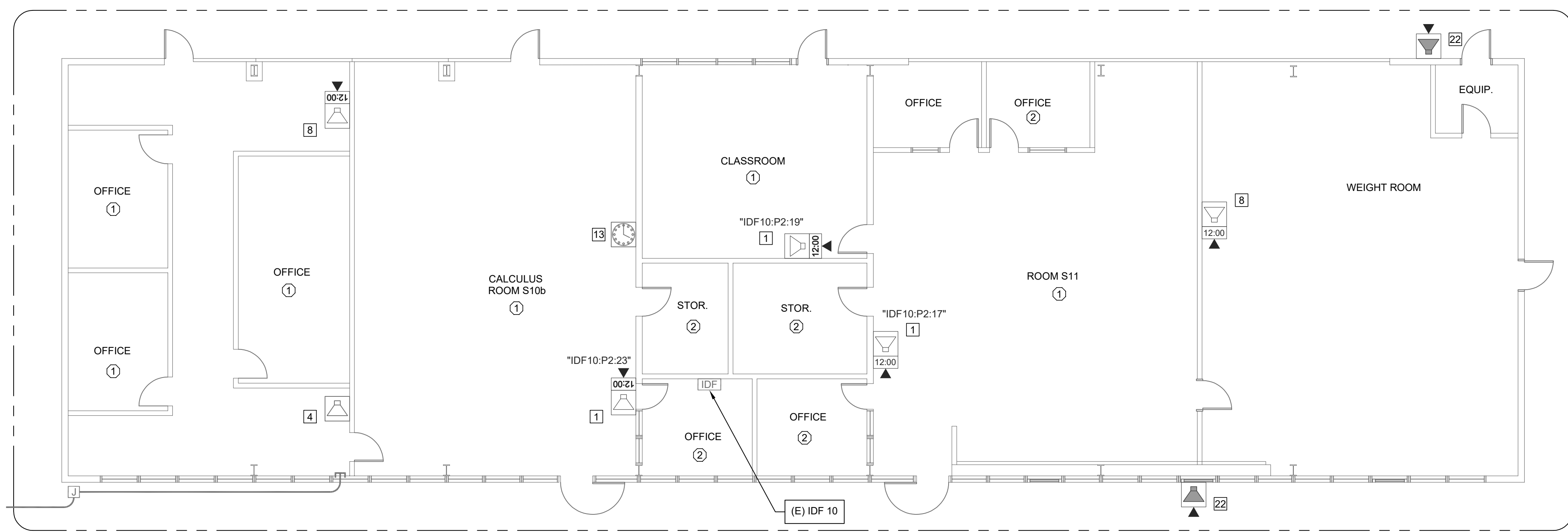
## TECHNOLOGY FLOOR PLANS - IDF 12.5 - SECOND FLOOR

SCALE: 1/8"=1'



## TECHNOLOGY FLOOR PLANS - IDF 12.5 - FIRST FLOOR

SCALE: 1/8"=1'



## TECHNOLOGY FLOOR PLANS - IDF 10

SCALE: 1/8"=1'

### GENERAL NOTES:

- NO STRUCTURAL BEAMS SHALL BE PENETRATED OR ALTERED.
- ALL WIRELESS SYSTEM CLOCKS REMOVED SHALL BE BOXED AND DELIVERED IN GOOD CONDITION TO DISTRICT MAINTENANCE WAREHOUSE.

### CEILING CONDITION CHART:

- DROP IN CEILING TILES.
- HARD LID CEILING.

### SHEET NOTES:

- REMOVE (E) SPEAKER, INSTALL (N) COMBO BOX OVER (E) SPEAKER LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
- REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (E) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING. SEE DETAIL SHEET T800.
- PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
- REMOVE (E) SPEAKER AND BLANK OVER AS REQUIRED.
- REMOVE (E) SPEAKER AND (E) CLOCK, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- REMOVE (E) SPEAKER, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- REMOVE (E) CLOCK, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
- PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (E) COMBO BOX. SEE DETAIL SHEET T800.
- REMOVE (E) SPEAKER AND BACKBOX, PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- REMOVE (E) CLOCK, AND BLANK OVER AS REQUIRED.
- REMOVE (E) SPEAKER, PROVIDE (N) LAY-IN SPEAKER AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- PROVIDE (N) WALL MOUNTED BACK BOX AND (N) 16" IP CLOCK AND (N) PROTECTIVE CAGE. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK BACKBOX.
- REMOVE (E) SPEAKER AND BACKBOX, PROVIDE (N) SPEAKER MOUNTED IN (N) BACKBOX AND (N) CLASSROOM IP MODULE. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO SPEAKER BACKBOX.
- REMOVE (E) CLOCK, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- PROVIDE (N) CONDUIT CLOSELY FOLLOWING ROOF TRUSS. PAINT TO MATCH.
- PROVIDE (N) CONDUIT VERTICAL TRANSITION TO/FROM ATTIC ABOVE THEATRICAL RIGGING GRID.
- PROVIDE (N) CONDUIT ACROSS HIGHEST ATTIC ABOVE THEATRICAL RIGGING GRID.
- ROUTE VIA ACCESSIBLE CRAWL SPACES BEHIND ARCHITECTURE. FISH FROM ACCESSIBLE SPACE TO SPEAKER LOCATION AS NECESSARY. NO CONDUIT OR WIREMOLD SHALL BE VISIBLE FROM SEATING AREA.
- REPLACE (E) EXTERIOR SPEAKER WITH (N) EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- (E) TELECENTER ICS TO BE REMOVED AFTER CUTOVER TO (N) SYSTEM. REMOVE ALL (E) CABLES, 66-BLOCKS, AND CABINET.
- REMOVE (E) TELECENTER ICS INPUT PLATE, PROVIDE (N) TELECENTER U PROGRAM LINE INPUT MODULE AND ONE (1) (N) CAT6A DATA DROP.
- (N) 1 EA. 1" GRC/EMT.
- RELOCATE (E) DATA DROP NOTED TO NEW LOCATION.
- (N) 1 EA. 2" GRC/EMT.
- REPLACE (E) OR PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. CABLE TO ZONE PAGE AMP IN NEAREST IDF.



KMM SERVICES, INC  
TECHNOLOGY & FIRE LIFE SAFETY

5433 El Camino Ave. Suite 5  
Carmichael, CA 95608  
Office: (916) 359-4000 www.kmmservices.com



RONNY KAGEFROM  
Signature  
EXP. 12/31/24  
Regis. No. 163629

Copyright © 2023

These drawings and specifications and the ideas, designs and arrangements represented thereby are and shall remain the property of KMM Services, Inc. and no part thereof shall be copied, disclosed to others, or used in connection with any other work or project other than the specific project for which they have been prepared and developed without the written consent of KMM Services, Inc. Visual contact with these drawings or specifications shall constitute conclusive evidence of these restrictions.

IF DRAWING IS NOT 30"x42" IT IS A REDUCED PRINT

### SHEET REVISIONS

DELTA	DESCRIPTION	DATE

### SITE KEY PLAN

PROJECT  
SACRAMENTO CITY USD  
HIRAM JOHNSON HS  
TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.  
SACRAMENTO, CA. 95820

SHEET TITLE  
TECHNOLOGY  
FLOOR PLANS  
- IDF 10 AND 12 - FIRST  
AND SECOND FLOORS

DRAWING STATUS  
CONSTRUCTION DOCUMENTS

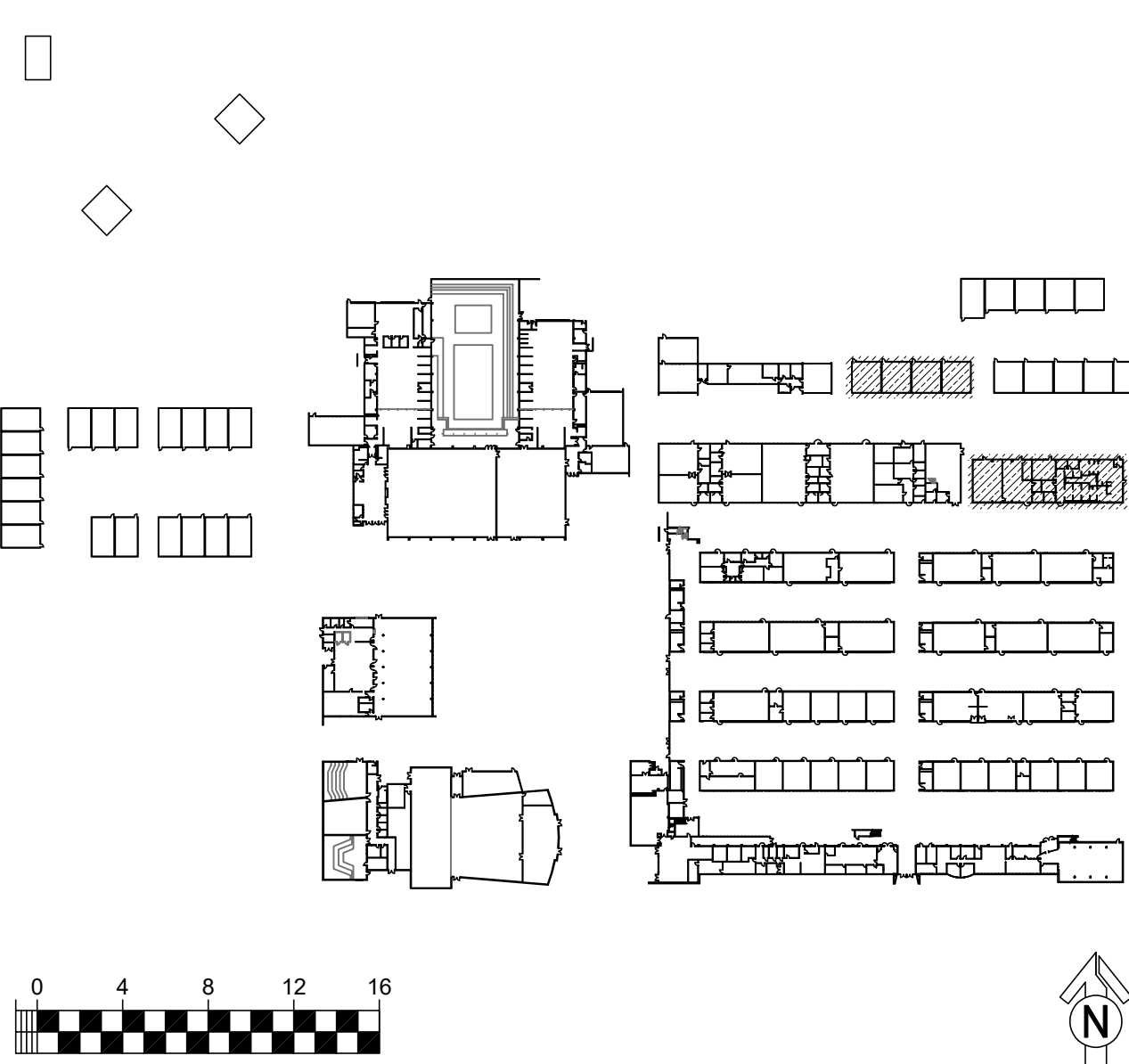
PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-31

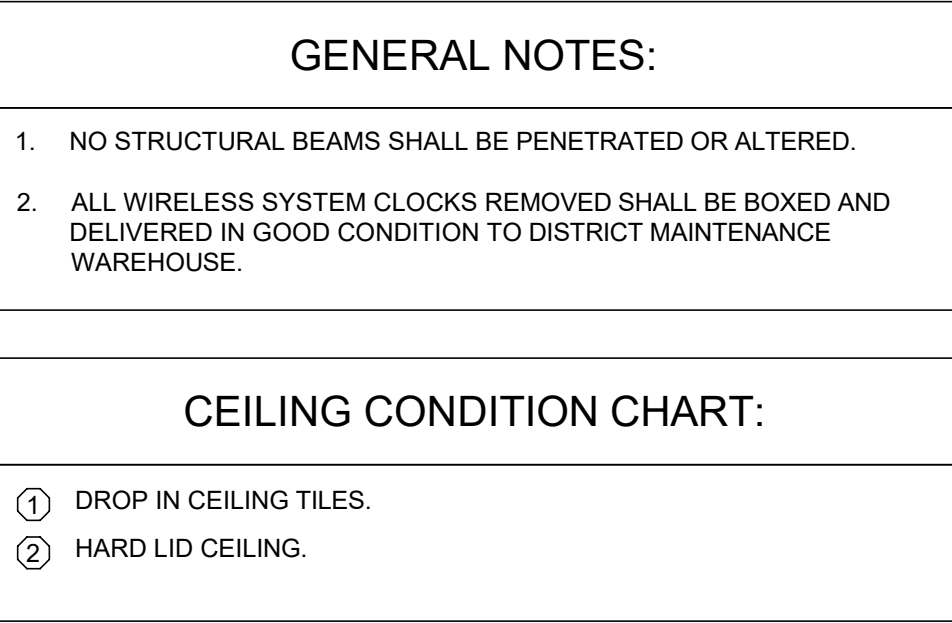
REVISION

SHEET

T207

### KEY PLAN



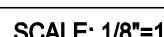


- ## SHEET NOTES:
- 1 REMOVE (E) SPEAKER. INSTALL (N) COMBO BOX OVER (E) SPEAKER LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING INTO (N) CUT IN BOX BEHIND (N) COMBO BOX.
  - 2 REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (E) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING, SEE DETAIL SHEET T800.
  - 3 PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/SPEAKER COMBO BOX. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
  - 4 REMOVE (E) SPEAKER AND BLANK OVER AS REQUIRED.
  - 5 REMOVE (E) SPEAKER AND (E) CLOCK. INSTALL (N) COMBO BOX AT (E) SPEAKER LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX. REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
  - 6 REMOVE (E) SPEAKER, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
  - 7 REMOVE (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
  - 8 PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/SPEAKER COMBO BOX. PROVIDE (N) SPEAKER WITH (N) SURFACE BACKBOX. PROVIDE (N) CAT6A DATA DROP, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
  - 9 PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/SPEAKER COMBO BOX. REMOVE (E) WIREMOLD DUPLEX BOX. REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
  - 10 REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. PROVIDE (N) 1" NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (E) COMBO BOX. SEE DETAIL SHEET T800.
  - 11 REMOVE (E) SPEAKER AND BACKBOX. PROVIDE (N) SPEAKER WITH (N) SURFACE BACKBOX. PROVIDE (N) CAT6A DATA DROP. PROVIDE ONE (1) (N) CAT6A DATA DROP.
  - 12 PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
  - 13 REMOVE (E) CLOCK, AND BLANK OVER AS REQUIRED.
  - 14 REMOVE (E) SPEAKER. PROVIDE (N) LAV-IN SPEAKER AND (N) CLASSROOM IP MODULE. PROVIDE (N) CAT6A DATA DROP. OUSE WITH (N) SPEAKER.
  - 15 PROVIDE (N) WALL MOUNTED BACK BOX AND (N) 16" IP CLOCK AND (N) PROTECTIVE CASE. REMOVE (E) WIREMOLD DUPLEX BOX. REWORK (E) DATA DROP INTO CLOCK BACKBOX.
  - 16 REMOVE (E) SPEAKER AND BACKBOX. PROVIDE (N) SPEAKER WITH (N) BACKBOX. PROVIDE (N) CLASSROOM IP MODULE AND (N) IP CLOCK MOUNTED IN (N) BACKBOX. PROVIDE (N) CAT6A DATA DROP. REMOVE (E) WIREMOLD DUPLEX BOX. REWORK (E) DATA DROP INTO SPEAKER BACKBOX.
  - 17 REMOVE (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. PROVIDE ONE (1) (N) CAT6A DATA DROP.
  - 18 PROVIDE (N) CONDUIT CLOSELY FOLLOWING ROOF TRUSS. PAINT TO MATCH.
  - 19 PROVIDE (N) CONDUIT VERTICAL TRANSITION TO/FROM ATTIC ABOVE THEATRICAL RIGGING GRID.
  - 20 PROVIDE (N) CONDUIT ACROSS HIGHEST ATTIC ABOVE THEATRICAL RIGGING GRID.
  - 21 ROUTE VIA ACCESSIBLE CRAWL SPACES BEHIND ARCHITECTURE. FISH FROM ACCESSIBLE SPACE TO SPEAKER LOCATION. IF NECESSARY, NO CONDUIT OR WIREMOLD SHALL BE VISIBLE FROM SEATING AREA.
  - 22 REPLACE (E) EXTERIOR SPEAKER WITH (N) EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) CAT6A DATA DROP. OUSE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
  - 23 PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERCOM SYSTEM AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
  - 24 (E) TELECENTER ICS TO BE REMOVED AFTER CUTOVER TO (N) SYSTEM. REMOVE ALL (E) CABLES, 66-BLOCKS, AND CABINET.
  - 25 REMOVE (E) TELECENTER ICS INPUT PLATE. PROVIDE (N) TELECENTER U PROGRAM LINE INPUT MODULE AND ONE (1) (N) CAT6A DATA DROP.
  - 26 (N) 1 EA, 1" GROMMET
  - 27 RELOCATE (E) DATA DROP NOTED TO NEW LOCATION.
  - 28 (N) 1 EA, 2" GROMMET
  - 29 REPLACE (E) OR PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. CABLE TO ZONE PAGE AMP IN NEAREST IDF.

SCALE: 1/8"=1'



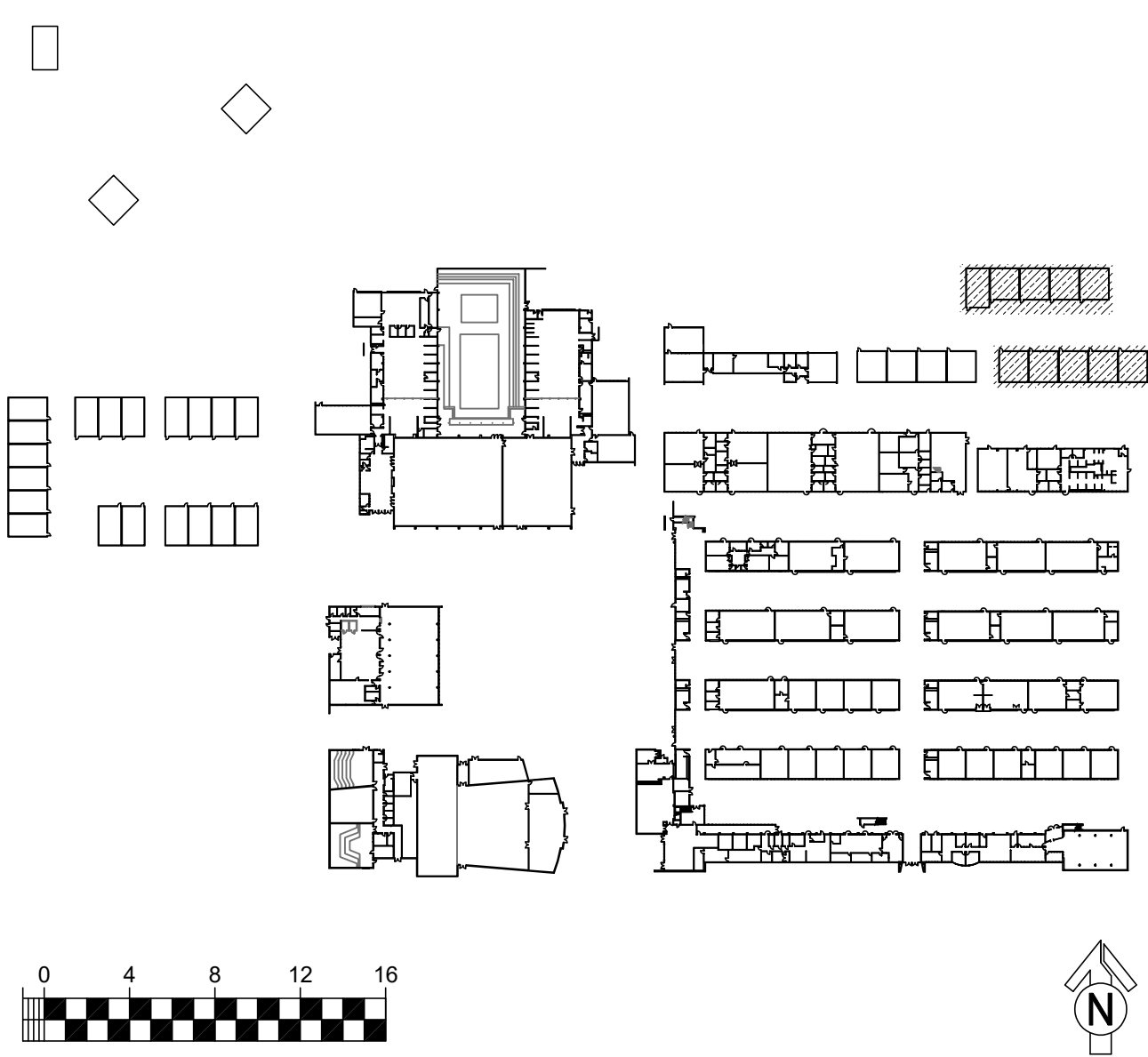
SCALE: 1/8"=1'



SCALE: 1/8"=1'



SCALE: 1/8"=1'



KMM SERVICES, INC  
TECHNOLOGY & FIRE LIFE SAFETY

5433 El Camino Ave. Suite 5  
Carmichael, CA 95608  
Office: (916) 359-4000 [www.kmmservices.com](http://www.kmmservices.com)



Copyright © 2023

These drawings and specifications and the ideas, designs and arrangements represented thereby are and shall remain the property of KMM Services, Inc. and no part thereof shall be copied, disclosed to others, or used in connection with any other work or project other than the specific project for which they have been prepared and developed without the written consent of KMM Services, Inc. Visual contact with these drawings or specifications shall constitute conclusive evidence of these restrictions.

IF DRAWING IS NOT 30"X42" IT IS A REDUCED PRINT

#### SHEET REVISIONS

[illegible]

### SITE KEY PLAN

PROJECT  
SACRAMENTO CITY USD  
HIRAM JOHNSON HS  
TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.  
SACRAMENTO, CA. 95820

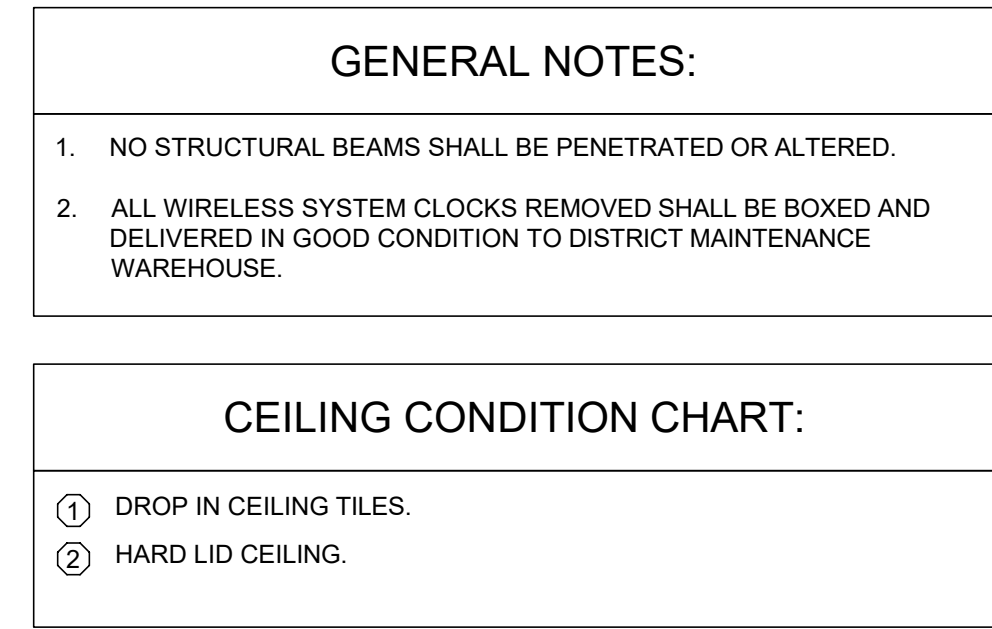
SHEET TITLE  
TECHNOLOGY  
FLOOR PLANS  
- IDF 13 AND 14 - FIRST  
AND SECOND FLOORS

DRAWING STATUS

CONSTRUCTION DOCUMENTS

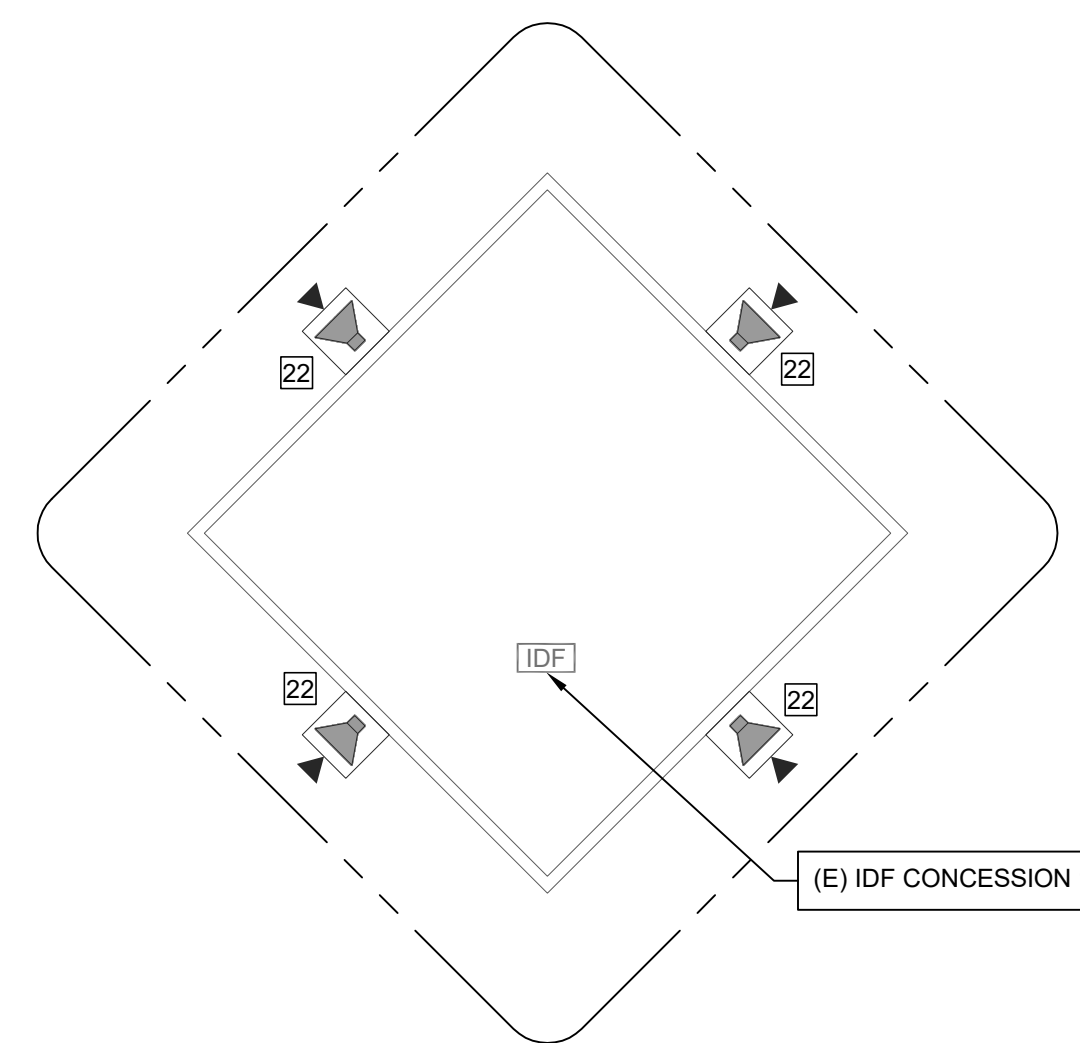
PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-31
REVISION	

SHEET **T208**



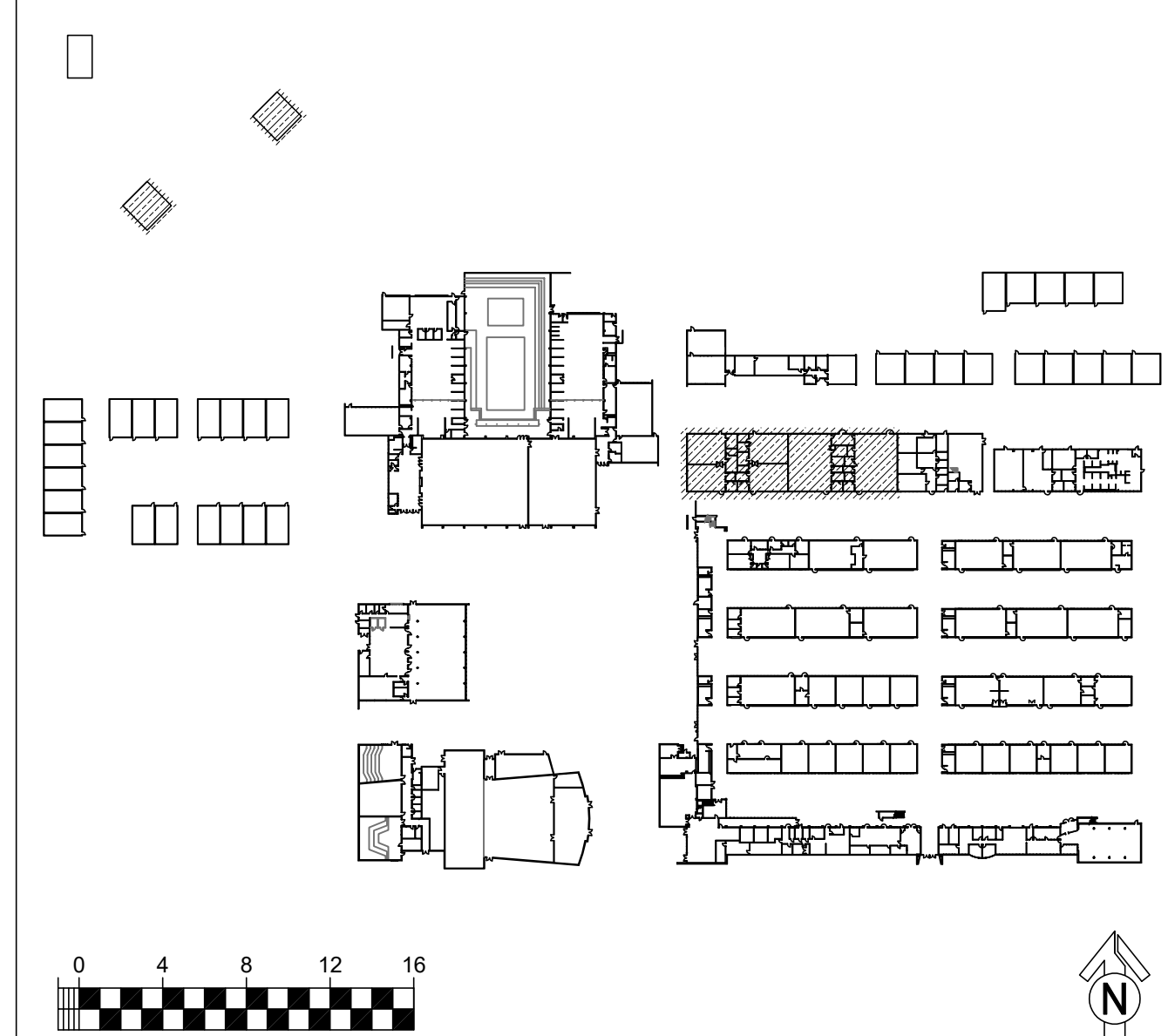
- ## SHEET NOTES:
- 1 REMOVE (E) SPEAKER, INSTALL (N) COMBO BOX OVER (E) SPEAKER LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
  - 2 REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (E) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING. SEE DETAIL SHEET T800.
  - 3 PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
  - 4 REMOVE (E) SPEAKER AND BLANK OVER AS REQUIRED.
  - 5 REMOVE (E) SPEAKER AND (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREDMLO DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
  - 6 REMOVE (E) SPEAKER, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREDMLO DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
  - 7 REMOVE (E) CLOCK, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREDMLO DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
  - 8 PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. PROVIDE (1) (N) NEW CAT6A DATA DROP FROM (E) DATA DROP ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
  - 9 PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. REMOVE (E) WIREDMLO DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
  - 10 REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. PROVIDE (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (E) COMBO BOX. SEE DETAIL SHEET T800.
  - 11 REMOVE (E) SPEAKER AND BACKBOX. PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
  - 12 PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
  - 13 REMOVE (E) CLOCK, AND BLANK OVER AS REQUIRED.
  - 14 REMOVE (E) SPEAKER, PROVIDE (N) LAY-IN SPEAKER AND (N) CLASSROOM IP MODULE. PROVIDE (N) CAT6A DATA DROP. PROVIDE (N) WALL MOUNTED BACK BOX AND (N) 16" IP CLOCK AND (N) PROTECTIVE CASE. REMOVE (E) WIREDMLO DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK BACKBOX.
  - 15 REMOVE (E) SPEAKER AND BACKBOX. PROVIDE (N) SPEAKER MOUNTED IN (N) BACKBOX AND (N) CLASSROOM IP MODULE. REMOVE (E) WIREDMLO DUPLEX BOX, REWORK (E) DATA DROP INTO SPEAKER BACKBOX.
  - 17 REMOVE (E) CLOCK, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) DATA DROP INTO (N) CAT6A DATA DROP.
  - 18 PROVIDE (N) CONDUIT CLOSELY FOLLOWING ROOF TRUSS. PAINT TO MATCH.
  - 19 PROVIDE (N) CONDUIT VERTICAL TRANSITION TO/FROM ATTIC ABOVE THEATRICAL RIGGING GRID.
  - 20 PROVIDE (N) CONDUIT ACROSS HIGHEST ATTIC ABOVE THEATRICAL RIGGING GRID.
  - 21 ROUTE VIA ACCESSIBLE CRAWLSPACES BEHIND ARCHITECTURE. FISH FROM ACCESSIBLE SPACE TO SEATING LOCATION AS NECESSARY. NO CONDUIT OR WIREDMLO SHALL BE VISIBLE FROM SEATING AREA.
  - 22 REPLACE (E) EXTERIOR SPEAKER WITH (N) EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM COMB. MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
  - 23 PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM COMB. MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
  - 24 (E) TELECENTER ICS TO BE REMOVED AFTER CUTOVER TO (N) SYSTEM. REMOVE ALL (E) CABLES, 66-BLOCKS, AND CABINET.
  - 25 REMOVE (E) TELECENTER ICS INPUT PLATE. PROVIDE (N) TELECENTER U PROGRAM LINE INPUT MODULE AND ONE (1) (N) CAT6A DATA DROP.
  - 26 1 EA " 1" GRCIMET.
  - 27 RELOCATE (E) DATA DROP NOTED TO NEW LOCATION.
  - 28 1 EA " 2" GRCIMET.
  - 29 REPLACE (E) OR PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. CABLE TO ZONE PAGE AMP IN NEAREST IDF.


SCALE: 1/8"=1'



SCALE: 1/8"=1'

SCALE: 1/8"=1'



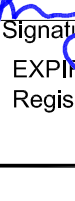


KMM SERVICES, INC.

TECHNOLOGY&FIRE LIFE SAFETY

5433 El Camino Ave. Suite 5  
Carmichael, CA 95608  
Office: (916) 339-4000    www.kmmsservices.com

REGISTERED COMMUNICATIONS  
DISTRIBUTION DESIGNER



DANNY KAGE ROM  
Signature  
EXPIRES 12/31/24  
Regis. No.163629

Copyright © 2023  
These drawings and specifications and the ideas, designs and  
arrangements represented hereby are and shall remain the property  
of KMM Services, Inc. and no part thereof shall be copied, disclosed  
to others, or used in connection with any other work or project other  
than the specific project for which they have been prepared and  
developed without the written consent of KMM Services, Inc. Visual  
contact with these drawings or specifications shall constitute  
conclusive evidence of these restrictions.

IF DRAWING IS NOT 30"x42" IT IS A REDUCED PRINT

SHEET REVISIONS

DELTA	DESCRIPTION	DATE

SITE KEY PLAN

PROJECT  
SACRAMENTO CITY USD  
HIRAM JOHNSON HS  
TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.  
SACRAMENTO, CA. 95820

SHEET TITLE  
TECHNOLOGY  
FLOOR PLANS  
- IDF 17 AND  
CONCESSION 1 AND 2

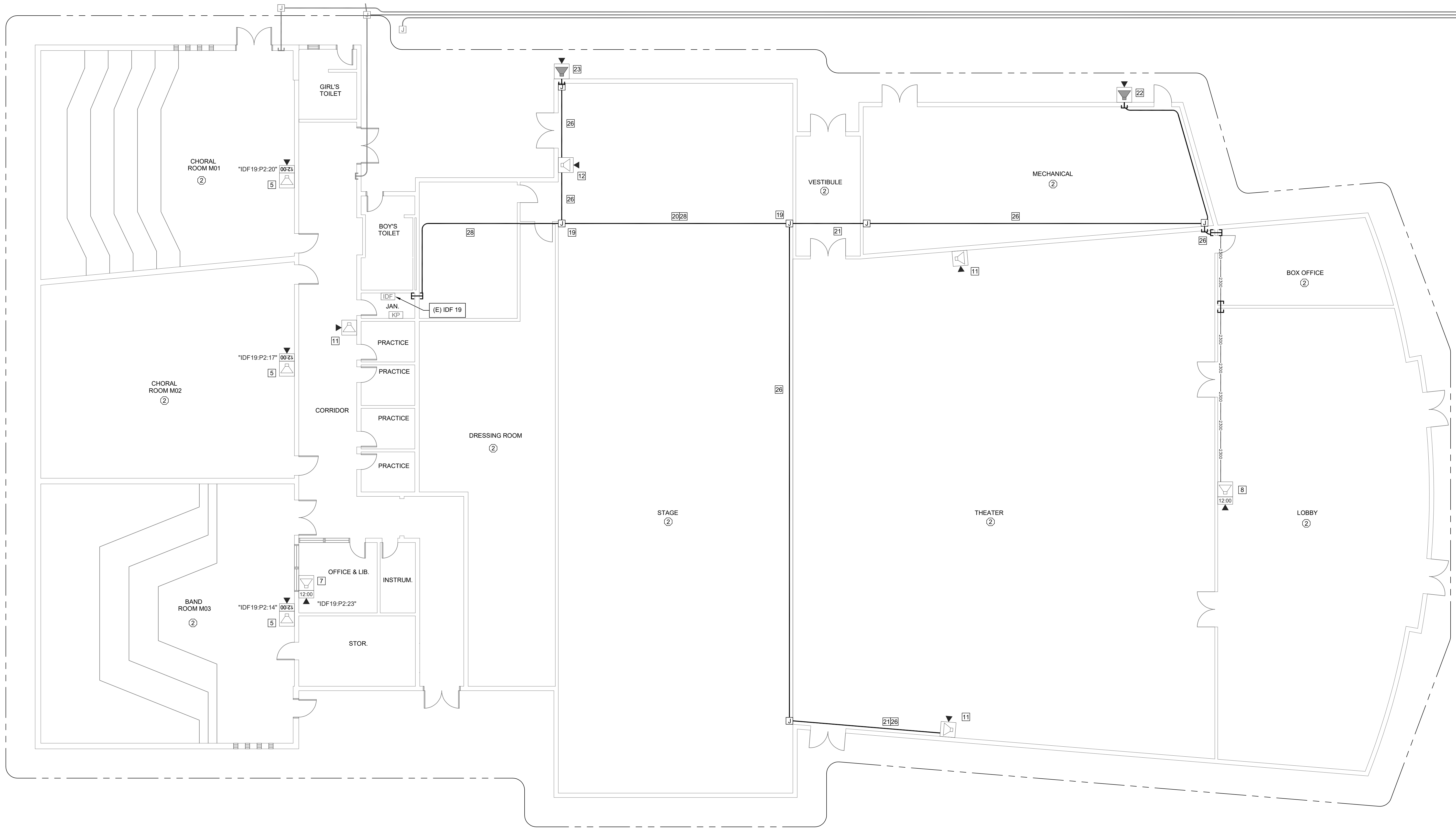
DRAWING STATUS  
CONSTRUCTION DOCUMENTS

PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-31
REVISION	

SHEET  
T209







## TECHNOLOGY FLOOR PLANS - IDF 19 - THEATER

SCALE: 1/8"=1'

### GENERAL NOTES:

- NO STRUCTURAL BEAMS SHALL BE PENETRATED OR ALTERED.
- ALL WIRELESS SYSTEM CLOCKS REMOVED SHALL BE BOXED AND DELIVERED IN GOOD CONDITION TO DISTRICT MAINTENANCE WAREHOUSE.

### CEILING CONDITION CHART:

- DROP IN CEILING TILES.
- HARD LID CEILING.

### SHEET NOTES (CONT.):

- REMOVE (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- PROVIDE (N) CONDUIT CLOSELY FOLLOWING ROOF TRUSS. PAINT TO MATCH.
- PROVIDE (N) CONDUIT VERTICAL TRANSITION TO/FROM ATTIC ABOVE THEATRICAL RIGGING GRID.
- PROVIDE (N) CONDUIT ACROSS HIGHEST ATTIC ABOVE THEATRICAL RIGGING GRID.
- ROUTE VIA ACCESSIBLE CRAWLSPACES BEHIND ARCHITECTURE. FISH FROM ACCESSIBLE SPACE TO SPEAKER LOCATION AS NECESSARY. NO CONDUIT OR WIREMOLD SHALL BE VISIBLE FROM SEATING AREA.
- REPLACE (E) EXTERIOR SPEAKER WITH (N) EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- (E) TELECENTER ICS TO BE REMOVED AFTER CUTOVER TO (N) SYSTEM. REMOVE ALL (E) CABLES, 66-BLOCKS, AND CABINET.
- REMOVE (E) TELECENTER ICS INPUT PLATE. PROVIDE (N) TELECENTER U PROGRAM LINE INPUT MODULE AND ONE (1) (N) CAT6A DATA DROP.
- (N) 1 EA. 1" GRCIEMT.
- RELOCATE (E) DATA DROP NOTED TO NEW LOCATION.
- (N) 1 EA. 2" GRCIEMT.
- REPLACE (E) OR PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. CABLE TO ZONE PAGE AMP IN NEAREST IDF.

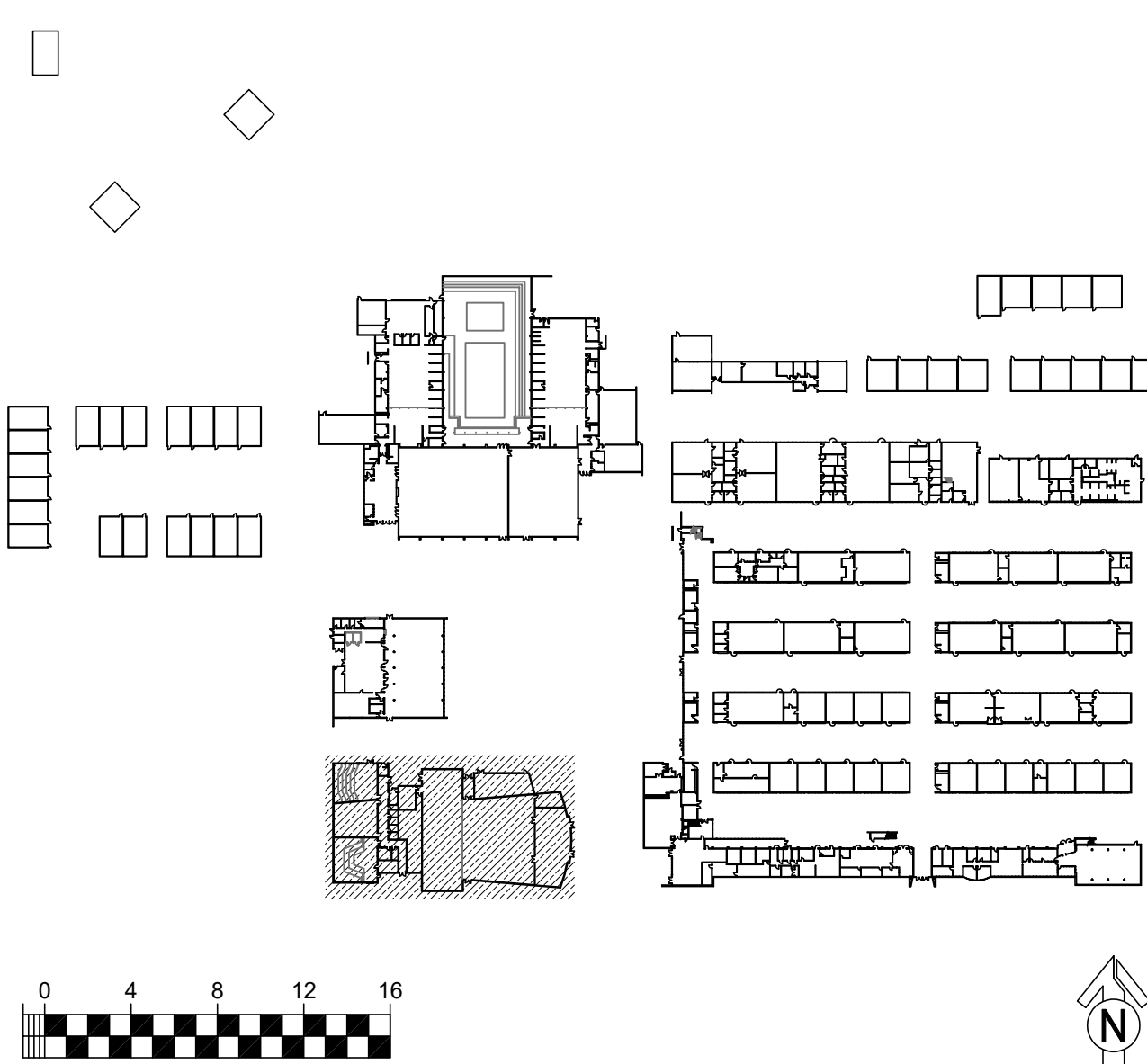
### SHEET NOTES (CONT.):

- PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR AND FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
- PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. REMOVE (E) WIREMOLD DUPLEX BOX. REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR. FISH FROM CEILING TO (E) COMBO BOX. SEE DETAIL SHEET T800.
- REMOVE (E) SPEAKER AND BACKBOX. PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- REMOVE (E) CLOCK. PROVIDE (N) LAY-IN SPEAKER AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
- PROVIDE (N) WALL MOUNTED BACK BOX AND (N) 16" IP CLOCK AND (N) PROTECTIVE CAGE. REMOVE (E) WIREMOLD DUPLEX BOX. REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- REMOVE (E) SPEAKER AND BACKBOX. PROVIDE (N) SPEAKER MOUNTED IN (N) BACKBOX AND (N) CLASSROOM IP MODULE. REMOVE (E) WIREMOLD DUPLEX BOX. REWORK (E) DATA DROP INTO SPEAKER BACKBOX.

### SHEET NOTES:

- REMOVE (E) SPEAKER. INSTALL (N) COMBO BOX OVER (E) SPEAKER LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR. FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
- REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR. FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
- PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR. FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
- REMOVE (E) SPEAKER AND BLANK OVER AS REQUIRED.
- REMOVE (E) SPEAKER AND (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX. REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- REMOVE (E) SPEAKER. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX. REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
- REMOVE (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX. REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.

### KEY PLAN



KMM SERVICES, INC  
TECHNOLOGY & FIRE LIFE SAFETY

5433 El Camino Ave. Suite 5  
Carmichael, CA 95608  
Office: (916) 359-4000 www.kmm-services.com



Copyright © 2023

These drawings and specifications and the ideas, designs and arrangements represented thereby are and shall remain the property of KMM Services, Inc. and no part thereof shall be copied, disclosed to others, or used in connection with any other work or project other than the specific project for which they have been prepared and developed without the written consent of KMM Services, Inc. Visual contact with these drawings or specifications shall constitute conclusive evidence of these restrictions.

IF DRAWING IS NOT 30"X42" IT IS A REDUCED PRINT

### SHEET REVISIONS

DELTA	DESCRIPTION	DATE

### SITE KEY PLAN

PROJECT  
SACRAMENTO CITY USD  
HIRAM JOHNSON HS  
TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.  
SACRAMENTO, CA. 95820

### SHEET TITLE

TECHNOLOGY  
FLOOR PLANS  
- IDF 19  
- THEATER

### DRAWING STATUS

### CONSTRUCTION DOCUMENTS

PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-31

REVISION

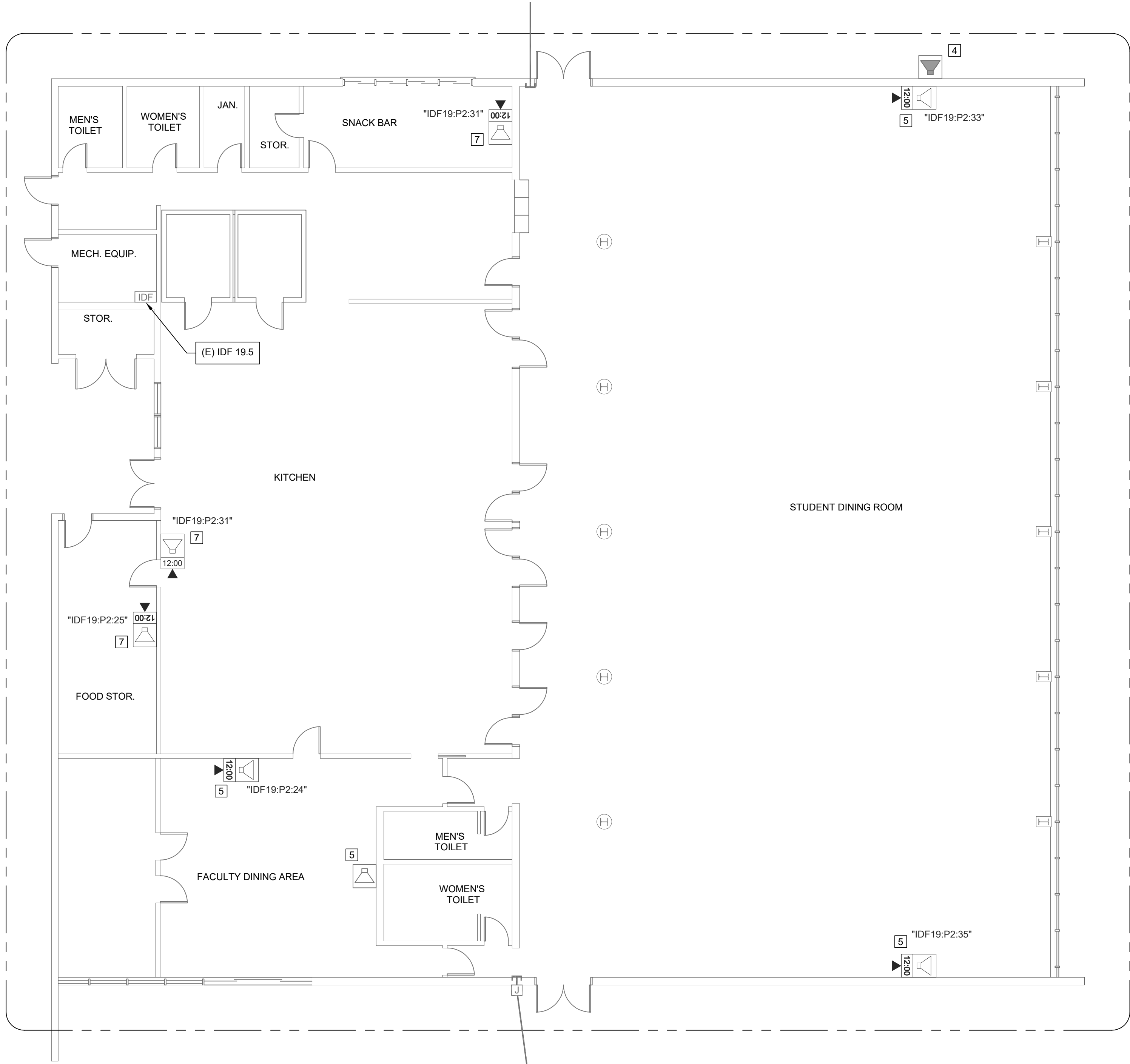
SHEET

T212

GENERAL NOTES:
1. NO STRUCTURAL BEAMS SHALL BE PENETRATED OR ALTERED.
2. ALL WIRELESS SYSTEM CLOCKS REMOVED SHALL BE BOXED AND DELIVERED IN GOOD CONDITION TO DISTRICT MAINTENANCE WAREHOUSE.

CEILING CONDITION CHART:
① DROP IN CEILING TILES.
② HARD LID CEILING.

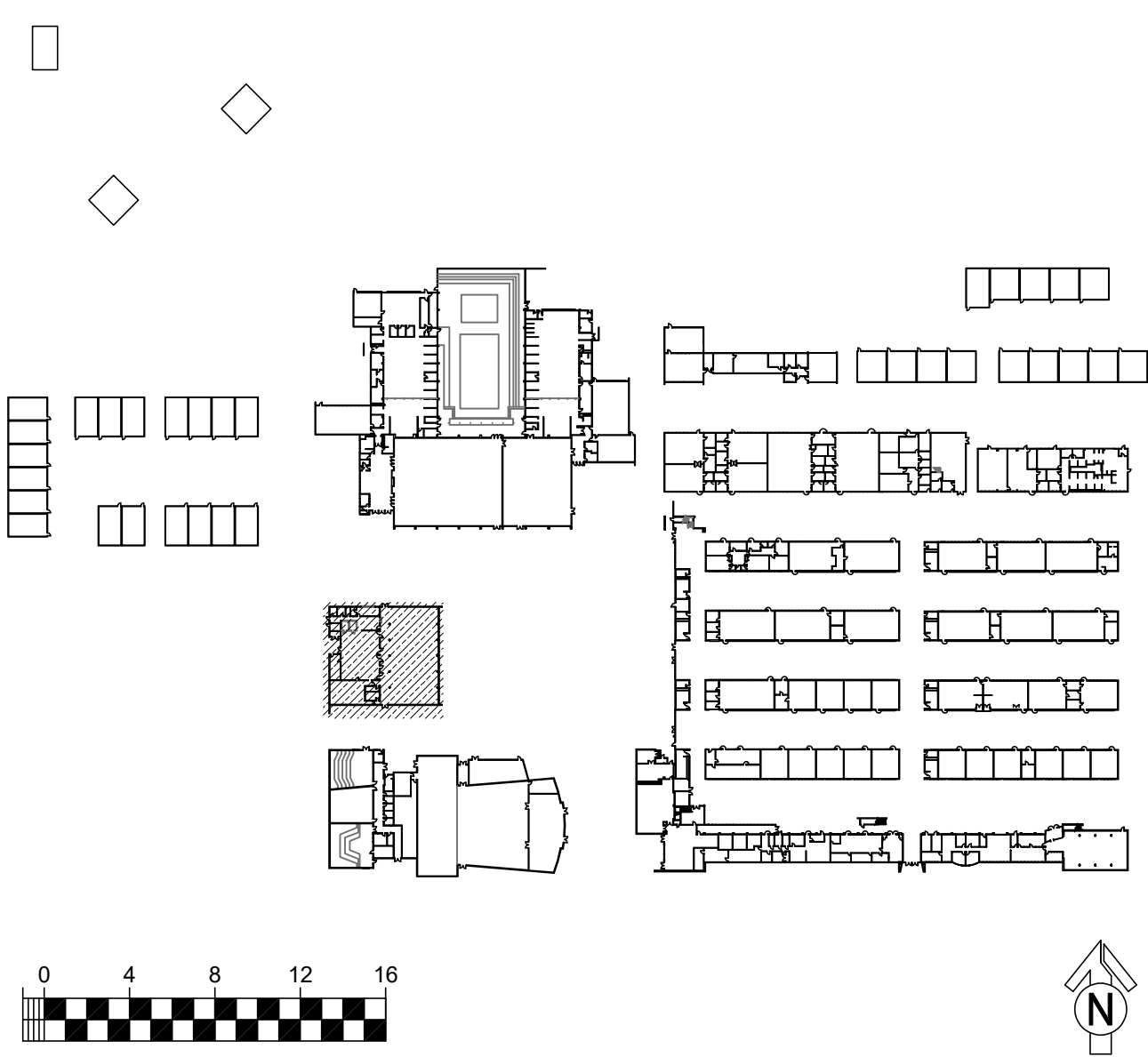
SHEET NOTES:
① REMOVE (E) SPEAKER. INSTALL (N) COMBO BOX OVER (E) SPEAKER LOCATION WITH (N) SPEAKER. (N) CLASSROOM IP MODULE. AND (N) CLOCK. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
② REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (E) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING. SEE DETAIL SHEET T800.
③ PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
④ REMOVE (E) SPEAKER AND BLANK OVER AS REQUIRED.
⑤ REMOVE (E) SPEAKER AND (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER. (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
⑥ REMOVE (E) SPEAKER. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER. (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
⑦ REMOVE (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER. (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
⑧ PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.
⑨ PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.
⑩ REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (E) COMBO BOX. SEE DETAIL SHEET T800.
⑪ REMOVE (E) SPEAKER AND BACKBOX, PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
⑫ PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
⑬ REMOVE (E) CLOCK, AND BLANK OVER AS REQUIRED.
⑭ REMOVE (E) SPEAKER, PROVIDE (N) LAY-IN SPEAKER AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
⑮ PROVIDE (N) WALL MOUNTED BACK BOX AND (N) 16" IP CLOCK AND (N) PROTECTIVE CAGE. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK BACKBOX.
⑯ REMOVE (E) SPEAKER AND BACKBOX, PROVIDE (N) SPEAKER MOUNTED IN (N) BACKBOX AND (N) CLASSROOM IP MODULE. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO SPEAKER BACKBOX.
⑰ REMOVE (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER. (N) CLASSROOM IP MODULE, AND (N) CLOCK. PROVIDE ONE (1) (N) CAT6A DATA DROP.
⑱ PROVIDE (N) CONDUIT CLOSELY FOLLOWING ROOF TRUSS. PAINT TO MATCH.
⑲ PROVIDE (N) CONDUIT VERTICAL TRANSITION TO/FROM ATTIC ABOVE THEATRICAL RIGGING GRID.
⑳ PROVIDE (N) CONDUIT ACROSS HIGHEST ATTIC ABOVE THEATRICAL RIGGING GRID.
㉑ ROUTE VIA ACCESSIBLE CRAWLSPACES BEHIND ARCHITECTURE. FISH FROM ACCESSIBLE SPACE TO SPEAKER LOCATION AS NECESSARY. NO CONDUIT OR WIREMOLD SHALL BE VISIBLE FROM SEATING AREA.
㉒ REPLACE (E) EXTERIOR SPEAKER WITH (N) EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
㉓ PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.
㉔ (E) TELECENTER ICS TO BE REMOVED AFTER CUTOVER TO (N) SYSTEM. REMOVE ALL (E) CABLES, 66-BLOCKS, AND CABINET.
㉕ REMOVE (E) TELECENTER ICS INPUT PLATE, PROVIDE (N) TELECENTER U PROGRAM LINE INPUT MODULE AND ONE (1) (N) CAT6A DATA DROP.
㉖ (N) 1 EA. 1" GRC/EMT.
㉗ RELOCATE (E) DATA DROP NOTED TO NEW LOCATION.
㉘ (N) 1 EA. 2" GRC/EMT.
㉙ REPLACE (E) OR PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. CABLE TO ZONE PAGE AMP IN NEAREST IDF.



TECHNOLOGY FLOOR PLANS - IDF 19 - CAFETERIA

SCALE: 1/8"=1'

KEY PLAN





**KMM SERVICES, INC**  
TECHNOLOGY & FIRE LIFE SAFETY

5433 El Camino Ave. Suite 5  
Carmichael, CA 95608  
Office: (916) 359-4000    www.kmmservices.com



REGISTERED COMMUNICATIONS  
DISTRIBUTION DESIGNER  
BICSI

RONNY KAGEFROM  
Signature  
EXP. 12/31/24  
Regis. No. 163629

Copyright © 2023

These drawings and specifications and the ideas, designs and arrangements represented thereby are and shall remain the property of KMM Services, Inc. and no part thereof shall be copied, disclosed to others, or used in connection with any other work or project other than the specific project for which they have been prepared and developed without the written consent of KMM Services, Inc. Visual contact with these drawings or specifications shall constitute conclusive evidence of these restrictions.

IF DRAWING IS NOT 30"x42" IT IS A REDUCED PRINT

SHEET REVISIONS		
DELTA	DESCRIPTION	DATE

SITE KEY PLAN

PROJECT  
**SACRAMENTO CITY USD  
HIRAM JOHNSON HS**

TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.  
SACRAMENTO, CA. 95820

SHEET TITLE  
**TECHNOLOGY  
FLOOR PLANS  
- IDF 19  
- CAFETERIA**

DRAWING STATUS	
CONSTRUCTION DOCUMENTS	
PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-31

REVISION

SHEET **T213**



1. NO STRUCTURAL BEAMS SHALL BE PENETRATED OR ALTERED.
2. ALL WIRELESS SYSTEM CLOCKS REMOVED SHALL BE BOXED AND DELIVERED IN GOOD CONDITION TO DISTRICT MAINTENANCE WAREHOUSE.

- ① DROP IN CEILING TILES.
- ② HARD LID CEILING.

**1** REMOVE (E) SPEAKER, INSTALL (N) COMBO BOX OVER (E) SPEAKER LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.

3 PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.

6 REMOVE (E) SPEAKER, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.

8 PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.

PROVIDE (N) SPEAKER WITH (N) CLASSROOM IF MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (E) COMBO BOX. SEE DETAIL SHEET T800.

13 REMOVE (E) CLOCK, AND BLANK OVER AS REQUIRED.

14 REMOVE (E) SPEAKER, PROVIDE (N) LAY-IN SPEAKER AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.

17 REMOVE (E) CLOCK, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK.

20 PROVIDE (N) CONDUIT ACROSS HIGHEST ATTIC ABOVE THEATRICAL RIGGING GRID.

21 ROUTE VIA ACCESSIBLE CRAWLSPACES BEHIND ARCHITECTURE.

23. PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.

26 (N) 1 EA. 1\* GRC/EMT.

29 REPLACE (E) OR PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. CABLE TO ZONE PAGE AMP IN NEAREST IDF.

---

---

LAN

Architectural drawings showing a section and elevation of the building facade. The section on the left shows a multi-story structure with a flat roof and internal divisions. The elevation on the right shows a facade with a series of windows and a central entrance area. The drawings are labeled with dimensions and structural details.

**KMM SERVICES, INC**  
TECHNOLOGY & FIRE LIFE SAFETY

433 El Camino Ave. Suite 5  
 Armichael, CA 95608  
 Office: (916) 359-4000 [www.kmmsservices.com](http://www.kmmsservices.com)



Copyright © 2023

These drawings and specifications and the ideas, designs and arrangements represented thereby are and shall remain the property of KMM Services, Inc. and no part thereof shall be copied disclosed to others, or used in connection with any other work or project other than the specific project for which they have been prepared and developed without the written consent of KMM Services, Inc. Visual contact with these drawings or specifications shall constitute conclusive evidence of these restrictions.

F DRAWING IS NOT 30"X42" IT IS A REDUCED PRINT

## SHEET REVISIONS

[illegible]

## SITE KEY PLAN

PROJECT  
SACRAMENTO CITY USD  
HIRAM JOHNSON HS  
TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.  
SACRAMENTO, CA. 95820

SHEET TITLE  
TECHNOLOGY  
FLOOR PLANS  
- IDF 22

DRAWING STATUS

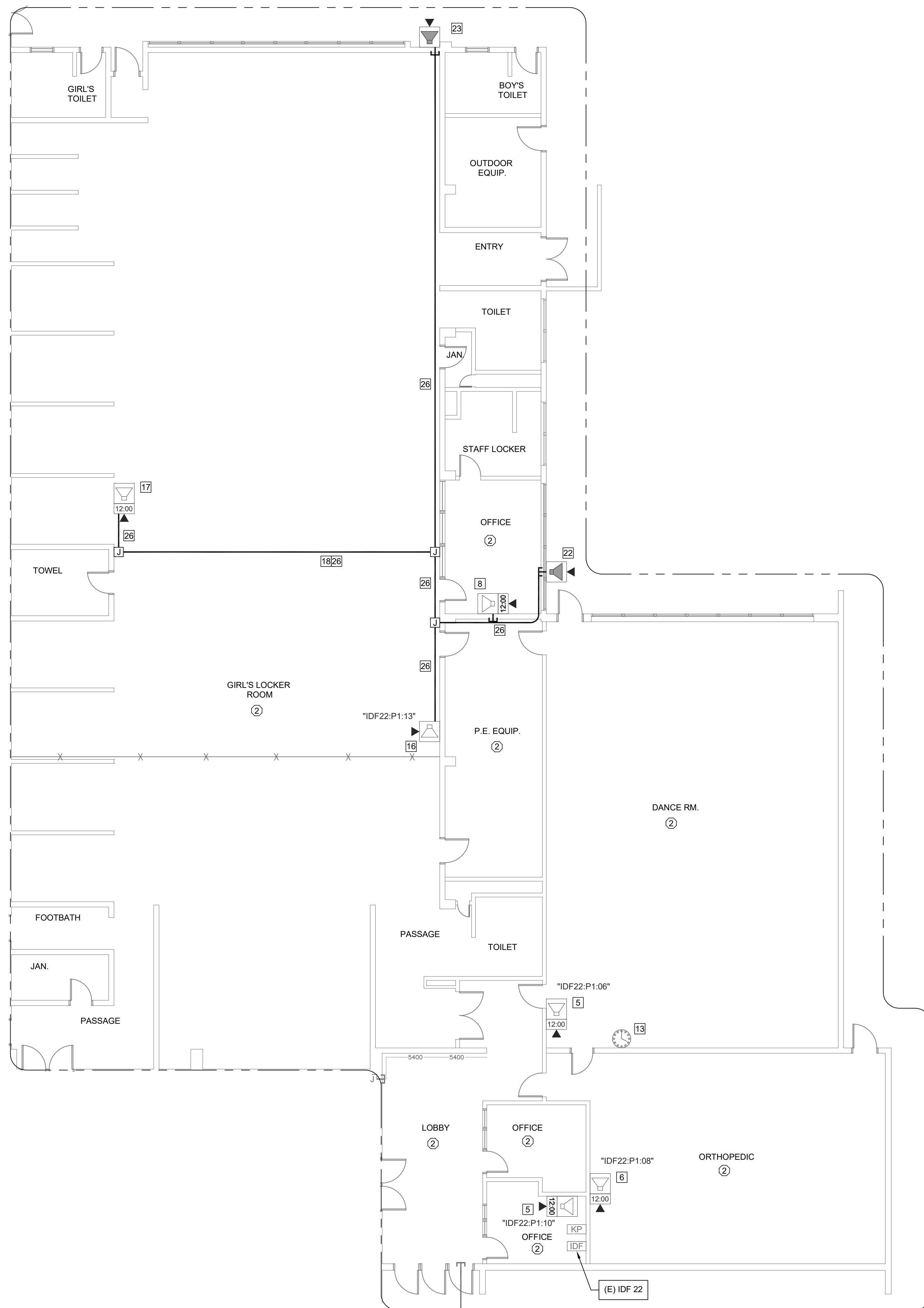
CONSTRUCTION DOCUMENTS

PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-31

REVISION

SHEET

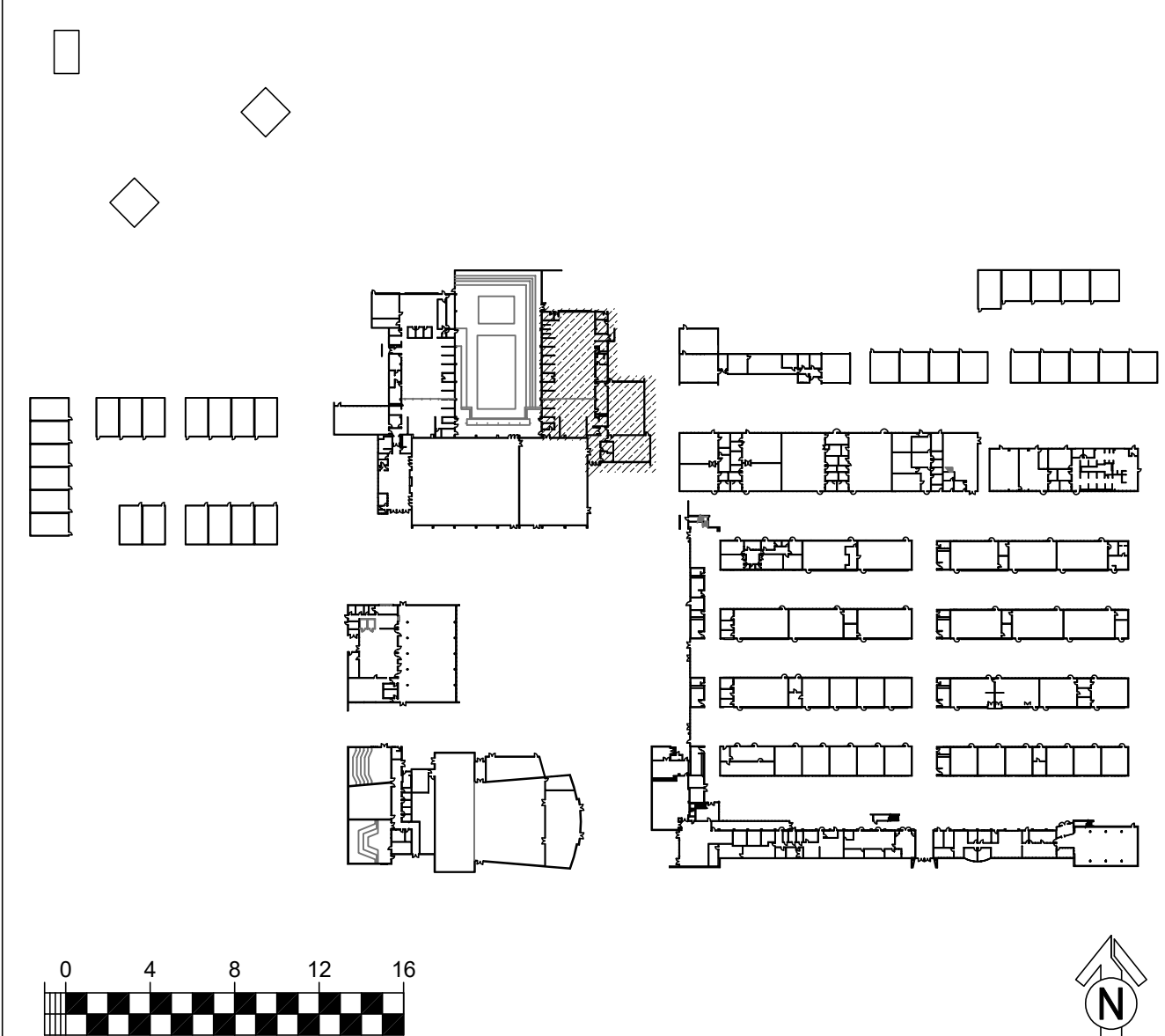
# T215

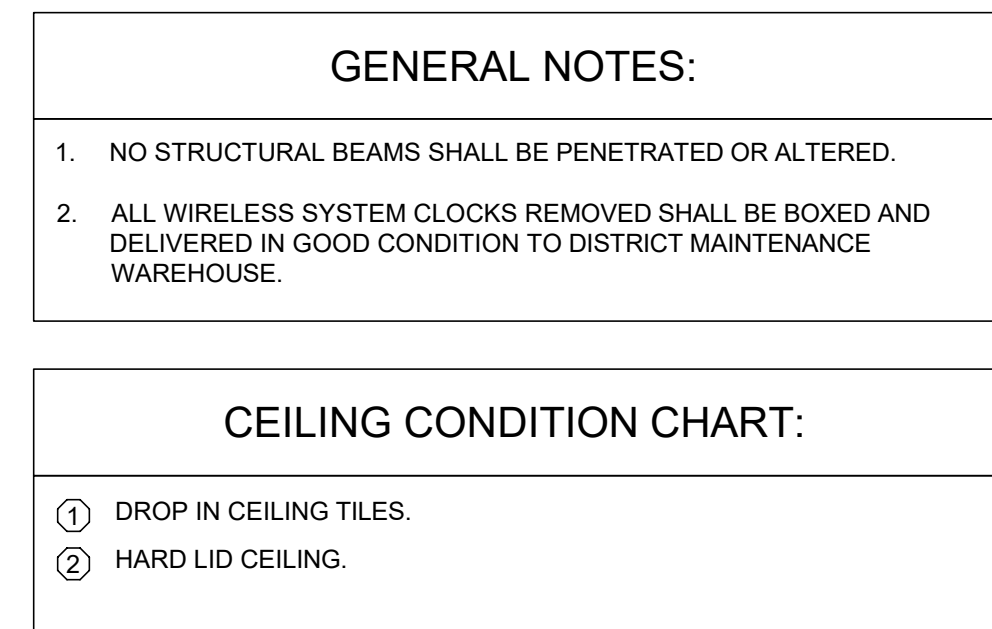


## TECHNOLOGY FLOOR PLANS - IDF 22

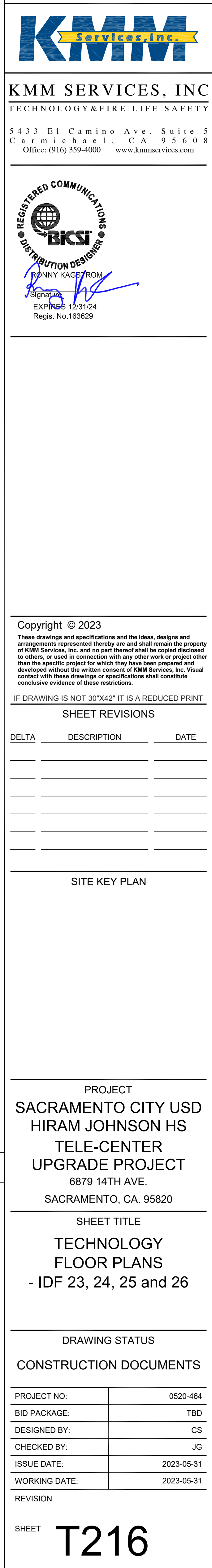
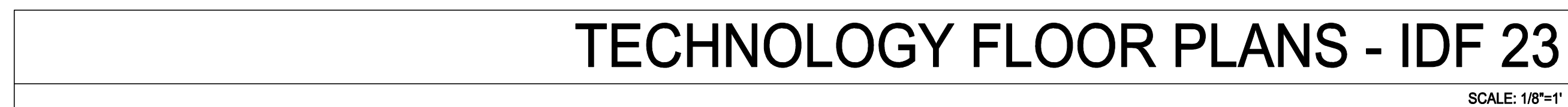
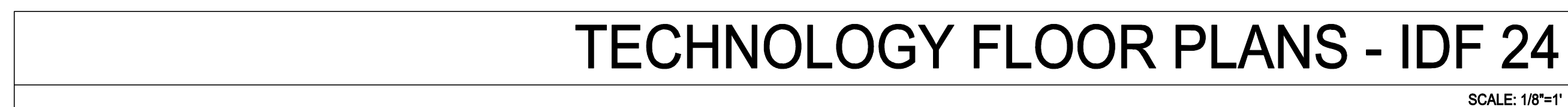
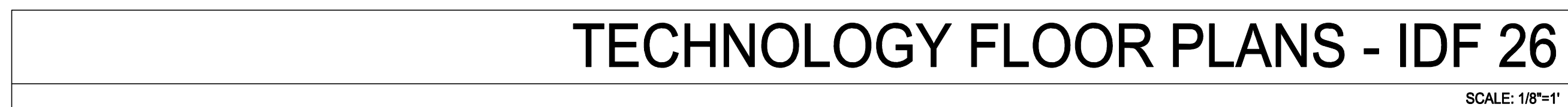
SCALE: 1/8"=1'

## KEY PLAN



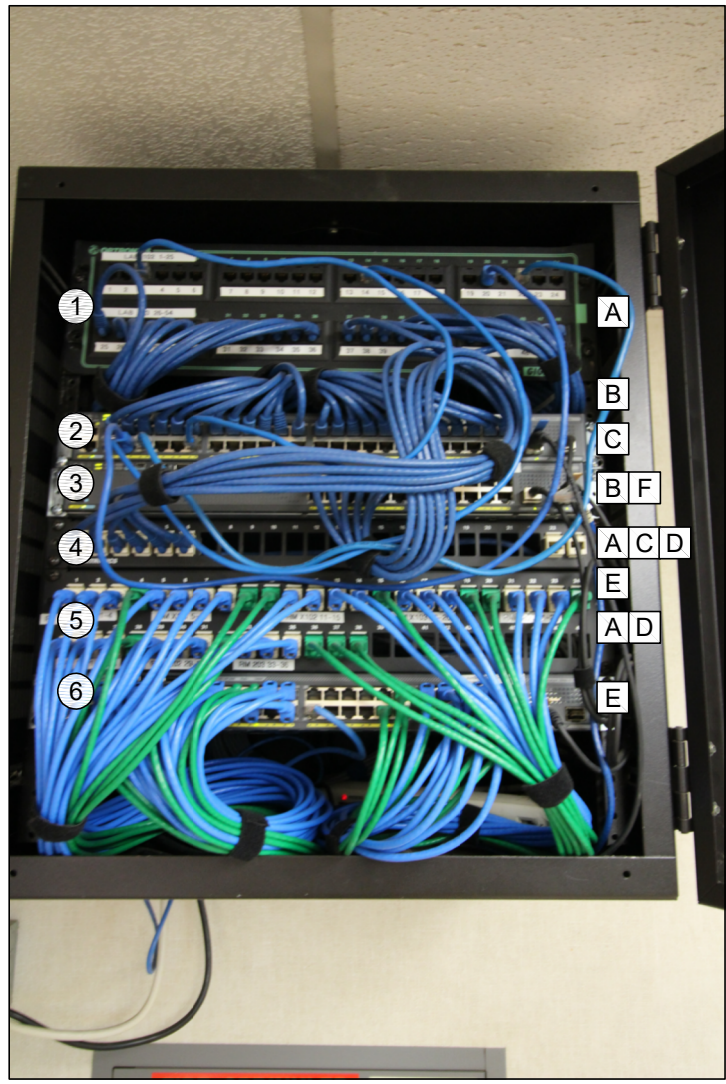


- | SHEET NOTES: |  |
|--------------|--|
| 1            | REMOVE (E) SPEAKER, INSTALL (N) COMBO BOX OVER (E) SPEAKER LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE AND (N) CLOCK. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.  |
| 2            | REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX. |
| 3            | REMOVE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. LOCATE EXISTING DATA DROP COILED ABOVE T-BAR AND ROUTE INTO (N) COMBO BOX. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.   |
| 4            | REMOVE (E) SPEAKER AND BLANK OVER AS REQUIRED.   |
| 5            | REMOVE (E) SPEAKER AND (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.   |
| 6            | REMOVE (E) SPEAKER, INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD NEW EX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.   |
| 7            | REMOVE (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.   |
| 8            | PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. PROVIDE (1) (N) NEW CAT6A DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (N) CUT IN BOX BEHIND (N) COMBO BOX.  |
| 9            | PROVIDE (N) SPEAKER (WITH (N) CLASSROOM IP MODULE) AND (N) IP CLOCK MOUNTED IN (N) CLOCK/ SPEAKER COMBO BOX. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK/SPEAKER COMBO BOX.  |
| 10           | REMOVE (E) SPEAKER AND (E) CLOCK FROM (E) COMBO BAFFLE. PROVIDE (N) SPEAKER WITH (N) CLASSROOM IP MODULE AND MOUNT TO (E) BAFFLE. PROVIDE (N) CLOCK AND MOUNT ON (N) PLASTIC PLATE. PROVIDE MOLD NEW EX BOX, REWORK (E) DATA DROP. INSTALL J-HOOK ABOVE T-BAR, FISH FROM CEILING TO (E) COMBO BOX. SEE DETAIL SHEET T800.                            |
| 11           | REMOVE (E) SPEAKER AND BACKBOX. PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.   |
| 12           | PROVIDE (N) SPEAKER MOUNTED IN (N) SURFACE BACKBOX AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.   |
| 13           | REMOVE (E) CLOCK, AND BLANK OVER AS REQUIRED.  |
| 14           | REMOVE (E) SPEAKER, PROVIDE (N) LAY-IN SPEAKER AND (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.   |
| 15           | PROVIDE (N) WALL MOUNTED BACK BOX AND (N) 16" IP CLOCK AND (N) PROTECTIVE CAP. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO CLOCK BACKBOX.  |
| 16           | REMOVE (E) SPEAKER AND BACKBOX. PROVIDE (N) SPEAKER MOUNTED IN (N) BACKBOX AND (N) CLASSROOM IP MODULE. REMOVE (E) WIREMOLD DUPLEX BOX, REWORK (E) DATA DROP INTO SPEAKER BACKBOX.   |
| 17           | REMOVE (E) CLOCK. INSTALL (N) COMBO BOX AT CLOCK LOCATION WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) CLOCK. PROVIDE ONE (1) (N) CAT6A DATA DROP.   |
| 18           | PROVIDE (N) CONDUIT FOLLOWING TRANSITION ROOF TRUSS. PAINT TO MATCH.   |
| 19           | PROVIDE (N) CONDUIT VERTICAL FLANSITION TO/FROM ATTIC ABOVE THEATRICAL RIGGING GRID.   |
| 20           | PROVIDE (N) CONDUIT ACROSS HIGHEST ATTIC ABOVE THEATRICAL RIGGING GRID.  |
| 21           | ROUTE VIA ACCESSIBLE CRAWLSPACES BEHIND ARCHITECTURE. FISH FROM ACCESSIBLE CRAWLSPACE TO LOCATION AS NOTED. IF NECESSARY, NO CONDUIT OR WIREMOLD SHALL BE VISIBLE FROM SEATING AREA.   |
| 22           | REPLACE (E) EXTERIOR SPEAKER WITH (N) EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.   |
| 23           | PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE ONE (1) (N) CAT6A DATA DROP.  |
| 24           | (E) TELECENTER ICS TO BE REMOVED AFTER CUTOVER TO (N) SYSTEM. REMOVE ALL (E) CABLES, 66-BLOCKS, AND CABINET.   |
| 25           | REMOVE (E) TELECENTER ICS INPUT PLATE. PROVIDE (N) TELECENTER U PROGRAM LINE INPUT MODULE AND ONE (1) (N) CAT6A DATA DROP.   |
| 26           | 1' EA. 1" GRCIMET.   |
| 27           | RELOCATE (E) DATA DROP NOTED TO NEW LOCATION.  |
| 28           | 1' EA. 2" GRCIMET.   |
| 29           | REPLACE (E) OR PROVIDE (N) WALL MOUNTED EXTERIOR BACKBOX AND (N) EXTERIOR SPEAKER. CABLE TO ZONE PAGE AMP IN NEAREST IDF.  |



EXISTING RACK COMPONENTS:
① 3U 48 PORT PATCH PANEL.
② 1U 48 PORT SWITCH (22 AVAIL.).
③ 1U 24 PORT SWITCH (15 AVAIL.).
④ 1U 24 PORT PATCH PANEL (16 AVAIL.).
⑤ 2U 48 PORT PATCH PANEL (10 AVAIL.).
⑥ 1U 48 PORT SWITCH (9 AVAIL.).

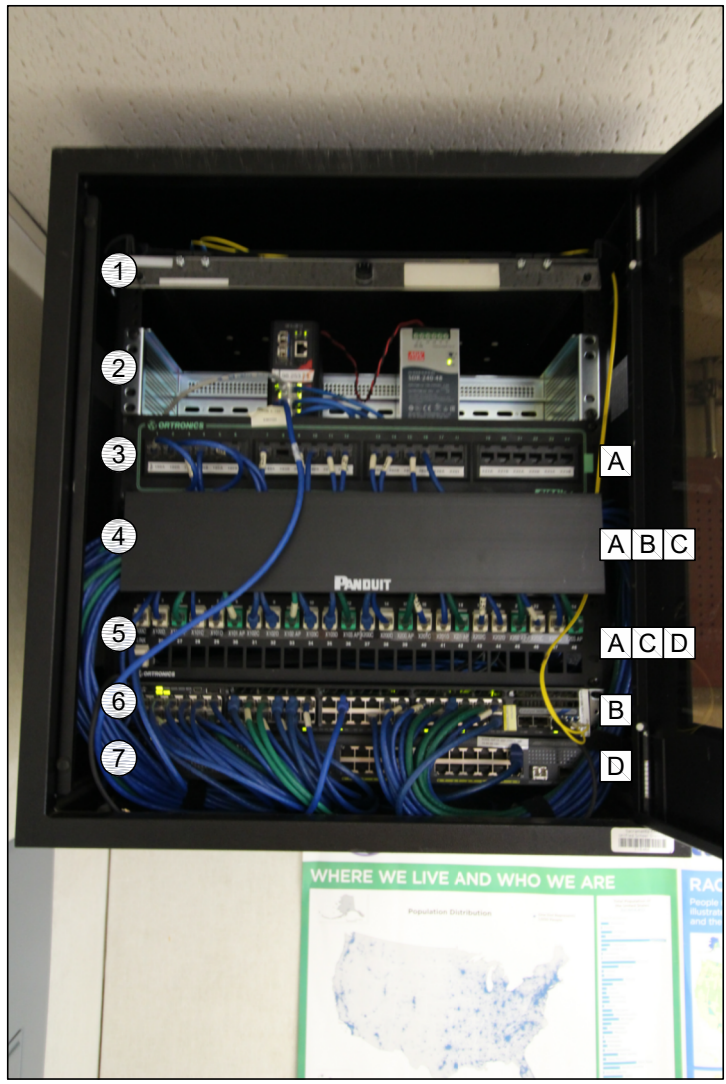
RACK SCOPE OF WORK:
<b>A</b> PROVIDE (N) REAR CABLE MANAGEMENT BAR (MIDDLE ATLANTIC P/N LBP-6R90) AT PATCH PANEL #1, #4, #5.
<b>B</b> RELOCATE (E) SWITCH #3 DIRECTLY BELOW (E) PATCH PANEL #1.
<b>C</b> RELOCATE (E) PATCH PANEL #4 DIRECTLY BELOW (E) SWITCH #3.
<b>D</b> RELOCATE (E) PATCH PANEL #5 DIRECTLY BELOW (E) SWITCH #2.
<b>E</b> RELOCATE (E) SWITCH #6 DIRECTLY BELOW (E) PATCH PANEL #5.
<b>F</b> PROVIDE (N) 12" SLIMLINE CAT6A PATCH CABLES TO REPLACE ALL (E) PATCH CABLES AND FOR ALL (N) DROPS. PATCH SO THAT ALL ACTIVE DROPS ON PATCH PANEL #1 ARE PATCHED TO SWITCH #3. ALL OTHERS, PATCH SO THAT SWITCH PORTS 1-24 ARE CONNECTED TO PATCH PORTS IMMEDIATELY ABOVE THE SWITCH, AND SWITCH PORTS 25-48 CONNECTED TO PATCH PORTS IMMEDIATELY BELOW THE SWITCH.



⑧ DATA RACK LAYOUT - (E) IDF 12.5 - CLASSROOM X102  
SCALE: NONE

EXISTING RACK COMPONENTS:
① 1U FIBER LIU.
② 3U CCTV SWITCH.
③ 2U 24 PORT SWITCH (0 AVAIL.).
④ 2U CABLE MANAGER.
⑤ 2U 48 PORT PATCH PANEL (23 AVAIL.).
⑥ 1U 48 PORT SWITCH (9 AVAIL.).
⑦ 1U 24 PORT SWITCH (23 AVAIL.).

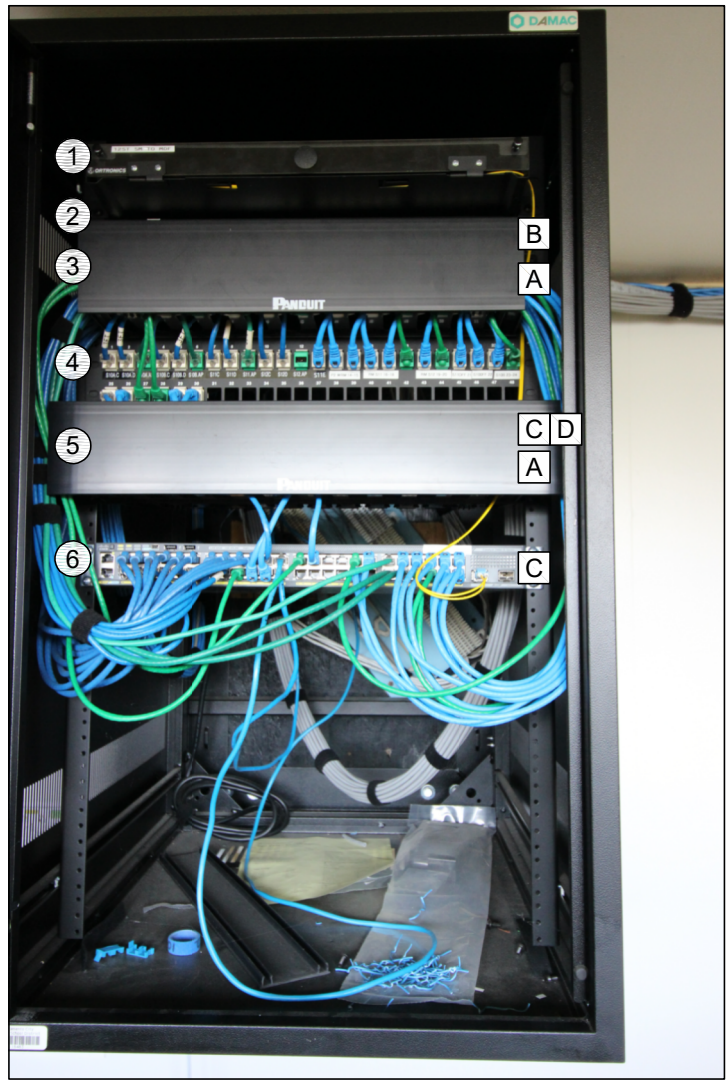
RACK SCOPE OF WORK:
<b>A</b> REMOVE (E) CABLE MANAGER #4. PROVIDE (N) REAR CABLE MANAGEMENT BAR (MIDDLE ATLANTIC P/N LBP-6R90) AT PATCH PANEL #1, #5.
<b>B</b> RELOCATE (E) SWITCH #6 DIRECTLY BELOW (E) PATCH PANEL #3.
<b>C</b> RELOCATE (E) PATCH PANEL #5 DIRECTLY BELOW (E) SWITCH #6.
<b>D</b> RELOCATE (E) SWITCH #7 DIRECTLY BELOW (E) PATCH PANEL #5.
<b>E</b> PROVIDE (N) 12" SLIMLINE CAT6A PATCH CABLES TO REPLACE ALL (E) PATCH CABLES AND FOR ALL (N) DROPS. PATCH SO THAT SWITCH PORTS 1-24 ARE CONNECTED TO PATCH PORTS IMMEDIATELY ABOVE THE SWITCH, AND SWITCH PORTS 25-48 CONNECTED TO PATCH PORTS IMMEDIATELY BELOW THE SWITCH.



⑦ DATA RACK LAYOUT - (E) IDF 12 - CLASSROOM X103  
SCALE: NONE

EXISTING RACK COMPONENTS:
① 1U FIBER LIU.
② 1U 24 PORT CAT6A PATCH PANEL (0 AVAIL.).
③ 2U 48 PORT CAT6A PATCH PANEL (18 AVAIL.).
④ 2U 48 PORT CAT6A PATCH PANEL (18 AVAIL.).
⑤ 2U CABLE MANAGER.
⑥ 1U 48 PORT SWITCH (6 AVAIL.).

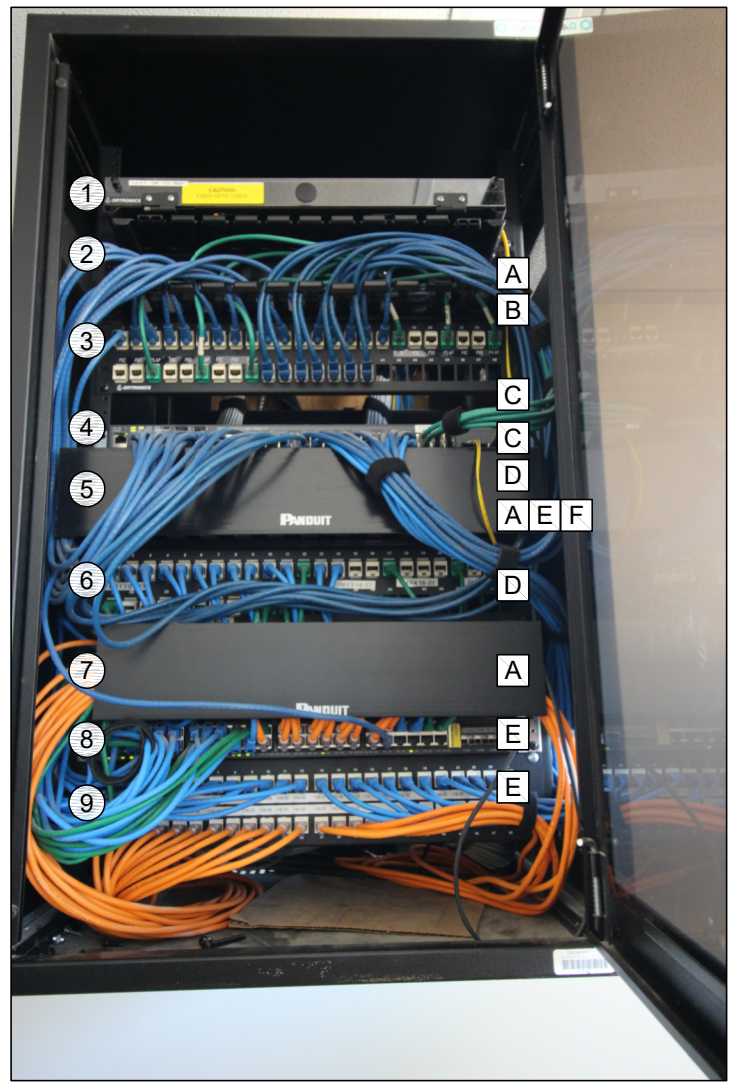
RACK SCOPE OF WORK:
<b>A</b> REMOVE (E) CABLE MANAGER #3 AND #5. PROVIDE (N) REAR CABLE MANAGEMENT BAR (MIDDLE ATLANTIC P/N LBP-6R90) AT PATCH PANEL #2, #4.
<b>B</b> PROVIDE (N) 48 PORT SWITCH, LICENSE, AND ACCESSORIES, CISCO P/N C9300L-48PF-4X-EDU, C9300-DNA-E-48-3Y, SFP-H10GB-CU1M, C9300L-STACK-KIT & STACK-T3-3M.
<b>C</b> RELOCATE (E) SWITCH #6 DIRECTLY BELOW (E) PATCH PANEL #4.
<b>D</b> PROVIDE (N) 12" SLIMLINE CAT6A PATCH CABLES TO REPLACE ALL (E) PATCH CABLES AND FOR ALL (N) DROPS. PATCH AS FOLLOWS: <ul style="list-style-type: none"><li>- PP 2 PORTS 1-24 TO (N) SWITCH PORTS 1-24.</li><li>- PP 4 PORTS 1-24 TO (N) SWITCH PORTS 25-48.</li><li>- PP 4 PORTS 25-48 TO SWITCH #6 PORTS 1-24.</li></ul>



⑥ DATA RACK LAYOUT - (E) IDF 10 - CLASSROOM S10B OFFICE  
SCALE: NONE

EXISTING RACK COMPONENTS:
① 1U FIBER LIU.
② 2U CABLE MANAGER.
③ 2U 48 PORT CAT6A PATCH PANEL (7 AVAIL.).
④ 1U 48 PORT SWITCH (1 AVAIL.).
⑤ 2U CABLE MANAGER.
⑥ 2U 48 PORT CAT6A PATCH PANEL (10 AVAIL.).
⑦ 2U CABLE MANAGER.
⑧ 1U 48 PORT SWITCH (4 AVAIL.).
⑨ 2U 48 PORT CAT6A PATCH PANEL (0 AVAIL.).

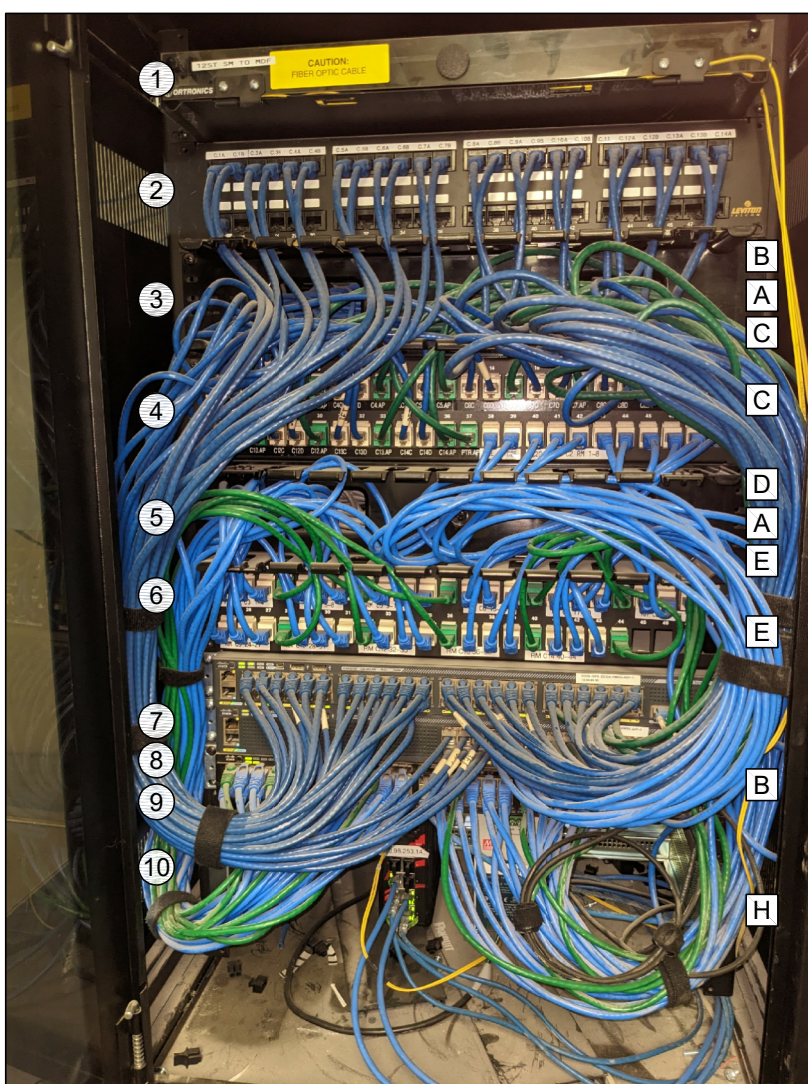
RACK SCOPE OF WORK:
<b>A</b> REMOVE (E) CABLE MANAGER #2 AND #5 AND #7. PROVIDE (N) REAR CABLE MANAGEMENT BAR (MIDDLE ATLANTIC P/N LBP-6R90) AT PATCH PANEL #3, #6, #9.
<b>B</b> PROVIDE (N) 48 PORT SWITCH, LICENSE, AND ACCESSORIES, CISCO P/N C9300L-48PF-4X-EDU, C9300-DNA-E-48-3Y, SFP-H10GB-CU1M, C9300L-STACK-KIT & STACK-T3-3M.
<b>C</b> RELOCATE (E) SWITCH #4 DIRECTLY BELOW (E) PATCH PANEL #3.
<b>D</b> RELOCATE (E) PATCH PANEL #6 DIRECTLY BELOW SWITCH #4.
<b>E</b> RELOCATE (E) SWITCH #9 AND PATCH PANEL #9 DIRECTLY BELOW (E) PATCH PANEL #6.
<b>F</b> PROVIDE (N) 12" SLIMLINE CAT6A PATCH CABLES TO REPLACE ALL (E) PATCH CABLES AND FOR ALL (N) DROPS. PATCH AS FOLLOWS: <ul style="list-style-type: none"><li>- PP 3 PORTS 1-48 TO (N) SWITCH PORTS 1-48.</li><li>- PP 6 PORTS 1-48 TO SWITCH #4 PORTS 1-48.</li><li>- PP 8 PORTS 1-48 TO SWITCH #8 PORTS 1-48.</li></ul>



⑤ DATA RACK LAYOUT - (E) IDF 09 - CLASSROOM F05  
SCALE: NONE

EXISTING RACK COMPONENTS:
① 1U FIBER LIU.
② 2U 48 PORT CAT6A PATCH PANEL (0 AVAIL.).
③ 2U CABLE MANAGER.
④ 2U 48 PORT CAT6A PATCH PANEL (0 AVAIL.).
⑤ 2U CABLE MANAGER.
⑥ 2U 48 PORT CAT6A PATCH PANEL (4 AVAIL.).
⑦ 1U 48 PORT SWITCH (1 AVAIL.).
⑧ 1U 24 PORT SWITCH (0 AVAIL.).
⑨ 1U 48 PORT SWITCH (0 AVAIL.).
⑩ 4U CCTV SWITCH.

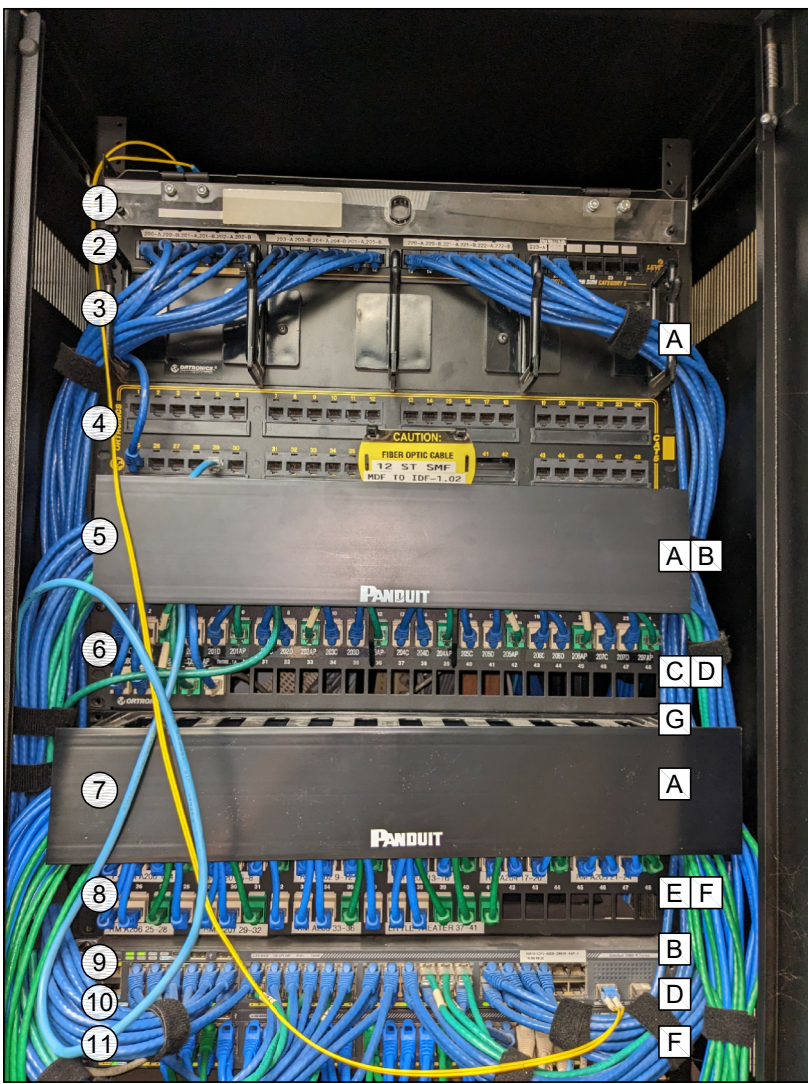
RACK SCOPE OF WORK:
<b>A</b> REMOVE (E) CABLE MANAGER #3 AND #5. PROVIDE (N) REAR CABLE MANAGEMENT BAR (MIDDLE ATLANTIC P/N LBP-6R90) AT PATCH PANEL #4, #6.
<b>B</b> RELOCATE (E) SWITCH #9 DIRECTLY BELOW (E) PATCH PANEL #2.
<b>C</b> RELOCATE (E) PATCH PANEL #4 DIRECTLY BELOW (E) SWITCH #9.
<b>D</b> PROVIDE (N) 48 PORT SWITCH, LICENSE, AND ACCESSORIES, CISCO P/N C9300L-48PF-4X-EDU, C9300-DNA-E-48-3Y, SFP-H10GB-CU1M, C9300L-STACK-KIT & STACK-T3-3M.
<b>E</b> RELOCATE (E) PATCH PANEL #6 AND (E) SWITCH #7 AND #8 DIRECTLY BELOW (N) SWITCH.
<b>F</b> PROVIDE (N) 12" SLIMLINE CAT6A PATCH CABLES TO REPLACE ALL (E) PATCH CABLES AND FOR ALL (N) DROPS. PATCH AS FOLLOWS: <ul style="list-style-type: none"><li>- PP 2 PORTS 1-24 TO SWITCH #9 PORTS 1-24.</li><li>- PP 4 PORTS 1-24 TO SWITCH #9 PORTS 25-48.</li><li>- PP 4 PORTS 25-48 TO (N) SWITCH PORTS 1-24.</li><li>- PP 6 PORTS 1-24 TO (N) SWITCH PORTS 25-48.</li><li>- PP 6 PORTS 25-48 TO SWITCH #7 PORTS 1-24.</li></ul>
<b>H</b> RELOCATE (E) SWITCH #10 UP THREE RACK UNITS.



④ DATA RACK LAYOUT - (E) IDF 05 - JANITOR T2  
SCALE: NONE

EXISTING RACK COMPONENTS:
① 1U FIBER LIU.
② 1U 24 PORT PATCH PANEL (0 AVAIL.).
③ 2U CABLE MANAGER.
④ 2U 28 PORT PATCH PANEL (0 AVAIL.).
⑤ 2U CABLE MANAGER.
⑥ 2U 48 PORT PATCH PANEL (19 AVAIL.).
⑦ 2U CABLE MANAGER.
⑧ 2U 48 PORT PATCH PANEL (7 AVAIL.).
⑨ 1U 48 PORT SWITCH (2 AVAIL.).
⑩ 1U 48 PORT SWITCH (0 AVAIL.).
⑪ 1U 48 PORT SWITCH (24 AVAIL.).

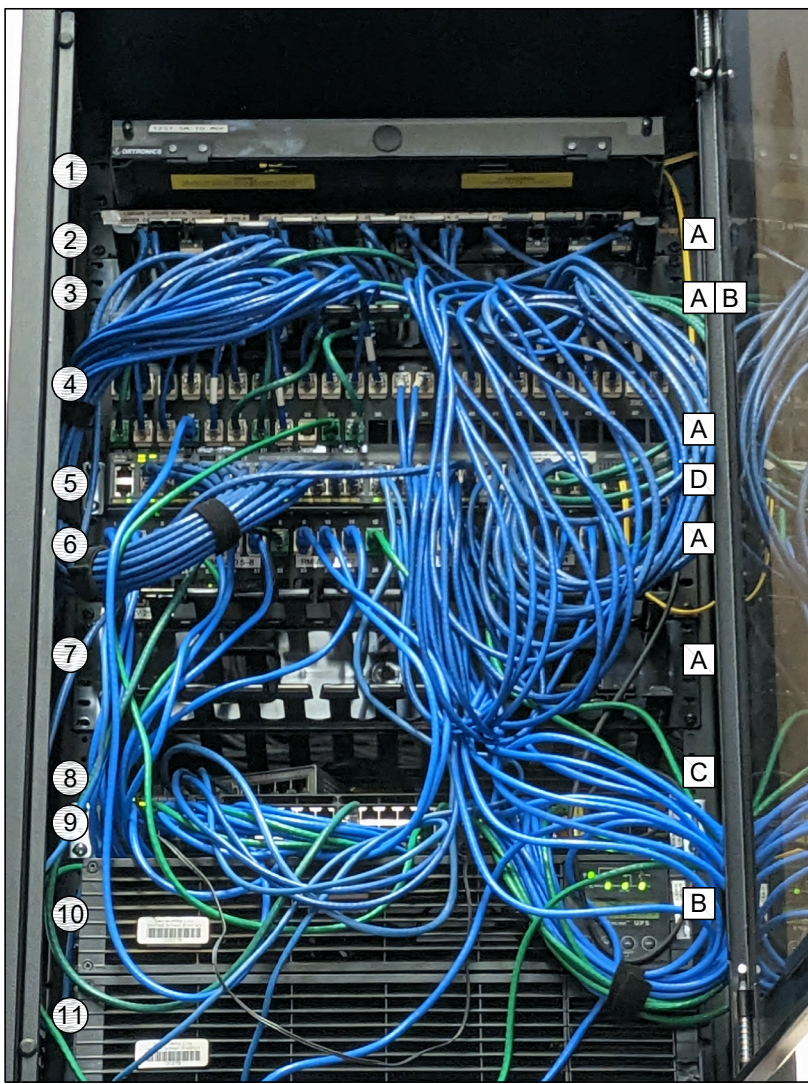
RACK SCOPE OF WORK:
<b>A</b> REMOVE (E) CABLE MANAGER #3, #5, AND #7. PROVIDE (N) REAR CABLE MANAGEMENT BAR (MIDDLE ATLANTIC P/N LBP-6R90) AT PATCH PANEL #2, #4, #6, AND #8.
<b>B</b> RELOCATE (E) SWITCH #9 DIRECTLY BELOW (E) PATCH PANEL #4.
<b>C</b> RELOCATE (E) PATCH PANEL #6 DIRECTLY BELOW (E) SWITCH #9.
<b>D</b> RELOCATE (E) SWITCH #10 DIRECTLY BELOW (E) PATCH PANEL #6.
<b>E</b> RELOCATE (E) PATCH PANEL #8 DIRECTLY BELOW (E) SWITCH #10.
<b>F</b> RELOCATE (E) SWITCH #11 DIRECTLY BELOW (E) PATCH PANEL #8.
<b>G</b> PROVIDE (N) 12" SLIMLINE CAT6A PATCH CABLES TO REPLACE ALL (E) PATCH CABLES AND FOR ALL (N) DROPS. PATCH SO THAT SWITCH PORTS 1-24 ARE CONNECTED TO PATCH PORTS IMMEDIATELY ABOVE THE SWITCH, AND SWITCH PORTS 25-48 CONNECTED TO PATCH PORTS IMMEDIATELY BELOW THE SWITCH.



③ DATA RACK LAYOUT - (E) IDF 02 - CLASSROOM A200  
SCALE: NONE

EXISTING RACK COMPONENTS:
① 1U FIBER LIU.
② 1U 24 PORT CAT6A PATCH PANEL (0 AVAIL.).
③ 2U CABLE MANAGER.
④ 2U 48 PORT CAT6A PATCH PANEL (13 AVAIL.).
⑤ 1U 48 PORT SWITCH (0 AVAIL.).
⑥ 2U 48 PORT CAT6A PATCH PANEL (24 AVAIL.).
⑦ 2U CABLE MANAGER.
⑧ NON-RACKED DEVICE.
⑨ 1U 48 PORT SWITCH (12 AVAIL.).
⑩ 2U UPS.
⑪ 2U BATTERY.

RACK SCOPE OF WORK:
<b>A</b> REMOVE (E) CABLE MANAGER #3 AND #7. PROVIDE (N) REAR CABLE MANAGEMENT BAR (MIDDLE ATLANTIC P/N LBP-6R90) AT PATCH PANEL #2, #4, #6.
<b>B</b> RELOCATE (E) SWITCH #9 DIRECTLY BELOW (E) PATCH PANEL #2.
<b>C</b> PROVIDE (N) 1U UNIVERSAL RACK SHELF TO MOUNT COMPONENT #8.
<b>D</b> PROVIDE (N) 12" SLIMLINE CAT6A PATCH CABLES TO REPLACE ALL (E) PATCH CABLES AND FOR ALL (N) DROPS. PATCH AS FOLLOWS: <ul style="list-style-type: none"><li>- PP 2 PORTS 1-24 TO SWITCH #9 PORTS 1-24.</li><li>- PP 4 PORTS 1-24 TO SWITCH #9 PORTS 25-48.</li><li>- PP 4 PORTS 25-48 TO SWITCH #5 PORTS 1-24.</li><li>- PP 6 PORTS 1-24 TO SWITCH #5 PORTS 25-48.</li></ul>

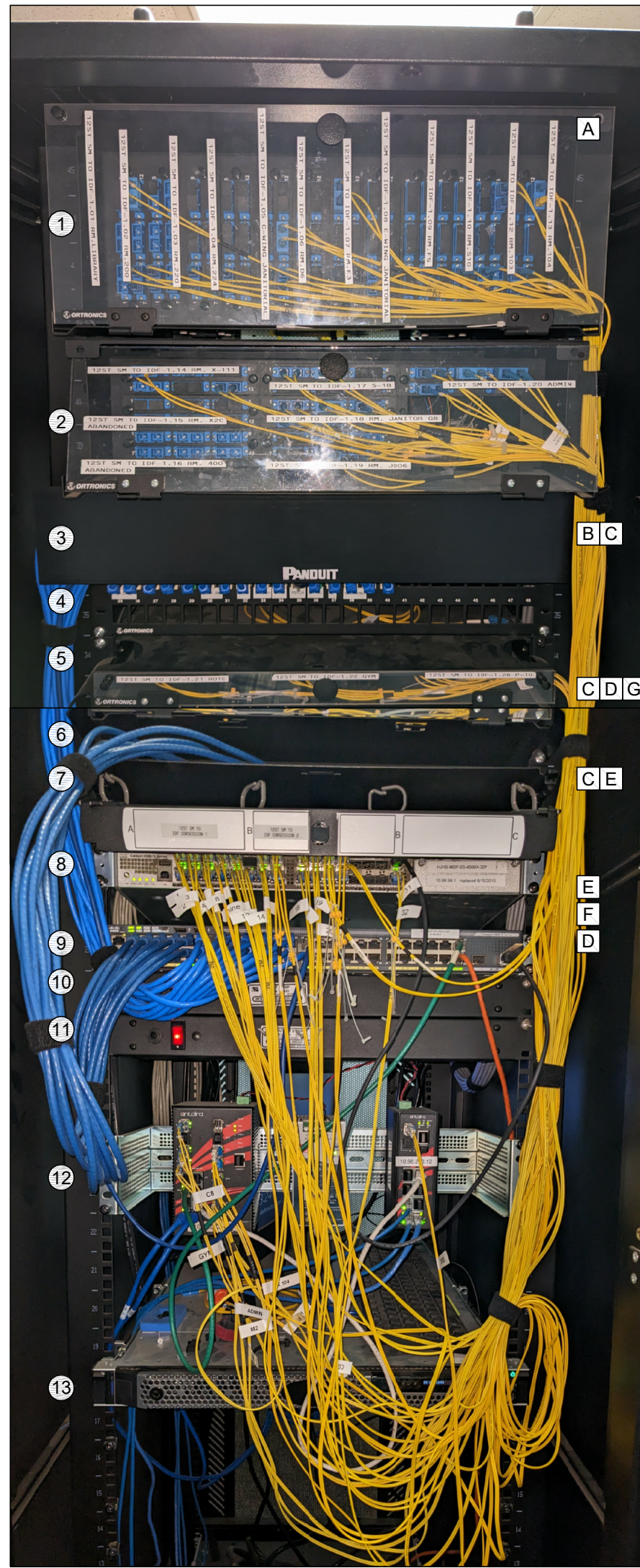


② DATA RACK LAYOUT - (E) IDF 01 - LIBRARY  
SCALE: NONE

SINGLE LINE GENERAL NOTES:
APPLICABLE TO ALL MDF/IDF CABINETS/RACKS LISTED BELOW
1. PROVIDE (N) UNINTERRUPTIBLE POWER SUPPLY, N1C P/N N1C.L1500, FOR INTERCOM HEAD END EQUIPMENT. MOUNT DIRECTLY ABOVE (E) UPS UNITS: <ul style="list-style-type: none"><li>1.1. (E) MDF</li></ul>
2. PROVIDE (N) UNINTERRUPTIBLE POWER SUPPLY, N1C P/N N1C.L1000, MOUNT AT BOTTOM OF CABINET. ROUTE POWER FOR ALL RACK COMPONENTS SO THAT IT IS PROTECTED BY UPS: <ul style="list-style-type: none"><li>2.1. (E) IDF 1.02, IDF 1.03, IDF 1.06, IDF 1.07, IDF 1.09, IDF 1.10, IDF 1.13, IDF 1.14, IDF 1.148, IDF 1.15, IDF 1.19, IDF 1.21, IDF 1.22, IDF 1.23, IDF 1.24, IDF 1.25, IDF 1.26</li></ul>
3. PROVIDE (N) UNINTERRUPTIBLE POWER SUPPLY, N1C P/N N1C.L1500, MOUNT AT BOTTOM OF CABINET. ROUTE POWER FOR ALL RACK COMPONENTS SO THAT IT IS PROTECTED BY UPS: <ul style="list-style-type: none"><li>3.1. (E) IDF 1.04, IDF 1.05, IDF 1.08, IDF 1.17</li></ul>
4. PROVIDE (N) SLIMLINE CAT6A PATCH CABLES WITH A MAXIMUM 12" OF SLACK FOR ALL (N) DROPS IN ANY IDF WHERE A DETAILED SCOPE HAS NOT BEEN PROVIDED.

EXISTING RACK COMPONENTS:
① 4U FIBER LIU.
② 3U FIBER LIU.
③ 2U CABLE MANAGER.
④ 2U 48 PORT CAT6A PATCH PANEL (32 AVAIL.).
⑤ 1U FIBER LIU.
⑥ 1U 24 PORT CAT6A PATCH PANEL (14 AVAIL.).
⑦ 1U FIBER LIU.
⑧ 1U AGGREGATION SWITCH.
⑨ 1U 48 PORT SWITCH (22 AVAIL.).
⑩ 1U PDU.
⑪ 1U PDU.
⑫ 4U CCTV SWITCH.
⑬ 1U SERVER.

RACK SCOPE OF WORK:
<b>A</b> PROVIDE (N) VERTICAL CABLE MANAGER, DAMAC P/N F532-004, ON RIGHT FRONT OF CABINET. ROUTE ALL FIBER PATCH CORDS THROUGH CABLE MANAGER.
<b>B</b> REMOVE (E) CABLE MANAGER #3. PROVIDE (N) REAR CABLE MANAGEMENT BAR (MIDDLE ATLANTIC P/N LBP-6R90) AT PATCH PANEL #4, #6.
<b>C</b> RELOCATE (E) FIBER LIU #5 AND #7 BELOW FIBER LIU #2.
<b>D</b> RELOCATE (E) SWITCH #9 DIRECTLY BELOW (E) PATCH PANEL #4.
<b>E</b> RELOCATE (E) AGGREGATION SWITCH #8 DIRECTLY BELOW (E) PATCH PANEL #6.
<b>F</b> MOUNT NEW INTERCOM HEAD END EQUIPMENT. SEE INTERCOM SINGLE LINE FOR DETAILS.
<b>G</b> PROVIDE (N) 12" SLIMLINE CAT6A PATCH CABLES TO REPLACE ALL (E) PATCH CABLES AND FOR ALL (N) DROPS. PATCH SO THAT SWITCH PORTS 1-24 ARE CONNECTED TO PATCH PORTS IMMEDIATELY ABOVE THE SWITCH, AND SWITCH PORTS 25-48 CONNECTED TO PATCH PORTS IMMEDIATELY BELOW THE SWITCH.



① DATA RACK LAYOUT - (E) MDF - ROOM S05  
SCALE: NONE



KMM SERVICES, INC  
TECHNOLOGY & FIRE LIFE SAFETY

5433 El Camino Ave. Suite 5  
Carmichael, CA 95608  
Office: (916) 359-4000 www.kmmsservices.com



Copyright © 2023  
These drawings and specifications and the ideas, designs and arrangements represented thereby are not shall remain the property of KMM Services, Inc. and no part thereof shall be copied, disclosed to others, or used in connection with any other work or project other than the specific project for which they have been prepared and developed without the written consent of KMM Services, Inc. Visual contact with these drawings or specifications shall constitute conclusive evidence of these restrictions.

IF DRAWING IS NOT 30"x42" IT IS A REDUCED PRINT

SHEET REVISIONS		
DELTA	DESCRIPTION	DATE

SITE KEY PLAN

PROJECT  
SACRAMENTO CITY USD  
HIRAM JOHNSON HS  
TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.  
SACRAMENTO, CA. 95820

SHEET TITLE  
TECHNOLOGY  
SINGLE LINE DIAGRAMS

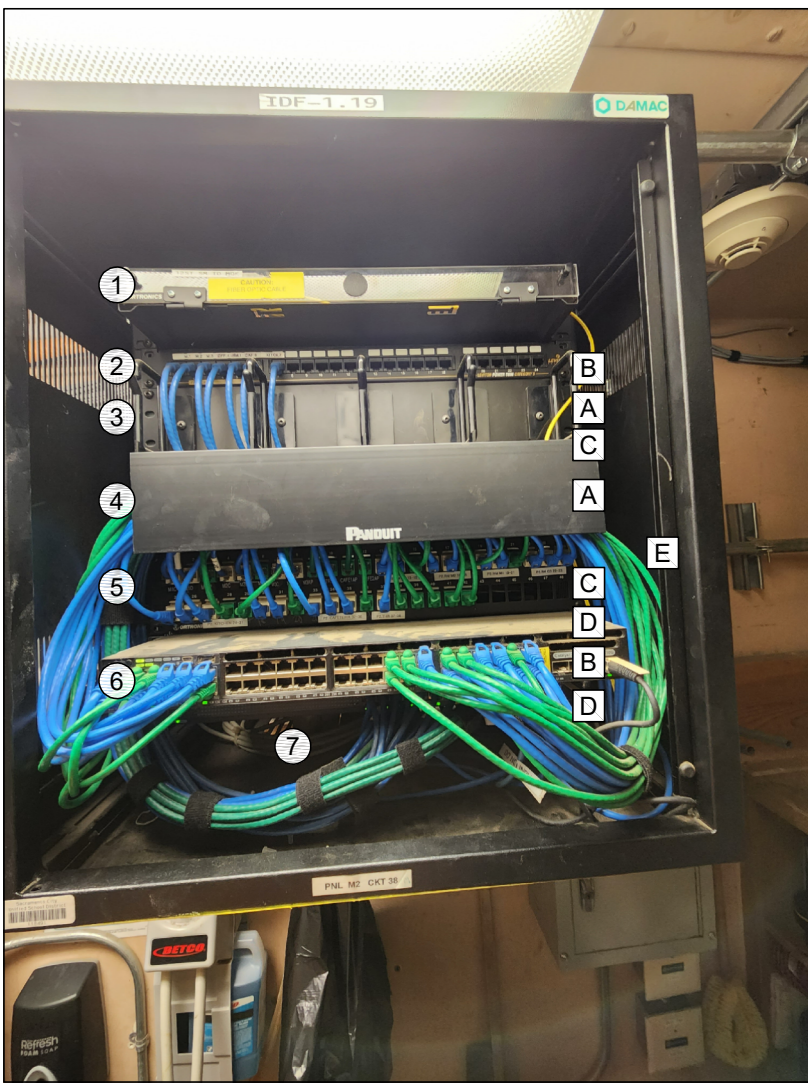
DRAWING STATUS  
CONSTRUCTION DOCUMENTS

PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-31

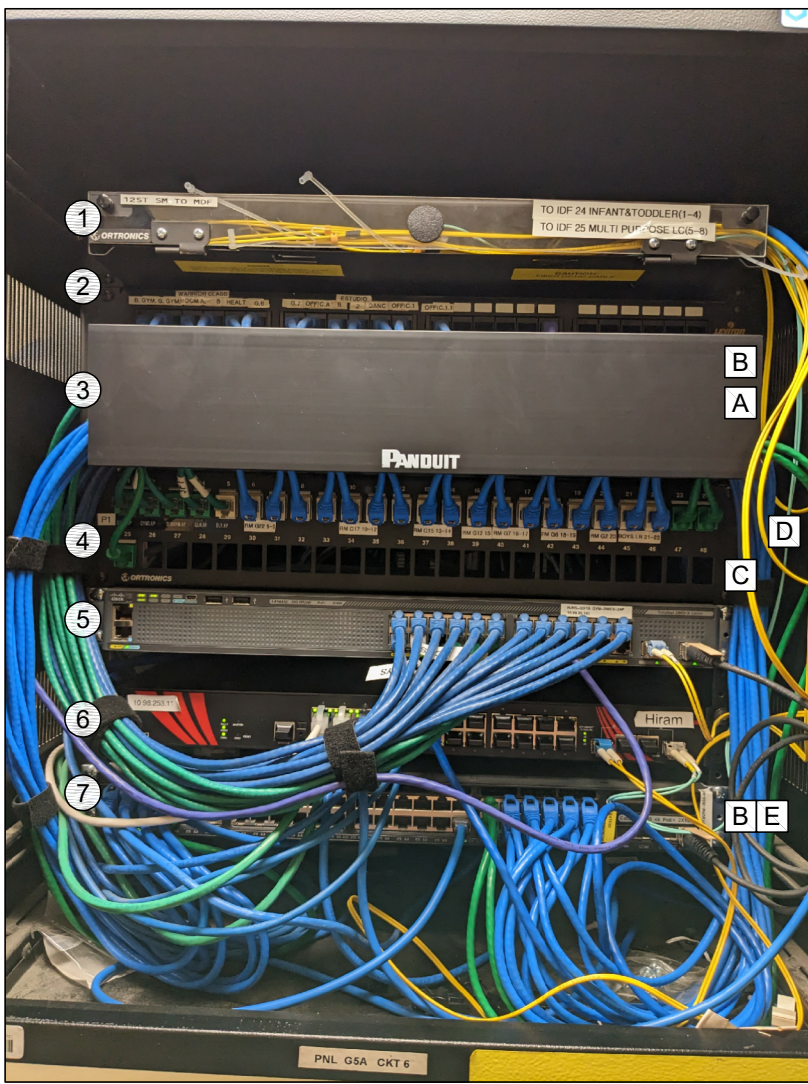
REVISION

SHEET  
T400

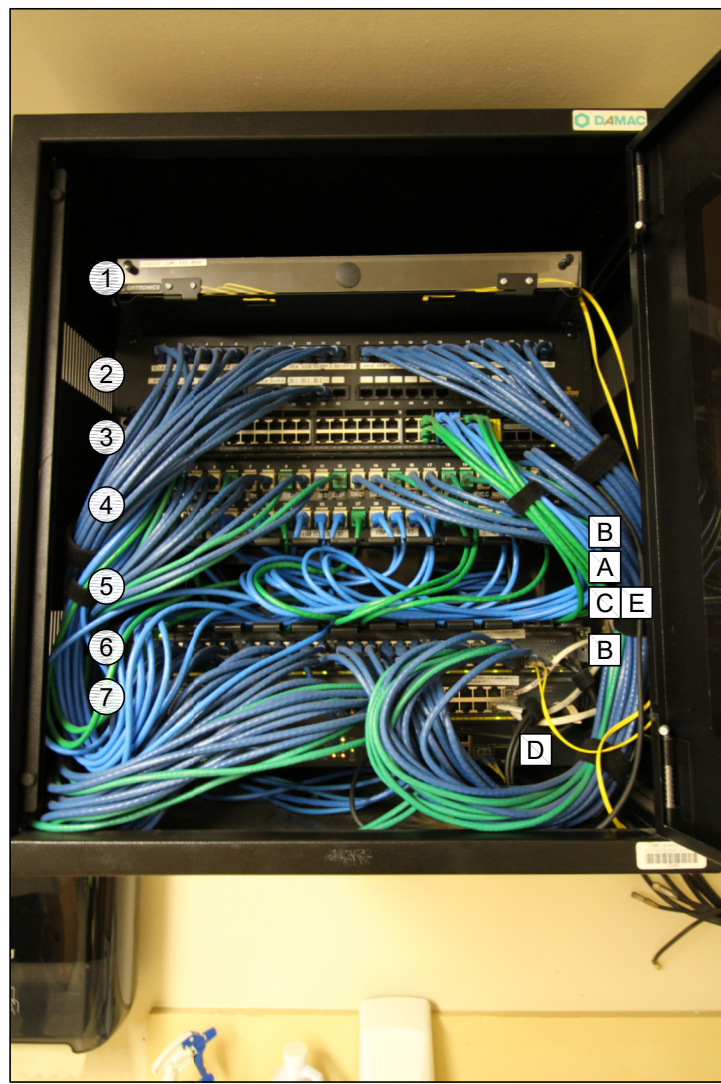
4 DATA RACK LAYOUT - (E) IDF 19 - THEATER  
 SCALE: NONE



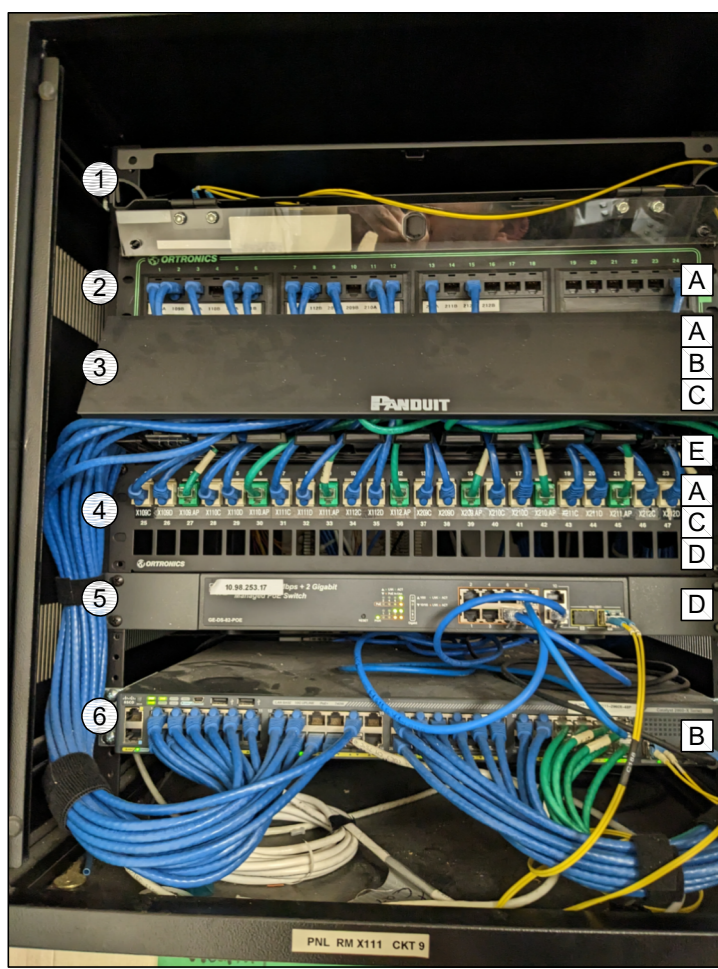
3 DATA RACK LAYOUT - (E) IDF 18 - GYM  
 SCALE: NONE



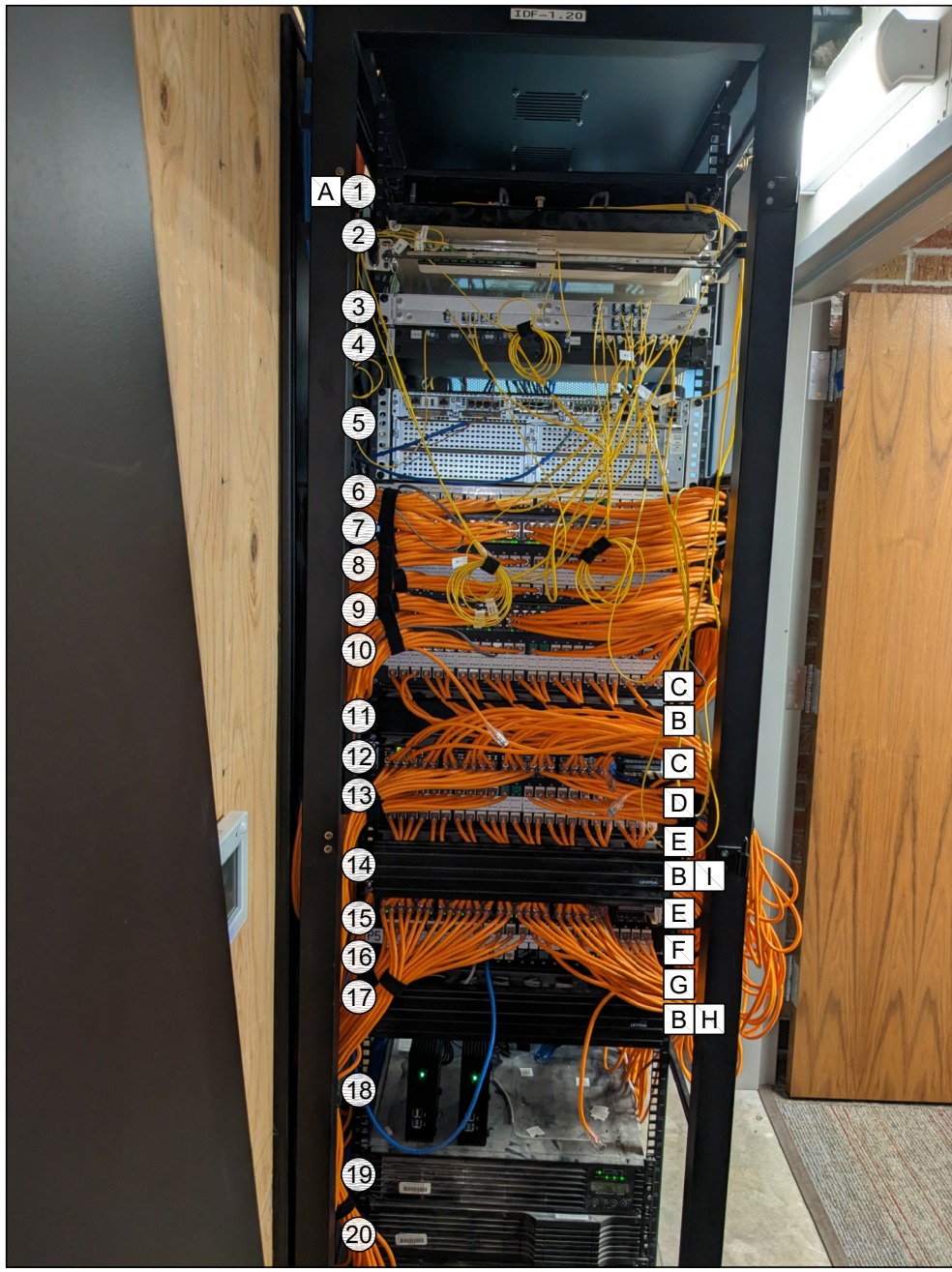
2 DATA RACK LAYOUT - (E) IDF 17 - RECEIVING S1A OFFICE  
 SCALE: NONE



1 DATA RACK LAYOUT - (E) IDF 14A - CLASSROOM X111  
 SCALE: NONE



5 DATA RACK LAYOUT - (E) IDF 20 - MAIN OFFICE  
 SCALE: NONE



EXISTING RACK COMPONENTS:

- 1U FIBER LIU.
- 1U 24 PORT CAT6A PATCH PANEL (0 AVAIL.).
- 2U CABLE MANAGER.
- 2U CABLE MANAGER.
- 2U 48 PORT CAT6A PATCH PANEL (6 AVAIL.).
- 1U 48 PORT SWITCH (6 AVAIL.).
- 1U 24 PORT SWITCH (0 AVAIL.).

RACK SCOPE OF WORK:

- [A] REMOVE (E) CABLE MANAGER #2 AND #3. PROVIDE (N) REAR CABLE MANAGEMENT BAR (MIDDLE ATLANTIC P/N LBP-6R90) AT PATCH PANEL #5.
- [B] RELOCATE (E) SWITCH #6 DIRECTLY BELOW (E) PATCH PANEL #2.
- [C] RELOCATE (E) PATCH PANEL #5 DIRECTLY BELOW SWITCH #6.
- [D] RELOCATE (E) SWITCH #7 DIRECTLY BELOW PATCH PANEL #5.
- [E] PROVIDE (N) 12" SLIMLINE CAT6A PATCH CABLES TO REPLACE ALL (E) PATCH CABLES AND FOR ALL (N) DROPS. PATCH AS FOLLOWS:
- PP 2 PORTS 1-7 TO SWITCH #6 PORTS 1-7.
  - PP 5 PORTS 1-24 TO SWITCH #6 PORTS 25-48.
  - PP 5 PORTS 25-48 TO SWITCH #7 PORTS 1-24.

EXISTING RACK COMPONENTS:

- 1U FIBER LIU.
- 1U 24 PORT CAT6A PATCH PANEL (0 AVAIL.).
- 2U CABLE MANAGER.
- 2U 48 PORT CAT6A PATCH PANEL (18 AVAIL.).
- 1U 24 PORT SWITCH (2 AVAIL.).
- 1U CCTV SWITCH.
- 1U 48 PORT SWITCH (27 AVAIL.).

RACK SCOPE OF WORK:

- [A] REMOVE (E) CABLE MANAGER #3. PROVIDE (N) REAR CABLE MANAGEMENT BAR (MIDDLE ATLANTIC P/N LBP-6R90) AT PATCH PANEL #4.
- [B] RELOCATE (E) SWITCH #7 DIRECTLY BELOW (E) PATCH PANEL #2.
- [C] RELOCATE (E) PATCH PANEL #4, SWITCH #5, AND SWITCH #6 ONE RACK UNIT HIGHER.
- [D] PROVIDE (N) 12" SLIMLINE CAT6A PATCH CABLES TO REPLACE ALL (E) PATCH CABLES AND FOR ALL (N) DROPS. PATCH AS FOLLOWS:
- PP 2 PORTS 1-24 TO SWITCH #7 PORTS 1-24.
  - PP 4 PORTS 1-24 TO SWITCH #7 PORTS 25-48.
  - PP 4 PORTS 25-48 TO SWITCH #5 PORTS 1-24.
- [E] PROVIDE (N) ZONE PAGE AMPLIFIER, RAULAND P/N TCC3022, WITH (N) EXTERNAL POWER SUPPLY, RAULAND P/N TCC3022PS.

EXISTING RACK COMPONENTS:

- 1U FIBER LIU.
- 1U FIBER LIU.
- 1U FIBER LIU.
- 1U FIBER LIU.
- 3U AGGREGATION SWITCH.
- 1U 24 PORT CAT6A PATCH PANEL (0 AVAIL.).
- 1U 48 PORT SWITCH (0 AVAIL.).
- 2U 48 PORT CAT6A PATCH PANEL (0 AVAIL.).
- 1U 48 PORT SWITCH (0 AVAIL.).
- 2U 48 PORT CAT6A PATCH PANEL (0 AVAIL.).
- 2U CABLE MANAGER.
- 1U 48 PORT SWITCH (0 AVAIL.).
- 2U 48 PORT CAT6A PATCH PANEL (0 AVAIL.).
- 2U CABLE MANAGER.
- 1U 48 PORT SWITCH (0 AVAIL.).
- 2U 28 PORT CAT6A PATCH PANEL (8 AVAIL.).
- 2U CABLE MANAGER.

RACK SCOPE OF WORK:

- [A] PROVIDE (N) VERTICAL CABLE MANAGER, DAMAC P/N F532-004, ON LEFT FRONT OF CABINET. ROUTE ALL FIBER PATCH CORDS THROUGH CABLE MANAGER.
- [B] REMOVE (E) CABLE MANAGER #11, #14, AND #17. PROVIDE (N) REAR CABLE MANAGEMENT BAR (MIDDLE ATLANTIC P/N LBP-6R90) AT PATCH PANEL #10, #15, AND #15.
- [C] RELOCATE (E) SWITCH #12 DIRECTLY BELOW (E) PATCH PANEL #10.
- [D] RELOCATE (E) PATCH PANEL #13 DIRECTLY BELOW SWITCH #12.
- [E] RELOCATE (E) SWITCH #15 DIRECTLY BELOW PATCH PANEL #13.
- [F] RELOCATE (E) PATCH PANEL #16 DIRECTLY BELOW SWITCH #15.
- [G] PROVIDE (N) 48 PORT SWITCH, LICENSE, AND ACCESSORIES, CISCO P/N C9300L-48PF-4X-EDU, C9300-DNA-E-48-3Y, SFP-H10GB-CU1M, C9300L-STACK-KIT & STACK-13-3M.
- [H] PROVIDE (N) 48 PORT PATCH PANEL, ORTRONICS P/N OR-SPKSU48 WITH (N) REAR CABLE MANAGEMENT BAR (MIDDLE ATLANTIC P/N LBP-6R90).
- [I] PROVIDE (N) 12" SLIMLINE CAT6A PATCH CABLES TO REPLACE ALL (E) PATCH CABLES AND FOR ALL (N) DROPS. PATCH SO THAT SWITCH PORTS 1-24 ARE CONNECTED TO PATCH PORTS IMMEDIATELY ABOVE THE SWITCH, AND SWITCH PORTS 25-48 CONNECTED TO PATCH PORTS IMMEDIATELY BELOW THE SWITCH.

SINGLE LINE GENERAL NOTES:

APPLICABLE TO ALL MDF/IDF CABINETS/RACKS LISTED BELOW

- PROVIDE (N) UNINTERRUPTIBLE POWER SUPPLY, N1C P/N N1C11500, FOR INTERCOM HEAD END EQUIPMENT. MOUNT DIRECTLY ABOVE (E) UPS UNITS:
  - (E) MDF
- PROVIDE (N) UNINTERRUPTIBLE POWER SUPPLY, N1C P/N N1C11000, MOUNT AT BOTTOM OF CABINET. ROUTE POWER FOR ALL RACK COMPONENTS SO THAT IT IS PROTECTED BY UPS:
  - (E) IDF 1.02, IDF 1.03, IDF 1.06, IDF 1.07, IDF 1.09, IDF 1.10, IDF 1.13, IDF 1.14, IDF1.14B, IDF 1.15, IDF 1.19, IDF 1.21, IDF 1.22, IDF 1.23, IDF 1.24, IDF 1.25, IDF 1.26
- PROVIDE (N) UNINTERRUPTIBLE POWER SUPPLY, N1C P/N N1C11500, MOUNT AT BOTTOM OF CABINET. ROUTE POWER FOR ALL RACK COMPONENTS SO THAT IT IS PROTECTED BY UPS:
  - (E) IDF 1.04, IDF 1.05, IDF 1.08, IDF 1.17
- PROVIDE (N) SLIMLINE CAT6A PATCH CABLES WITH A MAXIMUM 12" OF SLACK FOR ALL (N) DROPS IN ANY IDF WHERE A DETAILED SCOPE HAS NOT BEEN PROVIDED.



KMM SERVICES, INC  
 TECHNOLOGY & FIRE LIFE SAFETY

5433 El Camino Ave., Suite 5  
 Carmichael, CA 95608  
 Office: (916) 359-4000 www.kmmservices.com



Copyright © 2023

These drawings and specifications and the ideas, designs and arrangements represented thereby are and shall remain the property of KMM Services, Inc. and no part thereof shall be copied, disclosed to others, or used in connection with any other work or project other than the specific project for which they have been prepared and developed without the written consent of KMM Services, Inc. Visual contact with these drawings or specifications shall constitute conclusive evidence of these restrictions.

IF DRAWING IS NOT 30"x42" IT IS A REDUCED PRINT

SHEET REVISIONS

DELTA	DESCRIPTION	DATE

SITE KEY PLAN

PROJECT  
 SACRAMENTO CITY USD  
 HIRAM JOHNSON HS  
 TELE-CENTER  
 UPGRADE PROJECT  
 6879 14TH AVE.  
 SACRAMENTO, CA. 95820

SHEET TITLE  
 TECHNOLOGY  
 SINGLE LINE DIAGRAMS

DRAWING STATUS

CONSTRUCTION DOCUMENTS

PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-31

REVISION

SHEET

T401



EQUIPMENT SCHEDULE INTERIOR SURFACE SPEAKER:

EQUIPMENT SCHEDULE INTERIOR DROP CEILING SPEAKER

EQUIPMENT SCHEDULE EXTERIOR SURFACE SPEAKER:

Copyright © 2023

These drawings and specifications and the ideas, designs and arrangements represented thereby are and shall remain the property of KMM Services, Inc. and no part thereof shall be copied disclosed to others, or used in connection with any other work or project other than the specific project for which they have been prepared and developed without the written consent of KMM Services, Inc. Visual contact with these drawings or specifications shall constitute conclusive evidence of these restrictions.

	EQUIPMENT SCHEDULE INTERIOR SURFACE CLOCK:	
---	--	--

## SHEET REVISIONS

(E)	EQUIPMENT SCHEDULE INTERIOR SURFACE CLOCK/SPEAKER C
-----	---

## SITE KEY PLAN

(F) EQUIPMENT SCHEDULE INTERIOR RETROFIT BAFFLE CLOCK/SPEAK

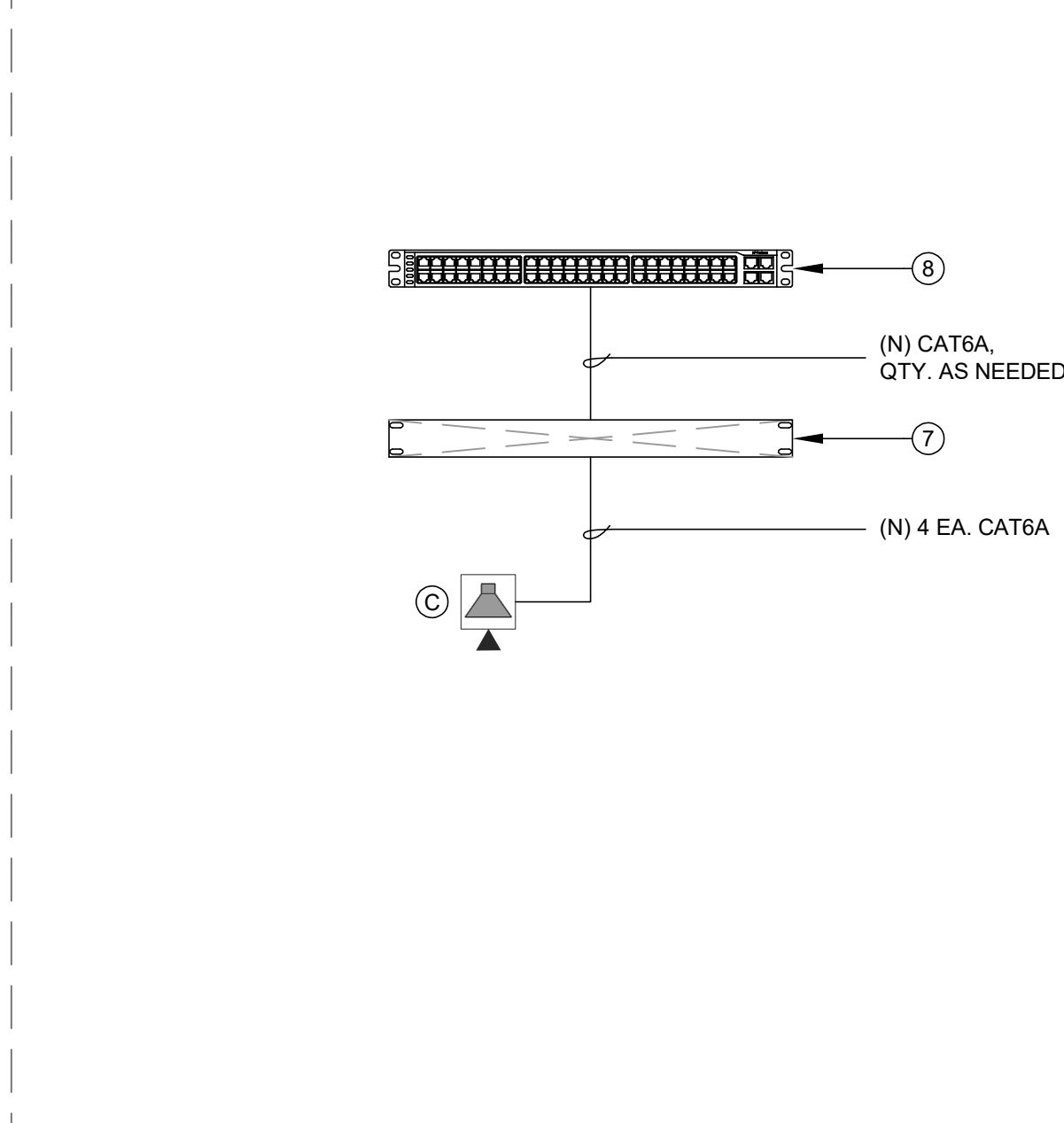
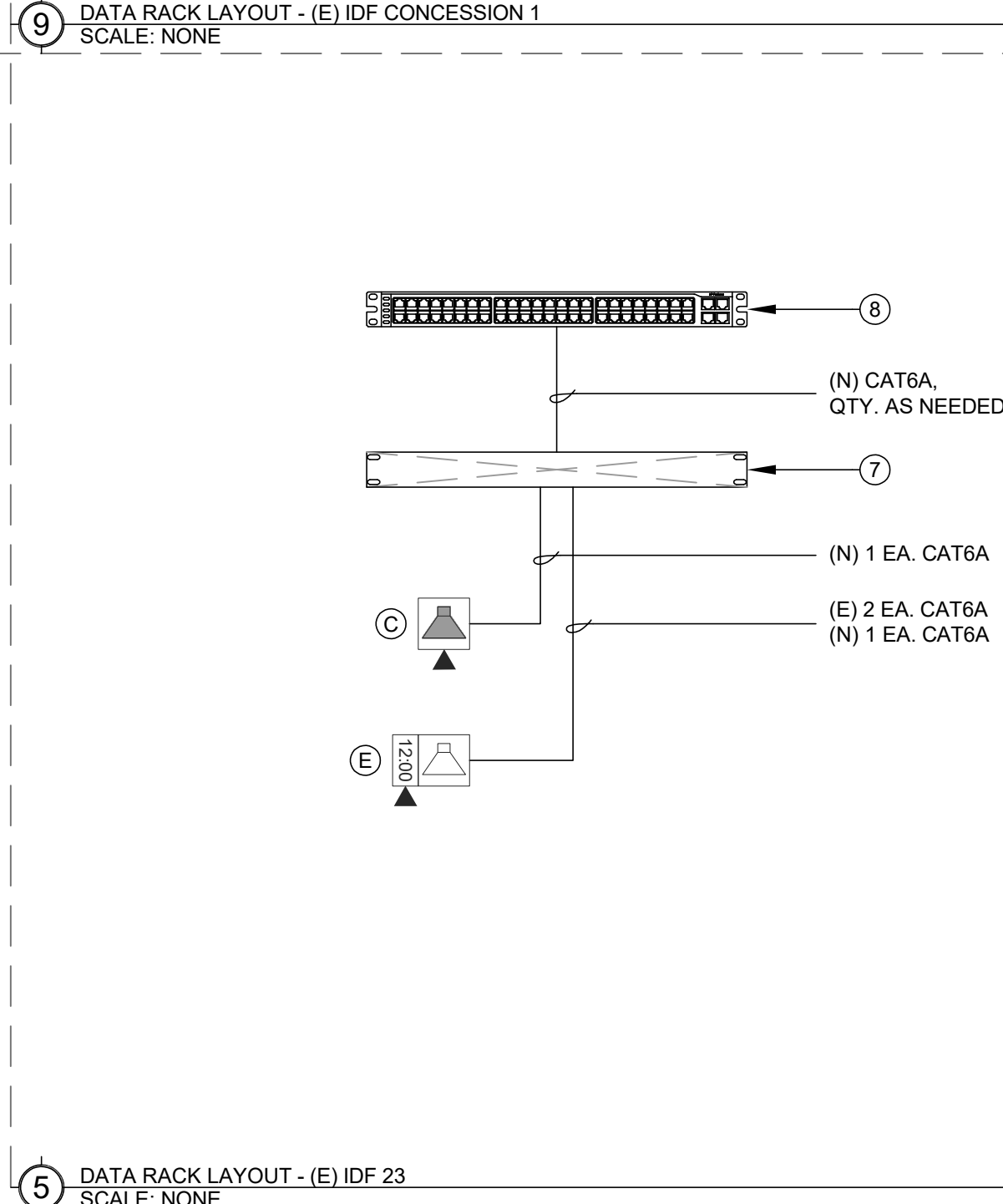
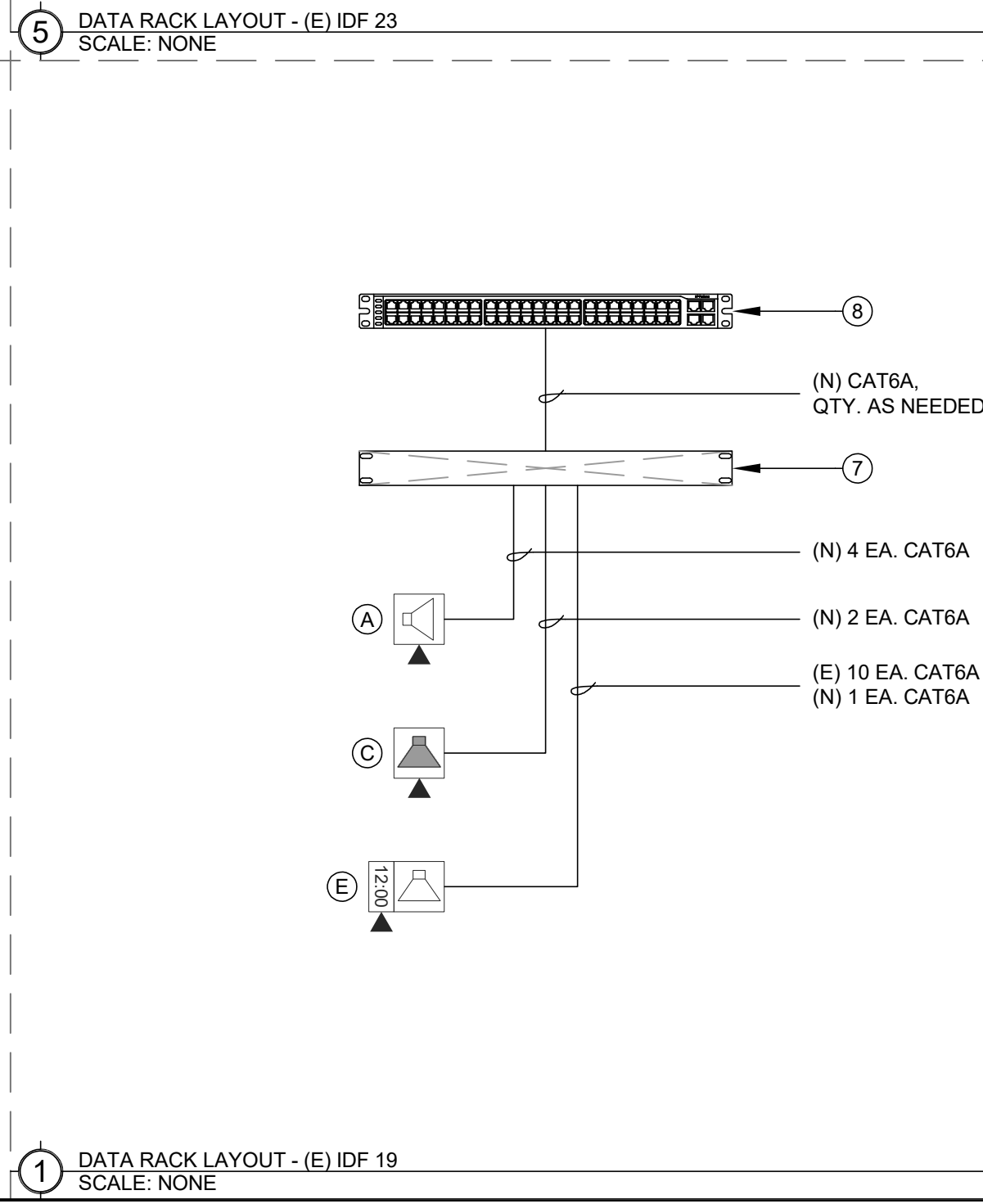
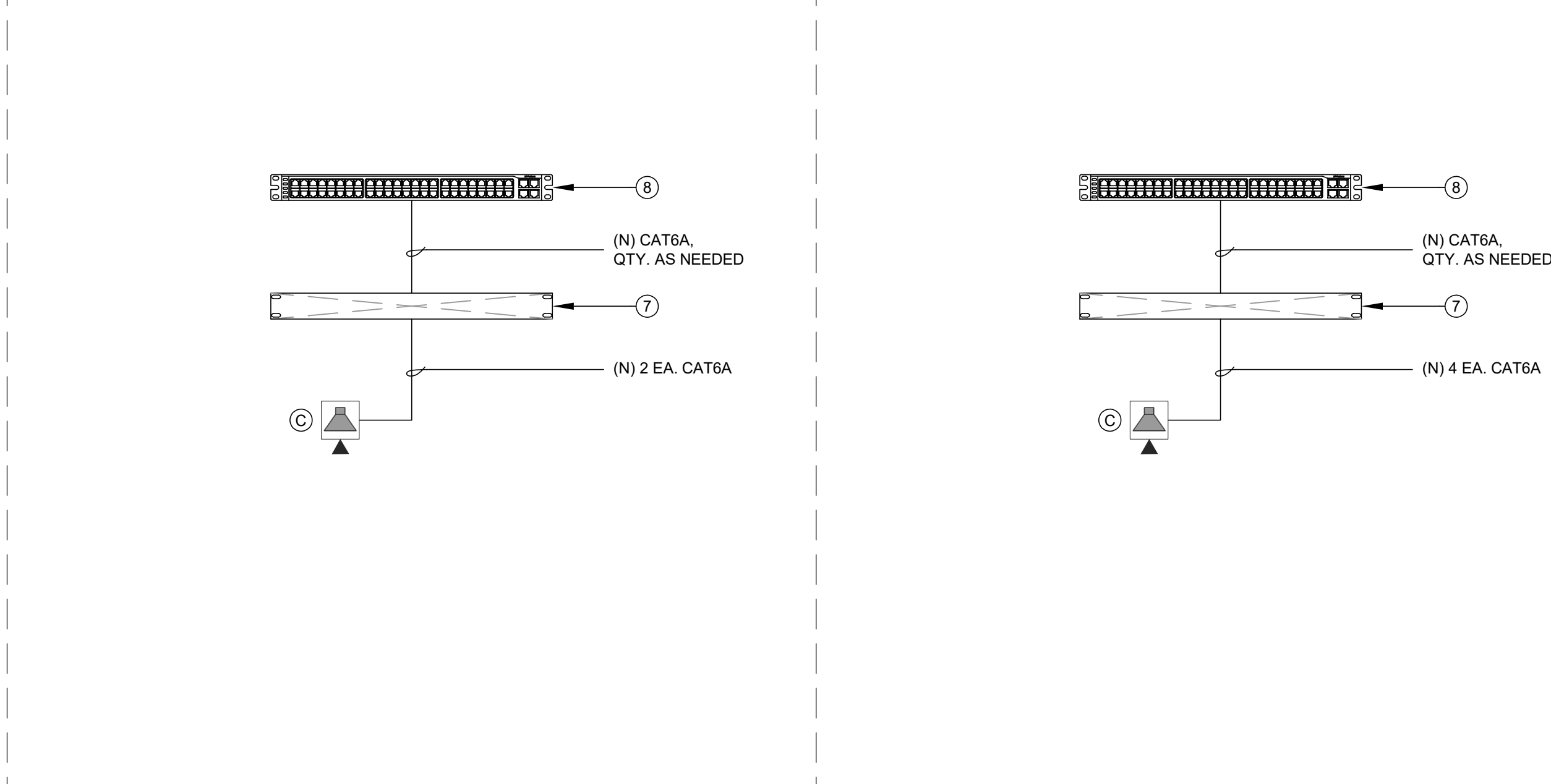
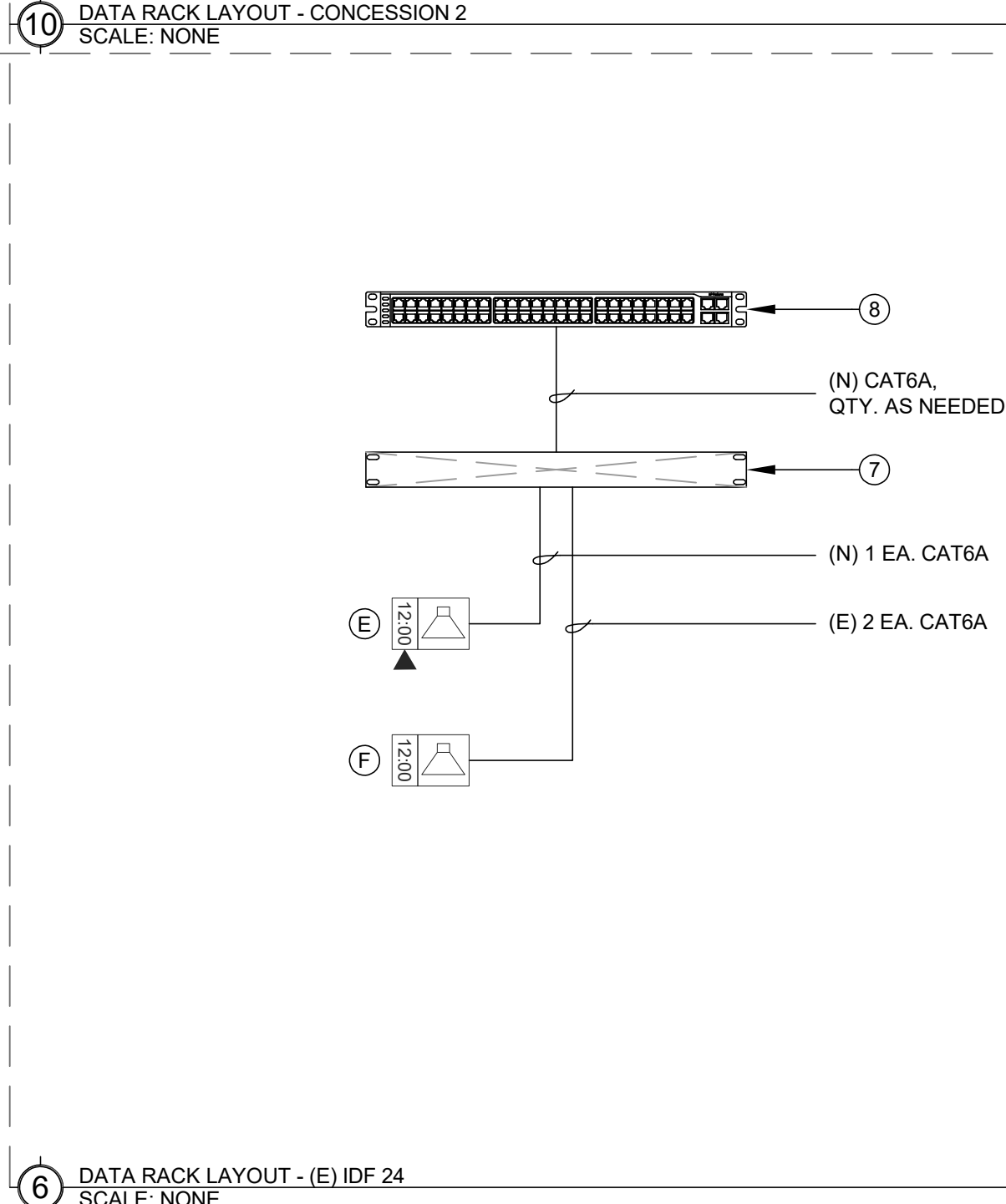
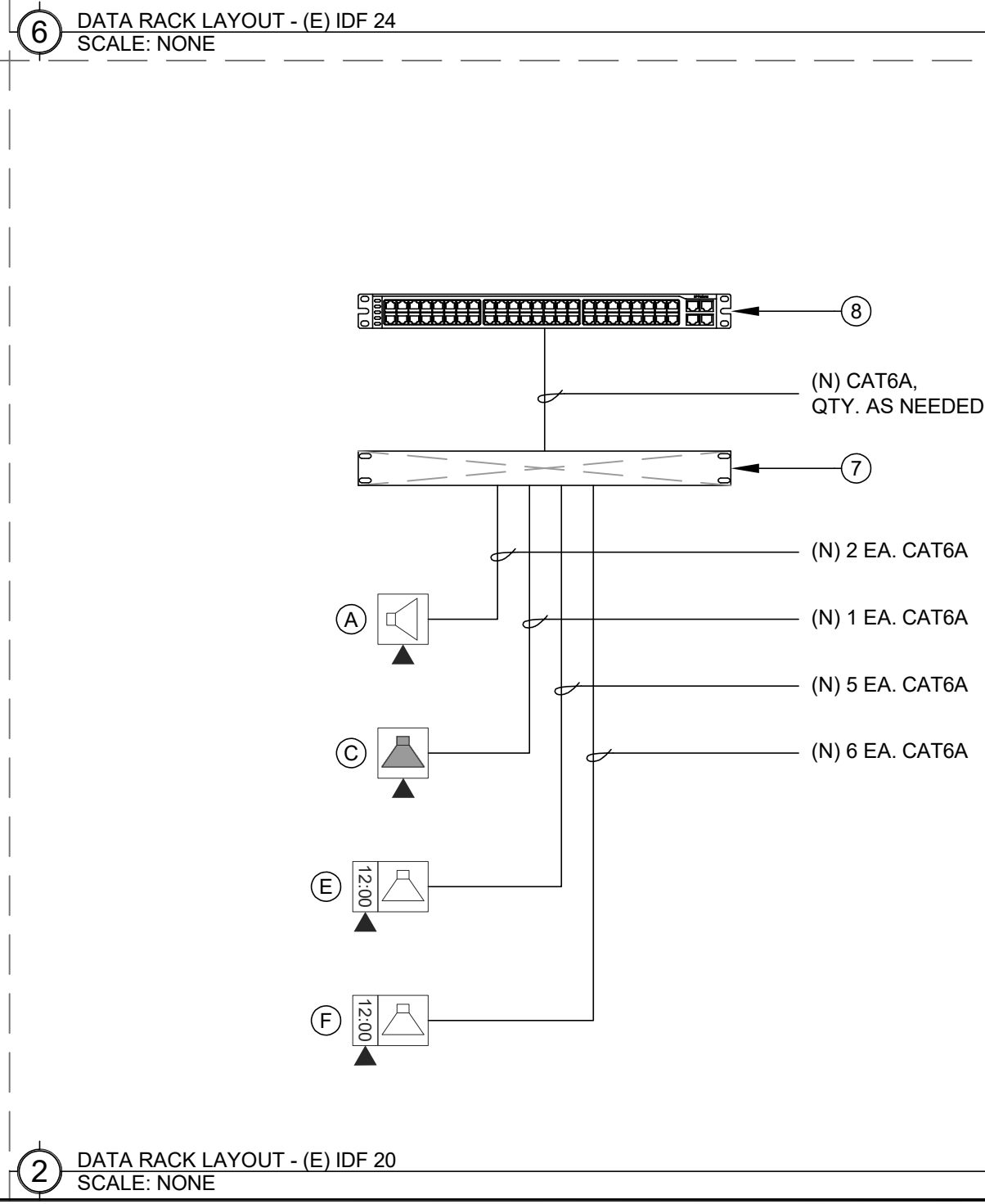
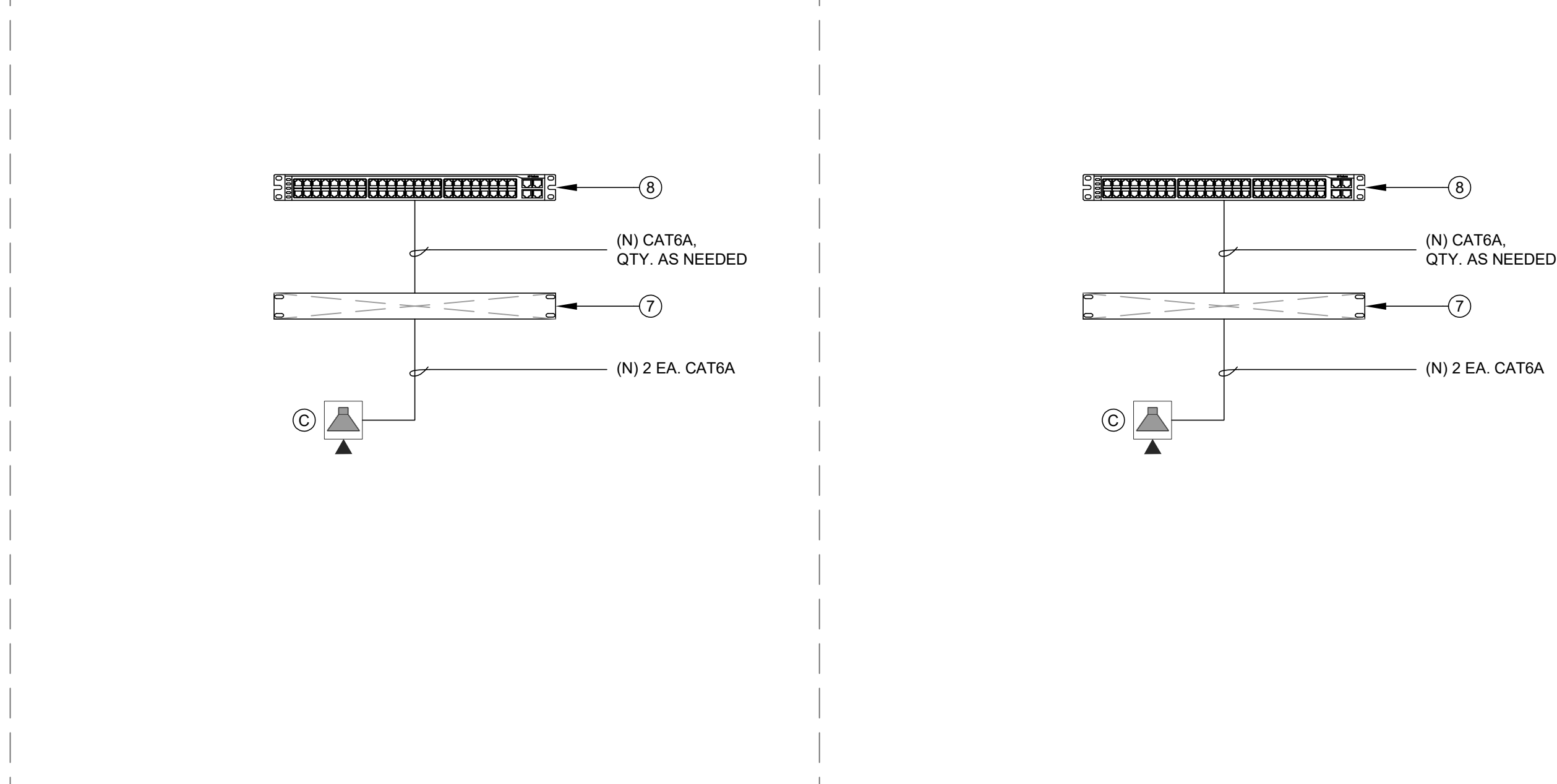
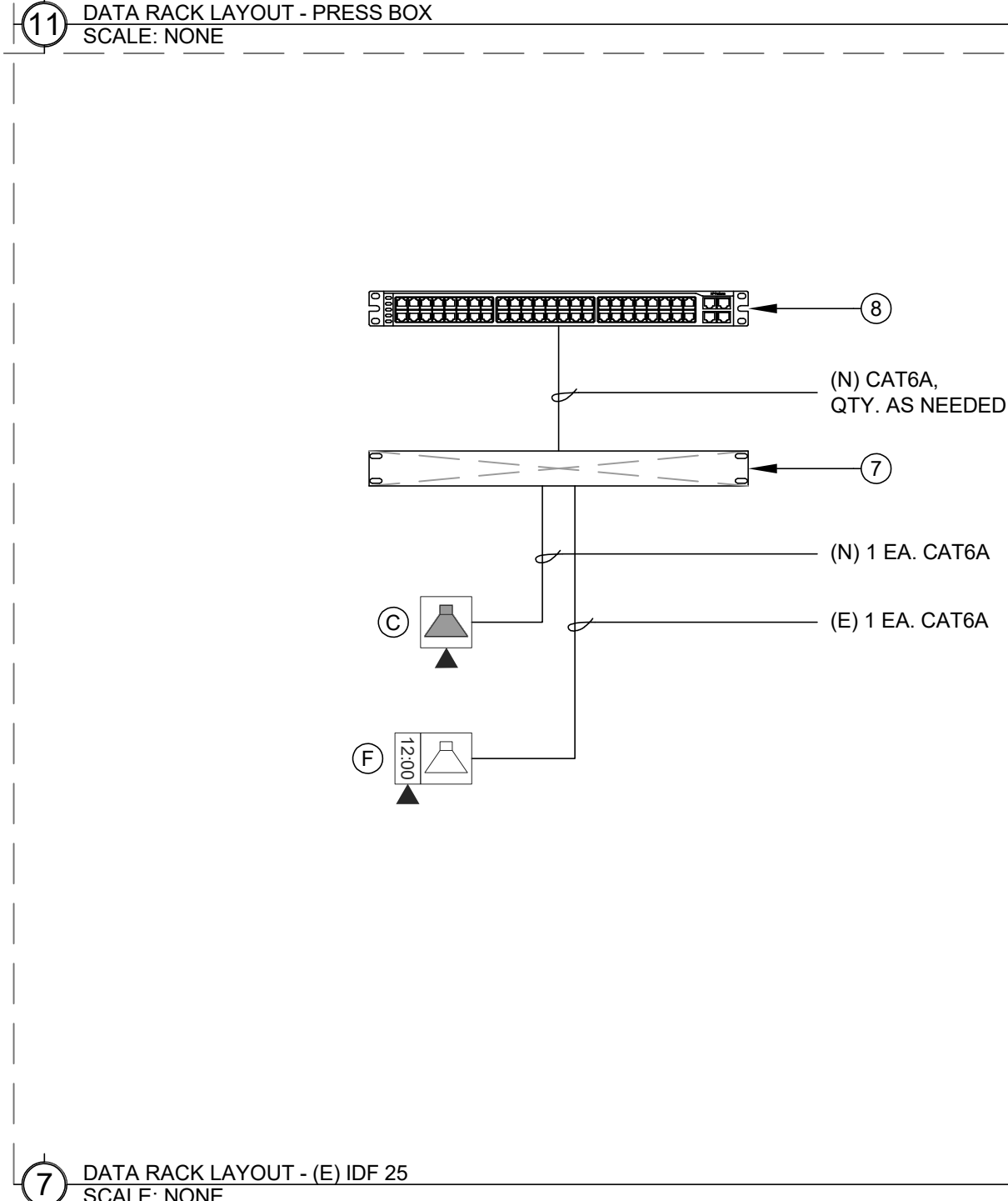
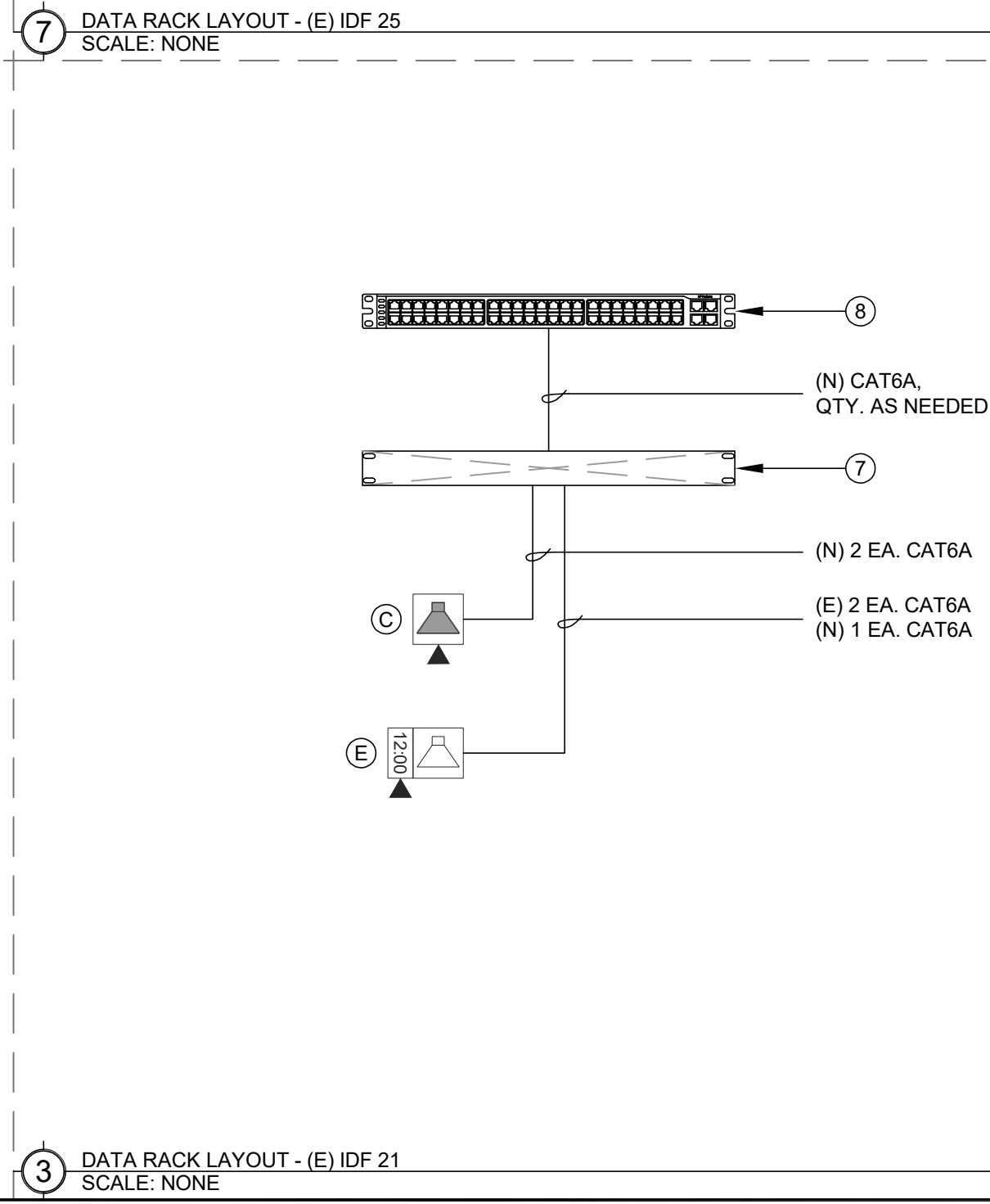
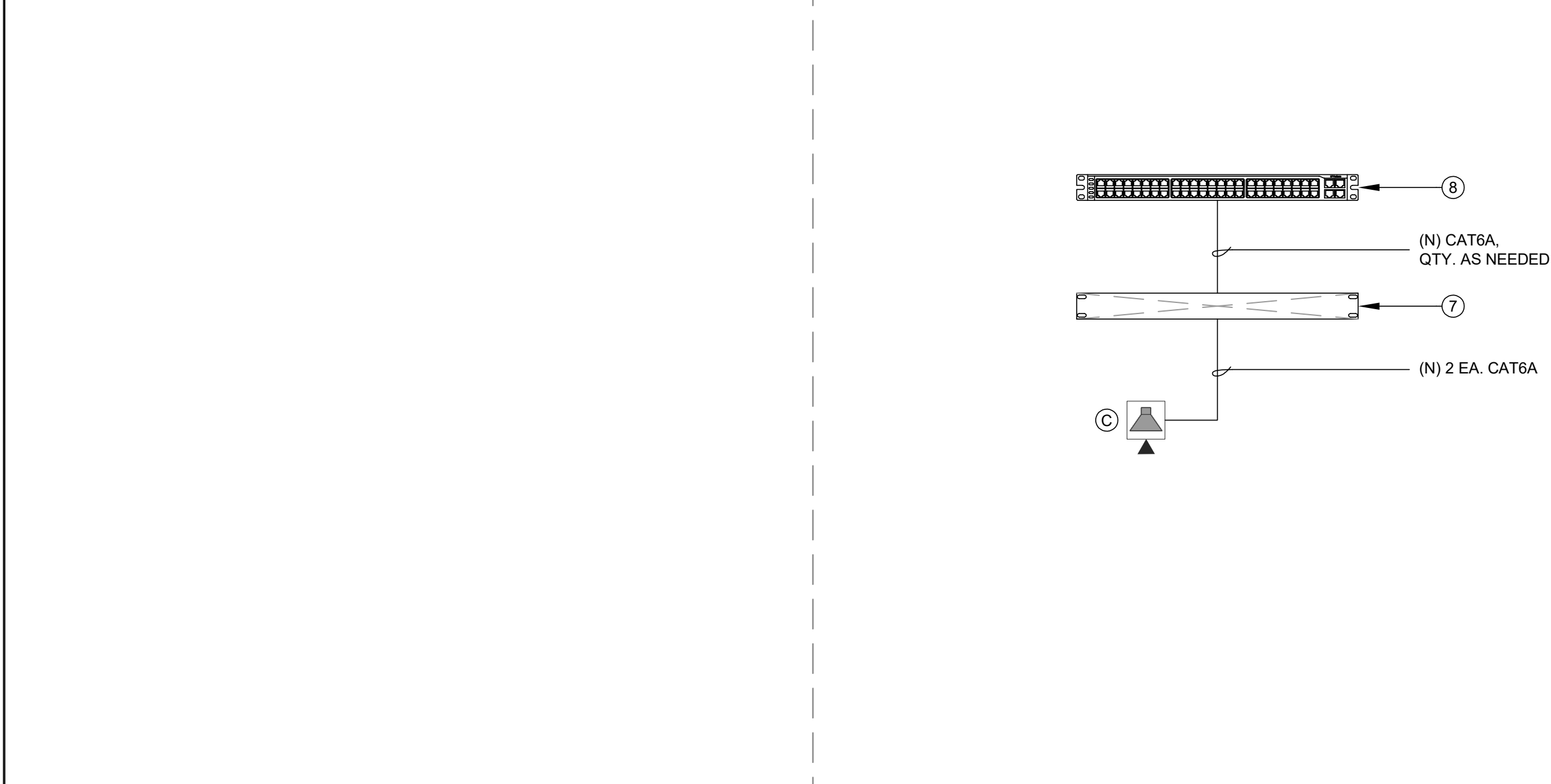
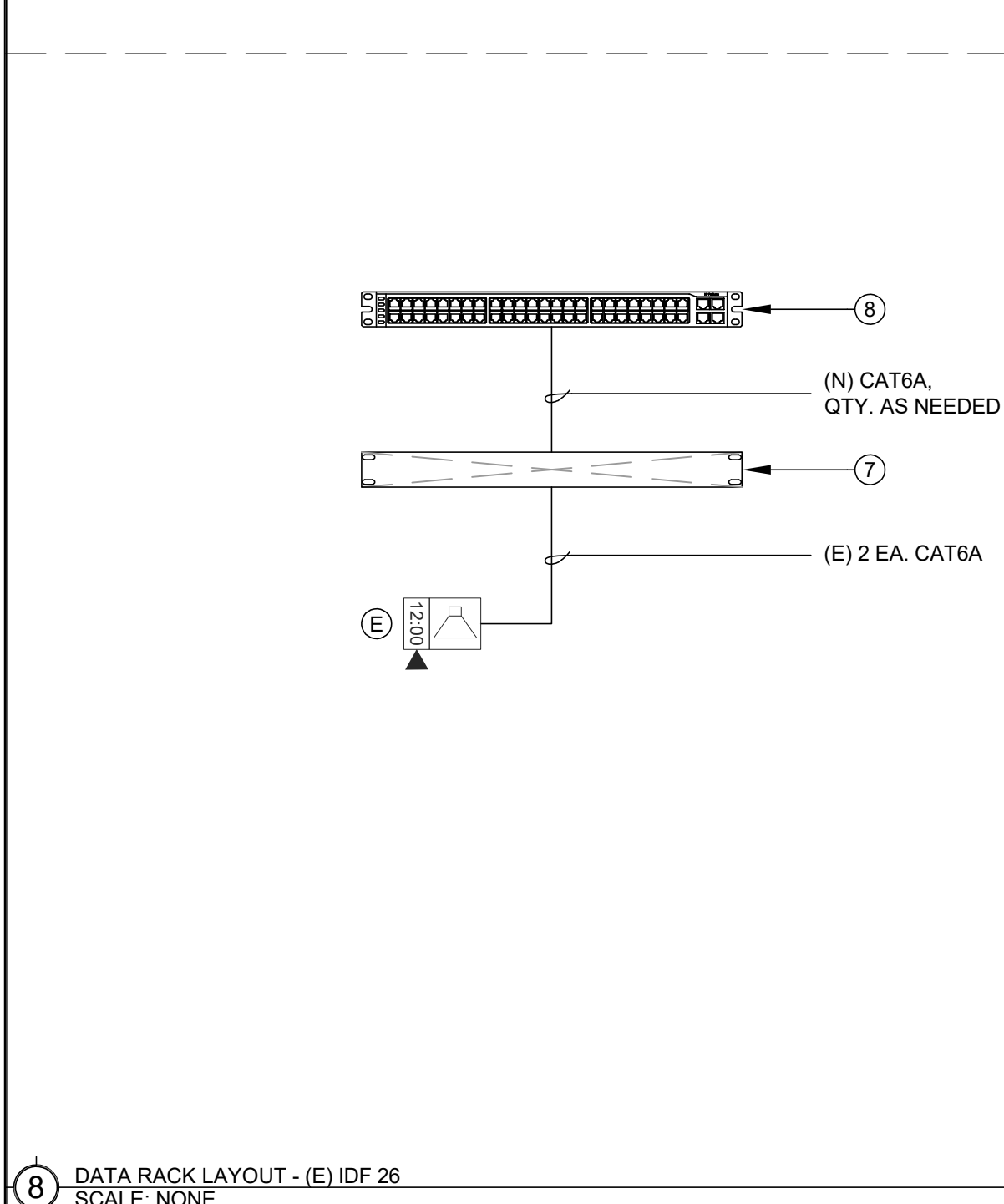
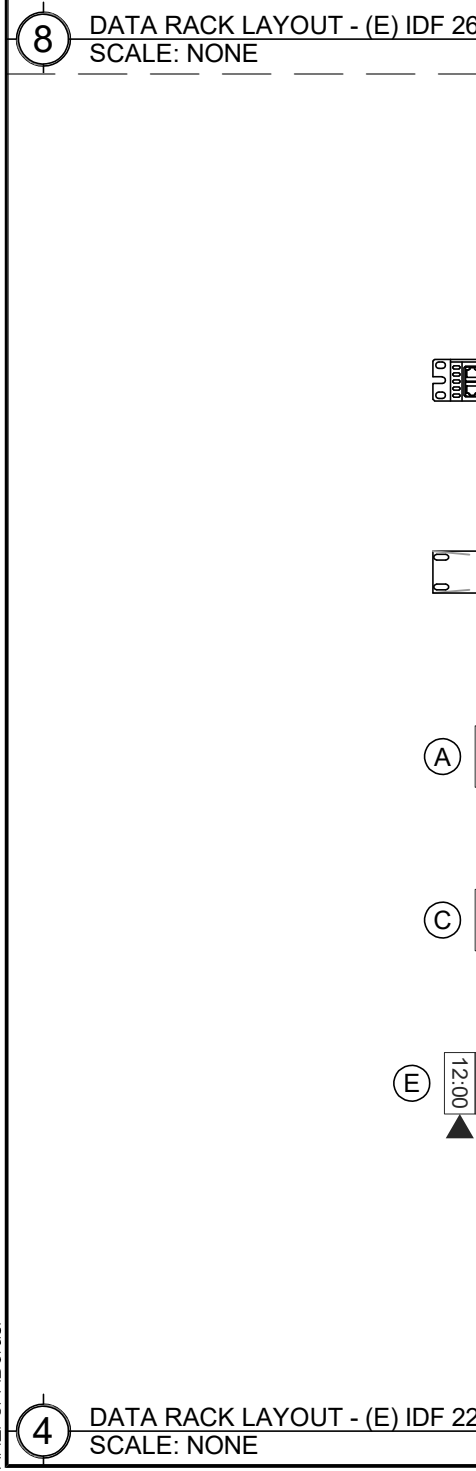
PROJECT  
SACRAMENTO CITY USD  
HIRAM JOHNSON HS  
TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.  
SACRAMENTO, CA. 95820

	EQUIPMENT SCHEDULE EXTERIOR SURFACE SPEAKER (25
--	---

SHEET TITLE

TECHNOLOGY  
SINGLE LINE DIAGRAMS

PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-31



EQUIPMENT INTERCOM SCHEDULE: ALL EQUIPMENT AND MATERIALS ARE CONTRACTOR FURNISHED, INSTALLED AND CONFIGURED (UNO)				
SYMBOL	DESCRIPTION	MODEL	PART NUMBER	NOTES / DETAIL REFERENCES
①	TELECENTER U IP CONTROLLER	RAULAND	TCC2000	N/A
②	TELECENTER U ADMIN CONSOLE		TCC2045	N/A
③	TELECENTER U AUX. IN/OUT. MODULE		TCC2033	N/A
	UNIVERSAL RACK MOUNTING KIT		TCC2099	N/A
④	TELECENTER U PROGRAM LINE INPUT MODULE		TCC2055	N/A
⑤	ZONE PAGE AMPLIFIER		TCC3022	N/A
⑥	ZONE PAGE AMPLIFIER AUX POWER SUPPLY		TCC3022PS	N/A
⑦	24-PORT OR 48-PORT PATCH PANEL	SEE DATA SINGLE LINE RACK COMPONENTS BELOW FOR MORE INFORMATION.		(N) OR (E) AS NOTED
⑧	48-PORT NETWORK SWITCH	SEE DATA SINGLE LINE RACK COMPONENTS BELOW FOR MORE INFORMATION.		(N) OR (E) AS NOTED

EQUIPMENT SCHEDULE INTERIOR SURFACE SPEAKER: ALL EQUIPMENT AND MATERIALS ARE CONTRACTOR FURNISHED, INSTALLED AND CONFIGURED (UNO)				
DESCRIPTION	MODEL	PART NUMBER	NOTES / DETAIL REFERENCES	
TELECENTER U IP CLASSROOM MODULE	RAULAND	TCC2011A	MOUNT INSIDE ENCLOSURE	
8 OHM, 8" SPEAKER WITH RJ45 CONNECTOR	RAULAND	US0880	N/A	
SPEAKER BAFFLE	RAULAND	ACC1003	N/A	
SURFACE MOUNT SPEAKER ENCLOSURE	RAULAND	ACC1112	N/A	

EQUIPMENT SCHEDULE INTERIOR DROP CEILING SPEAKER: ALL EQUIPMENT AND MATERIALS ARE CONTRACTOR FURNISHED, INSTALLED AND CONFIGURED (UNO)				
DESCRIPTION	MODEL	PART NUMBER	NOTES / DETAIL REFERENCES	
TELECENTER U IP CLASSROOM MODULE	RAULAND	TCC2011A	MOUNT TO SPEAKER	
2'X2' 8 OHM DROP-IN SPEAKER WITH RJ45 CONNECTOR	RAULAND	BAFKIT2X2L8RJ	N/A	

EQUIPMENT SCHEDULE EXTERIOR SURFACE SPEAKER: ALL EQUIPMENT AND MATERIALS ARE CONTRACTOR FURNISHED, INSTALLED AND CONFIGURED (UNO)				
DESCRIPTION	MODEL	PART NUMBER	NOTES / DETAIL REFERENCES	
TELECENTER U IP CLASSROOM MODULE	RAULAND	TCC2011A	MOUNT INSIDE BUILDING	
TELECENTER U BREAKOUT MODULE	RAULAND	603101	MOUNT INSIDE BUILDING	
8 OHM, 8" MOISTURE RESISTANT SPEAKER	LOWELL	8C10MRB	N/A	
GRILLE VANDAL RESISTANT	RAULAND	ACC1012	N/A	
SURFACE MOUNT SPEAKER ENCLOSURE	RAULAND	ACC1113	N/A	
(N) SURFACE MOUNTED 4 GANG BACKBOX - WHITE	FSR	SMWB-4G-WHT	MOUNT INSIDE BUILDING	

EQUIPMENT SCHEDULE INTERIOR SURFACE CLOCK: ALL EQUIPMENT AND MATERIALS ARE CONTRACTOR FURNISHED, INSTALLED AND CONFIGURED (UNO)				
DESCRIPTION	MODEL	PART NUMBER	NOTES / DETAIL REFERENCES	
IP 16" ROUND CLOCK	SAPLING	SAP-4BS-16R	N/A	
16" PROTECTIVE CAGE	RAULAND	WCANA16WG	N/A	

EQUIPMENT SCHEDULE INTERIOR SURFACE CLOCK/SPEAKER COMBO: ALL EQUIPMENT AND MATERIALS ARE CONTRACTOR FURNISHED, INSTALLED AND CONFIGURED (UNO)				
DESCRIPTION	MODEL	PART NUMBER	NOTES / DETAIL REFERENCES	
TELECENTER U IP CLASSROOM MODULE	RAULAND	TCC2011A	MOUNT IN ENCLOSURE	
IP DIGITAL CLOCK	RAULAND	TCC3011S	N/A	
BAFFLE ASSEMBLY WITH SPEAKER	RAULAND	ACC3011S	N/A	
SURFACE MOUNT ENCLOSURE CLOCK/SPEAKER COMBO	RAULAND	ACC3011SBB	N/A	

EQUIPMENT SCHEDULE INTERIOR RETROFIT BAFFLE CLOCK/SPEAKER COMBO: ALL EQUIPMENT AND MATERIALS ARE CONTRACTOR FURNISHED, INSTALLED AND CONFIGURED (UNO)				
DESCRIPTION	MODEL	PART NUMBER	NOTES / DETAIL REFERENCES	
TELECENTER U IP CLASSROOM MODULE	RAULAND	TCC2011A	MOUNT IN (E) BACKBOX	
IP DIGITAL CLOCK	RAULAND	TCC3011S	MOUNT TO (E) BAFFLE	
8" SPEAKER ASSEMBLY	RAULAND	US0880	MOUNT TO (E) BAFFLE	
CUSTOM COVER PLATE	INTERSTATE PLASTICS	N/A	SEE DETAIL SHEET T800	

EQUIPMENT SCHEDULE EXTERIOR SURFACE SPEAKER (25V): ALL EQUIPMENT AND MATERIALS ARE CONTRACTOR FURNISHED, INSTALLED AND CONFIGURED (UNO)				
DESCRIPTION	MODEL	PART NUMBER	NOTES / DETAIL REFERENCES	
8 OHM, 8" MOISTURE RESISTANT SPEAKER	LOWELL	8C10MRB-T72	N/A	
GRILLE VANDAL RESISTANT	RAULAND	ACC1012	N/A	
SURFACE MOUNT SPEAKER ENCLOSURE	RAULAND	ACC1113	N/A	



KMM SERVICES, INC  
TECHNOLOGY & FIRE LIFE SAFETY

5433 El Camino Ave. Suite 5  
Carmichael, CA 95608  
Office: (916) 359-4000 www.kmmservices.com



Copyright © 2023

These drawings and specifications and the ideas, designs and arrangements represented thereby are not shall remain the property of KMM Services, Inc. and no part thereof shall be copied, disclosed to others, or used in connection with any other work or project other than the specific project for which they have been prepared and developed without the written consent of KMM Services, Inc. Visual contact with these drawings or specifications shall constitute conclusive evidence of these restrictions.

IF DRAWING IS NOT 30"X42" IT IS A REDUCED PRINT

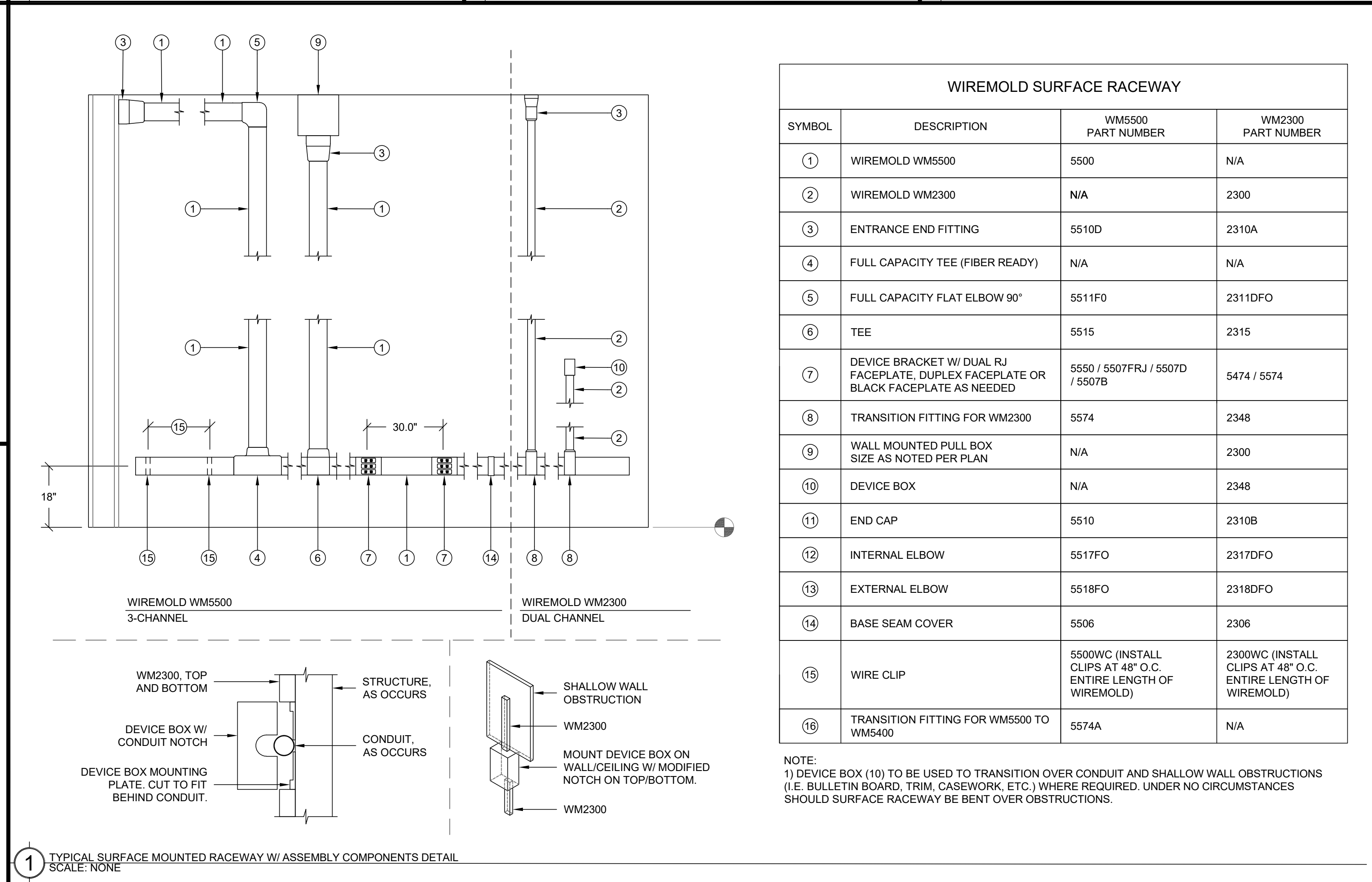
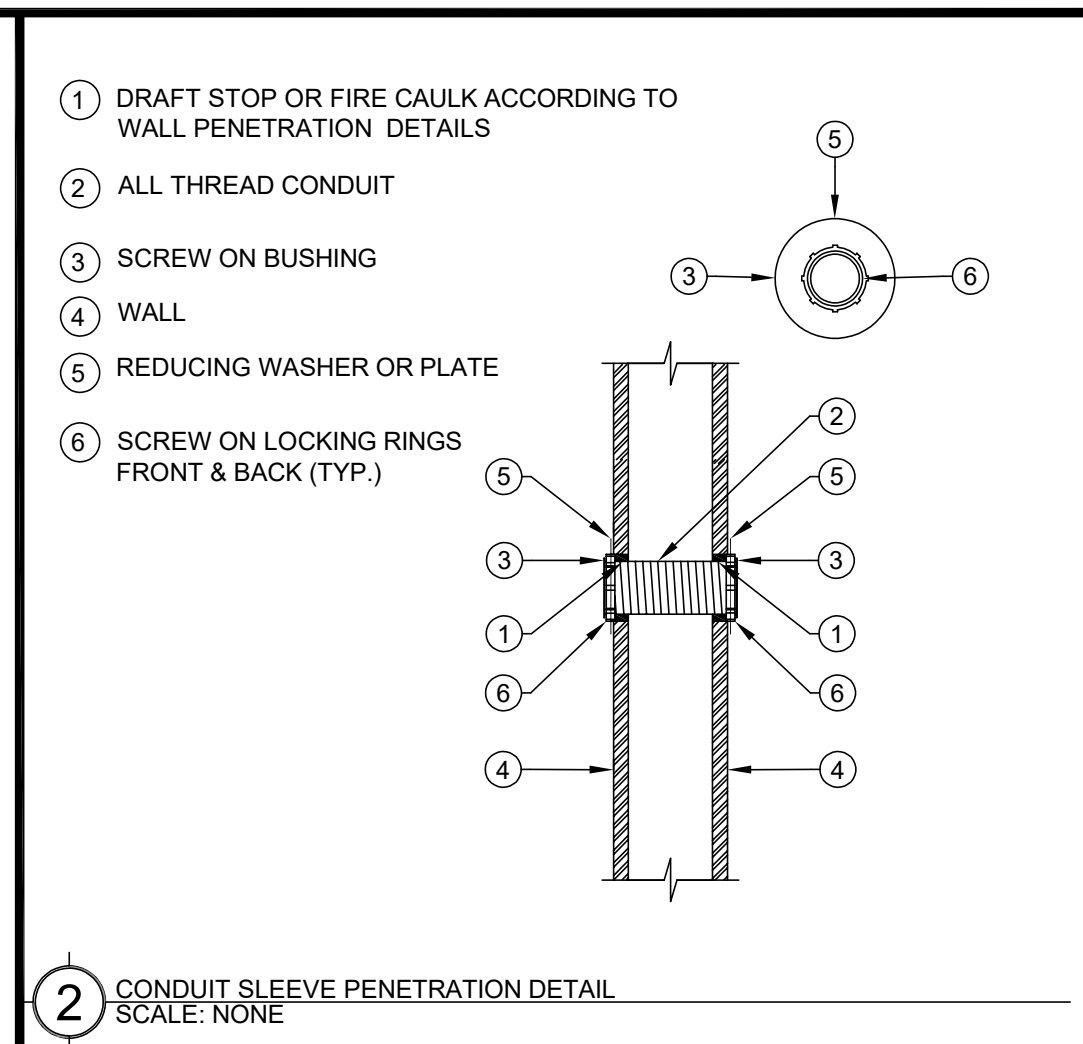
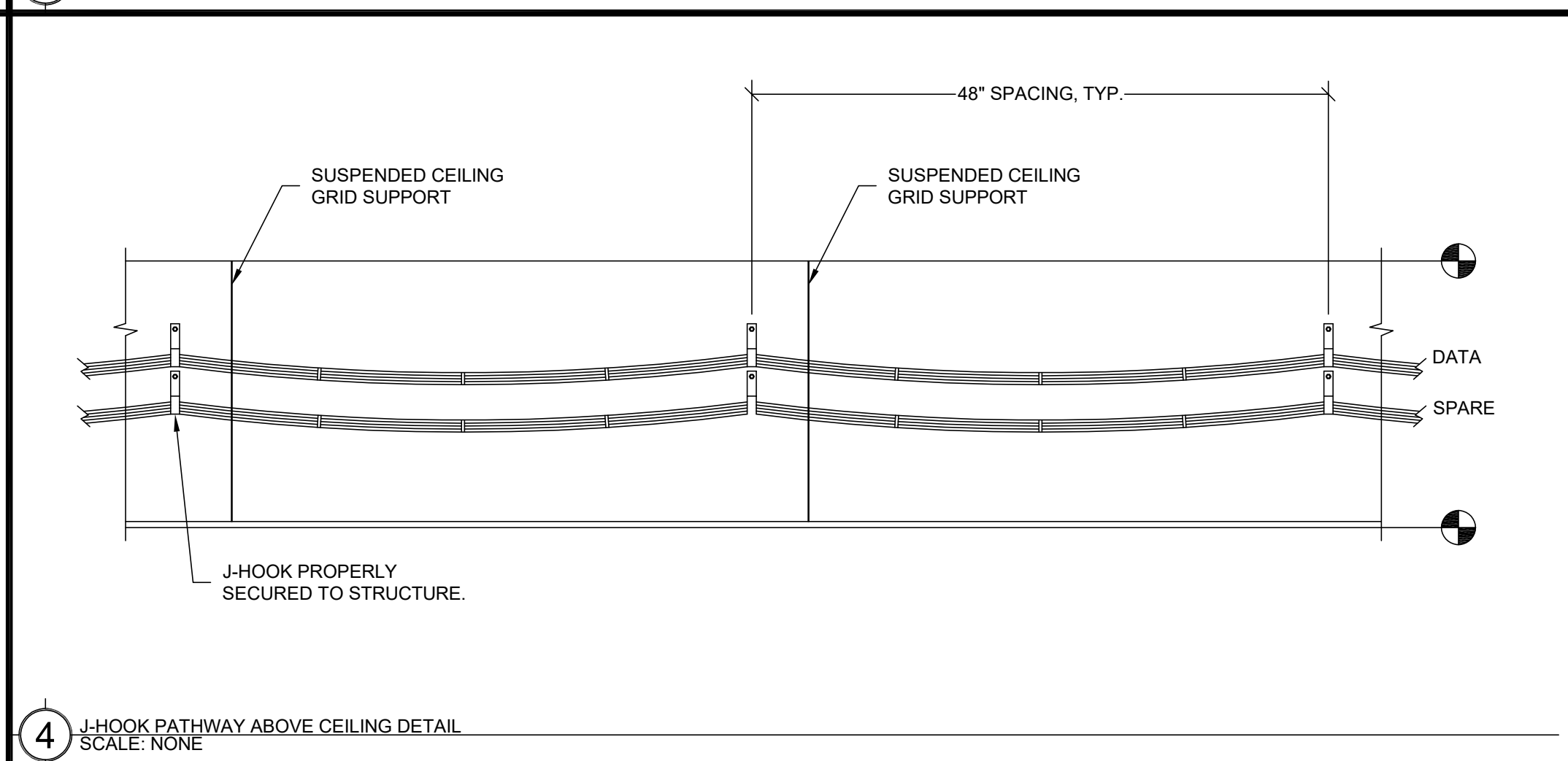
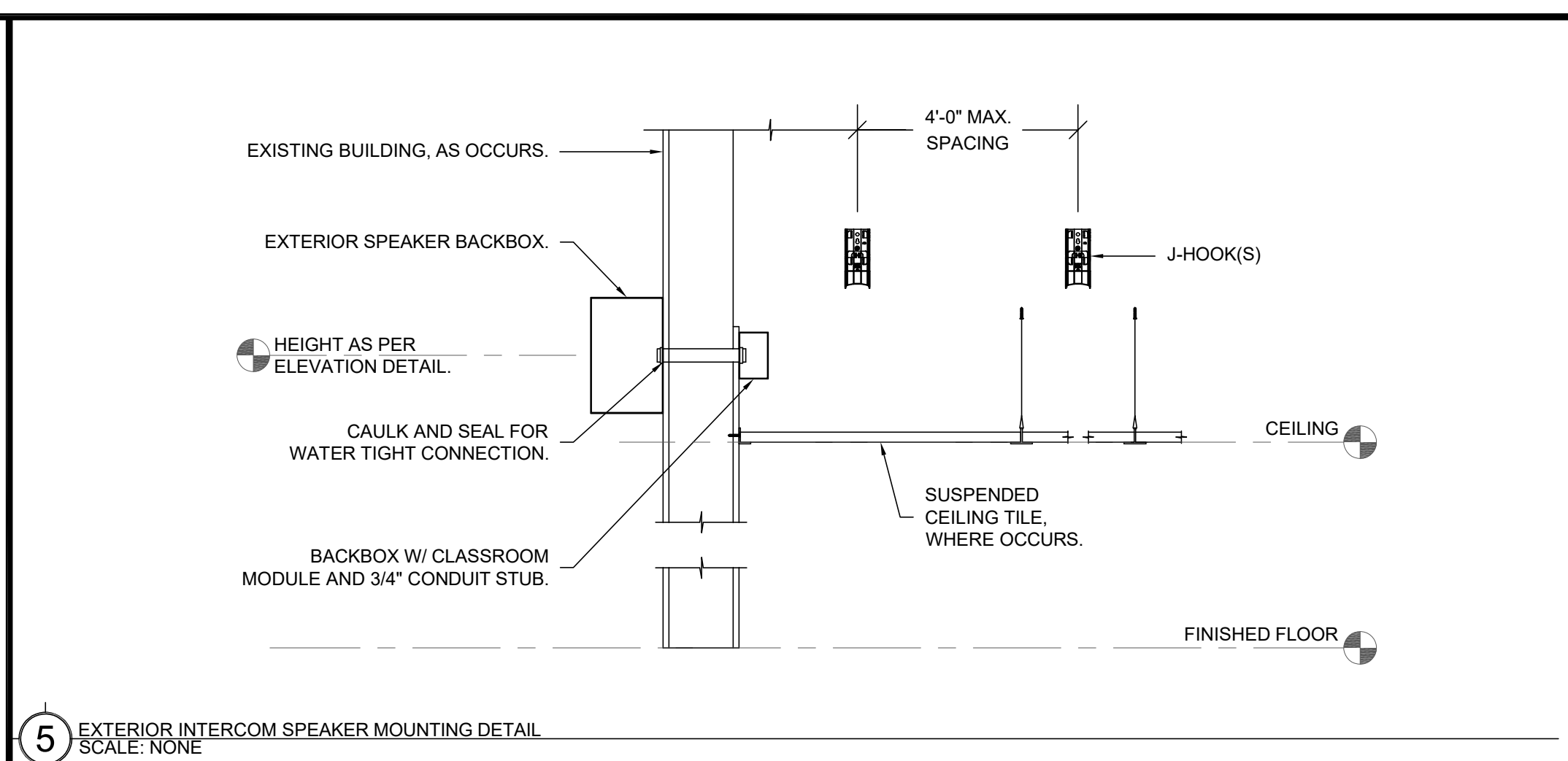
SHEET REVISIONS		
DELTA	DESCRIPTION	DATE

SITE KEY PLAN		

PROJECT  
SACRAMENTO CITY USD  
HIRAM JOHNSON HS  
TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.  
SACRAMENTO, CA. 95820  
SHEET TITLE  
TECHNOLOGY  
SINGLE LINE DIAGRAMS

DRAWING STATUS	
CONSTRUCTION DOCUMENTS	
PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-05-31

REVISION  
SHEET  
T403



NOTE:  
1) DEVICE BOX (10) TO BE USED TO TRANSITION OVER CONDUIT AND SHALLOW WALL OBSTRUCTIONS (I.E. BULLETIN BOARD, TRIM, CASEWORK, ETC.) WHERE REQUIRED. UNDER NO CIRCUMSTANCES SHOULD SURFACE RACEWAY BE BENT OVER OBSTRUCTIONS.

SHEET **T800**

[illegible]

Underwriters Laboratories, Inc. to ANSIUL 1479 (ASTM E814) and CANULC S115	<b>System No. W.L-3210</b>																								
<div> <div>ANSIUL 1479 (ASTM E814)</div> <div> <div>F Ratings - 1 and 2 Hr (See Item 1)</div> <div>T Rating - 3/4 Hr</div> </div> </div>	<div> <div>CANULC S115</div> <div> <div>F Ratings - 1 and 2 Hr (See Item 1)</div> <div>FT Rating - 3/4 Hr</div> <div>FH Ratings - 1 and 2 Hr (See Item 1)</div> <div>FTH Rating - 3/4 Hr</div> </div> </div>																								
<p>1. Wall Assembly - The 1 or 2 hr fire rated gypsum board/steel wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:</p> <p>A. Studs - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nominal 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be 3 in. (76 mm) wide and 16 in. (406 mm) deep.</p> <p>B. Gypsum Board - Thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, V300, U400, V400 or V400 Series Design in the UL Fire Resistance Directory. Max. diam of opening is 5-1/2 in. (165 mm) when sleeve (Item 2) is installed. Max diam of opening is 4 in. (102 mm) when sleeve is not used.</p> <p>The hourly F rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.</p> <p>2. Steel Sleeve - (Optional) - Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing (EMT), steel conduit, Schedule 5 or heavier steel pipe sleeve or min 0.010 in. thick (0.41 mm). No. 29 gals steel sleeve installed flush with wall surfaces. The annular space between the steel sleeve and periphery of opening shall be min 0 in. (continuous joint point) to max 2 in. (51 mm). When Schedule 5 steel pipe or EMT is used, sleeve may be installed flush with or extend up to 1/8 in. (44 mm) beyond one or both wall surfaces. Steel sleeve may be installed at an angle not greater than 45 degrees from perpendicular. Schedule 5 steel pipe or EMT sleeves may extend continuously beyond one wall surface. Sleeve to be rigidly supported when extending from the wall surfaces.</p>																									
<b>Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876</b>	<b>Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876</b>																								
Reproduced courtesy of Underwriters Laboratories, Inc. Created or Revised: June 13, 2016	Reproduced courtesy of Underwriters Laboratories, Inc. Created or Revised: June 13, 2016																								
(800)992-1180 (908)526-8000 FAX (908)231-8415 E-Mail: techsupport@stfi.com Website: www.stfiexpress.com	(800)992-1180 (908)526-8000 FAX (908)231-8415 E-Mail: techsupport@stfi.com Website: www.stfiexpress.com																								
Page 1 of 2	Page 1 of 2																								
<p>Cables - Aggregate cross-sectional area of cables in steel sleeve shall be max 48 percent of aggregate cross-sectional area of the opening or sleeve. Cables to be horizontally rigidly supported on both sides of wall assembly. When the sleeve (Item 2) is installed, the annular space between the cables and the sleeve shall be min 0 in. (point contact) to max 1-1/2 in. (38 mm). When the sleeve (Item 2) is not used, the annular space between the cables and the opening shall be max 0 in. (point contact) to max 2 in. (51 mm). Cable bundle, using cables described below, may penetrate the wall at an angle not greater than 45 degrees. Any combination of the following types and sizes of copper conductor cable may be used:</p> <p>A. Max 3/8 No. 20 AWG (or smaller) copper conductor cable with polyvinyl chloride (PVC) or plenum-rated jacketing and insulation.</p> <p>B. Max 3/4 No. 20 AWG (or smaller) aluminum or copper conductor sleeve entrance cable with PVC or plenum-rated jacketing and insulation.</p> <p>C. Max 3/8 No. 8 AWG (or smaller) nonmetallic sheathed (Romex) cable with copper conductors, PVC insulation and jacket.</p> <p>D. Max 7/8 No. 20 AWG (or smaller) multiconductor power and control cables with XLPE or PVC insulation and XLPE or PVC jacket.</p> <p>E. Max RDU (or smaller) coaxial cable with fluorinated ethylene or plenum-rated insulation and jacketing.</p> <p>F. Max 62 5/48 fiber optic cable with PVC or plenum-rated insulation and jacketing.</p> <p>G. Max 4 pair No. 24 AWG (or smaller) copper conductor data cable with PVC or plenum-rated insulation and jacket.</p> <p>H. Max 4/0 No. 20 aluminum or copper conductor aluminum or steel Metal-Clad or Armored-Clad cable.</p> <p>I. Max 1-in. (10 mm) copper ground cable with or without a PVC jacket.</p>	<p>Cables - Aggregate cross-sectional area of cables in steel sleeve shall be max 48 percent of aggregate cross-sectional area of the opening or sleeve. Cables to be horizontally rigidly supported on both sides of wall assembly. When the sleeve (Item 2) is installed, the annular space between the cables and the sleeve shall be min 0 in. (point contact) to max 1-1/2 in. (38 mm). When the sleeve (Item 2) is not used, the annular space between the cables and the opening shall be max 0 in. (point contact) to max 2 in. (51 mm). Cable bundle, using cables described below, may penetrate the wall at an angle not greater than 45 degrees. Any combination of the following types and sizes of copper conductor cable may be used:</p> <p>A. Max 3/8 No. 20 AWG (or smaller) copper conductor cable with polyvinyl chloride (PVC) or plenum-rated jacketing and insulation.</p> <p>B. Max 3/4 No. 20 AWG (or smaller) aluminum or copper conductor sleeve entrance cable with PVC or plenum-rated jacketing and insulation.</p> <p>C. Max 3/8 No. 8 AWG (or smaller) nonmetallic sheathed (Romex) cable with copper conductors, PVC insulation and jacket.</p> <p>D. Max 7/8 No. 20 AWG (or smaller) multiconductor power and control cables with XLPE or PVC insulation and XLPE or PVC jacket.</p> <p>E. Max RDU (or smaller) coaxial cable with fluorinated ethylene or plenum-rated insulation and jacketing.</p> <p>F. Max 62 5/48 fiber optic cable with PVC or plenum-rated insulation and jacketing.</p> <p>G. Max 4 pair No. 24 AWG (or smaller) copper conductor data cable with PVC or plenum-rated insulation and jacket.</p> <p>H. Max 4/0 No. 20 aluminum or copper conductor aluminum or steel Metal-Clad or Armored-Clad cable.</p> <p>I. Max 1-in. (10 mm) copper ground cable with or without a PVC jacket.</p>																								
4. Firestop System - The firestop system shall consist of the following:	4. Firestop System - The firestop system shall consist of the following:																								
<p>A. Packing Material - When required (See table in item 4B), 1 in. (25 mm) thickness of min 40 pf (44 kg/m<sup>3</sup>) mineral wool batt insulation fully packed into each end of sleeve as a permanent form. Packing material to be recessed from end of sleeve as required to accommodate the required thickness of fill material.</p> <p>B. Full Wall Penetration - Sealant or full fill material applied to appropriate thickness within 4 in. (102 mm) of sleeve with edges of steel sleeve on both surfaces of wall. Min 1/2 in. (13 mm) thickness of fill material installed into annular space between sleeve and wall flush with both surfaces of the wall. Min 1/2 in. (13 mm) diam bead of sealant or "topco" of putty shall be applied around the perimeter of the sleeve on each side of the wall when sleeve extends beyond surface of wall and is installed at continuous point contact. See table below for fill material thickness requirements around cables.</p>	<p>A. Packing Material - When required (See table in item 4B), 1 in. (25 mm) thickness of min 40 pf (44 kg/m<sup>3</sup>) mineral wool batt insulation fully packed into each end of sleeve as a permanent form. Packing material to be recessed from end of sleeve as required to accommodate the required thickness of fill material.</p> <p>B. Full Wall Penetration - Sealant or full fill material applied to appropriate thickness within 4 in. (102 mm) of sleeve with edges of steel sleeve on both surfaces of wall. Min 1/2 in. (13 mm) thickness of fill material installed into annular space between sleeve and wall flush with both surfaces of the wall. Min 1/2 in. (13 mm) diam bead of sealant or "topco" of putty shall be applied around the perimeter of the sleeve on each side of the wall when sleeve extends beyond surface of wall and is installed at continuous point contact. See table below for fill material thickness requirements around cables.</p>																								
<table border="1"> <thead> <tr> <th>Sealant or Putty Type</th><th>Thickness, (in./mm)</th><th>Packing Material Needed</th></tr> </thead> <tbody> <tr> <td>SpecialSpec Series SSS Sealant or LC Sealant</td><td>1/2 in. (13 mm)</td><td>Yes</td></tr> <tr> <td>SpecialSpec Series SSS Sealant or LC Sealant</td><td>1 in. (25 mm)</td><td>No</td></tr> <tr> <td>SpecialSpec Putty</td><td>1 in. (25 mm)</td><td>No</td></tr> </tbody> </table>	Sealant or Putty Type	Thickness, (in./mm)	Packing Material Needed	SpecialSpec Series SSS Sealant or LC Sealant	1/2 in. (13 mm)	Yes	SpecialSpec Series SSS Sealant or LC Sealant	1 in. (25 mm)	No	SpecialSpec Putty	1 in. (25 mm)	No	<table border="1"> <thead> <tr> <th>Sealant or Putty Type</th><th>Thickness, (in./mm)</th><th>Packing Material Needed</th></tr> </thead> <tbody> <tr> <td>SpecialSpec Series SSS Sealant or LC Sealant</td><td>1/2 in. (13 mm)</td><td>Yes</td></tr> <tr> <td>SpecialSpec Series SSS Sealant or LC Sealant</td><td>1 in. (25 mm)</td><td>No</td></tr> <tr> <td>SpecialSpec Putty</td><td>1 in. (25 mm)</td><td>No</td></tr> </tbody> </table>	Sealant or Putty Type	Thickness, (in./mm)	Packing Material Needed	SpecialSpec Series SSS Sealant or LC Sealant	1/2 in. (13 mm)	Yes	SpecialSpec Series SSS Sealant or LC Sealant	1 in. (25 mm)	No	SpecialSpec Putty	1 in. (25 mm)	No
Sealant or Putty Type	Thickness, (in./mm)	Packing Material Needed																							
SpecialSpec Series SSS Sealant or LC Sealant	1/2 in. (13 mm)	Yes																							
SpecialSpec Series SSS Sealant or LC Sealant	1 in. (25 mm)	No																							
SpecialSpec Putty	1 in. (25 mm)	No																							
Sealant or Putty Type	Thickness, (in./mm)	Packing Material Needed																							
SpecialSpec Series SSS Sealant or LC Sealant	1/2 in. (13 mm)	Yes																							
SpecialSpec Series SSS Sealant or LC Sealant	1 in. (25 mm)	No																							
SpecialSpec Putty	1 in. (25 mm)	No																							
<b>SPECIFIED TECHNOLOGIES INC. SpecialSpec Series SSS Sealant, SpecialSpec LC Sealant or SpecialSpec Putty</b>	<b>SPECIFIED TECHNOLOGIES INC. SpecialSpec Series SSS Sealant, SpecialSpec LC Sealant or SpecialSpec Putty</b>																								
* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL certification (such as Canada), respectively.	* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL certification (such as Canada), respectively.																								

<p>Classified by Underwriters Laboratories, Inc. to ANSIUL 1479 (ASTM E814) and CANULC S115</p>	<p align="center"><b>System No. W-L-1049</b></p>														
	<table border="1"> <thead> <tr> <th>ANSIUL1479 (ASTM E814)</th><th>CANULC S115</th></tr> </thead> <tbody> <tr> <td>F Rating - 1 and 2 Hr (See Item 1)</td><td>F Rating - 1 and 2 Hr (See Item 1)</td></tr> <tr> <td>T Rating - 0-Hr</td><td>FT Rating - 0-Hr</td></tr> <tr> <td>L Rating At Ambient - Less than 1 CFM/sq ft</td><td>FH Rating - 1 and 2 Hr (See Item 1)</td></tr> <tr> <td>L Rating At 400° F - Less than 1 CFM/sq ft</td><td>FTN Rating - 0-Hr</td></tr> <tr> <td></td><td>L Rating At Ambient - Less than 1 CFM/sq ft</td></tr> <tr> <td></td><td>L Rating At 400° F - Less than 1 CFM/sq ft</td></tr> </tbody> </table>	ANSIUL1479 (ASTM E814)	CANULC S115	F Rating - 1 and 2 Hr (See Item 1)	F Rating - 1 and 2 Hr (See Item 1)	T Rating - 0-Hr	FT Rating - 0-Hr	L Rating At Ambient - Less than 1 CFM/sq ft	FH Rating - 1 and 2 Hr (See Item 1)	L Rating At 400° F - Less than 1 CFM/sq ft	FTN Rating - 0-Hr		L Rating At Ambient - Less than 1 CFM/sq ft		L Rating At 400° F - Less than 1 CFM/sq ft
ANSIUL1479 (ASTM E814)	CANULC S115														
F Rating - 1 and 2 Hr (See Item 1)	F Rating - 1 and 2 Hr (See Item 1)														
T Rating - 0-Hr	FT Rating - 0-Hr														
L Rating At Ambient - Less than 1 CFM/sq ft	FH Rating - 1 and 2 Hr (See Item 1)														
L Rating At 400° F - Less than 1 CFM/sq ft	FTN Rating - 0-Hr														
	L Rating At Ambient - Less than 1 CFM/sq ft														
	L Rating At 400° F - Less than 1 CFM/sq ft														
<p>1. Wall Assembly - The 1 or 2 Hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall and Partition Division in the UL Fire Resistance Directory and shall include the following construction features:</p> <p>A. Studs - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nominal 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-5/8 by 1-3/8 in. (89 mm wide and spaced max 24 in. (609 mm) OC. When steel studs are used and the opening exceeds the width of stud cavity, the opening shall be framed on all sides using lengths of steel stud installed between the vertical studs and screw-fastened to the steel studs at each end. The framed opening in the wall shall be 4 to 6 in. (102 to 152 mm) wider and 4 to 6 in. (102 to 152 mm) higher than the diam of the penetrating item such that, when the penetrating item is installed in the opening, a 2 to 3 in. (51 to 76 mm) clearance is present between the penetrating item and the framing on all four sides.</p> <p>B. Gypsum Board - 5/8 in. (16 mm) thick, 4 ft (1 22 mm) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Division in the UL Fire Resistance Directory. Max diam of opening is 26 in. (660 mm) for steel stud walls. Max diam of opening is 14-1/2 in. (368 mm) for wood stud walls.</p> <p>The hourly F and FH Ratings of the freestop system are equivalent to the hourly fire rating of the assembly in which it is installed.</p> <p>1A. Metallic Sleeve - (Optional, Not Showed) - Cylindrical sleeve fabricated from min 0.016 in. (0.41 mm) to max 0.105 in. (2.7 mm) thick sheet steel. Length of sleeve to be equal to the thickness of wall. Longitudinal seam of sleeve welded or overlapped min 1 in. (25 mm). The ends of the steel sleeve shall be flush or recessed max 1/4 in. (6 mm) from wall surfaces.</p>															
<p align="center"><b>Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876</b></p> <p align="center">Reproduced courtesy of Underwriters Laboratories, Inc. Created or Revised: December 2001/13</p> <p align="center">(800)992-1180 (908)626-0800 FAX (908)231-8415 E-Mail techspec@stfgroup.com Website www.stfgroup.com</p> <p align="right">UL-1049 PAGE 2 OF 6</p>															
<p>2. Through Penetrant - One metallic pipe, conduit or tubing to be installed either diagonally or eccentrically within the freestop system. Pipe, conduit or tubing may be installed at an angle not greater than 45 degrees from perpendicular. The annular space between pipe, conduit or tubing and periphery of opening shall be min 0 in. (0 mm, point contact) to max 2 in. (51 mm). For maximum 16 in. (406 mm) diam (or smaller) pipes, annular space shall be min 0 in. (0 mm, point contact) to max 2 in. (51 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:</p> <p>A. Steel Pipe - Nom 3/6 in. (19.4 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.</p> <p>B. Iron Pipe - Nom 3/6 in. (19.4 mm) diam (or smaller) cast or ductile iron pipe.</p> <p>C. Conduit - Nom 4 in. (102 mm) diam (or smaller) electrical metallic tubing, nom 6 in. (152 mm) diam (or smaller) steel conduit or nom 1 in. (25 mm) diam (or smaller) flexible steel conduit.</p> <p>D. Copper Tubing - Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.</p> <p>E. Copper Pipe - Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.</p> <p>3. Fill Void or Cavity Material - Sealant - Min 5/16 in. (14 mm) thickness of fill material applied with annulus, flush with both surfaces of wall. At the point contact location between penetrant and gypsum board, a min 3/8 in. (10 mm) diam bead of fill material shall be applied at the gypsum board/through penetrant interface on both surfaces of wall.</p> <p><b>SPECIFIED TECHNOLOGIES INC. - SpecSect Series SSS Sealant and SpecSeal LO Sealant</b></p> <p>* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.</p>															
<p align="center"><b>Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876</b></p> <p align="center">Reproduced courtesy of Underwriters Laboratories, Inc. Created or Revised: December 2001/13</p> <p align="center">(800)992-1180 (908)626-0800 FAX (908)231-8415 E-Mail techspec@stfgroup.com Website www.stfgroup.com</p> <p align="right">UL-1049 PAGE 2 OF 6</p>															

<p>Classified by Universities Laboratories, Inc. to ANSIUL 147H (ANSI and CANULC S115)</p>	<p><b>System No. WJ-3098</b></p>
<p><b>ANSUL 147H (ASTM E814)</b></p> <p>F Ratings: - 2 and 4 Hr (See Item 3)</p> <p>T Ratings: - 3/4 and 1 Hr (See Item 3)</p> <p>L Rating At Ambient: - Less Than 1, 3, 4 or 7 CFM/Device Module (See Item 3)</p> <p>L Rating At 400° F: - Less Than 1, 2 or 3 CFM/Device Module (See Item 3)</p>	<p><b>CANULC S115</b></p> <p>F Ratings: - 2 and 4 Hr (See Item 3)</p> <p>FT Ratings: - 3/4 and 1 Hr (See Item 3)</p> <p>FH Ratings: - 2 and 4 Hr (See Item 3)</p> <p>FTH Ratings: - 3/4 and 1 Hr (See Item 3)</p> <p>L Rating At Ambient: - Less Than 1, 3, 4 or 7 CFM/Device Module (See Item 3)</p> <p>L Rating At 400° F: - Less Than 1, 2 or 3 CFM/Device Module (See Item 3)</p>
<p><b>Section A-A</b></p>	<p><b>Section A-A</b></p>
<p>1. Wall Assembly - Min 6 in. (152 mm) thick reinforced lightweight or normal weight (1500 pcf or 1600-2400 kg/m<sup>3</sup>) concrete wall. Wall may also be constructed of any UL Classified Concrete Blocks* Opening to be not less 16 in. (407 mm) larger than width and height dimensions of fireproof device(s).</p> <p>2. Freestop Device* - One, two, four or seven freestop device modules ganged together. The freestop device module consists of a 3 by 3 by 15-1/2 in. (76 by 76 by 267 mm) long galv steel tube with an instrument material lining. Freestop device modules to be installed in accordance with the accompanying installation instructions. The space between the freestop device module(s) and the periphery of the opening shall be min 0 in. (0 mm, joint contact) to max 1/8 in. (3.2 mm) on round openings, the space between the freestop device and the periphery of the opening shall be min 0 in. (joint contact) to max 1/2 in. (13 mm). Freestop device module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device by means of steel set screws provided with device. Each freestop device module is to be installed with ends projecting an equal distance beyond each surface of the wall assembly. As an option, devices may be cast or grouted into wall assembly. When device is cast or grouted in place, the steel wall plates are optional.</p> <p>SPECIFIED TECHNOLOGIES, INC. - EZ PATH Series 33 Fire Rated Pathway</p> <p>2A. Freestop Device* - Extension Module. (Optional, Not Shown) - Module attached to ends of 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long freestop device (Item 3) to increase its length to facilitate installation in thicker walls. Each module consists of a 3 by 3 by 6 in. (76 by 76 by 152 mm) long galv steel tube with an instrument material lining. Extension module to be installed in accordance with the accompanying installation instructions. When module is used, freestop device (Item 3) and extension module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device or extension module(s) by means of steel set screws provided with plates. Freestop device and extension module(s) assembly to be installed with ends projecting an equal distance beyond each surface of the wall assembly.</p> <p>SPECIFIED TECHNOLOGIES, INC. - EZ PATH Extension</p>	<p>* - See UL Classified Concrete Blocks* in the Fire Resistance Directory for names of manufacturers.</p> <p>1. Wall Assembly - Min 6 in. (152 mm) thick reinforced lightweight or normal weight (1500 pcf or 1600-2400 kg/m<sup>3</sup>) concrete wall. Wall may also be constructed of any UL Classified Concrete Blocks* Opening to be not less 16 in. (407 mm) larger than width and height dimensions of fireproof device(s).</p> <p>2. Freestop Device* - One, two, four or seven freestop device modules ganged together. The freestop device module consists of a 3 by 3 by 15-1/2 in. (76 by 76 by 267 mm) long galv steel tube with an instrument material lining. Freestop device modules to be installed in accordance with the accompanying installation instructions. The space between the freestop device module(s) and the periphery of the opening shall be min 0 in. (0 mm, joint contact) to max 1/8 in. (3.2 mm) on round openings, the space between the freestop device and the periphery of the opening shall be min 0 in. (joint contact) to max 1/2 in. (13 mm). Freestop device module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device by means of steel set screws provided with device. Each freestop device module is to be installed with ends projecting an equal distance beyond each surface of the wall assembly. As an option, devices may be cast or grouted into wall assembly. When device is cast or grouted in place, the steel wall plates are optional.</p> <p>SPECIFIED TECHNOLOGIES, INC. - EZ PATH Series 33 Fire Rated Pathway</p> <p>2A. Freestop Device* - Extension Module. (Optional, Not Shown) - Module attached to ends of 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long freestop device (Item 3) to increase its length to facilitate installation in thicker walls. Each module consists of a 3 by 3 by 6 in. (76 by 76 by 152 mm) long galv steel tube with an instrument material lining. Extension module to be installed in accordance with the accompanying installation instructions. When module is used, freestop device (Item 3) and extension module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device or extension module(s) by means of steel set screws provided with plates. Freestop device and extension module(s) assembly to be installed with ends projecting an equal distance beyond each surface of the wall assembly.</p> <p>SPECIFIED TECHNOLOGIES, INC. - EZ PATH Extension</p>
<p><b>STI.</b></p> <p>Responsible authority of Underwriters Laboratories, Inc. Created or Revised: January 23, 2014</p> <p>(800)992-1180 (069826-280) FAX (908)231-6415 E-Mail techserv@stfnet.com Website www.stfnet.com</p>	<p><b>Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876</b></p> <p><b>UL</b></p> <p>UL 3098 PAGE 1 OF 3</p>
<p>3. Cables - Cables may represent a 0 to 100 percent variety of wall within the loading area for each freestop device module. Cables to be rigidly supported on both sides of the wall assembly. Any combination of the following types of cables may be used:</p> <p>A. Max 400 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with polyvinyl chloride (PVC) jacketing and insulation.</p> <p>B. Max 350 kcmil single copper conductor power cable with XLPE jacket and insulation.</p> <p>C. Max 7/8 in. 12 AWG copper conductor control cable with PVC or XLPE jacket and insulation.</p> <p>D. Max 3/8 in. 10 AWG NM cable (or armored cable with steel or aluminum jacket).</p> <p>E. Max 3/8 in. 8 AWG NM cable with PVC insulation and jacketing.</p> <p>F. Max 400 pair No. 22 AWG (or smaller) copper conductor data cable with PVC or plenum rated jacketing and insulation.</p> <p>G. Max RG4U coaxial cable with fluorinated ethylene insulation and jacketing.</p> <p>H. Optical fiber cable with PVC/polyethylene (PE) jacket and insulation and having a max diam of 5/8 in. (16 mm).</p> <p>4. When 3A, 3B, 3C, 3D or 3E is used, the F and FH Ratings are 2 hr and the T, FT and FH Ratings are 3 hr.</p> <p>5. When 3A, 3B, 3C, 3D or 3E is used, the L Rating for each freestop device module with 100 percent visual fill is 1 cfm at ambient and less than 1 cfm at 400° F when Item 3F, 3G or 3H is used, the L Rating for each freestop device module with 100 percent visual fill is 1 cfm at ambient and less than 1 cfm at 400° F when Item 3F, 3G or 3H is used, the L Rating for each freestop device module with 100 percent visual fill is 1 cfm at ambient and less than 1 cfm at 400° F.</p> <p>* Indicates each product shall have the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.</p>	<p>3. Cables - Cables may represent a 0 to 100 percent variety of wall within the loading area for each freestop device module. Cables to be rigidly supported on both sides of the wall assembly. Any combination of the following types of cables may be used:</p> <p>A. Max 400 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with polyvinyl chloride (PVC) jacketing and insulation.</p> <p>B. Max 350 kcmil single copper conductor power cable with XLPE jacket and insulation.</p> <p>C. Max 7/8 in. 12 AWG copper conductor control cable with PVC or XLPE jacket and insulation.</p> <p>D. Max 3/8 in. 10 AWG NM cable (or armored cable with steel or aluminum jacket).</p> <p>E. Max 3/8 in. 8 AWG NM cable with PVC insulation and jacketing.</p> <p>F. Max 400 pair No. 22 AWG (or smaller) copper conductor data cable with PVC or plenum rated jacketing and insulation.</p> <p>G. Max RG4U coaxial cable with fluorinated ethylene insulation and jacketing.</p> <p>H. Optical fiber cable with PVC/polyethylene (PE) jacket and insulation and having a max diam of 5/8 in. (16 mm).</p> <p>4. When 3A, 3B, 3C, 3D or 3E is used, the F and FH Ratings are 2 hr and the T, FT and FH Ratings are 3 hr.</p> <p>5. When 3A, 3B, 3C, 3D or 3E is used, the L Rating for each freestop device module with 100 percent visual fill is 1 cfm at ambient and less than 1 cfm at 400° F when Item 3F, 3G or 3H is used, the L Rating for each freestop device module with 100 percent visual fill is 1 cfm at ambient and less than 1 cfm at 400° F when Item 3F, 3G or 3H is used, the L Rating for each freestop device module with 100 percent visual fill is 1 cfm at ambient and less than 1 cfm at 400° F.</p> <p>* Indicates each product shall have the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.</p>
<p><b>STI.</b></p> <p>Responsible authority of Underwriters Laboratories, Inc. Created or Revised: January 23, 2014</p> <p>(800)992-1180 (069826-280) FAX (908)231-6415 E-Mail techserv@stfnet.com Website www.stfnet.com</p>	<p><b>Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876</b></p> <p><b>UL</b></p> <p>UL 3098 PAGE 2 OF 3</p>



REGISTERED COMMUNICATIONS  
DISTRIBUTION DESIGNER

**BICSI**

RONNY KAGS ROM

Signature: 

EXPIRES 12/31/24  
Regis. No. 163629

PROJECT  
SACRAMENTO CITY USD  
HIRAM JOHNSON HS  
TELE-CENTER  
UPGRADE PROJECT  
6879 14TH AVE.

SHEET TITLE

TECHNOLOGY  
DETAILS

DRAWING STATUS

CONSTRUCTION DOCUMENTS

---

PROJECT NO:	0520-464
BID PACKAGE:	TBD
DESIGNED BY:	CS
CHECKED BY:	JG
ISSUE DATE:	2023-05-31
WORKING DATE:	2023-04-23

SHEET **T001**

1801

180

**1001**

---