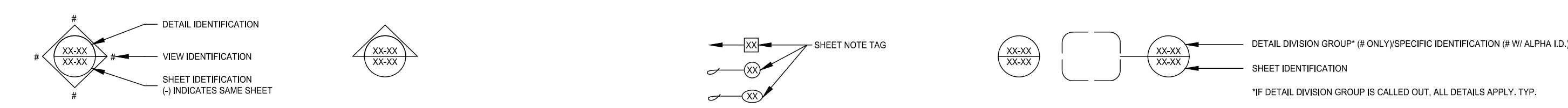


SYMBOL LEGEND

ALL EQUIPMENT SHALL BE CONTRACTOR FURNISHED, CONTRACTOR INSTALLED UNLESS NOTED OTHERWISE

ROW ID	ANNOTATION SYMBOL	DESCRIPTION	BACK BOX	TRIM RING	CONDUIT	MOUNTING HEIGHT	CABLE	MANUFACTURER	MODEL	WEIGHT CAPACITY (LBS.)	SPECIAL INSTRUCTION
1		MDF EQUIPMENT RACK	N/A	N/A	N/A	N/A	N/A	EXISTING	EXISTING	N/A	N/A
2		IDF EQUIPMENT RACK	N/A	N/A	N/A	N/A	N/A	EXISTING	EXISTING	N/A	N/A
3		SIGNAL TERMINATION CABINET	N/A	N/A	N/A	N/A	N/A	EXISTING	EXISTING	N/A	N/A
4		GROUND BOX W/ CONCRETE LID	N/A	N/A	N/A	N/A	N/A	EXISTING	EXISTING	N/A	N/A
5		PULL BOX W/ COVER	N/A	N/A	N/A	N/A	N/A	EXISTING	EXISTING	N/A	N/A
6		UNDERGROUND CONDUIT	N/A	N/A	N/A	N/A	N/A	EXISTING	EXISTING	N/A	N/A
7		SURFACE CONDUIT	N/A	N/A	N/A	N/A	N/A	EXISTING	EXISTING	N/A	N/A
8		HIGH CAPACITY CABLE TRAY / SPLINE	N/A	N/A	N/A	N/A	N/A	EXISTING	EXISTING	N/A	N/A
9		SURFACE RACEWAY, SINGLE CHANNEL	N/A	N/A	N/A	N/A	N/A	WIREMOLD	WM2300	N/A	N/A
10		NON-CONTINUOUS OPEN ENDED PATHWAY, J-HOOK	N/A	N/A	N/A	N/A	N/A	EXISTING / B-LINE	BCH-32	N/A	INSTALL 12" ABOVE CEILING
11		NETWORK POE SWITCH	N/A	N/A	N/A	AT RACK	CAT6	SEE ONE-LINES FOR INFORMATION	SEE ONE-LINES FOR INFORMATION	N/A	N/A
12		PATCH PANEL WITH WIRE MANAGER	N/A	N/A	N/A	AT RACK	CAT6	SEE ONE-LINES FOR INFORMATION	SEE ONE-LINES FOR INFORMATION	N/A	N/A
13		INTERCOM IP SITE CONTROLLER W/ SOFTWARE LICENSE	N/A	N/A	N/A	AT RACK	CAT6	SEE ONE-LINES FOR INFORMATION	SEE ONE-LINES FOR INFORMATION	N/A	INSTALL 12" ABOVE CEILING
14		ZONE AUDIO AMPLIFIER, 35-WATT 25/70V	N/A	N/A	N/A	AT RACK	CAT6	SEE ONE-LINES FOR INFORMATION	SEE ONE-LINES FOR INFORMATION	N/A	INSTALL 12" ABOVE CEILING
15		AUDIO AMPLIFIER, 320-WATT 25/70V	N/A	N/A	N/A	AT RACK	CAT6	SEE ONE-LINES FOR INFORMATION	SEE ONE-LINES FOR INFORMATION	N/A	INSTALL 12" ABOVE CEILING
16		ADMINISTRATIVE CONTROL CONSOLE / PHONE SET	N/A	N/A	N/A	AT RECEPTION DESK	CAT6	SEE ONE-LINES FOR INFORMATION	SEE ONE-LINES FOR INFORMATION	N/A	INSTALL 12" ABOVE CEILING
17		ANALOG INTERCOM SPEAKER (W/P-EXTERIOR WEATHERPROOF SPEAKER)	PER MFR.	PER MFR.	SURFACE RACEWAY / 1 EA. 1" C	REPLACE EXISTING / 90° AFF	CAT6	SEE ONE-LINES FOR INFORMATION	SEE ONE-LINES FOR INFORMATION	N/A	N/A
18		IP INTERCOM SPEAKER	PER MFR.	PER MFR.	SURFACE RACEWAY / 1 EA. 1" C	REPLACE EXISTING / 90° AFF	2C #18	SEE ONE-LINES FOR INFORMATION	SEE ONE-LINES FOR INFORMATION	N/A	N/A
19		IP ANALOG CLOCK	REUSE EXISTING / SINGLE GANG	REUSE EXISTING / SINGLE GANG	SURFACE RACEWAY / 1 EA. 1" C	REPLACE EXISTING / 90° AFF	CAT6	SEE ONE-LINES FOR INFORMATION	SEE ONE-LINES FOR INFORMATION	N/A	N/A
20		IP DIGITAL CLOCK	REUSE EXISTING / SINGLE GANG	REUSE EXISTING / SINGLE GANG	SURFACE RACEWAY / 1 EA. 1" C	REPLACE EXISTING / 90° AFF	CAT6	SEE ONE-LINES FOR INFORMATION	SEE ONE-LINES FOR INFORMATION	N/A	N/A
21		ANALOG INTERCOM SPEAKER AND IP ANALOG CLOCK COMBO.	REUSE EXISTING / SINGLE GANG	REUSE EXISTING / SINGLE GANG	SURFACE RACEWAY / 1 EA. 1" C	REPLACE EXISTING / 90° AFF	2C #18 (SPK) / CAT6 (CLOCK)	SEE ONE-LINES FOR INFORMATION	SEE ONE-LINES FOR INFORMATION	N/A	N/A
22		IP INTERCOM SPEAKER AND IP ANALOG CLOCK COMBO.	REUSE EXISTING / SINGLE GANG	REUSE EXISTING / SINGLE GANG	SURFACE RACEWAY / 1 EA. 1" C	REPLACE EXISTING / 90° AFF	2 EA. CAT6	SEE ONE-LINES FOR INFORMATION	SEE ONE-LINES FOR INFORMATION	N/A	N/A
23		IP INTERCOM SPEAKER AND IP DIGITAL CLOCK COMBO.	REUSE EXISTING / SINGLE GANG	REUSE EXISTING / SINGLE GANG	SURFACE RACEWAY / 1 EA. 1" C	REPLACE EXISTING / 90° AFF	2 EA. CAT6	SEE ONE-LINES FOR INFORMATION	SEE ONE-LINES FOR INFORMATION	N/A	N/A

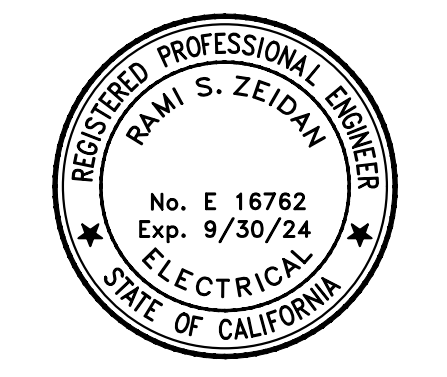


- NOTES:
- USE EXTENSION RINGS, DEPTH AS REQUIRED, ON ALL BACK BOX LOCATIONS.
 - REFERENCE ANSI / EIA / TIA STANDARDS AS APPLICABLE.
 - ROUTE CONDUIT IN-WALL TO NEAREST TO ACCESSIBLE CEILING SPACE. CONTRACTOR SHALL NOTIFY ARCHITECT/DESIGNER IF CONDUITS ARE UNABLE TO BE INSTALLED IN-WALL PRIOR TO SURFACE MOUNTED CONDUIT INSTALLATION.
 - ALL TRIM RINGS AND INSIDE OF BACK BOX SHALL BE PAINTED 'GREEN' FOR PRE-SHEETROCK / WALL PANEL IN-WALL INFRASTRUCTURE INSPECTION.

AGENCY APPROVAL STAMP

MEP & FS / Sustainability / CxA
 1209 Pleasant Grove Blvd.
 Roseville, CA 95678
 Ph: (916) 771-0778
 www.lpeengineers.com
 Job #: 23-2044

PROFESSIONAL STAMP



COPYRIGHT

CLIENT

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
 5735 47TH AVENUE,
 SACRAMENTO CA. 95824

PROJECT

LEONARDO DAVINCI K-8 SCHOOL
 4701 JOAQUIN WAY
 SACRAMENTO CA. 95822

SITE-WIDE INTERCOM AND CLOCK MODERNIZATION

SHEET TITLE

TECHNOLOGY SYMBOL LEGEND

LPCE PROJECT NO.	23-2044
DESIGNED BY:	JZ/RL
CHECKED BY:	LPCE
ISSUE DATE:	2023/06/08
WORKING DATE:	2023/06/08

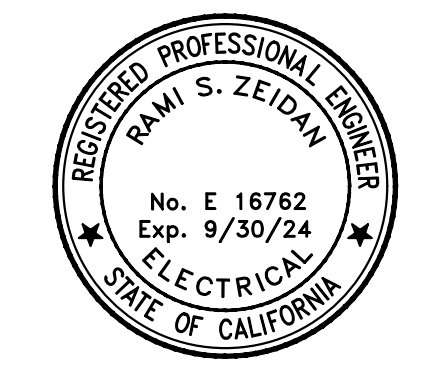
SHEET NUMBER

T0.01

Login Name: jzamora
 Print Date: June 09, 2023 - 4:04 pm
 Project Path: C:\Users\jzamora\OneDrive\Documents\23-2044_SCSUSD_Davinci MS Check\Intercom\LP_CAD\23-2044_SCSUSD_Davinci MS Intercom-Check_T0.01_Symbol Legend.dwg
 XREFS: LPCE_SCSUSD_MBA.dwg; LPCE_SCSUSD_MSE.dwg



PROFESSIONAL STAMP



COPYRIGHT

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
 5735 47TH AVENUE, SACRAMENTO CA. 95824

PROJECT
LEONARDO DAVINCI K-8 SCHOOL
 4701 JOAQUIN WAY, SACRAMENTO CA. 95822
SITE-WIDE INTERCOM AND CLOCK MODERNIZATION

SHEET TITLE
TECHNOLOGY OFFICE / ADMINISTRATION FLOOR PLAN

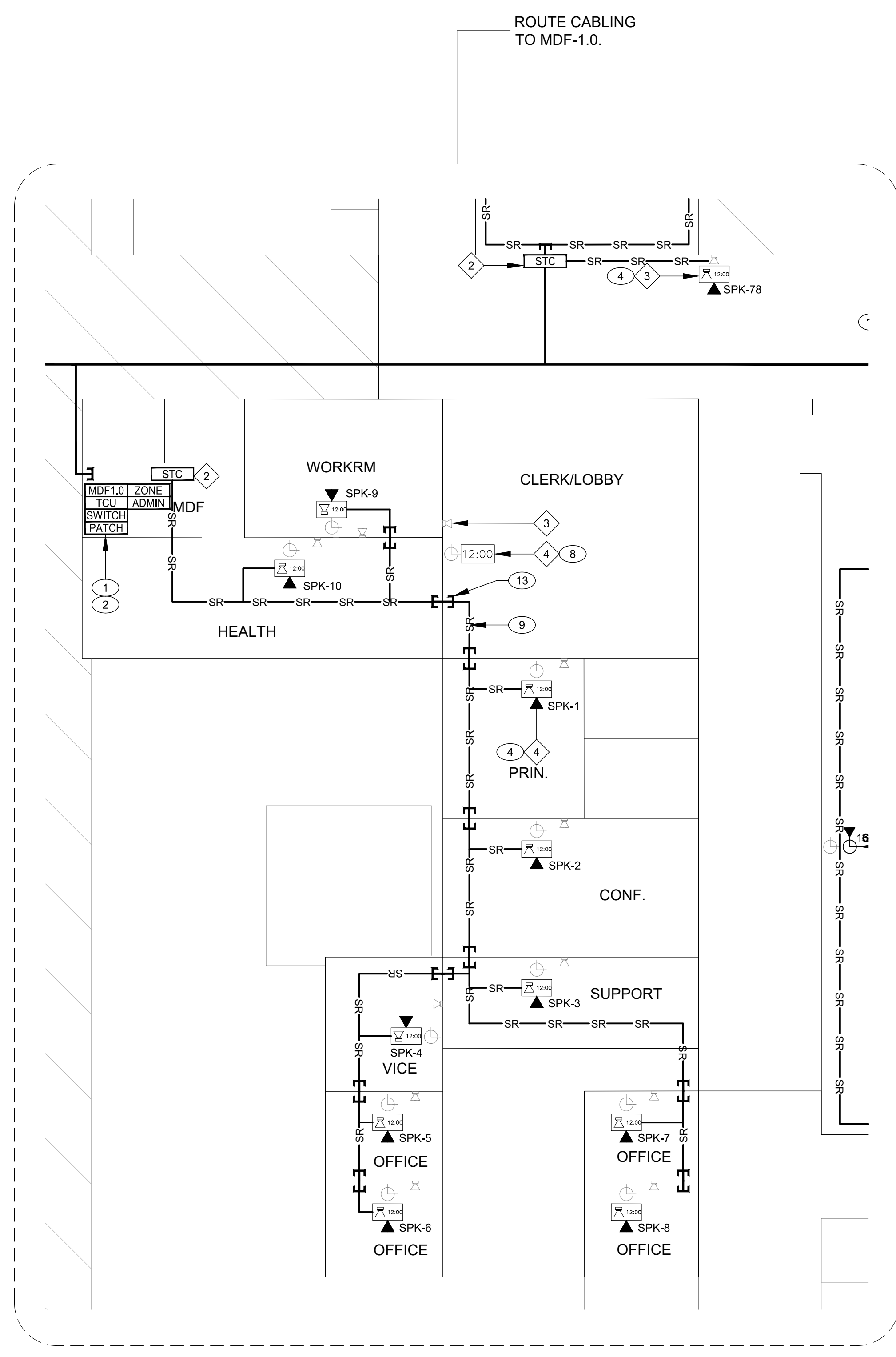
LPCE PROJECT NO.	23-2044
DESIGNED BY:	JZ/RL
CHECKED BY:	LPCE
ISSUE DATE:	2023/06/08
WORKING DATE:	2023/06/08

SHEET NUMBER
T2.00

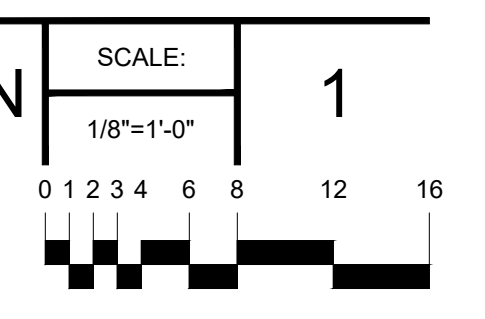
- SHEET GENERAL NOTES:**
- ALL EQUIPMENT SHOWN ON CONSTRUCTION DOCUMENTS SHALL BE NEW, CONTRACTOR FURNISHED/CONTRACTOR INSTALLED UNLESS SPECIFIED ON DRAWINGS AND/OR SCHEDULES.
 - ALL TECHNOLOGY SYSTEMS MUD RINGS SHALL BE PAINTED GREEN FOR A PRE-WALL FINISH/PANEL BOARD INSPECTION OF IN-WALL HORIZONTAL CABLING INFRASTRUCTURE.
 - ALL EXPOSED CONDUITS, STRUCTURED CHANNEL, FASTENERS SHALL BE PRIMED WHITE AND PAINTED TO MATCH SURROUNDING AREA.
 - WORK AREA OUTLET (WAO), AND FIELD DEVICE CABLING SHALL BE TERMINATED IN MODULAR PATCH PANEL(S) IN SEQUENTIAL ORDER OF ROOM NUMBER, DROP ID.
 - ALL NETWORK CABLES SHALL BE MACHINE LABELED AT PATCH PANEL FACE, AND AT CATEGORY CABLE (BOTH ENDS AS SHOWN ON DETAILS/SPECIFICATIONS).
 - ALL SPEAKER CABLES SHALL BE MACHINE LABELED AT SPEAKER AND STC.
 - ALL CLOCKS SHALL BE SET TO NTP SERVER, PACIFIC DAYLIGHT TIME (PST).
 - ALL EXTERIOR SPEAKERS SHALL BE ADJUSTED TO NOT EXCEED 65dB AT THE SCHOOL PROPERTY LINE.

- DEMO KEYNOTES:**
- | KEYNOTE ID | DESCRIPTION |
|------------|--|
| 1 | DEMO EXISTING INTERCOM CAMPUS CONTROLLER AND ASSOCIATED HARDWARE. WIPE DOWN CONTROL EQUIPMENT, INVENTORY AND RETURN TO THE DISTRICT IN "AS-IS" CONDITION. DEMO ALL ASSOCIATED CONTROL HARDWARE INTERCONNECTION CABLING, INCLUDING MULTI-PAIR COPPER FEEDERS TO EXISTING SIGNAL TERMINATION CABINETS, TERMINATION BLOCKS. |
| 2 | DEMO EXISTING SIGNAL TERMINATION CABINET AND TERMINAL BLOCKS. DEMO ALL CABLING FROM EXISTING TERMINAL BLOCKS TO FIELD SPEAKER LOCATIONS. |
| 3 | DEMO EXISTING SPEAKER DRIVER, EXISTING BACK BOX AND BAFFLE SHALL BE RE USED, TYP. U.N.O. |
| 4 | DEMO EXISTING CLOCK, WIPE DOWN, INVENTORY AND RETURN TO THE DISTRICT IN "AS-IS" CONDITION. |
| 5 | ALL DEMO EQUIPMENT AND MATERIALS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR UNLESS NOTED OTHERWISE. USE OF SCHOOL WASTE DISPOSAL CONTAINERS SHALL NOT BE PERMITTED. |

- KEYNOTES:**
- | KEYNOTE ID | DESCRIPTION |
|------------|---|
| 1 | NEW TELECENTER U IP SYSTEM SITE CONTROLLER. |
| 2 | NEW EXTERIOR SPEAKER ZONE AMPLIFIER. |
| 3 | NEW EXTERIOR SPEAKER AMPLIFIER W/ TELECENTER IP MODULE. |
| 4 | INSTALL NEW INTERCOM SPEAKER / CLOCK COMBO IN CLASSROOM. ROUTE NEW IP SPEAKER (1 EA, CAT6) / CLOCK (1 EA, CAT6) CABLES TO THE NEAREST IDF. |
| 5 | INSTALL NEW EXTERIOR INTERCOM SPEAKER, REUSE EXISTING BACK BOX, BAFFLE. ROUTE NEW SPEAKER (1 EA, CAT6) CABLE TO THE NEAREST TELECENTER U AMPLIFIER. |
| 6 | INSTALL NEW INTERCOM SPEAKER, REUSE EXISTING BACK BOX, BAFFLE. ROUTE NEW SPEAKER (1 EA, CAT6) CABLE TO THE NEAREST IDF. |
| 7 | INSTALL NEW IP ANALOG SWEEP TYPE CLOCK. ROUTE (1 EA, CAT6) CABLE TO THE NEAREST IDF. |
| 8 | INSTALL NEW IP DIGITAL DISPLAY CLOCK. ROUTE (1 EA, CAT6) CABLE TO THE NEAREST IDF. |
| 9 | INSTALL NEW SURFACE RACEWAY WITH APPROPRIATE TRANSITION AND END FITTINGS. MOUNT HIGH ON WALL-APPROXIMATE 6" FROM CEILING. |
| 10 | EXISTING HIGH CAPACITY CABLE TRAY / SPINE. |
| 11 | EXISTING BACK BOX AND UNDERGROUND CONDUIT. SEE SITE PLAN FOR ADDITIONAL INFORMATION. |
| 12 | EXISTING SIGNAL TERMINATION CABINET (STC). SEE DEMO NOTES FOR ADDITIONAL REQUIREMENTS. |
| 13 | NEW 1 EA, 1" SLEEVE THROUGH WALL. CONNECT TO NEW SURFACE MOUNTED RACEWAY AND ROUTE TO NEAREST MDF/IDF. |
| 14 | EXISTING FIBER/COPPER FEEDER HORIZONTAL CONDUITS. |
| 15 | EXISTING BREEZEWAY CONDUITS. ADD 1 EA, 2" CONDUIT FOR CLOCK CABLING TO NEAREST MDF/IDF. |



TECHNOLOGY OFFICE / ADMINISTRATION - FLOOR PLAN



Login Name: jzamora
 Plot Date: June 08, 2023 - 4:04 pm
 Project: 23-2044 LPCE_SUISD_Davinci MS Check-Information LP_CAD/23-2044_SUISD_Davinci MS Check-Information LP_T2_00_Floor Plans.dwg
 XREFS: 023-2044-RA_LPCE_SUISD_xbbsar_Davinci MS_ET

TECHNOLOGY AUDITORIUM, CLASSROOMS 26, 32 FLOOR PLAN



SHEET GENERAL NOTES:

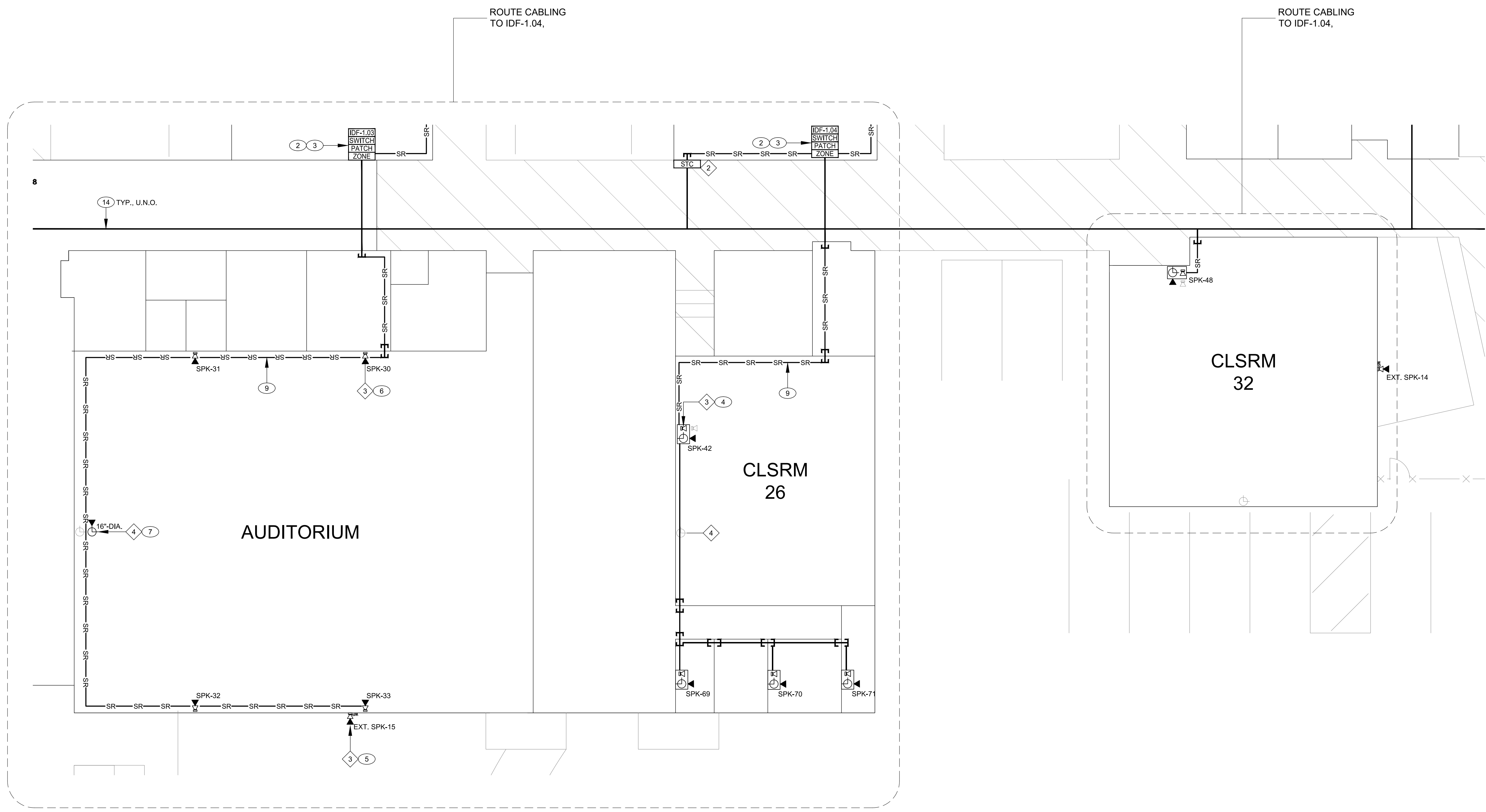
1. ALL EQUIPMENT SHOWN ON CONSTRUCTION DOCUMENTS SHALL BE NEW, CONTRACTOR FURNISHED/CONTRACTOR INSTALLED UNLESS SPECIFIED ON DRAWINGS AND/OR SCHEDULES.
2. ALL TECHNOLOGY SYSTEMS MUD RINGS SHALL BE PAINTED GREEN FOR A PRE-WALL FINISH/PANEL BOARD INSPECTION OF IN-WALL HORIZONTAL CABLING INFRASTRUCTURE.
3. ALL EXPOSED CONDUITS, STRUCTURED CHANNEL, FASTENERS SHALL BE PRIMED WHITE AND PAINTED TO MATCH SURROUNDING AREA.
4. WORK AREA OUTLET (WAO), AND FIELD DEVICE CABLING SHALL BE TERMINATED IN MODULAR PATCH PANEL(S) IN SEQUENTIAL ORDER OF ROOM NUMBER, DROP ID.
5. ALL NETWORK CABLES SHALL BE MACHINE LABELED AT PATCH PANEL FACE, AND AT CATEGORY CABLE (BOTH ENDS AS SHOWN ON DETAILS/SPECIFICATIONS).
6. ALL SPEAKER CABLES SHALL BE MACHINE LABELED AT SPEAKER AND STC.
7. ALL CLOCKS SHALL BE SET TO NTP SERVER, PACIFIC DAYLIGHT TIME (PST).
8. ALL EXTERIOR SPEAKERS SHALL BE ADJUSTED TO NOT EXCEED 65dB AT THE SCHOOL PROPERTY LINE.

DEMO KEYNOTES:

KEYNOTE ID	DESCRIPTION
1	DEMO EXISTING INTERCOM CAMPUS CONTROLLER AND ASSOCIATED HARDWARE. WIPE DOWN CONTROL EQUIPMENT, INVENTORY AND RETURN TO THE DISTRICT IN "AS-IS" CONDITION. DEMO ALL ASSOCIATED CONTROL HARDWARE INTERCONNECTION CABLING, INCLUDING MULTI-PAIR COPPER FEEDERS TO EXISTING SIGNAL TERMINATION CABINETS, TERMINATION BLOCKS.
2	DEMO EXISTING SIGNAL TERMINATION CABINET AND TERMINAL BLOCKS. DEMO ALL CABLING FROM EXISTING TERMINAL BLOCKS TO FIELD SPEAKER LOCATIONS.
3	DEMO EXISTING SPEAKER DRIVER, EXISTING BACK BOX AND BAFFLE SHALL BE REUSED, TYP. U.N.O.
4	DEMO EXISTING CLOCK, WIPE DOWN, INVENTORY AND RETURN TO THE DISTRICT IN "AS-IS" CONDITION.
5	ALL DEMO EQUIPMENT AND MATERIALS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR UNLESS NOTED OTHERWISE. USE OF SCHOOL WASTE DISPOSAL CONTAINERS SHALL NOT BE PERMITTED.

KEYNOTES:

KEYNOTE ID	DESCRIPTION
1	NEW TELECENTER U IP SYSTEM SITE CONTROLLER.
2	NEW EXTERIOR SPEAKER ZONE AMPLIFIER.
3	NEW EXTERIOR SPEAKER AMPLIFIER W/ TELECENTER IP MODULE.
4	INSTALL NEW INTERCOM SPEAKER / CLOCK COMBO IN CLASSROOM. ROUTE NEW IP SPEAKER (1 EA. CAT6) / CLOCK (1 EA. CAT6) CABLES TO THE NEAREST IDF.
5	INSTALL NEW EXTERIOR INTERCOM SPEAKER, REUSE EXISTING BACK BOX, BAFFLE. ROUTE NEW SPEAKER (1 EA. CAT6) CABLE TO THE NEAREST TELECENTER U AMPLIFIER.
6	INSTALL NEW INTERIOR INTERCOM SPEAKER, REUSE EXISTING BACK BOX, BAFFLE. ROUTE NEW SPEAKER (1 EA. CAT6) CABLE TO THE NEAREST IDF.
7	INSTALL NEW IP ANALOG SWEEP TYPE CLOCK. ROUTE (1 EA. CAT6) CABLE TO THE NEAREST IDF.
8	INSTALL NEW IP DIGITAL DISPLAY CLOCK. ROUTE (1 EA. CAT6) CABLE TO THE NEAREST IDF.
9	INSTALL NEW SURFACE RACEWAY WITH APPROPRIATE TRANSITION AND END FITTINGS. MOUNT HIGH ON WALL-APPROXIMATE 6" FROM CEILING.
10	EXISTING HIGH CAPACITY CABLE TRAY / SPINE.
11	EXISTING BACK BOX AND UNDERGROUND CONDUIT. SEE SITE PLAN FOR ADDITIONAL INFORMATION.
12	EXISTING SIGNAL TERMINATION CABINET (STC). SEE DEMO NOTES FOR ADDITIONAL REQUIREMENTS.
13	NEW 1 EA. 1" SLEEVE THROUGH WALL. CONNECT TO NEW SURFACE MOUNTED RACEWAY AND ROUTE TO NEAREST MDF/IDF.
14	EXISTING FIBER/COPPER FEEDER HORIZONTAL CONDUITS.
15	EXISTING BREEZEWAY CONDUITS. ADD 1 EA. 2" CONDUIT FOR CLOCK CABLING TO NEAREST MDF/IDF.



AGENCY APPROVAL STAMP

MEP & FS / Sustainability / CxA
 1209 Pleasant Grove Blvd.
 Roseville, CA 95678
 Ph: (916) 771-0778
 www.lpeengineers.com
 Job #: 23-2044

CONSULTING ENGINEERS

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
 RAY S. ZEIDON
 No. E 16762
 Exp. 9/30/24
 ELECTRICAL
 STATE OF CALIFORNIA

COPYRIGHT

CLIENT

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
 5735 47TH AVENUE,
 SACRAMENTO CA. 95824

PROJECT

LEONARDO DAVINCI K-8 SCHOOL
 4701 JOAQUIN WAY
 SACRAMENTO CA. 95822

SITE-WIDE INTERCOM AND CLOCK MODERNIZATION

SHEET TITLE

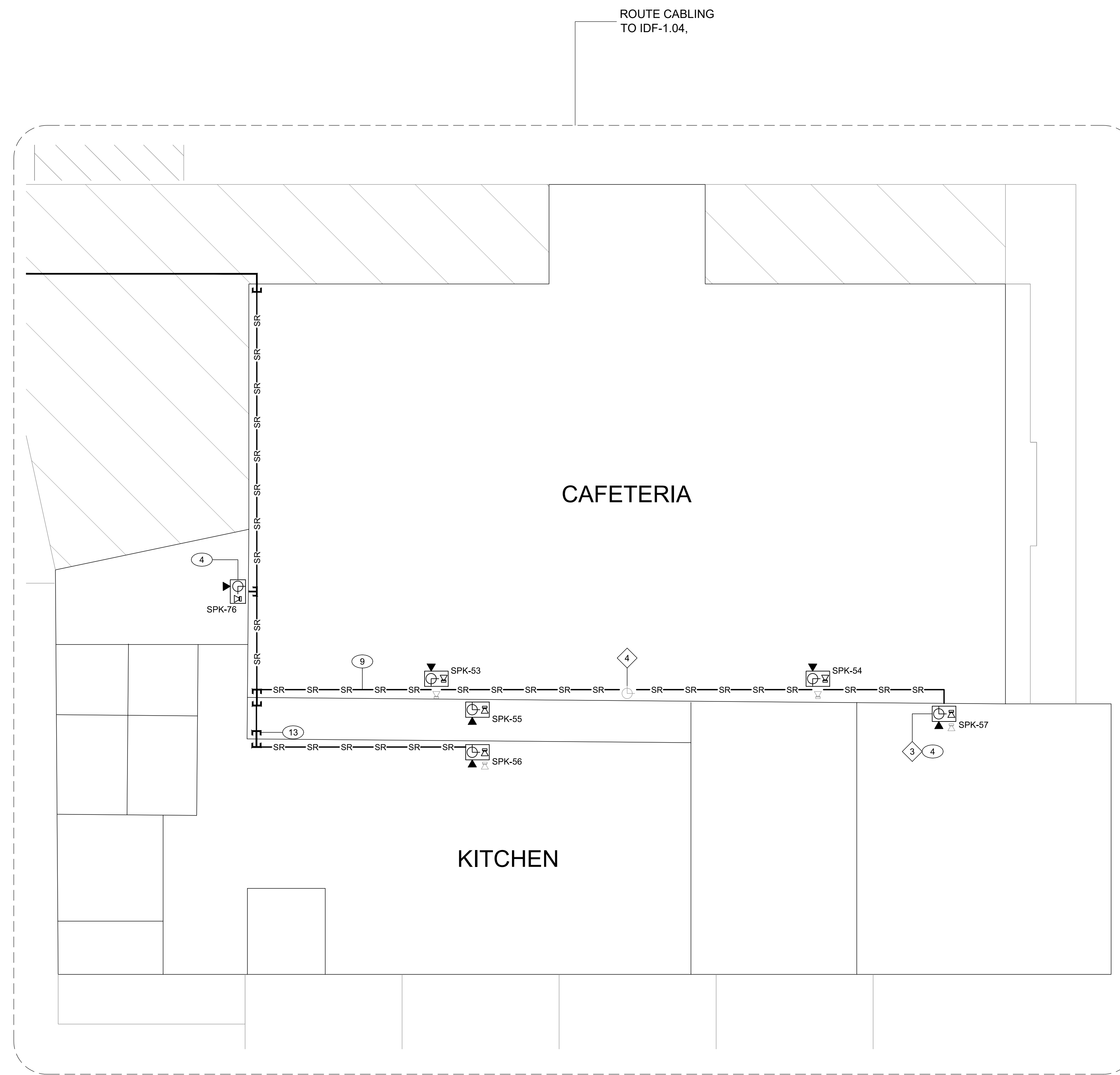
TECHNOLOGY AUDITORIUM, CLASSROOMS 26, 32 FLOOR PLAN

LPCE PROJECT NO.	23-2044
DESIGNED BY:	JZ/RL
CHECKED BY:	LPCE
ISSUE DATE:	2023/06/08
WORKING DATE:	2023/06/08

SHEET NUMBER

T2.01

Login Name: jzamora
 Plot Date: June 08, 2023 - 4:04 pm
 Project Path: C:\projects\23-2044_SCSUSD_Davinci K8 Check\Intercom\Floor Plans.dwg
 XREFS: 023-2044-RA_LPCE_SCSUSD_080623.dwg



- SHEET GENERAL NOTES:**
1. ALL EQUIPMENT SHOWN ON CONSTRUCTION DOCUMENTS SHALL BE NEW, CONTRACTOR FURNISHED/CONTRACTOR INSTALLED UNLESS SPECIFIED ON DRAWINGS AND/OR SCHEDULES.
 2. ALL TECHNOLOGY SYSTEMS MUD RINGS SHALL BE PAINTED GREEN FOR A PRE-WALL FINISH/PANEL BOARD INSPECTION OF IN-WALL HORIZONTAL CABLING INFRASTRUCTURE.
 3. ALL EXPOSED CONDUITS, STRUCTURED CHANNEL, FASTENERS SHALL BE PRIMED WHITE AND PAINTED TO MATCH SURROUNDING AREA.
 4. WORK AREA OUTLET (WAO), AND FIELD DEVICE CABLING SHALL BE TERMINATED IN MODULAR PATCH PANEL(S) IN SEQUENTIAL ORDER OF ROOM NUMBER, DROP ID.
 5. ALL NETWORK CABLES SHALL BE MACHINE LABELED AT PATCH PANEL FACE, AND AT CATEGORY CABLE (BOTH ENDS AS SHOWN ON DETAILS/SPECIFICATIONS).
 6. ALL SPEAKER CABLES SHALL BE MACHINE LABELED AT SPEAKER AND STC.
 7. ALL CLOCKS SHALL BE SET TO NTP SERVER, PACIFIC DAYLIGHT TIME (PST).
 8. ALL EXTERIOR SPEAKERS SHALL BE ADJUSTED TO NOT EXCEED 65dB AT THE SCHOOL PROPERTY LINE.

- DEMO KEYNOTES:**
- | KEYNOTE ID | DESCRIPTION |
|------------|--|
| 1 | DEMO EXISTING INTERCOM CAMPUS CONTROLLER AND ASSOCIATED HARDWARE. WIPE DOWN CONTROL EQUIPMENT, INVENTORY AND RETURN TO THE DISTRICT IN "AS-IS" CONDITION. DEMO ALL ASSOCIATED CONTROL HARDWARE INTERCONNECTION CABLING, INCLUDING MULTI-PAIR COPPER FEEDERS TO EXISTING SIGNAL TERMINATION CABINETS, TERMINATION BLOCKS. |
| 2 | DEMO EXISTING SIGNAL TERMINATION CABINET AND TERMINAL BLOCKS. DEMO ALL CABLING FROM EXISTING TERMINAL BLOCKS TO FIELD SPEAKER LOCATIONS. |
| 3 | DEMO EXISTING SPEAKER DRIVER, EXISTING BACK BOX AND BAFFLE SHALL BE RE USED, TYP. U.N.O. |
| 4 | DEMO EXISTING CLOCK, WIPE DOWN, INVENTORY AND RETURN TO THE DISTRICT IN "AS-IS" CONDITION. |
| 5 | ALL DEMO EQUIPMENT AND MATERIALS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR UNLESS NOTED OTHERWISE. USE OF SCHOOL WASTE DISPOSAL CONTAINERS SHALL NOT BE PERMITTED. |

- KEYNOTES:**
- | KEYNOTE ID | DESCRIPTION |
|------------|---|
| 1 | NEW TELECENTER U IP SYSTEM SITE CONTROLLER. |
| 2 | NEW EXTERIOR SPEAKER ZONE AMPLIFIER. |
| 3 | NEW EXTERIOR SPEAKER AMPLIFIER W/ TELECENTER IP MODULE. |
| 4 | INSTALL NEW INTERCOM SPEAKER / CLOCK COMBO IN CLASSROOM. ROUTE NEW IP SPEAKER (1 EA, CAT6) / CLOCK (1 EA, CAT6) CABLES TO THE NEAREST IDF. |
| 5 | INSTALL NEW EXTERIOR INTERCOM SPEAKER, REUSE EXISTING BACK BOX, BAFFLE. ROUTE NEW SPEAKER (1 EA, 2C #18) CABLE TO THE NEAREST TELECENTER U AMPLIFIER. |
| 6 | INSTALL NEW INTERIOR INTERCOM SPEAKER, REUSE EXISTING BACK BOX, BAFFLE. ROUTE NEW SPEAKER (1 EA, CAT6) CABLE TO THE NEAREST IDF. |
| 7 | INSTALL NEW IP ANALOG SWEEP TYPE CLOCK. ROUTE (1 EA, CAT6) CABLE TO THE NEAREST IDF. |
| 8 | INSTALL NEW IP DIGITAL DISPLAY CLOCK. ROUTE (1 EA, CAT6) CABLE TO THE NEAREST IDF. |
| 9 | INSTALL NEW SURFACE RACEWAY WITH APPROPRIATE TRANSITION AND END FITTINGS. MOUNT HIGH ON WALL-APPROXIMATE 6" FROM CEILING. |
| 10 | EXISTING HIGH CAPACITY CABLE TRAY / SPINE. |
| 11 | EXISTING BACK BOX AND UNDERGROUND CONDUIT. SEE SITE PLAN FOR ADDITIONAL INFORMATION. |
| 12 | EXISTING SIGNAL TERMINATION CABINET (STC). SEE DEMO NOTES FOR ADDITIONAL REQUIREMENTS. |
| 13 | NEW 1 EA, 1" SLEEVE THROUGH WALL. CONNECT TO NEW SURFACE MOUNTED RACEWAY AND ROUTE TO NEAREST MDF/IDF. |
| 14 | EXISTING FIBER/COPPER FEEDER HORIZONTAL CONDUITS. |
| 15 | EXISTING BREEZWAY CONDUITS. ADD 1 EA, 2" CONDUIT FOR CLOCK CABLING TO NEAREST MDF/IDF. |

AGENCY APPROVAL STAMP

MEP & FS / Sustainability / CxA
1209 Pleasant Grove Blvd.
Roseville, CA 95678
Ph: (916) 771-0778
www.lpenginers.com
Job #: 23-2044

PROFESSIONAL STAMP

COPYRIGHT

CLIENT

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
5735 47TH AVENUE,
SACRAMENTO CA. 95824

LEONARDO DAVINCI K-8 SCHOOL
4701 JOAQUIN WAY
SACRAMENTO CA. 95822

SITE-WIDE INTERCOM AND CLOCK MODERNIZATION

SHEET TITLE

TECHNOLOGY CAFETERIA, KITCHEN FLOOR PLAN

LPCE PROJECT NO.	23-2044
DESIGNED BY:	JZ/RL
CHECKED BY:	LPCE
ISSUE DATE:	2023/06/08
WORKING DATE:	2023/06/08

SHEET NUMBER

T2.02

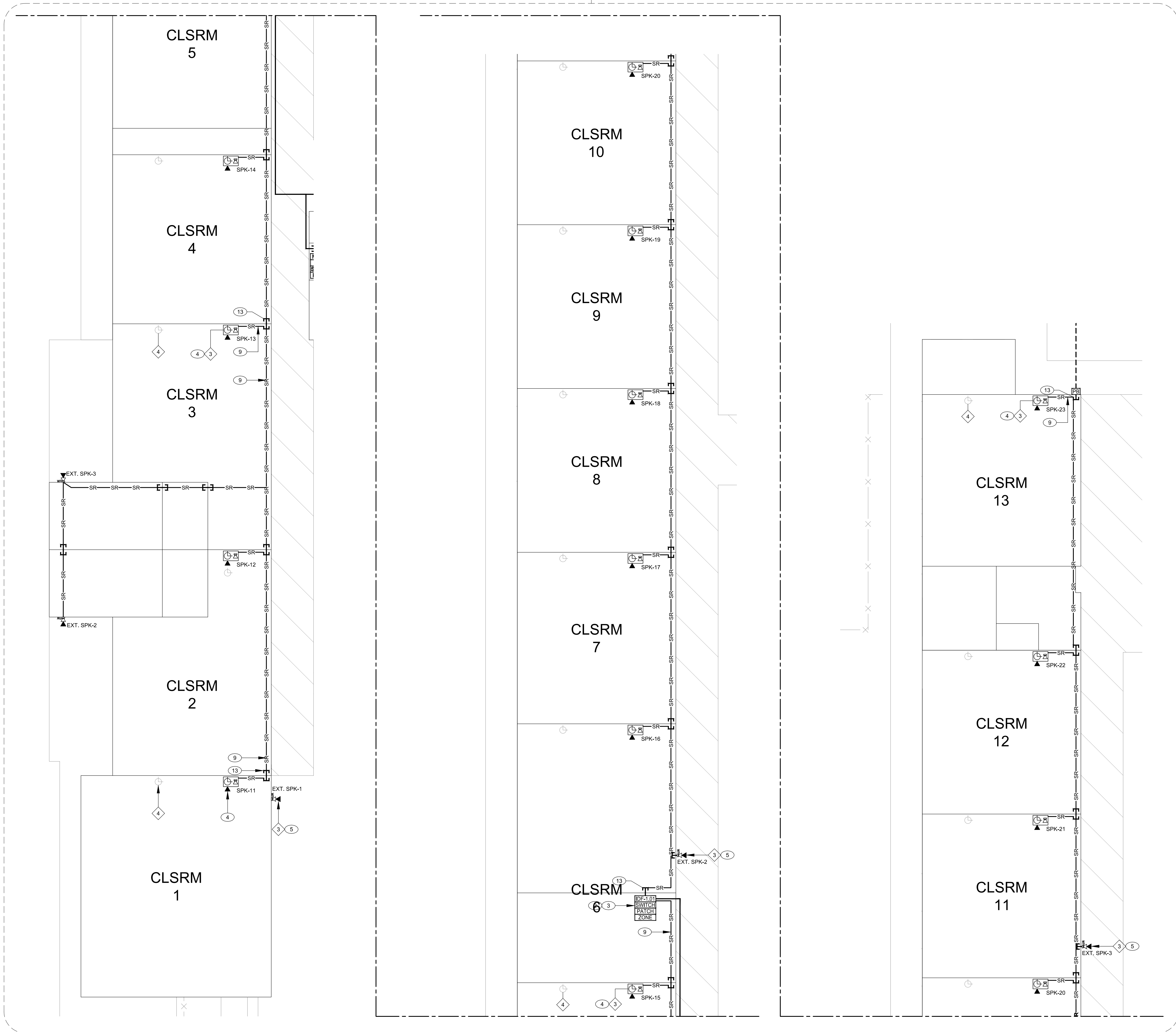
TECHNOLOGY CAFETERIA, KITCHEN FLOOR PLAN

SCALE: 1/8"=1'-0"

1

Login Name: jzamora
 Plot Date: June 08, 2023 - 4:04 pm
 Plot Path: C:\Users\jzamora\OneDrive\Documents\2023-2044_SCSUSD_Davinci MS Check\Information\LP_CAD\23-2044_SCSUSD_Davinci MS Intercom-Clock_T2_02_Floor Plans.dwg
 XREFS: 023-2044-RA_LPCE_SCSUSD_xbreviar_Davinci MS_ET

ROUTE CABLING
TO IDF-1.01



- SHEET GENERAL NOTES:**
1. ALL EQUIPMENT SHOWN ON CONSTRUCTION DOCUMENTS SHALL BE NEW, CONTRACTOR FURNISHED/CONTRACTOR INSTALLED UNLESS SPECIFIED ON DRAWINGS AND/OR SCHEDULES.
 2. ALL TECHNOLOGY SYSTEMS MUD RINGS SHALL BE PAINTED GREEN FOR A PRE-WALL FINISH/PANEL BOARD INSPECTION OF IN-WALL HORIZONTAL CABLING INFRASTRUCTURE.
 3. ALL EXPOSED CONDUITS, STRUCTURED CHANNEL, FASTENERS SHALL BE PRIMED WHITE AND PAINTED TO MATCH SURROUNDING AREA.
 4. WORK AREA OUTLET (WAO), AND FIELD DEVICE CABLING SHALL BE TERMINATED IN MODULAR PATCH PANEL(S) IN SEQUENTIAL ORDER OF ROOM NUMBER, DROP ID.
 5. ALL NETWORK CABLES SHALL BE MACHINE LABELED AT PATCH PANEL FACE, AND AT CATEGORY CABLE (BOTH ENDS AS SHOWN ON DETAILS/SPECIFICATIONS).
 6. ALL SPEAKER CABLES SHALL BE MACHINE LABELED AT SPEAKER AND STC.
 7. ALL CLOCKS SHALL BE SET TO NTP SERVER, PACIFIC DAYLIGHT TIME (PST).
 8. ALL EXTERIOR SPEAKERS SHALL BE ADJUSTED TO NOT EXCEED 65dB AT THE SCHOOL PROPERTY LINE.

- DEMO KEYNOTES:**
- | KEYNOTE ID | DESCRIPTION |
|------------|--|
| 1 | DEMO EXISTING INTERCOM CAMPUS CONTROLLER AND ASSOCIATED HARDWARE. WIPE DOWN CONTROL EQUIPMENT, INVENTORY AND RETURN TO THE DISTRICT IN "AS-IS" CONDITION. DEMO ALL ASSOCIATED CONTROL HARDWARE INTERCONNECTION CABLING, INCLUDING MULTI-PAIR COPPER FEEDERS TO EXISTING SIGNAL TERMINATION CABINETS, TERMINATION BLOCKS. |
| 2 | DEMO EXISTING SIGNAL TERMINATION CABINET AND TERMINAL BLOCKS. DEMO ALL CABLING FROM EXISTING TERMINAL BLOCKS TO FIELD SPEAKER LOCATIONS. |
| 3 | DEMO EXISTING SPEAKER DRIVER, EXISTING BACK BOX AND BAFFLE SHALL BE RE USED, TYP. U.N.O. |
| 4 | DEMO EXISTING CLOCK, WIPE DOWN, INVENTORY AND RETURN TO THE DISTRICT IN "AS-IS" CONDITION. |
| 5 | ALL DEMO EQUIPMENT AND MATERIALS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR UNLESS NOTED OTHERWISE. USE OF SCHOOL WASTE DISPOSAL CONTAINERS SHALL NOT BE PERMITTED. |

- KEYNOTES:**
- | KEYNOTE ID | DESCRIPTION |
|------------|---|
| 1 | NEW TELECENTER U IP SYSTEM SITE CONTROLLER. |
| 2 | NEW EXTERIOR SPEAKER ZONE AMPLIFIER. |
| 3 | NEW EXTERIOR SPEAKER AMPLIFIER W/ TELECENTER IP MODULE. |
| 4 | INSTALL NEW INTERCOM SPEAKER / CLOCK COMBO IN CLASSROOM. ROUTE NEW IP SPEAKER (1 EA, CAT6) / CLOCK (1 EA, CAT6) CABLES TO THE NEAREST IDF. |
| 5 | INSTALL NEW EXTERIOR INTERCOM SPEAKER, REUSE EXISTING BACK BOX, BAFFLE. ROUTE NEW SPEAKER (1 EA, 2C #18) CABLE TO THE NEAREST TELECENTER U AMPLIFIER. |
| 6 | INSTALL NEW INTERIOR INTERCOM SPEAKER, REUSE EXISTING BACK BOX, BAFFLE. ROUTE NEW SPEAKER (1 EA, CAT6) CABLE TO THE NEAREST IDF. |
| 7 | INSTALL NEW IP ANALOG SWEEP TYPE CLOCK. ROUTE (1 EA, CAT6) CABLE TO THE NEAREST IDF. |
| 8 | INSTALL NEW IP DIGITAL DISPLAY CLOCK. ROUTE (1 EA, CAT6) CABLE TO THE NEAREST IDF. |
| 9 | INSTALL NEW SURFACE RACEWAY WITH APPROPRIATE TRANSITION AND END FITTINGS. MOUNT HIGH ON WALL-APPROXIMATE 6" FROM CEILING. |
| 10 | EXISTING HIGH CAPACITY CABLE TRAY / SPINE. |
| 11 | EXISTING BACK BOX AND UNDERGROUND CONDUIT. SEE SITE PLAN FOR ADDITIONAL INFORMATION. |
| 12 | EXISTING SIGNAL TERMINATION CABINET (STC). SEE DEMO NOTES FOR ADDITIONAL REQUIREMENTS. |
| 13 | NEW 1 EA, 1" SLEEVE THROUGH WALL. CONNECT TO NEW SURFACE MOUNTED RACEWAY AND ROUTE TO NEAREST MDF/IDF. |
| 14 | EXISTING FIBER/COPPER FEEDER HORIZONTAL CONDUITS. |
| 15 | EXISTING BREEZEWAY CONDUITS. ADD 1 EA, 2" CONDUIT FOR CLOCK CABLING TO NEAREST MDF/IDF. |

AGENCY APPROVAL STAMP

MEP & FS / Sustainability / CxA
1209 Pleasant Grove Blvd.
Roseville, CA 95678
Ph: (916) 771-0778
www.lpeengineers.com
Job #: 23-2044

PROFESSIONAL STAMP

COPYRIGHT

CLIENT

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
5735 47TH AVENUE,
SACRAMENTO CA. 95824

PROJECT

LEONARDO DAVINCI K-8 SCHOOL
4701 JOAQUIN WAY
SACRAMENTO CA. 95822

SITE-WIDE INTERCOM AND CLOCK MODERNIZATION

SHEET TITLE

TECHNOLOGY CLASSROOMS 1-13 FLOOR PLAN

LPCE PROJECT NO. 23-2044
DESIGNED BY: JZ/RL
CHECKED BY: LPCE
ISSUE DATE: 2023/06/08
WORKING DATE: 2023/06/08
SHEET NUMBER

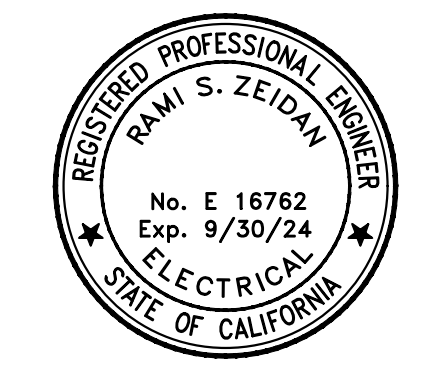
T2.03

TECHNOLOGY CLASSROOMS 1-13 FLOOR PLAN

SCALE: 1/8"=1'-0"

1

Login Name: jzamora
 Plot Date: June 08, 2023 - 4:04 pm
 Project: 23-2044 LPCE_SJUSD_Davinci K8 Check Intercom/IPC_CAD/05-2024_SJUSD_Davinci MS Intercom-Clock_T2_Floor Plans.dwg
 XREFS: 023-2044-RA_LPCE_SJUSD_Siteplan_Davinci MS ET



LPCE PROJECT NO.	23-2044
DESIGNED BY:	JZ/RL
CHECKED BY:	LPCE
ISSUE DATE:	2023/06/08
WORKING DATE:	2023/06/08
SHEET NUMBER	

SHEET GENERAL NOTES:

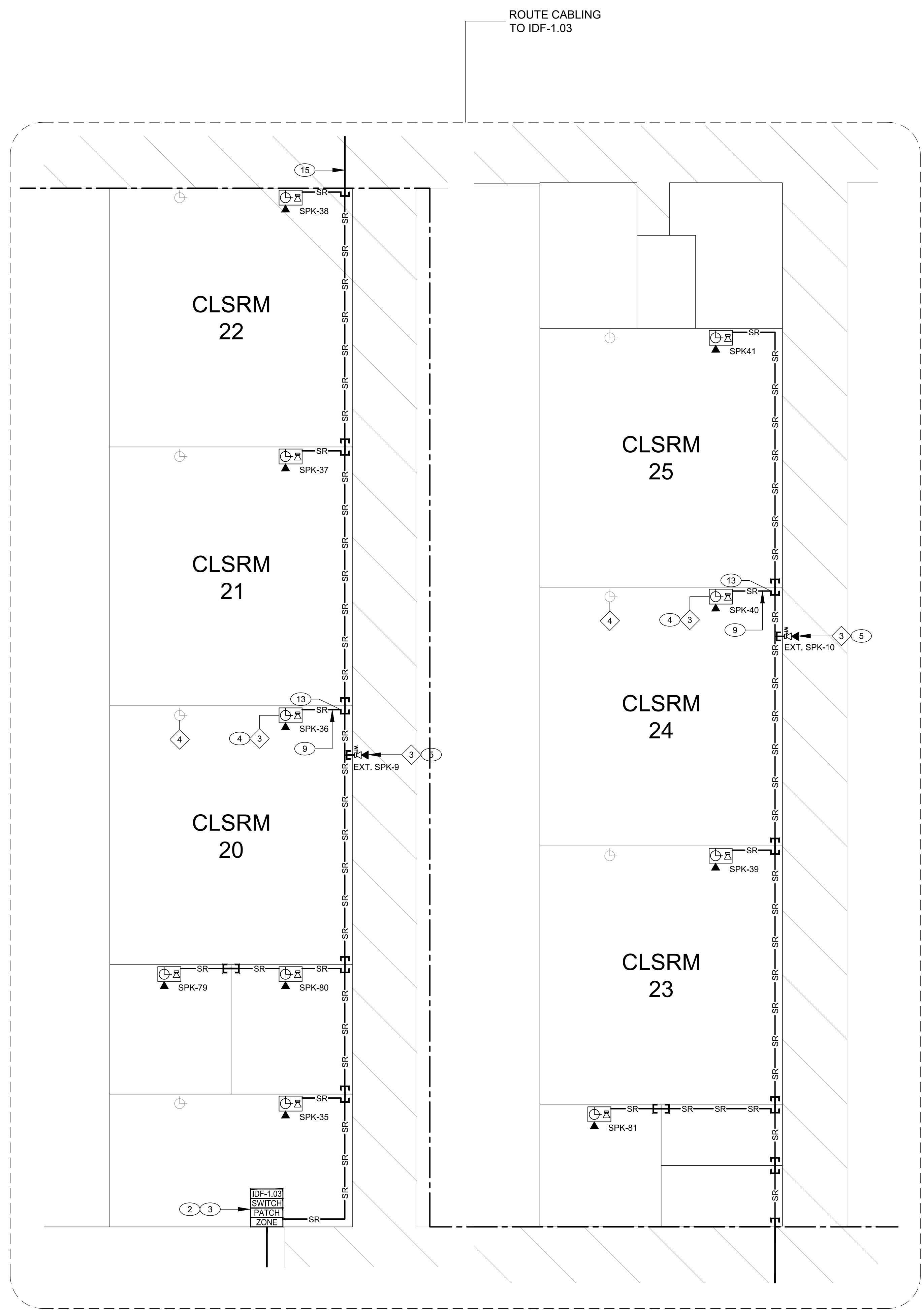
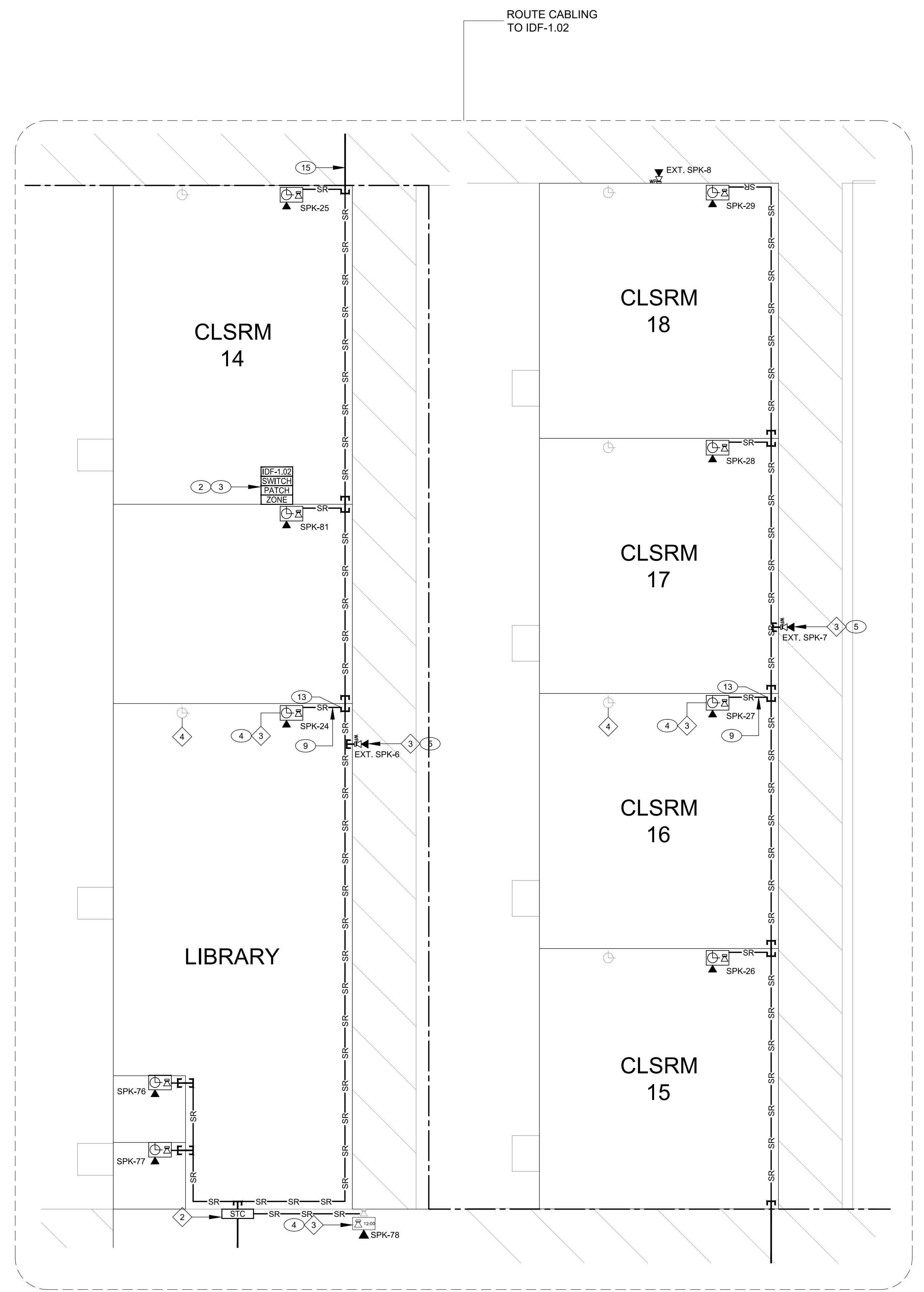
- ALL EQUIPMENT SHOWN ON CONSTRUCTION DOCUMENTS SHALL BE NEW, CONTRACTOR FURNISHED/CONTRACTOR INSTALLED UNLESS SPECIFIED ON DRAWINGS AND/OR SCHEDULES.
- ALL TECHNOLOGY SYSTEMS MUD RINGS SHALL BE PAINTED GREEN FOR A PRE-WALL FINISH/PANEL BOARD INSPECTION OF IN-WALL HORIZONTAL CABLING INFRASTRUCTURE.
- ALL EXPOSED CONDUITS, STRUCTURED CHANNEL, FASTENERS SHALL BE PRIMED WHITE AND PAINTED TO MATCH SURROUNDING AREA.
- WORK AREA OUTLET (WAO), AND FIELD DEVICE CABLING SHALL BE TERMINATED IN MODULAR PATCH PANEL(S) IN SEQUENTIAL ORDER OF ROOM NUMBER, DROP ID.
- ALL NETWORK CABLES SHALL BE MACHINE LABELED AT PATCH PANEL FACE, AND AT CATEGORY CABLE (BOTH ENDS AS SHOWN ON DETAILS/SPECIFICATIONS).
- ALL SPEAKER CABLES SHALL BE MACHINE LABELED AT SPEAKER AND STC.
- ALL CLOCKS SHALL BE SET TO NTP SERVER, PACIFIC DAYLIGHT TIME (PST).
- ALL EXTERIOR SPEAKERS SHALL BE ADJUSTED TO NOT EXCEED 65dB AT THE SCHOOL PROPERTY LINE.

DEMO KEYNOTES:

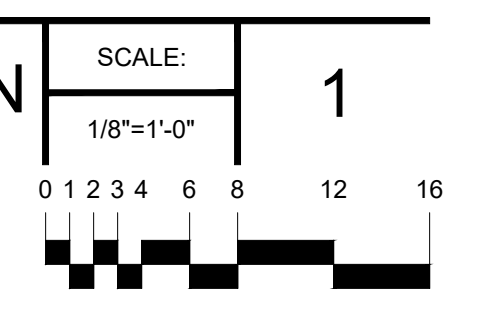
- | KEYNOTE ID | DESCRIPTION |
|------------|--|
| 1 | DEMO EXISTING INTERCOM CAMPUS CONTROLLER AND ASSOCIATED HARDWARE. WIPE DOWN CONTROL EQUIPMENT, INVENTORY AND RETURN TO THE DISTRICT IN "AS-IS" CONDITION. DEMO ALL ASSOCIATED CONTROL HARDWARE INTERCONNECTION CABLING, INCLUDING MULTI-PAIR COPPER FEEDERS TO EXISTING SIGNAL TERMINATION CABINETS, TERMINATION BLOCKS. |
| 2 | DEMO EXISTING SIGNAL TERMINATION CABINET AND TERMINAL BLOCKS. DEMO ALL CABLING FROM EXISTING TERMINAL BLOCKS TO FIELD SPEAKER LOCATIONS. |
| 3 | DEMO EXISTING SPEAKER DRIVER, EXISTING BACK BOX AND BAFFLE SHALL BE USED, TYP. U.N.O. |
| 4 | DEMO EXISTING CLOCK, WIPE DOWN, INVENTORY AND RETURN TO THE DISTRICT IN "AS-IS" CONDITION. |
| 5 | ALL DEMO EQUIPMENT AND MATERIALS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR UNLESS NOTED OTHERWISE. USE OF SCHOOL WASTE DISPOSAL CONTAINERS SHALL NOT BE PERMITTED. |

KEYNOTES:

- | KEYNOTE ID | DESCRIPTION |
|------------|---|
| 1 | NEW TELECENTER U IP SYSTEM SITE CONTROLLER. |
| 2 | NEW EXTERIOR SPEAKER ZONE AMPLIFIER. |
| 3 | NEW EXTERIOR SPEAKER AMPLIFIER W/ TELECENTER IP MODULE. |
| 4 | INSTALL NEW INTERCOM SPEAKER / CLOCK COMBO IN CLASSROOM. ROUTE NEW IP SPEAKER (1 EA. CAT6) / CLOCK (1 EA. CAT6) CABLES TO THE NEAREST IDF. |
| 5 | INSTALL NEW EXTERIOR INTERCOM SPEAKER, REUSE EXISTING BACK BOX, BAFFLE. ROUTE NEW SPEAKER (1 EA. CAT6) CABLE TO THE NEAREST TELECENTER U AMPLIFIER. |
| 6 | INSTALL NEW INTERIOR INTERCOM SPEAKER, REUSE EXISTING BACK BOX, BAFFLE. ROUTE NEW SPEAKER (1 EA. CAT6) CABLE TO THE NEAREST TELECENTER U AMPLIFIER. |
| 7 | INSTALL NEW IP ANALOG SWEEP TYPE CLOCK. ROUTE (1 EA. CAT6) CABLE TO THE NEAREST IDF. |
| 8 | INSTALL NEW IP DIGITAL DISPLAY CLOCK. ROUTE (1 EA. CAT6) CABLE TO THE NEAREST IDF. |
| 9 | INSTALL NEW SURFACE RACEWAY WITH APPROPRIATE TRANSITION AND END FITTINGS. MOUNT HIGH ON WALL-APPROXIMATE 6" FROM CEILING. |
| 10 | EXISTING HIGH CAPACITY CABLE TRAY / SPINE. |
| 11 | EXISTING BACK BOX AND UNDERGROUND CONDUIT. SEE SITE PLAN FOR ADDITIONAL INFORMATION. |
| 12 | EXISTING SIGNAL TERMINATION CABINET (STC). SEE DEMO NOTES FOR ADDITIONAL REQUIREMENTS. |
| 13 | NEW 1 EA. 1" SLEEVE THROUGH WALL. CONNECT TO NEW SURFACE MOUNTED RACEWAY AND ROUTE TO NEAREST MDF/IDF. |
| 14 | EXISTING FIBER/COPPER FEEDER HORIZONTAL CONDUITS. |
| 15 | EXISTING BREEZEWAY CONDUITS. ADD 1 EA. 2" CONDUIT FOR CLOCK CABLING TO NEAREST MDF/IDF. |



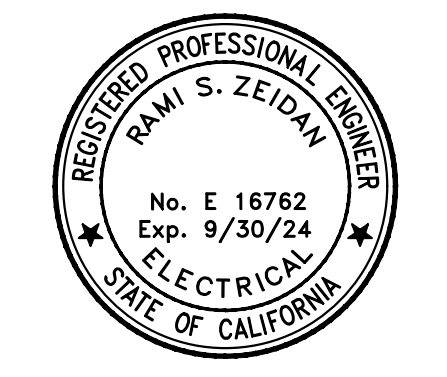
TECHNOLOGY LIBRARY, CLASSROOMS 14-25 FLOOR PLAN



Login Name: jzamora
 Plot Date: June 08, 2023 - 4:04 pm
 Project: C:\projects\23-2044_SCSUSD_Davinci MS Check\Intercom\Floor Plans.dwg
 XREFS: 023-2044-RA_LPCE_SCSUSD_080823.dwg



PROFESSIONAL STAMP



COPYRIGHT

CLIENT

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
5735 47TH AVENUE, SACRAMENTO CA. 95824

PROJECT
LEONARDO DAVINCI K-8 SCHOOL
4701 JOAQUIN WAY, SACRAMENTO CA. 95822

SITE-WIDE INTERCOM AND CLOCK MODERNIZATION

SHEET TITLE

TECHNOLOGY GYMNASIUM FLOOR PLAN

LPCE PROJECT NO.	23-2044
DESIGNED BY:	JZ/RL
CHECKED BY:	LPCE
ISSUE DATE:	2023/06/08
WORKING DATE:	2023/06/08

SHEET NUMBER
T2.06

SHEET GENERAL NOTES:

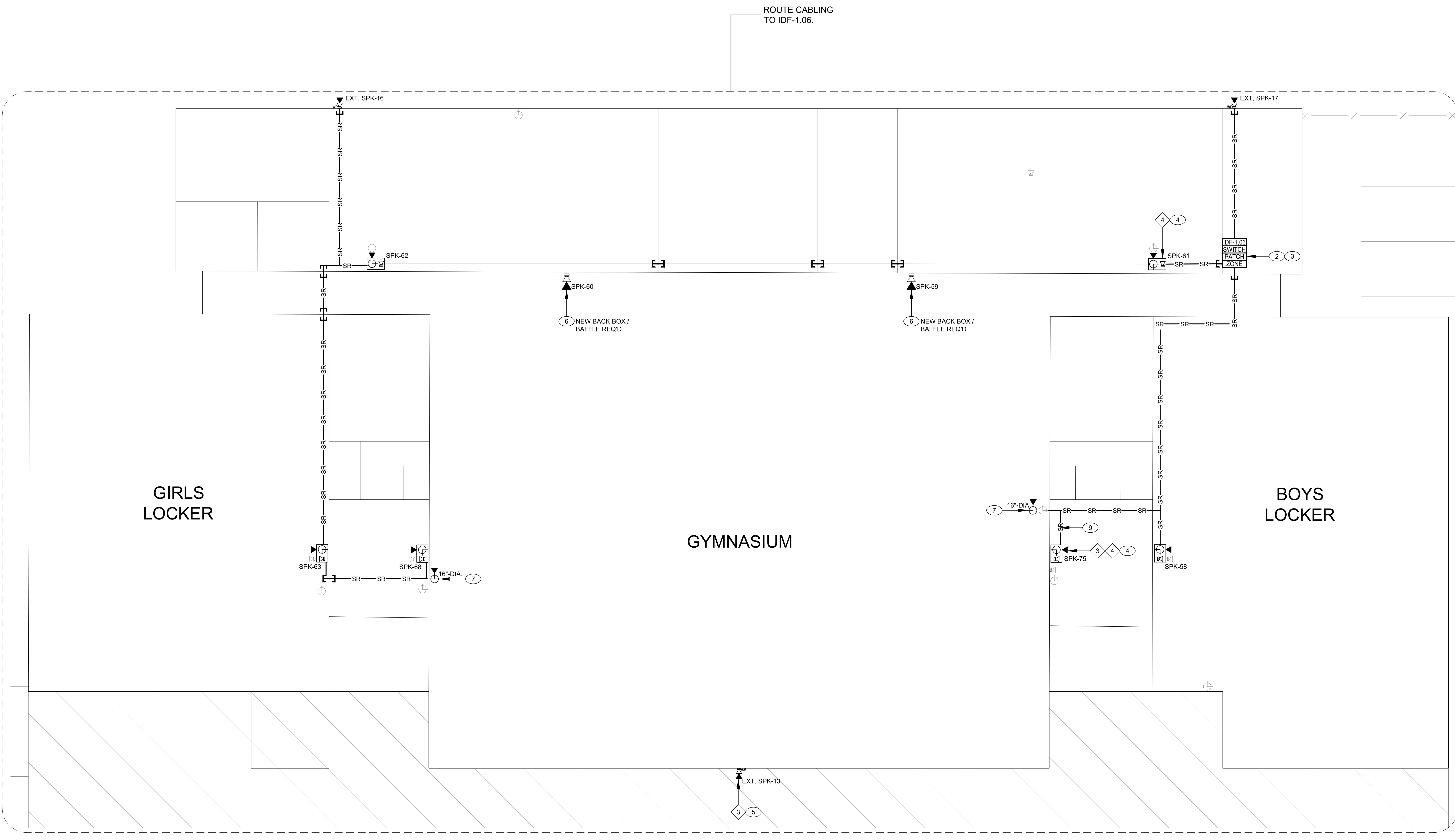
- ALL EQUIPMENT SHOWN ON CONSTRUCTION DOCUMENTS SHALL BE NEW, CONTRACTOR FURNISHED/CONTRACTOR INSTALLED UNLESS SPECIFIED ON DRAWINGS AND/OR SCHEDULES.
- ALL TECHNOLOGY SYSTEMS MUD RINGS SHALL BE PAINTED GREEN FOR A PRE-WALL FINISH/PANEL BOARD INSPECTION OF IN-WALL HORIZONTAL CABLING INFRASTRUCTURE.
- ALL EXPOSED CONDUITS, STRUCTURED CHANNEL, FASTENERS SHALL BE PRIMED WHITE AND PAINTED TO MATCH SURROUNDING AREA.
- WORK AREA OUTLET (WAO), AND FIELD DEVICE CABLING SHALL BE TERMINATED IN MODULAR PATCH PANEL(S) IN SEQUENTIAL ORDER OF ROOM NUMBER, DROP ID.
- ALL NETWORK CABLES SHALL BE MACHINE LABELED AT PATCH PANEL FACE, AND AT CATEGORY CABLE (BOTH ENDS AS SHOWN ON DETAILS/SPECIFICATIONS).
- ALL SPEAKER CABLES SHALL BE MACHINE LABELED AT SPEAKER AND STC.
- ALL CLOCKS SHALL BE SET TO NTP SERVER, PACIFIC DAYLIGHT TIME (PST).
- ALL EXTERIOR SPEAKERS SHALL BE ADJUSTED TO NOT EXCEED 65dB AT THE SCHOOL PROPERTY LINE.

DEMO KEYNOTES:

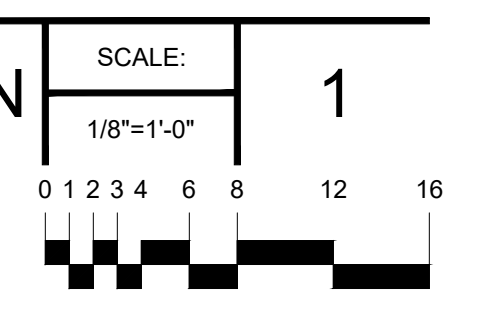
- | KEYNOTE ID | DESCRIPTION |
|------------|--|
| 1 | DEMO EXISTING INTERCOM CAMPUS CONTROLLER AND ASSOCIATED HARDWARE. WIPE DOWN CONTROL EQUIPMENT, INVENTORY AND RETURN TO THE DISTRICT IN "AS-IS" CONDITION. DEMO ALL ASSOCIATED CONTROL HARDWARE INTERCONNECTION CABLING, INCLUDING MULTI-PAIR COPPER FEEDERS TO EXISTING SIGNAL TERMINATION CABINETS, TERMINATION BLOCKS. |
| 2 | DEMO EXISTING SIGNAL TERMINATION CABINET AND TERMINAL BLOCKS. DEMO ALL CABLING FROM EXISTING TERMINAL BLOCKS TO FIELD SPEAKER LOCATIONS. |
| 3 | DEMO EXISTING SPEAKER DRIVER, EXISTING BACK BOX AND BAFFLE SHALL BE RE USED, TYP. U.N.O. |
| 4 | DEMO EXISTING CLOCK, WIPE DOWN, INVENTORY AND RETURN TO THE DISTRICT IN "AS-IS" CONDITION. |
| 5 | ALL DEMO EQUIPMENT AND MATERIALS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR UNLESS NOTED OTHERWISE. USE OF SCHOOL WASTE DISPOSAL CONTAINERS SHALL NOT BE PERMITTED. |

KEYNOTES:

- | KEYNOTE ID | DESCRIPTION |
|------------|---|
| 1 | NEW TELECENTER U IP SYSTEM SITE CONTROLLER. |
| 2 | NEW EXTERIOR SPEAKER ZONE AMPLIFIER. |
| 3 | NEW EXTERIOR SPEAKER AMPLIFIER W/ TELECENTER IP MODULE. |
| 4 | INSTALL NEW INTERCOM SPEAKER / CLOCK COMBO IN CLASSROOM. ROUTE NEW IP SPEAKER (1 EA, CAT6) / CLOCK (1 EA, CAT6) CABLES TO THE NEAREST IDF. |
| 5 | INSTALL NEW EXTERIOR INTERCOM SPEAKER, REUSE EXISTING BACK BOX, BAFFLE. ROUTE NEW SPEAKER (1 EA, 2C #18) CABLE TO THE NEAREST TELECENTER U AMPLIFIER. |
| 6 | INSTALL NEW INTERIOR INTERCOM SPEAKER, REUSE EXISTING BACK BOX, BAFFLE. ROUTE NEW SPEAKER (1 EA, CAT6) CABLE TO THE NEAREST IDF. |
| 7 | INSTALL NEW IP ANALOG SWEEP TYPE CLOCK. ROUTE (1 EA, CAT6) CABLE TO THE NEAREST IDF. |
| 8 | INSTALL NEW IP DIGITAL DISPLAY CLOCK. ROUTE (1 EA, CAT6) CABLE TO THE NEAREST IDF. |
| 9 | INSTALL NEW SURFACE RACEWAY WITH APPROPRIATE TRANSITION AND END FITTINGS. MOUNT HIGH ON WALL-APPROXIMATE 6" FROM CEILING. |
| 10 | EXISTING HIGH CAPACITY CABLE TRAY / SPINE. |
| 11 | EXISTING BACK BOX AND UNDERGROUND CONDUIT. SEE SITE PLAN FOR ADDITIONAL INFORMATION. |
| 12 | EXISTING SIGNAL TERMINATION CABINET (STC). SEE DEMO NOTES FOR ADDITIONAL REQUIREMENTS. |
| 13 | NEW 1 EA, 1" SLEEVE THROUGH WALL. CONNECT TO NEW SURFACE MOUNTED RACEWAY AND ROUTE TO NEAREST MDF/IDF. |
| 14 | EXISTING FIBER/COPPER FEEDER HORIZONTAL CONDUITS. |
| 15 | EXISTING BREEZWAY CONDUITS. ADD 1 EA, 2" CONDUIT FOR CLOCK CABLING TO NEAREST MDF/IDF. |



TECHNOLOGY GYMNASIUM FLOOR PLAN

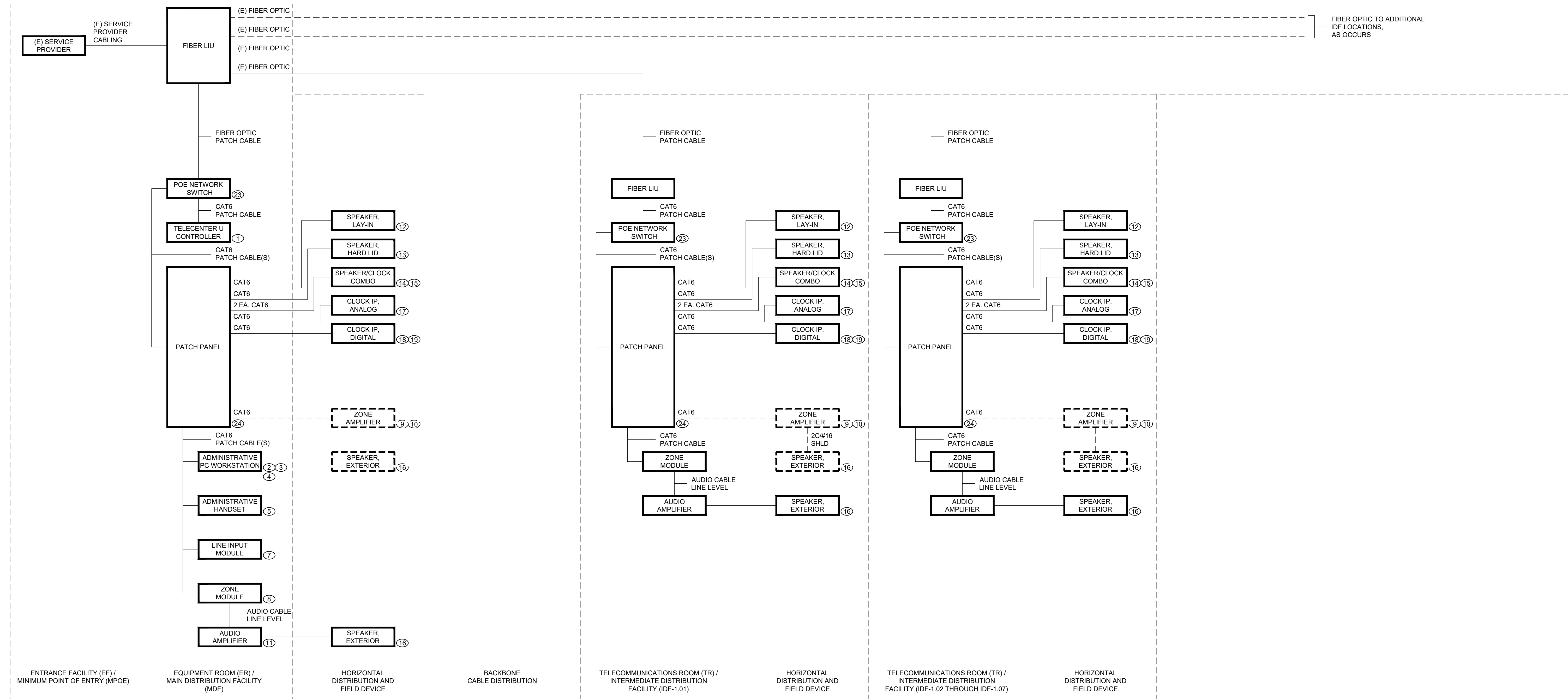


Login Name: jzamora
 Plot Date: June 08, 2023 - 4:04 pm
 Project: 023-2044-RA LPCE_SJUSD_T2.06
 XREFS: 023-2044-RA LPCE_SJUSD_T2.06

MAJOR EQUIPMENT LIST

ALL EQUIPMENT SHALL BE CONTRACTOR FURNISHED, CONTRACTOR INSTALLED UNLESS NOTED OTHERWISE

ROW ID	DESCRIPTION	MANUFACTURER	MODEL	RACK UNIT (RU)	DEPTH	POWER	WEIGHT (CAPACITY)	COMMENTS
1	IP SYSTEM SITE CONTROLLER	RAULAND	TCC2000	EDIT	DEPTH	120VAC	N/A	N/A
2	SITE CONTROLLER SOFTWARE LICENSE	RAULAND	TCU3000SW	N/A	N/A	N/A	N/A	CONFIGURE AT ADMIN PC WORKSTATION
3	SIP STREAM SOFTWARE LICENSE	RAULAND	TCU3100SW	N/A	N/A	N/A	N/A	CONFIGURE AT ADMIN PC WORKSTATION
4	GRAPHICAL MAP SOFTWARE LICENSE	RAULAND	TCU3300SW	N/A	N/A	N/A	N/A	CONFIGURE AT ADMIN PC WORKSTATION
5	ADMINISTRATIVE CONSOLE, PHONE HANDSET	RAULAND	TCC2045	N/A	N/A	N/A	N/A	N/A
6	IP SPEAKER + ROOM CONTROL MODULE	RAULAND	TCC2011A	N/A	N/A	POE	N/A	N/A
7	AUDIO LINE INPUT MODULE	RAULAND	TCC2055	N/A	N/A	120VAC	N/A	N/A
8	AUDIO ZONE MODULE	RAULAND	TCC2022	N/A	N/A	120VAC	N/A	N/A
9	ZONE AUDIO AMPLIFIER, 35-WATT, 25V	RAULAND	TCC3022	N/A	N/A	120VAC	N/A	N/A
10	POWER SUPPLY FOR ZONE AMPLIFIER	RAULAND	TCC3022PS	N/A	N/A	120VAC	N/A	N/A
11	AUDIO AMPLIFIER, 2X160-WATT, 25V	POWERSOFT	MEZZO-322-A	N/A	N/A	120VAC	N/A	N/A
12	INTERCOM SPEAKER, LAY-IN (INTERIOR)	RAULAND	IP MODULE: TCC2011A SPEAKER: BAFN12X2L8RJ	N/A	N/A	N/A	N/A	N/A
13	INTERCOM SPEAKER, HARD LID (INTERIOR)	RAULAND	IP MODULE: TCC2011A SPEAKER: ACC1480 (US0880 W/ R445) BACK BOX: ACC1112 BAFFLE: ACC1003	N/A	N/A	N/A	N/A	N/A
14	INTERCOM SPEAKER AND CLOCK COMBO, DIGITAL MESSAGE BOARD	RAULAND	IP MODULE: TCC2011A SPEAKER: ACC1480 (US0880 W/ R445) BACK BOX: ACC3011SB BAFFLE: ACC13011S MESSAGE: TCC3011S	N/A	N/A	N/A	N/A	N/A
15	INTERCOM SPEAKER AND CLOCK COMBO, 12"-DIA., ANALOG SWEEP	RAULAND / LOWELL / SAPLING	IP MODULE: TCC2011A SPEAKER: ACC1480 (US0880 W/ R445) BACK BOX: PC712 BAFFLE: AP-700 CLOCK: SAP-1BS-12R-0	N/A	N/A	N/A	N/A	N/A
16	INTERCOM SPEAKER, (EXTERIOR)	RAULAND / LOWELL	SPEAKER: 8C10MR8-T72 BACK BOX: ACC1113 BAFFLE: ACC1012	N/A	N/A	N/A	N/A	N/A
17	CLOCK IP, ANALOG SWEEP	SAPLING	12": SAP-1BS-12R-0 16": SAP-1BS-16R-0	N/A	N/A	N/A	N/A	N/A
18	DIGITAL CLOCK AND MESSAGE BOARD, SMALL	RAULAND	TCC3011S	N/A	N/A	N/A	N/A	N/A
19	DIGITAL CLOCK AND MESSAGE BOARD, LARGE	RAULAND	TCC3011L	N/A	N/A	N/A	N/A	N/A
20	PROTECTIVE CLOCK CAGE	NATIONAL TIME	AS REQ'D	N/A	N/A	N/A	N/A	N/A
21	UNIVERSAL RACK MOUNTING KIT	RAULAND	TCC2099	N/A	N/A	N/A	N/A	N/A
22	CABLES AND CONNECTORS AS REQ'D FOR COMPLETE SYSTEM OPERATION	AS REQ'D	AS REQ'D	N/A	N/A	N/A	N/A	N/A
23	48-PORT NETWORK SWITCH, POE	ARUBA	6200MR8068A	N/A	N/A	N/A	N/A	SEE SPECS. FOR ADDITIONAL INFORMATION
24	48-PORT MODULAR PATCH PANEL	OTRONICS	KSU48	N/A	N/A	N/A	N/A	SEE SPECS. FOR ADDITIONAL INFORMATION



AGENCY APPROVAL STAMP

MEP & FS / Sustainability / CxA
1209 Pleasant Grove Blvd.
Roseville, CA 95678
Ph: (916) 771-0778
www.lpeengineers.com
Job # 23-2044

PROFESSIONAL STAMP

COPYRIGHT

CLIENT

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
5735 47TH AVENUE,
SACRAMENTO CA. 95824

PROJECT

LEONARDO DAVINCI K-8 SCHOOL
4701 JOAQUIN WAY
SACRAMENTO CA. 95822

SITE-WIDE INTERCOM AND CLOCK MODERNIZATION

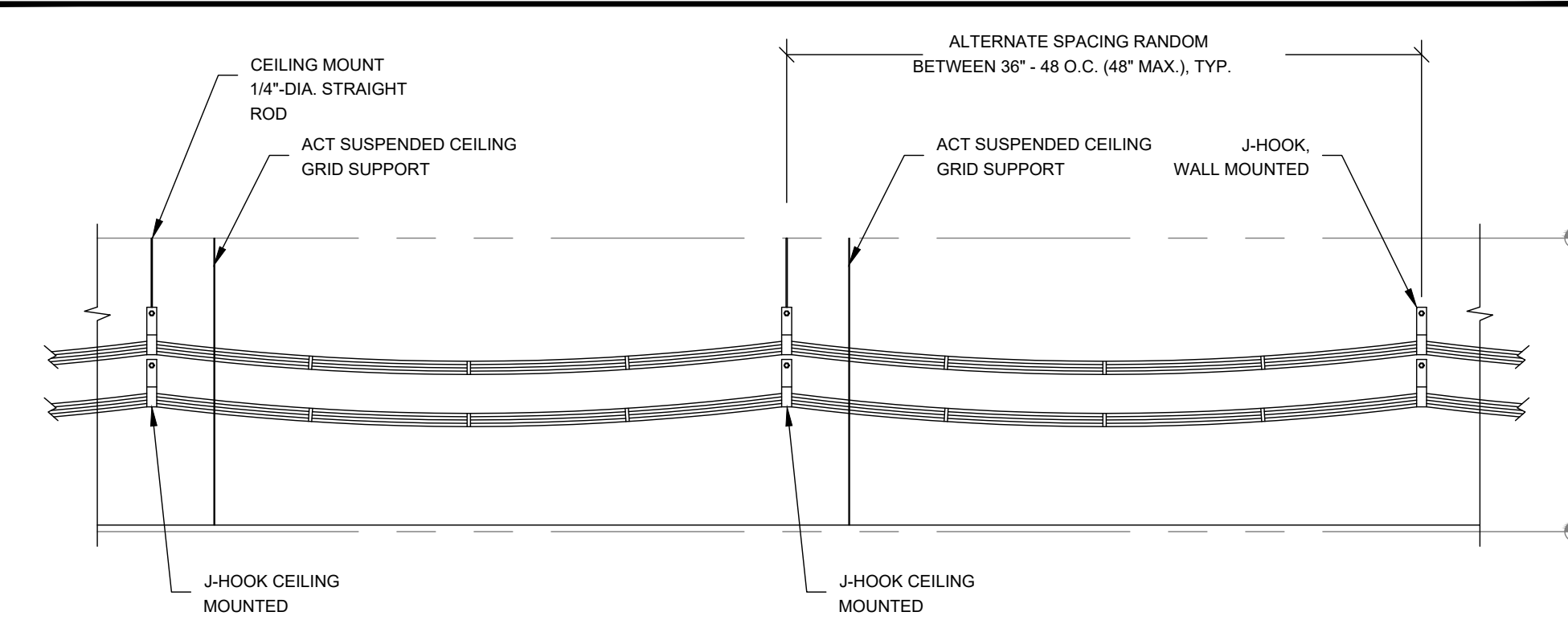
SHEET TITLE

TECHNOLOGY ONE-LINES AND EQUIPMENT SCHEDULE

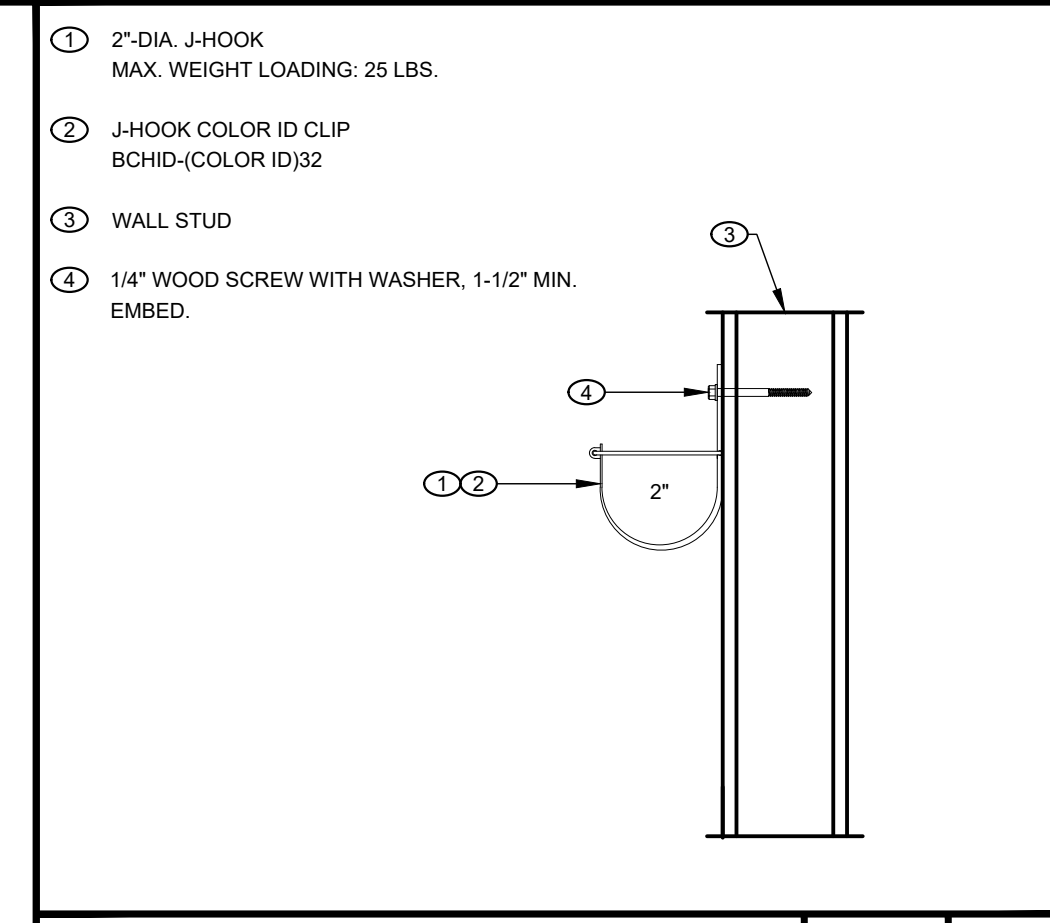
LPCE PROJECT NO.	23-2044
DESIGNED BY:	JZ/RL
CHECKED BY:	LPCE
ISSUE DATE:	2023/06/08
WORKING DATE:	2023/06/08
SHEET NUMBER	

T3.00

Login Name: jzamora
 Print Date: June 08, 2023 - 4:04 PM
 Project: C:\projects\23-2044 SCUSD_Davinci MS Check-Intercom\IP-Clock\MS-Intercom-Clock_T3.00_One-Lines.dwg
 XREFS: LPCE_SCSO_XBaffle_Davinci MS E1



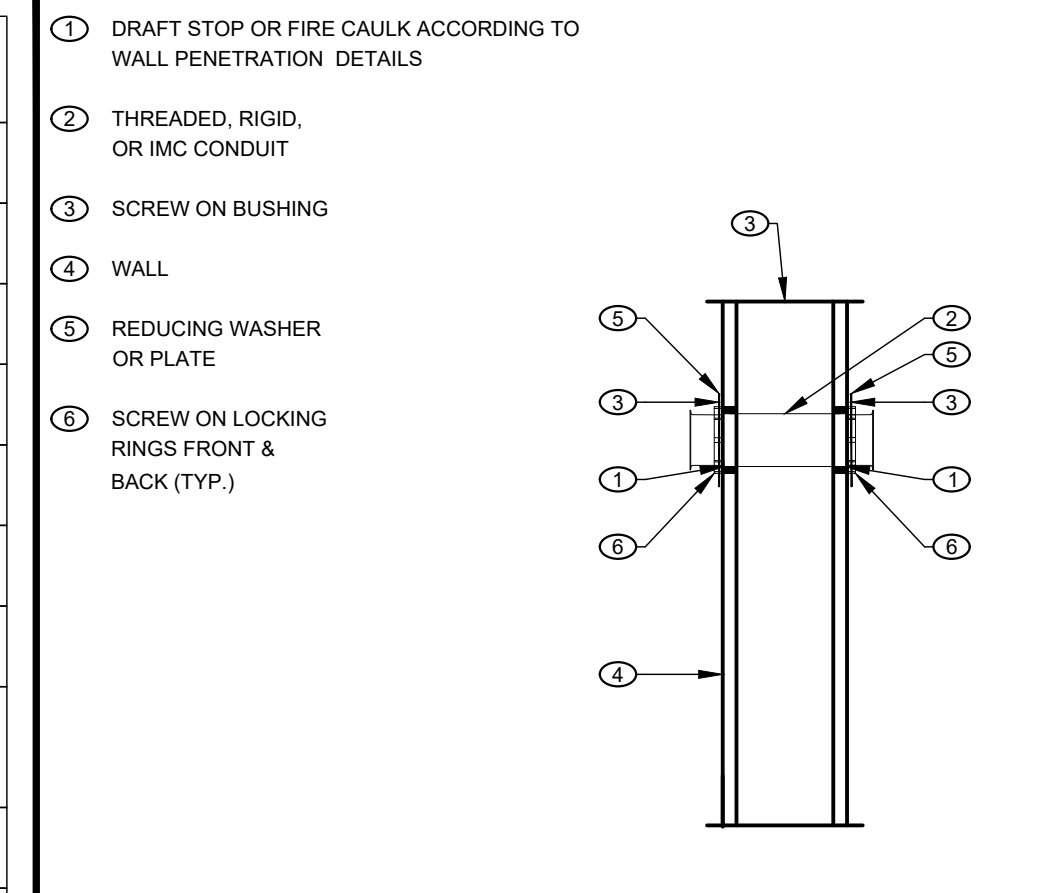
J-HOOK PATHWAY ABOVE CEILING SCALE: N/A 1



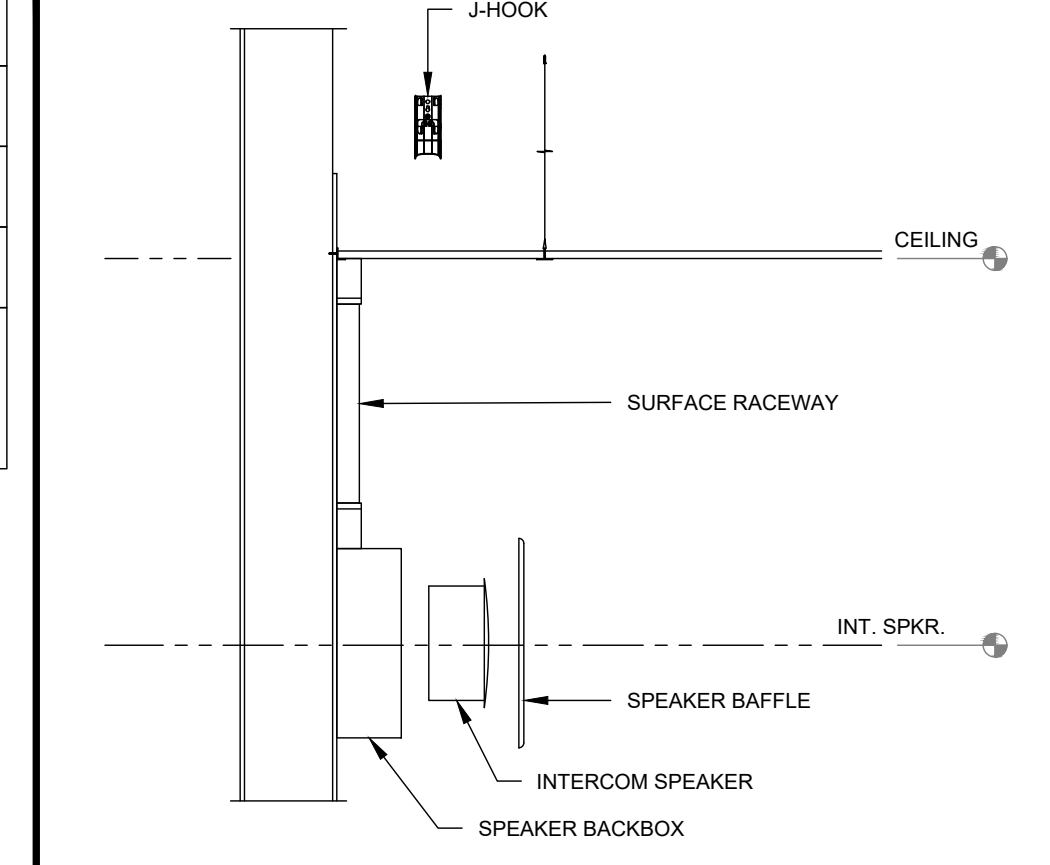
J-HOOK WALL MOUNTED SCALE: N/A 2

WIREMOLD SURFACE RACEWAY

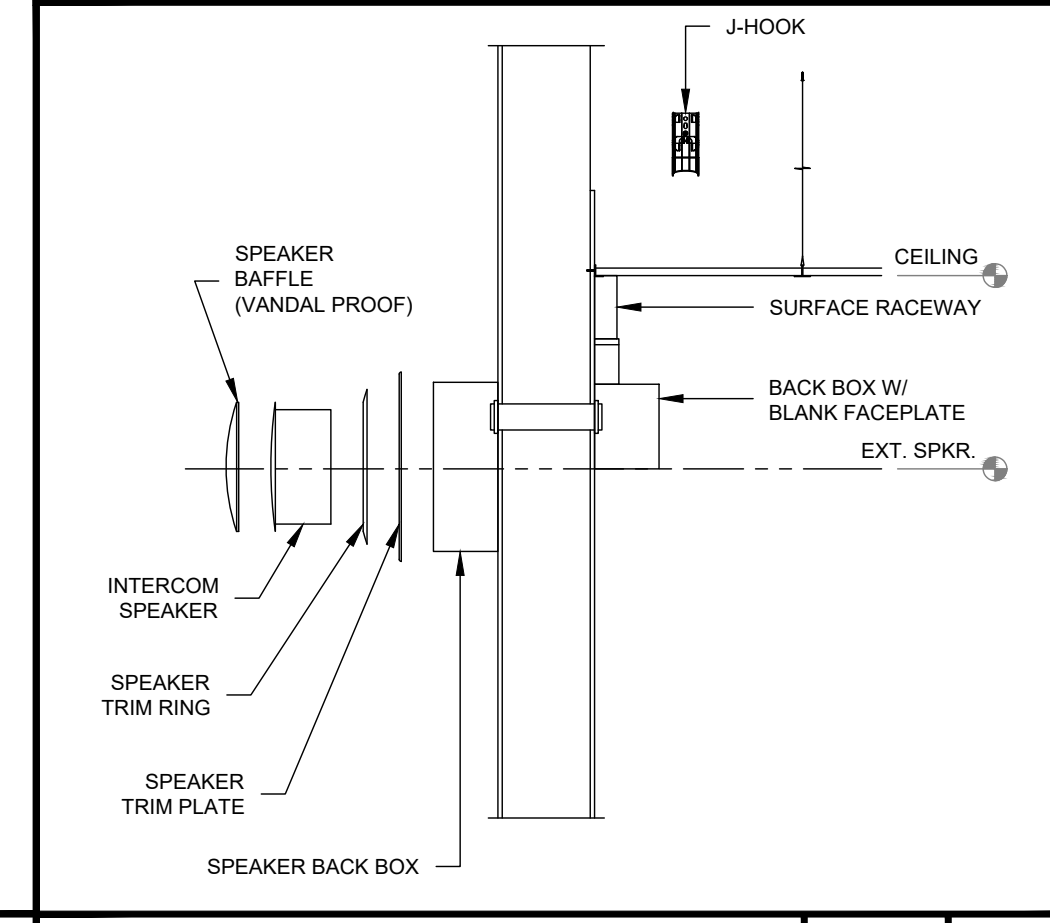
SYMBOL	DESCRIPTION	WM2300 PART NUMBER
①	WIREMOLD WM5500	N/A
②	WIREMOLD WM2300	2300
③	ENTRANCE END FITTING	2310A
④	FULL CAPACITY TEE (FIBER READY)	N/A
⑤	FULL CAPACITY FLAT ELBOW 90°	2311DFO
⑥	TEE	2315
⑦	DEVICE BRACKET W/ DUAL RJ FACEPLATE, DUPLEX FACEPLATE OR BLACK FACEPLATE AS NEEDED	5474 / 5574
⑧	TRANSITION FITTING FOR WM2300	2348
⑨	WALL MOUNTED PULL BOX SIZE AS NOTED PER PLAN	2300
⑩	DEVICE BOX	2348
⑪	END CAP	2310B
⑫	INTERNAL ELBOW	2317DFO
⑬	EXTERNAL ELBOW	2318DFO
⑭	BASE SEAM COVER	2306
⑮	WIRE CLIP	2300WC (INSTALL CLIPS AT 48" O.C. ENTIRE LENGTH OF WIREMOLD)



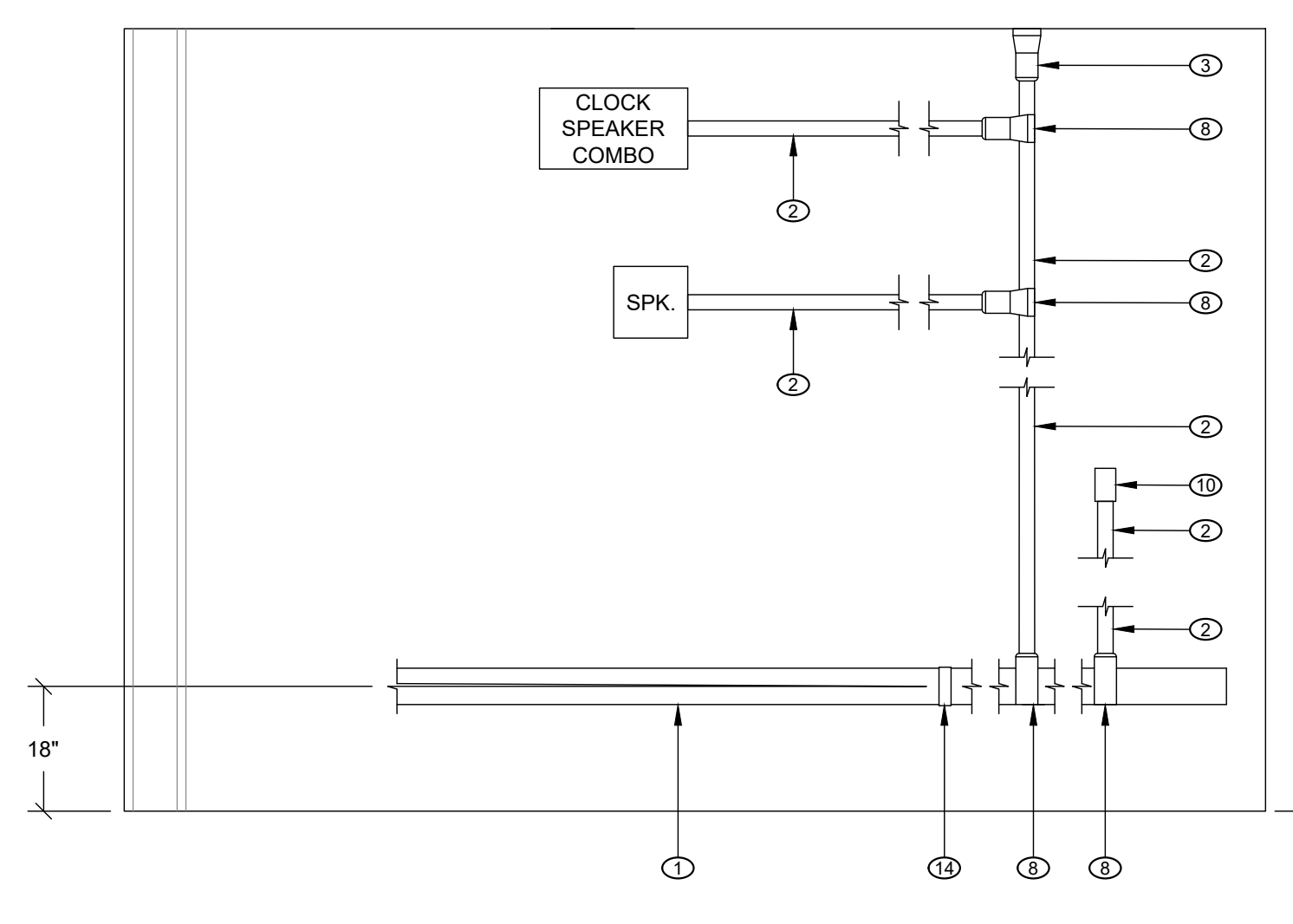
CONDUIT SLEEVE PENETRATION SCALE: N/A 3



WALL MOUNT INTERIOR INTERCOM SPEAKER SCALE: N/A 4



WALL MOUNT EXTERIOR INTERCOM SPEAKER SCALE: N/A 5

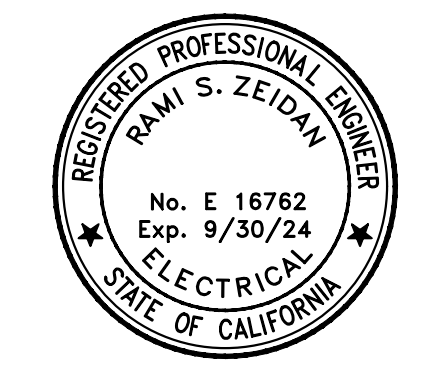


SURFACE RACEWAY COMPONENTS AND ACCESSORIES SCALE: N/A 6

AGENCY APPROVAL STAMP

MEP & FS / Sustainability / CxA
 1209 Pleasant Grove Blvd.
 Roseville, CA 95678
 Ph: (916) 771-0778
 www.lpeengineers.com
 Job #: 23-2044

PROFESSIONAL STAMP



COPYRIGHT

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
 5735 47TH AVENUE,
 SACRAMENTO CA. 95824

PROJECT
LEONARDO DAVINCI K-8 SCHOOL
 4701 JOAQUIN WAY
 SACRAMENTO CA. 95822

SITE-WIDE INTERCOM AND CLOCK MODERNIZATION

SHEET TITLE
TECHNOLOGY DETAILS

LPCE PROJECT NO.	23-2044
DESIGNED BY:	JZ/RL
CHECKED BY:	LPCE
ISSUE DATE:	2023/06/08
WORKING DATE:	2023/06/08
SHEET NUMBER	

T4.00

Login Name: jzamora
 Plot Date: June 09, 2023 - 4:04 pm
 Project Path: C:\projects\23-2044_SCSUSD_Davinci MS Clock-Intercom\LP_Clock-Intercom\T4_SCSUSD_Davinci MS Technology Details.dwg
 XREFS: LPCE_SCSUSD_XBstore_Davinci MS E1

Classified by Underwriters Laboratories, Inc. to ANSUL 1479 (ASTM E814) and ANSUL263 (ASTM E119) and ANSUL1479 (ASTM E814) and CANULC S115 System No. W-1-1049

SpecSeal Power Shield Box Inserts, for use with flush device UL Listed Metallic Outlet Boxes installed with internal clamps instead of steel stud rings in framed wall assemblies. When protective material is used on opposite sides of the wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. (610 mm) provided that the boxes are not installed back-to-back. Installation shall comply with the National Electrical Code (NFPA 70). The maximum box dimensions, hourly rating, type of stud, use of stud cavity insulation and type of fastener are tabulated below. Additional general construction features shall comply as follows:

- A. Studs - Unless otherwise specified, the minimum stud width is 3-1/2 in. (89 mm).
- B. Stud Cavity Insulation - Where indicated in the table below, stud cavity insulation is optional and may consist of min 3-1/2 in. (89 mm) thick fiberglass (min 0.5 pcf or 8 kg/m³) or mineral fiber (min 4 pcf or 64 kg/m³). Unless indicated as required, stud cavity insulation is optional.
- C. Wall Design - Stud composition is indicated in the table below. Wall construction shall comply with the individual U300, U400 or V400 Series Wall and Partition Design in the Fire Resistance Directory.
- D. Pad Dimensions - The minimum dimensions of the insert pad are shown in the table below. Pads may be cut to achieve dimensions shown in table and partial insert pads may be utilized.

Product	Max Outlet Box Size (in.)	Outlet Box Type	Outlet Box Mt	Pad Size (in.)	Rating	Stud	Cavity Insulation	Face Plate	Putty	Putty Ball
EP23	2 1/2 x 2 1/4 (63.5 x 63.5)	Steel	N.A.	1-7/8 x 2-3/4 (48 x 70)	2	Steel	Yes	Plastic	-	-
EP23	2 1/2 x 2 1/4 (63.5 x 63.5)	Steel	N.A.	1-7/8 x 2-3/4 (48 x 70)	2	Steel	Yes	Plastic	-	-
EP23	2 1/2 x 2 1/4 (63.5 x 63.5)	Steel	N.A.	1-7/8 x 2-3/4 (48 x 70)	1	Steel or Wood	Yes	Plastic or Wood	-	-
EP24	2-1/8 x 2-1/8 (54.0 x 54.0)	Steel	N.A.	1-7/8 x 2-3/4 (48 x 70)	2	Steel	No	Steel	-	-
EP24	2-1/8 x 2-1/8 (54.0 x 54.0)	Steel	N.A.	1-7/8 x 2-3/4 (48 x 70)	2	Steel	Yes	Plastic	-	-
EP24	2-1/8 x 2-1/8 (54.0 x 54.0)	Steel	N.A.	1-7/8 x 2-3/4 (48 x 70)	1	Steel or Wood	Yes	Plastic or Wood	-	-
EP44	102 x 102 x 54 (2590 x 2590 x 1376)	Steel	N.A.	102 x 102	2	Steel	No	Steel	-	-
EP44	102 x 102 x 54 (2590 x 2590 x 1376)	Steel	N.A.	102 x 102	2	Steel	Yes	Plastic	-	-
EP44	102 x 102 x 54 (2590 x 2590 x 1376)	Steel	N.A.	102 x 102	1	Steel or Wood	Yes	Plastic or Wood	-	-
EP45	119 x 119 x 54 (3018 x 3018 x 1376)	Steel	N.A.	114 x 114	1 or 2	Steel	Yes	Plastic	-	-
EP45	114 x 114 x 80 (2900 x 2900 x 2032)	Steel	N.A.	114 x 114	1 or 2	Wood	Yes	Plastic	-	-
EP45	114 x 114 x 80 (2900 x 2900 x 2032)	Steel	N.A.	114 x 114	1 or 2	Wood	Yes	Plastic	-	-

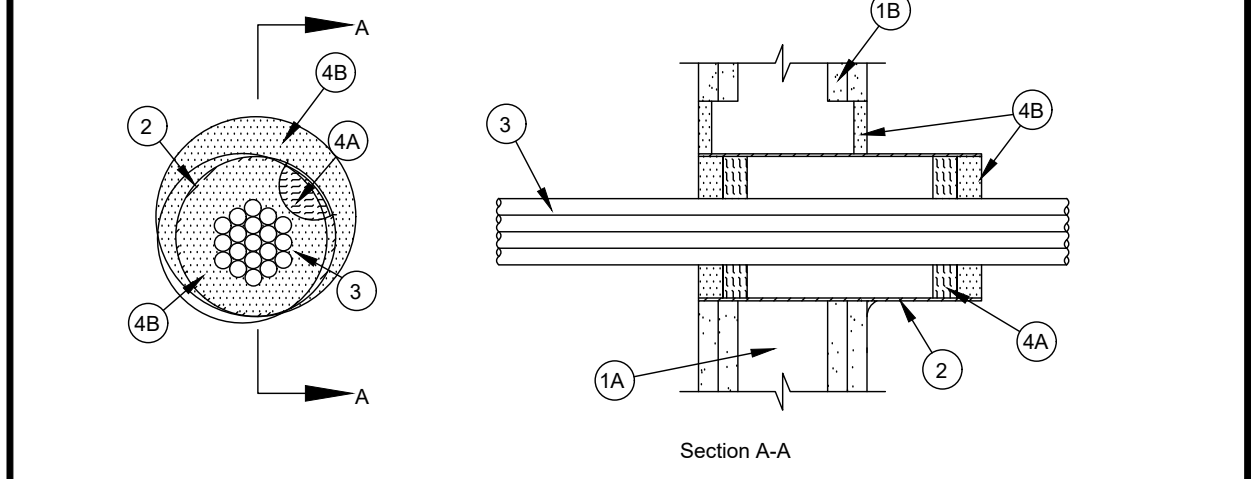
SpecSeal Putty Pads, for use with flush device UL Listed Metallic Outlet Boxes installed with steel stud rings or UL Listed Nonmetallic Outlet Boxes in framed wall assemblies. When protective material is used on opposite sides of the wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. (610 mm) provided that the boxes are not installed back-to-back. Installation shall comply with the National Electrical Code (NFPA 70). The maximum box dimensions, hourly rating, type of stud, use of stud cavity insulation and type of fastener are tabulated below. Additional general construction features shall comply as follows:

- A. Studs - Unless otherwise specified, the minimum stud width is 3-1/2 in. (89 mm).
- B. Stud Cavity Insulation - Unless indicated as required, stud cavity insulation is optional and may consist of min 3-1/2 in. (89 mm) thick fiberglass (min 0.5 pcf or 8 kg/m³) or mineral fiber (min 4 pcf or 64 kg/m³). Unless indicated as required, stud cavity insulation is optional.
- C. Wall Design - Stud composition is indicated in the table below. Wall construction shall comply with the individual U300, U400 or V400 Series Wall and Partition Design in the Fire Resistance Directory.

Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876
 Reproduced courtesy of Underwriters Laboratories, Inc.
 Created or Revised: October 30, 2013
 STI 069090-1100 069020-6502 FAX 069221-6411 E-Mail: info@spcst.com Website: www.spcst.com

Classified by Underwriters Laboratories, Inc. to ANSUL 1479 (ASTM E814) and CANULC S115 System No. W-1-1049

ANSUL1479 (ASTM E814)	CANULC S115
F Ratings - 1 and 2 Hr (See Item 1)	F Rating - 1 and 2 Hr (See Item 1)
T Rating - 3/4 Hr	FT Rating - 3/4 Hr
	FH Ratings - 1 and 2 Hr (See Item 1)
	FTH Rating - 3/4 Hr

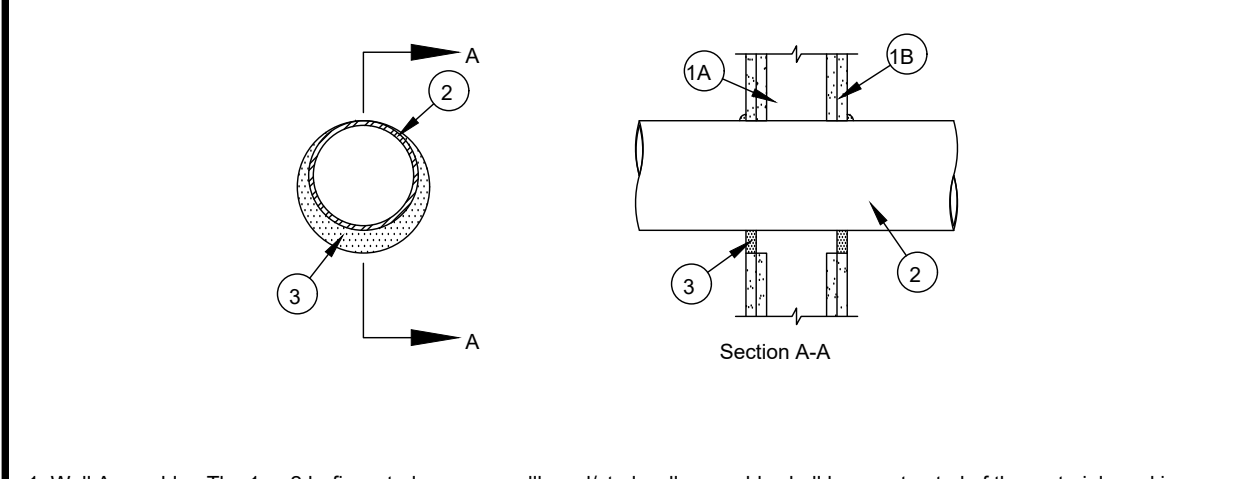


- Wall Assembly - The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
 - 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 to 1-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC. When steel studs are used and the diam of 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-attached to the steel studs at each end. The framed opening in FT 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.
 - B. Gypsum Board* - Thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400, V400 or W400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 6-1/2 in. (165 mm) when sleeve (Item 2) is installed. Max diam of opening is 4 in. (102 mm) when sleeve is not used.
 - The hourly F rating of the freestop system is equal to the hourly F rating of the wall assembly in which it is installed.
 - C. 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 0.016 in. thick (0.41 mm, No. 28 g) galv steel sleeve installed flush with wall surfaces. The annular space between the steel sleeve and periphery of opening shall be min 0 in. (continuous point contact) 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 18 in. (460 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 surface.

Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876
 Reproduced courtesy of Underwriters Laboratories, Inc.
 Created or Revised: June 13, 2016
 STI 069090-1100 069020-6502 FAX 069221-6411 E-Mail: info@spcst.com Website: www.spcst.com

Classified by Underwriters Laboratories, Inc. to ANSUL 1479 (ASTM E814) and CANULC S115 System No. W-1-1049

ANSUL1479 (ASTM E814)	CANULC S115
F Ratings - 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 CFMsq/ft	FH Rating - 1 and 2 Hr (See Item 1)
L Rating At 400 F - Less Than 1 CFMsq/ft	FTH Rating - 0 Hr
	L Rating At Ambient - Less Than 1 CFMsq/ft
	L Rating At 400 F - Less Than 1 CFMsq/ft

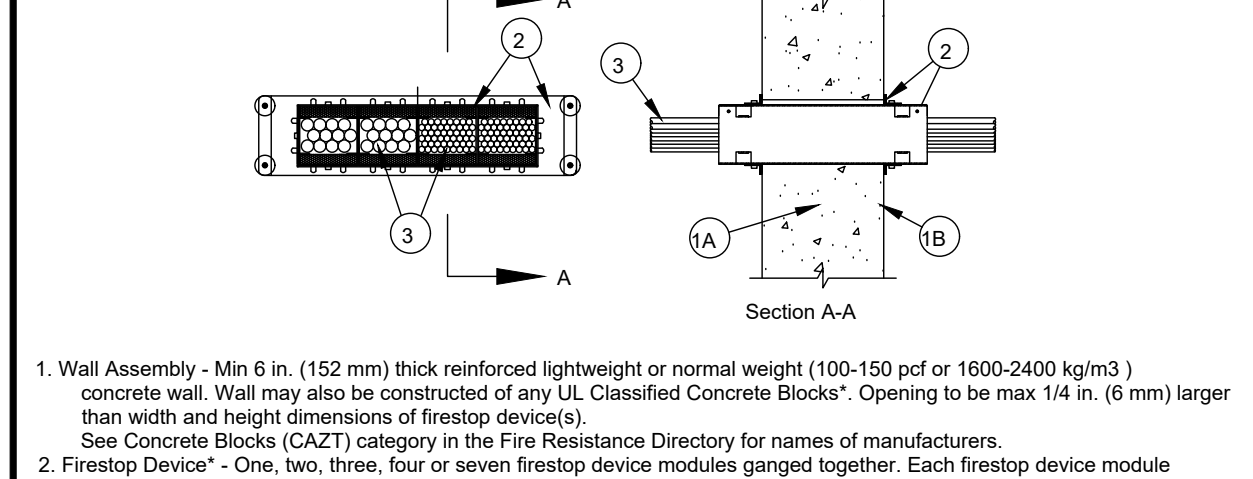


- Wall Assembly - The 1 or 2 hr fire rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
 - 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 to 1-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC. When steel studs are used and the diam of 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-attached to the steel studs at each end. The framed opening in FT 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.
 - B. Gypsum Board* - 5/8 in. (16 mm) thick, 4 (1.22 m) 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 Design in the UL Fire Resistance Directory. Max diam of opening is 20 in. (508 mm) for wood stud wall. Max diam of opening is 14-1/2 in. (368 mm) for wood stud wall.
 - The hourly F and FH Rating of the freestop system are equal to the hourly F rating of the wall assembly in which it is installed.
 - C. Metallic Sleeve - (Optional, Not Shown) - Cylindrical sleeve fabricated from min 0.016 in. (0.41 mm, No. 28 g) galv steel pipe. Length of sleeve shall 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.

Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876
 Reproduced courtesy of Underwriters Laboratories, Inc.
 Created or Revised: December 20, 2013
 STI 069090-1100 069020-6502 FAX 069221-6411 E-Mail: info@spcst.com Website: www.spcst.com

Classified by Underwriters Laboratories, Inc. to ANSUL 1479 (ASTM E814) and CANULC S115 System No. W-1-1049

ANSUL1479 (ASTM E814)	CANULC S115
F Ratings - 2 and 4 Hr (See Item 3)	F Ratings - 2 and 4 Hr (See Item 3)
T Ratings - 3/4 and 1 Hr (See Item 3)	FT Ratings - 3/4 and 1 Hr (See Item 3)
L Rating At Ambient - Less Than 1, 1.3, 4 or 7 CFMDevice Module (See Item 3)	FH Ratings - 2 and 4 Hr (See Item 3)
L Rating At 400 F - Less Than 1, 2 or 3 CFMDevice Module (See Item 3)	FTH Ratings - 3/4 and 1 Hr (See Item 3)
	L Rating At Ambient - Less Than 1, 1.3, 4 or 7 CFMDevice Module (See Item 3)
	L Rating At 400 F - Less Than 1, 2 or 3 CFMDevice Module (See Item 3)



- Wall Assembly - Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete wall. Wall may also be constructed of any UL Classified Concrete Block*. Opening to be max 14 in. (356 mm) larger than width and height dimensions of freestop device(s).
- Freestop Device* - One, two, three, four or seven freestop device modules ganged together. Each freestop device module consists of a 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long galv steel tube with an intumescent 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, point contact) to max 1/8 in. (3.2 mm), in round openings, the space between the freestop device and the periphery of the opening shall be min 0 in. (0 mm, point contact) to max 1/2 in. (12.7 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 and 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.
- SPECIFIED TECHNOLOGIES INC. - EZ PATH Series 33 Fire Rated Pathway
 - 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 10-1/2 in. (76 by 76 by 152 mm) long galv steel tube with an intumescent material lining. Extension module to be installed in accordance with the accompanying installation instructions. When module is used, freestop device (Item 2) 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 and screws provided with wall plates. Freestop device and extension module(s) assembly to be installed with ends projecting an equal distance beyond each surface of the wall assembly.

Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876
 Reproduced courtesy of Underwriters Laboratories, Inc.
 Created or Revised: January 23, 2014
 STI 069090-1100 069020-6502 FAX 069221-6411 E-Mail: info@spcst.com Website: www.spcst.com

D. Metallic Outlet Boxes - Except as indicated in the table below, when steel outlet boxes are used and the boxes are interconnected by means of electrical metallic tube or conduit, a ball of putty is to be installed to plug the open end of each electrical metallic tube (EMT) or conduit within the outlet box. When MC cable is used around when the outlet boxes are not interconnected, the ball of putty is not required.

E. Nonmetallic Outlet Boxes - The box manufacturer is indicated in the table below. Boxes shall bear a 2 hr rating under the "Outlet Boxes and Fittings Classified for Fire Resistance" category in the Fire Resistance Directory.

Model	Max Outlet Box Size (in.)	Outlet Box Type	Outlet Box Mt	Pad Size (in.)	Rating	Stud	Cavity Insulation	Face Plate	Putty	Putty Ball
-	102 x 102 x 54 (2590 x 2590 x 1376)	Steel	N.A.	-	1	Wood*	-	Steel	No	-
-	102 x 102 x 54 (2590 x 2590 x 1376)	Steel	N.A.	-	1	Wood*	-	Plastic	Yes	-
-	119 x 119 x 54 (3018 x 3018 x 1376)	Steel	N.A.	-	1 or 2	Wood*	-	Steel	Yes	-
-	114 x 114 x 80 (2900 x 2900 x 2032)	Steel	N.A.	-	1 or 2	Wood*	-	Steel	Yes	-
-	114 x 114 x 80 (2900 x 2900 x 2032)	Steel	N.A.	-	1 or 2	Wood*	-	Steel	Yes	-
-	102 x 102 x 70 (2590 x 2590 x 1778)	Phenolic	Almond Sessions	-	1 or 2	Wood*	-	Plastic or Steel	N.A.	-
-	102 x 102 x 70 (2590 x 2590 x 1778)	Phenolic	Almond Sessions	-	1 or 2	Wood*	-	Plastic or Steel	N.A.	-
-	102 x 102 x 70 (2590 x 2590 x 1778)	Phenolic	Thomas & Betts	-	1 or 2	Wood*	-	Plastic or Steel	N.A.	-
-	102 x 102 x 70 (2590 x 2590 x 1778)	Phenolic	Thomas & Betts	-	1 or 2	Wood*	-	Plastic or Steel	N.A.	-
-	102 x 102 x 70 (2590 x 2590 x 1778)	Phenolic	Thomas & Betts	-	1 or 2	Wood*	-	Plastic or Steel	N.A.	-
-	102 x 102 x 70 (2590 x 2590 x 1778)	Phenolic	Thomas & Betts	-	1 or 2	Wood*	-	Plastic or Steel	N.A.	-
-	102 x 102 x 70 (2590 x 2590 x 1778)	Phenolic	Thomas & Betts	-	1 or 2	Wood*	-	Plastic or Steel	N.A.	-

SpecSeal Putty Pads, for use with maximum 4 by 4 by 2-1/8 in. (102 by 102 by 54 mm) deep flush device UL Listed Metallic Outlet Boxes installed with steel stud rings and with steel fasteners in 1 hr or 2 hr fire rated gypsum board wall assemblies constructed with min 5-1/2 in. (140 mm) wide wood or steel studs and with stud cavities filled with fiberglass from 0.5 pcf or 8 kg/m³ or mineral fiber (nom 4 pcf or 64 kg/m³) insulation. When protective material is used on opposite sides of the wall as directed, the boxes may be installed back-to-back provided that the boxes on opposite sides of the wall are not interconnected with conduit, when interconnected, the open end of the conduit within the outlet box is filled with ball of putty, installation shall comply with the National Electrical Code (NFPA 70). Min 3/16 in. (5 mm) thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) and to completely seal against the stud within the stud cavity. Adjoining pieces of moldable putty pads to be overlapped approx 1/2 in. (13 mm) at the seam. An additional 3/16 in. (5 mm) thickness of putty to be formed around the connector securing the end of each Type MC cable, electrical metallic tube (EMT) or conduit to the box.

SpecSeal EP23, EP24 and EP44 Power Shield Box Inserts and SpecSeal Putty Pads, for use with maximum 4 by 4 by 1-1/2 or 2-1/8 in. (102 by 102 by 38 or 54 mm) deep flush device UL Listed Metallic Outlet Boxes installed with steel stud rings and with steel or plastic fasteners in 1 hr or 2 hr fire rated gypsum board wall assemblies constructed with min 3-1/2 in. (89 mm) wide wood or steel studs. When both protective materials are used with outlet boxes on both sides of the wall as directed, the boxes may be installed back-to-back provided that the boxes are minimum 12 in. (305 mm) apart and provided that the boxes are not interconnected. Installation shall comply with the National Electrical Code (NFPA 70). Min 3/16 in. (5 mm) thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) and to completely seal against the stud within the stud cavity. Adjoining pieces of moldable putty pads to be overlapped approx 1/2 in. (13 mm) at the seam. An additional 3/16 in. (5 mm) thickness of putty to be formed around the connector securing the end of each Type MC cable, electrical metallic tube (EMT) or conduit to the box. An insert pad shall be installed to completely cover the back inside surface of each outlet box.

Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876
 Reproduced courtesy of Underwriters Laboratories, Inc.
 Created or Revised: October 30, 2013
 STI 069090-1100 069020-6502 FAX 069221-6411 E-Mail: info@spcst.com Website: www.spcst.com

3. Cables - Aggregate cross-sectional area of cables in steel sleeve to be max 40 percent of the aggregate cross-sectional area of the opening in the wall. Cables to be bundled and rigidly supported on both sides of wall assembly. When 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 a max 1/8 in. (point contact) to a max 1/2 in. (13 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:

- A. Max 200 pair No. AWG (or smaller) copper conductor cable with polyvinyl chloride (PVC) or plenum-rated jacketing and insulation.
- B. Max 3/0 No. 2/0 AWG (or smaller) aluminum or copper conductor service entrance cable with PVC insulation and jacket.
- C. Max 3/0 No. 8 AWG (or smaller) nonmetallic sheathed (Romex) cable with copper conductors, PVC insulation and jacket.
- D. Max 3/0 No. 2/0 AWG (or smaller) multiconductor power and control cables with XLPE or PVC insulation and XLPE or PVC jacket.
- E. Max RG/U (or smaller) coaxial cable with fluorinated ethylene or phenol-clay based insulation and jacketing.
- F. Max 62 048 fiber optic cable with PVC or plenum-rated insulation and jacketing.
- G. Max 4 pair No. 24 AWG (or smaller) copper conductor data cable with PVC or plenum-rated insulation and jacket.
- H. Max 4/0 No. 2/0 aluminum or copper conductor aluminum or steel Metal-Clad or Armored-Clad cable.
- I. Max 1/4 in. (19 mm) copper ground cable with or without a PVC jacket.

- Freestop System - The freestop system shall consist of the following:
 - A. Packing Material - When required (see table in Item 4B), min 1 in. (25 mm) thickness of min 4.0 pcf (64 kg/m³) mineral wool batt insulation firmly packed on each end of sleeve as a permanent form. Packing material to be recessed from each end of sleeve as required to accommodate the required thickness of fill material.
 - B. Fill, Void or Cavity Material* - Sealant - Min 5/8 in. (16 mm) thickness of fill material applied within annular space, flush 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 "rope" 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.

Sealant or Putty Type	Thickness, (in. (mm))	Packing Material Required
SpecSeal Series SSS Sealant - I.C.I. Sealant	1/2 in. (13)	Yes
SpecSeal Series SSS Sealant - I.C.I. Sealant	1 in. (25)	No
SpecSeal Putty	1 in. (25)	No

SPECIFIED TECHNOLOGIES INC. - SpecSeal Series SSS Sealant, SpecSeal LCI Sealant or SpecSeal Putty
 *Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876
 Reproduced courtesy of Underwriters Laboratories, Inc.
 Created or Revised: June 13, 2016
 STI 069090-1100 069020-6502 FAX 069221-6411 E-Mail: info@spcst.com Website: www.spcst.com

2. Through Penetrant - One metallic pipe, conduit or tubing to be installed either concentrically 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 the pipe, conduit or tubing and the periphery of opening shall be a min 0 in. (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. (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, conduit or tubing may be used:

- A. Steel Pipe - Nom 36 in. (914 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
- B. Iron Pipe - Nom 36 in. (914 mm) diam (or smaller) cast or ductile iron pipe.
- C. Conduit - Nom 4 in. (102 mm) diam (or smaller) steel 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.
- D. Copper Tubing - Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
- E. Copper Pipe - Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.

- Fill, Void or Cavity Material* - Sealant - Min 5/8 in. (16 mm) thickness of fill material applied within annular space, flush 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 "rope" 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.

Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876
 Reproduced courtesy of Underwriters Laboratories, Inc.
 Created or Revised: December 20, 2013
 STI 069090-1100 069020-6502 FAX 069221-6411 E-Mail: info@spcst.com Website: www.spcst.com

3. Cables - Cables may represent a 0 to 100 percent visual fill 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:

- A. Max 400 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with polyvinyl chloride (PVC) jacketing and insulation.
- B. Max 350 kernl single copper conductor power cable with XLPE jacket and insulation.
- C. Max 7/0 No. 12 AWG copper conductor control cable with PVC or XLPE jacket and insulation.
- D. Max 3/0 No. 10 AWG metal clad or armored cable with steel or aluminum jacket.
- E. Max 3/0 No. 8 AWG NM cable (Romex) with PVC insulation and jacket.
- F. Max four pair No. 22 AWG (or smaller) copper conductor data cable with PVC or plenum rated jacketing and insulation.
- G. Max RG/U coaxial cable with fluorinated ethylene insulation and jacketing.
- H. Optical fiber cable with PVC or polyethylene (PE) jacket and insulation and providing a max diam of 5/8 in. (16 mm).

- Freestop System - The freestop system shall consist of the following:
 - A. Packing Material - When required (see table in Item 4B), min 1 in. (25 mm) thickness of min 4.0 pcf (64 kg/m³) mineral wool batt insulation firmly packed on each end of sleeve as a permanent form. Packing material to be recessed from each end of sleeve as required to accommodate the required thickness of fill material.
 - B. Fill, Void or Cavity Material* - Sealant - Min 5/8 in. (16 mm) thickness of fill material applied within annular space, flush 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 "rope" 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.

Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876
 Reproduced courtesy of Underwriters Laboratories, Inc.
 Created or Revised: January 23, 2014
 STI 069090-1100 069020-6502 FAX 069221-6411 E-Mail: info@spcst.com Website: www.spcst.com

SpecSeal Putty Pads, for use with max 5 by 5 by 2 7/8 in. (127 by 127 by 73 mm) deep flush device UL Listed Metallic Outlet Boxes or UL Listed Communications-Circuit Accessories manufactured by Randal Industries Inc for use in 1 hr or 2 hr fire rated gypsum board wall assemblies framed with min 3-5/8 in. (92 mm) wide wood or steel studs and constructed as specified in the individual U300, U400, or V400 Series Wall and Partition Design in the Fire Resistance Directory. Metallic outlet boxes to be provided with UL Listed Signal Appliance with steel cover plate manufactured by Cooper Wheelock Inc. Moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud unless otherwise noted) insulating metallic tube and to completely seal against the stud within the stud cavity