GENERAL NOTES

SPECIFICATION REFERENCES:

1. REFER TO DIVISION 27 SPECIFICATION SECTION "AUDIO-VIDEO SYSTEMS" AND RELATED DOCUMENTS AND SECTIONS FOR PRODUCT INFORMATION AND ADDITIONAL REQUIREMENTS.
2. CATEGORY AND FIBER CABLING SHALL BE INSTALLED, TERMINATED, AND TESTED PER DIVISION 27 SECTION "TELECOMMUNICATIONS REQUIREMENTS FOR AUDIO-VIDEO SYSTEMS".

GENERAL PATHWAY NOTES:

1. ALL BUILDING INFRASTRUCTURE, CONDUIT, AND PATHWAYS INCLUDING BUT NOT LIMITED TO CONDUIT, RACEWAYS, CABLE TRAYS, PEDESTALS, BACK BOXES, JUNCTION BOXES, FLOOR BOXES, DOORS, LIDS, AND COVERS ARE PER DIVISION 27 SECTION "COMMON WORK RESULTS FOR COMMUNICATIONS" UNLESS OTHERWISE NOTED WITHIN THIS DRAWING SERIES SET.
2. REFER TO "CONDUIT ROUTING AND SEPARATION" ON THIS SHEET FOR CONDUIT SPACING INFORMATION.
3. PROVIDE CONTINUOUS UNOBSTRUCTED CABLE PATH FOR ENTIRE LENGTH OF CABLE RUN. EXPOSED CABLING MAY REQUIRE CONDUIT TRANSITION(S) TO ACHIEVE A COMPLETE PATHWAY.
4. COORDINATE ANY CONFLICTS WITH APPROPRIATE DISCIPLINES.
5. REFER TO LIFE SAFETY PLANS FOR LOCATION OF FIRE- AND SMOKE-RATED WALLS AND FLOORS. PROVIDE LISTED FIRESTOPPING SYSTEMS FOR PENETRATIONS PER DIVISION 27 SPECIFICATION SECTION "COMMON WORK RESULTS FOR COMMUNICATIONS".

BOX SCHEDULE NOTES:

1. VERIFY QUANTITIES, LOCATIONS, AND MOUNTING WITH PLAN, DETAIL, AND EQUIPMENT VIEW DRAWINGS.
2. ALL BOXES SHOWN IN SCHEDULE ARE PER DIVISION 27 SECTION "COMMON WORK RESULTS FOR COMMUNICATIONS" UNLESS OTHERWISE NOTED WITHIN THIS DRAWING SERIES SET.
3. FIELD VERIFY MOUNTING CONDITIONS AND BOX SIZE PRIOR TO INSTALLATION.
4. WALL MOUNTED BOXES SHOWN AT SWITCH OR CONVENIENCE OUTLET HEIGHT SHALL MATCH MOUNTING HEIGHT OF ADJACENT BOXES ON WALL UNLESS OTHERWISE NOTED.
5. WALL MOUNTED TERMINATION GANG BOXES SHALL BE MOUNTED 18" A.F.F. TO CENTER OF DEVICE UNLESS OTHERWISE NOTED.
6. WALL MOUNTED TERMINATION NEMA AND MANUFACTURER SPECIFIC BOXES SHALL BE MOUNTED 16" A.F.F. TO BOTTOM OF DEVICE UNLESS OTHERWISE NOTED.
7. SURFACE MOUNTED BOXES SHALL BE PAINTED TO MATCH SURROUNDING FINISH.
8. COORDINATE ANY CONFLICTS WITH APPROPRIATE DISCIPLINES.

GENERAL PANEL AND PLATE NOTES:

1. CUSTOM TERMINATION COVER PANELS AND PLATES SHALL BE PROVIDED PER SPECIFICATION SECTION "AUDIO-VIDEO SYSTEMS" REQUIREMENTS AND SHALL BE SIZED TO APPROPRIATELY SELF-TRIM THEIR CORRESPONDING BACK BOX.
2. ALL PANELS AND PLATES SHALL BE 1/8" THICK (MINIMUM) BLACK ANODIZED ALUMINUM WITH ENGRAVED OR LASER ETCHED LETTERING OF A CONTRASTING COLOR. DEFAULT ENGRAVED TEXT COLOR SHALL BE WHITE. UTILIZE 3/16" UPPER CASE LETTERING, SANS-SERIF FONT. VERIFY PLATE COLOR WITH ARCHITECT.
3. REINFORCE PLATE AND/OR INCREASE PLATE THICKNESS TO MINIMIZE DEFLECTION.
4. UTILIZE COUNTERSUNK SCREW HEADS. SCREWS HEADS SHALL MATCH PLATE COLOR.
5. ANY PANEL AND PLATE DETAILS OR INFORMATION RELATED TO TERMINATION PLATING CONTAINED IN THIS SET ARE INCLUDED FOR COMMUNICATION OF FABRICATION REQUIREMENTS AND ARE FOR CONCEPT ONLY. LAYOUTS DO NOT REFLECT SPECIFIC REQUIREMENTS FOR THIS PROJECT UNLESS SPECIFICALLY STATED AS SUCH. VERIFY SIZES OF ALL COMPONENTS AND BOXES PRIOR TO SUBMITTAL OF SHOP DRAWINGS.
6. FIELD VERIFY THE SIZE OF ALL COMPONENTS AND BOXES PRIOR TO INSTALLATION. MODIFY PLATE SIZES IN THE CASE OF ALTERATIONS TO FIELD CONDITIONS.
7. REFER TO SPECIFICATIONS FOR SUBMITTAL AND ADDITIONAL PANEL AND PLATE REQUIREMENTS.

CABLE TERMINATION NOTES:

1. ALL AUDIO TERMINATIONS SHOULD COMPLY WITH RANE CORPORATION RANENOTE 110 REFERENCE FOR SOUND SYSTEM INTERCONNECTION. WWW.RANECOMMERCIAL.COM/LEGACY/LIBRARY.HTML

EQUIPMENT RACK NOTES:

1. REFER TO SPECIFICATIONS FOR RACK LAYOUT SUBMITTAL REQUIREMENTS.
2. ANY RACK LAYOUTS OR INFORMATION RELATED TO EQUIPMENT RACKING CONTAINED IN THIS SET ARE FOR CONCEPT ONLY. VERIFY RACK LAYOUT FOR EQUIPMENT FURNISHED PRIOR TO SUBMITTAL OF SHOP DRAWINGS. REVISE AS REQUIRED FOR ALTERNATES ACCEPTED OR REJECTED.
3. IF THERE ARE DIFFERENCES IN EQUIPMENT RACKING INFORMATION TO THAT SHOWN ON THE SIGNAL FLOW DIAGRAMS, SIGNAL FLOWS SHALL TAKE PRECEDENCE.

LOUDSPEAKER INSTALLATION NOTES:

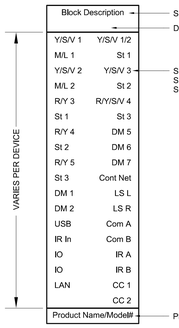
1. ANY STRUCTURAL DETAILS, STRUCTURAL MEMBER TYPES, SIZES, AND ATTACHMENT METHODS CONTAINED IN THIS SET ARE SHOWN FOR CONCEPT ONLY. FINAL DESIGN, INCLUDING DOCUMENTATION STAMPED BY STRUCTURAL ENGINEER (PROVIDED AS PORTION OF SHOP DRAWING REQUIREMENTS), SHALL BE MADE BY THE CONTRACTOR AND SHALL BE VERIFIED BY THE OWNER AND AV CONSULTANT.
2. REFER TO SPECIFICATIONS FOR ALL MOUNTING, INSTALLATION, ACCESS, AND SHOP DRAWING REQUIREMENTS.
3. EXPOSED LOUDSPEAKER CIRCUITS UTILIZING STRUCTURAL STEEL PATHWAYS SHALL BE ROUTED HIGH WITHIN TRUSS SPACE OR WHERE OTHERWISE PROTECTED FROM DAMAGE. ROUTING SHALL MINIMIZE CIRCUIT LENGTH BETWEEN LOUDSPEAKER AND EQUIPMENT RACK WHERE FEASIBLE. NEATLY BUNDLE CIRCUITS AND FASTEN SECURELY TO STRUCTURE TO ENSURE PROPER SUPPORT AND PROTECTION. TO MINIMIZE DAMAGE FROM TEMPORARY RIGGING ACTIVITIES ASSOCIATED WITH SPECIAL EVENT SUPPORT, AVOID ROUTING CIRCUITS IN AREAS PRONE TO THIS USE, I.E. BOTTOM CHORDS OF TRUSSES. AVOID CONTACT OR CONFLICT WITH OTHER BUILDING ELEMENTS SUCH AS LIGHTING FIXTURES & BALLASTS, DUCTS, RIGGING, AND SHARP EDGES. CABLE COLOR SHALL MATCH SURROUNDING ELEMENTS.

WIRE TYPE AND ABBREVIATIONS

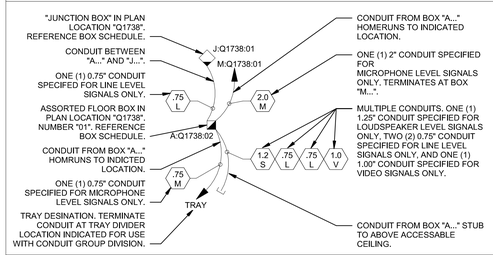
(NOTE 1)	ABBREVIATION DEFINITION OR SIGNAL TYPES	WIRE TYPE	(NOTE 2)
AB	AUDIO TRANSPORT OVER MANUF. PROPRIETARY (NON-IP) PROTO. - REQ. STP	CAT6 STP	90m
AEC	ACOUSTIC ECHO CANCELING SIGNAL	-	
AES	DIGITAL AUDIO OVER AES FORMAT - BALANCED	22 AWG	100m
	UNBALANCED	RG-6	1000m
AN	AUDIO TRANSPORT OVER IP STANDARD PROTOCOL REQUIRING STP	CAT6 STP	90m
CC	RELAY OR CONTACT CLOSURE CONTROL SIGNAL	22 AWG	
Com	CONTROL SIGNAL (RS232, RS422, RS485)	22 AWG	
	LOW CAPACITANCE CONTROL CABLE FOR LONG RUNS	(NOTE 3)	
Ctl	CONTROL SIGNAL OVER MANUF. PROPRIETARY PROTOCOL	(NOTE 3)	
D	DVI VIDEO SIGNAL	PREMADE	25'
DM	DIGITAL MEDIA AUDIO/VIDEO/CONTROL SIGNAL	CAT6 STP	90m
DP	DISPLAY PORT SIGNAL	PREMADE	3m
FW	FIREWIRE IEEE 1394	PREMADE	4.5m
GPIO	GPI/GPO/GPIO - GENERAL PURPOSE INPUT AND/OR OUTPUT	(NOTE 4)	
H	HDMI VIDEO/AUDIO SIGNAL	(NOTE 3)	
HDSDI	HD-SDI PER SMPTE 292M	RG-59	300'
		RG-6	370'
		RG-11	580'
IC	INTERCOM (PRODUCTION)	22 AWG	
IR	INFRARED CONTROL SIGNAL	PREMADE	
I/O	VARIABLE VOLTAGE CONTROL SIGNAL	22 AWG	
L	LINE LEVEL AUDIO SIGNAL	22 AWG	
LAN	ETHERNET	CAT6	90m
LS	LOUDSPEAKER LEVEL AUDIO SIGNAL 2/4/8/16OHM	(NOTE 4)	
LS70	LOUDSPEAKER LEVEL AUDIO SIGNAL 70V	(NOTE 4)	
M	MICROPHONE LEVEL AUDIO SIGNAL	22 AWG	
MADI	MADI SIGNAL PROTOCAL	RG-6	100m
		SMF	40km
MIDI	MIDI CONTROL SIGNAL	PREMADE	
MMF	MULTI-MODE FIBER	(NOTE 3)	
Mono	MONO AUDIO SIGNAL	22 AWG	
Phone	TELEPHONE SIGNAL	CAT3	
R	RGB/HV VIDEO SIGNAL	PREMADE	25'
Ref	REFERENCE/SYNC/BLACK - BLACK BURST OR TRI-LEVEL SYNCHRONIZATION	RG-59	
RF	RADIO FREQUENCY	RG-58	IN RACK
	RF WIRELESS MIC ANTENNA (-5dB @ 800MHz NO AMP)	RG-8X	40'
	RF WIRELESS MIC ANTENNA (-5dB @ 800MHz NO AMP)	RG-213	65'
	RF WIRELESS MIC ANTENNA (-5dB @ 800MHz NO AMP)	RG-8/U	120'
SAT IF	SATELLITE INTERMEDIATE FREQUENCY SIGNAL (TYPICALLY L-BAND)	RG-59	IN RACK
		RG-6	DROP
		RG-11	DISTRO
SDI	SERIAL DIGITAL INTERFACE PER SMPTE 259M	PREMADE	950'
		RG-6	1150'
		RG-11	1850'
SMF	SINGLE-MODE FIBER	(NOTE 3)	2.5Km
SPDIF	DIGITAL AUDIO OVER S/PDIF	PREMADE	10m
St	STEREO AUDIO SIGNAL	PREMADE	5m
		22 AWG	
TLY	TALLY	24 AWG	
TB	THUNDERBOLT SIGNAL	PREMADE	3m
TC	TIMECODE	RG-59	
TIE LINES	MICROPHONE LEVEL	22 AWG	
	LINE LEVEL	22 AWG	
	LOUDSPEAKER LEVEL	(NOTE 4)	
	VIDEO	(NOTE 4)	
TPA	AUDIO SIGNAL OVER TWISTED PAIR	CAT6	90m
TPC	CONTROL SIGNAL OVER TWISTED PAIR	CAT6	90m
TPT	TELEVISION SIGNAL OVER TWISTED PAIR	CAT6	90m
TPV	VIDEO SIGNAL OVER TWISTED PAIR	CAT6	90m
TRIAX	TRIAX VIDEO CAMERA CABLE	RG-59/U	IN ROOM
		RG-11/U	2950'
TV	CABLE TELEVISION DISTRIBUTION SIGNAL	RG-59	IN RACK
		RG-6	DROP
		RG-11	DISTRO
		1/2" HARDLINE	TRUNK
USB	UNIVERSAL SERIAL BUS SIGNAL	PREMADE	
USB1	USB VERSION 1.0	PREMADE	5m
USB2	USB VERSION 2.0	PREMADE	5m
USB3	USB VERSION 3.0	PREMADE	5m
V	COMPOSITE VIDEO SIGNAL	RG-59	750'
		RG-6	900'
		RG-11	1200'
Y	COMPONENT VIDEO SIGNAL	RG-59	125'
		RG-6	200'
3GSDI	3G-SDI PER SMPTE 424M	RG-59	200'
		RG-6	250'
		RG-11	390'
6GSDI	6G-SDI	(NOTE 4)	
*	DENOTES PORTION OF ITEM		

NOTES	
1	SIGNAL FLOW SIGNAL TYPE ABBREVIATION.
2	CABLE DISTANCE LIMITATION. CONTACT CONSULTANT FOR CONDITIONS OUTSIDE PARAMETERS.
3	REFER TO SPECIFICATION FOR WIRE TYPE.
4	REFER TO SIGNAL FLOWS FOR WIRE TYPE.

SIGNAL FLOW BLOCK LEGEND



PLAN BOX & CONDUIT EXAMPLE



NOTE: FOR TYPICAL BOXES, REFER TO TYPICAL BOX SCHEDULE FOR ADDITIONAL INSTRUCTIONS. FOLLOW CONDUIT REQUIREMENTS AS LISTED IN SCHEDULE AND ANY ADDITIONAL NOTES AS INDICATED ON PLANS.

AUDIO-VIDEO SYMBOLS

NOTE: THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ABBREVIATIONS, ETC. ARE NECESSARILY USED ON THE DRAWINGS.

AUDIO

SIGNAL FLOW	PANEL/PLATE	DESCRIPTION
F3	F3	FEMALE 3-PIN XLR PANEL MOUNT CONNECTOR
M3	M3	MALE 3-PIN XLR PANEL MOUNT CONNECTOR
C3	C3	FEMALE COMBO 3-PIN XLR AND 1/4" PANEL MOUNT CONNECTOR
F4	F4	FEMALE 4-PIN XLR PANEL MOUNT CONNECTOR
M4	M4	MALE 4-PIN XLR PANEL MOUNT CONNECTOR
F5	F5	FEMALE 5-PIN XLR PANEL MOUNT CONNECTOR
M5	M5	MALE 5-PIN XLR PANEL MOUNT CONNECTOR
F3		FEMALE XLR CABLE MOUNT CONNECTOR (NUMBER BELOW SYMBOL INDICATES NUMBER OF PINS)
M3		MALE XLR CABLE MOUNT CONNECTOR (NUMBER BELOW SYMBOL INDICATES NUMBER OF PINS)
		1/4" 3-CONDUCTOR PANEL MOUNT CONNECTOR
		1/4" 3-CONDUCTOR CABLE MOUNT CONNECTOR
		1/8" 3-CONDUCTOR MINI PANEL MOUNT CONNECTOR
		1/8" 3-CONDUCTOR MINI CABLE MOUNT CONNECTOR
4		SPEAKON JACK, 2-CONDUCTOR BLANK, 4-CONDUCTOR SHOWN
4		SPEAKON PLUG, SIMILAR TO ABOVE
		MALE DT12 PANEL MOUNT CONNECTOR
		FEMALE DT12 PANEL MOUNT CONNECTOR

DATA

SIGNAL FLOW	PANEL/PLATE	DESCRIPTION
		ST FIBER PANEL MOUNT CONNECTOR
		ST FIBER CABLE MOUNT CONNECTOR
		LC FIBER PANEL MOUNT CONNECTOR
		LC FIBER CABLE MOUNT CONNECTOR
		HYBRID FIBER PANEL MOUNT CONNECTOR
		HYBRID FIBER CABLE MOUNT CONNECTOR
		UTP PANEL MOUNT CONNECTOR
		UTP CABLE MOUNT CONNECTOR
		RJ-45 STANDARD PANEL MOUNT CONNECTOR
		RJ-45 STANDARD CABLE MOUNT CONNECTOR
		RJ-11 PANEL MOUNT CONNECTOR
		RJ-11 CABLE MOUNT CONNECTOR

NOTE: REFER TO DIVISION 27 SECTION "TELECOMMUNICATIONS REQUIREMENTS FOR AUDIO-VIDEO SYSTEMS" FOR ADDITIONAL INFORMATION

AUDIO-VIDEO

SIGNAL FLOW	PANEL/PLATE	DESCRIPTION
		FEMALE RCA PANEL MOUNT CONNECTOR
		MALE RCA CABLE MOUNT CONNECTOR
		FEMALE PANEL MOUNT MULTIPIN CONNECTOR
		FEMALE CABLE MOUNT MULTIPIN CONNECTOR
		MALE CABLE MOUNT MULTIPIN CONNECTOR
		PATCH JACK PLUG

NOTE: PANEL & PLATE CONNECTORS ARE NOT SHOWN TO SCALE.

VIDEO

SIGNAL FLOW	PANEL/PLATE	DESCRIPTION
		BNC PANEL MOUNT CONNECTOR
		CABLE END BNC CONNECTOR
		75 OHM BNC TERMINATOR
		RGBHV HD-15 PANEL MOUNT CONNECTOR
		RGBHV HD-15 CABLE MOUNT CONNECTOR
		DVI PANEL MOUNT CONNECTOR
		DVI CABLE MOUNT CONNECTOR
		HDMI PANEL MOUNT CONNECTOR
		HDMI CABLE MOUNT CONNECTOR
		DISPLAYPORT PANEL MOUNT CONNECTOR
		DISPLAYPORT CABLE MOUNT CONNECTOR
		F-STYLE RF PANEL MOUNT CONNECTOR
		F-STYLE RF CABLE MOUNT CONNECTOR
		VIDEO PATCH PANEL JACK
M		TRIAX MALE
F		TRIAX FEMALE
M		SMPTE 304 MALE
F		SMPTE 304 FEMALE

CONTROL

SIGNAL FLOW	PANEL/PLATE	DESCRIPTION
		COM (DB-9) PANEL MOUNT CONNECTOR
		COM (DB-9) CABLE MOUNT CONNECTOR
		IR EMITTER
		USB TYPE A PANEL MOUNT CONNECTOR
		USB TYPE A CABLE MOUNT CONNECTOR
		USB TYPE B PANEL MOUNT CONNECTOR
		USB TYPE B CABLE MOUNT CONNECTOR
		USB TYPE C PANEL MOUNT CONNECTOR
		USB TYPE C CABLE MOUNT CONNECTOR

DEVICES AND CONNECTIONS

SIGNAL FLOW	DESCRIPTION
	CONNECTION TO CHASSIS GROUND
	RUBBER JACKETED EXTENSION CABLE
	PARALLEL CONNECTION OR CHANGE IN WIRE TYPE
	ANTENNA
	PATCH POINT. CONNECT TO PATCH PANEL PER SPECIFICATION REQUIREMENTS
A1 700	CONNECTION BUBBLE UPPER DESIGNATION REFERS TO CONNECTION LABEL. LOWER DESIGNATION REFERS TO THE SHEET NUMBER ON WHICH THE CONNECTION IS CONTINUED.
	EQUIPMENT / TERMINATIONS WITHIN A COMMON LOCATION AS LABELED.
	ALTERNATE OUTLINE

CONDUIT/CIRCUIT GROUP DIVISIONS

GROUP	DESCRIPTIONS	LEVEL	BANDWIDTH
A	CONTROL CIRCUITS	0-28 VOLT INTO <50 kOHMS	0 Hz TO 250 MHz
	DATA CIRCUITS	2 VOLT PEAK-TO-PEAK INTO 100 OHMS	0 Hz TO 500 MHz
	FIBER CIRCUITS		
L	LINE LEVEL AUDIO CIRCUITS	-30dBU TO +24dBu	20 Hz TO 20kHz
M	MICROPHONE LEVEL AUDIO CIRCUITS	BELOW -30dBu	20 Hz TO 20kHz
P	PRODUCTION INTERCOM COMMUNICATION CIRCUITS	-30dBU TO +24dBu	20 Hz TO 20kHz
S	SPEAKER LEVEL AUDIO CIRCUITS INCLUDING BOTH LOW IMPEDANCE AND HIGH IMPEDANCE (70 VOLT) TYPES	GREATER THAN +24dBu	20 Hz TO 20kHz
V	VIDEO CIRCUITS	1 VOLT PEAK-TO-PEAK INTO 75 OHMS	0 Hz TO 250 MHz
W	RF LEVEL CIRCUITS INCLUDING WIRELESS MICROPHONE, ANTENNA CABLE, SATELLITE, ASSISTED LISTENING SYSTEM, AND TV DISTRIBUTION	GREATER THAN +24dBu	5 MHz TO 3GHz

CONDUIT ROUTING AND SEPARATION

BOTH EMT

EMT	RIGID	M	L, P	W	S	V
M	-	ADJACENT	6"	12"	12"	12"
L, P	-	6"	ADJACENT	12"	12"	6"
W	-	12"	12"	ADJACENT	ADJACENT	6"
S	-	12"	12"	ADJACENT	ADJACENT	6"
V	-	12"	6"	6"	6"	ADJACENT
POWER CONDUIT UNDER 60A	-	24"	24"	24"	24"	24"
POWER CONDUIT 60A	-	36"	36"	36"	36"	36"
POWER CONDUIT 120A	-	48"	48"	48"	48"	48"
POWER CONDUIT 240A	-	RIGID	RIGID	RIGID	RIGID	RIGID
POWER CONDUIT 400A	-	RIGID	RIGID	RIGID	RIGID	RIGID

POWER IN RIGID

EMT	RIGID	M	L, P	W	S	V
M	-	ADJACENT	6"	12"	12"	12"
L, P	-	6"	ADJACENT	12"	12"	6"
W	-	12"	12"	ADJACENT	ADJACENT	6"
S	-	12"	12"	ADJACENT	ADJACENT	6"
V	-	12"	6"	6"	6"	ADJACENT
-	POWER CONDUIT UNDER 60A	4"	4"	4"	4"	4"
-	POWER CONDUIT 60A	8"	8"	8"	8"	8"
-	POWER CONDUIT 120A	12"	12"	12"	12"	12"
-	POWER CONDUIT 240A	24"	24"	24"	24"	24"
-	POWER CONDUIT 400A	48"	48"	48"	48"	48"

BOTH IN RIGID

EMT	RIGID	M	L, P	W	S	V
-	M	ADJACENT	ADJACENT	ADJACENT	ADJACENT	ADJACENT
-	L, P	ADJACENT	ADJACENT	ADJACENT	ADJACENT	ADJACENT
-	W	ADJACENT	ADJACENT	ADJACENT	ADJACENT	ADJACENT
-	S	ADJACENT	ADJACENT	ADJACENT	ADJACENT	ADJACENT
-	V	ADJACENT	ADJACENT	ADJACENT	ADJACENT	ADJACENT
-	POWER CONDUIT UNDER 60A	1"	1"	1"	1"	1"
-	POWER CONDUIT 60A	2"	2"	2"	2"	2"
-	POWER CONDUIT 120A	4"	4"	4"	4"	4"
-	POWER CONDUIT 240A	8"	8"	8"	8"	8"
-	POWER CONDUIT 400A	16"	16"	16"	16"	16"

PLAN LEGEND

BOX AND PLAN SYMBOLS

- X## — WALL BOX. "X" INDICATES FUNCTION OF BOX (REFER TO BOX LABEL LEGEND). "##" INDICATES BOX DESIGNATION.
- X## — FLOOR BOX. SIMILAR TO ABOVE.
- X## — POKE THRU. SIMILAR TO ABOVE.
- AV X## — CEILING MOUNTED BOX. SIMILAR TO ABOVE.
- S S## — FLUSH MOUNTED CEILING LOUDSPEAKER. "S##" DESIGNATOR INDICATES LOUDSPEAKER IDENTIFICATION INFORMATION.
- S S## — PENDANT MOUNTED LOUDSPEAKER. "S##" DESIGNATOR INDICATES LOUDSPEAKER IDENTIFICATION INFORMATION.
- S S## — SURFACE/SUSPENDED MOUNTED LOUDSPEAKER. "S##" DESIGNATOR INDICATES LOUDSPEAKER IDENTIFICATION INFORMATION.
- M X## — CEILING MOUNTED MICROPHONE. SIMILAR TO ABOVE. NO BACK BOX.
- C X## — CEILING MOUNTED CAMERA. SIMILAR TO ABOVE. NO BACK BOX.

TYPICAL BOX SYMBOLS

- YY ## — WALL BOX. "YY" INDICATES TYPE. REFER TO TYPICAL BOX SCHEDULE FOR ADDITIONAL INFORMATION AND AS INDICATED ON PLANS AND KEY NOTES. "##" INDICATES BOX INSTALLATION HEIGHT.
- YY-F# YY — FLOOR BOX. CEILING BOX. SIMILAR TO ABOVE. "YY" INDICATES SYMBOL TYPE. "-F#" INDICATES UNIQUE IDENTIFIER.

NOTE: BLANK CELLS ON TYPICAL BOX SCHEDULE INDICATE INFORMATION PROVIDED ELSEWHERE.

CONDUIT LEGEND

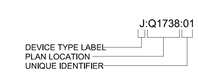
- # A — INDICATES ASSORTED SIGNALS ONLY. "#" SPECIFIES SIZE OF CONDUIT.
- # L — INDICATES LINE LEVEL SIGNALS ONLY. "#" SPECIFIES SIZE OF CONDUIT.
- # M — INDICATES MICROPHONE LEVEL SIGNALS ONLY. "#" SPECIFIES SIZE OF CONDUIT.
- # P — INDICATES PRODUCTION INTERCOM LEVEL SIGNALS ONLY. "#" SPECIFIES SIZE OF CONDUIT.
- # S — INDICATES LOUDSPEAKER LEVEL SIGNALS ONLY. "#" SPECIFIES SIZE OF CONDUIT.
- # V — INDICATES VIDEO SIGNALS ONLY. "#" SPECIFIES SIZE OF CONDUIT.
- # W — INDICATES WIRELESS/RF SIGNALS ONLY. "#" SPECIFIES SIZE OF CONDUIT.
- .75 X — 0.75" CONDUIT. X INDICATES SIGNAL TYPE, SEE ABOVE.
- 1.0 X — 1" CONDUIT. X INDICATES SIGNAL TYPE, SEE ABOVE.
- 1.2 X — 1.25" CONDUIT. X INDICATES SIGNAL TYPE, SEE ABOVE.
- 1.5 X — 1.5" CONDUIT. X INDICATES SIGNAL TYPE, SEE ABOVE.
- 2.0 X — 2" CONDUIT. X INDICATES SIGNAL TYPE, SEE ABOVE.
- 2.5 X — 2.5" CONDUIT. X INDICATES SIGNAL TYPE, SEE ABOVE.
- 3.0 X — 3" CONDUIT. X INDICATES SIGNAL TYPE, SEE ABOVE.
- CONDUIT PATH.
- X## — CONDUIT PATH CONTINUES ON TO DESTINATION AS INDICATED.
- CONDUIT STUB TO ACCESSIBLE PORTION OF CEILING. BUSH CONDUIT ENDS.
- CONDUIT STUB TO BELOW RAISED FLOOR IF PRESENT, OTHERWISE BELOW FLOOR SLAB. BUSH CONDUIT ENDS.
- CONDUIT IN/UNDER FLOOR/GROUND CONSTRUCTION
- EXPOSED CABLE PATH. NO CONDUIT.
- CABLE TRAY. SIZE AS INDICATED ON PLANS.

REFER TO BOX SCHEDULE FOR ADDITIONAL INFORMATION.

LABEL LEGEND

A	ASSORTED
B	BROADCAST
C	CONTROL
D	DSS SATELLITE
E	EXISTING
F	FUTURE / BY OTHERS
G	GAME CLOCK
J	JUNCTION / PULL BOX
K	CAMERA
L	LINE-LEVEL AUDIO
M	MICROPHONE-LEVEL AUDIO
P	PRODUCTION INTERCOM
R	EQUIPMENT RACK
S	LOUDSPEAKER-LEVEL AUDIO
T	TELEVISION DISTRIBUTION
V	VIDEO
W	WIRELESS / RF
DS	DIGITAL SIGNAGE
DV	DIRECT VIEW LED
FP	FLAT PANEL DISPLAY
LS	LOUDSPEAKER
PR	PROJECTOR
PS	PROJECTION SCREEN
TV	TELEVISION
VW	VIDEO WALL

LABEL STANDARD



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STATE OF MISSOURI
CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 LENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.3001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

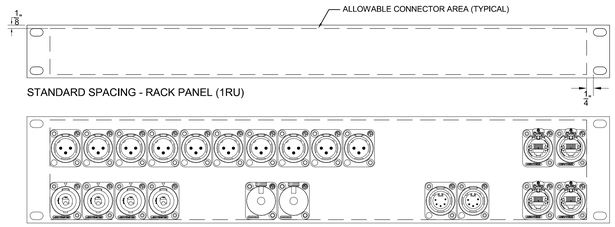
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AUDIO-VIDEO GENERAL NOTES AND LEGEND

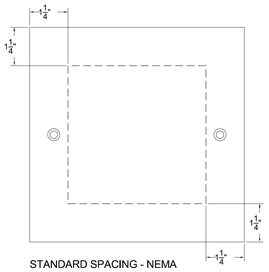
TA0.1

CURTIS A. OLDS

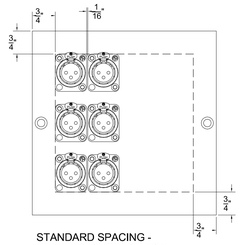


STANDARD SPACING - RACK PANEL (1RU)

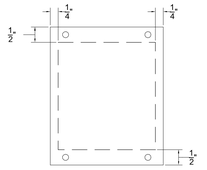
STANDARD LAYOUT - RACK PANEL (2RU)



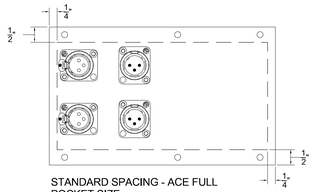
STANDARD SPACING - NEMA 7X7 (6X6 FLUSH BOX SIZE)



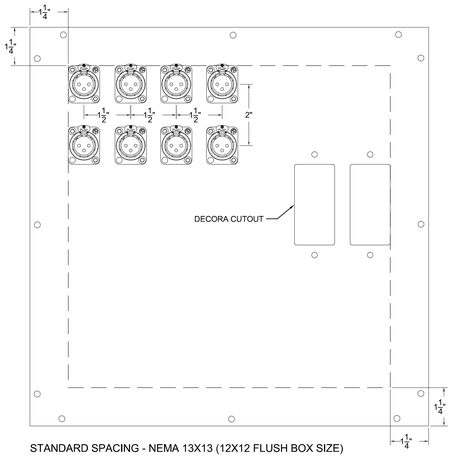
STANDARD SPACING - NEMA 6X6 SURFACE BOX



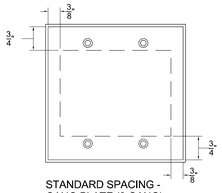
STANDARD SPACING - ACE HALF POCKET SIZE



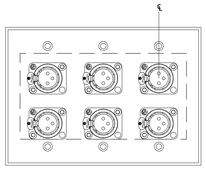
STANDARD SPACING - ACE FULL POCKET SIZE



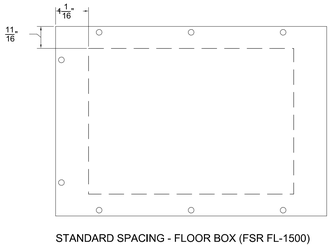
STANDARD SPACING - NEMA 13X13 (12X12 FLUSH BOX SIZE)



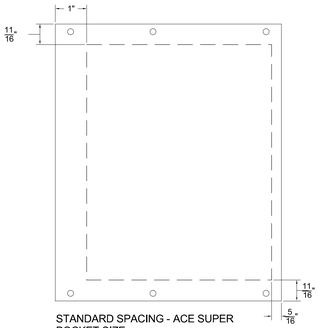
STANDARD SPACING - GANG PLATE (2 GANG)



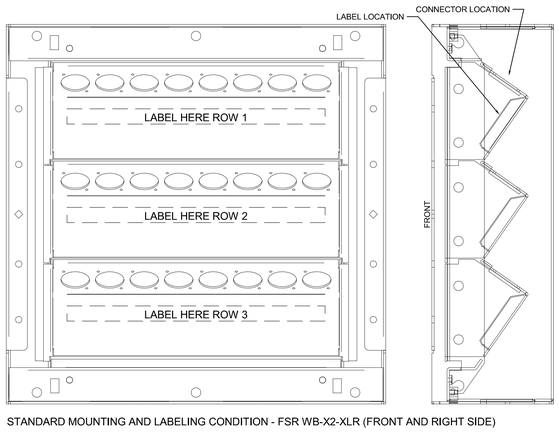
STANDARD LAYOUT - GANG PLATE (3 GANG)



STANDARD SPACING - FLOOR BOX (FSR FL-1500)



STANDARD SPACING - ACE SUPER POCKET SIZE

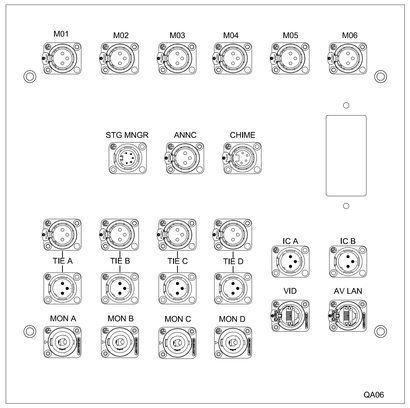


STANDARD MOUNTING AND LABELING CONDITION - FSR WB-X2-XLR (FRONT AND RIGHT SIDE)

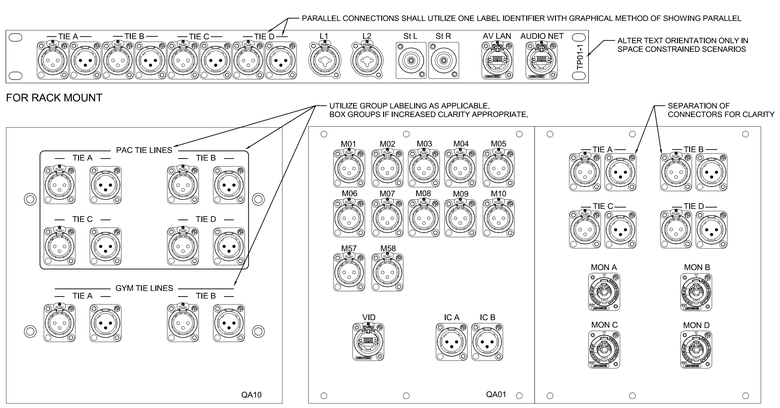
GENERAL NOTES:

1. THIS SHEET IS PROVIDED TO CONVEY PANEL AND PLATE REQUIREMENTS IN A GENERAL FASHION. IT SHALL BE USED AS A GUIDELINE FOR THE CREATION OF SHOP DRAWINGS. ALL DETAILS CONTAINED ON THIS SHEET ARE CONCEPTUAL IN NATURE AND DO NOT REFLECT SPECIFIC LAYOUTS RELATED TO THIS PROJECT.
2. DETAIL 1 DESCRIBES PLATE FABRICATION REQUIREMENTS RELATED TO PLATE LAYOUT AND CONNECTOR SPACING AND SEPERATION.
3. DETAIL 2 PROVIDES EXAMPLE PLATE LAYOUTS WITH LABELING REQUIREMENTS.
4. 3/32" LABEL TEXT SIZE REQUIRED ON ALL PLATES.
5. REFER TO LEGEND SHEET FOR GENERAL PANEL AND PLATE NOTES.
6. SHEET TA5.1 CONTAINS PLATE LAYOUTS SPECIFIC TO THIS PROJECT.

1 PLATE FABRICATION REQUIREMENTS
6" = 1'-0"

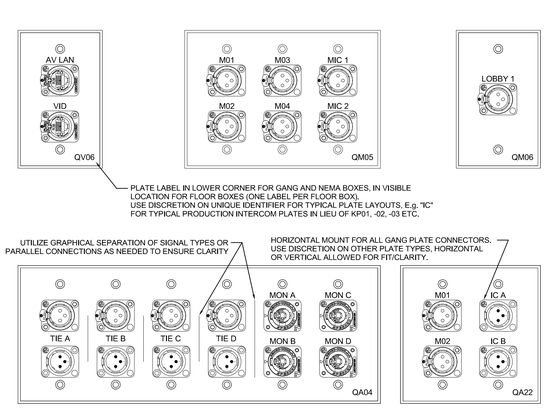


FOR 12" x 12" NEMA BACK BOX



FOR 8" x 8" NEMA BACK BOX

FOR ACE BACKSTAGE SUPER DOUBLE WIDE BACK BOX



FOR STANDARD GANG BOXES

2 PLATE LAYOUT EXAMPLES
6" = 1'-0"

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CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER
Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
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LEE'S SUMMIT MIDDLE SCHOOL #4
LEE'S SUMMIT R-7 SCHOOL DISTRICT
1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

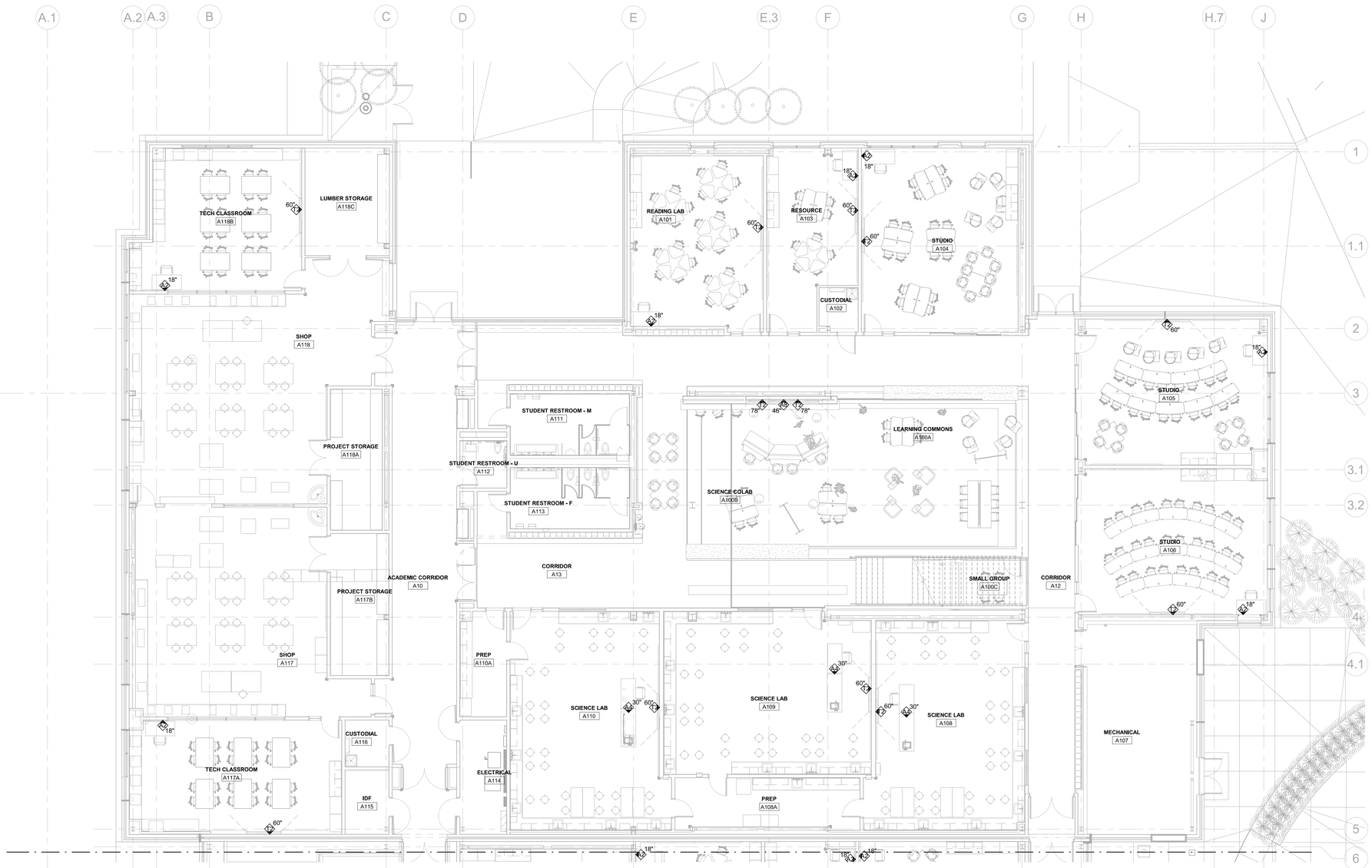
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AUDIO VIDEO GENERAL DETAILS - PLATES

TA0.2

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1 AUDIO-VIDEO FIRST LEVEL PLAN - AREA A
1/8" = 1'-0"

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HENDERSON ENGINEERS
8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.0001
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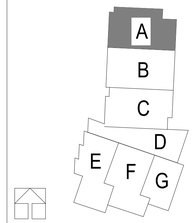
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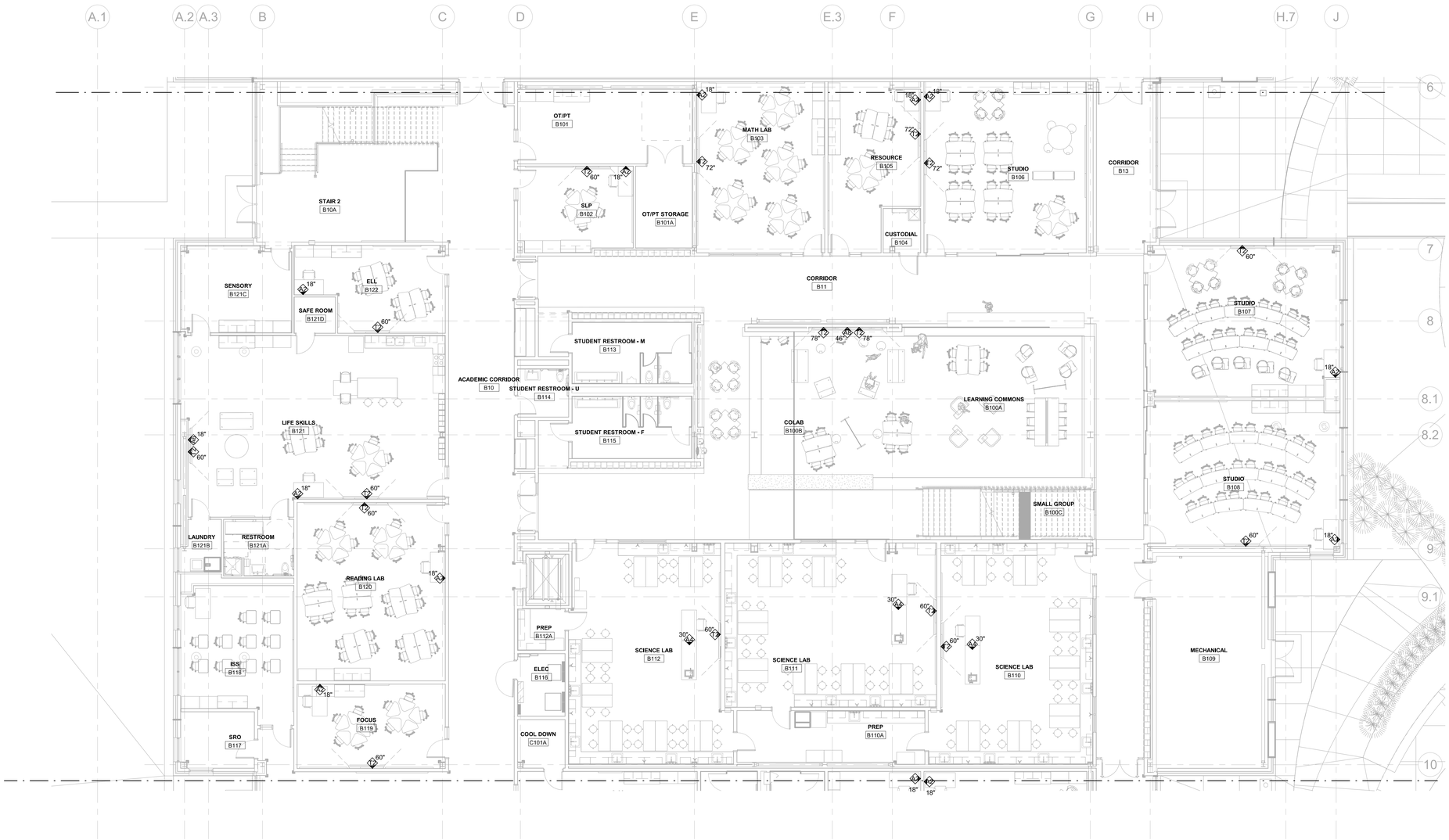


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AUDIO-VIDEO FIRST LEVEL PLAN - AREA A

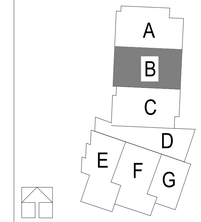
TA1.1A

CURTIS A. OLDS



1 AUDIO-VIDEO FIRST LEVEL PLAN - AREA B
1/8" = 1'-0"

KEY PLAN



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CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTERPRISE CIRCLE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.0001
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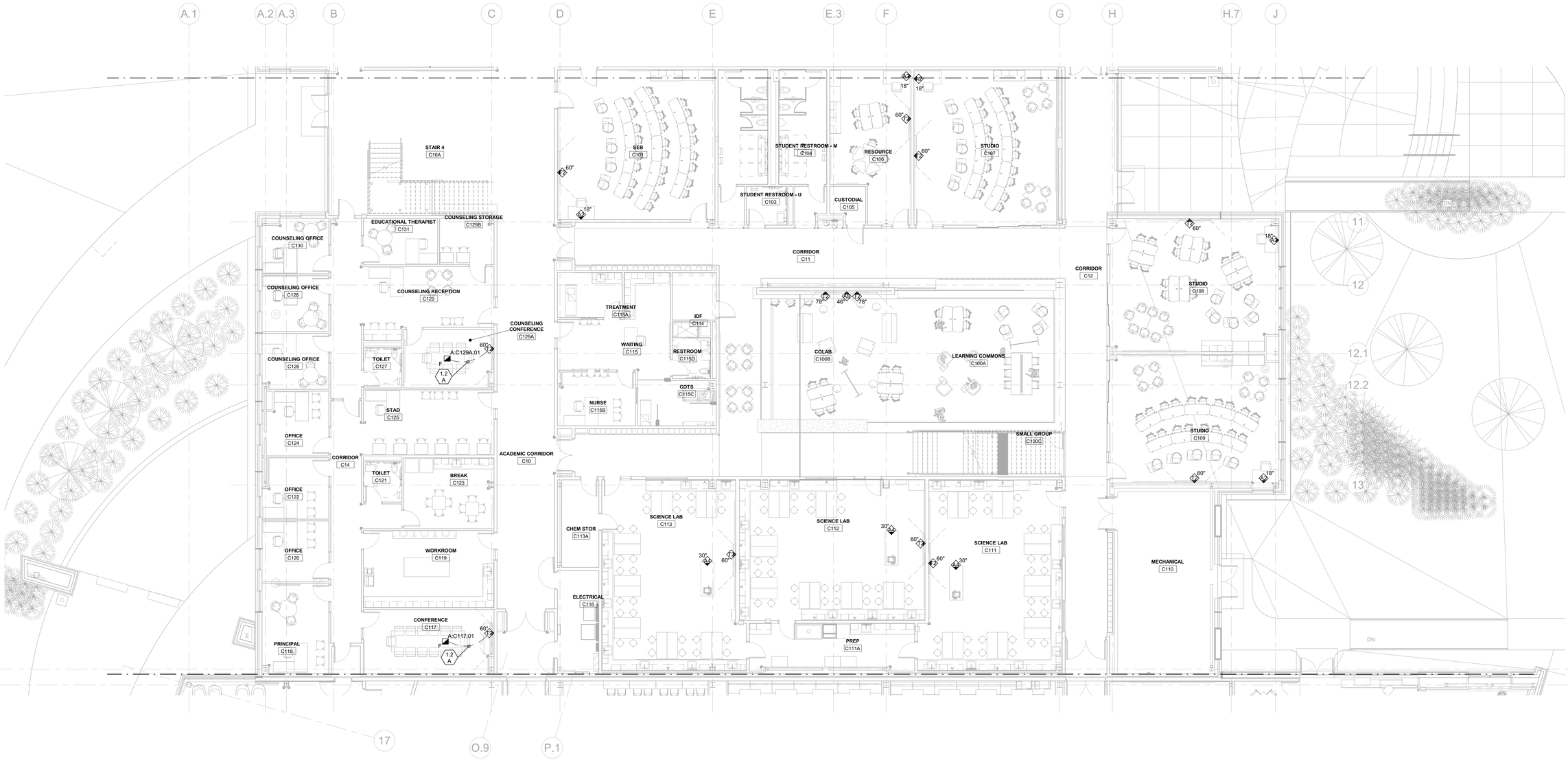
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AUDIO-VIDEO FIRST LEVEL PLAN - AREA B

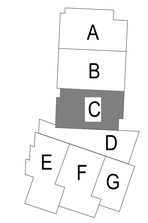
TA1.1B

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1 AUDIO-VIDEO FIRST LEVEL PLAN - AREA C
1/8" = 1'-0"

KEY PLAN



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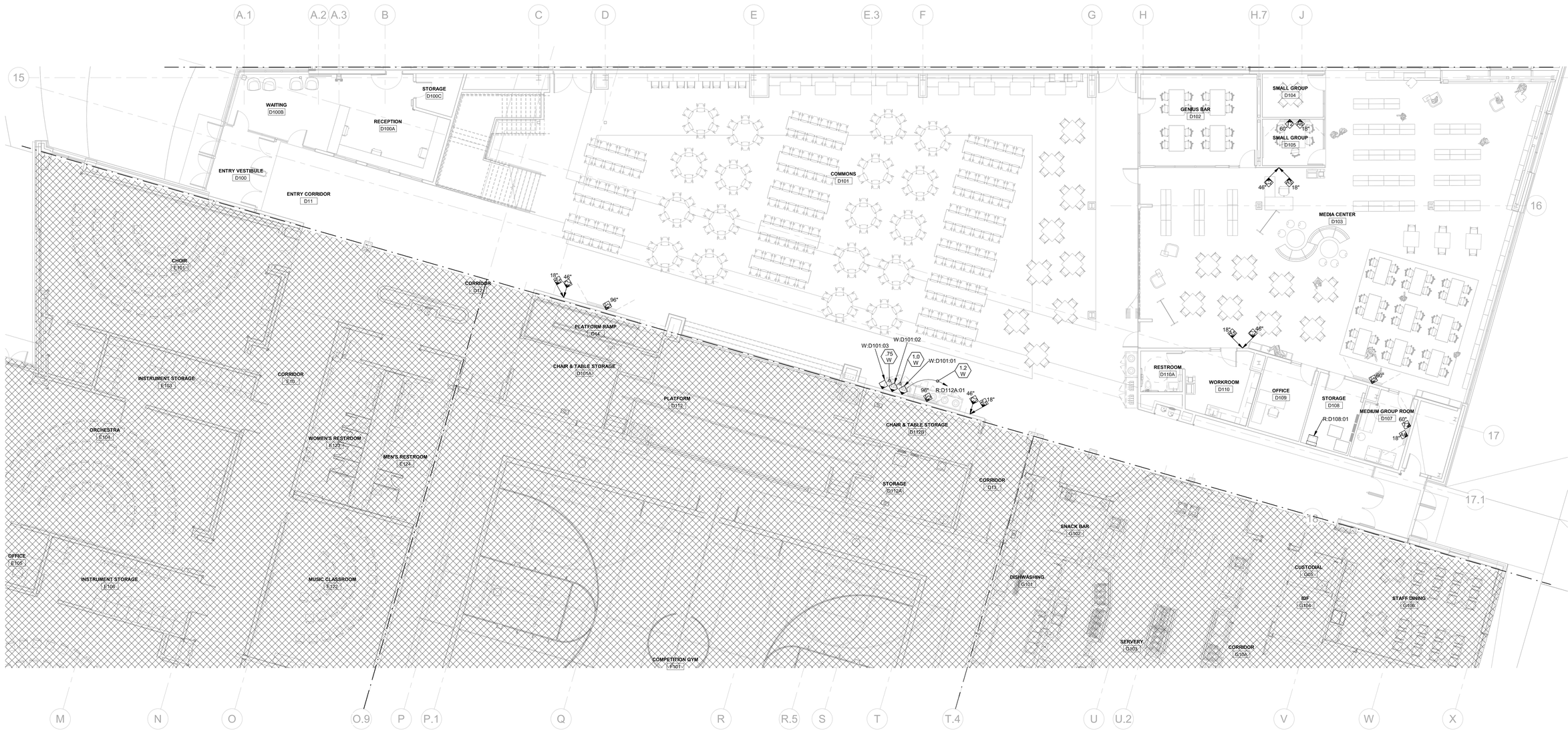
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AUDIO-VIDEO FIRST LEVEL PLAN - AREA C

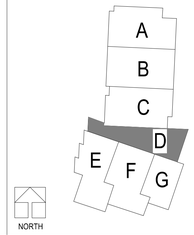
TA1.1C

CURTIS A. OLDS



1 AUDIO-VIDEO FIRST LEVEL PLAN - AREA D
1/8" = 1'-0"

KEY PLAN



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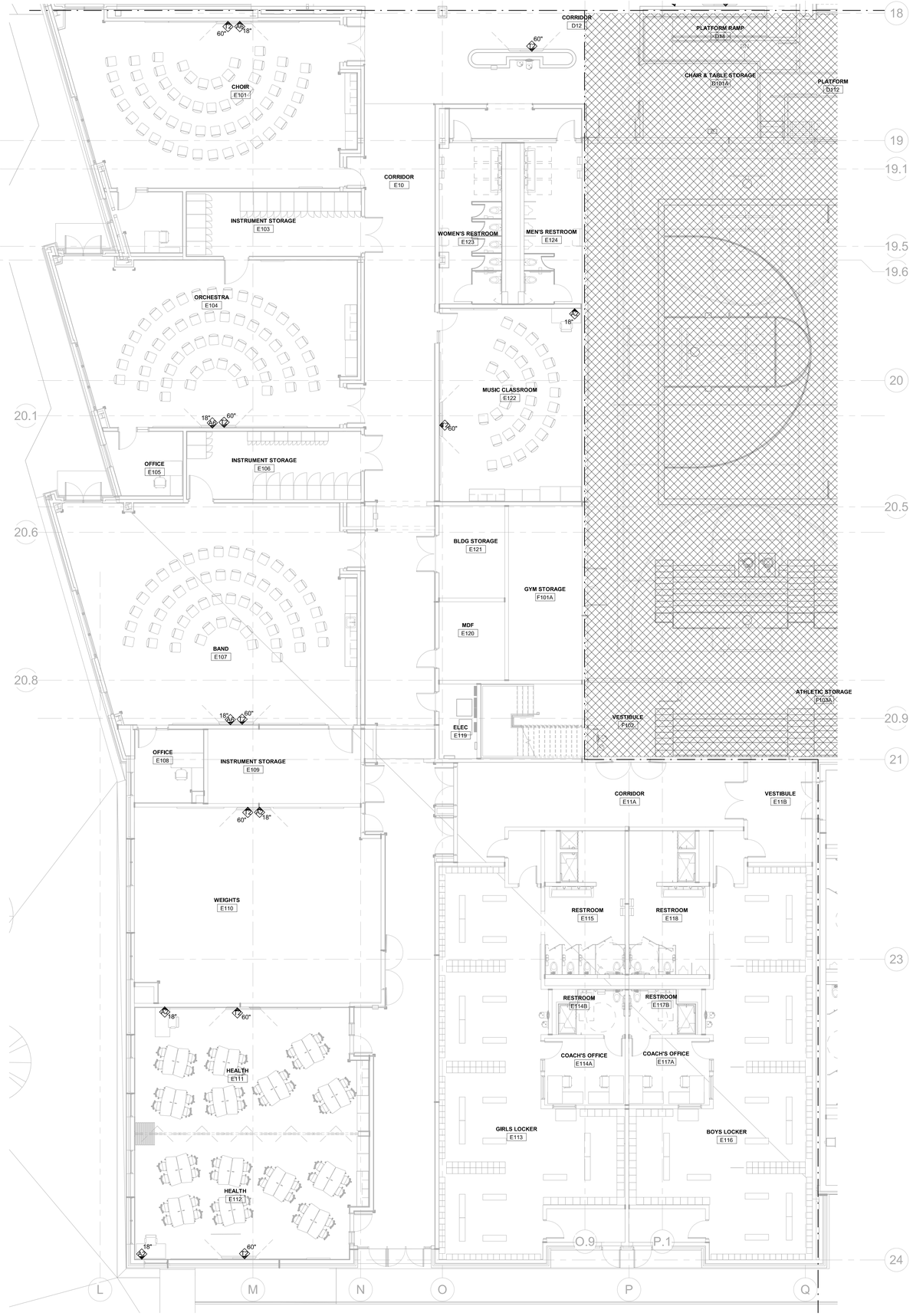
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AUDIO-VIDEO FIRST LEVEL PLAN - AREA D

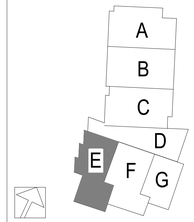
TA1.1D

CURTIS A. OLDS



1 AUDIO-VIDEO FIRST LEVEL PLAN - AREA E
1/8" = 1'-0"

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LEE'S SUMMIT R-7 SCHOOL DISTRICT

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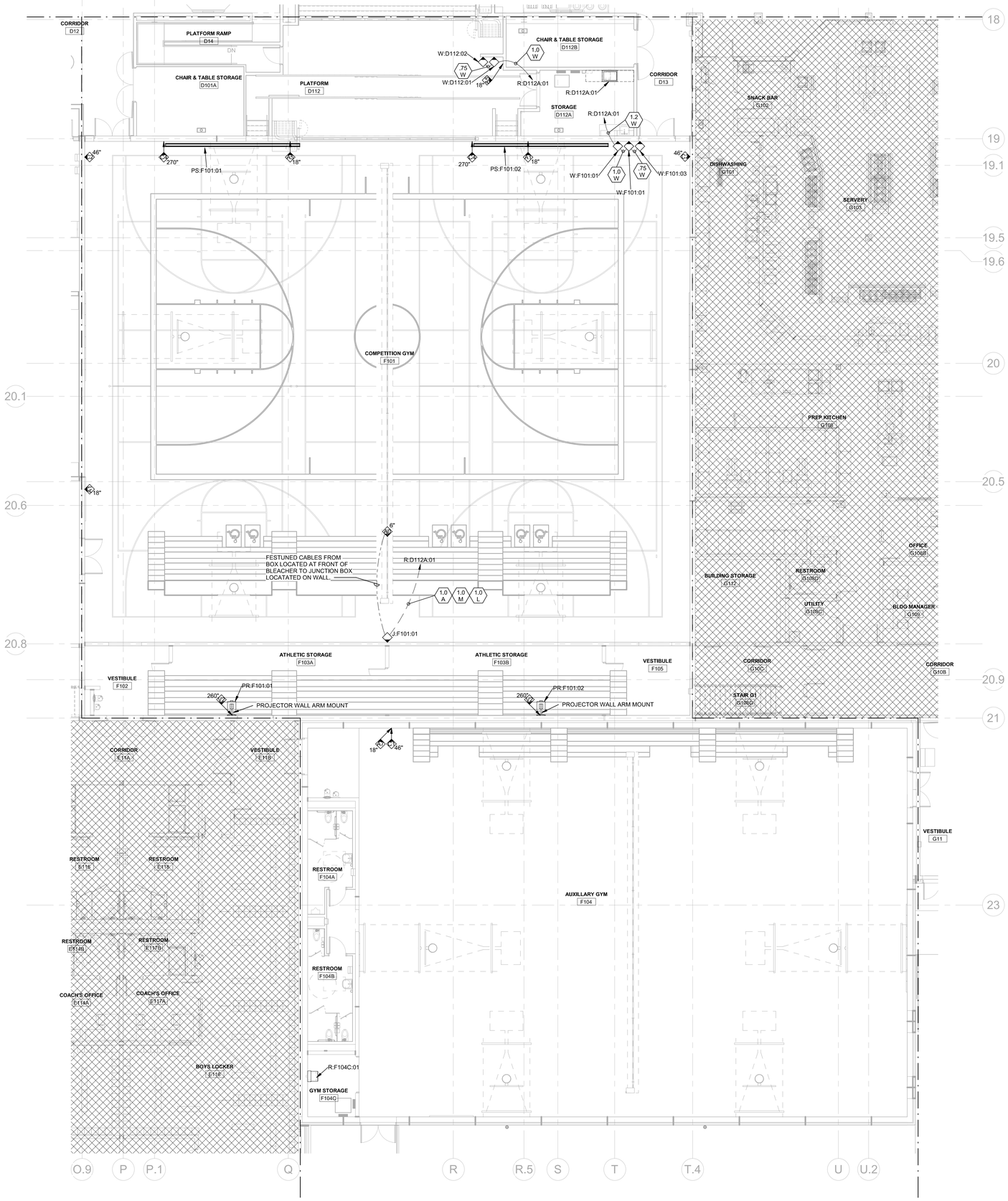
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AUDIO-VIDEO FIRST LEVEL PLAN - AREA E

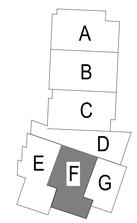
TA1.1E

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1 AUDIO-VIDEO FIRST LEVEL PLAN - AREA F
1/8" = 1'-0"

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8345 ENEXA PKWY E, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.0001
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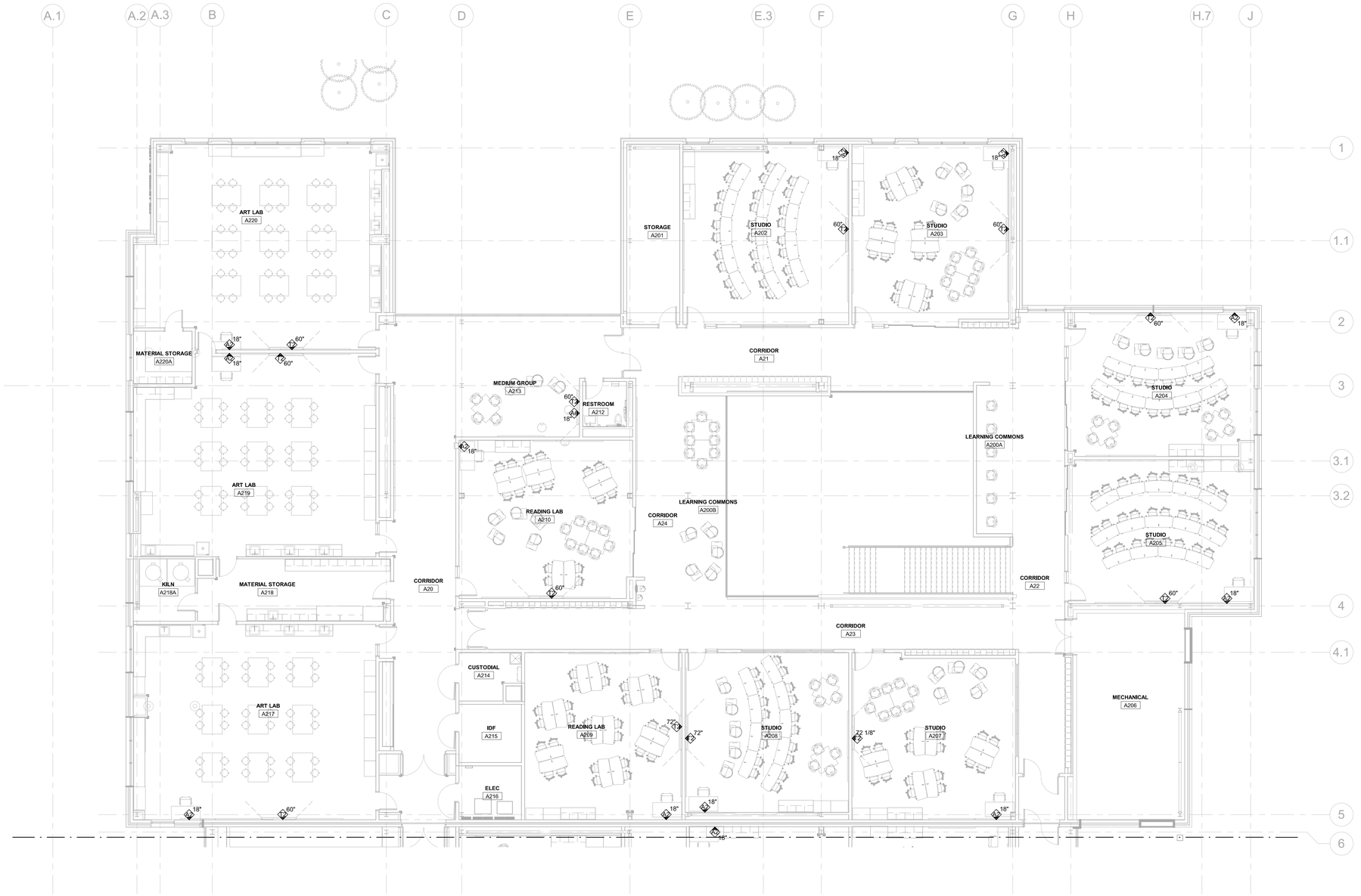
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AUDIO-VIDEO FIRST LEVEL PLAN - AREA F

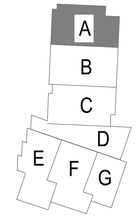
TA1.1F

CURTIS A. OLDS



1 AUDIO-VIDEO SECOND LEVEL PLAN - AREA A
1/8" = 1'-0"

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CURTIS A. OLDS
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HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.5001
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LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1301 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

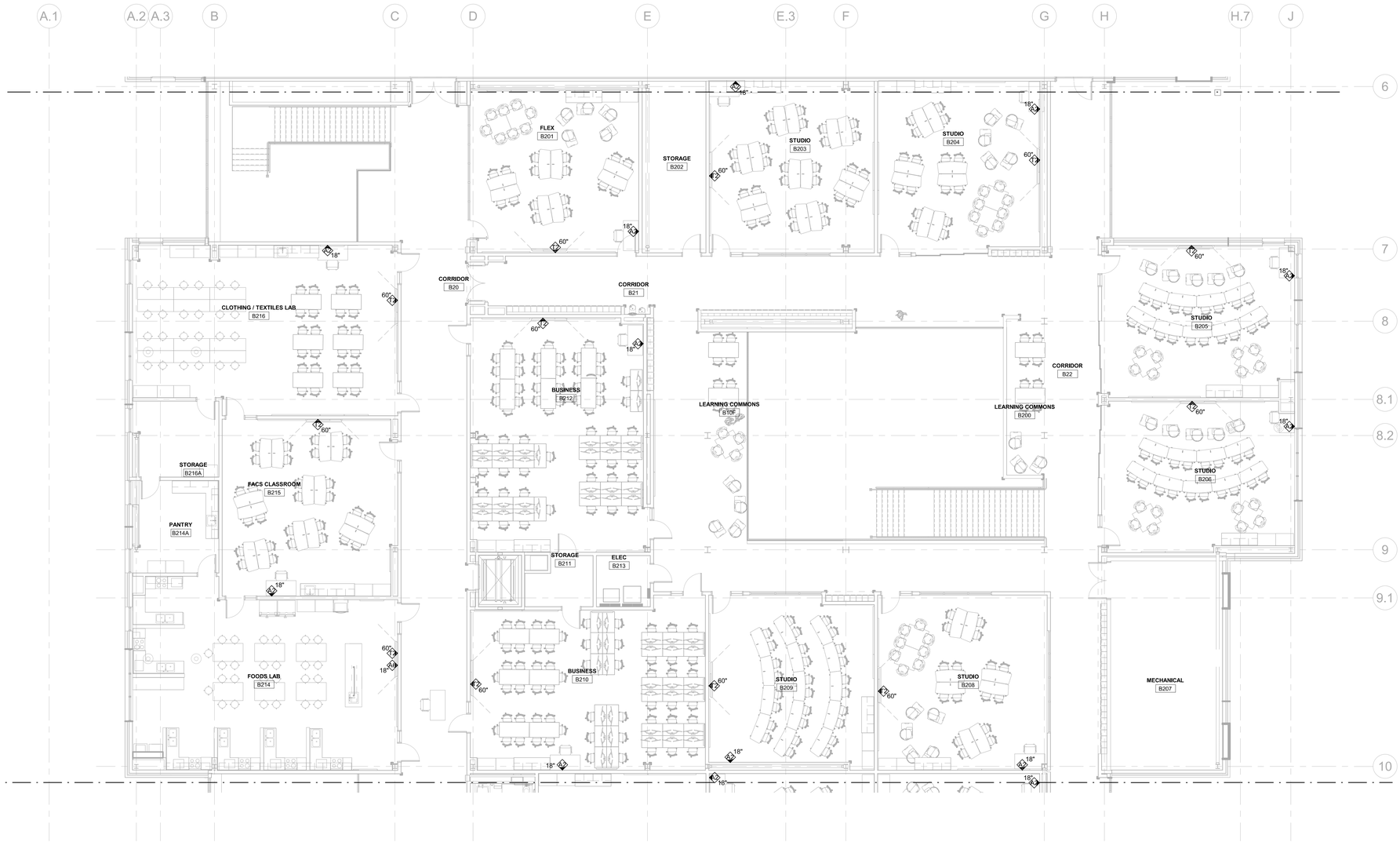
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AUDIO-VIDEO SECOND LEVEL PLAN - AREA A

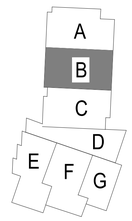
TA1.2A

CURTIS A. OLDS



1 AUDIO-VIDEO SECOND LEVEL PLAN - AREA B
1/8" = 1'-0"

KEY PLAN



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LICENSE # PE-2018036640

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8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
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LEE'S SUMMIT R-7 SCHOOL DISTRICT

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LEE'S SUMMIT, MO 64081

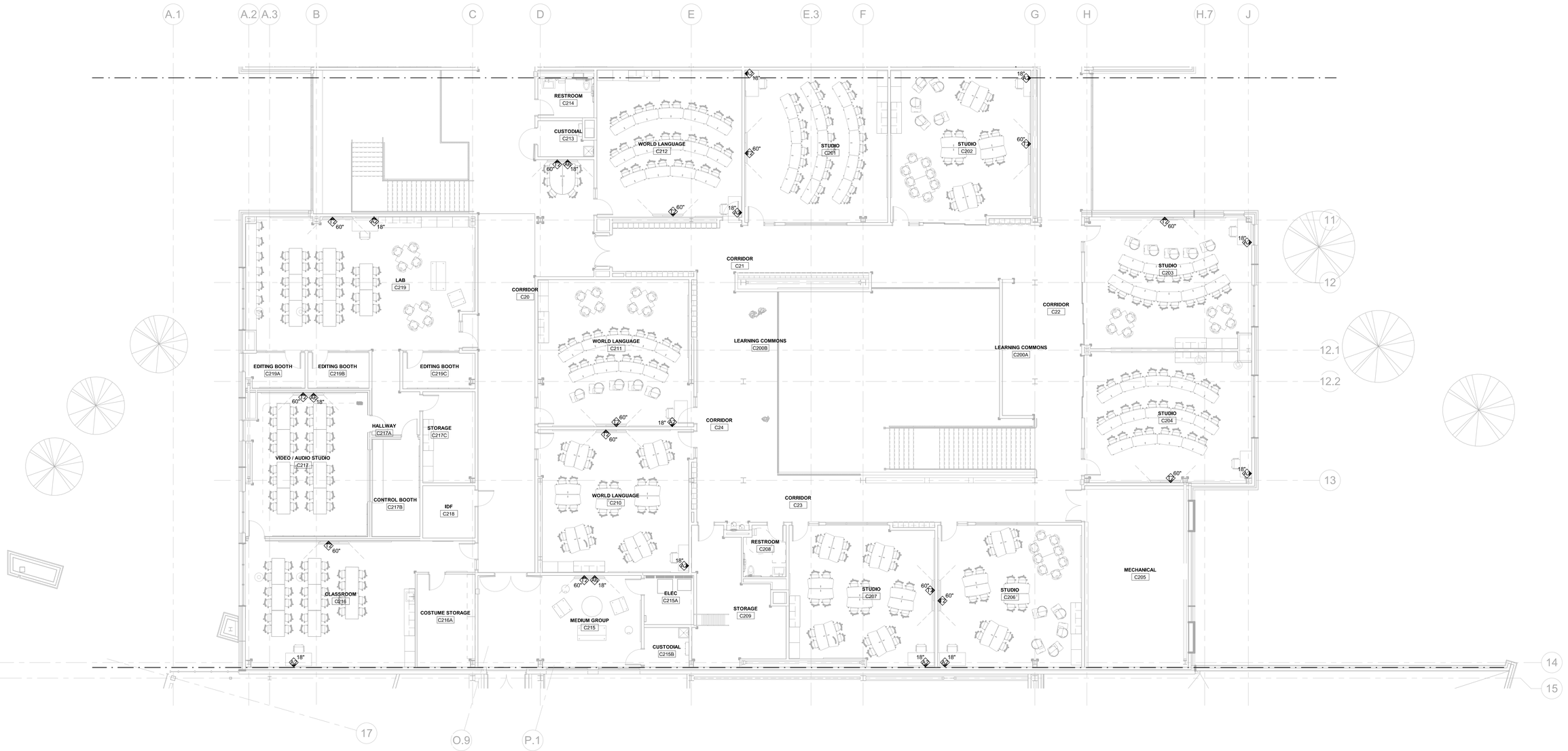
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AUDIO-VIDEO SECOND LEVEL PLAN - AREA B

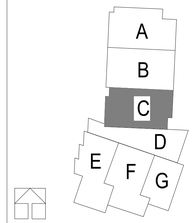
TA1.2B

CURTIS A. OLDS



1 AUDIO-VIDEO SECOND LEVEL PLAN - AREA C
1/8" = 1'-0"

KEY PLAN



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STATE OF MISSOURI
CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
MO. CERTIFICATE OF AUTHORITY
MO. CORPORATE NO. E-5360
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

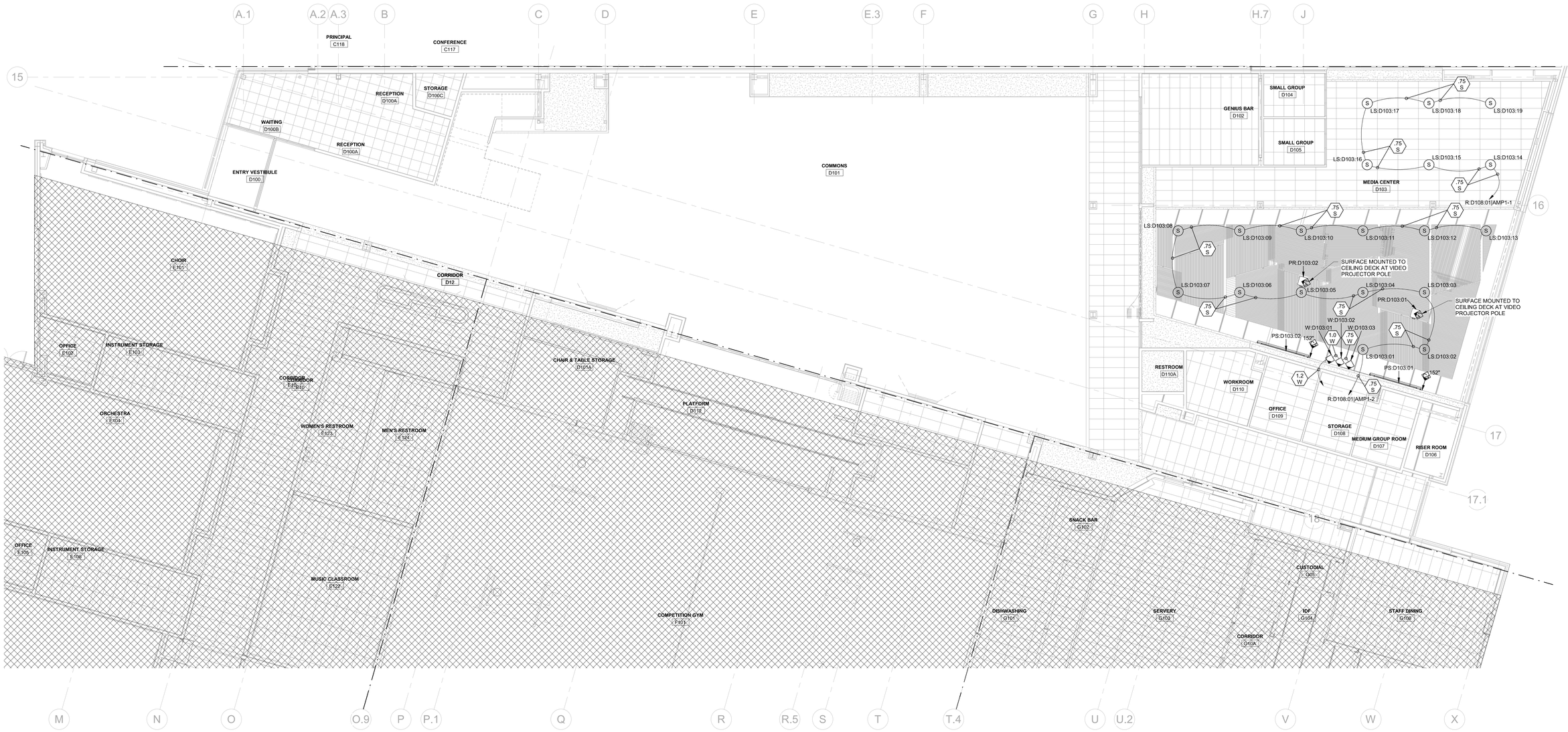
PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

13-20102-00

AUDIO-VIDEO SECOND LEVEL PLAN - AREA C

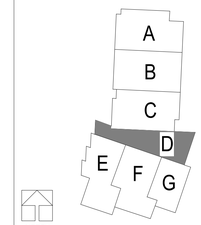
TA1.2C

CURTIS A. OLDS



1 AUDIO-VIDEO FIRST LEVEL RCP - AREA D
1/8" = 1'-0"

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CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTERPRISE CIRCLE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
MO. CERTIFICATE NO. E-5060
EXPIRES 12/31/2020

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LEE'S SUMMIT R-7 SCHOOL DISTRICT

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LEE'S SUMMIT, MO 64081

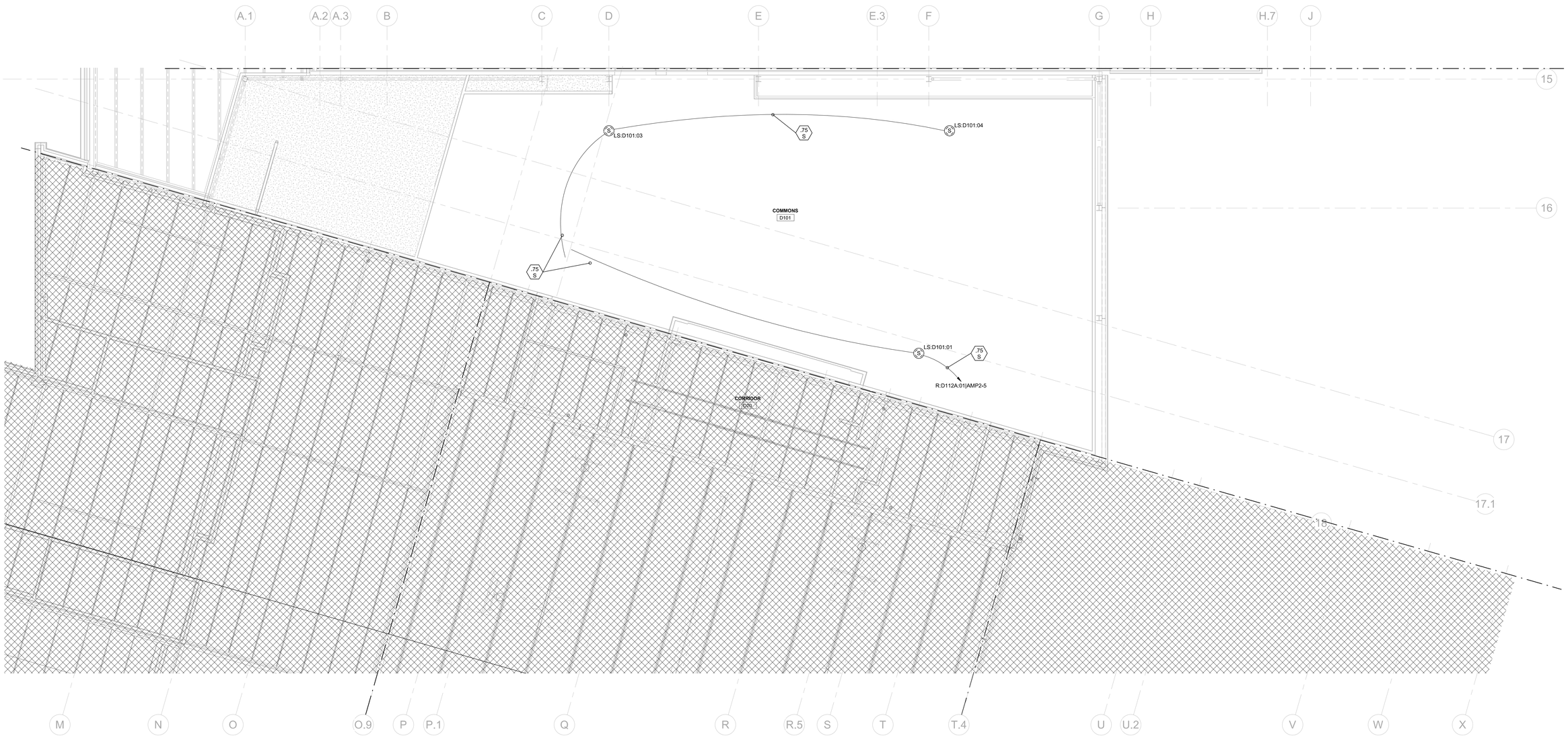
PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

13-20102-00

AUDIO-VIDEO FIRST LEVEL RCP - AREA D

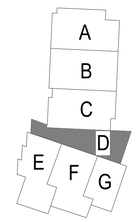
TA2.1D

CURTIS A. OLDS



1 AUDIO-VIDEO SECOND LEVEL RCP - AREA D
1/8" = 1'-0"

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Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTEX PKWY E, SUITE 300
LENEXA, KS 66214
TEL 913.742.3300 FAX 913.742.3301
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5360
EXPIRES 12/31/2020

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1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

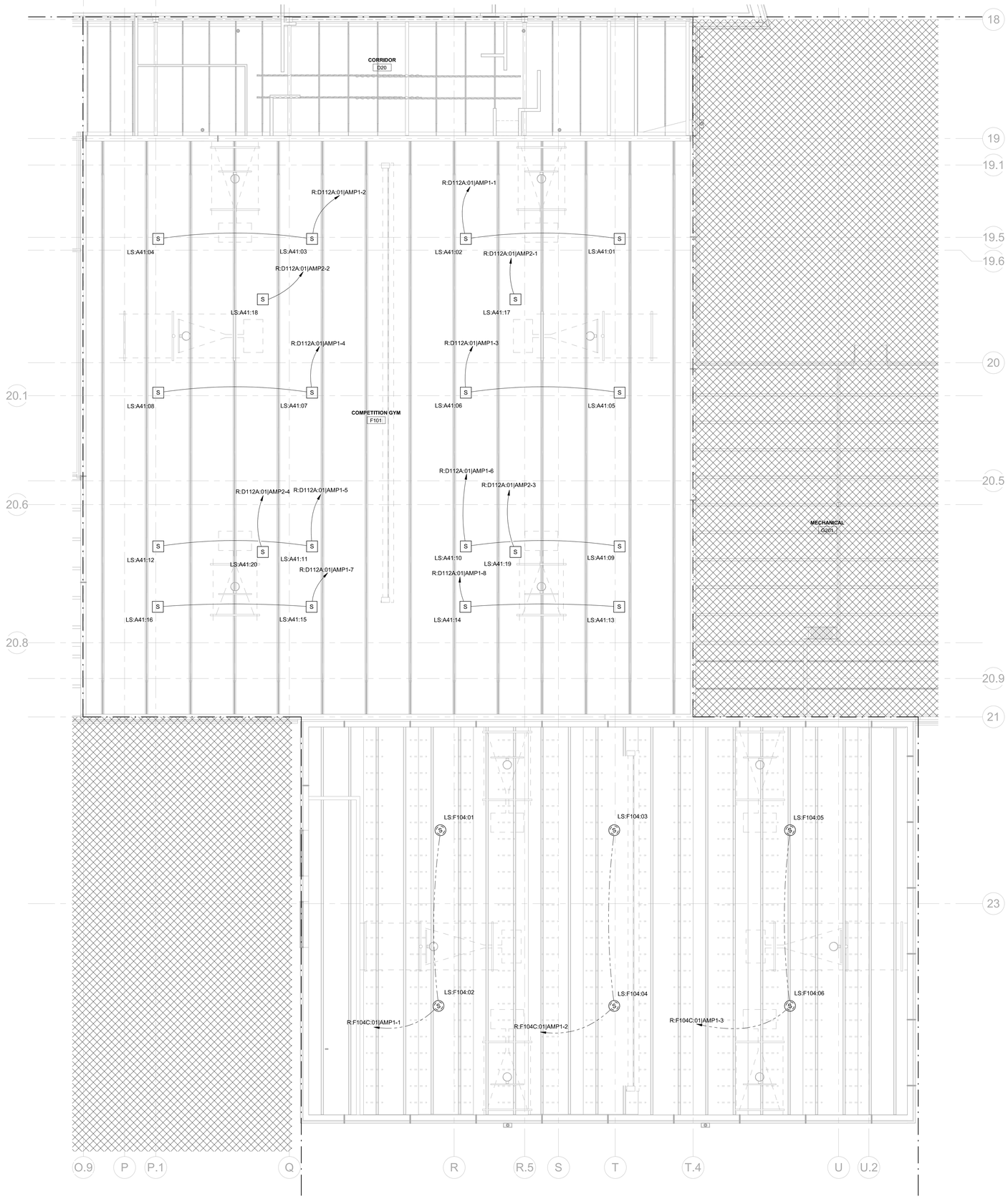
PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

13-20102-00

AUDIO-VIDEO SECOND LEVEL RCP - AREA D

TA2.2D

CURTIS A. OLDS



1 AUDIO-VIDEO SECOND LEVEL RCP - AREA F
1/8" = 1'-0"

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Oct 8 2020
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LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5360
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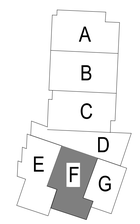
LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

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LEE'S SUMMIT, MO 64081

PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

KEY PLAN

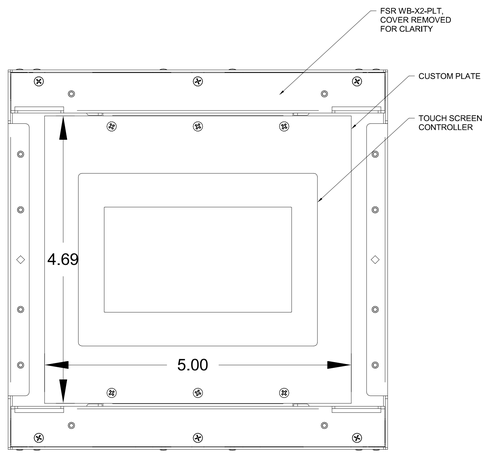


13-20102-00

AUDIO-VIDEO SECOND LEVEL RCP - AREA F

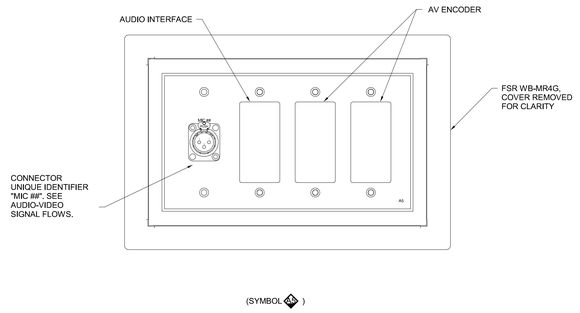
TA2.2F

CURTIS A. OLDS



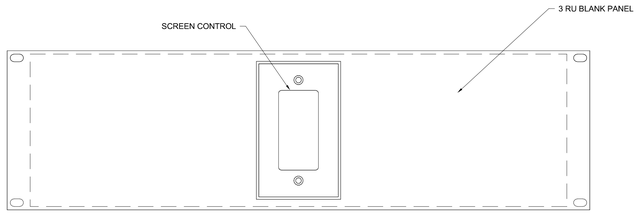
(SYMBOL A3)

1 AUDIO-VIDEO - TOUCH PANEL CONTROL WALL BOX
NTS

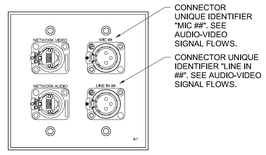


(SYMBOL A5)

2 AUDIO-VIDEO -INPUT BOX A5
NTS

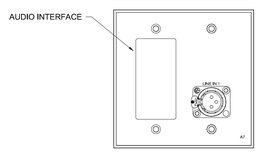


3 AUDIO-VIDEO - RACK PANEL
NTS



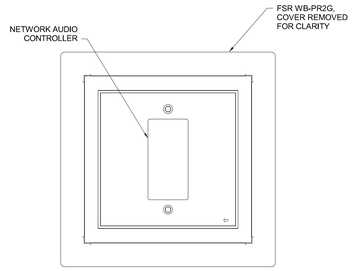
(SYMBOL A1)

4 AUDIO-VIDEO -INPUT BOX A1
NTS



(SYMBOL A7)

5 AUDIO-VIDEO - INPUT BOX A7
NTS



(SYMBOL C1)

6 AUDIO-VIDEO - BUTTON PANEL CONTROL WALL BOX
NTS

21RU	LOGO PANEL
20RU	ALS TRANSMITTER
19RU	1RU BLANK PANEL
18RU	WIRELESS RECEIVER
17RU	1RU BLANK PANEL
16RU	DSP FIXED 8x8 FLEX 8 I/O
15RU	1RU BLANK PANEL
14RU	ETHERNET SWITCH
13RU	CABLE BRUSH
12RU	1RU BLANK PANEL
11RU / 10RU / 9RU	RACK PANEL
8RU	1RU BLANK PANEL
7RU / 6RU	POWER AMPLIFIER
5RU	1RU BLANK PANEL
4RU	UPS
3RU / 2RU / 1RU	3RU STORAGE DRAWER

R:D108 SHOWN

7 MEDIA CENTER D103 - RACK ELEVATION
NTS

21RU	LOGO PANEL
20RU	ALS TRANSMITTER
19RU	1RU BLANK PANEL
18RU	WIRELESS MICROPHONE
17RU	1RU BLANK PANEL
16RU	DSP FIXED 8x8 FLEX 8 I/O
15RU	1RU BLANK PANEL
14RU	ETHERNET SWITCH
13RU	CABLE BRUSH
12RU	1RU BLANK PANEL
11RU / 10RU	2RU BLANK PANEL
9RU / 8RU	2RU BLANK PANEL
7RU / 6RU	POWER AMPLIFIER
5RU	1RU BLANK PANEL
4RU	UPS
3RU / 2RU / 1RU	3RU STORAGE DRAWER

R:F104C SHOWN

8 AUXILIRAY GYM F104 - RACK ELEVATION
NTS

44RU	LOGO PANEL
43RU	ALS TRANSMITTER
42RU	ALS TRANSMITTER
41RU / 40RU	2RU BLANK PANEL
39RU	WIRELESS ANTENNA DA
38RU	ANTENNA COMBINER
37RU	WIRELESS MICROPHONE
36RU	WIRELESS MICROPHONE
35RU	WIRELESS MICROPHONE
34RU	WIRELESS MICROPHONE
33RU / 32RU	2RU BLANK PANEL
31RU	DSP FIXED 8x8 FLEX 8 I/O
30RU	1RU BLANK PANEL
29RU	ETHERNET SWITCH
28RU	CABLE BRUSH
27RU / 26RU	2RU BLANK PANEL
25RU / 24RU / 23RU / 22RU	RACK PANEL
21RU	3RU STORAGE DRAWER
20RU / 19RU	2RU BLANK PANEL
18RU / 17RU	2RU BLANK PANEL
16RU / 15RU	2RU BLANK PANEL
14RU / 13RU	2RU BLANK PANEL
12RU / 11RU	POWER AMPLIFIER
10RU / 9RU	2RU BLANK PANEL
8RU / 7RU	POWER AMPLIFIER
6RU / 5RU	2RU BLANK PANEL
4RU / 3RU	UPS
2RU / 1RU	2RU BLANK PANEL

R:D112A SHOWN

9 COMPETITION GYM F101, PLATFORM D112. COMMONS D101 - RACK ELEVATION
NTS

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8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
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EXPIRES 12/31/2020

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LEE'S SUMMIT, MO 64081

PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

13-20102-00

AUDIO-VIDEO DETAILS

TA5.1

AUDIO-VIDEO BOX SCHEDULE - TYPICALS

UNIT TYPE	QTY	BOX PROPERTIES: DESCRIPTION	TYPE	B.O.D. MANUF.	B.O.D. MODEL	INSTALL HEIGHT (CENTER OF BOX)	MOUNTING	ACCESSORIES: COVER	INSERTS	CONDUIT REQUIREMENTS: SIZE	ROUTE	NOTES
A0	1	ASSORTED CONNECTION WALL BOX	2-GANG	RACO	683	AS INDICATED ON DRAWINGS	WALL FLUSH	BLANK	NONE	NONE	EXPOSED CABLE	FESTUNE CABLE TO A:F101:01
A1	2	ASSORTED CONNECTION WALL BOX	2-GANG	RACO	260 W/ 818	AS INDICATED ON DRAWINGS	WALL FLUSH	BLANK	NONE	1.00" (L)	STUB ABOVE ACCESSIBLE CEILING IN ROOM	
A2	59	ASSORTED CONNECTION WALL BOX	2-GANG	RACO	260 W/ 818	AS INDICATED ON DRAWINGS	WALL FLUSH	BLANK	NONE	1.25" (A)	STUB ABOVE ACCESSIBLE CEILING IN ROOM	
A4	9	ASSORTED CONNECTION WALL BOX	2-GANG	RACO	260 W/ 818	AS INDICATED ON DRAWINGS	WALL FLUSH	BLANK	NONE	1.25" (A)	STUB ABOVE ACCESSIBLE CEILING IN ROOM	
A5	6	ASSORTED CONNECTION WALL BOX	WALL BOX 07X11X04	FSR	WB-MR4G	AS INDICATED ON DRAWINGS	WALL FLUSH	INCLUDED	CUSTOM	1.00" (M) 1.00" (L) 1.00" (A)	STUB ABOVE ACCESSIBLE CEILING IN ROOM	
A6	11	ASSORTED CONNECTION WALL BOX	2-GANG	RACO	260 W/ 818	AS INDICATED ON DRAWINGS	WALL FLUSH	BLANK	NONE	1.25" (A)	CONNECT TO BOX BEHIND DISPLAY ON SAME WALL	
A7	1	ASSORTED CONNECTION WALL BOX	2-GANG	RACO	260 W/ 818	AS INDICATED ON DRAWINGS	WALL FLUSH	BLANK	NONE	1.00" (L)	STUB ABOVE ACCESSIBLE CEILING IN ROOM	
A8	3	ASSORTED CONNECTION WALL BOX	2-GANG	RACO	260 W/ 818	AS INDICATED ON DRAWINGS	WALL FLUSH	BLANK	NONE	1.25" (A)	CONNECT TO BOX BEHIND DISPLAY ON SAME WALL	
C1	1	CONTROL WALL BOX	WALL BOX 06X06X04	FSR	WB-PR2G	AS INDICATED ON DRAWINGS	WALL FLUSH	INCLUDED	CUSTOM	0.75" (A)	STUB ABOVE ACCESSIBLE CEILING IN ROOM	
C2	6	CONTROL WALL BOX	WALL BOX 12X12X04	FSR	WB-X2-PLT	AS INDICATED ON DRAWINGS	WALL FLUSH	INCLUDED	CUSTOM	0.75" (A)	STUB ABOVE ACCESSIBLE CEILING IN ROOM	
C4	4	CONTROL CONNECTION WALL BOX	2-GANG	RACO	260 W/ 818	AS INDICATED ON DRAWINGS	WALL FLUSH	BLANK	NONE	0.75" (V)	STUB ABOVE ACCESSIBLE CEILING IN ROOM	
T2	88	DISPLAY CONNECTION BOX	2-GANG	RACO	256 W/ 768	AS INDICATED ON DRAWINGS	WALL FLUSH	BLANK	NONE	1.25" (A)	STUB ABOVE ACCESSIBLE CEILING IN ROOM	
V1	2	VIDEO CONNECTION SURFACE BOX	2-GANG	RACO	683	AS INDICATED ON DRAWINGS	STRUCTURE SURFACE	BLANK	NONE	0.75" (V)	STUB ABOVE ACCESSIBLE CEILING IN ROOM	NEAR PROJECTOR CEILING POLE
V2	5	VIDEO CONNECTION WALL BOX	2-GANG	RACO	256 W/ 768	AS INDICATED ON DRAWINGS	WALL FLUSH	BLANK	NONE	0.75" (V)	STUB ABOVE ACCESSIBLE CEILING IN ROOM	

AUDIO-VIDEO BOX SCHEDULE

ID	BOX PROPERTIES: DESCRIPTION	TYPE	B.O.D. MANUF.	B.O.D. MODEL	INSTALL HEIGHT (CENTER OF BOX)	MOUNTING	ACCESSORIES: COVER	INSERTS	NOTES
A:C117:01	ASSORTED CONNECTION FLOOR BOX	FLOOR BOX 10x12x06	FSR	FL-500P-6	0"	FLOOR	PROVIDE	PROVIDE	
A:C129A:01	ASSORTED CONNECTION FLOOR BOX	FLOOR BOX 10x12x06	FSR	FL-500P-6	0"	FLOOR	PROVIDE	PROVIDE	

AUDIO-VIDEO EQUIPMENT RACK SCHEDULE

ID	RACK PROPERTIES: SPEC NAME	B.O.D.MANUF.	B.O.D. MODEL	RACK UNITS	MOUNTING: TYPE	INSTALL HEIGHT	MEASURED TO	RESPONSIBILITIES: FURNISHED BY	INSTALLED BY	NOTES
R:D108:01	WALL RACK SECTIONAL-S	MIDDLE ATLANTIC	DWR-21-22	21	WALL - SURFACE	48"	CENTER OF RACK	CONTRACTOR	CONTRACTOR	
R:D112A:01	OPEN SIDES - XD	MIDDLE ATLANTIC	WRK-44-32	44	FLOOR	0"	BOTTOM OF RACK	CONTRACTOR	CONTRACTOR	
R:F104C:01	WALL RACK SECTIONAL-S	MIDDLE ATLANTIC	DWR-21-22	21	WALL - SURFACE	48"	CENTER OF RACK	CONTRACTOR	CONTRACTOR	

AUDIO-VIDEO PROJECTION SCREEN SCHEDULE

LOCATION / ID	PROJECTION SCREEN PROPERTIES: SPEC NAME	B.O.D.MANUF.	B.O.D. MODEL	IMAGE HEIGHT	IMAGE WIDTH	ASPECT RATIO	SCREEN DROP	MOUNTING: TYPE	HEIGHT AFF.	RESPONSIBILITIES: INSTALLED BY	SCREEN BY	MOUNTING BY	NOTES
PS:D103:01	Projection Screen - 050-092-P/T/S	Da-Lite	Tensioned Contour Electrol	50"	92"	1.78	0' - 2"	WALL - SURFACE	142"	CONTRACTOR	CONTRACTOR	CONTRACTOR	
PS:D103:02	Projection Screen - 050-092-P/T/S	Da-Lite	Tensioned Contour Electrol	50"	92"	1.78	0' - 2"	WALL - SURFACE	142"	CONTRACTOR	CONTRACTOR	CONTRACTOR	
PS:F101:01	Projection Screen - 146-260-P/T/C	Da-Lite	Tensioned Professional Electrol	146"	260"	1.78	0' - 2"	WALL - SURFACE	260"	CONTRACTOR	CONTRACTOR	CONTRACTOR	
PS:F101:02	Projection Screen - 146-260-P/T/C	Da-Lite	Tensioned Professional Electrol	146"	260"	1.78	0' - 2"	WALL - SURFACE	260"	CONTRACTOR	CONTRACTOR	CONTRACTOR	

AUDIO-VIDEO PROJECTOR SCHEDULE

ID	PROJECTOR PROPERTIES: SPEC NAME	B.O.D.MANUF.	B.O.D. MODEL	LUMENS	ASPECT RATIO	THROW DISTANCE	LENS RATIO	MOUNTING: TYPE	INSTALL HEIGHT (CENTER OF LENS)	RESPONSIBILITY: FURNISHED BY	INSTALLED BY	MOUNT PROIDED BY	NOTES
PR:D103:01	4000 - 1200/3LCD	EPSON	PRO L400U	8900	1.78	12' - 8"	1.64	CEILING POLE	142"	CONTRACTOR	CONTRACTOR	CONTRACTOR	
PR:D103:02	4000 - 1200/3LCD	EPSON	PRO L400U	8900	1.78	12' - 8"	1.64	CEILING POLE	142"	CONTRACTOR	CONTRACTOR	CONTRACTOR	
PR:F101:01	12000 - 1200/3LCD	EPSON	PRO L1500UHNL	8900	1.78	101' - 0"	4.67	WALL ARM	260"	CONTRACTOR	CONTRACTOR	CONTRACTOR	WITH PROTECTIVE CAGE
PR:F101:01	12000 - 1200/3LCD	EPSON	PRO L1500UHNL	8900	1.78	101' - 0"	4.67	WALL ARM	260"	CONTRACTOR	CONTRACTOR	CONTRACTOR	WITH PROTECTIVE CAGE
PR:F101:02	12000 - 1200/3LCD	EPSON	PRO L1500UHNL	8900	1.78	101' - 0"	4.67	WALL ARM	260"	CONTRACTOR	CONTRACTOR	CONTRACTOR	WITH PROTECTIVE CAGE

NOTES:
1. ROLL ENCLOSURE 90 = STARTING POSITION OF LOUDSPEAKER IS ROLLED 90 DEGREES
2. ROTATE HORN 90 = STARTING POSTION OF HORN IS ROTATED 90 DEGREES IN THE ENCLOSURE
3. YAW = HORIZONTAL ORIENTATION IN RELATION TO PLAN NORTH
4. PITCH = VERTICAL ORIENTATION
5. ROLL = ROTATIONAL ORIENTATION AROUND LOUDSPEAKER AXIS

TO ORIENT LOUDSPEAKERS:
1. VIEW LOUDSPEAKERS FROM REAR (TOWARDS PLAN NORTH)
2. ROTATE LOUDSPEAKER LEFT (POSITIVE DEGREE) OR RIGHT (NEGATIVE DEGREE) TO THE SCHEDULED YAW ORIENTATION
3. TILT LOUDSPEAKER TO SCHEDULE PITCH ORIENTATION
4. ROTATE LOUDSPEAKER LEFT (POSITIVE DEGREE) OR RIGHT (NEGATIVE DEGREE) TO SCHEDULED ROLL ORIENTATION

FINAL ORIENTATION OF LOUDSPEAKERS:
1. SHALL BE AT THE DISCRETION OF THE CONSULTANT DURING COMMISSIONING
2. CONTRACTOR SHALL PROVIDE MEANS OF ACCESS TO ALL LOUDSPEAKER POSITIONS FOR TESTING, VERIFICATION, REORIENTATION, ETC.
3. MEANS OF ACCESS SHALL INCLUDE MOTORIZED LIFTS, SCAFFOLDING OR OTHER METHOD TO ALLOW FOR SAFE AND TIMELY OBSERVATION AND ADJUSTMENT.

AUDIO-VIDEO LOUDSPEAKER SCHEDULE

ID	CIRCUIT PROPERTIES: POWER DRAW	LOAD TYPE	QTY	LOUDSPEAKER PROPERTIES: SPEC NAME	B.O.D. MANUF.	B.O.D. MODEL	IMPEDANCE (OHM)	70V TAP (WATTS)	LOUDSPEAKER MOUNTING: MOUNTING CONDITION	HEIGHT (CENTER OF FACE)	ORIENTATION: YAW	PITCH	ROLL	ENCLOSURE/HORN: ROLL ENCL. 90	ROTATE HORN 90	NOTES
R:D108:01|AMP1																
1																
LS:D103:14	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:15	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:16	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:17	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:18	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:19	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
	23 W		6													
2																
LS:D103:01	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:02	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:03	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:04	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:05	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:06	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:07	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:08	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:09	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:10	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:11	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:12	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
LS:D103:13	4 W	70 V	1	CF|70|4|-	COMMUNITY	D4	1333	3.75	CEILING FLUSH	0"						
	49 W		13													
R:D112A:01|AMP1																
1																
LS:A41:01	200 W	LOW IMP	1	TR|08|08|100:100	ELECTRO-VOICE	EVC-1082/00	8	-	SUSPENDED	300"	0.00°	-90.00°	0.00°	Yes	No	
LS:A41:02	200 W	LOW IMP	1	TR|08|08|100:100	ELECTRO-VOICE	EVC-1082/00	8	-	SUSPENDED	300"	0.00°	-90.00°	0.00°	Yes	No	
	400 W		2													
2																
LS:A41:03	200 W	LOW IMP	1	TR|08|08|100:100	ELECTRO-VOICE	EVC-1082/00	8	-	SUSPENDED	300"	0.00°	-90.00°	0.00°	Yes	No	
LS:A41:04	200 W	LOW IMP	1	TR|08|08|100:100	ELECTRO-VOICE	EVC-1082/00	8	-	SUSPENDED	300"	0.00°	-90.00°	0.00°	Yes	No	
	400 W		2													
3																
LS:A41:05	200 W	LOW IMP	1	TR|08|08|100:100	ELECTRO-VOICE	EVC-1082/00	8	-	SUSPENDED	300"	0.00°	-90.00°	0.00°	Yes	No	
LS:A41:06	200 W	LOW IMP	1	TR|08|08|100:100	ELECTRO-VOICE	EVC-1082/00	8	-	SUSPENDED	300"	0.00°	-90.00°	0.00°	Yes	No	
	400 W		2													
4																
LS:A41:07	200 W	LOW IMP	1	TR|08|08|100:100	ELECTRO-VOICE	EVC-1082/00	8	-	SUSPENDED	300"	0.00°	-90.00°	0.00°	Yes	No	
LS:A41:08	200 W	LOW IMP	1	TR|08|08|100:100	ELECTRO-VOICE	EVC-1082/00	8	-	SUSPENDED	300"	0.00°	-90.00°	0.00°	Yes	No	
	400 W		2													
5																
LS:A41:11	200 W	LOW IMP	1	TR|08|08|100:100	ELECTRO-VOICE	EVC-1082/00	8	-	SUSPENDED	300"	0.00°	-90.00°	0.00°	Yes	No	
LS:A41:12	200 W	LOW IMP	1	TR|08|08|100:100	ELECTRO-VOICE	EVC-1082/00	8	-	SUSPENDED	300"	0.00°	-90.00°	0.00°	Yes	No	
	400 W		2													
6																
LS:A41:09	200 W	LOW IMP	1	TR|08|08|100:100	ELECTRO-VOICE	EVC-1082/00	8	-	SUSPENDED	300"	0.00°	-90.00°	0.00°	Yes	No	
LS:A41:10	200 W	LOW IMP	1	TR|08|08|100:100	ELECTRO-VOICE	EVC-1082/00	8	-	SUSPENDED	300"	0.00°	-90.00°	0.00°	Yes	No	
	400 W		2													
7																
LS:A41:15	200 W	LOW IMP	1	TR|08|08|90:60	ELECTRO-VOICE	EVC-1082/96	8	-	SUSPENDED	300"	180.00°	-50.00°	0.00°	Yes	Yes	
LS:A41:16	200 W	LOW IMP	1	TR|08|08|90:60	ELECTRO-VOICE	EVC-1082/96	8	-	SUSPENDED	300"	180.00°	-50.00°	0.00°	Yes	Yes	
	400 W		2													
8																
LS:A41:13	200 W	LOW IMP	1	TR|08|08|90:60	ELECTRO-VOICE	EVC-1082/96	8	-	SUSPENDED	300"	180.00°	-50.00°	0.00°	Yes	Yes	
LS:A41:14	200 W	LOW IMP	1	TR|08|08|90:60	ELECTRO-VOICE	EVC-1082/96	8	-	SUSPENDED	300"	180.00°	-50.00°	0.00°	Yes	Yes	
	400 W		2													
R:D112A:01|AMP2																
1																
LS:A41:17	300 W	LOW IMP	1	TR||04|2x12|60:180	COMMUNITY	V2-212S	4	-	SUSPENDED	300"	90.00°	-90.00°	0.00°	No	No	
	300 W		1													
2																
LS:A41:18	300 W	LOW IMP	1	TR||04|2x12|60:180	COMMUNITY	V2-212S	4	-	SUSPENDED	300"	90.00°	-90.00°	0.00°	No	No	
	300 W		1													
3																
LS:A41:19	300 W	LOW IMP	1	TR||04|2x12|60:180	COMMUNITY	V2-212S	4	-	SUSPENDED	300"	90.00°	-90.00°	0.00°	No	No	
	300 W		1													
4																
LS:A41:20	300 W	LOW IMP	1	TR||04|2x12|60:180	COMMUNITY	V2-212S	4	-	SUSPENDED	300"	90.00°	-90.00°	0.00°	No	No	
	300 W		1													
5																
LS:D101:01	120 W	70 V	1	PM|70|8|-	COMMUNITY	DP8	42	120	SUSPENDED	362"						
LS:D101:02	120 W	70 V	1	PM|70|8|-	COMMUNITY	DP8	42	120	SUSPENDED	362"						
LS:D101:03	120 W	70 V	1	PM|70|8|-	COMMUNITY	DP8	42	120	SUSPENDED	362"						
LS:D101:04	120 W	70 V	1	PM|70|8|-	COMMUNITY	DP8	42	120	SUSPENDED	362"						
	480 W		4													
R:F104C:01|AMP1																
1																
LS:F104:01	120 W	70 V	1	PM|70|8|-	COMMUNITY	DP8	42	120	SUSPENDED	300"						
LS:F104:02	120 W	70 V	1	PM|70|8|-	COMMUNITY	DP8	42	120	SUSPENDED	300"						
	240 W		2													
2																
LS:F104:03	120 W	70 V	1	PM|70|8|-	COMMUNITY	DP8	42	120	SUSPENDED	300"						
LS:F104:04	120 W	70 V	1	PM|70|8|-	COMMUNITY	DP8	42	120	SUSPENDED	300"						
	240 W		2													
3																
LS:F104:05	120 W	70 V	1	PM|70|8|-	COMMUNITY	DP8	42	120	SUSPENDED	300"						
LS:F104:06	120 W	70 V	1	PM|70|8|-	COMMUNITY	DP8	42	120	SUSPENDED	300"						
	240 W		2													

AUDIO-VIDEO LOUDSPEAKER TYPE SCHEDULE

LOUDSPEAKER PROPERTIES: SPEC NAME	LOAD TYPE	QTY	B.O.D. MANUF.	B.O.D. MODEL	RESPONSIBILTY: FURNISHED BY	INSTALLED BY	MOUNTING: TYPE	PROVIDED BY	NOTES
CF|70|4|-	70 V	19	COMMUNITY	D4	CONTRACTOR	CONTRACTOR	CEILING FLUSH	CONTRACTOR	
PM|70|8|-	70 V	10	COMMUNITY	DP8	CONTRACTOR	CONTRACTOR	SUSPENDED	CONTRACTOR	
TR|08|08|90:60	LOW IMP	4	ELECTRO-VOICE	EVC-1082/96	CONTRACTOR	CONTRACTOR	SUSPENDED	CONTRACTOR	
TR|08|08|100:100	LOW IMP	12	ELECTRO-VOICE	EVC-1082/00	CONTRACTOR	CONTRACTOR	SUSPENDED	CONTRACTOR	
TR||04|2x12|60:180	LOW IMP	4	COMMUNITY	V2-212S	CONTRACTOR	CONTRACTOR	SUSPENDED	CONTRACTOR	
Grand total: 49									

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STATE OF MISSOURI
CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENSLEA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.3091
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4
LEE'S SUMMIT R-7 SCHOOL DISTRICT
1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

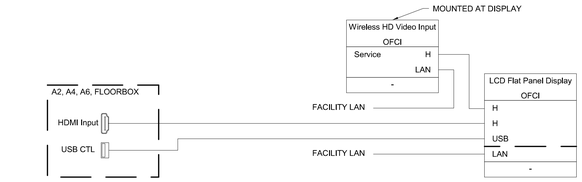
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REVISIONS

13-20102-00

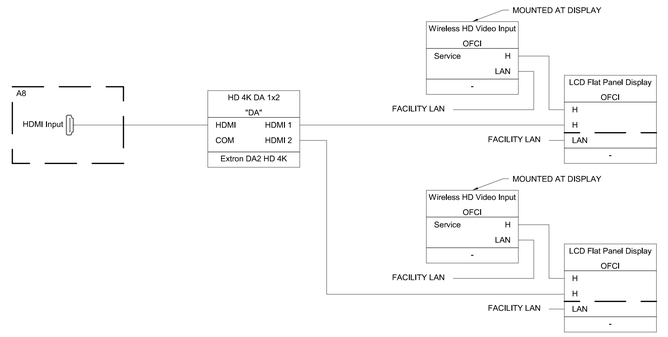
AUDIO-VIDEO SCHEDULES

TA6.1

CURTIS A. OLDS

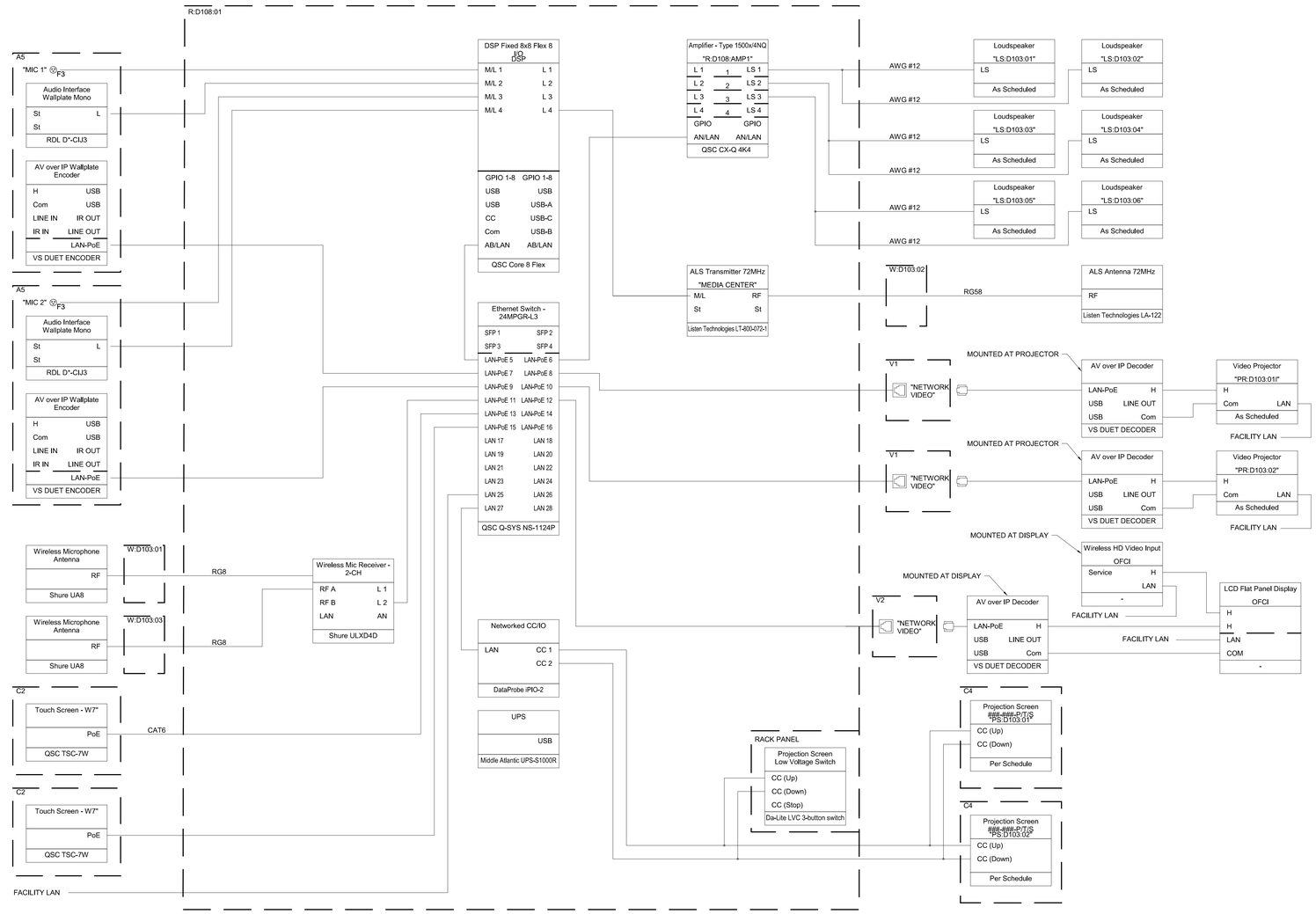


1 TYPICAL CLASSROOM/CONFERENCE ROOM - AUDIO-VIDEO SYSTEMS



2 TYPICAL COLLABORATION ROOM - AUDIO-VIDEO SYSTEMS

NOTES:
SYSTEM/ROOM SHOWN IS TYPICAL OF MULTIPLE SYSTEMS/ROOMS:
1.1 SCIENCE COLLABORATION A100B
1.2 COLLABORATION B100B
1.3 COLLABORATION C100B



3 MEDIA CENTER D103 - AUDIO-VIDEO SYSTEM

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CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
MO. CERTIFICATE NO. E-5360
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
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REVISIONS

13-20102-00

AUDIO-VIDEO SIGNAL FLOWS

TA7.1

R:D112A-01

COMPETITION GYM F101

A1
"MIC 1" F3
"LINE IN 1" F3
"NETWORK VIDEO" → V 702 AV SWITCH
"NETWORK AUDIO" → AB 702 AV SWITCH

A1
"MIC 2" F3
"LINE IN 2" F3
"NETWORK VIDEO" → V 702 AV SWITCH
"NETWORK AUDIO" → AB 702 AV SWITCH

A0
"MIC 3" F3
"LINE IN 3" F3
"NETWORK VIDEO" → V 702 AV SWITCH
"NETWORK AUDIO" → AB 702 AV SWITCH

A5 - TYPICAL OF 5 LOCATIONS
"MIC #8" F3 — LABEL MICROPHONE PANEL CONNECTORS FROM 4 TO 8.

COMMONS D101

Audio Interface Wallplate Mono
St L
St
RDL D*-CIJ3

AV over IP Wallplate Encoder
H USB
Com USB
LINE IN IR OUT
IR IN LINE OUT
LAN-PoE → V 702 AV SWITCH
VS DUET ENCODER

DSP Fixed 8x8 Flex 8 I/O - VoIP DSP

M/L 1	L 1
M/L 2	L 2
M/L 3	L 3
M/L 4	L 4
M/L 5	L 5
M/L 6	L 6
M/L 7	L 7
M/L 8	L 8
M/L 9	
M/L 10	
M/L 11	
M/L 12	
M/L 13	
M/L 14	
M/L 15	
M/L 16	

A5 INPUTS — FLEX (INPUT OR OUTPUT)

GPIO 1-8 GPIO 1-8
USB USB
USB USB
CC
Phone H
Com USB-B
AB/LAN AB/LAN
QSC Core 110f

Amplifier - Type 1000x/8NQ
"R:D112A:AMP1"

L 1	1	LS 1
L 2	2	LS 2
L 3	3	LS 3
L 4	4	LS 4
L 5	5	LS 5
L 6	6	LS 6
L 7	7	LS 7
L 8	8	LS 8

GPIO GPIO
AN/LAN AN/LAN
QSC CX-Q 4K8

AWG #12 →
Loudspeaker "LS:F101:01" LS As Scheduled
Loudspeaker "LS:F101:02" LS As Scheduled
Loudspeaker "LS:F101:03" LS As Scheduled
Loudspeaker "LS:F101:04" LS As Scheduled
Loudspeaker "LS:F101:05" LS As Scheduled
Loudspeaker "LS:F101:06" LS As Scheduled
Loudspeaker "LS:F101:07" LS As Scheduled
Loudspeaker "LS:F101:08" LS As Scheduled
Loudspeaker "LS:F101:09" LS As Scheduled
Loudspeaker "LS:F101:10" LS As Scheduled
Loudspeaker "LS:F101:11" LS As Scheduled
Loudspeaker "LS:F101:12" LS As Scheduled
Loudspeaker "LS:F101:13" LS As Scheduled
Loudspeaker "LS:F101:14" LS As Scheduled
Loudspeaker "LS:F101:15" LS As Scheduled
Loudspeaker "LS:F101:16" LS As Scheduled
Loudspeaker "LS:F101:17" LS As Scheduled
Loudspeaker "LS:F101:18" LS As Scheduled
Loudspeaker "LS:F101:19" LS As Scheduled
Loudspeaker "LS:F101:20" LS As Scheduled

COMPETITION GYM F101

Amplifier - Type 1000x/8NQ
"R:D112A:AMP2"

L 1	1	LS 1
L 2	2	LS 2
L 3	3	LS 3
L 4	4	LS 4
L 5	5	LS 5
L 6	6	LS 6
L 7	7	LS 7
L 8	8	LS 8

GPIO GPIO
AN/LAN AN/LAN
QSC CX-Q 4K8

Loudspeaker "LS:D101:01" LS As Scheduled
Loudspeaker "LS:D101:04" LS As Scheduled

COMMONS D101

ALS Transmitter 72MHz "GYMNASIUM"
M/L RF
St St
Listen Technologies LT-800-072-1

ALS Transmitter 72MHz "COMMONS"
M/L RF
St St
Listen Technologies LT-800-072-1

W:F101:02
W:D101:02

RG58 →
ALS Antenna 72MHz RF Listen Technologies LA-122

COMPETITION GYM F101

ALS Antenna 72MHz RF Listen Technologies LA-122

COMMONS D101

C2
Touch Screen - W7" GYMNASIUM PoE → CAT6 → C2 702 AV SWITCH
QSC TSC-7W

C2
Touch Screen - W7" GYMNASIUM PoE → CAT6 → C2 702 AV SWITCH
QSC TSC-7W

COMPETITION GYM F101

C2
Touch Screen - W7" COMMONS PoE → CAT6 → C2 702 AV SWITCH
QSC TSC-7W

COMMONS D101

C2
Touch Screen - W7" COMMONS PoE → CAT6 → C2 702 AV SWITCH
QSC TSC-7W

COMMONS D101

Ethernet Switch - 48MPGR-L3

SFP 1	SFP 2
SFP 3	SFP 4
LAN-PoE 5	LAN-PoE 6
LAN-PoE 7	LAN-PoE 8
LAN-PoE 9	LAN-PoE 10
LAN-PoE 11	LAN-PoE 12
LAN-PoE 13	LAN-PoE 14
LAN-PoE 15	LAN-PoE 16
LAN-PoE 17	LAN-PoE 18
LAN-PoE 19	LAN-PoE 20
LAN-PoE 21	LAN-PoE 22
LAN-PoE 23	LAN-PoE 24
LAN-PoE 25	LAN-PoE 26
LAN-PoE 27	LAN-PoE 28
LAN 29	LAN 30
LAN 31	LAN 32
LAN 33	LAN 34
LAN 35	LAN 36
LAN 37	LAN 38
LAN 39	LAN 40
LAN 41	LAN 42
LAN 43	LAN 44
LAN 45	LAN 46
LAN 47	LAN 48
LAN 49	LAN 50
LAN 51	LAN 52

QSC Q-SYS NS-1148P

Wireless Mic Receiver - 4-CH WIRELESS 1-4

RF A	L 1
RF B	L 2
	L 3
	L 4
	RF A
	RF B
LAN	LAN

Shure ULXD4Q

Wireless Mic Receiver - 4-CH WIRELESS 5-8
RF A L 1 / RF B L 2 / L 3 / L 4 / RF A / RF B / LAN LAN
Shure ULXD4Q

Wireless Mic Receiver - 4-CH WIRELESS 9-12
RF A L 1 / RF B L 2 / L 3 / L 4 / RF A / RF B / LAN LAN
Shure ULXD4Q

Wireless Mic Receiver - 4-CH WIRELESS 13-16
RF A L 1 / RF B L 2 / L 3 / L 4 / RF A / RF B / LAN LAN
Shure ULXD4Q

UPS
USB
Middle Atlantic UPS-S1000R

Networked CC/IO
LAN CC 1 / CC 2
DataProbe iPIO-2

RACK PANEL
Projection Screen Low Voltage Switch
CC (Up) / CC (Down) / CC (Stop)
Da-Lite LVC 3-button switch

COMPETITION GYM F101

Wireless Microphone Antenna RF Shure UA8 — W:F101:01 — RG8
Wireless Microphone Antenna RF Shure UA8 — W:F101:03 — RG8

PLATFORM D112

Wireless Microphone Antenna RF Shure UA8 — W:D112:01 — RG8
Wireless Microphone Antenna RF Shure UA8 — W:D112:02 — RG8

COMMONS D101

Wireless Microphone Antenna RF Shure UA8 — W:D101:01 — RG8
Wireless Microphone Antenna RF Shure UA8 — W:D101:02 — RG8

Antenna Combiner - 4 Zone
RF A RF A / RF B RF B / RF A / RF B / RF A / RF B / RF A / RF B
RF Venue 4 Zone

Wireless Antenna DA
RF A RF A / RF B RF B / RF A 1 / RF B 1 / RF A 2 / RF B 2 / RF A 3 / RF B 3 / RF A 4 / RF B 4
Shure UA845-SWB

FACILITY LAN

AV SWITCH P1 702 / P2 702 → "NETWORK VIDEO" V2

AV over IP Decoder
LAN-PoE H / USB LINE OUT / USB Com
VS DUET DECODER

MOUNTED AT DISPLAY
Wireless HD Video Input OFCI Service H / LAN / -
LCD Flat Panel Display OFCI H / H / LAN / COM / -
FACILITY LAN

MOUNTED AT VIDEO PROJECTOR
Video Projector "PR:F101:01" H / Com LAN / As Scheduled
Video Projector "PR:F101:02" H / Com LAN / As Scheduled
Projection Screen ###-###-P/T/S "PS:F101:01" / "PS:F101:02"
CC (Up) / CC (Down) / Per Schedule

COMPETITION GYM F101

1 COMPETITION GYM F101, PLATFORM D112. COMMONS D101 - AUDIO-VIDEO SYSTEMS

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STATE OF MISSOURI
CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTERPRISE CIRCLE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

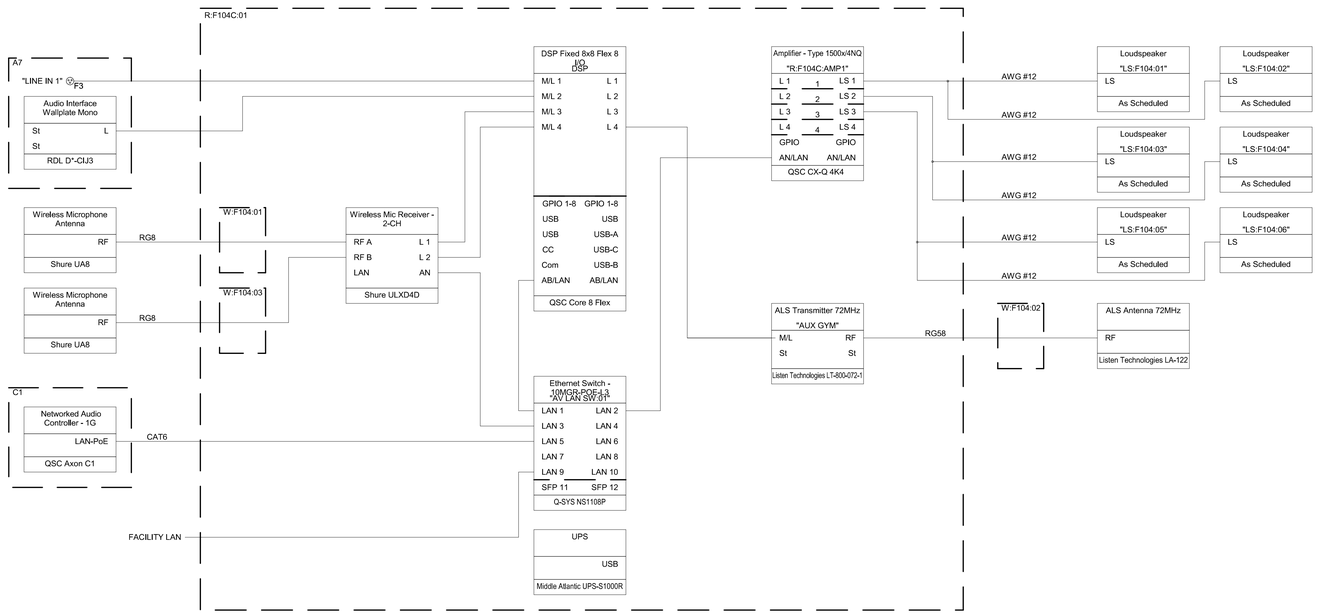
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10/08/20
REVISIONS

13-20102-00

AUDIO-VIDEO SIGNAL FLOWS

TA7.2



1 AUXILIARY GYM F104 - AUDIO SYSTEM

1 TA7.3
12" = 1'-0"

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STATE OF MISSOURI
CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS, INC.
8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.3001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5360
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

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10/08/20
REVISIONS

13-20102-00

AUDIO-VIDEO SIGNAL FLOWS

TA7.3

TELECOMMUNICATIONS SYMBOLS

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBREVIATIONS ARE USED.

V2.00

STANDARD MOUNTING HEIGHTS

TELECOM BACKBOARD (BOTTOM OF BACKBOARD)	4"
LADDER RACK IN TELECOM ROOMS (BOTTOM OF DEVICE)	90"
CABLE TRAY / CONDUIT AFC (BOTTOM OF PATHWAY)	3"(MIN)
LIGHT FIXTURE IN TELECOM ROOMS (BOTTOM OF DEVICE)	108"(MIN)
TELEPHONE WALL OUTLET (CENTERLINE)	48"
DATA WALL OUTLET	SAME AS ADJACENT DEVICE, UNO
TELEVISION OUTLET	REFER TO ARCH DRAWINGS
TMGB/TGB (CENTERLINE)	84"
WALL CLOCK (CENTERLINE)	84"
INTERCOM (CENTERLINE)	48"

USE THE DEFAULT MOUNTING HEIGHTS SHOWN ABOVE UNO IN THE CONSTRUCTION DOCUMENTS. MOUNTING HEIGHTS LISTED ARE ABOVE FINISHED FLOOR (AFF) OR ABOVE FINISHED GRADE (AFG) TO BOTTOM OF OUTLET BOX. ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH CURRENT ADA AND LOCAL REQUIREMENTS.

ABBREVIATIONS

A	AMPERES
ADA	AMERICANS WITH DISABILITIES ACT
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AP	ACCESS POINT
AV	AUDIO-VIDEO
AWG	AMERICAN WIRE GAUGE
BAS	BUILDING AUTOMATION SYSTEM
BD	BUILDING DISTRIBUTOR
BDF	BUILDING DISTRIBUTION FRAME
BFC	BELOW FINISHED CEILING
C	CONDUIT
CAT	CATEGORY
CATV	COMMUNITY ANTENNA TELEVISION
CCTV	CLOSED CIRCUIT TELEVISION
CD	CAMPUS DISTRIBUTOR
CMP	COMMUNICATIONS PLENUM JACKET
CMR	COMMUNICATIONS RISER JACKET
DAS	DISTRIBUTED ANTENNA SYSTEM
dB	DECIBELS
DEMO	DEMOLITION
(E)	EXISTING
EC	ELECTRICAL CONTRACTOR
ECIA	ELECTRONIC COMPONENTS INDUSTRY ASSOCIATION
EMI	ELECTROMAGNETIC INTERFERENCE
EMS	ENERGY MANAGEMENT SYSTEM
EMT	ELECTRICAL METALLIC TUBING
ER	EQUIPMENT ROOM
ETR	EXISTING TO REMAIN
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FD	FLOOR DISTRIBUTOR
FMC	FLEXIBLE METAL CONDUIT
FS	FIRE STOP SYSTEM
FLR	FLOOR
F/UTP	SCREEN TWISTED PAIR (SHIELDED)
GC	GENERAL CONTRACTOR
GE	GROUNDING EQUALIZER
GYP	GYPSUM BOARD
HC	HORIZONTAL CROSS-CONNECT
HCM	HORIZONTAL CABLE MANAGER
HH	HAND HOLE
Hz	HERTZ
IMC	INTERMEDIATE METAL CONDUIT
IP	INTERNET PROTOCOL
ISP	INTERNET SERVICE PROVIDER
ISP	INSIDE PLANT CABLE
JB	JUNCTION BOX
J-BOX	JUNCTION BOX
LAN	LOCAL AREA NETWORK
LCC	LIMITED COMBUSTIBLE CABLE
LEC	LOCAL EXCHANGE CARRIER
LED	LIGHT-EMITTING DIODE
LF	LINEAR FEET
MAN	METROPOLITAN AREA NETWORK
MATV	MASTER ANTENNA TELEVISION
MC	MAIN CROSS-CONNECT
MDF	MAIN DISTRIBUTION FRAME
MFR	MANUFACTURER
MH	MAINTENANCE HOLE
MM	MULTIMODE
MPOE	MAIN POINT OF ENTRANCE
MPOP	MAIN POINT OF PRESENCE
MTD	MOUNTED
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
nm	NANOMETER
NRTL	NATIONALLY RECOGNIZED TESTING LAB
OC	ON CENTER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OSP	OUTSIDE PLANT
PBX	PRIVATE BRANCH EXCHANGE
POE	POWER OVER ETHERNET
PON	PASSIVE OPTICAL NETWORK
POTS	PLAIN OLD TELEPHONE SERVICE
PSTN	PUBLIC SWITCHED TELEPHONE NETWORK
QTY	QUANTITY
RCDD	REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
RMC	RIGID METAL CONDUIT
RU	RACK UNIT
SCS	STRUCTURED CABLING SYSTEM
SF	SQUARE FEET
SM	SINGLEMODE
SPECS	SPECIFICATIONS
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TBD	TO BE DETERMINED
TIA	TELECOMMUNICATIONS INDUSTRY ASSOCIATION
TGB	TELECOMMUNICATIONS GROUND BUS BAR
TMGB	TELECOMMUNICATIONS MAIN GROUND BUS BAR
TR	TELECOMMUNICATIONS ROOM
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UL	UNDERWRITER LABORATORIES, INC.
UPS	UNINTERRUPTIBLE POWER SUPPLY
U/UTP	UNSHIELDED TWISTED PAIR
V	VOLT(S)
VCM	VERTICAL CABLE MANAGER
W	WIRE
WAN	WIDE AREA NETWORK
WAO	WORK AREA OUTLET
WAP	WIRELESS ACCESS POINT
WP	WEATHER PROOF
WR	WEATHER RESISTANT
WT	WATERTIGHT
XP	EXPLOSION-PROOF

ANNOTATION

- (1) TECHNOLOGY PLAN CALLOUT
- [1] EQUIPMENT DESIGATION (OWNER FURNISHED, CONTRACTOR INSTALLED)
- CONNECTION POINT OF NEW WORK TO EXISTING
- (1 / T1) DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER. LOWER NUMBER INDICATES SHEET NUMBER
- (1 / T1) SECTION CUT DESIGNATION

LINETYPE LEGEND

THROUGHOUT THE DRAWINGS DIFFERENT LINE-TYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS EXISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF THE NEW WORK AND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTURE. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR. PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASES DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE, ETC.

EXISTING	———	NEW	———
DEMOLISH	— — — — —	FUTURE	- - - - - - - -

PATHWAYS

- W"xH" — WIRE MESH CABLE TRAY - DETAILS 1,3,4/TN5.2 (W"=WIDTH, "H"=HEIGHT)
- VERTICAL CABLE TRAY
- D" — UNDERGROUND CONDUIT ("D"=CONDUIT DIAMETER)
- D" — CONDUIT ("D"=CONDUIT DIAMETER)
- CABLE SUPPORTS OR J-HOOKS
- (#) D" / FS — CONDUIT SLEEVE ("#"=QUANTITY, "D"=CONDUIT DIAMETER)
- UL FIRESTOP SYSTEM ASSEMBLY
- PB — L"XW"XH" PULL BOX ("L"=LENGTH, "W"=WIDTH, "H"=HEIGHT)
- SC — SPLICE

RISER DIAGRAMS

- FIBER OPTIC CROSS CONNECT - DETAIL 8/TN5.1
- COPPER UTP CROSS CONNECT
- P — 110-TYPE PROTECTOR BLOCK
- PATCH PANEL — PATCH PANEL - DETAIL 6/TN5.1
- TGB — TELECOM GROUND BAR (TGB) - DETAIL 6/TN5.2
- TMGB — TELECOM MAIN GROUND BAR (TMGB) - DETAIL 7/TN5.2
- TELECOMMUNICATIONS BACKBONE CABLING (REFER TO RISER DIAGRAM FOR MORE INFORMATION)

TELECOMMUNICATIONS ROOM

- LADDER RACK - DETAIL 5/TN5.2
- TMGB — TELECOM MAIN GROUND BAR (TMGB) - WALL ELEVATION VIEW
- TGB — TELECOM GROUND BAR (TGB) - WALL ELEVATION VIEW
- TMGB/TGB - PLAN VIEW
- TELECOM BACKBOARD
- TWO-POST EQUIPMENT RACK
- FOUR-POST EQUIPMENT RACK
- EQUIPMENT CABINET (REFER TO PLAN NOTES ON ENLARGED PLANS FOR MORE INFORMATION)

TELECOMMUNICATIONS OUTLETS

SYMBOL	DESCRIPTION	CABLE(S)	DETAIL
▽ 1D	DATA WALL OUTLET	1	2,4,5/TN5.1
▽ 2D	DATA WALL OUTLET	2	2,4,5/TN5.1
▽ 2D, +12'-0"AFF	DATA WALL OUTLET - WIRELESS ACCESS POINT	2 CAT6A	2,4,5/TN5.1
▽ 2D, +14'-0"AFF	DATA WALL OUTLET - WIRELESS ACCESS POINT	2 CAT6A	2,4,5/TN5.1
▽ 4D	DATA WALL OUTLET	4	2,4,5/TN5.1
▽ 8D	DATA WALL OUTLET	8	2,4,5/TN5.1
▽ W,1D	TELEPHONE, VoIP WAL OUTLET	1	4,5,7/TN5.1
▽ ELEV	ELEVATOR PHONE OUTLET	2	1/TN5.1
2D	DATA CEILING OUTLET - WIRELESS ACCESS POINT	2 CAT6A	5,10/TN5.1
2D, TYPE "E"	MULTI-SERVICE FLOOR BOX WITH DATA AND POWER OUTLETS, REFER TO SPECS FOR FLOOR BOX TYPE	2	3/TN5.1
2D, TYPE "F"	MULTI-SERVICE FLOOR BOX WITH DATA AND POWER OUTLETS, REFER TO SPECS FOR FLOOR BOX TYPE	2	3/TN5.1

TELECOMMUNICATIONS END-POINT DEVICES

DEVICE SCHEDULE

SYMBOL	DESCRIPTION	CABLE(S)	DETAIL
C S	CLOCK, ANALOG SINGLE SIDED, WALL MOUNT	-	-
DC D	CLOCK, DIGITAL DUAL SIDED, CEILING MOUNT	-	-
CB	PAGING CALL BUTTON, WALL MOUNT	1	9/TN5.1
S HRN	PAGING HORN SPEAKER, RECESSED WALL MOUNT	1	9/TN5.1
S R	PAGING SPEAKER, RECESSED WALL MOUNT	1	9/TN5.1
S RC	PAGING SPEAKER, RECESSED CAN CEILING MOUNT	1	9/TN5.1
S RT	PAGING SPEAKER, RECESSED CEILING TILE MOUNT	1	9/TN5.1

TELECOMMUNICATIONS RESPONSIBILITY MATRIX

Description	Furnish: Construction Team	Furnish: Owner	Install: Construction Team	Install: Owner	Comments
General Communications					
Grounding and Bonding	X		X		
Hangers and Supports	X		X		
Conduits and Backboxes	X		X		
Cable Trays	X		X		
Underground pathways for utility entrance and floor boxes	X		X		
Firestops, Conduit Sleeves, and Sleeve Seals	X		X		
Structured Cabling					
Telecom Room Cabinets, Racks, Frames, and Enclosures	X		X		
Telecom Room Buildout (ex. backboard and ladder rack)	X		X		
Telecom Room Uninterruptible Power Supply (UPS)		X	X		
Telecom Room Power Strips		X	X		
Optical Fiber Backbone Cable and Connectivity	X		X		
Copper Backbone Cable and Connectivity	X		X		
Copper Horizontal Cable and Connectivity	X		X		
Data Communications					
Router / Firewall		X		X	
Core Switch / Edge Switch		X		X	
Wireless Access Points		X		X	
Servers / Storage and Backup		X		X	
Laptops / Desktops / Copiers / Printers / Scanners		X		X	
Software		X		X	
Voice Communications					
VoIP Gateway / Analog handsets		X		X	
VoIP handset wall mount kit		X		X	
VoIP handsets		X		X	
VoIP Network licensing		X		X	
Audio-Video Communications					
Conduits and Backboxes for AV systems	X		X		
Refer to AV drawings for AV Scope					
Distributed & Monitoring Communications					
K12 Classroom Analog/IP Paging	X		X		
Wireless Clock Systems	X		X		
Electronic Safety and Security					
Conduits and Backboxes for Security systems	X		X		
Refer to Security drawings for Security Scope					

AUDIO-VIDEO IP END-POINT DEVICES

REFER TO TA-SERIES DRAWINGS FOR AV DEVICES

SYMBOL	DESCRIPTION	CABLE(S)	DETAIL
2D	TEACHER CONNECTION OUTLET	2	REFER TO TA-SERIES
2D	TEACHER CONNECTION OUTLET	2	REFER TO TA-SERIES
2D	DISPLAY INPUT OUTLET	2	REFER TO TA-SERIES
2D	DISPLAY INPUT OUTLET	2	REFER TO TA-SERIES
2D	TELEVISION WALL OUTLET	2	REFER TO TA-SERIES
2D	VIDEO OUTPUT OUTLET	2	REFER TO TA-SERIES

SECURITY IP END-POINT DEVICES

REFER TO TY-SERIES DRAWINGS FOR SECURITY DEVICES

SYMBOL	DESCRIPTION	CABLE(S)	DETAIL
1D	CEILING SECURITY CAMERA	1	REFER TO TY-SERIES
1D	WALL SECURITY CAMERA	1	REFER TO TY-SERIES

GENERAL NEW WORK NOTES

1. READ THE SPECIFICATIONS AND REVIEW DRAWINGS OF ALL DIVISIONS OF WORK. COORDINATE THIS WORK WITH ALL OTHER DIVISIONS OF WORK AND ALL SUBCONTRACTORS.
2. ALL WORK SHALL CONFORM TO THE APPLICABLE SPECIFICATIONS (DIVISION 26, DIVISION 27, DIVISION 28, ETC.) AND THE CUSTOMER PRE-ESTABLISHED STRUCTURED CABLING STANDARDS. SHOULD DIFFERENCES EXIST IN THE SPECIFICATIONS RELATING TO TECHNOLOGY AND THE CLIENT'S PRE-ESTABLISHED STANDARDS THE CONTRACTOR SHALL CONTACT THE LOW VOLTAGE ENGINEER FOR CLARIFICATION THROUGH THE RFI PROCESS.
3. FULLY COORDINATE ALL CABLE TRAY, FIRE STOP CONDUITS / SLEEVES, AND CONDUIT ROUTING WITH STRUCTURAL ELEMENTS. COORDINATE CABLE TRAY AND CONDUIT INSTALLATIONS WITH ARCHITECT, STRUCTURAL ENGINEER, STRUCTURAL CONTRACTOR, AND GENERAL CONTRACTOR PRIOR TO INSTALLATION. ROUTING IN CONCRETE SLAB OR UNDER SLAB (WHERE CONDUIT WOULD BE ON GRADE) REQUIRES THE USE OF WET LOCATION RATED CABLES.
4. ALL TELECOMMUNICATIONS CONTINUOUS PATHWAYS SHALL BE BONDED TO THE TELECOMMUNICATIONS BONDING BACKBONE. FOR CONDUITS, INSULATION BUSHINGS SHALL BE USED AT THE END OF THE CONDUIT THE FARTHEST AWAY FROM THE SERVING TR; A BONDING BUSHING SHALL BE USED AT THE END CLOSEST TO THE SERVING TR. CONTRACTOR TO REFER TO THE ANSI-STD-J 607 STANDARD FOR ADDITIONAL INFORMATION AS TO THE INSTALLATION OF THE TELECOMMUNICATIONS BONDING BACKBONE.
5. ALL FIRE RATED WALL / FLOOR ASSEMBLIES PENETRATED FOR TELECOMMUNICATIONS CABLING PATHWAYS SHALL BE FIRE STOPPED WITH THE APPROVED FIRE STOP SYSTEMS (F/S). ALL FIRESTOP SYSTEMS SHALL BE INSTALLED AS DIRECTED BY THE MANUFACTURER AND AS SPECIFIED IN DIVISION 07 07 84.00 - "FIRESTOPPING". FIRE STOP ASSEMBLY LOCATIONS ARE TO BE COORDINATED WITH CABLE TRAY PATHWAY TO TELECOMMUNICATIONS ROOM - SEE DETAIL 2/TN5.2.
6. BACK BOXES AND CONDUIT LOCATIONS IN PRECAST CONCRETE WALLS SHALL BE COORDINATED WITH ARCHITECT, STRUCTURAL ENGINEER, AND GC PRIOR TO ORDERING THE PRECAST WALLS.
7. ROUTING OF CABLES SHALL BE CONCEALED. CABLES SHALL BE ROUTED IN CONDUIT IN EXPOSED AREAS. MINIMIZE AMOUNT OF EXPOSED CONDUIT BY EMBEDDING CONDUIT IN SLAB WHEN POSSIBLE. EMBEDDED CONDUITS AND PENETRATIONS OF STRUCTURE SHALL FOLLOW DETAILS IN STRUCTURAL DRAWINGS. WHEN CONDUITS CAN ONLY BE INSTALLED EXPOSED, NOTIFY ARCHITECT PRIOR TO START OF INSTALLATION OF CONDUITS. CABLES SHALL BE ROUTED IN CONDUIT WHEN ABOVE HARD CEILINGS. CONDUITS FOR ELEVATOR PHONES AND FIRE ALARM CONTROL PANEL SHALL BE CONTINUOUS (HOMERUN) FROM THE TELECOMMUNICATIONS ROOM TO THE APPLICABLE BOX / CABINET. CONTRACTOR SHALL SIZE AND PROVIDE CONDUITS TO MEET TIA-569.
8. TELECOMMUNICATIONS ROOMS SHALL BE DEDICATED FOR INFORMATION TECHNOLOGY USE (I.E. NO SHARED SPACE WITH A JANITOR, FIRE ALARM SYSTEM, ETC.) NO SERVICES SHALL PASS THROUGH THE SPACE UNLESS DEDICATED TO THE SPACE (NO PLUMBING, MECHANICAL, ELECTRICAL, FIRE, ETC.)

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STATE OF MISSOURI
CURTIS A. OLDS
NUMBER PE-2018036440
PROFESSIONAL ENGINEER

Oct 8 2020

CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTERPRISE DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.0501
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

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TECHNOLOGY GENERAL NOTES AND LEGEND

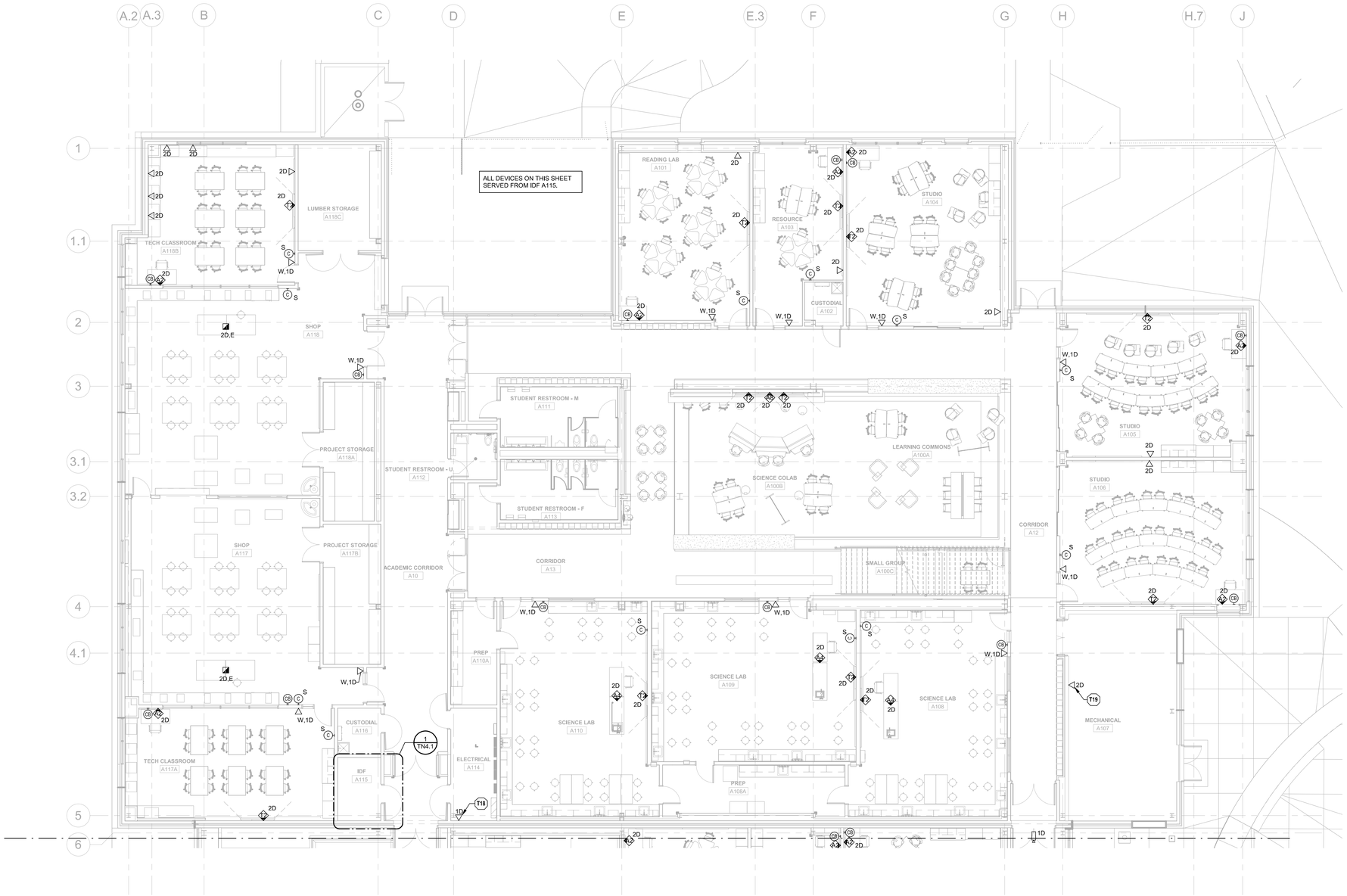
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TECHNOLOGY PLAN NOTES:

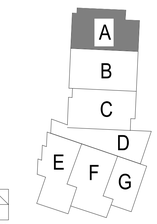
T18 DATA OUTLET FOR LIGHTING CONTROL PANEL. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO ROUGH-IN.

T19 DATA OUTLET FOR BAS PANEL. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH PANEL INSTALLER PRIOR TO ROUGH-IN.



1 TECHNOLOGY FIRST LEVEL PLAN - AREA A
1/8" = 1'-0"

KEY PLAN



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STATE OF MISSOURI
CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5360
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
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TECHNOLOGY FIRST LEVEL PLAN - AREA A

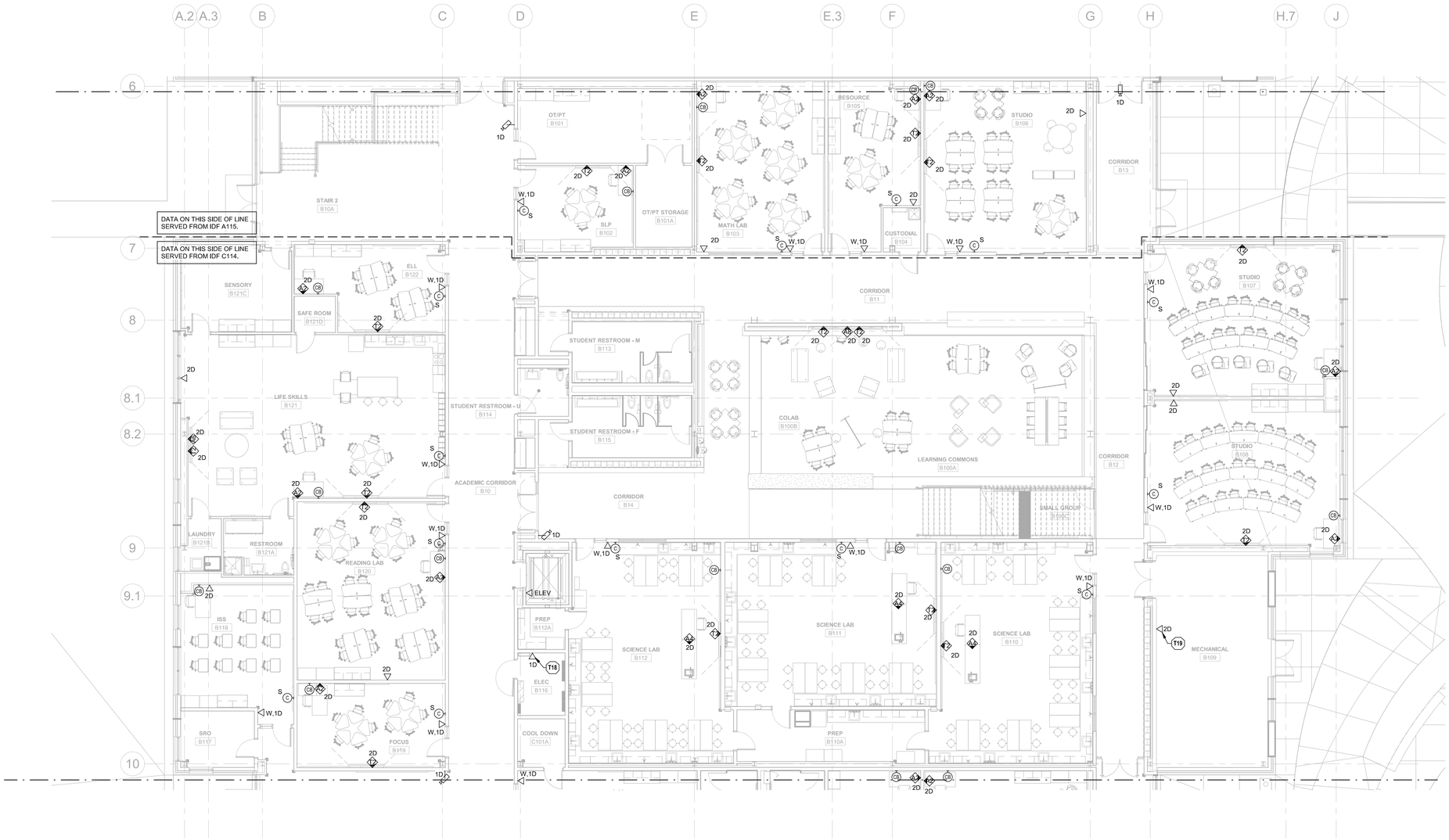
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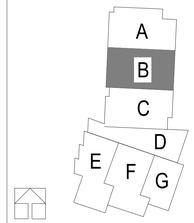
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1 TECHNOLOGY FIRST LEVEL PLAN - AREA B
1/8" = 1'-0"

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STATE OF MISSOURI
CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5360
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TECHNOLOGY FIRST LEVEL PLAN - AREA B

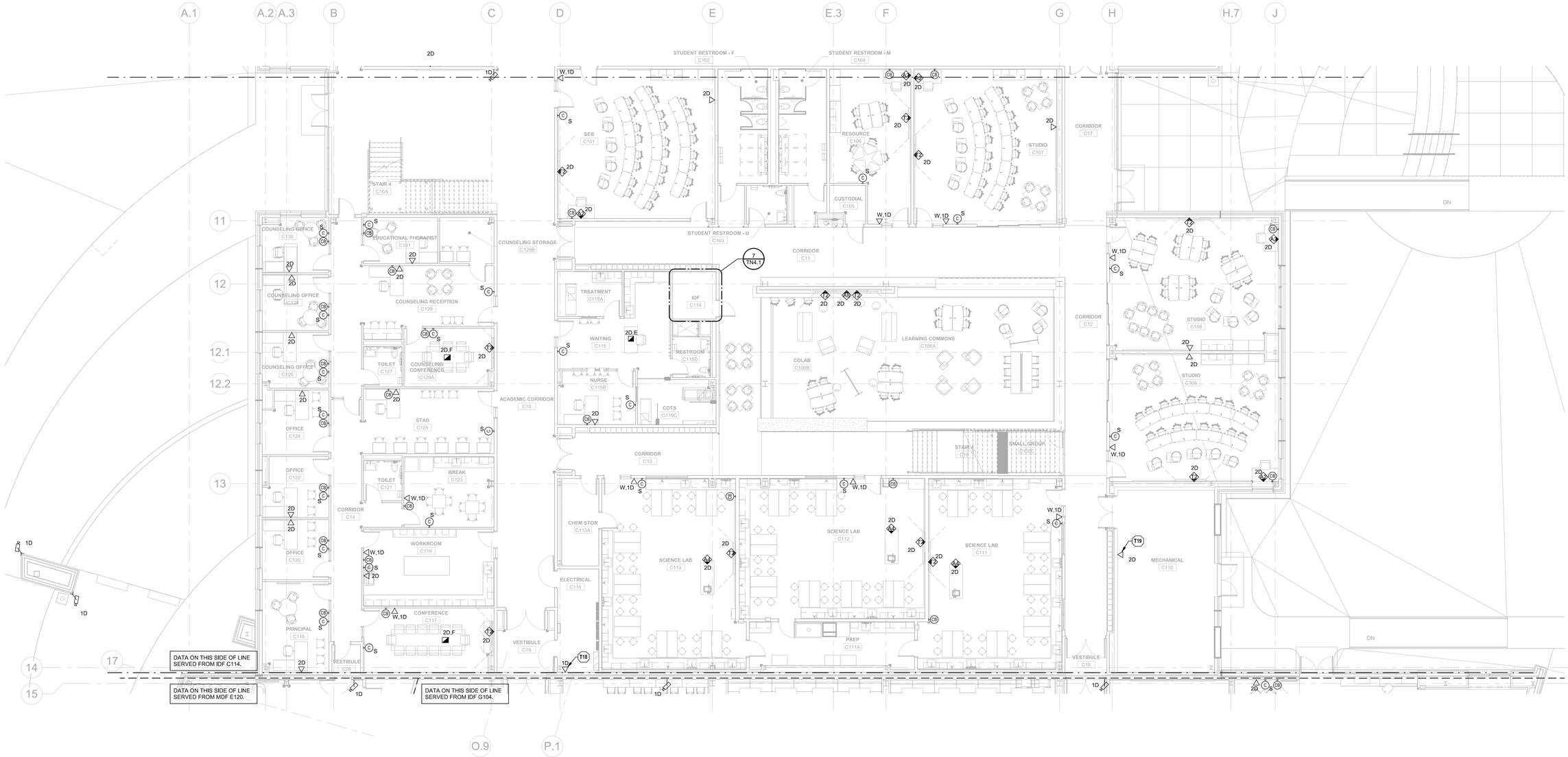
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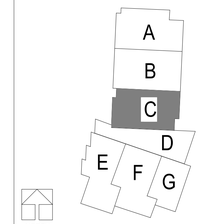
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1 TECHNOLOGY FIRST LEVEL PLAN - AREA C
1/8" = 1'-0"

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CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
EXPIRES 12/31/2020

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LEE'S SUMMIT R-7 SCHOOL DISTRICT
1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

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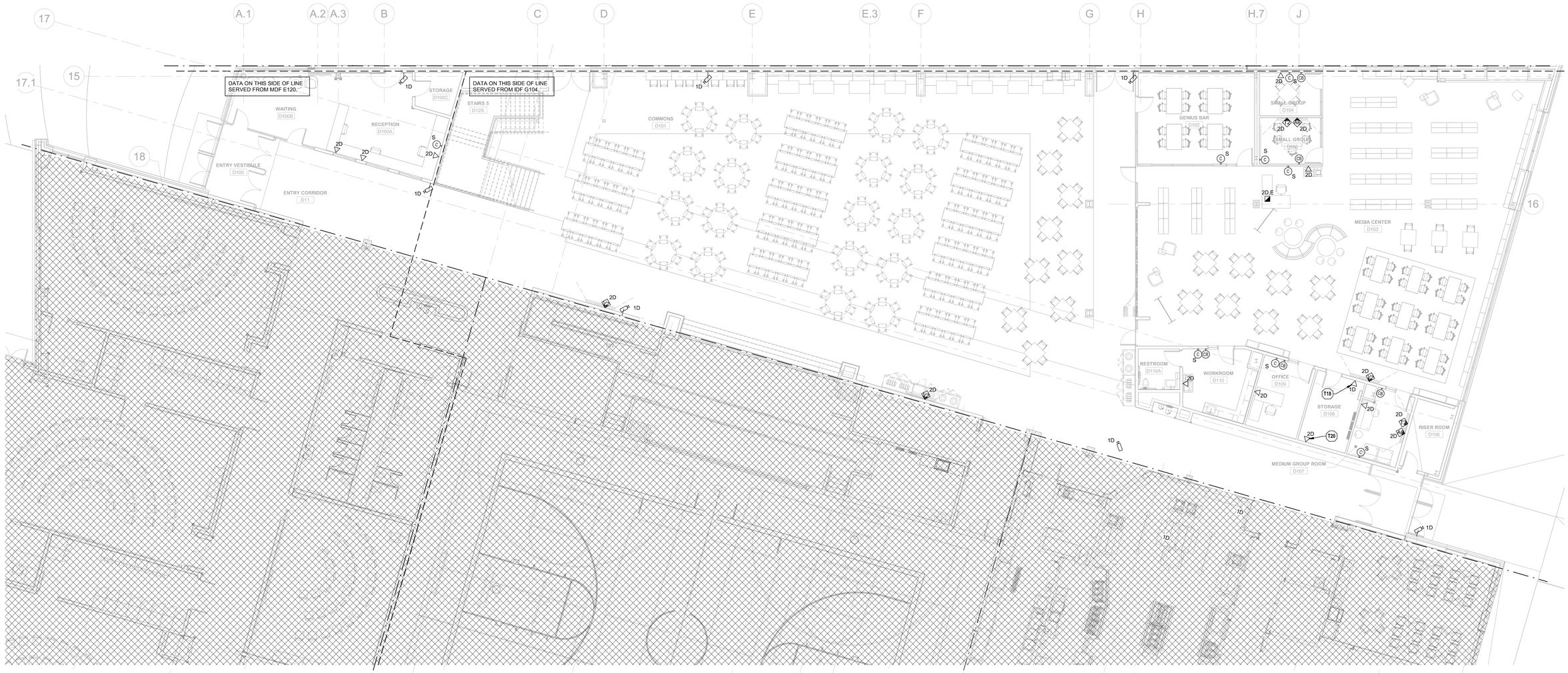
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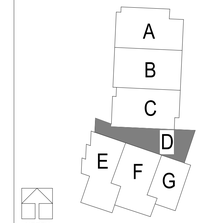
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T20 DATA OUTLET FOR AV RACK. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH AV CONTRACTOR PRIOR TO ROUGH-IN.



1 TECHNOLOGY FIRST LEVEL PLAN - AREA D
1/8" = 1'-0"

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CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
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LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
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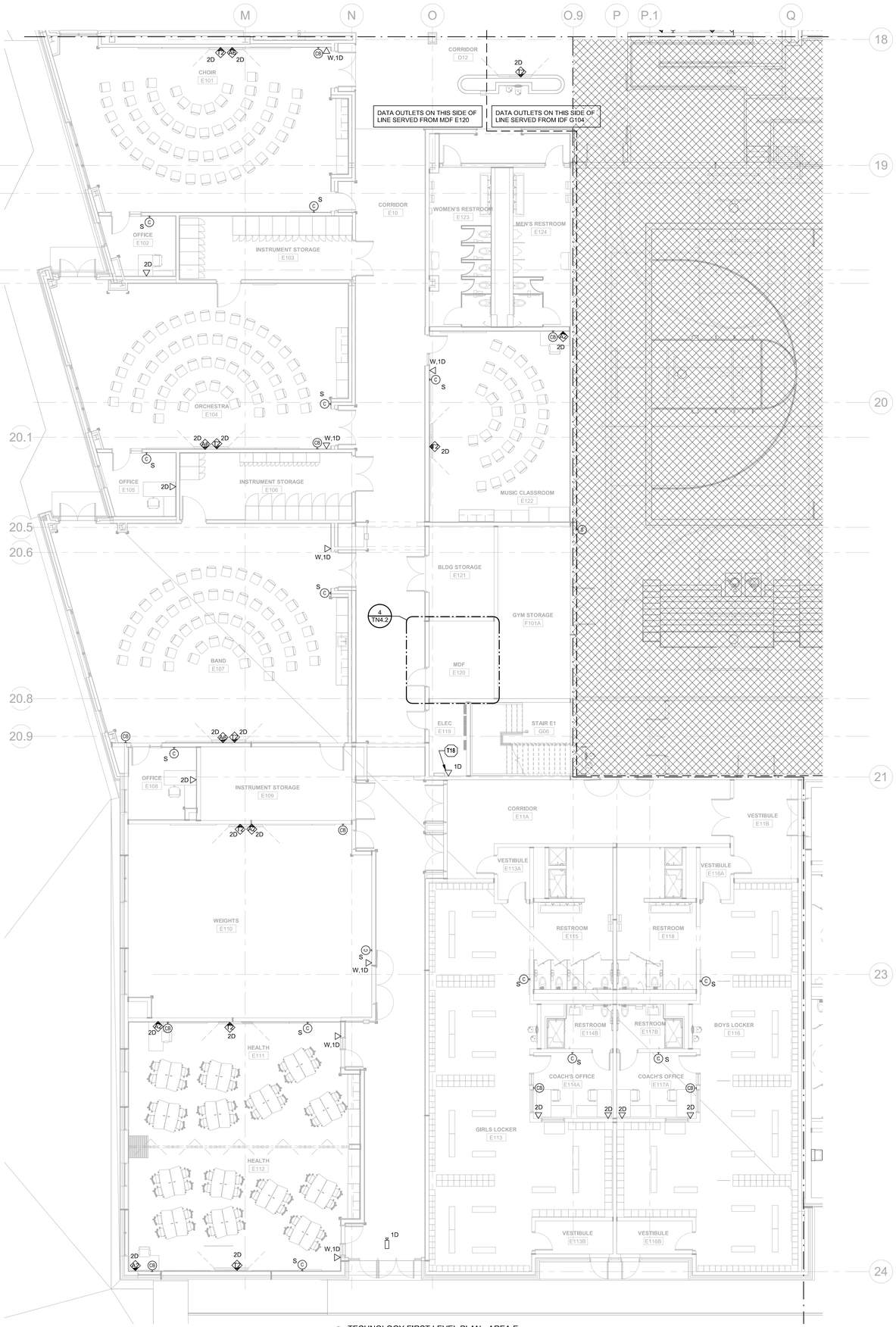
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TECHNOLOGY FIRST LEVEL PLAN - AREA D

TN1.1D

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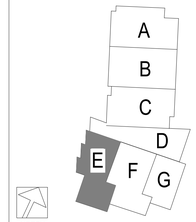


1 TECHNOLOGY FIRST LEVEL PLAN - AREA E
1/8" = 1'-0"

TECHNOLOGY PLAN NOTES:

T18 DATA OUTLET FOR LIGHTING CONTROL PANEL. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO ROUGH-IN.

KEY PLAN



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CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
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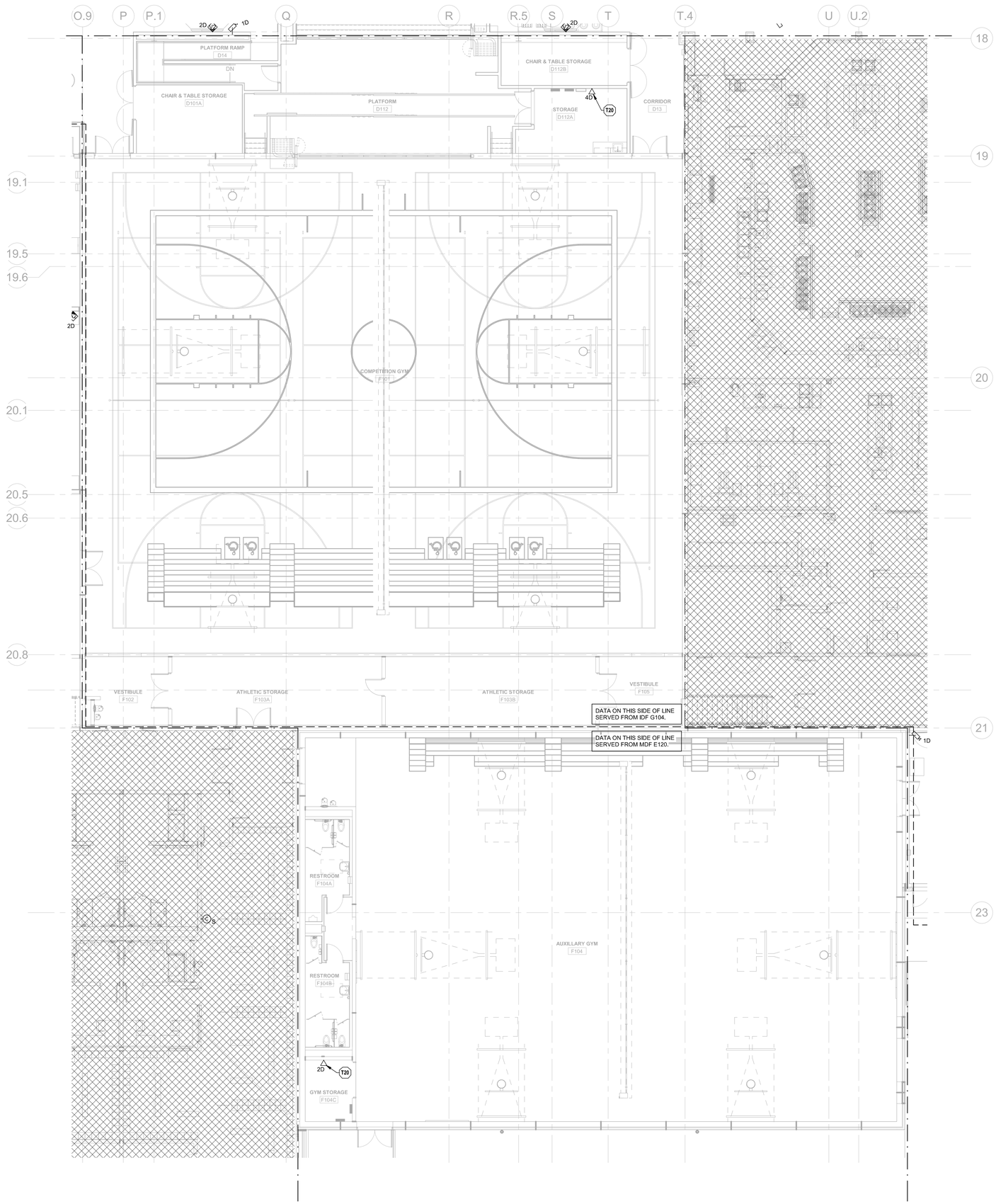
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REVISIONS

13-20102-00

TECHNOLOGY
FIRST LEVEL
PLAN - AREA E

TN1.1E

CURTIS A. OLDS

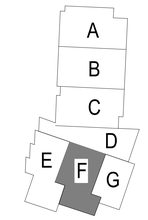


1 TECHNOLOGY FIRST LEVEL PLAN - AREA F
1/8" = 1'-0"

TECHNOLOGY PLAN NOTES:

T20 DATA OUTLET FOR AV RACK. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH AV CONTRACTOR PRIOR TO ROUGH-IN.

KEY PLAN



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CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTEX PKWY E, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
MO. CERTIFICATE OF AUTHORITY NO. E-5060
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

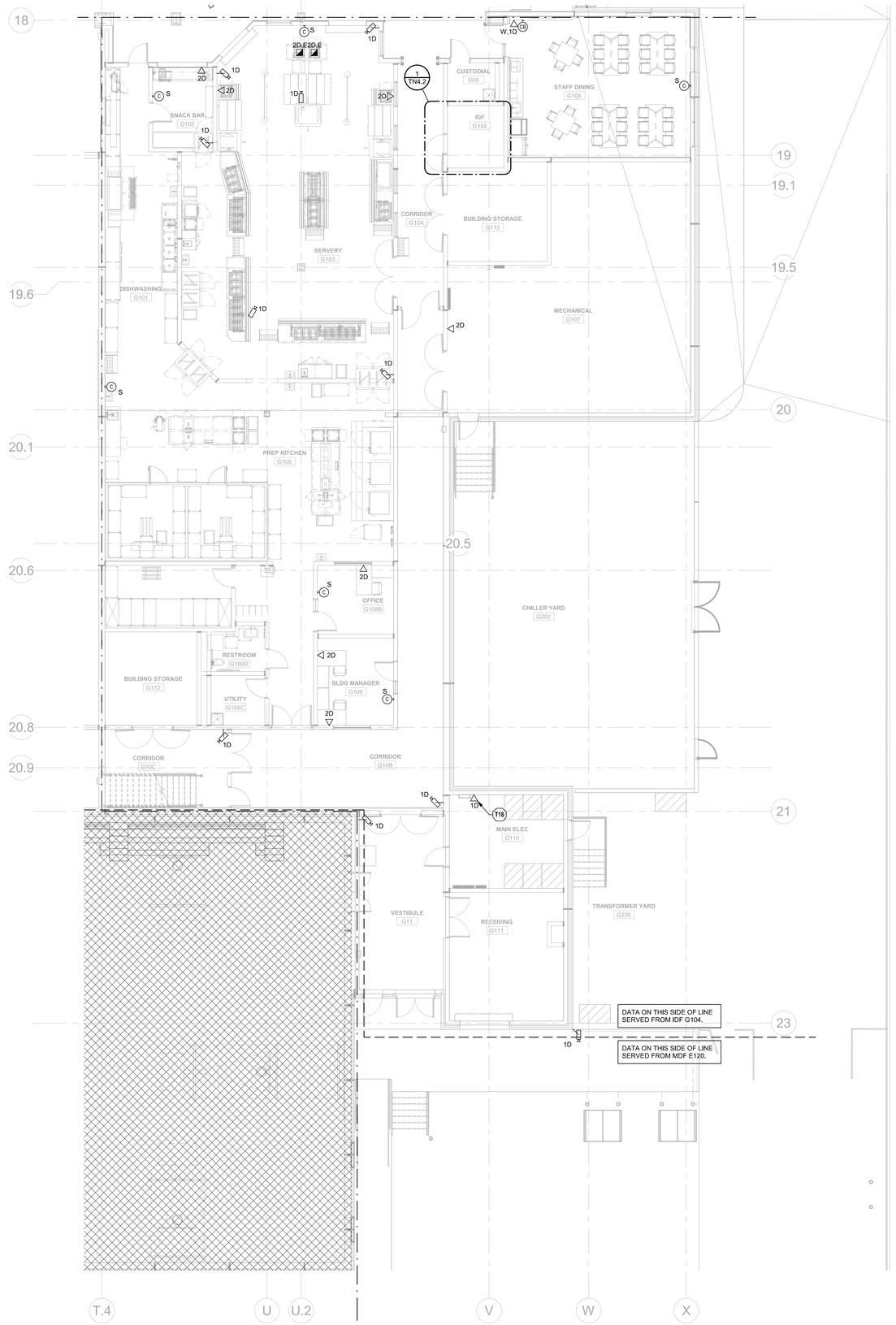
PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

13-20102-00

TECHNOLOGY FIRST LEVEL PLAN - AREA F

TN1.1F

CURTIS A. OLDS



1 TECHNOLOGY FIRST LEVEL PLAN - AREA G
1/8" = 1'-0"

TECHNOLOGY PLAN NOTES:

T18 DATA OUTLET FOR LIGHTING CONTROL PANEL. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO ROUGH-IN.

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CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2300 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
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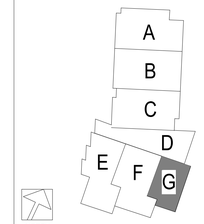
LEE'S SUMMIT MIDDLE SCHOOL #4

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KEY PLAN



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TECHNOLOGY FIRST LEVEL PLAN - AREA G

TN1.1G

CURTIS A. OLDS

TECHNOLOGY PLAN NOTES:

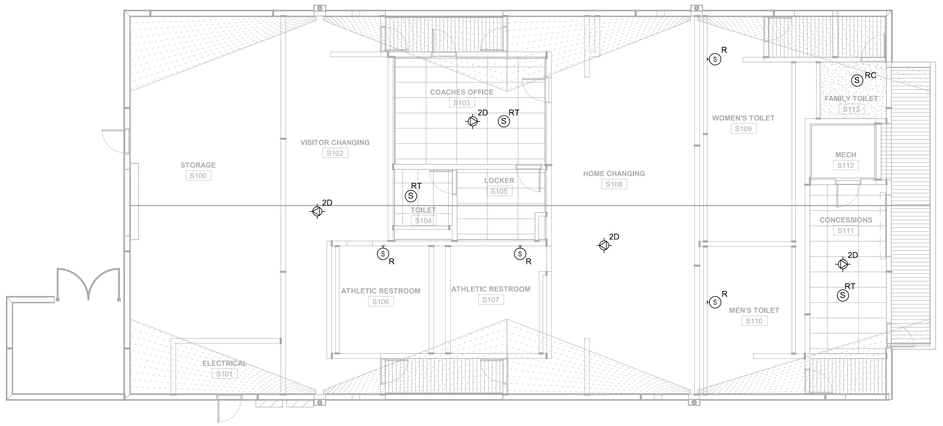
T2 PROVIDE TELECOMMUNICATIONS GROUNDING BUS BAR (TGB) MOUNTED AT 7'-0"AFF, SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T4 PROVIDE 4'X4' SHEET OF GRADE A/C 3/4" FIRE RATED PLYWOOD BACKBOARD (UNPAINTED) BEHIND RACK. THE A SIDE SHALL BE EXPOSED TO THE INTERIOR OF THE ROOM AND THE C SIDE PLACED AGAINST THE BUILDING STRUCTURE. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

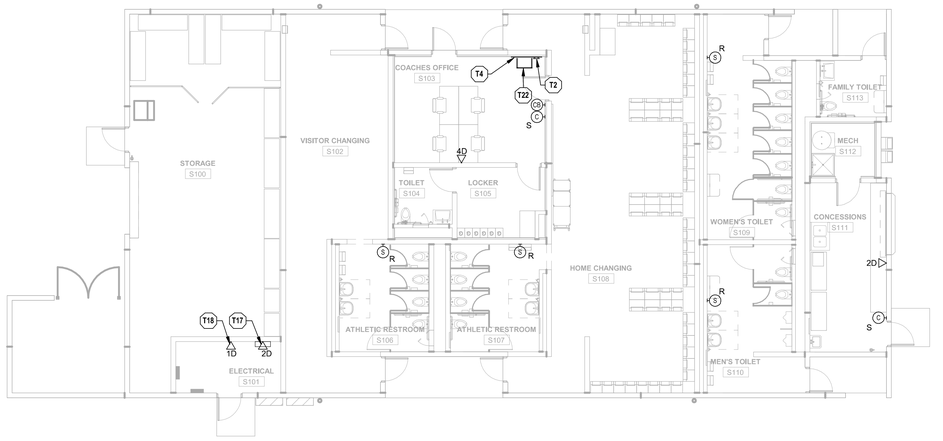
T17 DATA OUTLET FOR SECURITY PANEL. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH SECURITY CONTRACTOR PRIOR TO ROUGH-IN.

T18 DATA OUTLET FOR LIGHTING CONTROL PANEL. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO ROUGH-IN.

T22 FIXED WALL RACK TO SERVE FIELDS. PROVIDE OPTICAL FIBER PANEL AND PATCH PANELS AS REQUIRED TO SUPPORT DATA OUTLETS PER DIVISION 27 SPECIFICATIONS.



2 TECHNOLOGY FIRST LEVEL RCP - AREA S
1/8" = 1'-0"



1 TECHNOLOGY FIRST LEVEL PLAN - AREA S
1/8" = 1'-0"

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CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS, INC.
8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
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LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

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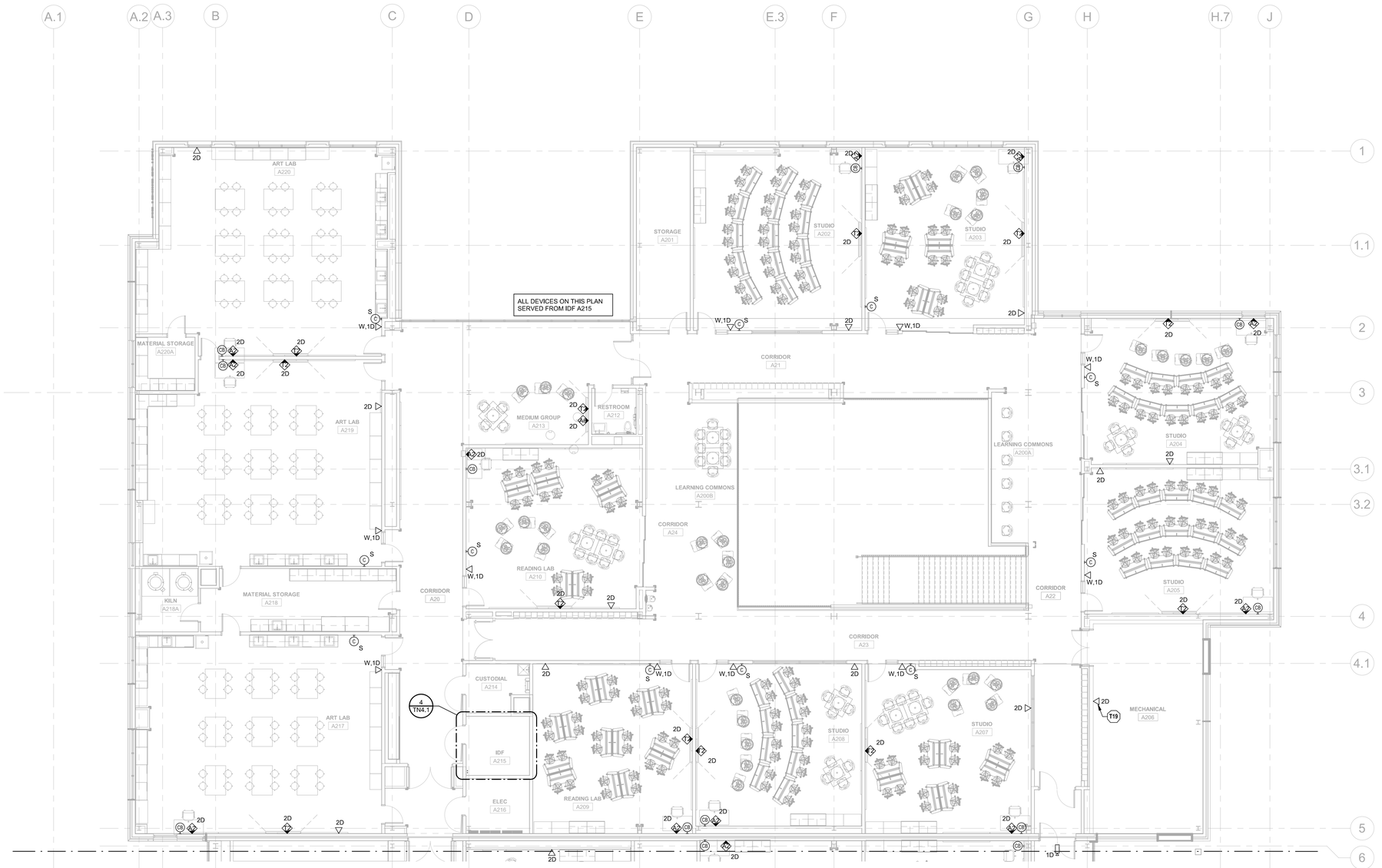
TECHNOLOGY FIRST LEVEL PLAN - AREA S

TN1.1S

CURTIS A. OLDS

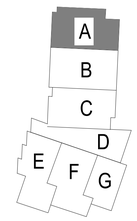
TECHNOLOGY PLAN NOTES:

T19 DATA OUTLET FOR BAS PANEL. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH PANEL INSTALLER PRIOR TO ROUGH-IN.



1 TECHNOLOGY SECOND LEVEL PLAN - AREA A
1/8" = 1'-0"

KEY PLAN



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CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTERPRISE CIRCLE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
MO. CERTIFICATE OF AUTHORITY NO. E-5060
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

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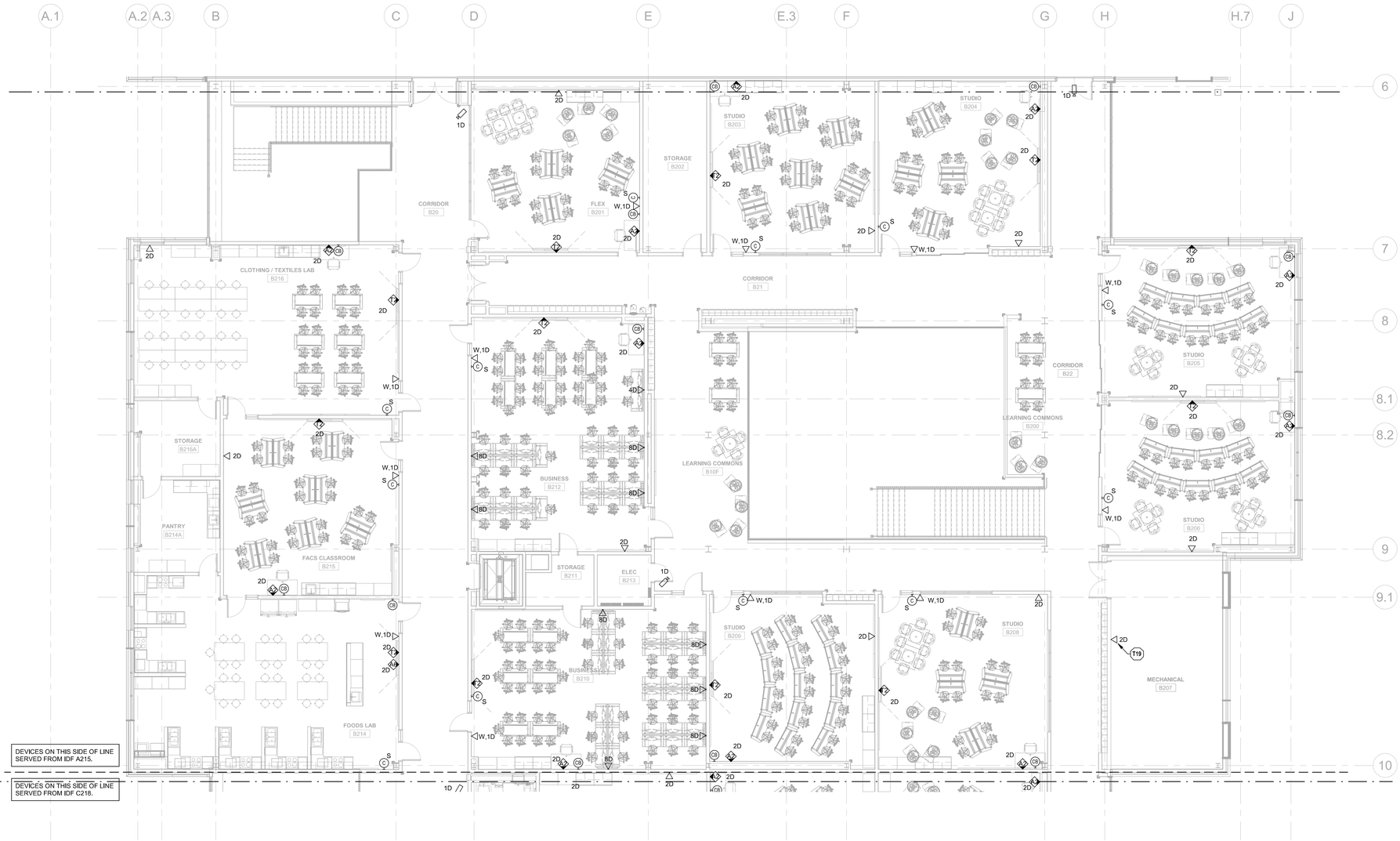
TECHNOLOGY SECOND LEVEL PLAN - AREA A

TN1.2A

CURTIS A. OLDS

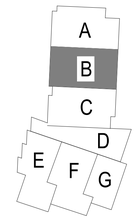
TECHNOLOGY PLAN NOTES:

T19 DATA OUTLET FOR BAS PANEL. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH PANEL INSTALLER PRIOR TO ROUGH-IN.



1 TECHNOLOGY SECOND LEVEL PLAN - AREA B
1/8" = 1'-0"

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CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5360
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LEE'S SUMMIT R-7 SCHOOL DISTRICT

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LEE'S SUMMIT, MO 64081

PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

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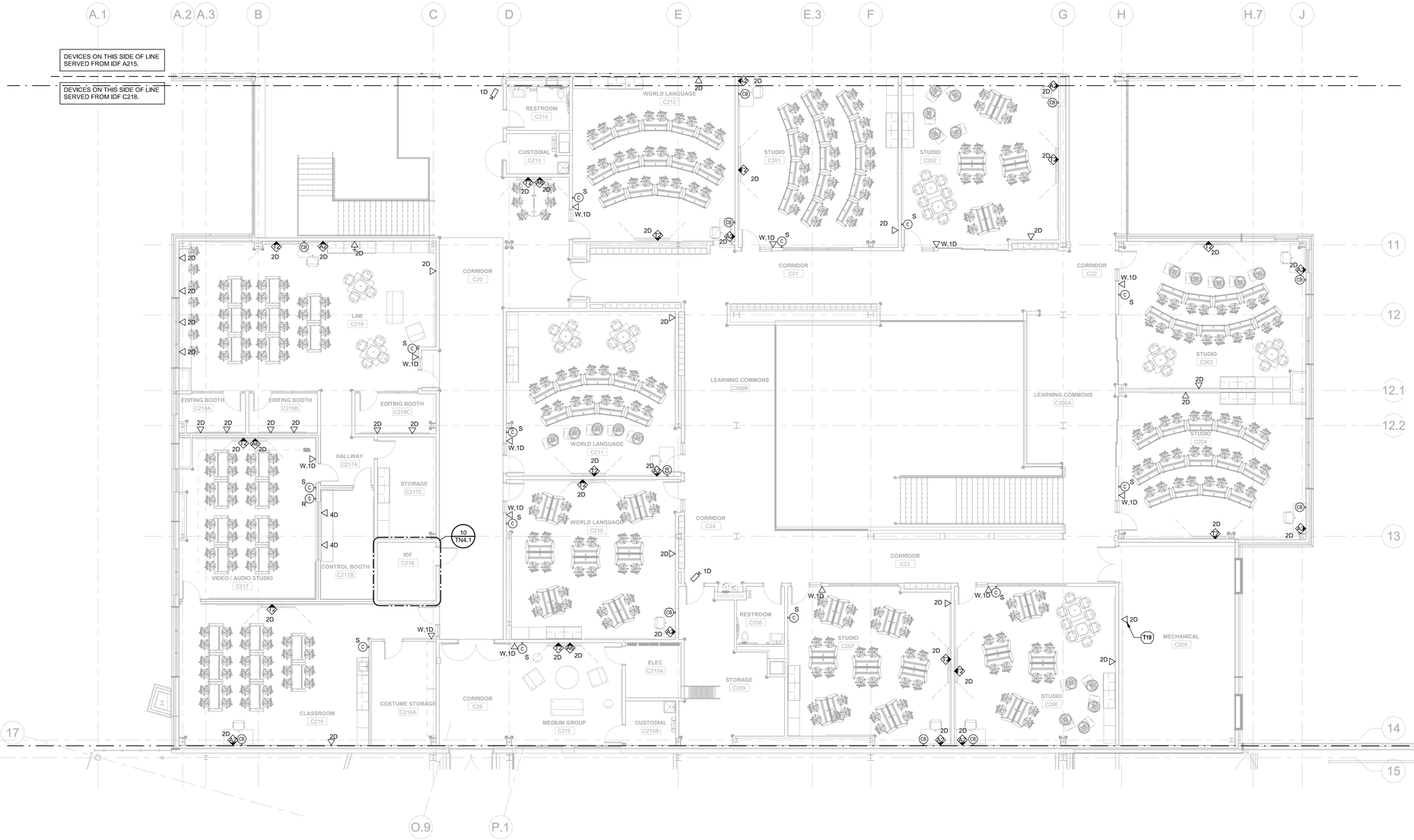
TECHNOLOGY SECOND LEVEL PLAN - AREA B

TN1.2B

CURTIS A. OLDS

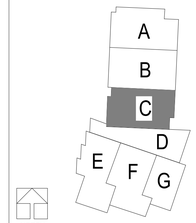
TECHNOLOGY PLAN NOTES:

T19 DATA OUTLET FOR BAS PANEL. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH PANEL INSTALLER PRIOR TO ROUGH-IN.



1 TECHNOLOGY SECOND LEVEL PLAN - AREA C
1/8" = 1'-0"

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CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

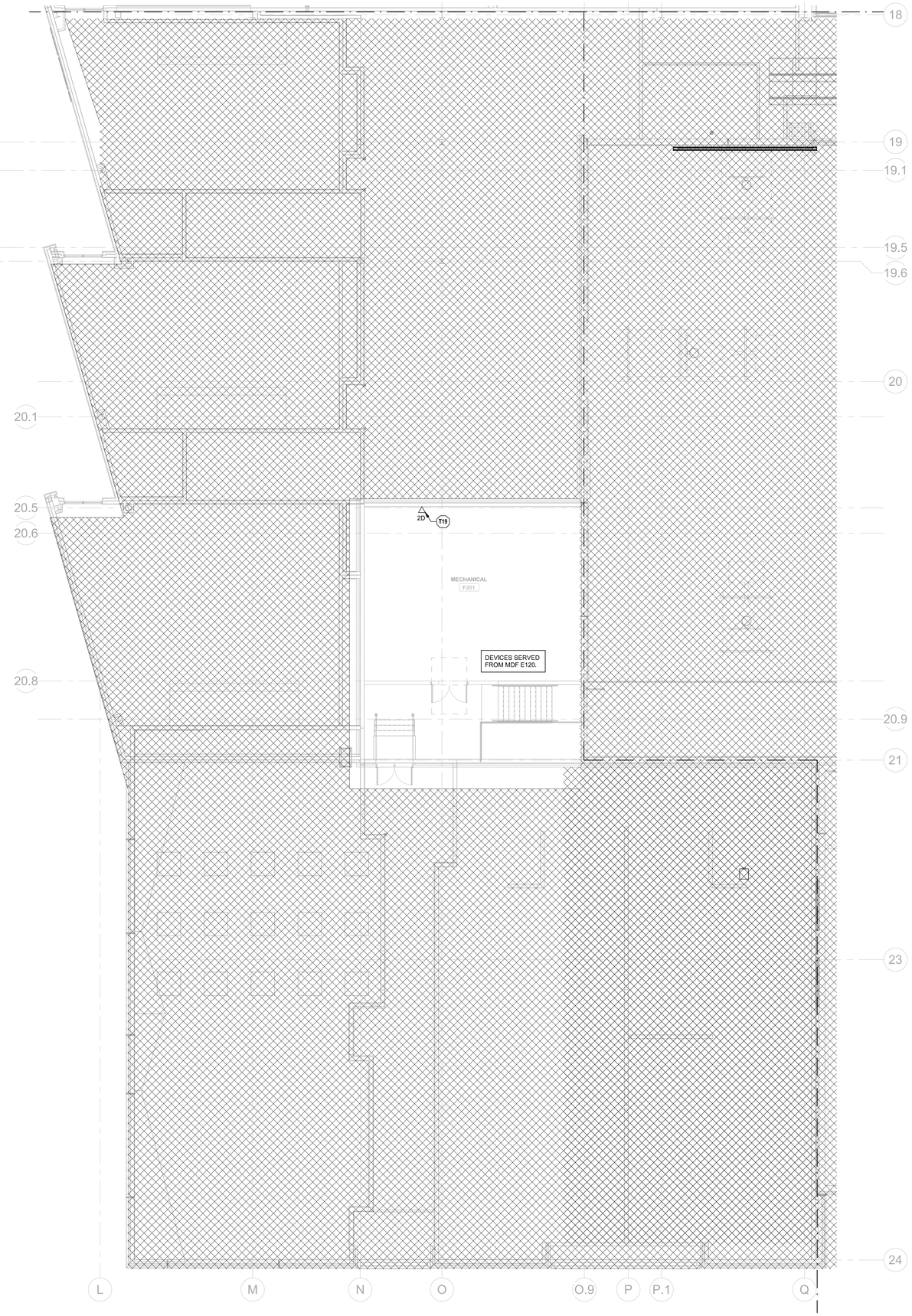
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REVISIONS

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TECHNOLOGY SECOND LEVEL PLAN - AREA C

TN1.2C

CURTIS A. OLDS

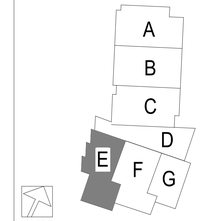


1 TECHNOLOGY SECOND LEVEL PLAN - AREA E
1/8" = 1'-0"

TECHNOLOGY PLAN NOTES:

T19 DATA OUTLET FOR BAS PANEL. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH PANEL INSTALLER PRIOR TO ROUGH-IN.

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CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
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LEE'S SUMMIT R-7 SCHOOL DISTRICT

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TECHNOLOGY SECOND LEVEL PLAN - AREA E

TN1.2E

CURTIS A. OLDS

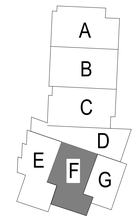


1 TECHNOLOGY SECOND LEVEL PLAN - AREA F
1/8" = 1'-0"

TECHNOLOGY PLAN NOTES:

T21 DATA OUTLET FOR PROJECTOR. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH AV CONTRACTOR PRIOR TO ROUGH-IN.

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CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
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LEE'S SUMMIT R-7 SCHOOL DISTRICT

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LEE'S SUMMIT, MO 64081

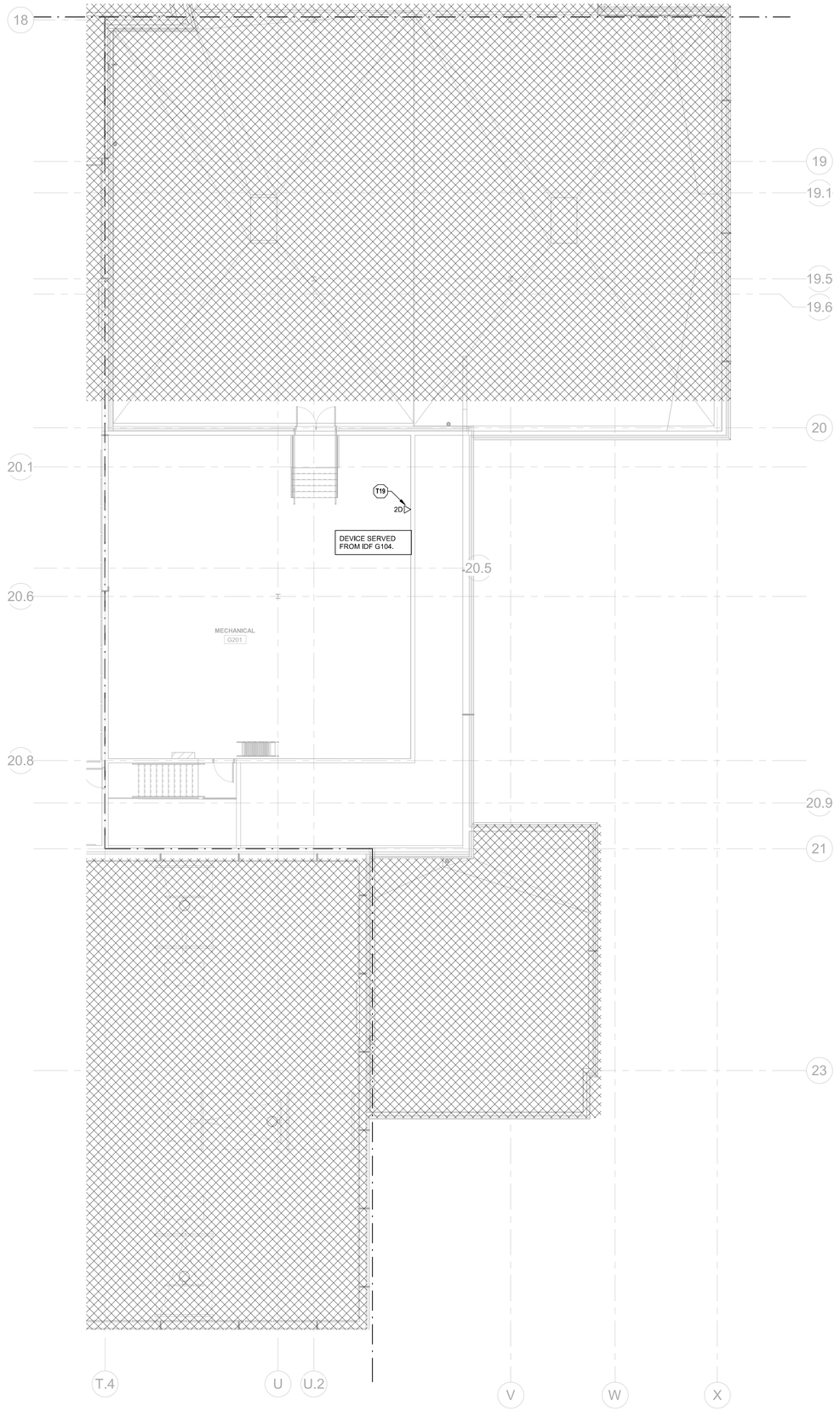
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TECHNOLOGY SECOND LEVEL PLAN - AREA F

TN1.2F

CURTIS A. OLDS



1 TECHNOLOGY SECOND LEVEL PLAN - AREA G
1/8" = 1'-0"

TECHNOLOGY PLAN NOTES:

T19 DATA OUTLET FOR BAS PANEL. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH PANEL INSTALLER PRIOR TO ROUGH-IN.

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CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
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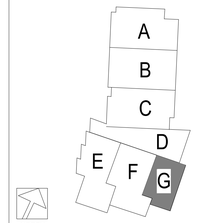
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LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

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TECHNOLOGY SECOND LEVEL PLAN - AREA G

TN1.2G

CURTIS A. OLDS



1 TECHNOLOGY FIRST LEVEL RCP - AREA A
1/8" = 1'-0"

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NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTEX, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
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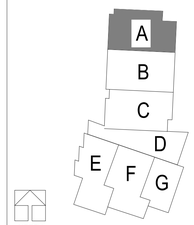
LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

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LEE'S SUMMIT, MO 64081

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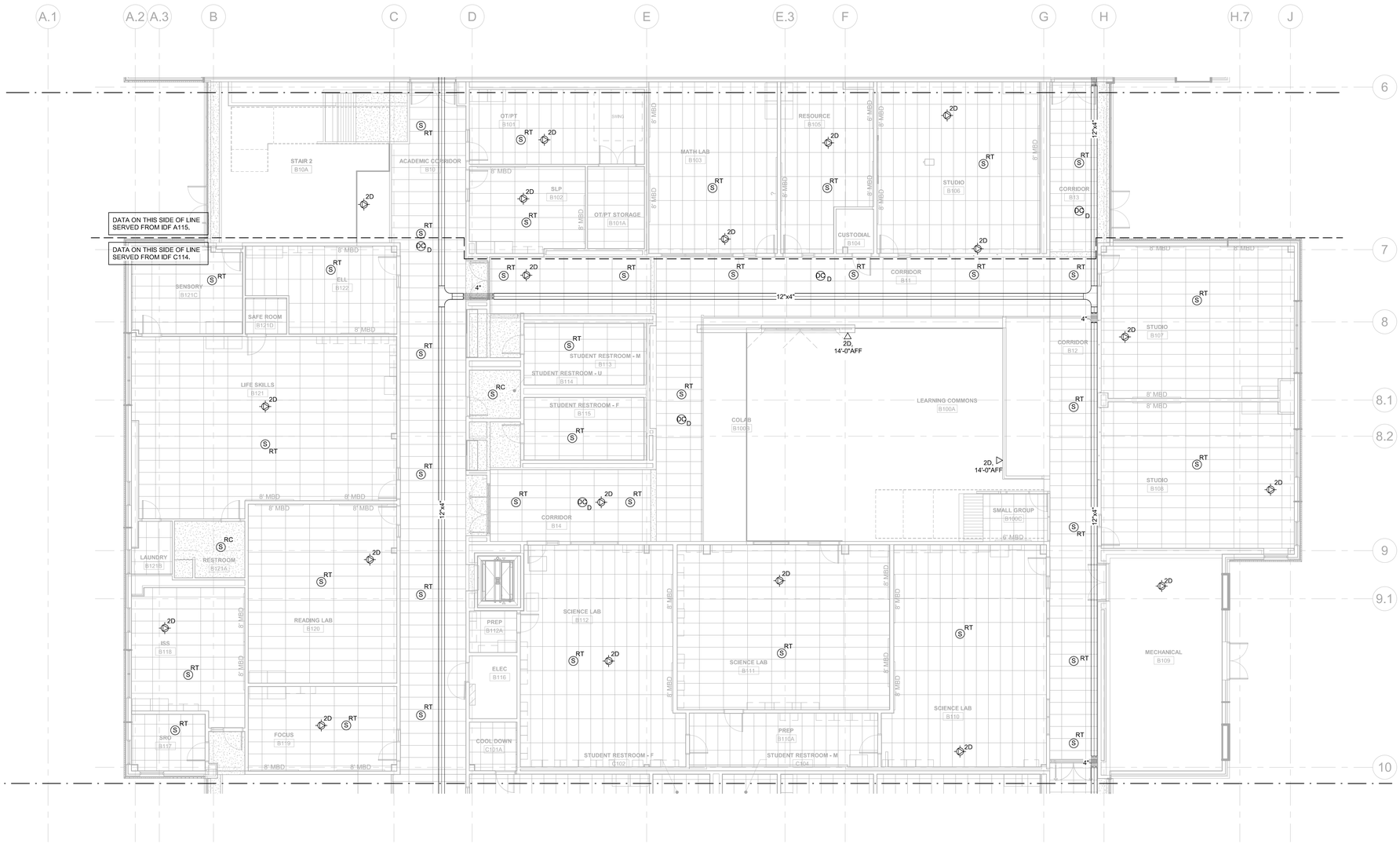


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TECHNOLOGY FIRST LEVEL RCP - AREA A

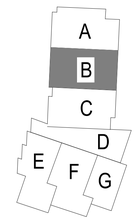
TN2.1A

CURTIS A. OLDS



1 TECHNOLOGY FIRST LEVEL RCP - AREA B
1/8" = 1'-0"

KEY PLAN



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NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.3001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5360
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LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

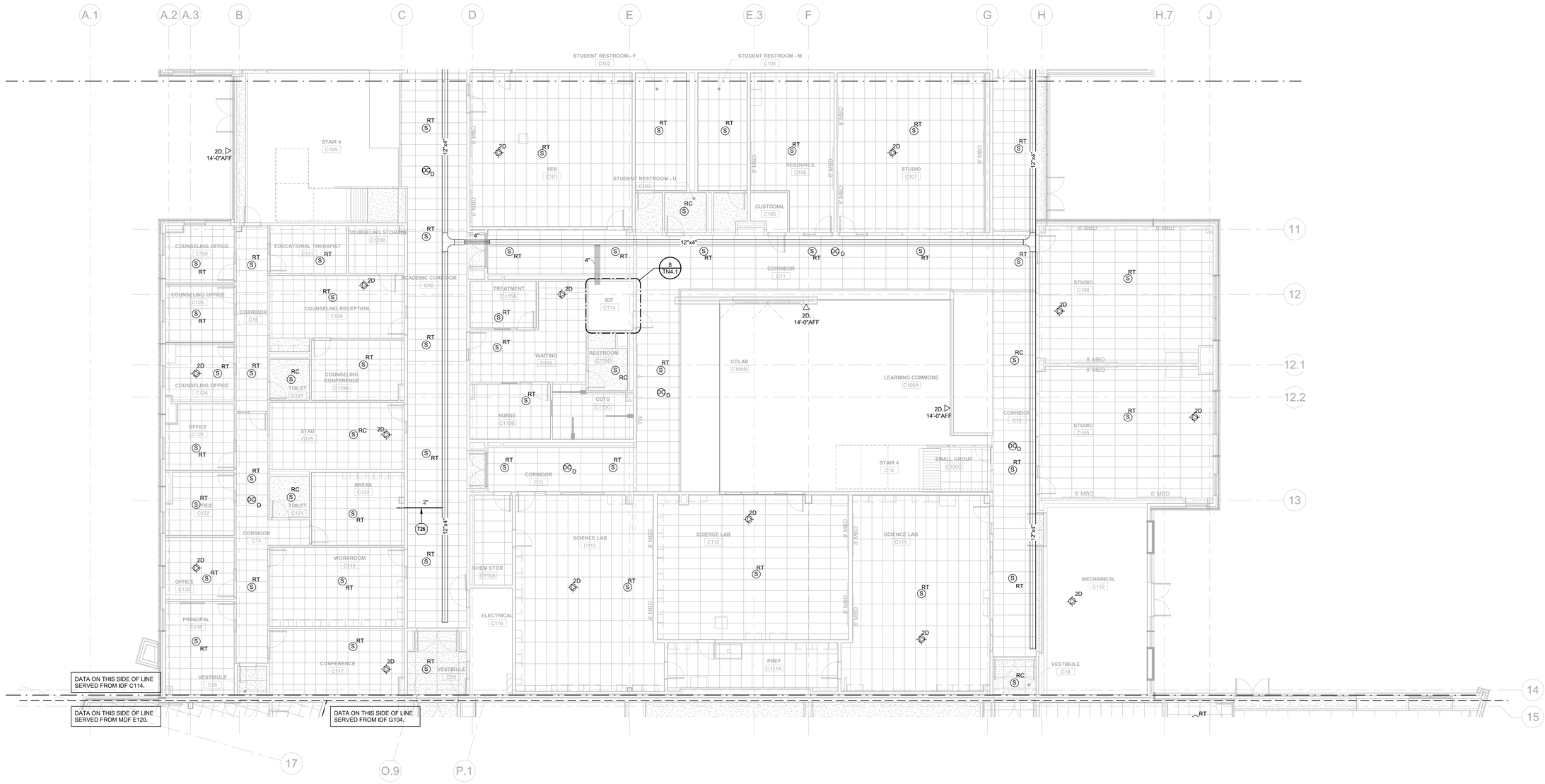
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TECHNOLOGY FIRST LEVEL RCP - AREA B

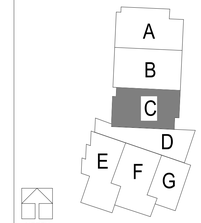
TN2.1B

CURTIS A. OLDS



1 TECHNOLOGY FIRST LEVEL RCP - AREA C
1/8" = 1'-0"

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Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4
LEE'S SUMMIT R-7 SCHOOL DISTRICT
1001 SE BAILEY ROAD
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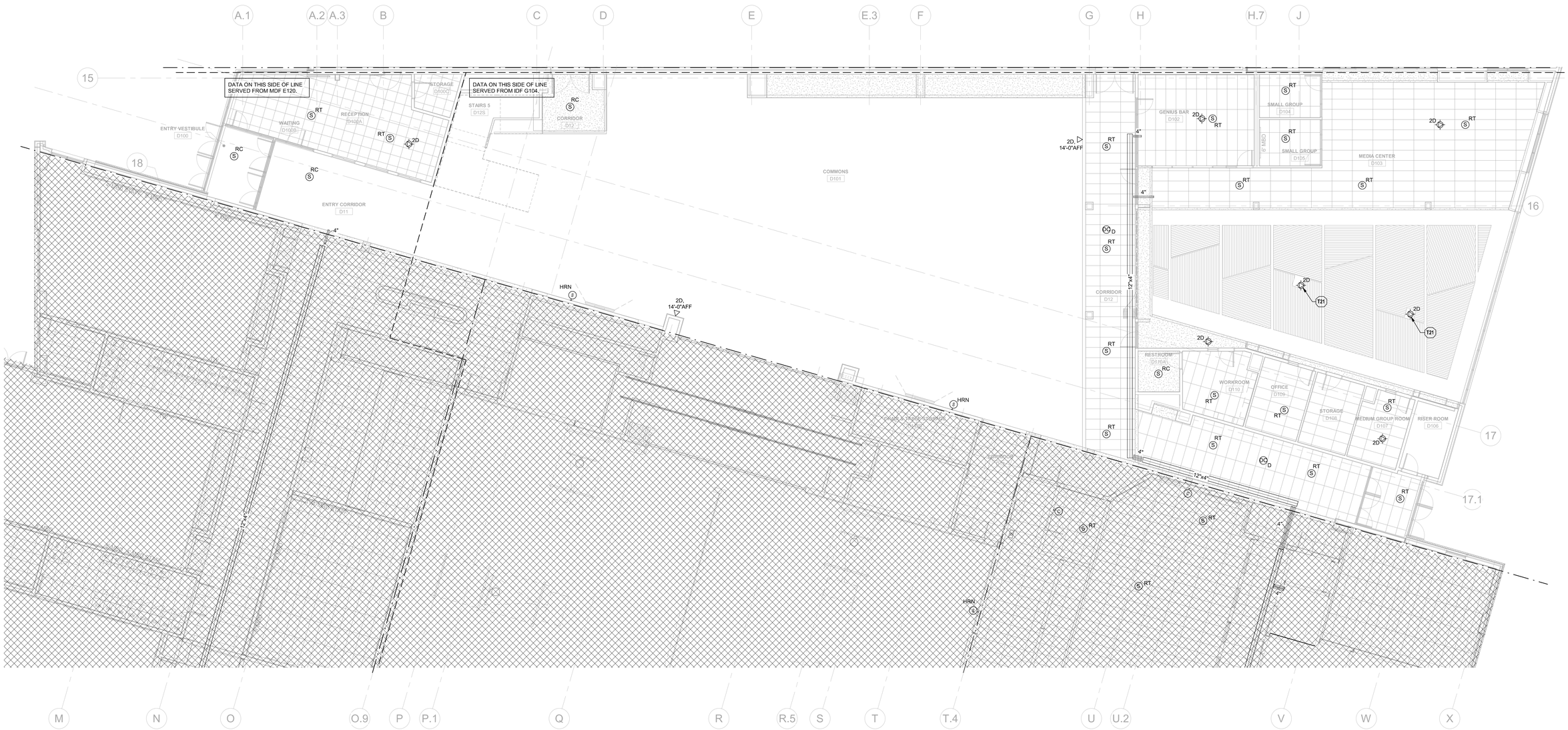
TECHNOLOGY FIRST LEVEL RCP - AREA C

TN2.1C

CURTIS A. OLDS

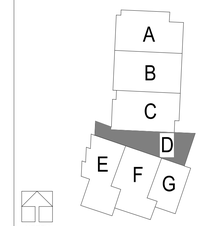
TECHNOLOGY PLAN NOTES:

T21 DATA OUTLET FOR PROJECTOR. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH AV CONTRACTOR PRIOR TO ROUGH-IN.



1 TECHNOLOGY FIRST LEVEL RCP - AREA D
1/8" = 1'-0"

KEY PLAN



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STATE OF MISSOURI
CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTERPRISE CIRCLE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.0501
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

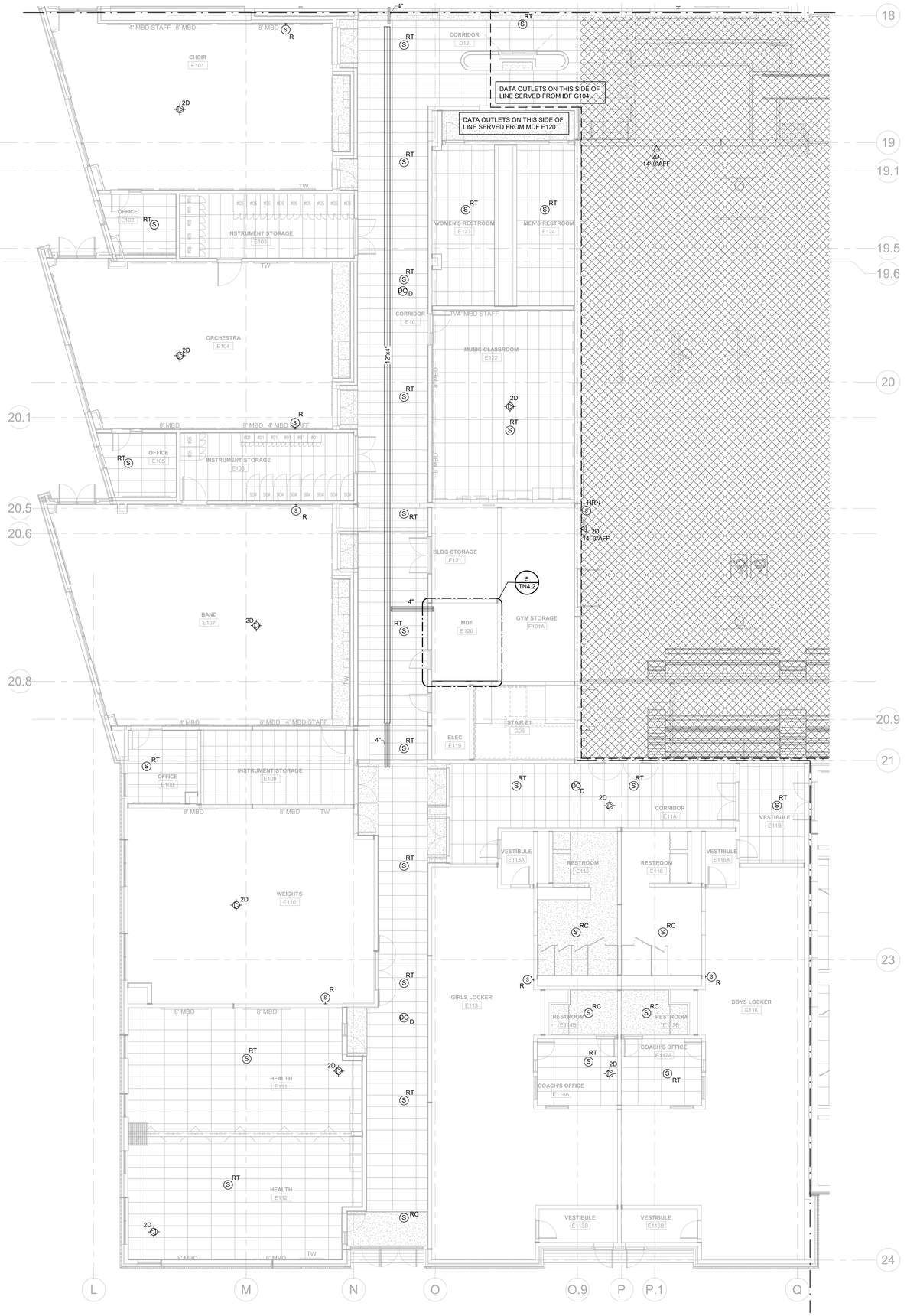
PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

13-20102-00

TECHNOLOGY FIRST LEVEL RCP - AREA D

TN2.1D

CURTIS A. OLDS



1 TECHNOLOGY FIRST LEVEL RCP - AREA E
1/8" = 1'-0"

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LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
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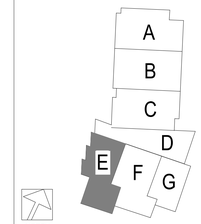
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PACKAGE 3 - BUILDING & SITE
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REVISIONS

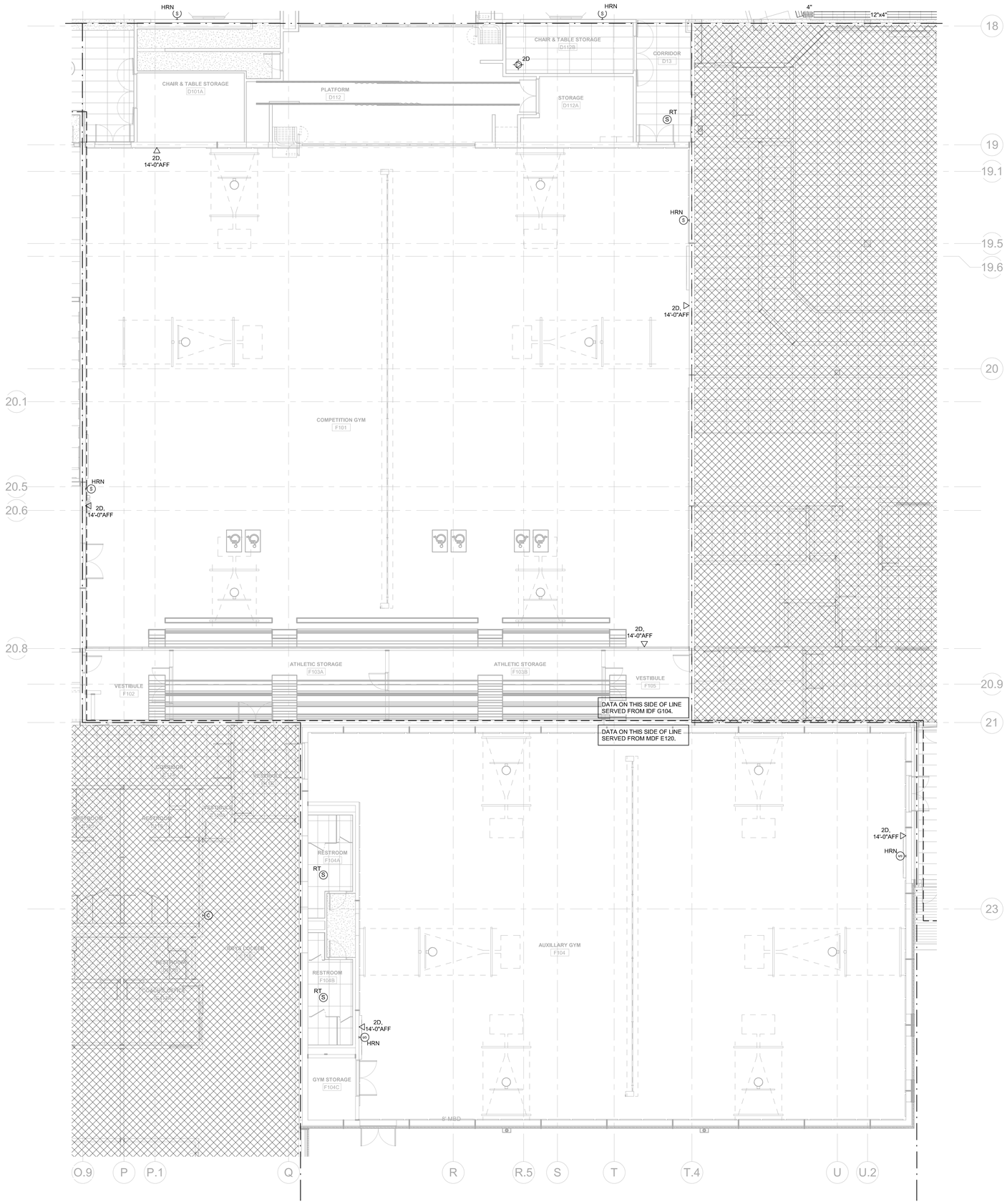
KEY PLAN



13-20102-00

TECHNOLOGY FIRST LEVEL RCP - AREA E

TN2.1E



1 TECHNOLOGY FIRST LEVEL RCP - AREA F
1/8" = 1'-0"

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PROFESSIONAL ENGINEER

Oct 8 2020
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LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5360
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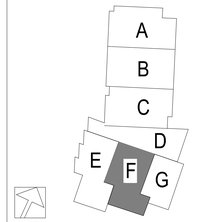
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1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

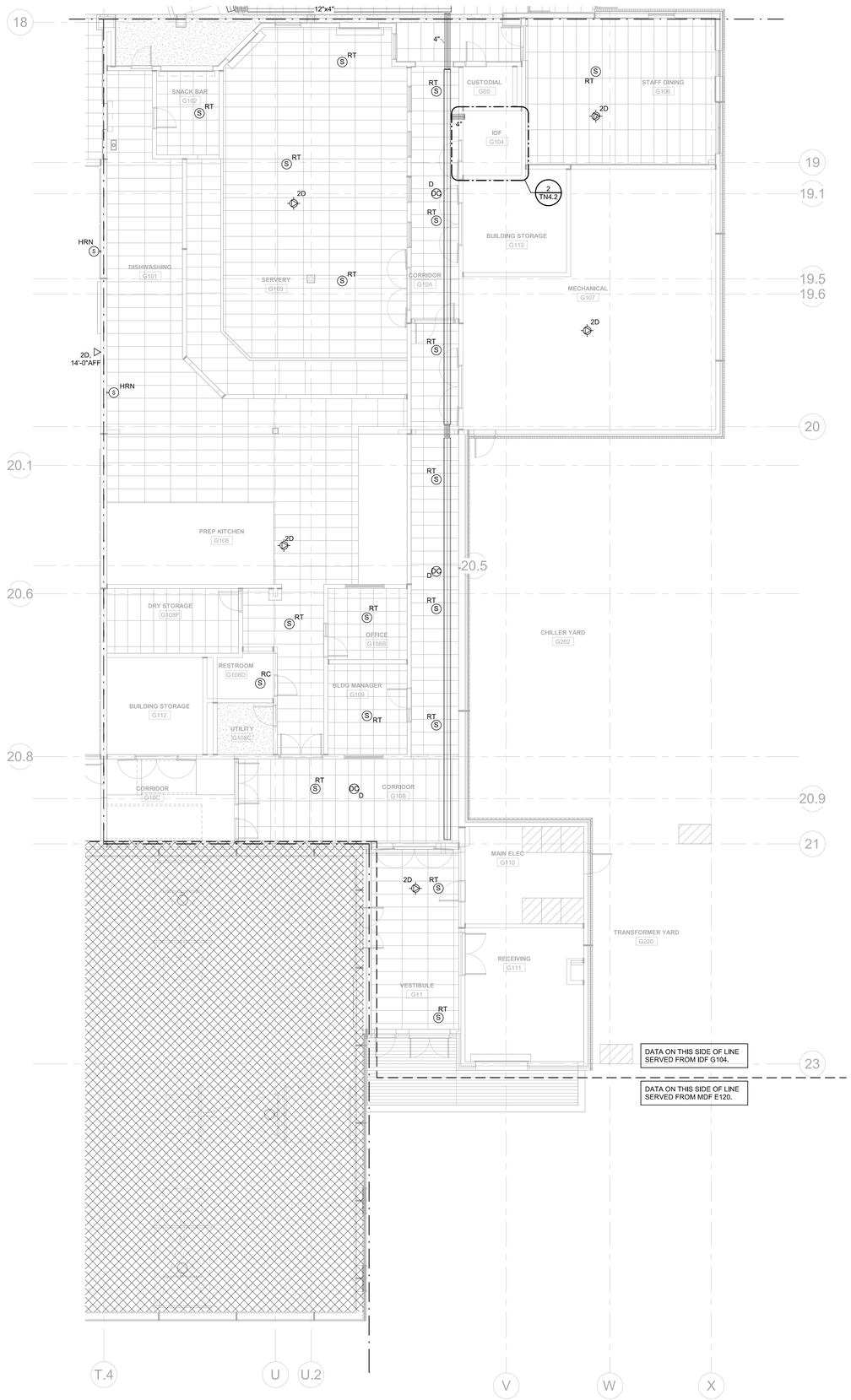
KEY PLAN



13-20102-00

TECHNOLOGY FIRST LEVEL RCP - AREA F

TN2.1F



1 TECHNOLOGY FIRST LEVEL RCP - AREA G
1/8" = 1'-0"

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NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2300 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
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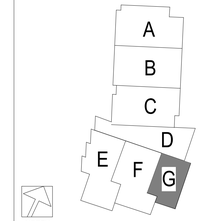
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REVISIONS

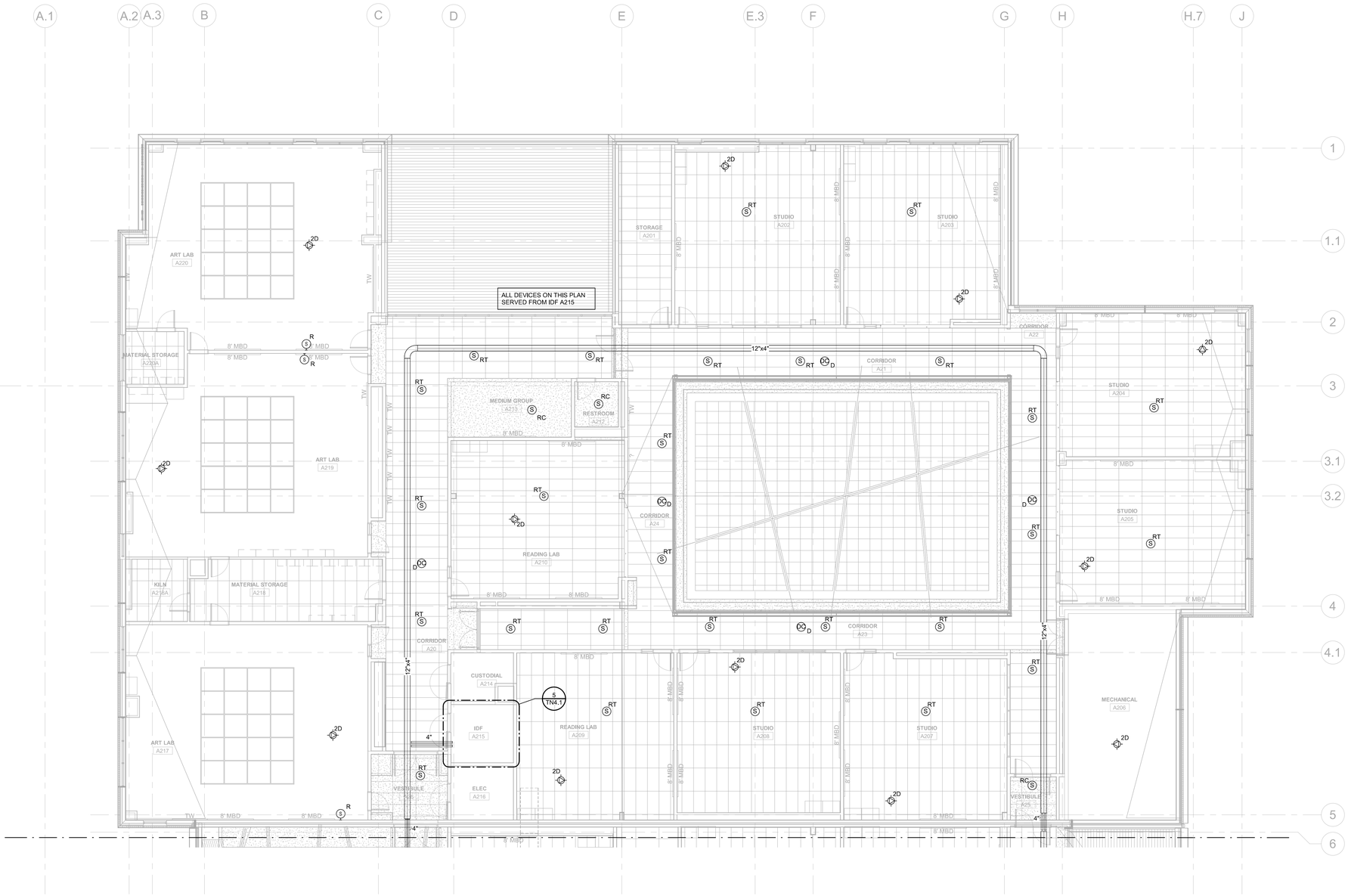
13-20102-00

TECHNOLOGY
FIRST LEVEL RCP
- AREA G

TN2.1G

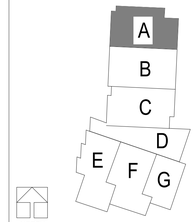
KEY PLAN





1 TECHNOLOGY SECOND LEVEL RCP - AREA A
1/8" = 1'-0"

KEY PLAN



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Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.3001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5360
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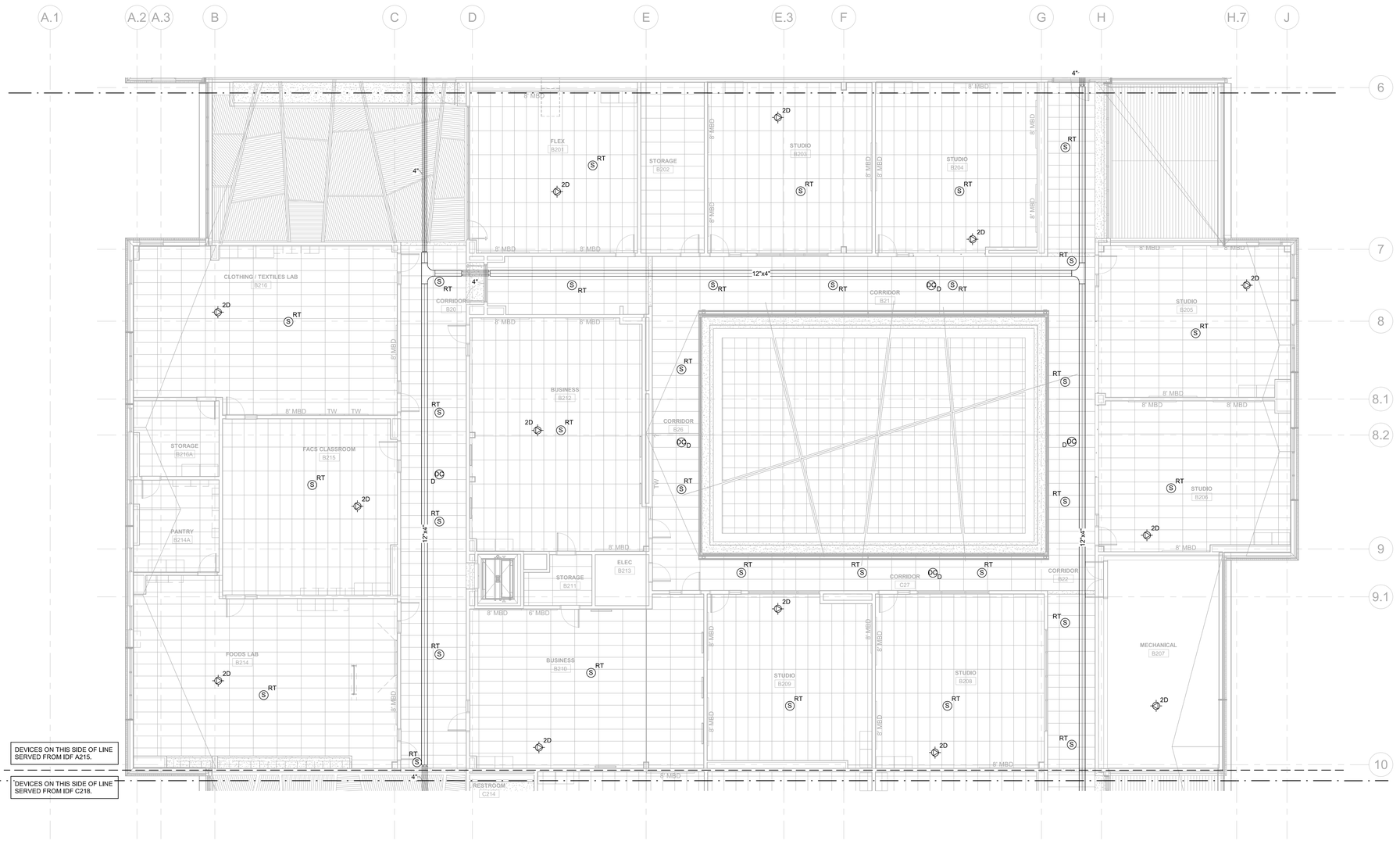
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REVISIONS

13-20102-00

TECHNOLOGY SECOND LEVEL RCP - AREA A

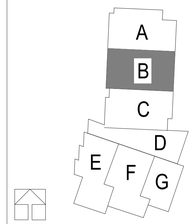
TN2.2A

CURTIS A. OLDS



1 TECHNOLOGY SECOND LEVEL RCP - AREA B
1/8" = 1'-0"

KEY PLAN



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CURTIS A. OLDS
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PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTEX PKWY E, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.3001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5360
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LEE'S SUMMIT R-7 SCHOOL DISTRICT

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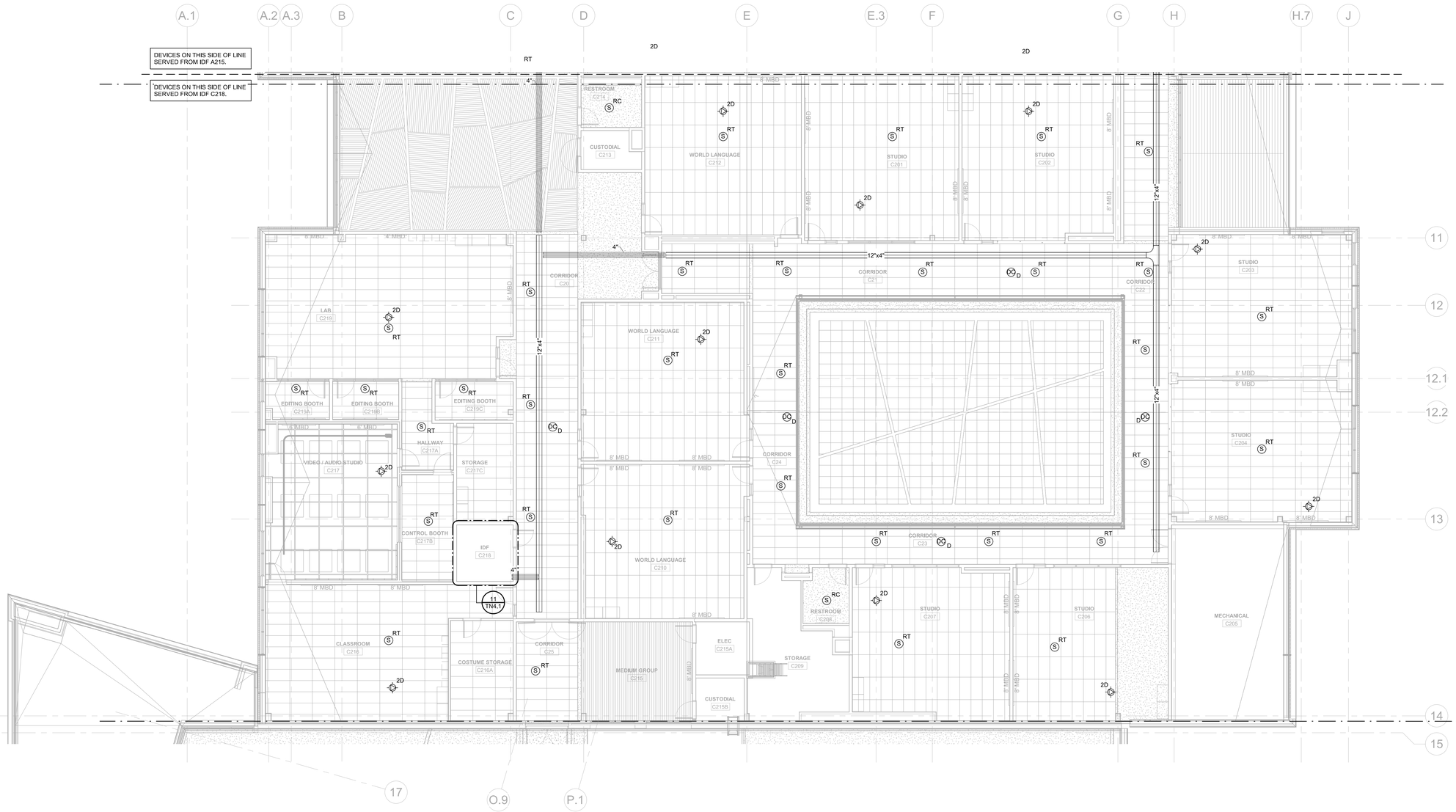
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REVISIONS

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TECHNOLOGY SECOND LEVEL RCP - AREA B

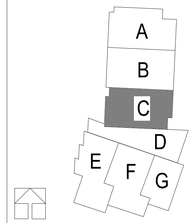
TN2.2B

CURTIS A. OLDS



1 TECHNOLOGY SECOND LEVEL RCP - AREA C
1/8" = 1'-0"

KEY PLAN



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CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTERPRISE CIRCLE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
MO. CERTIFICATE OF AUTHORITY NO. 2005004
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LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

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LEE'S SUMMIT, MO 64081

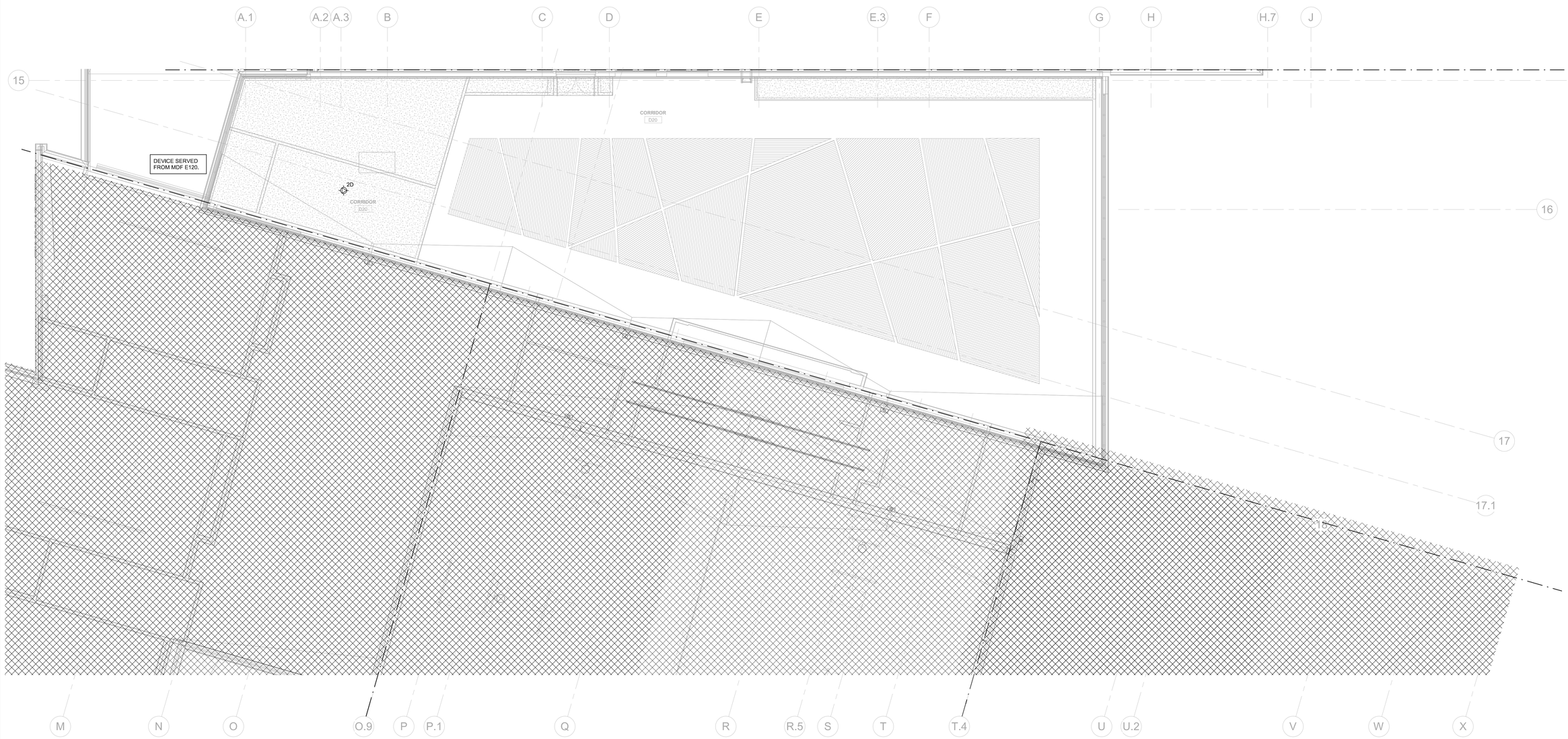
PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

13-20102-00

TECHNOLOGY SECOND LEVEL RCP - AREA C

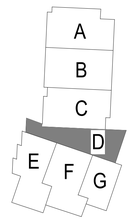
TN2.2C

CURTIS A. OLDS



1 TECHNOLOGY SECOND LEVEL RCP - AREA D
1/8" = 1'-0"

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Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
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LEE'S SUMMIT R-7 SCHOOL DISTRICT

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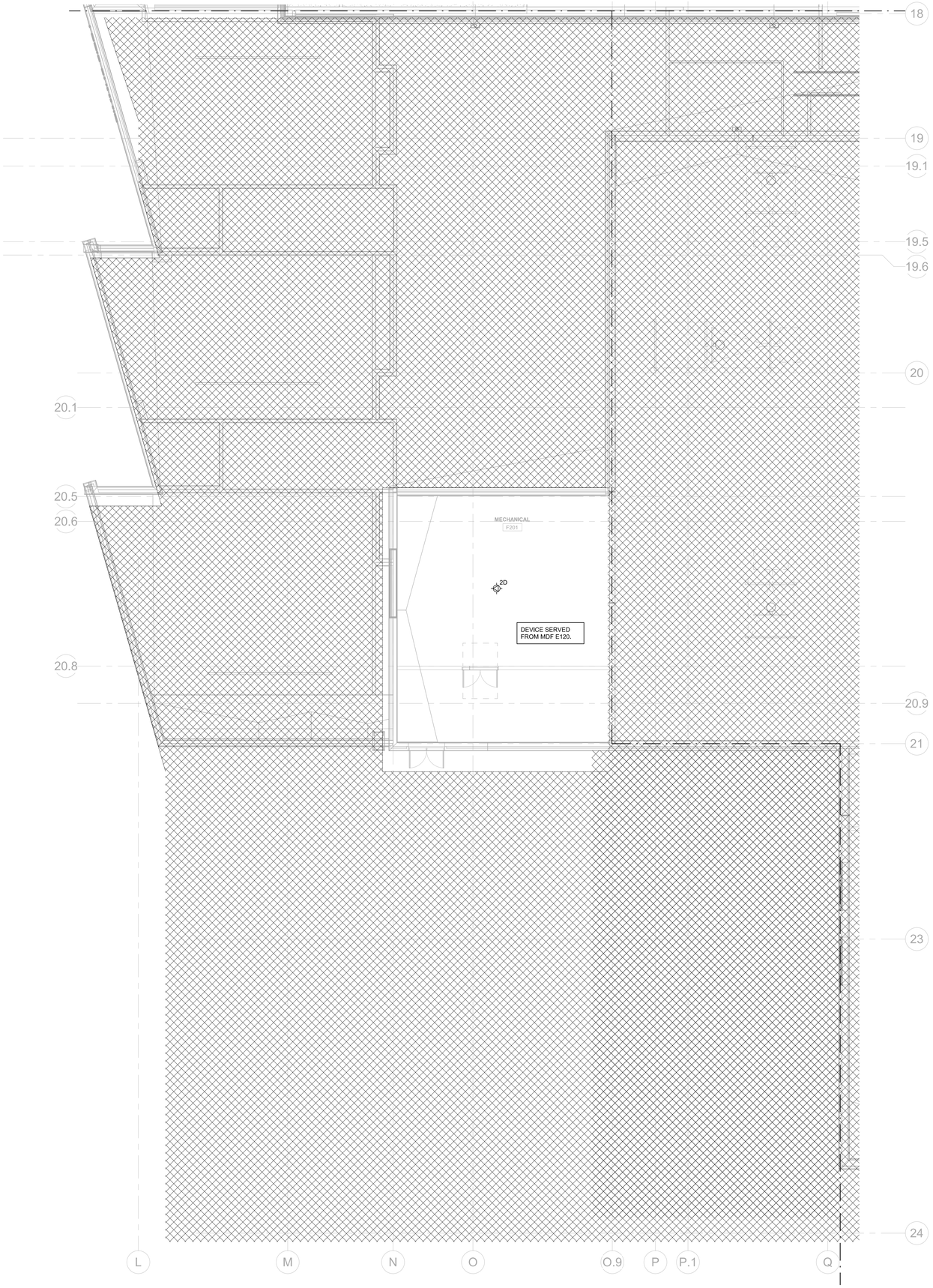
PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

13-20102-00

TECHNOLOGY SECOND LEVEL RCP - AREA D

TN2.2D

CURTIS A. OLDS



1 TECHNOLOGY SECOND LEVEL RCP - AREA E
1/8" = 1'-0"

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LICENSE # PE-2018036640

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8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
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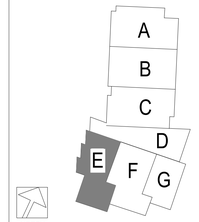
LEE'S SUMMIT MIDDLE SCHOOL #4

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PACKAGE 3 - BUILDING & SITE
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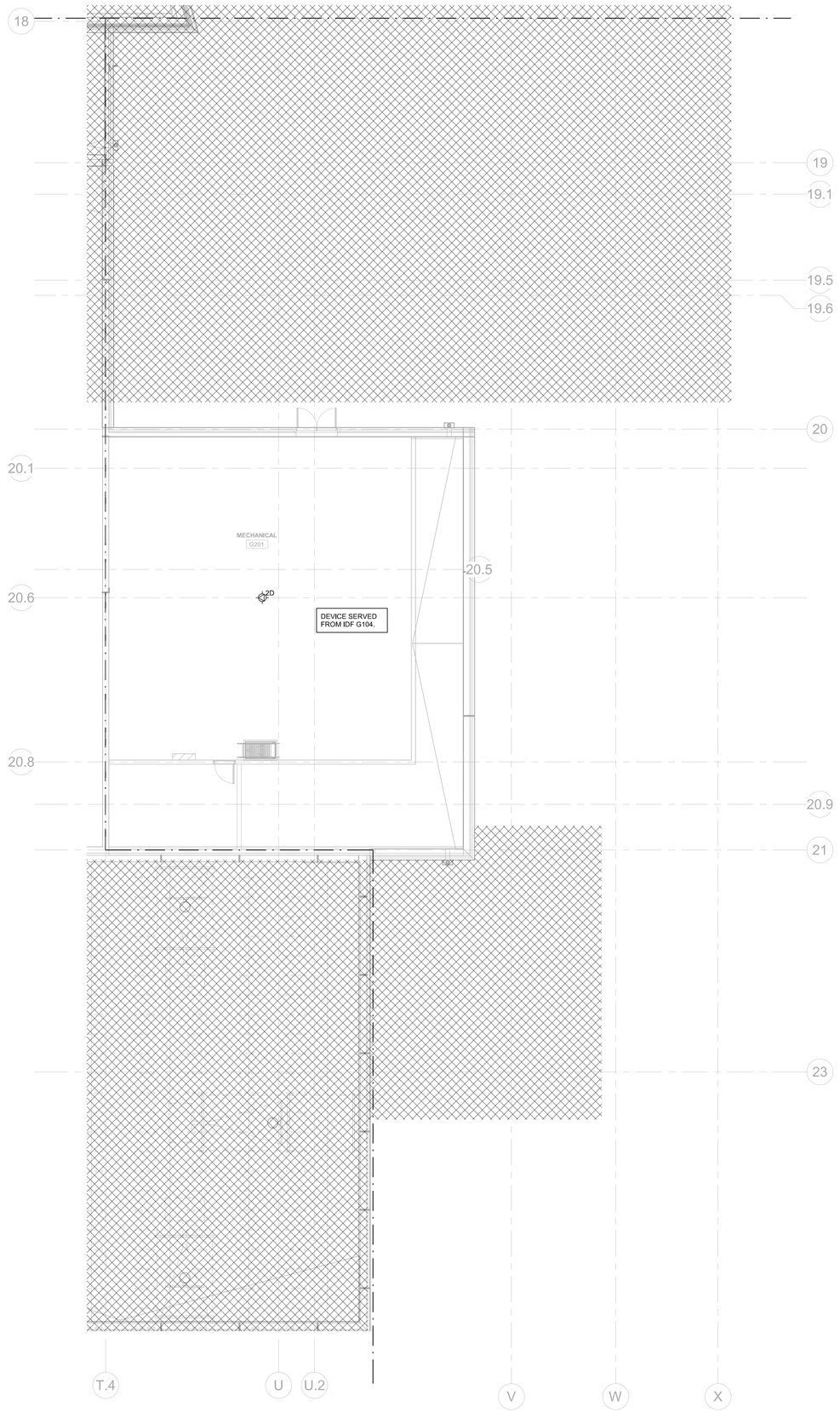


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TECHNOLOGY SECOND LEVEL RCP - AREA E

TN2.2E

CURTIS A. OLDS



1 TECHNOLOGY SECOND LEVEL RCP - AREA G
1/8" = 1'-0"

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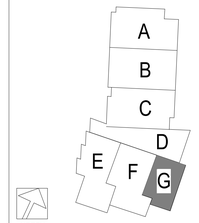
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LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

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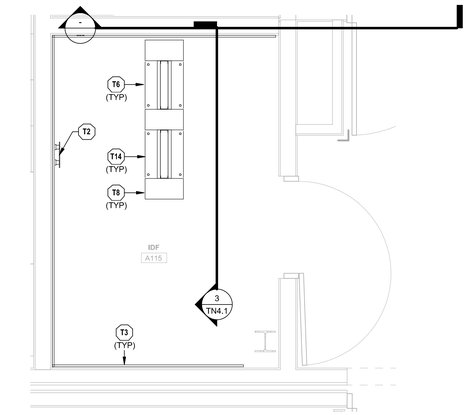


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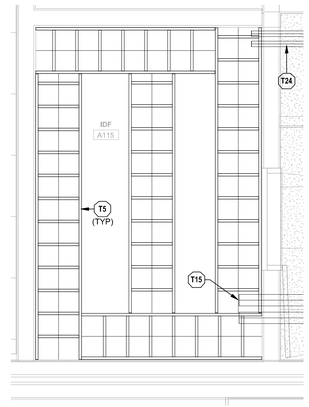
TECHNOLOGY SECOND LEVEL RCP - AREA G

TN2.2G

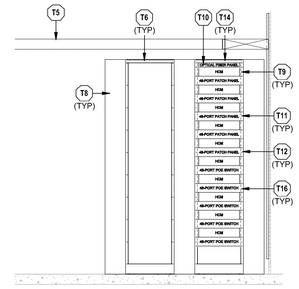
CURTIS A. OLDS



1 IDF A115 - ENLARGED PLAN
1/2" = 1'-0"



2 IDF A115 - ENLARGED RCP
1/2" = 1'-0"



3 IDF A115 - RACK ELEVATION
1/2" = 1'-0"

TECHNOLOGY PLAN NOTES:

T2 PROVIDE TELECOMMUNICATIONS GROUNDING BUS BAR (TGB) MOUNTED AT 7'-0"AFF. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T3 PROVIDE TELECOMMUNICATIONS BACKBOARD. GRADE A/C 3/4" FIRE RATED PLYWOOD BACKBOARD (UNPAINTED) STARTING AT 4" AFF AND EXTEND UPWARDS 8'-0" ON ALL WALLS AS INDICATED ON DRAWINGS. THE A SIDE SHALL BE EXPOSED TO THE INTERIOR OF THE ROOM AND THE C SIDE PLACED AGAINST THE BUILDING STRUCTURE. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T5 PROVIDE 18" WIDE LADDER RACK WITH 9" RUNG SPACING. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T6 PROVIDE 2-POST EQUIPMENT RACK. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T8 PROVIDE VERTICAL CABLE MANAGER. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T9 PROVIDE HORIZONTAL CABLE MANAGER. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T10 PROVIDE OPTICAL FIBER PANEL. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T11 PROVIDE 48-PORT CATEGORY 6A PATCH PANEL TO SUPPORT WIRELESS ACCESS POINTS. PROVIDE QUANTITY AS REQUIRED TO SUPPORT ALL CATEGORY 6A DATA OUTLETS SERVED BY TELECOM ROOM PLUS SPARES AS NOTED IN DIVISION 27 SPECIFICATIONS.

T12 PROVIDE 48-PORT CATEGORY 6 PATCH PANEL. PROVIDE QUANTITY AS REQUIRED TO SUPPORT ALL CATEGORY 6 DATA OUTLETS SERVED BY TELECOM ROOM PLUS SPARES AS NOTED IN DIVISION 27 SPECIFICATIONS.

T13 INSTALL OWNER FURNISHED UNINTERRUPTIBLE POWER SUPPLY.

T14 INSTALL OWNER FURNISHED VERTICAL POWER DISTRIBUTION UNIT ON BACK OF RACK.

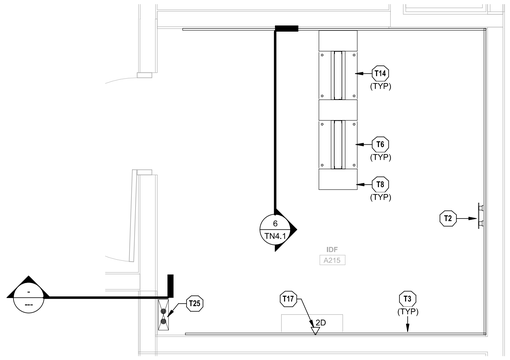
T15 PROVIDE 4" CONDUIT SLEEVES. PROVIDE UL FIRESTOP SYSTEM ASSEMBLY AS REQUIRED. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T16 OWNER PROVIDED NETWORK SWITCH.

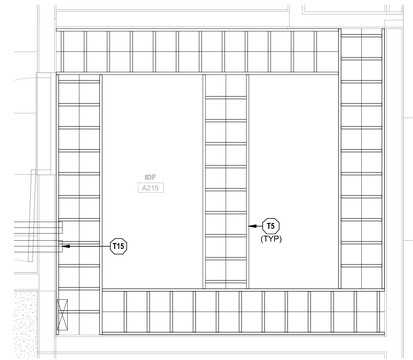
T17 DATA OUTLET FOR SECURITY PANEL. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH SECURITY CONTRACTOR PRIOR TO ROUGH-IN.

T24 (2) 2" CONDUITS FOR BACKBONE CABLING BETWEEN IDF A115 AND IDF A215.

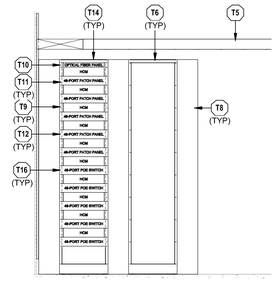
T25 12"X4" VERTICAL CABLE TRAY.



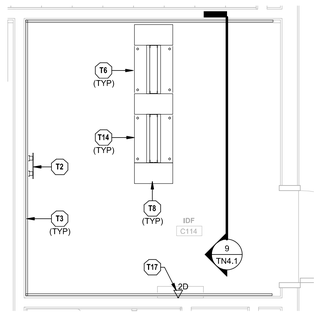
4 IDF A215 - ENLARGED PLAN
1/2" = 1'-0"



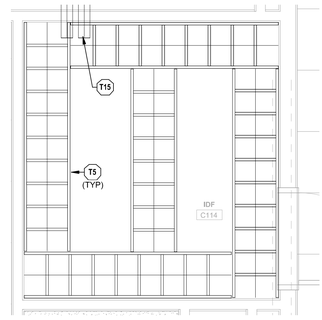
5 IDF A215 - ENLARGED RCP
1/2" = 1'-0"



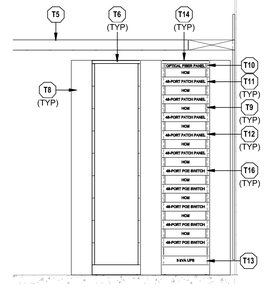
6 IDF A215 - RACK ELEVATION
1/2" = 1'-0"



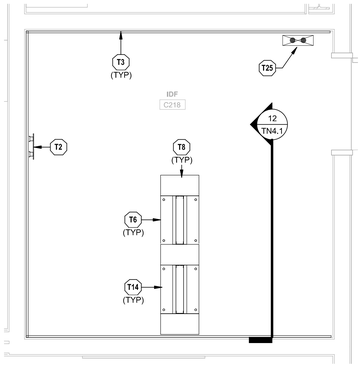
7 IDF C114 - ENLARGED PLAN
1/2" = 1'-0"



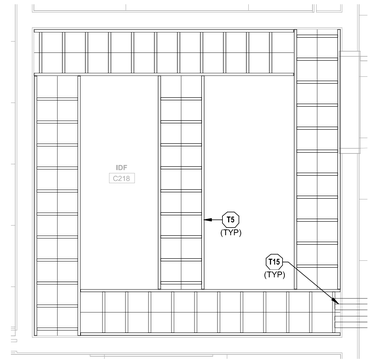
8 IDF C114 - ENLARGED RCP
1/2" = 1'-0"



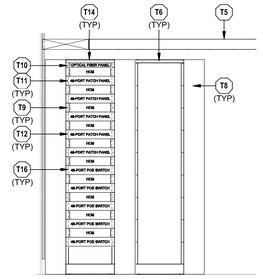
9 IDF C114 - RACK ELEVATION
1/2" = 1'-0"



10 IDF C218 - ENLARGED PLAN
1/2" = 1'-0"



11 IDF C218 - ENLARGED RCP
1/2" = 1'-0"



12 IDF C218 - RACK ELEVATION
1/2" = 1'-0"

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STATE OF MISSOURI
CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENEXA PKWY E, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

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TECHNOLOGY ENLARGED PLANS

TN4.1

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TECHNOLOGY PLAN NOTES:

T1 PROVIDE TELECOMMUNICATIONS MAIN GROUNDING BUS BAR (TMGB) MOUNTED AT 7'-0" AFF. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T2 PROVIDE TELECOMMUNICATIONS GROUNDING BUS BAR (TGB) MOUNTED AT 7'-0"AFF. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T3 PROVIDE TELECOMMUNICATIONS BACKBOARD, GRADE A/C 3/4" FIRE RATED PLYWOOD BACKBOARD (UNPAINTED) STARTING AT 4" AFF AND EXTEND UPWARDS 8'-0" ON ALL WALLS AS INDICATED ON DRAWINGS. THE A SIDE SHALL BE EXPOSED TO THE INTERIOR OF THE ROOM AND THE C SIDE PLACED AGAINST THE BUILDING STRUCTURE. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T5 PROVIDE 18" WIDE LADDER RACK WITH 9" RUNG SPACING. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T6 PROVIDE 2-POST EQUIPMENT RACK. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T7 PROVIDE 4-POST EQUIPMENT RACK. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T8 PROVIDE VERTICAL CABLE MANAGER. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T9 PROVIDE HORIZONTAL CABLE MANAGER. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T10 PROVIDE OPTICAL FIBER PANEL. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T11 PROVIDE 48-PORT CATEGORY 6A PATCH PANEL TO SUPPORT WIRELESS ACCESS POINTS. PROVIDE QUANTITY AS REQUIRED TO SUPPORT ALL CATEGORY 6A DATA OUTLETS SERVED BY TELECOM ROOM PLUS SPARES AS NOTED IN DIVISION 27 SPECIFICATIONS.

T12 PROVIDE 48-PORT CATEGORY 6 PATCH PANEL. PROVIDE QUANTITY AS REQUIRED TO SUPPORT ALL CATEGORY 6 DATA OUTLETS SERVED BY TELECOM ROOM PLUS SPARES AS NOTED IN DIVISION 27 SPECIFICATIONS.

T13 INSTALL OWNER FURNISHED UNINTERRUPTIBLE POWER SUPPLY.

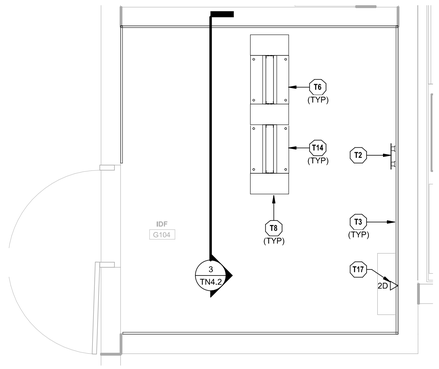
T14 INSTALL OWNER FURNISHED VERTICAL POWER DISTRIBUTION UNIT ON BACK OF RACK.

T15 PROVIDE 4" CONDUIT SLEEVES. PROVIDE UL FIRESTOP SYSTEM ASSEMBLY AS REQUIRED. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

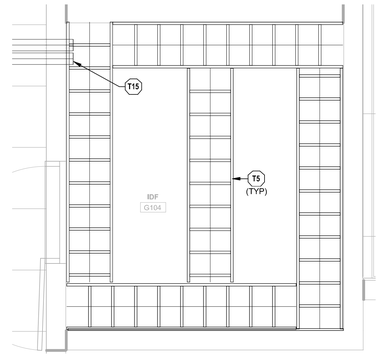
T16 OWNER PROVIDED NETWORK SWITCH.

T17 DATA OUTLET FOR SECURITY PANEL. COORDINATE MOUNTING HEIGHT AND EXACT REQUIREMENTS WITH SECURITY CONTRACTOR PRIOR TO ROUGH-IN.

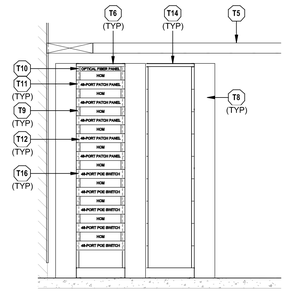
T23 SPACE RESERVED FOR INCOMING SERVICE PROVIDER EQUIPMENT.



1 IDF G104 - ENLARGED PLAN
1/2" = 1'-0"



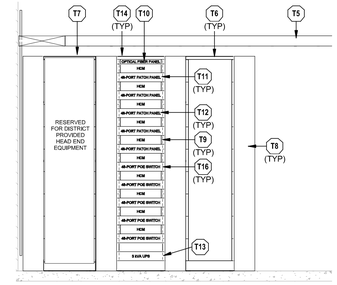
2 IDF G104 - ENLARGED RCP
1/2" = 1'-0"



3 IDF G104 - RACK ELEVATION
1/2" = 1'-0"

4 MDF E120 - ENLARGED PLAN
1/2" = 1'-0"

5 MDF E120 - ENLARGED RCP
1/2" = 1'-0"



6 MDF E120 - RACK ELEVATION
1/2" = 1'-0"

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HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 816.742.0001
WWW.HENDERSONENGINEERS.COM
MO. CERTIFICATE OF AUTHORITY NO. E-5060
EXPIRES 12/31/2020

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LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

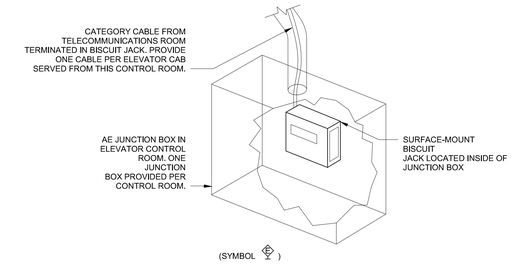
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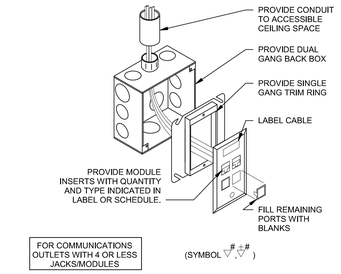
TECHNOLOGY ENLARGED PLANS

TN4.2

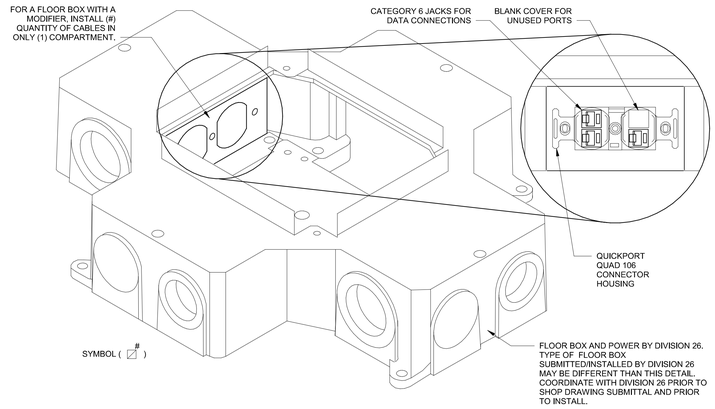
CURTIS A. OLDS



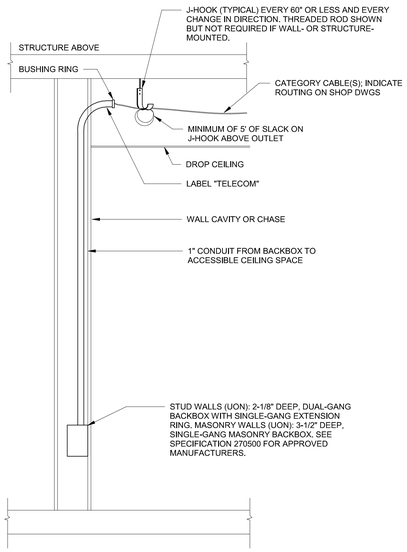
1 COMM OUTLET FOR ELEVATOR - LAND LINE
NTS



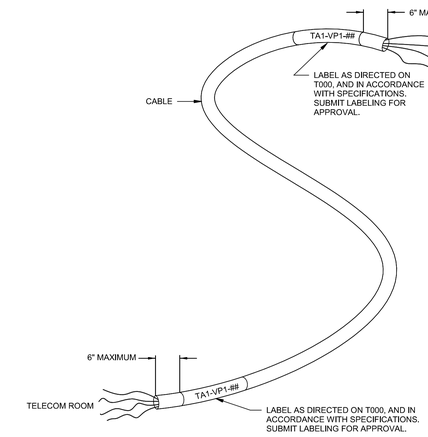
2 SINGLE GANG COMM OUTLET (3D)
NTS



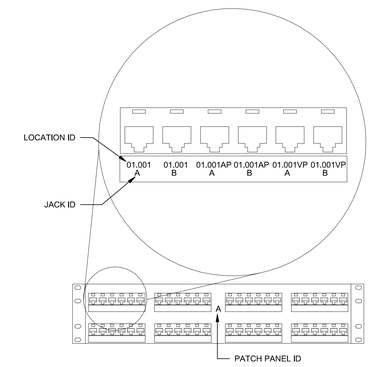
3 FLOOR BOX
NTS



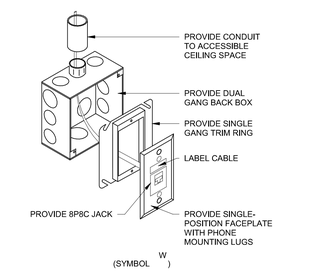
4 COMMUNICATIONS OUTLET MOUNTING
NTS



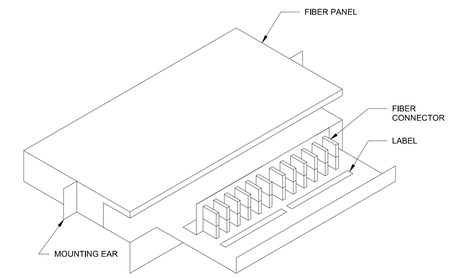
5 LABELING OF HORIZONTAL CABLE
NTS



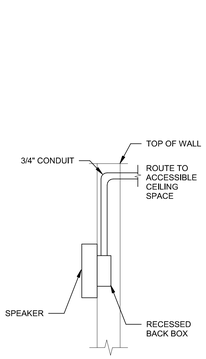
6 TYPICAL PATCH PANEL LABELING DETAIL
NTS



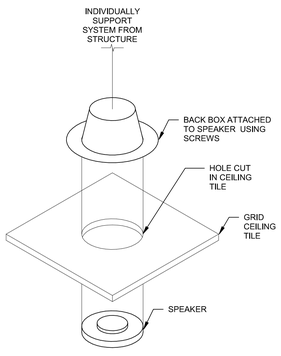
7 WALL PHONE OUTLET (3D)
NTS



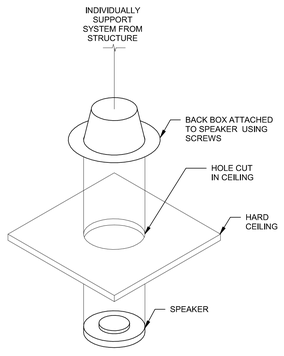
8 FIBER PANEL
NTS



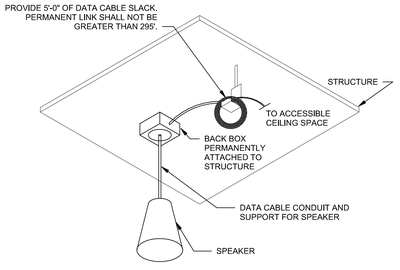
PAGING SPEAKER FOR WALL



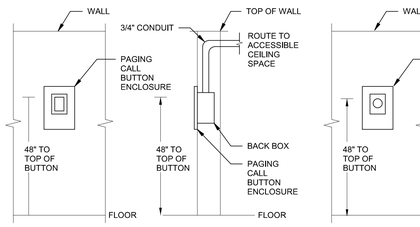
PAGING SPEAKER FOR ACCESSIBLE CEILING



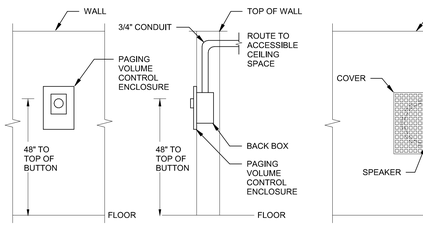
PAGING SPEAKER FOR HARD CEILING



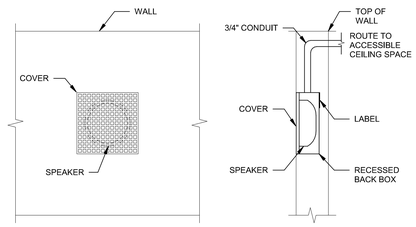
PAGING SPEAKER FOR EXPOSED CEILING



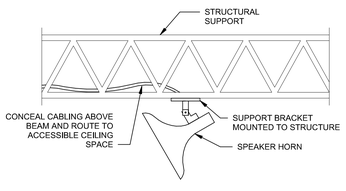
PAGING CALL BUTTON



PAGING VOLUME CONTROL

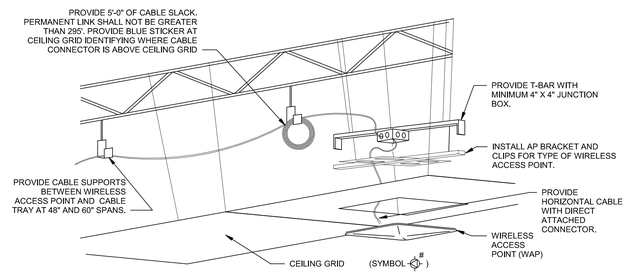


PAGING SPEAKER HORN FOR WALL

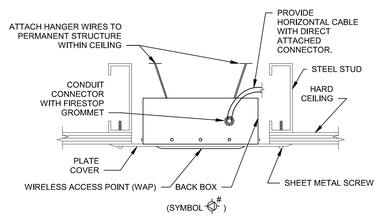


PAGING SPEAKER HORN FOR EXPOSED CEILING

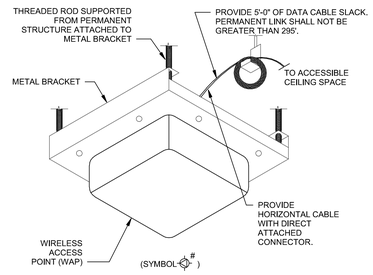
9 SPEAKER INSTALLATION
NTS



SURFACE MOUNTED WAP FOR ACCESSIBLE CEILING



SURFACE MOUNTED WAP FOR HARD CEILING



SURFACE MOUNTED WAP FOR EXPOSED CEILING

10 WIRELESS ACCESS POINT INSTALLATION
NTS

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HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
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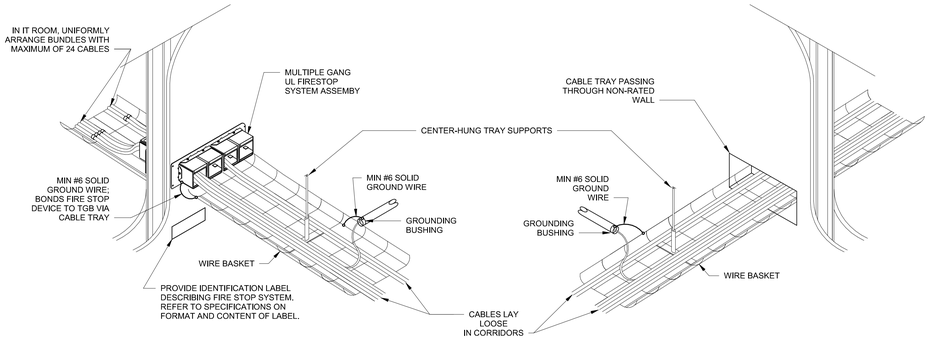
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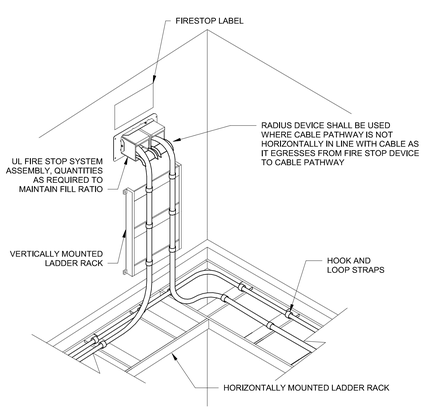
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TECHNOLOGY DETAILS

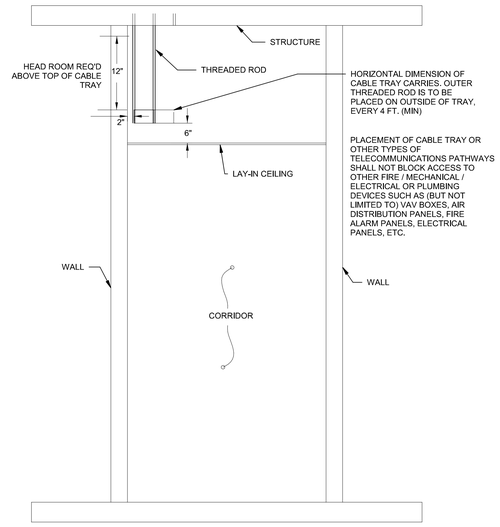
TN5.1



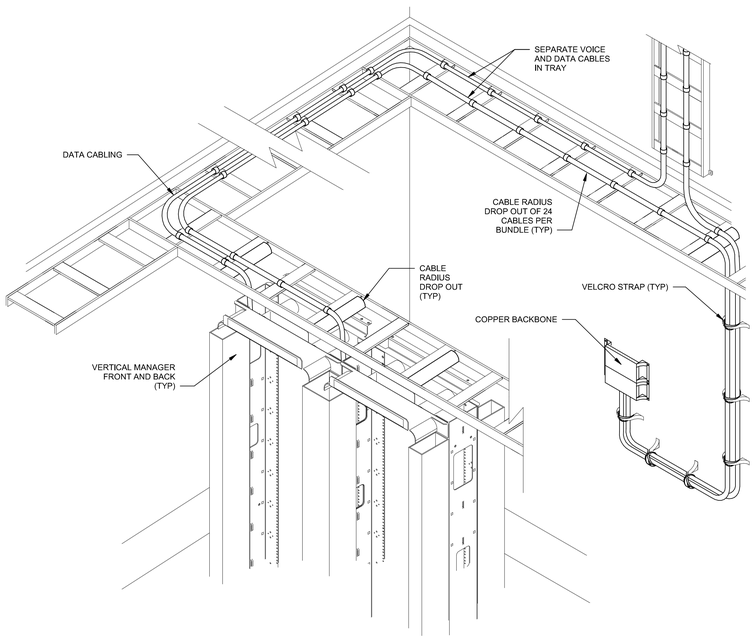
1 CORRIDOR TRAY, THROUGH WALL PENETRATIONS
NTS



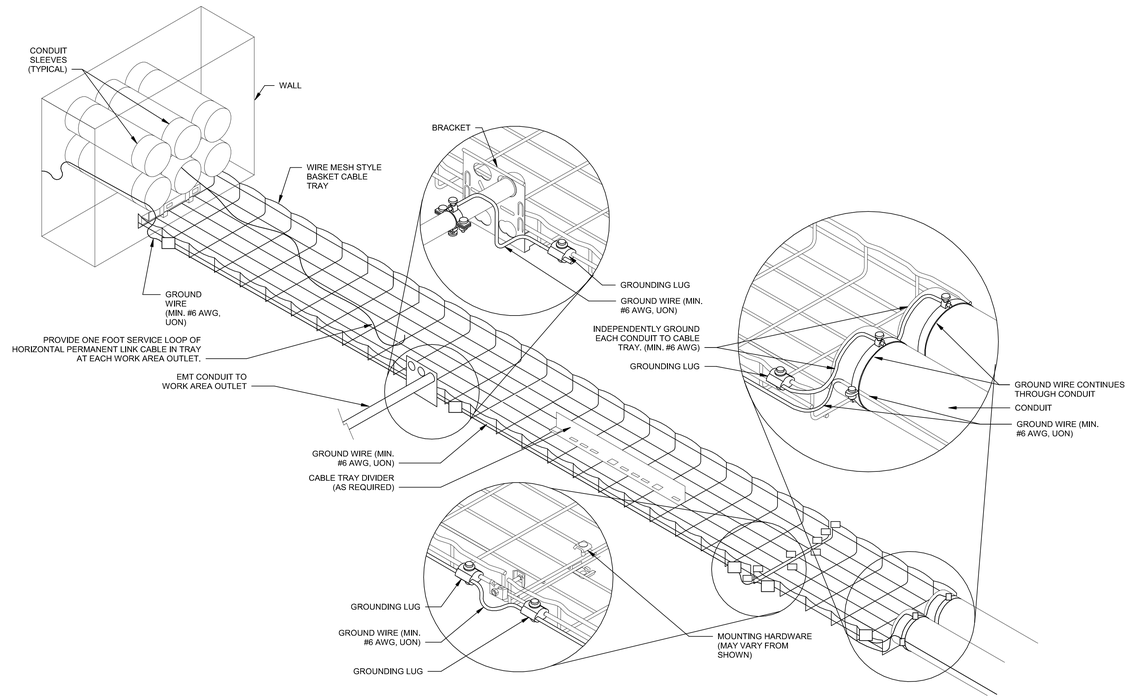
2 FIRE STOP SYSTEM
NTS



3 TECHNOLOGY PATHWAY CLEARANCES
NTS

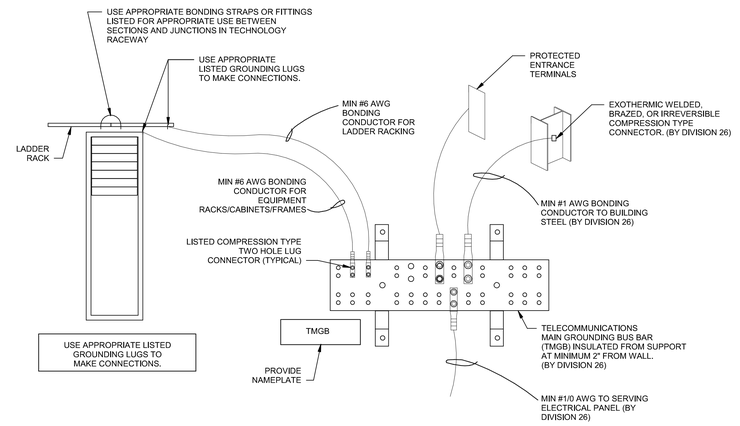


5 TELECOM ROOM TRAY ALIGNMENT, BEND RADIUS TREATMENT
NTS



4 TECHNOLOGY PATHWAY GROUND AND BOND CONNECT
NTS

6 TGB CONNECTIONS DIAGRAM
NTS



7 TMGB CONNECTIONS DIAGRAM
NTS

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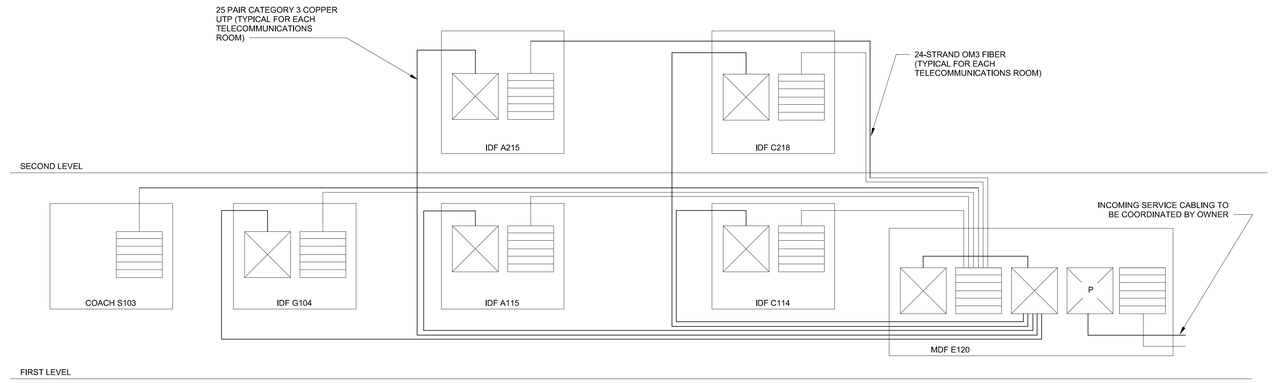
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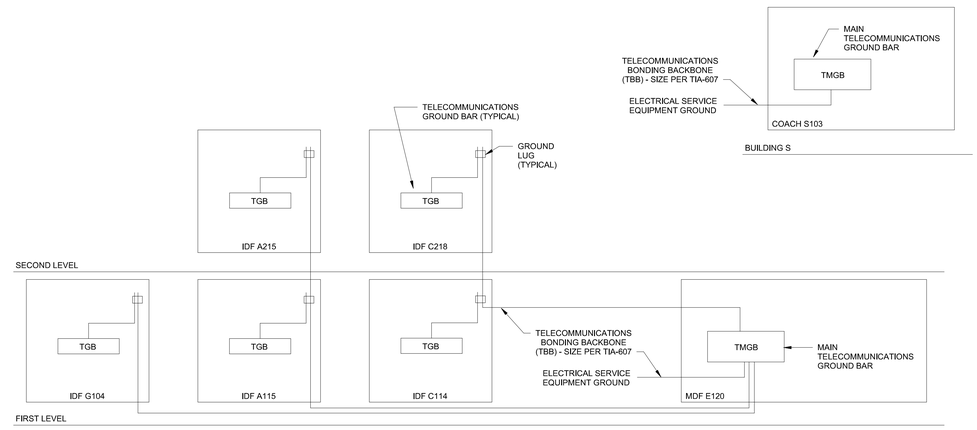
TECHNOLOGY DETAILS

TN5.2

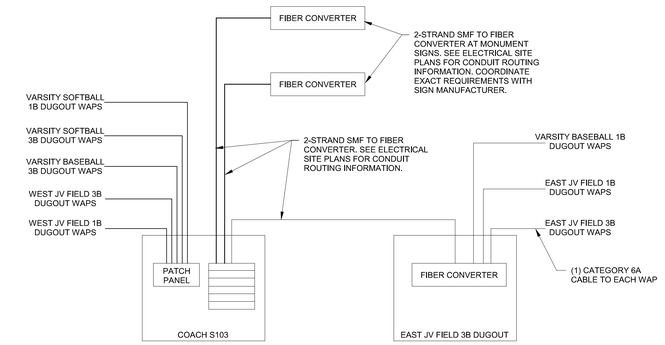
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1 RISER DIAGRAM - BACKBONE CABLES
NTS



2 RISER DIAGRAM - GROUNDING AND BONDING
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3 RISER DIAGRAM - SPORTS FIELDS
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TECHNOLOGY
RISER DIAGRAMS

TN6.1

CURTIS A. OLDS

SECURITY SYMBOLS

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBREVIATIONS ARE USED.

STANDARD MOUNTING HEIGHTS

INTERCOM (OPERABLE PART)	48"
CARD READER (CENTER OR TOP WHERE OPERABLE PARTS EXIST)	44"
EMERGENCY LOCK RELEASE	48"
EMERGENCY PHONE (OPERABLE PARTS)	48"

DEFAULT MOUNTING HEIGHTS SHOWN ABOVE WHERE NO CALL-OUT IS PROVIDED. MOUNTING HEIGHTS LISTED ARE ABOVE FINISHED FLOOR (AFF) OR ABOVE FINISHED GRADE (AFG). ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH CURRENT ADA AND LOCAL REQUIREMENTS.

ABBREVIATIONS

A	AMPERES
ACP	ACCESS CONTROL PANEL
ADA	AMERICANS WITH DISABILITIES ACT
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AV	AUDIO-VIDEO
AWG	AMERICAN WIRE GAUGE
BAS	BUILDING AUTOMATION SYSTEM
BD	BUILDING DISTRIBUTOR
BDF	BUILDING DISTRIBUTION FRAME
BFC	BELOW FINISHED CEILING
BR	BIOMETRIC READER
C	CONDUIT
CAT	CATEGORY
CC	CENTRAL CONTROL
CCTV	CLOSED CIRCUIT TELEVISION
CD	CAMPUS DISTRIBUTOR
CMP	COMMUNICATIONS PLENUM JACKET
CMR	COMMUNICATIONS RISER JACKET
(D)	REMOTE DEVICE
DAS	DISTRIBUTED ANTENNA SYSTEM
dB	DECIBELS
DCS	DOOR CONTROL SYSTEM
DEMO	DEMOLITION
DSP	DIGITAL SIGNAL PROCESSOR
DVR	DIGITAL VIDEO RECORDER
(E)	EXISTING DEVICE
EC	ELECTRICAL CONTRACTOR
ECIA	ELECTRONIC OMPONENTS INDUSTRY ASSOCIATION
EMI	ELECTROMAGNETIC INTERFERENCE
EMS	ENERGY MANAGEMENT SYSTEM
EMT	ELECTRICAL METALLIC TUBING
ER	EQUIPMENT ROOM
(ETR)	EXISTING TO REMAIN
(F)	DOOR FRAME MOUNTED DEVICE
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FD	FLOOR DISTRIBUTOR
FMC	FLEXIBLE METAL CONDUIT
FOR	FIBER OPTIC RACK
FS	FIRE STOP SYSTEM
FLR	FLOOR
GC	GENERAL CONTRACTOR
(GT)	GUARD TOUR
GYP	GYPSUM BOARD
HH	HAND HOLE
Hz	HERTZ
IMC	INTERMEDIATE METAL CONDUIT
ICS	INTERCOM CONTROL SYSTEM
IP	INTERNET PROTOCOL
ISP	INSIDE PLANT CABLE
J-BOX	JUNCTION BOX
(K)	ELECTRICALLY OPERATED BY KEY
KP	KEY PAD
KVM	KEYBOARD VIDEO MOUSE SWITCH
LAN	LOCAL AREA NETWORK
LED	LIGHT-EMITTING DIODE
LF	LINEAR FEET
MBS	MAINTENANCE BYPASS SWITCH
MDF	MAIN DISTRIBUTION FRAME
MFR	MANUFACTURER
MH	MAINTENANCE HOLE
MM	MULTIMODE
MPOE	MAIN POINT OF ENTRANCE
MPOP	MAIN POINT OF PRESENCE
MTD	MOUNTED
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCATION
NIC	NOT IN CONTRACT
nm	NANOMETER
NRTL	NATIONALLY RECOGNIZED TESTING LAB
NVR	NETWORK VIDEO RECORDER
OC	ON CENTER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OSP	OUTSIDE PLANT
POE	POWER OVER ETHERNET
PON	PASSIVE OPTICAL NETWORK
QTY	QUANTITY
(R)	RELOCATED EXISTING DEVICE
(RE)	REMOVE EXISTING DEVICE AND INSTALL AT ANOTHER LOCATION, SEE (R)
RMC	RIGID METAL CONDUIT
RMS	REMOTE MONITORING STATION
RU	RACK UNIT
SCS	STRUCTURED CABLING SYSTEM
SF	SQUARE FEET
SM	SINGLEMODE
SP	SCRAMBLE PAD
TBD	TO BE DETERMINED
TIA	TELECOMMUNICATIONS INDUSTRY ASSOCIATION
TGB	TELECOMMUNICATIONS GROUND BUS BAR
TMGB	TELECOMMUNICATIONS MAIN GROUND BUS BAR
TR	TELECOMMUNICATIONS ROOM
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UL	UNDERWRITER LABORATORIES, INC.
UPS	UNINTERRUPTIBLE POWER SUPPLY
UPSDP	UNINTERRUPTIBLE POWER SUPPLY DISTRIBUTION PANEL
V	VOLT(S)
VCM	VERTICAL CABLE MANAGER
VMS	VIDEO MANAGEMENT SYSTEM
WAO	WORK AREA OUTLET
WP	WEATHER PROOF
WR	WEATHER RESISTANT
WT	WATERTIGHT
XP	EXPLOSION-PROOF

( ) - INDICATES MODIFIER FOR SPECIAL OPERATION IN LABELING SCHEME

ANNOTATION

- 1 — SECURITY PLAN CALLOUT
- CONNECTION POINT OF NEW WORK TO EXISTING
- 1 / TY1 — DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER. LOWER NUMBER INDICATES SHEET NUMBER
- 1 / TY1 — SECTION CUT DESIGNATION

LINETYPE LEGEND

THROUGHOUT THE DRAWINGS DIFFERENT LINE-TYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS EXISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF THE NEW WORK AND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTURE. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR. PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASES DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE, ETC.

EXISTING	———	NEW	———
DEMOLISH	— — — — —	FUTURE	- - - - - - - -

SECURITY SYMBOLS

- AR — AREA OF REFUGE CALL BOX
- CR — CARD READER
- CW X — CLIENT WORKSTATION WHERE X = NUMBER OF MONITORS
  - (AC) ACCESS CONTROL
  - (SM) SECURITY MANAGEMENT
  - (TS) TOUCHSCREEN CONTROL
  - (VS) VIDEO SURVEILLANCE
- DO — DOOR OPERATOR, PUSH BUTTON
- DB — DOOR BELL
  - (PB) PUSH BUTTON
  - (CH) CHIME
- DM — DOOR POSITION SWITCH
  - SEE ARCHITECTURAL DOOR HARDWARE SCHEDULE
- DL — DOOR POSITION SWITCH AND LATCHBOLT MONITOR
  - SEE ARCHITECTURAL DOOR HARDWARE SCHEDULE
- EL — ELECTRIFIED LOCKING DEVICE, REQUEST TO EXIT, DOOR POSITION SWITCH, AND LATCH BOLT MONITOR
  - SEE ARCHITECTURAL DOOR HARDWARE SCHEDULE
- EO — ELECTRIFIED LOOKING DEVICE
  - SEE ARCHITECTURAL DOOR HARDWARE SCHEDULE
- EP — EMERGENCY PHONE
- GB — GLASS BREAK DETECTOR
- IC — INTERCOM
  - (CR) WITH CARD READER
  - (DS) DOOR STATION
  - (RS) RECEIVING (MASTER) STATION
  - (VS) VIDEO STATION
- IP — INMATE PHONE
- KP — KEYPAD
  - (ID) INTRUSION DETECTION SYSTEM
  - (AC) ACCESS CONTROL
- LC — LIGHTING CONTROL RELAYS
- MD — MOTION DETECTOR
- PL — PANIC ALARM THREE-COLOR INDICATOR LIGHT
- PB — PANIC/DURESS BUTTON
- RE — REQUEST-TO-EXIT PUSH PAD
- RO — REMOTE UNLOCK/OPEN BUTTON
- ML — MICROPHONE STATUS LIGHT, WALL MOUNT
- MP — MICROPHONE
- MS — MICROPHONE MUTE ILLUMINATED SWITCH
- S — SPEAKER (DOOR BELL)
- SP — PAGING SPEAKER
- VM — VAULT MONITOR
- WC — WATER CONTROL VALVE
  - VALVE BY DIVISION 22, CONTROL BY DIVISION 28
- WT — WATCH TOUR

SECURITY CAMERAS

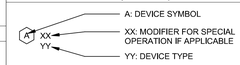
- FIXED CAMERA
- PTZ CAMERA
- 360 CAMERA
- 180 CAMERA
- TWO IMAGER CAMERA
- FOUR IMAGER CAMERA

MOUNTING TYPE SYMBOLS (APPLIES TO ANY SECURITY DEVICE SYMBOL)

- CEILING MOUNT
- WALL MOUNT
- POLE / BOLLARD MOUNT
- CORNER MOUNT
- PENDANT MOUNT
- WALL MOUNT PENDANT ARM

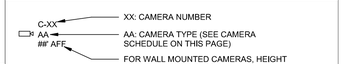
LABELING SCHEME

SECURITY DEVICES (TYPICAL)



SEE MATCHING SCHEDULES ON THIS SHEET (IF APPLICABLE)

SECURITY CAMERAS (TYPICAL)



SEE MATCHING SCHEDULES ON THIS SHEET (IF APPLICABLE)

GENERAL NOTES

1. CONTRACTOR SHALL SUPPORT ALL CABLE WITH APPROVED PATHWAY.
2. ALL CABLES SHALL BE ROUTED PARALLEL AND PERPENDICULAR TO THE BUILDING STRUCTURE, UNLESS OTHERWISE NOTED.
3. DOOR HARDWARE AND OPENING CONDITIONS SHOULD BE EVALUATED PRIOR TO CONDUIT AND CABLING INSTALLATION AND COORDINATED WITH DIVISION 08.
4. PROVIDE CONDUIT SLEEVE WITH NYLON BUSIHNGS FOR NON-RATED WALL PENENTRATIONS FOR COMMUNICATIONS CABLES. PATHWAYS SHALL BE SIZED FOR NO MORE THAN FORTY (40) PERCENT FILL.
5. PROVIDE CONDUIT SLEEVE WITH NYLON BUSHINGS FOR OVERHEAD CEILINGS THAT BLOCK ACCESS FOR MOVE/ADD/CHANGES TO CABLE PATHWAY, LIKE HARD GYPSUM CEILING. PATHWAYS SHALL BE SIZED FOR NO MORE THAN FORTY (40) PERCENT FILL.
6. PROVIDE UL LISTED FIRESTOP ASSEMBLY AT FIRE WALL PENETRATIONS FOR COMMUNICATIONS CABLES. MATERIAL AND INSTALLATION SHALL MAINTAIN THE RATED CAPACITY OF WALL AND MEET ALL APPLICABLE CODES.
7. CONTRACTOR SHALL COORDINATE ALL SECURITY AND CABLING PATHWAYS WITH OTHER DIVISIONS (08, 21, 22, 23, 26, AND 27) PRIOR TO INSTALL OF DUCTWORK, PIPING, CONDUITS, AND ETC.
8. FULLY COORDINATE ALL CONDUIT ROUTING WITH STRUCTURAL ELEMENTS. COORDINATE CONDUIT INSTALLATIONS WITH ARCHITECT, STRUCTURAL ENGINEER, STRUCTURAL CONTRACTOR, AND GENERAL CONTRACTOR PRIOR TO INSTALLATION. ROUTING IN OR UNDER THE SLAB FLOOR REQUIRES THE USE OF CABLE RATED FOR A WET ENVIRONMENT.
9. VERIFY ALL CAMERA LOCATIONS PRIOR TO ROUGH-IN. FIELD OF VIEW SHALL NOT BE OBSTRUCTED BY OTHER ELEMENTS INCLUDING, BUT NOT LIMITED TO, EXIT SIGNS, LIGHT FIXTURES, MILLWORK, SPRINKLERS, CURTAINS, AND SIGNAGE.
10. ALL WIRING SHALL BE INSTALLED COMPLETE AND UNSPLICED FROM THE SERVING EQUIPMENT PANEL TO DEVICE.
11. REFER TO TN0.1 FOR TECHNOLOGY RESPONSIBILITY MATRIX THAT ALSO DESCRIBES SECURITY COMPONENTS.

SECURITY ROUGH-IN AND CABLING SCHEDULE

SYMBOL	DESCRIPTION	BACK BOX	CONDUIT	CABLE(S)	MOUNTING HEIGHT	DETAIL
EL	ELECTRIFIED LOCK W/DPS AND REX	N/A	(2) 1/2" EMT TO DOOR FRAME	C, D, E	N/A	TY5.1/4-7 TY5.2/1
EL	REQUEST-TO-EXIT PIR MOTION DETECTOR	1-GANG BACKBOX WITH 1-GANG MUD RING	(1) 1/2" EMT	E	90" AFF OR 6" ABOVE DOOR FRAME	TY5.1/6
EO	ELECTRIFIED LOCK	N/A	(1) 1/2" EMT TO DOOR FRAME	C	N/A	TY5.2/1
CR	SECURITY CARD READER, WALL	2-GANG BACKBOX WITH 1-GANG MUD RING	(1) 3/4" EMT	B	44" AFF (CENTER)	TY5.1/4-7 TY5.2/1,6
	SECURITY CAMERA, CEILING - FLUSH	INSTALL SECURITY PROVIDER'S BACKBOX	(1) 3/4" EMT	A	N/A	TY5.1/2
	SECURITY CAMERA, CEILING - SURFACE	2-GANG BACKBOX WITH 1-GANG MUD RING	(1) 3/4" EMT	A	N/A	TY5.1/3
	SECURITY CAMERA, WALL - INTERIOR	2-GANG BACKBOX WITH 1-GANG MUD RING	(1) 3/4" EMT	A	9' - 0" AFF	TY5.1/1
	SECURITY CAMERA, WALL - EXTERIOR	INSTALL SECURITY PROVIDER'S BACKBOX	(1) 3/4" EMT	A	10' - 0" AFF	TY5.1/1
IC	SECURITY VIDEO INTERCOM, WALL	4-GANG BACKBOX WITH PROVIDER'S PLATE	(1) 3/4" EMT	A	48" AFF TO PUSH BUTTON	TY5.1/4
PB	SECURITY PANIC BUTTON, DESK/WALL	1-GANG BACKBOX WITH 1-GANG MUD RING	(1) 1/2" EMT	D	N/A	TY5.2/5
DM	DOOR POSITION SWITCH	N/A	(1) 1/2" EMT TO DOOR FRAME	D	N/A	TY5.1/4-7 TY5.2/2-3
DM	DOOR POISTION SWITCH, OVERHEAD DOOR	1-GANG JUNCTION BOX	(1) 3/4" EMT	D	N/A	TY5.2/3
DO	DOOR OPERATOR, PUSH BUTTON	2-GANG BACKBOX WITH 1-GANG MUD RING	(1) 3/4" EMT	BY DIV. 8	44" AFF	TY5.1/4

DEFAULT MOUNTING HEIGHTS SHOWN ABOVE WHERE NO CALL-OUT IS PROVIDED. MOUNTING HEIGHTS LISTED ARE ABOVE FINISHED FLOOR (AFF) OR ABOVE FINISHED GRADE (AFG). ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH CURRENT ADA AND LOCAL REQUIREMENTS.

CABLE TYPES

A	CATEGORY 6 CABLE
B	22 AWG, 6C SHIELDED
C	16 AWG, 4C SHIELDED
D	22 AWG, 2C UNSHIELDED
E	22 AWG, 4C UNSHEILDED

CABLE TYPES SHOWN ABOVE ARE TYPICAL FOR CABLE DISTANCES LESS THAN 250 FEET. REFER TO DEVICE MANUFACTUERER'S INSTALLATION REQUIREMENTS FOR LONGER DISTANCES. COORDINATE WITH DOOR HARDWARE PROVIDER TO CONFIRM CABLING REQUIREMENTS FOR LOCK POWER.

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STATE OF MISSOURI
CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTERPRISE DRIVE
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.2801
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4
LEE'S SUMMIT R-7 SCHOOL DISTRICT
1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

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10/08/20
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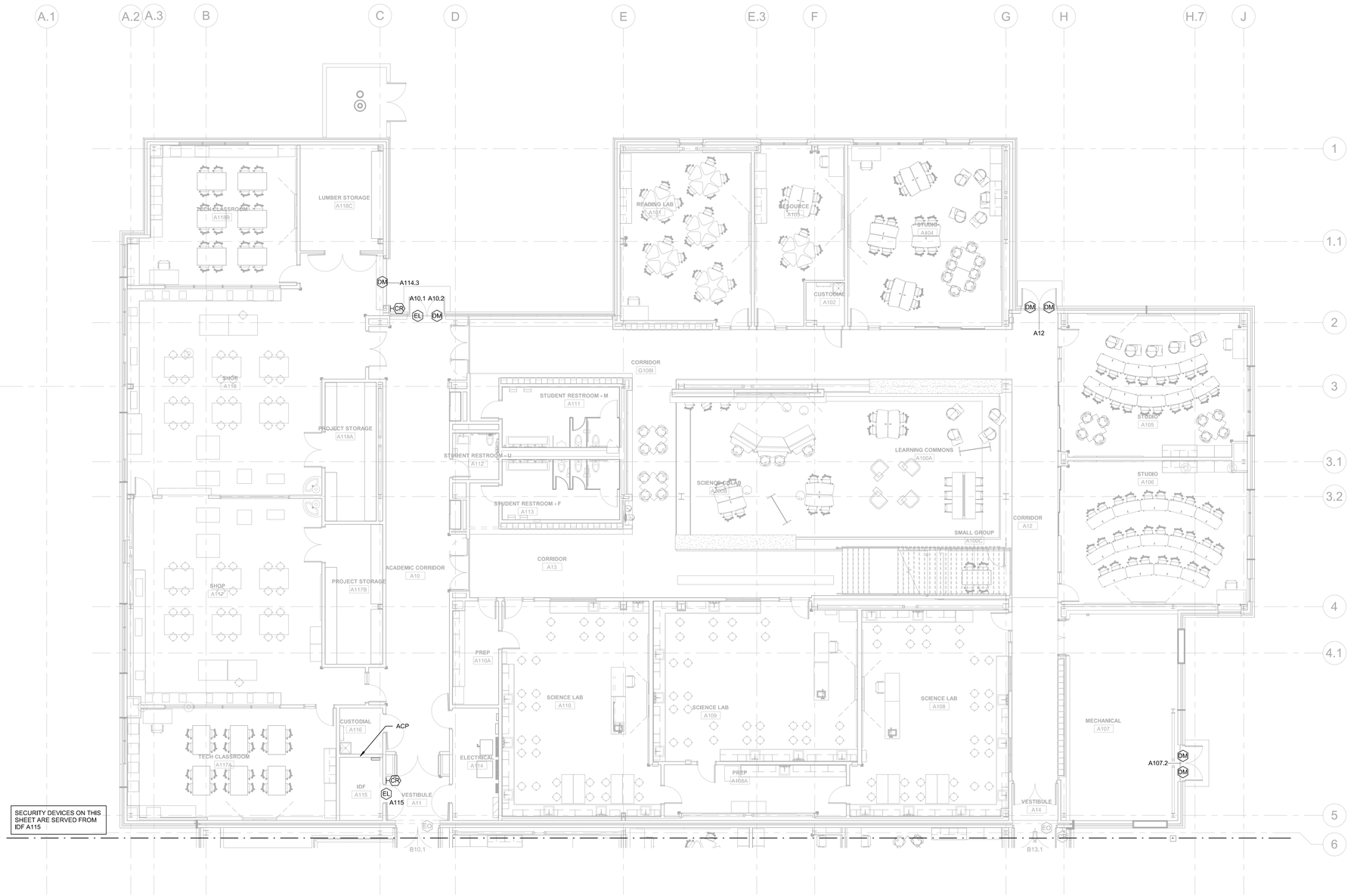
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SECURITY GENERAL NOTES AND LEGEND

TY0.1

CURTIS A. OLDS

SECURITY GENERAL NOTES:
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1 SECURITY FIRST LEVEL PLAN - AREA A
1/8" = 1'-0"

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STATE OF MISSOURI
CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5360
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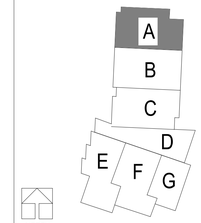
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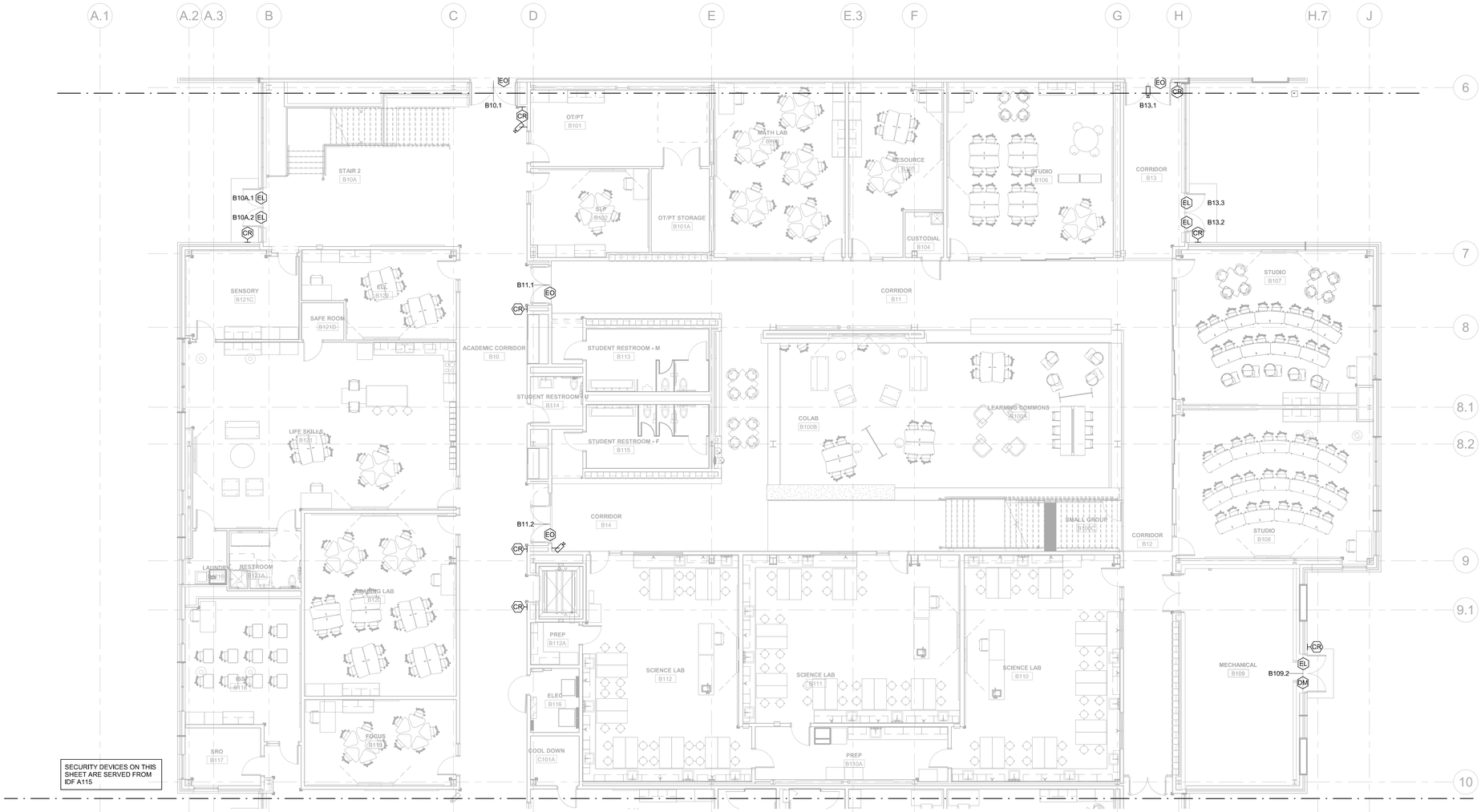
SECURITY FIRST LEVEL PLAN - AREA A

TY1.1A

CURTIS A. OLDS

SECURITY GENERAL NOTES:

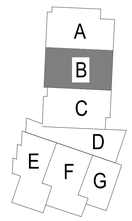
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SECURITY DEVICES ON THIS SHEET ARE SERVED FROM IDF A115

1 SECURITY FIRST LEVEL PLAN - AREA B
1/8" = 1'-0"

KEY PLAN



NORTH

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CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5360
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SECURITY FIRST LEVEL PLAN - AREA B

TY1.1B

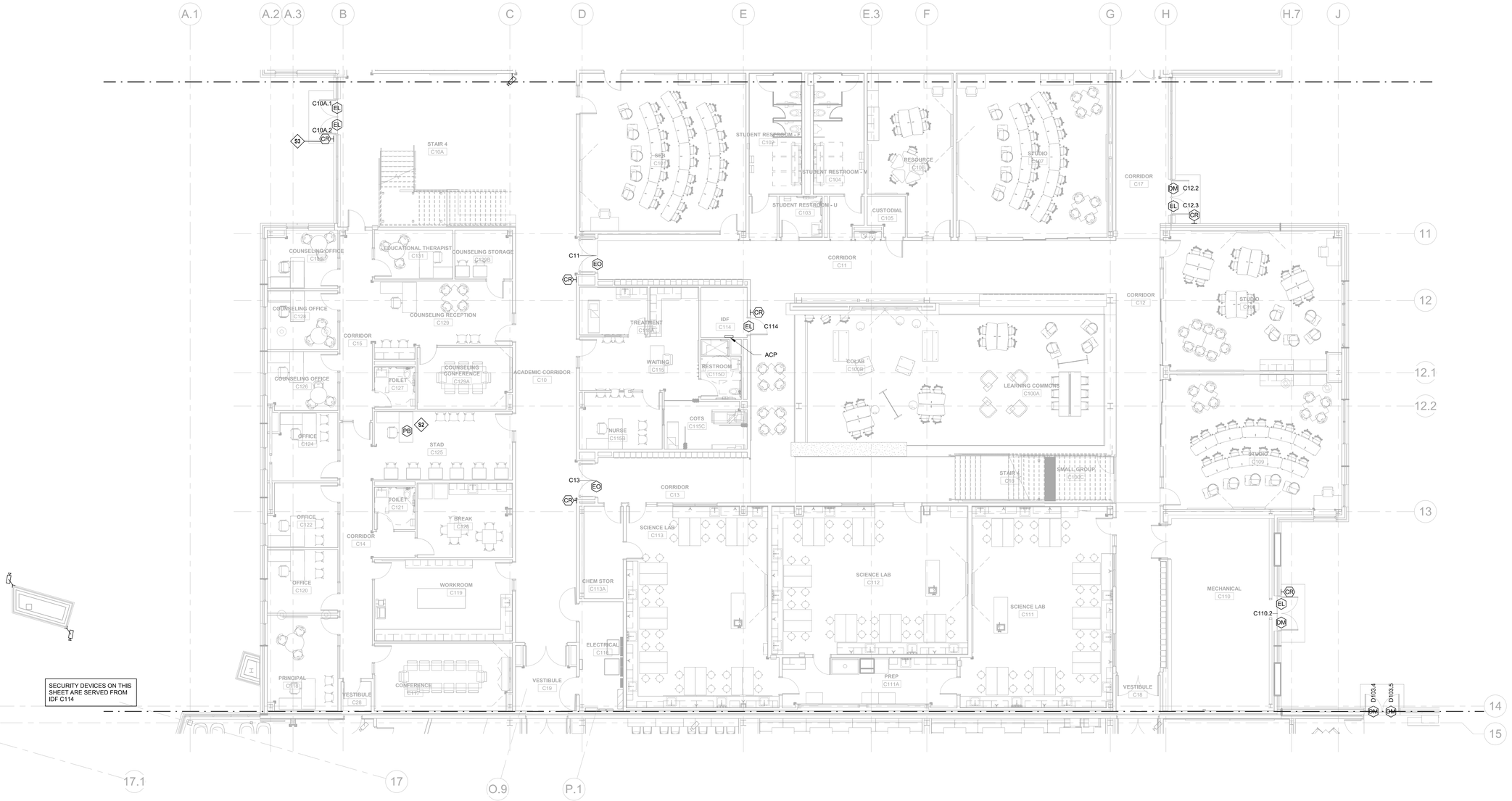
CURTIS A. OLDS

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SECURITY PLAN NOTES:

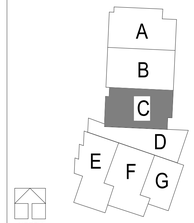
S2 COORDINATE PANIC BUTTON FINAL LOCATION WITH OWNER AND FURNITURE MANUFACTURER PRIOR TO ROUGH-IN.

S3 CARD READER MOUNTED ON MULLION. ROUTE CABLING THROUGH DOOR FRAME



1 SECURITY FIRST LEVEL PLAN - AREA C
1/8" = 1'-0"

KEY PLAN



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Oct 8 2020
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HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.0001
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LEE'S SUMMIT R-7 SCHOOL DISTRICT
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SECURITY FIRST LEVEL PLAN - AREA C

TY1.1C

CURTIS A. OLDS

SECURITY GENERAL NOTES:
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SECURITY PLAN NOTES:

S1 COORDINATE ADA PUSH BUTTON LOCATION AND LOCAL POWER REQUIREMENTS PRIOR TO ROUGH-IN.

S2 COORDINATE PANIC BUTTON FINAL LOCATION WITH OWNER AND FURNITURE MANUFACTURER PRIOR TO ROUGH-IN.

SECURITY DEVICES ON THIS SHEET ARE SERVED FROM IDF C114

A.1 A.2 A.3 B C D E E.3 F G H H.7 J

15 16 17 17.1

M N O O.9 P P.1 Q R R.5 S T T.4 U U.2 V W X

STORAGE D100C
WAITING D100B
RECEPTION D100A
STAIRS 5 D12S
ENTRY VESTIBULE D100
ENTRY CORRIDOR D11
CORRIDOR D12
COMMONS D101
GENIUS BAR D102
SMALL GROUP D104
MEDIA CENTER D103
RESTROOM D110A
WORKROOM D110
OFFICE D109
STORAGE D108
MEDIUM GROUP ROOM D107
RISER ROOM D106

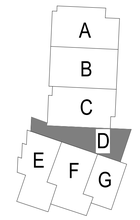
S1 (TYP) D100.1 D100.2 D100.3 D100.4 D11.1 D11.2 D11.4 EL CR DO DC IC PB

S2 (TYP) PB

EL D12.1 DM D12.2 DM D12.3

1 SECURITY FIRST LEVEL PLAN - AREA D
1/8" = 1'-0"

KEY PLAN



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HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.0501
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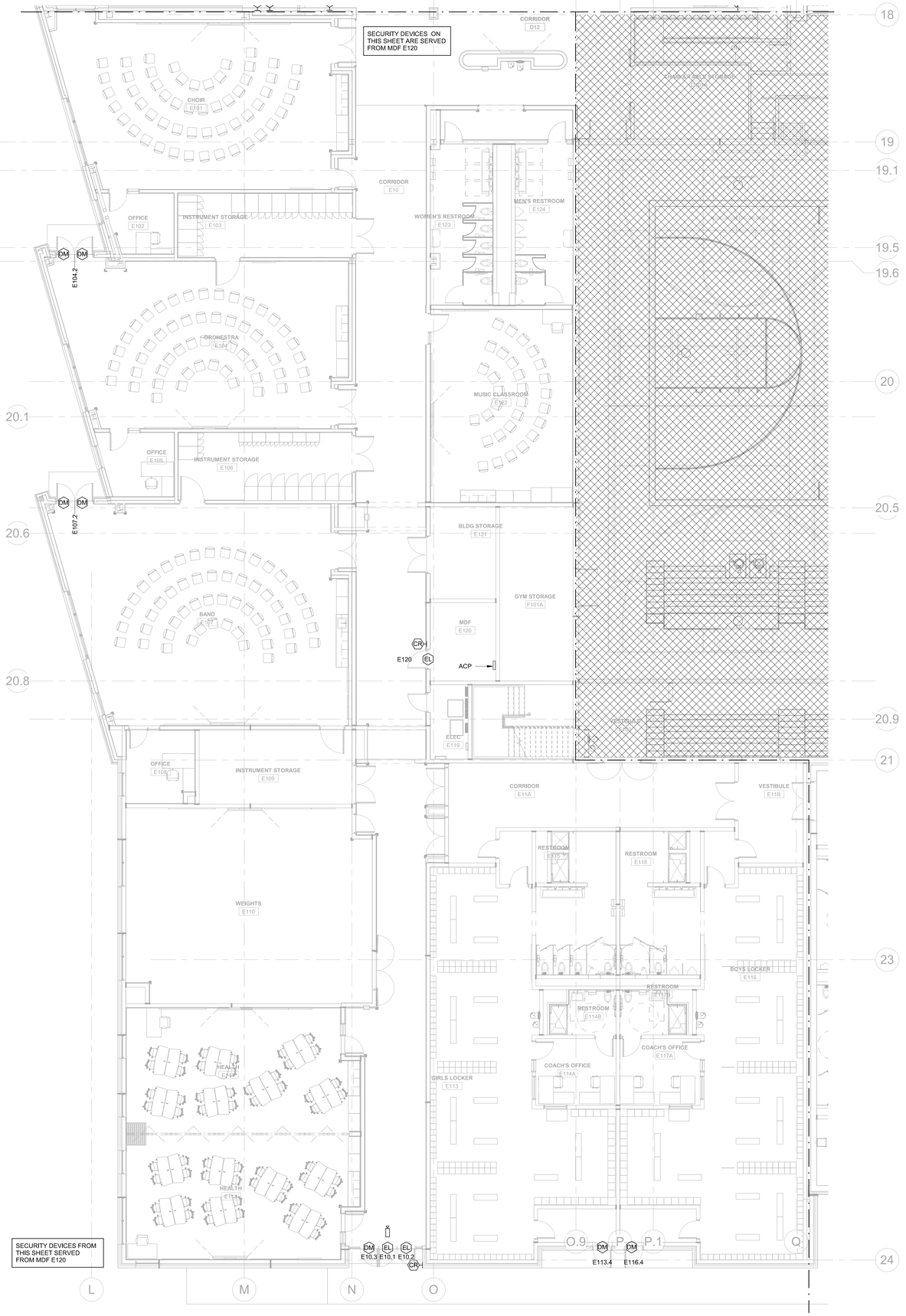
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SECURITY FIRST LEVEL PLAN - AREA D

TY1.1D

CURTIS A. OLDS



1 SECURITY FIRST LEVEL PLAN - AREA E
1/8" = 1'-0"

SECURITY GENERAL NOTES:

SECURITY DEVICES SHOWN ON PLANS ARE FOR REFERENCE ONLY. OWNER TO PROVIDE ALL SECURITY HEAD-END EQUIPMENT, FIELD DEVICES AND FIELD DEVICE TERMINATIONS. CONTRACTOR SHALL PROVIDE ALL CONDUIT, BACKBOXES AND CABLING FOR DEVICES SHOWN. REFER TO ROUGH-IN SCHEDULE ON SHEET TY0.1.

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STATE OF MISSOURI
CURTIS A. OLDS
NUMBER PE-2018036640
PROFESSIONAL ENGINEER

Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
EXPIRES 12/31/2020

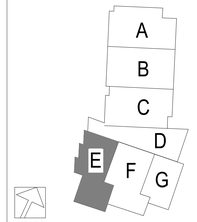
LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

KEY PLAN

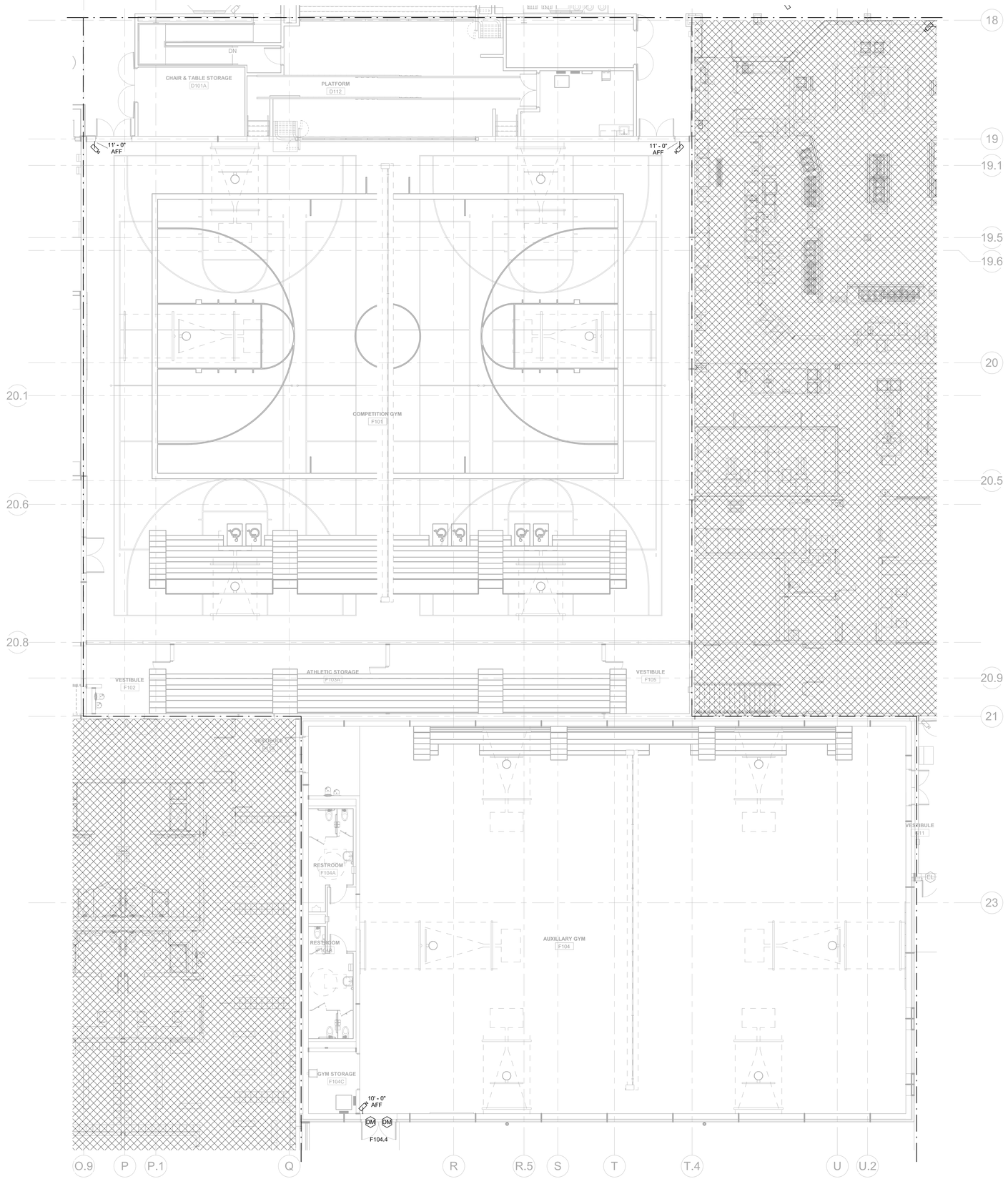


13-20102-00

SECURITY FIRST LEVEL PLAN - AREA E

TY1.1E

CURTIS A. OLDS

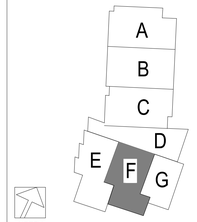


1 SECURITY FIRST LEVEL PLAN - AREA F
1/8" = 1'-0"

SECURITY GENERAL NOTES:

SECURITY DEVICES SHOWN ON PLANS ARE FOR REFERENCE ONLY. OWNER TO PROVIDE ALL SECURITY HEAD-END EQUIPMENT, FIELD DEVICES AND FIELD DEVICE TERMINATIONS. CONTRACTOR SHALL PROVIDE ALL CONDUIT, BACKBOXES AND CABLING FOR DEVICES SHOWN. REFER TO ROUGH-IN SCHEDULE ON SHEET TY0.1.

KEY PLAN



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8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.0001
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LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

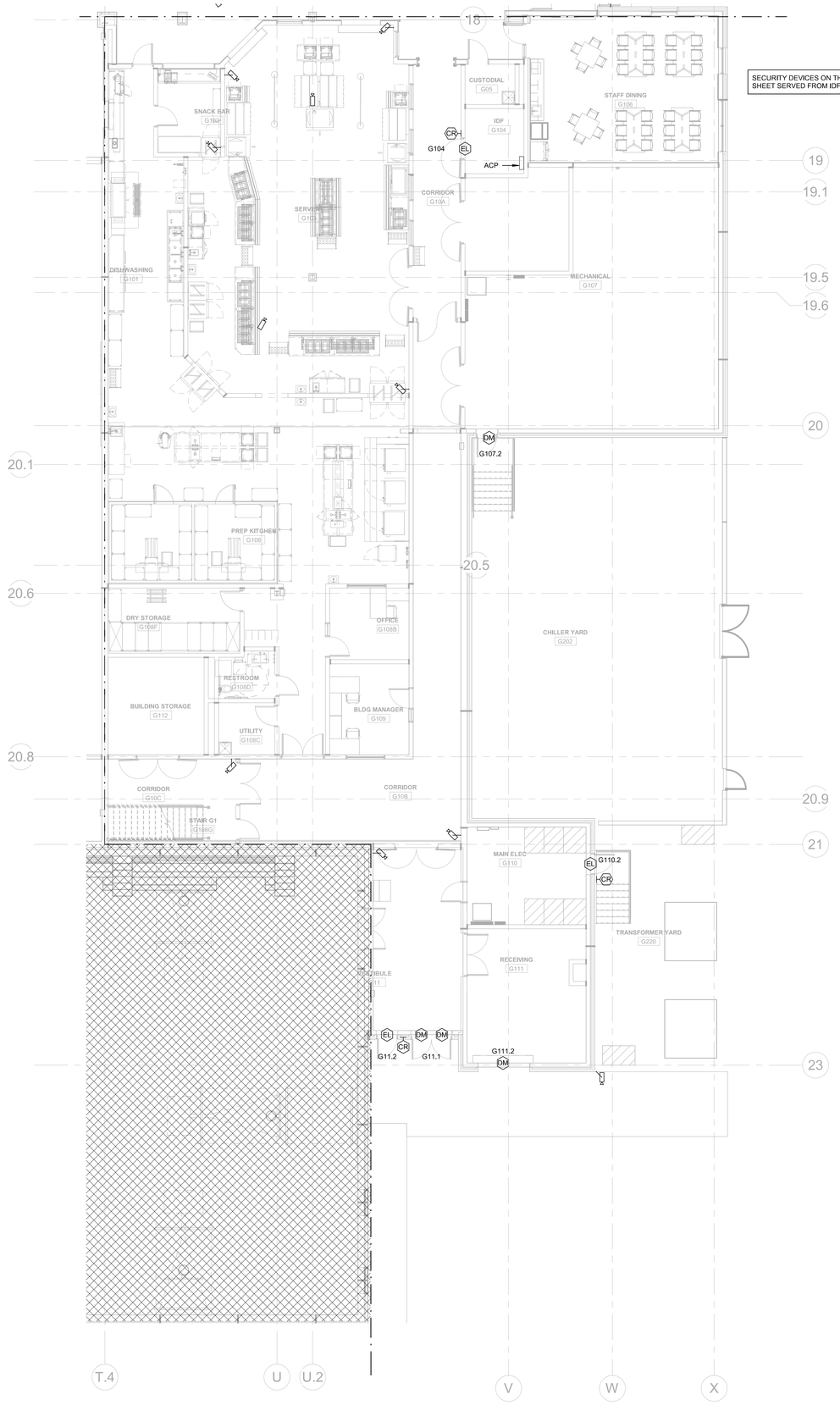
PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

13-20102-00

SECURITY FIRST LEVEL PLAN - AREA F

TY1.1F

CURTIS A. OLDS



1 SECURITY FIRST LEVEL PLAN - AREA G
1/8" = 1'-0"

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Oct 8 2020
CURTIS A. OLDS
LICENSE # PE-2018036640

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8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2300 FAX 913.742.2301
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
EXPIRES 12/31/2020

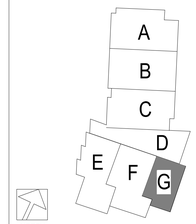
LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

KEY PLAN

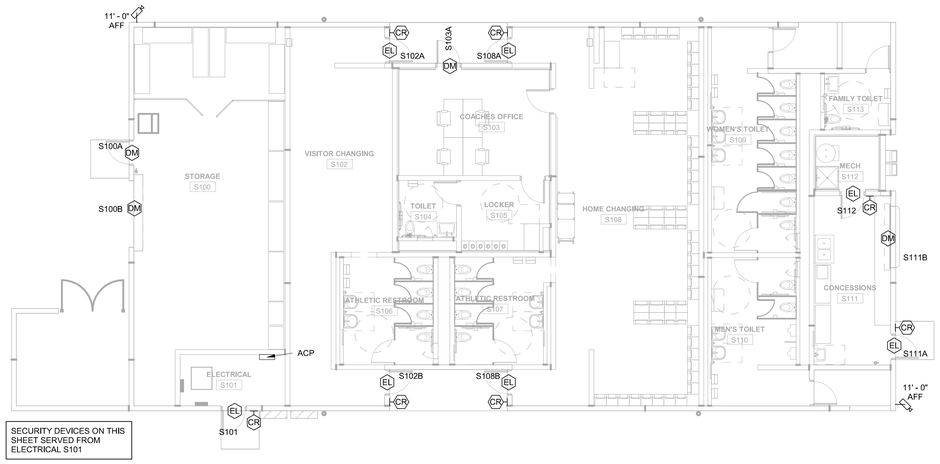


13-20102-00

SECURITY FIRST LEVEL PLAN - AREA G

TY1.1G

CURTIS A. OLDS



1 SECURITY FIRST LEVEL PLAN - AREA S
1/8" = 1'-0"

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8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.0001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5360
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PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

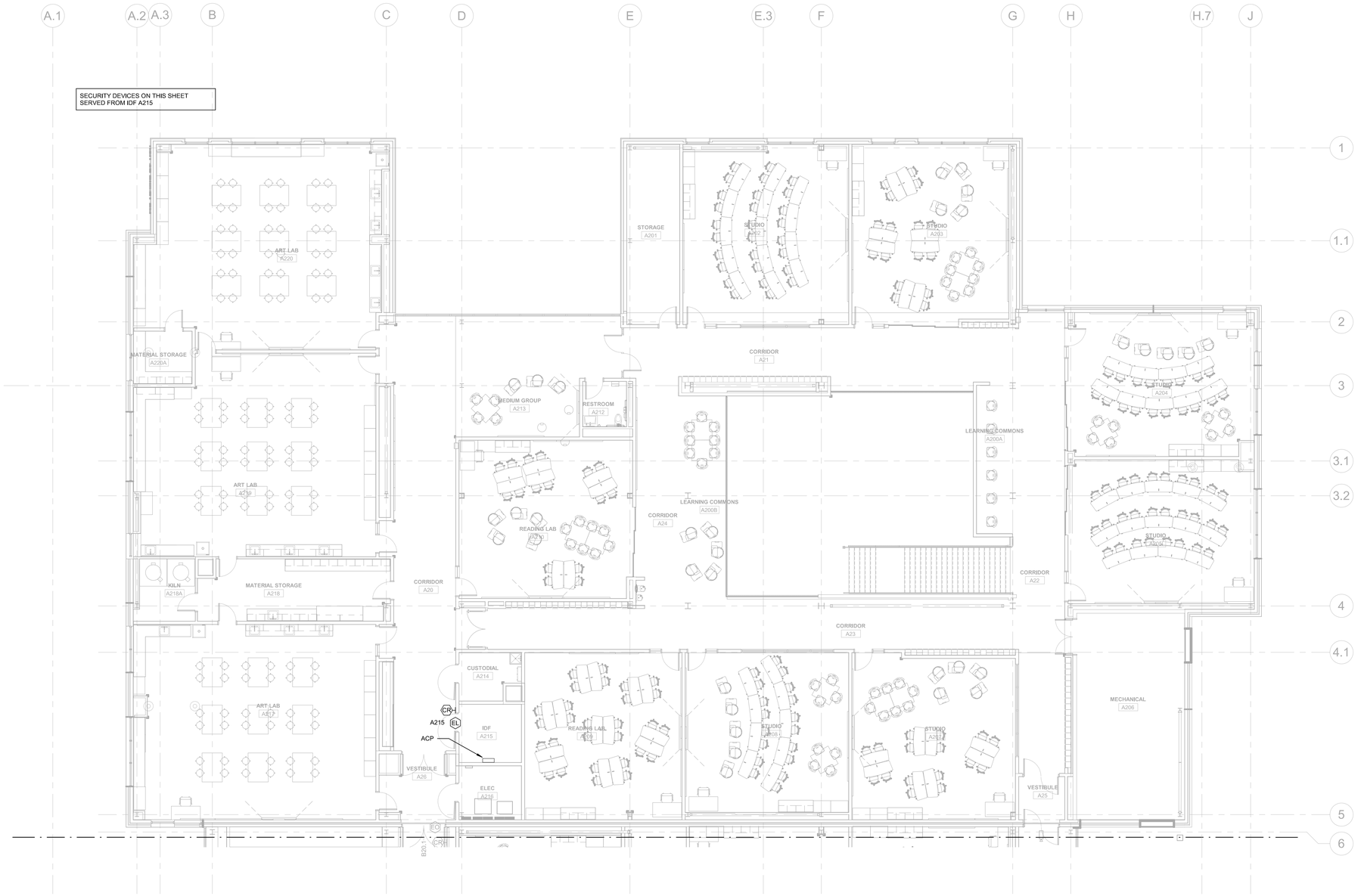
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SECURITY FIRST LEVEL PLAN - AREA S

TY1.1S

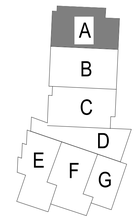
CURTIS A. OLDS

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1 SECURITY SECOND LEVEL PLAN - AREA A
1/8" = 1'-0"

KEY PLAN



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LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5060
EXPIRES 12/31/2020

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LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

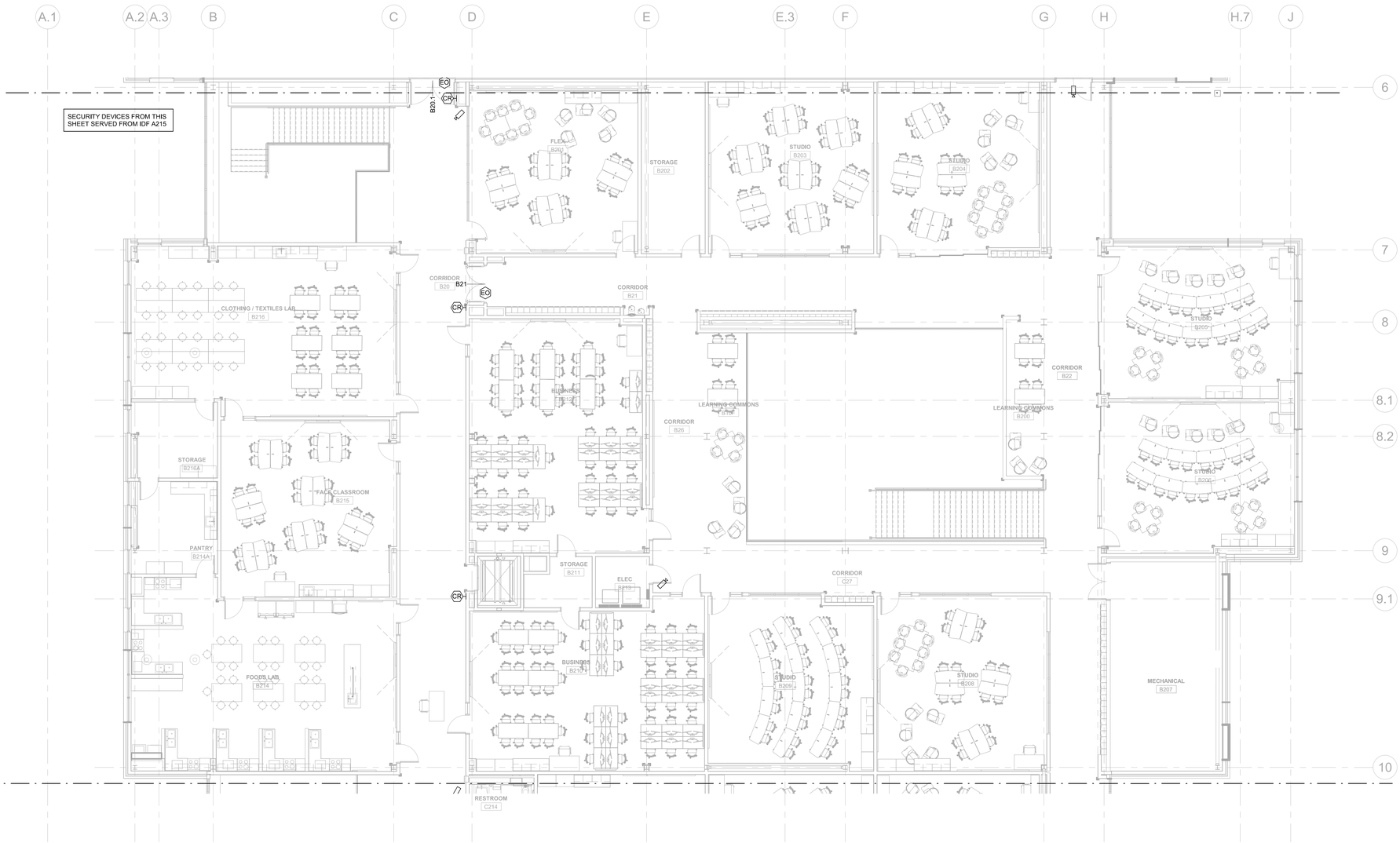
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SECURITY SECOND LEVEL PLAN - AREA A

TY1.2A

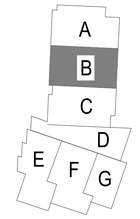
CURTIS A. OLDS

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1 SECURITY SECOND LEVEL PLAN - AREA B
1/8" = 1'-0"

KEY PLAN



NORTH

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Oct 8 2020
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LICENSE # PE-2018036640

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8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2000 FAX 913.742.0001
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LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

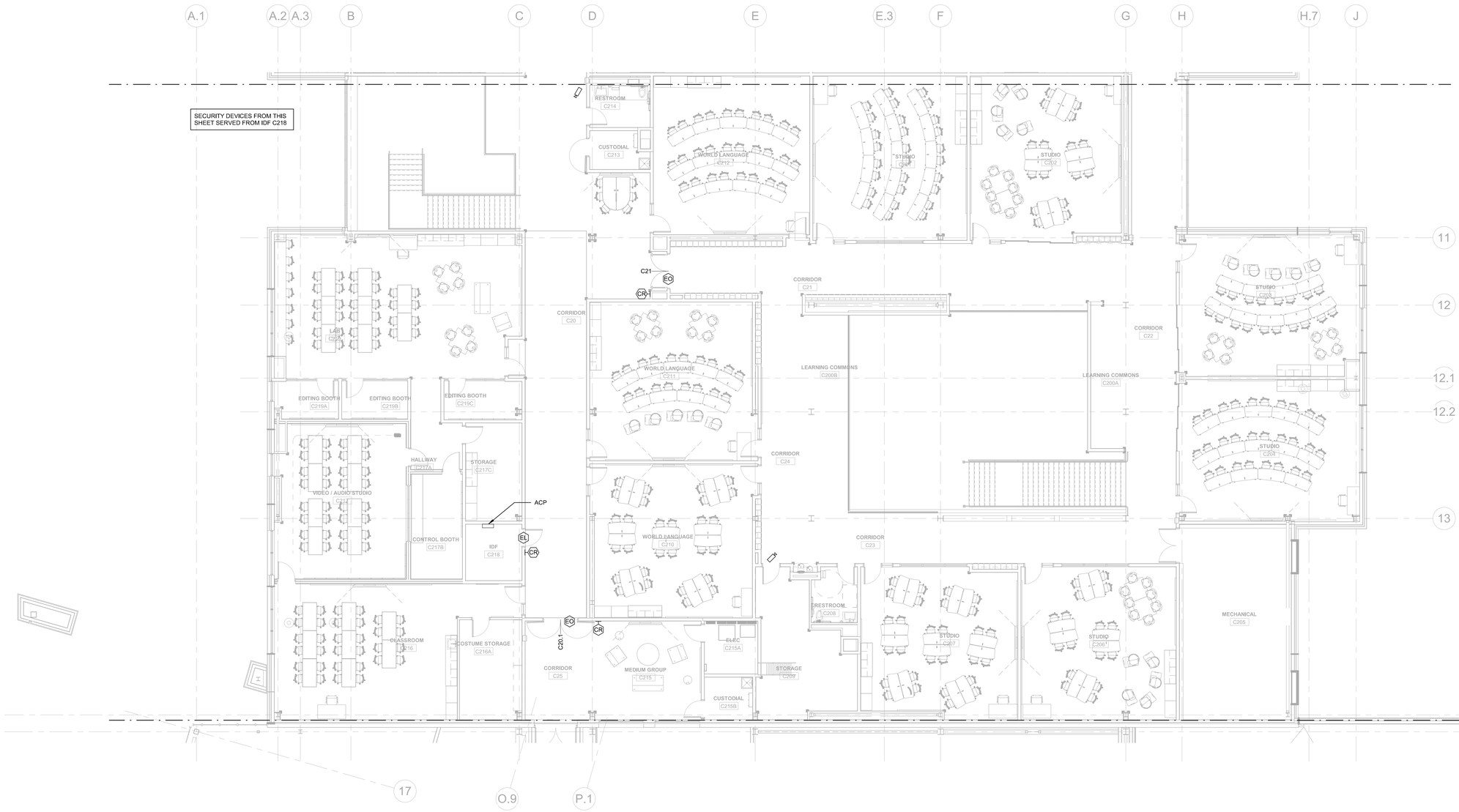
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SECURITY SECOND LEVEL PLAN - AREA B

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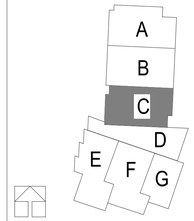
CURTIS A. OLDS

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1 SECURITY SECOND LEVEL PLAN - AREA C
1/8" = 1'-0"

KEY PLAN



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STATE OF MISSOURI
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PROFESSIONAL ENGINEER
Oct 8 2020
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LICENSE # PE-2018036640

HENDERSON ENGINEERS
8345 ENTEX DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.2800 FAX 913.742.3001
WWW.HENDERSONENGINEERS.COM
MO. CORPORATE NO. E-5360
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

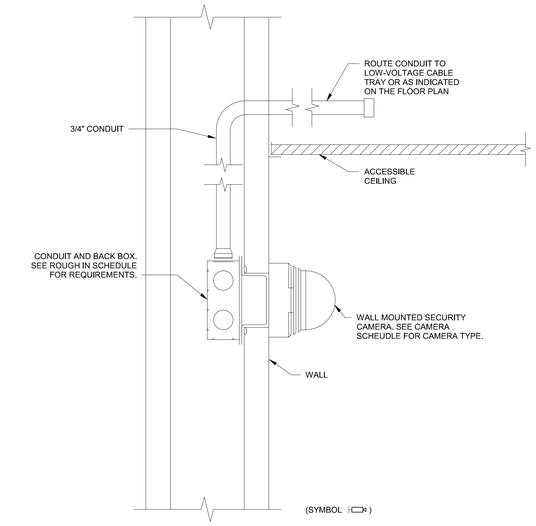
PACKAGE 3 - BUILDING & SITE
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REVISIONS

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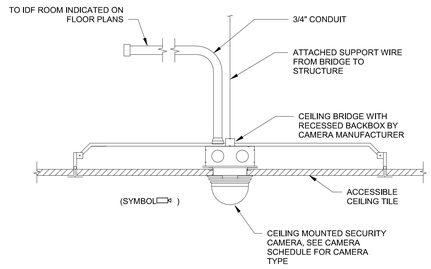
SECURITY SECOND LEVEL PLAN - AREA C

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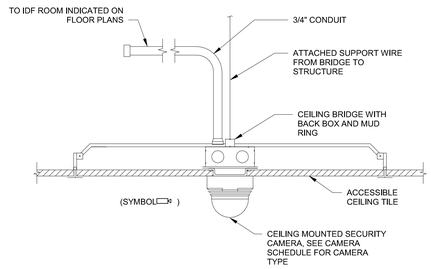
CURTIS A. OLDS



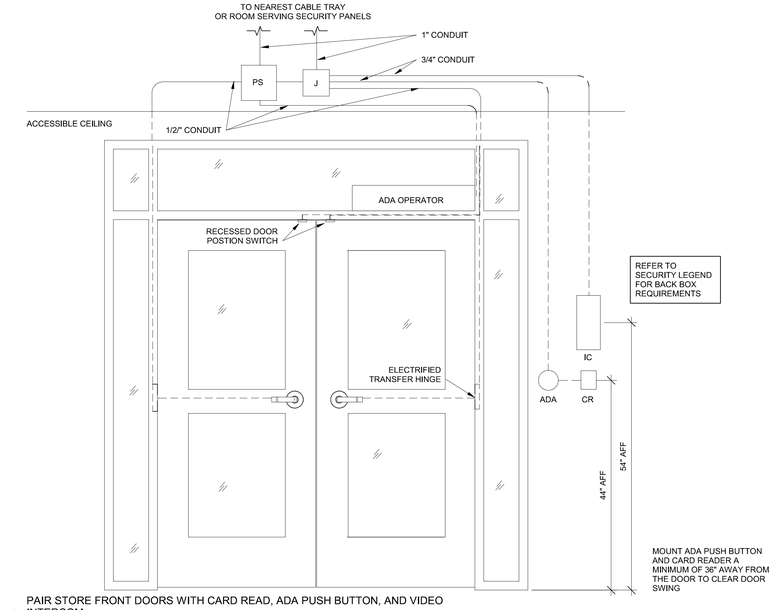
1 TYPICAL CAMERA INSTALLATION DETAIL - WALL MOUNT SURFACE
NTS



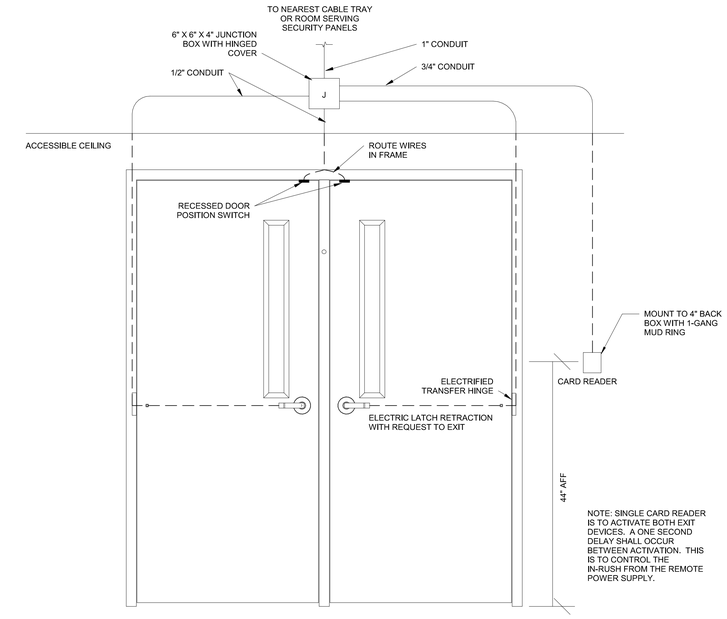
2 TYPICAL CAMERA INSTALLATION DETAIL - CEILING FLUSH MOUNT
NTS



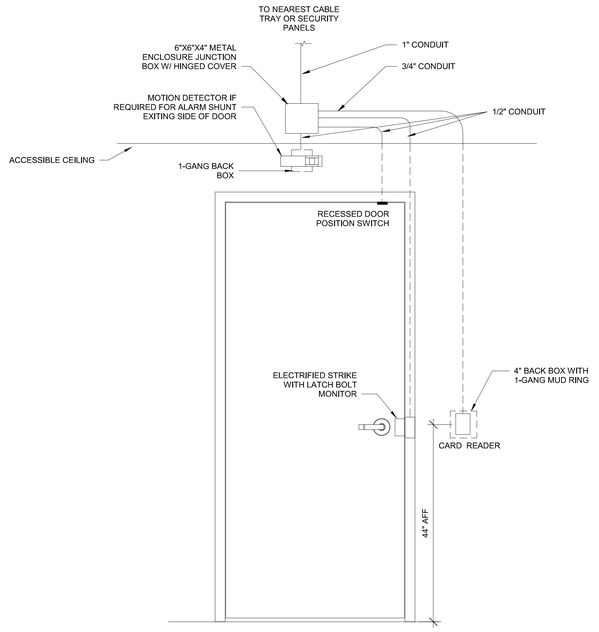
3 TYPICAL CAMERA INSTALLATION DETAIL - CEILING SURFACE MOUNT
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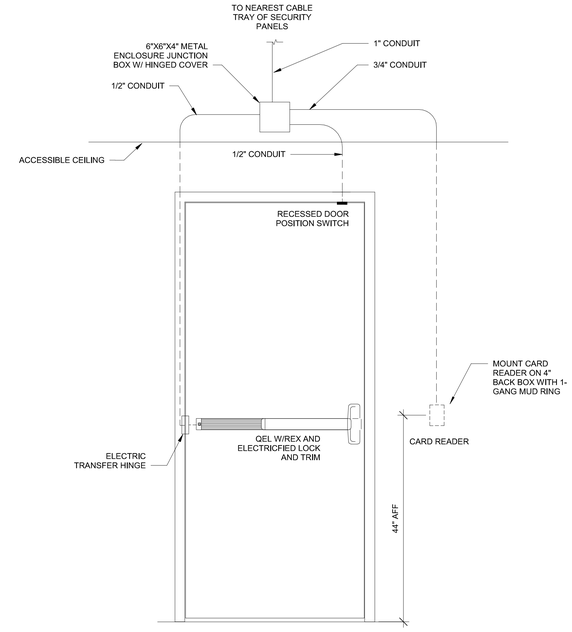
4 PAIR STORE FRONT DOORS WITH CARD READ, ADA PUSH BUTTON, AND VIDEO INTERCOM
NTS



5 DOUBLE DOOR ELECTRIC LOCK SET REMOVEABLE MULLION
NTS



6 SINGLE DOOR WITH ELECTRIFIED STRIKE AND MOTION DETECTOR
NTS



7 SINGLE DOOR WITH ELECTRIC PANIC DEVICE
NTS

CURTIS A. OLDS

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LICENSE # PE-2018036640

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LENEXA, KS 66214
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EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

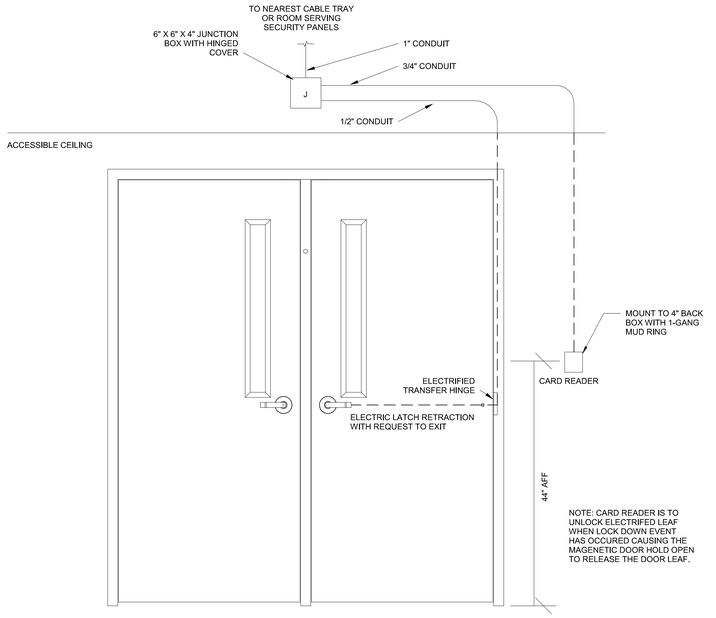
1001 SE BAILEY ROAD
LEE'S SUMMIT, MO 64081

PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

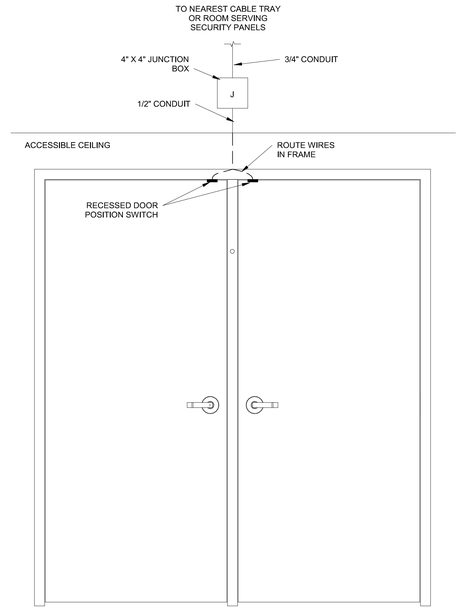
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SECURITY DETAILS

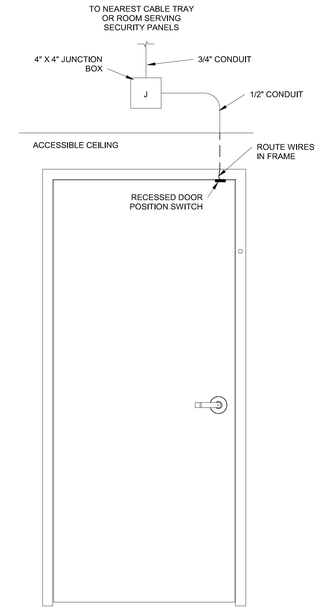
TY5.1



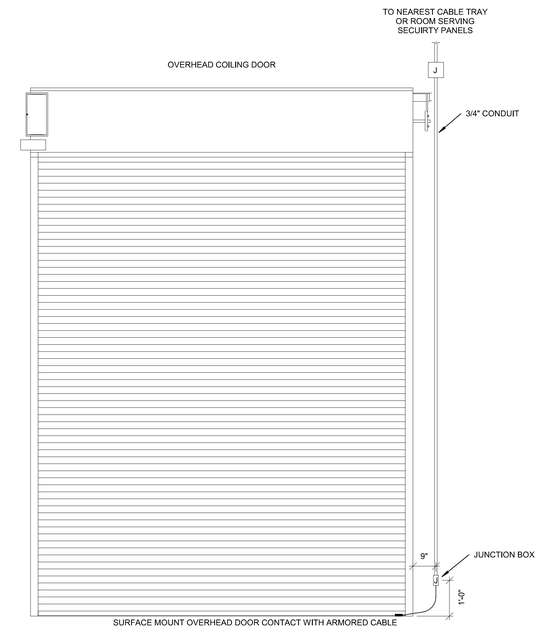
1 DOUBLE DOOR ELECTRIC LOCK SET REMOVEABLE MULLION
NTS



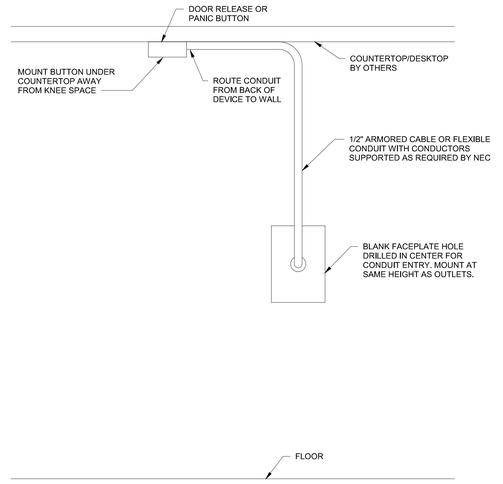
2 DOUBLE DOOR WITH DOOR POSITION SWITCH ONLY
NTS



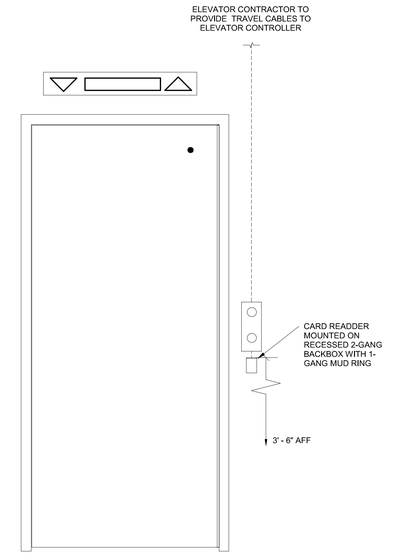
3 SINGLE DOOR WITH DOOR POSITION SWITCH ONLY
NTS



4 OVERHEAD COILING DOOR
NTS



5 UNDER COUNTERTOP PANIC BUTTON AND DOOR RELEASE BUTTON DETAIL
NTS



6 DOUBLE DOOR DOOR POSITION SWITCH ONLY
NTS

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SECURITY DETAILS

TY5.2

CURTIS A. OLDS