

RESPONSIBILITY MATRIX			
SCOPE ITEM	RESPONSIBILITY	NOTES	
		OFCI	OFCI
<b>COMMUNICATIONS - DIVISION 27</b>			
CATEGORY 6 STRUCTURED CABLING SYSTEM		X	
BUILDING INTERCOMPA, BELL, AND CLOCK SYSTEM		X	
NETWORK EQUIPMENT			
→ MDF/IDF NETWORK EQUIPMENT		X	
→ VOIP TELEPHONES		X	
→ WIRELESS ACCESS POINTS		X	
→ UNINTERRUPTIBLE POWER SUPPLIES (UPS)		X	
RACEWAY: CONDUIT, BACK BOXES, SLEEVES, ETC.		X	SEE NOTE 1.
ELECTRICAL POWER		X	SEE NOTE 1.
<b>LIFE SAFETY AND SECURITY - DIVISION 28</b>		OFCI	OFCI
ACCESS CONTROL SYSTEM(ACS)		X	
INTRUSION DETECTION SYSTEM		X	
VIDEO SURVEILLANCE SYSTEM (VSS)			
→ VSS SERVERS		X	
→ VSS CAMERAS		X	
→ VSS PROGRAMMING		X	
→ VSS CABLING		X	SEE NOTE 2.
FIRE ALARM SMOKE DETECTION WITH VOICE EVACUATION		X	SEE NOTE 1.
RACEWAY: CONDUIT, BACK BOXES, SLEEVES, ETC.		X	SEE NOTE 1.
ELECTRICAL POWER		X	SEE NOTE 1.
OFCI - OWNER FURNISHED AND OWNER INSTALLED CFCI - CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED OFG - OWNER FURNISHED AND CONTRACTOR INSTALLED			

REPSONSIBILITY MATRIX NOTES:  
1. BY DIVISION 26.  
2. BY DIVISION 27.

SUBSCRIPTS AND ABBREVIATIONS	
'WM'	INDICATES THAT THE DESIGNATED DEVICE IS TO BE WALL MOUNTED AT SPECIFIED HEIGHT OR IN COMPLIANCE WITH CODE REQUIREMENTS. ALL WALL MOUNTED HEIGHTS ARE TO BE CONFIRMED WITH THE PROJECT'S ARCHITECT PRIOR TO ROUGH-IN.
'WP'	INDICATES THAT THE DESIGNATED DEVICE SHALL BE WEATHER PROOF AND RATED FOR EXTERIOR CONDITIONS INSTALLATION.
'AC'	INDICATES THAT THE DESIGNATED DEVICE IS TO BE INSTALLED ABOVE THE COUNTERTOP. A NUMERIC VALUE SHALL REPLACE THE 'W' SYMBOL AND SHALL DESIGNATE THE SPECIFIC HEIGHT ABOVE COUNTERTOP. ALL HEIGHTS ARE TO BE CONFIRMED WITH THE PROJECT'S ARCHITECT PRIOR TO ROUGH-IN.
'AFF'	INDICATES THAT THE DESIGNATED DEVICE IS TO BE INSTALLED ABOVE THE FINISHED FLOOR. A NUMERIC VALUE SHALL REPLACE THE 'W' SYMBOL AND SHALL DESIGNATE THE SPECIFIC HEIGHT ABOVE FINISHED FLOOR. ALL HEIGHTS ARE TO BE CONFIRMED WITH THE PROJECTS ARCHITECT PRIOR TO ROUGH-IN.
'UC'	INDICATES THAT THE DESIGNATED DEVICE IS TO BE MOUNTED ON THE UNDERSIDE OF THE ELEVATED CANOPY.
'CM'	INDICATES THAT THE DESIGNATED DEVICE IS TO BE CORNER MOUNTED AT SPECIFIED HEIGHT. ALL WALL MOUNTED HEIGHTS ARE TO BE CONFIRMED WITH THE PROJECT'S ARCHITECT PRIOR TO ROUGH-IN.
	FIELD COORDINATE ELEVATION.

FIRE ALARM LEGEND	
[FACP]	FIRE ALARM CONTROL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[NAC]	NOTIFICATION APPLIANCE CIRCUIT
<b>NOTES:</b>	
1.	FIRE ALARM SYSTEM IS A PERFORMANCE BASED PER SPECIFICATIONS 28.46.00. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2.	A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72 LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.
3.	PROJECT SCOPE INCLUDES EXPANDING THE EXISTING FIRE ALARM SYSTEM. FIRE ALARM SYSTEM SHALL BE FULLY OPERATIONAL THROUGHOUT ALL PHASES OF CONSTRUCTION.

NOTES TO CONTRACTOR	
1.	EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS. REFER TO GENERAL ELECTRICAL NOTES FOR WALL-MOUNTED DEVICE MOUNTING HEIGHTS.
2.	REFERENCE SPECIFICATIONS FOR MATERIALS AND METHODS.
3.	COMPLETE INSTALLATION OF ALL PRODUCTS SHALL BE IN COMPLIANCE WITH ALL CODES, INDUSTRY STANDARDS, COMMON PRACTICES AND MANUFACTURER'S INSTRUCTIONS.
4.	ALL EXTERIOR AND WALL MOUNTED CAMERA LOCATIONS AND MOUNTING HEIGHTS MUST BE COORDINATED WITH THE OWNER PRIOR TO ROUGH-IN. COORDINATION MEETINGS SHALL BE SCHEDULED THROUGH THE ARCHITECT'S PROJECT MANAGER.

INTERCOM GENERAL NOTES	
1.	THE SYSTEM INSTALLER SHALL PROPERLY SUPPORT ALL INSTALLED SYSTEM CABLING FROM AN APPROVED CABLE SUPPORT SYSTEM AS DETAILED IN SPECIFICATIONS. NO CABLING SHALL BE ROUTED AND TIED DIRECTLY TO BUILDING STEEL, CEILING GRID SUPPORT, CONDUIT, PIPING, OR DUCTWORK. THE CABLE SUPPORT SYSTEM SHALL BE DIRECTLY CONNECTED TO THE BUILDING'S STEEL JOIST. AT LOCATIONS WHERE THE BOTTOM OF THE JOIST IS MORE THAN 5' ABOVE THE CEILING, THE SYSTEM INSTALLER SHALL PROVIDE AND INSTALL THREADED ROD AND ALL REQUIRED MATERIALS TO CONNECT THE THREADED ROD TO THE BUILDING STEEL AND THE CABLE SUPPORT SYSTEM TO THE THREADED ROD. CABLE PATHWAY SHALL NOT BE HIGHER THAN 5' ABOVE THE CEILING AT ANY LOCATIONS.
2.	ALL EXTERIOR AND WALL MOUNTED SPEAKERS SHALL BE MOUNTED AT 10'-0" UNLESS OTHERWISE NOTED.
3.	EXTERIOR SPEAKERS SHALL BE INDEPENDENTLY ZONED FROM INTERIOR SPEAKERS.
4.	ALL WALL MOUNTED CALL INITIATING DEVICES SHALL BE INSTALLED AT ADA HEIGHT, MATCHING THE HEIGHT OF THE INSTALLED LIGHT SWITCHES.
5.	PROVIDE AND INSTALL WALL MOUNTED VOLUME CONTROLS IN ALL OFFICES, CONFERENCE ROOMS, AND CLINICS.
6.	ALL VOLUME CONTROLS SHALL BE CONFIGURED WITH EMERGENCY CALL OVERRIDE, ALLOWING EMERGENCY ANNOUNCEMENTS TO BE HEARD DESPITE THE POSITION OF THE VOLUME CONTROL.
7.	ALL 12V/24V SPEAKERS SHALL BE CONNECTED TO A STANDARD PUNCH DOWN BLOCK LOCATED NEAR HEAD END EQUIPMENT AND THEN CONNECTED TO HEAD END EQUIPMENT.
8.	CONTRACTOR TO TAP ALL EXTERIOR SPEAKERS AT 7 WATTS.
9.	ALL EXTERIOR AND WALL MOUNTED SPEAKERS SHALL BE MOUNTED AT 10'-0" UNLESS OTHERWISE NOTED.

GENERAL NOTES	
1.	ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF EACH SYSTEM SHALL BE A DEDICATED CIRCUIT AND AN EMERGENCY POWER WHEN AVAILABLE. PROJECTS ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER TO MAIN CONTROL PANELS, REMOTE POWER SUPPLIES AND ALL HEAD END EQUIPMENT. SYSTEM INSTALLERS SHALL COORDINATE LOCATIONS AND CONNECTIONS WITH THE PROJECT'S ELECTRICAL CONTRACTOR.
2.	THE PROJECT'S ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONDUITS, FLOOR BOX, BACK BOXES, JUNCTION BOXES, RACEWAYS, AND SLEEVES REQUIRED TO ESTABLISH CLEAR PATHWAYS FOR ALL SYSTEMS. ALL CONDUITS, SLEEVES, BOXES, AND RACEWAYS SHALL BE PROPERLY SIZED TO MAINTAIN A 40% MAXIMUM FILL RATIO. THE INSTALLER FOR EACH SYSTEM SHALL PROVIDE THE ELECTRICAL CONTRACTOR WITH SHOP DRAWINGS INDICATING LOCATIONS AND SIZES OF CONDUITS BEYOND THOSE SHOWN ON THE CONTRACT DOCUMENTS.
3.	ALL EXPOSED SYSTEMS WIRING OR WIRING ROUTING ACROSS NON-ACCESSIBLE CEILINGS SHALL BE ROUTED IN CONDUIT, PROVIDED AND INSTALLED BY THE PROJECT'S ELECTRICAL CONTRACTOR. SIZE CONDUIT AS REQUIRED TO ROUTE SYSTEMS WITH 40% CABLE FILL RATIO. MINIMUM CONDUIT SIZE SHALL BE 3/4".
4.	EACH SYSTEM INSTALLER SHALL BE RESPONSIBLE FOR ENSURING ALL EXTERIOR WALL PENETRATIONS ARE PROPERLY SEALED TO PREVENT ANY MOISTURE FROM ENTERING BUILDING.
5.	NO CONDUITS SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING. IF EXTERIOR CONDUITS ARE REQUIRED FOR A COMPLETE INSTALLATION, EACH SYSTEM CONTRACTOR SHALL COORDINATE WITH THE PROJECTS CONSULTANT PRIOR TO ANY ROUGH-IN.
6.	EACH SYSTEM INSTALLER SHALL PROVIDE AND INSTALL PROTECTIVE BUSHINGS ON ALL CONDUIT STUB OUTS AND SLEEVES TO PREVENT CABLE DAMAGE. BUSHING TO BE INSTALLED PRIOR TO CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE ACCEPTED.
7.	ALL CABLE SHALL BE ROUTED DOWN CORRIDORS, PARALLEL AND PERPENDICULAR TO THE BUILDING WALLS AND STRUCTURE. CABLE TO EACH DEVICE SHALL BRANCH OFF OF A MAIN CORRIDOR TRUNK. ROUTING CABLES THROUGH CLASSROOMS, OFFICES, STORAGE ROOMS, RESTROOMS OR ANY TYPE OF ROOM OTHER THAN A CORRIDOR WILL NOT BE ACCEPTED. ENTER ALL ROOMS ABOVE THE ASSOCIATED ROOM DOORWAY.

TECHNOLOGY GENERAL NOTES	
1.	CONTRACTOR SHALL COORDINATE WITH THE SYSTEM ENGINEER PRIOR TO THE INSTALLATION OF RACKS AND RACK EQUIPMENT. NO RACKS SHALL BE PERMANENTLY INSTALLED WITHOUT WRITTEN APPROVAL OF THE PROPOSED LOCATIONS.
2.	THE SELECTED, INSTALLING CONTRACTOR MUST BE A CERTIFIED INTEGRATOR/INSTALLER AUTHORIZED BY THE SPECIFIED SYSTEM MANUFACTURER TO INSTALL THE CABLE PLANT AND CONNECTIVITY PRODUCTS. REFER TO SPECIFICATIONS FOR PRODUCT TYPE AND DESCRIPTION.
3.	SYSTEM WIRING AND EQUIPMENT INSTALLATION SHALL BE IN ACCORDANCE WITH GOOD ENGINEERING PRACTICES AS ESTABLISHED BY ANSII/EIA/TIA, BICSI, AND THE NEC.
4.	ALL WIRING SHALL MEET ALL STATE AND LOCAL ELECTRICAL CODES.
5.	ALL TELECOMMUNICATIONS SYSTEMS EQUIPMENT AND MOUNTING LOCATIONS SHALL BE IN COMPLIANCE WITH ADA ACCESSIBILITY STANDARDS.
6.	ALL INDUSTRY STANDARD CATEGORY 6 CABLING PRACTICES MUST BE FOLLOWED FOR ALL DATA CABLING.
7.	ALL CABLES/WIRING ARE TO BE INSTALLED WITH A MINIMUM OF 12" INCHES OF SEPARATION FROM AC POWER CABLES, INTERCOM, FIRE ALARM, SECURITY CABLES IN ANY PARALLEL OPEN WIRE RUN.
8.	ALWAYS CROSS OTHER SYSTEM CABLES AT A 90 DEGREE ANGLE.
9.	ALL CABLES AND TERMINATION COMPONENTS SHALL BE MACHINE LABELED AT BOTH ENDS. LABEL ALL CABLES PER TS DRAWINGS AND/OR SPECIFICATIONS. FINAL CABLE/OUTLET IDENTIFICATION LABELS SHALL BE COORDINATED WITH THE OWNER AND ENGINEER.
10.	CONTRACTOR TO PROVIDE LIGHTNING PROTECTION ON ALL COMMUNICATION CABLE BETWEEN BUILDINGS.
11.	ALL EXPOSED CABLING ROUTED IN PLENUM SHALL BE PLENUM-RATED. ALL NON PLENUM-RATED CABLING INSTALLED IN PLENUM SPACES SHALL BE INSTALLED IN CONDUIT.
12.	NO TERMINATION OR SPICES SHALL BE INSTALLED IN OR ABOVE CEILINGS UNLESS NOTED NOTED OTHERWISE.
13.	CONTRACTOR SHALL MAINTAIN WALL RATING WITH PROPER FIRE BLOCKING METHODS.
14.	ALL CABLE INSTALLED SHALL ROUTE TO THE CENTER OF THE ROOM IN WHICH IT SERVES AND THEN TO THE OUTLET LOCATION IT IS INTENDED FOR. EACH CABLE SHALL HAVE A 10' SERVICE LOOP AT THE CENTER OF EACH ROOM AND A 3' SERVICE LOOP ABOVE EACH OUTLET LOCATION.
15.	PROVIDE AND INSTALL ONE (1) CATEGORY 6 CABLE TO EACH VIDEO SURVEILLANCE CAMERA ON THE ENTIRE PROJECT. REFERENCE VIDEO SURVEILLANCE LEGEND, NOTES, FLOOR PLANS, DETAILS, AND SCHEDULE.
17.	PROVIDE AND INSTALL ONE (1) CATEGORY 6 CABLE TO THE BUILDING'S ACCESS CONTROL HEAD END PANEL. TERMINATION OF THIS CABLE SHALL BE COORDINATED WITH THE SYSTEM INSTALLER.
18.	PROVIDE AND INSTALL ONE (1) CATEGORY 6 CABLE TO THE BUILDING'S INTRUSION DETECTION PANEL. TERMINATION OF THIS CABLE SHALL BE COORDINATED WITH THE SYSTEM INSTALLER.
19.	PROVIDE AND INSTALL ONE (1) CATEGORY 6 CABLE TO EACH LIGHTING CONTROL HUB ON THE ENTIRE PROJECT. COORDINATE EXACT QUANTITY AND LOCATIONS WITH THE LIGHTING CONTROL SYSTEM INSTALLER. CONTRACTOR TO ASSUME A MINIMUM OF TEN (10) PER PROJECT.
20.	PROVIDE AND INSTALL TWO (2) CATEGORY 6 DATA CIRCUITS TO EACH FSD (ALL VARIATIONS OF), CMP, WMP, AND DS ON THE ENTIRE PROJECT. COORDINATE ANY DISCREPANCIES WITH ENGINEER.
21.	PROVIDE AND INSTALL ONE (1) CATEGORY 6 DATA CIRCUIT TO THE LOCAL AIR UNIT CONTROLLER IN EACH MDF AND IDF.
22.	PROVIDE AND INSTALL ONE (1) CATEGORY 6 DATA CIRCUIT TO EACH ACCESS CONTROL VIDEO DOOR STATION AND MASTER STATION ON THE ENTIRE PROJECT. COORDINATE EXACT LOCATION AND TERMINATION REQUIREMENTS WITH THE DOOR STATION INSTALLER, PRIOR TO INSTALLATION.

AUDIO/VIDEO LEGEND	
'AV-#'	INDICATES THAT THE DESIGNATED TECHNOLOGY OUTLET IS INTENDED FOR AN AUDIO/VIDEO (AV) INPUT. CONTRACTOR TO PROVIDE AND INSTALL A FLOOR MOUNTED OR WALL MOUNTED BOX AS INDICATED. (1) 1/2" CONDUIT AND (1) 1" CONDUITS FROM THE BOX TO THE NEAREST, PLENUM ACCESSIBLE CEILING WITHIN THE SAME ROOM. ALL FLOOR AND WALL MOUNTED BOXES SHALL BE A MINIMUM OF 2-GANGS. *# - WHEN REPLACED WITH A '1' (AV-1) ONLY, THE OUTLET SHALL BE A STANDALONE. LOCAL INPUT TIED TO A LOCAL VIDEO DISPLAY (FSD, CMP, WMP, AV-2, ETC.). THIS OUTLET WILL NOT BE ASSOCIATED WITH ANY SYSTEM FOR ROUTING TO DISPLAYS LOCATED IN ANY OTHER PORTION OF THE PROJECT. IF NOT REPLACED WITH A '1' SEE THE NOTES AT THE BOTTOM OF THE LEGEND FOR ADDITIONAL INSTRUCTIONS.
'FSD-#'	INDICATES THE LOCATION OF A FLAT PANEL VIDEO DISPLAY. CONTRACTOR TO PROVIDE AND INSTALL TWO (2) CATEGORY 6 UTP NETWORK CABLE TO ALL LOCATIONS SHOWN ON THE ENTIRE PROJECT. *# - WHEN REPLACED WITH A '1' (FSD-1) ONLY, THE OUTLET SHALL BE A STANDALONE AND ONLY HAVE THE CATEGORY 6 CABLE ROUTED TO IT, FROM THE MDF/IDF SERVING THE DEVICES AREA ROOM. *# - WHEN REPLACED WITH A '2' (FSD-2) ONLY, THE OUTLET SHALL HAVE THE CATEGORY 6 CABLE ROUTED TO IT, FROM THE MDF/IDF SERVING THE DEVICES AREA, AND THE CABLING FROM THE ASSOCIATED AV-1. *# - WHEN NOT REPLACED WITH A '1' OR '2', SEE THE 'NOTES' SECTION AT THE END OF THIS LEGEND. EACH FSD OUTLET SHALL BE A 2-GANG BOX AND TWO (2) 1/2" CONDUITS STUBBING INTO THE ROOM'S ACCESSIBLE CEILING. PROVIDE ONE DOUBLE-GANG FACEPLATE WITH TWO (2) DECORA PORTS. PROVIDE A DECORA STYLE INSERT THAT ACCEPTS THE STYLE OF DATA JACK BEING USED FOR STRUCTURED CABLING. WHEN THERE IS A LOCAL AV INPUT ASSOCIATED WITH THE DISPLAY, PROVIDE A DECORA INSERT THAT CONFORMS WITH THE SYSTEMS SPECIFIED. OTHERWISE PROVIDE A BLANK INSERT IN THE SECOND PORT.
'VD'	INDICATES THE LOCATION OF A WALL MOUNTED, INTERACTIVE VIDEO DISPLAY. PROVIDE AND INSTALL AV CABLE FROM THE ASSOCIATED AV-1 AS PER SYSTEM SPECIFICATIONS. RACEWAY SHALL CONSIST OF A 2-GANG BOX AND ONE (1) 1/2" CONDUITS STUBBING INTO THE ROOM'S ACCESSIBLE CEILING. PROVIDE ONE DOUBLE-GANG FACEPLATE WITH TWO (2) DECORA PORTS. PROVIDE A DECORA STYLE INSERT THAT ACCEPTS THE STYLE OF DATA JACK BEING USED FOR STRUCTURED CABLING. WHEN THERE IS A LOCAL AV INPUT ASSOCIATED WITH THE DISPLAY, PROVIDE A DECORA INSERT THAT CONFORMS WITH THE SYSTEMS SPECIFIED. OTHERWISE PROVIDE A BLANK INSERT IN THE SECOND PORT.
'AVC-#'	INDICATES THE LOCATION OF AN AUDIO/VIDEO CONTROL PLATE. RACEWAY SHALL CONSIST OF ONE (1) A BACK BOX WITH A 1" CONDUIT ROUTING INTO THE ACCESSIBLE CEILING SPACE WITHIN THE SAME ROOM. AV SYSTEM INSTALLER TO COORDINATE THE CONTROL BACK BOX SIZE REQUIREMENT WITH THE PROJECT'S ELECTRICAL CONTRACTOR.
'PS'	LOCAL INSTRUCTIONAL SPACE PRESENTATION SPEAKER. REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
'C-#'	INDICATES THE LOCATION OF A STREAMING CAMERA. CONTRACTOR TO PROVIDE AND INSTALL TWO (2) CATEGORY 6 UTP NETWORK CABLE TO ALL LOCATIONS SHOWN ON THE ENTIRE PROJECT. REFERENCE SPECIFICATION FOR ADDITIONAL INFORMATION.
<b>NOTES:</b>	
A.	IN THE EVENT THAT "#" IS NOT DEFINED IN THE OUTLET DESCRIPTION, THE DEVICE SHALL BE CONSIDERED A STANDALONE DEVICE, SERVING THE SYSTEM WITHIN THE SAME SPACE OR THE FOLLOWING SHALL APPLY: *# - UNLESS SPECIFICALLY NOTED OTHERWISE, THE FOLLOWING SHALL APPLY TO EACH DEVICE SHOWN ON THE ENTIRE PROJECT: *# - SHALL BE REPLACED WITH ALPHABETICAL CHARACTERS THAT SHALL INDICATE THE SPECIFIC VENUE THAT THE DEVICE IS ASSOCIATED WITH. *# - SHALL BE REPLACED WITH A NUMERIC VALUE THAT SHALL IDENTIFY THE SPECIFIC DEVICE WITHIN THE SPECIFIC VENUE.
B.	THE AUDIO/VIDEO SYSTEM INTEGRATOR SHALL COORDINATE ALL BOX AND CONDUIT SIZE REQUIREMENTS PRIOR TO ROUGH-IN BY THE PROJECT'S ELECTRICAL CONTRACTOR.
C.	REFERENCE SCOPE MATRIX AND PROJECT SPECIFICATIONS FOR INSTRUCTIONS REGARDING THE PROVIDING AND INSTALLATION OF VIDEO DISPLAYS, PROJECTORS, SCREENS, MOUNTS, AND LIFTS.

INTERCOM/CLOCK LEGEND	
[S]	PROVIDE AND INSTALL A 2" TILE REPLACEMENT, CEILING MOUNTED, 25/70V INTERCOM SPEAKER. SPEAKER TO BE INSTALLED FLUSH WITH CEILING UNLESS NOTED OTHERWISE.
[S2]	PROVIDE AND INSTALL A 12" CEILING MOUNTED, 25/70V INTERCOM SPEAKER THAT IS TO BE FLUSH MOUNTED IN A SOLID CEILING ENVIRONMENT. SYSTEM INSTALLER TO PROVIDE BACK CANS TO PROJECTS ELECTRICAL CONTRACTOR FOR INSTALLATION. ON PROJECTS WITHOUT AN ELECTRICAL CONTRACTOR THE INSTALLER SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION INCLUDING BACK CANS AND ASSOCIATED RACEWAY.
[S3]	INTERIOR WALL MOUNTED, 25/70V INTERCOM SPEAKER INTERCOM SPEAKER. SPEAKER TO BE INSTALLED FLUSH WITH WALL UNLESS NOTED OTHERWISE. SYSTEM INSTALLER TO PROVIDE BACK CANS TO PROJECTS ELECTRICAL CONTRACTOR FOR INSTALLATION. ON PROJECTS WITHOUT AN ELECTRICAL CONTRACTOR THE INSTALLER SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION INCLUDING BACK CANS AND ASSOCIATED RACEWAY.
[S4]	EXTERIOR WALL MOUNTED INTERCOM PAGING HORN. PAGING HORN SHALL BE TAPPED AT 7 WATTS UNLESS NOTE OTHERWISE. SYSTEM INSTALLER TO PROVIDE BACK CANS TO PROJECTS ELECTRICAL CONTRACTOR FOR INSTALLATION. ON PROJECTS WITHOUT AN ELECTRICAL CONTRACTOR THE INSTALLER SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION INCLUDING BACK CANS AND ASSOCIATED RACEWAY. REFERENCE SHEET SPECIFICATIONS FOR MORE INFORMATION.
[VC]	PROVIDE AND INSTALL A WALL MOUNTED VOLUME CONTROL WITH EMERGENCY ANNOUNCEMENT PRIORITY OVERRIDE. VOLUME CONTROL SHALL BE INSTALLED WITH LEVEL ZERO ATTENUATING AT NO LESS THAN 10DB. DEVICE TO BE MOUNTED AT +48" AFF.
[CB]	PROVIDE AND INSTALL A WALL MOUNTED, INTERCOM CALL BUTTON. DEVICE TO BE MOUNTED AT +48" AFF.
[ACS]	PROVIDE AND INSTALL AN IP ADMINISTRATIVE CALL STATION. DEVICE OUTLET TO BE INSTALLED IN THE WORKSTATION KNEE SPACE AND THE DEVICE SHALL RESIDE ON THE WORKSTATION SURFACE.
[C]	INDICATES THE LOCATION OF A SINGLE FACE SECONDARY TIME CLOCK. REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION. PROVIDE CABLING AS REQUIRED FOR THE TYPE OF CLOCK BEING INSTALLED. - IP BASED CLOCKS - PROVIDE ONE (1) CATEGORY 6 CABLE PER FACE - 12V/24V CLOCK TO BE POWERED VIA A CLOCK POWER SUPPLY AND CONNECTED TO THE SPECIFIED MASTER CLOCK. - 120V CLOCK SHALL BE POWERED VIA 120V ELECTRICAL OUTLET AT THE DEVICE LOCATION AND CONNECTED TO THE SPECIFIED MASTER CLOCK.
[C2]	INDICATES THE LOCATION OF A DUAL FACE SECONDARY TIME CLOCK. REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION. PROVIDE CABLING AS REQUIRED FOR THE TYPE OF CLOCK BEING INSTALLED. - IP BASED CLOCKS - PROVIDE ONE (1) CATEGORY 6 CABLE PER FACE - 12V/24V CLOCK TO BE POWERED VIA A CLOCK POWER SUPPLY AND CONNECTED TO THE SPECIFIED MASTER CLOCK. - 120V CLOCK SHALL BE POWERED VIA 120V ELECTRICAL OUTLET AT THE DEVICE LOCATION AND CONNECTED TO THE SPECIFIED MASTER CLOCK.

ACCESS CONTROL LEGEND	
[CR]	WALL OR MULLION MOUNTED ACCESS CONTROL PROXIMITY CARD READER.
[CR2]	DOOR MOUNTED ACCESS CONTROL PROXIMITY CARD READER THAT IS INTEGRATED INTO THE DOOR HARDWARE.
[DR]	DOOR RELEASE BUTTON
[ACCP]	DESIGNATES THE LOCATION OF THE ACCESS CONTROL SYSTEM, CONTROL PANEL. ELECTRICAL CONTRACTOR TO PROVIDE 120V POWER TO PANEL. PROVIDE NETWORK CABLE TO PANEL AND COORDINATE WITH THE OWNER'S TECHNOLOGY DEPARTMENT ON ACQUIRING AN IP ADDRESS.
[DS]	WALL OR MULLION MOUNTED, 2-WAY AUDIO/VIDEO INTERCOM DOOR STATION.
[DS2]	DOOR MOUNTED, 2-WAY AUDIO/VIDEO INTERCOM DOOR STATION.
[MS]	2-WAY AUDIO/VIDEO INTERCOM MASTER STATION.
[PB]	ADA AUTO DOOR OPEN BUTTON. SHOWN FOR REFERENCE ONLY. BUTTON AND AUTO DOOR OPERATOR PROVIDED AND INSTALLED BY THE DOOR SYSTEM INSTALLER.
[CC]	DPDT MAGNETIC DOOR CONTACT/DOOR POSITION SENSOR. FLUSH MOUNTED IN DOOR FRAME, UNLESS NOTED OTHERWISE.
[LD]	LOCKDOWN BUTTON
<b>NOTES:</b>	
1.	REFERENCE ACCESS CONTROL SCHEDULE, DETAILS, AND DIVISION 28 SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS

VIDEO SURVEILLANCE LEGEND	
[C-#]	4-SENSOR CAMERA WITH 3-SENSOR PROVIDING A 270 DEGREE AREA OF VIEW AND 1-SENSOR PROVIDING COVERAGE DIRECTLY UNDERNEATH THE CAMERA LOCATION. # TO BE REPLACED WITH AN ALPHABETICAL TEXT DEPICTING THE CAMERA TYPE AS ASSOCIATED WITH THE VIDEO SURVEILLANCE CAMERA SCHEDULE.
[C-#]	4-SENSOR CAMERA, 4-SENSORS TO PROVIDE A 360 DEGREE AREA OF VIEW # TO BE REPLACED WITH AN ALPHABETICAL TEXT DEPICTING THE CAMERA TYPE AS ASSOCIATED WITH THE VIDEO SURVEILLANCE CAMERA SCHEDULE.
[C-#]	2-SENSOR CAMERA. EACH SENSOR SHALL BE POSITIONED TO PROVIDE COVERAGE IN THE DIRECTION SHOWN. # TO BE REPLACED WITH AN ALPHABETICAL TEXT DEPICTING THE CAMERA TYPE AS ASSOCIATED WITH THE VIDEO SURVEILLANCE CAMERA SCHEDULE.
[C-#]	1-SENSOR CAMERA. SENSOR SHALL BE POSITIONED TO PROVIDE COVERAGE IN THE DIRECTION SHOWN. # TO BE REPLACED WITH AN ALPHABETICAL TEXT DEPICTING THE CAMERA TYPE AS ASSOCIATED WITH THE VIDEO SURVEILLANCE CAMERA SCHEDULE.
<b>NOTES:</b>	
1.	REFERENCE VIDEO SURVEILLANCE SCHEDULE AND DIVISION 28 SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS

SECURITY GENERAL NOTES	
1.	THE SECURITY SYSTEM INSTALLERS SHALL BE RESPONSIBLE FOR CONNECTING ALL APPLICABLE SYSTEM EQUIPMENT TO THE OWNER'S NETWORK.
2.	THE SYSTEM INSTALLER SHALL PROPERLY SUPPORT ALL INSTALLED SYSTEM CABLING FROM AN APPROVED CABLE SUPPORT SYSTEM AS DETAILED IN SPECIFICATIONS. NO CABLING SHALL BE ROUTED AND TIED DIRECTLY TO BUILDING STEEL, CEILING GRID SUPPORT, CONDUIT, PIPING, OR DUCTWORK. THE CABLE SUPPORT SYSTEM SHALL BE DIRECTLY CONNECTED TO THE BUILDING'S STEEL JOIST. AT LOCATIONS WHERE THE BOTTOM OF THE JOIST IS MORE THAN 5' ABOVE THE CEILING, THE SYSTEM INSTALLER SHALL PROVIDE AND INSTALL THREADED ROD AND ALL REQUIRED MATERIALS TO CONNECT THE THREADED ROD TO THE BUILDING STEEL AND THE CABLE SUPPORT SYSTEM TO THE THREADED ROD. CABLE PATHWAY SHALL NOT BE HIGHER THAN 5' ABOVE THE CEILING AT ANY LOCATIONS.
3.	SECURITY CAMERA SYSTEM INSTALLER SHALL PROVIDE A CEILING MOUNTED INSTALLATION KIT RECOMMENDED BY THE MANUFACTURER OF THE CAMERA. EACH CEILING MOUNTED CAMERA KIT SHALL HAVE A SUPPORT WIRE ATTACHED TO THE BUILDING'S STRUCTURE TO PREVENT THE CAMERA FROM DROPPING TO THE FLOOR AT ANY TIME. AT NO POINT SHALL THE WEIGHT OF THE CEILING MOUNTED SECURITY CAMERA BE SUPPORTED BY THE CEILING GRID SYSTEM OR CEILING TILES. ALL CEILING MOUNTED CAMERAS SHALL BE FLUSH MOUNTED.
4.	ALL EXTERIOR AND WALL MOUNTED CAMERA LOCATIONS AND MOUNTING HEIGHTS MUST BE COORDINATED WITH THE OWNER PRIOR TO ROUGH-IN. COORDINATION MEETINGS SHALL BE SCHEDULED THROUGH THE ARCHITECT'S PROJECT MANAGER.
5.	PROVIDE AND INSTALL MAGNETIC DOOR CONTACT AT ALL ROOF HATCHES ON THE ENTIRE PROJECT. CONTACTS TO BE CONNECTED TO THE BUILDING'S INTRUSION DETECTION SYSTEM.
COORDINATE MONITORING REQUIREMENTS WITH THE INSTALLER FOR EACH SYSTEM AND THE OWNER. PROGRAM SYSTEM TO ALERT THE OWNER DESIGNATED PERSONNEL UPON A MONITORED ALARM EVENT	

LOCAL SOUND SYSTEM LEGEND	
[S-#]	VENUE SPECIFIC LOCAL SOUND SYSTEM SPEAKER. # TO BE REPLACED WITH NUMERIC VALUE INDICATING THE POSITION NUMBER OF THE VENUE SPECIFIC DEVICE.
[ESC-#]	VENUE SPECIFIC LOCAL SOUND SYSTEM CONTROL PLATE. # TO BE REPLACED WITH NUMERIC VALUE INDICATING THE POSITION NUMBER OF THE VENUE SPECIFIC DEVICE.
[MI-#]	VENUE SPECIFIC LOCAL SOUND SYSTEM MICROPHONE INPUT. # TO BE REPLACED WITH NUMERIC VALUE INDICATING THE POSITION NUMBER OF THE VENUE SPECIFIC DEVICE.
[ABM-#]	VENUE SPECIFIC LOCAL SOUND SYSTEM 3.5MM AUXILIARY INPUT AND BLUETOOTH MIXER. # TO BE REPLACED WITH ALPHANUMERIC TEXT INDICATING THE ASSOCIATED VENUE AND MIXER NUMBER. CONTRACTOR TO PROVIDE AND INSTALL A RECESSED ENCLOSURE WITH FLUSH MOUNTED, LOCKABLE DOOR. DEVICE TO BE MOUNTED AT + 42" AFF.
[RACK]	INDICATED THE LOCATION OF THE VENUE SPECIFIC LOCAL SOUND SYSTEM HEAD END RACK. AMPLIFIERS, DSPS, AND ALL OTHER HEAD END EQUIPMENT SHALL BE INSTALLED IN THIS RACK/CABINET.
[WA]	WIRELESS MICROPHONE ANTENNA. REFERENCE SPECIFICATIONS FOR MORE INFORMATION.
[ALA]	ASSISTED LISTENING ANTENNA. REFERENCE SPECIFICATIONS FOR MORE INFORMATION.
<b>NOTES:</b>	
1.	REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS

TECHNOLOGY LEGEND	
'DF'	DESIGNATES THAT THE ASSOCIATED TECHNOLOGY OUTLET IS INTENDED FOR THE USE OF A NETWORK CONNECTION. THE 'F' SHALL BE REPLACED WITH NUMERIC TEXT THAT IDENTIFIES THE TOTAL NUMBER OF CATEGORY 6 NETWORK CABLES THAT ARE TO BE INSTALLED AT THE TECHNOLOGY OUTLET LOCATION. CONTRACTOR TO PROVIDE AND INSTALL CATEGORY 6 NETWORK CABLES. CATEGORY 6 CONNECTORS, STAINLESS STEEL FACEPLATES WITH IDENTIFICATION WINDOWS, LABELS, BLANK INSERTS, AND ANY OTHER MATERIALS REQUIRED TO FURNISH A COMPLETE FUNCTIONAL AND TESTED OUTLET LOCATION. ALL FACEPLATES PROVIDED SHALL CONTAIN A MINIMUM 4-PORTS AND SHALL BE APPROPRIATELY SIZED TO ACCOMMODATE THE NUMBER OF CIRCUITS BEING INSTALLED AT THIS TECHNOLOGY OUTLET LOCATION. MAXIMUM OF SIX(6) DATA CABLES PER OUTLET.
'W'	DESIGNATES THAT THE ASSOCIATED TECHNOLOGY OUTLET IS INTENDED FOR THE USE OF A WALL MOUNTED TELEPHONE CONNECTION. CONTRACTOR TO PROVIDE AND INSTALL (1) CATEGORY 6 NETWORK CABLE, (1) CATEGORY 6 CONNECTOR, STAINLESS STEEL WALL TELEPHONE FACEPLATE, LABELS, AND ANY OTHER MATERIALS REQUIRED TO FURNISH A COMPLETE FUNCTIONAL AND TESTED CIRCUIT AT EACH LOCATION SHOWN. CONTRACTOR SHALL MOUNT THIS OUTLET AT ADA HEIGHT (MATCH LIGHT SWITCH HEIGHT) AND COORDINATE ALL FINAL LOCATIONS WITH OTHER TRADES ON THE PROJECT TO VERIFY THAT THE LOCATION OF THE OUTLET MAINTAINS 8" OF CLEARANCE ON ALL FOUR SIDES OF THE BACK BOX. OUTLETS SHALL REMAIN CLEAR OF ROOM DOORS, CABINET DOORS, APPLIANCE DOORS, AND SLIDING DRAWERS.
'AP'	DESIGNATES THAT THE ASSOCIATED TECHNOLOGY OUTLET IS INTENDED FOR THE USE OF A WIRELESS ACCESS POINT CONNECTION. CONTRACTOR TO PROVIDE AND INSTALL (2) CATEGORY 6 NETWORK CABLE, (2) CATEGORY 6 CONNECTOR, (2) CAT 6 BISCUIT JACK FACEPLATE WITH IDENTIFICATION WINDOWS, LABELS, AND ANY OTHER MATERIALS REQUIRED TO FURNISH A COMPLETE FUNCTIONAL AND TESTED CIRCUIT AT EACH LOCATION SHOWN. REFERENCE SPECIFICATIONS FOR PATCH CABLE REQUIREMENTS.
'FF'	INDICATES THAT THE ASSOCIATED TECHNOLOGY OUTLET IS INTENDED FOR FURNITURE FEED. ALLOWING CABLING TO ROUTE INTO A MODULAR FURNITURE SYSTEM. CONDUIT SHALL BE SIZE TO ACCOMMODATE THE NUMBER CABLE ROUTING INTO TO THE FURNITURE SYSTEM.
'VF'	VOICE OUTLET WITH CABLE AND TERMINATION AS INDICATED.
<b>NOTES:</b>	
REFERENCE TECHNOLOGY GENERAL NOTES, PLAN KEYED NOTES, AND ALL OTHER SYSTEM LEGENDS/NOTES. THE STRUCTURED CABLING SYSTEM CONTRACTOR SHALL PROVIDE AND INSTALL CATEGORY 6GA CABLE TO ALL SYSTEMS' EQUIPMENT REQUIRING NETWORK CONNECTIVITY.	

RACEWAY LEGEND	
[R]	INDICATES THE LOCATION OF A FLOOR MOUNTED BOX AND RACEWAY FOR LOW VOLTAGE. CONTRACTOR TO PROVIDE AND INSTALL A FLOOR BOX. EACH FLOOR BOX SHALL HAVE ONE (1) SINGLE GANG PORT WITH ONE (1) 1" CONDUIT/PER EVERY SIX(6) CATEGORY 6 OR FOUR(4) CATEGORY 6A CABLES AND ONE (1) DOUBLE GANG PORT WITH ONE (1) 1/2" CONDUIT UNLESS NOTED OTHERWISE. ALL CONDUITS SHALL ROUTE FROM THE FLOOR BOX DIRECTLY TO THE WALL INDICATED AND STUB-UP INTO THE NEAREST ACCESSIBLE PLENUM CEILING.
[R2]	INDICATES THE LOCATION OF A CEILING MOUNTED OUTLET. CONTRACTOR SHALL MOUNT THIS OUTLET AT +12" ABOVE THE CEILING AND COORDINATE ALL FINAL LOCATIONS WITH OTHER TRADES ON THE PROJECT TO VERIFY THAT THE LOCATION OF THE OUTLET MAINTAINS 12" OF CLEARANCE FROM THE FRONT OF THE FACEPLATE FOR OWNER ACCESS.
[R3]	INDICATES THE LOCATION OF A NEW LOW VOLTAGE OUTLET. CONTRACTOR TO PROVIDE ONE (1) DOUBLE GANG BACK BOX WITH A SINGLE GANG REDUCER ONE (1) 1" CONDUIT STUBBING INTO THE NEAREST, ACCESSIBLE PLENUM CEILING.
[R4]	INDICATES THE LOCATION OF A NEW LOW VOLTAGE OUTLET. CONTRACTOR TO PROVIDE ONE (1) DOUBLE GANG BACK BOX WITH ONE (1) 1/2" CONDUITS STUBBING INTO THE NEAREST, ACCESSIBLE PLENUM CEILING.
[R5]	INDICATES THE LOCATION OF A NEW LOW VOLTAGE OUTLET. CONTRACTOR TO PROVIDE ONE (1) SINGLE GANG BACK BOX WITH ONE (1) 3/4" CONDUITS STUBBING INTO THE NEAREST, ACCESSIBLE PLENUM CEILING.
<b>NOTES:</b>	
A.	SYSTEM INSTALLER TO PROVIDE AND INSTALL A PLASTIC PROTECTIVE BUSHING ON ALL CONDUIT STUB-UP AND SLEEVES. PRIOR TO ROUTING CABLING IN CONDUIT, CUTTING BUSHING TO FIT ROUND INSTALLED CABLE WILL NOT BE ACCEPTED
B.	NO CONDUITS SHALL EXCEED FOR 40% MAXIMUM FILL RATIO. CONTRACTOR TO PROVIDE ADDITIONAL CONDUITS REQUIRED.
C.	ANY CONDUIT INSTALL FOR AUDIO /VIDEO SYSTEMS SHALL INCLUDE AT LEAST ONE (1) 1 1/4" CONDUIT.

INTRUSION DETECTION LEGEND	
[IDP]	DESIGNATES THE LOCATION OF THE INTRUSION DETECTION SYSTEM, CONTROL PANEL, ZONE EXPANDER AND POWER SUPPLIES. ELECTRICAL CONTRACTOR TO PROVIDE 120V POWER TO PANEL.
[DC]	FLUSH MOUNTED MAGNETIC DOOR CONTACT.
[KPD]	INTRUSION DETECTION SYSTEM ARM/DISARM KEYPAD.
[MDC]	STANDARD RANGE WALL MOUNTED MOTION DETECTOR. PROVIDE WALL MOUNT FOR EACH DEVICE INSTALLED.
[360]	CEILING MOUNTED, 360° MOTION DETECTOR.
[SS]	SECURITY SYSTEM ALARM SIREN
[GBD]	CEILING MOUNTED GLASS BREAK DETECTOR

NY

drawn by

NY

checked by

SEPTEMBER 2023

date

revisions

MOORE PUBLIC SCHOOLS  
BOARD OF EDUCATION  
MOORE, OKLAHOMA



OFFICE ADDITION  
FAIRVIEW  
ELEMENTARY SCHOOL

sheet no:

## T-001

OWNERSHIP USE OF DOCUMENTS:

AGP EXPRESSLY RESERVES ITS  
COPYRIGHT AND OTHER PROPERTY  
RIGHTS OF ALL PLANS AND DRAWINGS  
DESIGNED AND/OR PRODUCED. PLANS  
AND DRAWINGS ARE NOT TO BE  
REPRODUCED IN ANY FORM OR MANNER  
WITHOUT THE EXPRESSED WRITTEN  
CONSENT OF AGP.



KEYED NOTES	
1.	EXISTING NETWORK MDF LOCATION
2.	EXISTING TELECOR INTERCOM SYSTEM HEAD END LOCATION
3.	EXISTING DSC SECURITY PANEL LOCATIONS
4.	EXISTING SILENT KNIGHT FACP LOCATIONS
5.	EXISTING NETWORK IDF LOCATION.
6.	EXISTING FAA RELOCATE TO NEW OFFICE ENTRANCE.
7.	EXISTING GLASSBREAK SENSORS REMOVE AND GIVE TO MPS TECHNOLOGIES.
8.	EXISTING FIRE PULL AND HORN/STROBE RELOCATE TO NEW ENTRANCE IF REQUIRED.
9.	EXISTING DOOR CONTACTS. REMOVE AND GIVE TO MPS TECHNOLOGY DEPT.
10.	EXISTING OUTSIDE SECURITY SIREN. RELOCATE.
11.	EXISTING OUTSIDE CAMERA. REMOVE AND GIVE TO MPS TECHNOLOGY DEPT.
12.	EXISTING CARD READER REMOVE AND GIVE TO MPS TECHNOLOGY DEPT.
13.	EXISTING AVIGILON DOOR STATION. RELOCATE TO TEMPORARY ENTRANCE. THEN RELOCATE TO NEW OFFICE ENTRANCE WHEN CONSTRUCTION IS COMPLETE.
14.	EXISTING SECURITY MOTION DETECTOR. CONTRACTOR TO LEAVE IN SAME LOCATION IF POSSIBLE.
15.	EXISTING INTERCOM PAGING HORN, RELOCATED TO EXTERIOR OF NEW OFFICE.

FIRE ALARM	
A.	FIRE ALARM CONTRACTOR IS TO CONNECT ALL NEW FIRE ALARM DEVICES IN THE ADDITION AREA TO THE BUILDING'S EXISTING FIRE ALARM SYSTEM. THE EXISTING BUILDING SHALL ALSO BE BROUGHT UP CODE COMPLIANCE. CONTRACTOR TO REFERENCE SHEET SPECIFICATIONS FOR ADDITIONAL INFORMATION.
B.	A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.



### GENERAL NOTES

ACCESS CONTROL: CONNECT NEW ACCESS CONTROL DEVICES TO NEW KEYSKAN CONTROLLER. IF SITE WILL HAVE A TEMPORARY PARENT ENTRANCE A DOOR STATION AND ACCESS CONTROL CARD READER SHALL BE INSTALLED AT TEMPORARY ENTRANCE.

SECURITY: CONNECT NEW SECURITY DEVICES TO EXISTING DSC SYSTEM. PROGRAM SYSTEM AS NEEDED. SEE SECURITY SHEET SPECIFICATIONS FOR PART NUMBERS AND INSTALLATION REQUIREMENTS.

FIRE: FIRE ALARM CONTRACTOR IS TO CONNECT ALL NEW FIRE ALARM DEVICES IN THE ADDITION AREA TO THE BUILDING'S EXISTING FIRE ALARM SYSTEM. THE EXISTING BUILDING SHALL ALSO BE BROUGHT UP CODE COMPLIANCE. CONTRACTOR TO REFERENCE SHEET SPECIFICATIONS FOR ADDITIONAL INFORMATION.

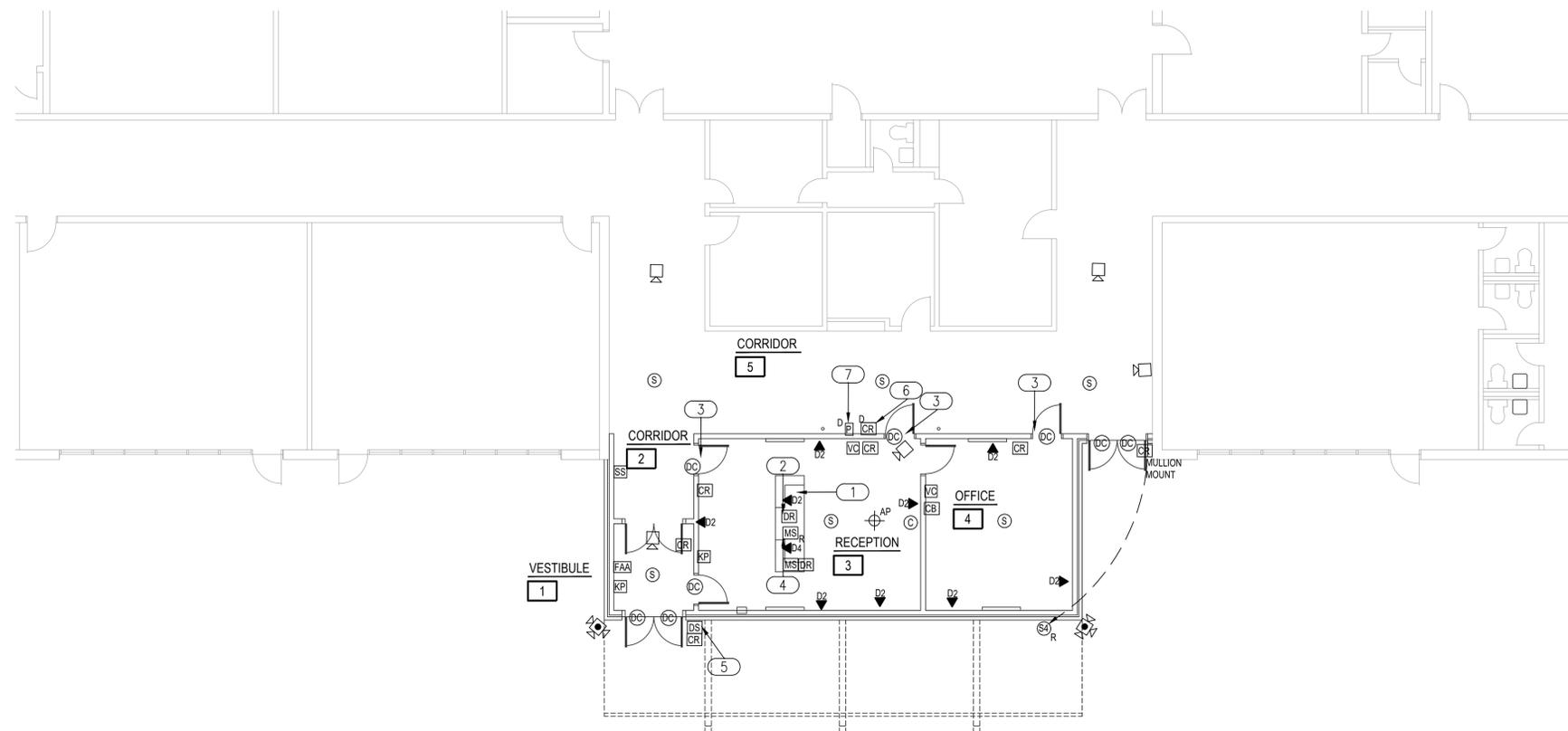
INTERCOM: CONNECT NEW INTERCOM DEVICES TO EXISTING TELECOR INTERCOM SYSTEM. SEE INTERCOM SPECIFICATIONS FOR PART NUMBERS AND INSTALLATION REQUIREMENTS.

CLOCK: CONNECT NEW TELECOR ANALOG AND SHALL CONNECT TO EXISTING SYSTEM. PROVIDE TELECOR CLOCK DRIVER IF NEEDED. SEE INTERCOM SPECIFICATIONS FOR PART NUMBERS AND INSTALLATION REQUIREMENTS.

DATA: CONNECT NEW DATA, WIFI AND CAMERA DROPS TO EXISTING IDF LOCATED IN TEACHERS LOUNGE.

### KEYED NOTES

- 1 CONTRACTOR TO RELOCATE EXISTING WIRELESS HOLD UP BUTTONS FROM OFFICE TO THIS NEW OFFICE. INSTALL 'HOLD UP' BUTTON UNDER COUNTER AND CONNECT TO EXISTING SECURITY ALARM SYSTEM.
- 2 COORDINATE WITH OWNER ON NUMBER OF BUTTONS WHICH DOORS ARE TO BE RELEASED.
- 3 INDICATED DOOR HARDWARE SHALL BE CAPABLE OF BEING LOCKED ON THE NEW OFFICE SIDE AND UNLOCKED ON THE HALLWAY SIDE DURING SCHOOL HOURS. SHALL ALSO BE CAPABLE OF BEING UNLOCKED ON THE NEW OFFICE SIDE AND LOCKED ON THE HALLWAY SIDE AFTER SCHOOL HOURS. CONTRACTOR TO COORDINATE WITH ARCHITECT AND PROVIDE ALL DOOR HARDWARE NEEDED TO ACCOMPLISH ABOVE MENTIONED FUNCTIONALITY. CONTRACTOR TO CONNECT DOOR HARDWARE/ACCESS CONTROL SYSTEM TO FIRE ALARM SYSTEM IF REQUIRED TO UNLOCK DOOR IN CASE OF FIRE ALARM.
- 4 RELOCATE EXISTING TELECOR INTERCOM CONSOLES (2).
- 5 RELOCATE EXISTING AVIGILON DOOR STATION AND MODULE. MODULE WILL NEED TO BE RELOCATED TO THE NEW KEYSKAN CONTROLLER OPERATING ENTRY DOOR.
- 6 CONTRACTOR TO REMOVE AND RETURN EXISTING CARD READER TO MPS TECHNOLOGY DEPARTMENT.
- 7 CONTRACTOR TO REMOVE FIRE ALARM PULL STATION IF CODE ALLOWS. RETURN DEVICE TO MPS TECHNOLOGY.



NY  
drawn by  
NY  
checked by  
SEPTEMBER 2023  
date  
revisions

MOORE PUBLIC SCHOOLS  
BOARD OF EDUCATION  
MOORE, OKLAHOMA

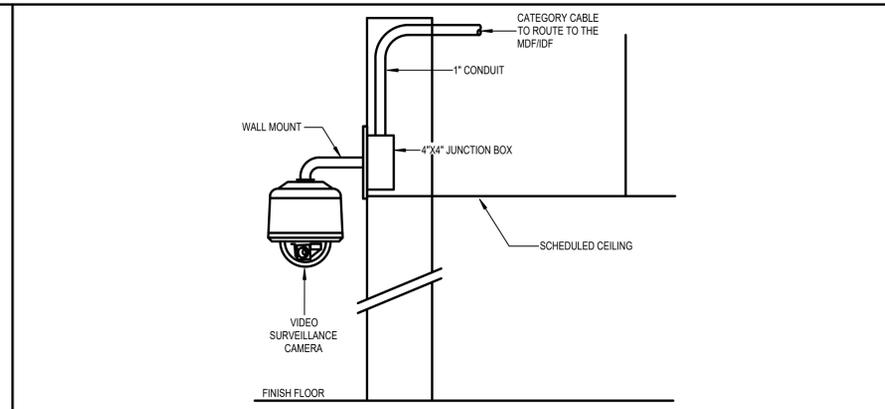


OFFICE ADDITION  
FAIRVIEW  
ELEMENTARY SCHOOL

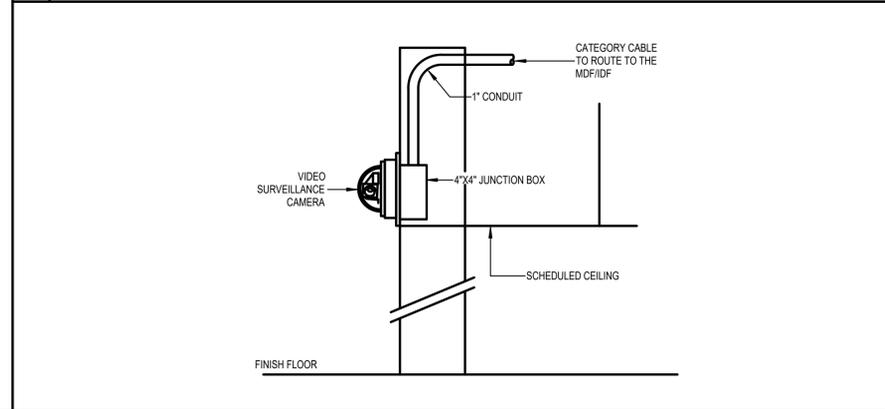
sheet no:

# T201

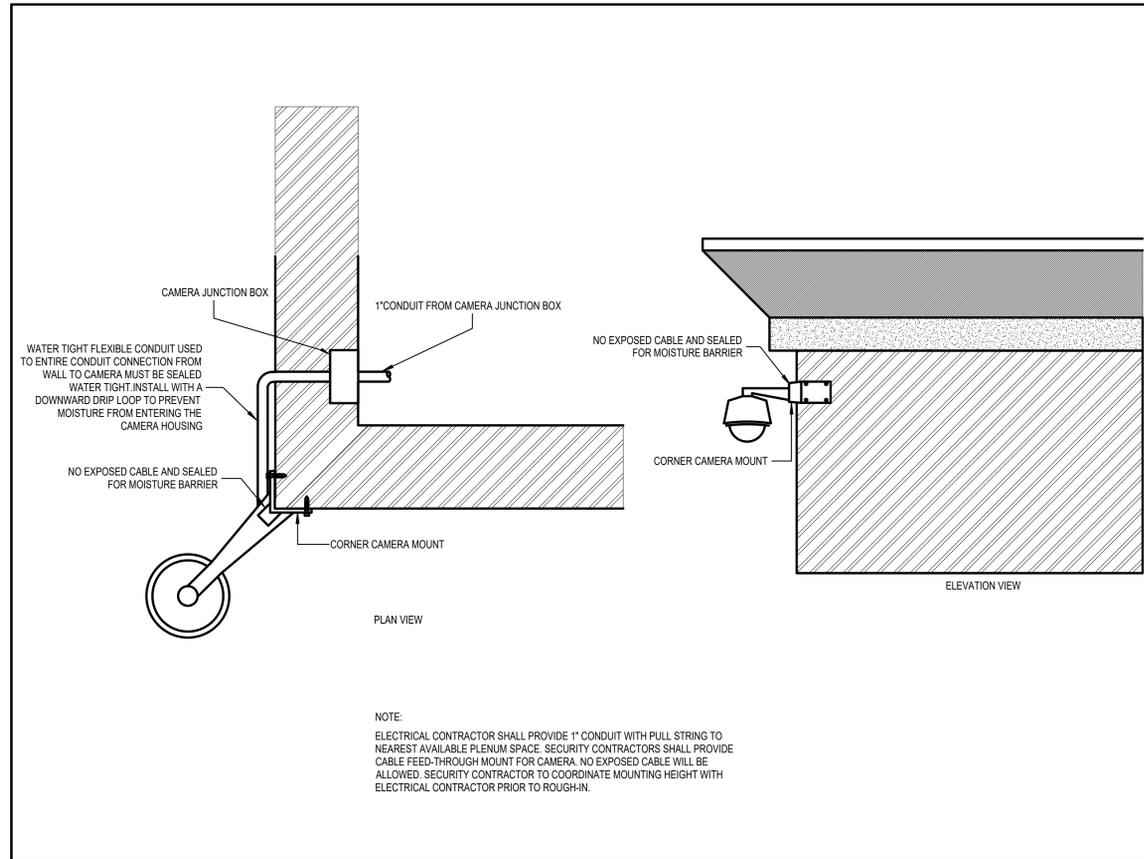




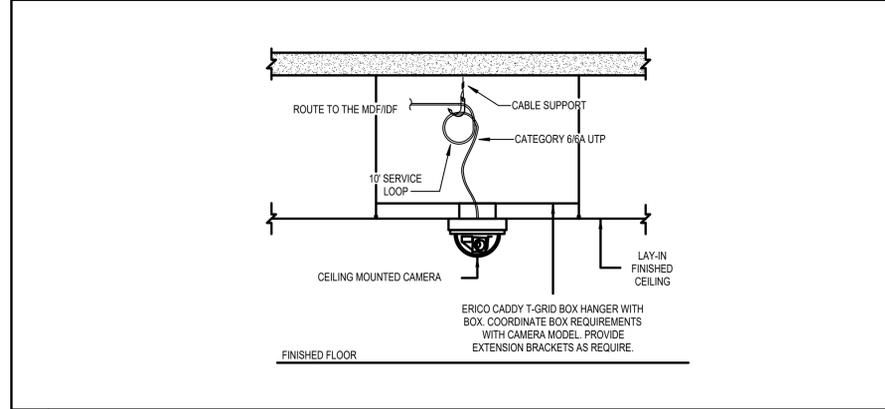
03 INTERIOR WALL MOUNTED DOME CAMERA NOT TO SCALE



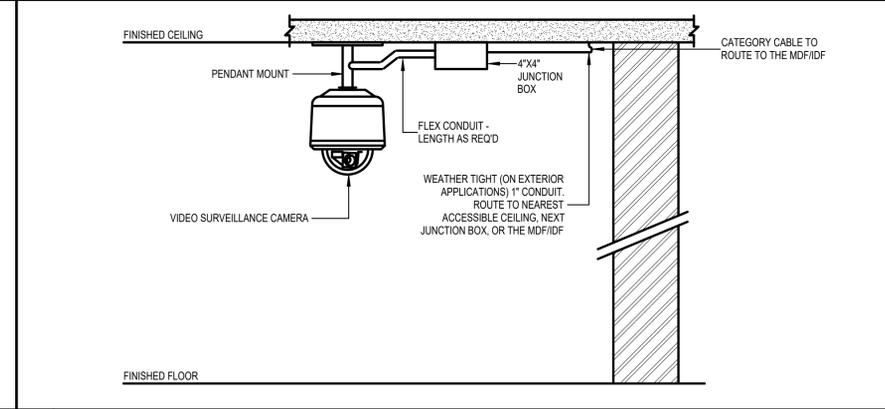
02 INTERIOR WALL MOUNT CAMERA-VERTICAL NOT TO SCALE



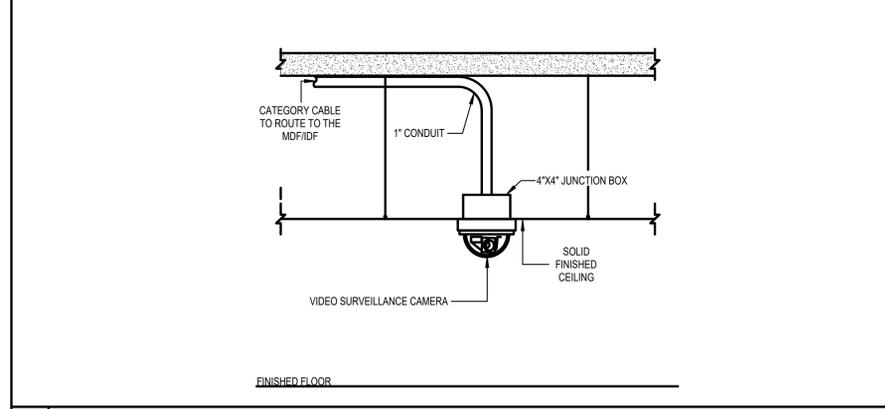
01 CORNER MOUNTING DETAIL NOT TO SCALE



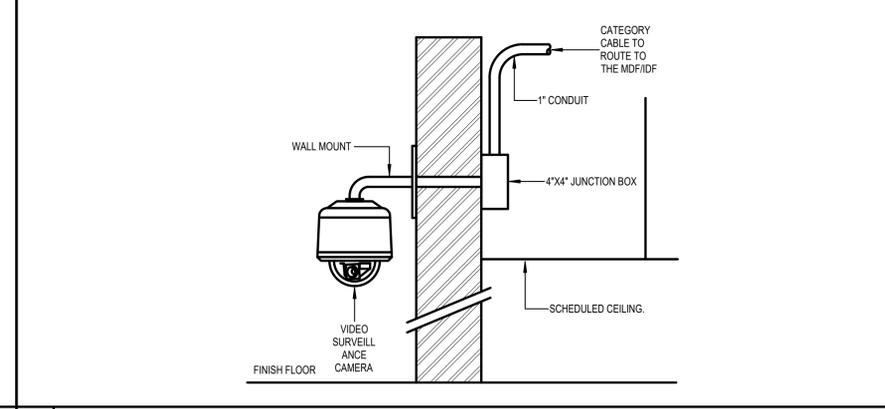
04 INTERIOR LAY-IN CEILING MOUNTED CAMERA NOT TO SCALE



05 EXT./INT. PENDANT MOUNTED DOME CAMERA NOT TO SCALE



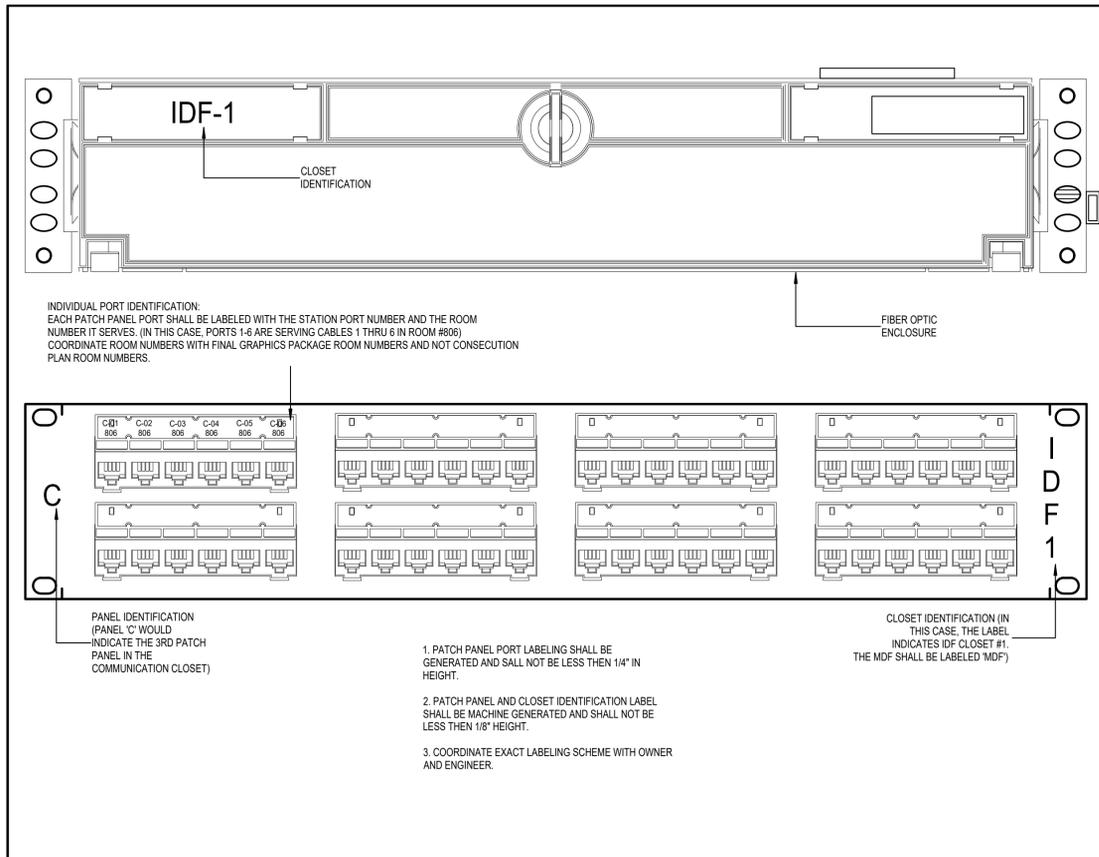
06 EXTERIOR/INTERIOR SOLID CEILING MOUNT CAMERA NOT TO SCALE



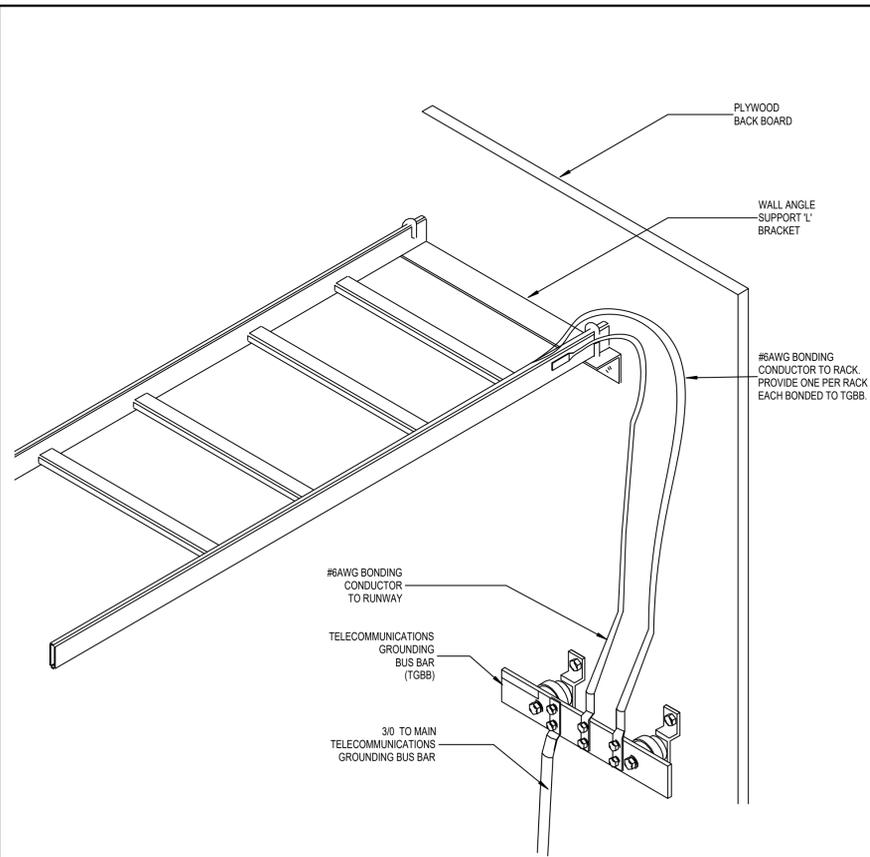
07 EXTERIOR WALL MOUNTED DOME CAMERA NOT TO SCALE

GENERAL NOTES:  
A. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUITS AND BACK BOXES. CONDUITS SHALL ROUTE TO THE NEAREST, ACCESSIBLE PLENUM SPACE.  
B. ALL WALL, CORNER, PENDANT, AND UNDER CANOPY MOUNTING HEIGHTS SHALL BE COORDINATED WITH THE OWNER AND SECURITY CONSULTANT PRIOR TO ROUGH-IN.  
C. SECURITY CONTRACTOR SHALL PROVIDE CAMERAS, MOUNTING HARDWARE, AND ANY OTHER COMPONENTS AND/OR HARDWARE REQUIRED FOR A COMPLETE INSTALLATION.  
D. REFERENCE VIDEO SURVEILLANCE CAMERA SCHEDULES, FLOOR PLANS, AND SPECIFICATIONS FOR ADDITIONAL INSTRUCTIONS.  
E. CABLE FEED-THROUGH MOUNT FOR CAMERA. NO EXPOSED CABLE WILL BE ALLOWED. SECURITY CONTRACTOR TO COORDINATE MOUNTING HEIGHT WITH ELECTRICAL CONTRACTOR PRIOR TO ROUGH-IN.

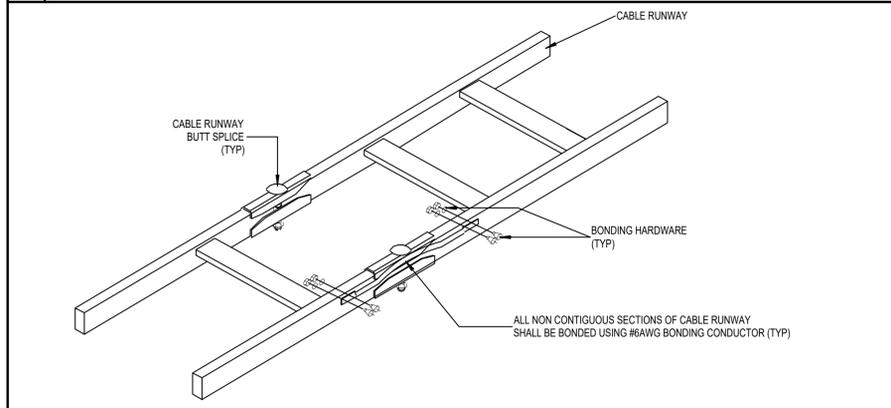
08 NOTES NOT TO SCALE



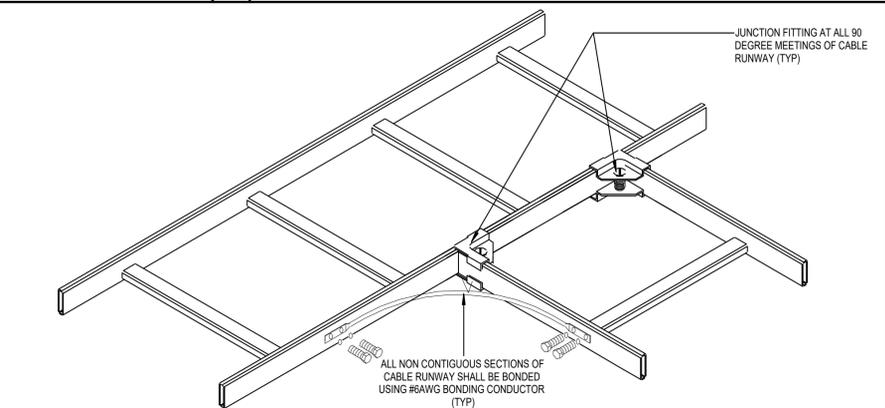
01 FIBER ENCLOSURE/ COPPER PATCH PANEL LABELING DETAIL NOT TO SCALE



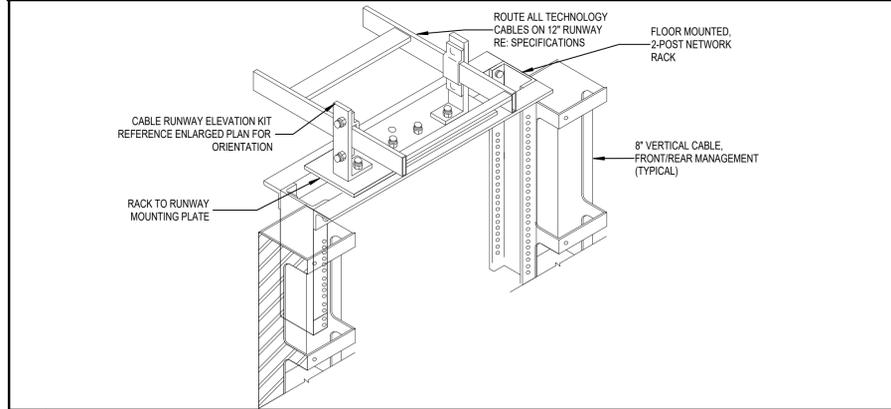
02 CABLE RUNWAY - GROUNDING AND BONDING NOT TO SCALE



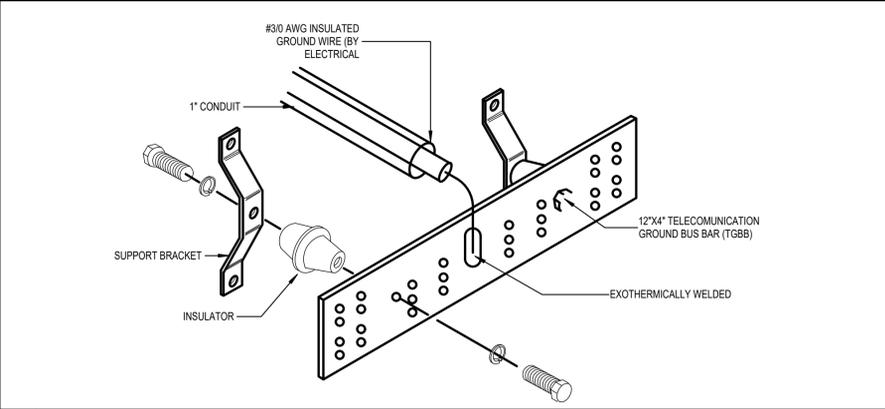
03 CABLE RUNWAY - BONDING AND BUTT SPLICE NOT TO SCALE



04 CABLE RUNWAY - JUNCTION AND BONDING NOT TO SCALE



05 RACK TO RUNWAY DETAIL NOT TO SCALE



06 TELECOMMUNICATION GROUNDING BUS DETAIL NOT TO SCALE

NY  
drawn by  
NY  
checked by  
SEPTEMBER 2023  
date  
revisions

MOORE PUBLIC SCHOOLS  
BOARD OF EDUCATION  
MOORE, OKLAHOMA



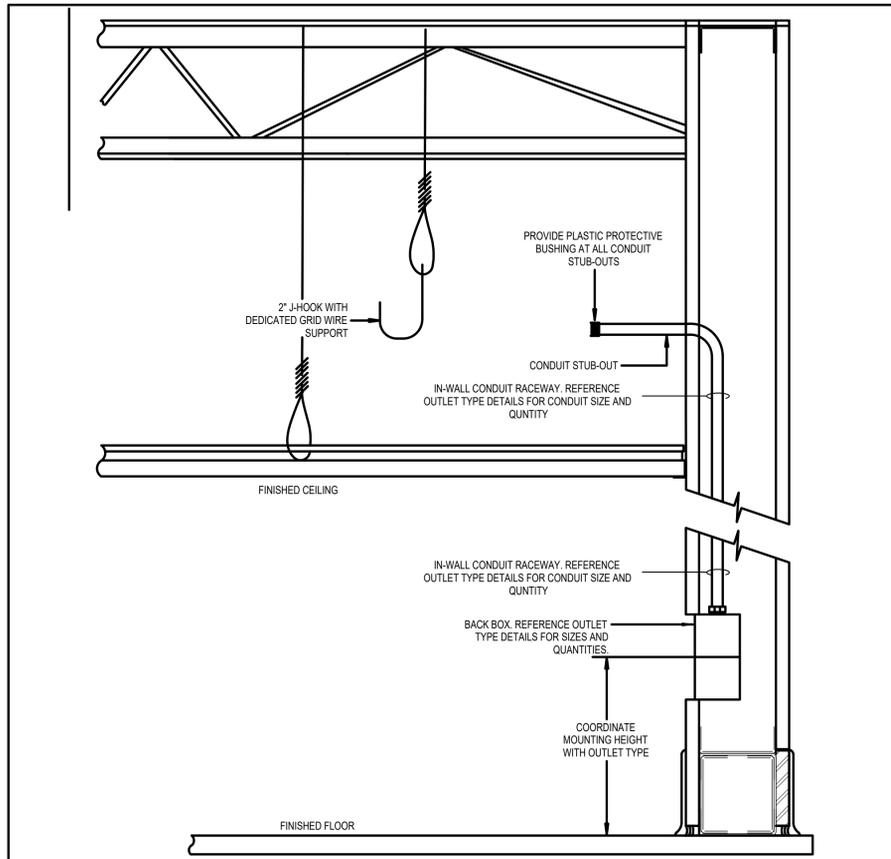
OFFICE ADDITION  
FAIRVIEW  
ELEMENTARY SCHOOL

sheet no:

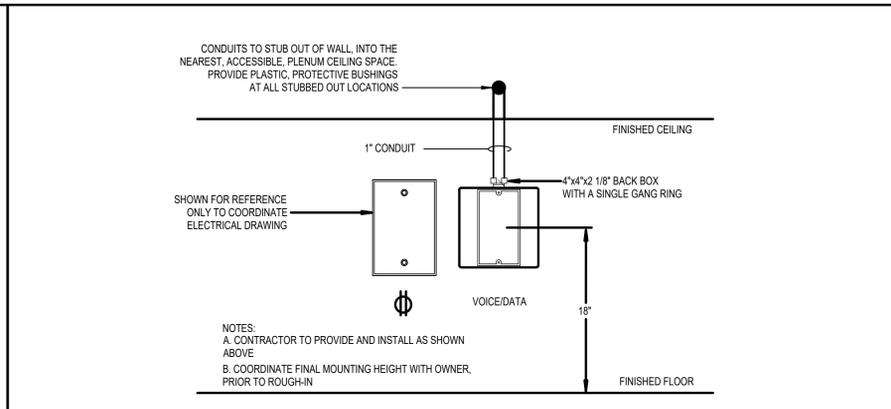
T-402

OWNERSHIP USE OF DOCUMENTS:  
AGP EXPRESSLY RESERVES ITS COPYRIGHT AND OTHER PROPERTY RIGHTS OF ALL PLANS AND DRAWINGS DESIGNED AND/OR PRODUCED, PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED IN ANY FORM OR MANNER WITHOUT THE EXPRESSED WRITTEN CONSENT OF AGP.

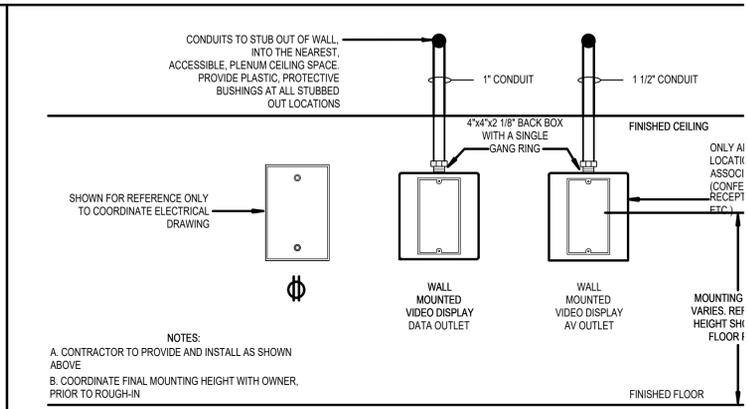
**Salas O'Brien**  
2600 Van Buren St., Suite 2635  
Norman, OK 73072  
Salas O'Brien Registration: CA# 7058  
Expiration Date: 6/30/2025  
Salas O'Brien Project Number: 2023-04386-00



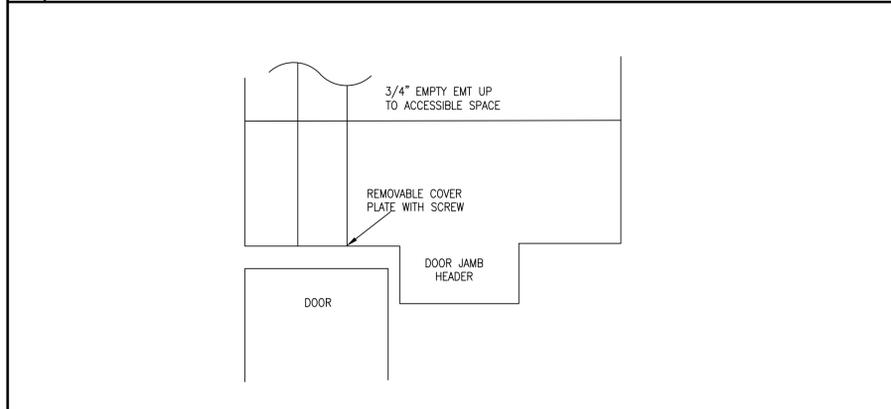
01 LOW VOLTAGE ELEVATION - IN-WALL RACEWAY NOT TO SCALE



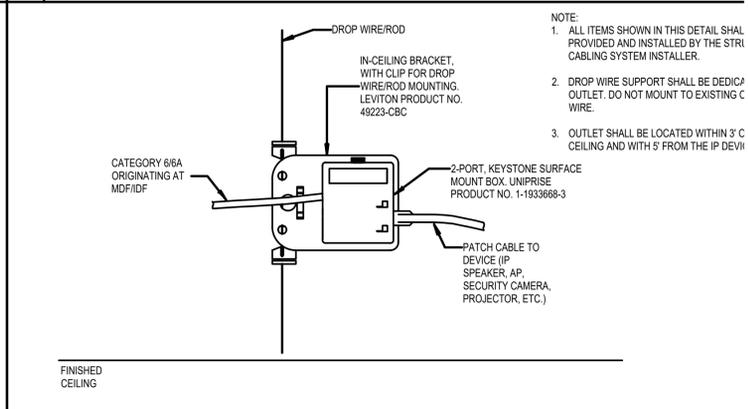
02 RACEWAY DETAIL - TYPICAL VOICE/DATA OUTLET NOT TO SCALE



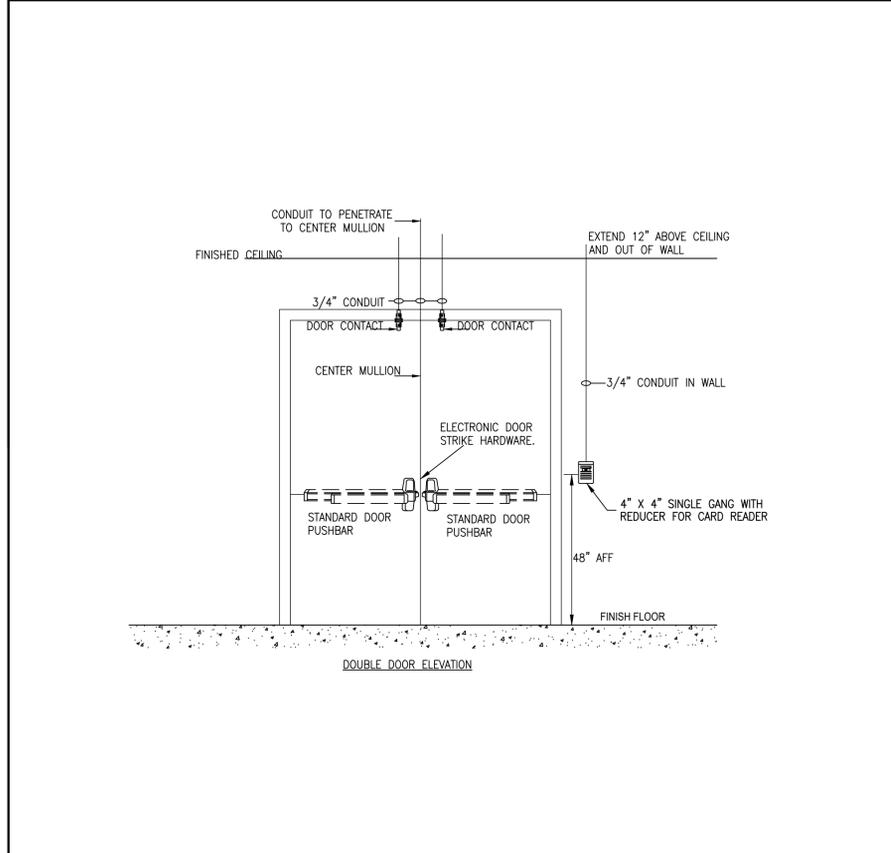
03 RACEWAY DETAIL - WALL MOUNTED DISPLAY NOT TO SCALE



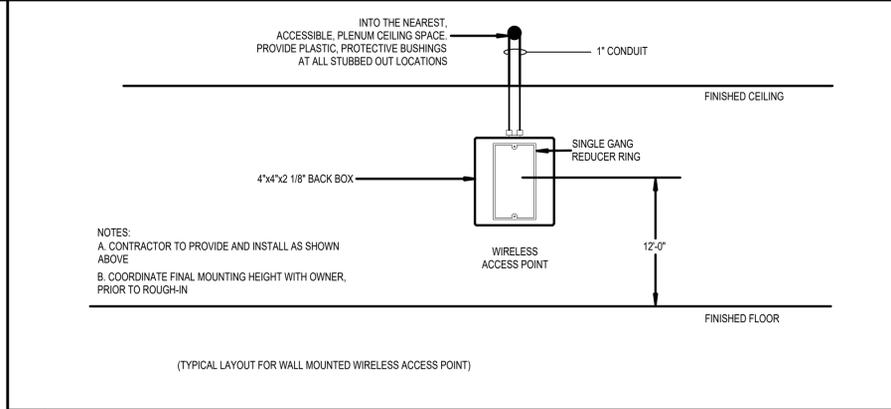
04 SECURITY CONDUIT DOOR JAMB HEADER NOT TO SCALE



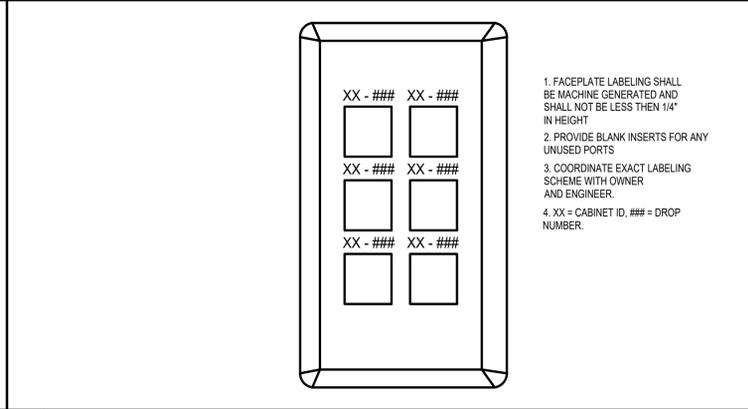
05 ABOVE CEILING STAND ALONE OUTLET N



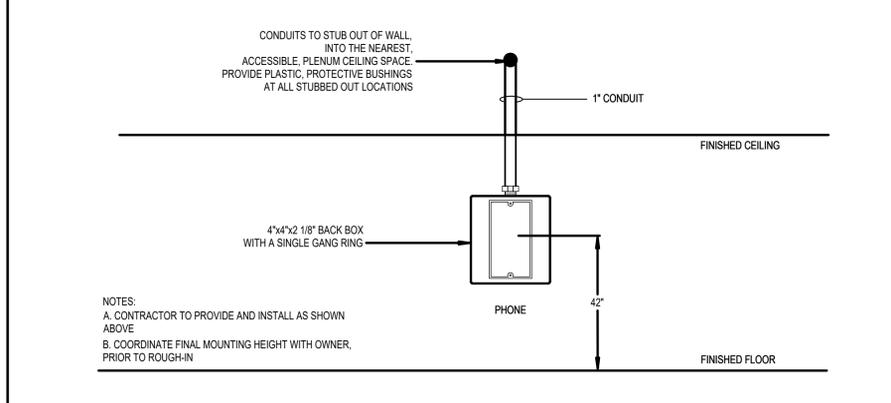
06 DOUBLE DOOR SECURITY & ACCESS CONTROL



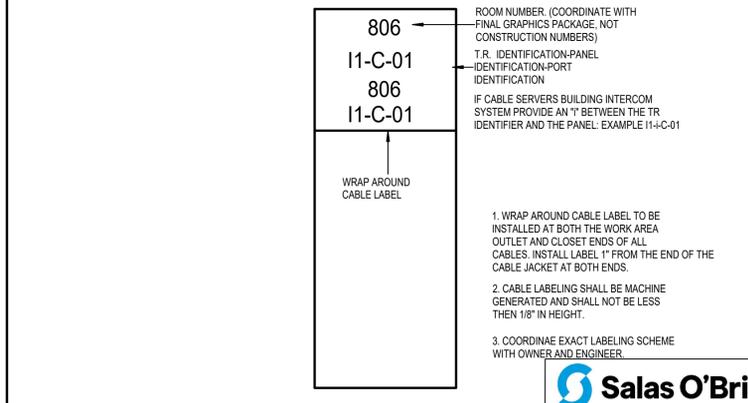
07 RACEWAY DETAIL - WALL MOUNTED WIRELESS AP NOT TO SCALE



08 FACEPLATE LABEL DETAIL N



09 RACEWAY DETAIL - WALL MOUNTED TELEPHONE NOT TO SCALE



10 CABLE LABEL DETAIL

NY  
drawn by  
  
NY  
checked by  
  
SEPTEMBER 2023  
date  
  
revisions

MOORE PUBLIC SCHOOLS  
BOARD OF EDUCATION  
MOORE, OKLAHOMA



OFFICE ADDITION  
FAIRVIEW  
ELEMENTARY SCHOOL

sheet no:  
  
**T-403**

OWNERSHIP USE OF DOCUMENTS:

AGP EXPRESSLY RESERVES ITS  
COPYRIGHT AND OTHER PROPERTY  
RIGHTS OF ALL PLANS AND DRAWINGS  
DESIGNED AND/OR PRODUCED. PLANS  
AND DRAWINGS ARE NOT TO BE  
REPRODUCED IN ANY FORM OR MANNER  
WITHOUT THE EXPRESSED WRITTEN  
CONSENT OF AGP.



2600 Van Buren St., Suite 2635  
Norman, OK 73072  
Salas O'Brien Registration: CA# 7058  
Expiration Date: 6/30/2025  
Salas O'Brien Project Number: 2023-04386-00



SYSTEMS SPECIFICATIONS

UPDATED OCTOBER 2023

• Intercom 12" Analog Clock shall be hard wired and may not use battery power for its primary power source. Clock must be compatible with existing clock system.

• If site does not have an existing working clock system, stand-alone battery powered clocks shall be used. Stand-alone wall clock shall be American Time E56BAQD304BP

Stand-alone dual face hallway clock shall be American Time E93BAQD304BP

An 110v electric clock receptacle shall be installed at each clock location for future devices.

**1.03 Systems Installation**

- All devices shall be mounted according to the manufactures specifications.
- All devices shall be properly adjusted and tested prior to job completion.
- All extra wire taps shall be insulated.
- Protective grommets shall be installed on all conduits to protect wire.
- All wire shall be run in J hooks above ceiling with a minimum space of 4" from ceiling deck. All wire shall be in separate pathways 6" from other system wiring. No wire ties allowed.
- All wire ran between building shall be in conduit and shall be direct burial cable. It shall be a minimum of 5 conductor 18 AWG copper.
- Installer shall supply the electrical and or masonry contractors with specialty back boxes such as clock recessed back boxes etc. and coordinate with them to ensure that all necessary conduits, back boxes, etc. are installed in the proper locations.
- Follow and adhere to installation practices specified by NFPA-70 National Electric Code, Edition 2008.
- Follow and adhere to installation practices specified by the Manufacturers.

**1.04 Quality Assurance**

**1.04.01 Qualifications**

- Install all components as directed by Manufacturer's installation guidelines.
- All products shall bear the mark of UL or ETL for performance level.
- System installation shall meet all applicable Local/State codes and safety requirements where project is located.
- All products shall be new and un-used in original packaging.

**1.04.02 Bidder/Installer Qualifications**

- Bidding contractor shall have a minimum of 5 years experience installing school intercom systems.
- Bidding contractor shall be able to provide insurance at the request of the owner.

**1.05 Delivery, Storage, and Protection**

- Contractor shall ensure that materials delivery to work area shall be coordinated with construction site manager responsible for materials distribution to all trades.
- Contractor is responsible for all materials, tools and vehicles left on the job site.
- Follow Manufacturer's recommendations for handling of materials.

**1.06 Scheduling**

- Contractor shall provide a detailed construction schedule with hard dates for completion of roughing in cables, terminations and testing once scheduling sequence has been determined to the Owner's Project Manager.

**1.07 Warranty**

- Contractor shall provide a 1 year parts and labor warranty against defective workmanship and/or system component failure.

**Part 3 - Execution**

**3.01 Field Quality Control**

- Contractor shall make available all ceiling and termination work for inspection by Manufacturer's representative or owner's representative.
- Contractor shall replace all defective components.

**3.02 Adjusting**

- No additional work outside of the contract scope of work shall be completed without the approval of the Owner or Owner's representative.

**3.03 Protection**

- It is the responsibility of the Contractor to ensure equipment is protected from dust and water during the project with appropriate materials.
- Remove all protective covers and protective materials from equipment prior to turnover to Owner.

**3.04 Schedules**

- Coordinate work with Owner's project manager and follow scheduling sequence as established by Owner's project manager.
- It is recommended that the Contractor schedule closely with any other systems contractor to ensure turnover date is met.
- Contractor bidding will supply the electrical and or masonry contractors with any specialty back boxes such as clock recessed back boxes etc. and coordinate with them to ensure that all necessary conduits, back boxes, etc. are installed in the proper locations.

End of Section

**1.04 Submittals**

**1.04.01 Prior to Installation**

- Show complete map of system design for approval by Owner.

End of Section

**Clock System Installation Completion Check List**

**Part 1 - General**

**1.01 Section Includes**

- Clock System Completion Check List

**1.02 Completion Check List**

- All Clocks have been tested for proper operation and synchronization.

End of Section

**Security System Specifications**

**Part 1 - General**

**2.01 Manufacturers**

- Security System Manufacturer shall be DSC or DMP. See plans for the specific manufacturer required. (no substitutions)
- Installer shall be certified by manufacturer to install and program the specified systems. (no substitutions)
- Peripheral device Manufacturers shall be according to equipment list. (No Substitutions)
- Cable Manufacturer shall be Genesis. (Or Equivalent)

**Security Systems Equipment**

- security alarm control shall be dsc model # pc4020 or dmp model # xr550n-g. (no substitutions)
- security alarm control communicator shall be dsc model # l-linkII250. dpm n/a. (no substitutions)
- security alarm keypad shall be dsc model # lcd4501 or dmp model # 7873. (no substitutions)
- security alarm keypad for all kitchen locations shall be dsc model # lcd4501 or dmp model # 7073. (no substitutions)
- security alarm 8 zone hardwire expander shall be dsc model # pc4108 or dmp model # 714-8. (no substitutions)
- security alarm 16 zone hardwire expander shall be dsc model # pc4116 or dmp model # 714-16. (no substitutions)
- security alarm power supply shall be dsc model # pc4204 or dmp systems = altronix model # smp3pmcxc. (no substitutions)
- security alarm power supply cabinet shall be dsc model # pc4051c. dmp n/a. (no substitutions)
- security alarm cabinet locks shall be dsc model # 11 or dmp model # 301. (no substitutions)
- security alarm 35x35 motion detector shall be honeywell model # dt-8035. (no substitutions)
- security alarm 50x60 motion detector shall be honeywell model # dt-8050. (no substitutions)
- security alarm window glass break sensor shall be honeywell model # lg-730. (no substitutions)
- security alarm door contact shall be ge model # 1076d-m. double pole double throw for all doors (no substitutions)
- each single door or double door shall be wired with 4 conductor wire.
- dmp systems shall be wired with 2 zones per single door or double door. one zone for security alarm and one zone for "door held open alert"
  - security alarm c channel door magnets shall be grl model # mc180
  - security alarm surface window contact shall be alph model # ps-1541. (or equivalent approved by mps)
  - security alarm overhead door & roof hatch contact shall be amsec model # ods-59a or for rail mount applications Interlogix ge2315a. (no substitutions)
  - security alarm indoor siren shall be ademo model # wave2ex. (no substitutions)
  - security alarm outdoor siren shall be atw model # ds301set. (no substitutions)
  - security alarm outdoor strobe shall be amsec model # s401c. (no substitutions)

**1.01 Systems Installation**

- installer shall be certified by manufacturer to install & program the specified systems.
- installer shall perform all programming required to complete the installation. moore public schools shall not be required to assist in any part of the installation or programming.
- All alarm junctions and or splices shall be soldered and insulated.
- All circuits and wiring shall be labeled at all terminating ends.
- All devices shall be mounted according to the manufactures specifications.
- All devices shall be properly adjusted and tested prior to job completion.
- All expansion module shall be DMP 714-16 and Relay Output Module shall be DMP 860.
- All cabinets shall be labeled outside with their corresponding module and zone numbers and installed with lock.
- All cabinets shall be labeled inside with module number by the corresponding module and zone list definitions.
- Main control panel shall have a CAT 6 cable ran between the main control and the phone company DMARC for monitoring purposes.
- Each expansion cabinets shall have two non-shielded16 gauge 4 conductor cables ran from the main control to the expansion cabinet.
- All devices such as motion detectors, glass break detectors, door contacts, Keypads, etc. shall be labeled with their corresponding module and zone number. Label shall be visible from the floor.
- All motion detectors shall be sealed to prevent air and insects from entering.
- All steel doors shall have wide gap contacts installed.
- All door contacts shall be recessed and door magnets shall be glued in place.
- All keypads shall be wired individually back to new power supply.
- All sirens shall be wired individually and connected to new power supply.
- All devices such as door contact (double doors wire as one), motion detectors, glass break detectors, etc. shall be wired individually on separate zones with end of line resistors at the devices.
- All devices such as motion detectors, glass break detectors, door contacts, keypads, sirens, etc. shall be labeled with their corresponding module and or zone number. label shall be visible from the floor.
- All air conditioning condensers accessible from the outside and roof shall have pressure switches installed on the high pressure side and be connected to the security alarm.
- Protective grommets shall be installed on all conduits to protect wire.
- All devices shall be wired with NON shielded cable.
- All panels, power supplies and modules shall be grounded.
- All wire shall be run in J hooks above ceiling with a minimum space of 4" from ceiling deck. All wire shall be in separate pathways 6" from other system wiring. No wire ties allowed. No wire shall be run between the red iron and roof deck.
- All wire visible from the finished floor shall be covered in decorative wire molding.
- All wire ran between building shall be in conduit and shall be non shielded direct burial cable. It shall be a minimum of 4 conductor 16 AWG copper.
- Installer shall have a commercial burglar technician on the job site at all times during installation.
- Installer will work closely with the electrical and or masonry contractors to ensure conduit, back boxes, door frame access conduit, etc. are in the proper locations and accessible.
- Follow and adhere to installation practices specified by NFPA-70 National Electric Code, Edition 2008.
- Follow and adhere to installation practices specified by the Manufacturers.

End of Section

**1.02 Submittals**

**1.03.01 Prior to Installation**

- Show complete map of system design for approval by Owner.

End of Section

**Security System Installation Completion Check List**

**Part 1 - General**

**1.01 Section Includes**

- Security System Completion Check List

**1.02 Completion Check List**

- A map of the entire system showing device numbers and wire routes has been left inside the main control panel and a copy has been given to Jack Phillips with MPS.

**Part 1 - General**

**1.01 Section Includes**

- Security System Completion Check List

**1.02 Completion Check List**

- All conduit and EMT required for Fire cabling pathway in/out of closets and in/out of wall cavities at the work area. EMT or Conduit for pathways shall have no more than two 90 degree sweeps and no continuous section over 100'.
- All core holes and poke through devices in the floor for the installation of Fire cabling.
- All core holes and EMT sleeves between floors for the routing of Fire cabling.
- Back boxes for the mounting of Fire Devices.
- Drag line or pull string at the back boxes fished through EMT or conduit to the other end for installing Fire Cabling.

**1.03 Quality Assurance**

**1.03.01 Qualifications**

- Install all components as directed by Manufacturer's installation guidelines.
- All products shall bear the mark of UL or ETL for performance level.
- System installation shall meet all applicable Local/State codes and safety requirements where project is located.
- All products shall be new and un-used in original packaging.

**1.03.02 Bidder/Installer Qualifications**

- Bidding contractor shall be a local licensed Commercial Burglar Alarm Company with licensed Commercial Burglar Alarm technician(s) on staff.
- bidding contractor shall be certified by manufacturer to install & program the specified systems.
- bidding contractor shall perform all programming required to complete the installation. moore public schools shall not be required to assist in any part of the installation or programming.
- bidding contractor shall have at least one year experience installing dsc/dmp equipment.
- bidding contractor shall have a minimum of 5 years experience installing commercial burglar alarms.
- bidding contractor shall be able to provide insurance at the request of the owner.
- bidding contractor shall have a commercial burglar technician on the job site at all times during installation

**1.04 Delivery, Storage, and Protection**

- Contractor shall ensure that materials delivery to work area shall be coordinated with construction site manager responsible for materials distribution to all trades.
- Contractor is responsible for all materials, tools and vehicles left on the job site.
- Follow Manufacturer's recommendations for handling of materials.

**1.05 Project Conditions**

**1.05.01 Environmental Requirements**

- Contractor shall ensure that any pollutants produced during the Work are disposed off according to local, state or national regulations. Follow the most stringent guidelines.
- It is preferred that the Contractor recycle any used or un-used components during the course of the construction project.

**1.06 Sequencing**

- Contractor shall coordinate with Owner's project manager on sequencing of various trades and construction teams for the lifecycle of the project.

**1.07 Scheduling**

- Contractor shall provide a detailed construction schedule with hard dates for completion of roughing in cables, terminations and testing once scheduling sequence has been determined to the Owner's Project Manager.

**1.08 Warranty**

- Contractor shall provide a 1 year parts and labor warranty against defective workmanship and/or system component failure. (1 year warranty shall begin at job completion)

**Part 2 - Products**

**2.02 Source Quality Control**

- Materials shall be purchased from Distributors authorized by system Manufacturers to sell new and unused components.

**Part 3 -**

**3.01 Field Quality Control**

- Contractor shall make available all ceiling and termination work for inspection by Manufacturer's representative or owner's representative.
- Contractor shall replace all defective components.

**3.02 Adjusting**

- No additional work outside of the contract scope of work shall be completed without the approval of the Owner or Owner's representative.

**3.03 Cleaning**

- Contractor shall sweep and mop the floors of all equipment rooms or connection point closets prior to turnover to the Owner.

**3.04 Protection**

- It is the responsibility of the Contractor to ensure equipment is protected from dust and water during the project with appropriate materials.
- Remove all protective covers and protective materials from equipment prior to turnover to Owner.

**3.05 Schedules**

- Coordinate work with Owner's project manager and follow scheduling sequence as established by Owner's project manager.
- It is recommended that the Contractor schedule closely with any other systems contractor to ensure turnover date is met.
- Contractor bidding will work closely with the electrical and or masonry contractors to ensure conduit, back boxes, door frame access conduit, etc. are in the proper locations and accessible.

End of Section

**Access Control System Specifications**

**Access Control Equipment**

**Part 1 - Manufacture**

- Access Control Manufacturer shall be Keyscan. (No Substitutions)
- Peripheral device Manufacturers shall be according to equipment list. (No Substitutions)
- Cable Manufacturer shall be Genesis. (Or Equivalent)

**1.01 Access Control Equipment Description**

- Access Control System Manufacture shall be Keyscan (No Substitutions)
- Access Control Management Software = Aurora (This software is already installed and in use. It is listed for information purposes only)
- Reader Control Panels shall be (No Substitutions)
  - Keyscan CA 4500 = 4 Door
  - Keyscan CA 8500 = 8 Door
- Each Reader Control Panel shall be equipped with (2) 18VAC 40VA Transformer
- Each Reader Control Panel shall be equipped with (1) 12V 7AH Battery
- One 2,4 or 8 Door Reader Control Panel per site shall be equipped with (1) Keyscan Netcom2p module. If the site has an existing 2,4 or 8 Door Control Panel with a Netcom2P already installed, then a Netcom 2P is not needed and CIM or CIM-Link modules shall be used to connect the new Control Panel to the existing Control Panel.
- All Reader Control Panels shall be linked together with either CIM or CIM-Link modules.
- Each new Reader Control Panel shall be capable of 4 doors minimum

**Card Readers shall be (No Substitutions)**

- HID 40NKS00000000 Signo Wall Mount reader (for use in all locations except where mullion mount reader size is required to fit)
- HID 20NKS00000000 Signo 20 Mullion Reader (For use on mullion mount locations where single gang reader is too large).
- ALL READERS REQUIRE 22/6 STR OAS WIRE.
- Access Control Strikes and locks shall be (No Substitutions unless approved by Moore Public Schools)
  - RCI 0163X32D 1/2 inch Rim (ONLY USE IF 1/2 INCH RIM WILL NOT FIT)
  - RCI 0162X32D 3/4 inch Rim
  - RCI F0162X32D 3/4 inch Rim Fire Rated
  - RCI F2164 RECESSED ALL-IN-ONE STRIKE
- Where storm doors are installed, install compatible power motor and power supply to activate door hardware unless installed by door contractor.
- Egress Motions shall be (No Substitutions)
  - BOSCH DS160 OR HONEYWELL IS310

Access Control Installation Completion Check List

**Part 4 - General**

**4.01 Section Includes**

- Access Control System Completion Check List

**4.02 Completion Check List**

- A map of the entire system showing device numbers and wire routes has been left inside the main control panel and a copy has been given to Jack Phillips with MPS.

**1.09 References**

- NFPA-70 National Electrical Code 2008 edition
- NFPA-72 National Fire Alarm Code
- UL 1686 - Standard for Safety of Flame Propagation Height
- NFPA 262 - Flame Travel and Smoke of Wires and Cables
- Local Authority Having Jurisdiction

**1.10 Definitions**

AWG - American Wire Gauge

BICSI - Building Industry Consulting Service International

EIA - Electronics Industry Alliance

FCC - Federal Communications Commission

NECA - National Electrical Contractors Association

NFPA - National Fire Protection Agency

UL - Underwriters Laboratory

- All panel programming has been checked and is correct.
- Panel(s) has been tested for proper operation.
- All zones have been tested to verify proper description at keypad.
- All zones have been tested to verify proper reporting to the monitoring station.
- All zones have been tested to verify they are in their proper partition(s).
- All sirens and strobes have been tested for proper operation.
- All motion detectors have been adjusted for proper sensitivity and have been walk tested.
- All motion detectors have been sealed to prevent air and insects from entering.
- All glass break detectors have been adjusted for proper sensitivity and tested.
- All cabinets are labeled on the outside with module numbers and zone numbers.
- All cabinets are labeled on the inside with module numbers by the corresponding module and zone descriptions.
- All user codes have been programmed and tested for proper partition access.
- The monitoring station has the correct account information such as call list, zone descriptions etc.

End of Section

**Access Control System Specifications**

**Access Control Equipment**

**Part 1 - Manufacture**

- Access Control Manufacturer shall be Keyscan. (No Substitutions)
- Peripheral device Manufacturers shall be according to equipment list. (No Substitutions)
- Cable Manufacturer shall be Genesis. (Or Equivalent)

**1.01 Access Control Equipment Description**

- Access Control System Manufacture shall be Keyscan (No Substitutions)
- Access Control Management Software = Aurora (This software is already installed and in use. It is listed for information purposes only)
- Reader Control Panels shall be (No Substitutions)
  - Keyscan CA 4500 = 4 Door
  - Keyscan CA 8500 = 8 Door
- Each Reader Control Panel shall be equipped with (2) 18VAC 40VA Transformer
- Each Reader Control Panel shall be equipped with (1) 12V 7AH Battery
- One 2,4 or 8 Door Reader Control Panel per site shall be equipped with (1) Keyscan Netcom2p module. If the site has an existing 2,4 or 8 Door Control Panel with a Netcom2P already installed, then a Netcom 2P is not needed and CIM or CIM-Link modules shall be used to connect the new Control Panel to the existing Control Panel.
- All Reader Control Panels shall be linked together with either CIM or CIM-Link modules.
- Each new Reader Control Panel shall be capable of 4 doors minimum

**Card Readers shall be (No Substitutions)**

- HID 40NKS00000000 Signo Wall Mount reader (for use in all locations except where mullion mount reader size is required to fit)
- HID 20NKS00000000 Signo 20 Mullion Reader (For use on mullion mount locations where single gang reader is too large).
- ALL READERS REQUIRE 22/6 STR OAS WIRE.
- Access Control Strikes and locks shall be (No Substitutions unless approved by Moore Public Schools)
  - RCI 0163X32D 1/2 inch Rim (ONLY USE IF 1/2 INCH RIM WILL NOT FIT)
  - RCI 0162X32D 3/4 inch Rim
  - RCI F0162X32D 3/4 inch Rim Fire Rated
  - RCI F2164 RECESSED ALL-IN-ONE STRIKE
- Where storm doors are installed, install compatible power motor and power supply to activate door hardware unless installed by door contractor.
- Egress Motions shall be (No Substitutions)
  - BOSCH DS160 OR HONEYWELL IS310

Access Control Installation Completion Check List

**Part 4 - General**

**4.01 Section Includes**

- Access Control System Completion Check List

**4.02 Completion Check List**

- A map of the entire system showing device numbers and wire routes has been left inside the main control panel and a copy has been given to Rodney Cobb with MPS.

**1.09 References**

- NFPA-70 National Electrical Code 2008 edition
- NFPA-72 National Fire Alarm Code
- UL 1686 - Standard for Safety of Flame Propagation Height
- NFPA 262 - Flame Travel and Smoke of Wires and Cables
- Local Authority Having Jurisdiction

**1.10 Definitions**

AWG - American Wire Gauge

BICSI - Building Industry Consulting Service International

EIA - Electronics Industry Alliance

FCC - Federal Communications Commission

NECA - National Electrical Contractors Association

NFPA - National Fire Protection Agency

UL - Underwriters Laboratory

- Door Contacts shall be GE Model # 1076d-M Double Pole Double Throw (To be utilized for Access Control and Security Alarm) (See security alarm specs)
- DOOR LOCK RELEASE BUTTON SHALL BE (NO SUBSTITUTIONS)
  - RCI PART # 909S ROCKER SWITCH
- Power Supply for locking hardware
  - \*Power supply in Keyscan Controller is for the Control and Readers only.
- Power Supplies shall be sized to meet requirements of Strikes and locks with a maximum of 80% amp load.
- Power Supply shall have form "C" contacts for supervision that is connected to Keyscan Control Aux Input. 24 VDC Securtron- AccuPower- AQM20-8C/16C. AQD5-8C or equal.

**2.01 Systems Installation**

- All junctions and or splices shall be soldered and insulated.
- All circuits and wiring shall be labeled at all terminating ends.
- All devices shall be mounted in accordance to the manufactures specifications.
- All devices shall be properly adjusted and tested prior to job completion.
- All controllers shall be labeled outside with their corresponding modules and installed with lock.
- All controllers shall have a Cat 6 network cable Blue in color ran from the nearest network cabinet and labeled with drop number.
- All card readers shall be labeled with their corresponding reader number.
- All doors with access control shall have contacts installed for door status indication. Steel doors shall have wide gap door contacts installed.
- All doors with access control shall have egress motions installed to allow system to detect proper egress. (including doors with panic exit hardware.)
- Protective grommets shall be installed on all conduits to protect wire.
- All panels, power supplies and modules shall be grounded.
- All wire shall be run in J hooks above ceiling with a minimum space of 6" from ceiling deck. All wire shall be in separate pathways 6" from other system wiring. No wire shall be run between the red iron and roof deck.
- All wire visible from the finished floor shall be covered in decorative wire molding.
- All wire ran between building shall be in conduit and shall be direct burial cable.
- Installer shall have a licensed Access Control technician on the job site at all times during installation.
- Installer will work closely with the electrical and or masonry contractors to ensure conduit, back boxes, door frame access conduit, etc. are in the proper locations and accessible.
- Follow and adhere to installation practices specified by NFPA-70 National Electric Code, Edition 2008.
- Follow and adhere to installation practices specified by the Manufacturers.

**3.01 Bidder/Installer Qualifications**

- Bidding contractor shall be a local licensed Access Control Company with licensed Access Control technician(s) on staff.
- Bidding contractor shall have at least one year experience installing Keyscan Access Control Systems.
- Bidding contractor shall have a minimum of 5 years experience installing commercial Access Control Systems.
- Bidding contractor shall be able to provide insurance at the request of the owner.
- Bidding contractor shall have a commercial Access Control technician on the job site at all times during installation.

**3.01.1 Submittals**

**3.01.2 Prior to Installation**

- Show complete map of system design for approval by Owner.

**3.01.3 Prior to final acceptance**

- Provide a soft CAD copy As-Built showing layout of Controller Panel, Card Readers, Power Supplies and all mounted equipment upon Substantial Completion.
- Ensure all warranties specify that the Owner is entitled to all rights guaranteed by the warranty for various components.

**3.02 Quality Assurance**

**3.02.1 Qualifications**

- Install all components as directed by Manufacturer's installation guidelines.
- All products shall bear the mark of UL or ETL for performance level.
- System installation shall meet all applicable Local/State codes and safety requirements where project is located.
- All products shall be new and un-used in original packaging.

Access Control Installation Completion Check List

**Part 4 - General**

**4.01 Section Includes**

- Access Control System Completion Check List

**4.02 Completion Check List**

- A map of the entire system showing device numbers and wire routes has been left inside the main controller panel and a copy has been given to Rodney Cobb with MPS.
- All system programming has been checked and is correct.
- Panel(s) has been tested for proper operation.
- All card readers are labeled with reader number and have been tested to verify proper operation.
- All user card and key fobs have been programmed into system and tested to verify proper operation.
- All egress motion detectors have been adjusted for proper sensitivity and have been walk tested.
- All controllers are labeled on the outside with module numbers.
- All controllers are labeled on the inside with module numbers by the corresponding module.

**1.09 References**

- NFPA-70 National Electrical Code 2008 edition
- NFPA-72 National Fire Alarm Code
- UL 1686 - Standard for Safety of Flame Propagation Height
- NFPA 262 - Flame Travel and Smoke of Wires and Cables
- Local Authority Having Jurisdiction

**1.10 Definitions**

AWG - American Wire Gauge

BICSI - Building Industry Consulting Service International

EIA - Electronics Industry Alliance

FCC - Federal Communications Commission

NECA - National Electrical Contractors Association

NFPA - National Fire Protection Agency

UL - Underwriters Laboratory

- Door Contacts shall be GE Model # 1076d-M Double Pole Double Throw (To be utilized for Access Control and Security Alarm) (See security alarm specs)
- DOOR LOCK RELEASE BUTTON SHALL BE (NO SUBSTITUTIONS)
  - RCI PART # 909S ROCKER SWITCH
- Power Supply for locking hardware
  - \*Power supply in Keyscan Controller is for the Control and Readers only.
- Power Supplies shall be sized to meet requirements of Strikes and locks with a maximum of 80% amp load.
- Power Supply shall have form "C" contacts for supervision that is connected to Keyscan Control Aux Input. 24 VDC Securtron- AccuPower- AQM20-8C/16C. AQD5-8C or equal.

**2.01 Systems Installation**

- All junctions and or splices shall be soldered and insulated.
- All circuits and wiring shall be labeled at all terminating ends.
- All devices shall be mounted in accordance to the manufactures specifications.
- All devices shall be properly adjusted and tested prior to job completion.
- All controllers shall be labeled outside with their corresponding modules and installed with lock.
- All controllers shall have a Cat 6 network cable Blue in color ran from the nearest network cabinet and labeled with drop number.
- All card readers shall be labeled with their corresponding reader number.
- All doors with access control shall have contacts installed for door status indication. Steel doors shall have wide gap door contacts installed.
- All doors with access control shall have egress motions installed to allow system to detect proper egress. (including doors with panic exit hardware.)
- Protective grommets shall be installed on all conduits to protect wire.
- All panels, power supplies and modules shall be grounded.
- All wire shall be run in J hooks above ceiling with a minimum space of 6" from ceiling deck. All wire shall be in separate pathways 6" from other system wiring. No wire shall be run between the red iron and roof deck.
- All wire visible from the finished floor shall be covered in decorative wire molding.
- All wire ran between building shall be in conduit and shall be direct burial cable.
- Installer shall have a licensed Access Control technician on the job site at all times during installation.
- Installer will work closely with the electrical and or masonry contractors to ensure conduit, back boxes, door frame access conduit, etc. are in the proper locations and accessible.
- Follow and adhere to installation practices specified by NFPA-70 National Electric Code, Edition 2008.
- Follow and adhere to installation practices specified by the Manufacturers.

**3.01 Bidder/Installer Qualifications**

- Bidding contractor shall be a local licensed Access Control Company with licensed Access Control technician(s) on staff.
- Bidding contractor shall have at least one year experience installing Keyscan Access Control Systems.
- Bidding contractor shall have a minimum of 5 years experience installing commercial Access Control Systems.
- Bidding contractor shall be able to provide insurance at the request of the owner.
- Bidding contractor shall have a commercial Access Control technician on the job site at all times during installation.

**3.01.1 Submittals**

**3.01.2 Prior to Installation**

- Show complete map of system design for approval by Owner.

**3.01.3 Prior to final acceptance**

- Provide a soft CAD copy As-Built showing layout of Controller Panel, Card Readers, Power Supplies and all mounted equipment upon Substantial Completion.
- Ensure all warranties specify that the Owner is entitled to all rights guaranteed by the warranty for various components.

**3.02 Quality Assurance**

**3.02.1 Qualifications**

- Install all components as directed by Manufacturer's installation guidelines.
- All products shall bear the mark of UL or ETL for performance level.
- System installation shall meet all applicable Local/State codes and safety requirements where project is located.
- All products shall be new and un-used in original packaging.

Access Control Installation Completion Check List

**Part 4 - General**

**4.01 Section Includes**

- Access Control System Completion Check List

**4.02 Completion Check List**

- A map of the entire system showing device numbers and wire routes has been left inside the main controller panel and a copy has been given to Rodney Cobb with MPS.
- All system programming has been checked and is correct.
- Panel(s) has been tested for proper operation.
- All card readers are labeled with reader number and have been tested to verify proper operation.
- All user card and key fobs have been programmed into system and tested to verify proper operation.
- All egress motion detectors have been adjusted for proper sensitivity and have been walk tested.
- All controllers are labeled on the outside with module numbers.
- All controllers are labeled on the inside with module numbers by the corresponding module.

**1.09 References**

- NFPA-70 National Electrical Code 2008 edition
- NFPA-72 National Fire Alarm Code
- UL 1686 - Standard for Safety of Flame Propagation Height
- NFPA 262 - Flame Travel and Smoke of Wires and Cables
- Local Authority Having Jurisdiction

**1.10 Definitions**

AWG - American Wire Gauge

BICSI - Building Industry Consulting Service International

EIA - Electronics Industry Alliance

FCC - Federal Communications Commission

NECA - National Electrical Contractors Association

NFPA - National Fire Protection Agency

UL - Underwriters Laboratory



201 N. BROADWAY  
SUITE 210  
MOORE, OK. 73160  
405.735.3477  
AGP@theAGP.net  
www.theAGP.net

KFC ENGINEERING

STRUCTURAL

SALAS O'BRIEN

MECHANICAL / ELECTRICAL

NY

drawn by

NY

checked by

SEPTEMBER 2023

date

revisions

MOORE PUBLIC SCHOOLS  
BOARD OF EDUCATION  
MOORE, OKLAHOMA



OFFICE ADDITION  
FAIRVIEW  
ELEMENTARY SCHOOL

sheet no:

T-502

OWNERSHIP USE OF DOCUMENTS:

AGP EXPRESSLY RESERVES ITS COPYRIGHT AND OTHER PROPERTY RIGHTS OF ALL PLANS AND DRAWINGS DESIGNED AND/OR PRODUCED. PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED IN ANY FORM OR MANNER WITHOUT THE EXPRESSED WRITTEN CONSENT OF AGP.



2600 Van Buren St., Suite 2635  
Norman, OK 73072  
Salas O'Brien Registration: CA# 7058  
Expiration Date: 6/30/2025  
Salas O'Brien Project Number: 2023-04386-00



**SYSTEMS SPECIFICATIONS**

**4.03 Products Installed but not Supplied Under This Section**

- All conduit and EMT required for Fire cabling pathway in/out of closets and in/out of wall cavities at the work or Conduit for pathways shall have no more than two 90 degree sweeps and no continuous section over 100'.
- All core holes and poke through devices in the floor for the installation of cabling.
- All core holes and EMT sleeves between floors for the routing of cabling.
- Back boxes for the mounting of Devices.
- Drag line or pull string at the back boxes fished through EMT or conduit to the other end for installing Cabling.

**4.04 References**

- NFPA-70 National Electrical Code 2008 edition
- NFPA-72 National Fire Alarm Code
- UL 1666 - Standard for Safety of Flame Propagation Height
- NFPA 262 - Flame Travel and Smoke of Wires and Cables
- Local Authority Having Jurisdiction

**4.05 Definitions**

AWG - American Wire Gauge  
 BICSI - Building Industry Consulting Service International  
 EIA - Electronics Industry Alliance  
 FCC - Federal Communications Commission  
 NECA - National Electrical Contractors Association  
 NFPA - National Fire Protection Agency  
 UL - Underwriters Laboratory

**4.06 Delivery, Storage, and Protection**

- Contractor shall ensure that materials delivery to work area shall be coordinated with construction site manager responsible for materials distribution to all trades.
- Contractor is responsible for all materials, tools and vehicles left on the job site.
- Follow Manufacturer's recommendations for handling of materials.

**4.07 Project Conditions**

**4.07.1 Environmental Requirements**

- Contractor shall ensure that any pollutants produced during the Work are disposed off according to local, state or national regulations. Follow the most stringent guidelines.
- It is preferred that the Contractor recycle any used or un-used components during the course of the construction project.

**4.07.2 Field Measurements**

- Contractor shall coordinate with electrical engineer on project that the main electrical service ground has a resistance to earth of less than 5 ohms.
- Contractor shall ensure that all field testers have been calibrated from the Manufacturer within 1 year.
- All field test results will be documented and submitted to Moore Public Schools, Technology Department.

**4.08 Sequencing**

- Contractor shall coordinate with Owner's project manager on sequencing of various trades and construction teams for the lifecycle of the project.

**4.09 Scheduling**

- Contractor shall provide a detailed construction schedule with hard dates for completion of roughing in cables, terminations and testing once scheduling sequence has been determined to the Owner's Project Manager.

**4.10 Warranty**

- Contractor shall provide a 1 year parts and labor warranty against defective workmanship and/or system component failure. (1 year warranty shall begin at job completion)

**4.11 Source Quality Control**

- Materials shall be purchased from Distributors authorized by system Manufacturers to sell new and unused components.

**Part 5 -**

**5.01 Field Quality Control**

- Contractor shall make available all ceiling and termination work for inspection by Manufacturer's representative or owner's representative.
- Contractor shall replace all defective components.

**5.02 Adjusting**

- No additional work outside of the contract scope of work shall be completed without the approval of the Owner or Owner's representative.

**5.03 Cleaning**

- Contractor shall sweep and mop the floors of all equipment rooms or connection point closets prior to turnover to the Owner.

**5.04 Protection**

- It is the responsibility of the Contractor to ensure equipment is protected from dust and water during the project with appropriate materials.
- Remove all protective covers and protective materials from equipment prior to turnover to Owner.

**5.05 Schedules**

- Coordinate work with Owner's project manager and follow scheduling sequence as established by Owner's project manager.
- It is recommended that the Contractor schedule closely with any other systems contractor to ensure turnover date is met.
- Contractor bidding will work closely with the electrical and/or masonry contractors to ensure conduit, back boxes, door frame access conduit, etc. are in the proper locations and accessible.

End of Section

**Moore Public Schools Fire System Specifications SK & SD Protocol**

**Part 1 - General**

**2.01 Manufacturers**

- Fire System Manufacturer shall be Silent Knight. (No Substitutions)
- Notification appliance Manufacturer shall be System Sensor. (No Substitutions)
- Device Manufacture shall be as specified in equipment description. (No Substitutions)
- Cable Manufacturer shall be Genesis. (Or Equivalent)

**1.03 Fire Systems Equipment Description**

- NOTE:** Contractor shall use SK Protocol devices on all new installations except when the existing system has SD protocol devices connected. In these instances, SD protocol devices shall be used. Contractor shall not combine SD & SK protocol devices to one system.
- Fire alarm control shall be Silent Knight Model # 5820 or 6820. (No Substitutions)
- Fire alarm distributed power module NAC Expansion shall be Silent Knight SK-PS6 / SK-PS10 or Fire-Lite Model #'s FL-PS6 / FL-PS10. (No Substitutions)
- Fire alarm intelligent power supply shall be Silent Knight Model # 5895XL. (No Substitutions)  
 NOTE: The 5895XL NAC circuits will not sync with the main control panels NAC circuits. If new NAC circuit synchronization is required with existing NAC circuits, use the SK-PS6/FL-PS6 or SK-PS10/FL-PS10
- Fire alarm remote Annunciator shall be Silent Knight Model # 5860 (Grey) and surface mount trim ring 5860TG (Grey) shall be used if surface mounted. (No Substitutions)
- Fire Alarm signaling line circuit expander shall be Silent Knight Model # 5815XL for SD protocol devices & 6815 for SK protocol devices. (No Substitutions)

**SK Protocol Devices Shall Be**

- Fire alarm addressable manual pull station shall be Silent Knight Model # SK-PULL-DA. (No Substitutions)
- Fire alarm addressable photoelectric smoke detector shall be Silent Knight Model # SK-PHOTO-W. (No Substitutions)
- Fire alarm addressable heat detector shall be Silent Knight Model # SK-HEAT-W. (No Substitutions)
- Fire alarm base shall be Silent Knight Model # B300-6. (No Substitutions)
- Smoke Detectors in areas that require a CO Detector shall be SK-FIRE-CO-W. (No Substitutions)
- Fire alarm addressable input module shall be Silent Knight Model # SK-MONITOR or SK-MONITOR-2. (No Substitutions)
- Fire alarm addressable relay module shall be a Silent Knight Model # SK-RELAY. (No Substitutions)
- Fire alarm SLC line isolator shall be Silent Knight Model # SK-ISO. (No Substitutions)
- Fire alarm Duct detectors and Duct Detector Remote Test Stations shall be Silent Knight Model #'s SK-DUCT and RTS151KEY. If a Form-C relay is required, please add an SK-RELAY. (No Substitutions)

**SD Protocol Devices Shall Be**

- Fire alarm addressable manual pull station shall be Silent Knight Model # SD500-PSDA. (No Substitutions)
- Fire alarm addressable photoelectric smoke detector shall be Silent Knight Model # SD505-PHOTO. (No Substitutions)
- Fire alarm addressable heat detector shall be Silent Knight Model # SD505-HEAT. (No Substitutions)
- Fire alarm base for Silent Knight Model #'s SD505-PHOTO and SD505-HEAT shall be Silent Knight Model # SD505-6AB. (No Substitutions)
- CO Detector shall be System Sensor Model # CO1224T. (No Substitutions) An SD500-AIM shall be installed on each CO1224T and shall be accessible and visible from the finished floor.
- Fire alarm addressable input module shall be Silent Knight Model # SD500-AIM. (No Substitutions)
- Fire alarm addressable relay module shall be a Silent Knight Model # SD500-ARM. (No Substitutions)
- Fire alarm SLC line isolator shall be Silent Knight Model # SD500-LIM. (No Substitutions)
- Fire alarm Duct detectors and Duct Detector Remote Test Stations shall be Silent Knight Model #'s SD505-DUCTR and SD505-DTS-K. (No Substitutions) Remote test station shall be accessible and visible from the finished floor.
- Fire alarm Horn / Strobe signaling device shall be System Sensor Model # P2WL. (Model PC2WL can be substituted if mounted on non-stainable ceiling tile. No other Substitutions)
- Fire alarm Strobe signaling device shall be System Sensor Model # SWL. (Model SCWL can be substituted if mounted on non-stainable ceiling tile. No other Substitutions)
- Fire alarm strobe synch module shall be System Sensor Model # MDL3. (Not needed on version 9 panels or newer) (No Substitutions)
- Fire alarm Outdoor strobe signaling device shall be System Sensor Model # P2RK. (No Substitutions)
- Fire alarm Speaker / Strobe signaling device shall be System Sensor Model # SPSWL. (Model SPSCWL can be substituted if mounted on non-stainable ceiling tile. No other Substitutions)
- Fire alarm Speaker signaling device shall be System Sensor Model # SPWL. (No Substitutions)
- Fire alarm 50-watt Voice Evac system shall be as needed Silent Knight SKE-450 (Single Zone), SKE-450-ZN4 (4 Zone) or SKE-450-ZN6 (6 Zone). (No Substitutions)

**1.0 Systems Installation**

- All fire alarm junctions and or splices shall be soldered and insulated.
- All Ceiling mounted devices shall be mounted on non-stainable ceiling tiles.
- All circuits and wiring shall be labeled at all terminating ends.
- All fire system wiring shall be RED in color and non-shielded.
- All devices shall be mounted according to the manufacture's specifications.
- All devices shall be properly adjusted and tested prior to job completion.
- All fire pulls shall be dual action.
- All Initiating Devices shall be labeled with their corresponding module and point number. Smoke detector label shall be on smoke detector and smoke detector base and be clearly visible from the finished floor.
- Each Initiating Device Circuits (IDC) shall have Line Isolator Modules installed at the SLC Head End.
- All Initiating Device Circuits (IDC) shall be wired Class B (NFPA Style B).
- All Initiating Device Circuits (IDC) shall be wired with minimum 18 AWG gauge red **NON-Shielded cable.**

- All duct detectors shall be connected to fire system and shall have remote test stations installed accessible and visible from the finished floor. They shall be labeled with their corresponding module and point number.
- All duct detector ARM / AIM shall be installed adjacent to the remote test stations and shall be accessible and visible from the finished floor. They shall be labeled with their corresponding module and point number. (ARMA/IMA should not be needed when using SD505-DUCTR duct det.)
- Each CO 1224T detectors shall have an SD500 AIM installed (No doubling). All CO1224T & SD500 AIM shall be labeled with their corresponding module and point number and shall be accessible and visible from the finished floor.
- All modules shall have their corresponding module number.
- All notification devices shall be wall mounted where possible. Where wire is exposed decorative wire molding shall be installed from the ceiling to the device. If ceiling mount devices are used, they shall be mounted on a non-stainable ceiling tile.
- All notification devices shall be labeled with their corresponding module, circuit number and device number. Label shall be on the base and be clearly visible from the finished floor. EOL Device shall be labeled as such.
- All horn / strobes and strobes shall be synchronized.
- All Notification Appliance Circuits (NAC) shall be wired Class B (NFPA Style Y).
- All Notification Appliance Circuits (NAC) shall be wired with minimum 16 AWG gauge red **NON-Shielded** cable.
- Protective grommets shall be installed on all conduits to protect wire.
- All SBUS and SLC circuits shall be wired with red **NON-shielded cable.**
- All wire shall be run in J hooks above ceiling with a minimum space of 6" from ceiling deck. All wire shall be in separate pathways 6" from other system wiring. No wire ties allowed. No wire shall be run between the red iron and roof deck.
- Main control panel shall have a CAT 6 cable ran between the main control and the phone company DMARC for monitoring purposes.
- All wire ran between building shall be in conduit and shall be **Non-shielded** direct burial cable. It shall be a minimum of 4 conductor 16 AWG copper.
- Installer shall have a commercial fire technician on the job site at all times during the installation.
- Installer shall supply the electrical and/or masonry contractors with specialty back boxes such as remote annunciator recessed back boxes etc. and coordinate with them to ensure that all necessary conduits, back boxes, etc. are installed in the proper locations.
- Follow and adhere to installation practices specified by the applicable NFPA 72 standards.
- Follow and adhere to installation practices specified by NFPA-70 National Electric Code, Edition 2008.
- Follow and adhere to installation practices specified by the Manufacturers.

**1.02 Products Installed but not Supplied Under This Section**

- All conduit and EMT required for Fire cabling pathway in/out of closets and in/out of wall cavities at the work area. EMT or Conduit for pathways shall have no more than two 90-degree sweeps and no continuous section over 100'.
- All core holes and poke through devices in the floor for the installation of Fire cabling.
- All core holes and EMT sleeves between floors for the routing of Fire cabling.
- Back boxes for the mounting of Fire Devices.
- Drag line or pull string at the back boxes fished through EMT or conduit to the other end for installing Fire Cabling.

**1.0 Quality Assurance**

**1.03.01 Qualifications**

- Install all components as directed by Manufacturer's installation guidelines.
- All products shall bear the mark of UL or ETL for performance level.
- System installation shall meet all applicable Local/State codes and safety requirements where project is located.
- All products shall be new and un-used in original packaging.

**1.03.02 Bidder/Installer Qualifications**

- Bidding contractor shall be a local licensed Commercial Fire Alarm Company with licensed Commercial Fire Alarm technician(s) on staff.
- Bidding contractor shall have a minimum of one year experience installing Silent Knight Addressable fire panels.
- Bidding contractor shall have a minimum of 5 years experience installing commercial fire alarms.
- Bidding contractor shall be able to provide insurance at the request of the owner.
- Bidding contractor shall have a commercial fire technician on the job site at all times during the installation.

**1.0 Sequencing**

- Contractor shall coordinate with Owner's project manager on sequencing of various trades and construction teams for the lifecycle of the project.

**1.05 Scheduling**

- Contractor shall provide a detailed construction schedule with hard dates for completion of roughing in cables, terminations and testing once scheduling sequence has been determined to the Owner's Project Manager.

**1.06 Warranty**

- Contractor shall provide a 1-year parts and labor warranty against defective workmanship and/or system component failure. (1-year warranty shall begin at job completion)

**Part 2 - Products**

**2.02 Source Quality Control**

- Materials shall be purchased from Distributors authorized by system Manufacturers to sell new and unused components.

**Part 3 -**

**3.01 Field Quality Control**

- Contractor shall make available all ceiling and termination work for inspection by Manufacturer's representative or owner's representative.
- Contractor shall replace all defective components.

**3.02 Adjusting**

- No additional work outside of the contract scope of work shall be completed without the approval of the Owner or Owner's representative.

**3.03 Protection**

End of Section

- It is the responsibility of the Contractor to ensure equipment is protected from dust and water during the project with appropriate materials.
- Remove all protective covers and protective materials from equipment prior to turnover to Owner.

**End of Section**

**1.04 Submittals**

**1.04.01 Prior to installation**

- Show compete map of system design for approval by Owner.

**1.04.02 Prior to final acceptance**

- Provide a soft CAD copy As-Built showing layout of panel, initiating devices, notification devices and all mounted equipment upon Substantial Completion.
- Ensure all warranties specify that the Owner is entitled to all rights guaranteed by the warranty for various components.

**Fire System Installation Completion Check List**

**Part 1 - General**

**1.01 Section Includes**

- Fire System Completion Check List

**1.02 Completion Check List**

- A map of the entire system showing device numbers and wire routes has been left inside the main control panel and a copy has been given to Jack Phillips with MPS.
- All panel programming has been checked and is correct.
- Panel(s) has been tested for proper operation.
- All zones have been tested to verify proper description at keypad.
- All points have been tested to verify proper reporting to the monitoring station.
- All points have been tested to verify proper description at the keypad.
- All horn/strobes and strobes have been tested for proper operation.
- All smoke detectors have been tested and dust covers removed.
- All devices have been tested for proper operation.
- All cabinets are labeled on the outside with module numbers and point numbers.
- All cabinets are labeled on the inside with module numbers by the corresponding module and point descriptions.
- The monitoring station has the correct account information such as call list, zone descriptions, etc.

**End of Section**

IP camera Specifications

**Moore Public Schools**  
**IP camera Specifications**

**IP CAMERA MANUFACTURE IS AVIGILON (NO SUBSTITUTIONS).**

**AVIGILON EQUIPMENT**  
**INDOOR DOME SINGLE HEAD CAMERA REQUIRED EQUIPMENT LIST**

4.0C-H5A-D1-IR  
 ACC7-ENT LICENSE - 1 per camera

INDOOR MULTI-HEAD 3 HEAD CAMERA REQUIRED EQUIPMENT LIST

9C-H4A-3MH-180 (3x3MP)  
 POE-INI2-60W-NA Power Injector  
 ACC7-ENT LICENSE - 1 per camera  
 H4AMH-AD-CEIL1  
 H4AMH-DC-COVR1

INDOOR MULTI-HEAD 4 HEAD CAMERA REQUIRED EQUIPMENT LIST

12C-H4A-3MH-360 (4x3MP)  
 POE-INI2-60W-NA Power Injector  
 ACC7-ENT LICENSE - 1 per camera  
 H4AMH-AD-CEIL1  
 H4AMH-DC-COVR1

OUTDOOR DOME SINGLE HEAD CAMERA REQUIRED EQUIPMENT LIST

6.0C-H5A-DO1-IR  
 ACC7-ENT LICENSE - 1 per camera

OUTDOOR MULTI-HEAD 3 HEAD CAMERA CORNER MOUNT REQUIRED EQUIPMENT LIST

15C-H4A-3MH-270 (3x5MP)  
 POE-INI2-60W-NA Power Injector  
 ACC7-ENT LICENSE - 1 per camera  
 H4AMH-AD-PEND1  
 H4AMH-DO-COVR1  
 H4AMH-AD-IR1L1  
 H4-MT-CRNR1

OUTDOOR MULTI-HEAD 3 HEAD CAMERA WALL MOUNT REQUIRED EQUIPMENT LIST

15C-H4A-3MH-180 (3x5MP)  
 POE-INI2-60W-NA Power Injector  
 ACC7-ENT LICENSE - 1 per camera  
 H4AMH-AD-PEND1  
 H4AMH-DO-COVR1  
 H4AMH-AD-IR1L1  
 IRPTZ-MNT-WALL1

**INSTALLATION**

- Install cameras on adjacent walls where possible. If it must be mounted on ceiling, it shall be on a water-resistant non-stainable ceiling tile. **MPS to have final determination of camera location and field of view) (Call Jack Phillips for final location and view phone 473-5225)**
- Any cameras installed on ceiling shall be mounted on a water-resistant non-stainable ceiling tile. (BIDDING CONTRACTOR SHALL PROVIDE NON-STAINABLE TILE)
- Each installed camera needs a camera license.
- All network drops shall be connected with patch cords to a switch at each rack location.
- No Substitutions.

**Horizontal Cabling**

**Requirements**

- See MPS Structured Cabling Specifications for camera network cabling installation, labelling and testing requirements.

**Warranty**

- Communications Contractor shall provide a 1 year parts and labor warranty against defective workmanship and/or system component failure.
- Communications Contractor shall execute a Lifetime Applications Assurance Warranty for parts and labor to support stated applications from the connectivity Manufacturer.

End of Section

**Audio Visual Systems for Instructional Spaces Specifications**

**Part 1 - General**

**1.01 Instructional Spaces**

- Reference technology drawings and detail sheet T504 for classroom configuration and part numbers.

**1.02 Special Spaces**

- Reference technology drawings and one line diagrams.

**1.03 Flat Panel Displays**

- All non interactive Flat Panel displays shall be 43" Samsung BE Series.
- Bio Lab 37 displays shall be ceiling mounted.
- Career Tech 12 and Career Tech 15 displays shall be wall mounted 55" AFF to center of display.

End of Section

**AGP**  
 the Abla Griffin  
 Partnership L.L.C.

201 N. BROADWAY  
 SUITE 210  
 MOORE, OK. 73160  
 405.735.3477  
 AGP@theAGP.net  
 www.theAGP.net

KFC ENGINEERING  
 STRUCTURAL

SALAS O'BRIEN  
 MECHANICAL / ELECTRICAL

NY
drawn by
NY
checked by
SEPTEMBER 2023
date
revisions

MOORE PUBLIC SCHOOLS  
 BOARD OF EDUCATION  
 MOORE, OKLAHOMA



OFFICE ADDITION  
 FAIRVIEW  
 ELEMENTARY SCHOOL

sheet no:

**T-503**

OWNERSHIP USE OF DOCUMENTS:  
 AGP EXPRESSLY RESERVES ITS  
 COPYRIGHT AND OTHER PROPERTY  
 RIGHTS OF ALL PLANS AND DRAWINGS  
 DESIGNED AND/OR PRODUCED. PLANS  
 AND DRAWINGS ARE NOT TO BE  
 REPRODUCED IN ANY FORM OR MANNER  
 WITHOUT THE EXPRESSED WRITTEN  
 CONSENT OF AGP.

**Salas O'Brien**

2600 Van Buren St., Suite 2635  
 Norman, OK 73072  
 Salas O'Brien Registration: CA# 7058  
 Expiration Date : 6/30/2025  
 Salas O'Brien Project Number: 2023-04386-00

Moore Public Schools  
Video Intercom Door System Specifications

**MANUFACTURE**  
AVIGILON (NO SUBSTITUTIONS).

**AVIGILON REQUIRED EQUIPMENT**

**3.0CH4VIRO1-IR**  
3.0 MP; H4 Video Intercom; WDR; Light Catcher; Day/Night; 1.83mm  
f/2.4; Integrated IR; Recessed Mount

**H4VI-AC-RELY1**  
Safety Relay for H4 Video Intercom

**H4VI-MT-SURF1**  
Surface mount adapter for H4 Video Intercom

**ACC7-ENT**  
ACC 7 Enterprise camera channel license

**INSTALLATION**

- Video Intercom system requires a Cat 6 network drop ran to the nearest IDF
- Video Intercom system requires an 18 gauge 4 conductor cable ran between the video intercom station and the entry door Keyscan controller unit. **MPS to have final determination of camera location and field of view (Call Jack Phillips for final location and view phone 473-5225)**
- Each installed Video Intercom System requires a license.
- All network drops shall be connected with patch cords to a switch at each rack location.
- No Substitutions.

**Horizontal Cabling**

**Requirements**

- See MPS Structured Cabling Specifications for camera network cabling installation, labelling and testing requirements.

**Warranty**

- Contractor shall provide a 1 year parts and labor warranty against defective workmanship and/or system component failure.
- Contractor shall execute a Lifetime Applications Assurance Warranty for parts and labor to support stated applications from the connectivity Manufacturer.

**End of Section**

NY

drawn by

NY

checked by

SEPTEMBER 2023

date

revisions

MOORE PUBLIC SCHOOLS  
BOARD OF EDUCATION  
MOORE, OKLAHOMA



OFFICE ADDITION  
FAIRVIEW  
ELEMENTARY SCHOOL

sheet no:

**T-504**



2600 Van Buren St., Suite 2635  
Norman, OK 73072  
Salas O'Brien Registration: CA# 7058  
Expiration Date: 6/30/2025  
Salas O'Brien Project Number: 2023-04386-00

OWNERSHIP USE OF DOCUMENTS:  
AGP EXPRESSLY RESERVES ITS  
COPYRIGHT AND OTHER PROPERTY  
RIGHTS OF ALL PLANS AND DRAWINGS  
DESIGNED AND/OR PRODUCED. PLANS  
AND DRAWINGS ARE NOT TO BE  
REPRODUCED IN ANY FORM OR MANNER  
WITHOUT THE EXPRESSED WRITTEN  
CONSENT OF AGP.