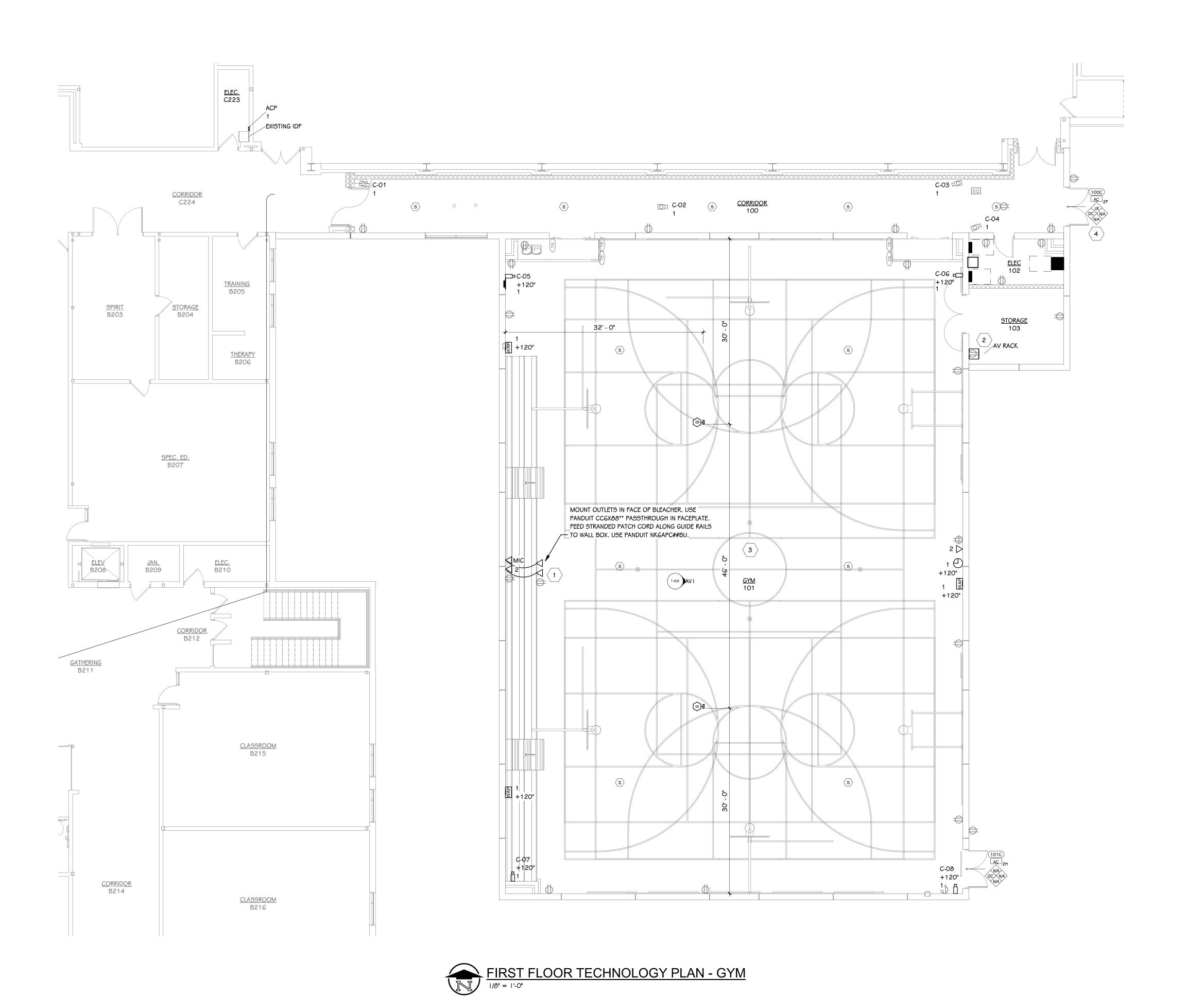
	GENERAL TECHNOLOGY NOTES	ING AND CLOCK NOTES	RUCTURED CABLING MOUNTING HEIGHTS FA
	1 TECHNOLOGY CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED FOR NEW WORK OR WHERE DEVICES ARE REMOVED AND NOT REPLACED.	FOR CLOCKS REQUIRING A MANUFACTURER-SPECIFIC IN-WALL ROUGH-IN BOX, THE CLOCK CONTRACTOR SHALL PROVIDE THE ROUGH-IN BOX TO ELECTRICIAN FOR WALL INSTALLATION. THE CLOCK	DATA/VOICE OUTLET - 4 9Q BOX, 9G COVER, 1" CONDUIT STUB 16" DATA/VOICE OUTLET - 4 9Q BOX, 9G COVER, SURFACE #WM500 16"
Steriol Sterior	2 TECHNOLOGY CONTRACTOR SHALL COORDINATE WITH G SERIES	CONTRACTOR AND ELECTRICIAN SHALL COORDINATE AHEAD OF SCHEDULED WALL INSTALLATIONS. COORDINATE WITH CONSTRUCTION MANAGER.	DATA/VOICE OUTLET - 4 SQ BOX, SG COVER, 1" CONDUIT STUB 4" ABOVE BACKSPLASH WIRELESS ACCESS POINT (REFER TO DETAILS)
	SHEETS DEVICE COORDINATION DETAIL. DEVICES ARE TO ALIGN VERTICALLY AND HORIZONTALLY AND FOLLOW THE RULES OF THIS DETAIL CONSISTENTLY. A PRE-INSTALL DEVICE COORDINATION MEETING	PAGING AND CLOCK CONTROLLERS SHALL BE PROPERLY CONFIGURED	WIRELESS ACCESS POINT (REFER TO DETAILS) GROUNDING BUS BAR WITH DEDICATED GROUND, (REFER TO DETAILS) CABLE TRAY, (12"x4" UNLESS NOTED OTHERWISE)
ering	FOR DEVICE FINISHES AND LAYOUT MAY BE REQUIRED IN THE SPECIFICATION FOR THIS PROJECT.	FOR TIME SYNCHRONIZATION WITH OWNER'S NETWORK TIME PROTOCOL (NTP) SOURCE. COORDINATE NTP ADDRESS WITH OWNER.	CABLE TRAY, (12"x4" UNLESS NOTED OTHERWISE) CLOCK (REFER TO DETAILS) MASTER CLOCK PANEL
	3 REFER TO TECHNOLOGY, ELECTRICAL AND ARCHITECTURAL DETAILS AND ELEVATIONS FOR SYMBOL INFORMATION AND ELEVATION DETAIL.	PAGING SPEAKER CABLING SHALL BE SIZED APPROPRIATELY FOR CABLE LENGTH AND POWER LOAD OF A GIVEN CIRCUIT.	PAGING SYSTEM HEAD END TC# NETWORK COMMUNICATION RACK - FLOOR STANDING 3' CLEAR ON BOTH SIDES
Jre · Er	DEVICES AND EQUIPMENT SHOWN DASHED OR WITH AN "X" ARE TO BE REMOVED. FIXTURES, DEVICES AND EQUIPMENT SHOWN LIGHTLY OR WITH AN "E" ARE EXISTING TO REMAIN UNDISTURBED.	FOR WIRELESS CLOCK SYSTEMS THAT REQUIRE FCC LICENSURE, THE CLOCK INTEGRATOR SHALL COORDINATE ANY REQUIRED LICENSE APPLICATION FORMS THAT ARE REQUIRED TO BE COMPLETED BY THE OWNER.	CONDUIT SLEEVE IN ACCESSIBLE CEILING (2" CONDUIT UNLESS NOTED OTHERWISE, ONLY SHOWN ON PLANS
Kectu	5 DEVICES SHOWN WITH AN "R" ARE EXISTING TO BE REPLACED WITH NEW DEVICE AND COVERPLATE.	THE CLOCK INTEGRATOR SHALL BE RESPONSIBLE FOR REVIEW OF THE PROJECT ARCHITECTURAL ELEVATIONS AND ADHERE TO CLOCK	INDICATING SPECIFIC CONDITIONS, REFER TO GENERAL NOTES FOR SLEEVES THAT ARE REQUIRED INTO ALL SPACES) 5
Archi	6 TEMPORARILY SUPPORT EXISTING CEILING DEVICES TO REMAIN IN EXISTING CEILINGS TO BE REPLACED. REINSTALL DEVICES INTO NEW	PLACEMENT/ALIGNMENT GUIDELINES. ANY PLACEMENT CLARIFICATION REQUESTS SHALL BE MADE BY RFI.	DIO/VISUAL
	CEILING. 7 CONTRACTOR SHALL BE RESPONSIBLE FOR PROJECT PHASING.	FOR INTEGRATION OF NEW PAGING HEADEND HARDWARE TO PRE-EXISTING PAGING CIRCUITS, THE PAGING INTEGRATOR SHALL PERFORM A PRE-INSTALLATION SPEAKER TEST OF ALL EXISTING	n TV WALL RECESSED "FSR" BACKBOX, (REFER TO DETAILS) n A/V WALL STATION BOXES, USE FSR MUDRING MUD-2G-** FOR 2-GANG OPENINGS (REFER TO DETAILS)
•	TEMPORARY WIRING TO KEEP SYSTEMS RUNNING SHALL BE PROVIDED AS REQUIRED WHILE BUILDING IS OCCUPIED BETWEEN PHASES OF CONSTRUCTION.	SPEAKERS. ANY FAULTY EXISTING SPEAKERS SHALL BE NOTED AND COMMUNICATED TO THE CM/ARCHITECT PRIOR TO THE INSTALLATION OF NEW EQUIPMENT.	TECHNOLOGY OR TEACHER'S STATION BOXES, USE FSR MUDRING MUD-2G-** FOR 2-GANG OPENINGS, (REFER TO DETAILS) WIRELESS MICROPHONE ANTENNA, (REFER TO DETAILS)
	STRUCTURED CABLING NOTES	ALANN STSTEM TO OVERSIDE FAGING. CONNECTION AT THE TIRE	PAGING CEILING SPEAKER, (REFER TO DETAILS) GYM LOUDSPEAKER CEILING-MOUNTED, (REFER TO DETAILS) 7
	1 BICSI TECHNICIAN (TECH) CERTIFICATION IS REQUIRED FOR THE LEAD INSTALLER THAT WILL BE ONSITE AT ALL TIMES.	PANEL SHALL BE BY THE FIRE ALARM INTEGRATOR. COORDINATE WITH OTHER TRADES.	CURITY SYMBOLS
	2 EACH INSTALLER IS REQUIRED TO BE CERTIFIED BY THE MANUFACTURER OF THE PRODUCTS THAT ARE INSTALLED (I.E. PANDUIT, BELDEN, HUBBELL, COMMSCOPE, ETC.).	THE PAGING SYSTEM RISER DETAIL IS INTENDED TO BE DIAGRAMMATICAL FOR THE PURPOSE OF UNDERSTANDING THE BASIC SYSTEM ARCHITECTURE. THE PAGING INTEGRATOR SHALL PROVIDE ALL COMPONENTS, CABLES AND ADAPTERS REQUIRED FOR A FULLY	SECURITY CAMERA - WALL SECURITY CAMERA - CEILING
	3 VALID BICSI TECH AND MANUFACTURER INSTALLER CERTIFICATES SHALL BE INCLUDED IN SUBMITTAL PACKAGE.	FUNCTIONAL SYSTEM, REGARDLESS IF SHOWN ON THE DIAGRAM.	SECURITY CABLING PATHWAY, 4 SQ, SG BRUSH PLATE, 1" CONDUIT STUB 16" ACP# ACCESS CONTROL PANEL (REFER TO DETAILS) RELEASE BUTTON
SUED FOR DA	SYSTEM SHALL BE SUBMITTED TO TOWERPINKSTER AS PART OF THE	O SYSTEM NOTES	RELEASE BUTTON INTERCOM MASTER STATION LOCKDOWN BUTTON
	5 STRUCTURED CABLING INTEGRATOR SHALL PROVIDE A MANUFACTURERS 25 YEAR WARRANTY AT PROJECT COMPLETION	AUDIO SYSTEM SHALL BE FREE OF NOISE, RATTLE, HUM, BUZZ, OR ANY OTHER AUDIO DISTORTIONS	DURESS ALARM PUSH BUTTON - UNDER DESK CARD READER - 4 SQ BOX, SG COVER, 3/4" CONDUIT STUB 40"
	MANUFACTURER'S 25 YEAR WARRANTY AT PROJECT COMPLETION. 6 ALL CABLES SHALL HAVE A MINIMUM OF 5FT SERVICE LOOP AT OUTLET LOCATION OR AS NOTED ON DRAWINGS.	SECURE CABLES UTILIZING VELCRO STRAPS. WIRE "ZIP TIES" SHALL NOT BE USED	CARD READER, MULLION MOUNT, 3/4" CONDUIT STUB LOCKDOWN STROBE (REFER TO DETAILS) 2
	7 ALL DATA CABLES SHALL HAVE A MINIMUM OF 5FT SERVICE LOOP IN THE TELECOMMUNICATIONS ROOM.	ROUTE ALL CABLES IN A MANNER THAT WILL ENSURE SIGNAL INTEGRITY AND WILL NOT INTRODUCE CROSSTALK	INTERCOM - 4 SQ BOX, SG COVER, 3/4" CONDUIT STUB 40"
	8 DATA CABLES SHALL NOT BE BUNDLED IN GROUPS OF MORE THAN 24 WITHIN A TELECOMMUNICATIONS ROOM.	PROVIDE A SERVICE LOOP FOR RACKS AND EQUIPMENT SUITABLE TO EASILY PLUG AND UNPLUG EQUIPMENT FOR TROUBLESHOOTING OR REPLACEMENT	ACCESS CONTROL DETAIL INDICATOR: REFER TO ACCESS CONTROL DETAILS AND SCHEDULE
	9 STRUCTURED CABLING INTEGRATOR SHALL PROVIDE THE MINIMUM REQUIRED QUANTITY OF PATCH PANELS NEEDED FOR ALL DATA CABLES	NEATLY DRESS ALL CABLING INSTALLED INSIDE AND OUTSIDE OF RACKS IN A SUITABLE HARNESS TO KEEP CABLES CLEAN, NEAT, AND TIDY	TES: UNIT DEVICES AT HEIGHTS INDICATED UNLESS INDICATED
Z O	PLUS HAVE CAPACITY FOR A MINIMUM OF 20 FUTURE DATA CABLES. 10 ALL DATA FACEPLATES SHALL MATCH THE COLOR, STYLE AND MATERIAL (LE STAINLESS STEEL PLASTIC ETC.) OF THE ELECTRICAL DEVICE.	COMMISSION AUDIO SYSTEM USING AUDIO MEASUREMENT MICROPHONE AND SOFTWARE (SMAART OR EASERA)	ERWISE ON PLANS. HEIGHTS ARE TO BOTTOM OF DEVICE.
DITIO	(I.E. STAINLESS STEEL, PLASTIC, ETC.) OF THE ELECTRICAL DEVICE FACEPLATE WITHIN EACH SPACE. 1 1 ALL HORIZONTAL CABLES (CATEGORY CABLE, COAX, FIBER, ETC.) SHALL	ADJUST EQ AND CROSSOVER SETTINGS IN AMPLIFIER AND/OR DSP TO PROVIDE FLAT FREQUENCE RESPONSE, FULL RANGE AUDIO WITH PROTECTIVE LIMITING	7
A ADI	BE CERTIFIED BY USING A MINIMUM OF A LEVEL IIIE CERTIFICATION TESTER THAT IS WITHIN MANUFACTURER'S CALIBRATION PERIOD.	USE SPEECH, HIGH QUALITY REFERENCE AUDIO, AND SINE WAVE SWEEPS TO TEST THE SYSTEM - CORRECT ANY ABNORMALITIES	8
	MANUFACTURER'S CABUBRATION PERIOD	VERIFY PROPER FUNCTION OF ALL INSTALLED EQUIPMENT (NEW AND EXISTING)	9
SH SH		TURN OVER EXISTING UNUSED EQUIPMENT TO OWNER - NEATLY ORGANIZED	10
WS/S	SECURITY CAMERA NOTES	COORDINATE WITH OWNER FOR LABELING OF EQUIPMENT AND AUDIO CONSOLE CHANNELS AND BUSSES AS WELL AS CONSOLE CONFIGURATION	11
	1 INSTALLATION SHALL BE COMPLETED BY OR OVERSEEN BY A MANUFACTURER CERTIFIED PROFESSIONAL. 2 INSTALL CAMERAS USING ALL APPROPRIATE HANGERS, FASTENERS,	REMOTE MOUNT ALL ANTENNAS AS REQUIRED FOR MAXIMUM PERFORMANCE	12
	ETC. CAMERAS USING ALL APPROPRIATE HANGERS, FASTENERS, ETC. CAMERAS INSTALLED IN GRID/LAY IN CEILING SHALL HAVE SAFETY WIRE TYING THE CAMERA TO STRUCTURE ABOVE. EXTERIOR CAMERAS SHALL HAVE WEATHERTIGHT SEALANT AND SURGE SUPPRESSION INSTALLED. REFER TO CAMERA ROUGH IN DETAILS.	CONFIGURE DELAYS ON ANY SPEAKERS THAT ARE STAGGERED IN A LISTENING PLANE TO TIME-ALIGN AUDIO	13
OOLS	PRIOR TO CONNECTION TO OWNER'S NETWORK, DEFAULT USERNAME AND PASSWORD SHALL BE CHANGED. COORDINATE WITH OWNER FOR DEVICE SPECIFIC USERNAMES AND PASSWORDS.	CONNECT COMPONENTS TO POWER SEQUENCER IN SUCH A WAY AS TO MITIGATE POPPING AND SYSTEM DAMAGE DURING SYSTEM POWER UP AND POWER DOWN	14
SCHC	4 CAMERA SHALL BE CONFIGURED BASED ON OWNER'S NETWORK CONFIGURATION AND NAMING STANDARDS. COMPLETE AN IP ADDRESS REQUEST WITH THE OWNER, COORDINATE NAMING CONFIGURATION		
JBLIC	BASED ON CAMERA COORDINATION SPREADSHEET. 5 INSTALL CAMERAS WITH INITIAL VIEW DEFINED BY THE CAMERA COORDINATION SPREADSHEET OR COVERAGE ANGLES PROVIDED BY		
EA Pl	ARCHITECT. VARIFOCAL AIMING WHERE REQUIRED TO OBTAIN INTENDED VIEW SHALL BE COMPLETED. 6 FOLLOWING SETTING THE INITIAL VIEW, COORDINATE AIMING		
E AR	MODIFICATIONS WITH ARCHITECT AND OWNER AND OBTAIN SIGN OFF PER CAMERA THROUGH THE CAMERA AIMING COORDINATION SPREADSHEET.		
IISTE stee,	7 CONFIGURE CAMERA TO RECORD TO NVR BASED ON OWNER'S RECORDING CONFIGURATION STANDARDS. RESOLUTION, FRAMES PER SECOND, CONTINUOUS/MOTION ACTIVATED RECORDING, ANALYTICS, AND ANY OTHER FEATURES SHALL BE COORDINATED.		
Mani	8 LABEL CAMERA HOUSING IN A LOCATION VISIBLE FROM THE GROUND. REFER TO CAMERA LABELING DETAIL FOR REQUIREMENTS.		
	9 CAMERA SYMBOLS AND COVERAGE ANGLES SHALL BE SET IN VMS MAPS ONCE OWNER AND ARCHITECT HAVE SIGNED OFF ON VIEWS.		
IERA 23			
GEN 1, 20			
NND (ST 2)			
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STRUCTURED CABLING

PAGING AND CLOCK NOTES

GENERAL TECHNOLOGY NOTES

MOUNTING HEIGHTS



TECHNOLOGY KEYED NOTES

PROVIDE STAINLESS STEEL COVER PLATES FOR BLEACHER MOUNTED WALL DEVICES.

2 MOUNT AV RACK 4' AFF.

3 PULL ALL DATA CABLES FOR THE GYM ADDITION TO THE EXISTING IDF IN ELEC 223.

4 COORDINATE PROGRAMMING OF DOOR AND LOCK/UNLOCK SCHEDULE WITH OWNER.

ISSUED FOR

DATE

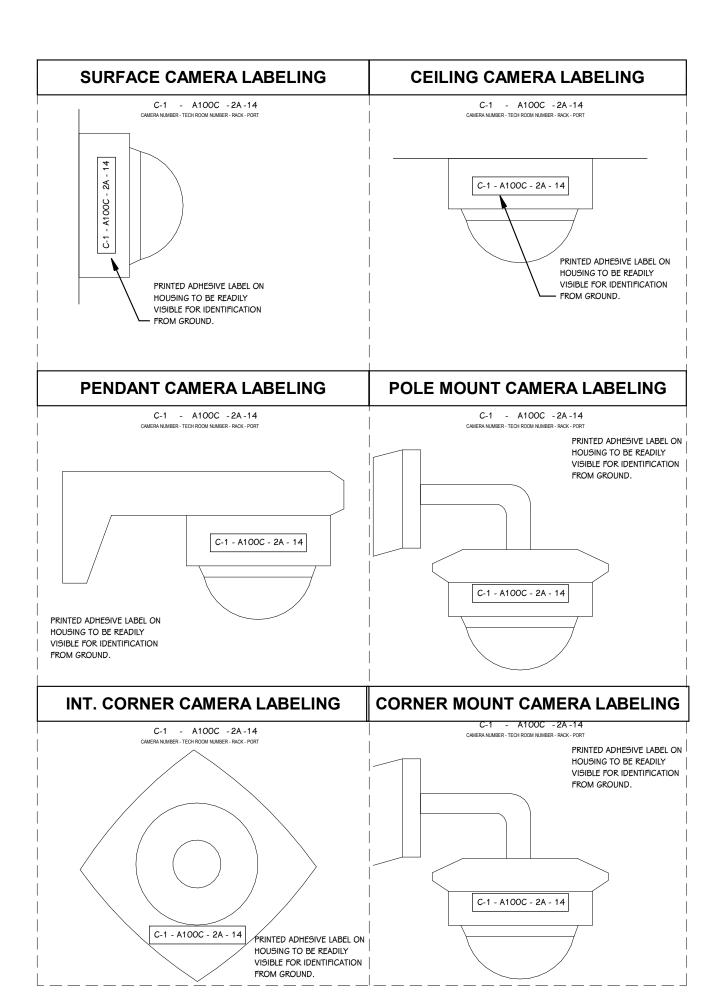
MANISTEE MIDDLE + HIGH SCHOOL

KEY PLAN
SCALE: NO SCALE

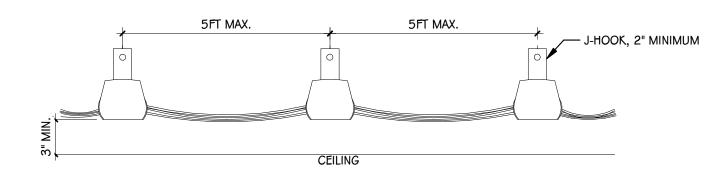
FACEPLATES ___ 2-PORT FACEPLATE -/--- 4-PORT FACEPLATE --— TELCOMMUNICATION ROOM IN LABEL WINDOW LABEL WINDOW LABEL WINDOW LABEL WINDOW — PATCH PANEL & PORT # **BELOW JACK** \triangle 1 △2 DATA CABLES (TYP) DATA CABLES - MODULAR PLUGS PRINTED LABEL ON BOTH PRINTED LABEL ON ENDS OF CABLE WITHIN BOTH ENDS OF CABLE ____ 12" OF TERMINATION WITHIN 12" OF TERMINATION JACK (TYP) PLUG (TYP) SURFACE BOXES **MODULAR FRAMES** TELECOMMUNICATION ROOM, PATCH PANEL \$ PORT ON TOP OF SURFACE BOX DEEP 4 SQUARE TELCOMMUNICATION; WITH RAISED ROOM LABEL DUPLEX COVER SURFACE BOX FURNITURE FACEPLATE PATCH PANEL \$ - TELCOMMUNICATION ⊕ PORT # NEXT ROOM LABEL - PATCH PANEL & PORT #

BELOW JACK

TYPICAL LABELING DETAIL
SCALE: NONE



TYPICAL CAMERA LABELING DETAIL



CABLE SUPPORT DETAIL
SCALE: NONE

DATA CABLE SCHEDULE DATA CABLE PERFORMANCE LEVEL CABLE PURPOSE CABLE PART # CABLE MFG. ALL DATA CABLING 7131801 GENERAL CABLE 7133801 ALL DATA CABLING GENERAL CABLE

DATA JACK SCHEDULE								
DATA JACK COLOR	CABLE PERFORMANCE LEVEL	PURPOSE	DATA JACK MFG.	DATA JACK PART #				
YELLOW	CAT6	WIRELESS ACCESS POINT	PANDUIT	CJ688TGYL				
GREEN	CAT6	FACILITIES	PANDUIT	CJ688TGGR				
VIOLET	CAT6	SECURITY CAMERAS	PANDUIT	CJ688TGVL				
IVORY, WHITE OR OFF-WHITE	CAT6	GENERAL DATA	PANDUIT	CJ688TGIW, **				

CABLE COLOR

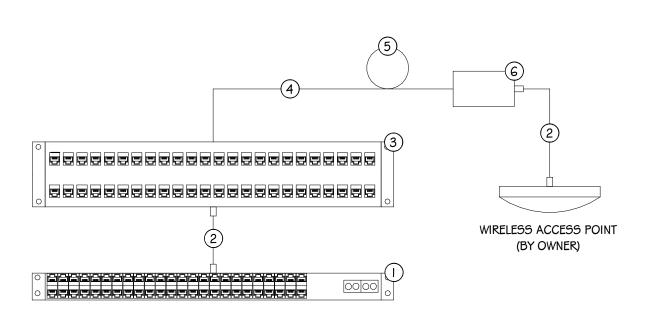
CAT6

WHITE - PLENUM

WHITE - RISER

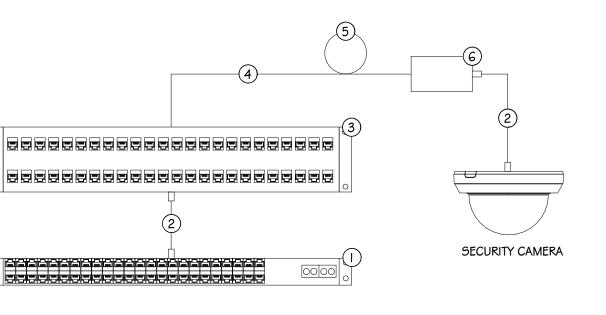
PATCH CABLE SCHEDULE									
PATCH CABLE COLOR	ATCH CABLE COLOR PATCH CABLE PERFORMANCE LEVEL PATCH CABLE PURPOSE PATCH CABLE MFG. PATCH CABLE PART # PATCH CABLE QUANTIT								
VHITE, NON-PLENUM	CAT6	CROSS-CONNECT IN TELECOM. ROOM	PANDUIT	UTP285P1	1 PER INSTALLED CABLE				
VHITE, NON-PLENUM	CAT6	WORKSTATION OR DEVICE	PANDUIT	UTPSP10Y	1 PER INSTALLED CABLE				
BLUE, PLENUM	CAT6	INSTALLED IN PLENUM SPACE	PANDUIT	UPPBU*10	1 PER INSTALLED CABLE				

FACEPLATE SCHEDULE							
FACEPLATE COLOR & MATERIAL	FACEPLATE TYPE	FACEPLATE MFG.	FACEPLATE PART #				
PLASTIC OR STAINLESS STEEL - MATCH ELECTRICAL COLOR & MATERIAL WITHIN SAME ROOM	1 PORT, SINGLE-GANG	PANDUIT	PLASTIC - CFPL1**Y, STAINLESS STEEL - NA				
PLASTIC OR STAINLESS STEEL - MATCH ELECTRICAL COLOR & MATERIAL WITHIN SAME ROOM	2 PORT, SINGLE-GANG	PANDUIT	PLASTIC - CFPL2**Y, STAINLESS STEEL - CFPL2SY				
PLASTIC OR STAINLESS STEEL - MATCH ELECTRICAL COLOR & MATERIAL WITHIN SAME ROOM	3 PORT, SINGLE-GANG	PANDUIT	PLASTIC - CFPL3**Y, STAINLESS STEEL - NA				
PLASTIC OR STAINLESS STEEL - MATCH ELECTRICAL COLOR \$ MATERIAL WITHIN SAME ROOM	4 PORT, SINGLE-GANG	PANDUIT	PLASTIC - CFPL4**Y, STAINLESS STEEL - CFPL4SY				
PLASTIC OR STAINLESS STEEL - MATCH ELECTRICAL COLOR \$ MATERIAL WITHIN SAME ROOM	6 PORT, SINGLE-GANG	PANDUIT	PLASTIC - CFPL6**Y, STAINLESS STEEL - CFPL6SY				
PLASTIC OR STAINLESS STEEL - MATCH ELECTRICAL COLOR \$ MATERIAL WITHIN SAME ROOM	10 PORT, TWO-GANG	PANDUIT	PLASTIC - CFPE10**-2GY, STAINLESS STEEL - CFPL10S-2GY				
PLASTIC - MATCH ELECTRICAL COLOR \$ MATERIAL WITHIN SAME ROOM	1 PORT SURFACE BOX	PANDUIT	CBX1**-AY				
PLASTIC - MATCH ELECTRICAL COLOR \$ MATERIAL WITHIN SAME ROOM	2 PORT SURFACE BOX	PANDUIT	CBX2IW-AY				
PLASTIC - MATCH ELECTRICAL COLOR \$ MATERIAL WITHIN SAME ROOM	4 PORT FURNTIURE ADAPTER	PANDUIT	MATCH WTIH FURNITURE MFG.				



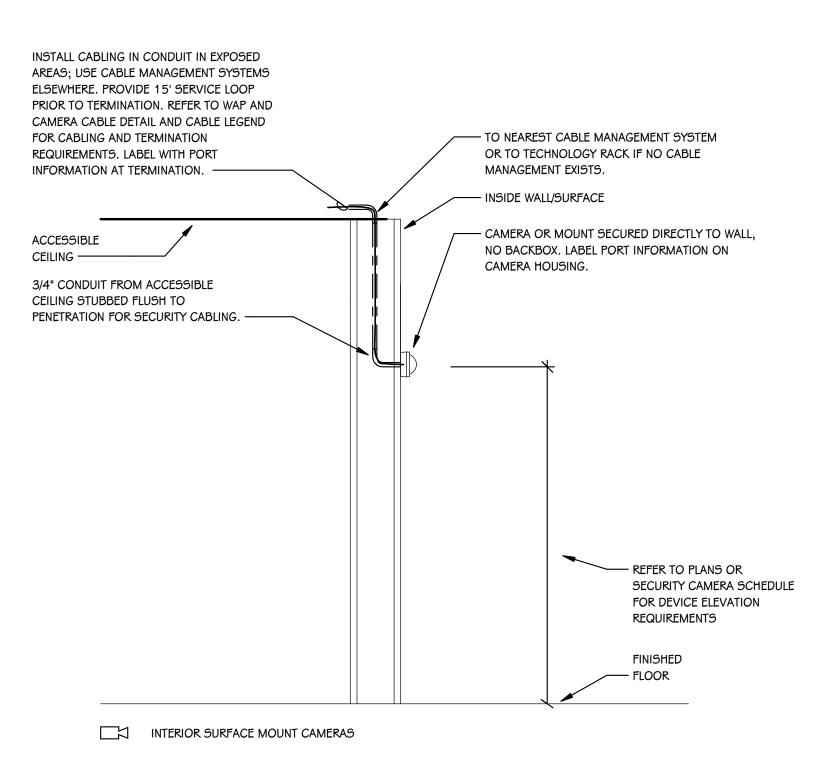
	NETWORK SWITCH	PROVIDED BY OWNER
2	CAT6 PATCH CABLE	REFER TO PATCH CABLE SCHEDULE
3	48 PORT PATCH PANEL	EXISTING
4	CAT6 CABLE	REFER TO DATA CABLE SCHEDULE
(5)	SERVICE LOOP	MINIMUM 15FT SERVICE LOOP
6	SURFACE MOUNT BOX	REFER TO TYPICAL LABELING DETAIL

WIRELESS ACCESS POINT CABLING DETAIL
SCALE: NONE

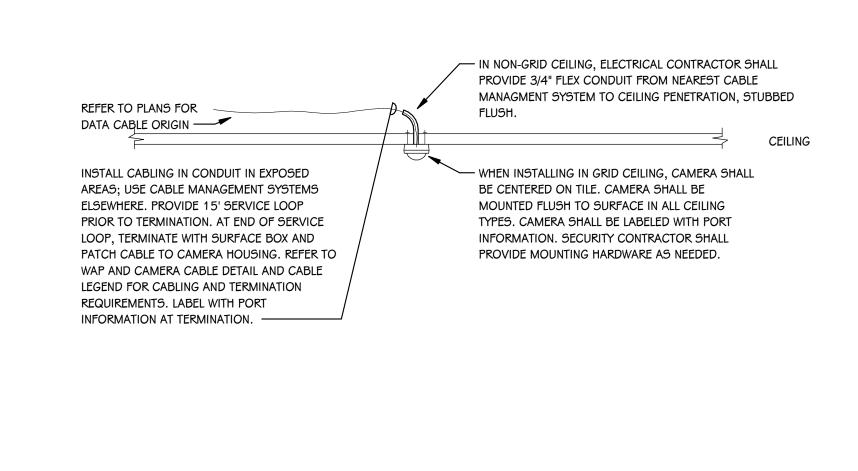


	NETWORK SWITCH	PROVIDED BY OWNER
2	CAT6 PATCH CABLE	REFER TO PATCH CABLE SCHEDULE
3	48 PORT PATCH PANEL	EXISTING
4	CAT6 CABLE	REFER TO DATA CABLE SCHEDULE
5	SERVICE LOOP	MINIMUM 15FT SERVICE LOOP
6	SURFACE MOUNT BOX	REFER TO TYPICAL LABELING DETAIL

INTERIOR SECURITY CAMERA CABLING DETAIL
SCALE: NONE



TYPICAL SECURITY CAMERA ROUGH-IN - INTERIOR WALL SCALE: NONE



TYPICAL SECURITY CAMERA ROUGH-IN - CEILING
SCALE: NONE

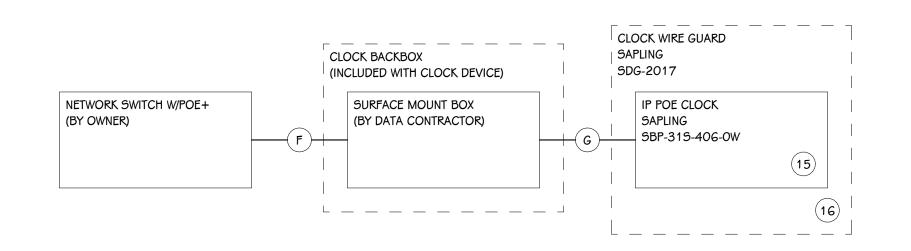
CEILING MOUNT CAMERAS

SECURITY CAMERA SCHEDULE								
CAMERA NUMBER MAKE/MODEL MOUNTING HEIGHT MOUNTING TYPE DATA DROPS COMMENTS								
C-01	I-PRO WV-522500-F3L		CEILING	1				
C-02	I-PRO WV-85402-V2L		CEILING	1				
C-03	I-PRO WV-522500-F3L		CEILING	1				
C-04	I-PRO WV-522500-F3L		CEILING	1				
C-05	I-PRO WV-522700-V2L	10' - O"	WALL	1				
C-06	I-PRO WV-522700-V2L	10' - O"	WALL	1				
C-07	I-PRO WV-522700-V2L	10' - O"	WALL	1				
C-08	I-PRO WV-522700-V2L	10' - O"	WALL	1				

PROJECT TITLE MS/HS GYM ADDITION

AREA PUBLIC SCHOOLS

POE CLOCK - RISER DIAGRAM SCALE: NONE



PAGING DIAGRAM SCALE: NONE

SIP PAGING AMPLIFIER VIKING PA-250-IP (LOCATED IN IDF)	GYM PAGING SPEAKER QUAM SYSTEM 1 TYP OF QTY 6	CORRIDOR PAGING SPEAKER QUAM SYSTEM 12/VC TYP OF QTY 5
--	---	--

SIP PAGING AMPLIFIER		GYM PAGING SPEAKER			CORRIDOR PAGING SPEA	KER
VIKING PA-250-IP	<u>E</u> -	QUAM SYSTEM 1		E -	QUAM SYSTEM 12/VC	
(LOCATED IN IDF)	(17)	TYP OF QTY 6	(14)		TYP OF QTY 5	(15

SIP PAGING AMPLIFIER		GYM PAGING SPEAKER		CORRIDOR PAGING	SPEAKER
VIKING		QUAM		QUAM	
PA-250-IP	(E)	SYSTEM 1		SYSTEM 12/VC	
· · · · - · ·	ጚ╘╱╴				
(LOCATED IN IDF)		TYP OF QTY 6		TYP OF QTY 5	

AVI	GYM AUDIO SYSTEM DIAGRAM
T 402	SCALE: NONE

				AV RACK MIDDLE ATLANTIC DWR-10-22PD			
			 	POWER CONDITIONER FURMAN M-8X2			
		WIRELESS MICROPHONE	BLEACHER FACE		12		
POWER CONDITIONER FURMAN M-8X2		SHURE QLXD24/9M58		RACK STORAGE DRAWER MIDDLE ATLANTIC D2	2		
(12)	SMALL DEVICE RACKSHELF MIDDLE ATLANTIC UTR1	(9)			13	LOUDSPEAKER JBL AM5212/26-WH	
RACK STORAGE DRAWER MIDDLE ATLANTIC D2	BLUETOOTH RECEIVER AUDIOENGINE B1	RACKMOUNT AUDIO MIXER DENON DN-312X	DUAL XLRF WALL PLATE RDL D-XLR2F	AUDIO AMPLIFIER CROWN CDI 2000	B		3
(13)	8 (7)		5 A		2 B	LOUDSPEAKER JBL AM5212/26-WH	
							3
	VOCAL MICROPHONE SHURE SM58	SPORTS ANNOUNCER SWITCH PRO CO SAS2					
		10					

KEY #	DESCRIPTION	MANUFACTURER	PART#	COMMENTS
1	RACKMOUNT AUDIO MIXER	DENON	DN-312X	
2	AUDIO AMPLIFIER	CROWN	CDI 2000	
3	LOUDSPEAKER	JBL	AM5212/26-WH	
4	AV RACK	MIDDLE ATLANTIC	DWR-10-22PD	
5	DUAL XLRF WALL PLATE	RDL	D-XLR2F	
6	ROLLING EQUIPMENT RACK	GATOR CASES	G-PROR-6U-19	
7	SMALL DEVICE RACKSHELF	MIDDLE ATLANTIC	UTR1	
8	BLUETOOTH RECEIVER	AUDIOENGINE	B1	
9	WIRELESS MICROPHONE	SHURE	QLXD24/SM58	
10	SPORTS ANNOUNCER SWITCH	PRO CO	SAS2	
11	VOCAL MICROPHONE	SHURE	SM58	
12	POWER CONDITIONER	FURMAN	M-8X2	
13	RACK STORAGE DRAWER	MIDDLE ATLANTIC	D2	
Α	LINE LEVEL CABLE	BELDEN	9451P	
В	SPEAKER CABLE	BELDEN	6000UE	
С	25' MICROPHONE CABLE	PRO CO	EXMN-25	
D	1' MICROPHONE CABLE	PRO CO	EXMN-1	

KEY #	DESCRIPTION	MANUFACTURER	PART#	COMMENTS
14	GYM PAGING SPEAKER	QUAM	SYSTEM 1	
15	CORRIDOR PAGING SPEAKER	QUAM	SYSTEM 12/VC	
17	SIP PAGING AMPLIFIER	VIKING	PA-250-IP	
Е	PAGING SPEAKER CABLE	BELDEN	6200UE	

#	DECODIDATION			
	DESCRIPTION	MANUFACTURER	PART#	COMMENTS
14 GY	YM PAGING SPEAKER	QUAM	SYSTEM 1	
15 CC	ORRIDOR PAGING SPEAKER	QUAM	SYSTEM 12/VC	
17 SIF	IP PAGING AMPLIFIER	VIKING	PA-250-IP	
E PA	AGING SPEAKER CABLE	BELDEN	6200UE	

CLOCK EQUIPMENT SCHEDULE

MANUFACTURER

REFER TO DATA CABLE SCHEDULE

REFER TO PATCH CABLE SCHEDULE

SAPLING

SAPLING

PART#

SBP-31S-406-0W

SDG-2017

COMMENTS

KEY #

15 IP POE CLOCK

16 CLOCK WIRE GUARD

G CAT6 PATCH CABLE

BULK CAT6 CABLE

DESCRIPTION

CEILING OR NEAR DECK WHERE NO CEILINGS REFER TO TECHNOLOGY PLAN FOR EXACT LOCATIONS. ARE PRESENT. BOX SHALL BE MINIMUM 6"x6"x4" (HOFFMAN ASG6X6X4 OR EQUIVALENT). ----REQUEST TO EXIT MOTION SENSOR (CENTER ABOVE DOORS) -DOOR CONTACTS -

SIZE JUNCTION BOX AND CONDUIT ACCORDING

TO MANUFACTURERS RECOMMENDATIONS, J-

BOX AND CONDUIT STUBS TO BE ABOVE

WITH LOCK POWER — STANDARD CARD READER

CR SINGLE GANG BOX 1/2" FLEX CONDUIT RUN DOWN THE FRAMES TO TRANSFER HINGE ----

NOTE: REFER TO SECURITY DOOR

REQUIREMENTS AT EACH DOOR

SCHEDULE FOR DEVICE

POWER SUPPLIES TO BE CENTRALLY LOCATED NEXT TO NEAREST

____ 1 1/4" C

TO CABLE MGMT SYSTEM

— MULLION MOUNTED

CARD READER;
SHARE CONDUIT

REFER TO PLANS FOR READER LOCATION

MOUNTED READERS WILL BE SHOWN ON

A MULLION OR NARROW WIDTH FRAME).

ACCESS CONTROL ROUGH IN DETAILS - DOUBLE DOOR

AND MOUNTING STYLE (MULLION

- 1/2" CONDUIT

ACCESS CONTROL PANEL UNLESS OTHERWISE INDICATED.

CEILING OR NEAR DECK WHERE NO CEILINGS ARE PRESENT. BOX SHALL BE MINIMUM 6"x6"x4" (HOFFMAN ASG6X6X4 OR EQUIVALENT). ---_ TO CABLE MGMT SYSTEM DOOR CONTACTS ----

SIZE JUNCTION BOX AND CONDUIT ACCORDING

TO MANUFACTURERS RECOMMENDATIONS, J-

BOX AND CONDUIT STUBS TO BE ABOVE

NOTE: REFER TO SECURITY DOOR SCHEDULE FOR DEVICE REQUIREMENTS AT EACH DOOR

SYMBOL DESIGNATOR

SCALE: NONE

ACCESS CONTROL DOOR LABEL NOMENCLATURE:

DOOR NUMBER

— ACCESS CONTROL SYMBOL (DOOR HAS

SOME FORM OF ACCESS CONTROL)

(REFER TO MATCHING DOOR DETAIL)

A - DETAIL DESIGNATOR

REX - SENSOR N/A - NOT APPLICABLE

OTHER OPTIONS

— ACCESS CONTROL SYMBOL DESIGNATION

- NUMBER OF DOORS OR DOOR TYPE

REQUEST TO EXIST SENSOR

AO - AUTO OPERATOR TIE

(TIE TO FIRE ALARM SYSTEM)

RB - TIED TO REMOTE RELEASE BUTTON

PULL/PUSH SIDE MOUNTING.

REFER TO ACCESS CONTROL

ROUGH IN DETAILS FOR

RACEWAY REQUIREMENTS.

LD - TIED TO LOCKDOWN BUTTON

DE - DELAYED EGRESS

N/A - NOT APPLICABLE

LOCKING HARDWARE TYPE

PANIC HARDWARE

ML - MAGNETIC LOCK

N/A - NOT APPLICABLE

DOOR CONTACT DC - DOOR CONTACT

ACCESS CONTROL CABLES AT

DEVICE

ACCESS CONTROL LABELING WITHIN

PANEL

NAMING CONVENTIONS

LCK POWER - LOCKING

HARDWARE/POWER SUPPLY

REX - REQUEST TO EXIT

SENSOR OR MANUAL BUTTON.

DR MNTR - DOOR POSITION

SPARE - SPARE CONDUCTORS

READER INTERFACE/

(2 - DOOR) PANEL NAME

SWITCH.

LH - MULTIPLE LOCKING METHODS

LR - ELECTRIFIED LATCH RETRACTION /

55 - SURFACE MOUNTED/RIM STRIKE

PROVIDE THESE DEVICES WHERE INDICATED AT EACH

DOOR SYMBOL AND/OR IN SECURITY DOOR SCHEDULE.

ACCESS CONTROL CABLES AT

PANEL

ACCESS CONTROL PANEL **LABELING**

DOOR FACE

PANEL NAME

CONTROLLER # X

CONTROLLER # Y

DOOR # Y

DOOR # Z

DOOR # ETC.

INSIDE DOOR

WALL DEVICE/CARD READER LABEL

PRINTED ADHESIVE

LABEL ON TOP OF

LATCHING FLIP COVER.

EMERGENCY

RELEASE BUTTON, ETC.)

DEVICE UNDER

DESIGNATING FUNCTION

WITHIN 12" OF DEVICE.

PROVIDE WIRE NUT ON ANY

UNUSED/SPARE CONDUCTORS.

PROVIDE PRINTED

ADHESIVE LABELS OF

WITHIN ENCLOSURE.

ENCLOSURE IS

ASSOCIATED WITH.

WHERE ENCLOSURE IS A SUB-PANEL, IDENTIFY EACH PANEL THAT THE

PRINTED ADHESIVE

LABEL ON TOP OF |

PRINTED LABEL ON CABLE NAMING CONVENTIONS

HARDWARE/POWER SUPPLY.

SENSOR OR MANUAL BUTTON.

SPARE - SPARE CONDUCTORS

DR MNTR - DOOR POSITION

REX - REQUEST TO EXIT

WITHIN 12" OF DEVICE. LCK POWER - LOCKING

PROVIDE WIRE NUT ON ANY

CONTROLLER REFER TO FLOOR PLANS

REFER TO FLOOR PLANS

FOR CONTROLLER

NAME; USE PRINTED

ADHESIVE LABEL. -

DR#X TO DOOR

DR#Y TO DOOR

UNDER DESK DEVICE LABELING

BOTTOM VIEW

A100C - ACP1 - 14

PANIC BUTTON, RELEASE BUTTON, TOGGLE SWITCH, ETC. FOR CONTROLLER

TO READER INTERFACE

TO READER INTERFACE

TO READER INTERFACE

TO I/O BOARD

I/O MODULE

NAME; USE PRINTED

ADHESIVE LABEL.

UNUSED/SPARE CONDUCTORS.

REFER TO CORRESPONDING DOOR DETAILS FOR

ARRANGEMENT AND ROUGH-IN REQUIREMENTS.

EH - ELECTRIFIED HANDLE EL - ELECTRIFIED LATCH

ES - ELECTRIC STRIKE

— WHERE CR \$ MONITORING ARE TO BE SUPPLIED AT A DOOR, PROVIDE MULTICABLE AND BREAK OFF PAIRS AS TO ACCESS CONTROL PANEL READER NEEDED PER DEVICE IN LIEU OF AND/OR I/O MODULE ---INDIVIDUAL CABLES. 4 ----_____-----— ACCESSIBLE CEILING PROVIDE (2) CABLES -REFER TO FLOOR PLANS FOR TO ACCESS

CONTROL

PANEL —

DEVICE	MANUFACTURER/PART #	NOTES
CARD READER - MULLION	HID SIGNO 20TKS-00-000000	USE WHEN CR SYMBOL IS SHOWN ON MULLION, FRAME, OR OTHER NARROW-WIDTH MOUNTING APPLICATION.
2 CARD READER - STANDARD	HID SIGNO 40TKS-00-000000	SCHLAGE MTB SERIES ACCEPTABLE EQUIVALENT.
3 CABLE - MULTICABLE	BELDEN 658AFJ ACCESS CONTROL	USE WHEN DOOR REQUIRES CR AND ANY OTHER DEVICE. OTHERWISE, SEE BELOW CABLES.
4) CABLE - 18/2 AWG/CONDUCTOR	BELDEN 6300FC	UPSIZE CABLE AS REQUIRED TO ELIMINATE SIGNAL LOSS.
5) CABLE - 18/4 AWG/CONDUCTOR	BELDEN 6341FE	UPSIZE CABLE AS REQUIRED TO ELIMINATE SIGNAL LOSS.
6 CABLE - 18/6 AWG/CONDUCTOR	BELDEN 6304FE	UPSIZE CABLE AS REQUIRED TO ELIMINATE SIGNAL LOSS.
CABLE - INTERCOM MASTER STATION DOOR RELEASE	N/A	DOOR RELEASE IS CONFIGURED SEPARATELY (SEE NO. 5, 13, \$ 14).
8 CABLE - INTERCOM MASTER STATION	CATEGORY CABLE	REFER TO COMMUNICATION CABLE \$ COMPONENT LEGEND
9 CABLE - INTERCOM DOOR STATION	CATEGORY CABLE	REFER TO COMMUNICATION CABLE \$ COMPONENT LEGEND
DEVICE - INTERCOM MASTER STATION	OWNER'S DESK PHONE/COMPUTER	COORDINATE WITH OWNER TO PROGRAM PHONES FOR INTERCOM DIALING AND DOOR RELEASE THROUGH ACP
DEVICE - INTERCOM DOOR STATION	AXI5 A8207-VE	RECESS WITH TA8201 IN NEW WALL OR SURFACE MOUNT ON EXISTING
DEVICE - DESK MOUNT BOX	FSR INC. DSKB-2G	USE BLACK CABLE MESH TO ALLOW FOR BOX TO MOVE AS OWNER SEES FIT.
3 DEVICE - WALL MOUNTED LOCKDOWN BUTTON	SAFETY TECHNOLOGY INTERNATIONAL 552425LD-EN	
DEVICE - LOCKDOWN BUTTON MOUNTED UNDER DESK	ALARM CONTROLS TS-18	COORDINATE FINAL LOCATION WITH OWNER AT TIME OF INSTALL.
5 DEVICE - LOCKDOWN BUTTON	APEM INC. IAR3F1200	N/A
DEVICE - 2 GANG BLANK FACEPLATE WITH 2 HOLES SIDE BY SIDE TO FIT LOCKDOWN BUTTON		LABEL BUTTONS AS TO WHICH DOOR THEY RELEASE
DEVICE - DOOR CONTACT	9CHLAGE 679-05HM	
8) DEVICE - REQUEST TO EXIT SENSOR	SCHLAGE SCAN II WHT	MOUNT HORIZONTALLY ABOVE DOOR.

SECURITY END OF LINE DEVICE AND CABLING CHART SCALE: NONE

/-- FLOOR/GRADE

ACCE	SS CONTRO	L DOOR SCHE	DULE				
NUMBER	ACCESS CONTROL			SECURIT	Y INFO		
DOOR	CARD READER	LOCKING HARDWARE TYPE	DOOR CONTACT	OTHER	REX	DOOR DETAIL#	PROGRAMMING NOTES
100C	Yes	LR	DC	N/A	N/A	2F	
101C	No	N/A	DC	N/A	N/A	2H	

GENERAL NOTES APPLY TO ALL LV CABLE*

- ALL CABLE SHALL BE PLENUM RATED IN PLENUM SPACE. - CABLES UTILIZING WIEGAND COMMS SHALL NOT EXCEED 500FT TO ACCESS CONTROL PANEL. - CABLES UTILIZING OSDP SHALL NOT EXCEED 2000FT. - CABLE SIZING SHALL BE VERIFIED PRIOR TO INSTALLATION AND UPSIZED AS NECESSARY TO ELIMINATE SIGNAL LOSS. - CABLES SHALL BE RUN IN CONTINUOUS OR NON-CONTINUOUS CABLE MANAGEMENT SYSTEMS. FREE-RUN CABLING IS NOT ACCEPTABLE ANYWHERE. ZIP TIES, ELECTRICAL TAPE, OR OTHER SIMILAR ADHESIVES ARE NOT ACCEPTABLE. - WHERE IN EXPOSED AREAS (E.G. UNDER DESK, ALONG COUNTERTOP), CABLES SHALL BE RUN IN MESH CABLE SLEEVE (TECHFLEX F6N2.00-25-BLACK, CUT TO SIZE).

THE LOCK POWER. *SEE COPPER CABLE DETAIL AND SPECIFICATIONS FOR REQUIREMENTS AND CONDITIONS.

- ALL DEVICES THAT CONTROL DOOR HARDWARE SHALL BE CABLED TO INTERFACE

THROUGH THE ACCESS CONTROL PLATFORM AND NEVER BE DIRECTLY CONNECTED TO

	DOOR # CR LOCK ¢ PERIPHERALS
TO LAN — 1 ACCESS CONTROL DOOR CONTROLLER TO LAN — 1	DOOR # CR LOCK # PERIPHERALS
	DOOR # CR LOCK ¢ PERIPHERALS

DEVICE	MANUFACTURER/PART #	NOTES	
CATEGORY CABLE	SEE CABLE DETAIL	PROVIDED BY CONTRACTOR RESPONSIBLE FOR SECTION 27 1513.	
18AWG/2C	SEE SECURITY DEVICE AND CABLING CHART	12-24 VDC CONNECTION TO POWER DIST. MODULE/POWER SUPPLY	
MULTICONDUCTOR CABLE	SEE SECURITY DEVICE AND CABLING CHART FOR	EXACT LAYOUT AND QTY. OF EACH DEVICE PER MODULE SHALL BE SIZED, CONFIGURED, AND	
CR, RX, DC, LD, RB, & OTHER CONTROL INTERFACES	PART #	SUPPLIED TO SUPPORT # OF DEVICES ON PLANS.	
DOOR CONTROLLER	ISONAS IPB2.0 2-DOOR OR 3-DOOR AS NEEDED	PROVIDE DIN RAIL ENCLOSURE FOR CONTROLLERS.	

COORDINATE FAIL-SAFE VS. FAIL-SECURE LOCK CONNECTIONS IN COMPLIANCE WITH FIRE CODE AND COORDINATED WITH ACCESS CONTROL SCHEDULE TBD BY OWNER.

ACCESS CONTROL PANEL AND INTERFACE GENERAL WIRING DIAGRAM

TYPICAL SECURITY DEVICE LABELING DETAIL
SCALE: NONE