AIA® Document G731™ – 2019

Change Order, Construction Manager as Adviser Edition

PROJECT: *(name and address)*
Christian County High School

5185 Fort Campbell Blvd
Hopkinsville, KY 42240

CONTRACT INFORMATION:
Contract For: BP 084-04 Alum Frame Ent Storefront Curtain
Date: September 08, 2023

CHANGE ORDER INFORMATION:
Change Order Number: 056

Date: December 12, 2024

OWNER: *(name and address)*
Christian County Board of Education
200 Glass Avenue Hopkinsville, KY 42240

CONTRACTOR: *(name and address)*
Kentucky Mirror & Plate Glass
738 State Street Bowling Green, KY 42101

ARCHITECT: *(name and address)*
Hafer PSC
101 E. Second Street, Suite 101 Owensboro, KY 42303

CONSTRUCTION MANAGER: *(name and address)*
Alliance Corporation
116 E. College Street Glasgow, KY 42141

THE CONTRACT IS CHANGED AS FOLLOWS:
(Insert a detailed description of the change and, if applicable, attach or reference specific exhibits. Also include agreed upon adjustments attributable to executed Construction Change Directives.)
Access control modifications per PR #24. Window 40 revisions.

The original Contract Sum was	$	1,234,393.00
Net change by previously authorized Change Orders	$	54,249.00
The Contract Sum prior to this Change Order was	$	1,288,642.00
The Contract Sum will be decreased by this Change Order in the amount of	$	(1,513.00)
The new Contract Sum including this Change Order will be	$	1,287,129.00

The Contract time will be unchanged by Zero(0) days.
The Contractor's Work shall be substantially complete on .

NOTE: This Change Order does not include adjustments to the Contract Sum or Guaranteed Maximum Price, or the Contract Time, that have been authorized by Construction Change Directive until the cost and time have been agreed upon by both the Owner and Contractor, in which case a Change Order is executed to supersede the Construction Change Directive.

NOT VALID UNTIL SIGNED BY THE ARCHITECT, CONSTRUCTION MANAGER, CONTRACTOR, AND OWNER.

ARCHITECT *(Signature)*	**CONSTRUCTION MANAGER** *(Signature)*
BY: Eric Rang, Hafer PSC	BY: Kevin Hitchel, Alliance Corporation
(Printed name, title, and license number if required)	*(Printed name and title)*
Date	*Date*
CONTRACTOR *(Signature)*	**OWNER** *(Signature)*
BY: Josh Abner, Kentucky Mirror & Plate Glass	BY: Christopher Bentzel, Christian County Board of Education
(Printed name and title)	*(Printed name and title)*
Date	*Date*

084-04 56

PROPOSED CHANGE ORDER

PROJECT Christian County High School

CONTRACTOR/SUPPLIER KY Mirror

BID PACKAGE 084

DETAIL ITEM		**AMOUNT**
LABOR	*$*	*(2,645.00)*
MATERIALS	*$*	*1,132.00*
PROFIT & OVERHEAD		
BOND INSURANCE		
COST BREAKDOWN TOTAL	*$*	*(1,513.00)*

DESCRIPTION

Access Control Modifications per PR #24

Window 40 Revisions

PR # 24 and N/A *(ATTACH PR)*

CHANGE ORDER INITIATED BY:

- X *ARCHITECT/ENGINEER*
- _____ *OWNER*
- _____ *CONTRACTOR*
- X *CM*
- _____ *CODE OFFICIAL*
- _____ *OTHER* _____

PLEASE INCLUDE THIS FORM WITH EVERY CHANGE ORDER.

HAFER
architects • designers • engineers

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PROPOSAL REQUEST

Project:	Christian County High School 5185 Ft. Campbell Blvd Hopkinsville,KY 42240	**PR No.:**	024
		Date:	October 22, 2024
Owner:	Christian County Public Schools 222 Glass Ave Hopkinsville, KY 42240	**Project Number:**	2106-204
		Contract for:	
To:	Kevin Hitchel Alliance Corporation 116 E. College Steet Glasgow, KY 42141		

This PR replaces PR16. All electrical items remain unchanged from PR16, so i have included those items from original PR. Atlas and KMPG to review new scope of work on cover sheet and refer to new Offline Access Control Spec 087100 for all items covered under new Salto bid.

RE: Access Control System Modifications

Please submit an itemized quotation for changes in the Contract Sum and/or Time incidental to proposed modifications to the Contract Documents described herein. THIS IS NOT A CHANGE ORDER NOR A DIRECTION TO PROCEED WITH THE WORK DESCRIBED HEREIN.

Description:

THIS PR IS A REVISION OF PR16. PR16 is now null and void. Salto products for rebid will be using 087101 specification for Offline Access Control Door Hardware. All items not substituted in 087101 or mentioned below shall remain.

Revise door hardware to include the following changes:

1. Access control items will be rebid to Salto systems per attached hardware set for reference. Atlas is to delete levers and KMPG is to remove exterior panic device trim for doors listed on Offline Access Control Door Hardware - 087101 and as shown in the attached Floor Plan 'AC-CTRL' where Salto devices are specified.

2. At Base Bid hardwired access controlled doors:

   a) Remove all requests to exit, power supplies, card readers and other such items as listed in attached hardware set specification which will now be provided by Salto. Please note some doors will be changed to 'offline' Salto Hardware as shown in the plan and specification.

B) Refer to Offline Access Control Door Hardware Specification 087101, revised Electrical drawings and itemized list of changes, and new Overall Plan 'AC-CNTRL' for additional information.

3. Change alternate bid 'offline' doors (Sets 19 and 20) to be provided by Salto as shown in the Offline Access Control Door Hardware 087101 and new Overall Plan 'AC-CNTRL'. Please note, some openings from revert to non-electrified hardware.

NEW ACCESS CONTROL BID (SALTO) TO:

- Furnish and Install Electrical Locks as specified in the revised hardware sets.
- Furnish and Install Exit Trim (outside lever, alignment kit, battery and escutcheon) as specified in the revised hardware sets
- Installation of exit device provided by Bid Package 080
- Furnish and Install REX & Power Supplies.
- Furnish and Install Card Readers.
- Furnish and Install Access Control System and components as shown in 'Set #AC Access Control System'.
- Program system & coordinate data wiring in racks with data cabling installer.
- Provide submittals to CM/Architect for coordination.
- Provide ATLAS and KMPG with templates for door hardware prep.
- Adhere to new prevailing wage rates
- *No Door Position Switches
- Hardware must be prepped to receive Best cores.

ATLAS TO:

- Delete Locksets where Salto is indicated to provide locksets.
- Delete Exit Trim where Salto is indicated to provide exit trim
- Delete installation costs of Salto provided hardware sets.
- Delete Exit Trim on select rooms with multiple doors (science rooms, business classrooms, CTE Spaces. Ie #20a) where second door is required for egress (these are not access control doors); prep. For potential future installation.
- Delete Access Control System
- Delete any REX & Power Supplies
- Delete dogging function from any exit devices
- Keep Door Position Switches in price.
- Delete provide and install cores and cylinders for all doors.
- Delete installation of exit devices (Atlas will only provide the exit device to Salto partner for installation)
- Provide all exit devices with LD (less dogging) option.

KMPG TO:

- Most openings general door hardware will remain as originally specified for access control as they are still wired.
- A few openings (B127.1, C113.1, C113.2) will have substituted Salto Devices. Coordinate with Salto for door prep.
- Delete any REX & Power Supplies
- Delete dogging function from any exit devices
- Keep Door Position Switches in contract price.
- Change powered panic/hinges to Electric Strike on keyed removable mullion
- Change frames to include the 'wire run' from edge of frame to edge of frame (this is from last on-site meeting conversation).
- Delete installation of exit devices (KY Mirror will only provide the exit device to Salto partner for installation)
- Alter banks of vestibule doors so that only one door in each bank shall be outfitted with keyed entry: (**Bold** openings to receive keyed entry, other doors to have keyed entry removed) A100A.2, A100A.2, **A100A.3** // **A100E.1**, A100E.2 // B100A.2, B100A.2, **B100A.3** // F100A.1, F100A.2, **F100A.3** // F100A.4, F100A.5, **F100A.6 //** F100B.1, F100B.2, **F100B.3** // H100B.1, **H100B.2**
- Provide all exit devices with LD (less dogging) option.

MISC ITEMS:

- ICC500 doors to remain as originally specified (no Salto Substitute)

STATE ELEC TO:

- Run wiring and conduit as required in original bid and as modified in PR-016. Items remained unchanged in this PR so original PR#16 is still present on revised electrical drawings.
- Coordinate with Access Control Provider on wiring and installation.
- Provide and install Category 6 cable from BX75 to each Comm. Room.
- Provide and install wiring from BX75 to each door.

CCPS ITEMS:

- Provide and install cores and cylinders for all doors and mullions.

Attachments:

- OFFLINE ACCESS CONTROL DOOR HARDWARE 087101;
- Overall Floor Plan 'AC-CTRL';
-Itemized list of Changes to Electrical Drawings,
-Revised Electrical Drawings (Not changed from PR16): E1.1 Rev 1, E2.1A Rev 3, E2.1B Rev 3, E2.1B-ALT Rev 4, E2.1D Rev 3, E2.1E Rev 2, E2.1 F Rev 4, E2.1G Rev 2, E2.1H Rev 3, E2.1J Rev 2, E2.1K Rev 3, E2.2D Rev 2, E2.2E Rev 2, E2.2G Rev 2, E2.2J Rev 2, E3.1A Rev 1, E3.1B Rev 2, E3.1B-ALT Rev 1, E3.1C Rev 1, E3.1D Rev 1, E3.1E Rev 2, E3.1F Rev 1, E3.1G Rev 1, E3.1H Rev 1,

E3.1J Rev 1, E3.1K Rev 1, E3.2B-ALT Rev 1, E3.2D Rev 1, E3.2E Rev 1, E3.2F Rev 1, E3.2G Rev 1, E3.2H Rev 1, E3.2J Rev 1, E6.1 Rev 3, E6.3 Rev 4, E6.4 Rev 4, E6.5 Rev 3, E6.6 Rev 2, E6.7 Rev 3, E6.9 Rev 3, E6.10 Rev 3, E6.11 Rev 5, E6.12 Rev 2, E6.13 Rev 4, E6.14 Rev 1, E6.17 Rev 3, E7.3 Rev 3

By: Eric Rang, Matt Brockman

CC:

SECTION 087101 – OFFLINE ACCESS CONTROL DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Commercial offline door hardware for the following:

a. Swinging doors.

2. Request to Exits
3. Power supplies and softw

B. Related Sections include the following:

1. Division 08 Section "Hollow Metal Doors and Frames" for astragals provided as part of fire-rated labeled assemblies and for door silencers provided as part of hollow-metal frames.
2. Division 08 Section "Aluminum Frames" for door silencers provided as part of frames.
3. Division 08 Section "Flush Wood Doors" for astragals and integral intumescent seals provided as part of fire-rated labeled assemblies.
4. Division 08 Section "Coiling Security Grilles" for door hardware provided as part of overhead door assemblies.
5. Division 08 Section "Aluminum-Framed Entrances and Storefronts" for entrance door hardware, including cylinders.
6. Division 08 Section "Door Hardware "
7. Division 28 Section "Conduit and Raceways for Cabling for Access Control Systems" for wiring and conduit for access control systems.

C. Products not provided, under this Section include the following:

1. Permanent cores to be furnished and installed by Owner.

1.3 SUBMITTALS

A. Product Data: Include construction and installation details, material descriptions, dimensions of individual components and profiles, and finishes.

B. Maintenance Data: For each type of door hardware to include in maintenance manuals.

C. Other Action Submittals:

1. Door Hardware Sets: Prepared by or under the supervision of an Architectural Hardware Consultant, detailing fabrication and assembly of door hardware, as well as procedures and diagrams.

2. Rough-In diagrams to provide for to the door manufacturer.

a. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
b. Format: Use same scheduling sequence and format and use same door numbers as in the Contract Documents.
c. Content: Include the following information:
    1) Type, style, function, size, quantity, and finish of each door hardware item, including handing & door number. Include description and function of each lockset and exit device.
    2) Explanation of abbreviations, symbols, and codes contained in schedule.
    3) Description of each electrified door hardware function, including location, sequence of operation, and interface with other building control systems.

        a) Sequence of Operation: Include description of component functions.

d. Submittal Sequence: Submit the final door hardware sets at earliest possible date, particularly where approval of the door hardware sets must precede fabrication of other work that is critical in Project construction schedule. Include Product Data, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the door hardware sets.

1.4 QUALITY ASSURANCE

A. Source Limitations: Obtain each type and variety of door hardware from a single manufacturer, unless otherwise indicated.

B. Electrified Door Hardware: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use as applicable.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up for door hardware delivered to Project site.

B. Tag each item or package separately with identification related to the final door hardware sets, and include basic installation instructions, templates, and necessary fasteners with each item or package.

C. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.

D. Deliver keys and permanent cores to Owner by registered mail or overnight package service.

1.6 COORDINATION

A. Templates: Distribute door hardware templates for doors, frames, and other work specified to be factory prepared for installing door hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

B. Electrical System Roughing-in: Coordinate layout and installation of electrified door hardware with connections to power supplies, fire alarm system and detection devices, access control system, security system and building control system.

1.7 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

a. Faulty operation of operators and door hardware.
b. Deterioration of metals, metal finishes, and other materials beyond normal weathering and use.

2. Warranty Period: One (1) year from date of Substantial Completion, or manufacture's standard warranty, whichever is longer.

1.8 MAINTENANCE SERVICE

A. Maintenance Service: Beginning at Substantial Completion, provide six months' full maintenance by skilled employees of door hardware Installer.

1.9 SCHEDULED DOOR HARDWARE

A. General: Provide door hardware for each door to comply with requirements in this Section and door hardware sets indicated in door and frame schedule and door hardware sets indicated in Part 3 "Door Hardware Sets".

1. Door Hardware Sets: Provide quantity, item, size, finish or color indicated, and [named manufacturers' products, products equivalent in function and comparable in quality to named products, products complying with BHMA standard referenced.
2. Sequence of Operation: Provide electrified door hardware function, sequence of operation, and interface with other building control systems indicated.

B. Designations: Requirements for design, grade, function, finish, size, and other distinctive qualities of each type of door hardware are indicated in Part 3 "Door Hardware Sets" Article. Products are identified by using door hardware designations, as follows:

1. Named Manufacturers' Products: Manufacturer and product designation are listed for each door hardware type required for the purpose of establishing minimum requirements. Manufacturers' names are abbreviated in Part 3 "Door Hardware Sets" Article.
2. References to BHMA Standards: Provide products complying with these standards and requirements for description, quality, and function.

C. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:

1. Manufacturers: **Provide products by the manufacturers specified.**

1.10 LOCKS AND LATCHES, GENERAL

A. Accessibility Requirements: Where indicated to comply with accessibility requirements, comply with "Uniform Federal Accessibility Standards."]

1. Provide operating devices that do not require tight grasping, pinching, or twisting of the wrist and that operate with a force of not more than 5 lbf (22 N).

B. Latches and Locks for Means of Egress Doors: Comply with NFPA 101. Latches shall not require more than 15 lbf (67 N) to release the latch. Locks shall not require use of a key, tool, or special knowledge for operation.

C. Electrified Locking Devices: BHMA A156.25.

D. Backset: 2-3/4 inches (70 mm), unless otherwise indicated.

E. Cylinders: Provide locks capable of receiving Best CORMAX cylinders and cores.

F. Strikes: Manufacturer's standard strike with strike box for each latchbolt or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, and as follows:

1. Strikes for Locks and Latches: ANSI A115.2.
2. Strikes for Auxiliary Deadlocks: as recommended by manufacturer.
3. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.

MISCELLANEOUS DOOR HARDWARE

G. Boxed Power Supplies: Modular unit in NEMA ICS 6, Type 4 enclosures; filtered and regulated; voltage rating and type matching requirements of door hardware served; and listed and labeled for use with fire alarm systems.

1.11 FABRICATION

A. Manufacturer's Nameplate: Do not provide products that have manufacturer's name or trade name displayed in a visible location except in conjunction with required fire-rated labels and as otherwise approved by Architect.

1. Manufacturer's identification is permitted on rim of lock cylinders only.

B. Base Metals: Produce door hardware units of base metal, fabricated by forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness. Furnish metals of a quality equal to or greater than that of specified door hardware units and BHMA A156.18. Do not furnish manufacturer's standard materials or forming methods if different from specified standard.

C. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to commercially recognized industry standards for application intended, except aluminum fasteners are not permitted. Provide Phillips flat-head screws with finished heads to match surface of door hardware, unless otherwise indicated.

1.12 FINISHES

A. Standard: BHMA A156.18, as indicated in door hardware sets.

B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

PART 2 - EXECUTION

2.1 EXAMINATION

A. Examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.

B. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

2.2 INSTALLATION

A. Mounting Heights: Mount door hardware units at heights indicated [on Drawings] [as follows] unless otherwise indicated or required to comply with governing regulations.

1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
2. Custom Steel Doors and Frames: DHI's "Recommended Locations for Builders' Hardware for Custom Steel Doors and Frames."
3. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."

B. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 09 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.

1. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
2. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.

C. Boxed Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings in equipment room. Verify location with Architect.

1. Configuration: **Provide power supplies as illustrated on plan.**

D. Items to be furnished or installed or coordinated in field under this specification:

1. Furnish and Install Electrical Locks as specified in the revised hardware sets.

2. Furnish and Install Exit Trim (outside lever, alignment kit, battery and escutcheon) as specified in the revised hardware sets for

3. Furnish and Install REX & Power Supplies.

4. Furnish and Install Card Readers.

5. Furnish and Install Access Control System and components as shown in 'Set #AC Access Control System'.

6. Program system & coordinate data wiring in racks with data cabling installer.

2.3 FIELD QUALITY CONTROL

2.4 ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to

operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

2.5 CLEANING AND PROTECTION

A. Clean adjacent surfaces soiled by door hardware installation.

B. Clean operating items as necessary to restore proper function and finish.

C. Provide final protection and maintain conditions that ensure that door hardware is without damage or deterioration at time of Substantial Completion.

2.6 DEMONSTRATION

Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain door hardware and door hardware finishes. Refer to Division 01 Section "Demonstration and Training."

Hardware Sets:

ACCESS CONTROL CONTRACTOR TO PROVIDE THE FOLLOWING HARWARE SETS AND PRODUCTS BY SALTO SYSTEMS, S.L

Set # 1 Exterior Pair – Access Control / Card Reader

Opening # A100E.1, B100A.3, F100A.3, F100A.6, F100B.3, G3, H100B.2, H114.2, J2

(*) See Plan "AC-CTRL" & Set #AC		*POWER SUPPLY*
(1) T.REX0CLBLK	Black	Request to Exit

Set # 2 Exterior Pair – DPS

Opening # A100A.1, A100A.2, A100E.2, B100A.1, B100A.2, F100A.1, F100A.2, F100A.4, F100A.5, F100B.1, F100B.2, H100B.1

(*) See Plan "AC-CTRL" & Set #AC		*POWER SUPPLY*
(1) T.REX0CLBLK	Black	Request to Exit

Set # 3 Exterior Pair– NO WORK

Set # 4 Exterior Pair– NO WORK

Set # 5a Single Interior - Access Control / Card Reader

Opening # D101.1, D101.2, E101.1, E101.2, E201, G101.1, G101.2, J101.1, J101.2, K100A, K101.1, K102.1

(*) See Plan "AC-CTRL" & Set #AC		*POWER SUPPLY*
(1) T.REX0CLBLK	Black	Request to Exit

Set # 5b Single Int – AC / Card Reader

Opening # A194, B191, B195, D293, E204, G210, H113, H190, J210, K100D, K103.1, K113.2, K120, K191.1, K191.2

(1ea) CM270N70CPB3 – with mechanical override SFIC cylinder (cylinder not included)

(1) T.REX0CLBLK	Black	Request to Exit

Set # 6 Exterior Single – Access Control / Card Reader

Opening # H116

(*) See Set # AC		*POWER SUPPLY*
(1) T.REX0CLBLK	Black	Request to Exit

Set # 7a Exterior Single– NO WORK

Set # 7b Exterior Single – DPS

Opening # G104.1, G108, G114.2, G116.2, H115.1, J104.2, J108.1, J108.6, J112.2 & B127.1

(1ea) AM660N00IPBH8
(1ra) KPP04IP

Set # 8 Exterior Single– NO WORK

Set # 9, 10 & 11 – NO WORK

Set # 12 Interior Pair – Access Control / Card Reader

Opening # D100, E100, G100, J100

(*) See Plan "AC-CTRL" & Set #AC		*POWER SUPPLY*
(1) T.REX0CLBLK	Black	Request to Exit

Set # 13 – NO WORK

Set # 14 Single - Rated

Opening # H105.1 & B107.1, B120.1

(1ea) CM270N70CPB3 – with mechanical override SFIC cylinder (cylinder not included)

Set # 15 - NO WORK

Set # 16 Inswing Pair - Rated

Opening # H102.1, H102.2

(1ea) CM270N70CPB3 – with mechanical override SFIC cylinder (cylinder not included)

Set # 17b Interior Pair – Rated –

Opening # ALT - B101.2, B101.4, B101.5, B101.7, B101.9, B101.10

(2ea) KPP04IP
(2ea) A0600N00IP38

Set # 17a Interior Pair – Rated –

Opening # ALT - B101.1, B101.3, B101.6, B101.8,

(1ea) AM660N00IPBH8E5 – with mechanical override Mortise cylinder (cylinder not included)
(2ea) KPP04IP
(1ea) A0600N00IP38

Set # 18 Office Entrance / Misc. Openings w/ Closer

Opening # A101, A114.1, A195, B117.1, D193, E196.1, E196.2, H107, H108, K118, K119.1, H193 J100B, J200B,

(1ea) CM270N70CPB3 – with mechanical override SFIC cylinder (cylinder not included)

Set # 19a - NO WORK

Set # 19b In Swing Classrooms / Out swing less than 50

Opening # A102, A103, A104, A105, A106, A107, A112, A113, B101, B102, B103, B104, C106, D102.1, D102.2, D103, D105, D107, D108.1, D108.2, D112, D116, D201, D203, D205, D206, D209, D210, D212, E102, E103, E105, E110, E112, E113, E114, E115, E116, E117, E118, E120, E122, E202, E203, E205, E210, E212, E213, E214, E215, E216, E217, E218, E220, E222, G103, G105, G110, G112.1, G112.2, G118.3, G201, G202, G203, G204, G205, G211, G212, G216, J102.1, J102.2, J103, J105, J106.1, J106.2, J110.1, J110.2, J114.1, J114.2, J116, J201, J202, J203, J204, J205, J206, J208, J209, J212

(1ea) CM270N70CPB3 – with mechanical override SFIC cylinder (cylinder not included)

Set # 20a - NO WORK

Set # 20b Out Swing Classrooms more than 50 / Misc.

Opening # A109, A109.2, A116.1, A117.1, A193, B190, C2.2, C100C.1, C102.1, C102.2, C203, C204, D100B.1, , 100B.2, D104, D114.1, D115.1, D194, D202.1, D204.1, D207.1, D207.2, D208.1, D211.1, D296, E106.1, E106.2, E108.1, E194, E206.1, E206.2, E208.1, E294, G102, G106, G107.1, G114.1, G115.1, G116.1, G118.1, G193, G200C, G206, G207.1, G207.2, G209.1, G209.2, G213.1, G214.1, G295, 105.4, H114.1, H192.1, J104.1, J112.1, J113.1, J194, J207.1, J207.2, J211.1, J295, K190 & B127.2, B193.2

(1ea) AM660N00IPBH8E5 – with mechanical override Mortise cylinder (cylinder not included)
(1ea) KPP04IP

Set # 21 Single Storeroom / Elec. Closet

Opening # A108.1, A108.2, A116A, A116B, A202.1, A202.2, C2.3, C104, C112, C205, C206, D106A, D114A, D114B, D115A, D211A, D295, D298, E108A, E195, E208A, E295, G102A, G114A, G114B, G115A, G116A, G197, G213A, G296, H112.2, H191, J113A, J195, J211A, J294, K122 & B111B, B112B, B123D, B124D, B127A, B206

(1ea) CM270N70CPB3 – with mechanical override SFIC cylinder (cylinder not included)

Set # 22a - NO WORK

Set # 22B Office / Misc. Entrance Openings

Opening # A112A.1, A112A.2, A115.1, A115.2, B101A.1, B101A.2, B103A.1, B103A.2, C105, C113A, C113B, C202, C207, D101A, D101B, D101C, D111, D113, D202B.1, D202B.2, D294, E101A, E101B, E101C, E104, E109, E111, E201A, E201B, E201C, E209, E211, E296, G101A, G101B, G101C, G111, G113, G196, G294, H104, H106, J101A, J101B, J101C, J109, J111, J196, J296, K102.2, K102.3, K103.2, K104, K105, K106.1, K106.2, K107, K108, K109, K110, K111, K112, K113.1, K113A, K114, K119.2, K121.1, K121.2 & B107A.1, B107A.2, B108, B109, B110, B111A.1, B111A.2, B112A.1, B112A.2, B114, B123A.1, B123A.2, B124A.1, B124A.2, B125, B202, B203

(1ea) CM270N70CPB3 – with mechanical override SFIC cylinder (cylinder not included)

Set # 23 Outswing Pair – Storeroom

Opening # B118, C103. D195, D297, E193, GE293, G194, G293, J193, J293

(1ea) CM270N70CPB3 – with mechanical override SFIC cylinder (cylinder not included)

Set # 24 Inswing Pair - Storeroom

Opening # H112.1

(1ea) CM270N70CPB3 – with mechanical override SFIC cylinder (cylinder not included)

Set # 25– NO WORK

Set # 26a – NO WORK

Set # 26b Interior Pair

Opening # A110.1, A110.2, C101.6

(1ea) AM660N00IPBH8E5 – with mechanical override Mortise cylinder (cylinder not included)
(2ea) KPP04IP
(1ea) A0600N00IP38

Set # 27 Interior Pair – Alum

Opening # C113.1, C113.2

(1ea) AM660N00IPBH8E5 – with mechanical override Mortise cylinder (cylinder not included)
(2ea) KPP04IP
(1ea) A0600N00IP38

Sets # 28 - 31 – NO WORK

SET # 31 Pair – Store

Opening # B105

(1ea) CM270N70CPB3 – with mechanical override SFIC cylinder (cylinder not included)

Set # 32 Misc. – NO WORK

Set # 33– NO WORK

Set # 34 – NO WORK

Set # 35

Opening # C2.1, C2.4, , C200, C102.5

(1ea) AM660N00IPBH8
(1ra) KPP04IP

Set # 36 Pair ICC-500 – NO WORK

Set # 37A Pair ICC-500 Rated – NO WORK

Set # 37B Pair ICC-500 Rated – NO WORK

Set # 38 Single – NO WORK

Set # 39

Opening # K101.2

(*) See Plan "AC-CTRL" & Set #AC		*POWER SUPPLY*
(1) T.REX0CLBLK	Black	Request to Exit

Set # AC Access Control System

Salto SPACE Software has already been installed and used by the district. All Salto hardware is a simple addition to the existing software.
****Note** It is recommended to contact the existing Salto providers, Compass Security Solutions, for programing and commissioning for district-wide unity.**

(8) LSP - BX75-C4E1
(6) LSP – BX75-C8E1
(5) LSP – E1-Boxed
(36) Salto – WRDM0M4B - **Note WRDM0A4B can be used when a single gang box is used for per-wire**
(14) Salto – CU42E0TUS
(10) Salto – CU4200TUS
(6) Salto – CCVD20700-50 (Salto Cards – Printable both sides)

The door hardware provider shall furnish and install a quantity one Bitstream BTS500-8R POE Switch in each of the following data rooms (i.e. a total quantity of nine)

1. **Data room A194**
2. **Data room B191**
3. **Data room H190**
4. **Data room K191**

5. **Data room D293**
6. **Data room E204**
7. **Data room G210**
8. **Data room J210**

The POE switches shall be installed within the data equipment rack (in each data room) which houses the patch panels dedicated to access control system data cabling.

The door hardware provider shall coordinate the installed location within the rack with the Division 271310 Structure Data Cabling Systems contractor.

Push Button Release

Opening # D100, D101.1, D101.2, E100, E101.1, E101.2, G100, G101.1, G101.2, , K101.1, K102.1, J100, J101.1, J101.2

(20)SDC 15-2 SPDT Momentary Desk Pushbutton Switch (1 Pushbutton at Admin Desk for each Opening)

Video Door Intercom

Opening # F100A.3, F100B.3, H100B.2

(1) IX-DVF SIP Aiphone IP Video Door Station (1 Needed per Opening)

Opening # F100A.3, F100B.3, H100B.2

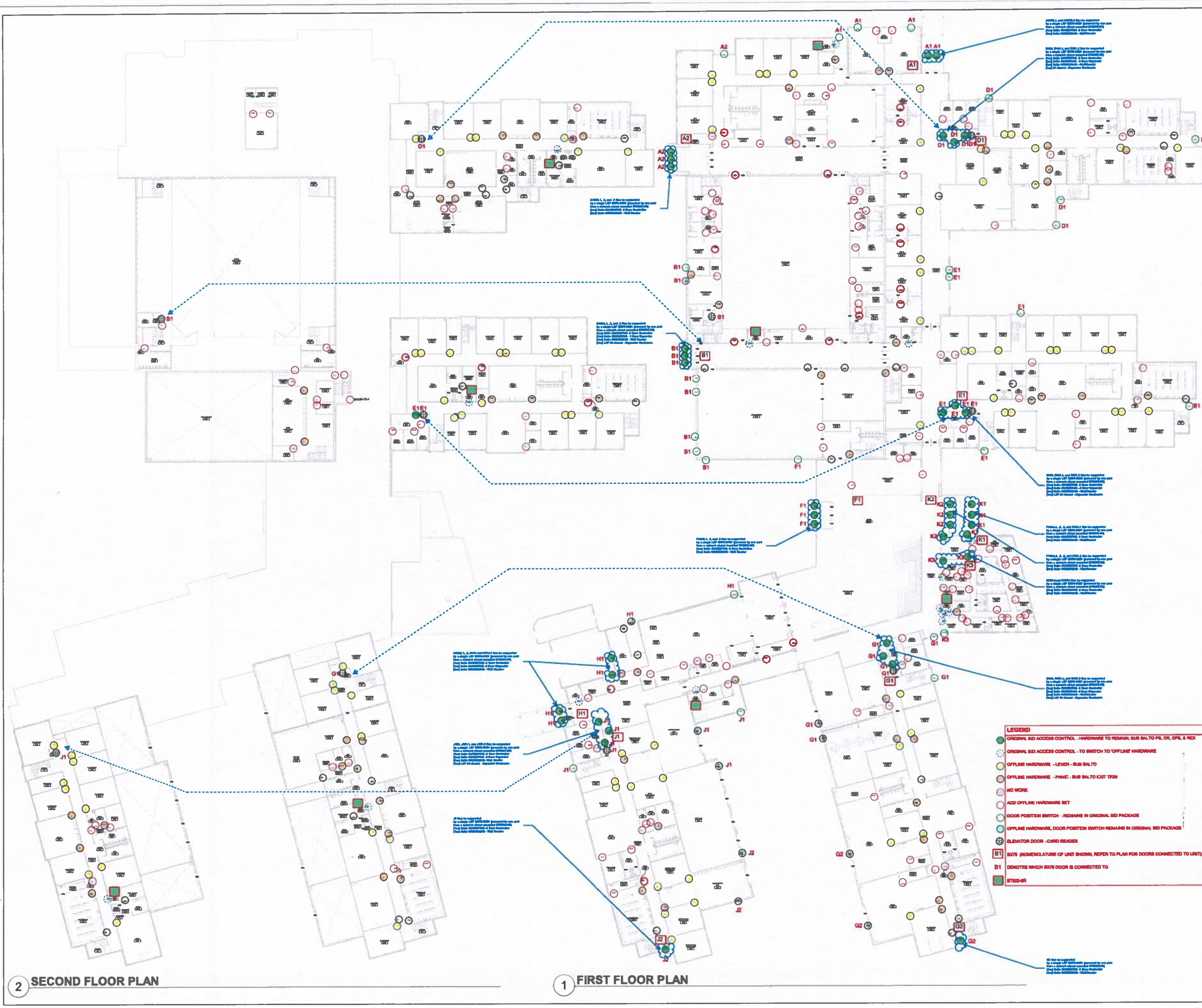
(1) SBX-IDVF Aiphone Stainless Steel Surface Mount Box for IX-DVF (1 Needed per Opening)

(1) IX-Soft-5 Aiphone IX Software for up to 5 Computers (only 1 Needed for Project)

**Final Hook up and Training by Hardware Supplier

**Conduit, wire and pulling of wire by electrical contractor

****End of Section****



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CHRISTIAN COUNT
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Revisions:		
#	Description	Date

Designed By:	Drawn By:	Checked By:

Sheet title:

OFFLINE ACCESS CONTROL BID OVERALL PLANS

Architect's Project No: 2106-204

Date: OCTOBER, 202

Drawing No.

A100

CHANGES TO ELECTRICAL DRAWINGS
FOR
PROPOSAL REQUEST NO. "PR-016"
ACCESS CONTROL/DOOR HARDWARE MODIFICATIONS
4/19/2024

1. Reference attached sheets (Quantity 3) which show basic wiring riser diagrams of typical interconnections for the SALTO access control "wired" locations. Intent is to show basic interconnections required for the SALTO system.
2. All RJ45 jacks furnished and installed on access control data circuits shall fully support 100W POE.
3. Reference Revised Drawing E1.1 Rev 1.
    a. Modified Door Hardware / Access Control Legend and symbol descriptions.
4. Reference Revised Drawings E2.1A Rev 3 & E6.1 Rev 3.
    a. Vestibule A100A. DELETE requirement to provide 120V power circuit to Power supply for door hardware (Three doors).
    b. Vestibule A100E. DELETE requirement to provide 120V power circuit to Power supply for door hardware (Two doors).
    c. Data Room A194. DELETE requirement to provide 120V power circuits (quantity three) to Access Control System panels.
5. Reference Revised Drawings E2.1B Rev 3 & E6.3 Rev 4.
    a. Vestibule B100A. DELETE requirement to provide 120V power circuit to Power supply for door hardware (Three Doors).
    b. Data Room B191. DELETE requirement to provide 120V power circuits (quantity three) to Access Control System panels.
    c. Data Room B195. DELETE requirement to provide 120V power circuits (quantity two) to Access Control System panels.
6. Reference Revised Drawings E2.1B-ALT Rev 4 & E6.17 Rev 3.
    a. Multipurpose Room B127. DELETE requirement to provide 120V power circuit to Power supply for exterior door hardware.
7. Reference Revised Drawings E2.1D Rev 3 & E6.4 Rev 4.
    a. Corridor D100A. DELETE requirement to provide 120V power circuit to Power supply for door hardware (West End of corridor).
    b. Admin D101. DELETE requirement to provide 120V power circuit to Power supply for door hardware (Two doors).
8. Reference Revised Drawings E2.1E Rev 2 & E6.6 Rev 2.
    a. Corridor E100A. DELETE requirement to provide 120V power circuit to Power supply for door hardware (West End of corridor).

b. Admin E101. DELETE requirement to provide 120V power circuit to Power supply for door hardware (Two doors).

9. Reference Revised Drawings E2.1F Rev 4, E6.9 Rev 3 & E6.14 Rev 1.
    a. Vestibule F100B. DELETE requirement to provide 120V power circuit to Power supply for door hardware (Three doors).
    b. Corridor G100A. DELETE requirement to provide 120V power circuit to Power supply for door hardware (North End of corridor).
    c. Admin G101. DELETE requirement to provide 120V power circuit to Power supply for door hardware (Two doors).
10. Reference Revised Drawings E2.1G Rev 2 & E6.9 Rev 3.
    a. Corridor G100B. DELETE requirement to provide 120V power circuit to Power supply for door hardware (South End of corridor).
11. Reference Revised Drawings E2.1H Rev 3, E6.11 Rev 5, E6.12 Rev 2, E6.11 Rev 5, E6.17 Rev 3, & E7.3 Rev 3.
    a. Vestibule H100B. DELETE requirement to provide 120V power circuit to Power supply for door hardware (Two doors).
    b. Vestibule H116. DELETE requirement to provide 120V power circuit to Power supply for door hardware (Two doors).
    c. Corridor J100A. DELETE requirement to provide 120V power circuit to Power supply for door hardware (North End of corridor).
    d. Admin J101. DELETE requirement to provide 120V power circuit to Power supply for door hardware (Two doors).
    e. Data Room H190. DELETE requirement to provide 120V power circuits (quantity two) to Access Control System panels.
    f. Data Room H190. DELETE requirement to provide 120V power circuit to door hardware power supply.
12. Reference Revised Drawings E2.1J Rev 2 & E6.12 Rev 2.
    a. Corridor J100A. DELETE requirement to provide 120V power circuit to Power supply for door hardware (South End of corridor).
13. Reference Revised Drawing E2.1K Rev 3 & E6.14 Rev 1.
    a. Vestibule F100A. DELETE requirement to provide 120V power circuits to Power supply for door hardware (Six doors).
    b. Corridor K100A. DELETE requirement to provide 120V power circuit Power supply for door hardware. (West End of Corridor)
    c. Reception K101. DELETE requirement to provide 120V power circuit to Power supply for door hardware (Two doors).
    d. Guide Conf K102. DELETE requirement to provide 120V power circuit Power supply for door hardware.
    e. S.R.O. K103. DELETE requirement to provide 120V power circuit Power supply for door hardware.

f. Guide Sec K120. DELETE requirement to provide 120V power circuit Power supply for door hardware.

g. FRC – Office K113. DELETE requirement to provide 120V power circuit Power supply for door hardware.

h. Data Room K191. DELETE requirement to provide 120V power circuit Power supply for door hardware.

i. Data Room K191. DELETE requirement to provide 120V power circuits (quantity three) to Access Control System panels.

14. Reference Revised Drawings E2.2D Rev 2 & E6.5 Rev 3.

    a. Data Room D293. DELETE requirement to provide 120V power circuits (quantity two) to Access Control System panels.

    b. Data Room D293. DELETE requirement to provide 120V power circuit to door hardware power supply.

15. Reference Revised Drawing E2.2E Rev 2 & E6.7 Rev 3.

    a. Data Room E204. DELETE requirement to provide 120V power circuits (quantity two) to Access Control System panels.

    b. Data Room E204. DELETE requirement to provide 120V power circuit to door hardware power supply.

16. Reference Revised Drawings E2.2G Rev 2 & E6.10 Rev 3.

    a. Data Room G210. DELETE requirement to provide 120V power circuits (quantity two) to Access Control System panels.

    b. Data Room G210. DELETE requirement to provide 120V power circuit to door hardware power supply.

17. Reference Revised Drawings E2.2J Rev 2 & E6.13 Rev 4

    a. Data Room J210. DELETE requirement to provide 120V power circuits (quantity two) to Access Control System panels.

    b. Data Room J210. DELETE requirement to provide 120V power circuit to door hardware power supply.

18. Reference Revised Drawing E3.1A Rev 1.

    a. Data Room A194.

        i. DELETE requirement to install Access Control system panels.

        ii. DELETE requirement to provide data cable to Access Control system panels.

        iii. DELETE requirement to rough-in for proximity reader, electric strike, request-to-exit and door position switch.

        iv. ADD requirement to provide CAT6A data patch cord from the CCHS network switch to the BTS500-8R POE switch.

    b. Corridor A100K (North End).

i. Door A100K. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room A194 to the door position switches on the exterior doors.

ii. Door A100K. ADD requirement to provide 22/4 low voltage cable from Door position Switches to BX75 in Ceiling cavity of Ticket Room A101.

c. Corridor A100J (North End).

i. Door A100J.1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room A194 to the door position switches on the exterior doors.

ii. Door A100J.1. ADD requirement to provide 22/4 low voltage cable from Door position Switches to BX75 in Ceiling cavity of Art Room 2 A117.

d. Art 1 A116.

i. Door A116.2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room A194 to the door position switch on the exterior door.

ii. Door A116.2. ADD requirement to provide 22/4 low voltage cable from Door position Switches to BX75 in Ceiling cavity of Art Room 2 A117.

e. Art 2 A117.

i. Door A117.2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room A194 to the door position switch on the exterior door.

ii. Door A117.2. ADD requirement to provide 22/4 low voltage cable from Door position Switches to BX75 in Ceiling cavity of Art Room 2 A117.

f. Vestibule A100E.

i. Doors A100E.1 & A100E.2. DELETE requirement to provide composite low voltage cables from Access Control Panels in Data Room A194 to the door hardware access control system devices.

ii. Doors A100E.1 & A100E.2. ADD requirement to provide data cables (two) to "C2" data outlet & BX75 equipment [provided within Art Room 2 accessible ceiling cavity space] required to control & monitor the vestibule doors.

iii. Doors A100E.1 & A100E.2. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within Art Room 2 accessible ceiling cavity space] required to control & monitor the vestibule doors.

g. Vestibule A100A.

i. Doors A100A.1, A100A.2 & A100A.3. DELETE requirement to provide composite low voltage cables from Access Control Panels in Data Room A194 to the door hardware access control system devices.

ii. Doors A100A.1, A100A.2 & A100A.3. ADD requirement to provide data cables (two) to "C2" data outlet & BX75 equipment [provided within Tickets

Room A101ceiling cavity space] required to control & monitor the vestibule doors.

iii. Doors A100A.1, A100A.2 & A100A.3. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within Tickets Room A101ceiling cavity space] required to control & monitor the vestibule doors.

19. Reference Revised Drawing E3.1B Rev 2.

a. Data Room B191.

i. DELETE requirement to install Access Control system panels.

ii. DELETE requirement to provide data cable to Access Control system panels.

iii. Door B191. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room B191 to the door hardware access control devices.

iv. Door B191. DELETE requirement to rough-in for proximity reader, electric strike, request-to-exit and door position switch.

v. ADD requirement to provide CAT6A data patch cord from the CCHS network switch to the BTS500-8R POE switch.

b. Data Room B195.

i. DELETE requirement to install Access Control system panels.

ii. DELETE requirement to provide data cable to Access Control system panels.

iii. Door B195. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room B195 to the door hardware access control devices.

iv. Door B195. DELETE requirement to rough-in for proximity reader, electric strike, request-to-exit and door position switch.

c. Vestibule B100A.

i. Doors B100A.1, B100A.2 & B100A.3. DELETE requirement to provide composite low voltage cables from Access Control Panels in Data Room B191 to the door hardware access control system devices.

ii. Doors B100A.1, B100A.2 & B100A.3. ADD requirement to provide data cables to "C2" data outlet & BX75 equipment [provided within Corridor B100B accessible ceiling cavity space] required to control & monitor the vestibule doors.

iii. Doors B100A.1, B100A.2 & B100A.3. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within Corridor B100B accessible ceiling cavity space] required to control & monitor the vestibule doors.

d. Corridor B100C.

i. Door B100C. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room B195 to the door position switches on the exterior doors.

ii. Door B100C. ADD requirement to provide 22/4 low voltage cable from Door position Switches to BX75 in Ceiling cavity of Corridor E100A.

20. Reference Revised Drawing E3.1B-ALT Rev 1.

a. Elec Room B193.

i. Door B193.1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room B191 to the door position switch on the exterior door.

ii. Door B193.1. ADD requirement to provide 22/4 low voltage cable from BX75 Equipment provided in the Accessible ceiling cavity space of Corridor B100B to the door position switch.

b. Mult-Purpose Room B127.

i. Door B127.1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room B191 to the door hardware access control devices.

ii. Door B127.1. DELETE requirement to rough-in for proximity reader, electric strike and request-to-exit. Rough-in for a door position switch is still required.

iii. Door B127.1. ADD requirement to provide 22/4 low voltage cable from BX75 Equipment provided in the Accessible ceiling cavity space of Corridor B100B to the door position switch.

c. Elevator B (EL-B).

i. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room B191 to the elevator controller and proximity readers on the 1st & 2nd floors.

ii. ADD requirement to provide low voltage access control system cables from the BX75 device [provided within the accessible ceiling cavity space of Corridor B100B] required to control the elevator. Provide all required access control cables to the proximity readers and the elevator controller.

21. Reference Revised Drawing E3.1C Rev 1.

a. Auxiliary Gym Room C101.

i. Exterior Doors C101.7, C101.8, C101.9, C101.10, C101.11 & C101.12. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room B191 to the door position switches on the exterior doors.

ii. Exterior Doors C101.8, C101.9, C101.10, C101.11 & C101.12. ADD requirement to provide 22/4 low voltage cables from BX75 equipment provided in accessible ceiling cavity space of Corridor B100B to the door position switches on the exterior doors.

iii. Exterior Door C101.7. ADD requirement to provide 22/4 low voltage cables from BX75 equipment provided in accessible ceiling cavity space of Lobby F100F to the door position switches on the exterior doors.

22. Reference Revised Drawing E3.1D Rev 1.

a. Admin D101.

i. Door D101.1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room D293 to the door hardware access control devices.

ii. Door D101.2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room D293 to the door hardware access control devices.

iii. ADD requirement to provide data cables to "C2" data outlet & BX75 equipment [provided within Corridor D100A accessible ceiling cavity space] required to control & monitor doors D101.1, D101.2, D100 & Elevator D-EL & associated proximity readers.

iv. Doors D101.1 & D101.2. ADD requirement to provide low voltage access control system cables from the BX75 EQUIPMENT [provided within the accessible ceiling cavity space of Corridor D100A] required to control & monitor the doors.

v. Note: The requirement for the Door release buttons and required operation shall remain a requirement. Provide low voltage access control system cables from the BX75 device [provided within the accessible ceiling cavity space of Corridor D100A] required to unlock the doors.

b. Corridor D100A (East End).

i. Door D100. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room D293 to the door hardware access control devices.

ii. Door D100. ADD requirement to provide 22/4 low voltage cables from BX75 equipment provided in accessible ceiling cavity space of Corridor D100A to the door position switches on the exterior doors.

c. Elevator D (EL-B).

i. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room D293 to the elevator controller and proximity readers on the 1st & 2nd floors.

ii. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of

Corridor D100A] required to control the elevator. Provide all required access control cables to the proximity readers and the elevator controller.

d. Stair 1 (D1).
    i. Door D1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room D293 to the door hardware door position switch.
    ii. Door D1. ADD requirement to provide 22/4 low voltage cables from BX75 equipment provided in accessible ceiling cavity space of Corridor D100A to the door position switches on the exterior door(s).
e. Stair 2 (D2).
    i. Door D2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room D293 to the door hardware door position switches.
    ii. Door D2. ADD requirement to provide 22/4 low voltage cables from BX75 equipment provided in accessible ceiling cavity space of Corridor D100A to the door position switches on the exterior door(s).
f. Stair 3 (D3).
    i. Door D3.1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room D293 to the door hardware door position switches.
    ii. Door D3.1. ADD requirement to provide 22/4 low voltage cables from BX75 equipment provided in accessible ceiling cavity space of Corridor D100A to the door position switches on the exterior door(s).
g. FCS Lab Room D110.
    i. Door D110.2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room D293 to the door hardware door position switches.
    ii. Door D110.2. ADD requirement to provide 22/4 low voltage cables from BX75 equipment provided in accessible ceiling cavity space of Corridor D100A to the door position switches on the exterior door(s).

23. Reference Revised Drawing E3.1E Rev 2.
    a. Admin E101.
        i. Door E101.1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room E204 to the door hardware access control devices.
        ii. Door E101.2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room E204 to the door hardware access control devices.

iii. ADD requirement to provide data cables to "C2" data outlet & BX75 equipment [provided within Corridor E100A accessible ceiling cavity space] required to control & monitor doors E101.1, E101.2, E100 & Elevator E-EL & associated proximity readers.

iv. Doors E101.1 & E101.2. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor E100A] required to control & monitor the doors.

v. Note: The requirement for the Door release buttons and required operation shall remain a requirement. Provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor E100A] required to unlock the doors.

b. Corridor E100A (East End).

i. Door E100. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room E204 to the door hardware access control devices.

ii. Door E100. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor E100A] required to control & monitor the door.

iii. Door E100. Note: The requirement for the Door release button (within Admin E101) and required operation shall remain a requirement. Provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor E100A] required to unlock the door.

c. Elevator E (E-EL).

i. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room E204 to the elevator controller and proximity readers on the 1st & 2nd floors.

ii. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor E100A] required to control the elevator. Provide all required access control cables to the proximity readers and the elevator controller.

d. Stair 1 (E1).

i. Door E1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room E204 to the door hardware door position switches.

ii. Door E1. ADD requirement to provide 22/4 low voltage cables from BX75 equipment provided in accessible ceiling cavity space of Corridor E100A to the door position switches on the exterior door(s).

e. Stair 2 (E2).

i. Door E2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room E204 to the door hardware door position switches.

ii. Door E2. ADD requirement to provide 22/4 low voltage cables from BX75 equipment provided in accessible ceiling cavity space of Corridor E100A to the door position switches on the exterior door(s).

f. Stair 3 (E3).

i. Door E3. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room E204 to the door hardware door position switches.

ii. Door E3. ADD requirement to provide 22/4 low voltage cables from BX75 equipment provided in accessible ceiling cavity space of Corridor E100A to the door position switches on the exterior door(s).

24. Reference Revised Drawing E3.1F Rev 1.

a. Vestibule F100B.

i. Doors F100B.1, F100B.2 & F100B.3. DELETE requirement to provide composite low voltage cables from Access Control Panels in Data Room K191 to the door hardware access control system devices.

ii. Doors F100B.1, F100B.2 & F100B.3. ADD requirement to provide data cables to "C2" data outlet & BX75 equipment [provided within Lobby F100F accessible ceiling cavity space] required to control & monitor doors F100B.1, F100.2 & F100B.3 & associated proximity readers.

iii. Doors F100B.1, F100B.2 & F100B.3. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Lobby F100F] required to control & monitor the vestibule doors.

b. Corridor F100D.

i. Exterior Door F100D. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room K191 to the door position switches on the exterior doors.

ii. Exterior Door F100D. ADD requirement to provide 22/4 low voltage cables from BX75 equipment provided in the accessible ceiling cavity space of Corridor G100A to the door position switches on the exterior doors.

c. Admin G101.

i. Door G101.1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room G210 to the door hardware access control devices.

ii. Door G101.2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room G210 to the door hardware access control devices.

iii. ADD requirement to provide data cables to "C2" data outlet & BX75 equipment [provided within Corridor G100A accessible ceiling cavity space] required to control & monitor doors G101.1, G101.2, G100 & Elevator G-EL & associated proximity readers.

iv. Doors G101.1 & G101.2. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor G100A] required to control & monitor the doors.

v. Note: The requirement for the Door release buttons and required operation shall remain a requirement. Provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor G100A] required to unlock the doors.

d. Corridor G100A (North End).

i. Door G100. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room G210 to the door hardware access control devices.

ii. Door G100. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor G100A] required to control & monitor the door.

iii. Door G100. Note: The requirement for the Door release button (within Admin G101) and required operation shall remain a requirement. Provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor G100A] required to unlock the door.

e. Elevator G (G-EL).

i. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room G210 to the elevator controller and proximity readers on the 1st & 2nd floors.

ii. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor G100A] required to control the elevator. Provide all required access control cables to the proximity readers and the elevator controller.

f. Stair 1 (G1).

i. Door G1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room G210 to the door hardware door position switch.

ii. Door G1. ADD requirement to provide 22/4 low voltage cable from BX75 equipment [provided within the accessible ceiling cavity space of Corridor G100A] to the door position switch on the exterior door.

g. Engr Lab Room G104.

i. Door G104.1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room G210 to the door hardware door position switch.

ii. Door G104.1. ADD requirement to provide 22/4 low voltage cable from BX75 equipment [provided within the accessible ceiling cavity space of Corridor G100A] to the door position switch on the exterior door.

25. Reference Revised Drawing E3.1G Rev 1.

a. Stair 3 (G3).

i. Door G3. DELETE requirement to provide composite low voltage cables from Access Control Panels in Data Room G210 to the door hardware access control system devices.

ii. Door G3. ADD requirement to provide data cables to "C2" data outlet & BX75 equipment [provided within Stair G3 accessible ceiling cavity space] required to control & monitor door G3 & associated proximity reader.

iii. DoorG3. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within accessible ceiling cavity space of Stair G3] required to control & monitor the vestibule doors.

b. Ind Maint Lab Room G116.

i. Door G116.2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room G210 to the door hardware door position switch.

ii. Door G116.2. ADD requirement to provide 22/4 low voltage cable from BX75 equipment [provided within the accessible ceiling cavity space of Stair G3] to the door position switch on the exterior door.

c. Welding Lab Room G114.

i. Door G114.2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room G210 to the door hardware door position switch.

ii. Door G114.2. ADD requirement to provide 22/4 low voltage cable from BX75 equipment [provided within the accessible ceiling cavity space of Stair G3] to the door position switch on the exterior door.

d. I.T. – CTE Room G108.

i. Door G108. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room G210 to the door hardware door position switch.

ii. Door G108. ADD requirement to provide 22/4 low voltage cable from BX75 equipment [provided within the accessible ceiling cavity space of Corridor G100A] to the door position switch on the exterior door.

26. Reference Revised Drawing E3.1H Rev 1.

a. Vestibule H100B.

i. Doors H100B.1 & H100B.2. DELETE requirement to provide composite low voltage cables from Access Control Panels in Data Room H190 to the door hardware access control system devices.

ii. Doors H100B.1 & H100B.2. ADD requirement to provide data cables to "C2" data outlet & BX75 equipment [provided within Corridor H100A accessible ceiling cavity space] required to control & monitor doors H100B.1 & H100B.2 associated proximity reader.

iii. Doors H100B.1 & H100B.2. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor H100A] required to control & monitor the doors.

iv. Door G100. Note: The requirement for the Door release button (within Admin K101) and required operation shall remain a requirement. Provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor H100A] required to unlock the door.

b. KEN Data Room H113.

i. Door H113. DELETE requirement to provide composite low voltage cables from Access Control Panels in Data Room H190 to the door hardware access control system devices.

ii. Door H113. DELETE requirement to rough-in for proximity reader, electric strike, request-to-exit and door position switch.

c. Vestibule H116.

i. Door H116. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room H190 to the door hardware access control system devices.

ii. Door H116. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor H100A] required to control & monitor the door.

d. Elec Room H114.

i. Door H114.2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room H190 to the door hardware access control system devices.

ii. Doors H114.2. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor H100A] required to control & monitor the door.

e. Elec Room H115.

i. Door H115.1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room H190 to the door hardware access control system devices.

ii. Doors H115.1. ADD requirement to provide 22/4 low voltage cable from BX75 equipment [provided within the accessible ceiling cavity space of Corridor H100A] to the door position switch on the exterior door.

f. Prep Room H105.

i. Exterior Door H105.5. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room H190 to the door position switch on the exterior door.

ii. Exterior Door H105.5. ADD requirement to provide 22/4 low voltage cable from BX75 equipment [provided within the accessible ceiling cavity space of Corridor H100A] to the door position switch on the exterior door.

g. Mech Room H192.

i. Exterior Door H192.2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room H190 to the door position switches on the exterior door.

ii. Exterior Door H192.2. ADD requirement to provide 22/4 low voltage cables from BX75 equipment [provided within the accessible ceiling cavity space of Corridor J100A] to the door position switches on the exterior doors.

h. Data Room H190.

i. DELETE requirement to install Access Control system panels.

ii. Door H190 DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room H190 to the door hardware access control devices.

iii. Door H190. DELETE requirement to rough-in for proximity reader, electric strike, request-to-exit and door position switch.

iv. ADD requirement to provide CAT6A data patch cord from the CCHS network switch to the BTS500-8R POE switch.

i. Construction Lab Room J104.

i. Exterior Door J104.2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room J210 to the door position switch on the exterior door.

ii. Exterior Door J104.2. ADD requirement to provide 22/4 low voltage cables from BX75 equipment [provided within the accessible ceiling cavity space of Corridor J100A] to the door position switch on the exterior door.

j. Admin J101.

i. Door J101.1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room J210 to the door hardware access control devices.

ii. Door J101.2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room J210 to the door hardware access control devices.

iii. ADD requirement to provide data cables to "C2" data outlet & BX75 equipment [provided within Corridor J100A accessible ceiling cavity space] required to control & monitor doors J101.1, J101.2, J100 & Elevator J-EL & associated proximity readers.

iv. Doors J101.1 & J101.2. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor J100A] required to control & monitor the doors.

v. Note: The requirement for the Door release buttons and required operation shall remain a requirement. Provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor J100A] required to unlock the doors.

k. Corridor J100A (North End).

i. Door J100. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room J210 to the door hardware access control devices.

ii. Door J100. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor J100A] required to control & monitor the door.

iii. Door J100. Note: The requirement for the Door release button (within Admin J101) and required operation shall remain a requirement. Provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor J100A] required to unlock the door.

l. Elevator J (J-EL).

i. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room J210 to the elevator controller and proximity readers on the 1st & 2nd floors.

ii. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor J100A] required to control the elevator. Provide all required access control cables to the proximity readers and the elevator controller.

m. Stair 1 (J1).

i. Exterior Door J1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room J210 to the door position switch on the exterior door.

ii. Exterior Door J1. ADD requirement to provide 22/4 low voltage cables from BX75 equipment [provided within the accessible ceiling cavity space of Corridor J100A] to the door position switch on the exterior door.

27. Reference Revised Drawing E3.1J Rev 1.

a. Stair 2 (J2).

i. Exterior Door J2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room J210 to the access control devices on the exterior doors.

ii. ADD requirement to provide data cables to "C2" data outlet & BX75 equipment [provided within Stair J2 accessible ceiling cavity space] required to control & monitor door J2 & associated proximity readers.

iii. Exterior Door J2. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within the accessible ceiling cavity space of Stair 2 (J2)]required to control & monitor the door.

b. Auto Lab Room J108.

i. Exterior Door J108.6. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room J210 to the door position switch on the exterior door.

ii. Exterior Door J108.6. ADD requirement to provide 22/4 low voltage cables from the BX75 equipment [provided within the accessible ceiling cavity space of Stair 2 (J2)] to the door position switch on the exterior door.

iii. Exterior Door J108.1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room J210 to the door position switch on the exterior door.

iv. Exterior Door J108.1. ADD requirement to provide 22/4 low voltage cables from the BX75 equipment [provided within the accessible ceiling cavity space of Corridor J100A] to the door position switch on the exterior door.

c. Agriculture Lab Room J112.

i. Exterior Door J112.2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room J210 to the door position switch on the exterior door.

ii. Exterior Door J112.2. ADD requirement to provide 22/4 low voltage cables from the BX75 equipment [provided within the accessible ceiling cavity space of Stair 2 (J2)] to the door position switch on the exterior door.

28. Reference Revised Drawing E3.1K Rev 1.

a. Vestibule F100A.

i. Doors F100A.1, F100A.2, F100A.3 & K101.1. DELETE requirement to provide composite low voltage cables from Access Control Panels in Data Room K191 to the door hardware access control system devices.

ii. Doors F100A.1, F100A.2, F100A.3 & K101.1. ADD requirement to provide data cables to "C2" data outlet & BX75 equipment [provided within SRO Room K103 accessible ceiling cavity space] required to control & monitoring of doors & associated proximity readers.

iii. Doors F100A.1, F100A.2, F100A.3 & K101.1. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within SRO Room K103 accessible ceiling cavity space] required to control & monitor the following doors:F100A.1, F100A.2, F100A.3 and K101.1.

iv. Doors F100A.4, F100A.5, F100A.6 & K101.2. DELETE requirement to provide composite low voltage cables from Access Control Panels in Data Room K191 to the door hardware access control system devices.

v. Doors F100A.4, F100A.5, F100A.6 & K101.2. ADD requirement to provide data cables to "C2" data outlet & BX75 equipment [provided within Corridor F100C accessible ceiling cavity space] required to control & monitoring of doors & associated proximity readers.

vi. Doors F100A.4, F100A.5 & F100A.6. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within SRO Room K103 accessible ceiling cavity space] required to control & monitor the following doors: F100A.4, F100A.5, F100A.6 and K101.2.

vii. Note: The requirement for the Door release button and required operation shall remain a requirement. Provide low voltage access control system cables from the associated BX75 equipment [provided within SRO Room K103 accessible ceiling cavity space] and door release button as required to unlock door F100.3.

b. Reception K101.

i. Door K101.1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room K191 to the door hardware access control devices.

ii. Door K101.2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room K191 to the door hardware access control devices.

iii. Door K101.1. ADD requirement to provide data cables to "C2" data outlet & BX75 equipment [provided within SRO Room K103 accessible ceiling cavity space] required to control & monitoring of doors & associated proximity readers.

iv. Door K101.1. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within SRO Room K103 accessible ceiling cavity space] required to control & monitor door K101.1.

v. Door K101.1. Note: The requirement for the Door release button and required operation shall remain a requirement. Provide low voltage access control system cables from the BX75 equipment [provided within SRO Room K103 accessible ceiling cavity space] required to unlock the door.

vi. Door K101.2. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within Corridor F100C accessible ceiling cavity space] required to control & monitor the door.

vii. Door K101.2. Note: The requirement for the Door release button and required operation shall remain a requirement. Provide low voltage access control system cables from the BX75 equipment [provided within Corridor F100C accessible ceiling cavity space] required to unlock the door.

c. Corridor K100A.

i. Door K100A. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room K191 to the door hardware access control devices.

ii. Doors K100A & K102.1. ADD requirement to provide data cables to "C2" data outlet & BX75 equipment [provided within Corridor K100A accessible ceiling cavity space] required to control & monitor doors & associated proximity readers.

iii. Door K100A. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within Corridor K100A accessible ceiling cavity space] required to control & monitor the door.

d. Guide Conf K102.

i. Door K102.1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room K191 to the door hardware access control devices.

ii. Door K102.1. ADD requirement to provide low voltage access control system cables from the BX75 equipment [provided within Corridor K100A accessible ceiling cavity space] required to control & monitor the door.

e. S.R.O. Room K103.

i. Door K103.1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room K191 to the door hardware access control devices.

ii. Door K103.1. DELETE requirements for rough-in of raceways for Proximity Reader, Electric Strike, Door Position Switch and Request-to-Exit device.

f. Guide Sec Room K120.

i. Door K120. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room K191 to the door hardware access control devices.

ii. Door K120. DELETE requirements for rough-in of raceways for Proximity Reader, Electric Strike, Door Position Switch and Request-to-Exit device.

g. Corridor K100D.

i. Door K100D. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room K191 to the door hardware access control devices.

ii. Door K100D. DELETE requirements for rough-in of raceways for Proximity Reader, Electric Strike, Door Position Switch and Request-to-Exit device.

h. FRC – Office Room K113.

i. Door K113.2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room K191 to the door hardware access control devices.

ii. Door K113.2. DELETE requirements for rough-in of raceways for Proximity Reader, Electric Strike, Door Position Switch and Request-to-Exit device.

iii. Door K113.3. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room K191 to the door hardware access control devices.

iv. Door K113.3. ADD requirement to provide 22/4 low voltage cables from the BX75 device [provided within Corridor K100A accessible ceiling cavity space] required to monitor the door position switch on the exterior door.

i. Data Room K191.

i. DELETE requirement to install Access Control system panels.

ii. DELETE requirement to provide data cables to Access Control system panels.

iii. Door K191.1. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room K191 to the door hardware access control devices.

iv. Door K191.1. DELETE requirement to rough-in for proximity reader, electric strike, request-to-exit and door position switch.

v. Door K191.2. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room K191 to the door hardware access control devices.

vi. Door K191.2. DELETE requirement to rough-in for proximity reader, electric strike, request-to-exit and door position switch.

vii. ADD requirement to provide CAT6A data patch cord from the CCHS network switch to the BTS500-8R POE switch.

29. Reference Revised Drawing E3.2B-ALT Rev 1.

a. Elevator B (EL-B).

i. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room B191 to the elevator controller and proximity readers on the 1st & 2nd floors.

ii. ADD requirement to provide low voltage access control system cables from the BX75 device [provided within the accessible ceiling cavity space of Corridor B100B] required to control the elevator. Provide all required access control cables to the proximity readers and the elevator controller.

30. Reference Revised Drawing E3.2D Rev 1.

a. Data Room D293.

i. DELETE requirement to install Access Control system panels.

ii. Door D293. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room D293 to the door hardware access control devices.

iii. Door D293. DELETE requirement to rough-in for proximity reader, electric strike, request-to-exit and door position switch.

iv. ADD requirement to provide CAT6A data patch cord from the CCHS network switch to the BTS500-8R POE switch.

b. Elevator D (D-EL).

i. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room D293 to the elevator controller and proximity readers on the 1st & 2nd floors.

ii. ADD requirement to provide low voltage access control system cables from the BX75 device [provided within the accessible ceiling cavity space of Corridor D100A] required to control the elevator. Provide all required access control cables to the proximity readers and the elevator controller.

31. Reference Revised Drawing E3.2E Rev 1.

a. Data Room E204.

i. DELETE requirement to install Access Control system panels.

ii. Door E204. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room E204 to the door hardware access control devices.

iii. Door E204. DELETE requirement to rough-in for proximity reader, electric strike, request-to-exit and door position switch.

iv. ADD requirement to provide CAT6A data patch cord from the CCHS network switch to the BTS500-8R POE switch.

b. Elevator E (E-EL).

i. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room E204 to the elevator controller and proximity readers on the 1st & 2nd floors.

ii. ADD requirement to provide low voltage access control system cables from the BX75 device [provided within the accessible ceiling cavity space of Corridor E100A] required to control the elevator. Provide all required access control cables to the proximity readers and the elevator controller.

c. Admin Room E201.

i. Door E201. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room E204 to the door hardware access control devices.

ii. ADD requirement to provide data cables to "C2" data outlet & BX75 equipment [provided within Corridor E200A accessible ceiling cavity space] required to control & monitor door E201 & associated proximity reader.

iii. Door E201. ADD requirement to provide low voltage access control system cables from the BX75 EQUIPMENT [provided within the accessible ceiling cavity space of Corridor E200A] required to control & monitor the door.

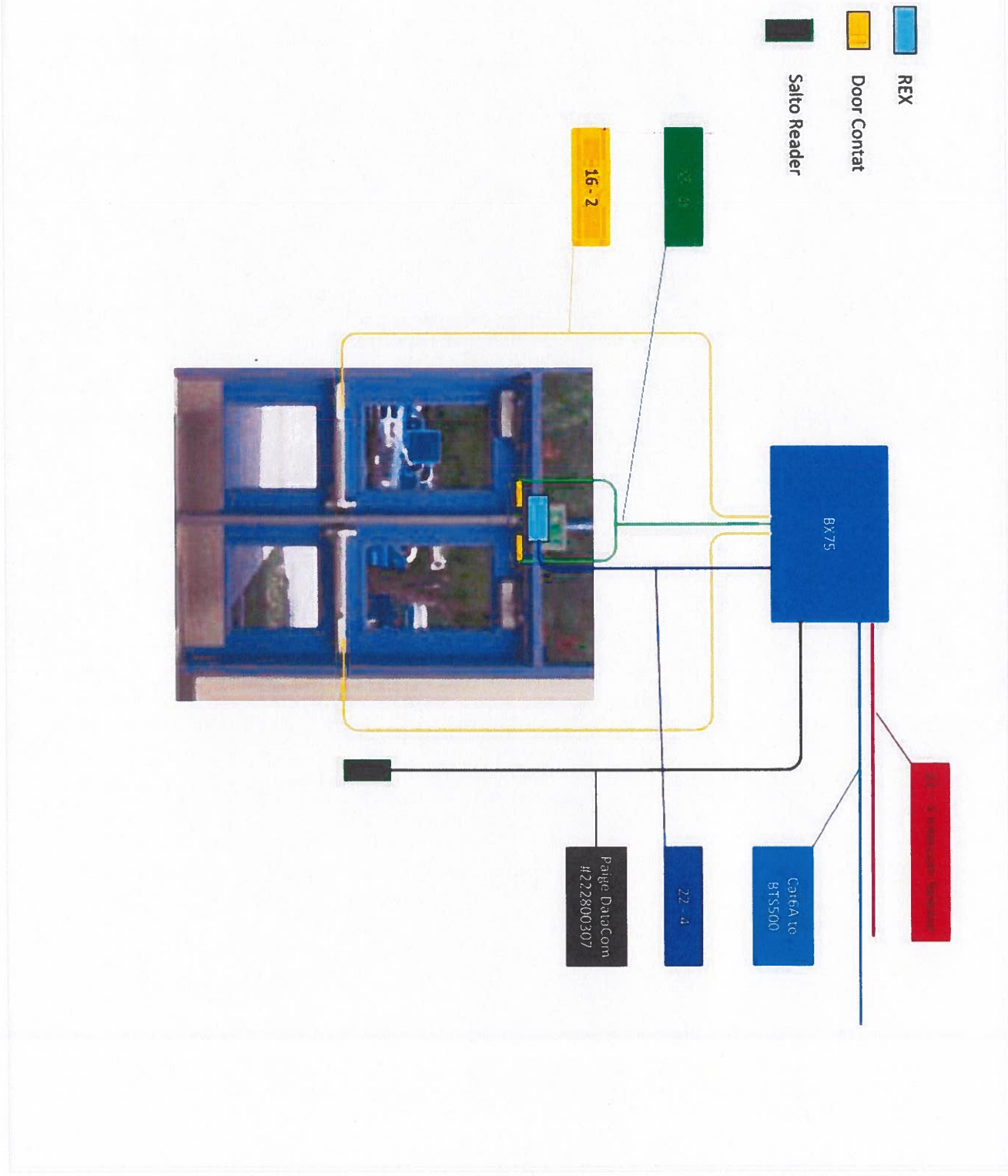
iv. Note: The requirement for the Door release buttons and required operation shall remain a requirement. Provide low voltage access control system

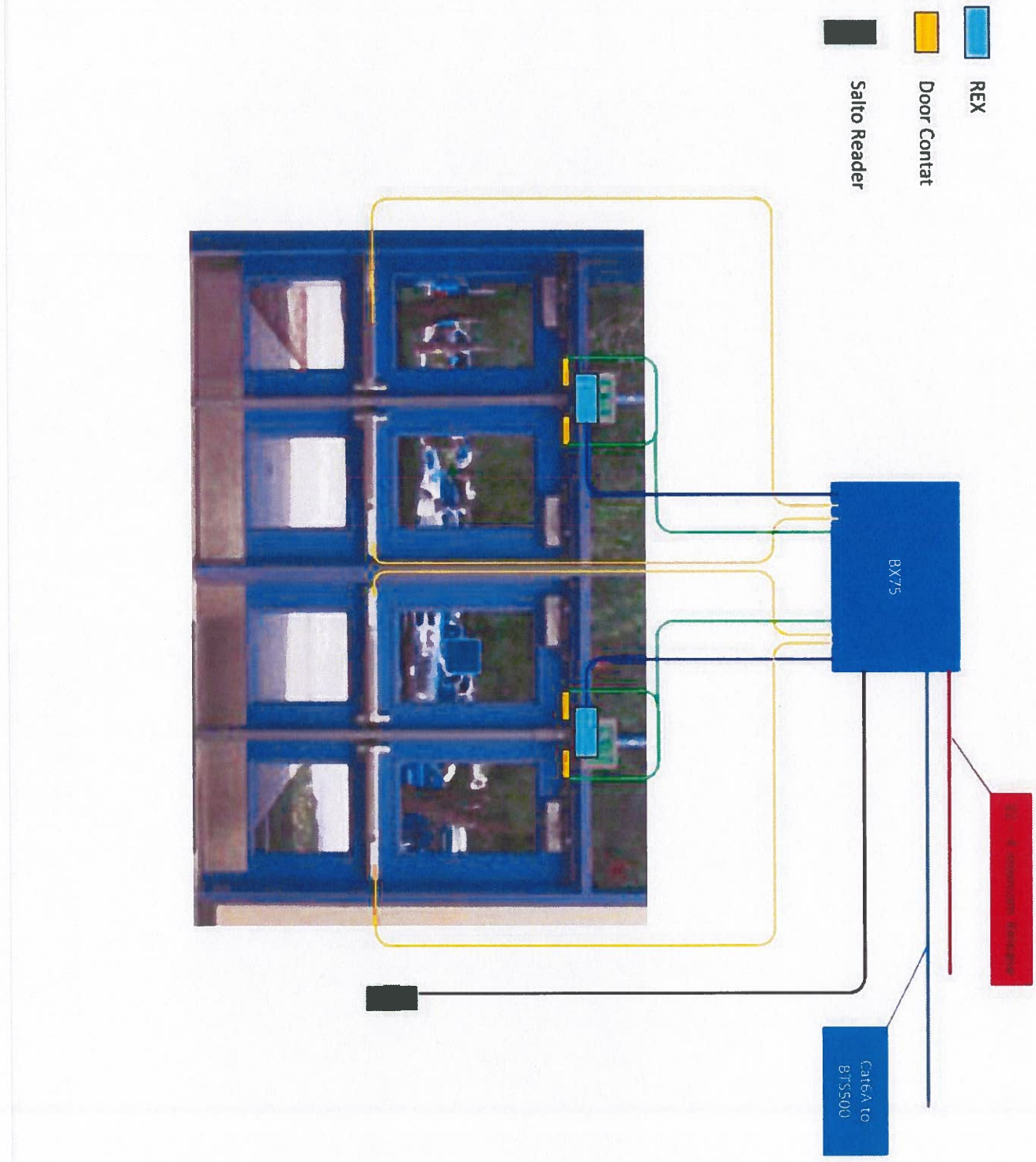
cables from the BX75 device [provided within the accessible ceiling cavity space of Corridor E200A] required to unlock the doors.

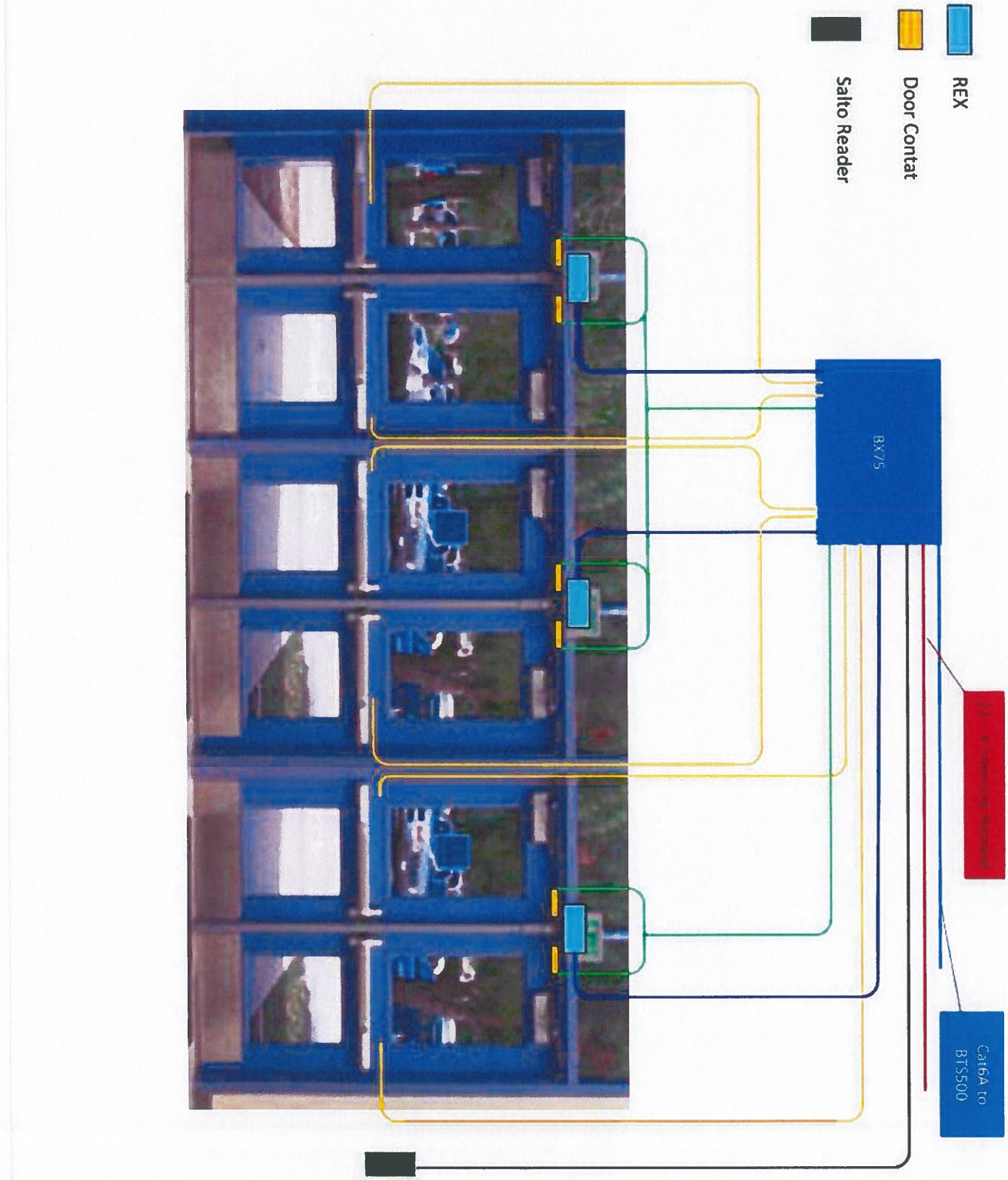
32. Reference Revised Drawing E3.2F Rev 1.
    a. Elevator G (G-EL).
        i. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room G210 to the elevator controller and proximity readers on the 1st & 2nd floors.
        ii. ADD requirement to provide low voltage access control system cables from the BX75 device [provided within the accessible ceiling cavity space of Corridor G100A] required to control the elevator. Provide all required access control cables to the proximity readers and the elevator controller.
33. Reference Revised Drawing E3.2G Rev 1.
    a. Data Room G210.
        i. DELETE requirement to install Access Control system panels.
        ii. Door G210. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room G210 to the door hardware access control devices.
        iii. Door G210. DELETE requirement to rough-in for proximity reader, electric strike, request-to-exit and door position switch.
        iv. ADD requirement to provide CAT6A data patch cord from the CCHS network switch to the BTS500-8R POE switch.
34. Reference Revised Drawing E3.2H Rev 1.
    a. Elevator J (J-EL).
        i. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room J210 to the elevator controller and proximity readers on the 1st & 2nd floors.
        ii. ADD requirement to provide low voltage access control system cables from the BX75 device [provided within the accessible ceiling cavity space of Corridor J100A] required to control the elevator. Provide all required access control cables to the proximity readers and the elevator controller.
35. Reference Revised Drawing E3.2J Rev 1.
    a. Data Room J210.
        i. DELETE requirement to install Access Control system panels.
        ii. Door J210. DELETE requirement to provide composite low voltage cable from Access Control Panels in Data Room J210 to the door hardware access control devices.
        iii. Door J210. DELETE requirement to rough-in for proximity reader, electric strike, request-to-exit and door position switch.
        iv. ADD requirement to provide CAT6A data patch cord from the CCHS network switch to the BTS500-8R POE switch.

END OF CHANGES

BASIC RISER WIRING DIAGRAMS FOR SALTO SYSTEM




REX
Door Contat
Salto Reader
BX75
Gate A to BT5500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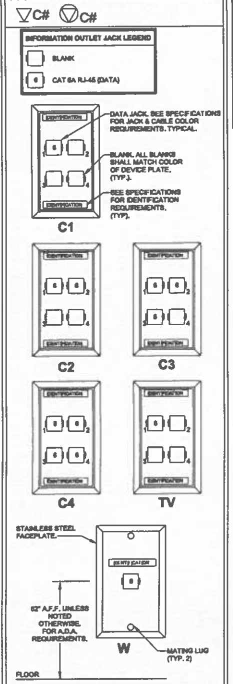
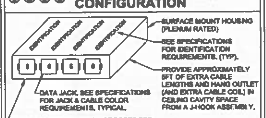
INFORMATION OUTLET FACEPLATE CONFIGURATIONS

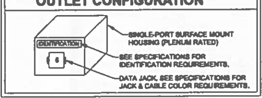


CEILING DATA OUTLET CONFIGURATION



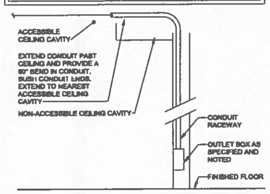
NOTE: PROVIDE QUANTITY OF PORTS PER THE DATA OUTLET CONFIGURATION TYPE.

VIDEO SURVEILLANCE CAMERA OUTLET CONFIGURATION

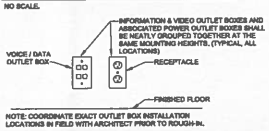


DETAIL - TYPICAL INFORMATION / VIDEO OUTLET & CONDUIT INSTALLATION

NO SCALE.



NOTE: COORDINATE EXACT OUTLET BOX INSTALLATION LOCATIONS IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN.



DETAIL - TYPICAL INFORMATION, VIDEO & POWER OUTLETS INSTALLATION

NO SCALE.

LEGEND - POWER

SYMBOL	DESCRIPTION
	WALL OUTLET WITH 20A, 125V DUPLEX RECEPTACLE. INSTALL AT 18 INCHES ABOVE FINISHED FLOOR TO CENTER, UNLESS NOTED OTHERWISE.
	WALL OUTLET WITH 20A, 125V DUPLEX RECEPTACLE. INSTALL ABOVE COUNTER TOP, UNLESS NOTED OTHERWISE. COORDINATE THE REQUIRED HEIGHT ABOVE COUNTER TOP WITH ARCHITECT AND ALL OTHER INSTALLATION IN AREA PRIOR TO ROUGH-IN.
	WALL OUTLET WITH 20A, 125V DOUBLE-DUPLEX RECEPTACLE. INSTALL AT 18 INCHES ABOVE FINISHED FLOOR TO CENTER, UNLESS NOTED OTHERWISE.
	WALL OUTLET WITH 20A, 125V DOUBLE-DUPLEX RECEPTACLE. INSTALL ABOVE COUNTER TOP, UNLESS NOTED OTHERWISE. COORDINATE THE REQUIRED HEIGHT ABOVE COUNTER TOP WITH ARCHITECT AND ALL OTHER INSTALLATION IN AREA PRIOR TO ROUGH-IN.
	WALL OUTLET WITH NEMA TYPE RECEPTACLE AS NOTED ON PLANS.
"GFI"	NOMENCLATURE INDICATES GROUND FAULT INTERRUPTER TYPE RECEPTACLE WHEN SHOWN ON PLANS ADJACENT TO SYMBOL.
"USB"	NOMENCLATURE INDICATES A NEMA 5-20R DUPLEX RECEPTACLE WITH TWO INTEGRAL USB CHARGING PORTS WHEN SHOWN ON PLANS ADJACENT TO SYMBOL.
"T"	NOMENCLATURE INDICATES A TAMPER RESISTANT TYPE NEMA 5-20R DUPLEX RECEPTACLE WHEN SHOWN ON PLANS ADJACENT TO SYMBOL.
1,3,5,...	NUMBERS INDICATE CIRCUIT NUMBERS WHEN SHOWN NEXT TO OR WITHIN SYMBOL ON PLANS.
a,b,c,...	LOWER CASE LETTERS INDICATE SWITCHING ARRANGEMENT WHEN SHOWN NEXT TO OR WITHIN SYMBOL ON PLANS.
CKT NO. / PANEL ID / L1067A-21	UNLESS NOTED OTHERWISE, NOMENCLATURE SHOWN NEXT TO DEVICE SYMBOL INDICATES THE PANEL AND BRANCH CIRCUIT WHICH SHALL BE USED TO FEED THE DEVICE.
"TV"	NOMENCLATURE INDICATES RECEPTACLE FOR TV MONITOR WHEN SHOWN ON PLANS ADJACENT TO SYMBOL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT OF THE RECEPTACLE (AND ASSOCIATED VIDEO/DATA OUTLET) WITH THE BACKING IN WALL, THE TV MONITOR BRACKET, THE TV MONITOR, AND THE ARCHITECT IN FIELD PRIOR TO START OF ROUGH-IN. IN GENERAL, ALL OUTLETS ASSOCIATED WITH THE TV MONITOR SHALL BE HIDDEN FROM VIEW AND ACCESSIBLE BEHIND THE TV MONITOR.
"IG"	NOMENCLATURE INDICATES ISOLATED GROUND TYPE RECEPTACLE WHEN SHOWN ADJACENT TO RECEPTACLE SYMBOL.
"WP"	NOMENCLATURE INDICATES WEATHER RESISTANT RECEPTACLE IN CAST-ALUMINUM WEATHERPROOF WHILE IN-USE TYPE ENCLOSURE WHEN SHOWN ON PLANS ADJACENT TO SYMBOL.
S	SAFETY DISCONNECT MEANS, AS NOTED WHEN SHOWN ON POWER PLANS.
	JUNCTION BOX AS REQUIRED OR AS NOTED.
TYPE xx	MULTI-FUNCTION FLOORBOX/POKE-THRU ASSEMBLY, AS SCHEDULED.
	HATCHING WITHIN RECEPTACLE OR JUNCTION BOX SYMBOLS INDICATES ITEM FED FROM AN EMERGENCY POWER CIRCUIT AS INDICATED OR AS NOTED.
	COMBINATION DISCONNECT DEVICE & MOTOR CONTROLLER RATED FOR CONNECTED LOAD AND INSTALLATION LOCATION ENVIRONMENT.
	NON-FUSIBLE DISCONNECT DEVICE RATED FOR CONNECTED LOAD AND INSTALLATION LOCATION ENVIRONMENT.
	FUSIBLE, CIRCUIT BREAKER OR MOLDED CASE SWITCH TYPE DISCONNECT DEVICE RATED FOR CONNECTED LOAD, AVAILABLE FAULT CURRENT AND INSTALLATION LOCATION ENVIRONMENT.
L11A-1	HOMERUN TO PANEL INDICATED. PREFIX INDICATES PANEL NOMENCLATURE, NUMBER INDICATE CIRCUIT NUMBER.
PHASE CONDUCTOR, NEUTRAL, GROUND, "ISOLATED" GROUND	CIRCUIT. NUMBER OF CROSSBARS INDICATE QUANTITY OF CONDUCTORS REQUIRED. MINIMUM CONDUIT SIZE SHALL BE 3/4 INCH TRADE SIZE. MINIMUM SIZE CONDUCTORS SHALL BE 12 AWG.

LEGEND - SYSTEMS & TECHNOLOGY

TELECOMMUNICATIONS

AUDIO/VIDEO INTEGRATION

DOOR HARDWARE/ACCESS CONTROL

INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM

VIDEO SURVEILLANCE SYSTEM

LEGEND - LIGHTING

SYMBOL	DESCRIPTION
	CEILING OUTLET AND LIGHTING FIXTURE AS SCHEDULED.
	CEILING OUTLET AND LIGHTING FIXTURE AS SCHEDULED.
	CEILING OUTLET AND LIGHTING FIXTURE AS SCHEDULED.
	CEILING OUTLET AND LIGHTING FIXTURE AS SCHEDULED.
	CEILING OUTLET AND LIGHTING FIXTURE AS SCHEDULED.
	WALL OUTLET AND LIGHTING FIXTURE AS SCHEDULED.
	OUTLET AND EXIT LIGHT FIXTURE AS SCHEDULED OR NOTED. ARROWS INDICATE DIRECTION ARROWS REQUIRED
F1	SYMBOL INDICATES FIXTURE TYPE WHEN SHOWN ON LIGHTING PLANS AND SITE ELECTRICAL PLANS ADJACENT TO FIXTURE SYMBOL. REFER TO LIGHTING FIXTURE SCHEDULE FOR FIXTURE REQUIREMENTS.
S_a	OUTLET BOX AND 20A, SINGLE POLE SWITCH. INSTALL AT 48 INCHES ABOVE FINISHED FLOOR TO CENTER, UNLESS NOTED OTHERWISE. LOCATE WITHIN 8" OF STRIKE SIDE OF DOOR, UNLESS NOTED OTHERWISE. LOWER CASE LETTER INDICATES CIRCUIT SWITCHED.
S_{3a}	OUTLET BOX AND 20A, THREE-WAY SWITCH. INSTALL AT 48 INCHES ABOVE FINISHED FLOOR TO CENTER, UNLESS NOTED OTHERWISE. LOCATE WITHIN 8" OF STRIKE SIDE OF DOOR, UNLESS NOTED OTHERWISE. LOWER CASE LETTER INDICATES CIRCUIT SWITCHED.
S_{4a}	OUTLET BOX AND 20A, FOUR-WAY SWITCH. INSTALL AT 48 INCHES ABOVE FINISHED FLOOR TO CENTER, UNLESS NOTED OTHERWISE. LOCATE WITHIN 8" OF STRIKE SIDE OF DOOR, UNLESS NOTED OTHERWISE. LOWER CASE LETTER INDICATES CIRCUIT SWITCHED.
S_O	OUTLET BOX AND 20A, SINGLE POLE SWITCH WITH INTEGRAL OCCUPANCY SENSOR (DUAL TECHNOLOGY PIR/MICROPHONICS). INSTALL AT 48 INCHES ABOVE FINISHED FLOOR TO CENTER, UNLESS NOTED OTHERWISE. LOCATE WITHIN 8" OF STRIKE SIDE OF DOOR, UNLESS NOTED OTHERWISE.
	OUTLET BOX AND DIMMER SWITCH RATED FOR CONNECTED LOAD. INSTALL AT 48 INCHES ABOVE FINISHED FLOOR TO CENTER, UNLESS NOTED OTHERWISE. LOCATE WITHIN 8" OF STRIKE SIDE OF DOOR, UNLESS NOTED OTHERWISE. LOWER CASE LETTER INDICATES CIRCUIT CONTROLLED.
	OUTLET BOX AND THREE-WAY DIMMER SWITCH RATED FOR CONNECTED LOAD. INSTALL AT 48 INCHES ABOVE FINISHED FLOOR TO CENTER, UNLESS NOTED OTHERWISE. LOCATE WITHIN 8" OF STRIKE SIDE OF DOOR, UNLESS NOTED OTHERWISE. LOWER CASE LETTER INDICATES CIRCUIT CONTROLLED.
	OUTLET BOX AND DIMMER SWITCH WITH INTEGRAL OCCUPANCY SENSOR (DUAL TECHNOLOGY PIR/MICROPHONICS) AND RATED FOR CONNECTED LOAD. INSTALL AT 48 INCHES ABOVE FINISHED FLOOR TO CENTER, UNLESS NOTED OTHERWISE. LOCATE WITHIN 8" OF STRIKE SIDE OF DOOR, UNLESS NOTED OTHERWISE. LOWER CASE LETTER INDICATES CIRCUIT CONTROLLED.
	OCCUPANCY SENSOR (DUAL TECHNOLOGY PIR/MICROPHONICS). THE LETTER(S) DESIGNATION NEXT TO THE SYMBOL (IF SHOWN) INDICATE SWITCHING ZONES TO BE CONTROLLED VIA THE OCCUPANCY SENSOR. IF A LETTER DESIGNATION IS NOT SHOWN, THE OCCUPANCY SENSOR SHALL CONTROL ALL LIGHTING FIXTURES WITHIN THE ROOM. SEE OCCUPANCY SENSOR CONTROL WIRING DIAGRAM AND DETAILS, SHEET E1.13, FOR ADDITIONAL REQUIREMENTS.
ETD EH11D-xx	EMERGENCY POWER GENERATOR TRANSFER DEVICE. UL924 AND UL1008 LISTED FOR USE AS A SWITCH BYPASS OR BRANCH CIRCUIT EMERGENCY LIGHTING TRANSFER SWITCH AND RATED FOR CONNECTED LOAD AND VOLTAGE. PROVIDE BODINE GTDU OR APPROVED EQUAL. NOMENCLATURE SHOWN NEXT TO SYMBOL INDICATES THE EMERGENCY POWER PANEL AND BRANCH CIRCUIT NO. WHICH SHALL BE USED TO PROVIDE THE EMERGENCY FEED TO THE DEVICE.
NL	NOMENCLATURE INDICATES A "NIGHT LIGHTING" FIXTURE WHEN SHOWN ON LIGHTING PLANS ADJACENT TO (OR WITHIN) LIGHTING FIXTURE SYMBOL. A FIXTURE INDICATED WITH "NL" SHALL BE CONNECTED SUCH THAT IT REMAINS "ON" WHENEVER THE BRANCH CIRCUIT IS ENERGIZED.
	FULL-HATCHING PATTERN SHOWN WITHIN A LIGHTING FIXTURE SYMBOL INDICATES THE LIGHTING FIXTURE SHALL BE FED FROM AN EMERGENCY POWER "NEC 702 OPTIONAL STANDBY" BRANCH CIRCUIT AS INDICATED ON THE LIGHTING PLANS.
	HALF-HATCHING WITHIN LIGHTING FIXTURE SYMBOL INDICATES FIXTURE SHALL BE FED DIRECTLY FROM (OR THRU AN EMERGENCY POWER GENERATOR TRANSFER DEVICE) FROM AN EMERGENCY POWER "NEC 700 EMERGENCY LOADS" BRANCH CIRCUIT AS INDICATED OR AS NOTED ON THE LIGHTING PLAN.

GENERAL NOTES (ENTIRE PROJECT):

A. COORDINATE EXACT INSTALLATION LOCATIONS AND MOUNTING HEIGHTS OF ALL WIRING DEVICES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN. IN GENERAL, POWER OUTLETS SHALL BE INSTALLED AT THE SAME MOUNTING HEIGHT AND ADJACENT TO ASSOCIATED OUTLETS FOR VOICE, DATA, AND VIDEO OUTLETS.

B. COORDINATE THE INSTALLATION LOCATIONS AND MOUNTING HEIGHTS OF OUTLET BOXES FOR POWER, SYSTEMS AND TECHNOLOGY DEVICES WITHIN OFFICES, CLASSROOMS, MEETING ROOMS, CONFERENCE ROOMS AND ALL OTHER TYPES OF ROOMS WITH THE FURNITURE SYSTEMS & MILLWORK PROVIDERS AND ARCHITECT PRIOR TO START OF ROUGH-IN. THE ELECTRICAL DRAWINGS SHALL NOT BE "SCALED" TO DETERMINE INSTALLATION LOCATION.

C. DO NOT INSTALL OUTLET BOXES BACK-TO-BACK ON OPPOSITE SIDES OF WALLS. PROVIDE SOUND DAMPENING MATERIALS (QUIET PUTTY OR EQUAL) AROUND THE BACK-SIDE OF OUTLET BOXES INSTALLED ON OPPOSITE SIDES OF WALLS (WITHIN THE SAME STUD CAVITY) AND WITHIN WALLS IDENTIFIED ON THE ARCHITECTURAL PLANS TO BE PROVIDED WITH SOUND DAMPENING MATERIALS / INSULATION. SEE ARCHITECTURAL PLANS FOR IDENTIFICATION OF ROOMS REQUIRING WALLS WITH SOUND DAMPENING MATERIALS.

D. EQUIPMENT AND WIRING DEVICE LABELING: SEE PROJECT SPECIFICATIONS FOR LABELING AND EQUIPMENT AND LOAD IDENTIFICATION REQUIREMENTS.

E. ACCESS DOOR LOCATIONS: CONTRACTORS SHALL COORDINATE ACCESS DOOR LOCATIONS WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT. IN GENERAL, IN LOCATIONS WHERE ACCESS DOORS ARE REQUIRED, THE OWNER SHALL HAVE FULL ACCESS TO THE EQUIPMENT REQUIRING ACCESS. THIS ACCESS SPACE SHALL NOT BE BLOCKED OR REDUCED IN ANY WAY BY CONDUIT, CABLING, PIPING, HVAC DUCTS, OR ANY OTHER TYPE OF INSTALLATION.

F. EQUIPMENT REQUIRING ACCESS: CONTRACTOR SHALL COORDINATE ACCESS REQUIREMENTS WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT. IN GENERAL, IN LOCATIONS WHERE EQUIPMENT WILL REQUIRE ACCESS FOR MAINTENANCE, INSPECTION, OPERATION, OR CODE REQUIRED CLEARANCE SPACES, THE OWNER SHALL HAVE ADEQUATE (AND CODE REQUIRED) ACCESS SPACE TO THE EQUIPMENT REQUIRING ACCESS. THIS ACCESS SPACE SHALL NOT BE BLOCKED OR REDUCED IN ANY WAY BY CONDUIT, CABLING, PIPING, HVAC DUCTS, OR ANY OTHER TYPE OF INSTALLATION.

G. VARIABLE FREQUENCY DRIVES: UNLESS NOTED OTHERWISE, VARIABLE FREQUENCY DRIVE TYPE MOTOR CONTROLLERS SHALL BE FURNISHED BY THE TEMPERATURE CONTROL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED POWER CIRCUITS AND CIRCUITS REQUIRED FOR INTERFACING WITH "LIFE SAFETY" (I.E. FIRE ALARM) FUNCTIONS.

H. WALL PENETRATIONS FOR LOW VOLTAGE CABLING: SLEEVES SHALL BE PROVIDED AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING PENETRATES WALLS. THESE SLEEVES SHALL BE PROVIDED BY THE CONTRACTOR INSTALLING THE LOW VOLTAGE CABLING SYSTEM. SLEEVE LOCATIONS ARE NOT SHOWN ON THE DRAWINGS. SLEEVE LOCATIONS AND QUANTITIES SHALL BE DETERMINED AND COORDINATED IN THE FIELD BY THE ASSOCIATED CONTRACTOR. ALL SLEEVES SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE. ALL SLEEVES SHALL BE BONDED TO THE GROUND BUS BAR WITHIN THE NEAREST DATA EQUIPMENT ROOM USING #10AWG COPPER CONDUCTOR.

I. SMOKE AND FIRE STOPPING: SEE PROJECT SPECIFICATIONS FOR SMOKE AND FIRE STOPPING REQUIREMENTS.

J. BUILDING EXPANSION JOINTS: CONTRACTOR SHALL USE METAL FLEXIBLE CONDUIT AT ALL LOCATIONS WHERE CONDUIT RACEWAYS CROSS BUILDING EXPANSION JOINTS. THE FLEXIBLE CONDUIT SHALL BE PROVIDED WITH ADEQUATE EXTRA LENGTH TO ACCOMMODATE THE MAXIMUM BUILDING EXPANSION ALLOWED BY THE EXPANSION JOINT.

K. SUPPORT STRUCTURES: SUPPORT STRUCTURES SHALL BE PROVIDED FOR DISTRIBUTION AND CONTROL EQUIPMENT AS REQUIRED TO PROPERLY SUPPORT THE ASSOCIATED EQUIPMENT. STRUCTURES SHALL BE SECURED TO THE FLOOR AT THE BOTTOM AND TO THE BUILDING STRUCTURE AT THE TOP.

L. SMOKE COMPARTMENTS & RATED WALLS: THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR INFORMATION ON RATED PARTITIONS & WALLS. ALL ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA 101 LIFE SAFETY CODE REQUIREMENTS FOR THROUGH PENETRATIONS AND MEMBRANE PENETRATIONS OF RATED WALLS. SEE FIRE-STOP PUTTY PAD SEALANT DETAIL, THIS SHEET, FOR EXAMPLE OF USE OF PUTTY PADS ON OUTLET BOXES INSTALLED WITHIN RATED PARTITIONS & WALLS.

M. ALL ELECTRICAL MATERIALS AND EQUIPMENT, INCLUDING CONDUCTORS, CONTROLS, AND SIGNALING DEVICES, SHALL BE INSTALLED IN COMPLIANCE WITH APPLICABLE SECTIONS OF: NFPA 70: NATIONAL ELECTRICAL CODE.

N. ALL ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION AND ALL APPLICABLE NATIONAL, COMMONWEALTH & LOCAL CODES AND REGULATIONS, INCLUDING BUT NOT LIMITED TO: THE NATIONAL ELECTRICAL CODE & THE KENTUCKY BUILDING CODE.

O. COMMISSIONING: THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH OWNER'S COMMISSIONING AGENT. THE COMMISSIONING AGENT RESPONSIBILITIES INCLUDE FUNCTIONAL TESTING OF LIGHTING AND LIGHTING CONTROLS INCLUDING INTERIOR AND EXTERIOR LIGHTING, BMS INTEGRATION, OCCUPANT SENSOR CONTROLS, SCHEDULING AND DAYLIGHT RESPONSIVE CONTROLS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING LABOR AND MATERIALS FOR FIXING ANY DEFICIENCIES FOUND DURING COMMISSIONING ACTIVITIES. REFER TO SPECIFICATION SECTION 019113 – "GENERAL COMMISSIONING REQUIREMENTS (INFORMATION ONLY)" AND SPECIFICATION SECTION 230800 – "COMMISSIONING OF HVAC PLUMBING AND ELECTRICAL (INFORMATION ONLY)" FOR COMMISSIONING SCOPE OF WORK.

LEGEND - BUILDING MANAGEMENT SYSTEM (LTG CONTROL VIA TEMP CONTROL SYS)

SYMBOL	DESCRIPTION
TC,x	OCCUPANCY SENSOR (PART OF BUILDING MANAGEMENT (TEMPERATURE CONTROL) SYSTEM. THE LETTER DESIGNATION NEXT TO THE SYMBOL (AND FOLLOWING "TC") INDICATES THE SWITCHING ZONE TO BE CONTROLLED VIA THE OCCUPANCY SENSOR. SEE THE ASSOCIATED TEMPERATURE CONTROL RELAY PANEL SCHEDULES, SHEETS E1.12 & E1.13, FOR ADDITIONAL REQUIREMENTS. (NOTE: THE OCCUPANCY SENSORS AND ALL ASSOCIATED CIRCUITS, TERMINATIONS AND SYSTEM PROGRAMMING SHALL BE FURNISHED AND INSTALLED BY THE TEMPERATURE CONTROL CONTRACTOR).

EQUIPMENT NAMING CONVENTION FOR CHRISTIAN COUNTY HIGH SCHOOL

PANELBOARD & SWITCHBOARDS

X-XXXX-X-X-X

EQUIPMENT POWER SOURCE:
- = (NO PREFIX INDICATES NORMAL POWER).
"E" = INDICATES EMERGENCY POWER.

EQUIPMENT VOLTAGE AND TYPE:
H = 480V BRANCH CIRCUIT PANEL.
L = 208V BRANCH CIRCUIT PANEL.
HD = 480V DISTRIBUTION PANEL.
LD = 208V DISTRIBUTION PANEL.
HSB = 480V DISTRIBUTION SWITCHBOARD.
LSB = 208V DISTRIBUTION SWITCHBOARD.
HMSB = 480V MAIN SERVICE DISTRIBUTION SWITCHBOARD.

LEVEL ON WHICH EQUIPMENT IS LOCATED:
1 = 1ST FLOOR
2 = 2ND FLOOR

EQUIPMENT NO.:
1, 2, 3, 4, ETC

AREA OF BUILDING EQUIPMENT IS LOCATED:
A = AREA "A".
B = AREA "B".
C = AREA "C".
D = AREA "D".
E = AREA "E".
F = AREA "F".
G = AREA "G".
H = AREA "H".
J = AREA "J".
K = AREA "K".

TRANSFORMERS

X-X-X-X-X

EQUIPMENT POWER SOURCE:
- = (NO PREFIX INDICATES NORMAL POWER).
"E" = INDICATES EMERGENCY POWER.

EQUIPMENT TYPE:
X = TRANSFORMER

LEVEL ON WHICH EQUIPMENT IS LOCATED:
1 = 1ST FLOOR
2 = 2ND FLOOR

EQUIPMENT NO.:
1, 2, 3, 4, ETC

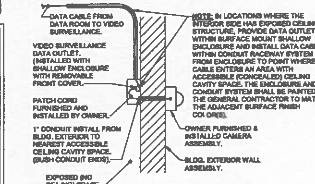
AREA OF BUILDING EQUIPMENT IS LOCATED:
A = AREA "A".
B = AREA "B".
C = AREA "C".
D = AREA "D".
E = AREA "E".
F = AREA "F".
G = AREA "G".
H = AREA "H".
J = AREA "J".
K = AREA "K".

CIRCUIT BREAKER, DISC SWITCH & MOTOR STARTERS

XX-XXXXXX

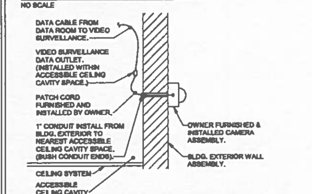
EQUIPMENT TYPE:
CB = CIRCUIT BREAKER.
DS = DISCONNECT SWITCH (FUSIBLE OR NON-FUSIBLE)
CS = COMBINATION DISC. SWITCH / STARTER (MOTOR CONTROLLER)
VFD = VARIABLE FREQUENCY DRIVE

LOAD FED IDENTIFICATION:
(I.E. TRANSFORMER ID, PANEL ID, LOAD ID, ETC.)



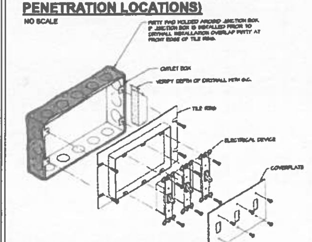
DETAIL - TYPICAL EXTERIOR CAMERA LOCATION (EXPOSED CONDUIT PENETRATION LOCATIONS)

NO SCALE



DETAIL - TYPICAL EXTERIOR CAMERA LOCATION (CONCEALED CONDUIT PENETRATION LOCATIONS)

NO SCALE



NOTE: PUTTY PADS SHALL BE PROVIDED FOR BOXES INSTALLED WITHIN FIRE RATED WALLS AND SMOKE WALLS WITH A TIME RATING.

FIRE-STOP PUTTY PAD SEALANT DETAIL

NO SCALE

CABLETRAY ASSEMBLY SCHEDULE

TYPE	DESCRIPTION	ACCEPTABLE MANUFACTURERS	REMARKS
CT6	6"(W) x 4"(D) WIRE BASKET TYPE CABLETRAY SYSTEM RATED FOR USE WITH LOW VOLTAGE CATEGORY 6 DATA CABLES.	1. LEGRAND / CABLOFIL. 2. EATON FLEXTRAY. 3. HUBBELL WIRE BASKET. 4. B-LINE WIRE BASKET	1. PROVIDE #6 BARE COPPER GROUND BONDING CONDUCTOR IN CABLETRAY THE ENTIRE LENGTH OF CABLETRAY. BOND TO CABLETRAY USING UL LISTED BONDING METHOD. 2. PROVIDE CABLETRAY SUPPORT SYSTEM CAPABLE OF SUPPORTING THE CABLETRAY WITH A MINIMUM LOADING OF: 2A. TYPE "CT-6": 16LBS PER LINEAR FT OF CABLETRAY. 2B. TYPE "CT-12": 20LBS PER LINEAR FT OF CABLETRAY. 2C. TYPE "CT-18": 25LBS PER LINEAR FT OF CABLETRAY. 2D. TYPE "CT-24": 30LBS PER LINEAR FT OF CABLETRAY. 3. PROVIDE CABLETRAY WITH ALL ACCESSORIES AND SUPPLEMENTAL STEEL / ASSEMBLIES AS REQUIRED TO SEISMICALLY SECURE THE CABLETRAY TO THE BUILDING STRUCTURAL ASSEMBLIES. 4. THE CABLETRAY ASSEMBLY SHALL ONLY BE USED FOR ROUTING OF LOW VOLTAGE DATA NETWORK SYSTEM CABLES. 5. LOW VOLTAGE CABLES (INCLUDING LOW VOLTAGE DATA CABLES) FOR OTHER NON-DATA NETWORK SYSTEMS SHALL NOT BE INSTALLED WITHIN THE CABLETRAY SYSTEM. 6. PROVIDE CABLE DROP-OUT ACCESSORIES AT ALL LOCATIONS WHERE CABLES ENTER AND LEAVE THE CABLE TRAY SYSTEM. 7. PROVIDE ALL REQUIRED BENDS (HORIZONTAL & VERTICAL BENDS) IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS FOR ALL TRADES INVOLVED ON THIS PROJECT. 8. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE CABLETRAY INSTALLATION AND ROUTING REQUIREMENTS IN THE FIELD WITH ALL OTHER CONTRACTORS INVOLVED ON THIS PROJECT. 9. ALL SECTIONS OF CABLETRAY SYSTEMS SHALL BE BONDED TOGETHER AND TO THE GROUND BUS BAR SYSTEMS INSTALLED WITHIN EACH DATA ROOM. 10. METALLIC SLEEVES INSTALLED THRU WALLS (FOR CONTINUATION OF ROUTING OF CABLES FROM CABLETRAY SYSTEM TO CABLETRAY SYSTEM) SHALL BE BONDED TO THE #6AWG COPPER GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY SYSTEMS USING #10AWG COPPER CONDUCTOR.
CT12	12"(W) x 4"(D) WIRE BASKET TYPE CABLETRAY SYSTEM RATED FOR USE WITH LOW VOLTAGE CATEGORY 6 DATA CABLES.		
CT18	18"(W) x 4"(D) WIRE BASKET TYPE CABLETRAY SYSTEM RATED FOR USE WITH LOW VOLTAGE CATEGORY 6 DATA CABLES.		
CT24	24"(W) x 4"(D) WIRE BASKET TYPE CABLETRAY SYSTEM RATED FOR USE WITH LOW VOLTAGE CATEGORY 6 DATA CABLES.		

MULTI-FUNCTION FLOORBOX/POKE-THRU ASSEMBLY SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	SERIES	COVER ASSEMBLY	REMARKS
1A	RECESSED, MULTI-SERVICE, FLOOR BOX FOR POWER AND COMMUNICATION APPLICATIONS, DESIGNED FOR USE IN SLAB ON GRADE APPLICATIONS. HEAVY DUTY COVER ASSEMBLY WITH POWER AND DATA SERVICES FOR CORD & PLUG & PATCH CORD FEEDS TO EQUIPMENT. SIX COMPARTMENTS.	LEGRAND / WIREMOLD	RFB6-OG	FLANGED DIE-CAST ALUMINUM COVER ASSEMBLY DESIGNED FOR USE IN TILE OR CARPET INSTALLATION. FINISH COLOR SHALL BE SELECTED DURING SUBMITTAL REVIEW PROCESS.	1. INSTALLED COVER ASSEMBLY SHALL BE FLUSH WITH THE FINISHED FLOOR. 2. COVER SHALL COMPLY WITH UL514A. 3. PROVIDE FLOOR BOX ASSEMBLY WITH ALL ACCESSORIES AS REQUIRED TO HOUSE AND MOUNT ALL SERVICES INDICATED AND NOTED. 4. PROVIDE FLOOR BOXES WITH BLANK DEVICE PLATES ON ALL UNUSED OPENINGS WITHIN THE FLOOR BOX. 5. COORDINATE INSTALLATION LOCATION WITH ARCHITECT AND THE OWNER'S FURNITURE SYSTEM PROVIDER PRIOR TO ROUGH-IN. 6. PROVIDE THREE 1-1/4" CONDUITS (FOR LOW VOLTAGE COMMUNICATIONS) FROM LOW VOLTAGE COMPARTMENT TO NEAREST ACCESSIBLE CEILING CAVITY SPACE ON THE ASSOCIATED FLOOR. BUSH CONDUIT ENDS. PROVIDE PULL STRINGS IN ALL CONDUITS. 7. PROVIDE TWO 3/4" CONDUITS TO FLOOR BOX FOR POWER FEEDS. PROVIDE PULL STRING IN CONDUITS LEFT AS SPARE AND NOT USED ON THIS PROJECT. 8. UNLESS NOTED OTHERWISE, PROVIDE EACH FLOOR BOX ASSEMBLY WITH A MINIMUM QUANTITY OF THREE NEMA 5-20R GFI TYPE DUPLEX RECEPTACLES. PROVIDE POWER FEED TO RECEPTACLES FROM PANEL(S) AND BRANCH CIRCUIT(S) AS INDICATED ON THE POWER PLANS. 9. UNLESS NOTED OTHERWISE, PROVIDE EACH FLOOR BOX ASSEMBLY WITH A MINIMUM QUANTITY OF SIX DATA JACK / CABLES.
1B	RECESSED, MULTI-SERVICE, FLOOR BOX FOR POWER AND COMMUNICATION APPLICATIONS. DESIGNED FOR USE IN SLAB ON GRADE APPLICATIONS. HEAVY DUTY COVER ASSEMBLY WITH ONE 1" TRADE SIZE SCREW PLUG FOR POWER FEED AND ONE COMBINATION 1-1/4" AND 2" TRADE SIZE SCREW PLUG FOR COMMUNICATIONS TYPE CABLING FEED TO FURNITURE SYSTEM POWER AND COMMUNICATIONS CABLING RACEWAYS. FOUR COMPARTMENTS.	LEGRAND / WIREMOLD	RFB4	FLANGED DIE-CAST ALUMINUM COVER ASSEMBLY DESIGNED FOR USE IN TILE OR CARPET INSTALLATION. FINISH COLOR SHALL BE SELECTED DURING SUBMITTAL REVIEW PROCESS.	1. INSTALLED COVER ASSEMBLY SHALL BE FLUSH WITH THE FINISHED FLOOR. 2. COVER SHALL COMPLY WITH UL514A. 3. PROVIDE FLOOR BOX ASSEMBLY WITH ALL ACCESSORIES AS REQUIRED TO HOUSE AND MOUNT ALL SERVICES INDICATED AND NOTED. 4. PROVIDE FLOOR BOXES WITH BLANK DEVICE PLATES ON ALL UNUSED OPENINGS WITHIN THE FLOOR BOX. 5. COORDINATE INSTALLATION LOCATION WITH ARCHITECT AND THE OWNER'S FURNITURE SYSTEM PROVIDER PRIOR TO ROUGH-IN. 6. PROVIDE TWO 1-1/4" CONDUITS (FOR LOW VOLTAGE COMMUNICATIONS) FROM LOW VOLTAGE COMPARTMENT TO NEAREST ACCESSIBLE CEILING CAVITY SPACE ON THE ASSOCIATED FLOOR. BUSH CONDUIT ENDS. PROVIDE PULL STRINGS IN ALL CONDUITS. 7. PROVIDE ONE 1" CONDUIT TO FLOOR BOX FOR POWER FEED.
1C	RECESSED, MULTI-SERVICE, FLOOR BOX ASSEMBLY WITH LIFT-OFF FULL ACCESS DOOR FOR POWER AND COMMUNICATION APPLICATIONS. DESIGNED FOR USE IN SLAB ON GRADE APPLICATIONS AND WITHIN GYMNASIUM WOOD FLOOR LOCATIONS. HEAVY DUTY COVER ASSEMBLY WITH POWER AND DATA SERVICES FOR CORD & PLUG & PATCH CORD FEEDS TO EQUIPMENT. 10"(L) x 12"(W) x 6"(D) BOX.	FSR METAL PRODUCTS GROUP	FSR-600P-6-6 BOX WITH FL-600P-PPSLV COVER	TOP OF COVER SHALL BE FLUSH WITH THE TOP OF THE FINISHED WOOD FLOORING SYSTEM.	1. THE TOP OF THE INSTALLED COVER ASSEMBLY SHALL BE FLUSH WITH THE FINISHED FLOOR. 2. COVER SHALL COMPLY WITH UL514A. 3. PROVIDE FLOOR BOX ASSEMBLY WITH ALL ACCESSORIES AS REQUIRED TO HOUSE AND MOUNT ALL SERVICES INDICATED AND NOTED. 4. PROVIDE FLOOR BOXES WITH BLANK DEVICE PLATES ON ALL UNUSED OPENINGS WITHIN THE FLOOR BOX. 5. COORDINATE INSTALLATION LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN. 6. PROVIDE TWO 1-1/4" CONDUITS (FOR LOW VOLTAGE COMMUNICATIONS) FROM LOW VOLTAGE COMPARTMENT TO NEAREST ACCESSIBLE CEILING CAVITY SPACE ON THE ASSOCIATED FLOOR. BUSH CONDUIT ENDS. PROVIDE PULL STRINGS IN ALL CONDUITS. 7. PROVIDE ONE 1" CONDUIT TO FLOOR BOX FOR POWER FEED. 8. PROVIDE WITH SIX GFI TYPE DUPLEX RECEPTACLES. PROVIDE POWER FEED TO RECEPTACLES FROM PANEL AND BRANCH CIRCUITS AS INDICATED ON THE POWER PLANS. 9. PROVIDE FLOOR BOX ASSEMBLY WITH A MINIMUM QUANTITY OF FOUR DATA JACK / CABLES. 10. PROVIDE 1-1/4" CONDUIT RACEWAY SYSTEM FROM FLOOR BOX (BELOW GRADE) AND VERTICALLY UP WALL (WITHIN WALL). PROVIDE PULLBOX IN WALL IN ACCESSIBLE LOCATION. PROVIDE 1" CONDUIT RACEWAYS FROM PULL BOX IN WALL TO MAIN SCOREBOARD (CENTERED IN GYM) AND FROM PULLBOX TO EACH OF THE PLAYER'S SCOREBOARD LOCATIONS. PROVIDE CABLING AS REQUIRED BETWEEN FLOORBOX LOCATION AND EACH OF THE SCOREBOARD LOCATIONS PER THE SCOREBOARD SYSTEM MANUFACTURER'S REQUIREMENTS.
2A	LARGE CAPACITY, MULTI-SERVICE, FIRE RATED POKE-THRU DEVICE FOR POWER AND COMMUNICATION APPLICATIONS. HEAVY DUTY COVER ASSEMBLY WITH POWER AND DATA SERVICES FOR CORD & PLUG & PATCH CORD FEEDS TO EQUIPMENT.	LEGRAND / WIREMOLD	8" EVOLUTION SERIES	HEAVY DUTY COVER ASSEMBLY. FINISH COLOR SHALL BE SELECTED DURING SUBMITTAL REVIEW PROCESS.	1. INSTALLED COVER ASSEMBLY SHALL BE FLUSH WITH THE FINISHED FLOOR. 2. COVER SHALL COMPLY WITH UL514A. 3. PROVIDE POKE-THRU ASSEMBLY WITH ALL ACCESSORIES AS REQUIRED TO HOUSE AND MOUNT ALL SERVICES INDICATED AND NOTED. 4. COORDINATE INSTALLATION LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN. 5. PROVIDE WITH THREE NEMA 5-20R DUPLEX GFI RECEPTACLES, UNLESS NOTED OTHERWISE. 6. PROVIDE WITH SIX DATA JACKS / CABLES, UNLESS NOTED OTHERWISE.
2B	4" FURNITURE FEED POKE-THRU DEVICE FOR POWER AND COMMUNICATION APPLICATIONS. HEAVY DUTY COVER ASSEMBLY WITH ONE 3/4" TRADE SIZE SCREW PLUG FOR POWER FEED AND ONE 1-1/2" TRADE SIZE SCREW PLUG FOR COMMUNICATIONS TYPE CABLING FEED TO FURNITURE SYSTEM POWER AND COMMUNICATIONS CABLING RACEWAYS.	LEGRAND / WIREMOLD	4FFATC15 SERIES	HEAVY DUTY COVER ASSEMBLY. FINISH COLOR SHALL BE SELECTED DURING SUBMITTAL REVIEW PROCESS.	1. INSTALLED COVER ASSEMBLY SHALL BE FLUSH WITH THE FINISHED FLOOR. 2. COVER SHALL COMPLY WITH UL514A. 3. PROVIDE FLOOR BOX ASSEMBLY WITH ALL ACCESSORIES AS REQUIRED TO HOUSE AND MOUNT ALL SERVICES INDICATED AND NOTED. 4. COORDINATE INSTALLATION LOCATION WITH ARCHITECT AND THE OWNER'S FURNITURE SYSTEM PROVIDER PRIOR TO ROUGH-IN.

HOPKINSVILLE - CHRISTIAN COUNTY ACADEMY

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Revisions:

Designed By: MJB | Drawn By: SOB | Checked By: MJB

Sheet title: ELECTRICAL LEGEND

Architect's Project No.: 2106-204 | Date: May, 20

Drawing No.: E1.1

NOTES (FIRST FLOOR POWER PLAN - AREA "A") [CONT]:

A1. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFI TYPE CIRCUIT BREAKER) FOR REFRIGERATOR.

A2. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

A3. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFI TYPE CIRCUIT BREAKER) FOR REFRIGERATOR. PROVIDE CIRCUIT TO REFRIGERATOR FROM PANEL "L11A" CIRCUIT NO. 28 USING 2#12, 1#12G, IN 3/4"C.

A4. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFI TYPE CIRCUIT BREAKER) FOR REFRIGERATOR. PROVIDE CIRCUIT TO REFRIGERATOR FROM PANEL "L11A" CIRCUIT NO. 27 USING 2#12, 1#12G, IN 3/4"C.

A5. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR MICROWAVE. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION LOCATION FOR THE MICROWAVE UNIT. PROVIDE CIRCUIT TO MICROWAVE FROM PANEL "L11A" CIRCUIT NO. 18 USING 2#12, 1#12G, IN 3/4"C.

A6. JUNCTION BOX AND BRANCH CIRCUIT FOR RANGE. PROVIDE FINAL CIRCUIT TO RANGE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE RANGE. PROVIDE CIRCUIT TO RANGE FROM PANEL "L11A" CIRCUIT NO. 20 USING 2#8, 1#8N, 1#10G, 3/4"C.

A7. JUNCTION BOX FOR POWER CIRCUIT TO RANGE HOOD. PROVIDE FINAL CIRCUIT TO RANGE HOOD PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

A8. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR DISH WASHING MACHINE. PROVIDE FINAL CIRCUIT TO DISH WASHING MACHINE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE CIRCUIT TO DISHWASHING MACHINE FROM PANEL "L11A" CIRCUIT NO. 14 USING 2#12, 1#12G, 3/4"C.

A9. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CLOTHES WASHING MACHINE. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE WASHING MACHINE. CORD AND PLUG SHALL BE ACCESSIBLE WITH THE WASHING MACHINE PLACED IN IT'S FINAL INSTALLATION LOCATION.

A10. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR MICROWAVE. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION LOCATION FOR THE MICROWAVE UNIT. PROVIDE CIRCUIT TO MICROWAVE FROM PANEL "L11A" CIRCUIT NO. 33 USING 2#12, 1#12G, IN 3/4"C.

A11. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR POWER TO ELECTRIC WATER COOLER.

A12. SEE AREA "A" CANOPY ELECTRICAL PLAN, SHEET E7.2, FOR ADDITIONAL REQUIREMENTS WITHIN THIS CANOPY AREA.

A13. RECEPTACLE AND BRANCH CIRCUIT FOR LARGE VIDEO MONITOR. COORDINATE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

3 A14. NOTE NOT USED.

NOTES (FIRST FLOOR POWER PLAN - AREA "A") [CONT]:

A15. PROVIDE JUNCTION BOX BELOW SINK AND 1HP RATED TOGGLE SWITCH FOR CONTROL OF FOOD WASTE DISPOSAL UNIT. MOUNT SWITCH 6 INCHES ABOVE COUNTER OR COUNTER BACKSPLASH TO BOTTOM. VERIFY EXACT MOUNTING LOCATION WITH ARCHITECT PRIOR TO START OF ROUGH-IN. PROVIDE FINAL CONNECTION TO DISPOSAL UNIT WITH FLEXIBLE CONDUIT. SWITCH SHALL BE LOCATED ON THE SAME SIDE OF THE SINK WHICH HOUSES THE DISPOSAL. (NOTE: IN THE EVENT THE DISPOSAL DOES NOT REQUIRE A DIRECT CONNECTION AND/OR A TOGGLE SWITCH, PROVIDE A GFI RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT TO SERVE THE FOOD WASTE DISPOSAL FROM PANEL "L11A" CIRCUIT NO. 37 USING 2#12, 1#12G, IN 3/4"C. COORDINATE WITH MECHANICAL CONTRACTOR FOR ADDITIONAL REQUIREMENTS.)

A16. RECEPTACLE FOR POWER TO AUDIO/VIDEO CONTROL CABINET. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE AUDIO/VIDEO CONTROL CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

A17. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A NORMAL POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:

RACK #1: L14A-2,4,6,8
RACK #2: L14A-10,12,14,16
RACK #3: L14A-18,20,22,24

A18. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A EMERGENCY POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:

RACK #1: EL11A-2,4,6,8
RACK #2: EL11A-10,12,14,16
RACK #3: EL11A-18,20,22,24

A19. COORDINATE THE INSTALLATION LOCATIONS & MOUNTING HEIGHTS WITHIN THE EQUIPMENT RACK WITH ALL INSTALLATION WITHIN THE RACK. ACCESS TO THE RECEPTACLES SHALL NOT BE BLOCKED BY EQUIPMENT INSTALLATION. INSTALLATION LOCATIONS SHALL NOT PREVENT THE OWNER FROM INSTALLING EQUIPMENT WITHIN THE RACK.

A20. JUNCTION BOX(S) AND DEDICATED NEC 700 EMERGENCY POWER BRANCH CIRCUIT FOR POWER TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT. PROVIDE ALL REQUIRED POWER CIRCUITS AND CONNECT TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT PER THE FIRE ALARM SYSTEM MANUFACTURER'S REQUIREMENTS. COORDINATE THE REQUIRED INSTALLATION LOCATIONS WITH THE INSTALLATION REQUIREMENTS FOR THE FIRE ALARM SYSTEM. PROVIDE CIRCUIT TO FIRE ALARM SYSTEM PANELS FROM PANEL "EL11A", BRANCH CIRCUIT NO. 1.

3 A21. NOTE NOT USED.

3 A22. NOTE NOT USED.

A23. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR HVAC UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO HVAC UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

NOTES (FIRST FLOOR POWER PLAN - AREA "A") [CONT]:

A24. PROVIDE JUNCTION BOX BELOW SINK AND 1HP RATED TOGGLE SWITCH FOR CONTROL OF FOOD WASTE DISPOSAL UNIT. MOUNT SWITCH 6 INCHES ABOVE COUNTER OR COUNTER BACKSPLASH TO BOTTOM. VERIFY EXACT MOUNTING LOCATION WITH ARCHITECT PRIOR TO START OF ROUGH-IN. PROVIDE FINAL CONNECTION TO DISPOSAL UNIT WITH FLEXIBLE CONDUIT. SWITCH SHALL BE LOCATED ON THE SAME SIDE OF THE SINK WHICH HOUSES THE DISPOSAL. (NOTE: IN THE EVENT THE DISPOSAL DOES NOT REQUIRE A DIRECT CONNECTION AND/OR A TOGGLE SWITCH, PROVIDE A GFI RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT TO SERVE THE FOOD WASTE DISPOSAL FROM PANEL "L11A" CIRCUIT NO. 16 USING 2#12, 1#12G, IN 3/4"C. COORDINATE WITH MECHANICAL CONTRACTOR FOR ADDITIONAL REQUIREMENTS.)

A25. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR DISH WASHING MACHINE. PROVIDE FINAL CIRCUIT TO DISH WASHING MACHINE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE CIRCUIT TO DISHWASHING MACHINE FROM PANEL "L11A" CIRCUIT NO. 36 USING 2#12, 1#12G, 3/4"C.

A26. PROVIDE #10AWG CONDUCTORS FOR ALL "PHASE", "NEUTRAL" AND EQUIPMENT GROUND CONDUCTORS FOR ENTIRE LENGTH OF BRANCH CIRCUIT.

3 A27. NOTE NOT USED.

3 A28. NOTE NOT USED.

A29. PROVIDE 30A/1 FUSIBLE SAFETY DISCONNECT MEANS WITHIN ACCESSIBLE CEILING CAVITY SPACE NEAR COILING SECURITY GRILL CONTROLLER PROVIDE FUSING AND FINAL CIRCUIT TO CONTROLLER PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND CIRCUIT NO. AS INDICATED USING 2#10, 1#10G IN 3/4"C. PROVIDE ALL CIRCUITS REQUIRED BETWEEN THE CONTROLLER AND REMOTE CONTROL DEVICES PER EQUIPMENT MANUFACTURER'S REQUIREMENTS.

A30. INSTALL POWER OUTLET HIGH ON WALL APPROXIMATELY 18 INCHES BELOW CEILING TO TOP OF OUTLET BOX (FOR FUTURE VIDEO DISPLAY MONITORS).

A31. JUNCTION BOX AND BRANCH CIRCUIT FOR RANGE. PROVIDE FINAL CIRCUIT TO RANGE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE RANGE. PROVIDE CIRCUIT TO RANGE FROM PANEL "L11A" CIRCUIT NO. 29 USING 2#8, 1#8N, 1#10G, 3/4"C.

A32. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CLOTHES DRYER MACHINE. PROVIDE BRANCH CIRCUIT FROM PANEL "L11A" CIRCUIT NO. 43 USING 2#10, 1#10N, 1#10G, IN 3/4"C.

A33. PROVIDE NEMA 14-30R RECEPTACLE. PROVIDE MATCHING CORD & PLUG (6FT MINIMUM LENGTH) AND INSTALL ON THE DRYER MACHINE. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE DRYER MACHINE. CORD AND PLUG SHALL BE ACCESSIBLE WITH THE DRYER MACHINE PLACED IN IT'S FINAL INSTALLATION LOCATION.

A34. GROUND BUS BAR ON INSULATED STAND-OFF DEVICES. SEE GROUNDING SYSTEM RISER DIAGRAM, SHEET E1.14, FOR ADDITIONAL REQUIREMENTS.

A35. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFI TYPE CIRCUIT BREAKER) FOR ICE MACHINE.

A36. PROVIDE HP RATED TOGGLE SAFETY DISCONNECT SWITCH (WITH LOCK-OUT/TAG-OUT ACCESSORY) NEAR BOOSTER FAN FOR POWER TO DRYER BOOSTER FAN. PROVIDE POWER CIRCUIT TO BOOSTER FAN PER MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4" C. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE DRYER BOOSTER FAN PROVIDER PRIOR TO ROUGH-IN

NOTES (FIRST FLOOR POWER PLAN - AREA "A") [CONT]:

A37. MOTORIZED SHADE SYSTEM CONTROLLER. PROVIDE DEDICATED 120V, 20A POWER CIRCUIT TO CONTROLLER FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED. PROVIDE ALL REQUIRED POWER AND CONTROL CIRCUITS TO MOTORIZED SHADES PER THE MOTORIZED SHADE SYSTEM PROVIDER'S REQUIREMENTS AND APPROVED SUBMITTAL DRAWINGS. COORDINATE INSTALLATION LOCATION FOR CONTROL PANEL WITH ARCHITECT AND SHADE SYSTEM PROVIDER PRIOR TO START OF ROUGH-IN. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS REGARDING MOTORIZED SHADE SYSTEM.

A38. PROVIDE RECEPTACLE HIGH ON WALL BEHIND VIDEO MONITOR FOR TICKETS. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE MOUNTING REQUIREMENTS FOR THE VIDEO MONITOR. INSTALL WHERE OUTLET IS HIDDEN BEHIND THE MONITOR WHILE STILL BEING ACCESSIBLE.

A39. PROVIDE RECEPTACLE HIGH ON WALL BEHIND VIDEO MONITOR FOR CONCESSIONS. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE MOUNTING REQUIREMENTS FOR THE VIDEO MONITOR. INSTALL WHERE OUTLET IS HIDDEN BEHIND THE MONITOR WHILE STILL BEING ACCESSIBLE.

A40. PROVIDE SUPPORT STRUCTURE AS REQUIRED FOR SUPPORT OF DISTRIBUTION EQUIPMENT. SECURE STRUCTURE TO THE FLOOR AT THE BOTTOM AND TO THE BUILDING STRUCTURE AT THE TOP.

A41. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR BRANCH SELECTOR UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO BRANCH SELECTOR UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

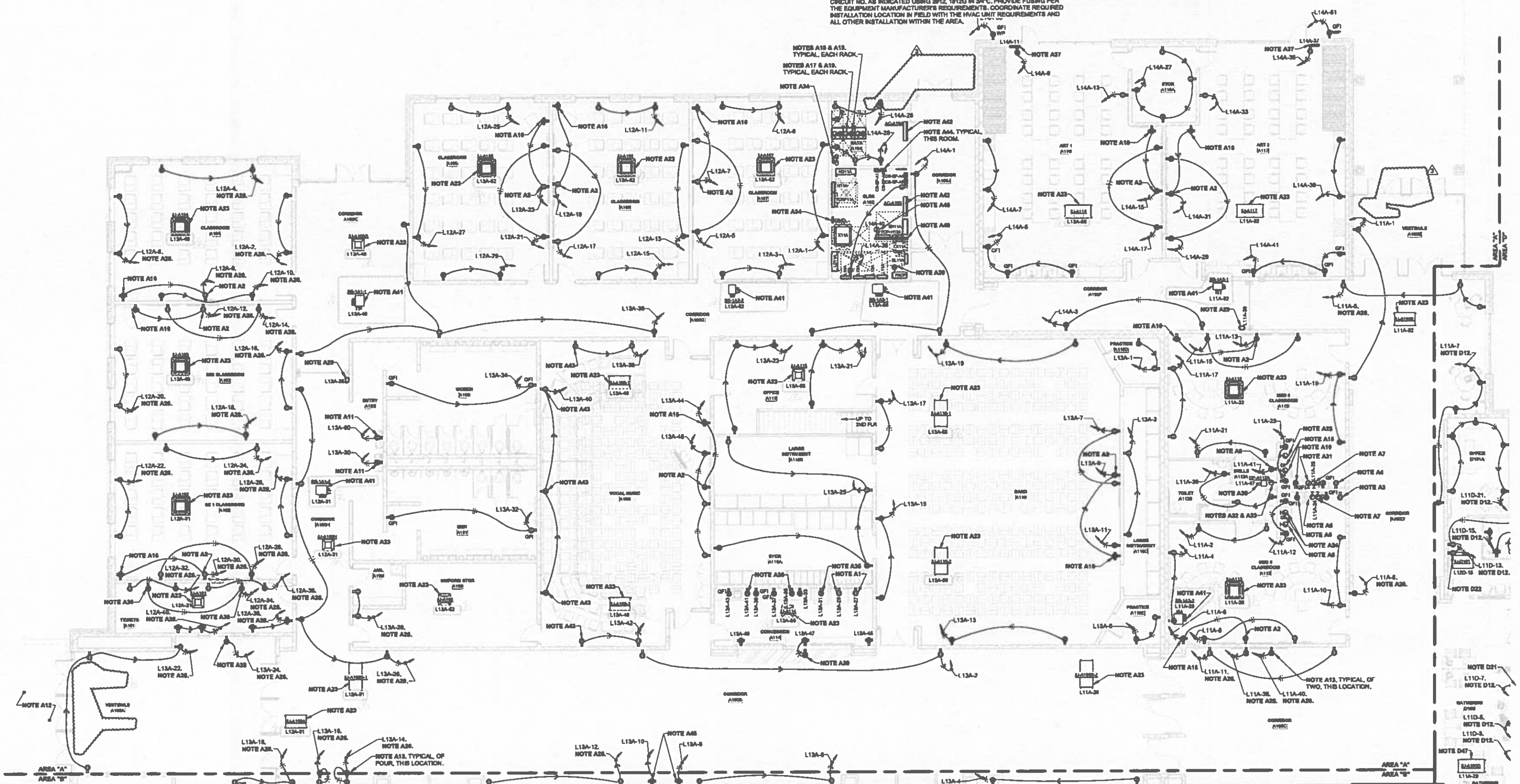
A42. PROVIDE SAFETY DISCONNECT MEANS NEAR THE INDOOR UNIT. PROVIDE ALL REQUIRED POWER, CONTROL, & COMMUNICATION CIRCUITS BETWEEN THE INDOOR UNIT AND THE ASSOCIATED OUTDOOR CONDENSING UNIT PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

A43. INSTALL OUTLET AT APPROXIMATELY 18" ABOVE THE TOP OF THE HIGHEST RISER (TO BOTTOM OF OUTLET BOX) AT THIS LOCATION.

A44. COMBINATION MOTOR CONTROLLER FOR LOAD AS INDICATED. SEE ROOF ELECTRICAL PLAN - AREA "A", SHEET E2.3A, FOR ADDITIONAL REQUIREMENTS.

A45. RECEPTACLE FOR POWER TO FUTURE HALL OF FAME 75" PANEL SYSTEM EQUIPMENT. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE OWNER & ARCHITECT PRIOR TO START OF ROUGH-IN.

A46. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR TEMPERATURE CONTROL PANEL. PROVIDE FINAL CIRCUIT TO T.C. PANEL PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C.



POWER PLAN - FIRST FLOOR - AREA "A"
1/8" = 1'-0"

1/8"=1'-0"

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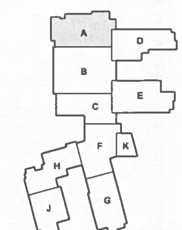


KEYPLAN

Revisions:

#	Description	Date
1	PR-001	10/13/2023
2	ASI-008 VRF Coordination	12/18/2023
3	Access Control System Mods	4/19/2024

Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:

POWER PLAN - FIRST FLOOR - AREA "A"

Architect's Project No: 2106-204

Date: May, 20

Drawing No.: E2.1A

NOTES (FIRST FLOOR POWER PLAN - AREA "B"):

B1. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR REFRIGERATOR. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED.

B2. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

B3. PROVIDE JUNCTION BOX BELOW SINK AND 1HP RATED TOGGLE SWITCH FOR CONTROL OF FOOD WASTE DISPOSAL UNIT. MOUNT SWITCH 6 INCHES ABOVE COUNTER OR COUNTER BACKSPLASH TO BOTTOM. VERIFY EXACT MOUNTING LOCATION WITH ARCHITECT PRIOR TO START OF ROUGH-IN. PROVIDE FINAL CONNECTION TO DISPOSAL UNIT WITH FLEXIBLE CONDUIT. SWITCH SHALL BE LOCATED ON THE SAME SIDE OF THE SINK WHICH HOUSES THE DISPOSAL. (NOTE: IN THE EVENT THE DISPOSAL DOES NOT REQUIRE A DIRECT CONNECTION AND/OR A TOGGLE SWITCH, PROVIDE A GFI RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT TO SERVE THE FOOD WASTE DISPOSAL FROM PANEL "L11C" CIRCUIT NO. 27 USING 2#10, 1#10G, 3/4"C. COORDINATE WITH MECHANICAL CONTRACTOR FOR ADDITIONAL REQUIREMENTS.)

B4. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR ICE MAKER. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED.

B5. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR MICROWAVE. PROVIDE CIRCUIT TO MICROWAVE FROM PANEL "L12C" CIRCUIT NO. 18 USING 2 #12, 1#12G, 3/4"C.

B6. JUNCTION BOX AND BRANCH CIRCUIT FOR RANGE. PROVIDE FINAL CIRCUIT TO RANGE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE RANGE. PROVIDE CIRCUIT TO RANGE FROM PANEL "L12C" CIRCUIT NO. 20 USING 2#6, 1#6N, 1#10G, 3/4"C.

NOTES (FIRST FLOOR POWER PLAN - AREA "B") [CONT]:

B7. JUNCTION BOX FOR POWER TO RANGE HOOD. PROVIDE FINAL CIRCUIT TO RANGE HOOD PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

B8. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR DISH WASHING MACHINE. PROVIDE FINAL CIRCUIT TO DISH WASHING MACHINE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE CIRCUIT TO RANGE FROM PANEL "L12C" CIRCUIT NO. 14 USING 2#12, 1#12G, IN 3/4"C.

B9. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CLOTHES DRYER MACHINE. PROVIDE BRANCH CIRCUIT FROM PANEL "L12C" CIRCUIT NO. 32 USING 2#10, 1#10N, 1#10G, IN 3/4"C.

B10. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CLOTHES WASHING MACHINE. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE WASHING MACHINE. CORD AND PLUG SHALL BE ACCESSIBLE WITH THE WASHING MACHINE PLACED IN IT'S FINAL INSTALLATION LOCATION. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C.

B11. RECEPTACLE FOR POWER TO AUDIO/VIDEO CONTROL CABINET. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE AUDIO/VIDEO CONTROL CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

B12. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A NORMAL POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:
RACK #1: L12C-17,19,21,23
RACK #2: L12C-25,27,29,31
RACK #3: L12C-33,35,37,39

NOTES (FIRST FLOOR POWER PLAN - AREA "B") [CONT]:

B13. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A EMERGENCY POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:
RACK #1: EL11C-2,4,6,8
RACK #2: EL11C-10,12,14,16
RACK #3: EL11C-18,20,22,24

B14. COORDINATE THE INSTALLATION LOCATIONS & MOUNTING HEIGHTS WITHIN THE EQUIPMENT RACK WITH ALL INSTALLATION WITHIN THE RACK. ACCESS TO THE RECEPTACLES SHALL NOT BE BLOCKED BY EQUIPMENT INSTALLATION. INSTALLATION LOCATIONS SHALL NOT PREVENT THE OWNER FROM INSTALLING EQUIPMENT WITHIN THE RACK.

B15. JUNCTION BOX AND DEDICATED EMERGENCY NEC702 BRANCH CIRCUIT FOR TEMPERATURE CONTROL PANEL. PROVIDE FINAL CIRCUIT TO T.C. PANEL PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C.

B16. JUNCTION BOX(S) AND DEDICATED NEC 700 EMERGENCY POWER BRANCH CIRCUIT FOR POWER TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT. PROVIDE ALL REQUIRED POWER CIRCUITS AND CONNECT TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT PER THE FIRE ALARM SYSTEM MANUFACTURER'S REQUIREMENTS. COORDINATE THE REQUIRED INSTALLATION LOCATIONS WITH THE INSTALLATION REQUIREMENTS FOR THE FIRE ALARM SYSTEM. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C.

B17. NOTE NOT USED.

NOTES (FIRST FLOOR POWER PLAN - AREA "B") [CONT]:

B18. PROVIDE TRANSFORMER WITH ALL REQUIRED ACCESSORIES (AND PROVIDE SUPPLEMENTAL STEEL SUPPORT SYSTEM) AS REQUIRED TO INSTALL TRANSFORMER ABOVE THE FINISHED FLOOR AND SEISMICALLY SUPPORT/BRACE THE TRANSFORMER FROM THE BUILDING STRUCTURAL SYSTEM. INSTALL SUCH THAT THE BOTTOM OF THE TRANSFORMER / SEISMIC SUPPORT SYSTEM IS NOT LOWER THAN 8'-0" ABOVE FINISHED FLOOR. INSTALL THE PRIMARY DISCONNECT MEANS AND THE SECONDARY OVERCURRENT PROTECTION DEVICE ON WALL BELOW THE TRANSFORMER (TO MAXIMIZE MOUNTING SPACE FOR DISTRIBUTION EQUIPMENT WITHIN THE ASSOCIATED ELECTRICAL ROOM).

B19. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A NORMAL POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:
RACK #1: L13C-12,14,16,18
RACK #2: L13C-20,22,24,26
RACK #3: L13C-28,30,32,34
RACK #4: L13C-36,38,40,42
RACK #5: L13C-44,46,48,50

B20. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A EMERGENCY POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:
RACK #1: EL11C-1,3,5,7
RACK #2: EL11C-9,11,13,15
RACK #3: EL11C-17,19,21,23
RACK #4: EL11C-25,27,29,31
RACK #5: EL11C-33,35,37,39

B21. NOTE NOT USED.

B22. NOTE NOT USED.

NOTES (FIRST FLOOR POWER PLAN - AREA "B") [CONT]:

B23. NOTE NOT USED.

B24. NOTE NOT USED.

B25. NOTE NOT USED.

B26. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR MICROWAVE. PROVIDE CIRCUIT TO MICROWAVE FROM PANEL "L11C" CIRCUIT NO. 28 USING 2#10, 1#10G, 3/4"C.

B27. JUNCTION BOX AND BRANCH CIRCUIT FOR RANGE. PROVIDE FINAL CIRCUIT TO RANGE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE RANGE. PROVIDE CIRCUIT TO RANGE FROM PANEL "L12C" CIRCUIT NO. 54 USING 2#6, 1#6N, 1#10G, 3/4"C.

B28. JUNCTION BOX AND BRANCH CIRCUIT FOR RANGE. PROVIDE FINAL CIRCUIT TO RANGE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE RANGE. PROVIDE CIRCUIT TO RANGE FROM PANEL "L11C" CIRCUIT NO. 31 USING 2#6, 1#6N, 1#10G, 3/4"C.

B29. PROVIDE NEMA 14-30R RECEPTACLE. PROVIDE MATCHING CORD & PLUG (6FT MINIMUM LENGTH) AND INSTALL ON THE DRYER MACHINE. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE DRYER MACHINE. CORD AND PLUG SHALL BE ACCESSIBLE WITH THE DRYER MACHINE PLACED IN IT'S FINAL INSTALLATION LOCATION.

B30. JUNCTION BOX AND BRANCH CIRCUIT FOR RANGE. PROVIDE FINAL CIRCUIT TO RANGE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE RANGE. PROVIDE CIRCUIT TO RANGE FROM PANEL "L11C" CIRCUIT NO. 28 USING 2#6, 1#6N, 1#10G, 3/4"C.

B31. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR MICROWAVE. PROVIDE CIRCUIT TO MICROWAVE FROM PANEL "L11C" CIRCUIT NO. 20 USING 2#10, 1#10G, 3/4"C.

NOTES (FIRST FLOOR POWER PLAN - AREA "B") [CONT]:

B32. PROVIDE JUNCTION BOX BELOW SINK AND 1HP RATED TOGGLE SWITCH FOR CONTROL OF FOOD WASTE DISPOSAL UNIT. MOUNT SWITCH 6 INCHES ABOVE COUNTER OR COUNTER BACKSPLASH TO BOTTOM. VERIFY EXACT MOUNTING LOCATION WITH ARCHITECT PRIOR TO START OF ROUGH-IN. PROVIDE FINAL CONNECTION TO DISPOSAL UNIT WITH FLEXIBLE CONDUIT. SWITCH SHALL BE LOCATED ON THE SAME SIDE OF THE SINK WHICH HOUSES THE DISPOSAL. (NOTE: IN THE EVENT THE DISPOSAL DOES NOT REQUIRE A DIRECT CONNECTION AND/OR A TOGGLE SWITCH, PROVIDE A GFI RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT TO SERVE THE FOOD WASTE DISPOSAL FROM PANEL "L11C" CIRCUIT NO. 34 USING 2#10, 1#10G, 3/4"C. COORDINATE WITH MECHANICAL CONTRACTOR FOR ADDITIONAL REQUIREMENTS.)

B33. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR DISH WASHING MACHINE. PROVIDE FINAL CIRCUIT TO DISH WASHING MACHINE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE CIRCUIT TO RANGE FROM PANEL "L11C" CIRCUIT NO. 22 USING 2#10, 1#10G, IN 3/4"C.

B34. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CLOTHES DRYER MACHINE. PROVIDE BRANCH CIRCUIT FROM PANEL "L11C" CIRCUIT NO. 6 USING 2#10, 1#10N, 1#10G, IN 3/4"C.

B35. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR DISH WASHING MACHINE. PROVIDE FINAL CIRCUIT TO DISH WASHING MACHINE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE CIRCUIT TO RANGE FROM PANEL "L11C" CIRCUIT NO. 25 USING 2#10, 1#10G, IN 3/4"C.

B36. COMBINATION MOTOR CONTROLLERS "CS-EF-B1", "CS-EF-B2", "CS-EF-B3", "CS-EF-B4", "CS-EF-B5" & "CS-EF-C1". SEE ELECTRICAL PLAN - ROOF - AREA "B" SHEET E2.3B, FOR ADDITIONAL REQUIREMENTS. SEE MOTOR CONTROL SCHEDULE AND MOTOR CONTROL WIRING DIAGRAMS, SHEETS E1.10 AND E1.11, FOR ADDITIONAL REQUIREMENTS.

B37. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR DISH WASHING MACHINE. PROVIDE FINAL CIRCUIT TO DISH WASHING MACHINE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE CIRCUIT TO RANGE FROM PANEL "L12C" CIRCUIT NO. 48 USING 2#12, 1#12G, IN 3/4"C.

NOTES (FIRST FLOOR POWER PLAN - AREA "B") [CONT]:

B38. PROVIDE JUNCTION BOX BELOW SINK AND 1HP RATED TOGGLE SWITCH FOR CONTROL OF FOOD WASTE DISPOSAL UNIT. MOUNT SWITCH 6 INCHES ABOVE COUNTER OR COUNTER BACKSPLASH TO BOTTOM. VERIFY EXACT MOUNTING LOCATION WITH ARCHITECT PRIOR TO START OF ROUGH-IN. PROVIDE FINAL CONNECTION TO DISPOSAL UNIT WITH FLEXIBLE CONDUIT. SWITCH SHALL BE LOCATED ON THE SAME SIDE OF THE SINK WHICH HOUSES THE DISPOSAL. (NOTE: IN THE EVENT THE DISPOSAL DOES NOT REQUIRE A DIRECT CONNECTION AND/OR A TOGGLE SWITCH, PROVIDE A GFI RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT TO SERVE THE FOOD WASTE DISPOSAL FROM PANEL "L12C" CIRCUIT NO. 50 USING 2#12, 1#12G, 3/4"C. COORDINATE WITH MECHANICAL CONTRACTOR FOR ADDITIONAL REQUIREMENTS.)

B39. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR MICROWAVE. PROVIDE CIRCUIT TO MICROWAVE FROM PANEL "L12C" CIRCUIT NO. 52 USING 2#12, 1#12G, 3/4"C.

B40. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR REFRIGERATOR. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#10, 1#10G IN 3/4"C.

B41. PROVIDE JUNCTION BOX BELOW SINK AND 1HP RATED TOGGLE SWITCH FOR CONTROL OF FOOD WASTE DISPOSAL UNIT. MOUNT SWITCH 6 INCHES ABOVE COUNTER OR COUNTER BACKSPLASH TO BOTTOM. VERIFY EXACT MOUNTING LOCATION WITH ARCHITECT PRIOR TO START OF ROUGH-IN. PROVIDE FINAL CONNECTION TO DISPOSAL UNIT WITH FLEXIBLE CONDUIT. SWITCH SHALL BE LOCATED ON THE SAME SIDE OF THE SINK WHICH HOUSES THE DISPOSAL. (NOTE: IN THE EVENT THE DISPOSAL DOES NOT REQUIRE A DIRECT CONNECTION AND/OR A TOGGLE SWITCH, PROVIDE A GFI RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT TO SERVE THE FOOD WASTE DISPOSAL FROM PANEL "L12C" CIRCUIT NO. 16 USING 2#12, 1#12G, 3/4"C. COORDINATE WITH MECHANICAL CONTRACTOR FOR ADDITIONAL REQUIREMENTS.)

B42. PROVIDE SUPPORT STRUCTURE AS REQUIRED FOR SUPPORT OF EQUIPMENT. SECURE STRUCTURE TO THE FLOOR AT THE BOTTOM AND TO THE BUILDING STRUCTURE AT THE TOP.

B43. PROVIDE HP RATED TOGGLE SAFETY DISCONNECT SWITCH (WITH LOCK-OUT/TAG-OUT ACCESSORY) NEAR BOOSTER FAN FOR POWER TO DRYER BOOSTER FAN. PROVIDE POWER CIRCUIT TO BOOSTER FAN PER MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE DRYER BOOSTER FAN PROVIDER PRIOR TO ROUGH-IN.

B44. GROUND BUS BAR ON INSULATED STAND-OFF DEVICES. SEE GROUNDING SYSTEM RISER DIAGRAM, SHEET E1.14, FOR ADDITIONAL REQUIREMENTS.

B45. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR THE DUCTLESS SPLIT UNIT. PROVIDE ALL REQUIRED POWER, CONTROL, AND COMMUNICATION CIRCUITS BETWEEN THE INDOOR UNIT AND THE ASSOCIATED OUTDOOR CONDENSING UNIT PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE FUSES PER THE MANUFACTURER'S REQUIREMENTS.

B46. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR POWER TO GYMNASIUM "LIVE-STREAM" VIDEO CONTROL EQUIPMENT.

B47. SEE DRAWINGS E2.1, E3.1 & E8.1 FOR ADDITIONAL REQUIREMENTS FOR UNDERGROUND CONDUITS WITHIN THIS AREA. ALL UNDERGROUND CONDUITS SHALL BE INSTALLED AT A SUFFICIENT DEPTH TO PREVENT DAMAGE TO CONDUITS WHEN THE ALTERNATE BID GYMNASIUM AREA IS INSTALLED.

B48. NOTE NOT USED.

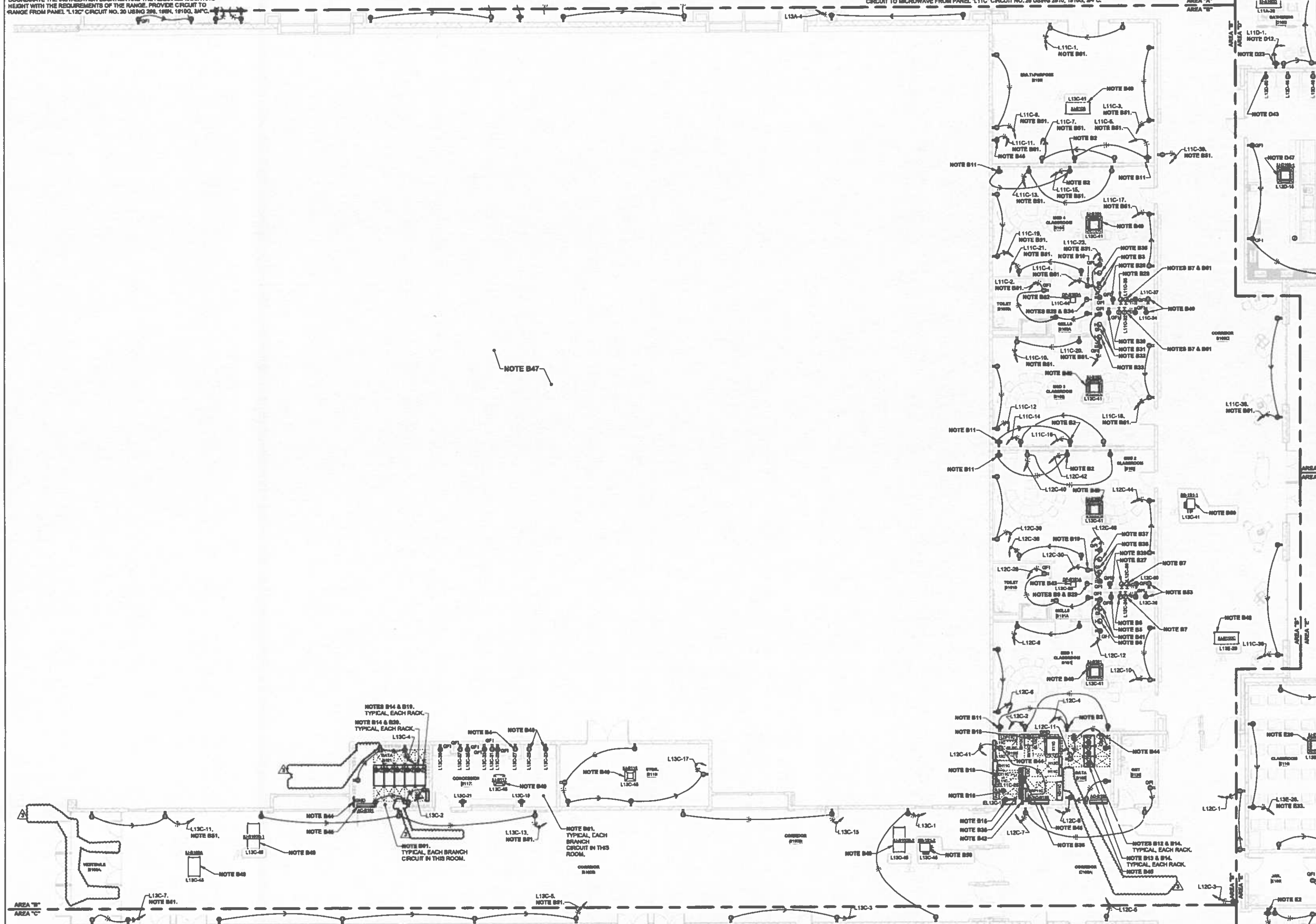
B49. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR HVAC UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO HVAC UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

B50. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR BRANCH SELECTOR UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO BRANCH SELECTOR UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

B51. PROVIDE #10AWG CONDUCTORS FOR ALL "PHASE", "NEUTRAL" AND EQUIPMENT GROUND CONDUCTORS FOR ENTIRE LENGTH OF BRANCH CIRCUIT.

B52. PROVIDE HP RATED TOGGLE SAFETY DISCONNECT SWITCH (WITH LOCK-OUT/TAG-OUT ACCESSORY) NEAR BOOSTER FAN FOR POWER TO DRYER BOOSTER FAN. PROVIDE POWER CIRCUIT TO BOOSTER FAN PER MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#10, 1#10G IN 3/4" C. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE DRYER BOOSTER FAN PROVIDER PRIOR TO ROUGH-IN.

B53. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR REFRIGERATOR. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C.



POWER PLAN - FIRST FLOOR - AREA "B"
1/8" = 1'-0"

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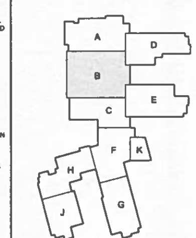


KEYPLA

Revisions:

#	Description	Date
1	PR-001	10/13/2023
2	ASI-005 VRF Coordination	12/18/2023
3	Access Control System Mods	1/18/2024

Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:
POWER PLAN - FIRST FLOO - AREA "B"

Architect's Project No: 2106-204
Date: May, 20

Drawing No:
E2.1B

NOTES (FIRST FLOOR POWER PLAN - AREA "B"- ALT) [CONTINUED]:

B1. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR POWER TO ICE MACHINE. PROVIDE CIRCUIT TO ICE MACHINE FROM PANEL "L13A" CIRCUIT NO. 10 USING 2#12, 1#12G, IN 3/4"C.

B2. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CLOTHES WASHING MACHINE. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE WASHING MACHINE. CORD AND PLUG SHALL BE ACCESSIBLE WITH THE WASHING MACHINE PLACED IN IT'S FINAL INSTALLATION LOCATION. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL "L13B" BRANCH CIRCUIT NO. 28 USING 2#12, 1#12G IN 3/4"C.

B3. PROVIDE NEMA 5-20R SIMPLEX RECEPTACLE. PROVIDE POWER FEED TO RECEPTACLE THROUGH ASSOCIATED CONTROLLER INSTALLED WITHIN ELEVATOR MACHINE ROOM. COORDINATE THE INSTALLATION LOCATION AND INSTALLATION REQUIREMENTS WITH THE PUMP/CONTROLLER PROVIDER AND ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN.

B4. COORDINATE ALL ELECTRICAL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS AND MOUNTING HEIGHTS WITHIN THE ELEVATOR SHAFT AND THE ELEVATOR PIT AREAS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN TO ENSURE INSTALLATION WILL MEET THE REQUIREMENTS OF THE ELEVATOR PROVIDER, ELEVATOR INSPECTOR AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

B5. PROVIDE RECEPTACLE HIGH ON WALL FOR POWER TO VIDEO MONITOR.

B6. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CLOTHES DRYER MACHINE. PROVIDE BRANCH CIRCUIT FROM PANEL "L13B" AND BRANCH CIRCUIT NO. 28 USING 2#10, 1#10N, 1#10G, IN 3/4"C.

B7. PROVIDE NEMA 14-30R RECEPTACLE. PROVIDE MATCHING CORD & PLUG (6FT MINIMUM LENGTH) AND INSTALL ON THE DRYER MACHINE. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE DRYER MACHINE. CORD AND PLUG SHALL BE ACCESSIBLE WITH THE DRYER MACHINE PLACED IN IT'S FINAL INSTALLATION LOCATION.

B8. SEE ONE-LINE DIAGRAM - BLDG AREA "B-ALT", SHEET E5.3, FOR ADDITIONAL REQUIREMENTS.

NOTES (FIRST FLOOR POWER PLAN - AREA "B"- ALT) [CONTINUED]:

B9. ALL RECEPTACLES FED FROM THIS PANEL SHALL BE "ISOLATED" GROUND TYPE RECEPTACLES WITH ORANGE FINISH AND IDENTIFIED WITH A GREEN TRIANGLE ON THE RECEPTACLE. ALL ASSOCIATED DEVICE PLATES SHALL BE COLOR ORANGE TO MATCH THE RECEPTACLE. ALL RECEPTACLES SHALL BE PROVIDED WITH DEDICATED BRANCH CIRCUITS WHICH INCLUDE A DEDICATED PHASE, DEDICATED NEUTRAL, DEDICATED "INSULATED" GREEN WIRE WITH YELLOW STRIPES (CONNECTED TO THE ISOLATED GROUND LUG ON THE RECEPTACLE), AND A SOLID GREEN INSULATED "EQUIPMENT" GROUND CONDUCTOR WHICH SHALL BE BONDED TO THE METALLIC OUTLET BOX. THE EQUIPMENT GROUND AND ISOLATED GROUND CONDUCTORS SHALL BE SIZED TO MATCH THE PHASE AND NEUTRAL CONDUCTORS.

B10. RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT FOR POWER TO LARGE VIDEO BOARD. INSTALL HIGH ON WALL WITHIN WALLBOX PROVIDED AS PART OF THE PERFORMANCE AV FOR GYM PACKAGE.

B11. PROVIDE A QUANTITY OF TEN DEDICATED 120V, 20A AUDIO-VIDEO TECHNICAL POWER (AVTP) BRANCH CIRCUITS TO EQUIPMENT RACK FROM CLEAN AUDIO POWER PANEL "L14B" CIRCUIT NO.S 2, 4, 6, 8, 10, 12, 14, 16, 18 & 20. EACH CIRCUIT SHALL BE PROVIDED WITH DEDICATED "PHASE", "NEUTRAL" AND "ISOLATED GROUND" CONDUCTORS. PROVIDE A COMMON EQUIPMENT GROUND CONDUCTOR WITHIN EACH CONDUIT RACEWAY FEEDING THE EQUIPMENT RACK. TERMINATE THE CIRCUITS ON ISOLATED GROUND RECEPTACLES FURNISHED AS PART OF THE AUDIO EQUIPMENT RACK.

B12. PROVIDE DEDICATED BRANCH CIRCUIT WITH DEDICATED "PHASE", "NEUTRAL", "ISOLATED GROUND", AND EQUIPMENT GROUND CONDUCTORS.

B13. JUNCTION BOX AS REQUIRED FOR POWER CIRCUIT TO TEMPERATURE CONTROL PANEL. PROVIDE DEDICATED 120V, 20A CIRCUIT TO T.C. PANEL FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C.

B14. PROVIDE POWER CIRCUITS TO FLOOR BOX FROM PANEL AND BRANCH CIRCUIT NUMBERS AS INDICATED USING #10AWG CONDUCTORS FOR PHASE, NEUTRAL AND EQUIPMENT GROUND CONDUCTORS.

B15. SEE MULTIFUNCTION FLOORBOX SCHEDULE, SHEET E1.1, FOR ADDITIONAL REQUIREMENTS.

B16. COORDINATE THE REQUIRED INSTALLATION LOCATION WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

NOTES (FIRST FLOOR POWER PLAN - AREA "B"- ALT):

B17. PROVIDE 120V, 20A ISOLATED GROUND POWER CIRCUIT TO ISOLATED GROUND TYPE RECEPTACLE WITHIN THE FLOOR BOX FROM PANEL "L14B" CIRCUIT NUMBER 3, USING 2#10, 1#10G, 1#10(IG) IN 1" CONDUIT.

B18. PROVIDE 120V, 20A ISOLATED GROUND POWER CIRCUIT TO ISOLATED GROUND TYPE RECEPTACLE.

B19. PROVIDE 30A/3 NON-FUSIBLE SAFETY DISCONNECT SWITCH IN NEMA 1 ENCLOSURE FOR POWER CIRCUIT TO MOTORIZED BLEACHER SYSTEM. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL AND BRANCH CIRCUIT NUMBER AS INDICATED USING 4#12, 1#12G IN 3/4"C. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND BLEACHER SYSTEM PROVIDER PRIOR TO START OF ROUGH-IN. PROVIDE FINAL CIRCUIT TO BLEACHER SYSTEM PER THE BLEACHER SYSTEM PROVIDER'S REQUIREMENTS. PROVIDE ALL REQUIRED POWER, CONTROL, MONITORING AND ALL OTHER CIRCUITS AND ELECTRICAL INSTALLATION PER THE BLEACHER SYSTEM PROVIDER'S REQUIREMENTS. COORDINATE ALL REQUIREMENTS WITH THE BLEACHER SYSTEM PROVIDER.

B20. PROVIDE #10AWG CONDUCTORS FOR ALL "PHASE", "NEUTRAL", "ISOLATED GROUND", AND EQUIPMENT GROUND CONDUCTORS.

B21. JUNCTION BOX AS REQUIRED FOR POWER CIRCUIT TO PLAYER'S SCOREBOARD. PROVIDE ONE DEDICATED 120V, 20A BRANCH CIRCUIT TO JUNCTION BOX FROM PANEL AND BRANCH CIRCUIT AS INDICATED USING 2#10, 1#10G IN 3/4". COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE INSTALLATION LOCATION AND REQUIREMENTS FOR THE PLAYER'S SCOREBOARD PRIOR TO START OF ROUGH-IN. PROVIDE FINAL CIRCUIT TO SCOREBOARD PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

B22. PROVIDE JUNCTION BOX HIGH ON WALL FOR LOCKER ROOM TIMER CLOCK (PART OF SCOREBOARD SYSTEM). PROVIDE 3/4"C FROM BOX TO FLOOR BOX WITHIN GYM NEAR THE SCORE KEEPER'S TABLE.

B23. PROVIDE HP RATED TOGGLE SAFETY DISCONNECT SWITCH (WITH LOCK-OUT/TAG-OUT ACCESSORY) NEAR BOOSTER FAN FOR POWER TO DRYER BOOSTER FAN. PROVIDE POWER CIRCUIT TO BOOSTER FAN PER MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4" C. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE DRYER BOOSTER FAN PROVIDER PRIOR TO ROUGH-IN.

B24. JUNCTION BOX AS REQUIRED FOR POWER CIRCUIT TO SHOT CLOCK. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE INSTALLATION LOCATION AND REQUIREMENTS FOR THE SHOT CLOCK PRIOR TO START OF ROUGH-IN. PROVIDE FINAL CIRCUIT TO SHOT CLOCK PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

B25. MOTORIZED SHADE SYSTEM CONTROLLER. PROVIDE DEDICATED 120V, 20A POWER CIRCUIT TO CONTROLLER FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#10, 1#10G IN 3/4"C. PROVIDE ALL REQUIRED POWER AND CONTROL CIRCUITS TO MOTORIZED SHADES (WITHIN THE GYMNASIUM - 2ND FLOOR WEST WALL) PER THE MOTORIZED SHADE SYSTEM PROVIDER'S REQUIREMENTS AND APPROVED SUBMITTAL DRAWINGS. COORDINATE INSTALLATION LOCATION FOR CONTROL PANEL WITH ARCHITECT AND SHADE SYSTEM PROVIDER PRIOR TO START OF ROUGH-IN. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS REGARDING MOTORIZED SHADE SYSTEM.

B26. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

B27. RECEPTACLE FOR POWER TO AUDIO/VIDEO CONTROL CABINET. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE AUDIO/VIDEO CONTROL CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

B28. INSTALLATION SHOWN WITHIN THE DASHED LINE INDICATES WORK WHICH SHALL BE BID AS PART OF THE GYMNASIUM ALTERNATE BID.

B29. PROVIDE FUSIBLE SAFETY DISCONNECT SWITCH FOR POWER TO ELEVATOR CONTROLLER. SEE ONE-LINE DIAGRAM - EMERGENCY POWER, SHEET E5.2, FOR ADDITIONAL REQUIREMENTS.

B30. RECEPTACLE AND DEDICATED BRANCH CIRCUIT. INSTALL WITHIN THE ELEVATOR PIT AREA

B31. PROVIDE NEMA 5-20R DUPLEX RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT FOR CORD AND PLUG POWER CONNECTIONS TO ELEVATOR SUMP PUMP CONTROLLER AND ASSOCIATED ALARM PANEL. PANEL AND CIRCUIT NO. INDICATED SHALL BE USED TO PROVIDE POWER TO THE CONTROLLER AND ALARM PANEL, AND FROM THE CONTROLLER TO RECEPTACLE IN ELEVATOR PIT FOR SUMP PUMP. COORDINATE THE INSTALLATION LOCATION AND INSTALLATION REQUIREMENTS WITH THE PUMP/CONTROLLER PROVIDER AND ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN. THE CONTROLLER AND ASSOCIATED ALARM PANEL SHALL BE FED FROM SAME BRANCH CIRCUIT.

B32. PROVIDE SUPPORT STRUCTURE AS REQUIRED FOR SUPPORT OF EQUIPMENT. SECURE STRUCTURE TO THE FLOOR AT THE BOTTOM AND TO THE BUILDING STRUCTURE AT THE TOP.

B33. GROUND BUS BAR ON INSULATED STAND-OFF DEVICES. SEE GROUNDING SYSTEM RISER DIAGRAM, SHEET E1.14, FOR ADDITIONAL REQUIREMENTS.

B34. PROVIDE SAFETY DISCONNECT MEANS NEAR THE INDOOR UNIT. PROVIDE ALL REQUIRED POWER, CONTROL, & COMMUNICATION CIRCUITS BETWEEN THE INDOOR UNIT AND THE ASSOCIATED OUTDOOR CONDENSING UNIT PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

B35. JUNCTION BOX(S) AND DEDICATED NEC 700 EMERGENCY POWER BRANCH CIRCUIT FOR POWER TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT. PROVIDE ALL REQUIRED POWER CIRCUITS AND CONNECT TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT PER THE FIRE ALARM SYSTEM MANUFACTURER'S REQUIREMENTS. COORDINATE THE REQUIRED INSTALLATION LOCATIONS WITH THE INSTALLATION REQUIREMENTS FOR THE FIRE ALARM SYSTEM.

B36. PROVIDE #10AWG CONDUCTORS FOR ALL "PHASE", "NEUTRAL" AND EQUIPMENT GROUND CONDUCTORS FOR ENTIRE LENGTH OF BRANCH CIRCUIT.

B37. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR POWER TO UNDERCOUNTER ICE MACHINE. PROVIDE CIRCUIT TO UNDERCOUNTER ICE MACHINE FROM PANEL "L13B" CIRCUIT NO. 10 USING 2#12, 1#12G, IN 3/4"C.

B38. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR HVAC UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO HVAC UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

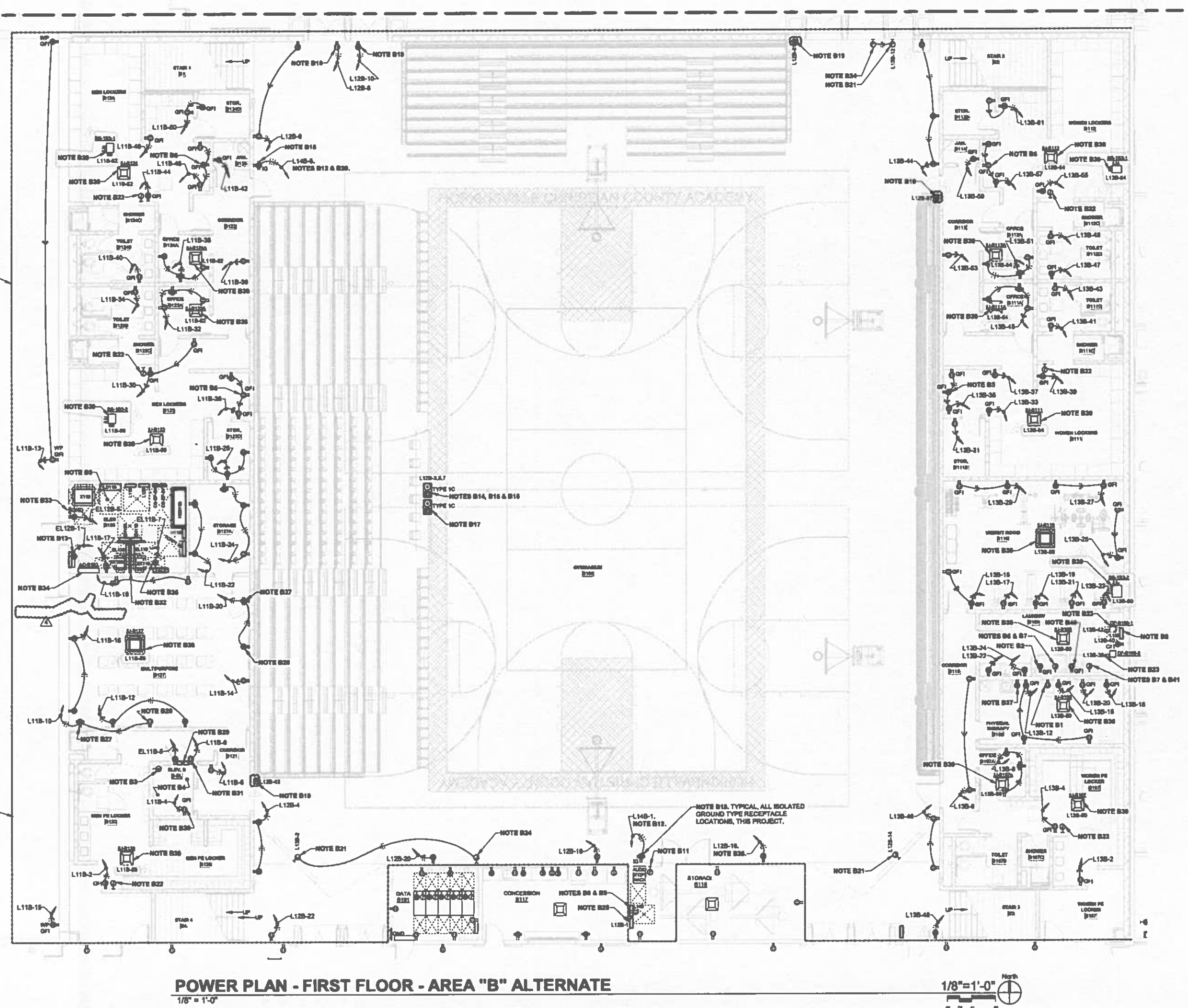
B39. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR BRANCH SELECTOR UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO BRANCH SELECTOR UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

B40. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CLOTHES WASHING MACHINE. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE WASHING MACHINE. CORD AND PLUG SHALL BE ACCESSIBLE WITH THE WASHING MACHINE PLACED IN IT'S FINAL INSTALLATION LOCATION. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL "L13B" BRANCH CIRCUIT NO. 32 USING 2#12, 1#12G IN 3/4"C.

B41. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CLOTHES DRYER MACHINE. PROVIDE BRANCH CIRCUIT FROM PANEL "L13B" AND BRANCH CIRCUIT NO. 34 USING 2#10, 1#10N, 1#10G, IN 3/4"C.

4 B42. NOTE NOT USED.

***NOTE:** ALL INSTALLATION SHOWN WITHIN THE DASH BOUNDARY LINE SHALL BE INCLUDED IN THE ALTERNATE BID ADDITION OF GYM. INSTALLATION ON THE OUTSIDE OF THE DASH BOUNDARY LINE SHALL BE INSTALLED AS PART OF THE BASE BID REQUIREMENTS. SEE BASE BID DRAWINGS FOR ALL REQUIREMENTS ON THE OUTSIDE OF THE DASHED BOUNDARY LINES.*



POWER PLAN - FIRST FLOOR - AREA "B" ALTERNATE
1/8" = 1'-0"

1/8"=1'-0" North

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CHRISTIAN COUNTY PUBLIC SCHOOLS

KDE # : BG 22-104

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KEYPLAN

Revisions:

#	Description	Date
1	PR-001	[illegible]
2	ASI-006 VRF Coordination	[illegible]
3	PR-00? Elec Mods - Telescoping Bleacher Submittal Review	[illegible]
4	Access Control System Mods	[illegible]

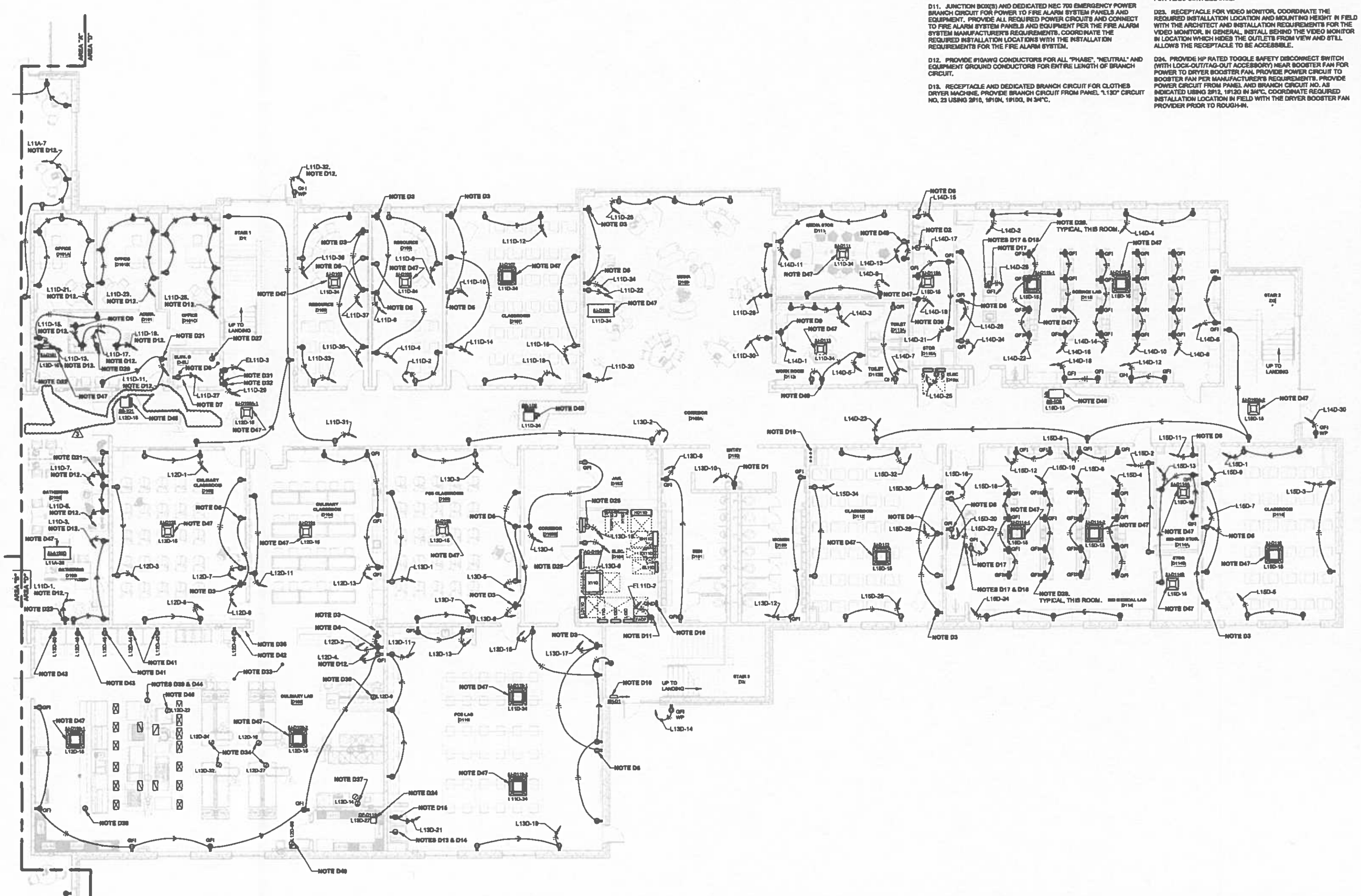
Designed By:	Drawn By:	Checked By:
MJS	SDB	MJS

Sheet title:
POWER PLAN - FIRST FLOOR - AREA "B" ALTERNATE

Architect's Project No: 2106-204

Date: May, 20

Drawing No: E2.1B-AL



POWER PLAN - FIRST FLOOR - AREA "D"
1/8" = 1'-0"

1/8"=1'-0"

GENERAL NOTES (FIRST FLOOR POWER PLAN - AREA "D"):

G1. CONTRACTOR SHALL COORDINATE WITH FOOD SERVICE DRAWINGS, FOOD SERVICES EQUIPMENT CONTRACTOR AND APPROVED FOOD SERVICE SUBMITTAL DRAWINGS FOR ALL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS, AND REQUIRED MOUNTING HEIGHTS PRIOR TO START OF ROUGH-IN.

NOTES (FIRST FLOOR POWER PLAN - AREA "D"):

D1. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR POWER TO ELECTRIC WATER COOLER.

D2. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR DISH WASHING MACHINE. PROVIDE FINAL CIRCUIT TO DISH WASHING MACHINE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS..

D3. RECEPTACLE FOR POWER TO AUDIO/VIDEO CONTROL CABINET. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE AUDIO/VIDEO CONTROL CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

D4. RECEPTACLE FOR MOBILE INTERACTIVE FLAT PANEL. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

D5. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

D6. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR REFRIGERATOR.

D7. RECEPTACLE AND DEDICATED BRANCH CIRCUIT. INSTALL WITHIN THE ELEVATOR PIT AREA.

D8. COORDINATE ALL ELECTRICAL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS AND MOUNTING HEIGHTS WITHIN THE ELEVATOR SHAFT AND THE ELEVATOR PIT AREAS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN TO ENSURE INSTALLATION WILL MEET THE REQUIREMENTS OF THE ELEVATOR PROVIDER, ELEVATOR INSPECTOR AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

D9. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR COPIER / PRINTER MACHINE.

D10. ELECTRIC HEATER SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR WITH A FACTORY INSTALLED SAFETY DISCONNECT MEANS FOR SINGLE-POINT POWER FEED. PROVIDE 277V CIRCUIT TO HEATER FROM PANEL "H11D" CIRCUIT NO. 30 USING 2#10, 1#10G IN 3/4"C.

D11. JUNCTION BOX(S) AND DEDICATED NEC 700 EMERGENCY POWER BRANCH CIRCUIT FOR POWER TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT. PROVIDE ALL REQUIRED POWER CIRCUITS AND CONNECT TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT PER THE FIRE ALARM SYSTEM MANUFACTURER'S REQUIREMENTS. COORDINATE THE REQUIRED INSTALLATION LOCATIONS WITH THE INSTALLATION REQUIREMENTS FOR THE FIRE ALARM SYSTEM.

D12. PROVIDE #10AWG CONDUCTORS FOR ALL "PHASE", "NEUTRAL" AND EQUIPMENT GROUND CONDUCTORS FOR ENTIRE LENGTH OF BRANCH CIRCUIT.

D13. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CLOTHES DRYER MACHINE. PROVIDE BRANCH CIRCUIT FROM PANEL "L13D" CIRCUIT NO. 23 USING 2#10, 1#10N, 1#10G, IN 3/4"C.

NOTES (FIRST FLOOR POWER PLAN - AREA "D") [CONTINUED]:

D14. PROVIDE NEMA 14-30R RECEPTACLE. PROVIDE MATCHING CORD & PLUG (6FT MINIMUM LENGTH) AND INSTALL ON THE DRYER MACHINE. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE DRYER MACHINE. CORD AND PLUG SHALL BE ACCESSIBLE WITH THE DRYER MACHINE PLACED IN IT'S FINAL INSTALLATION LOCATION.

D15. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CLOTHES WASHING MACHINE. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE WASHING MACHINE CORD AND PLUG SHALL BE ACCESSIBLE WITH THE WASHING MACHINE PLACED IN IT'S FINAL SPOT.

D16. GROUND BUS BAR ON INSULATED STAND-OFF DEVICES. SEE GROUNDING SYSTEM RISER DIAGRAM, SHEET E1.14, FOR ADDITIONAL REQUIREMENTS.

D17. INSTALL WITHIN TEACHER'S STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED.

D18. PROVIDE TOGGLE TYPE CONTROL SWITCH FOR CONTROL OF ELECTRIC SOLENOID VALVES FOR HOT AND COLD WATER SERVICE WITHIN THIS ROOM. PROVIDE POWER FEED TO CONTROL SWITCH FROM THE SAME BRANCH CIRCUIT WHICH FEEDS THE ADJACENT RECEPTACLE. PROVIDE ENGRAVED DEVICE PLATE ON SWITCH WHICH READS "WTR CTRL". LABELS SHALL ALSO INCLUDE THE "ON" AND "OFF" POSITIONS. PROVIDE CIRCUIT FROM LOAD SIDE OF SWITCH TO WATER CONTROL VALVES FOR CORRECT OPERATION. WATER SHALL BE ALLOWED TO FLOW WHENEVER THERE IS 120V APPLIED TO THE VALVES. SEE MECHANICAL & PLUMBING DRAWINGS FOR ADDITIONAL REQUIREMENTS AND GENERAL LOCATIONS OF WATER CONTROL VALVES.

D19. SPACE RESERVED FOR ROUTING OF VERTICAL CONDUIT RACEWAYS (FROM UNDERGROUND TO VERTICAL UP WALL) FOR COMMUNICATIONS FIBER CABLES. SEE COMMUNICATION ROOM LOCATION PLAN - FIRST FLOOR, SHEET E3.1, FOR ADDITIONAL REQUIREMENTS.

D20. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR KIOSK.

D21. PROVIDE POWER OUTLET HIGH ON WALL BEHIND DIGITAL SIGNAGE VIDEO MONITOR.

D22. PROVIDE RECEPTACLE HIGH ON WALL BEHIND VIDEO MONITOR FOR VIDEO SURVEILLANCE.

D23. RECEPTACLE FOR VIDEO MONITOR. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE VIDEO MONITOR. IN GENERAL, INSTALL BEHIND THE VIDEO MONITOR IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE.

D24. PROVIDE HP RATED TOGGLE SAFETY DISCONNECT SWITCH (WITH LOCK-OUT/TAG-OUT ACCESSORY) NEAR BOOSTER FAN FOR POWER TO DRYER BOOSTER FAN. PROVIDE POWER CIRCUIT TO BOOSTER FAN PER MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE DRYER BOOSTER FAN PROVIDER PRIOR TO ROUGH-IN.

NOTES (FIRST FLOOR POWER PLAN - AREA "D") [CONTINUED]:

D25. PROVIDE SAFETY DISCONNECT MEANS NEAR THE INDOOR UNIT. PROVIDE ALL REQUIRED POWER, CONTROL, & COMMUNICATION CIRCUITS BETWEEN THE INDOOR UNIT AND THE ASSOCIATED OUTDOOR CONDENSING UNIT PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

D26. JUNCTION BOX AS REQUIRED FOR POWER CIRCUIT TO TEMPERATURE CONTROL PANEL. PROVIDE DEDICATED 120V, 20A CIRCUIT TO T.C. PANEL FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C.

D27. PROVIDE NEMA 5-20R SIMPLEX RECEPTACLE. PROVIDE POWER FEED TO RECEPTACLE THROUGH ASSOCIATED CONTROLLER INSTALLED WITHIN ROOM. COORDINATE THE INSTALLATION LOCATION AND INSTALLATION REQUIREMENTS WITH THE PUMP/CONTROLLER PROVIDER AND ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN.

D28. INSTALL WITHIN STUDENT STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED.

3 D29. NOTE NOT USED.

D30. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR AUTOCLAVE. COORDINATE THE REQUIRED RECEPTACLE NEMA CONFIGURATION WITH THE AUTOCLAVE EQUIPMENT PRIOR TO PURCHASE OF CONDUCTORS AND RECEPTACLE.

D31. PROVIDE FUSIBLE SAFETY DISCONNECT SWITCH FOR POWER TO ELEVATOR CONTROLLER. SEE ONE-LINE DIAGRAM - EMERGENCY POWER, SHEET E5.2, FOR ADDITIONAL REQUIREMENTS.

D32. PROVIDE NEMA 5-20R DUPLEX RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT FOR CORD AND PLUG POWER CONNECTIONS TO ELEVATOR SUMP PUMP CONTROLLER AND ASSOCIATED ALARM PANEL. PANEL AND CIRCUIT NO. INDICATED SHALL BE USED TO PROVIDE POWER TO THE CONTROLLER AND ALARM PANEL, AND FROM THE CONTROLLER TO RECEPTACLE IN ELEVATOR PIT FOR SUMP PUMP. COORDINATE THE INSTALLATION LOCATION AND INSTALLATION REQUIREMENTS WITH THE PUMP/CONTROLLER PROVIDER AND ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN. THE CONTROLLER AND ASSOCIATED ALARM PANEL SHALL BE FED FROM SAME BRANCH CIRCUIT.

D33. CONTRACTOR SHALL PROVIDE ALL UNDERGROUND RACEWAYS REQUIRED TO PROVIDE POWER, SYSTEMS & TECHNOLOGY, AND LIGHTING CIRCUITS WITHIN AREAS WHICH DO NOT HAVE WALLS OR OTHER PATHWAYS TO GET FROM SERVICE OUTLETS TO SOURCES OF FEED AND CONTROL.

D34. PROVIDE A QUANTITY OF ONE 20A, 120/208V SINGLE PHASE CIRCUIT TO STUDENT WORK TABLE LOAD CENTER FROM PANEL AND CIRCUIT NO. AS INDICATED USING 3#12, 1#12G IN 3/4"C. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS. COORDINATE WITH FOOD SERVICE EQUIPMENT CONTRACTOR PRIOR TO START OF ROUGH-IN.

D35. PROVIDE 40A, 208Y/120V, THREE-PHASE FEEDER CIRCUIT TO WORK TABLE LOAD CENTER "LC12" FROM PANEL AND CIRCUIT NO. AS INDICATED USING 4#8, 1#8G, IN 1"C. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS. CONTRACTOR SHALL COORDINATE WITH FOOD SERVICES EQUIPMENT CONTRACTOR AND VERIFY REQUIRED FEEDER SIZE PRIOR TO START OF ROUGH-IN.

D36. SEE FOOD SERVICE DRAWINGS FOR REQUIREMENTS REGARDING INSTALLATION OF REMOTE FIRE PULL STATION FOR FIRE SUPPRESSION SYSTEM.

D37. PROVIDE 60A/3 CIRCUIT BREAKER TYPE SAFETY DISCONNECT SWITCH IN NEMA 4X ENCLOSURE FOR DISH WASHER. PROVIDE 60A, 208V, THREE-PHASE CIRCUIT (THROUGH SAFETY DISCONNECT) TO DISHWASHER FROM PANEL AND CIRCUIT NO. AS INDICATED USING 3#6, 1#10G, IN 1"C. FEED . SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

D38. PROVIDE 150A, 208Y/120V, THREE-PHASE FEEDER CIRCUIT TO CHEF TABLE LOAD CENTER. SEE ONE-LINE DIAGRAM - BLDG AREA "D" - NORMAL POWER, SHEET E5.4, AND FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS. COORDINATE WITH FOOD SERVICES EQUIPMENT CONTRACTOR PRIOR TO START OF ROUGH-IN.

D39. PROVIDE 400A, 208Y/120V OVERHEAD FEED TO UTILITY DISTRIBUTION SYSTEM "UDS1". SEE ONE-LINE DIAGRAMS - BLDG AREA "D" - NORMAL POWER, SHEET E5.4, AND FOOD SERVICE DRAWINGS, FOR ADDITIONAL REQUIREMENTS. COORDINATE WITH FOOD SERVICES EQUIPMENT CONTRACTOR PRIOR TO START OF ROUGH-IN.

D40. PROVIDE JUNCTION BOX AS REQUIRED AND 20A (GFI PROTECTED) 120V POWER CIRCUIT TO HEAT TRACE TAPE CONTROLLER FROM PANEL AND CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. COORDINATE INSTALLATION LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO START OF ROUGH-IN.

D41. PROVIDE RECEPTACLE HIGH ON WALL FOR CORD & PLUG POWER TO REACH-IN REFRIGERATOR. PROVIDE DEDICATED 20A, 120V CIRCUIT TO RECEPTACLE FROM PANEL AND CIRCUIT NO. AS INDICATED USING 2#10, 1#10G IN 3/4"C. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

D42. PROVIDE RECEPTACLE AND DEDICATED 20A, 120V CIRCUIT FOR POWER TO ICE MAKER. PROVIDE CIRCUIT FROM PANEL AND CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

D43. PROVIDE RECEPTACLE HIGH ON WALL FOR CORD & PLUG POWER TO REACH-IN FREEZER. PROVIDE DEDICATED 20A, 120V CIRCUIT TO RECEPTACLE FROM PANEL AND CIRCUIT NO. AS INDICATED USING 2#10, 1#10G IN 3/4"C. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

D44. PROVIDE 120V, 20A CIRCUIT TO UTILITY DISTRIBUTION SYSTEM FOR CONTROL POWER FROM PANEL "L12D" CIRCUIT NO. 28 USING 2#12, 1#12G IN 3/4"C.

D45. NOTE NOT USED.

D46. PROVIDE 20A, 120V CIRCUIT TO EXHAUST HOOD (FOR LIGHTING AND CONTROLS) FROM PANEL AND CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

D47. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR HVAC UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO HVAC UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

D48. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR BRANCH SELECTOR UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO BRANCH SELECTOR UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

D49. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE.

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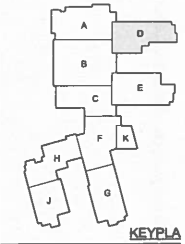


KEYPLAN

Revisions:

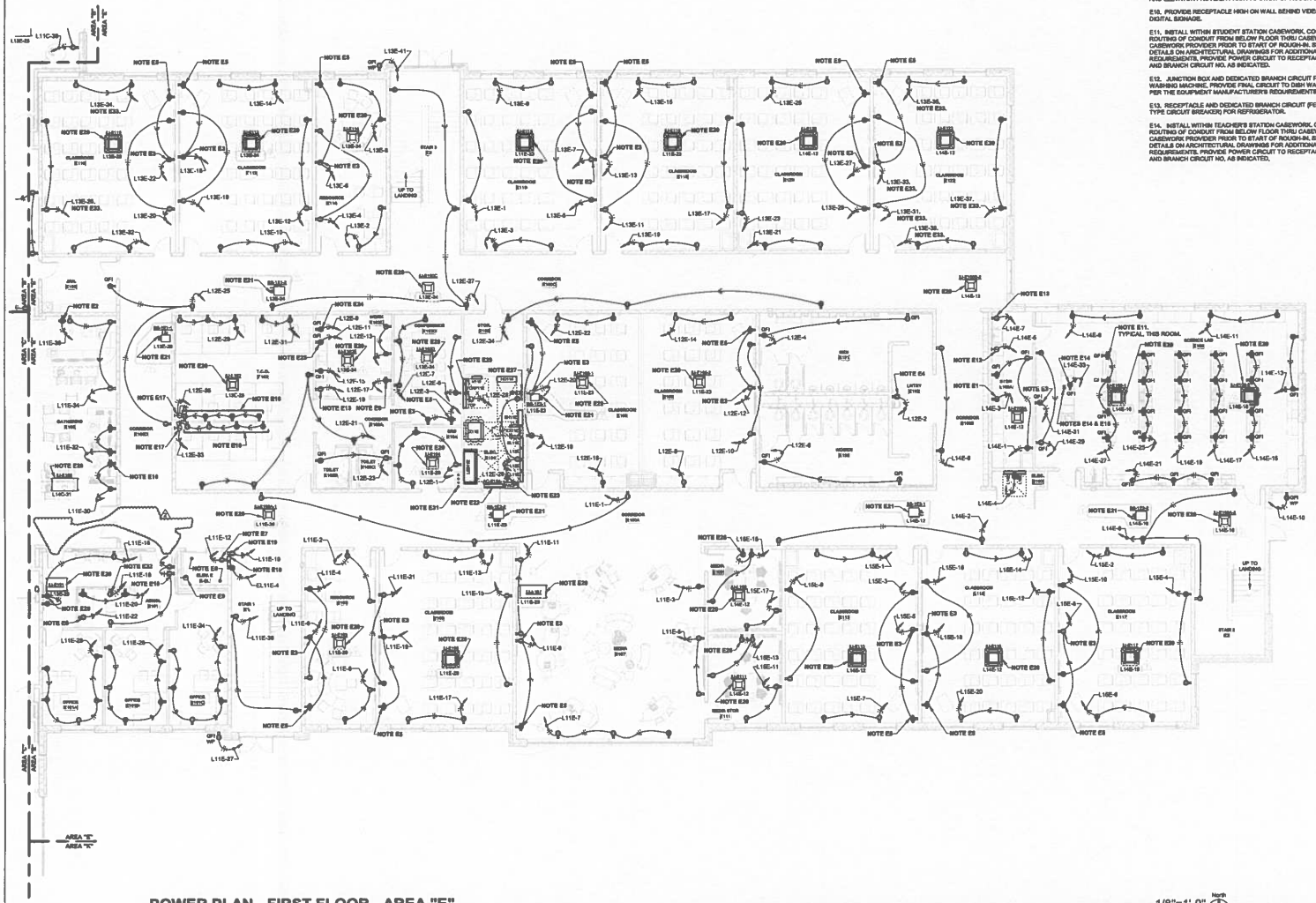
#	Description	Date
1	ASI #08 VRF Coordination	12/18/2023
2	Food Service Submittal Review Elec Mods	2/13/2024
3	Access Control System Mods	4/1/2024

Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:
POWER PLAN - FIRST FLOOR - AREA "D"

Architect's Project No: 2106-204
Date: May, 20

Drawing No:
E2.1D



POWER PLAN - FIRST FLOOR - AREA "E"

1/8" = 1'-0"

1/8"=1'-0"

North

NOTES (FIRST FLOOR POWER PLAN - AREA "E"):

E1. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR AUTOCLAVE. COORDINATE THE REQUIRED RECEPTACLE NEMA CONFIGURATION WITH THE AUTOCLAVE EQUIPMENT PRIOR TO PURCHASE OF CONDUCTORS AND RECEPTACLE.

E2. RECEPTACLE FOR VIDEO MONITOR. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIRSMENTS FOR THE VIDEO MONITOR. IN GENERAL, INSTALL BEHIND THE VIDEO MONITOR IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE.

E3. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

E4. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR POWER TO ELECTRIC WATER COOLER.

E5. RECEPTACLE FOR POWER TO AUDIO/VIDEO CONTROL CABINET. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE AUDIO/VIDEO CONTROL CABINET. SEE TYPICAL INSTRUCTOR'S AV ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

E6. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR PRINTER/COPIER MACHINE.

E7. RECEPTACLE AND DEDICATED BRANCH CIRCUIT. INSTALL WITHIN THE ELEVATOR PIT AREA.

E8. COORDINATE ALL ELECTRICAL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS AND MOUNTING HEIGHTS WITHIN THE ELEVATOR SHAFT AND THE ELEVATOR PIT AREAS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN TO ENSURE INSTALLATION WILL MEET THE REQUIREMENTS OF THE ELEVATOR PROVIDER, ELEVATOR INSPECTOR AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

E9. PROVIDE NEMA 5-20R SIMPLEX RECEPTACLE. PROVIDE POWER FEED TO RECEPTACLE THROUGH ASSOCIATED CONTROLLER, INSTALLED WITHIN ROOM. COORDINATE THE INSTALLATION LOCATION AND INSTALLATION REQUIREMENTS WITH THE PUMP/CONTROLLER PROVIDER AND ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN.

E10. PROVIDE RECEPTACLE HIGH ON WALL BEHIND VIDEO MONITOR FOR DIGITAL SIGNAGE.

E11. INSTALL WITHIN STUDENT STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED.

E12. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR DISH WASHING MACHINE. PROVIDE FINAL CIRCUIT TO DISH WASHING MACHINE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS..

E13. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR REFRIGERATOR.

E14. INSTALL WITHIN TEACHER'S STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED.

NOTES (FIRST FLOOR POWER PLAN - AREA "E") (CONTINUED):

E15. PROVIDE TOGGLE TYPE CONTROL SWITCH FOR CONTROL OF ELECTRIC SOLENOID VALVES FOR HOT AND COLD WATER SERVICE WITHIN THIS ROOM. PROVIDE POWER FEED TO CONTROL SWITCH FROM THE SAME BRANCH CIRCUIT WHICH FEEDS THE ADJACENT RECEPTACLE. PROVIDE ENGRAVED DEVICE PLATE ON SWITCH WHICH READS "WTR CTRL". LABELS SHALL ALSO INCLUDE THE "ON" AND "OFF" POSITIONS. PROVIDE CIRCUIT FROM LOAD SIDE OF SWITCH TO WATER CONTROL VALVES FOR CORRECT OPERATION. WATER SHALL BE ALLOWED TO FLOW WHENEVER THERE IS 120V APPLIED TO THE VALVES. SEE MECHANICAL & PLUMBING DRAWINGS FOR ADDITIONAL REQUIREMENTS AND GENERAL LOCATIONS OF WATER CONTROL VALVES.

E16. PROVIDE POWER OUTLETS WITHIN FURNITURE SYSTEM RACEWAY.

E17. PROVIDE 2-GANG OUTLET BOX IN WALL WITH A 2-GANG RING AND WITH QUANTITY OF ONE 3/4" CONDUIT RACEWAY FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE. (FOR ROUTING OF POWER CONDUCTORS TO RECEPTACLES WITHIN THE FURNITURE SYSTEM BOX IN WALL FACEPLATE AS REQUIRED FOR INSTALLATION OF THE POWER CONDUCTORS TO THE RECEPTACLES IN THE FURNITURE SYSTEM RACEWAY.

E18. PROVIDE FUSIBLE SAFETY DISCONNECT SWITCH FOR POWER TO ELEVATOR CONTROLLER. SEE ONE-LINE DIAGRAM - EMERGENCY POWER, SHEET E3.2, FOR ADDITIONAL REQUIREMENTS.

E19. PROVIDE NEMA 5-20R DUPLEX RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT FOR CORD AND PLUG POWER CONNECTIONS TO ELEVATOR SUMP PUMP CONTROLLER AND ASSOCIATED ALARM PANEL. PANEL AND CIRCUIT NO. INDICATED SHALL BE USED TO PROVIDE POWER TO THE CONTROLLER AND ALARM PANEL, AND FROM THE CONTROLLER TO RECEPTACLE IN ELEVATOR PIT FOR SUMP PUMP. COORDINATE THE INSTALLATION LOCATION AND INSTALLATION REQUIREMENTS WITH THE PUMP/CONTROLLER PROVIDER AND ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN. THE CONTROLLER AND ASSOCIATED ALARM PANEL SHALL BE FED FROM SAME BRANCH CIRCUIT.

E20. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR HVAC UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO HVAC UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL, AND BRANCH CIRCUIT NO. AS INDICATED USING 3P12, 1P120 IN 3#7C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

E21. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR BRANCH SELECTOR UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO BRANCH SELECTOR UNIT (1HROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 3P12, 1P120 IN 3#7C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

E22. PROVIDE SAFETY DISCONNECT MEANS NEAR THE INDOOR UNIT. PROVIDE ALL REQUIRED POWER, CONTROL, & COMMUNICATION CIRCUITS BETWEEN THE INDOOR UNIT AND THE ASSOCIATED OUTDOOR CONDENSING UNIT PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

E23. JUNCTION BOX(ES) AND DEDICATED NEC 700 EMERGENCY POWER BRANCH CIRCUIT FOR POWER TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT. PROVIDE POWER TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT FROM PANEL "EL11E" CIRCUIT NO. 1 USING 3P12, 2P12, 1P12G IN 3/4"C.. PROVIDE ALL REQUIRED POWER CIRCUITS AND CONNECT TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT PER THE FIRE ALARM SYSTEM MANUFACTURER'S REQUIREMENTS. COORDINATE THE REQUIRED INSTALLATION LOCATIONS WITH THE INSTALLATION REQUIREMENTS FOR THE FIRE ALARM SYSTEM.

E24. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR MICROWAVE. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION LOCATION FOR THE MICROWAVE UNIT.

E25. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR COFFEE MAKER.

E26. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE.

E27. GROUND BUS BAR ON INSULATED STAND-OFF DEVICES. SEE GROUNDING SYSTEM RISER DIAGRAM, SHEET E1.14, FOR ADDITIONAL REQUIREMENTS.

E28. PROVIDE RECEPTACLE HIGH ON WALL BEHIND VIDEO MONITOR FOR VIDEO SURVEILLANCE.

E29. JUNCTION BOX AS REQUIRED FOR POWER CIRCUIT TO TEMPERATURE CONTROL PANEL. PROVIDE DEDICATED 120V, 20A CIRCUIT TO T.C. PANEL FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 3P12, 1P120 IN 3/4"C.

E30. NOTE NOT USED.

E31. SPACE RESERVED FOR ROUTING OF VERTICAL CONDUIT RACEWAYS (FROM UNDERGROUND TO VERTICAL UP WALL) FOR COMMUNICATIONS FIBER CABLES. SEE COMMUNICATION ROOM LOCATION PLAN - FIRST FLOOR, SHEET E3.1, FOR ADDITIONAL REQUIREMENTS.

E32. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR KIOSK.

E33. PROVIDE #10AWG CONDUCTORS FOR ALL "PHASE", "NEUTRAL" AND EQUIPMENT GROUND CONDUCTORS FOR ENTIRE LENGTH OF BRANCH CIRCUIT.

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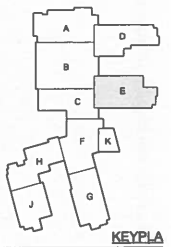


KEYPLA

Revisions:

#	Description	Date
1	ASI-004 VAV Coordination	12/10/2021
2	Access Control System Mods	04/18/2022

Designed By:	Drawn By:	Checked By:
MJB	BDB	MJB

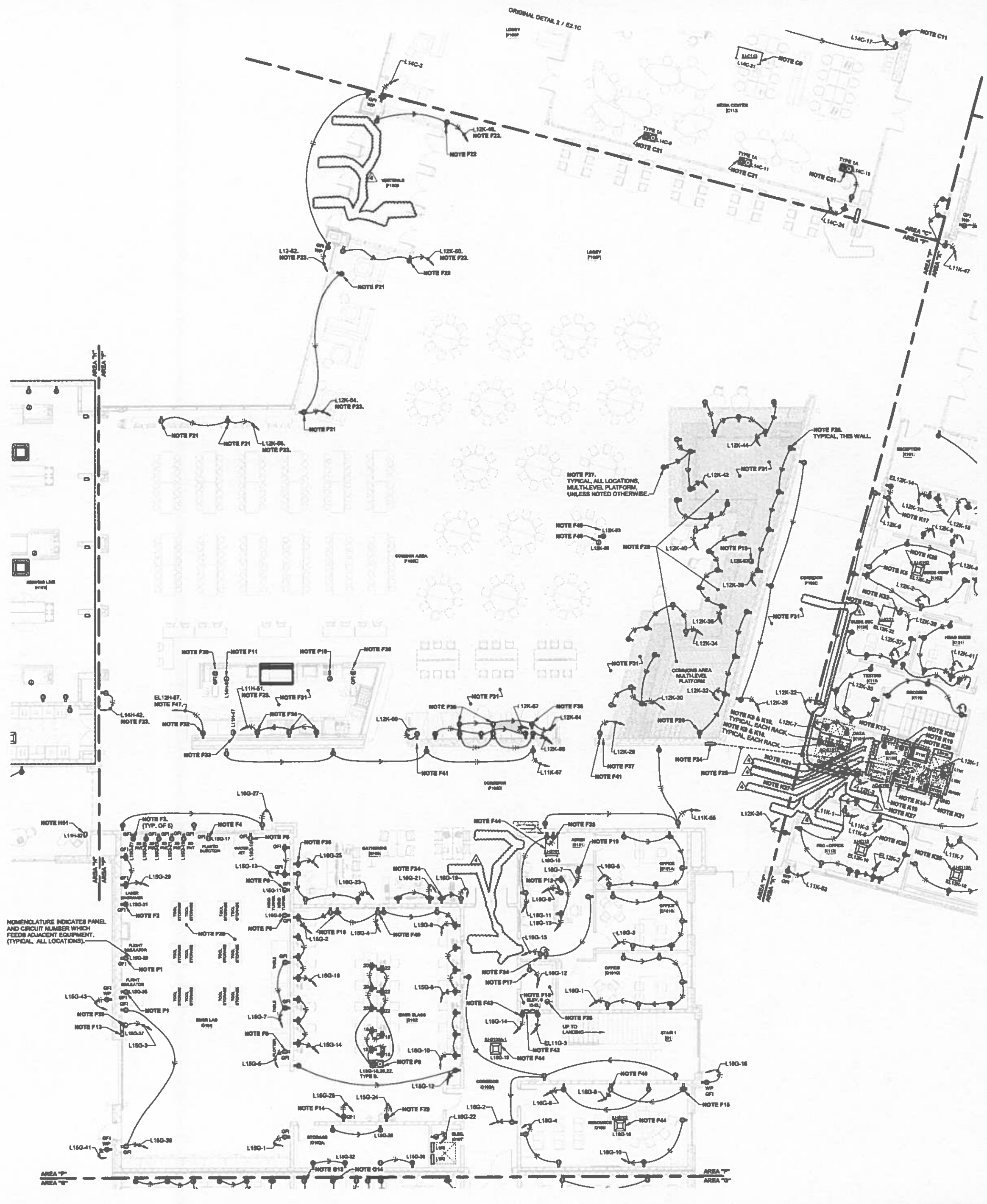
Sheet title:

POWER PLAN - FIRST FLOO
- AREA "E"

Architect's Project No:	Date:
2106-204	May, 20

Drawing No:

E2.1E



POWER PLAN - FIRST FLOOR - AREA "F"

1/8" = 1'-0"

GENERAL NOTES (FIRST FLOOR POWER PLAN - AREA "F")[CONT.]:

GF1. CONTRACTOR SHALL COORDINATE WITH FOOD SERVICE DRAWINGS, FOOD SERVICES EQUIPMENT CONTRACTOR AND APPROVED FOOD SERVICE SUBMITTAL DRAWINGS FOR ALL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS, AND REQUIRED MOUNTING HEIGHTS PRIOR TO START OF ROUGH-IN.

NOTES (FIRST FLOOR POWER PLAN - AREA "F"):

F1. PROVIDE RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR FLIGHT SIMULATOR.

F2. PROVIDE RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR LASER ENGRAVER.

F3. PROVIDE RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR 3D PRINTER.

F4. PROVIDE RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR PLASTIC INJECTION.

F5. PROVIDE RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR WATER JET.

F6. PROVIDE RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR WIND TUNNEL.

F7. NOTE NOT USED.

F8. PROVIDE RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR PLOTTER.

F9. PROVIDE MULTIFUNCTION FLOORBOX ASSEMBLY TYPE AS INDICATED. PROVIDE UNDERGROUND CONDUITS AND ACCESSORIES AS INDICATED FOR THE TYPE OF ASSEMBLY IN THE MULTI-FUNCTION FLOORBOX / POKE-THRU SCHEDULE SHOWN ON SHEET E1.1. PROVIDE POWER CIRCUIT(S) TO FLOORBOX (AND ASSOCIATED LOADS AS INDICATED) FROM PANEL AND BRANCH CIRCUIT NUMBER(S) AS INDICATED. SEE SYSTEMS & TECHNOLOGY PLANE - FIRST FLOOR AREA "F", SHEET E3.1F, FOR ADDITIONAL REQUIREMENTS. CONTRACTOR SHALL PROVIDE THE RECEPTACLES WITHIN THE RACEWAY SYSTEM FURNISHED AS PART OF THE FURNITURE SYSTEM.

F10. PROVIDE 150A, 120/208V, SINGLE-PHASE FEEDER CIRCUIT TO HOT/COLD SERVING COUNTER LOAD CENTER "15.2" FROM SWITCHBOARD "LSB11H". SEE ONE-LINE DIAGRAM - BLDG AREA "H" - NORMAL POWER (208Y/120V DIST SYSTEM), SHEET E5.8, AND FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

F11. PROVIDE 40A, 120/208V, SINGLE-PHASE FEEDER CIRCUIT TO HOT/COLD SERVING COUNTER LOAD CENTER "15.1" FROM PANEL AND CIRCUIT NO. AS INDICATED. SEE ONE-LINE DIAGRAM - BLDG AREA "H" - NORMAL POWER, SHEET E5.8, AND FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

F12. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR KIOSK.

F13. PROVIDE 30A/1 FUSIBLE SAFETY DISCONNECT SWITCH FOR POWER TO MOTORIZED OVERHEAD DOOR SYSTEM. COORDINATE INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE REQUIREMENTS OF THE MOTORIZED OVER HEAD DOOR SYSTEM. PROVIDE FINAL CIRCUIT TO MOTORIZED DOOR SYSTEM CONTROLLER PER MANUFACTURER'S REQUIREMENTS. PROVIDE FUSING PER MANUFACTURER'S REQUIREMENTS. PROVIDE ALL REQUIRED CIRCUITS BETWEEN THE REMOTE UP/DOWN CONTROL DEVICE AND THE CONTROLLER PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#10, 1#10G IN 3/4"C.

F14. PROVIDE GFI RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT FOR WASH FOUNTAIN SINK FROM PANEL AND CIRCUIT NO. AS INDICATED. COORDINATE THE REQUIRED INSTALLATION LOCATION AND HEIGHT WITH EQUIPMENT PROVIDER PRIOR TO START OF ROUGH-IN.

F15. JUNCTION BOX AS REQUIRED FOR POWER CONNECTION TO MOTORIZED PROJECTION SCREEN. PROVIDE DEDICATED 120V, 20A BRANCH CIRCUIT TO PROJECTION SCREEN CONTROLLER FROM PANEL AND CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE REQUIRED CIRCUITS BETWEEN THE REMOTE "UP/DOWN" CONTROL DEVICE PER THE MANUFACTURER'S REQUIREMENTS.

F16. RECEPTACLE FOR POWER TO AUDIO/VIDEO CONTROL CABINET. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE AUDIO/VIDEO CONTROL CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

F17. RECEPTACLE AND DEDICATED BRANCH CIRCUIT. INSTALL WITHIN THE ELEVATOR PIT AREA.

F18. COORDINATE ALL ELECTRICAL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS AND MOUNTING HEIGHTS WITHIN THE ELEVATOR SHAFT AND THE ELEVATOR PIT AREAS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN TO ENSURE INSTALLATION WILL MEET THE REQUIREMENTS OF THE ELEVATOR PROVIDER, ELEVATOR INSPECTOR AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

F19. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR PRINTER / COPIER MACHINE.

F20. ALL RECEPTACLES PROVIDED WITHIN THIS ROOM SHALL BE NEMA 5-20R HEAVY DUTY INDUSTRIAL GRADE GFI TYPE UNLESS NOTED OTHERWISE OR NOTED TO BE FED FROM A GFI TYPE CIRCUIT BREAKER.

F21. PROVIDE RECEPTACLE WITHIN A SINGLE-SIDED STAINLESS STEEL "TOMBSTONE" TYPE FLOOR MOUNT ENCLOSURE. PROVIDE WIREMOLD 525H SERIES ENCLOSURE, OR APPROVED EQUAL. PROVIDE POWER FEED TO RECEPTACLE FROM BELOW GRADE. COORDINATE THE REQUIRED INSTALLATION LOCATION WITH ARCHITECT PRIOR TO START OF ROUGH-IN. INSTALL CLOSE TO WALL / BASEBOARD HEATER AS REQUIRED TO MINIMIZE TRIPPING HAZARD.

F22. COORDINATE INSTALLATION REQUIREMENT WITH THE STOREFRONT SYSTEM PROVIDER PRIOR TO START OF ROUGH-IN. INSTALL FLUSH WITHIN STOREFRONT SYSTEM. COORDINATE FINISH COLOR OF RECEPTACLE AND DEVICE PLATE WITH ARCHITECT PRIOR TO PURCHASE AND INSTALLATION.

F23. PROVIDE #10AWG CONDUCTORS FOR ALL "PHASE", "NEUTRAL" AND EQUIPMENT GROUND CONDUCTORS FOR ENTIRE LENGTH OF BRANCH CIRCUIT.

F24. PROVIDE FLUSH MOUNT PULL BOX (6"Wx6"Hx4"D) IN WALL AT APPROXIMATELY 16" ABOVE FINISHED FLOOR TO BOTTOM OF BOX FOR POWER FEEDS TO RECEPTACLES WITHIN COMMON AREA SEATING STEPS. PROVIDE CUSTOM 1/8" THICK COVER PLATE. COVER PLATE SHALL BE PAINTED TO MATCH WALL FINISH. SLIGHTLY RECESS BOX IN WALL SUCH THAT COVER PLATE IS FLUSH WITH FINISHED WALL WHEN INSTALLED ON BOX.

F25. PROVIDE UNDERGROUND CONDUITS (QUANTITY THREE 1" FROM PANEL TO PULL BOX FOR POWER CIRCUITS, PLUS ONE SPARE) TO RECEPTACLES IN STEPPED SEATING AREA.

F26. INSTALL RECEPTACLES AT 18" ABOVE TOP OF ADJACENT PLATFORM TO CENTER OF OUTLET BOX.

F27. INSTALL RECEPTACLE HORIZONTALLY IN FACE OF MULTI-LEVEL PLATFORM.

F28. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS AND DETAILS FOR ADDITIONAL REQUIREMENTS WITH REGARDS TO THE COMMONS AREA MULTI-LEVEL PLATFORM.

F29. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR POWER TO ELECTRIC WATER COOLER.

F30. PROVIDE RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT FOR DROP-IN SINK WITH FAUCET FROM LOAD CENTER PROVIDED WITHIN THE KIOSK FOOD SERVICE EQUIPMENT. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

F31. CONTRACTOR SHALL COORDINATE REQUIREMENTS TO PROVIDE CONDUIT RACEWAYS BELOW GRADE FOR POWER, SYSTEMS, TECHNOLOGY AND LIGHTING CIRCUITS WITHIN AREAS WHICH DO NOT HAVE WALLS OR OTHER PATHWAYS TO GET FROM WALL OUTLETS TO SOURCES OF FEED AND CONTROL.

F32. PROVIDE RECEPTACLE HIGH ON WALL AND DEDICATED EMERGENCY POWER (NEC 702) 20A, 120V BRANCH CIRCUIT FOR ROLL-IN REFRIGERATOR. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

F33. PROVIDE NEMA L14-20R TWIST-LOCK RECEPTACLE AND DEDICATED 120/208V, 20A, SINGLE-PHASE BRANCH CIRCUIT FOR ROLL-IN HEATED CABINET, USING 3#12, 1#12G, IN 3/4" C. FROM PANEL AND CIRCUIT NO. AS INDICATED. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

F34. PROVIDE RECEPTACLE HIGH ON WALL BEHIND VIDEO MONITOR FOR DIGITAL SIGNAGE.

F35. PROVIDE RECEPTACLE HIGH ON WALL BEHIND MONITOR FOR VIDEO SURVEILLANCE.

F36. RECEPTACLE FOR VIDEO MONITOR. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE VIDEO MONITOR. IN GENERAL, INSTALL BEHIND THE VIDEO MONITOR IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE.

NOTES (FIRST FLOOR POWER PLAN - AREA "F")[CONT.]:

F37. INSTALL REMOTE "UP/DOWN" CONTROL DEVICES FOR THE MOTORIZED PROJECTOR LIFT AND THE MOTORIZED PROJECTION SCREEN IN WALL AT THIS LOCATION. PROVIDE LABEL ON DEVICE PLATES WHICH CLEARLY IDENTIFY THE LOAD CONTROLLED BY THE SWITCH.

F38. PROVIDE NEMA 5-20R SIMPLEX RECEPTACLE. PROVIDE POWER FEED TO RECEPTACLE THROUGH ASSOCIATED CONTROLLER INSTALLED WITHIN ROOM. COORDINATE THE INSTALLATION LOCATION AND INSTALLATION REQUIREMENTS WITH THE PUMP/CONTROLLER PROVIDER AND ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN.

F39. PROVIDE JUNCTION BOX AS REQUIRED AND 120V CIRCUIT TO CO/NO2 MONITORING PANEL FROM PANEL AND CIRCUIT NO. AS INDICATED. PROVIDE FINAL CONNECTION TO EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. SEE MECHANICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS. COORDINATE WITH MECHANICAL ENGINEER FOR INSTALLATION LOCATION PRIOR TO START OF ROUGH-IN.

F40. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

F41. RECEPTACLE FOR POWER TO LAPTOP COMPUTER.

F42. PROVIDE FUSIBLE SAFETY DISCONNECT SWITCH FOR POWER TO ELEVATOR CONTROLLER. SEE ONE-LINE DIAGRAM - EMERGENCY POWER, SHEET E5.2, FOR ADDITIONAL REQUIREMENTS.

F43. PROVIDE NEMA 5-20R DUPLEX RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT FOR CORD AND PLUG POWER CONNECTIONS TO ELEVATOR SUMP PUMP CONTROLLER AND ASSOCIATED ALARM PANEL. PANEL AND CIRCUIT NO. INDICATED SHALL BE USED TO PROVIDE POWER TO THE CONTROLLER AND ALARM PANEL, AND FROM THE CONTROLLER TO RECEPTACLE IN ELEVATOR PIT FOR SUMP PUMP. COORDINATE THE INSTALLATION LOCATION AND INSTALLATION REQUIREMENTS WITH THE PUMP/CONTROLLER PROVIDER AND ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN. THE CONTROLLER AND ASSOCIATED ALARM PANEL SHALL BE FED FROM SAME BRANCH CIRCUIT.

F44. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR HVAC UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO HVAC UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

F45. JUNCTION BOX AS REQUIRED FOR POWER CONNECTION TO MOTORIZED LIFT SYSTEM. PROVIDE DEDICATED 120V, 20A BRANCH CIRCUIT TO LIFT SYSTEM FROM PANEL AND CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE REQUIRED CIRCUITS BETWEEN THE REMOTE "UP/DOWN" CONTROL DEVICE PER THE MANUFACTURER'S REQUIREMENTS.

F46. PROVIDE RECEPTACLE ON THE MOTORIZED LIFT SYSTEM PLATFORM AS REQUIRED FOR POWER TO PROJECTOR EQUIPMENT. PROVIDE DEDICATED 120V, 20A BRANCH CIRCUIT TO RECEPTACLE FROM PANEL AND CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C.

F47. PROVIDE 2#8, 1#8G IN 3/4"C. TRANSITION DOWN TO 2#10, 1#10G WHERE THE CIRCUIT IS TERMINATED ON THE RECEPTACLE.

F48. NOTE NOT USED.

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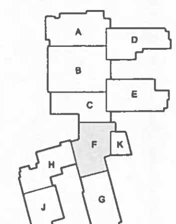


KEYPLAN

Revisions:

#	Description	Date
1	[illegible] VRF Coordination	[illegible]
2	Food Service Submittal Review [illegible]	[illegible]
3	[illegible] System Mods	[illegible]
4	Access Control System Mods	[illegible]

Designed By:	Drawn By:	Checked By:
MJS	SDB	MJS

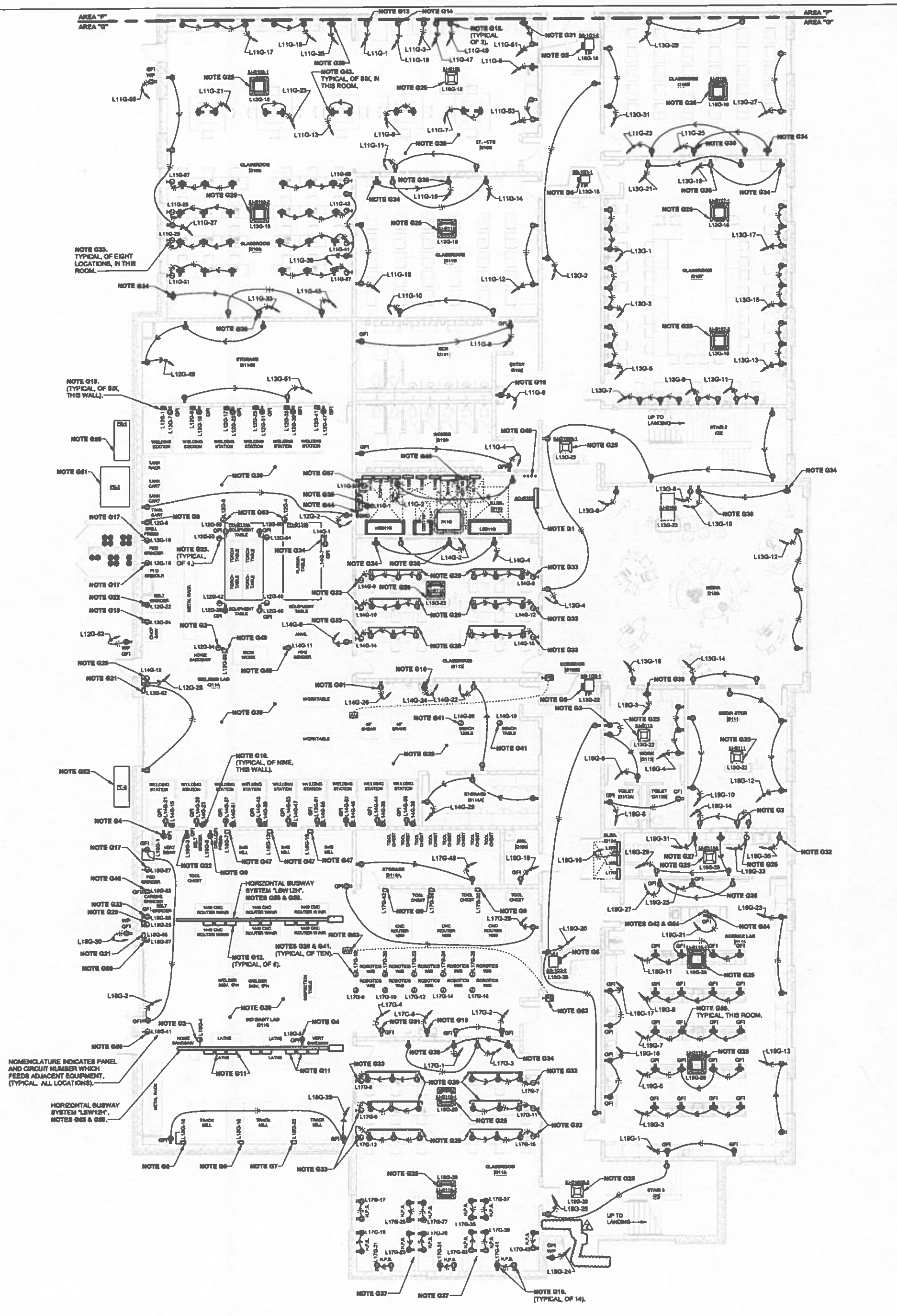
The drawings, specifications and other documents, including those in electronic form prepared by Hafer for this project are instruments of [illegible] and may be used solely with respect to this project. [illegible]

Sheet title:
POWER PLAN - FIRST FLOOR - AREA "F"

Architect's Project No: 2106-204

Date: May, 20[illegible]

Drawing No: E2.1F



POWER PLAN - FIRST FLOOR - AREA "G"

1/8" = 1'-0"

NOTES (FIRST FLOOR POWER PLAN - AREA "G"):

G1. PROVIDE SAFETY DISCONNECT MEANS NEAR THE INDOOR UNIT. PROVIDE ALL REQUIRED POWER, CONTROL, & COMMUNICATION CIRCUITS BETWEEN THE INDOOR UNIT AND THE ASSOCIATED OUTDOOR CONDENSING UNIT PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

G2. PROVIDE RECEPTACLE AND DEDICATED 30A, 208V SINGLE-PHASE BRANCH CIRCUIT FOR HORIZONTAL BANDSAW. PROVIDE NEMA 6-30R RECEPTACLE. PROVIDE #10AWG CONDUCTORS FOR ALL PHASE AND GROUND CONDUCTORS.

G3. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE.

G4. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR VERTICAL BAND SAW.

G5. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR BRANCH SELECTOR UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO BRANCH SELECTOR UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

G6. PROVIDE 60A/3 FUSIBLE SAFETY DISCONNECT SWITCH FOR 208V, 3-PHASE POWER TO TRACK MILL. COORDINATE INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE REQUIREMENTS OF THE TRACK MILL. PROVIDE FINAL CIRCUIT TO TRACK MILL CONTROLLER PER MANUFACTURER'S REQUIREMENTS. PROVIDE FUSING PER MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 3#8, 1#10G IN 3/4"C. PROVIDE FINAL CIRCUIT TO TRACK MILL PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE THE INSTALLATION LOCATION WITH THE INSTALLATION LOCATION FOR THE TRACK MILL.

G7. PROVIDE 30A/3 FUSIBLE SAFETY DISCONNECT SWITCH FOR 208V, 3-PHASE POWER TO TRACK MILL. COORDINATE INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE REQUIREMENTS OF THE TRACK MILL. PROVIDE FINAL CIRCUIT TO TRACK MILL CONTROLLER PER MANUFACTURER'S REQUIREMENTS. PROVIDE FUSING PER MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 3#10, 1#10G IN 3/4"C. PROVIDE FINAL CIRCUIT TO TRACK MILL PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE THE INSTALLATION LOCATION WITH THE INSTALLATION LOCATION FOR THE TRACK MILL.

G8. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR DRILL PRESS.

G9. PROVIDE 60A/3 FUSIBLE SAFETY DISCONNECT SWITCH FOR 208V, 3-PHASE POWER TO CNC ROUTER 1630. COORDINATE INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE REQUIREMENTS OF THE CNC ROUTER. PROVIDE FINAL CIRCUIT TO CNC ROUTER CONTROLLER PER MANUFACTURER'S REQUIREMENTS. PROVIDE FUSING PER MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 3#8, 1#10G IN 3/4"C. PROVIDE FINAL CIRCUIT TO CNC ROUTER PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE THE INSTALLATION LOCATION WITH THE INSTALLATION LOCATION FOR THE CNC ROUTER.

G10. PROVIDE RECEPTACLES AND BRANCH CIRCUIT FOR HYDRAULIC / PNEUMATIC STATION.

G11. BUS-PLUG ASSEMBLY. PROVIDE FUSING AS REQUIRED AND PROVIDE POWER FEED FROM BUS PLUG ASSEMBLY TO LATHE EQUIPMENT. COORDINATE THE INSTALLATION LOCATION FOR THE BUS PLUG IN FIELD WITH THE POWER FEED REQUIREMENTS OF THE CONNECTED LOAD.

G12. BUS-PLUG ASSEMBLY. PROVIDE FUSING AS REQUIRED AND PROVIDE POWER FEED FROM BUS PLUG ASSEMBLY TO CNC ROUTER FEL-1440GWI EQUIPMENT. COORDINATE THE INSTALLATION LOCATION FOR THE BUS PLUG IN FIELD WITH THE POWER FEED REQUIREMENTS OF THE CONNECTED LOAD.

G13. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CNC ROUTER.

G14. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR BENCH MILL.

G15. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR 3D PRINTER.

G16. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR POWER TO ELECTRIC WATER COOLER.

G17. PROVIDE 30A/3 NON-FUSIBLE SAFETY DISCONNECT SWITCH AND NEMA L15-20R TWIST-LOCK RECEPTACLE FOR 20A, 208V, 3-PHASE POWER FEED TO PED GRINDER. PROVIDE CIRCUIT FROM PANEL AND BRANCH CIRCUIT NUMBER AS INDICATED USING 3#12, 1#12G IN 3/4"C. INSTALL THE SAFETY DISCONNECT SWITCH ON THE LINE SIDE OF THE RECEPTACLE. COORDINATE THE INSTALLATION LOCATIONS WITH THE INSTALLATION LOCATION FOR THE PED GRINDER MACHINE.

G18. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CHOP SAW.

G19. PROVIDE 60A/3 NON-FUSED SAFETY DISCONNECT SWITCH AND 60A/3 PIN & SLEEVE SCREW-ON RECEPTACLE BELOW DISCONNECT SWITCH FOR 60A, 208V 3-PHASE POWER SERVICE TO WELDING EQUIPMENT. PROVIDE APPLETON RECEPTACLE CAT. NO. FSQC6340, OR EQUAL TO MATCH THE OWNER'S EXISTING WELDING SHOP ELECTRICAL CONFIGURATION. PROVIDE CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. INDICATED USING 3#6, 1#8G IN 3/4"C. COORDINATE THE REQUIRED INSTALLATION LOCATION WITHIN THE BOOTH WITH THE OWNER AND ARCHITECT PRIOR TO START OF ROUGH-IN.

G20. PROVIDE POWER OUTLETS WITHIN FURNITURE SYSTEM RACEWAY.

G21. PROVIDE 30A/1 FUSIBLE SAFETY DISCONNECT SWITCH FOR POWER TO MOTORIZED OVERHEAD DOOR SYSTEM. COORDINATE INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE REQUIREMENTS OF THE MOTORIZED OVER HEAD DOOR SYSTEM. PROVIDE FINAL CIRCUIT TO MOTORIZED DOOR SYSTEM CONTROLLER PER MANUFACTURER'S REQUIREMENTS. PROVIDE FUSING PER MANUFACTURER'S REQUIREMENTS. PROVIDE ALL REQUIRED CIRCUITS BETWEEN THE REMOTE UP/DOWN CONTROL DEVICE AND THE CONTROLLER PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#10, 1#10G IN 3/4"C.

G22. PROVIDE RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR BELT GRINDER.

G23. PROVIDE 50A, 208V SINGLE-PHASE NEMA 6-50R RECEPTACLE FOR POWER SERVICE TO TORCH. PROVIDE CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. INDICATED USING 2#8, 1#10G IN 3/4"C. COORDINATE THE REQUIRED INSTALLATION LOCATION WITH THE OWNER AND ARCHITECT PRIOR TO START OF ROUGH-IN.

G24. PROVIDE 60A/3 NON-FUSED SAFETY DISCONNECT SWITCH AND 60A/3 PIN & SLEEVE SCREW-ON RECEPTACLE BELOW DISCONNECT SWITCH FOR 60A, 208V 3-PHASE POWER SERVICE TO PLASMA TABLE EQUIPMENT. PROVIDE APPLETON RECEPTACLE CAT. NO. FSQC6340, OR EQUAL TO MATCH THE OWNER'S EXISTING PLASMA TABLE SET-UP IN WELDING SHOP. PROVIDE CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. INDICATED USING 3#6, 1#8G IN 3/4"C. COORDINATE THE REQUIRED INSTALLATION LOCATION WITHIN THE BOOTH WITH THE OWNER AND ARCHITECT PRIOR TO START OF ROUGH-IN.

G25. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR HVAC UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO HVAC UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

G26. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR DISH WASHING MACHINE. PROVIDE FINAL CIRCUIT TO DISH WASHING MACHINE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

G27. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR AUTOCLAVE. COORDINATE THE REQUIRED RECEPTACLE NEMA CONFIGURATION WITH THE AUTOCLAVE EQUIPMENT PRIOR TO PURCHASE OF CONDUCTORS AND RECEPTACLE.

G28. PROVIDE POWER FOR ROBOTICS WORKSTATION.

G29. PROVIDE JUNCTION BOX AS REQUIRED AND 120V CIRCUIT TO CO/NO2 MONITORING PANEL FROM PANEL AND CIRCUIT NO. AS INDICATED. PROVIDE FINAL CONNECTION TO EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. SEE MECHANICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS. COORDINATE WITH MECHANICAL ENGINEER FOR INSTALLATION LOCATION PRIOR TO START OF ROUGH-IN.

G30. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR COPIER/PRINTER.

G31. RECEPTACLE FOR MOCK SERVER STATION.

G32. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR REFRIGERATOR.

G33. PROVIDE JUNCTION BOX IN WALL AS REQUIRED FOR POWER CIRCUIT(S) TO RECEPTACLES WITHIN FURNITURE SYSTEM POWER RACEWAY SYSTEM. PROVIDE FINAL CIRCUITS TO FURNITURE SYSTEM POWER RACEWAY AND TO RECEPTACLES PER THE FURNITURE SYSTEM PROVIDER / MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUITS FROM PANEL AND BRANCH CIRCUIT NUMBERS AS INDICATED.

NOTES (FIRST FLOOR POWER PLAN - AREA "G") [CONT]:

G34. RECEPTACLE FOR POWER TO AUDIO/VIDEO CONTROL CABINET. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE AUDIO/VIDEO CONTROL CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

G35. JUNCTION BOX(S) AND DEDICATED NEC 700 EMERGENCY POWER BRANCH CIRCUIT FOR POWER TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT. PROVIDE ALL REQUIRED POWER CIRCUITS AND CONNECT TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT PER THE FIRE ALARM SYSTEM MANUFACTURER'S REQUIREMENTS. COORDINATE THE REQUIRED INSTALLATION LOCATIONS WITH THE INSTALLATION REQUIREMENTS FOR THE FIRE ALARM SYSTEM.

G36. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

G37. ROUTE CONDUITS BELOW GRADE AS REQUIRED FOR POWER AND DATA FEEDS TO OUTLETS WITHIN THIS SHORT WALL SYSTEM.

G38. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR POWER TO PRINTER / COPIER MACHINE.

G39. ALL RECEPTACLES PROVIDED WITHIN THIS ROOM SHALL BE NEMA 5-20R HEAVY DUTY INDUSTRIAL GRADE GFI TYPE UNLESS NOTED OTHERWISE OR NOTED TO BE FED FROM A GFI TYPE CIRCUIT BREAKER.

G40. PROVIDE TRANSFORMER WITH ALL REQUIRED ACCESSORIES (AND PROVIDE SUPPLEMENTAL STEEL SUPPORT SYSTEM) AS REQUIRED TO INSTALL TRANSFORMER ABOVE THE FINISHED FLOOR AND SEISMICALLY SUPPORT / BRACE THE TRANSFORMER FROM THE BUILDING STRUCTURAL SYSTEM. INSTALL SUCH THAT THE BOTTOM OF THE TRANSFORMER / SEISMIC SUPPORT SYSTEM IS NOT LOWER THAN 8'-6" ABOVE FINISHED FLOOR. INSTALL THE PRIMARY DISCONNECT MEANS AND THE SECONDARY OVERCURRENT PROTECTION DEVICE ON WALL BELOW THE TRANSFORMER (TO MAXIMIZE MOUNTING SPACE FOR DISTRIBUTION EQUIPMENT WITHIN THE ASSOCIATED ELECTRICAL ROOM).

G41. PROVIDE 20A, 125V NEMA 5-20R DUPLEX RECEPTACLE WITHIN THE EXPOSED CEILING STRUCTURE AREA FOR POWER TO CORD REEL ASSEMBLY. PROVIDE ALL REQUIRED SUPPLEMENT STEEL STRUCTURE SYSTEM AS REQUIRED TO SUPPORT THE CORD REEL AND WITHSTAND FORCES FROM HANGING THE CORD REEL AND PULLING CORD ASSEMBLY FOR USE. PROVIDE CORD REEL ASSEMBLY. COORDINATE THE LOCATION IN FIELD WITH ARCHITECT PRIOR TO START OF ROUGH-IN. SEE CORD REEL INSTALLATION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS REGARDING THE CORD REEL ASSEMBLY AND INSTALLATION OF THE CORD REEL ASSEMBLY. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NUMBER AS INDICATED.

G42. PROVIDE TOGGLE TYPE CONTROL SWITCH FOR CONTROL OF ELECTRIC SOLENOID VALVES FOR HOT AND COLD WATER SERVICE WITHIN THIS ROOM. PROVIDE POWER FEED TO CONTROL SWITCH FROM THE SAME BRANCH CIRCUIT WHICH FEEDS THE ADJACENT RECEPTACLE. PROVIDE ENGRAVED DEVICE PLATE ON SWITCH WHICH READS "WTR CTRL". LABELS SHALL ALSO INCLUDE THE "ON" AND "OFF" POSITIONS. PROVIDE CIRCUIT FROM LOAD SIDE OF SWITCH TO WATER CONTROL VALVES FOR CORRECT OPERATION. WATER SHALL BE ALLOWED TO FLOW WHENEVER THERE IS 120V APPLIED TO THE VALVES. SEE MECHANICAL & PLUMBING DRAWINGS FOR ADDITIONAL REQUIREMENTS AND GENERAL LOCATIONS OF WATER CONTROL VALVES.

G43. SEE ARCHITECTURAL PLANS AND DETAILS FOR ADDITIONAL REQUIREMENTS REGARDING INSTALLATION LOCATIONS, MOUNTING HEIGHTS, AND STEEL STRUT SUPPORT INSTALLATION REQUIREMENTS FOR POWER, DATA AND CABLETRAY INSTALLATION FOR WORK BENCH AREA.

G44. GROUND BUS BAR ON INSULATED STAND-OFF DEVICES. SEE GROUNDING SYSTEM RISER DIAGRAM, SHEET E1.14, FOR ADDITIONAL REQUIREMENTS.

G45. SPACE RESERVED FOR ROUTING OF VERTICAL CONDUIT RACEWAYS (FROM UNDERGROUND TO VERTICAL UP WALL) FOR COMMUNICATIONS FIBER CABLES. SEE COMMUNICATION ROOM LOCATION PLAN - FIRST FLOOR, SHEET E3.1, FOR ADDITIONAL REQUIREMENTS.

G46. PROVIDE RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CARBIDE GRINDER.

G47. PROVIDE 30A/3 FUSIBLE SAFETY DISCONNECT SWITCH FOR 208V, 3-PHASE POWER TO 8x42 MILL. COORDINATE INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE REQUIREMENTS OF THE MILL EQUIPMENT. PROVIDE FINAL CIRCUIT TO MILL EQUIPMENT CONTROLLER PER MANUFACTURER'S REQUIREMENTS. PROVIDE FUSING PER MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 3#10, 1#10G IN 3/4"C.

G48. PROVIDE RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR PIPE BENDER.

G49. PROVIDE 60A/3 FUSIBLE SAFETY DISCONNECT SWITCH FOR 208V, 3-PHASE POWER TO IRONWORK PIRANHA P65 MACHINE. COORDINATE INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE REQUIREMENTS OF THE MACHINE AND INSTALLATION LOCATION. PROVIDE FINAL CIRCUIT TO MACHINE PER MANUFACTURER'S REQUIREMENTS. PROVIDE FUSING PER MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 3#8, 1#10G IN 3/4"C.

G50. WELD FUME EXTRACTOR "FE-1". WELD FUME EXTRACTOR SHALL BE FURNISHED WITH CONTROLLER AND FUSIBLE SAFETY DISCONNECT SWITCH. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED AND SHALL INSTALL THE DISCONNECT SWITCH PER THE MANUFACTURER'S REQUIREMENTS FOR CORRECT OPERATION. ELECTRICAL CONTRACTOR SHALL COORDINATE THE REQUIRED INSTALLATION LOCATIONS WITH THE MECHANICAL CONTRACTOR PRIOR TO START OF ROUGH-IN. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL "H11G" CIRCUIT NO. 28 USING 3#10, 1#10G, IN 3/4"C. PROVIDE FUSES PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

G51. WELD FUME EXTRACTOR "FE-2". WELD FUME EXTRACTOR SHALL BE FURNISHED WITH CONTROLLER AND FUSIBLE DISCONNECT. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED AND SHALL INSTALL THE DISCONNECT SWITCH PER THE MANUFACTURER'S REQUIREMENTS FOR CORRECT OPERATION. ELECTRICAL CONTRACTOR SHALL COORDINATE THE REQUIRED INSTALLATION LOCATIONS WITH THE MECHANICAL CONTRACTOR PRIOR TO START OF ROUGH-IN. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL "H11G" CIRCUIT NO. 32 USING 3#8, 1#10G, IN 1-1/4" C. PROVIDE FUSES PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

G52. WELD FUME EXTRACTOR "FE-3". WELD FUME EXTRACTOR SHALL BE FURNISHED WITH CONTROLLER AND FUSIBLE SAFETY DISCONNECT SWITCH. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED AND SHALL INSTALL THE DISCONNECT SWITCH PER THE MANUFACTURER'S REQUIREMENTS FOR CORRECT OPERATION. ELECTRICAL CONTRACTOR SHALL COORDINATE THE REQUIRED INSTALLATION LOCATIONS WITH THE MECHANICAL CONTRACTOR PRIOR TO START OF ROUGH-IN. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL "H11G" CIRCUIT NO. 38 USING 3#8, 1#10G, IN 1"C. PROVIDE FUSES PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

G53. PROVIDE 20A, 120V POWER CIRCUIT TO FUME HOOD SYSTEM FOR POWER TO LIGHT KIT. PROVIDE FINAL CIRCUITS TO FUME HOOD SYSTEM PER THE MANUFACTURER'S REQUIREMENTS. THE ELECTRICAL CONTRACTOR SHALL INSTALL THE LIGHT KIT WITHIN THE FUME HOOD PER THE FUME HOOD SYSTEM PROVIDER'S REQUIREMENTS. PROVIDE POWER CIRCUIT TO FUME HOOD SYSTEM FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G, IN 3/4"C.

G54. INSTALL WITHIN TEACHER'S STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED.

G55. INSTALL WITHIN STUDENT STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED.

2 G56. NOTE NOT USED.

G57. JUNCTION BOX AS REQUIRED FOR POWER CIRCUIT TO TEMPERATURE CONTROL PANEL. PROVIDE DEDICATED 120V, 20A CIRCUIT TO T.C. PANEL FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C.

NOTES (FIRST FLOOR POWER PLAN - AREA "G") [CONT]:

G58. PROVIDE PLUG-IN TYPE HORIZONTAL BUSWAY SYSTEM (225A, 208V, 3-PHASE + GND) COMPLETE WITH CABLE TAP BUS, AND ALL REQUIRED ACCESSORIES TO FORM A COMPLETE SYSTEM. PROVIDE WITH BUS-PLUG ACCESS LOCATIONS SPACED EVERY 24 INCHES. PROVIDE WITH A QUANTITY OF EIGHT 60A/3 FUSIBLE BUS PLUG ASSEMBLIES FOR POWER FEED TO EQUIPMENT BELOW THE BUSWAY SYSTEM. BUS PLUG ASSEMBLIES NOT USED SHALL BE INSTALLED AND LABELED AS "SPARE".

G59. SEE ONE-LINE DIAGRAM, BUILDING AREA "H", SHEET E5.8, FOR ADDITIONAL REQUIREMENTS.

G60. PROVIDE NEMA 6-50R RECEPTACLE FOR WELDER. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#8, 1#10G IN 3/4"C. COORDINATE THE REQUIRED INSTALLATION LOCATION WITHIN THE ROOM AND THE REQUIRED MOUNTING HEIGHT WITH OWNER PRIOR TO START OF ROUGH-IN.

G61. PROVIDE GFI RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT FOR WASH FOUNTAIN SINK FROM PANEL AND CIRCUIT NO. AS INDICATED. COORDINATE THE REQUIRED INSTALLATION LOCATION AND HEIGHT WITH EQUIPMENT PROVIDER PRIOR TO START OF ROUGH-IN.

G62. PUSH BUTTON ACTIVATION DEVICE FOR AUDIO/VISUAL DOORBELL SYSTEM. PROVIDE ALL REQUIRED CIRCUITS BETWEEN THE PUSH BUTTON ACTIVATION DEVICE AND THE DOORBELL SYSTEM PER THE EQUIPMENT MANUFACTURE'S REQUIREMENTS FOR CORRECT OPERATION.

G63. DOOR BELL SYSTEM AUDIO/VISUAL NOTIFICATION DEVICE. PROVIDE COMPLETE WITH ALL REQUIRED ACCESSORIES FOR OPERATION FROM A 120V BRANCH CIRCUIT. PROVIDE POWER CIRCUIT TO NOTIFICATION DEVICE FROM THE NEAREST GENERAL PURPOSE RECEPTACLE CIRCUIT. PROVIDE ALL CIRCUITS BETWEEN THE NOTIFICATION DEVICE AND THE PUSH BUTTON ACTIVATION DEVICE AS REQUIRED FOR CORRECT OPERATION. PROVIDE PRODUCTS BY EDWARDS SIGNALING, OR APPROVED EQUAL. PROVIDE PRODUCT DATA SHEETS AND SIMPLE INTERCONNECTION DIAGRAM OF NOTIFICATION DEVICE(S), PUSH-BUTTON ACTIVATION DEVICE AND POWER SOURCE AS PART OF THE SUBMITTAL PROCESS. COORDINATE THE REQUIRED INSTALLATION LOCATION AND SUSPENSION HEIGHT WITH ALL OTHER INSTALLATION WITHIN THE AREA. LOCATION AS REQUIRED TO PROVIDE MAXIMUM VIEW OF THE VISUAL ALARM FROM ALL AREAS WITHIN THE CLASSROOM SPACES.

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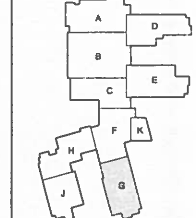


KEYPLAN

Revisions:

Designed By: MJB
Drawn By: SDB
Checked By: MJB

Sheet title: POWER PLAN - FIRST FLOOR - AREA "G"

Architect's Project No: 2106-204

Date: May, 20

Drawing No: E2.1G

GENERAL NOTES (FIRST FLOOR POWER PLAN - AREA "H"):

G1. CONTRACTOR SHALL COORDINATE WITH FOOD SERVICE DRAWINGS, FOOD SERVICES EQUIPMENT CONTRACTOR AND APPROVED FOOD SERVICE SUBMITTAL DRAWINGS FOR ALL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS, AND REQUIRED MOUNTING HEIGHTS PRIOR TO START OF ROUGH-IN.

NOTES (FIRST FLOOR POWER PLAN - AREA "H"):

H1. PROVIDE JUNCTION BOX AS REQUIRED AND 120V CIRCUIT TO CO/NO2 MONITORING PANEL FROM PANEL AND CIRCUIT NO. AS INDICATED. PROVIDE FINAL CONNECTION TO EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. SEE MECHANICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS. COORDINATE WITH MECHANICAL ENGINEER FOR INSTALLATION LOCATION PRIOR TO START OF ROUGH-IN.

H2. RECEPTACLE FOR MOBILE INTERACTIVE FLAT PANEL. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

H3. PROVIDE RECEPTACLES AND DEDICATED BRANCH CIRCUIT FOR ELECTRICAL TRAINING TABLE.

H4. INSTALL TRANSFORMER "EX13H" HIGH ON WALL ABOVE CIRCUIT BREAKER "CBELEG1" (FOR POWER CIRCUIT TO GENERATOR LOAD CENTER PANEL FURNISHED WITHIN THE GENERATOR SET ENCLOSURE AS PART OF THE GENERATOR PACKAGE). SEE ONE-LINE DIAGRAM, SHEET E5.2, FOR ADDITIONAL REQUIREMENTS.

H5. RECEPTACLE FOR POWER TO AUDIO/VIDEO CONTROL CABINET. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE AUDIO/VIDEO CONTROL CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

H6. RECEPTACLE AND DEDICATED BRANCH CIRCUIT. INSTALL WITHIN THE ELEVATOR PIT AREA.

H7. COORDINATE ALL ELECTRICAL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS AND MOUNTING HEIGHTS WITHIN THE ELEVATOR SHAFT AND THE ELEVATOR PIT AREAS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN TO ENSURE INSTALLATION WILL MEET THE REQUIREMENTS OF THE ELEVATOR PROVIDER, ELEVATOR INSPECTOR AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

H8. PROVIDE RECEPTACLE AND DEDICATED 30A, 208V SINGLE-PHASE BRANCH CIRCUIT FOR HORIZONTAL BANDSAW. PROVIDE NEMA 6-30R RECEPTACLE. PROVIDE #10AWG CONDUCTORS FOR ALL PHASE AND GROUND CONDUCTORS.

NOTES (FIRST FLOOR POWER PLAN - AREA "H")[CONT]:

H9. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR RADIAL ARM SAW.

H10. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR VERTICAL BAND SAW.

H11. PROVIDE 30A/1 FUSIBLE SAFETY DISCONNECT SWITCH FOR POWER TO MOTORIZED OVERHEAD DOOR SYSTEM. COORDINATE INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE REQUIREMENTS OF THE MOTORIZED OVER HEAD DOOR SYSTEM. PROVIDE FINAL CIRCUIT TO MOTORIZED DOOR SYSTEM CONTROLLER PER MANUFACTURER'S REQUIREMENTS. PROVIDE FUSING PER MANUFACTURER'S REQUIREMENTS. PROVIDE ALL REQUIRED CIRCUITS BETWEEN THE REMOTE UP/DOWN CONTROL DEVICE AND THE CONTROLLER PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#10, 1#10G IN 3/4"C.

H12. JUNCTION BOX(S) AND DEDICATED NEC 700 EMERGENCY POWER BRANCH CIRCUIT FOR POWER TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT. PROVIDE ALL REQUIRED POWER CIRCUITS AND CONNECT TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT PER THE FIRE ALARM SYSTEM MANUFACTURER'S REQUIREMENTS. COORDINATE THE REQUIRED INSTALLATION LOCATIONS WITH THE INSTALLATION REQUIREMENTS FOR THE FIRE ALARM SYSTEM.

H13. NOTE NOT USED.

H14. ALL RECEPTACLES PROVIDED WITHIN THIS ROOM SHALL BE NEMA 5-20R HEAVY DUTY INDUSTRIAL GRADE GFI TYPE UNLESS NOTED OTHERWISE OR NOTED TO BE FED FROM A GFI TYPE CIRCUIT BREAKER.

H15. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A NORMAL POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:
RACK #1: L12H-1,3,5,7
RACK #2: L12H-9,11,13,15
RACK #3: L12H-17,19,21,23

NOTES (FIRST FLOOR POWER PLAN - AREA "H")[CONT]:

H16. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A EMERGENCY POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:
RACK #1: EL11H-2,4,6,8
RACK #2: EL11H-10,12,14,16
RACK #3: EL11H-18,20,22,24

H17. COORDINATE THE INSTALLATION LOCATIONS & MOUNTING HEIGHTS WITHIN THE EQUIPMENT RACK WITH ALL INSTALLATION WITHIN THE RACK. ACCESS TO THE RECEPTACLES SHALL NOT BE BLOCKED BY EQUIPMENT INSTALLATION. INSTALLATION LOCATIONS SHALL NOT PREVENT THE OWNER FROM INSTALLING EQUIPMENT WITHIN THE RACK.

H18. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR POWER TO PRINTER / COPIER MACHINE.

H19. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

H20. PROVIDE NEMA L6-30R TYPE RECEPTACLE. PROVIDE DEDICATED 208V, SINGLE-PHASE 30A BRANCH CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NUMBER AS INDICATED USING 2#10, 1#10G IN 3/4"C.

H21. PROVIDE #10AWG CONDUCTORS FOR ALL "PHASE", "NEUTRAL" AND EQUIPMENT GROUND CONDUCTORS FOR ENTIRE LENGTH OF BRANCH CIRCUIT.

H22. RECEPTACLE FOR VIDEO MONITOR. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE VIDEO MONITOR. IN GENERAL, INSTALL BEHIND THE VIDEO MONITOR IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE.

NOTES (FIRST FLOOR POWER PLAN - AREA "H")[CONT]:

H23. PROVIDE 20A, 125V NEMA 5-20R DUPLEX RECEPTACLE WITHIN THE EXPOSED CEILING STRUCTURE AREA FOR POWER TO CORD REEL ASSEMBLY. PROVIDE ALL REQUIRED SUPPLEMENT STEEL STRUCTURE SYSTEM AS REQUIRED TO SUPPORT THE CORD REEL AND WITHSTAND FORCES FROM HANGING THE CORD REEL AND PULLING CORD ASSEMBLY FOR USE. PROVIDE CORD REEL ASSEMBLY. COORDINATE THE LOCATION IN FIELD WITH ARCHITECT PRIOR TO START OF ROUGH-IN. SEE CORD REEL INSTALLATION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS REGARDING THE CORD REEL ASSEMBLY AND INSTALLATION OF THE CORD REEL ASSEMBLY. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NUMBER AS INDICATED.

H24. GROUND BUS BAR ON INSULATED STAND-OFF DEVICES. SEE GROUNDING SYSTEM RISER DIAGRAM, SHEET E1.14, FOR ADDITIONAL REQUIREMENTS.

H25. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH FOR POWER TO JOINTER EQUIPMENT. COORDINATE INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE REQUIREMENTS OF THE JOINTER. PROVIDE FINAL CIRCUIT TO JOINTER CONTROLLER PER MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#10, 1#10G IN 3/4"C. PROVIDE BUCK-BOOST TRANSFORMER (SIZED FOR THE CONNECTED LOAD) TO CONVERT THE 208 SINGLE-PHASE CIRCUIT TO 230V SINGLE-PHASE. VERIFY REQUIREMENTS PRIOR TO START OF ROUGH-IN.

H26. COMBO STARTERS FOR MOTOR LOADS AS INDICATED. SEE ELECTRICAL PLAN - ROOF - AREA "H", SHEET E2.3H, FOR ADDITIONAL REQUIREMENTS. SEE MOTOR CONTROL SCHEDULE & MOTOR CONTROL WIRING DIAGRAMS, SHEETS E1.10 & E1.11, FOR ADDITIONAL REQUIREMENTS.

H27. PROVIDE GFI RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT FOR WASH FOUNTAIN SINK FROM PANEL AND CIRCUIT NO. AS INDICATED. COORDINATE THE REQUIRED INSTALLATION LOCATION AND HEIGHT WITH EQUIPMENT PROVIDER PRIOR TO START OF ROUGH-IN.

H28. NOTE NOT USED.

NOTES (FIRST FLOOR POWER PLAN - AREA "H")[CONT]:

H29. NOTE NOT USED

H30. MOBILE GENERATOR SET DOCKING STATION. SEE ONE-LINE DIAGRAM, SHEET E5.2, FOR ADDITIONAL REQUIREMENTS.

H31. PROVIDE NEMA 5-20R SIMPLEX RECEPTACLE. PROVIDE POWER FEED TO RECEPTACLE THROUGH ASSOCIATED CONTROLLER INSTALLED WITHIN ROOM. COORDINATE THE INSTALLATION LOCATION AND INSTALLATION REQUIREMENTS WITH THE PUMP/CONTROLLER PROVIDER AND ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN.

H32. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR KIOSK.

H33. NOTE NOT USED.

H34. NOTE NOT USED.

H35. PROVIDE RECEPTACLE HIGH ON WALL BEHIND MONITOR FOR VIDEO SURVEILLANCE.

H36. PROVIDE RECEPTACLE HIGH ON WALL BEHIND VIDEO MONITOR FOR DIGITAL SIGNAGE.

H37. PROVIDE A QUANTITY OF EIGHT (4 OVER 4 ARRANGEMENT) 4" RIGID STEEL CONDUITS THROUGH WALL FOR INSTALLATION PATHWAY FOR MOBILE GENSET CABLES TO THE NORMAL POWER MAIN DISTRIBUTION SWITCHBOARD. PROVIDE SCREW-ON CAPS ON BOTH SIDES OF THE CONDUITS. PAINT CONDUITS (ON BUILDING EXTERIOR SIDE) TO MATCH ADJACENT FINISH. COORDINATE PAINT COLOR WITH ARCHITECT.

H38. PROVIDE SAFETY DISCONNECT MEANS NEAR THE INDOOR UNIT. PROVIDE ALL REQUIRED POWER, CONTROL, & COMMUNICATION CIRCUITS BETWEEN THE INDOOR UNIT AND THE ASSOCIATED OUTDOOR CONDENSING UNIT PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

H39. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR POWER TO ELECTRIC WATER COOLER.

H40. PROVIDE 60A/3 FUSIBLE SAFETY DISCONNECT SWITCH FOR 480V 3-PHASE POWER CIRCUIT TO PLANER EQUIPMENT. COORDINATE INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE REQUIREMENTS OF THE PLANER. PROVIDE FINAL CIRCUIT TO PLANER CONTROLLER PER MANUFACTURER'S REQUIREMENTS. PROVIDE FUSING PER MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 3#8, 1#10G IN 1"C.

H41. PROVIDE 60A/3 FUSIBLE SAFETY DISCONNECT SWITCH FOR POWER TO 48" SHEAR MACHINE. PROVIDE FINAL CIRCUIT TO MACHINE PER EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE FUSING AS REQUIRED PER EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 3#8, 1#10G IN 3/4"C. PROVIDE SUPPORT STRUCTURE AS REQUIRED AND INSTALL DISCONNECT SWITCH NEAR EQUIPMENT.

H42. PUSH BUTTON ACTIVATION DEVICE FOR AUDIO/VISUAL DOORBELL SYSTEM. PROVIDE ALL REQUIRED CIRCUITS BETWEEN THE PUSH BUTTON ACTIVATION DEVICE AND THE DOORBELL SYSTEM PER THE EQUIPMENT MANUFACTURE'S REQUIREMENTS FOR CORRECT OPERATION.

H43. DOOR BELL SYSTEM AUDIO/VISUAL NOTIFICATION DEVICE. PROVIDE COMPLETE WITH ALL REQUIRED ACCESSORIES FOR OPERATION FROM A 120V BRANCH CIRCUIT. PROVIDE POWER CIRCUIT TO NOTIFICATION DEVICE FROM THE NEAREST GENERAL PURPOSE RECEPTACLE CIRCUIT. PROVIDE ALL CIRCUITS BETWEEN THE NOTIFICATION DEVICE AND THE PUSH BUTTON ACTIVATION DEVICE AS REQUIRED FOR CORRECT OPERATION. PROVIDE PRODUCTS BY EDWARDS SIGNALING, OR APPROVED EQUAL. PROVIDE PRODUCT DATA SHEETS AND SIMPLE INTERCONNECTION DIAGRAM OF NOTIFICATION DEVICE(S), PUSH-BUTTON ACTIVATION DEVICE AND POWER SOURCE AS PART OF THE SUBMITTAL PROCESS. COORDINATE THE REQUIRED INSTALLATION LOCATION AND SUSPENSION HEIGHT WITH ALL OTHER INSTALLATION WITHIN THE AREA. LOCATION AS REQUIRED TO PROVIDE MAXIMUM VIEW OF THE VISUAL ALARM FROM ALL AREAS WITHIN THE CLASSROOM SPACES.

H44. PROVIDE 2-GANG OUTLET BOX IN WALL WITH A 2-GANG RING AND WITH A QUANTITY OF ONE 3/4" CONDUIT RACEWAY FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE. (FOR ROUTING OF POWER CONDUCTORS TO RECEPTACLES WITHIN THE FURNITURE SYSTEM RACEWAY. PROVIDE FLEXIBLE CONDUIT RACEWAY SYSTEM FROM OUTLET BOX IN WALL FACEPLATE AS REQUIRED FOR INSTALLATION OF THE POWER CONDUCTORS TO THE RECEPTACLES IN THE FURNITURE SYSTEM RACEWAY. PROVIDE POWER CIRCUITS FROM PANEL AND BRANCH CIRCUIT NUMBERS AS INDICATED.

H45. PROVIDE 20A, 125V NEMA 5-20R DUPLEX RECEPTACLE WITHIN THE EXPOSED CEILING STRUCTURE AREA FOR POWER TO CORD REEL ASSEMBLY FOR TABLE SAW. PROVIDE ALL REQUIRED SUPPLEMENT STEEL STRUCTURE SYSTEM AS REQUIRED TO SUPPORT THE CORD REEL AND WITHSTAND FORCES FROM HANGING THE CORD REEL AND PULLING CORD ASSEMBLY FOR USE. PROVIDE CORD REEL ASSEMBLY. COORDINATE THE LOCATION IN FIELD WITH ARCHITECT PRIOR TO START OF ROUGH-IN. SEE CORD REEL INSTALLATION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS REGARDING THE CORD REEL ASSEMBLY AND INSTALLATION OF THE CORD REEL ASSEMBLY. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NUMBER AS INDICATED.

H46. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR HVAC UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO HVAC UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

H47. PROVIDE 30A/3P FUSIBLE SAFETY DISCONNECT SWITCH FOR POWER TO MOBILE DUST COLLECTION SYSTEM. COORDINATE INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH REQUIREMENTS OF THE FUME EXTRACTOR. PROVIDE FUSING PER MANUFACTURER'S REQUIREMENTS. PROVIDE 480V, THREE-PHASE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 3#12, 1#12G, IN 3/4"C.

H48. PROVIDE FUSIBLE SAFETY DISCONNECT SWITCH FOR POWER TO ELEVATOR CONTROLLER. SEE ONE-LINE DIAGRAM - EMERGENCY POWER, SHEET E5.2, FOR ADDITIONAL REQUIREMENTS.

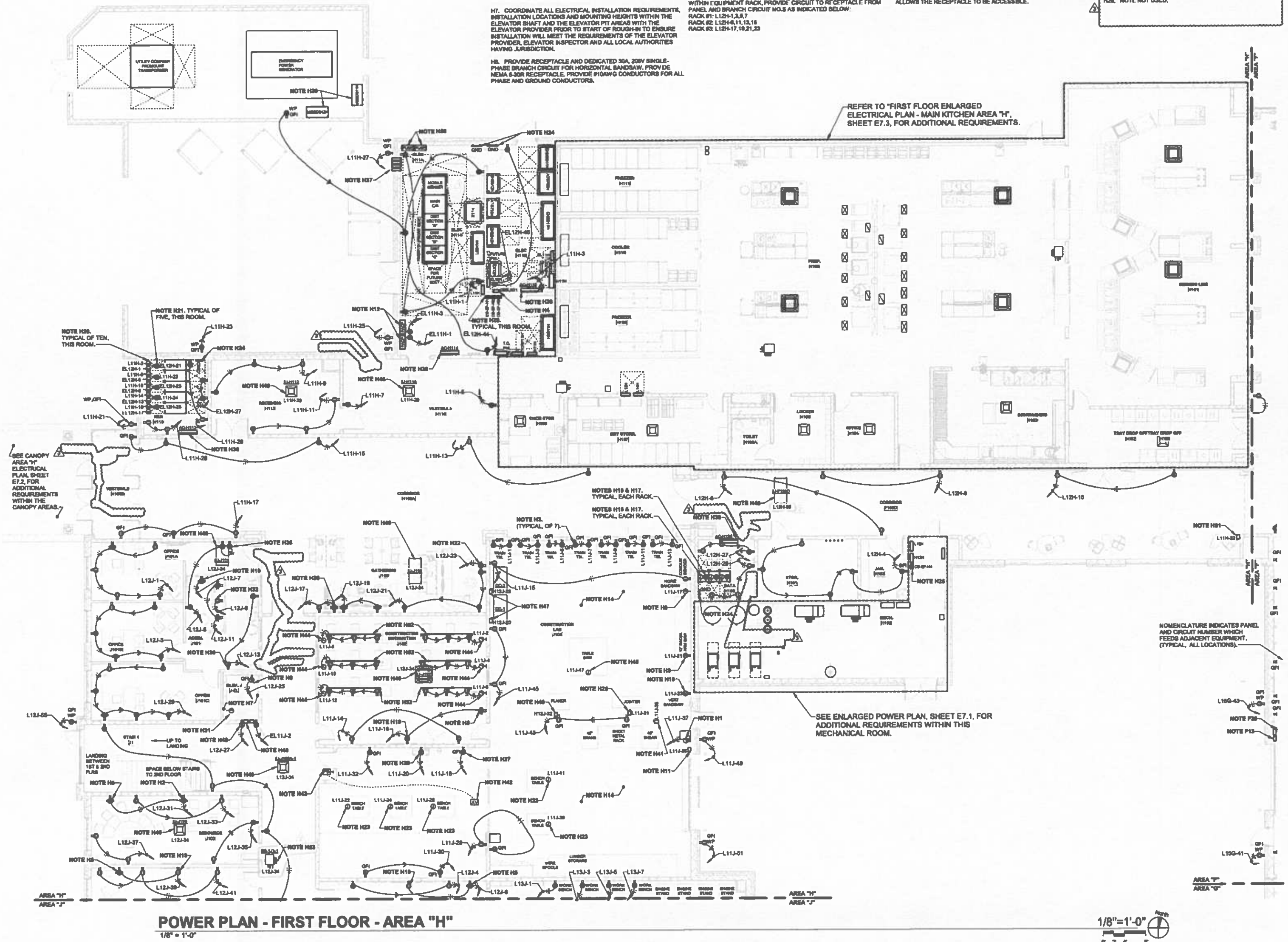
H49. PROVIDE NEMA 5-20R DUPLEX RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT FOR CORD AND PLUG POWER CONNECTIONS TO ELEVATOR SUMP PUMP CONTROLLER AND ASSOCIATED ALARM PANEL. PANEL AND CIRCUIT NO. INDICATED SHALL BE USED TO PROVIDE POWER TO THE CONTROLLER AND ALARM PANEL, AND FROM THE CONTROLLER TO RECEPTACLE IN ELEVATOR PIT FOR SUMP PUMP. COORDINATE THE INSTALLATION LOCATION AND INSTALLATION REQUIREMENTS WITH THE PUMP/CONTROLLER PROVIDER AND ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN. THE CONTROLLER AND ASSOCIATED ALARM PANEL SHALL BE FED FROM SAME BRANCH CIRCUIT.

H50. SPARE FUSE CABINET. PROVIDE SPARE FUSE CABINET. SEE DIVISION 26 SPECIFICATION SECTION 262813 "FUSES (600V AND LESS) AND SPARE FUSE CABINETS" FOR ADDITIONAL REQUIREMENTS.

H51. PROVIDE 30A/1 FUSIBLE SAFETY DISCONNECT MEANS WITHIN ACCESSIBLE CEILING CAVITY SPACE NEAR COILING SECURITY GRILL CONTROLLER PROVIDE FUSING AND FINAL CIRCUIT TO CONTROLLER PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND CIRCUIT NO. AS INDICATED USING 2#10, 1#10G IN 3/4"C. PROVIDE ALL CIRCUITS REQUIRED BETWEEN THE CONTROLLER AND REMOTE CONTROL DEVICES PER EQUIPMENT MANUFACTURER'S REQUIREMENTS.

H52. PROVIDE POWER OUTLETS WITHIN FURNITURE SYSTEM RACEWAY.

H53. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR BRANCH SELECTOR UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO BRANCH SELECTOR UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.



POWER PLAN - FIRST FLOOR - AREA "H"
1/8" = 1'-0"

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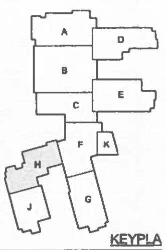


KEYPLA

Revisions:

#	Description	Date
1	Field Clarification (X12H, CB3112H & CB, 14H Not Rqd)	11/22/2023
2	ASI-005 VRF Coordination	12/-/2023
3	Access Control System Mods	4/16/2024

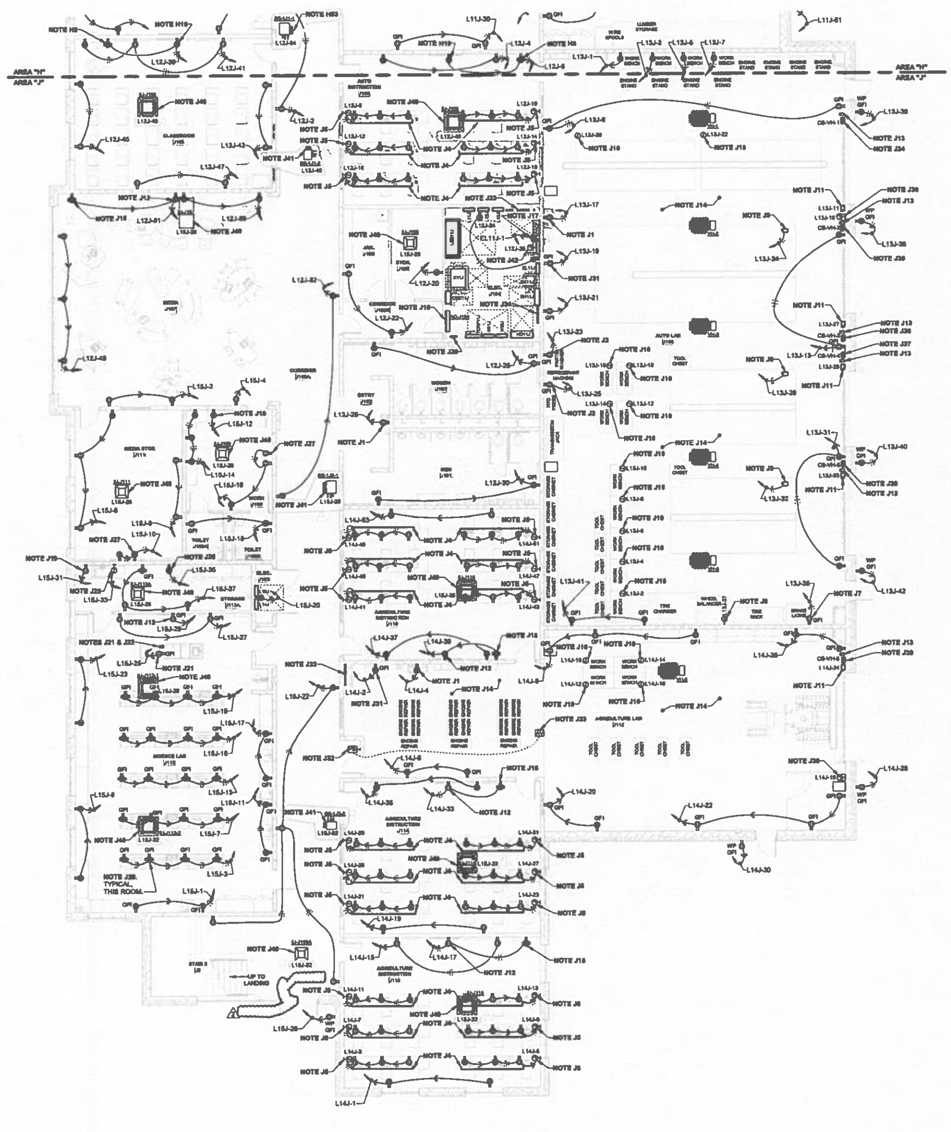
Designed By:	Drawn By:	Checked By:
MJS	SDB	MJS

[illegible]

Sheet title:
POWER PLAN - FIRST FLOOR - AREA "H"

Architect's Project No: 2106-204
Date: May, 20

Drawing No:
E2.1H



POWER PLAN - FIRST FLOOR - AREA "J"
1/8" = 1'-0"

NOTES (FIRST FLOOR POWER PLAN - AREA "J"):

J1. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR POWER TO ELECTRIC WATER COOLER.

J2. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR PARTS WASHER.

J3. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR REFRIGERANT MACHINE.

J4. PROVIDE POWER OUTLETS WITHIN FURNITURE SYSTEM RACEWAY.

J5. PROVIDE 2-GANG OUTLET BOX IN WALL WITH A 2-GANG RING AND WITH A QUANTITY OF ONE 3/4" CONDUIT RACEWAY FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE. (FOR ROUTING OF POWER CONDUCTORS TO RECEPTACLES WITHIN THE FURNITURE SYSTEM RACEWAY. PROVIDE FLEXIBLE CONDUIT RACEWAY SYSTEM FROM OUTLET BOX IN WALL FACEPLATE AS REQUIRED FOR INSTALLATION OF THE POWER CONDUCTORS TO THE RECEPTACLES IN THE FURNITURE SYSTEM RACEWAY. PROVIDE POWER CIRCUITS FROM PANEL AND BRANCH CIRCUIT NUMBERS AS INDICATED.

J6. PROVIDE NEMA 6-30R 250V RECEPTACLE AND DEDICATED 30A, 208V SINGLE-PHASE BRANCH CIRCUIT FOR WHEEL BALANCER. PROVIDE BUCK-BOOST TRANSFORMER (HIGH ON WALL) NEAR THE RECEPTACLE AS REQUIRED TO CONVERT THE 208V SYSTEM TO 230V SYSTEM REQUIRED FOR THE WHEEL BALANCER EQUIPMENT. PROVIDE CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#10, 1#10G IN 3/4"C. PROVIDE MATCHING CORD AND PLUG ASSEMBLY (10FT CORD) AND INSTALL ON THE OWNER'S WHEEL BALANCER EQUIPMENT. [WHEEL BALANCER ELECTRICAL REQUIREMENTS ARE 230V, 10 AMPERES].

J7. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR BRAKE LATHE. PROVIDE NEMA 6-20R RECEPTACLE. PROVIDE POWER CIRCUIT TO RECEPTACLE USING 2#10, 1#10G IN 3/4"C. (NOTE: WIRE SIZE IS BUMPED UP FOR EASY CHANGE IN FUTURE TO A 30A CIRCUIT.

J8. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH FOR POWER TO AUTOMOTIVE LIFT EQUIPMENT. COORDINATE INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE REQUIREMENTS OF THE AUTOMOTIVE LIFT EQUIPMENT. PROVIDE FINAL CIRCUIT TO AUTOMOTIVE LIFT EQUIPMENT CONTROLLER PER MANUFACTURER'S REQUIREMENTS. PROVIDE FUSING PER MANUFACTURER'S REQUIREMENTS. PROVIDE ALL REQUIRED CIRCUITS BETWEEN THE REMOTE UP/DOWN CONTROL DEVICE AND THE CONTROLLER PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED. PROVIDE SUPPORT STRUCTURE AS REQUIRED FOR SUPPORT OF DISCONNECT SWITCH.

J9. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH FOR POWER TO AUTOMOTIVE LIFT EQUIPMENT. COORDINATE INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE REQUIREMENTS OF THE AUTOMOTIVE LIFT EQUIPMENT. PROVIDE FINAL CIRCUIT TO AUTOMOTIVE LIFT EQUIPMENT CONTROLLER PER MANUFACTURER'S REQUIREMENTS. PROVIDE FUSING PER MANUFACTURER'S REQUIREMENTS. PROVIDE ALL REQUIRED CIRCUITS BETWEEN THE REMOTE UP/DOWN CONTROL DEVICE AND THE CONTROLLER PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED. PROVIDE SUPPORT STRUCTURE AS REQUIRED FOR SUPPORT OF DISCONNECT SWITCH.

J10. PROVIDE 20A, 125V NEMA 5-20R DUPLEX RECEPTACLE WITHIN THE EXPOSED CEILING STRUCTURE AREA FOR POWER TO CORD REEL ASSEMBLY. PROVIDE ALL REQUIRED SUPPLEMENT STEEL STRUCTURE SYSTEM AS REQUIRED TO SUPPORT THE CORD REEL AND WITHSTAND FORCES FROM HANGING THE CORD REEL AND PULLING CORD ASSEMBLY FOR USE. PROVIDE CORD REEL ASSEMBLY. COORDINATE THE LOCATION IN FIELD WITH ARCHITECT PRIOR TO START OF ROUGH-IN. SEE CORD REEL INSTALLATION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS REGARDING THE CORD REEL ASSEMBLY AND INSTALLATION OF THE CORD REEL ASSEMBLY. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NUMBER AS INDICATED.

J11. PROVIDE 30A/1 FUSIBLE SAFETY DISCONNECT SWITCH FOR POWER TO MOTORIZED OVERHEAD DOOR SYSTEM. COORDINATE INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE REQUIREMENTS OF THE MOTORIZED OVER HEAD DOOR SYSTEM. PROVIDE FINAL CIRCUIT TO MOTORIZED DOOR SYSTEM CONTROLLER PER MANUFACTURER'S REQUIREMENTS. PROVIDE FUSING PER MANUFACTURER'S REQUIREMENTS. PROVIDE ALL REQUIRED CIRCUITS BETWEEN THE REMOTE UP/DOWN CONTROL DEVICE AND THE CONTROLLER PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT TO DISCONNECT SWITCH FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#10, 1#10G IN 3/4"C.

J12. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

J13. PROVIDE TOGGLE-TYPE ON/OFF CONTROL SWITCH NEAR COMBO-MOTOR STARTER. SEE MOTOR CONTROL SCHEDULE AND MOTOR CONTROL WIRING DIAGRAM, SHEETS E1.10 AND E1.11, FOR ADDITIONAL REQUIREMENTS.

J14. ALL RECEPTACLES PROVIDED WITHIN THIS ROOM SHALL BE NEMA 5-20R HEAVY DUTY INDUSTRIAL GRADE GFI TYPE UNLESS NOTED OTHERWISE OR NOTED TO BE FED FROM A GFI TYPE CIRCUIT BREAKER.

J15. RECEPTACLE FOR POWER TO AUDIO/VIDEO CONTROL CABINET. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE AUDIO/VIDEO CONTROL CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

J16. PROVIDE SAFETY DISCONNECT MEANS NEAR THE INDOOR UNIT. PROVIDE ALL REQUIRED POWER, CONTROL, & COMMUNICATION CIRCUITS BETWEEN THE INDOOR UNIT AND THE ASSOCIATED OUTDOOR CONDENSING UNIT PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

J17. JUNCTION BOX(S) AND DEDICATED NEC 700 EMERGENCY POWER BRANCH CIRCUIT FOR POWER TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT. PROVIDE ALL REQUIRED POWER CIRCUITS AND CONNECT TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT PER THE FIRE ALARM SYSTEM MANUFACTURER'S REQUIREMENTS. COORDINATE THE REQUIRED INSTALLATION LOCATIONS WITH THE INSTALLATION REQUIREMENTS FOR THE FIRE ALARM SYSTEM.

J18. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR POWER TO PRINTER / COPIER MACHINE.

J19. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR REFRIGERATOR.

J20. GROUND BUS BAR ON INSULATED STAND-OFF DEVICES. SEE GROUNDING SYSTEM RISER DIAGRAM, SHEET E1.14, FOR ADDITIONAL REQUIREMENTS.

J21. INSTALL WITHIN TEACHER'S STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED.

J22. PROVIDE TOGGLE TYPE CONTROL SWITCH FOR CONTROL OF ELECTRIC SOLENOID VALVES FOR HOT AND COLD WATER SERVICE WITHIN THIS ROOM. PROVIDE POWER FEED TO CONTROL SWITCH FROM THE SAME BRANCH CIRCUIT WHICH FEEDS THE ADJACENT RECEPTACLE. PROVIDE ENGRAVED DEVICE PLATE ON SWITCH WHICH READS "WTR CTRL". LABELS SHALL ALSO INCLUDE THE "ON" AND "OFF" POSITIONS. PROVIDE CIRCUIT FROM LOAD SIDE OF SWITCH TO WATER CONTROL VALVES FOR CORRECT OPERATION. WATER SHALL BE ALLOWED TO FLOW WHENEVER THERE IS 120V APPLIED TO THE VALVES. SEE MECHANICAL & PLUMBING DRAWINGS FOR ADDITIONAL REQUIREMENTS AND GENERAL LOCATIONS OF WATER CONTROL VALVES.

J23. SPACE RESERVED FOR ROUTING OF VERTICAL CONDUIT RACEWAYS (FROM UNDERGROUND TO VERTICAL UP WALL) FOR COMMUNICATIONS FIBER CABLES. SEE COMMUNICATION ROOM LOCATION PLAN - FIRST FLOOR, SHEET E3.1, FOR ADDITIONAL REQUIREMENTS. SEE SITE ELECTRICAL PLAN, SHEET ES1, FOR ADDITIONAL REQUIREMENTS.

J24. PROVIDE COMBINATION MOTOR CONTROLLER FOR MOTOR LOAD AS INDICATED. PROVIDE SUPPORT STRUCTURE AS REQUIRED TO INSTALL COMBO-STARTER NEAR MOTOR LOAD. PROVIDE POWER CIRCUIT TO MOTOR LOAD (THROUGH COMBO-STARTER) FROM PANEL "H12J", CIRCUIT NO. 1 USING 3#10, 1#10G, IN 3/4"C. COORDINATE INSTALLATION LOCATION IN FIELD WITH ALL OTHER INSTALLATION AND MOTOR LOAD. SEE MOTOR CONTROL SCHEDULE AND MOTOR CONTROL WIRING DIAGRAM, SHEETS E1.10 AND E1.11, FOR ADDITIONAL REQUIREMENTS.

J25. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR DISH WASHING MACHINE. PROVIDE FINAL CIRCUIT TO DISH WASHING MACHINE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

J26. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR AUTOCLAVE. COORDINATE THE REQUIRED RECEPTACLE NEMA CONFIGURATION WITH THE AUTOCLAVE EQUIPMENT PRIOR TO PURCHASE OF CONDUCTORS AND RECEPTACLE.

NOTES (FIRST FLOOR POWER PLAN - AREA "J")[CONT.]:

J27. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE.

J28. INSTALL WITHIN STUDENT STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED.

2 J29. NOTE NOT USED.

J30. PROVIDE JUNCTION BOX AS REQUIRED AND 120V CIRCUIT TO CO/NO2 MONITORING PANEL FROM PANEL AND CIRCUIT NO. AS INDICATED. PROVIDE FINAL CONNECTION TO EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. SEE MECHANICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS. COORDINATE WITH MECHANICAL ENGINEER FOR INSTALLATION LOCATION PRIOR TO START OF ROUGH-IN.

J31. PROVIDE GFI RECEPTACLE AND DEDICATED 120V BRANCH CIRCUIT FOR WASH FOUNTAIN SINK FROM PANEL AND CIRCUIT NO. AS INDICATED. COORDINATE THE REQUIRED INSTALLATION LOCATION AND HEIGHT WITH EQUIPMENT PROVIDER PRIOR TO START OF ROUGH-IN.

J32. PUSH BUTTON ACTIVATION DEVICE FOR AUDIO/VISUAL DOORBELL SYSTEM. PROVIDE ALL REQUIRED CIRCUITS BETWEEN THE PUSH BUTTON ACTIVATION DEVICE AND THE DOORBELL SYSTEM PER THE EQUIPMENT MANUFACTURE'S REQUIREMENTS FOR CORRECT OPERATION.

J33. DOOR BELL SYSTEM AUDIO/VISUAL NOTIFICATION DEVICE. PROVIDE COMPLETE WITH ALL REQUIRED ACCESSORIES FOR OPERATION FROM A 120V BRANCH CIRCUIT. PROVIDE POWER CIRCUIT TO NOTIFICATION DEVICE FROM THE NEAREST GENERAL PURPOSE RECEPTACLE CIRCUIT. PROVIDE ALL CIRCUITS BETWEEN THE NOTIFICATION DEVICE AND THE PUSH BUTTON ACTIVATION DEVICE AS REQUIRED FOR CORRECT OPERATION. PROVIDE PRODUCTS BY EDWARDS SIGNALING, OR APPROVED EQUAL. PROVIDE PRODUCT DATA SHEETS AND SIMPLE INTERCONNECTION DIAGRAM OF NOTIFICATION DEVICE(S), PUSH-BUTTON ACTIVATION DEVICE AND POWER SOURCE AS PART OF THE SUBMITTAL PROCESS. COORDINATE THE REQUIRED INSTALLATION LOCATION AND SUSPENSION HEIGHT WITH ALL OTHER INSTALLATION WITHIN THE AREA. LOCATION AS REQUIRED TO PROVIDE MAXIMUM VIEW OF THE VISUAL ALARM FROM ALL AREAS WITHIN THE CLASSROOM SPACES.

J34. AREA ALONG THIS WALL SHALL BE RESERVED FOR CONDUIT STUB-UP LOCATION FOR POWER CONDUITS TO SITE LOADS AND SITE ELECTRIC HANDHOLES.

J35. PROVIDE COMBINATION MOTOR CONTROLLER FOR MOTOR LOAD AS INDICATED. PROVIDE SUPPORT STRUCTURE AS REQUIRED TO INSTALL COMBO-STARTER NEAR MOTOR LOAD. PROVIDE POWER CIRCUIT TO MOTOR LOAD (THROUGH COMBO-STARTER) FROM PANEL "H12J", CIRCUIT NO. 7 USING 3#10, 1#10G, IN 3/4"C. COORDINATE INSTALLATION LOCATION IN FIELD WITH ALL OTHER INSTALLATION AND MOTOR LOAD. SEE MOTOR CONTROL SCHEDULE AND MOTOR CONTROL WIRING DIAGRAM, SHEETS E1.10 AND E1.11, FOR ADDITIONAL REQUIREMENTS.

J36. PROVIDE COMBINATION MOTOR CONTROLLER FOR MOTOR LOAD AS INDICATED. PROVIDE SUPPORT STRUCTURE AS REQUIRED TO INSTALL COMBO-STARTER NEAR MOTOR LOAD. PROVIDE POWER CIRCUIT TO MOTOR LOAD (THROUGH COMBO-STARTER) FROM PANEL "H12J", CIRCUIT NO. 13 USING 3#10, 1#10G, IN 3/4"C. COORDINATE INSTALLATION LOCATION IN FIELD WITH ALL OTHER INSTALLATION AND MOTOR LOAD. SEE MOTOR CONTROL SCHEDULE AND MOTOR CONTROL WIRING DIAGRAM, SHEETS E1.10 AND E1.11, FOR ADDITIONAL REQUIREMENTS.

J37. PROVIDE COMBINATION MOTOR CONTROLLER FOR MOTOR LOAD AS INDICATED. PROVIDE SUPPORT STRUCTURE AS REQUIRED TO INSTALL COMBO-STARTER NEAR MOTOR LOAD. PROVIDE POWER CIRCUIT TO MOTOR LOAD (THROUGH COMBO-STARTER) FROM PANEL "H12J", CIRCUIT NO. 19 USING 3#10, 1#10G, IN 3/4"C. COORDINATE INSTALLATION LOCATION IN FIELD WITH ALL OTHER INSTALLATION AND MOTOR LOAD. SEE MOTOR CONTROL SCHEDULE AND MOTOR CONTROL WIRING DIAGRAM, SHEETS E1.10 AND E1.11, FOR ADDITIONAL REQUIREMENTS.

J38. PROVIDE COMBINATION MOTOR CONTROLLER FOR MOTOR LOAD AS INDICATED. PROVIDE SUPPORT STRUCTURE AS REQUIRED TO INSTALL COMBO-STARTER NEAR MOTOR LOAD. PROVIDE POWER CIRCUIT TO MOTOR LOAD (THROUGH COMBO-STARTER) FROM PANEL "H12J", CIRCUIT NO. 25 USING 3#10, 1#10G, IN 3/4"C. COORDINATE INSTALLATION LOCATION IN FIELD WITH ALL OTHER INSTALLATION AND MOTOR LOAD. SEE MOTOR CONTROL SCHEDULE AND MOTOR CONTROL WIRING DIAGRAM, SHEETS E1.10 AND E1.11, FOR ADDITIONAL REQUIREMENTS.

J39. PROVIDE COMBINATION MOTOR CONTROLLER FOR MOTOR LOAD AS INDICATED. PROVIDE SUPPORT STRUCTURE AS REQUIRED TO INSTALL COMBO-STARTER NEAR MOTOR LOAD. PROVIDE POWER CIRCUIT TO MOTOR LOAD (THROUGH COMBO-STARTER) FROM PANEL "H12J", CIRCUIT NO. 31 USING 3#10, 1#10G, IN 3/4"C. COORDINATE INSTALLATION LOCATION IN FIELD WITH ALL OTHER INSTALLATION AND MOTOR LOAD. SEE MOTOR CONTROL SCHEDULE AND MOTOR CONTROL WIRING DIAGRAM, SHEETS E1.10 AND E1.11, FOR ADDITIONAL REQUIREMENTS.

J40. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR HVAC UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO HVAC UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

J41. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR BRANCH SELECTOR UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO BRANCH SELECTOR UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

J42. JUNCTION BOX AS REQUIRED FOR POWER CIRCUIT TO TEMPERATURE CONTROL PANEL. PROVIDE DEDICATED 120V, 20A CIRCUIT TO T.C. PANEL FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C.

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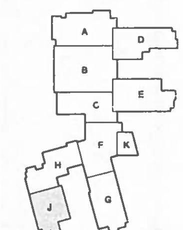


KEYPLAN

Revisions:

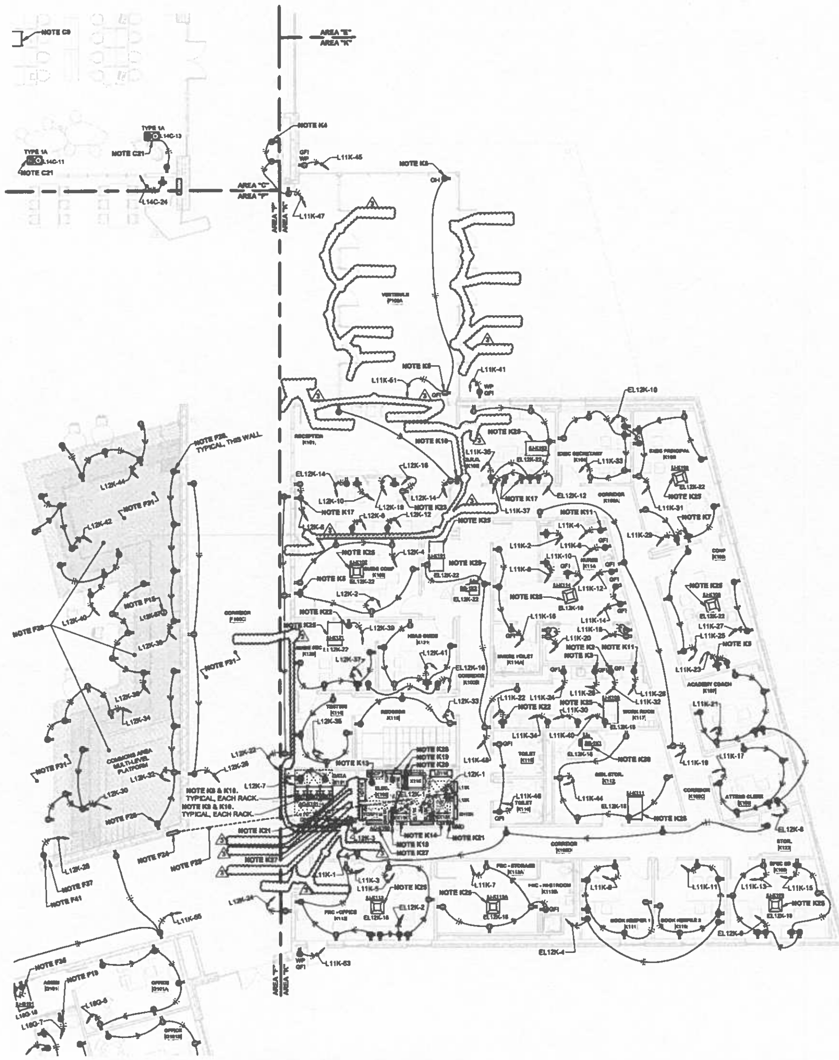
#	Description	Date
1	[illegible]	[illegible]
2	[illegible]	[illegible]

Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:
POWER PLAN - FIRST FLOOR - AREA "J"

Architect's Project No: 2106-204
Date: May, 20

Drawing No: E2.1J



POWER PLAN - FIRST FLOOR - AREA "K"
1/8" = 1'-0"

1/8"=1'-0"

NOTES (FIRST FLOOR POWER PLAN - AREA "K"):

K1. PROVIDE CIRCUIT TO ACCESS CONTROL PANELS FROM PANEL "L12K", BRANCH CIRCUIT NO. 43.

K2. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR MICROWAVE.

K3. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR COFFEE MAKER.

K4. PROVIDE RECEPTACLE HIGH ON WALL BEHIND VIDEO MONITOR FOR DIGITAL SIGNAGE.

K5. RECEPTACLE FOR INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE.

K6. INSTALL RECEPTACLE FLUSH WITHIN HOLLOW STRUCTURAL TUBE COLUMN. COORDINATE HOLE REQUIREMENTS FOR OUTLET BOXES AND POWER CIRCUIT WITH GENERAL CONTRACTOR / STEEL FABRICATOR DURING SUBMITTAL DRAWING PHASE AS REQUIRED TO PROVIDE OPENINGS NECESSARY FOR ELECTRICAL INSTALLATION.

K7. RECEPTACLE FOR VIDEO MONITOR. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE VIDEO MONITOR. IN GENERAL, INSTALL BEHIND THE VIDEO MONITOR IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE.

K8. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A NORMAL POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:
RACK #1: L12K-9,11,13,15
RACK #2: L12K-17,19,21,23
RACK #3: L12K-25,27,29,31

K9. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A EMERGENCY POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:
RACK #1: EL11K-2,4,6,8
RACK #2: EL11K-10,12,14,16
RACK #3: EL11K-18,20,22,24

K10. COORDINATE THE INSTALLATION LOCATIONS & MOUNTING HEIGHTS WITHIN THE EQUIPMENT RACK WITH ALL INSTALLATION WITHIN THE RACK. ACCESS TO THE RECEPTACLES SHALL NOT BE BLOCKED BY EQUIPMENT INSTALLATION. INSTALLATION LOCATIONS SHALL NOT PREVENT THE OWNER FROM INSTALLING EQUIPMENT WITHIN THE RACK.

K11. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFI TYPE CIRCUIT BREAKER) FOR REFRIGERATOR.

K12. PROVIDE JUNCTION BOXES AS REQUIRED FOR POWER CIRCUITS TO STACKED ACCESS CONTROL SYSTEM PANELS. PANELS SHALL BE STACKED VERTICALLY AS REQUIRED TO MAXIMIZE AVAILABLE FUTURE SPACE ON WALL. COORDINATE ALL REQUIREMENTS WITH THE DOOR HARDWARE /ACCESS CONTROL SYSTEM EQUIPMENT PROVIDER PRIOR TO START OF ROUGH-IN. PROVIDE FINAL CIRCUIT TO PANELS PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

K13. JUNCTION BOX(S) AND DEDICATED NEC 700 EMERGENCY POWER BRANCH CIRCUIT FOR POWER TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT. PROVIDE ALL REQUIRED POWER CIRCUITS AND CONNECT TO FIRE ALARM SYSTEM PANELS AND EQUIPMENT PER THE FIRE ALARM SYSTEM MANUFACTURER'S REQUIREMENTS. COORDINATE THE REQUIRED INSTALLATION LOCATIONS WITH THE INSTALLATION REQUIREMENTS FOR THE FIRE ALARM SYSTEM. PROVIDE CIRCUIT TO JUNCTION BOX FROM PANEL "EL11K", BRANCH CIRCUIT NO. 1.

K14. PROVIDE TRANSFORMER WITH ALL REQUIRED ACCESSORIES (AND PROVIDE SUPPLEMENTAL STEEL SUPPORT SYSTEM) AS REQUIRED TO INSTALL TRANSFORMER ABOVE THE FINISHED FLOOR AND SEISMICALLY SUPPORT/BRACE THE TRANSFORMER FROM THE BUILDING STRUCTURAL SYSTEM. INSTALL SUCH THAT THE BOTTOM OF THE TRANSFORMER / SEISMIC SUPPORT SYSTEM IS NOT LOWER THAN 8'-0" ABOVE FINISHED FLOOR. INSTALL THE PRIMARY DISCONNECT MEANS AND THE SECONDARY OVERCURRENT PROTECTION DEVICE ON WALL BELOW THE TRANSFORMER (TO MAXIMIZE MOUNTING SPACE FOR DISTRIBUTION EQUIPMENT WITHIN THE ASSOCIATED ELECTRICAL ROOM).

K15. PROVIDE CIRCUIT TO ACCESS CONTROL PANELS FROM PANEL "L12K", BRANCH CIRCUIT NO. 49.

K16. PROVIDE CIRCUIT TO ACCESS CONTROL PANELS FROM PANEL "L12K", BRANCH CIRCUIT NO. 51.

K17. PROVIDE RECEPTACLE UP HIGH ON WALL FOR MONITOR FOR VIDEO SURVEILLANCE.

K18. REMOTE ANNUNCIATOR(S) (WITHIN FLUSH MOUNT ENCLOSURE(S)) FOR THE EMERGENCY GENERATOR AND AUTOMATIC TRANSFER SWITCHES. PROVIDE ALL REQUIRED CIRCUITS BETWEEN THE REMOTE ANNUNCIATOR(S) AND THE GENERATOR AND AUTOMATIC TRANSFER SWITCHES TO CORRECTLY DISPLAY REQUIRED PARAMETERS AND ALARMS. SEE EMERGENCY POWER ONE-LINE DIAGRAM, SHEET E5.2, FOR ADDITIONAL REQUIREMENTS.

K19. PROVIDE SUPPORT STRUCTURE AS REQUIRED FOR SUPPORT OF EQUIPMENT.

K20. COMBINATION MOTOR CONTROLLER FOR EXHAUST FAN "EF-K1". SEE ELECTRICAL PLAN - ROOF - AREA "K", SHEET E2.3K, AND MOTOR CONTROL SCHEDULE & CONTROL WIRING DIAGRAM, SHEET E1.10 & E1.11, FOR ADDITIONAL REQUIREMENTS.

K21. GROUND BUS BAR ON INSULATED STAND-OFF DEVICES. SEE GROUNDING SYSTEM RISER DIAGRAM, SHEET E1.14, FOR ADDITIONAL REQUIREMENTS.

K22. RECEPTACLE AND BRANCH FOR COPIER MACHINE.

K23. RECEPTACLE AND BRANCH CIRCUIT FOR PRINTER.

K24. NOTE NOT USED.

K25. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR HVAC UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO HVAC UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

K26. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR BRANCH SELECTOR UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO BRANCH SELECTOR UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

K27. PROVIDE SAFETY DISCONNECT MEANS NEAR THE INDOOR UNIT. PROVIDE ALL REQUIRED POWER, CONTROL, & COMMUNICATION CIRCUITS BETWEEN THE INDOOR UNIT AND THE ASSOCIATED OUTDOOR CONDENSING UNIT PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

K28. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR TEMPERATURE CONTROL PANEL. PROVIDE FINAL CIRCUIT TO T.C. PANEL PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE CIRCUIT FROM PANEL "EL12K" CIRCUIT NO.17 USING 2#12, 1#12G IN 3/4"C.

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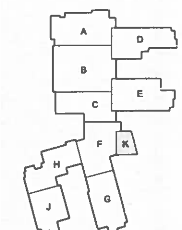


KEYPLAN

Revisions:

#	Description	Date
1	[illegible]	[illegible]
2	[illegible]	[illegible]
3	[illegible]	[illegible]

Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:
POWER PLAN - FIRST FLOOR - AREA "K"

Architect's Project No: 2106-204
Date: May, 20[illegible]

Drawing No: E2.1K

NOTES (SECOND FLOOR POWER PLAN - AREA "D"):

D1. PROVIDE 2-GANG OUTLET BOX IN WALL WITH A 2-GANG RING AND WITH A QUANTITY OF ONE 3/4" CONDUIT RACEWAY FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE. (FOR ROUTING OF POWER CONDUCTORS TO RECEPTACLES WITHIN THE FURNITURE SYSTEM RACEWAY. PROVIDE FLEXIBLE CONDUIT RACEWAY SYSTEM FROM OUTLET BOX IN WALL FACEPLATE AS REQUIRED FOR INSTALLATION OF THE POWER CONDUCTORS TO THE RECEPTACLES IN THE FURNITURE SYSTEM RACEWAY. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 3#12, 1#12G IN 3/4" C.

D2. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR MICROWAVE.

D3. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR COFFEE MAKER.

D4. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR PRINTER.

D5. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR DISHWASHER. PROVIDE FINAL CIRCUIT TO DISH WASHING MACHINE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

D6. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR AUTOCLAVE. COORDINATE THE REQUIRED RECEPTACLE NEMA CONFIGURATION WITH THE AUTOCLAVE EQUIPMENT PRIOR TO PURCHASE OF CONDUCTORS AND RECEPTACLE.

D7. RECEPTACLE FOR MOCK HEAD WALL UNIT. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE MOCK HEAD WALL EQUIPMENT REQUIREMENTS AND THE ARCHITECT PRIOR TO START OF ROUGH-IN.

D8. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR POWER TO FUME HOOD. PROVIDE ALL REQUIRED CIRCUITS AND CONNECT TO FUME HOOD CONTROL PANEL PER THE FUME HOOD PROVIDER'S REQUIREMENTS. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE REQUIREMENTS FOR THE FUME HOOD SYSTEM.

D9. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR POWER TO ELECTRIC WATER COOLER.

D10. RECEPTACLE FOR POWER TO AUDIO/VIDEO CONTROL CABINET. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE AUDIO/VIDEO CONTROL CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

D11. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A NORMAL POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:
RACK #1: L22D-17,19,21,23
RACK #2: L22D-25,27,29,31
RACK #3: L22D-33,35,37,39

D12. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A EMERGENCY POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:
RACK #1: EL21D-2,4,6,8
RACK #2: EL21D-10,12,14,16
RACK #3: EL21D-18,20,22,24

NOTES (SECOND FLOOR POWER PLAN - AREA "D") (CONTINUED):

D13. COORDINATE THE INSTALLATION LOCATIONS & MOUNTING HEIGHTS WITHIN THE EQUIPMENT RACK WITH ALL INSTALLATION WITHIN THE RACK. ACCESS TO THE RECEPTACLES SHALL NOT BE BLOCKED BY EQUIPMENT INSTALLATION. INSTALLATION LOCATIONS SHALL NOT PREVENT THE OWNER FROM INSTALLING EQUIPMENT WITHIN THE RACK.

D14. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

D15. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFI TYPE CIRCUIT BREAKER) FOR REFRIGERATOR.

D18. NOTE NOT USED.

D17. NOTE NOT USED.

D18. COORDINATE ALL ELECTRICAL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS AND MOUNTING HEIGHTS WITHIN THE ELEVATOR EQUIPMENT ROOM AND THE ELEVATOR SHAFT AREAS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN TO ENSURE INSTALLATION WILL MEET THE REQUIREMENTS OF THE ELEVATOR PROVIDER, ELEVATOR INSPECTOR AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

D19. GROUND BUS BAR ON INSULATED STAND-OFF DEVICES. SEE GROUNDING SYSTEM RISER DIAGRAM. SHEET E1.14, FOR ADDITIONAL REQUIREMENTS.

D20. INSTALL WITHIN TEACHER'S STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

D21. PROVIDE TOGGLE TYPE CONTROL SWITCH FOR CONTROL OF ELECTRIC SOLENOID VALVES FOR HOT AND COLD WATER SERVICE WITHIN THIS ROOM. PROVIDE POWER FEED TO CONTROL SWITCH FROM THE SAME BRANCH CIRCUIT WHICH FEEDS THE ADJACENT RECEPTACLE. PROVIDE ENGRAVED DEVICE PLATE ON SWITCH WHICH READS "WTR CTRL". LABELS SHALL ALSO INCLUDE THE "ON" AND "OFF" POSITIONS. PROVIDE CIRCUIT FROM LOAD SIDE OF SWITCH TO WATER CONTROL VALVES FOR CORRECT OPERATION. WATER SHALL BE ALLOWED TO FLOW WHENEVER THERE IS 120V APPLIED TO THE VALVES. SEE MECHANICAL & PLUMBING DRAWINGS FOR ADDITIONAL REQUIREMENTS AND GENERAL LOCATIONS OF WATER CONTROL VALVES.

D22. INSTALL WITHIN STUDENT STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED.

D23. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CLOTHES DRYER MACHINE. PROVIDE BRANCH CIRCUIT FROM PANEL "L21D" CIRCUIT NO. 24 USING 2#10, 1#10N, 1#10G, IN 3/4"C.

D24. NOTE NOT USED.

D25. PROVIDE POWER OUTLETS WITHIN FURNITURE SYSTEM RACEWAY.

D26. PROVIDE NEMA 14-50R RECEPTACLE. PROVIDE MATCHING CORD & PLUG (6FT MINIMUM LENGTH) AND INSTALL ON THE DRYER MACHINE. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE DRYER MACHINE. CORD AND PLUG SHALL BE ACCESSIBLE WITH THE DRYER MACHINE PLACED IN IT'S FINAL INSTALLATION LOCATION

D27. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CLOTHES WASHING MACHINE. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE WASHING MACHINE. CORD AND PLUG SHALL BE ACCESSIBLE WITH THE WASHING MACHINE PLACED IN IT'S FINAL INSTALLATION LOCATION.

D28. NOTE NOT USED.

D29. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR HVAC UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO HVAC UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 3#12, 1#10G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

D30. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR BRANCH SELECTOR UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO BRANCH SELECTOR UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 3#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

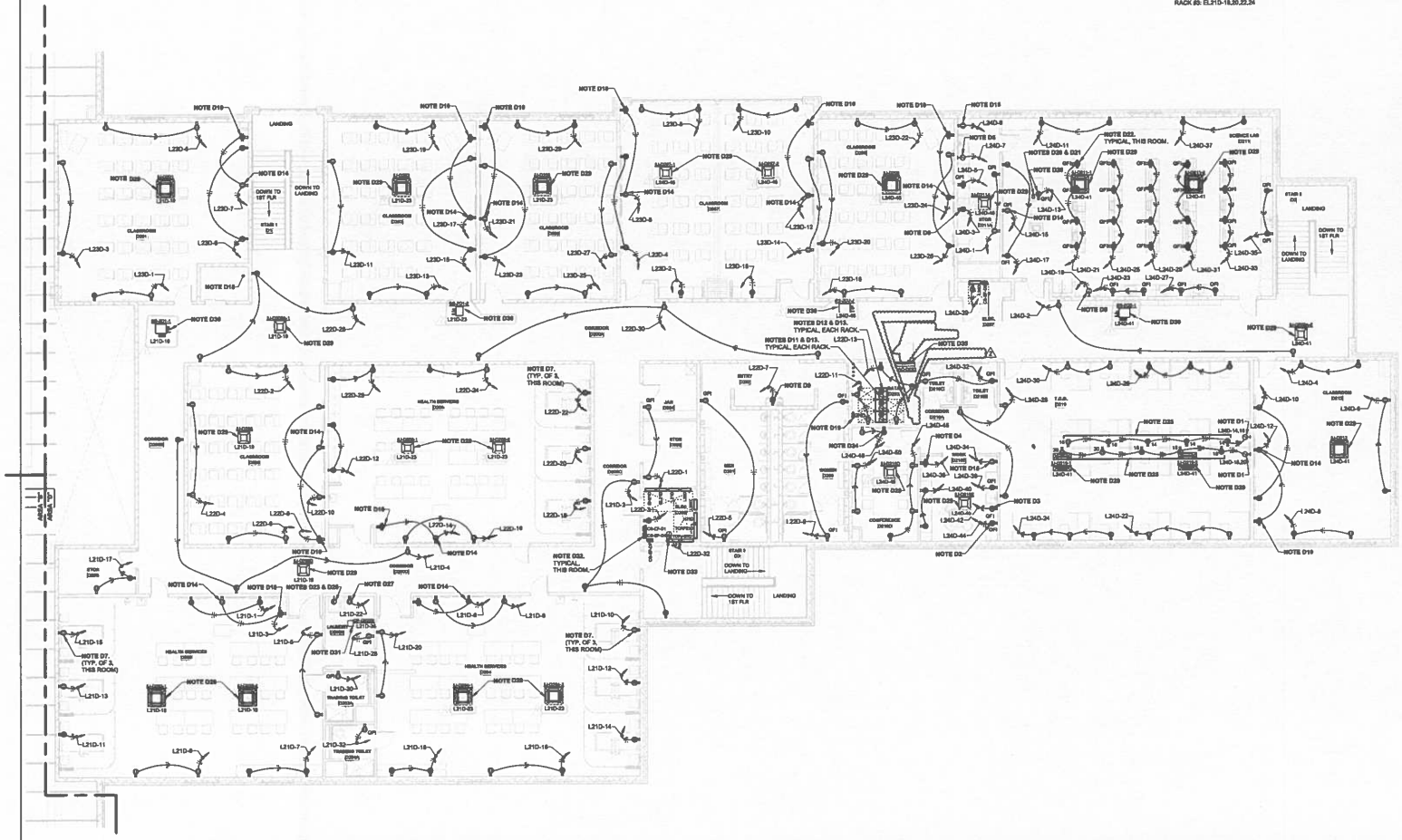
D31. PROVIDE HP RATED TOGGLE SAFETY DISCONNECT SWITCH (WITH LOCK-OUT/TAG-OUT ACCESSORY) NEAR BOOSTER FAN FOR POWER TO DRYER BOOSTER FAN. PROVIDE POWER CIRCUIT TO BOOSTER FAN PER MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 3#12, 1#10G IN 3/4" C. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE DRYER BOOSTER FAN PROVIDER PRIOR TO ROUGH-IN.

D32. COMBINATION MOTOR CONTROLLER FOR LOAD AB INDICATED. SEE ROOF ELECTRICAL PLAN - AREA "D", SHEET E2.3D, FOR ADDITIONAL REQUIREMENTS.

D33. PROVIDE JUNCTION BOX AS REQUIRED AND PROVIDE DEDICATED 120V, 20A BRANCH CIRCUIT TO T.C. PANEL.

D34. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE.

D35. PROVIDE SAFETY DISCONNECT MEANS NEAR THE INDOOR UNIT. PROVIDE ALL REQUIRED POWER, CONTROL, & COMMUNICATION CIRCUITS BETWEEN THE INDOOR UNIT AND THE ASSOCIATED OUTDOOR CONDENSING UNIT PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.



POWER PLAN - SECOND FLOOR - AREA "D"

1/8" = 1'-0"

1/8"=1'-0"

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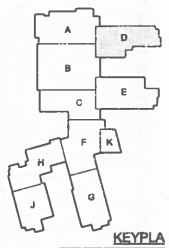


KEYPLA

Revisions:

#	Description	Date
1	Address Visit Coordination	12/1/2023
2	Access Control System Mods	6/1/2024

Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:

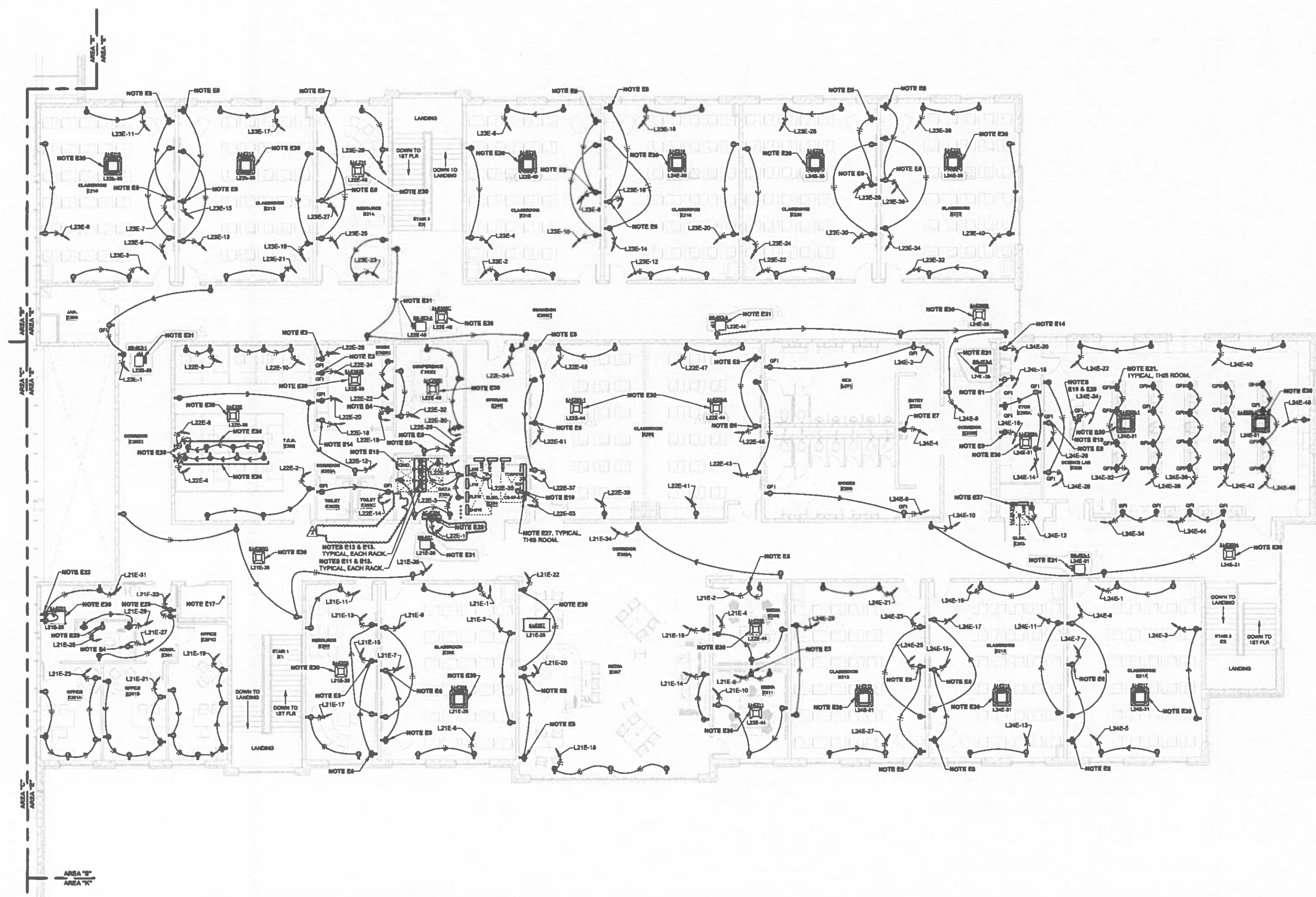
POWER PLAN - SECOND FLOOR - AREA "D"

Architect's Project No: 2106-204

Date: May, 20

Drawing No:

E2.2D



POWER PLAN - SECOND FLOOR - AREA "E"

1/8" = 1'-0"

1/8"=1'-0"

NOTES (SECOND FLOOR POWER PLAN - AREA "E"):

E1. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR DISHWASHER. PROVIDE FINAL CIRCUIT TO DISH WASHING MACHINE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

E2. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR MICROWAVE.

E3. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR COFFEE MAKER.

E4. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR PRINTER/COPIER MACHINE.

E5. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE.

E6. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

E7. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR POWER TO ELECTRIC WATER COOLER.

E8. RECEPTACLE FOR POWER TO AUDIO/VIDEO CONTROL CABINET. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE AUDIO/VIDEO CONTROL CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

E9. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR POWER TO AUTOCLAVE. COORDINATE THE REQUIRED RECEPTACLE NEMA CONFIGURATION WITH AUTOCLAVE REQUIREMENTS PRIOR TO PURCHASE OF CONDUCTORS AND RECEPTACLE.

E10. JUNCTION BOX AS REQUIRED FOR POWER CIRCUIT TO TEMPERATURE CONTROL PANEL. PROVIDE DEDICATED 120V, 20A CIRCUIT TO T.C. PANEL FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C.

E11. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A NORMAL POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:
RACK #1: L22E-7,9,11,13
RACK #2: L22E-15,17,19,21
RACK #3: L22E-23,25,27,29

E12. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A EMERGENCY POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:
RACK #1: EL21E-2,4,6,8
RACK #2: EL21E-10,12,14,16
RACK #3: EL21E-18,20,22,24

E13. COORDINATE THE INSTALLATION LOCATIONS & MOUNTING HEIGHTS WITHIN THE EQUIPMENT RACK WITH ALL INSTALLATION WITHIN THE RACK. ACCESS TO THE RECEPTACLES SHALL NOT BE BLOCKED BY EQUIPMENT INSTALLATION. INSTALLATION LOCATIONS SHALL NOT PREVENT THE OWNER FROM INSTALLING EQUIPMENT WITHIN THE RACK.

E14. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFI TYPE CIRCUIT BREAKER) FOR REFRIGERATOR.

E15. NOTE NOT USED.

E16. NOTE NOT USED.

E17. COORDINATE ALL ELECTRICAL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS AND MOUNTING HEIGHTS WITHIN THE ELEVATOR EQUIPMENT ROOM AND THE ELEVATOR SHAFT AREAS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN TO ENSURE INSTALLATION WILL MEET THE REQUIREMENTS OF THE ELEVATOR PROVIDER, ELEVATOR INSPECTOR AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

E18. GROUND BUS BAR ON INSULATED STAND-OFF DEVICES. SEE GROUNDING SYSTEM RISER DIAGRAM, SHEET E1.14, FOR ADDITIONAL REQUIREMENTS.

E19. INSTALL WITHIN TEACHER'S STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

E20. PROVIDE TOGGLE TYPE CONTROL SWITCH FOR CONTROL OF ELECTRIC SOLENOID VALVES FOR HOT AND COLD WATER SERVICE WITHIN THIS ROOM. PROVIDE POWER FEED TO CONTROL SWITCH FROM THE SAME BRANCH CIRCUIT WHICH FEEDS THE ADJACENT RECEPTACLE. PROVIDE ENGRAVED DEVICE PLATE ON SWITCH WHICH READS "WTR CTRL". LABELS SHALL ALSO INCLUDE THE "ON" AND "OFF" POSITIONS. PROVIDE CIRCUIT FROM LOAD SIDE OF SWITCH TO WATER CONTROL VALVES FOR CORRECT OPERATION. WATER SHALL BE ALLOWED TO FLOW WHENEVER THERE IS 120V APPLIED TO THE VALVES. SEE MECHANICAL & PLUMBING DRAWINGS FOR ADDITIONAL REQUIREMENTS AND GENERAL LOCATIONS OF WATER CONTROL VALVES.

E21. INSTALL WITHIN STUDENT STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED.

E22. PROVIDE POWER OUTLET HIGH ON WALL BEHIND DIGITAL SIGNAGE VIDEO MONITOR.

E23. NOTE NOT USED.

E24. PROVIDE POWER OUTLETS WITHIN FURNITURE SYSTEM RACEWAY.

E25. PROVIDE 2-GANG OUTLET BOX IN WALL WITH A 2-GANG RING AND WITH A QUANTITY OF ONE 3/4" CONDUIT RACEWAY FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE. (FOR ROUTING OF POWER CONDUCTORS TO RECEPTACLES WITHIN THE FURNITURE SYSTEM RACEWAY. PROVIDE FLEXIBLE CONDUIT RACEWAY SYSTEM FROM OUTLET BOX IN WALL FACEPLATE AS REQUIRED FOR INSTALLATION OF THE POWER CONDUCTORS TO THE RECEPTACLES IN THE FURNITURE SYSTEM RACEWAY.

E26. PROVIDE RECEPTACLE HIGH ON WALL BEHIND VIDEO MONITOR FOR VIDEO SURVEILLANCE.

E27. COMBINATION MOTOR CONTROLLER FOR LOAD AS INDICATED. SEE ROOF ELECTRICAL PLAN - AREA "E", SHEET E2.3E, FOR ADDITIONAL REQUIREMENTS.

E28. NOTE NOT USED.

E29. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR KIOSK.

E30. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR HVAC UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO HVAC UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

E31. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR BRANCH SELECTOR UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO BRANCH SELECTOR UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

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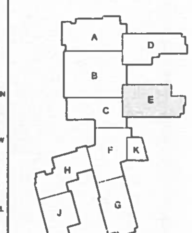


KEYPLAN

Revisions:

#	Description	Date
1	[illegible]	[illegible]
2	[illegible]	[illegible]

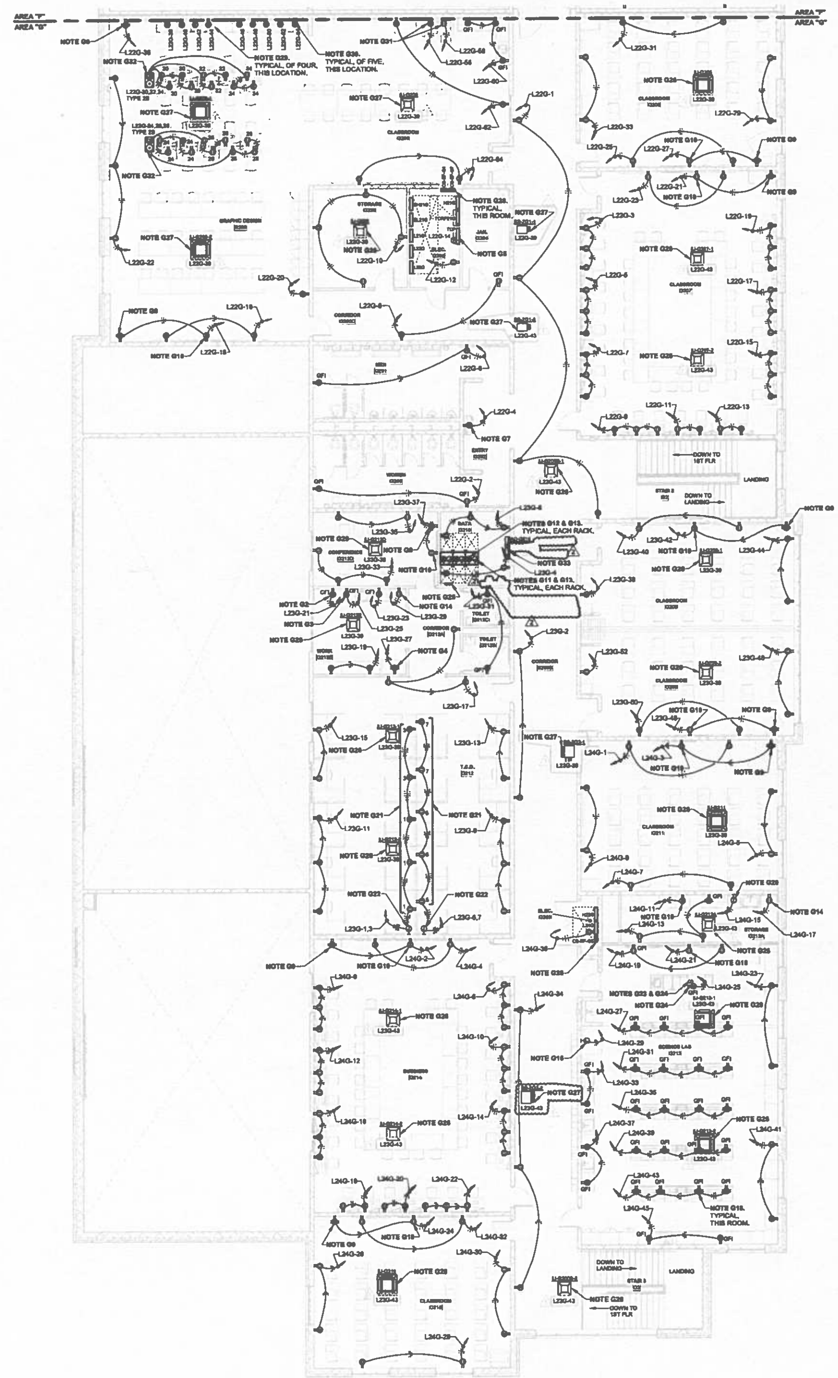
Designed By:	Drawn By:	Checked By:
MJS	SDB	MJS

Sheet title: POWER PLAN - SECOND FLOOR - AREA "E"

Architect's Project No: 2106-204

Date: May, 20

Drawing No: E2.2E



POWER PLAN - SECOND FLOOR - AREA "G"

1/8" = 1'-0"

1/8"=1'-0"

NOTES (SECOND FLOOR POWER PLAN - AREA "G"):

G1. NOTE NOT USED.

G2. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR MICROWAVE.

G3. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR COFFEE MAKER.

G4. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR PRINTER.

G5. JUNCTION BOX AS REQUIRED FOR POWER CIRCUIT TO TEMPERATURE CONTROL PANEL. PROVIDE DEDICATED 120V, 20A CIRCUIT TO T.C. PANEL FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C.

G6. NOTE NOT USED.

G7. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR POWER TO ELECTRIC WATER COOLER.

G8. RECEPTACLE AND DEDICATE BRANCH CIRCUIT FOR PLOTTER MACHINE.

G9. RECEPTACLE FOR POWER TO AUDIO/VIDEO CONTROL CABINET. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE AUDIO/VIDEO CONTROL CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

G10. RECEPTACLE FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

G11. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A NORMAL POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:
RACK #1: L23G-10,14,14,16
RACK #2: L23G-18,20,22,24
RACK #3: L23G-26,28,30,32

G12. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A EMERGENCY POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:
RACK #1: EL21G-2,4,6,8
RACK #2: EL21G-10,12,14,16
RACK #3: EL21G-18,20,22,24

G13. COORDINATE THE INSTALLATION LOCATIONS & MOUNTING HEIGHTS WITHIN THE EQUIPMENT RACK WITH ALL INSTALLATION WITHIN THE RACK. ACCESS TO THE RECEPTACLES SHALL NOT BE BLOCKED BY EQUIPMENT INSTALLATION. INSTALLATION LOCATIONS SHALL NOT PREVENT THE OWNER FROM INSTALLING EQUIPMENT WITHIN THE RACK.

G14. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFI TYPE CIRCUIT BREAKER) FOR REFRIGERATOR.

G15. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR AUTOCLAVE. COORDINATE THE REQUIRED NEMA RECEPTACLE CONFIGURATION WITH ACTUAL EQUIPMENT REQUIREMENTS PRIOR TO PURCHASE OF RECEPTACLE AND CONDUCTORS.

G16. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR POWER TO FUME HOOD. PROVIDE ALL REQUIRED CIRCUITS AND CONNECT TO FUME HOOD CONTROL PANEL PER THE FUME HOOD PROVIDER'S REQUIREMENTS. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE REQUIREMENTS FOR THE FUME HOOD SYSTEM.

G17. NOTE NOT USED.

G18. INSTALL WITHIN STUDENT STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED.

G19. NOTE NOT USED.

G20. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR DISHWASHER. PROVIDE FINAL CIRCUIT TO DISH WASHING MACHINE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE CIRCUIT TO JUNCTION BOX FROM PANEL "L23G", BRANCH CIRCUIT NO. 16.

G21. PROVIDE POWER OUTLETS WITHIN FURNITURE SYSTEM RACEWAY.

G22. PROVIDE 2-GANG OUTLET BOX IN WALL WITH A 2-GANG RING AND WITH A QUANTITY OF ONE 3/4" CONDUIT RACEWAY FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE. (FOR ROUTING OF POWER CONDUCTORS TO RECEPTACLES WITHIN THE FURNITURE SYSTEM RACEWAY. PROVIDE FLEXIBLE CONDUIT RACEWAY SYSTEM FROM OUTLET BOX IN WALL. FACEPLATE AS REQUIRED FOR INSTALLATION OF THE POWER CONDUCTORS TO THE RECEPTACLES IN THE FURNITURE SYSTEM RACEWAY.

G23. PROVIDE TOGGLE TYPE CONTROL SWITCH FOR CONTROL OF ELECTRIC SOLENOID VALVES FOR HOT AND COLD WATER SERVICE WITHIN THIS ROOM. PROVIDE POWER FEED TO CONTROL SWITCH FROM THE SAME BRANCH CIRCUIT WHICH FEEDS THE ADJACENT RECEPTACLE. PROVIDE ENGRAVED DEVICE PLATE ON SWITCH WHICH READS "WTR CTRL". LABELS SHALL ALSO INCLUDE THE "ON" AND "OFF" POSITIONS. PROVIDE CIRCUIT FROM LOAD SIDE OF SWITCH TO WATER CONTROL VALVES FOR CORRECT OPERATION. WATER SHALL BE ALLOWED TO FLOW WHENEVER THERE IS 120V APPLIED TO THE VALVES. SEE MECHANICAL & PLUMBING DRAWINGS FOR ADDITIONAL REQUIREMENTS AND GENERAL LOCATIONS OF WATER CONTROL VALVES.

G24. INSTALL WITHIN TEACHER'S STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

G25. GROUND BUS BAR ON INSULATED STAND-OFF DEVICES. SEE GROUNDING SYSTEM RISER DIAGRAM, SHEET E1.14, FOR ADDITIONAL REQUIREMENTS.

G26. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR HVAC UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO HVAC UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

G27. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR BRANCH SELECTOR UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO BRANCH SELECTOR UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

G28. COMBINATION MOTOR CONTROLLER FOR LOAD AS INDICATED. SEE ROOF ELECTRICAL PLAN - AREA "G", SHEET E2.3G, FOR ADDITIONAL REQUIREMENTS.

G29. RECEPTACLE AND DEDICATED 120V, 20A BRANCH CIRCUIT FOR POWER TO HEAT PRESS MACHINE. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE HEAT PRESS REQUIREMENTS AND THE ARCHITECT PRIOR TO START OF ROUGH-IN. PROVIDE POWER AND CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G, IN 3/4"C.

G30. RECEPTACLE AND DEDICATED 120V, 20A BRANCH CIRCUIT FOR POWER TO CUTTING MACHINE. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE CUTTING MACHINE REQUIREMENTS AND THE ARCHITECT PRIOR TO START OF ROUGH-IN. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G, IN 3/4"C.

G31. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR EMBROIDERY MACHINE.

NOTES (SECOND FLOOR POWER PLAN - AREA "G") [CONTINUED]:

G32. PROVIDE MULTI-FUNCTION POKE-THRU ASSEMBLY (TYPE AS INDICATED). PROVIDE UNDERGROUND CONDUITS AND ACCESSORIES AS INDICATED FOR THE TYPE OF ASSEMBLY IN THE MULTI-FUNCTION FLOORBOX / POKE-THRU SCHEDULE SHOWN ON SHEET E1.1. PROVIDE POWER CIRCUIT(S) TO POKE-THRU (AND ASSOCIATED LOADS AS INDICATED) FROM PANEL AND BRANCH CIRCUIT NUMBER(S) AS INDICATED. SEE SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR AREA "G", SHEET E3.2G, FOR ADDITIONAL REQUIREMENTS. CONTRACTOR SHALL PROVIDE THE RECEPTACLES WITHIN THE RACEWAY SYSTEM FURNISHED AS PART OF FURNITURE SYSTEM.

G33. PROVIDE SAFETY DISCONNECT MEANS NEAR THE INDOOR UNIT. PROVIDE ALL REQUIRED POWER, CONTROL, & COMMUNICATION CIRCUITS BETWEEN THE INDOOR UNIT AND THE ASSOCIATED OUTDOOR CONDENSING UNIT PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

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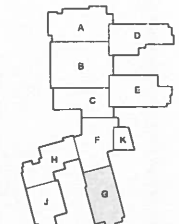


KEYPLAN

Revisions:

#	Description	Date
1	[illegible] VRF Coordination	[illegible]
2	Access Control System Mods	[illegible]

Designed By:	Drawn By:	Checked By:
MJS	SDS	MJS

Sheet title:

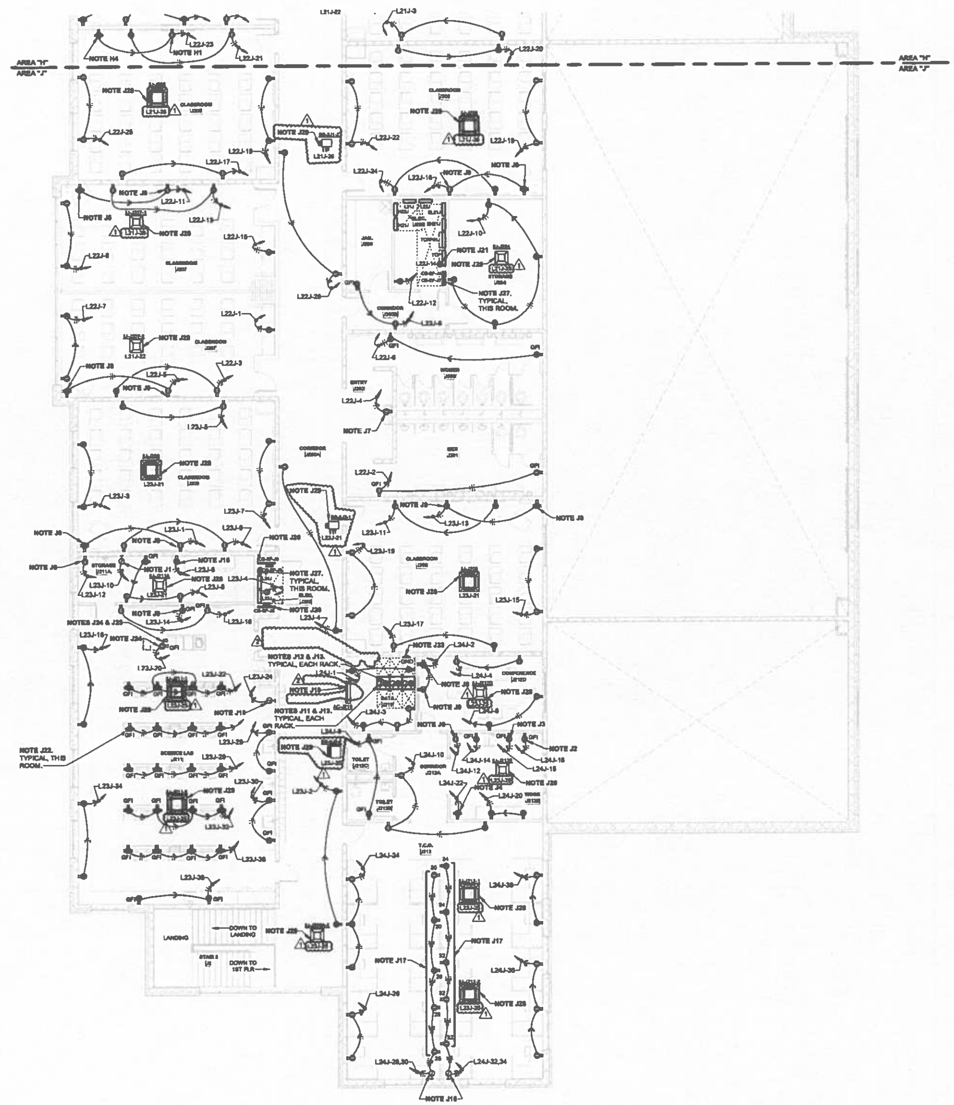
POWER PLAN - SECOND FLOOR - AREA "G"

Architect's Project No: 2106-204

Date: May, 20

Drawing No:

E2.2G



POWER PLAN - SECOND FLOOR - AREA "J"

1/8" = 1'-0"

NOTES (SECOND FLOOR POWER PLAN - AREA "J"):

J1. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR DISHWASHER. PROVIDE FINAL CIRCUIT TO DISH WASHING MACHINE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE CIRCUIT TO JUNCTION BOX FROM PANEL "L24K", BRANCH CIRCUIT NO. 23.

J2. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR MICROWAVE.

J3. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR COFFEE MAKER.

J4. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR PRINTER.

J5. NOTE NOT USED.

J6. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR REFRIGERATOR.

J7. RECEPTACLE AND DEDICATED BRANCH CIRCUIT (FED FROM A GFCI TYPE CIRCUIT BREAKER) FOR POWER TO ELECTRIC WATER COOLER.

J8. RECEPTACLE FOR POWER TO AUDIO/VIDEO CONTROL CABINET. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE AUDIO/VIDEO CONTROL CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

J9. RECEPTACLE FOR WALL MOUNTED INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

J10. JUNCTION BOX AND DEDICATED BRANCH CIRCUIT FOR POWER TO FUME HOOD. PROVIDE ALL REQUIRED CIRCUITS AND CONNECT TO FUME HOOD CONTROL PANEL PER THE FUME HOOD PROVIDER'S REQUIREMENTS. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE REQUIREMENTS FOR THE FUME HOOD SYSTEM.

J11. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A NORMAL POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:
RACK #1: L24J-7,9,11,13
RACK #2: L24J-15,17,19,21
RACK #3: L24J-23,25,27,29

J12. PROVIDE A QUANTITY FOUR DUPLEX RECEPTACLES (EACH FED FROM A DEDICATED 120V, 20A EMERGENCY POWER BRANCH CIRCUIT) WITHIN EQUIPMENT RACK. PROVIDE CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO.S AS INDICATED BELOW:
RACK #1: EL21J-2,4,6,8
RACK #2: EL21J-10,12,14,16
RACK #3: EL21J-18,20,22,24

J13. COORDINATE THE INSTALLATION LOCATIONS & MOUNTING HEIGHTS WITHIN THE EQUIPMENT RACK WITH ALL INSTALLATION WITHIN THE RACK. ACCESS TO THE RECEPTACLES SHALL NOT BE BLOCKED BY EQUIPMENT INSTALLATION. INSTALLATION LOCATIONS SHALL NOT PREVENT THE OWNER FROM INSTALLING EQUIPMENT WITHIN THE RACK.

J14. NOTE NOT USED.

J15. NOTE NOT USED.

J16. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR AUTOCLAVE. COORDINATE THE REQUIRED RECEPTACLE NEMA CONFIGURATION WITH THE AUTOCLAVE EQUIPMENT PRIOR TO PURCHASE OF CONDUCTORS AND RECEPTACLE.

J17. PROVIDE POWER OUTLETS WITHIN FURNITURE SYSTEM RACEWAY.

J18. PROVIDE 2-GANG OUTLET BOX IN WALL WITH A 2-GANG RING AND WITH A QUANTITY OF ONE 3/4" CONDUIT RACEWAY FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE. (FOR ROUTING OF POWER CONDUCTORS TO RECEPTACLES WITHIN THE FURNITURE SYSTEM RACEWAY. PROVIDE FLEXIBLE CONDUIT RACEWAY SYSTEM FROM OUTLET BOX IN WALL FACEPLATE AS REQUIRED FOR INSTALLATION OF THE POWER CONDUCTORS TO THE RECEPTACLES IN THE FURNITURE SYSTEM RACEWAY.

J19. PROVIDE SAFETY DISCONNECT MEANS NEAR THE INDOOR UNIT. PROVIDE ALL REQUIRED POWER, CONTROL, & COMMUNICATION CIRCUITS BETWEEN THE INDOOR UNIT AND THE ASSOCIATED OUTDOOR CONDENSING UNIT PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.

J20. NOTE NOT USED.

J21. JUNCTION BOX AS REQUIRED FOR POWER CIRCUIT TO TEMPERATURE CONTROL PANEL. PROVIDE DEDICATED 120V, 20A CIRCUIT TO T.C. PANEL FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C.

J22. INSTALL WITHIN STUDENT STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS. PROVIDE POWER CIRCUIT TO RECEPTACLE FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED.

J23. GROUND BUS BAR ON INSULATED STAND-OFF DEVICES. SEE GROUNDING SYSTEM RISER DIAGRAM, SHEET E1.14, FOR ADDITIONAL REQUIREMENTS.

J24. INSTALL WITHIN TEACHER'S STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

J25. PROVIDE TOGGLE TYPE CONTROL SWITCH FOR CONTROL OF ELECTRIC SOLENOID VALVES FOR HOT AND COLD WATER SERVICE WITHIN THIS ROOM. PROVIDE POWER FEED TO CONTROL SWITCH FROM THE SAME BRANCH CIRCUIT WHICH FEEDS THE ADJACENT RECEPTACLE. PROVIDE ENGRAVED DEVICE PLATE ON SWITCH WHICH READS "WTR CTRL". LABELS SHALL ALSO INCLUDE THE "ON" AND "OFF" POSITIONS. PROVIDE CIRCUIT FROM LOAD SIDE OF SWITCH TO WATER CONTROL VALVES FOR CORRECT OPERATION. WATER SHALL BE ALLOWED TO FLOW WHENEVER THERE IS 120V APPLIED TO THE VALVES. SEE MECHANICAL & PLUMBING DRAWINGS FOR ADDITIONAL REQUIREMENTS AND GENERAL LOCATIONS OF WATER CONTROL VALVES.

J26. PROVIDE SUPPORT STRUCTURE AS REQUIRED TO SUPPORT EQUIPMENT IN LOCATIONS AS REQUIRED TO PROVIDE CODE REQUIRED WORKING SPACE CLEARANCES.

J27. PROVIDE COMBINATION MOTOR CONTROLLER FOR MOTOR LOAD AS INDICATED. SEE MOTOR CONTROL SCHEDULE AND MOTOR CONTROL WIRING DIAGRAM, SHEETS E1.10 AND E1.11, FOR ADDITIONAL REQUIREMENTS. SEE ELECTRICAL PLAN - ROOF - AREA "J", SHEET E2.3J, FOR ADDITIONAL REQUIREMENTS.

J28. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR HVAC UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO HVAC UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

J29. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR BRANCH SELECTOR UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO BRANCH SELECTOR UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

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KEYPLA

Revisions:

#	Description	Date
1	[illegible]	[illegible]
2	Access Control System Mods	[illegible]

Designed By:	Drawn By:	Checked By:
MJB	[illegible]	MJB

[illegible]

Sheet title: POWER PLAN - SECOND FLOOR - AREA "J"

Architect's Project No: 2106-204

Date: May, 20

Drawing No: E2.2J

GENERAL NOTES
(FOR ALL SYSTEMS & TECH. PLANS):

GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (I.E. SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES
(FOR ALL SYSTEMS & TECH. PLANS) [CONT]:

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS, MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "A"):

A1. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 11'-4" ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE CORRIDOR.

A2. INSTALL CABLE TRAY SYSTEM AT APPROXIMATELY 3" ABOVE THE ACCESSIBLE CEILING GRID SYSTEM. PROVIDE ALL REQUIRED HORIZONTAL AND VERTICAL BENDS IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT. IN GENERAL, INSTALL THE CABLETRAY SYSTEMS WITH MINIMUM BENDS. VERTICAL CHANGES ARE NOT SHOWN ON THESE DRAWINGS AND SHALL BE COORDINATED IN THE FIELD.

A3. PROVIDE OPENINGS THROUGH ALL WALLS WHERE CABLETRAY SYSTEMS ARE REQUIRED TO BE ROUTED THROUGH (NON-RATED) WALLS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION REQUIREMENTS IN THE FIELD WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT.

A4. PROVIDE U.L. LISTED FIRE STOPPING SYSTEMS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING ARE REQUIRED TO PASS-THROUGH FIRE RATED AND / OR RATED WALL ASSEMBLIES.

A5. SEE CABLETRAY SCHEDULE, SHEET E1.1, FOR ADDITIONAL CABLETRAY AND CABLETRAY INSTALLATION REQUIREMENTS.

A6. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CONCESSIONS AREA.

A7. DATA OUTLET LOCATION FOR USE WITH METAL DETECTION SECURITY SYSTEM EQUIPMENT.

A8. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

A9. DATA OUTLET FOR WALL PHONE.

A10. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR MICROPHONE WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

A11. STACKED ACCESS CONTROL SYSTEM PANELS. PANELS SHALL BE STACKED VERTICALLY AS REQUIRED TO MAXIMIZE AVAILABLE FUTURE SPACE ON WALL. PROVIDE DATA CABLE TO ACCESS CONTROL PANEL AS REQUIRED FOR ACCESS TO DATA NETWORK. COORDINATE ALL REQUIREMENTS WITH THE DOOR HARDWARE /ACCESS CONTROL SYSTEM EQUIPMENT PROVIDER PRIOR TO START OF ROUGH-IN.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "A"):

A12. SEE FIRE ALARM SYSTEM DRAWINGS (E10.xx SERIES DRAWINGS) PREPARED BY WBW FOR ADDITIONAL REQUIREMENTS REGARDING THE BUILDING FIRE ALARM SYSTEM.

A13. PROVIDE CABLETRAY SYSTEM FROM WALL-TO-WALL AND INSTALLED ABOVE THE INSTALLATION LOCATION FOR THE DATA EQUIPMENT RACKS. COORDINATE INSTALLATION LOCATION IN THE FIELD WITH THE FINAL INSTALLATION LOCATION OF THE DATA EQUIPMENT RACKS. INSTALL CABLETRAY SYSTEM AT APPROXIMATELY 1FT ABOVE THE TOP OF THE DATA EQUIPMENT RACKS TO THE BOTTOM OF THE CABLETRAY SYSTEM.

A14. PROVIDE CABLETRAY SYSTEMS ALONG ALL PERIMETER WALLS OF THE DATA EQUIPMENT ROOM. COORDINATE THE REQUIRED INSTALLATION HEIGHT IN FIELD WITH ALL OTHER INSTALLATION REQUIREMENTS WITHIN THE ROOM. THE CABLE TRAY SHALL BE INSTALLED JUST BELOW THE HEIGHT WHERE THE CONDUIT SLEEVES ARE PROVIDED TO ROUTE THE LOW VOLTAGE DATA CABLES INTO THE ADJACENT CORRIDOR SPACE.

A15. PROVIDE A QUANTITY OF THREE DATA EQUIPMENT RACKS (4-POST). SEE DIVISION 27 PROJECT SPECIFICATIONS SECTION "271310 STRUCTURED DATA CABLING SYSTEMS" FOR ADDITIONAL REQUIREMENTS.

A16. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR TOUCH PANEL WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

A17. APPROXIMATE INSTALLATION LOCATION FOR CONDUIT RACEWAY SYSTEMS WITH FIBER CABLES. SEE COMMUNICATION ROOM LOCATION PLAN - FIRST FLOOR, SHEET E3.1, FOR ADDITIONAL REQUIREMENTS.

A18. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE INSTRUCTOR'S A/V ACCESS CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

A19. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "A") [CONT]:

A20. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

A21. PROVIDE DATA CABLE FROM WALL CLOCK LOCATION TO CLOCK SYSTEM HEAD-END EQUIPMENT PROVIDED WITHIN DATA ROOM.

A22. DATA OUTLET FOR FUTURE HALL OF FAME 75" PANEL SYSTEM EQUIPMENT. COORDINATE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE OWNER & ARCHITECT PRIOR TO START OF ROUGH-IN.

A23. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

A24. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 10'-0 ABOVE FINISHED FLOOR. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF ENTRY VESTIBULE AREAS.

A25. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 11'-4" ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE VESTIBULE.

A26. PROVIDE SPECIFIED TECHNOLOGIES INC. EZ PATH SERIES 44+ FIRE RATED PATHWAY ASSEMBLIES (QUANTITY OF THREE ASSEMBLIES GANGED SIDE-BY-SIDE) THRU FIRE WALL FOR ROUTING OF LOW VOLTAGE DATA CABLES FROM CABLETRAY SYSTEM TO CABLETRAY SYSTEM. INSTALL PER MANUFACTURER'S REQUIREMENTS TO ENSURE RATING OF WALL AND ALLOW INSTALLATION OF THE REQUIRED DATA CABLES.

A27. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0" ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE CORRIDOR.

A28. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR EXTERIOR HORN WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

A29. OUTDOOR RATED CAMERA ASSEMBLY. INSTALL AT APPROXIMATELY 13'-0" ABOVE FINISHED FLOOR. AIM CAMERA AS REQUIRED TO PROVIDE MAXIMUM VIEW OF BUILDING EXTERIOR AREAS. SEE EXTERIOR VIDEO SURVEILLANCE SYSTEM CAMERA INSTALLATION DETAIL, SHEET E1.1, FOR ADDITIONAL REQUIREMENTS.

A30. DATA OUTLET FOR LARGE VIDEO MONITOR. COORDINATE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "A") [CONT]:

A31. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR WALL MOUNT SPEAKERS IN ROOM WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

A32. REFER TO TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

A33. PROVIDE DATA OUTLET WITHIN THE SOUND REINFORCEMENT SYSTEM CABINET.

A34. INSTALL DATA OUTLET HIGH ON WALL APPROXIMATELY 18 INCHES BELOW CEILING TO TOP OF OUTLET BOX.

A35. SEE AREA "A" CANOPY ELECTRICAL PLAN, SHEET E7.2, FOR ADDITIONAL SYSTEMS AND TECHNOLOGY REQUIREMENTS WITHIN THE CANOPY AREAS.

A36. PROVIDE DATA OUTLET HIGH ON THE WALL (APPROXIMATELY 16FT ABOVE FINISHED FLOOR) FOR THE OWNER'S FUTURE USE. VERIFY THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE OWNER'S TECHNOLOGY COORDINATOR PRIOR TO START OF ROUGH-IN.

A37. PROVIDE WALL MOUNT TYPE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE DATA CABLING PATCH CORD BETWEEN THE SOUND REINFORCEMENT SYSTEM CABINET TO THE DATA OUTLET PROVIDED NEAR / WITHIN THE SOUND REINFORCEMENT SYSTEM CABINET (PER THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM MANUFACTURER'S REQUIREMENTS). PROVIDE THREE 1" CONDUIT RACEWAYS (WITHIN THE WALL FROM CABINET LOCATION TO ACCESSIBLE CEILING CAVITY SPACE) FOR ROUTING OF REQUIRED CABLING BETWEEN AUDIO INPUTS, AUDIO OUTPUTS, DATA INPUTS, TOUCH PANEL AND WALL CLOCK ASSEMBLIES.

A38. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF ENTIRE ROOM.

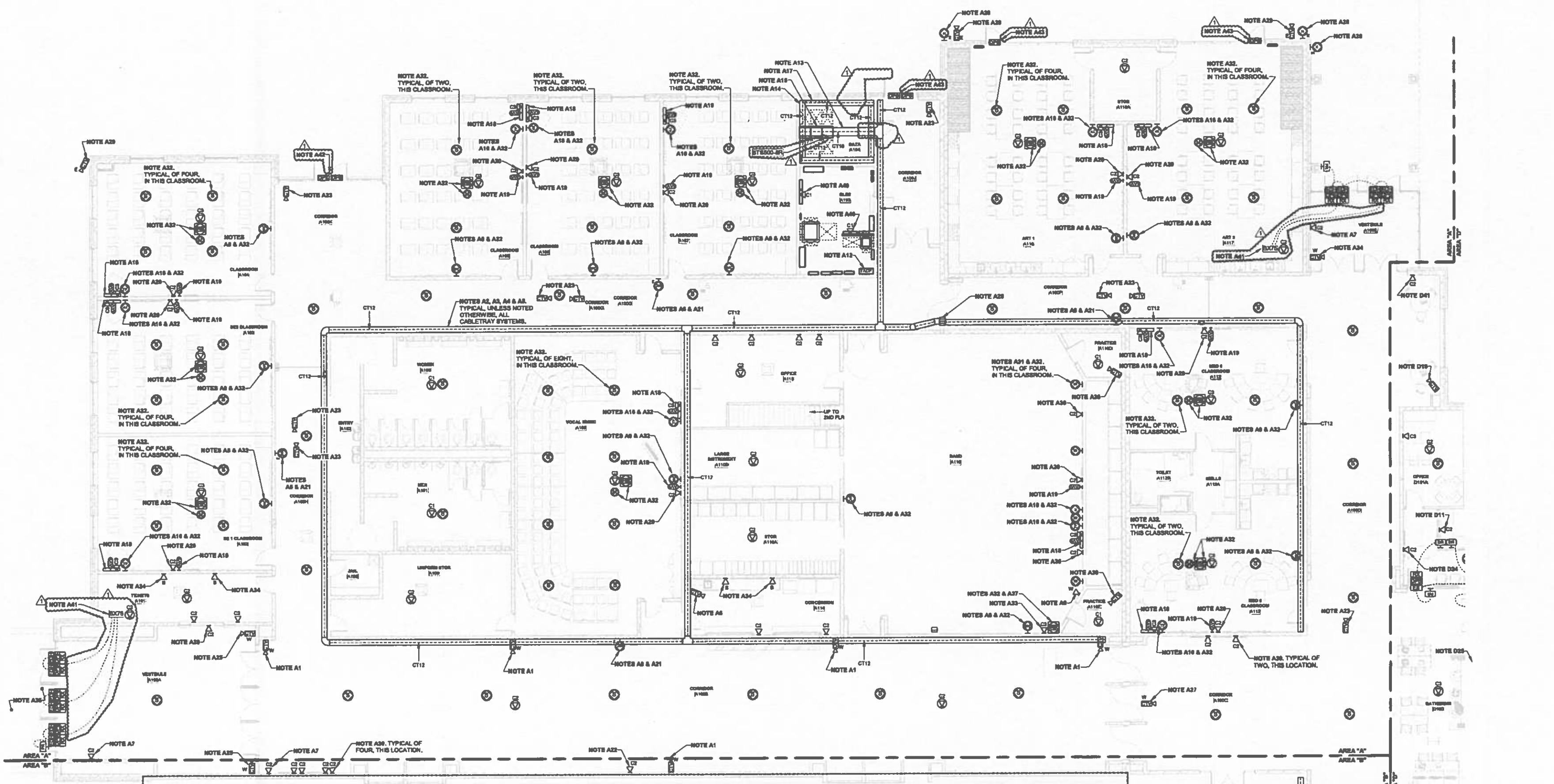
A39. PROVIDE DATA OUTLET HIGH ON WALL BEHIND VIDEO MONITOR FOR TICKETS. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE MOUNTING REQUIREMENTS FOR THE VIDEO MONITOR. INSTALL WHERE OUTLET IS HIDDEN BEHIND THE MONITOR WHILE STILL BEING ACCESSIBLE.

A40. PROVIDE DATA OUTLET FOR NETWORK CONNECTION TO BUILDING MANAGEMENT SYSTEM (T.C.) CONTROL / MONITORING PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE T.C. CONTRACTOR PRIOR TO START OF ROUGH-IN.

A41. GENERAL LOCATION FOR BX76 SERIES DOOR CONTROLLER / POWER SUPPLY (WITHIN ACCESSIBLE CEILING CAVITY SPACE) AND ASSOCIATED "C2" DATA OUTLET.

A42. PROVIDE REQUIRED CIRCUITS FROM DPS DEVICES TO BX76 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF TICKETS ROOM A101.

A43. PROVIDE REQUIRED CIRCUITS FROM DPS DEVICE(S) TO BX76 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF ART 2 ROOM A117.



SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "A"

1/8" = 1'-0"

1/8"=1'-0"

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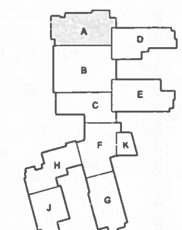


KEYPLAN

Revisions:

#	Description	Date
1	[illegible]	[illegible]

Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title: SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "A"

Architect's Project No: 2106-204

Date: May, 20…

Drawing No: E3.1A

GENERAL NOTES
(FOR ALL SYSTEMS & TECH. PLANS):

GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (I.E., SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES
(FOR ALL SYSTEMS & TECH. PLANS) [CONT]:

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS, MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "B"):

B1. PROVIDE SPECIFIED TECHNOLOGIES INC. EZ PATH SERIES 44+ FIRE RATED PATHWAY ASSEMBLIES (QUANTITY OF FOUR ASSEMBLIES GANGED SIDE-BY-SIDE) THRU FIRE WALL FOR ROUTING OF LOW VOLTAGE DATA CABLES FROM CABLETRAY SYSTEM TO CABLETRAY SYSTEM. INSTALL PER MANUFACTURER'S REQUIREMENTS TO ENSURE RATING OF WALL AND ALLOW INSTALLATION OF THE REQUIRED DATA CABLES. BOND CABLETRAY SYSTEMS TO THE GROUND BUS BAR WITHIN THE DATA ROOM USING #10AWG COPPER CONDUCTOR.

B2. INSTALL CABLE TRAY SYSTEM AT APPROXIMATELY 3" ABOVE THE ACCESSIBLE CEILING GRID SYSTEM. PROVIDE ALL REQUIRED HORIZONTAL AND VERTICAL BENDS IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT. IN GENERAL, INSTALL THE CABLETRAY SYSTEMS WITH MINIMUM BENDS. VERTICAL CHANGES ARE NOT SHOWN ON THESE DRAWINGS AND SHALL BE COORDINATED IN THE FIELD.

B3. PROVIDE OPENINGS THROUGH ALL WALLS WHERE CABLETRAY SYSTEMS ARE REQUIRED TO BE ROUTED THROUGH (NON-RATED) WALLS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION REQUIREMENTS IN THE FIELD WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT.

B4. PROVIDE U.L. LISTED FIRE STOPPING SYSTEMS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING ARE REQUIRED TO PASS-THROUGH FIRE RATED AND / OR RATED WALL ASSEMBLIES.

B5. SEE CABLETRAY SCHEDULE, SHEET E1.1, FOR ADDITIONAL CABLETRAY AND CABLETRAY INSTALLATION REQUIREMENTS.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "B") [CONT]:

B6. SEE DRAWINGS E2.1, E3.1 & E8.1 FOR ADDITIONAL REQUIREMENTS FOR UNDERGROUND CONDUITS WITHIN THIS AREA. ALL UNDERGROUND CONDUITS SHALL BE INSTALLED AT A SUFFICIENT DEPTH TO PREVENT DAMAGE TO CONDUITS WHEN THE ALTERNATE BID GYMNASIUM AREA IS INSTALLED.

B7. PROVIDE 1" CONDUIT BELOW GRADE FROM MAIN DATA ROOM TO JUNCTION BOX IN ROOM B106 FOR OWNER FURNISHED AND INSTALLED FIBER CABLING TO GYMNASIUM "LIVE-STREAM" VIDEO CONTROL EQUIPMENT. BUSH CONDUIT ENDS. PROVIDE PULL STRING IN CONDUIT.

B8. PROVIDE 4" SQUARE DEEP OUTLET BOX AND 2-GANG PLASTER RING FOR OWNER FURNISHED AND INSTALLED FIBER CABLING TO GYMNASIUM "LIVE-STREAM" VIDEO CONTROL EQUIPMENT. PROVIDE ADDITIONAL 1" CONDUIT FROM TOP OF OUTLET BOX TO ACCESSIBLE CEILING CAVITY IN ROOM. BUSH CONDUIT ENDS. PROVIDE PULL STRING IN CONDUITS. PROVIDE WITH BLANK COVER PLATE.

B9. PROVIDE A QUANTITY OF FOUR 4" CONDUITS FROM THE EXPOSED CABLETRAY SYSTEM WITHIN THE DATA ROOM TO ACCESSIBLE CEILING CAVITY SPACE WITHIN THE CORRIDOR. BUSH CONDUIT ENDS. (FOR ROUTING OF LOW VOLTAGE DATA NETWORK CABLING). BOND CONDUITS TO THE GROUND BUS BAR WITHIN THE DATA ROOM USING #10AWG COPPER CONDUCTOR.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "B") [CONT]:

B10. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE INSTRUCTOR'S A/V ACCESS CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET ELECTRICAL REQUIREMENT DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

B11. SEE FIRE ALARM SYSTEM DRAWINGS (E10.xx SERIES DRAWINGS) PREPARED BY WBW FOR ADDITIONAL REQUIREMENTS REGARDING THE BUILDING FIRE ALARM SYSTEM.

B12. PROVIDE DATA OUTLET FOR NETWORK CONNECTION TO BUILDING MANAGEMENT SYSTEM (T.C.) CONTROL / MONITORING PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE T.C. CONTRACTOR PRIOR TO START OF ROUGH-IN.

B13. PROVIDE CABLETRAY SYSTEM FROM WALL-TO-WALL AND INSTALLED ABOVE THE INSTALLATION LOCATION FOR THE DATA EQUIPMENT RACKS. COORDINATE INSTALLATION LOCATION IN THE FIELD WITH THE FINAL INSTALLATION LOCATION OF THE DATA EQUIPMENT RACKS. INSTALL CABLETRAY SYSTEM AT APPROXIMATELY 1FT ABOVE THE TOP OF THE DATA EQUIPMENT RACKS TO THE BOTTOM OF THE CABLETRAY SYSTEM.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "B") [CONT]:

B14. PROVIDE CABLETRAY SYSTEMS ALONG ALL PERIMETER WALLS OF THE DATA EQUIPMENT ROOM. COORDINATE THE REQUIRED INSTALLATION HEIGHT IN FIELD WITH ALL OTHER INSTALLATION REQUIREMENTS WITHIN THE ROOM. THE CABLE TRAY SHALL BE INSTALLED JUST BELOW THE HEIGHT WHERE THE CONDUIT SLEEVES ARE PROVIDED TO ROUTE THE LOW VOLTAGE DATA CABLES INTO THE ADJACENT CORRIDOR SPACE.

B15. PROVIDE A QUANTITY OF THREE DATA EQUIPMENT RACKS (4-POST). SEE DIVISION 27 PROJECT SPECIFICATIONS SECTION "271310 STRUCTURED DATA CABLING SYSTEMS" FOR ADDITIONAL REQUIREMENTS.

B16. PROVIDE A QUANTITY OF FIVE (EXTRA DEPTH 4-POST) DATA EQUIPMENT RACKS. SEE DIVISION 27 PROJECT SPECIFICATIONS SECTION "271310 STRUCTURED DATA CABLING SYSTEMS" FOR ADDITIONAL REQUIREMENTS.

B17. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 9'-4 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

B18. NOTE NOT USED.

B19. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

B20. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

B21. SEE CANOPY PLAN, SHEET E7.2, FOR ADDITIONAL SYSTEMS AND TECHNOLOGY REQUIREMENTS WITHIN THE CANOPY AREAS.

B22. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

B23. PROVIDE DATA CABLE FROM WALL CLOCK LOCATION TO CLOCK SYSTEM TO HEAD-END EQUIPMENT PROVIDED WITHIN DATA ROOM.

B24. PROVIDE A QUANTITY OF FOUR 4" CONDUITS FROM THE EXPOSED CABLETRAY SYSTEM WITHIN THE DATA ROOM (ACROSS THE HARD CEILING WITHIN THE CORRIDOR) TO CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. (FOR ROUTING OF LOW VOLTAGE DATA NETWORK CABLING). BOND CONDUITS TO THE GROUND BUS BAR WITHIN THE DATA ROOM USING #10AWG COPPER CONDUCTOR.

B25. OUTDOOR RATED CAMERA ASSEMBLY. CAMERA SHALL BE INSTALLED AT APPROXIMATELY 13'-0" ABOVE FINISHED FLOOR AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF BUILDING EXTERIOR AREAS. SEE EXTERIOR VIDEO SURVEILLANCE SYSTEM CAMERA INSTALLATION DETAIL, SHEET E1.1, FOR ADDITIONAL REQUIREMENTS.

B26. APPROXIMATE INSTALLATION LOCATION FOR CONDUIT RACEWAY SYSTEMS WITH FIBER CABLES. SEE COMMUNICATION ROOM LOCATION PLAN - FIRST FLOOR, SHEET E3.1, FOR ADDITIONAL REQUIREMENTS.

B27. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR TOUCH PANEL WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

B28. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

B29. REFER TO TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

B30. THE REQUIREMENT FOR THIS CAMERA LOCATION SHALL BE DELETED IF THE GYMNASIUM ALTERNATE BID ITEM IS ACCEPTED. *DELETE CAMERA, CABLING AND ASSOCIATED CONDUIT RACEWAY SYSTEM REQUIREMENTS AS PART OF THE GYMNASIUM ALTERNATE BID.*

B31. THE REQUIREMENT FOR ACCESS CONTROL (DOOR POSITION SWITCH(S)) AT THIS LOCATION SHALL BE DELETED IF THE GYMNASIUM ALTERNATE BID ITEM IS ACCEPTED. *DELETE DOOR POSITION SWITCH, CABLING AND ASSOCIATED CONDUIT RACEWAY SYSTEM REQUIREMENTS AS PART OF THE GYMNASIUM ALTERNATE BID.*

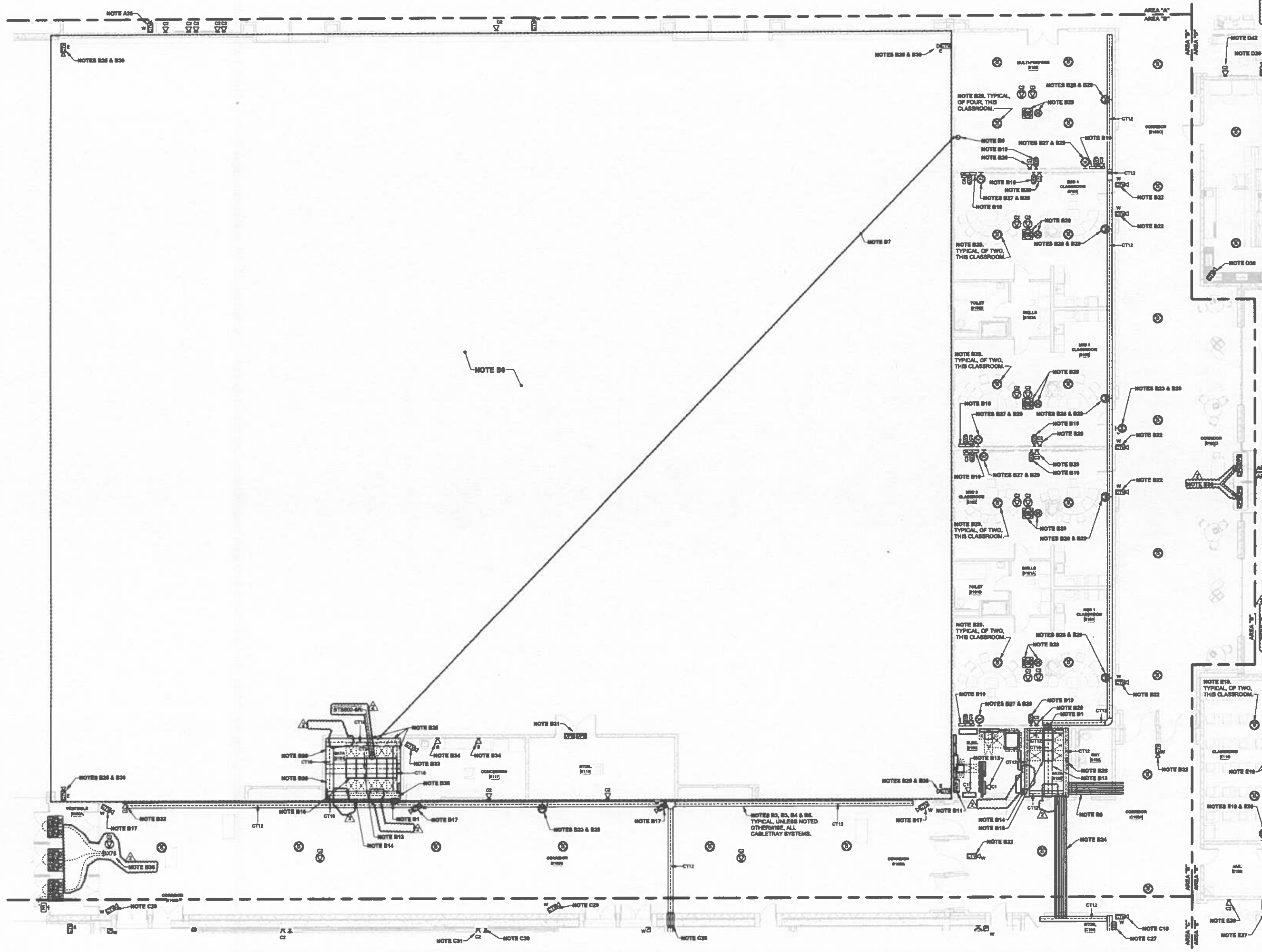
B32. DATA OUTLET LOCATION FOR USE WITH METAL DETECTION SECURITY SYSTEM EQUIPMENT.

B33. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CONCESSIONS AREAS.

B34. INSTALL DATA OUTLET HIGH ON WALL APPROXIMATELY 18 INCHES BELOW CEILING TO TOP OF OUTLET BOX.

B35. GENERAL LOCATION FOR SX75 SERIES DOOR CONTROLLER / POWER SUPPLY (WITHIN ACCESSIBLE CEILING CAVITY SPACE) AND ASSOCIATED "C2" DATA OUTLET.

B36. PROVIDE REQUIRED CIRCUITS FROM DPS DEVICES TO SX75 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR E100A.



SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "B"

1/8" = 1'-0"

1/8"=1'-0"

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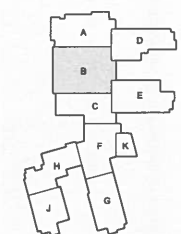

KEYPLAN

Revisions:

#	Description	Date
1	PR-001	10/13/2023
2	Access Control System Mods	4/18/2024

Designed By:	Drawn By:	Checked By:
MJB	SOB	MJB

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Sheet title:
SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "B"

Architect's Project No: 2106-204

Date: May, 20

Drawing No:

E3.1B

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "B"-ALT):

B1. SEE FIRE ALARM SYSTEM DRAWINGS (E10.xx SERIES DRAWINGS) PREPARED BY WBW FOR ADDITIONAL REQUIREMENTS REGARDING THE BUILDING FIRE ALARM SYSTEM.

B2. OWNER FURNISHED AND INSTALLED AUDIO/VIDEO EQUIPMENT RACK.

B3. PROVIDE DATA OUTLET FOR NETWORK CONNECTION TO BUILDING MANAGEMENT SYSTEM (T.C.) CONTROL / MONITORING PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE T.C. CONTRACTOR PRIOR TO START OF ROUGH-IN.

B4. PROVIDE DATA OUTLET HIGH ON WALL FOR VIDEO MONITOR.

B5. SEE MULTI-FUNCTION FLOORBOX ASSEMBLY SCHEDULE, SHEET E1.1, FOR ADDITIONAL REQUIREMENTS REGARDING CONDUIT RACEWAYS, DATA DROPS AND OTHER REQUIREMENTS.

B6. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREAS AROUND THE ENTRY TO THE GYMNASIUM.

B7. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR EXTERIOR HORN WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "B"-ALT) [CONT]:

B8. PROVIDE A QUANTITY OF TWO 1" CONDUITS (WITH PULL STRINGS) FROM PULL-BOX PROVIDED BEHIND THE OWNER FURNISHED AND INSTALLED AUDIO/VIDEO EQUIPMENT RACK IN STORAGE ROOM B118 TO MULTI-FUNCTION FLOOR BOX. PROVIDE LARGE SWEEP RADIUS TURNS WHERE THE CONDUITS TRANSITION FROM BELOW GRADE TO VERTICALLY WITHIN THE WALLS. INSTALL SUCH THAT THERE IS NO MORE THAN 180 DEGREES OF BENDS IN CONDUIT RACEWAYS. (FOR OWNER FURNISHED AND INSTALLED AUDIO/VIDEO SYSTEM CABLING).

B9. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 10'-0" ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF GYMNASIUM AREAS.

B10. OUTDOOR RATED CAMERA ASSEMBLY. CAMERA SHALL BE INSTALLED AT APPROXIMATELY 13'-0" ABOVE FINISHED FLOOR AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF BUILDING EXTERIOR AREAS. SEE EXTERIOR VIDEO SURVEILLANCE SYSTEM CAMERA INSTALLATION DETAIL, SHEET E1.1, FOR ADDITIONAL REQUIREMENTS.

B11. PROXIMITY READER FOR ACCESS TO ELEVATOR CAB. PROVIDE ALL REQUIRED CIRCUITS AND INTERCONNECT WITH THE ELEVATOR CONTROLLER. ACCESS INTO THE ELEVATOR CAB SHALL REQUIRE A VALID READ FROM THE PROXIMITY READER. PROXIMITY READER SHALL BE PART OF THE ACCESS CONTROL SYSTEM.

B12. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED FIRST FLOOR. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF GYMNASIUM AREAS.

B13. PROVIDE DATA OUTLET HIGH ON WALL FOR LARGE VIDEO BOARD. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION LOCATION AND REQUIREMENTS FOR THE LARGE VIDEO BOARD PRIOR TO START OF ROUGH-IN.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "B"-ALT) [CONT]:

B14. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 10'-0 ABOVE TOP OF BLEACHERS. CENTER OUTLET ON BLEACHER STAIRWAY AREA. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF BLEACHER AREA AND ACTIVITY ON BLEACHER STAIRWAY.

B15. COORDINATE ALL ELECTRICAL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS AND MOUNTING HEIGHTS WITHIN THE ELEVATOR SHAFT AND THE ELEVATOR PIT AREAS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN TO ENSURE INSTALLATION WILL MEET THE REQUIREMENTS OF THE ELEVATOR PROVIDER, ELEVATOR INSPECTOR AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

B16. SEE SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "B", SHEET E3.2B-ALT, FOR ADDITIONAL SYSTEMS & TECHNOLOGY REQUIREMENTS WITHIN THE ELEVATOR CAB.

B17. PROVIDE ACCESS CONTROL CIRCUIT FROM ACCESS CONTROL SYSTEM TO ELEVATOR CONTROLLER AS REQUIRED FOR TIE-IN WITH THE ELEVATOR CONTROLLER. FINAL TERMINATION TO THE ELEVATOR CONTROLLER SHALL BE BY THE ELEVATOR PROVIDER. COORDINATE ALL REQUIRED INSTALLATION WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN.

B18. PROVIDE DATA OUTLET AS REQUIRED FOR CONNECTION TO EMERGENCY PHONE WITHIN THE ELEVATOR CAB. COORDINATE THE INSTALLATION LOCATION AND ALL OTHER REQUIREMENTS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-INS.

B19. INSTALLATION SHOWN WITHIN THE DASHED LINE INDICATES WORK WHICH SHALL BE BID AS PART OF THE GYMNASIUM ALTERNATE BID.

B20. SEE BASE BID DRAWING FOR ELECTRICAL REQUIREMENTS WITHIN THIS ROOM. THE AREAS WITHIN THE DASHED LINE SHALL BE ADDED TO THE BASE BID CONSTRUCTION AS PART OF THE GYMNASIUM ALTERNATE BID.

B21. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

B22. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

B23. PROVIDE A QUANTITY OF EIGHT 1" CONDUITS (WITH PULL STRINGS) FROM PULL-BOX PROVIDED ON THE SIDE OF THE OWNER FURNISHED AND INSTALLED AUDIO/VIDEO EQUIPMENT RACK IN STORAGE ROOM B118 TO PULL BOX ON WALL (WITHIN THE PHYSICAL THERAPY ROOM B108). ROUTE BELOW GRADE. PROVIDE LARGE SWEEP RADIUS TURNS WHERE THE CONDUITS TRANSITION FROM BELOW GRADE TO VERTICALLY WITHIN THE WALLS. INSTALL SUCH THAT THERE IS NO MORE THAN 180 DEGREES OF BENDS IN CONDUIT RACEWAYS. (FOR OWNER FURNISHED AND INSTALLED AUDIO/VIDEO SYSTEM CABLING).

B24 COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR TOUCH PANEL WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

B25. REFER TO TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

B26. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE INSTRUCTOR'S A/V ACCESS CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET ELECTRICAL REQUIREMENT DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

B27. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

B28. PROVIDE A QUANTITY OF THREE 3" CONDUITS FROM ACCESSIBLE CEILING CAVITY SPACE - ACROSS HARD CEILING - TO ACCESSIBLE CEILING CAVITY SPACE FOR ROUTING OF LOW VOLTAGE CABLING. BUSH CONDUIT ENDS.

B29. PROVIDE A QUANTITY OF THREE 3" CONDUITS FROM ACCESSIBLE CEILING CAVITY SPACE TO ACCESSIBLE CEILING CAVITY SPACE FOR ROUTING OF LOW VOLTAGE CABLING. BUSH CONDUIT ENDS.

B30. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

B31. NOTE NOT USED.

B32. PROVIDE FLUSH-MOUNT 4" SQUARE OUTLET BOX WITH 2-GANG PLASTER RING AS HIGH AS POSSIBLE ON WALL JUST BELOW THE GYMNASIUM SECOND FLOOR. (FOR OWNER FURNISHED AND INSTALLED VIDEO CAMERA LOCATION).

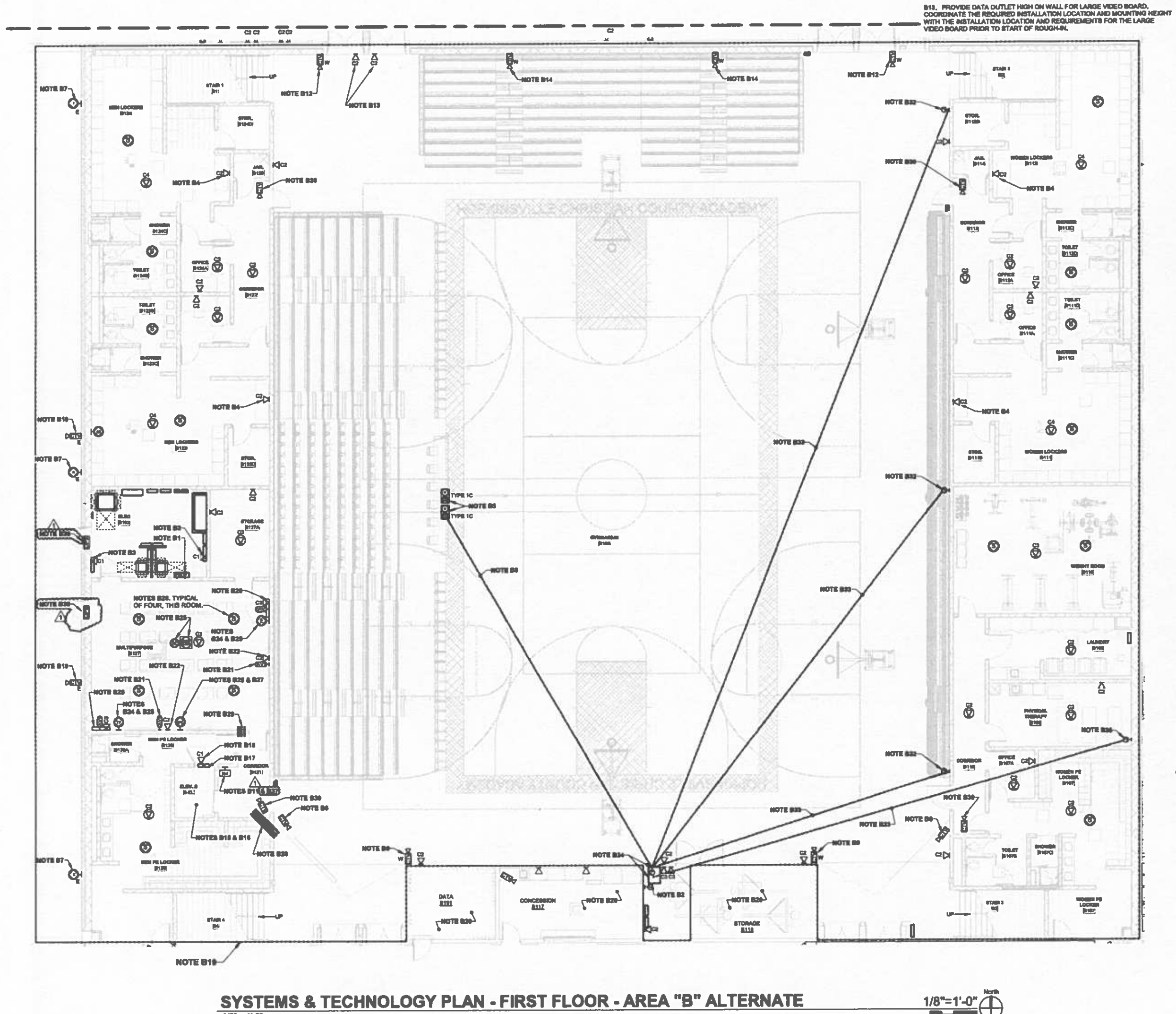
B33. PROVIDE 1" CONDUIT (WITH PULL STRING) FROM PULL-BOX PROVIDED BEHIND THE OWNER FURNISHED AND INSTALL AUDIO/VIDEO EQUIPMENT RACK IN STORAGE ROOM B118 TO OUTLET BOX ON WALL. ROUTE BELOW GRADE. PROVIDE LARGE SWEEP RADIUS TURNS WHERE THE CONDUIT TRANSITION FROM BELOW GRADE TO VERTICALLY WITHIN THE WALLS. INSTALL SUCH THAT THERE IS NO MORE THAN 180 DEGREES OF BENDS IN CONDUIT RACEWAYS. (FOR OWNER FURNISHED AND INSTALLED VIDEO SYSTEM CABLING).

B34. PROVIDE FLUSH-MOUNT PULL BOX (SIZE AS REQUIRED TO TERMINATE QUANTITY AND SIZES OF CONDUITS) FOR ROUTING OF LOW VOLTAGE CABLES TO AUDIO/VIDEO EQUIPMENT RACK. PROVIDE COVER PLATE ON PULL BOX. (NOTE: THE REQUIRED OPENINGS IN PULL BOX COVER WILL BE MADE BY THE OWNER'S AUDIO/VIDEO EQUIPMENT PROVIDER).

B35. PROVIDE FLUSH-MOUNT PULL BOX (SIZE AS REQUIRED TO TERMINATE QUANTITY AND SIZES OF CONDUITS). INSTALL AT APPROXIMATELY 18" ABOVE FINISHED FLOOR TO BOTTOM OF ENCLOSURE. PROVIDE COVER FOR PULL BOX WHICH EXTENDS PAST THE EDGES OF THE BOX TO PROVIDE A CLEAN APPEARANCE. PULL BOX COVER SHALL BE PAINTED TO MATCH THE FINISH COLOR OF THE WALLS. (FOR ROUTING OF OWNER FURNISHED AND INSTALLED LOW VOLTAGE CABLES FROM AUDIO/VIDEO EQUIPMENT RACK TO PULL BOX PROVIDED HIGH WITHIN THE UPPER GYMNASIUM LEVEL AREA WALL). PROVIDE A QUANTITY OF EIGHT 1" CONDUITS (WITH PULL STRINGS) VERTICALLY WITHIN THE WALL FROM THIS PULL BOX TO THE PULL BOX PROVIDED ABOVE.

1 B36. PROVIDE REQUIRED CIRCUITS FROM DPS DEVICES TO BX76 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR B100B.

B37. PROVIDE REQUIRED CIRCUITS FROM PROXIMITY READER AND ELEVATOR CONTROLLER TO BX76 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR B100B.



SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "B" ALTERNATE

1/8" = 1'-0"

1/8"=1'-0" North

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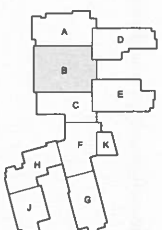


KEYPLAN

Revisions:

#	Description	Date
1	Access Control System Mods	4/19/2024

Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:
SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "B" ALTERNATE

Architect's Project No: 2106-204
Date: May, 20

Drawing No:
E3.1B-Al

GENERAL NOTES
(FOR ALL SYSTEMS & TECH. PLANS):

GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (I.E. SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES
(FOR ALL SYSTEMS & TECH. PLANS) [CONT]:

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS, MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "C"):

C1. PROVIDE DATA OUTLET FOR NETWORK CONNECTION TO BUILDING MANAGEMENT SYSTEM (T.C.) CONTROL / MONITORING PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE T.C. CONTRACTOR PRIOR TO START OF ROUGH-IN.

C2. INSTALL CABLE TRAY SYSTEM AT APPROXIMATELY 3" ABOVE THE ACCESSIBLE CEILING GRID SYSTEM. PROVIDE ALL REQUIRED HORIZONTAL AND VERTICAL BENDS IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT. IN GENERAL, INSTALL THE CABLETRAY SYSTEMS WITH MINIMUM BENDS. VERTICAL CHANGES ARE NOT SHOWN ON THESE DRAWINGS AND SHALL BE COORDINATED IN THE FIELD.

C3. PROVIDE OPENINGS THROUGH ALL WALLS WHERE CABLETRAY SYSTEMS ARE REQUIRED TO BE ROUTED THROUGH (NON-RATED) WALLS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION REQUIREMENTS IN THE FIELD WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT.

C4. PROVIDE U.L. LISTED FIRE STOPPING SYSTEMS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING ARE REQUIRED TO PASS-THROUGH FIRE RATED AND / OR RATED WALL ASSEMBLIES.

C5. SEE CABLETRAY SCHEDULE, SHEET E1.1, FOR ADDITIONAL CABLETRAY AND CABLETRAY INSTALLATION REQUIREMENTS.

C6. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

C7. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "C"):

C8. CAMERA SHALL BE INSTALLED ON HARD CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS. PROVIDE DATA OUTLET FLUSH IN FINISHED CEILING. INSTALL CONDUIT RACEWAY SYSTEM FROM OUTLET BOX TO NEAREST ACCESSIBLE CEILING CAVITY SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATION IN FIELD WITH ARCHITECT AND OWNER'S I.T. STAFF PRIOR TO START OF ROUGH-IN. INSTALLATION LOCATION SHALL BE AS REQUIRED TO PREVENT BLOCKAGE OF CAMERA VIEW BY SUSPENDED LIGHTING FIXTURES AND ALL OTHER OBSTRUCTIONS.

C9. OUTDOOR RATED CAMERA ASSEMBLY. CAMERA SHALL BE INSTALLED AT APPROXIMATELY 13'-0" ABOVE FINISHED FLOOR AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF BUILDING EXTERIOR AREAS. SEE EXTERIOR VIDEO SURVEILLANCE SYSTEM CAMERA INSTALLATION DETAIL, SHEET E1.1, FOR ADDITIONAL REQUIREMENTS.

C10. PROVIDE A QUANTITY OF TWO DATA CABLES TO THIS FLOOR BOX LOCATION.

C11. INSTALL WITHIN STORE FRONT METALLIC FRAME SYSTEM. COORDINATE THE INSTALLATION REQUIREMENTS WITH THE STOREFRONT SYSTEM PROVIDER PRIOR TO START OF ROUGH-IN OF RACEWAYS.

C12. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE INSTRUCTOR'S A/V ACCESS CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET ELECTRICAL REQUIREMENT DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

C13. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR HORN WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

C14. DATA OUTLET AND A/V OUTLET INSTALLATION FOR FLAT PANEL MONITOR SYSTEM. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE FLAT PANEL INSTALLATION REQUIREMENTS AND THE ARCHITECT PRIOR TO START OF ROUGH-IN.

C15. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX. AIM CAMERA AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIRS AND AREA BELOW STAIRS.

C16. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF ENTRY CORRIDOR AREAS.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "C"):

C17. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 11'-8" ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE MEDIA SPACE. CAMERA VIEW SHALL NOT BE OBSTRUCTED BY SUSPENDED LIGHTING OR ANY OTHER INSTALLATION WITHIN THE AREA.

C18. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX. AIM CAMERA AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

C19. PROVIDE A QUANTITY OF THREE 4" CONDUITS FROM ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ADJACENT ROOM. BUSH CONDUIT ENDS. FOR ROUTING OF LOW VOLTAGE DATA NETWORK CABLING. BOND CONDUITS TO THE GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY SYSTEM USING #10AWG COPPER CONDUCTOR.

C20. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR TOUCH PANEL WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

C21. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

C22. REFER TO TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

C23. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0" ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED ON OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM COVERAGE OF GYM AND ENTRANCES.

C24. SEE POWER PLAN - FIRST FLOOR AREA "C", SHEET E2.1C, FOR ADDITIONAL REQUIREMENTS.

C25. ALL LOW VOLTAGE DATA CABLES INSTALLED WITHIN (OR ROUTED THROUGH) THIS OPEN CEILING SPACE AREA SHALL BE INSTALLED WITHIN CONDUIT RACEWAY SYSTEMS FROM THE DATA OUTLET LOCATION (OR VIDEO SURVEILLANCE SYSTEM CAMERA LOCATION) TO THE NEAREST ACCESSIBLE CEILING CAVITY SPACE ON THE 2ND FLOOR. PROVIDE PULL BOXES WHERE REQUIRED TO LIMIT THE NUMBER OF BENDS IN THE CONDUIT RACEWAY SYSTEMS TO A MAXIMUM OF 180 DEGREES. PROVIDE RACEWAY SYSTEMS WITH CAPACITY AS REQUIRED TO ADD A MINIMUM QUANTITY OF 50 PERCENT MORE FUTURE CABLES WITHIN THE INDIVIDUAL CONDUIT RUNS.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "C"):

C26. PROVIDE DATA CABLE FROM WALL CLOCK LOCATION TO CLOCK SYSTEM TO HEAD-END EQUIPMENT PROVIDED WITHIN DATA RACK.

C27. PROVIDE SPECIFIED TECHNOLOGIES INC. EZ PATH SERIES 44+ FIRE RATED PATHWAY ASSEMBLIES (QUANTITY OF FOUR ASSEMBLIES GANGED SIDE-BY-SIDE) THRU FIRE WALL FOR ROUTING OF LOW VOLTAGE DATA CABLES FROM CABLETRAY SYSTEM TO CABLETRAY SYSTEM. INSTALL PER MANUFACTURER'S REQUIREMENTS TO ENSURE RATING OF WALL AND ALLOW INSTALLATION OF THE REQUIRED DATA CABLES. BOND CABLETRAY SYSTEMS TO THE GROUND BUS BAR WITHIN THE DATA ROOM USING #10AWG CONDUCTOR.

C28. PROVIDE SPECIFIED TECHNOLOGIES INC. EZ PATH SERIES 44+ FIRE RATED PATHWAY ASSEMBLIES (QUANTITY OF FOUR ASSEMBLIES GANGED SIDE-BY-SIDE) THRU FIRE WALL/STORM SHELTER WALL FOR ROUTING OF LOW VOLTAGE DATA CABLES FROM CABLETRAY SYSTEM TO CABLETRAY SYSTEM. INSTALL PER MANUFACTURER'S REQUIREMENTS TO ENSURE RATING OF WALL AND ALLOW INSTALLATION OF THE REQUIRED DATA CABLES. BOND CABLETRAY SYSTEMS TO EACH OTHER USING #10AWG CONDUCTOR.

C29. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 9'-4 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

C30. PROVIDE A QUANTITY OF ONE SPARE 1-1/4" CONDUIT (WITH PULL STRING) FROM FLOORBOX TO THE ACCESSIBLE CEILING CAVITY SPACE OF ENTRY ROOM C100C. (FOR FUTURE LOW VOLTAGE DATA CABLING USE).

C31. DATA OUTLET ON WALL FOR VIDEO PROJECTOR EQUIPMENT. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS FOR THE VIDEO PROJECTOR PRIOR TO START OF ROUGH-IN.

C32. OWNER FURNISHED AND INSTALLED AUDIO / VIDEO EQUIPMENT RACK FOR THE AUX GYM AND ROOM C102.

C33. PROVIDE FLUSH MOUNT SINGLE-GANG OUTLET BOX IN WALL AT 12" BELOW CEILING TO TOP OF OUTLET BOX. PROVIDE 3/4" CONDUIT FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ASSOCIATED ROOM. PROVIDE BLANK DEVICE PLATE ON OUTLET BOXES. (FOR OWNER FURNISHED AND INSTALLED SPEAKER AND AUDIO CABLING SYSTEMS).

C34. PROVIDE FLUSH MOUNT TWO-GANG OUTLET BOX IN WALL AT 18" ABOVE FINISHED FLOOR TO CENTER OF BOX. PROVIDE TWO 1" CONDUITS FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ASSOCIATED ROOM. PROVIDE BLANK DEVICE PLATE ON OUTLET BOXES. (FOR OWNER FURNISHED AND INSTALLED AUDIO CABLING SYSTEMS FOR AUDIO WITHIN ROOM C102).

C35. PROVIDE FLUSH MOUNT PULL-BOX IN WALL AT APPROXIMATELY 18" ABOVE FINISHED FLOOR TO CENTER OF BOX. PROVIDE SIX 1" CONDUITS (WITH PULL STRINGS) FROM PULL-BOX TO FLUSH MOUNT PULL BOX PROVIDED HIGH ON THE OPPOSITE SIDE OF THE WALL WITHIN THE AUXILIARY GYM EXPOSED CEILING AREA. (FOR OWNER FURNISHED AND INSTALLED AUDIO & VIDEO CABLING SYSTEMS FOR AUDIO & VIDEO WITHIN THE AUXILIARY GYM).

C36. PROVIDE FLUSH MOUNT TWO-GANG OUTLET BOX IN WALL AT 18" ABOVE FINISHED FLOOR TO CENTER OF BOX. PROVIDE TWO 1" CONDUITS FROM OUTLET BOX TO VIDEO PROJECTOR LOCATIONS (ONE CONDUIT TO EACH PROJECTOR LOCATION). PROVIDE BLANK DEVICE PLATE ON OUTLET BOX. (FOR OWNER FURNISHED AND INSTALLED HDMI CABLING SYSTEMS FROM LAPTOP TO VIDEO PROJECTORS).

C37. PROVIDE 1" CONDUIT (WITH PULL STRING) BETWEEN OUTLET BOXES. ROUTE CONDUIT VERTICALLY WITHIN WALL FROM OUTLET BOXES TO BELOW GRADE. PROVIDE LARGE SWEEP BENDS FOR TRANSITIONS FROM VERTICAL TO HORIZONTAL INSTALLATION. (FOR OWNER FURNISHED AND INSTALLED HDMI CABLING SYSTEMS).

C38. PROVIDE FLUSH MOUNT TWO-GANG OUTLET BOX HIGH IN WALL NEAR THE VIDEO PROJECTOR. COORDINATE THE INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE INSTALLATION LOCATION AND REQUIREMENTS OF THE VIDEO PROJECTOR. PROVIDE BLANK DEVICE PLATE ON OUTLET BOX. (FOR OWNER FURNISHED AND INSTALLED HDMI CABLING SYSTEMS).

C39. PROVIDE FLUSH MOUNT PULL-BOX HIGH IN WALL AT APPROXIMATELY 1" BELOW THE BOTTOM OF THE STRUCTURAL BEAMS. (FOR OWNER FURNISHED AND INSTALLED AUDIO & VIDEO CABLING SYSTEMS FOR AUDIO & VIDEO WITHIN THE AUXILIARY GYM).

C40. PROVIDE FLUSH MOUNT PULL-BOX IN WALL AT APPROXIMATELY 18" ABOVE FINISHED FLOOR TO CENTER OF BOX. PROVIDE SIX 1" CONDUITS (WITH PULL STRINGS) FROM PULL-BOX TO FLUSH MOUNT PULL BOX ON ADJACENT WALL. (FOR OWNER FURNISHED AND INSTALLED AUDIO & VIDEO CABLING SYSTEMS FOR AUDIO & VIDEO WITHIN THE AUXILIARY GYM).

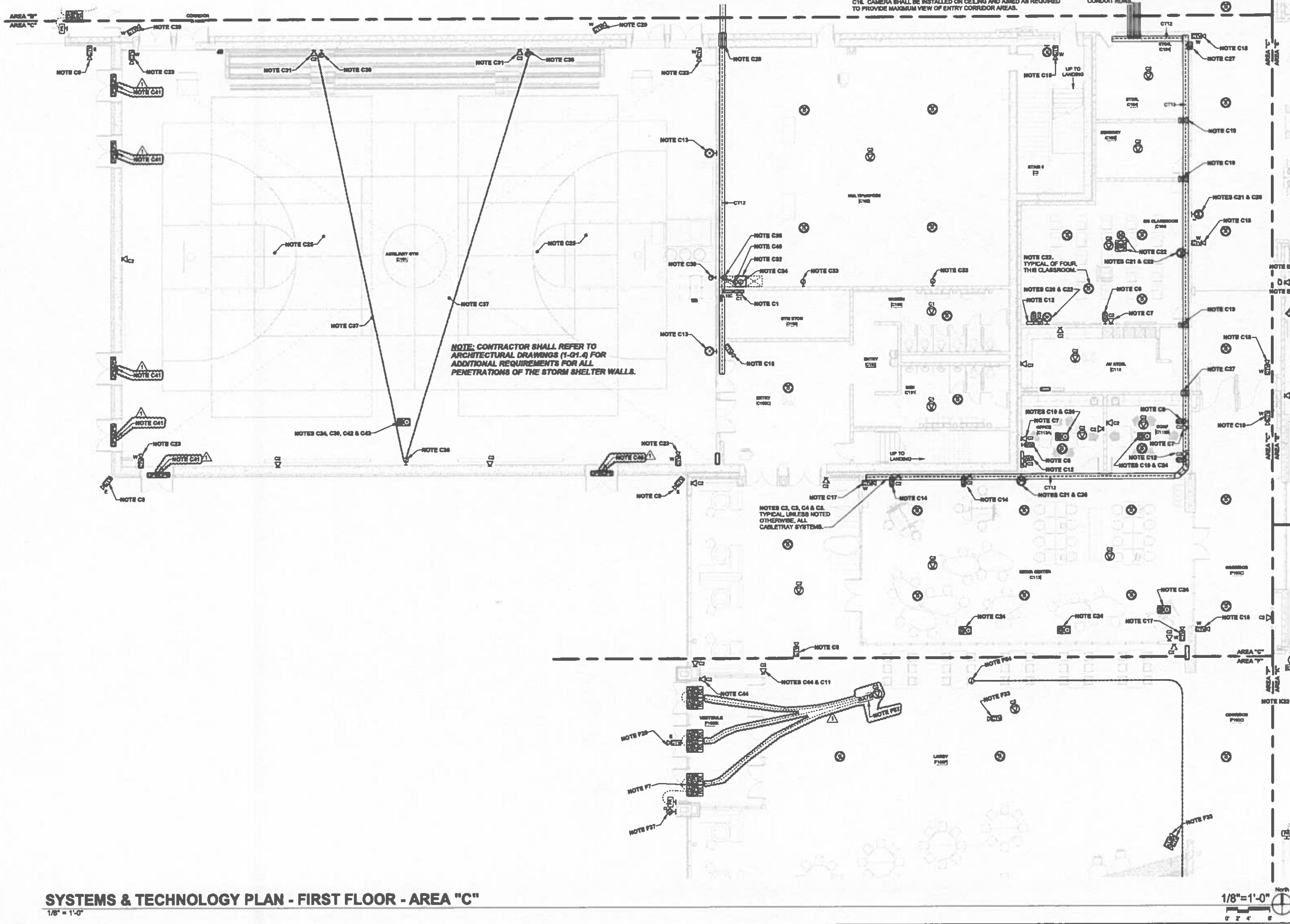
C41. PROVIDE REQUIRED CIRCUITS FROM DPS DEVICES TO BX76 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR B100B. (1)

C42. PROVIDE A QUANTITY OF FOUR DATA CABLES TO MULTI-FUNCTION FLOOR BOX.

C43. PROVIDE A QUANTITY OF TWO SPARE 1" CONDUITS (WITH PULL STRINGS) FROM FLOORBOX TO THE PULLBOX PROVIDED BEHIND THE OWNER FURNISHED AND INSTALLED AUDIO/VIDEO EQUIPMENT CABINET (WITHIN ROOM C102).

C44. DATA OUTLET LOCATION FOR USE WITH METAL DETECTION SECURITY SYSTEM EQUIPMENT.

C45. PROVIDE REQUIRED CIRCUITS FROM DPS DEVICES TO BX76 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF LOBBY F100F. (1)



SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "C"
1/8" = 1'-0"

HOPKINSVILLE - CHRISTIAN COUNTY ACADEMY

CHRISTIAN COUNTY PUBLIC SCHOOLS

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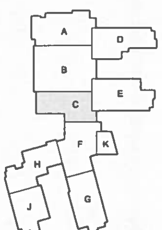


KEYPLAN

Revisions:

#	Description	Date
1	Access Control System Mods	4/19/2024

Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:
SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "C"

Architect's Project No: 2106-204
Date: May, 20

Drawing No:
E3.1C

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS):

GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #6AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (UL SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS) (CONT):

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #12AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS, MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "D"):

D1. APPROXIMATE LOCATION OF VERTICAL CONDUITS FROM DATA ROOM ON FLOOR ABOVE. (FOR ROUTING OF LOW VOLTAGE VOICE, DATA, VIDEO, ACCESS CONTROL TYPE CABLES).

D2. INSTALL CABLE TRAY SYSTEM AT APPROXIMATELY 3" ABOVE THE ACCESSIBLE CEILING GRID SYSTEM. PROVIDE ALL REQUIRED HORIZONTAL AND VERTICAL BENDS IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT. IN GENERAL, INSTALL THE CABLETRAY SYSTEMS WITH MINIMUM BENDS. VERTICAL CHANGES ARE NOT SHOWN ON THESE DRAWINGS AND SHALL BE COORDINATED IN THE FIELD.

D3. PROVIDE OPENINGS THROUGH ALL WALLS WHERE CABLETRAY SYSTEMS ARE REQUIRED TO BE ROUTED THROUGH (NON-RATED) WALLS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION REQUIREMENTS IN THE FIELD WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT.

D4. PROVIDE U.L. LISTED FIRE STOPPING SYSTEMS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING ARE REQUIRED TO PASS-THROUGH FIRE RATED AND / OR RATED WALL ASSEMBLIES.

D5. SEE CABLETRAY SCHEDULE, SHEET E1.1, FOR ADDITIONAL CABLETRAY AND CABLETRAY INSTALLATION REQUIREMENTS.

D6. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

D7. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE, SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "D") (CONT):

D8. AUDIO/VIDEO INPUT OUTLET FOR MOBILE INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

D9. DATA OUTLET FOR MOBILE INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

D10. DATA OUTLET FOR WALL PHONE.

D11. PROVIDE DATA OUTLET FOR COPIER / PRINTER MACHINE.

D12. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE INSTRUCTOR'S A/V ACCESS CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET ELECTRICAL REQUIREMENT DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "D") (CONT):

D13. PROVIDE ACCESS CONTROL CIRCUIT FROM ACCESS CONTROL SYSTEM TO ELEVATOR CONTROLLER AS REQUIRED FOR TIE-IN WITH THE ELEVATOR CONTROLLER. FINAL TERMINATION TO THE ELEVATOR CONTROLLER SHALL BE BY THE ELEVATOR PROVIDER. COORDINATE ALL REQUIRED INSTALLATION WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN.

D14. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 10'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CENTER OUTLET BOX ON WALL. INSTALL CAMERA OVER OUTLET BOX AND ABI CAMERA AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIRS AND AREA BELOW STAIRS.

D15. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIRS AND AREA BELOW STAIRS.

D16. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

D17. PROVIDE DATA OUTLET AS REQUIRED FOR CONNECTION TO EMERGENCY PHONE WITHIN THE ELEVATOR CAB. COORDINATE THE INSTALLATION LOCATION AND ALL OTHER REQUIREMENTS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-INS.

D18. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER THE OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE MEDIA ROOM.

D19. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE ADMIN ROOM.

D20. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 8'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE GATHERING SPACE. CAMERA VIEW SHALL NOT BE OBSTRUCTED BY SUSPENDED LIGHTING OR ANY OTHER INSTALLATION WITHIN THE AREA.

D21. PROVIDE DATA OUTLET FOR NETWORK CONNECTION TO BUILDING MANAGEMENT SYSTEM (T.C.) CONTROL / MONITORING PANELS. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE T.C. CONTRACTOR PRIOR TO START OF ROUGH-IN.

D22. SEE FIRE ALARM SYSTEM DRAWINGS (E10.xx SERIES DRAWINGS) PREPARED BY WBW FOR ADDITIONAL REQUIREMENTS REGARDING THE BUILDING FIRE ALARM SYSTEM.

D23. SEE SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "D", SHEET E3.2D, FOR ADDITIONAL SYSTEMS & TECHNOLOGY REQUIREMENTS WITHIN THE ELEVATOR CAB.

D24. PROVIDE DATA OUTLET HIGH ON WALL BEHIND MONITOR FOR VIDEO SURVEILLANCE.

D25. PROVIDE DATA OUTLET HIGH ON WALL BEHIND DIGITAL SIGNAGE VIDEO MONITOR.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "D") (CONT):

D26. COORDINATE ALL ELECTRICAL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS AND MOUNTING HEIGHTS WITHIN THE ELEVATOR SHAFT AND THE ELEVATOR PIT AREAS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN TO ENSURE INSTALLATION WILL MEET THE REQUIREMENTS OF THE ELEVATOR PROVIDER, ELEVATOR INSPECTOR AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

D27. INSTALL WITHIN TEACHER'S STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

D28. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR TOUCH PANEL WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

D29. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

D30. REFER TO TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

D31. OUTDOOR RATED CAMERA ASSEMBLY. CAMERA SHALL BE INSTALLED AT APPROXIMATELY 12'-0" ABOVE FINISHED FLOOR AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF BUILDING EXTERIOR AREAS. SEE EXTERIOR VIDEO SURVEILLANCE SYSTEM CAMERA INSTALLATION DETAIL, SHEET E1.1, FOR ADDITIONAL REQUIREMENTS.

D32. PROVIDE DATA CABLE FROM WALL CLOCK LOCATION TO CLOCK SYSTEM TO HEAD-END EQUIPMENT PROVIDED WITHIN DATA ROOM.

D33. SPACE RESERVED FOR ROUTING OF VERTICAL CONDUIT RACEWAYS (FROM UNDERGROUND TO VERTICAL UP WALL) FOR COMMUNICATIONS FIBER CABLES. SEE COMMUNICATION ROOM LOCATION PLAN - FIRST FLOOR, SHEET E3.1, FOR ADDITIONAL REQUIREMENTS.

D34. INSTRUCTOR'S ISLAND. PROVIDE DEVICE PLATE WITH ONE HDMI JACK. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE AVI DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE.

D35. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 3-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S ISLAND. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

D36. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE ROOM.

D37. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S AV ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE AVI DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS MEDIA CENTER. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE A/V ACCESS CABINET.

D38. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 3-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE BOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN AUDIO/VIDEO OUTLET A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

D39. PROXIMITY READER FOR ACCESS TO ELEVATOR CAB. PROVIDE ALL REQUIRED CIRCUITS AND INTERCONNECT WITH THE ELEVATOR CONTROLLER. ACCESS INTO THE ELEVATOR CAB SHALL REQUIRE A VALID READ FROM THE PROXIMITY READER. PROXIMITY READER SHALL BE PART OF THE ACCESS CONTROL SYSTEM.

D40. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE.

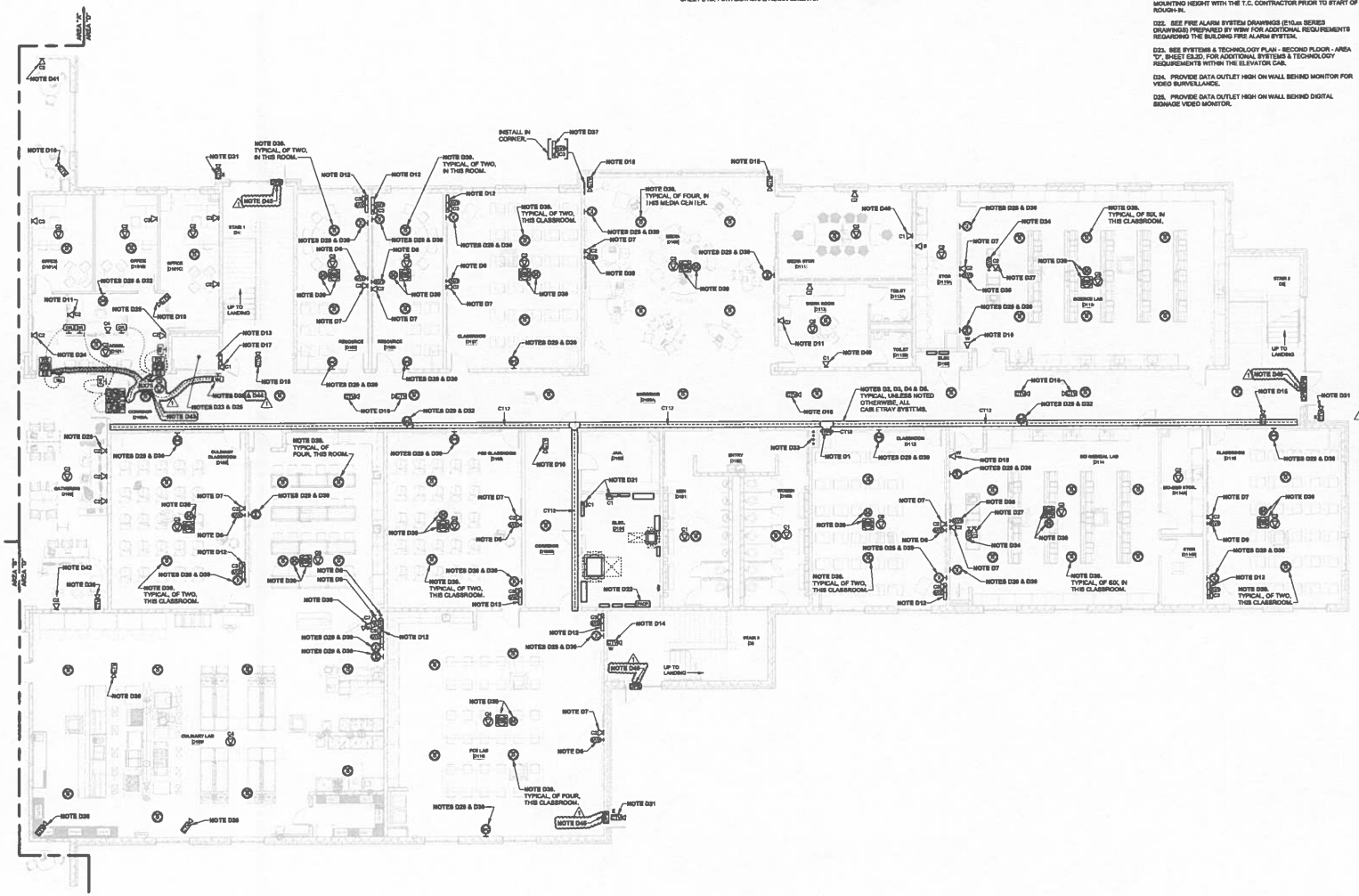
D41. DATA OUTLET LOCATION FOR USE WITH METAL DETECTION SECURITY SYSTEM EQUIPMENT.

D42. DATA OUTLET FOR VIDEO MONITOR. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE VIDEO MONITOR. IN GENERAL, INSTALL BEHIND THE VIDEO MONITOR IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE.

D43. GENERAL LOCATION FOR EX73 SERIES DOOR CONTROLLER / POWER SUPPLY (WITHIN ACCESSIBLE CEILING CAVITY SPACE) AND ASSOCIATED "CZ" DATA OUTLET.

D44. PROVIDE REQUIRED CIRCUITS FROM PROXIMITY READER AND ELEVATOR CONTROLLER TO EX70 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR D100A.

D45. PROVIDE REQUIRED CIRCUITS FROM DPS DEVICES TO EX70 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR D100A.



SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "D"

1/8" = 1'-0"

1/8"=1'-0"

0' 2' 4' 8'

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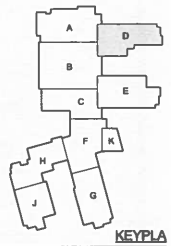


KEYPLA

Revisions:

#	Description	Date
1	Access Control System Issue	5/18/2024

Designed By:	Drawn By:	Checked By:
MJB	SCB	MJB

Sheet title:
SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - ARE "D"

Architect's Project No: 2106-204

Date: May, 20

Drawing No:
E3.1D

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS):

GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (I.E. SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS) [CONT]:

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS, MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "E"):

E1. APPROXIMATE LOCATION OF VERTICAL CONDUITS FROM DATA ROOM ON FLOOR ABOVE. (FOR ROUTING OF LOW VOLTAGE VOICE, DATA, VIDEO, ACCESS CONTROL TYPE CABLES).

E2. INSTALL CABLE TRAY SYSTEM AT APPROXIMATELY 3" ABOVE THE ACCESSIBLE CEILING GRID SYSTEM. PROVIDE ALL REQUIRED HORIZONTAL AND VERTICAL BENDS IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT. IN GENERAL, INSTALL THE CABLETRAY SYSTEMS WITH MINIMUM BENDS. VERTICAL CHANGES ARE NOT SHOWN ON THESE DRAWINGS AND SHALL BE COORDINATED IN THE FIELD.

E3. PROVIDE OPENINGS THROUGH ALL WALLS WHERE CABLETRAY SYSTEMS ARE REQUIRED TO BE ROUTED THROUGH (NON-RATED) WALLS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION REQUIREMENTS IN THE FIELD WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT.

E4. PROVIDE U.L. LISTED FIRE STOPPING SYSTEMS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING ARE REQUIRED TO PASS-THROUGH FIRE RATED AND / OR RATED WALL ASSEMBLIES.

E5. SEE CABLETRAY SCHEDULE, SHEET E1.1, FOR ADDITIONAL CABLETRAY AND CABLETRAY INSTALLATION REQUIREMENTS.

E6. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "E"):

E7. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

E8. PROVIDE DATA OUTLET HIGH ON WALL BEHIND DIGITAL SIGNAGE VIDEO MONITOR.

E9. PROVIDE DATA OUTLET HIGH ON WALL BEHIND MONITOR FOR VIDEO SURVEILLANCE.

E10. DATA OUTLET FOR WALL PHONE.

E11. DATA OUTLET FOR PRINTER/COPIER MACHINE.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "E"):

E12. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE AVI DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE INSTRUCTOR'S A/V ACCESS CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

E13. PROVIDE OUTLET BOX IN WALL WITH A 2-GANG RING AND WITH A QUANTITY OF TWO 1" CONDUIT RACEWAYS FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE. BUSH CONDUIT ENDS. (FOR ROUTING OF LOW VOLTAGE DATA CABLES TO DATA OUTLETS WITHIN THE FURNITURE SYSTEM. PROVIDE FLEXIBLE CONDUIT RACEWAY SYSTEMS FROM OUTLET FACEPLATE AS REQUIRED FOR INSTALLATION OF THE DATA CABLES TO THE FURNITURE SYSTEM RACEWAY.

E14. PROVIDE DATA OUTLETS WITHIN FURNITURE SYSTEM RACEWAY.

E15. SPACE RESERVED FOR ROUTING OF VERTICAL CONDUIT RACEWAYS (FROM UNDERGROUND TO VERTICAL UP WALL) FOR COMMUNICATIONS FIBER CABLES. SEE COMMUNICATION ROOM LOCATION PLAN - FIRST FLOOR, SHEET E3.1, FOR ADDITIONAL REQUIREMENTS.

E16. SEE FIRE ALARM SYSTEM DRAWINGS (E10.xx SERIES DRAWINGS) PREPARED BY WBW FOR ADDITIONAL REQUIREMENTS REGARDING THE BUILDING FIRE ALARM SYSTEM.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "E") [CONT]:

E17. OUTDOOR RATED CAMERA ASSEMBLY. CAMERA SHALL BE INSTALLED AT APPROXIMATELY 13'-0" ABOVE FINISHED FLOOR AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF BUILDING EXTERIOR AREAS. SEE EXTERIOR VIDEO SURVEILLANCE SYSTEM CAMERA INSTALLATION DETAIL, SHEET E1.1, FOR ADDITIONAL REQUIREMENTS.

E18. PROVIDE ACCESS CONTROL CIRCUIT FROM ACCESS CONTROL SYSTEM TO ELEVATOR CONTROLLER AS REQUIRED FOR TIE-IN WITH THE ELEVATOR CONTROLLER. FINAL TERMINATION TO THE ELEVATOR CONTROLLER SHALL BE BY THE ELEVATOR PROVIDER. COORDINATE ALL REQUIRED INSTALLATION WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN.

E19. REFER TO TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

E20. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

E21. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIRS AND AREA BELOW STAIRS.

E22. PROVIDE DATA OUTLET FOR NETWORK CONNECTION TO BUILDING MANAGEMENT SYSTEM (T.C.) CONTROL / MONITORING PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE T.C. CONTRACTOR PRIOR TO START OF ROUGH-IN.

E23. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

E24. PROVIDE DATA OUTLET AS REQUIRED FOR CONNECTION TO EMERGENCY PHONE WITHIN THE ELEVATOR CAB. COORDINATE THE INSTALLATION LOCATION AND ALL OTHER REQUIREMENTS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-INS.

E25. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE MEDIA ROOM.

E26. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE ADMIN ROOM.

E27. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 9'-2" ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE GATHERING SPACE. CAMERA VIEW SHALL NOT BE OBSTRUCTED BY SUSPENDED LIGHTING OR ANY OTHER INSTALLATION WITHIN THE AREA.

E28. SEE SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "E", SHEET E3.2E, FOR ADDITIONAL SYSTEMS & TECHNOLOGY REQUIREMENTS WITHIN THE ELEVATOR CAB.

E29. INSTALL WITHIN TEACHER'S STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

E30. INSTRUCTOR'S ISLAND. PROVIDE DEVICE PLATE WITH ONE HDMI JACK. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE AVI DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE.

E31. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S ISLAND. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

E32. COORDINATE ALL ELECTRICAL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS AND MOUNTING HEIGHTS WITHIN THE ELEVATOR SHAFT AND THE ELEVATOR PIT AREAS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN TO ENSURE INSTALLATION WILL MEET THE REQUIREMENTS OF THE ELEVATOR PROVIDER, ELEVATOR INSPECTOR AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

E33. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR TOUCH PANEL WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

E34. PROVIDE DATA CABLE FROM WALL CLOCK LOCATION TO CLOCK SYSTEM TO HEAD-END EQUIPMENT PROVIDED WITHIN DATA ROOM.

E35. PROXIMITY READER FOR ACCESS TO ELEVATOR CAB. PROVIDE ALL REQUIRED CIRCUITS AND INTERCONNECT WITH THE ELEVATOR CONTROLLER. ACCESS INTO THE ELEVATOR CAB SHALL REQUIRE A VALID READ FROM THE PROXIMITY READER. PROXIMITY READER SHALL BE PART OF THE ACCESS CONTROL SYSTEM.

E36. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN AUDIO/VIDEO OUTLET A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

E37. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE AVI DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS MEDIA CENTER. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE A/V ACCESS CABINET.

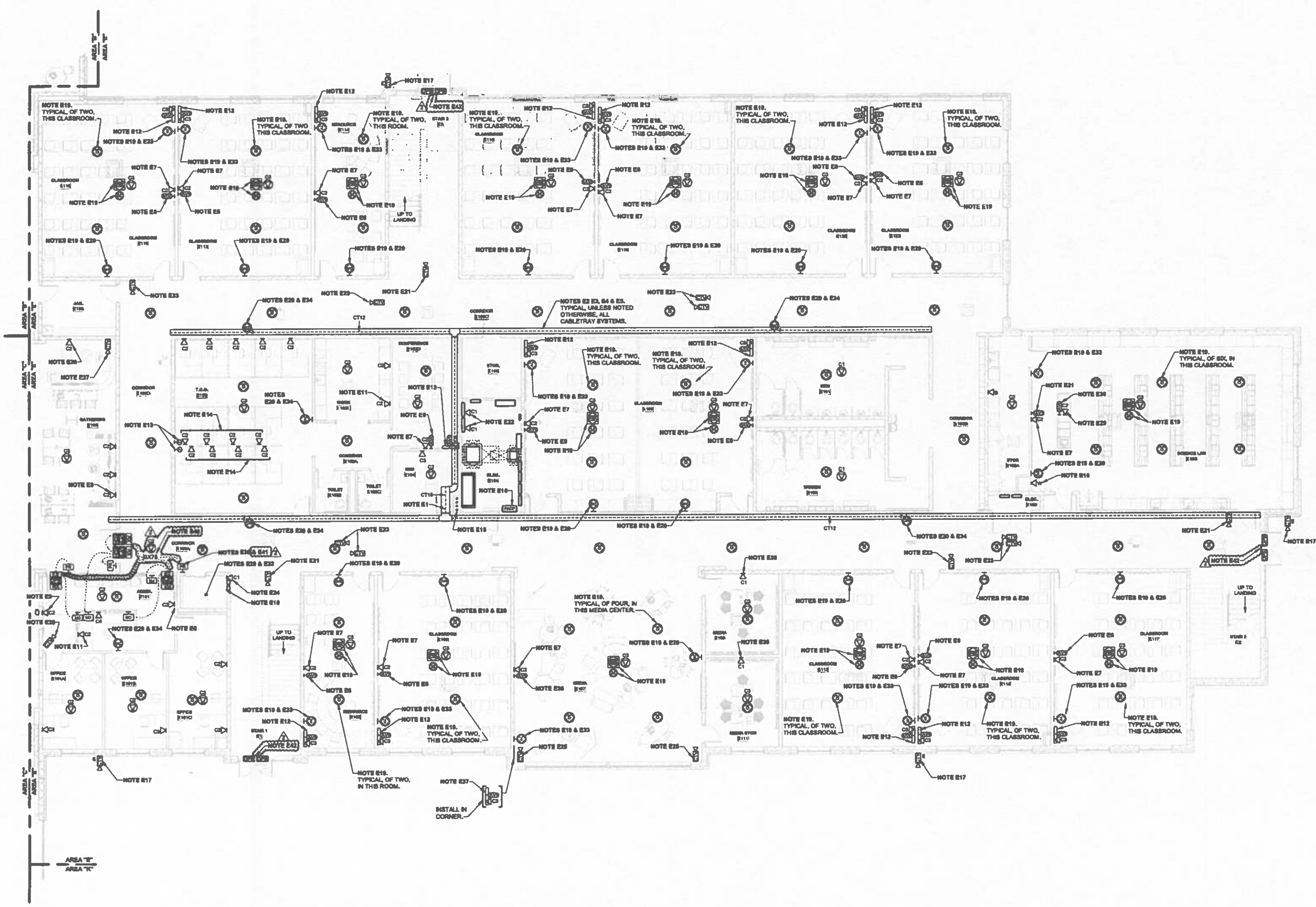
E38. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE.

E39. DATA OUTLET FOR VIDEO MONITOR. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE VIDEO MONITOR. IN GENERAL, INSTALL BEHIND THE VIDEO MONITOR IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE.

E40. GENERAL LOCATION FOR BX75 SERIES DOOR CONTROLLER / POWER SUPPLY (WITHIN ACCESSIBLE CEILING CAVITY SPACE) AND ASSOCIATED "C2" DATA OUTLET.

E41. PROVIDE REQUIRED CIRCUITS FROM PROXIMITY READER AND ELEVATOR CONTROLLER TO BX75 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR E100A.

E42. PROVIDE REQUIRED CIRCUITS FROM DPS DEVICES TO BX75 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR E100A.



SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "E"
1/8" = 1'-0"

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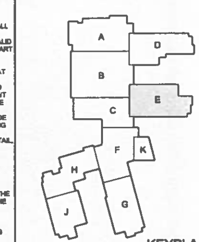


KEYPLAN

Revisions:

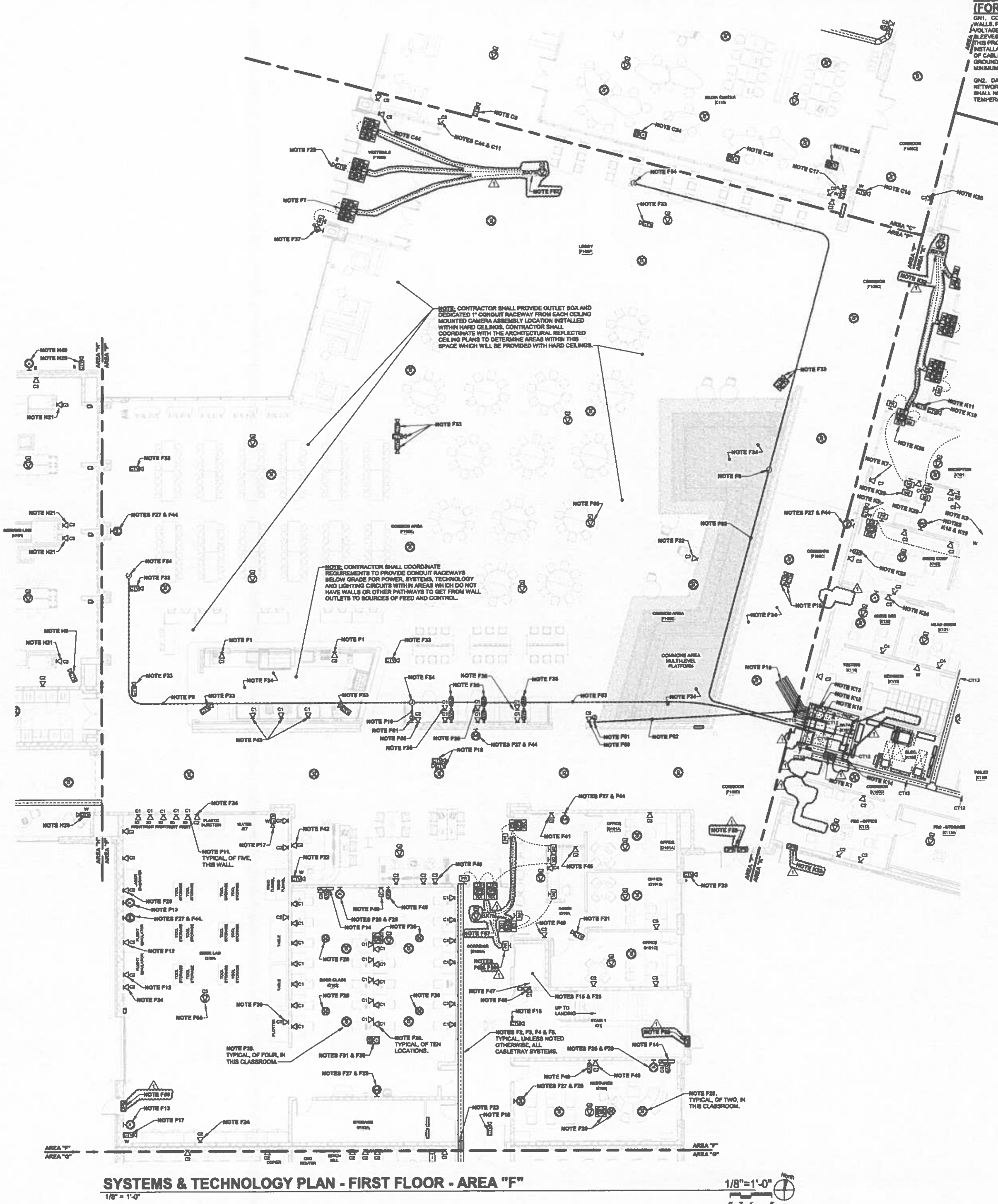
#	Description	Date
1	PR-001	10/13/2023
2	Access Control System Mods	4/18/2024

Designed By:	Drawn By:	Checked By:
MJB	EDB	MJB

Sheet title:
SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "E"

Architect's Project No: 2106-204
Date: May, 20

Drawing No:
E3.1E



SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "F"
1/8" = 1'-0"

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS):

GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (I.E. SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS) [CONT]:

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS, MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "F"):

F1. DATA OUTLET FOR NETWORK CONNECTION TO POINT OF SALE EQUIPMENT. ROUTE CONDUIT BELOW GRADE FROM AREA "K" DATA ROOM TO OUTLET BOX INSTALLED WITHIN THE CUSTOM MILLWORK. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITHIN THE MILL WORK WITH ARCHITECT AND FOOD SERVICE EQUIPMENT PROVIDER PRIOR TO START OF ROUGH-IN.

F2. INSTALL CABLE TRAY SYSTEM AT APPROXIMATELY 3" ABOVE THE ACCESSIBLE CEILING GRID SYSTEM. PROVIDE ALL REQUIRED HORIZONTAL AND VERTICAL BENDS IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT. IN GENERAL, INSTALL THE CABLETRAY SYSTEMS WITH MINIMUM BENDS. VERTICAL CHANGES ARE NOT SHOWN ON THESE DRAWINGS AND SHALL BE COORDINATED IN THE FIELD.

F3. PROVIDE OPENINGS THROUGH ALL WALLS WHERE CABLETRAY SYSTEMS ARE REQUIRED TO BE ROUTED THROUGH (NON-RATED) WALLS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION REQUIREMENTS IN THE FIELD WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT.

F4. PROVIDE U.L. LISTED FIRE STOPPING SYSTEMS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING ARE REQUIRED TO PASS-THROUGH FIRE RATED AND / OR RATED WALL ASSEMBLIES.

F5. SEE CABLETRAY SCHEDULE, SHEET E1.1, FOR ADDITIONAL CABLETRAY AND CABLETRAY INSTALLATION REQUIREMENTS.

F6. PROXIMITY READER FOR ACCESS TO ELEVATOR CAB. PROVIDE ALL REQUIRED CIRCUITS AND INTERCONNECT WITH THE ELEVATOR CONTROLLER. ACCESS INTO THE ELEVATOR CAB SHALL REQUIRE A VALID READ FROM THE PROXIMITY READER. PROXIMITY READER SHALL BE PART OF THE ACCESS CONTROL SYSTEM.

F7. PROVIDE CIRCUIT TO AREA "K" ADMIN RECEPTIONIST DESK AREA FOR MOMENTARY DOOR RELEASE FUNCTION "UNLOCKING" OPERATION OF THIS ACCESS CONTROLLED DOOR OPENING.

F8. COORDINATE WITH THE GENERAL CONTRACTOR THE REQUIREMENTS FOR AN ACCESSIBLE CEILING SYSTEM PANEL TO ALLOW ACCESS TO THE PULL BOX AT THIS LOCATION. THE ACCESS PANEL SHALL BE FURNISHED AND INSTALLED BY THE GENERAL CONTRACTOR.

F9. PROVIDE ONE 1" CONDUIT (WITH PULL STRING) FROM PULL BOX IN ACCESSIBLE CEILING CAVITY SPACE TO PULL BOX IN ACCESSIBLE CEILING CAVITY SPACE. PROVIDE LARGE SWEEP RADIUS TURNS WHERE THE CONDUIT CHANGES DIRECTIONS. INSTALL SUCH THAT THERE IS NO MORE THAN 180 DEGREES OF BENDS IN THE CONDUIT RACEWAY. PROVIDE ADDITIONAL PULL BOXES AS REQUIRED TO LIMIT NUMBER OF BENDS TO 180 DEGREES. (FOR OWNER FURNISHED AND INSTALLED AUDIO/VIDEO SYSTEM CABLING).

F10. PROVIDE ONE 1" CONDUIT (WITH PULL STRING) FROM PULL BOX IN ACCESSIBLE CEILING CAVITY SPACE TO WALL OUTLET BOX. PROVIDE LARGE SWEEP RADIUS TURNS WHERE THE CONDUIT CHANGES DIRECTIONS. INSTALL SUCH THAT THERE IS NO MORE THAN 180 DEGREES OF BENDS IN THE CONDUIT RACEWAY. (FOR OWNER FURNISHED AND INSTALLED AUDIO/VIDEO SYSTEM CABLING).

F11. DATA OUTLET FOR 3D PRINTER.

F12. DATA OUTLET FOR NETWORK CONNECTION TO FLIGHT SIMULATOR EQUIPMENT.

F13. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR WALL MOUNT HORNS WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

F14. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE INSTRUCTOR'S A/V ACCESS CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

F15. SEE SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "F", SHEET E3.2F, FOR ADDITIONAL SYSTEMS & TECHNOLOGY REQUIREMENTS WITHIN THE ELEVATOR CAB.

F16. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIRS AND AREA BELOW STAIRS AREAS.

F17. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CENTER OUTLET BOX ON WALL. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF THE ENGINEERING LAB AREAS.

F18. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

F19. PROVIDE FOUR 4" CONDUIT RACEWAYS FROM THE ACCESSIBLE SPACE BELOW CEILING IN DATA ROOM TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE CORRIDOR AREA. BUSH CONDUIT ENDS. BOND EACH CONDUITS TO THE GROUND BUS BAR WITHIN THE DATA ROOM USING #10AWG COPPER CONDUCTOR. PROVIDE PULL STRING IN ALL CONDUITS FOR FUTURE USE WITH INSTALLATION OF NEW DATA CABLE. (CONDUITS SHALL BE DEDICATED FOR ROUTING OF DATA SYSTEM CABLES ACROSS THE HARD CEILING AREA). LOW VOLTAGE CABLES FOR OTHER SYSTEMS (I.E. FIRE ALARM, BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, ETC. SHALL NOT BE ROUTED WITHIN THE CONDUIT RACEWAYS.

F20. DATA OUTLET FOR NETWORK CONNECTION TO LASER ENGRAVER.

F21. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE ADMIN ROOM.

F22. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 9'-2 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CENTER OUTLET BOX ON WALL. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE GATHERING SPACE. CAMERA VIEW SHALL NOT BE OBSTRUCTED BY SUSPENDED LIGHTING OR ANY OTHER INSTALLATION WITHIN THE AREA.

F23. PROVIDE SPECIFIED TECHNOLOGIES INC. EZ PATH SERIES 44+ FIRE RATED PATHWAY ASSEMBLIES (QUANTITY OF THREE ASSEMBLIES GANGED SIDE-BY-SIDE) THRU FIRE WALL FOR ROUTING OF LOW VOLTAGE DATA CABLES FROM CABLETRAY SYSTEM TO CABLETRAY SYSTEM. INSTALL PER MANUFACTURER'S REQUIREMENTS TO ENSURE RATING OF WALL AND ALLOW INSTALLATION OF THE REQUIRED DATA CABLES. BOND THE CABLETRAY SYSTEMS TO EACH OTHER USING #10AWG COPPER CONDUCTOR.

F24. PROVIDE DATA OUTLET HIGH ON THE WALL (APPROXIMATELY 16FT ABOVE FINISHED FLOOR) FOR THE OWNER'S FUTURE USE. VERIFY THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE OWNER'S TECHNOLOGY COORDINATOR PRIOR TO START OF ROUGH-IN.

F25. COORDINATE ALL ELECTRICAL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS AND MOUNTING HEIGHTS WITHIN THE ELEVATOR SHAFT AND THE ELEVATOR PIT AREAS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN TO ENSURE INSTALLATION WILL MEET THE REQUIREMENTS OF THE ELEVATOR PROVIDER, ELEVATOR INSPECTOR AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

F26. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR TOUCH PANEL WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

F27. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

F28. REFER TO TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "F") [CONT]:

F29. OUTDOOR RATED CAMERA ASSEMBLY. CAMERA SHALL BE INSTALLED AT APPROXIMATELY 13'-0" ABOVE FINISHED FLOOR AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF BUILDING EXTERIOR AREAS. SEE EXTERIOR VIDEO SURVEILLANCE SYSTEM CAMERA INSTALLATION DETAIL, SHEET E1.1, FOR ADDITIONAL REQUIREMENTS.

F30. DATA OUTLET FOR NETWORK CONNECTION TO PLOTTER.

F31. SEE POWER PLAN - FIRST FLOOR - AREA "F", SHEET E2.1F, FOR ADDITIONAL REQUIREMENTS.

F32. PROVIDE 1" CONDUIT FROM THIS OUTLET LOCATION TO THE AREA "K" 1ST FLOOR DATA ROOM K101. INSTALL OUTLET WITHIN THE FACE OF THE MULTI-LEVEL PLATFORM.

F33. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREAS WITHIN THE INSTALLED SPACE.

F34. CONTRACTOR SHALL COORDINATE REQUIREMENTS TO PROVIDE CONDUIT RACEWAYS BELOW GRADE FOR POWER, SYSTEMS, TECHNOLOGY AND LIGHTING CIRCUITS WITHIN AREAS WHICH DO NOT HAVE WALLS OR OTHER PATHWAYS TO GET FROM WALL OUTLETS TO SOURCES OF FEED AND CONTROL.

F35. AUDIO/VIDEO INPUT DEVICE FOR VIDEO MONITOR.

F36. DATA OUTLET FOR VIDEO MONITOR.

F37. POE AUDIO/VIDEO INTERCOM DOOR STATION. (FURNISHED AND INSTALLED BY THE DOOR HARDWARE PROVIDER. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT RACEWAY AND DATA CABLE FROM DOOR STATION TO THE AREA "K" FIRST FLOOR DATA ROOM. (NOTE: THE ASSOCIATED MASTER STATION WILL BE A PERSONAL COMPUTER LOCATED WITHIN THE ADMINISTRATION RECEPTION ROOM K101). COORDINATE ROUGH-IN REQUIREMENTS WITH THE DOOR HARDWARE PROVIDER PRIOR TO START OF ROUGH-IN.

F38. PROVIDE DATA CABLES TO DATA OUTLETS WITHIN FURNITURE SYSTEM RACEWAY FROM MULTIFUNCTION FLOOR BOX ASSEMBLY.

F39. PROVIDE FLEXIBLE METAL CONDUIT RACEWAY SYSTEM FROM FLOOR BOX ASSEMBLY TO FURNITURE SYSTEM RACEWAYS.

F40. PROVIDE DATA OUTLET HIGH ON WALL BEHIND DIGITAL SIGNAGE VIDEO MONITOR.

F41. PROVIDE DATA OUTLET HIGH ON WALL BEHIND MONITOR FOR VIDEO SURVEILLANCE.

F42. DATA OUTLET FOR VIDEO MONITOR. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE VIDEO MONITOR. IN GENERAL, INSTALL BEHIND THE VIDEO MONITOR IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE.

F43. PROVIDE DATA OUTLET HIGH ON WALL FOR NETWORK CONNECTION TO DIGITAL SIGNAGE MONITOR. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE REQUIREMENTS FOR THE DIGITAL SIGNAGE MONITOR PRIOR TO START OF ROUGH-IN.

F44. PROVIDE DATA CABLE FROM WALL CLOCK LOCATION TO CLOCK SYSTEM TO HEAD-END EQUIPMENT PROVIDED WITHIN DATA ROOM.

F45. PROVIDE DATA OUTLET FOR PRINTER/COPIER MACHINE.

F46. PROVIDE DATA OUTLET AS REQUIRED FOR CONNECTION TO EMERGENCY PHONE WITHIN THE ELEVATOR CAB. COORDINATE THE INSTALLATION LOCATION AND ALL OTHER REQUIREMENTS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-INS.

F47. PROVIDE ACCESS CONTROL CIRCUIT FROM ACCESS CONTROL SYSTEM TO ELEVATOR CONTROLLER AS REQUIRED FOR TIE-IN WITH THE ELEVATOR CONTROLLER. FINAL TERMINATION TO THE ELEVATOR CONTROLLER SHALL BE BY THE ELEVATOR PROVIDER. COORDINATE ALL REQUIRED INSTALLATION WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN.

F48. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

F49. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

F50. DATA OUTLET FOR LAPTOP COMPUTER ACCESS TO DATA NETWORK.

F51. PROVIDE 4"SQUARE OUTLET BOX WITH 2-GANG PLASTER RING NEAR DATA OUTLET. PROVIDE BLANK DEVICE PLATE ON OUTLET BOX. PROVIDE 1" CONDUIT FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE. PROVIDE PULL STRING IN CONDUIT. (FOR OWNER FURNISHED AND INSTALLED AUDIO/VIDEO SYSTEM CABLING).

F52. PROVIDE 1" CONDUIT (WITH PULL STRING) FROM OUTLET BOX BELOW GRADE TO PERIMETER WALL OF AREA "K" DATA ROOM. PROVIDE LARGE SWEEP RADIUS TURNS WHERE THE CONDUITS TRANSITION FROM BELOW GRADE TO VERTICALLY WITHIN THE WALLS. INSTALL SUCH THAT THERE IS NO MORE THAN 180 DEGREES OF BENDS IN CONDUIT RACEWAYS. (FOR OWNER FURNISHED AND INSTALLED AUDIO/VIDEO SYSTEM CABLING).

F53. PROVIDE TWO 1" CONDUITS (WITH PULL STRINGS) FROM PULL BOX IN ACCESSIBLE CEILING CAVITY SPACE TO CEILING OF AREA "K" DATA ROOM. PROVIDE LARGE SWEEP RADIUS TURNS WHERE THE CONDUITS CHANGE DIRECTIONS. INSTALL SUCH THAT THERE IS NO MORE THAN 180 DEGREES OF BENDS IN THE CONDUIT RACEWAYS. PROVIDE ADDITIONAL PULL BOXES AS REQUIRED TO LIMIT NUMBER OF BENDS TO 180 DEGREES. (FOR OWNER FURNISHED AND INSTALLED AUDIO/VIDEO SYSTEM CABLING).

F54. PROVIDE PULL BOX (SIZE AS REQUIRED FOR TERMINATION OF SIZE AND QUANTITY OF CONDUITS) WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. (FOR OWNER FURNISHED AND INSTALLED AUDIO/VIDEO SYSTEM CABLING).

F55. DATA OUTLET FOR PROJECTOR ON MOTORIZED LIFT SYSTEM.

F56. PROVIDE DATA OUTLET ON THE BOTTOM OF THE BUILDING STRUCTURAL SUPPORT. (FOR THE OWNER'S FUTURE USE). VERIFY THE REQUIRED INSTALLATION LOCATION WITH THE OWNER'S TECHNOLOGY COORDINATOR PRIOR TO START OF ROUGH-IN.

F57. GENERAL LOCATION FOR SX75 SERIES DOOR CONTROLLER / POWER SUPPLY (WITHIN ACCESSIBLE CEILING CAVITY SPACE) AND ASSOCIATED "C2" DATA OUTLET.

F58. PROVIDE REQUIRED CIRCUITS FROM PROXIMITY READER AND ELEVATOR CONTROLLER TO SX75 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR G100A.

F59. PROVIDE REQUIRED CIRCUITS FROM DPS DEVICES TO SX75 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR G100A.

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KEYPLAN

Revisions:

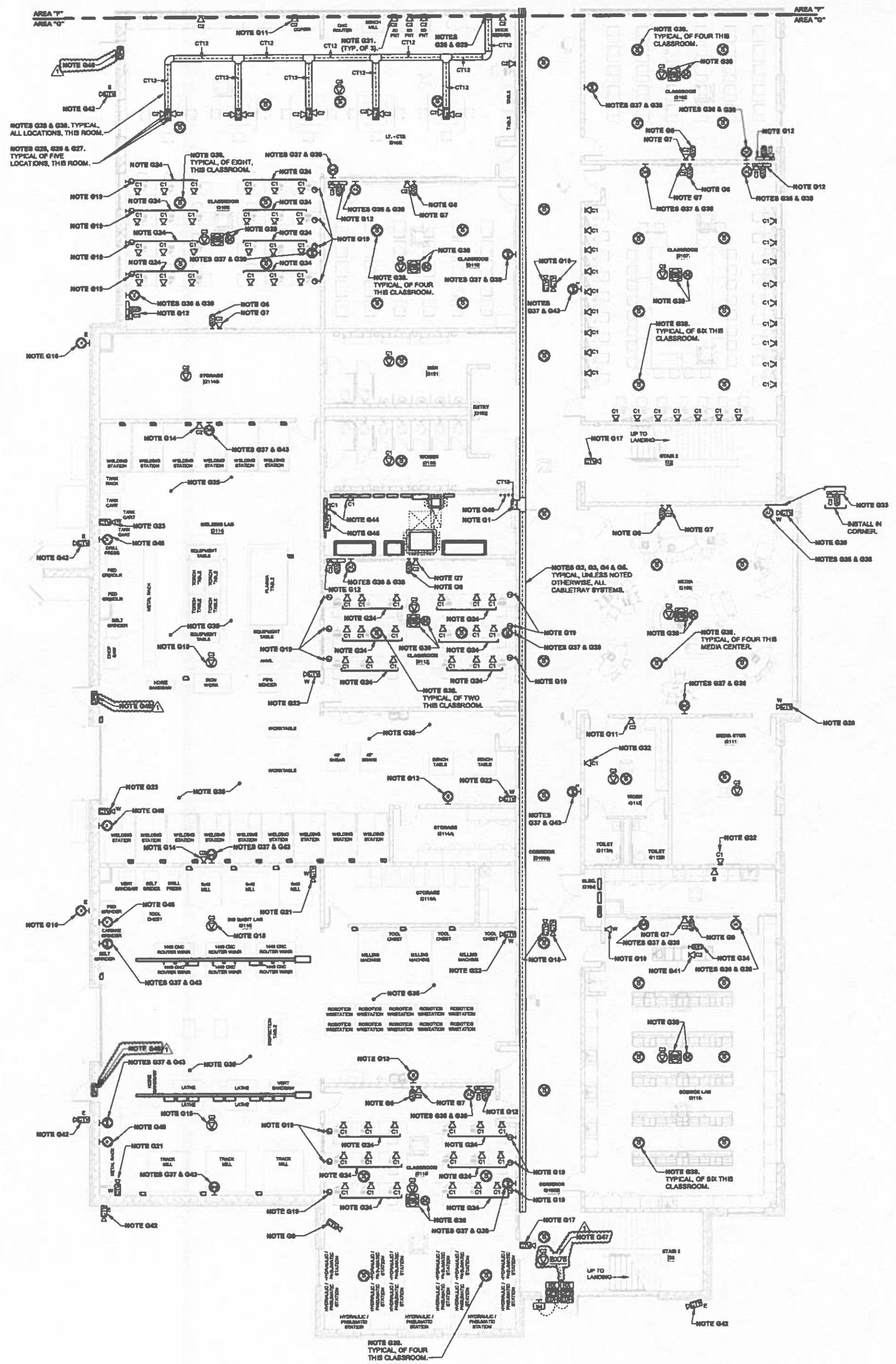
#	Description	Date
1	Access Control System Mods	4/19/2024

Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:
SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "F"

Architect's Project No.: 2106-204
Date: May, 20

Drawing No.:
E3.1F



SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "G" 1/8"=1'-0"

1/8" = 1'-0"

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS):

GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (I.E. SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS) [CONT]:

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS, MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "G"):

G1. APPROXIMATE LOCATION OF VERTICAL CONDUITS FROM DATA ROOM ON FLOOR ABOVE. (FOR ROUTING OF LOW VOLTAGE VOICE, DATA, VIDEO, ACCESS CONTROL TYPE CABLES).

G2. INSTALL CABLE TRAY SYSTEM AT APPROXIMATELY 3" ABOVE THE ACCESSIBLE CEILING GRID SYSTEM. PROVIDE ALL REQUIRED HORIZONTAL AND VERTICAL BENDS IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT. IN GENERAL, INSTALL THE CABLETRAY SYSTEMS WITH MINIMUM BENDS. VERTICAL CHANGES ARE NOT SHOWN ON THESE DRAWINGS AND SHALL BE COORDINATED IN THE FIELD.

G3. PROVIDE OPENINGS THROUGH ALL WALLS WHERE CABLETRAY SYSTEMS ARE REQUIRED TO BE ROUTED THROUGH (NON-RATED) WALLS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION REQUIREMENTS IN THE FIELD WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT.

G4. PROVIDE U.L. LISTED FIRE STOPPING SYSTEMS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING ARE REQUIRED TO PASS-THROUGH FIRE RATED AND / OR RATED WALL ASSEMBLIES.

G5. SEE CABLETRAY SCHEDULE, SHEET E1.1, FOR ADDITIONAL CABLETRAY AND CABLETRAY INSTALLATION REQUIREMENTS.

G6. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

G7. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

G8. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREAS WITHIN THE ROOM.

G9. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S ISLAND. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

G10. DATA OUTLET FOR WALL PHONE.

G11. DATA OUTLET FOR PRINTER/COPIER MACHINE.

G12. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE INSTRUCTOR'S A/V ACCESS CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

G13. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR WALL MOUNT SPEAKERS WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

G14. PROVIDE DATA OUTLET HIGH ON THE WALL (APPROXIMATELY 16FT ABOVE FINISHED FLOOR) FOR THE OWNER'S FUTURE USE. VERIFY THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE OWNER'S TECHNOLOGY COORDINATOR PRIOR TO START OF ROUGH-IN.

G15. PROVIDE DATA OUTLET ON THE BOTTOM OF THE BUILDING STRUCTURAL SUPPORT. (FOR THE OWNER'S FUTURE USE). VERIFY THE REQUIRED INSTALLATION LOCATION WITH THE OWNER'S TECHNOLOGY COORDINATOR PRIOR TO START OF ROUGH-IN.

G16. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR EXTERIOR HORN WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

G17. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIRS AND AREA BELOW STAIRS AREAS.

G18. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

G19. PROVIDE OUTLET BOX IN WALL WITH A 2-GANG RING AND WITH A QUANTITY OF TWO 1" CONDUIT RACEWAYS FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE. BUSH CONDUIT ENDS. (FOR ROUTING OF LOW VOLTAGE DATA CABLES TO DATA OUTLETS WITHIN THE FURNITURE SYSTEM. PROVIDE FLEXIBLE CONDUIT RACEWAY SYSTEMS FROM OUTLET FACEPLATE AS REQUIRED FOR INSTALLATION OF THE DATA CABLES TO THE FURNITURE SYSTEM RACEWAY.

G20. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0" ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. INSTALL CAMERA OVER OUTLET BOX AND AIM CAMERA AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE MEDIA ROOM.

G21. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0" ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CENTER OUTLET BOX ON WALL. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF THE INDUSTRIAL MAINTENANCE LARGE ROOM AREAS.

G22. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 10'-6" ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. INSTALL CAMERA OVER OUTLET BOX AND AIM CAMERA AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE CLASSROOM.

G23. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0" ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. INSTALL CAMERA OVER OUTLET BOX AND AIM CAMERA AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE WELDING ROOM.

G24. PROVIDE DATA OUTLETS WITHIN FURNITURE SYSTEM RACEWAY SYSTEM. PROVIDE DATA FEED TO RACEWAY SYSTEM FROM PULL BOX IN ADJACENT WALL.

G25. SEE ARCHITECTURAL PLANS AND DETAILS FOR ADDITIONAL REQUIREMENTS REGARDING INSTALLATION LOCATIONS, MOUNTING HEIGHTS, AND STEEL STRUT SUPPORT INSTALLATION REQUIREMENTS FOR POWER, DATA AND CABLETRAY INSTALLATION FOR WORK BENCH AREA.

G26. PROVIDE CABLETRAY DROP-OUT ACCESSORIES AT LOCATIONS WHERE THE VERTICAL CABLETRAY SYSTEMS ATTACH TO THE HORIZONTAL CABLETRAY SYSTEM.

G27. PROVIDE TYPE "C12" VERTICAL CABLETRAY SYSTEMS ON FRONT AND BACK SIDES OF THE VERTICAL STRUCTURAL SUPPORT SYSTEM. BOND CABLETRAY SYSTEMS TO THE HORIZONTAL CABLETRAY SYSTEM USING #10AWG COPPER CABLE.

G28. PROVIDE #10AWG COPPER CONDUCTOR WITHIN CABLETRAY SYSTEM AND CONNECT TO THE EQUIPMENT GROUND BUS WITHIN THE POWER PANEL WHICH FEEDS THE RECEPTACLES WITHIN THIS ROOM. BOND EACH SECTION OF CABLETRAY TO THE #10AWG COPPER GROUND CONDUCTOR.

G29. PROVIDE TYPE "C12" VERTICAL CABLETRAY SYSTEMS ON WALL FROM TOP OF DESKTOP TO THE BOTTOM OF THE HORIZONTAL CABLETRAY. BOND VERTICAL CABLETRAY SYSTEM TO THE HORIZONTAL CABLETRAY SYSTEM USING #10AWG COPPER CABLE.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "G" - [CONTINUED]):

G30. COORDINATE THE REQUIRED INSTALLATION HEIGHT WITH ARCHITECT. IN GENERAL, THE CABLETRAY SYSTEM SHALL BE INSTALLED BELOW THE ACCESSIBLE CEILING SYSTEM AT APPROXIMATELY 12" BELOW BOTTOM OF CEILING SYSTEM TO TOP OF CABLETRAY SYSTEM. THE CABLETRAY SYSTEM SHALL BE USED FOR EDUCATIONAL TRAINING PURPOSES AND SHALL BE ACCESSIBLE AND PROPERLY SUPPORTED TO THE BUILDING STRUCTURAL SYSTEM.

G31. DATA OUTLET FOR 3D PRINTER.

G32. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE.

G33. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS MEDIA CENTER. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE A/V ACCESS CABINET.

G34. INSTRUCTOR'S ISLAND. PROVIDE DEVICE PLATE WITH ONE HDMI JACK. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE.

G35. ALL LOW VOLTAGE DATA CABLES INSTALLED WITHIN (OR ROUTED THROUGH) THIS OPEN CEILING SPACE AREA SHALL BE INSTALLED WITHIN CONDUIT RACEWAY SYSTEMS FROM THE DATA OUTLET LOCATION (OR VIDEO SURVEILLANCE SYSTEM CAMERA LOCATION) TO THE NEAREST ACCESSIBLE CEILING CAVITY SPACE ON THE 2ND FLOOR. PROVIDE PULL BOXES WHERE REQUIRED TO LIMIT THE NUMBER OF BENDS IN THE CONDUIT RACEWAY SYSTEMS TO A MAXIMUM OF 180 DEGREES. PROVIDE RACEWAY SYSTEMS WITH CAPACITY AS REQUIRED TO ADD A MINIMUM QUANTITY OF 50 PERCENT MORE FUTURE CABLES WITHIN THE INDIVIDUAL CONDUIT RUNS.

G36. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR TOUCH PANEL WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

G37. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

G38. REFER TO TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

G39. DATA OUTLET FOR ELECTRICAL TRAINING TABLE.

G40. SPACE RESERVED FOR ROUTING OF VERTICAL CONDUIT RACEWAYS (FROM UNDERGROUND TO VERTICAL UP WALL) FOR COMMUNICATIONS FIBER CABLES. SEE COMMUNICATION ROOM LOCATION PLAN - FIRST FLOOR, SHEET E3.1, FOR ADDITIONAL REQUIREMENTS.

G41. INSTALL WITHIN TEACHER'S STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

G42. OUTDOOR RATED CAMERA ASSEMBLY. CAMERA SHALL BE INSTALLED AT APPROXIMATELY 13'-0" ABOVE FINISHED FLOOR AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF BUILDING EXTERIOR AREAS. SEE EXTERIOR VIDEO SURVEILLANCE SYSTEM CAMERA INSTALLATION DETAIL, SHEET E1.1, FOR ADDITIONAL REQUIREMENTS. PROVIDE "C1" TYPE DATA OUTLET IN INTERIOR SIDE WALL NEAR CONDUIT PENETRATION. PROVIDE DATA CABLE WITHIN A 1" CONDUIT RACEWAY SYSTEM FROM THE DATA OUTLET LOCATION TO NEAREST ACCESSIBLE (CONCEALED) CEILING CAVITY SPACE LOCATION. BUSH CONDUIT ENDS FOR PROTECTION OF DATA CABLING.

G43. PROVIDE DATA CABLE FROM WALL CLOCK LOCATION TO CLOCK SYSTEM TO HEAD-END EQUIPMENT PROVIDED WITHIN DATA ROOM.

G44. PROVIDE DATA OUTLET FOR NETWORK CONNECTION TO BUILDING MANAGEMENT SYSTEM (T.C.) CONTROL / MONITORING PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE T.C. CONTRACTOR PRIOR TO START OF ROUGH-IN.

G45. SEE FIRE ALARM SYSTEM DRAWINGS (E10.xx SERIES DRAWINGS) PREPARED BY WBW FOR ADDITIONAL REQUIREMENTS REGARDING THE BUILDING FIRE ALARM SYSTEM.

G46. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR WALL MOUNT HORNS WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

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G47. GENERAL LOCATION FOR BX75 SERIES DOOR CONTROLLER / POWER SUPPLY (WITHIN ACCESSIBLE CEILING CAVITY SPACE) AND ASSOCIATED "C2" DATA OUTLET.

G48. PROVIDE REQUIRED CIRCUITS FROM DPS DEVICES TO BX75 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR G100A.

G49. PROVIDE REQUIRED CIRCUITS FROM DPS DEVICES TO BX75 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF STAIR G3.

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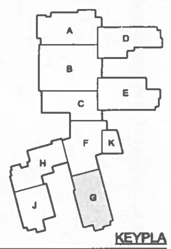


KEYPLA

Revisions:

#	Description	Date
1	[illegible]	[illegible]

Designed By:	Drawn By:	Checked By:
MJS	SDB	MJS

Sheet title:
SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "G"

Architect's Project No: 2106-204

Date: May, 20

Drawing No:

E3.1G

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS):

GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (I.E. SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS) (CONT):

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS. MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "H"):

H1. PROXIMITY READER FOR ACCESS TO ELEVATOR CAB. PROVIDE ALL REQUIRED CIRCUITS AND INTERCONNECT WITH THE ELEVATOR CONTROLLER. ACCESS INTO THE ELEVATOR CAB SHALL REQUIRE A VALID READ FROM THE PROXIMITY READER. PROXIMITY READER SHALL BE PART OF THE ACCESS CONTROL SYSTEM.

H2. NOTE NOT USED.

H3. PROVIDE CIRCUIT TO AREA "K" ADMIN RECEPTIONIST DESK AREA FOR MOMENTARY DOOR RELEASE FUNCTION "UNLOCKING" OPERATION OF THIS DOOR'S CONTROLLED DOOR OPENING.

H4. POE AUDIOVIDEO INTERCOM DOOR STATION, (FURNISHED AND INSTALLED BY THE DOOR HARDWARE PROVIDER. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT RACEWAY SYSTEM AND DATA CABLE FROM DOOR STATION TO THE AREA "H" FIRST FLOOR DATA ROOM, (BOTH). THE ASSOCIATED MASTER STATION WILL BE A PERSONAL COMPUTER LOCATED WITHIN THE ADMINISTRATION RECEPTION ROOM H101. COORDINATE THE ROUGH-IN REQUIREMENTS WITH THE DOOR HARDWARE PROVIDER PRIOR TO START OF ROUGH-IN.

H5. PROVIDE FLUSH MOUNT OUTLET BOX IN UNDERSIDE OF CANOPY CEILING AND PROVIDE 1" CONDUIT FROM OUTLET BOX, DOWN BACKSIDE OF COLUMN STRUCTURE, BELOW GRADE TO BUILDING, AND VERTICALLY UP WITHIN WALL TO ACCESSIBLE CEILING CAVITY SPACE WITHIN THE BUILDING. PROVIDE DATA CABLE FROM AREA "H" DATA ROOM "H100", CAMERA ASSEMBLY SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREAS UNDERNEATH THE CANOPY.

H6. AUDIOVIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 3-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL), PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM, BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "H"):

H7. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

H8. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREAS WITHIN THE ROOM.

H9. PROVIDE DATA OUTLET AS REQUIRED FOR CONNECTION TO EMERGENCY PHONE WITHIN THE ELEVATOR CAB. COORDINATE THE INSTALLATION LOCATION AND ALL OTHER REQUIREMENTS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-INS.

H10. DATA OUTLET FOR WALL PHONE.

H11. PROVIDE A 2-PORT DATA OUTLET HIGH ON THE WALL (APPROXIMATELY 10FT ABOVE FINISHED FLOOR) FOR THE OWNER'S FUTURE USE. VERIFY THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE OWNER'S TECHNOLOGY COORDINATOR PRIOR TO START OF ROUGH-IN.

H12. PROVIDE A QUANTITY OF FOUR 4" CONDUITS FROM ACCESSIBLE CEILING CAVITY SPACE WITHIN THE CORRIDOR TO ABOVE THE EXPOSED CABLETRAY SYSTEM WITHIN THE DATA ROOM. BUSH CONDUIT ENDS. (FOR ROUTING OF LOW VOLTAGE DATA NETWORK CABLING). BOND CONDUITS TO THE GROUND BUS BAR WITHIN THE DATA ROOM USING #10AWG COPPER CONDUCTOR.

H13. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR WALL MOUNT HORN WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

H14. PROVIDE CABLETRAY SYSTEM FROM WALL-TO-WALL AND INSTALLED ABOVE THE INSTALLATION LOCATION FOR THE DATA EQUIPMENT RACKS. COORDINATE INSTALLATION LOCATION IN THE FIELD WITH THE FINAL INSTALLATION LOCATION OF THE DATA EQUIPMENT RACKS. INSTALL CABLETRAY SYSTEM AT APPROXIMATELY 18"I ABOVE THE TOP OF THE DATA EQUIPMENT RACKS TO THE BOTTOM OF THE CABLETRAY SYSTEM.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "H") (CONTINUED):

H15. PROVIDE CABLETRAY SYSTEMS ALONG ALL PERIMETER WALLS OF THE DATA EQUIPMENT ROOM. COORDINATE THE REQUIRED INSTALLATION HEIGHT IN FIELD WITH ALL OTHER INSTALLATION REQUIREMENTS WITHIN THE ROOM. THE CABLE TRAY SHALL BE INSTALLED JUST BELOW THE HEIGHT WHERE THE CONDUIT SLEEVES ARE PROVIDED TO ROUTE THE LOW VOLTAGE DATA CABLES INTO THE ADJACENT CORRIDOR SPACE.

H16. PROVIDE A QUANTITY OF THREE DATA EQUIPMENT RACKS (4-POST). SEE DIVISION 27 PROJECT SPECIFICATIONS SECTION "27 1319 STRUCTURED DATA CABLING SYSTEMS" FOR ADDITIONAL REQUIREMENTS.

H17. QUANTITY OF ONE AUDIOVIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE AVI DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE INSTRUCTOR'S A/V ACCESS CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

H18. SEE SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "H". SHEET E3.2H, FOR ADDITIONAL SYSTEMS & TECHNOLOGY REQUIREMENTS WITHIN THE ELEVATOR CAB.

H19. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIRS AND AREA BELOW STAIRS AREAS.

H20. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

H21. DATA OUTLET FOR NETWORK CONNECTION TO POINT OF SALE EQUIPMENT. ROUTE CONDUIT BELOW GRADE FROM AREA "H" 1ST FLOOR DATA ROOM TO OUTLET BOX INSTALLED WITHIN THE CUSTOM MILLWORK. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITHIN THE MILL WORK WITH ARCHITECT AND FOOD SERVICE EQUIPMENT PROVIDER PRIOR TO START OF ROUGH-IN.

H22. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE ADMIN ROOM.

H23. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 8'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CENTER OUTLET BOX ON WALL. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE GATHERING SPACE. CAMERA VIEW SHALL NOT BE OBSTRUCTED BY SUSPENDED LIGHTING OR ANY OTHER INSTALLATION WITHIN THE AREA.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "H") (CONTINUED):

H24. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CONSTRUCTION LAB AREAS.

H25. OUTDOOR RATED CAMERA ASSEMBLY. CAMERA SHALL BE INSTALLED AT APPROXIMATELY 12'-0" ABOVE FINISHED FLOOR AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF BUILDING EXTERIOR AREAS. SEE EXTERIOR VIDEO SURVELLANCE SYSTEM CAMERA INSTALLATION DETAIL, SHEET E1.1, FOR ADDITIONAL REQUIREMENTS.

H26. PROVIDE DATA OUTLET FOR NETWORK CONNECTION TO BUILDING MANAGEMENT SYSTEM (T.C.) CONTROL / MONITORING PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE T.C. CONTRACTOR PRIOR TO START OF ROUGH-IN.

H27. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 10'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. INSTALL CAMERA OVER OUTLET BOX AND AIM CAMERA AS REQUIRED TO PROVIDE MAXIMUM VIEW OF VESTIBULE AREA.

H28. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. INSTALL CAMERA OVER OUTLET BOX AND AIM CAMERA AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREA.

H29. GENERAL LOCATION FOR FIRE ALARM SYSTEM HEAD-END MAIN EQUIPMENT. PROVIDE TWO DATA CABLES (EACH CABLE INSTALLED WITHIN ITS OWN DEDICATED CONDUIT RACEWAY SYSTEM) FROM THE SEH DATA ROOM H113 TO THE FIRE ALARM SYSTEM EQUIPMENT FOR REMOTE SITE 24/7/365 MONITORING SERVICE. COORDINATE INSTALLATION REQUIREMENTS WITH THE ACTUAL FIRE ALARM SYSTEM EQUIPMENT FURNISHED AS PART OF THIS CONTRACT PRIOR TO START OF ROUGH-IN.

H30. PROVIDE SPECIFIED TECHNOLOGIES INC. 6Z PATH SERIES 44+ FIRE RATED PATHWAY ASSEMBLIES (QUANTITY OF THREE ASSEMBLIES GANGED SIDE-BY-SIDE) THRU FIRE WALL FOR ROUTING OF LOW VOLTAGE DATA CABLES FROM CABLETRAY SYSTEM TO CABLETRAY SYSTEM. INSTALL PER MANUFACTURER'S REQUIREMENTS TO ENSURE RATING OF WALL AND ALLOW INSTALLATION OF THE REQUIRED DATA CABLES.

H31. ALL LOW VOLTAGE DATA CABLES INSTALLED WITHIN (OR ROUTED THROUGH) THIS OPEN CEILING SPACE AREA SHALL BE INSTALLED WITHIN CONDUIT RACEWAY SYSTEMS FROM THE DATA OUTLET LOCATION (OR VIDEO SURVELLANCE SYSTEM CAMERA LOCATIONS TO THE NEAREST ACCESSIBLE CEILING CAVITY SPACE ON THE 2ND FLOOR. PROVIDE PULL BOXES WHERE REQUIRED TO LIMIT THE NUMBER OF BENDS IN THE CONDUIT RACEWAY SYSTEMS TO A MAXIMUM OF 180 DEGREES. PROVIDE RACEWAY SYSTEMS WITH CAPACITY AS REQUIRED TO ADD A MINIMUM QUANTITY OF 50 PERCENT MORE FUTURE CABLES WITHIN THE INDIVIDUAL CONDUIT RUNS.

H32. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CONSTRUCTION LAB AREAS.

H33. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR TOUCH PANEL WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

H34. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

H35. REFER TO TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

H36. APPROXIMATE INSTALLATION LOCATION FOR CONDUIT RACEWAY SYSTEMS WITH FIBER CABLES. SEE COMMUNICATION ROOM LOCATION PLAN - FIRST FLOOR, SHEET E3.1, FOR ADDITIONAL REQUIREMENTS.

H37. PROVIDE ACCESS CONTROL CIRCUIT FROM ACCESS CONTROL SYSTEM TO ELEVATOR CONTROLLER AS REQUIRED FOR TIE-IN WITH THE ELEVATOR CONTROLLER. FINAL TERMINATION TO THE ELEVATOR CONTROLLER SHALL BE BY THE ELEVATOR PROVIDER. COORDINATE ALL REQUIRED INSTALLATION WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN.

H38. OUTDOOR RATED CAMERA ASSEMBLY. CAMERA SHALL BE INSTALLED AT APPROXIMATELY 12'-0" ABOVE FINISHED FLOOR AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF BUILDING EXTERIOR AREAS. SEE EXTERIOR VIDEO SURVELLANCE SYSTEM CAMERA INSTALLATION DETAIL, SHEET E1.1, FOR ADDITIONAL REQUIREMENTS.

H39. PROVIDE DATA OUTLET HIGH ON WALL BEHIND DIGITAL SIGNAGE VIDEO MONITOR.

H40. PROVIDE DATA OUTLET HIGH ON WALL BEHIND MONITOR FOR VIDEO SURVELLANCE.

H41. DATA OUTLET FOR VIDEO MONITOR. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE VIDEO MONITOR. IN GENERAL, INSTALL BEHIND THE VIDEO MONITOR IN LOCATION WHICH HIDES THE OUTLETS FROM VIEW AND STILL ALLOWS THE RECEPTACLE TO BE ACCESSIBLE.

H42. SEE FIRE ALARM SYSTEM DRAWINGS (E10.xx SERIES DRAWINGS) PREPARED BY VENDOR FOR ADDITIONAL REQUIREMENTS REGARDING THE BUILDING FIRE ALARM SYSTEM.

H43. PROVIDE DATA OUTLET HIGH ON WALL FOR NETWORK CONNECTION TO DIGITAL SIGNAGE MONITOR. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE REQUIREMENTS FOR THE DIGITAL SIGNAGE MONITOR PRIOR TO START OF ROUGH-IN.

H44. PROVIDE DATA CABLE FROM WALL CLOCK LOCATION TO CLOCK SYSTEM TO HEAD-END EQUIPMENT PROVIDED WITHIN DATA RACK.

H45. INSTALL CABLE TRAY SYSTEM AT APPROXIMATELY 3" ABOVE THE ACCESSIBLE CEILING GRID SYSTEM. PROVIDE ALL REQUIRED HORIZONTAL AND VERTICAL BENDS IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT. IN GENERAL, INSTALL THE CABLETRAY SYSTEMS WITH MINIMUM BENDS. VERTICAL CHANGES ARE NOT SHOWN ON THESE DRAWINGS AND SHALL BE COORDINATED IN THE FIELD.

H46. PROVIDE OPENINGS THROUGH ALL WALLS WHERE CABLETRAY SYSTEMS ARE REQUIRED TO BE ROUTED THROUGH (NON-RATED) WALLS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION REQUIREMENTS IN THE FIELD WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT.

H47. PROVIDE U.L. LISTED FIRE STOPPING SYSTEMS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING ARE REQUIRED TO PASS-THROUGH FIRE RATED AND / OR RATED WALL ASSEMBLIES.

H48. SEE CABLETRAY SCHEDULE, SHEET E1.1, FOR ADDITIONAL CABLETRAY AND CABLETRAY INSTALLATION REQUIREMENTS.

H49. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR EXTERIOR HORN WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

H50. PROVIDE DATA OUTLET FOR PRINTER / COPIER MACHINE.

H51. COORDINATE ALL ELECTRICAL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS AND MOUNTING HEIGHTS WITHIN THE ELEVATOR EQUIPMENT ROOM AND THE ELEVATOR SHAFT AREAS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN TO ENSURE INSTALLATION WILL MEET THE REQUIREMENTS OF THE ELEVATOR PROVIDER, ELEVATOR INSPECTOR AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

H52. PROVIDE OUTLET BOX IN WALL WITH A 3-GANG RING AND WITH A QUANTITY OF TWO 1" CONDUIT RACEWAYS FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE. BUSH CONDUIT ENDS. FOR ROUTING OF LOW VOLTAGE DATA CABLING TO DATA OUTLETS WITHIN THE FURNITURE SYSTEM. PROVIDE FLEXIBLE CONDUIT RACEWAY SYSTEMS FROM OUTLET FACEPLATE AS REQUIRED FOR INSTALLATION OF THE DATA CABLES TO THE FURNITURE SYSTEM RACEWAY.

H53. PROVIDE DATA OUTLETS WITHIN FURNITURE SYSTEM RACEWAY.

H54. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR WALL MOUNT SPEAKERS WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

H55. PROVIDE DATA OUTLET ON THE BOTTOM OF THE BUILDING STRUCTURAL SUPPORT, (FOR THE OWNERS FUTURE USE). VERIFY THE REQUIRED INSTALLATION LOCATION WITH THE OWNER'S TECHNOLOGY COORDINATOR PRIOR TO START OF ROUGH-IN.

H56. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AUTOMOTIVE LAB AREAS.

H57. DATA OUTLET LOCATION FOR USE WITH METAL DETECTION SECURITY SYSTEM EQUIPMENT.

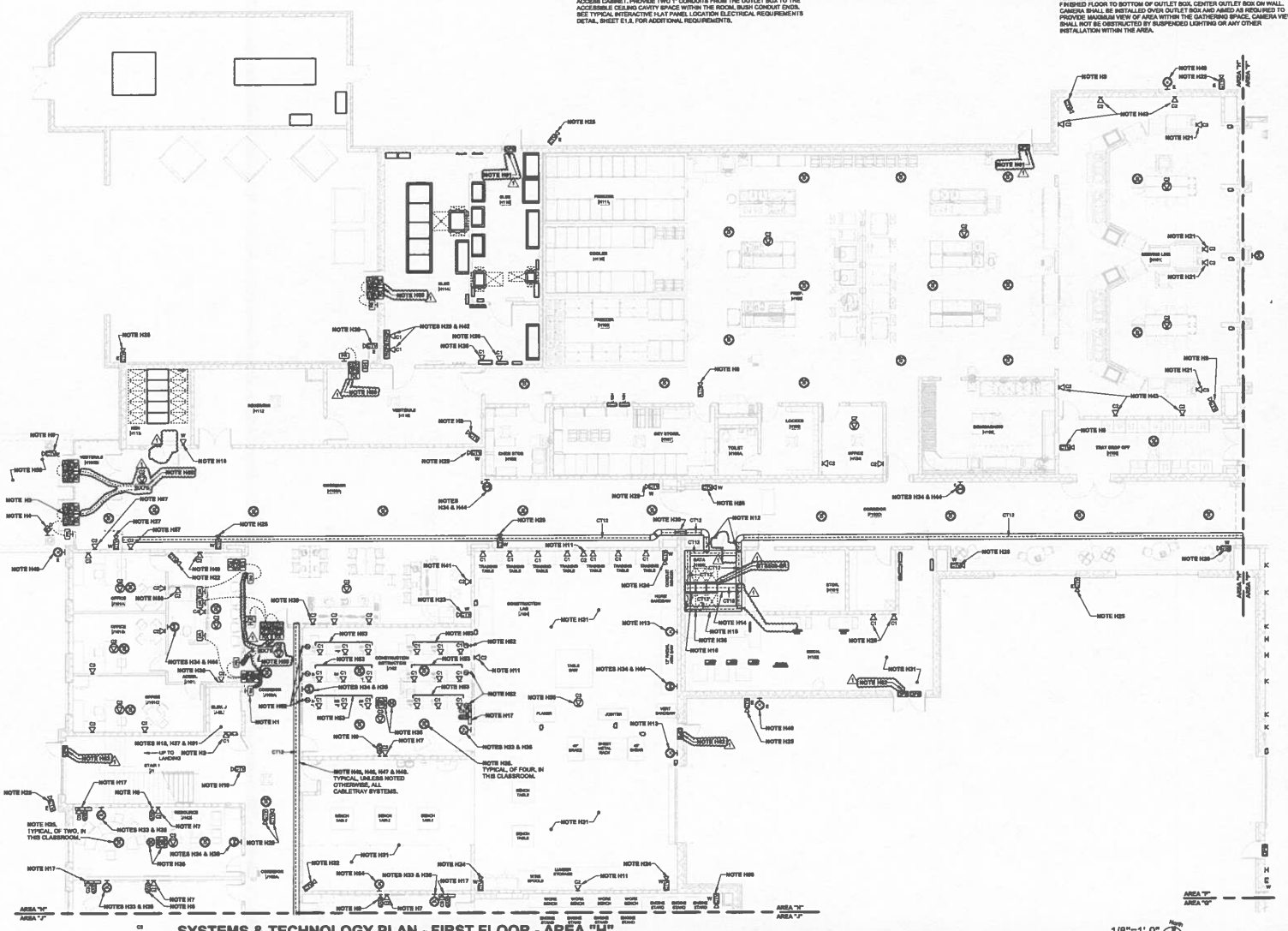
H58. SEE AREA "H" CANOPY ELECTRICAL PLAN, SHEET E7.2, FOR ADDITIONAL REQUIREMENTS WITHIN THE CANOPY AREA.

H59. GENERAL LOCATION FOR 8975 SERIES DOOR CONTROLLER / POWER SUPPLY (WITHIN ACCESSIBLE CEILING CAVITY SPACE) AND ASSOCIATED "C2" DATA OUTLET.

H60. PROVIDE REQUIRED LOW VOLTAGE CIRCUITS FROM DOOR HARDWARE / ACCESS CONTROL DEVICES TO 8975 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR H100A.

H61. PROVIDE REQUIRED CIRCUITS FROM DPS DEVICES TO 8975 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR H100A.

H62. PROVIDE REQUIRED CIRCUITS FROM DPS DEVICES TO 8975 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR J100A.



SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "H"

1/8" = 1'-0"

1/8"=1'-0"

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KEYPLA

Revisions:

#	Description	Date
1	Access Control System Mods	4/18/2024

Designed By: MJB | Drawn By: SDB | Checked By: MJB

Sheet title:
SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - ARE "H"

Architect's Project No: 2106-204

Date: May, 20

Drawing No:
E3.1H

GENERAL NOTES
(FOR ALL SYSTEMS & TECH. PLANS):

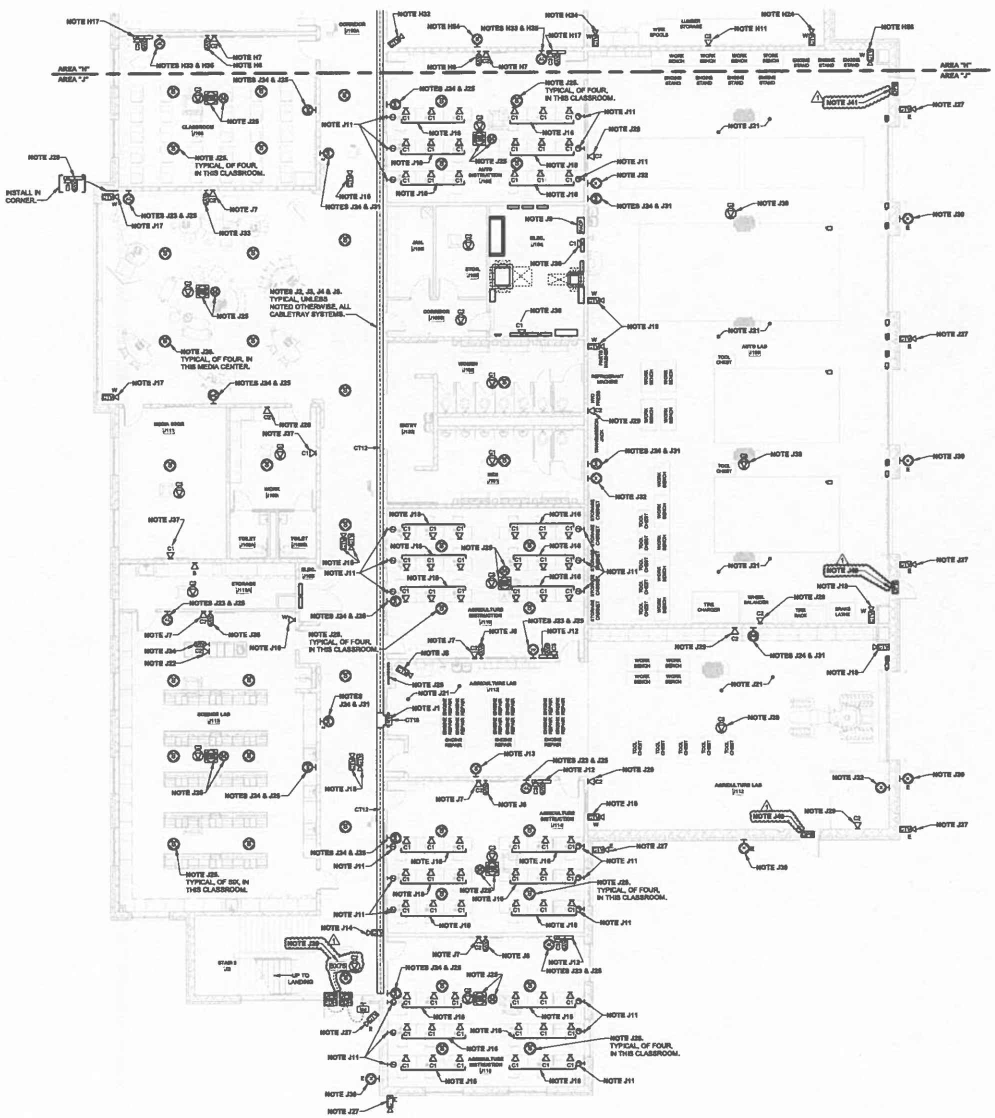
GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (I.E. SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES
(FOR ALL SYSTEMS & TECH. PLANS) [CONT]:

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS, MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.



SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "J"

1/8" = 1'-0"

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "J"):

J1. APPROXIMATE LOCATION OF VERTICAL CONDUITS FROM DATA ROOM ON FLOOR ABOVE. (FOR ROUTING OF LOW VOLTAGE VOICE, DATA, VIDEO, ACCESS CONTROL TYPE CABLES).

J2. INSTALL CABLE TRAY SYSTEM AT APPROXIMATELY 3" ABOVE THE ACCESSIBLE CEILING GRID SYSTEM. PROVIDE ALL REQUIRED HORIZONTAL AND VERTICAL BENDS IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT. IN GENERAL, INSTALL THE CABLETRAY SYSTEMS WITH MINIMUM BENDS. VERTICAL CHANGES ARE NOT SHOWN ON THESE DRAWINGS AND SHALL BE COORDINATED IN THE FIELD.

J3. PROVIDE OPENINGS THROUGH ALL WALLS WHERE CABLETRAY SYSTEMS ARE REQUIRED TO BE ROUTED THROUGH (NON-RATED) WALLS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION REQUIREMENTS IN THE FIELD WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT.

J4. PROVIDE U.L. LISTED FIRE STOPPING SYSTEMS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING ARE REQUIRED TO PASS-THROUGH FIRE RATED AND / OR RATED WALL ASSEMBLIES.

J5. SEE CABLETRAY SCHEDULE, SHEET E1.1, FOR ADDITIONAL CABLETRAY AND CABLETRAY INSTALLATION REQUIREMENTS.

J6. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

J7. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

J8. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AGRICULTURE LAB AREAS.

J9. SEE FIRE ALARM SYSTEM DRAWINGS (E10.xx SERIES DRAWINGS) PREPARED BY WBW FOR ADDITIONAL REQUIREMENTS REGARDING THE BUILDING FIRE ALARM SYSTEM.

J10. DATA OUTLET FOR WALL PHONE.

J11. PROVIDE OUTLET BOX IN WALL WITH A 2-GANG RING AND WITH A QUANTITY OF TWO 1" CONDUIT RACEWAYS FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE. BUSH CONDUIT ENDS. (FOR ROUTING OF LOW VOLTAGE DATA CABLES TO DATA OUTLETS WITHIN THE FURNITURE SYSTEM. PROVIDE FLEXIBLE CONDUIT RACEWAY SYSTEMS FROM OUTLET FACEPLATE AS REQUIRED FOR INSTALLATION OF THE DATA CABLES TO THE FURNITURE SYSTEM RACEWAY.

J12. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE INSTRUCTOR'S A/V ACCESS CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

J13. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR WALL MOUNT SPEAKERS WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

J14. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIRS AND AREA BELOW STAIRS AREAS.

J15. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

J16. PROVIDE DATA OUTLETS WITHIN FURNITURE SYSTEM RACEWAY.

J17. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE MEDIA ROOM.

J18. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AGRICULTURE LAB AREAS.

J19. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AUTOMOTIVE LAB AREAS.

J20. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS MEDIA CENTER. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE A/V ACCESS CABINET.

J21. ALL LOW VOLTAGE DATA CABLES INSTALLED WITHIN (OR ROUTED THROUGH) THIS OPEN CEILING SPACE AREA SHALL BE INSTALLED WITHIN CONDUIT RACEWAY SYSTEMS FROM THE DATA OUTLET LOCATION (OR VIDEO SURVEILLANCE SYSTEM CAMERA LOCATION) TO THE NEAREST ACCESSIBLE CEILING CAVITY SPACE ON THE 2ND FLOOR. PROVIDE PULL BOXES WHERE REQUIRED TO LIMIT THE NUMBER OF BENDS IN THE CONDUIT RACEWAY SYSTEMS TO A MAXIMUM OF 180 DEGREES. PROVIDE RACEWAY SYSTEMS WITH CAPACITY AS REQUIRED TO ADD A MINIMUM QUANTITY OF 50 PERCENT MORE FUTURE CABLES WITHIN THE INDIVIDUAL CONDUIT RUNS.

J22. INSTALL WITHIN TEACHER'S STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

J23. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR TOUCH PANEL WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

J24. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

J25. REFER TO TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

J26. PROVIDE DATA OUTLET FOR COPIER / PRINTER MACHINE.

J27. OUTDOOR RATED CAMERA ASSEMBLY. CAMERA SHALL BE INSTALLED AT APPROXIMATELY 13'-0" ABOVE FINISHED FLOOR AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF BUILDING EXTERIOR AREAS. SEE EXTERIOR VIDEO SURVEILLANCE SYSTEM CAMERA INSTALLATION DETAIL, E1.1, FOR ADDITIONAL REQUIREMENTS. PROVIDE "C1" TYPE DATA OUTLET IN INTERIOR SIDE WALL NEAR CONDUIT PENETRATION. PROVIDE DATA CABLE WITHIN A 1" CONDUIT RACEWAY SYSTEM FROM THE DATA OUTLET LOCATION TO NEAREST ACCESSIBLE (CONCEALED) CEILING CAVITY SPACE LOCATION. BUSH CONDUIT ENDS FOR PROTECTION OF DATA CABLING.

J28. SPACE RESERVED FOR ROUTING OF VERTICAL CONDUIT RACEWAYS (FROM UNDERGROUND TO VERTICAL UP WALL) FOR COMMUNICATIONS FIBER CABLES AND COMMUNICATION CABLES TO SITE HANDHOLES. SEE COMMUNICATION ROOM LOCATION PLAN - FIRST FLOOR, SHEET E3.1, FOR ADDITIONAL REQUIREMENTS.

J29. PROVIDE A 2-PORT DATA OUTLET HIGH ON THE WALL (APPROXIMATELY 10FT ABOVE FINISHED FLOOR) FOR THE OWNER'S FUTURE USE. VERIFY THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE OWNER'S TECHNOLOGY COORDINATOR PRIOR TO START OF ROUGH-IN.

J30. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR WALL MOUNT EXTERIOR HORN WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "J") [CONT]:

J31. PROVIDE DATA CABLE FROM WALL CLOCK LOCATION TO CLOCK SYSTEM TO HEAD-END EQUIPMENT PROVIDED WITHIN DATA ROOM.

J32. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR WALL MOUNT HORNS WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

J33. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN AUDIO/VIDEO OUTLET A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

J34. INSTRUCTOR'S ISLAND. PROVIDE DEVICE PLATE WITH ONE HDMI JACK. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE.

J35. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S ISLAND. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

J36. PROVIDE DATA OUTLET FOR NETWORK CONNECTION TO BUILDING MANAGEMENT SYSTEM (T.C.) CONTROL / MONITORING PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE T.C. CONTRACTOR PRIOR TO START OF ROUGH-IN.

J37. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE.

J38. PROVIDE DATA OUTLET ON THE BOTTOM OF THE BUILDING STRUCTURAL SUPPORT. (FOR THE OWNER'S FUTURE USE). VERIFY THE REQUIRED INSTALLATION LOCATION WITH THE OWNER'S TECHNOLOGY COORDINATOR PRIOR TO START OF ROUGH-IN.

1 J39. GENERAL LOCATION FOR BX75 SERIES DOOR CONTROLLER / POWER SUPPLY (WITHIN ACCESSIBLE CEILING CAVITY SPACE) AND ASSOCIATED "C2" DATA OUTLET.

J40. PROVIDE REQUIRED CIRCUITS FROM DPS DEVICES TO BX75 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF STAIR 2 (J2).

J41. PROVIDE REQUIRED CIRCUITS FROM DPS DEVICES TO BX75 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR J100A.

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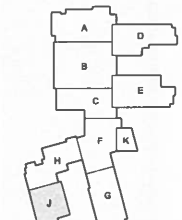


KEYPLAN

Revisions:

#	Description	Date
1	Access Control System Mods	4/15/2024

Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:
SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "J"

Architect's Project No: 2106-204

Date: May, 20

Drawing No: E3.1J

GENERAL NOTES
(FOR ALL SYSTEMS & TECH. PLANS):

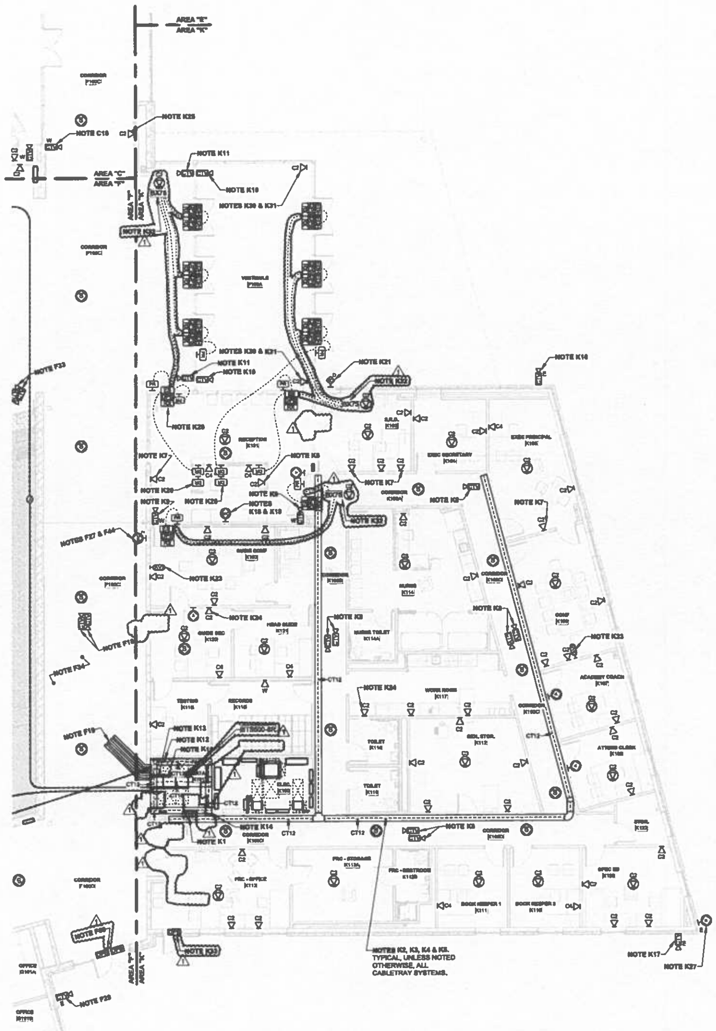
GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (I.E. SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES
(FOR ALL SYSTEMS & TECH. PLANS) [CONT]:

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS, MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.



SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "K"

1/8" = 1'-0"

1/8"=1'-0"

North

NOTES (FIRST FLOOR SYS. & TECH. PLAN - AREA "K"):

K1. PROVIDE A QUANTITY OF FOUR 4" CONDUITS FROM ACCESSIBLE CEILING CAVITY SPACE WITHIN THE CORRIDOR TO ABOVE THE EXPOSED CABLETRAY SYSTEM WITHIN THE DATA ROOM. BUSH CONDUIT ENDS. (FOR ROUTING OF LOW VOLTAGE DATA NETWORK CABLING). BOND CONDUITS TO THE GROUND BUS BAR WITHIN THE DATA ROOM USING #10AWG COPPER CONDUCTOR.

K2. INSTALL CABLE TRAY SYSTEM AT APPROXIMATELY 3" ABOVE THE ACCESSIBLE CEILING GRID SYSTEM. PROVIDE ALL REQUIRED HORIZONTAL AND VERTICAL BENDS IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT. IN GENERAL, INSTALL THE CABLETRAY SYSTEMS WITH MINIMUM BENDS. VERTICAL CHANGES ARE NOT SHOWN ON THESE DRAWINGS AND SHALL BE COORDINATED IN THE FIELD.

K3. PROVIDE OPENINGS THROUGH ALL WALLS WHERE CABLETRAY SYSTEMS ARE REQUIRED TO BE ROUTED THROUGH (NON-RATED) WALLS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION REQUIREMENTS IN THE FIELD WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT.

K4. PROVIDE U.L. LISTED FIRE STOPPING SYSTEMS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING ARE REQUIRED TO PASS-THROUGH FIRE RATED AND / OR RATED WALL ASSEMBLIES.

K5. SEE CABLETRAY SCHEDULE, SHEET E1.1, FOR ADDITIONAL CABLETRAY AND CABLETRAY INSTALLATION REQUIREMENTS.

K6. DATA OUTLET FOR PRINTER.

K7. PROVIDE DATA OUTLET HIGH ON WALL BEHIND MONITOR FOR VIDEO SURVEILLANCE.

K8. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

K9. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 10'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF THE RECEPTION AND ENTRY VESTIBULE AREAS.

K10. FLUSH MOUNT OUTLET BOX IN HORIZONTAL MULLION AT APPROXIMATELY 10'-6 ABOVE FINISHED FLOOR. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF ENTRY VESTIBULE AREAS.

K11. FLUSH MOUNT OUTLET BOX IN HORIZONTAL MULLION AT APPROXIMATELY 10'-6 ABOVE FINISHED FLOOR. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

K12. APPROXIMATE INSTALLATION LOCATION FOR CONDUIT RACEWAY SYSTEMS WITH FIBER CABLES. SEE COMMUNICATION ROOM LOCATION PLAN - FIRST FLOOR, SHEET E3.1, FOR ADDITIONAL REQUIREMENTS.

K13. PROVIDE CABLETRAY SYSTEM FROM WALL-TO-WALL AND INSTALLED ABOVE THE INSTALLATION LOCATION FOR THE DATA EQUIPMENT RACKS. COORDINATE INSTALLATION LOCATION IN THE FIELD WITH THE FINAL INSTALLATION LOCATION OF THE DATA EQUIPMENT RACKS. INSTALL CABLETRAY SYSTEM AT APPROXIMATELY 1FT ABOVE THE TOP OF THE DATA EQUIPMENT RACKS TO THE BOTTOM OF THE CABLETRAY SYSTEM.

K14. PROVIDE CABLETRAY SYSTEMS ALONG ALL PERIMETER WALLS OF THE DATA EQUIPMENT ROOM. COORDINATE THE REQUIRED INSTALLATION HEIGHT IN FIELD WITH ALL OTHER INSTALLATION REQUIREMENTS WITHIN THE ROOM. THE CABLE TRAY SHALL BE INSTALLED JUST BELOW THE HEIGHT WHERE THE CONDUIT SLEEVES ARE PROVIDED TO ROUTE THE LOW VOLTAGE DATA CABLES INTO THE ADJACENT CORRIDOR SPACE.

K15. PROVIDE A QUANTITY OF THREE DATA EQUIPMENT RACKS (4-POST). SEE DIVISION 27 PROJECT SPECIFICATIONS SECTION "271310 STRUCTURED DATA CABLING SYSTEMS" FOR ADDITIONAL REQUIREMENTS.

K16. OUTDOOR RATED CAMERA ASSEMBLY. CAMERA SHALL BE INSTALLED AT APPROXIMATELY 12'-0" ABOVE FINISHED FLOOR AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF BUILDING EXTERIOR AREAS. SEE EXTERIOR VIDEO SURVEILLANCE SYSTEM CAMERA INSTALLATION DETAIL, SHEET E1.1, FOR ADDITIONAL REQUIREMENTS.

K17. OUTDOOR RATED CAMERA ASSEMBLY. CAMERA SHALL BE INSTALLED AT APPROXIMATELY 13'-0" ABOVE FINISHED FLOOR AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF BUILDING EXTERIOR AREAS. SEE EXTERIOR VIDEO SURVEILLANCE SYSTEM CAMERA INSTALLATION DETAIL, SHEET E1.1, FOR ADDITIONAL REQUIREMENTS.

K18. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

K19. PROVIDE DATA CABLE FROM WALL CLOCK LOCATION TO CLOCK SYSTEM TO HEAD-END EQUIPMENT PROVIDED WITHIN DATA ROOM.

K20. DOOR RELEASE BUTTON FOR MOMENTARILY UNLOCKING THE ACCESS CONTROLLED DOOR IN AREA "F" VESTIBULE F100B. SEE SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "F", SHEET E3.1F, FOR ADDITIONAL REQUIREMENTS.

K21. POE AUDIO/VIDEO INTERCOM DOOR STATION. (FURNISHED AND INSTALLED BY THE DOOR HARDWARE PROVIDER. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT RACEWAY SYSTEM AND DATA CABLE FROM DOOR STATION TO THE AREA "K" FIRST FLOOR DATA ROOM. (NOTE: THE ASSOCIATED MASTER STATION WILL BE A PERSONAL COMPUTER LOCATED WITHIN THE ADMINISTRATION RECEPTION ROOM K101). COORDINATE ALL ROUGH-IN REQUIREMENTS WITH THE DOOR HARDWARE PROVIDER.

1 K22. NOTE NOT USED.

K23. AUDIO/VIDEO INPUT DEVICE FOR MOBILE INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. PROVIDE BLANK DEVICE PLATE ON OUTLET BOX.

K24. DATA OUTLET FOR COPIER MACHINE.

K25. PROVIDE DATA OUTLET HIGH ON WALL BEHIND DIGITAL SIGNAGE VIDEO MONITOR.

K26. DOOR RELEASE BUTTON FOR MOMENTARILY UNLOCKING THE ACCESS CONTROLLED DOOR IN AREA "H" VESTIBULE H100B. SEE SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "H", SHEET E3.1H, FOR ADDITIONAL REQUIREMENTS.

K27. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT FOR EXTERIOR HORN WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

K28. DOOR OPERATION AT THIS LOCATION SHALL BE AS FOLLOWS:
"NORMAL OPERATION MODE": GOING FROM ADMIN SIDE TO CORRIDOR REQUIRES A VALID BADGE READ OR THE DOOR RELEASE PUSH BUTTON TO BE PRESSED MOMENTARILY TO UNLOCK THE DOOR. GOING FROM CORRIDOR SIDE INTO ADMIN WILL BE POSSIBLE BY TURNING THE DOOR HARDWARE HANDLE ON THE CORRIDOR SIDE.
"SYSTEM LOCK-DOWN MODE": THIS MODE OF OPERATION WILL REQUIRE STAFF TO ROTATE A DEVICE ON THE DOOR HARDWARE WHICH WILL PREVENT A PERSON FROM BEING ABLE TO ENTER THE ADMIN ROOM FROM THE CORRIDOR SIDE WITHOUT FIRST PRESENTING A VALID BADGE READ. THE BADGE READER ON THE CORRIDOR SIDE IS REQUIRED TO BE INSTALLED FOR SYSTEM LOCK-DOWN MODE ONLY AND WILL NOT BE FUNCTIONAL DURING NORMAL OPERATION MODE.

1 K29. NOTE NOT USED.

K30. DATA OUTLET LOCATION FOR USE WITH METAL DETECTION SECURITY SYSTEM EQUIPMENT.

K31. INSTALL DATA OUTLET FLUSH WITHIN HOLLOW STRUCTURAL TUBE COLUMN. COORDINATE HOLE REQUIREMENTS FOR OUTLET BOX AND DATA CIRCUIT WITH GENERAL CONTRACTOR / STEEL FABRICATOR DURING SUBMITTAL DRAWING PHASE AS REQUIRED TO PROVIDE OPENINGS NECESSARY FOR ELECTRICAL INSTALLATION.

1 K32. GENERAL LOCATION FOR BX75 SERIES DOOR CONTROLLER / POWER SUPPLY (WITHIN ACCESSIBLE CEILING CAVITY SPACE) AND ASSOCIATED "C2" DATA OUTLET.

K33. PROVIDE REQUIRED CIRCUITS FROM DPS DEVICES TO BX75 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR K100A.

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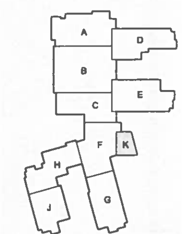


KEYPLAN

Revisions:

#	Description	Date
1	Access Control System Mode	[illegible]

Designed By:	Drawn By:	Checked By:
MJS	SOB	MJS

[illegible]

Sheet title:
SYSTEMS & TECHNOLOGY PLAN - FIRST FLOOR - AREA "K"

Architect's Project No: 2106-204

Date: May, 20[illegible]

Drawing No:
E3.1K

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS):

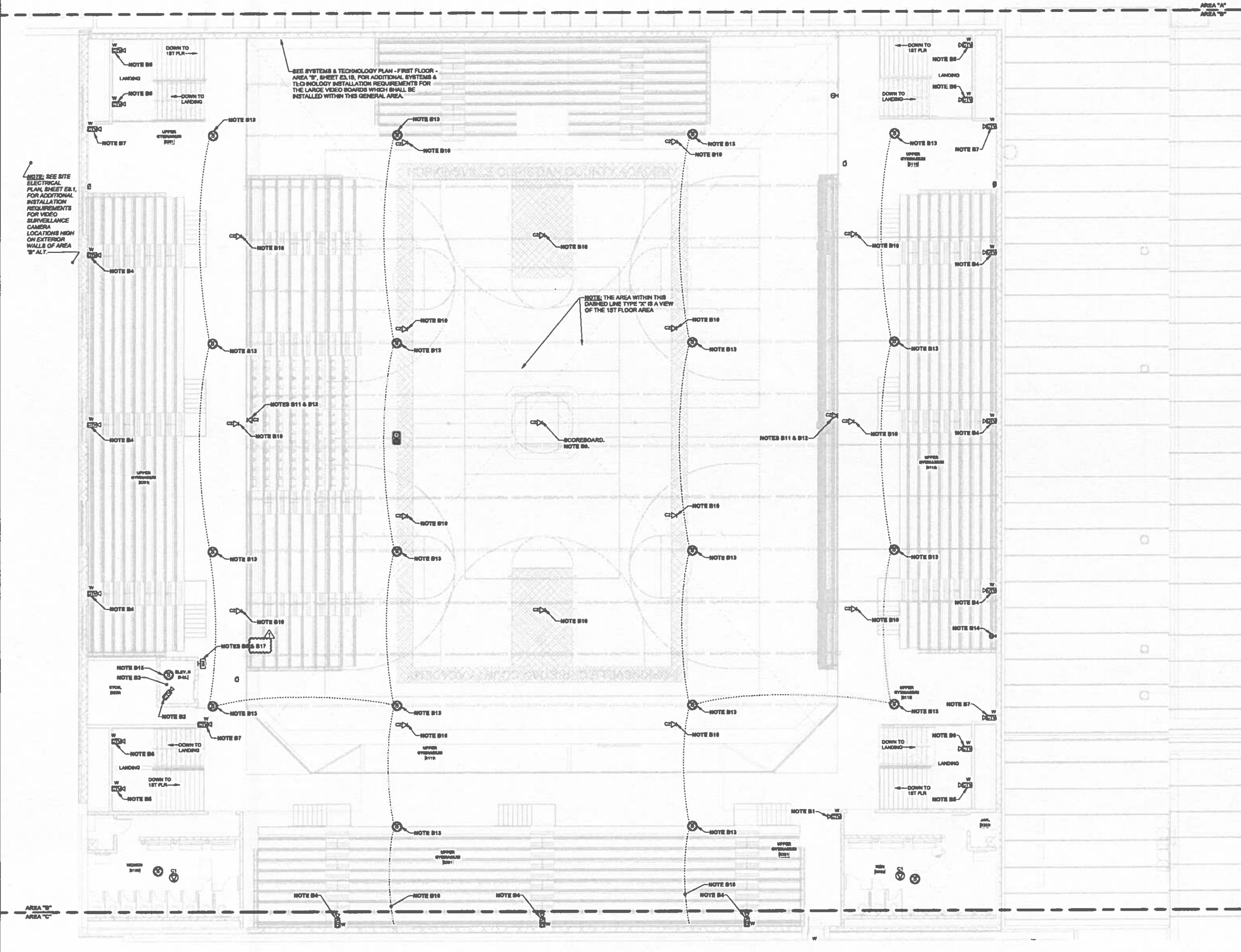
GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (I.E. SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS) [CONT]:

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS, MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.



SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "B"
1/8" = 1'-0"

1/8"=1'-0"

NOTES (SECOND FLOOR SYS. & TECH. PLAN - AREA "B"-ALT):

B1. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0" ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF PERSONS AND ACTIVITY AROUND THE DOORWAY WHICH ENTERS THE ROTC GATHERING ROOM C201.

B2. CAMERA SHALL BE INSTALLED WITHIN THE ELEVATOR CAB AND AIMED AS REQUIRED TO PROVIDE THE MAXIMUM VIEW OF ACTIVITY WITHIN THE ELEVATOR CAB. CONTRACTOR SHALL COORDINATE THE CAMERA DATA CABLING REQUIREMENTS WITH THE ELEVATOR PROVIDER PRIOR TO THE ELEVATOR SUBMITTAL PROCESS TO ENSURE THE CORRECT CABLING REQUIRED FOR THE CAMERA SYSTEM IS PROVIDED AS PART OF THIS PROJECT.

B3. COORDINATE ALL ELECTRICAL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS AND MOUNTING HEIGHTS WITHIN THE ELEVATOR EQUIPMENT ROOM AND THE ELEVATOR SHAFT AREAS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN TO ENSURE INSTALLATION WILL MEET THE REQUIREMENTS OF THE ELEVATOR PROVIDER, ELEVATOR INSPECTOR AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

B4. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 10'-0 ABOVE TOP OF BLEACHERS TO BOTTOM OF OUTLET BOX. CENTER OUTLET ON BLEACHER STAIRWAY AREA. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF BLEACHER AREA AND ACTIVITY ON BLEACHER STAIRWAY.

B5. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 10'-0" ABOVE TOP OF LANDING TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF PERSONS COMING UP THE STAIRS.

B6. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 4'-6" ABOVE TOP OF 2ND FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF PERSONS COMING DOWN THE STAIRS.

B7. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0" ABOVE TOP OF SECOND FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM ACTIVITY ON THE SECOND FLOOR.

B8. PROXIMITY READER FOR ACCESS TO ELEVATOR CAB. PROVIDE ALL REQUIRED CIRCUITS AND INTERCONNECT WITH THE ELEVATOR CONTROLLER. ACCESS INTO THE ELEVATOR CAB SHALL REQUIRE A VALID READ FROM THE PROXIMITY READER. PROXIMITY READER SHALL BE PART OF THE ACCESS CONTROL SYSTEM.

B9. PROVIDE DATA OUTLET FLUSH MOUNTED IN THE BOTTOM PANEL OF THE SCOREBOARD SYSTEM FOR MOUNTING OF OWNER FURNISHED AND INSTALLED WIRELESS ACCESS DEVICE. ALL DATA CABLING ROUTED WITHIN THE EXPOSED CEILING AREAS OF THE GYMNASIUM SHALL BE INSTALLED WITHIN CONDUIT RACEWAY SYSTEMS.

B10. PROVIDE DATA OUTLET FOR MOUNTING OF OWNER FURNISHED AND INSTALLED WIRELESS ACCESS DEVICE. PROVIDE ALL SUPPLEMENT STEEL SUPPORT MATERIALS AS REQUIRED TO SUPPORT THE OUTLET BOX AND WIRELESS ACCESS DEVICE IN REQUIRED INSTALLATION LOCATION. COORDINATE THE REQUIRED INSTALLATION LOCATION WITH THE OWNER'S I.T. PERSON PRIOR TO START OF ROUGH-IN. ALL DATA CABLING ROUTED WITHIN THE EXPOSED CEILING AREAS OF THE GYMNASIUM SHALL BE INSTALLED WITHIN CONDUIT RACEWAY SYSTEMS.

B11. PROVIDE DATA OUTLET WITHIN THE SPECIAL AV LOCKABLE ENCLOSURE.

B12. SEE ELECTRICAL FOR PERFORMANCE AV - FIRST FLOOR PLAN - AREA "B", SHEET EA1.1B, FOR ADDITIONAL REQUIREMENTS.

B13. LOCATION FOR OWNER FURNISHED AND INSTALLED SPEAKER SYSTEM ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM. PROVIDE 3/4" CONDUIT RACEWAY SYSTEMS BETWEEN CEILING SPEAKER LOCATIONS. PROVIDE PULL STRINGS IN ALL CONDUIT RACEWAY SEGMENTS ASSOCIATED WITH THIS SYSTEM. (FOR OWNER FURNISHED AND INSTALLED AUDIO CABLING).

B14. PROVIDE FLUSH-MOUNT PULL BOX (SIZE AS REQUIRED TO TERMINATE QUANTITY AND SIZES OF CONDUITS). INSTALL HIGH ON WALL AS REQUIRED TO BE ABOVE THE BOTTOM OF THE STRUCTURAL MEMBERS (~ 30' ABOVE FINISHED GYM SECOND FLOOR LEVEL). PROVIDE COVER FOR PULL BOX WHICH EXTENDS PAST THE EDGES OF THE BOX TO PROVIDE A CLEAN APPEARANCE. PULL BOX COVER SHALL BE PAINTED TO MATCH THE FINISH COLOR OF THE WALLS. PROVIDE A QUANTITY OF EIGHT 1" CONDUITS (WITH PULL STRINGS) VERTICALLY WITHIN THE WALL FROM THIS PULL BOX TO THE PULL BOX PROVIDED BELOW WITHIN THE PHYSICAL THERAPY ROOM B106. INSTALL CONDUITS SUCH THAT THERE IS NO MORE THAN 180 DEGREES OF BENDS IN CONDUIT RACEWAYS. (FOR ROUTING OF OWNER FURNISHED AND INSTALLED LOW VOLTAGE CABLES FROM AUDIO/VIDEO EQUIPMENT RACK IN STORAGE ROOM B118 TO PULL BOX).

B15. SPEAKER ASSEMBLY SHALL BE INSTALLED WITHIN THE ELEVATOR CAB. CONTRACTOR SHALL COORDINATE THE SPEAKER SYSTEM CABLING REQUIREMENTS WITH THE ELEVATOR PROVIDER PRIOR TO THE ELEVATOR SUBMITTAL PROCESS TO ENSURE THE CORRECT CABLING REQUIRED FOR SPEAKER SYSTEM IS PROVIDED AS PART OF THIS PROJECT.

B16. PROVIDE 3/4" CONDUIT RACEWAY FROM SPEAKER LOCATION TO THE 1ST FLOOR AREA "B" DATA ROOM "B101". PROVIDE PULL STRING IN EACH CONDUIT SEGMENT. (FOR OWNER FURNISHED AND INSTALLED AUDIO CABLING).

B17. PROVIDE REQUIRED CIRCUITS FROM PROXIMITY READER AND ELEVATOR CONTROLLER TO BX75 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR B100B.

HOPKINSVILLE - CHRISTIAI COUNTY ACADEMY

CHRISTIAN COUNT
— PUBLIC SCHOOLS —

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2102 Kotter Avenue, Suite
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KEYPLA

Revisions:

#	Description	Date
1	Access Control System Mods	4/10/2024

Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:
SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "B"

Architect's Project No: 2106-204
Date: May, 20

Drawing No:
E3.2B-AI

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS):

GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (I.E. SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS) [CONT]:

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS, MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.

NOTES (SECOND FLOOR SYS. & TECH. PLAN - AREA "D"):

D1. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S ISLAND. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

D2. INSTALL CABLE TRAY SYSTEM AT APPROXIMATELY 3" ABOVE THE ACCESSIBLE CEILING GRID SYSTEM. PROVIDE ALL REQUIRED HORIZONTAL AND VERTICAL BENDS IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT. IN GENERAL, INSTALL THE CABLETRAY SYSTEMS WITH MINIMUM BENDS. VERTICAL CHANGES ARE NOT SHOWN ON THESE DRAWINGS AND SHALL BE COORDINATED IN THE FIELD.

D3. PROVIDE OPENINGS THROUGH ALL WALLS WHERE CABLETRAY SYSTEMS ARE REQUIRED TO BE ROUTED THROUGH (NON-RATED) WALLS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION REQUIREMENTS IN THE FIELD WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT.

D4. PROVIDE U.L. LISTED FIRE STOPPING SYSTEMS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING ARE REQUIRED TO PASS-THROUGH FIRE RATED AND / OR RATED WALL ASSEMBLIES.

NOTES (SECOND FLOOR SYS. & TECH. PLAN - AREA "D") [CONT]:

D5. SEE CABLETRAY SCHEDULE, SHEET E1.1, FOR ADDITIONAL CABLETRAY AND CABLETRAY INSTALLATION REQUIREMENTS.

D6. PROVIDE A QUANTITY OF FOUR 4" CONDUITS THRU FLOOR FROM ACCESSIBLE CEILING CAVITY SPACE ON THE FLOOR BELOW. STUB 12" ABOVE FINISHED 2ND FLOOR. BUSH CONDUIT ENDS. BOND CONDUITS TO GROUND BUS BAR WITHIN DATA ROOM USING #10AWG COPPER CONDUCTOR. PROVIDE REMOVABLE FIRE STOP BISCUITS IN CONDUITS AFTER ALL CABLES HAVE BEEN INSTALLED. (FOR ROUTING OF LOW VOLTAGE DATA, VIDEO, AND ACCESS CONTROL TYPE CABLES). COORDINATE THE REQUIRED INSTALLATION LOCATION WITHIN THE ROOM WITH THE FIRST AND SECOND FLOOR FIELD CONDITIONS AND THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT.

D7. NOTE NOT USED.

D8. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

D9. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

D10. PROVIDE DATA CABLE FROM WALL CLOCK LOCATION TO CLOCK SYSTEM TO HEAD-END EQUIPMENT PROVIDED WITHIN DATA RACK.

D11. DATA OUTLET FOR WALL PHONE.

D12. DATA OUTLET FOR PRINTER.

NOTES (SECOND FLOOR SYS. & TECH. PLAN - AREA "D") [CONT]:

D13. PROVIDE CABLETRAY SYSTEM FROM WALL-TO-WALL AND INSTALLED ABOVE THE INSTALLATION LOCATION FOR THE DATA EQUIPMENT RACKS. COORDINATE INSTALLATION LOCATION IN THE FIELD WITH THE FINAL INSTALLATION LOCATION OF THE DATA EQUIPMENT RACKS. INSTALL CABLETRAY SYSTEM AT APPROXIMATELY 1FT ABOVE THE TOP OF THE DATA EQUIPMENT RACKS TO THE BOTTOM OF THE CABLETRAY SYSTEM.

D14. PROVIDE CABLETRAY SYSTEMS ALONG ALL PERIMETER WALLS OF THE DATA EQUIPMENT ROOM. COORDINATE THE REQUIRED INSTALLATION HEIGHT IN FIELD WITH ALL OTHER INSTALLATION REQUIREMENTS WITHIN THE ROOM. THE CABLE TRAY SHALL BE INSTALLED JUST BELOW THE HEIGHT WHERE THE CONDUIT SLEEVES ARE PROVIDED TO ROUTE THE LOW VOLTAGE DATA CABLES INTO THE ADJACENT CORRIDOR SPACE.

D15. PROVIDE A QUANTITY OF THREE DATA EQUIPMENT RACKS (4-POST). SEE DIVISION 27 PROJECT SPECIFICATIONS SECTION "271310 STRUCTURED DATA CABLING SYSTEMS" FOR ADDITIONAL REQUIREMENTS.

D16. PROXIMITY READER FOR ACCESS TO ELEVATOR CAB. PROVIDE ALL REQUIRED CIRCUITS AND INTERCONNECT WITH THE ELEVATOR CONTROLLER. ACCESS INTO THE ELEVATOR CAB SHALL REQUIRE A VALID READ FROM THE PROXIMITY READER. PROXIMITY READER SHALL BE PART OF THE ACCESS CONTROL SYSTEM.

D17. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE INSTRUCTOR'S A/V ACCESS CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

D18. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED STAIR LANDING TO BOTTOM OF OUTLET BOX. CENTER OUTLET BOX ON WALL. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIR AREAS.

D19. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIR AREAS.

D20. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

D21. PROVIDE DATA OUTLET FOR NETWORK CONNECTION TO BUILDING MANAGEMENT SYSTEM (T.C.) CONTROL / MONITORING PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE T.C. CONTRACTOR PRIOR TO START OF ROUGH-IN.

D22. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED STAIR LANDING TO BOTTOM OF OUTLET BOX. INSTALL OUTLET BOX ON THE WALL WHICH HAS THE STAIR TREADS EXTENDING FROM THE 1ST FLOOR TO THE INTERMEDIATE STAIR LANDING. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIR AREAS AND PERSONS COMING UP THE STAIRS FROM THE 1ST FLOOR.

D23. CAMERA SHALL BE INSTALLED WITHIN THE ELEVATOR CAB AND AIMED AS REQUIRED TO PROVIDE THE MAXIMUM VIEW OF ACTIVITY WITHIN THE ELEVATOR CAB. CONTRACTOR SHALL COORDINATE THE CAMERA DATA CABLING REQUIREMENTS WITH THE ELEVATOR PROVIDER PRIOR TO THE ELEVATOR SUBMITTAL PROCESS TO ENSURE THE CORRECT CABLING REQUIRED FOR THE CAMERA SYSTEM IS PROVIDED AS PART OF THIS PROJECT.

D24. INSTRUCTOR'S ISLAND. PROVIDE DEVICE PLATE WITH ONE HDMI JACK. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE.

D25. PROVIDE DATA OUTLETS WITHIN FURNITURE SYSTEM RACEWAY.

D26. PROVIDE OUTLET BOX IN WALL WITH A 3-GANG RING AND WITH A QUANTITY OF THREE 1" CONDUIT RACEWAYS FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE. BUSH CONDUIT ENDS. (FOR ROUTING OF LOW VOLTAGE DATA CABLES TO DATA OUTLETS WITHIN THE FURNITURE SYSTEM. PROVIDE FLEXIBLE CONDUIT RACEWAY SYSTEMS FROM OUTLET FACEPLATE AS REQUIRED FOR INSTALLATION OF THE DATA CABLES TO THE FURNITURE SYSTEM RACEWAY.

D27. APPROXIMATE INSTALLATION LOCATION FOR CONDUIT RACEWAY SYSTEMS WITH FIBER CABLES. SEE COMMUNICATION ROOM LOCATION PLAN - FIRST FLOOR, SHEET E3.1, FOR ADDITIONAL REQUIREMENTS.

D28. COORDINATE ALL ELECTRICAL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS AND MOUNTING HEIGHTS WITHIN THE ELEVATOR EQUIPMENT ROOM AND THE ELEVATOR SHAFT AREAS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN TO ENSURE INSTALLATION WILL MEET THE REQUIREMENTS OF THE ELEVATOR PROVIDER, ELEVATOR INSPECTOR AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

D29. INSTALL WITHIN TEACHER'S STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

D30. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR TOUCH PANEL WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

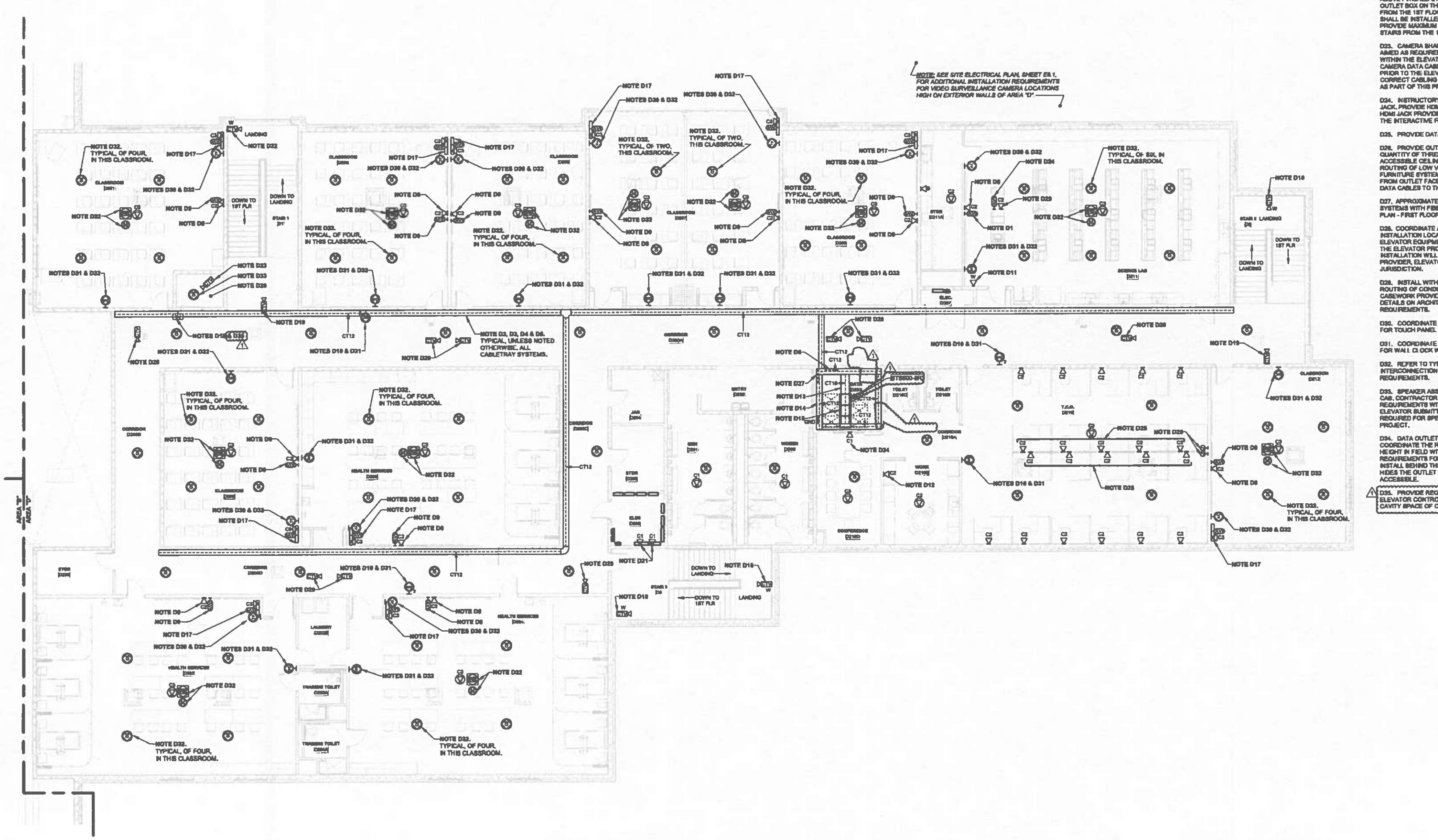
D31. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

D32. REFER TO TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

D33. SPEAKER ASSEMBLY SHALL BE INSTALLED WITHIN THE ELEVATOR CAB. CONTRACTOR SHALL COORDINATE THE SPEAKER SYSTEM CABLING REQUIREMENTS WITH THE ELEVATOR PROVIDER PRIOR TO THE ELEVATOR SUBMITTAL PROCESS TO ENSURE THE CORRECT CABLING REQUIRED FOR SPEAKER SYSTEM IS PROVIDED AS PART OF THIS PROJECT.

D34. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE.

D35. PROVIDE REQUIRED CIRCUITS FROM PROXIMITY READER AND ELEVATOR CONTROLLER TO BOC'S EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR D100A.



SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "D

1/8" = 1'-0"

1/8"=1'-0"

North

HOPKINSVILLE - CHRISTIAN COUNTY ACADEMY

CHRISTIAN COUNTY PUBLIC SCHOOLS

KDE # : BG 22-104

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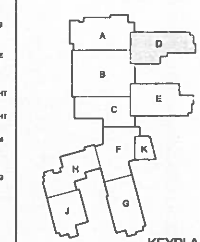
C&T Design and Equipment Co.



KEYPLAN

Revisions:

#	Description	Date
1	Access Control System Mods	4/19/2024

Designed By:	Drawn By:	Checked By:
MJB	SOB	MJB

Sheet title:
SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "D

Architect's Project No: 2106-204

Date: May, 20

Drawing No: E3.2D

GENERAL NOTES
(FOR ALL SYSTEMS & TECH. PLANS):

GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (I.E. SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES
(FOR ALL SYSTEMS & TECH. PLANS) [CONT]:

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS, MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.

NOTES (SECOND FLOOR SYS. & TECH. PLAN - AREA "E"):

E1. NOTE NOT USED. (1)

E2. INSTALL CABLE TRAY SYSTEM AT APPROXIMATELY 3" ABOVE THE ACCESSIBLE CEILING GRID SYSTEM. PROVIDE ALL REQUIRED HORIZONTAL AND VERTICAL BENDS IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT. IN GENERAL, INSTALL THE CABLETRAY SYSTEMS WITH MINIMUM BENDS. VERTICAL CHANGES ARE NOT SHOWN ON THESE DRAWINGS AND SHALL BE COORDINATED IN THE FIELD.

E3. PROVIDE OPENINGS THROUGH ALL WALLS WHERE CABLETRAY SYSTEMS ARE REQUIRED TO BE ROUTED THROUGH (NON-RATED) WALLS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION REQUIREMENTS IN THE FIELD WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT.

E4. PROVIDE U.L. LISTED FIRE STOPPING SYSTEMS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING ARE REQUIRED TO PASS-THROUGH FIRE RATED AND / OR RATED WALL ASSEMBLIES.

E5. SEE CABLETRAY SCHEDULE, SHEET E1.1, FOR ADDITIONAL CABLETRAY AND CABLETRAY INSTALLATION REQUIREMENTS.

E6. PROVIDE A QUANTITY OF FOUR 4" CONDUITS THRU FLOOR FROM ACCESSIBLE CEILING CAVITY SPACE ON THE FLOOR BELOW. STUB 12" ABOVE FINISHED 2ND FLOOR. BUSH CONDUIT ENDS. BOND CONDUITS TO GROUND BUS BAR WITHIN DATA ROOM USING #10AWG COPPER CONDUCTOR. PROVIDE REMOVABLE FIRE STOP BISCUITS IN CONDUITS AFTER ALL CABLES HAVE BEEN INSTALLED. (FOR ROUTING OF LOW VOLTAGE DATA, VIDEO, AND ACCESS CONTROL TYPE CABLES). COORDINATE THE REQUIRED INSTALLATION LOCATION WITHIN THE ROOM WITH THE FIRST AND SECOND FLOOR FIELD CONDITIONS AND THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT.

E7. PROXIMITY READER FOR ACCESS TO ELEVATOR CAB. PROVIDE ALL REQUIRED CIRCUITS AND INTERCONNECT WITH THE ELEVATOR CONTROLLER. ACCESS INTO THE ELEVATOR CAB SHALL REQUIRE A VALID READ FROM THE PROXIMITY READER. PROXIMITY READER SHALL BE PART OF THE ACCESS CONTROL SYSTEM.

NOTES (SECOND FLOOR SYS. & TECH. PLAN - AREA "E") [CONT]:

E8. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

E9. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET BOX. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREA WITHIN THE MEDIA ROOM.

E10. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE AVI DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS MEDIA CENTER. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE A/V ACCESS CABINET.

E11. DATA OUTLET FOR WALL PHONE.

E12. DATA OUTLET FOR PRINTER.

E13. PROVIDE CABLETRAY SYSTEM FROM WALL-TO-WALL AND INSTALLED ABOVE THE INSTALLATION LOCATION FOR THE DATA EQUIPMENT RACKS. COORDINATE INSTALLATION LOCATION IN THE FIELD WITH THE FINAL INSTALLATION LOCATION OF THE DATA EQUIPMENT RACKS. INSTALL CABLETRAY SYSTEM AT APPROXIMATELY 1FT ABOVE THE TOP OF THE DATA EQUIPMENT RACKS TO THE BOTTOM OF THE CABLETRAY SYSTEM.

E14. PROVIDE CABLETRAY SYSTEMS ALONG ALL PERIMETER WALLS OF THE DATA EQUIPMENT ROOM. COORDINATE THE REQUIRED INSTALLATION HEIGHT IN FIELD WITH ALL OTHER INSTALLATION REQUIREMENTS WITHIN THE ROOM. THE CABLE TRAY SHALL BE INSTALLED JUST BELOW THE HEIGHT WHERE THE CONDUIT SLEEVES ARE PROVIDED TO ROUTE THE LOW VOLTAGE DATA CABLES INTO THE ADJACENT CORRIDOR SPACE.

NOTES (SECOND FLOOR SYS. & TECH. PLAN - AREA "E") [CONT]:

E15. PROVIDE A QUANTITY OF THREE DATA EQUIPMENT RACKS (4-POST). SEE DIVISION 27 PROJECT SPECIFICATIONS SECTION "271310 STRUCTURED DATA CABLING SYSTEMS" FOR ADDITIONAL REQUIREMENTS.

E16. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S ISLAND. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

E17. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE AVI DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE INSTRUCTOR'S A/V ACCESS CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

E18. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED STAIR LANDING TO BOTTOM OF OUTLET BOX. CENTER OUTLET BOX ON WALL. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIR AREAS.

E19. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIR AREAS.

E20. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

E21. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN AUDIO/VIDEO OUTLET A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

E22. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED STAIR LANDING TO BOTTOM OF OUTLET BOX. INSTALL OUTLET BOX ON THE WALL WHICH HAS THE STAIR TREADS EXTENDING FROM THE 1ST FLOOR TO THE INTERMEDIATE STAIR LANDING. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIR AREAS AND PERSONS COMING UP THE STAIRS FROM THE 1ST FLOOR.

E23. CAMERA SHALL BE INSTALLED WITHIN THE ELEVATOR CAB AND AIMED AS REQUIRED TO PROVIDE THE MAXIMUM VIEW OF ACTIVITY WITHIN THE ELEVATOR CAB. CONTRACTOR SHALL COORDINATE THE CAMERA DATA CABLING REQUIREMENTS WITH THE ELEVATOR PROVIDER PRIOR TO THE ELEVATOR SUBMITTAL PROCESS TO ENSURE THE CORRECT CABLING REQUIRED FOR THE CAMERA SYSTEM IS PROVIDED AS PART OF THIS PROJECT.

E24. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF AREAS WITHIN THE ADMIN ROOM.

E25. PROVIDE DATA OUTLETS WITHIN FURNITURE SYSTEM RACEWAY

E26. PROVIDE OUTLET BOX IN WALL WITH A 2-GANG RING AND WITH A QUANTITY OF TWO 1" CONDUIT RACEWAYS FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE. BUSH CONDUIT ENDS. (FOR ROUTING OF LOW VOLTAGE DATA CABLES TO DATA OUTLETS WITHIN THE FURNITURE SYSTEM. PROVIDE FLEXIBLE CONDUIT RACEWAY SYSTEMS FROM OUTLET FACEPLATE AS REQUIRED FOR INSTALLATION OF THE DATA CABLES TO THE FURNITURE SYSTEM RACEWAY.

E27. COORDINATE ALL ELECTRICAL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS AND MOUNTING HEIGHTS WITHIN THE ELEVATOR EQUIPMENT ROOM AND THE ELEVATOR SHAFT AREAS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN TO ENSURE INSTALLATION WILL MEET THE REQUIREMENTS OF THE ELEVATOR PROVIDER, ELEVATOR INSPECTOR AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

E28. INSTALL WITHIN TEACHER'S STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

E29. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR TOUCH PANEL WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

E30. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

E31. REFER TO TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

E32. APPROXIMATE INSTALLATION LOCATION FOR CONDUIT RACEWAY SYSTEMS WITH FIBER CABLES. SEE COMMUNICATION ROOM LOCATION PLAN - FIRST FLOOR, SHEET E3.1, FOR ADDITIONAL REQUIREMENTS.

E33. INSTRUCTOR'S ISLAND. PROVIDE DEVICE PLATE WITH ONE HDMI JACK. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE AVI DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE.

E34. PROVIDE DATA OUTLET HIGH ON WALL BEHIND MONITOR FOR VIDEO SURVEILLANCE.

E35. PROVIDE DATA OUTLET FOR NETWORK CONNECTION TO BUILDING MANAGEMENT SYSTEM (T.C.) CONTROL / MONITORING PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE T.C. CONTRACTOR PRIOR TO START OF ROUGH-IN.

E36. PROVIDE DATA CABLE FROM WALL CLOCK LOCATION TO CLOCK SYSTEM TO HEAD-END EQUIPMENT PROVIDED WITHIN DATA ROOM.

E37. PROVIDE DATA OUTLET HIGH ON WALL BEHIND DIGITAL SIGNAGE VIDEO MONITOR.

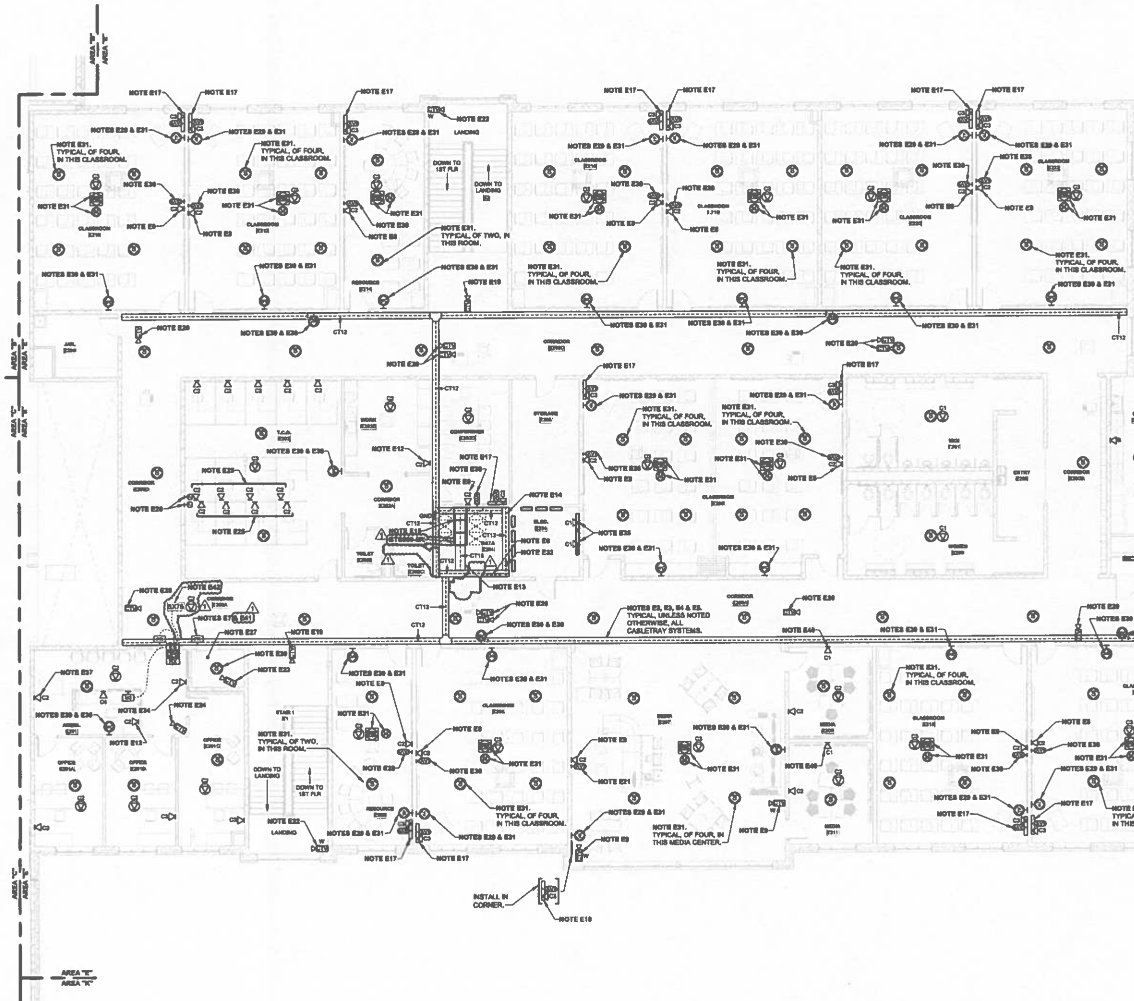
E38. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

E39. SPEAKER ASSEMBLY SHALL BE INSTALLED WITHIN THE ELEVATOR CAB. CONTRACTOR SHALL COORDINATE THE SPEAKER SYSTEM CABLING REQUIREMENTS WITH THE ELEVATOR PROVIDER PRIOR TO THE ELEVATOR SUBMITTAL PROCESS TO ENSURE THE CORRECT CABLING REQUIRED FOR SPEAKER SYSTEM IS PROVIDED AS PART OF THIS PROJECT.

E40. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE.

(1) E41. PROVIDE REQUIRED CIRCUITS FROM PROXIMITY READER AND ELEVATOR CONTROLLER TO BX75 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR D100A.

E42. GENERAL LOCATION FOR BX75 SERIES DOOR CONTROLLER / POWER SUPPLY (WITHIN ACCESSIBLE CEILING CAVITY SPACE) AND ASSOCIATED "C2" DATA OUTLET.



SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "E"

1/8" = 1'-0"

1/8"=1'-0" North

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CHRISTIAN COUNTY PUBLIC SCHOOLS

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KEYPLAN

Revisions:

#	Description	Date
1	Access Control System Mods	4/19/2024

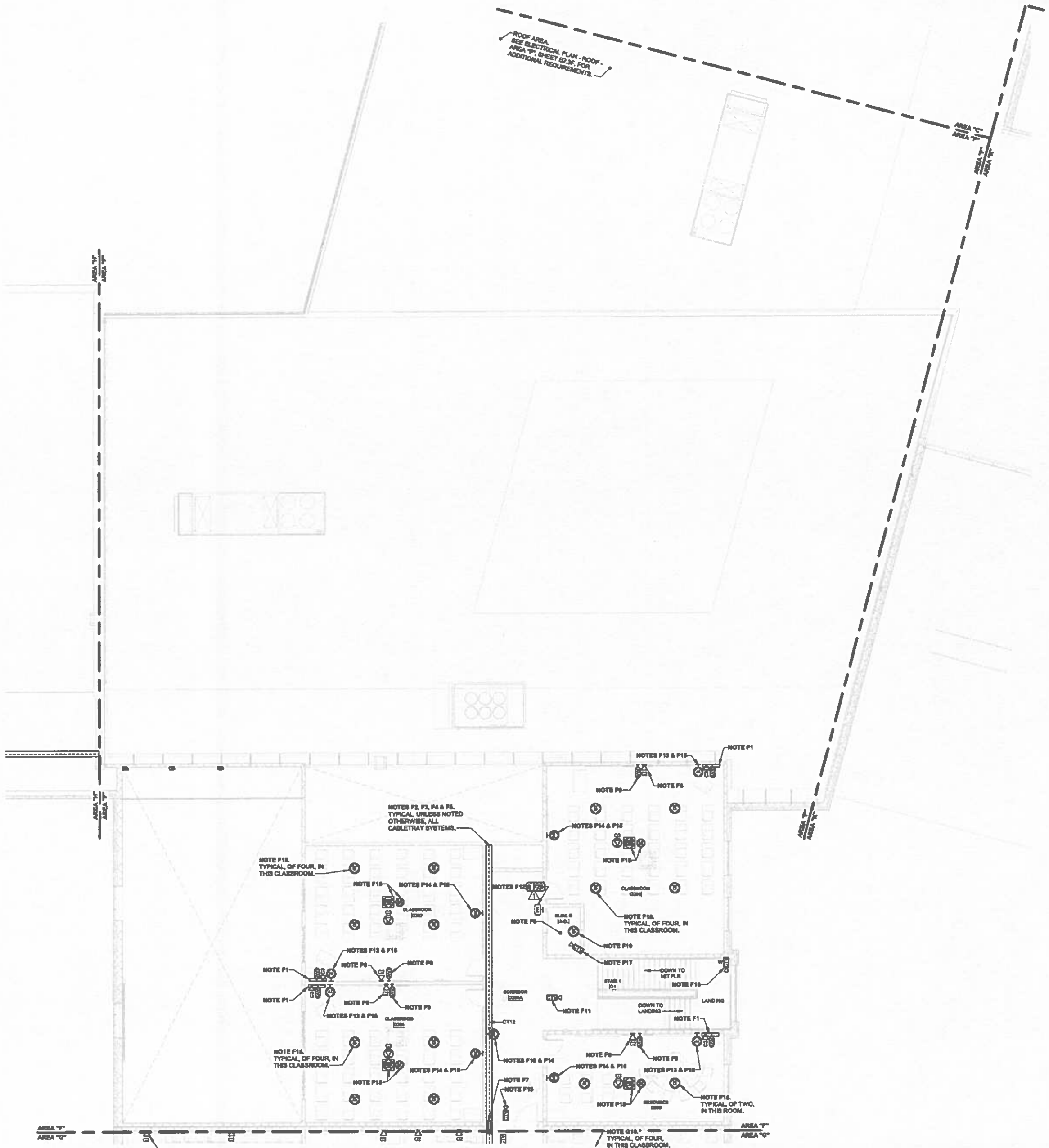
Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:
SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "E"

Architect's Project No: 2106-204

Date: May, 20

Drawing No: E3.2E



SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "F"

1/8" = 1'-0"

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS):

GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (I.E. SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS) [CONT]:

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS, MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.

NOTES (SECOND FLOOR SYS. & TECH. PLAN - AREA "G"):

F1. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE AVI DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE INSTRUCTOR'S A/V ACCESS CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

F2. INSTALL CABLE TRAY SYSTEM AT APPROXIMATELY 3" ABOVE THE ACCESSIBLE CEILING GRID SYSTEM. PROVIDE ALL REQUIRED HORIZONTAL AND VERTICAL BENDS IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT. IN GENERAL, INSTALL THE CABLETRAY SYSTEMS WITH MINIMUM BENDS. VERTICAL CHANGES ARE NOT SHOWN ON THESE DRAWINGS AND SHALL BE COORDINATED IN THE FIELD.

F3. PROVIDE OPENINGS THROUGH ALL WALLS WHERE CABLETRAY SYSTEMS ARE REQUIRED TO BE ROUTED THROUGH (NON-RATED) WALLS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION REQUIREMENTS IN THE FIELD WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT.

F4. PROVIDE U.L. LISTED FIRE STOPPING SYSTEMS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING ARE REQUIRED TO PASS-THROUGH FIRE RATED AND / OR RATED WALL ASSEMBLIES.

F5. SEE CABLETRAY SCHEDULE, SHEET E1.1, FOR ADDITIONAL CABLETRAY AND CABLETRAY INSTALLATION REQUIREMENTS.

F6. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

F7. PROVIDE SPECIFIED TECHNOLOGIES INC. EZ PATH SERIES 44+ FIRE RATED PATHWAY ASSEMBLIES (QUANTITY OF THREE ASSEMBLIES GANGED SIDE-BY-SIDE) THRU FIRE WALL FOR ROUTING OF LOW VOLTAGE DATA CABLES FROM CABLETRAY SYSTEM TO CABLETRAY SYSTEM. INSTALL PER MANUFACTURER'S REQUIREMENTS TO ENSURE RATING OF WALL AND ALLOW INSTALLATION OF THE REQUIRED DATA CABLES.

F8. COORDINATE ALL ELECTRICAL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS AND MOUNTING HEIGHTS WITHIN THE ELEVATOR EQUIPMENT ROOM AND THE ELEVATOR SHAFT AREAS WITH THE ELEVATOR PROVIDER PRIOR TO START OF ROUGH-IN TO ENSURE INSTALLATION WILL MEET THE REQUIREMENTS OF THE ELEVATOR PROVIDER, ELEVATOR INSPECTOR AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

F9. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

F10. PROVIDE DATA CABLE FROM WALL CLOCK LOCATION TO CLOCK SYSTEM TO HEAD-END EQUIPMENT PROVIDED WITHIN DATA ROOM.

F11. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIR AREAS.

F12. PROXIMITY READER FOR ACCESS TO ELEVATOR CAB. PROVIDE ALL REQUIRED CIRCUITS AND INTERCONNECT WITH THE ELEVATOR CONTROLLER. ACCESS INTO THE ELEVATOR CAB SHALL REQUIRE A VALID READ FROM THE PROXIMITY READER. PROXIMITY READER SHALL BE PART OF THE ACCESS CONTROL SYSTEM.

F13. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR TOUCH PANEL WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

F14. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

F15. REFER TO TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

F16. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED STAIR LANDING TO BOTTOM OF OUTLET BOX. INSTALL OUTLET BOX ON THE WALL WHICH HAS THE STAIR TREADS EXTENDING FROM THE 1ST FLOOR TO THE INTERMEDIATE STAIR LANDING. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIR AREAS AND PERSONS COMING UP THE STAIRS FROM THE 1ST FLOOR.

F17. CAMERA SHALL BE INSTALLED WITHIN THE ELEVATOR CAB AND AIMED AS REQUIRED TO PROVIDE THE MAXIMUM VIEW OF ACTIVITY WITHIN THE ELEVATOR CAB. CONTRACTOR SHALL COORDINATE THE CAMERA DATA CABLING REQUIREMENTS WITH THE ELEVATOR PROVIDER PRIOR TO THE ELEVATOR SUBMITTAL PROCESS TO ENSURE THE CORRECT CABLING REQUIRED FOR THE CAMERA SYSTEM IS PROVIDED AS PART OF THIS PROJECT.

F18. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

F19. SPEAKER ASSEMBLY SHALL BE INSTALLED WITHIN THE ELEVATOR CAB. CONTRACTOR SHALL COORDINATE THE SPEAKER SYSTEM CABLING REQUIREMENTS WITH THE ELEVATOR PROVIDER PRIOR TO THE ELEVATOR SUBMITTAL PROCESS TO ENSURE THE CORRECT CABLING REQUIRED FOR SPEAKER SYSTEM IS PROVIDED AS PART OF THIS PROJECT.

(1) F20. PROVIDE REQUIRED CIRCUITS FROM PROXIMITY READER AND ELEVATOR CONTROLLER TO BX75 EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR G100A.

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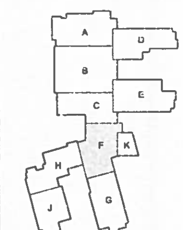


KEYPLAN

Revisions:

#	Description	Date
1	[illegible]	[illegible]

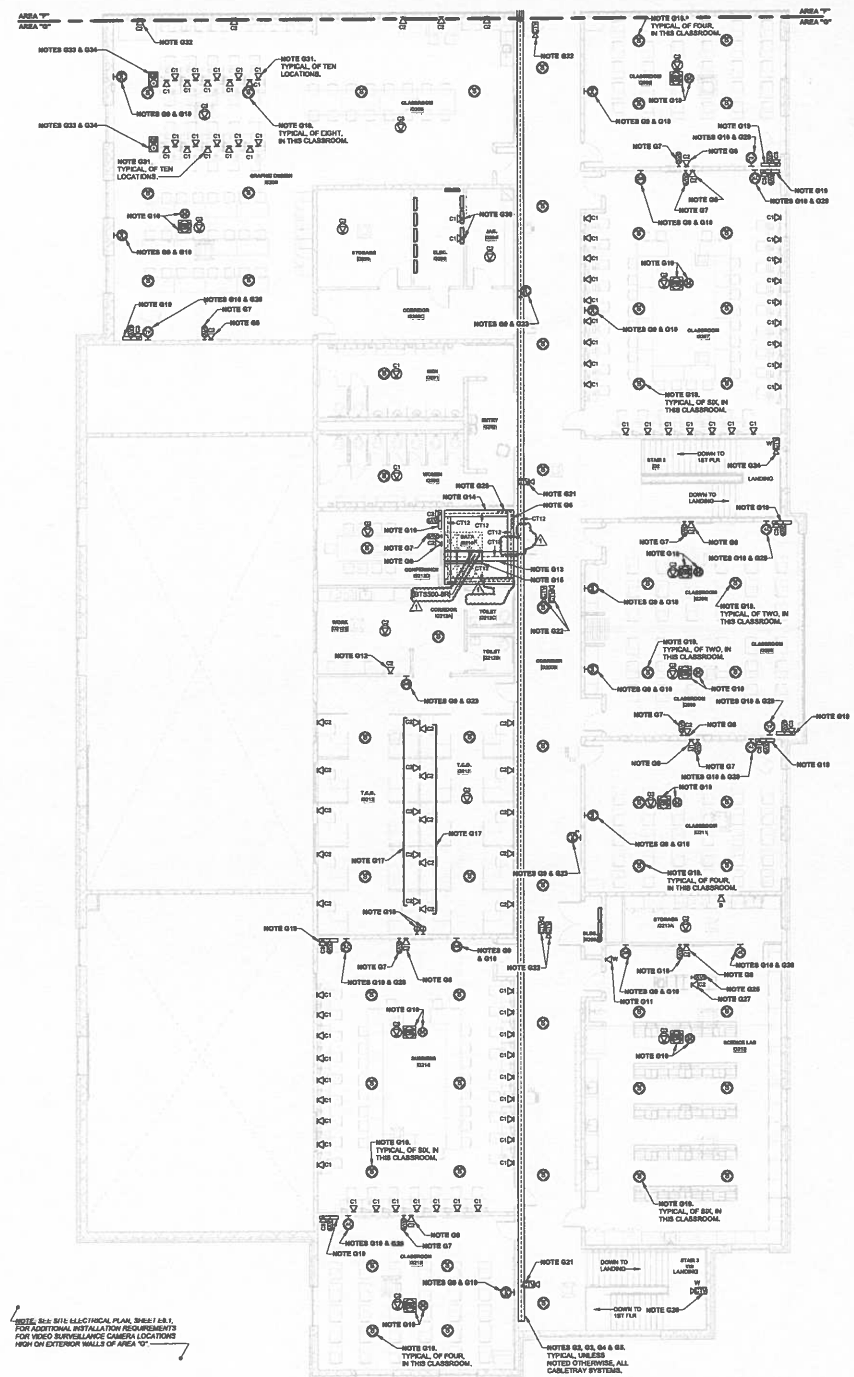
Designed By:	Drawn By:	Checked By:
MJS	SDB	MJS

Sheet title: SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "F"

Architect's Project No.: 2106-204

Date: May, 20

Drawing No.: E3.2F



SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "G" 1/8"=1'-0"

1/8" = 1'-0"

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS):

GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (I.E. SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES (FOR ALL SYSTEMS & TECH. PLANS) [CONT]:

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS, MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.

NOTES (SECOND FLOOR SYS. & TECH. PLAN - AREA "G"):

G1. NOTE NOT USED. (1)

G2. INSTALL CABLE TRAY SYSTEM AT APPROXIMATELY 3" ABOVE THE ACCESSIBLE CEILING GRID SYSTEM. PROVIDE ALL REQUIRED HORIZONTAL AND VERTICAL BENDS IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT. IN GENERAL, INSTALL THE CABLETRAY SYSTEMS WITH MINIMUM BENDS. VERTICAL CHANGES ARE NOT SHOWN ON THESE DRAWINGS AND SHALL BE COORDINATED IN THE FIELD.

G3. PROVIDE OPENINGS THROUGH ALL WALLS WHERE CABLETRAY SYSTEMS ARE REQUIRED TO BE ROUTED THROUGH (NON-RATED) WALLS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION REQUIREMENTS IN THE FIELD WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT.

G4. PROVIDE U.L. LISTED FIRE STOPPING SYSTEMS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING ARE REQUIRED TO PASS-THROUGH FIRE RATED AND / OR RATED WALL ASSEMBLIES.

G5. SEE CABLETRAY SCHEDULE, SHEET E1.1, FOR ADDITIONAL CABLETRAY AND CABLETRAY INSTALLATION REQUIREMENTS.

G6. PROVIDE A QUANTITY OF FOUR 4" CONDUITS THRU FLOOR FROM ACCESSIBLE CEILING CAVITY SPACE ON THE FLOOR BELOW. STUB 12" ABOVE FINISHED 2ND FLOOR. BUSH CONDUIT ENDS. BOND CONDUITS TO GROUND BUS BAR WITHIN DATA ROOM USING #10AWG COPPER CONDUCTOR. PROVIDE REMOVABLE FIRE STOP BISCUITS IN CONDUITS AFTER ALL CABLES HAVE BEEN INSTALLED. (FOR ROUTING OF LOW VOLTAGE DATA, VIDEO, AND ACCESS CONTROL TYPE CABLES). COORDINATE THE REQUIRED INSTALLATION LOCATION WITHIN THE ROOM WITH THE FIRST AND SECOND FLOOR FIELD CONDITIONS AND THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT.

G7. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

G8. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

G9. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

G10. REFER TO TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.8, FOR ADDITIONAL REQUIREMENTS.

G11. DATA OUTLET FOR WALL PHONE.

G12. DATA OUTLET FOR PRINTER.

G13. PROVIDE CABLETRAY SYSTEM FROM WALL-TO-WALL AND INSTALLED ABOVE THE INSTALLATION LOCATION FOR THE DATA EQUIPMENT RACKS. COORDINATE INSTALLATION LOCATION IN THE FIELD WITH THE FINAL INSTALLATION LOCATION OF THE DATA EQUIPMENT RACKS. INSTALL CABLETRAY SYSTEM AT APPROXIMATELY 1FT ABOVE THE TOP OF THE DATA EQUIPMENT RACKS TO THE BOTTOM OF THE CABLETRAY SYSTEM.

G14. PROVIDE CABLETRAY SYSTEMS ALONG ALL PERIMETER WALLS OF THE DATA EQUIPMENT ROOM. COORDINATE THE REQUIRED INSTALLATION HEIGHT IN FIELD WITH ALL OTHER INSTALLATION REQUIREMENTS WITHIN THE ROOM. THE CABLE TRAY SHALL BE INSTALLED JUST BELOW THE HEIGHT WHERE THE CONDUIT SLEEVES ARE PROVIDED TO ROUTE THE LOW VOLTAGE DATA CABLES INTO THE ADJACENT CORRIDOR SPACE.

G15. PROVIDE A QUANTITY OF THREE DATA EQUIPMENT RACKS (4-POST). SEE DIVISION 27 PROJECT SPECIFICATIONS SECTION "271310 STRUCTURED DATA CABLING SYSTEMS" FOR ADDITIONAL REQUIREMENTS.

G16. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S ISLAND. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

G17. PROVIDE DATA OUTLETS WITHIN FURNITURE SYSTEM RACEWAY.

G18. PROVIDE OUTLET BOX IN WALL WITH A 3-GANG RING AND WITH A QUANTITY OF THREE 1" CONDUIT RACEWAYS FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE. BUSH CONDUIT ENDS. (FOR ROUTING OF LOW VOLTAGE DATA CABLES TO DATA OUTLETS WITHIN THE FURNITURE SYSTEM. PROVIDE FLEXIBLE CONDUIT RACEWAY SYSTEMS FROM OUTLET FACEPLATE AS REQUIRED FOR INSTALLATION OF THE DATA CABLES TO THE FURNITURE SYSTEM RACEWAY.

G19. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE INSTRUCTOR'S A/V ACCESS CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

G20. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED STAIR LANDING TO BOTTOM OF OUTLET BOX. CENTER OUTLET BOX ON WALL. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIR AREAS.

G21. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIR AREAS.

G22. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

NOTES (SECOND FLOOR SYS. & TECH. PLAN - AREA "G") [CONT]:

G23. PROVIDE DATA CABLE FROM WALL CLOCK LOCATION TO CLOCK SYSTEM TO HEAD-END EQUIPMENT PROVIDED WITHIN DATA ROOM.

G24. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED STAIR LANDING TO BOTTOM OF OUTLET BOX. INSTALL OUTLET BOX ON THE WALL WHICH HAS THE STAIR TREADS EXTENDING FROM THE 1ST FLOOR TO THE INTERMEDIATE STAIR LANDING. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIR AREAS AND PERSONS COMING UP THE STAIRS FROM THE 1ST FLOOR.

G25. INSTRUCTOR'S ISLAND. PROVIDE DEVICE PLATE WITH ONE HDMI JACK. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE.

G26. APPROXIMATE INSTALLATION LOCATION FOR CONDUIT RACEWAY SYSTEMS WITH FIBER CABLES. SEE COMMUNICATION ROOM LOCATION PLAN - FIRST FLOOR, SHEET E3.1, FOR ADDITIONAL REQUIREMENTS.

G27. INSTALL WITHIN TEACHER'S STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

G28. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR TOUCH PANEL WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

G30. PROVIDE DATA OUTLET FOR NETWORK CONNECTION TO BUILDING MANAGEMENT SYSTEM (T.C.) CONTROL / MONITORING PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE T.C. CONTRACTOR PRIOR TO START OF ROUGH-IN.

G31. PROVIDE DATA CABLES TO DATA OUTLETS WITHIN FURNITURE SYSTEM RACEWAY FROM MULTI-FUNCTION POKE-THRU ASSEMBLY.

G32. PROVIDE DATA OUTLET FOR PLOTTER.

G33. PROVIDE FLEXIBLE METAL CONDUIT RACEWAY SYSTEM FROM POKE-THRU ASSEMBLY TO FURNITURE SYSTEM RACEWAYS.

G34. SEE POWER PLAN - SECOND FLOOR - AREA "G", SHEET E2.2G, FOR ADDITIONAL REQUIREMENTS.

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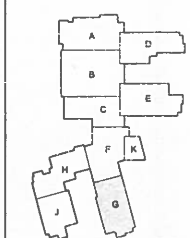


KEYPLAN

Revisions:

#	Description	Date
1	Access Control System Mods	4/18/2024

Designed By:	Drawn By:	Checked By:
MJS	SDB	AJS

Sheet title: SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "G"

Architect's Project No: 2106-204

Date: May, 20

Drawing No: E3.2G

GENERAL NOTES
(FOR ALL SYSTEMS & TECH. PLANS):

GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (I.E., SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES
(FOR ALL SYSTEMS & TECH. PLANS) [CONT]:

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS, MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.

NOTES (SECOND FLOOR SYS. & TECH. PLAN - AREA "H"):

H1. PROXIMITY READER FOR ACCESS TO ELEVATOR CAB. PROVIDE ALL REQUIRED CIRCUITS AND INTERCONNECT WITH THE ELEVATOR CONTROLLER. ACCESS INTO THE ELEVATOR CAB SHALL REQUIRE A VALID READ FROM THE PROXIMITY READER. PROXIMITY READER SHALL BE PART OF THE ACCESS CONTROL SYSTEM.

H2. INSTALL CABLE TRAY SYSTEM AT APPROXIMATELY 3" ABOVE THE ACCESSIBLE CEILING GRID SYSTEM. PROVIDE ALL REQUIRED HORIZONTAL AND VERTICAL BENDS IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT. IN GENERAL, INSTALL THE CABLETRAY SYSTEMS WITH MINIMUM BENDS. VERTICAL CHANGES ARE NOT SHOWN ON THESE DRAWINGS AND SHALL BE COORDINATED IN THE FIELD.

H3. PROVIDE OPENINGS THROUGH ALL WALLS WHERE CABLETRAY SYSTEMS ARE REQUIRED TO BE ROUTED THROUGH (NON-RATED) WALLS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION REQUIREMENTS IN THE FIELD WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT.

H4. PROVIDE U.L. LISTED FIRE STOPPING SYSTEMS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING ARE REQUIRED TO PASS-THROUGH FIRE RATED AND / OR RATED WALL ASSEMBLIES.

H5. SEE CABLETRAY SCHEDULE, SHEET E1.1, FOR ADDITIONAL CABLETRAY AND CABLETRAY INSTALLATION REQUIREMENTS.

H6. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE INSTRUCTOR'S A/V ACCESS CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

H7. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

H8. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

H9. PROVIDE DATA CABLE FROM WALL CLOCK LOCATION TO CLOCK SYSTEM TO HEAD-END EQUIPMENT PROVIDED WITHIN DATA ROOM.

H10. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIR AREAS.

H11. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 11'-7" ABOVE FINISHED STAIR LANDING TO BOTTOM OF OUTLET BOX. INSTALL OUTLET BOX ON THE WALL WHICH HAS THE STAIR TREADS EXTENDING FROM THE 1ST FLOOR TO THE INTERMEDIATE STAIR LANDING. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIR AREAS AND PERSONS COMING UP THE STAIRS FROM THE 1ST FLOOR.

H12. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

H13. CAMERA SHALL BE INSTALLED WITHIN THE ELEVATOR CAB AND AIMED AS REQUIRED TO PROVIDE THE MAXIMUM VIEW OF ACTIVITY WITHIN THE ELEVATOR CAB. COORDINATE THE CAMERA DATA CABLING REQUIREMENTS WITH THE ELEVATOR PROVIDER PRIOR TO THE ELEVATOR SUBMITTAL PROCESS TO ENSURE THE CORRECT CABLING REQUIRED FOR THE CAMERA SYSTEM IS PROVIDED AS PART OF THIS PROJECT.

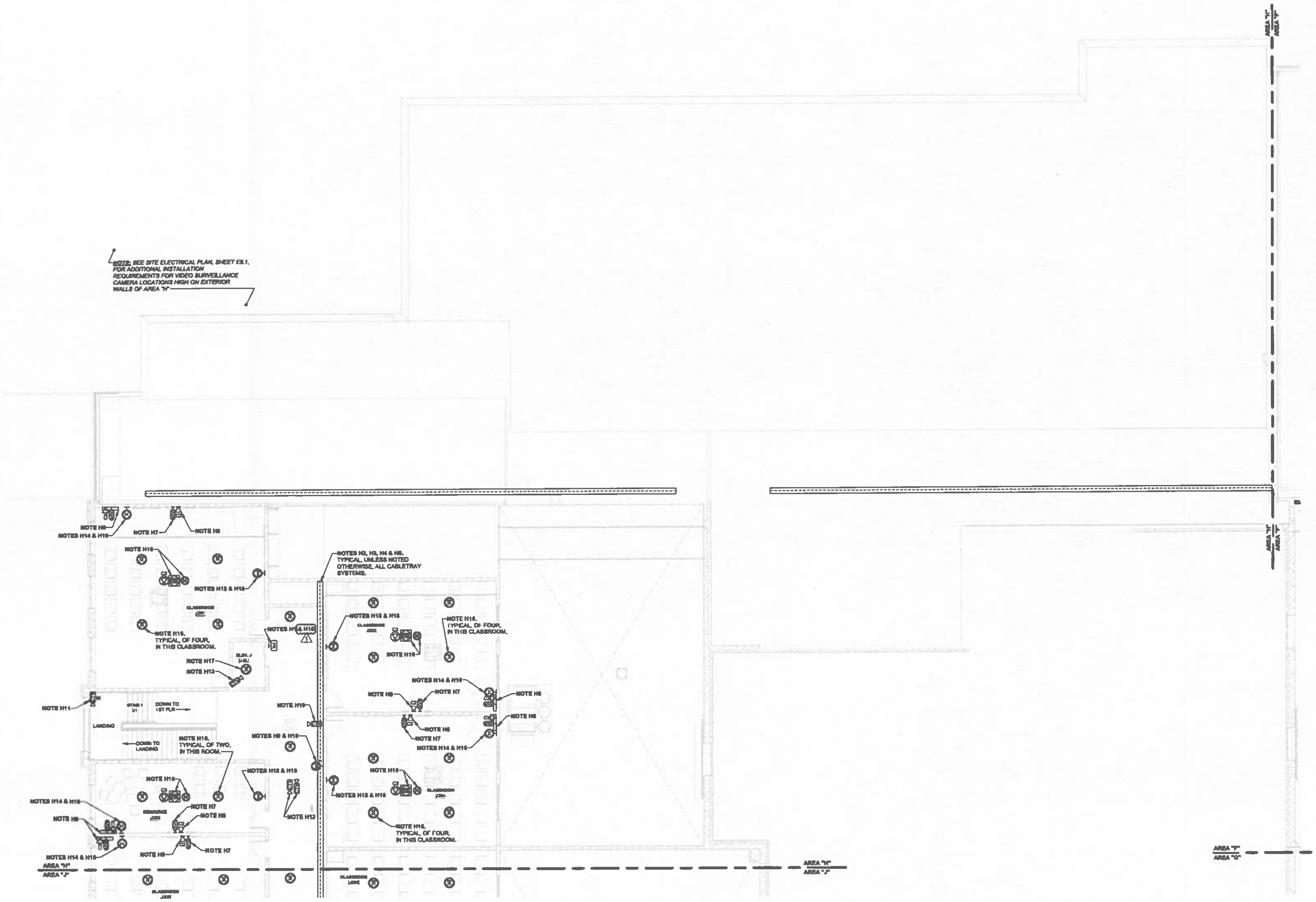
H14. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR TOUCH PANEL WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

H15. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

H16. REFER TO TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

H17. SPEAKER ASSEMBLY SHALL BE INSTALLED WITHIN THE ELEVATOR CAB. CONTRACTOR SHALL COORDINATE THE SPEAKER SYSTEM CABLING REQUIREMENTS WITH THE ELEVATOR PROVIDER PRIOR TO THE ELEVATOR SUBMITTAL PROCESS TO ENSURE THE CORRECT CABLING REQUIRED FOR SPEAKER SYSTEM IS PROVIDED AS PART OF THIS PROJECT.

(1) H18. PROVIDE REQUIRED CIRCUITS FROM PROXIMITY READER AND ELEVATOR CONTROLLER TO SXXS EQUIPMENT INSTALLED WITHIN CEILING CAVITY SPACE OF CORRIDOR J100A.



SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "H"

1/8" = 1'-0"

1/8"=1'-0"

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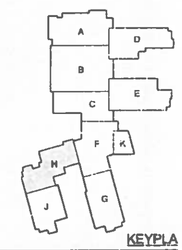


KEYPLAN

Revisions:

#	Description	Date
1	Access Control System Mods	[illegible]

Designed By:	Drawn By:	Checked By:
MJB	SDG	MJB

Sheet title:
SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "H"

Architect's Project No: 2106-204

Date: May, 20

Drawing No: E3.2H

GENERAL NOTES
(FOR ALL SYSTEMS & TECH. PLANS):

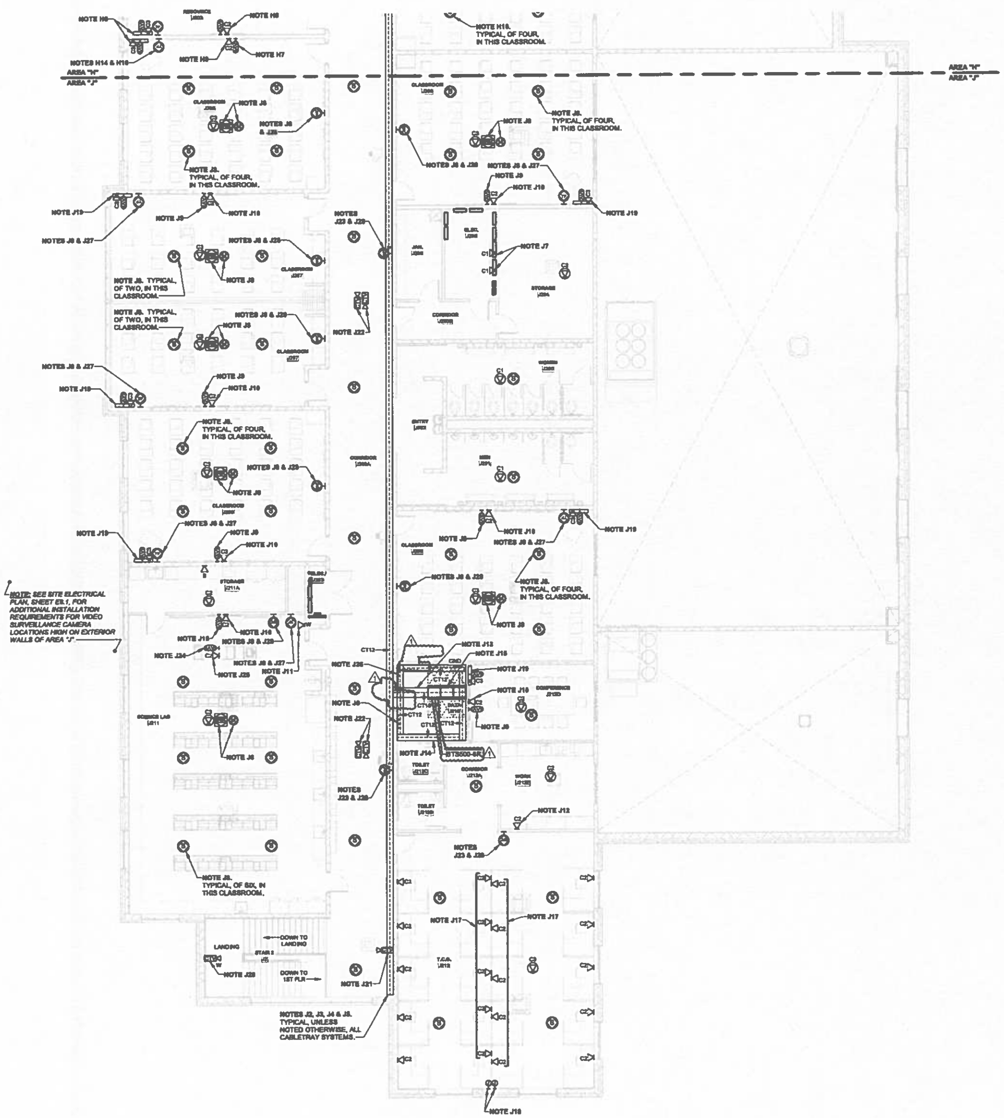
GN1. CONDUIT SLEEVES FOR ROUTING OF LOW VOLTAGE CABLES THROUGH NON-RATED WALLS. PROVIDE CONDUIT SLEEVES THROUGH WALLS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING SYSTEMS PASS THROUGH NON-RATED WALL ASSEMBLIES. PROVIDE SLEEVES OF SUFFICIENT OPENING SIZE TO ACCOMMODATE CABLES PROVIDED AS PART OF THIS PROJECT PLUS WITH AN ADDITIONAL MINIMUM CAPACITY OF 50% FOR FUTURE CABLE INSTALLATION. PROVIDE BUSHINGS ON EACH END OF CONDUIT SLEEVES FOR PROTECTION OF CABLING. PROVIDE BOND BUSHINGS ON ALL SLEEVES AND BOND TO THE EQUIPMENT GROUND BUS BAR IN THE NEAREST DATA EQUIPMENT ROOM. PROVIDE #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN2. DATA SYSTEM CABLES. PROVIDE SLEEVES DEDICATED FOR USE WITH THE DATA NETWORK CABLING SYSTEMS (I.E. SLEEVES PROVIDED FOR DATA NETWORK CABLING SHALL NOT BE USED FOR OTHER SYSTEMS, SUCH AS BUILDING MANAGEMENT, TEMPERATURE CONTROLS, ACCESS CONTROL, FIRE ALARM, ETC.).

GENERAL NOTES
(FOR ALL SYSTEMS & TECH. PLANS) [CONT]:

GN3. BOND THE METALLIC ENCLOSURES OF ALL FIRE RATED CABLE PASS-THRU ASSEMBLIES TO THE EQUIPMENT GROUND CONDUCTOR PROVIDED WITHIN THE CABLETRAY ASSEMBLIES USING #10AWG COPPER MINIMUM GROUND BONDING CONDUCTOR.

GN4. SEE TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS REGARDING THE SOUND REINFORCEMENT INSTALLATION REQUIREMENTS WITHIN CLASSROOMS, MEDIA AND OTHER AREAS SHOWN TO BE PROVIDED WITH SPEAKERS AND OTHER EQUIPMENT ASSOCIATED WITH THE INTEGRATED IP BASED SAFETY & INTERCOMMUNICATION SYSTEM EQUIPMENT.



SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "J"

1/8" = 1'-0"

NOTES (SECOND FLOOR SYS. & TECH. PLAN - AREA "J"):

J1. NOTE NOT USED.

J2. INSTALL CABLE TRAY SYSTEM AT APPROXIMATELY 3" ABOVE THE ACCESSIBLE CEILING GRID SYSTEM. PROVIDE ALL REQUIRED HORIZONTAL AND VERTICAL BENDS IN CABLETRAY SYSTEM TO ACCOMMODATE THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT. IN GENERAL, INSTALL THE CABLETRAY SYSTEMS WITH MINIMUM BENDS. VERTICAL CHANGES ARE NOT SHOWN ON THESE DRAWINGS AND SHALL BE COORDINATED IN THE FIELD.

J3. PROVIDE OPENINGS THROUGH ALL WALLS WHERE CABLETRAY SYSTEMS ARE REQUIRED TO BE ROUTED THROUGH (NON-RATED) WALLS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION REQUIREMENTS IN THE FIELD WITH ALL OTHER TRADES INVOLVED ON THIS PROJECT.

J4. PROVIDE U.L. LISTED FIRE STOPPING SYSTEMS AT ALL LOCATIONS WHERE LOW VOLTAGE CABLING ARE REQUIRED TO PASS-THROUGH FIRE RATED AND / OR RATED WALL ASSEMBLIES.

J5. SEE CABLETRAY SCHEDULE, SHEET E1.1, FOR ADDITIONAL CABLETRAY AND CABLETRAY INSTALLATION REQUIREMENTS.

J6. PROVIDE A QUANTITY OF FOUR 4" CONDUITS THRU FLOOR FROM ACCESSIBLE CEILING CAVITY SPACE ON THE FLOOR BELOW. STUB 12" ABOVE FINISHED 2ND FLOOR. BUSH CONDUIT ENDS. BOND CONDUITS TO GROUND BUS BAR WITHIN DATA ROOM USING #10AWG COPPER CONDUCTOR. PROVIDE REMOVABLE FIRE STOP BISCUITS IN CONDUITS AFTER ALL CABLES HAVE BEEN INSTALLED. (FOR ROUTING OF LOW VOLTAGE DATA, VIDEO, AND ACCESS CONTROL TYPE CABLES). COORDINATE THE REQUIRED INSTALLATION LOCATION WITHIN THE ROOM WITH THE FIRST AND SECOND FLOOR FIELD CONDITIONS AND THE INSTALLATION REQUIREMENTS OF ALL TRADES INVOLVED ON THIS PROJECT.

J7. PROVIDE DATA OUTLET FOR NETWORK CONNECTION TO BUILDING MANAGEMENT SYSTEM (T.C.) CONTROL / MONITORING PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE T.C. CONTRACTOR PRIOR TO START OF ROUGH-IN.

J8. REFER TO TYPICAL CLASSROOM SOUND REINFORCEMENT SYSTEM INTERCONNECTION DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

J9. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

J10. DATA OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT IN FIELD WITH THE ARCHITECT AND INSTALLATION REQUIREMENTS FOR THE INTERACTIVE FLAT PANEL. IN GENERAL, INSTALL BEHIND THE INTERACTIVE FLAT PANEL IN LOCATION WHICH HIDES THE OUTLET FROM VIEW AND STILL ALLOWS THE OUTLETS TO BE ACCESSIBLE. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

J11. DATA OUTLET FOR WALL PHONE.

J12. DATA OUTLET FOR PRINTER.

J13. PROVIDE CABLETRAY SYSTEM FROM WALL-TO-WALL AND INSTALLED ABOVE THE INSTALLATION LOCATION FOR THE DATA EQUIPMENT RACKS. COORDINATE INSTALLATION LOCATION IN THE FIELD WITH THE FINAL INSTALLATION LOCATION OF THE DATA EQUIPMENT RACKS. INSTALL CABLETRAY SYSTEM AT APPROXIMATELY 1FT ABOVE THE TOP OF THE DATA EQUIPMENT RACKS TO THE BOTTOM OF THE CABLETRAY SYSTEM.

J14. PROVIDE CABLETRAY SYSTEMS ALONG ALL PERIMETER WALLS OF THE DATA EQUIPMENT ROOM. COORDINATE THE REQUIRED INSTALLATION HEIGHT IN FIELD WITH ALL OTHER INSTALLATION REQUIREMENTS WITHIN THE ROOM. THE CABLE TRAY SHALL BE INSTALLED JUST BELOW THE HEIGHT WHERE THE CONDUIT SLEEVES ARE PROVIDED TO ROUTE THE LOW VOLTAGE DATA CABLES INTO THE ADJACENT CORRIDOR SPACE.

J15. PROVIDE A QUANTITY OF THREE DATA EQUIPMENT RACKS (4-POST). SEE DIVISION 27 PROJECT SPECIFICATIONS SECTION "271310 STRUCTURED DATA CABLING SYSTEMS" FOR ADDITIONAL REQUIREMENTS.

J16. AUDIO/VIDEO INPUT OUTLET FOR WALL MOUNT INTERACTIVE FLAT PANEL. PROVIDE OUTLET BOX WITH 2-GANG RING (BEHIND THE INTERACTIVE FLAT PANEL). PROVIDE DEVICE PLATE WITH 3.5MM AUDIO JACK WITH REQUIRED AUDIO CABLING TO THE SOUND REINFORCEMENT SYSTEM CABINET. PROVIDE ONE HDMI JACK IN DEVICE PLATE. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE INSTRUCTOR'S ISLAND. PROVIDE TWO 1" CONDUITS FROM THE OUTLET BOX TO THE ACCESSIBLE CEILING CAVITY SPACE WITHIN THE ROOM. BUSH CONDUIT ENDS. SEE TYPICAL INTERACTIVE FLAT PANEL LOCATION ELECTRICAL REQUIREMENTS DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

J17. PROVIDE DATA OUTLETS WITHIN FURNITURE SYSTEM RACEWAY.

J18. PROVIDE OUTLET BOX IN WALL WITH A 3-GANG RING AND WITH A QUANTITY OF THREE 1" CONDUIT RACEWAYS FROM OUTLET BOX TO ACCESSIBLE CEILING CAVITY SPACE. BUSH CONDUIT ENDS. (FOR ROUTING OF LOW VOLTAGE DATA CABLES TO DATA OUTLETS WITHIN THE FURNITURE SYSTEM. PROVIDE FLEXIBLE CONDUIT RACEWAY SYSTEMS FROM OUTLET FACEPLATE AS REQUIRED FOR INSTALLATION OF THE DATA CABLES TO THE FURNITURE SYSTEM RACEWAY.

J19. QUANTITY OF ONE AUDIO/VIDEO INPUT OUTLET AND ONE DATA OUTLET WITHIN INSTRUCTOR'S A/V ACCESS CABINET. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE. COORDINATE THE REQUIRED INSTALLATION LOCATIONS AND MOUNTING HEIGHT WITH THE INSTALLATION REQUIREMENTS OF THE INSTRUCTOR'S A/V ACCESS CABINET. SEE TYPICAL INSTRUCTOR'S A/V ACCESS CABINET LOCATION ELECTRICAL REQUIREMENT DETAIL, SHEET E1.9, FOR ADDITIONAL REQUIREMENTS.

J20. FLUSH MOUNT OUTLET BOX IN WALL AT APPROXIMATELY 12'-0 ABOVE FINISHED STAIR LANDING TO BOTTOM OF OUTLET BOX. CENTER OUTLET BOX ON WALL. CAMERA SHALL BE INSTALLED OVER OUTLET BOX AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIR AREAS.

J21. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF STAIR AREAS.

J22. CAMERA SHALL BE INSTALLED ON CEILING AND AIMED AS REQUIRED TO PROVIDE MAXIMUM VIEW OF CORRIDOR AREAS.

J23. PROVIDE DATA CABLE FROM WALL CLOCK LOCATION TO CLOCK SYSTEM TO HEAD-END EQUIPMENT PROVIDED WITHIN DATA RACK.

J24. INSTRUCTOR'S ISLAND. PROVIDE DEVICE PLATE WITH ONE HDMI JACK. PROVIDE HDMI CABLING FROM HDMI JACK IN DEVICE PLATE TO THE HDMI JACK PROVIDED WITHIN THE A/V DEVICE PLATE PROVIDED BEHIND THE INTERACTIVE FLAT PANEL WITHIN THIS CLASSROOM SPACE.

J25. INSTALL WITHIN TEACHER'S STATION CASEWORK. COORDINATE ROUTING OF CONDUIT FROM BELOW FLOOR THRU CASEWORK WITH THE CASEWORK PROVIDER PRIOR TO START OF ROUGH-IN. SEE CASEWORK DETAILS ON ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

J26. APPROXIMATE INSTALLATION LOCATION FOR CONDUIT RACEWAY SYSTEMS WITH FIBER CABLES. SEE COMMUNICATION ROOM LOCATION PLAN - FIRST FLOOR, SHEET E3.1, FOR ADDITIONAL REQUIREMENTS.

NOTES (SECOND FLOOR SYS. & TECH. PLAN - AREA "J") [CONT]:

J27. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR TOUCH PANEL WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

J28. COORDINATE THE REQUIRED INSTALLATION AND MOUNTING HEIGHT FOR WALL CLOCK WITH ARCHITECT PRIOR TO START OF ROUGH-IN.

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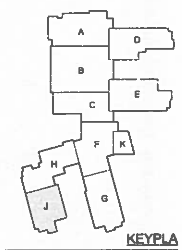


KEYPLAN

Revisions:

#	Description	Date
1	Access Control System Mods	4/18/2024

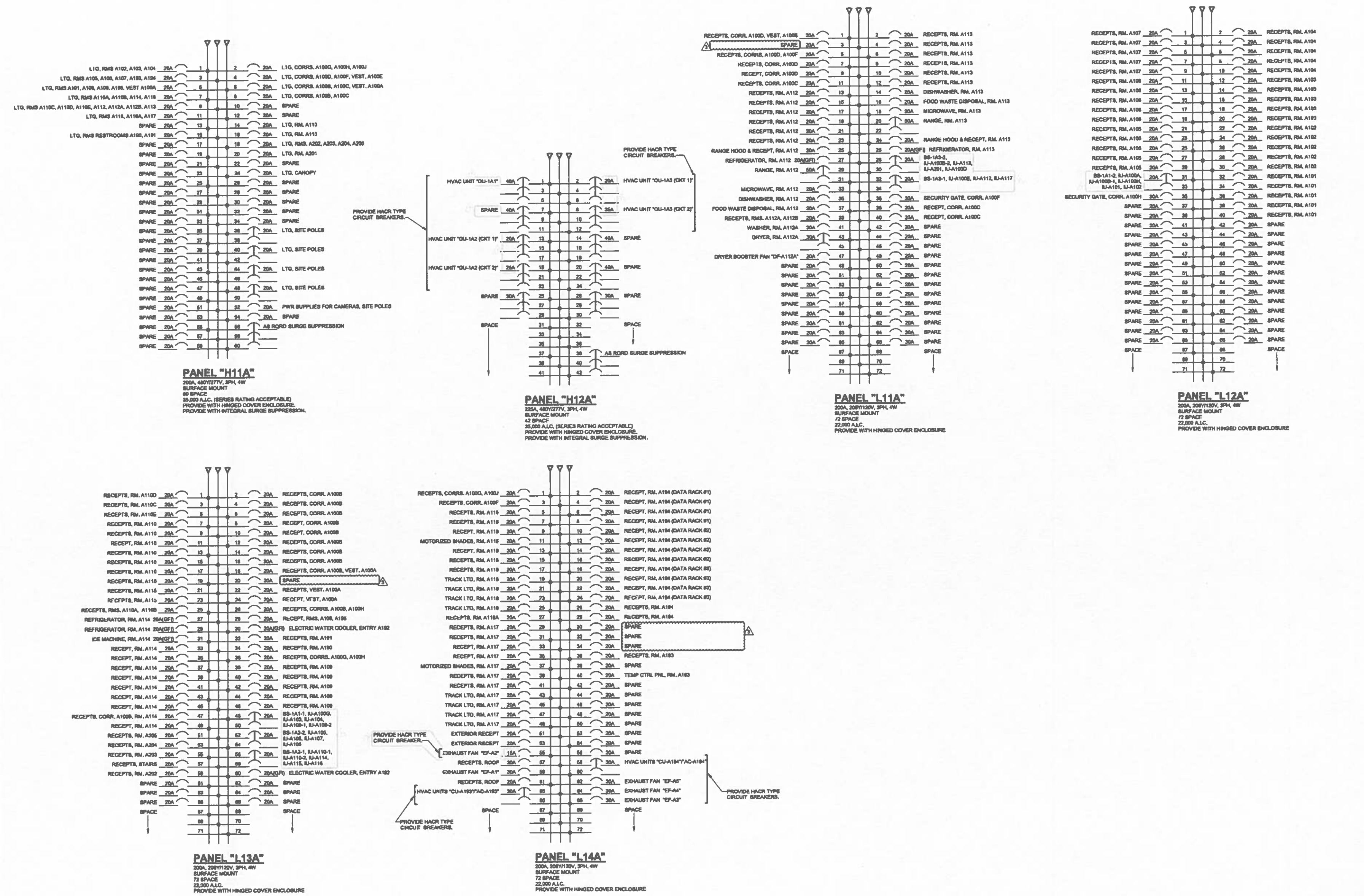
Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:
SYSTEMS & TECHNOLOGY PLAN - SECOND FLOOR - AREA "J"

Architect's Project No: 2106-204

Date: May, 20

Drawing No:
E3.2J



PANEL "H11A"
200A, 480Y/277V, 3PH, 4W
SURFACE MOUNT
60 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE)
PROVIDE WITH HINGED COVER ENCLOSURE.
PROVIDE WITH INTEGRAL SURGE SUPPRESSION.
PANEL "H12A"
225A, 480Y/277V, 3PH, 4W
SURFACE MOUNT
42 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE)
PROVIDE WITH HINGED COVER ENCLOSURE.
PROVIDE WITH INTEGRAL SURGE SUPPRESSION.
PROVIDE HACR TYPE CIRCUIT BREAKERS.
PANEL "L11A"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L12A"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L13A"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L14A"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PROVIDE HACR TYPE CIRCUIT BREAKERS.

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Revisions:

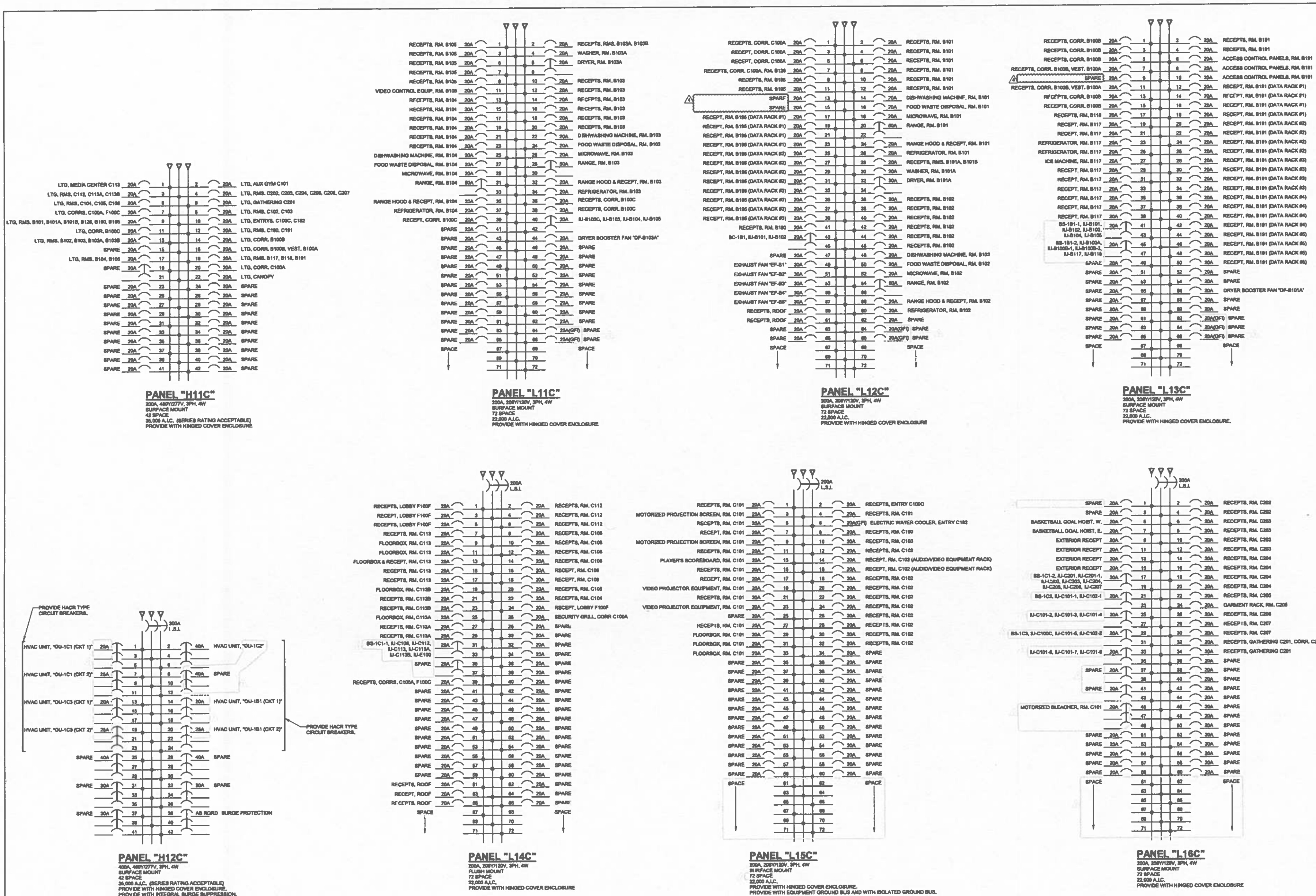
#	Description	Date
1	ASI-008 VRF Coordination	10/18/2023
2	Mods due to Exhaust Fan Submittal Review	11/10/2023
3	Access Control System Mods	4/16/2024

Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:
BUSSING DIAGRAMS - BLDG AREA "A" (1ST FLOOR) - NORMAL POWER

Architect's Project No: 2106-204
Date: May, 20

Drawing No:
E6.1



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WBW Engineering — 3000 Canton Street, Hopkinsville, KY 42240

C&T Design and Equipment Co. — 2162 Keller Avenue, Suite, Evansville, IN 47715

Revisions:

Designed By: MJB | Drawn By: SDB | Checked By: MJB

Sheet title:
BUSSING DIAGRAMS - BLDG AREA "C" (1ST FLOOR) - NORMAL POWER

Architect's Project No: 2106-204 | Date: May, 20

Drawing No:
E6.3

PANEL "H11D"

Load	Breaker	Ckt	Ckt	Breaker	Load
LTG, RMS. D102, D104, D106, D108, D110, D193, D194	20A	1	2	20A	SPARE
LTG, CORRS. D100A, D100B, ENTRY D182, STAIR 1 D1, STAIR 2 D2	20A	3	4	20A	SPARE
LTG, RMS. D180, D181	20A	5	6	20A	SPARE
LTG, RMS. D112, D114, D114A, D114B, D116	20A	7	8	20A	SPARE
LTG, RMS. D111, D113, D113A, D113B, D115, D115A, D186	20A	9	10	20A	SPARE
LTG, MEDIA D109	20A	11	12	20A	SPARE
LTG, RMS. D101, D101A, D101B, D101C, D103, D105, D107	20A	13	14	20A	SPARE
LTG, GATHERING D100	20A	15	16	20A	SPARE
SPARE	20A	17	18	20A	SPARE
SPARE	20A	19	20	20A	SPARE
SPARE	20A	21	22	20A	SPARE
SPARE	20A	23	24	20A	SPARE
SPARE	20A	25	26	20A	SPARE
SPARE	20A	27	28	20A	SPARE
SPARE	20A	29	30	20A	SPARE
		31	32	20A	SPARE
SPARE	20A	33	34	25A	SPARE
		35	36	30A	ELEC HEATER "EH-D1", STAIR 3 (D3)
INTEGRAL SURGE SUPPRESSION AS RQRD		37	38	20A	SPARE
		39	40		
		41	42		

200A, 480Y/277V, 3PH, 4W
SURFACE MOUNT
42 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE).
PROVIDE WITH HINGED COVER ENCLOSURE.
PROVIDE WITH INTEGRAL SURGE SUPPRESSION.

PANEL "L11D"

Load	Breaker	Ckt	Ckt	Breaker	Load
RECEPTS, GATHERING D100	20A	1	2	20A	RECEPTS, RM. D105
RECEPTS, GATHERING D100	20A	3	4	20A	RECEPTS, RM. D105
RECEPTS, GATHERING D100	20A	5	6	20A	RECEPTS, RM. D105
RECEPTS, GATHERING D100	20A	7	8	20A	RECEPTS, RM. D105
4 SPARE	20A	9	10	20A	RECEPTS, RM. D107
RECEPTS, RM. D101	20A	11	12	20A	RECEPTS, RM. D107
RECEPTS, RM. D101	20A	13	14	20A	RECEPTS, RM. D107
PRINTER, RM. D101	20A	15	16	20A	RECEPTS, RM. D107
KIOSK, RM. D101	20A	17	18	20A	RECEPTS, RM. D107
RECEPTS, RM. D101	20A	19	20	20A	RECEPT, MEDIA D109
RECEPTS, RM. D101A	20A	21	22	20A	RECEPT, MEDIA D109
RECEPTS, RM. D101B	20A	23	24	20A	RECEPTS, MEDIA D109
RECEPTS, RM. D101C	20A	25	26	20A	RECEPTS, MEDIA D109
RECEPT, ELEV. D, D-EL	20A	27	28	20A	RECEPTS, MEDIA D109
RECEPT, SUMP PUMP, ELEV. D, D-EL	20A	29	30	20A	RECEPT, MEDIA D109
RECEPTS, CORR. D100A, STAIR 1 D1	20A	31	32	20A	EXTERIOR RECEPT
RECEPTS, RM. D103	20A	33	34	20A	BS-1D2, IU-D103, IU-D106, IU-D107, IU-D109, IU-D110-1, IU-D110-2, IU-D111, IU-D113
RECEPTS, RM. D103	20A	35	36		
RECEPTS, RM. D103	20A	37	38	20A	SPARE
RECEPTS, RM. D103	20A	39	40	20A	SPARE
SPARE	20A	41	42	20A	SPARE
SPARE	20A	43	44	20A	SPARE
SPARE	20A	45	46	20A	SPARE
SPARE	20A	47	48	20A	SPARE
SPARE	20A	49	50	20A	SPARE
SPARE	20A	51	52	20A	SPARE
SPARE	20A	53	54	20A	SPARE
SPARE	20A	55	56	20A	SPARE
SPARE	20A	57	58	20A	SPARE
SPARE	20A	59	60	20A	SPARE
SPARE	20A	61	62	20A	SPARE
SPARE	20A	63	64	20A	SPARE
SPARE	20A	65	66	20A(GFI)	SPARE
SPACE		67	68		SPACE
		69	70		
		71	72		

200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE

PANEL "L12D"

Load	Breaker	Ckt	Ckt	Breaker	Load
RECEPTS, RM. D102	20A	1	2	20A	RECEPTS, RM. D106
RECEPTS, RM. D102	20A	3	4	20A	RECEPTS, RM. D106
RECEPTS, RM. D102	20A	5	6	40A	WORK TABLE LOAD CENTER "LC12"
RECEPTS, RM. D102	20A	7	8		
RECEPTS, RM. D102	20A	9	10		
RECEPTS, RM. D104	20A	11	12	20A	SPARE
RECEPTS, RM. D104	20A	13	14	60A	DISHWASHER, RM. D106
BS-1D1, IU-D100A-1, IU-D101, IU-D102, IU-D104, IU-D106-1, IU-D106-2, IU-D108	20A	15	16		
		17	18		
RECEPTS, STUDENT WORK TABLE, RM. D106	20A	19	20	20A	SPARE
		21	22	20A	EXHAUST HOOD CONTROLS CULINARY
SPARE	20A	23	24	20A	RECEPTS, STUDENT WORK TABLE, RM. D106
SPARE	20A	25	26		
RECEPTS, STUDENT WORK TABLE, RM. D106	20A	27	28	20A	CTRL PWR, UTILITY DIST SYS, RM D106,
		29	30	20A	SPARE
SPARE	20A	31	32	20A	RECEPTS, STUDENT WORK TABLE, RM. D106
SPARE	20A	33	34		
SPARE	20A	35	36	20A	SPARE
SPARE	20A	37	38	20A	SPARE
SPARE	20A	39	40	20A	RECEPT, ICE MAKER, RM. D106
SPARE	20A	41	42	20A	RECEPT, REACH-IN REFRIG, RM. D106
SPARE	20A	43	44	20A	RECEPT, REACH-IN REFRIG, RM. D106
SPARE	20A	45	46	20A	RECEPT, REACH-IN REFRIG, RM. D106
SPARE	20A	47	48	20A	RECEPT, REACH-IN FREEZER, RM. D106
SPARE	20A	49	50	20A	RECEPT, REACH-IN FREEZER, RM. D106
SPARE	20A	51	52	20A	SPARE
SPARE	20A	53	54	20A	
SPARE	20A	55	56		
SPARE	20A	57	58	20A	
SPARE	20A	59	60	20A	SPARE
SPARE	20A	61	62	20A(30mA GFI)	SPARE
SPARE	20A	63	64	20A(30mA GFI)	SPARE
SPARE	20A	65	66	20A(30mA GFI)	HEAT TRACE CONTROLLER, RM. D106
SPACE		67	68		SPACE
		69	70		
		71	72		

400A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE

PANEL "L13D"

Load	Breaker	Ckt	Ckt	Breaker	Load
RECEPTS, RM. D108	20A	1	2	20A	RECEPTS, CORR. D100A
RECEPTS, RM. D108	20A	3	4	20A	RECEPT, CORR. D100B, RM. D193
RECEPTS, RM. D108	20A	5	6	20A	RECEPT, RM. D194
RECEPTS, RM. D108	20A	7	8	20A	RECEPTS, RM. D181
RECEPTS, RM. D108	20A	9	10	20A(GFI)	ELECTRIC WATER COOLER, ENTRY D182
RECEPTS, RM. D110	20A	11	12	20A	RECEPTS, RM. D180
RECEPTS, RM. D110	20A	13	14	20A	EXTERIOR RECEPT
RECEPTS, RM. D110	20A	15	16	20A	TEMP. CTRL. PANEL, RM. D194
RECEPTS, RM. D110	20A	17	18	20A	SPARE
RECEPTS, RM. D110	20A	19	20	20A	SPARE
WASHER, RM. D110	20A	21	22	20A	SPARE
DRYER, RM. D110	20A	23	24	20A	SPARE
		25	26	20A	SPARE
DRYER BOOSTER FAN "DF-D110"	20A	27	28	20A	SPARE
SPARE	20A	29	30	20A	SPARE
SPARE	20A	31	32	20A	SPARE
SPARE	20A	33	34	20A	SPARE
SPARE	20A	35	36	20A	SPARE
SPARE	20A	37	38	20A	SPARE
SPARE	20A	39	40	20A	SPARE
SPARE	20A	41	42	20A	SPARE
SPARE	20A	43	44	20A	SPARE
SPARE	20A	45	46	20A	SPARE
SPARE	20A	47	48	20A	SPARE
SPARE	20A	49	50	20A	SPARE
SPARE	20A	51	52	20A	SPARE
SPARE	20A	53	54	20A	SPARE
SPARE	20A	55	56	20A	SPARE
SPARE	20A	57	58	20A	SPARE
SPARE	20A	59	60	20A	SPARE
SPARE	20A	61	62	20A	SPARE
SPARE	20A	63	64	20A	SPARE
SPARE	20A	65	66	20A	SPARE
SPACE		67	68		SPACE
		69	70		
		71	72		

200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE

PANEL "L14D"

200A L.S.I.

Load	Breaker	Ckt	Ckt	Breaker	Load
PRINTER/COPIER, RM. D113	20A	1	2	20A	RECEPTS, RM. D115
RECEPTS, RM. D113	20A	3	4	20A	RECEPTS, RM. D115
RECEPTS, RM. D113	20A	5	6	20A	RECEPTS, RM. D115
RECEPTS, RMS. D113A, D113B	20A	7	8	20A	RECEPTS, RM. D115
RECEPTS, RM. D111	20A	9	10	20A	RECEPTS, RM. D115
RECEPTS, RM. D111	20A	11	12	20A	RECEPTS, RM. D115
RECEPTS, RM. D111	20A	13	14	20A	RECEPTS, RM. D115
REFRIGERATOR, RM. D115A	20A(GFI)	15	16	20A	RECEPTS, RM. D115
DISHWASHING MACHINE, RM. D115A	20A	17	18	20A	RECEPTS, RM. D115
AUTOCLAVE, RM. D115A	20A	19	20	20A	SPARE
RECEPTS, RM. D115A	20A	21	22	20A	RECEPTS, RM. D115
RECEPTS, CORR. D100A	20A	23	24	20A	RECEPTS, RM. D115
RECEPT, RM. D186	20A	25	26	20A	RECEPT, RM. D115
SPARE	20A	27	28	20A	RECEPT & CTRL OF ELEC. SOLENOID VALVES, RM. D115
SPARE	20A	29	30	20A	EXTERIOR RECEPT
SPARE	20A	31	32	20A	SPARE
SPARE	20A	33	34	20A	SPARE
SPARE	20A	35	36	20A	SPARE
SPARE	20A	37	38	20A	SPARE
SPARE	20A	39	40	20A	SPARE
SPARE	20A	41	42	20A	SPARE
SPARE	20A	43	44	20A	SPARE
SPARE	20A	45	46	20A	SPARE
SPARE	20A	47	48	20A	SPARE
SPARE	20A	49	50	20A	SPARE
SPARE	20A	51	52	20A	SPARE
SPARE	20A	53	54	20A	SPARE
SPARE	20A	55	56	20A	SPARE
SPARE	20A	57	58	20A	SPARE
SPARE	20A	59	60	20A	SPARE
SPARE	20A	61	62	20A	SPARE
SPARE	20A	63	64	20A	SPARE
SPARE	20A	65	66	20A	SPARE
SPACE		67	68		SPACE
		69	70		
		71	72		

200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE

PANEL "L15D"

200A L.S.I.

Load	Breaker	Ckt	Ckt	Breaker	Load
RECEPTS, RM. D116	20A	1	2	20A	RECEPTS, RM. D114
RECEPTS, RM. D116	20A	3	4	20A	RECEPTS, RM. D114
RECEPTS, RM. D116	20A	5	6	20A	RECEPTS, RM. D114
RECEPTS, RM. D116	20A	7	8	20A	RECEPTS, RM. D114
RECEPTS, RM. D116	20A	9	10	20A	RECEPTS, RM. D114
REFRIGERATOR, RM. D114A	20A(GFI)	11	12	20A	RECEPTS, RM. D114
RECEPTS, RMS. D114A, D114B	20A	13	14	20A	SPARE
BS-1D3, IU-D100A-2, IU-D112, IU-D114-1, IU-D114-2, IU-D114A, IU-D114B, IU-D116-1, IU-D116-2, IU-D116A, IU-D118	20A	15	16	20A	RECEPTS, RM. D114
		17	18	20A	RECEPTS, RM. D114
SPARE	20A	19	20	20A	RECEPT, RM. D114
SPARE	20A	21	22	20A	RECEPT & CTRL OF ELECTRIC SOLENOID VALVES, RM. D114
SPARE	20A	23	24	20A	RECEPTS, RM. D114
SPARE	20A	25	26	20A	RECEPTS, RM. D112
SPARE	20A	27	28	20A	RECEPTS, RM. D112
SPARE	20A	29	30	20A	RECEPTS, RM. D112
SPARE	20A	31	32	20A	RECEPTS, RM. D112
SPARE	20A	33	34	20A	RECEPTS, RM. D112
SPARE	20A	35	36	20A	SPARE
SPARE	20A	37	38	20A	SPARE
SPARE	20A	39	40	20A	SPARE
SPARE	20A	41	42	20A	SPARE
SPARE	20A	43	44	20A	SPARE
SPARE	20A	45	46	20A	SPARE
SPARE	20A	47	48	20A	SPARE
SPARE	20A	49	50	20A	SPARE
SPARE	20A	51	52	20A	SPARE
SPARE	20A	53	54	20A	SPARE
SPARE	20A	55	56	20A	SPARE
SPARE	20A	57	58	20A	SPARE
SPARE	20A	59	60	20A	SPARE
SPARE	20A	61	62	20A	SPARE
SPARE	20A	63	64	20A	SPARE
SPARE	20A	65	66	20A	SPARE
SPACE		67	68		SPACE
		69	70		
		71	72		

200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE

HOPKINSVILLE - CHRISTIAN COUNTY ACADEMY

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KDE # : BG 22-104

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Hopkinsville, KY 42240
Telephone: 270-886-5430

K&S Engineering, PLLC
Structural Engineers
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Clarksville, TN 37043
Telephone: 931-647-5542

WBW Engineering, Inc.
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Telephone: 270-886-2530

C&T Design and Equipment Co.
2102 Kotter Avenue, Suite 1
Evansville, IN 47715
Telephone: 812-421-0877

Revisions:

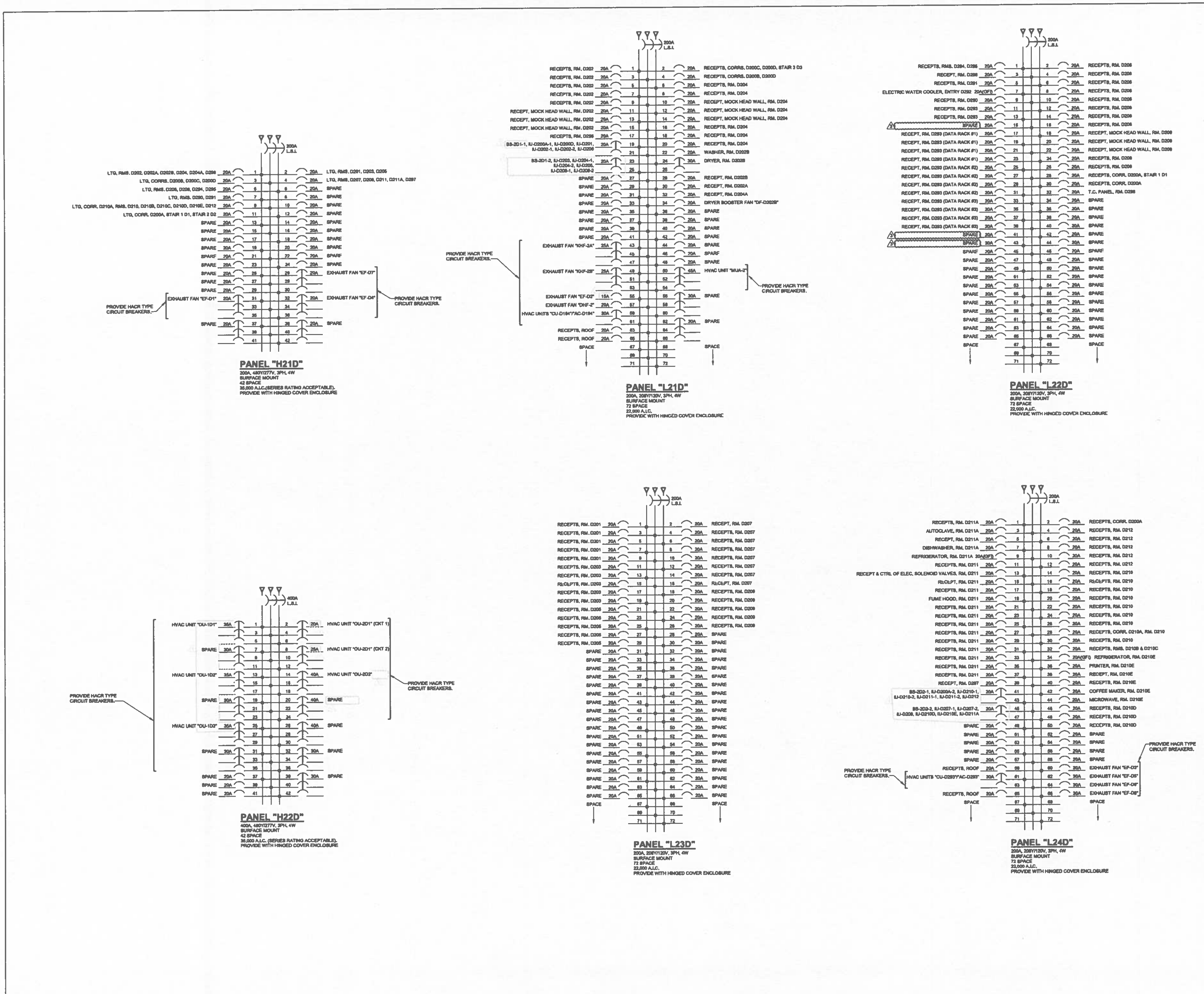
#	Description	Date
1	[illegible] VRF Coordination	[illegible]
2	Panelboard Submittal Review Mods	[illegible]
3	Food Service Submittal Review Elec Mods	[illegible]
4	Access Control System Mods	[illegible]

Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:
BUSSING DIAGRAMS - BLD
AREA "D" (1ST FLOOR) -
NORMAL POWER

Architect's Project No: 2106-204
Date: May, 20

Drawing No:
E6.4



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C&T Design and Equipment Co.
2162 Keller Avenue, Suite 1
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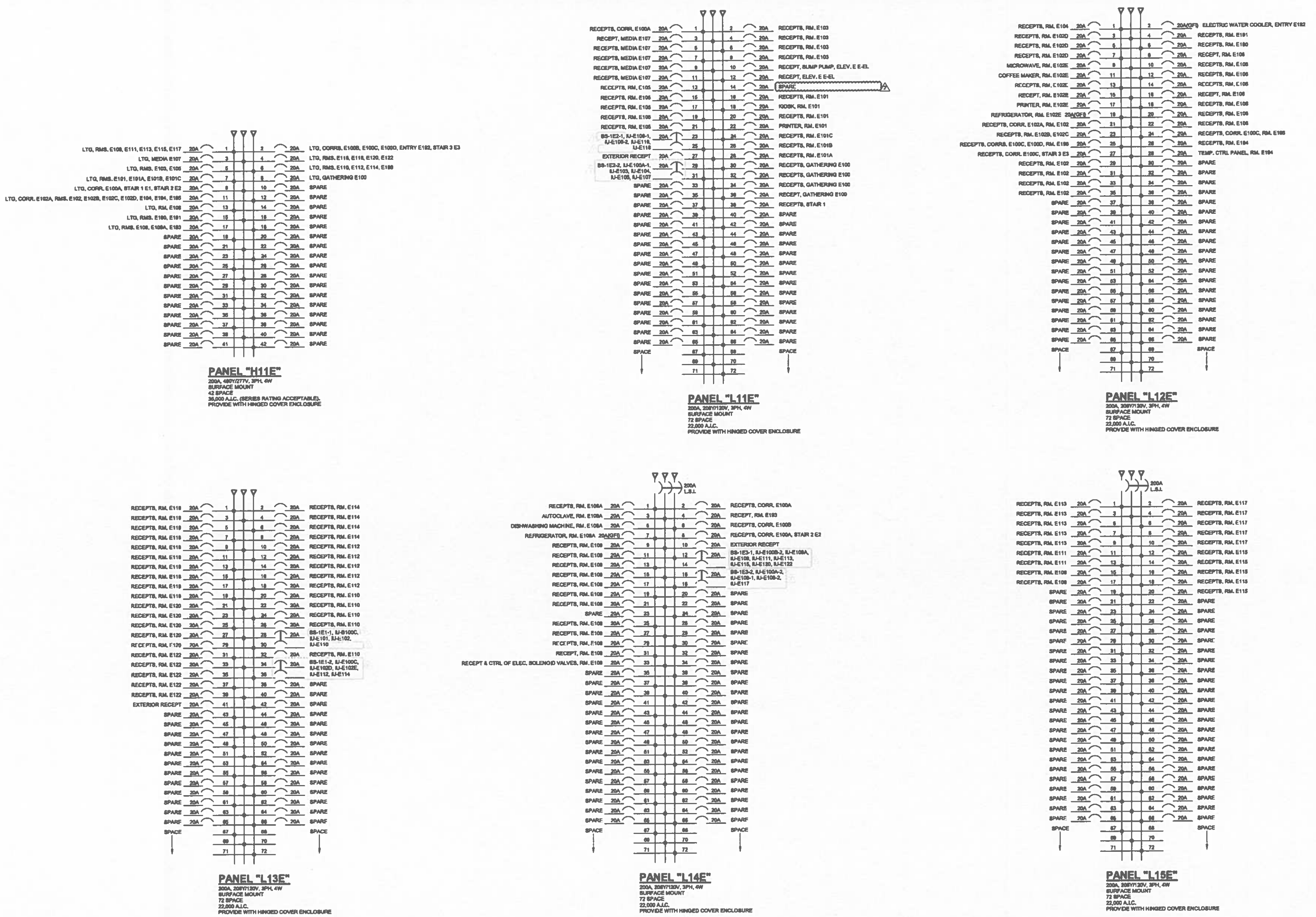
Revisions:

Designed By: MJB
Drawn By: EDB
Checked By: MJB

Sheet title:
BUSSING DIAGRAMS - BLDG AREA "D" (2ND FLOOR) - NORMAL POWER

Architect's Project No: 2106-204
Date: May, 20

Drawing No:
E6.5


PANEL "H11E"
200A, 480Y/277V, 3PH, 4W
SURFACE MOUNT
42 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE).
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L11E"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L12E"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L13E"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L14E"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L15E"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE

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WBW Engineering — 3000 Canton Street, Hopkinsville, KY 42240

CST Design and Equipment Co. — 2102 Keller Avenue, Evansville, IN 47715

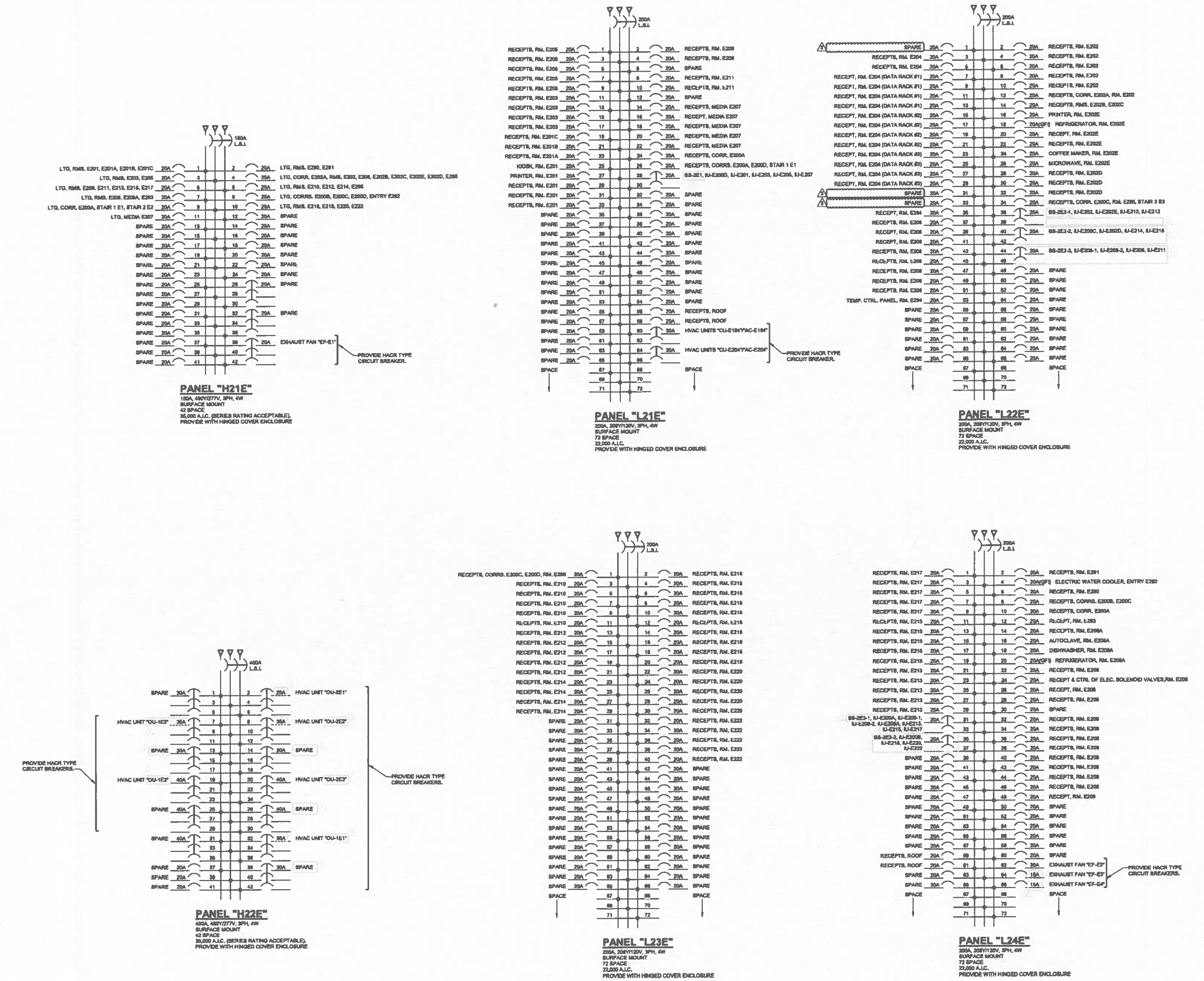
Revisions:

Designed By: MJB | Drawn By: SDB | Checked By: MJB

Sheet title:
BUSSING DIAGRAMS - BLDG AREA "E" (1ST FLOOR) - NORMAL POWER

Architect's Project No: 2106-204
Date: May, 20

Drawing No: E6.6



PANEL "H21E"
150A, 480Y/277V, 3PH, 4W
SURFACE MOUNT
42 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE).
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L21E"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L22E"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "H22E"
400A, 480Y/277V, 3PH, 4W
SURFACE MOUNT
42 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE).
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L23E"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L24E"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PROVIDE HACR TYPE CIRCUIT BREAKER.
PROVIDE HACR TYPE CIRCUIT BREAKERS.

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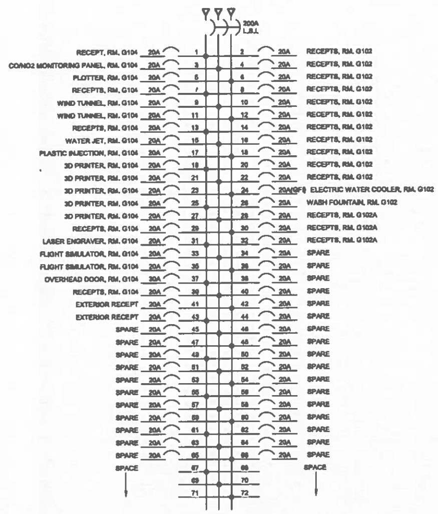
Revisions:

Designed By: MJB | Drawn By: SDB | Checked By: MJM

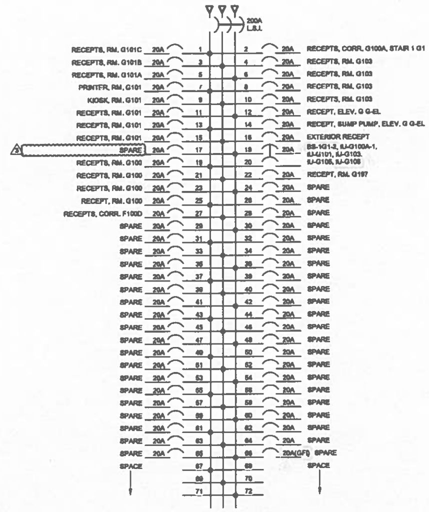
Sheet title:
BUSSING DIAGRAMS - BLDG AREA "E" (2ND FLOOR) - NORMAL POWER

Architect's Project No: 2106-204
Date: May, 20

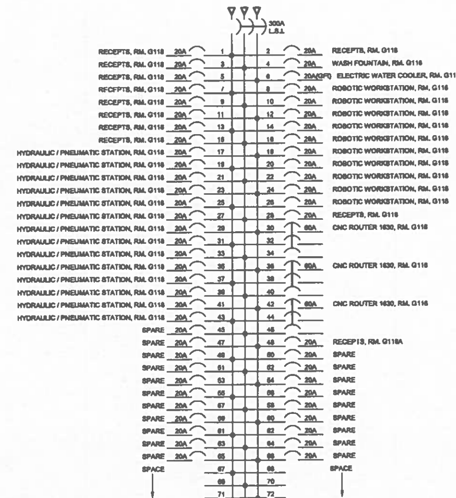
Drawing No: E6.7



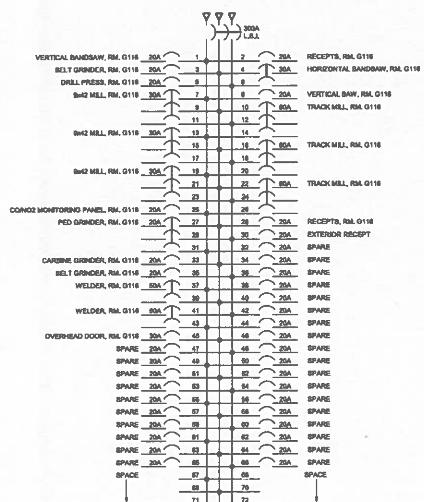
PANEL "L15G"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE)
PROVIDE WITH HINGED COVER ENCLOSURE



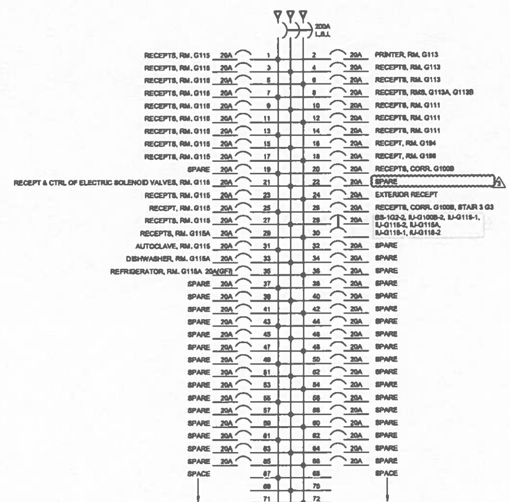
PANEL "L16G"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE)
PROVIDE WITH HINGED COVER ENCLOSURE



PANEL "L17G"
400A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE)
PROVIDE WITH HINGED COVER ENCLOSURE



PANEL "L18G"
400A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE)
PROVIDE WITH HINGED COVER ENCLOSURE



PANEL "L19G"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE)
PROVIDE WITH HINGED COVER ENCLOSURE

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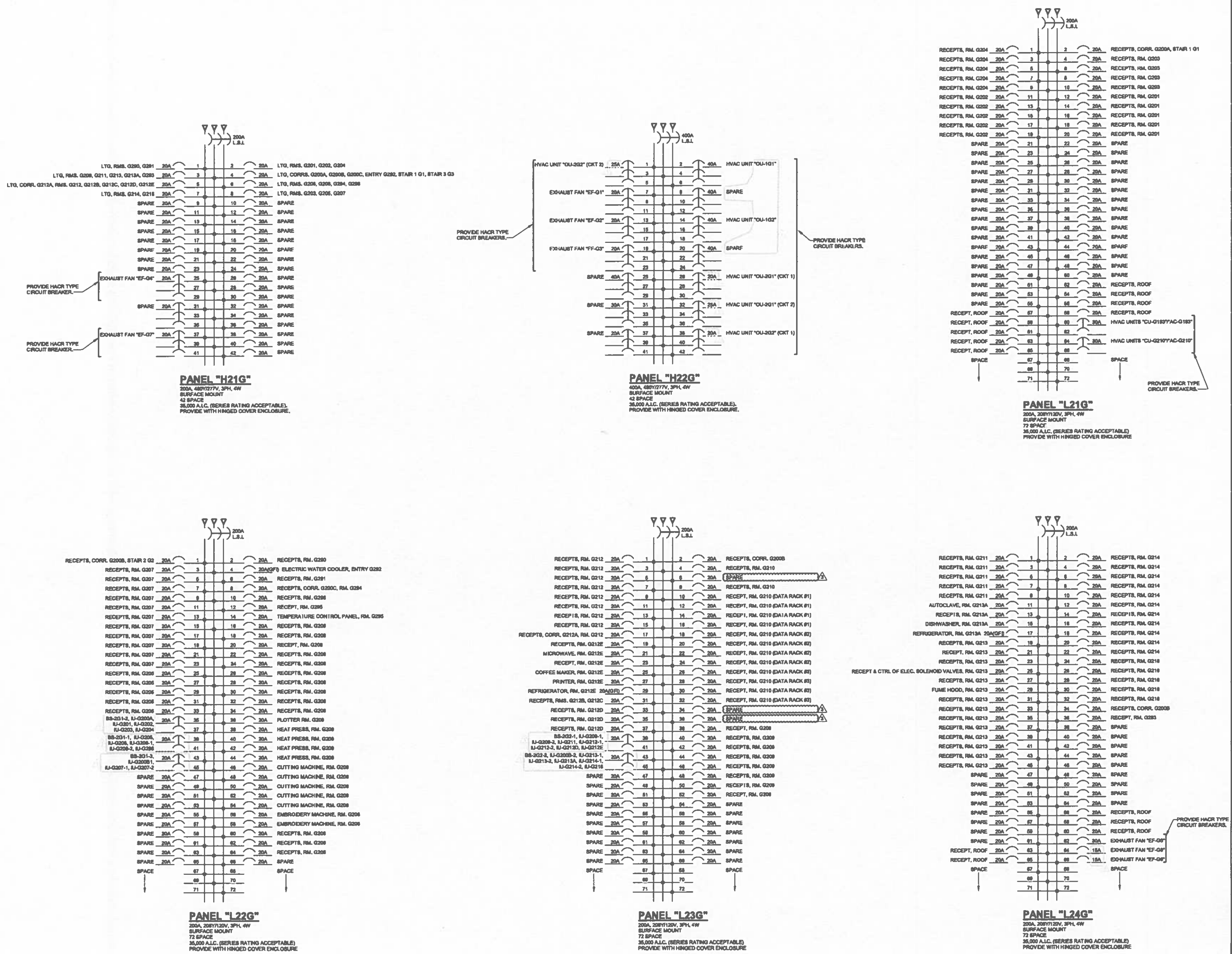
Revisions:

Designed By: MJS | Drawn By: SDB | Checked By: MJS

Sheet title:
BUSSING DIAGRAMS - BLDG AREA "G" (1ST FLOOR) - NORMAL POWER CONT.

Architect's Project No: 2106-204
Date: May, 20

Drawing No:
E6.9



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2102 Kotter Avenue
Evansville, IN 47715

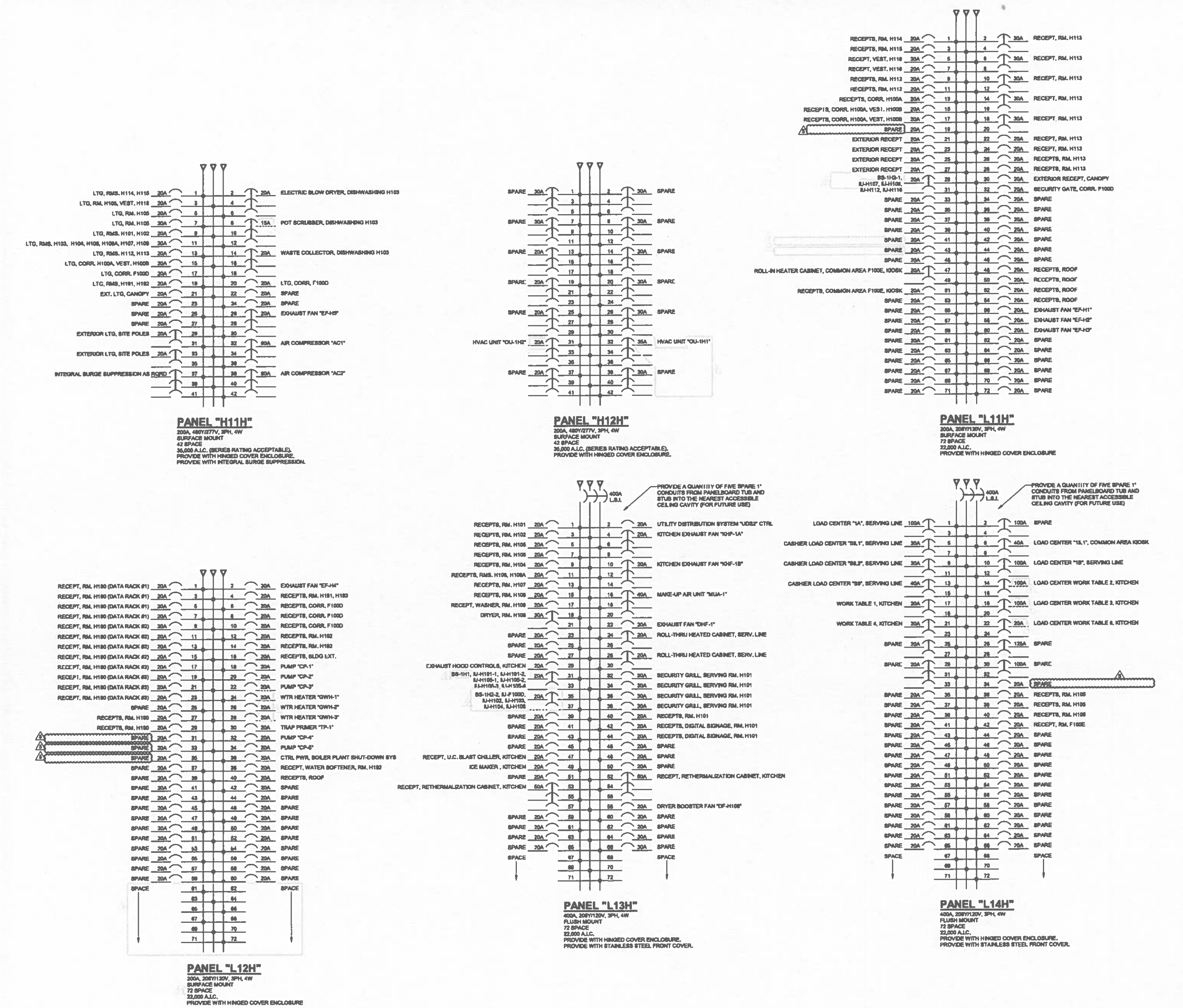
Revisions:

Designed By: MJB
Drawn By: SDB
Checked By: MJB

Sheet title:
BUSSING DIAGRAMS - BLD
AREA "G" (2ND FLOOR) -
NORMAL POWER

Architect's Project No: 2106-204
Date: May, 20

Drawing No:
E6.10


PANEL "H11H"
200A, 480Y/277V, 3PH, 4W
SURFACE MOUNT
42 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE).
PROVIDE WITH HINGED COVER ENCLOSURE.
PROVIDE WITH INTEGRAL SURGE SUPPRESSION.
PANEL "H12H"
200A, 480Y/277V, 3PH, 4W
SURFACE MOUNT
42 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE).
PROVIDE WITH HINGED COVER ENCLOSURE.
PANEL "L11H"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L12H"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L13H"
400A, 208Y/120V, 3PH, 4W
FLUSH MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE.
PROVIDE WITH STAINLESS STEEL FRONT COVER.
PANEL "L14H"
400A, 208Y/120V, 3PH, 4W
FLUSH MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE.
PROVIDE WITH STAINLESS STEEL FRONT COVER.
PROVIDE A QUANTITY OF FIVE SPARE 1" CONDUITS FROM PANELBOARD TUB AND STUB INTO THE NEAREST ACCESSIBLE CEILING CAVITY (FOR FUTURE USE)

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C&T Design and Equipment Co. — 2102 Kotter Avenue, Suite, Evansville, IN 47715

Revisions:

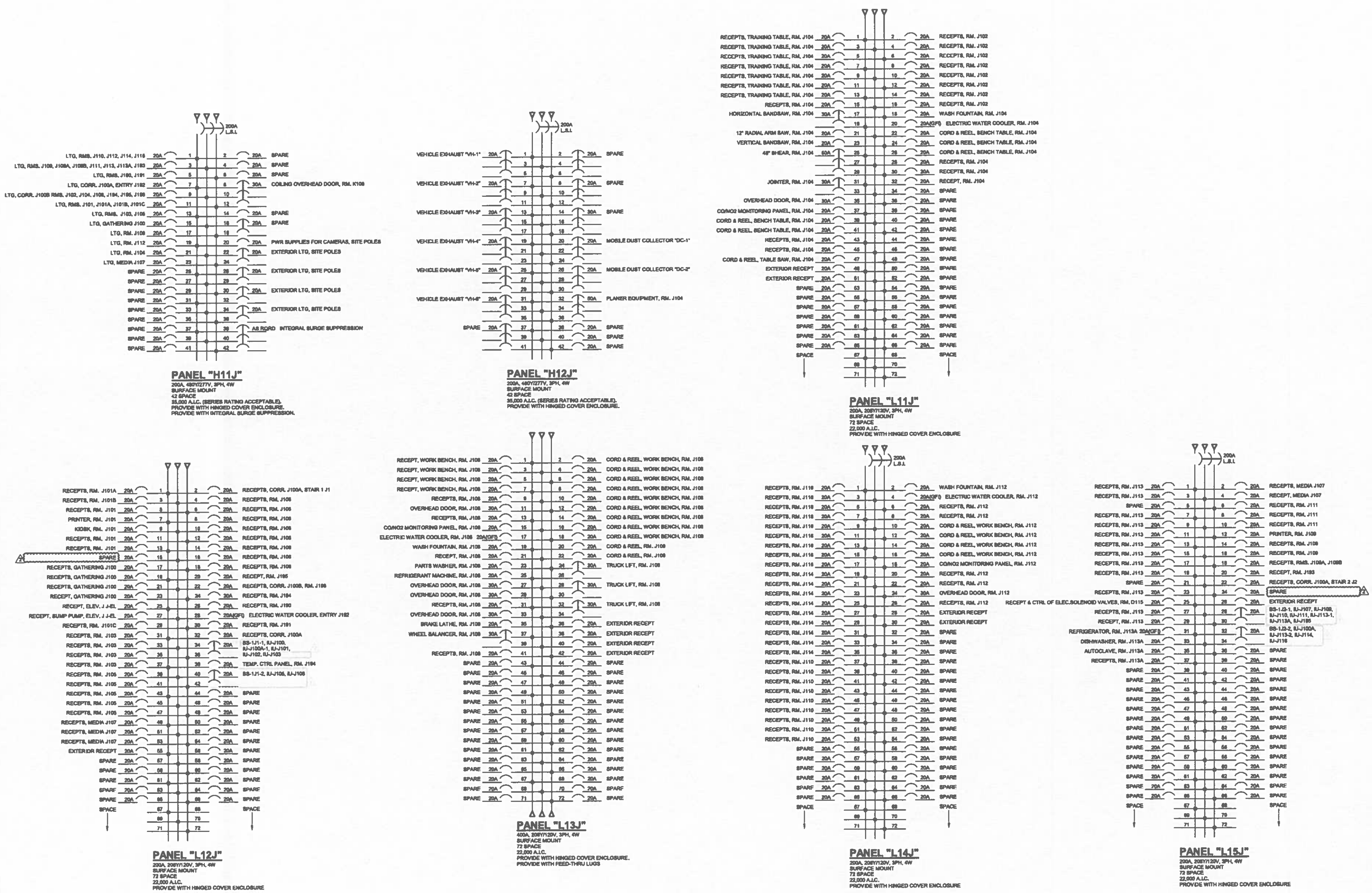
#	Description	Date
1	PR-002	
2	ASI-005 VRF Coordination	
3	Permit Submittal Review Mods	
4	Food Service Submittal Review Mods	
5	Access Control System Mods	

Designed By: MJB | Drawn By: EDB | Checked By: MJB

Sheet title:
BUSSING DIAGRAMS - BLDG AREA "H" (1ST FLOOR) - NORMAL POWER

Architect's Project No: 2106-204 | Date: May, 20

Drawing No:
E6.11


PANEL "H11J"
200A, 480Y/277V, 3PH, 4W
SURFACE MOUNT
42 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE).
PROVIDE WITH HINGED COVER ENCLOSURE.
PROVIDE WITH INTEGRAL SURGE SUPPRESSION.
PANEL "H12J"
200A, 480Y/277V, 3PH, 4W
SURFACE MOUNT
42 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE).
PROVIDE WITH HINGED COVER ENCLOSURE.
PANEL "L11J"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L12J"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L13J"
400A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE.
PROVIDE WITH FEED-THRU LUGS
PANEL "L14J"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE
PANEL "L15J"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE

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K&S Engineering, PLLC
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WBW
3000 Canton Street
Hopkinsville, KY 42240

C&T Design and Equipment Co.

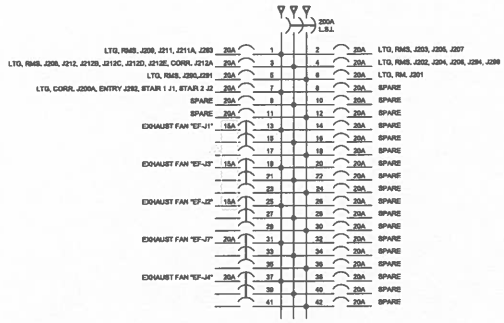
Revisions:

Designed By: MJS | Drawn By: SDB | Checked By: MJS

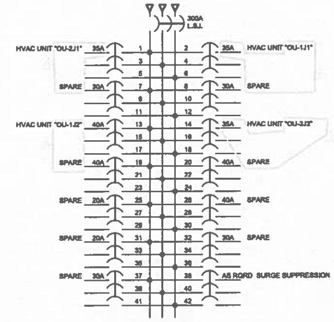
Sheet title:
BUSSING DIAGRAMS - BLDG AREA "J" (1ST FLOOR) - NORMAL POWER

Architect's Project No: 2106-204
Date: May, 20

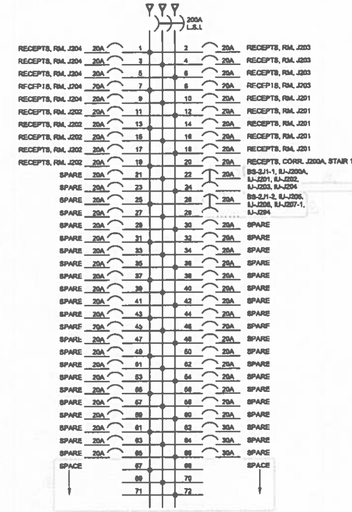
Drawing No:
E6.12



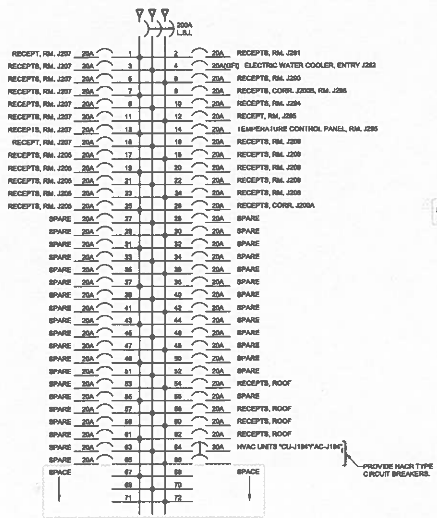
PANEL "H21J"
200A, 480Y/277V, 3PH, 4W
SURFACE MOUNT
42 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE).
PROVIDE WITH HINGED COVER ENCLOSURE.



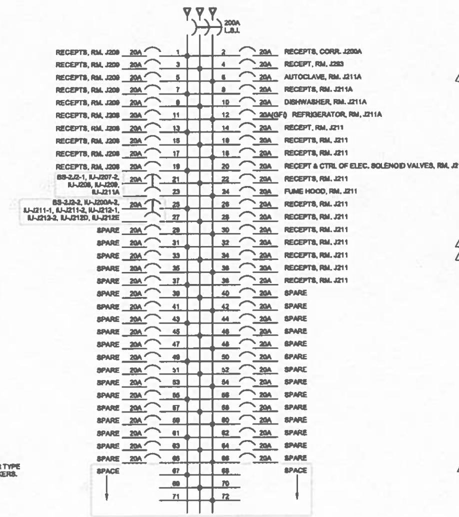
PANEL "H22J"
400A, 480Y/277V, 3PH, 4W
SURFACE MOUNT
42 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE).
PROVIDE WITH HINGED COVER ENCLOSURE.
PROVIDE WITH INTEGRAL SURGE SUPPRESSION.



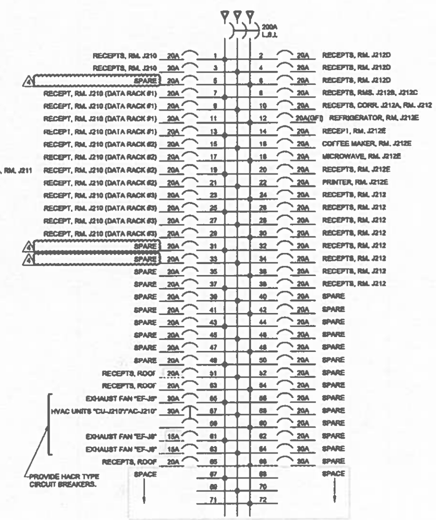
PANEL "L21J"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE



PANEL "L22J"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE



PANEL "L23J"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE



PANEL "L24J"
200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
22,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE

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Hopkinsville, KY 42240

C&T Design and Equipment Co.

Revisions:

Designed By: MJB | Drawn By: SDB | Checked By: MJB

Sheet title:
BUSSING DIAGRAMS - BLDG AREA "J" (2ND FLOOR) - NORMAL POWER

Architect's Project No: 2106-204
Date: May, 20

Drawing No:
E6.13

PANEL "H11K"

Load	Breaker	Ckt	Ckt	Breaker	Load
SPARE	20A	1	2	20A	LTG, CORRS. F100C, F100D
		3	4	20A	LTG, VESTIBULE F100A
		5	6	20A	LTG, CORR. F100C
SPARE	20A	7	8	20A	EXTERIOR LIGHTING
		9	10	20A	LTG, VEST. F100B
		11	12	20A	LTG, LOBBY F100F
LTG, RM. F100E	20A	13	14	20A	LTG, RMS. F100E, F100F
SPARE	20A	15	16	20A	LTG, LOBBY F100F
SPARE	20A	17	18	20A	LTG, LOBBY F100F
SPARE	20A	19	20	20A	LTG, RM. F100E
SPARE	20A	21	22	20A	LTG, RM. F100E
SPARE	20A	23	24	20A	SPARE
SPARE	20A	25	26	20A	SPARE
SPARE	20A	27	28	20A	SPARE
SPARE	20A	29	30	20A	SPARE
SPARE	20A	31	32	20A	SPARE
SPARE	20A	33	34	20A	SPARE
EXTERIOR LTG, SITE POLES	20A	35	36	20A	SPARE
		37	38	AS RQRD	INTEGRAL SURGE SUPPRESSION
EXTERIOR LTG, SITE POLES	20A	39	40		
		41	42		

200A, 480Y/277V, 3PH, 4W
SURFACE MOUNT
42 SPACE
35,000 A.I.C. (SERIES RATING ACCEPTABLE).
PROVIDE WITH HINGED COVER ENCLOSURE.
PROVIDE WITH INTEGRAL SURGE SUPPRESSION.

PANEL "L11K"

Load	Breaker	Ckt	Ckt	Breaker	Load
RECEPTS, CORR. K100D, RM. K122	20A	1	2	20A	RECEPT, RM. K114
RECEPTS, RM. K113	20A	3	4	20A(GFI)	REFRIGERATOR, RM. K114
RECEPTS, RM. K113	20A	5	6	20A	RECEPT, RM. K114
RECEPTS, RMS. K113A, K113B	20A	7	8	20A	RECEPT, RM. K114
RECEPTS, RM. K111	20A	9	10	20A	RECEPT, RM. K114
RECEPTS, RM. K110	20A	11	12	20A	RECEPT, RM. K114
RECEPTS, RM. K109	20A	13	14	20A	RECEPTS, RM. K114
RECEPTS, RM. K109	20A	15	16	20A	RECEPTS, RMS. K114, K114A
RECEPTS, RM. K108	20A	17	18	20A	RECEPTS, RM. K114
RECEPTS, CORRS. K100A, K100C	20A	19	20	20A	RECEPTS, RM. K114
RECEPTS, RM. K107	20A	21	22	20A	PRINTER, RM. K117
RECEPTS, RM. K108	20A	23	24	20A	RECEPT, RM. K117
RECEPTS, RM. K106	20A	25	26	20A	COFFEE MAKER, RM. K117
RECEPTS, RM. K106	20A	27	28	20A(GFI)	REFRIGERATOR, RM. K117
RECEPTS, RM. K105	20A	29	30	20A	RECEPT, RM. K117
RECEPTS, RM. K105	20A	31	32	20A	MICROWAVE, RM. K117
RECEPTS, RM. K104	20A	33	34	20A	RECEPT, RM. K117
RECEPTS, RM. K103	20A	35	36	20A	RECEPTS, ROOF
RECEPTS, RM. K103	20A	37	38	20A	SPARE
SPARE (1)	20A	39	40	20A	RECEPT, RM. K117
EXTERIOR RECEPT	20A	41	42	20A	SPARE
SPARE (1)	20A	43	44	20A	RECEPTS, RM. K112
EXTERIOR RECEPT	20A	45	46	20A	RECEPTS, RMS. K115, K116
RECEPTS, CORR. F100C	20A	47	48	20A	RECEPT, CORR. K100B
SPARE (1)	20A	49	50	20A	SPARE
RECEPTS, VEST. F100A	20A	51	52	20A	SPARE
EXTERIOR RECEPT	20A	53	54	20A	SPARE
RECEPTS, CORR. F100D	20A	55	56	20A	SPARE
RECEPTS, CORR. F100D	20A	57	58	20A	SPARE
SPARE	20A	59	60	20A	SPARE
SPARE	20A	61	62	20A	SPARE
SPARE	20A	63	64	20A	SPARE
SPARE	20A	65	66	20A	SPARE
SPACE		67	68		SPACE
		69	70		
		71	72		

200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
10,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE

PANEL "L12K"

Load	Breaker	Ckt	Ckt	Breaker	Load
RECEPT, RM. K180	20A	1	2	20A	RECEPTS, RM. K102
RECEPTS, RM. K181	20A	3	4	20A	RECEPTS, RM. K102
SPARE (1)	20A	5	6	20A	RECEPTS, RM. K101
RECEPTS, RM. K181	20A	7	8	20A	RECEPT, RM. K101
RECEPT, RM. K181 (DATA RACK #1)	20A	9	10	20A	RECEPT, RM. K101
RECEPT, RM. K181 (DATA RACK #1)	20A	11	12	20A	RECEPT, RM. K101
RECEPT, RM. K181 (DATA RACK #1)	20A	13	14	20A	RECEPTS, RM. K101
RECEPT, RM. K181 (DATA RACK #1)	20A	15	16	20A	PRINTER, RM. K101
RECEPT, RM. K181 (DATA RACK #2)	20A	17	18	20A	RECEPT, RM. K101
RECEPT, RM. K181 (DATA RACK #2)	20A	19	20	20A	SPARE (1)
RECEPT, RM. K181 (DATA RACK #2)	20A	21	22	20A	RECEPTS, CORR. F100C
RECEPT, RM. K181 (DATA RACK #2)	20A	23	24	20A	RECEPT, CORR. F100D
RECEPT, RM. K181 (DATA RACK #3)	20A	25	26	20A	RECEPTS, CORR. F100C
RECEPT, RM. K181 (DATA RACK #3)	20A	27	28	20A	RECEPT, RM. F100E
RECEPT, RM. K181 (DATA RACK #3)	20A	29	30	20A	RECEPTS, RM. F100E (STEPPED SEATING)
RECEPT, RM. K181 (DATA RACK #3)	20A	31	32	20A	RECEPTS, RM. F100E (STEPPED SEATING)
RECEPTS, RM. K119	20A	33	34	20A	RECEPTS, RM. F100E (STEPPED SEATING)
RECEPTS, RM. K118	20A	35	36	20A	RECEPTS, RM. F100E (STEPPED SEATING)
RECEPTS, RM. K120	20A	37	38	20A	RECEPTS, RM. F100E (STEPPED SEATING)
RECEPT, RM. K120	20A	39	40	20A	RECEPTS, RM. F100E (STEPPED SEATING)
RECEPTS, RM. K121	20A	41	42	20A	RECEPTS, RM. F100E (STEPPED SEATING)
SPARE (1)	20A	43	44	20A	RECEPTS, RM. F100E (STEPPED SEATING)
RECEPTS, ROOF	20A	45	46	20A	RECEPTS, LOBBY F100F, VEST. F100B
RECEPTS, ROOF	20A	47	48	20A	SPARE (1)
SPARE (1)	20A	49	50	20A	RECEPTS, LOBBY F100F
SPARE (1)	20A	51	52	20A	EXTERIOR RECEPTS
RECEPT, PROJECTOR EQUIPMENT, RM. F100E	20A	53	54	20A	RECEPTS, LOBBY F100F
MOTORIZED LIFT SYSTEM, RM. F100E	20A	55	56	20A	RECEPTS, RM. F100E
MOTORIZED PROJECTOR SCREEN, RM. F100E	20A	57	58	20A	SPARE
SPARE	20A	59	60	20A	RECEPTS, RM. F100E
SPARE	20A	61	62	20A	RECEPTS, RM. F100E
SPARE	20A	63	64	20A	RECEPTS, RM. F100E
SPARE	20A	65	66	20A	RECEPTS, RM. F100E
SPARE	20A	67	68	20A	SPARE
SPARE	20A	69	70	20A	SPARE
SPARE	20A	71	72	20A	SPARE

200A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
10,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE

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CHRISTIAN COUNTY PUBLIC SCHOOLS

KDE # : BG 22-104

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architects • designers • engineers

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Revisions:

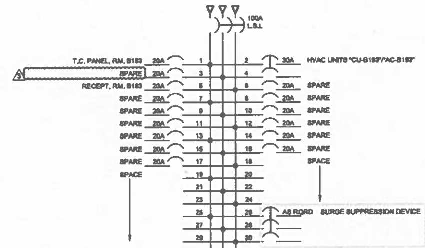
#	Description	Date
1	Access Control System Mods	[illegible]

Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:
BUSSING DIAGRAMS - BLDG AREA "K" (1ST FLOOR) - NORMAL POWER

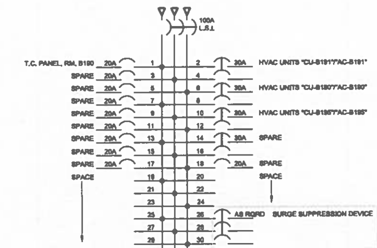
Architect's Project No: 2106-204
Date: May, 20..

Drawing No:
E6.14

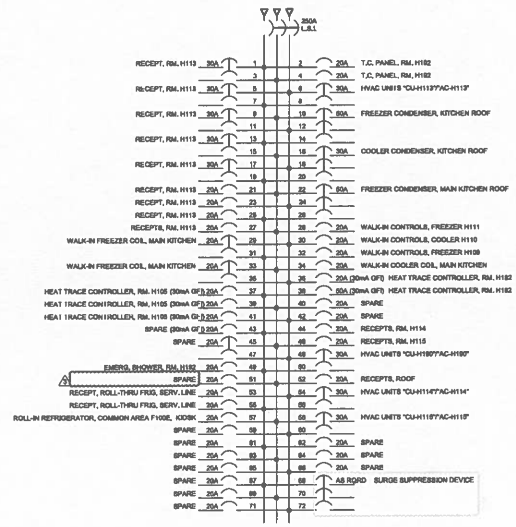


PANEL "EL12B" [NEC702]
100A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
30 SPACE
10,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE.
PROVIDE WITH FEED-THRU LUGS.
PROVIDE WITH INTEGRAL SURGE SUPPRESSION.

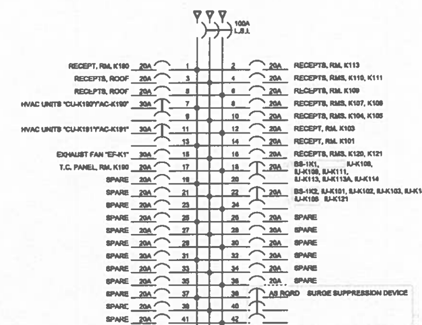
"PART OF ADD GYMNASIUM ALTERNATE BID"



PANEL "EL12C" [NEC702]
100A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
30 SPACE
10,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE.
PROVIDE WITH FEED-THRU LUGS
PROVIDE WITH INTEGRAL SURGE SUPPRESSION.



PANEL "EL12H" [NEC702]
250A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
72 SPACE
10,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE.
PROVIDE WITH INTEGRAL SURGE SUPPRESSION.



PANEL "EL12K" [NEC702]
100A, 208Y/120V, 3PH, 4W
SURFACE MOUNT
42 SPACE
10,000 A.I.C.
PROVIDE WITH HINGED COVER ENCLOSURE.
PROVIDE WITH FEED-THRU LUGS.
PROVIDE WITH INTEGRAL SURGE SUPPRESSION.

HOPKINSVILLE - CHRISTIAN COUNTY ACADEMY

CHRISTIAN COUNT
— PUBLIC SCHOOLS —

KDE # : BG 22-104

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WBW
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2107 Kotter Avenue
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Revisions:

#	Description	Date
1	[illegible]	[illegible]
2	[illegible]	[illegible]
3	[illegible]	[illegible]

Designed By:	Drawn By:	Checked By:
MJB	SDB	MJB

Sheet title:
BUSSING DIAGRAMS - EMERGENCY POWER PANELS (208Y/120V)

Architect's Project No: 2106-204
Date: May, 20

Drawing No:
E6.17

GENERAL NOTES (FIRST FLOOR POWER PLAN - AREA "H"):

G1. CONTRACTOR SHALL COORDINATE WITH FOOD SERVICE DRAWINGS, FOOD SERVICES EQUIPMENT CONTRACTOR AND APPROVED FOOD SERVICE SUBMITTAL DRAWINGS FOR ALL INSTALLATION REQUIREMENTS, INSTALLATION LOCATIONS, AND REQUIRED MOUNTING HEIGHTS PRIOR TO START OF ROUGH-IN.

NOTES (FIRST FLOOR POWER PLAN - AREA "H"):

H1. PROVIDE JUNCTION BOX AS REQUIRED AND DEDICATED 120V, 20A BRANCH CIRCUIT FOR UTILITY DISTRIBUTION SYSTEM "UDS2" CONTROLS FROM PANEL "L13H" CIRCUIT NO. 2, REFER TO FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H2. PROVIDE NEMA 14-30R RECEPTACLE. PROVIDE MATCHING CORD & PLUG (6FT MINIMUM LENGTH) AND INSTALL ON THE DRYER MACHINE. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE DRYER MACHINE. CORD AND PLUG SHALL BE ACCESSIBLE WITH THE DRYER MACHINE PLACED IN IT'S FINAL INSTALLATION LOCATION.

H3. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CLOTHES WASHING MACHINE. COORDINATE THE INSTALLATION LOCATION AND THE REQUIRED MOUNTING HEIGHT WITH THE REQUIREMENTS OF THE WASHING MACHINE. CORD AND PLUG SHALL BE ACCESSIBLE WITH THE WASHING MACHINE INSTALLED IN IT'S FINAL RESTING LOCATION.

H4. PROVIDE 400A, 480V, THREE-PHASE, OVERHEAD FEED TO UTILITY DISTRIBUTION SYSTEM "UDS2", SEE ONE-LINE DIAGRAM - BLDG AREA "H", SHEET E5.6, AND FOOD SERVICE DRAWINGS, FOR ADDITIONAL REQUIREMENTS.

H5. RECEPTACLE AND DEDICATED BRANCH CIRCUIT FOR CLOTHES DRYER MACHINE. PROVIDE BRANCH CIRCUIT FROM PANEL "L13H" CIRCUIT NO. 18 USING 2#10, 1#10N, 1#10G, IN 3/4"C.

H6. PROVIDE 400A, 208Y/120V, THREE-PHASE, OVERHEAD FEEDER CIRCUIT TO UTILITY DISTRIBUTION SYSTEM "UDS2". SEE ONE-LINE DIAGRAM - BLDG AREA "H", SHEET E5.6, AND FOOD SERVICE DRAWINGS, FOR ADDITIONAL REQUIREMENTS.

H7. PROVIDE NEMA 5-20R SIMPLEX RECEPTACLE (HIGH ON WALL) FOR ROLL-THRU REFRIGERATOR. PROVIDE DEDICATED 120V, 20A EMERGENCY POWER (NEC 702) BRANCH CIRCUIT FROM PANEL AND CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H8. PROVIDE 30A/2 SAFETY DISCONNECT SWITCH FOR ROLL-THRU HEATED CABINET. PROVIDE 20A, 120/208V, SINGLE PHASE POWER CIRCUIT (THROUGH DISCONNECT SWITCH) TO ROLL-THRU HEATED CABINET FROM PANEL AND CIRCUIT NO. AS INDICATED USING 3#12, 3 #12G, IN 3/4"C. FEED. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H9. PROVIDE 100A, 120/208V, SINGLE-PHASE FEEDER CIRCUIT TO LOAD CENTER "1B" (PROVIDED INTEGRAL WITH THE FOOD SERVICE EQUIPMENT). PROVIDE FEEDER CIRCUIT FROM PANEL AND CIRCUIT NUMBER AS INDICATED. SEE ONE-LINE DIAGRAM - BLDG AREA "H" - NORMAL POWER, SHEET E5.6, AND FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

NOTES (FIRST FLOOR POWER PLAN - AREA "H")(CONTINUED):

H10. PROVIDE 100A, 120/208V, SINGLE-PHASE FEEDER CIRCUIT TO LOAD CENTER "1A" (PROVIDED INTEGRAL WITH THE FOOD SERVICE EQUIPMENT). PROVIDE FEEDER CIRCUIT FROM PANEL AND CIRCUIT NUMBER AS INDICATED. SEE ONE-LINE DIAGRAM - BLDG AREA "H" - NORMAL POWER, SHEET E5.6, AND FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H11. PROVIDE 30A, 120/208V, SINGLE-PHASE FEEDER CIRCUIT TO LOAD CENTER "88.1" (PROVIDED INTEGRAL WITH THE FOOD SERVICE EQUIPMENT). PROVIDE FEEDER CIRCUIT FROM PANEL AND CIRCUIT NUMBER AS INDICATED. SEE ONE-LINE DIAGRAM - BLDG AREA "H" - NORMAL POWER, SHEET E5.6, AND FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H12. PROVIDE 30A, 120/208V, SINGLE-PHASE FEEDER CIRCUIT TO LOAD CENTER "88.2" (PROVIDED INTEGRAL WITH THE FOOD SERVICE EQUIPMENT). PROVIDE FEEDER CIRCUIT FROM PANEL AND CIRCUIT NUMBER AS INDICATED. SEE ONE-LINE DIAGRAM - BLDG AREA "H" - NORMAL POWER, SHEET E5.6, AND FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H13. PROVIDE 40A, 120/208V, SINGLE-PHASE FEEDER CIRCUIT TO LOAD CENTER "89" (PROVIDED INTEGRAL WITH THE FOOD SERVICE EQUIPMENT). PROVIDE FEEDER CIRCUIT FROM PANEL AND CIRCUIT NUMBER AS INDICATED. SEE ONE-LINE DIAGRAM - BLDG AREA "H" - NORMAL POWER, SHEET E5.6, AND FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H14. PROVIDE EMERGENCY POWER (NEC702) 120V BRANCH CIRCUIT (FED FROM ABOVE) FOR WALK-IN UNIT LIGHTING FIXTURES, HEATERS, AND CONTROLS. PROVIDE ALL REQUIRED CIRCUITS TO LIGHTING FIXTURES, HEATERS, AND CONTROLS PER THE EQUIPMENT PROVIDER'S REQUIREMENTS. FEED FROM PANEL AND CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H15. PROVIDE 20A, 120V BRANCH CIRCUIT FOR EXHAUST HOOD CONTROLS FROM PANEL AND CIRCUIT NO. AS INDICATED USING 2#12, 1 #12G IN 3/4"C. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H16. PROVIDE 30A/2 FUSIBLE DISCONNECT SWITCH FOR POWER TO FREEZER COIL. PROVIDE EMERGENCY POWER (NEC702) 208V, 20A, SINGLE-PHASE CIRCUIT TO EQUIPMENT (THROUGH SAFETY DISCONNECT SWITCH) FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G, IN 3/4"C. PROVIDE FUSING AS REQUIRED FOR THE CONNECTED LOAD. PROVIDE ALL REQUIRED CIRCUITS PER THE FREEZER PROVIDER'S REQUIREMENTS. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H17. PROVIDE 30A/1 FUSIBLE DISCONNECT SWITCH FOR POWER TO COOLER COIL. PROVIDE EMERGENCY POWER (NEC702) 120V, 20A, SINGLE-PHASE CIRCUIT TO EQUIPMENT (THROUGH SAFETY DISCONNECT SWITCH) FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G, IN 3/4"C. PROVIDE FUSING AS REQUIRED FOR THE CONNECTED LOAD. PROVIDE ALL REQUIRED CIRCUITS PER THE COOLER PROVIDER'S REQUIREMENTS. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H18. PROVIDE HP RATED TOGGLE SAFETY DISCONNECT SWITCH (WITH LOCK-OUT/TAG-OUT ACCESSORY) NEAR BOOSTER FAN FOR POWER TO DRYER BOOSTER FAN. PROVIDE POWER CIRCUIT TO BOOSTER FAN PER MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4" C. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE DRYER BOOSTER FAN PROVIDER PRIOR TO ROUGH-IN.

H19. CONTRACTOR SHALL COORDINATE AND PROVIDE ALL REQUIRED UNDERGROUND CONDUIT RACEWAY SYSTEMS (FOR POWER, SYSTEMS & TECHNOLOGY, CONTROL AND LIGHTING CIRCUITS) TO PROVIDE CIRCUITS TO FOOD SERVICE EQUIPMENT. CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS WITH THE FOOD SERVICE EQUIPMENT PROVIDER PRIOR TO START OF ROUGH-IN.

NOTES (FIRST FLOOR POWER PLAN - AREA "H")(CONTINUED):

H20. PROVIDE CIRCUIT BREAKER TYPE SAFETY DISCONNECT MEANS "CB-DISHWASH" AND PROVIDE 100A, 480V, 3-PHASE CIRCUIT TO DISH WASHER EQUIPMENT PER THE EQUIPMENT PROVIDER'S REQUIREMENTS. SEE ONE-LINE DIAGRAM - BLDG AREA "H" - NORMAL POWER, SHEET E5.6, AND FOOD SERVICE DRAWINGS, FOR ADDITIONAL REQUIREMENTS.

H21. PROVIDE 20A/3 CIRCUIT BREAKER TYPE SAFETY DISCONNECT MEANS (NEMA 4X ENCLOSURE) "CB-DRYER" AND PROVIDE 20A, 480V, THREE-PHASE CIRCUIT TO ELECTRIC BLOW DRYER PER THE EQUIPMENT PROVIDER'S REQUIREMENTS. PROVIDE CIRCUIT FROM PANEL AND CIRCUIT NO. AS INDICATED USING 3#12, 1#12G, IN 3/4"C. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H22. PROVIDE 15A/3 CIRCUIT BREAKER TYPE SAFETY DISCONNECT MEANS (NEMA 4X ENCLOSURE) "CB-POTSCRUBBER" AND PROVIDE 480V, THREE-PHASE CIRCUIT TO POT SCRUBBER PER THE EQUIPMENT PROVIDER'S REQUIREMENTS. PROVIDE CIRCUIT FROM PANEL AND CIRCUIT NO. AS INDICATED USING 3#12, 1#12G, IN 3/4"C. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H23. PROVIDE 20A/3 CIRCUIT BREAKER TYPE SAFETY DISCONNECT MEANS (NEMA 4X ENCLOSURE) "CB-WASTECOLLECT" AND PROVIDE 20A, 480V, THREE- PHASE CIRCUIT TO WASTE COLLECTOR PER THE EQUIPMENT PROVIDER'S REQUIREMENTS. PROVIDE CIRCUIT FROM PANEL AND CIRCUIT NO. AS INDICATED USING 3#12, 1#12G, IN 3/4"C. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H24. PROVIDE RECEPTACLE AND DEDICATED 120V, 20A BRANCH CIRCUIT FOR UNDERCOUNTER BLAST CHILLER. FEED FROM PANEL AND CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H25. WORK TABLE SHALL BE PROVIDED WITH AN INTEGRAL LOAD CENTER (125A, 208Y/120V, 3-PHASE, 4-WIRE) BY THE FOOD SERVICE EQUIPMENT PROVIDER. PROVIDE 125A, 208Y/120V, THREE-PHASE FEEDER CIRCUIT TO LOAD CENTER FROM DISTRIBUTION SWITCHBOARD AS INDICATED. SEE ONE-LINE DIAGRAM - BLDG AREA "H" - NORMAL POWER, SHEET E5.6, AND FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H26. PROVIDE 30A/1 SAFETY DISCONNECT SWITCH AND DEDICATED 120V, 20A BRANCH CIRCUIT TO ICE MAKER. FEED FROM PANEL AND CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FINAL CIRCUIT TO ICE MAKER PER MANUFACTURER'S REQUIREMENTS. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H27. PROVIDE NEMA 15-50R RECEPTACLE FOR RETHERMALIZATION AND HOLDING CABINET. PROVIDE 50A, 208V, THREE-PHASE CIRCUIT TO RECEPTACLE FROM PANEL AND CIRCUIT NO. AS INDICATED USING 3#6, 1# 10G, IN 3/4"C. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H28. CONTRACTOR SHALL REFER TO CLASSROOM BUILDING FIRE ALARM SYSTEM DRAWINGS (E10.xx SERIES DRAWINGS) FOR ADDITIONAL FIRE ALARM SYSTEM & KITCHEN INTERCONNECTION REQUIREMENTS.

NOTES (FIRST FLOOR POWER PLAN - AREA "H")(CONTINUED):

H29. WORK TABLE SHALL BE FURNISHED WITH FACTORY INSTALLED RECEPTACLES. PROVIDE 120/208V, 20A, SINGLE PHASE BRANCH CIRCUIT FROM PANEL AND CIRCUIT NO. AS INDICATED USING 3#12, 1#12G, IN 3/4"C. PROVIDE FINAL CIRCUIT TO WORK TABLE JUNCTION BOX PER MANUFACTURER'S REQUIREMENTS. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H30. PROVIDE 30A/1 FUSIBLE SAFETY DISCONNECT MEANS WITHIN ACCESSIBLE CEILING CAVITY SPACE NEAR COILING SECURITY GRILL CONTROLLER. PROVIDE FUSING AND FINAL CIRCUIT TO CONTROLLER PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND CIRCUIT NO. AS INDICATED USING 2#10, 1#10G IN 3/4"C. PROVIDE ALL CIRCUITS REQUIRED BETWEEN THE CONTROLLER AND REMOTE CONTROL DEVICES PER EQUIPMENT MANUFACTURER'S REQUIREMENTS.

H31. PROVIDE RECEPTACLE HIGH ON WALL FOR POWER TO VIDEO MONITOR FOR DIGITAL SIGNAGE. COORDINATE THE REQUIRED INSTALLATION LOCATION AND MOUNTING HEIGHT WITH THE REQUIREMENTS FOR THE DIGITAL SIGNAGE PRIOR TO START OF ROUGH-IN.

H32. WORK TABLE SHALL BE PROVIDED WITH AN INTEGRAL LOAD CENTER (100A, 120/208V, SINGLE-PHASE, 3-WIRE) BY THE FOOD SERVICE EQUIPMENT PROVIDER. PROVIDE 100A, 120/208V, SINGLE-PHASE FEEDER CIRCUIT TO LOAD CENTER FROM PANEL AND CIRCUIT NO. AS INDICATED. SEE ONE-LINE DIAGRAM - BLDG AREA "H" - NORMAL POWER, SHEET E5.6, AND FOOD SERVICE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

H33. PROVIDE JUNCTION BOX AS REQUIRED AND 120V POWER CIRCUIT TO HEAT TRACE CONTROLLER FROM PANEL AND CIRCUIT NO. AS INDICATED. PROVIDE FINAL CONNECTIONS PER CONTROLLER MANUFACTURER'S REQUIREMENTS. COORDINATE LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO START OF ROUGH-IN.

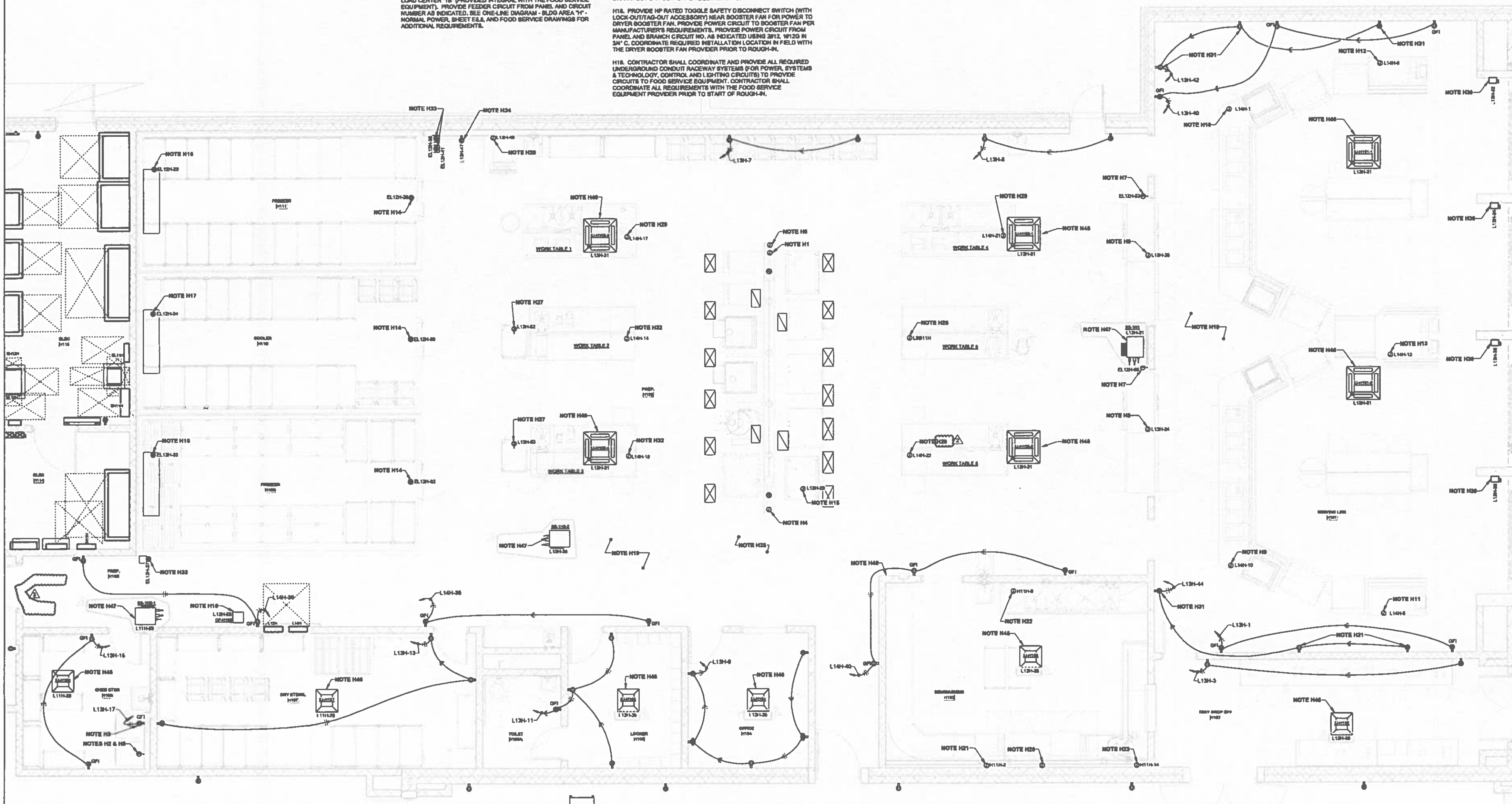
3 H34. NOTE NOT USED.

H46. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR HVAC UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO HVAC UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1#12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

NOTES (FIRST FLOOR POWER PLAN - AREA "H")(CONTINUED):

H47. PROVIDE 30A/2 FUSIBLE SAFETY DISCONNECT SWITCH NEAR BRANCH SELECTOR UNIT WITHIN THE ACCESSIBLE CEILING CAVITY SPACE. PROVIDE POWER CIRCUIT TO BRANCH SELECTOR UNIT (THROUGH DISCONNECT SWITCH) PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE POWER CIRCUIT FROM PANEL AND BRANCH CIRCUIT NO. AS INDICATED USING 2#12, 1# 12G IN 3/4"C. PROVIDE FUSING PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE REQUIRED INSTALLATION LOCATION IN FIELD WITH THE HVAC UNIT REQUIREMENTS AND ALL OTHER INSTALLATION WITHIN THE AREA.

H48. SEE FOOD SERVICE DRAWINGS FOR REQUIREMENTS REGARDING INSTALLATION OF REMOTE FIRE PULL STATION FOR FIRE SUPPRESSION SYSTEM.



FIRST FLOOR ENLARGED ELECTRICAL PLAN - MAIN KITCHEN AREA "H"
1/4" = 1'-0"

HOPKINSVILLE - CHRISTIAN COUNTY ACADEMY

CHRISTIAN COUNTY PUBLIC SCHOOLS

KDE #: BG 22-104

5165 FT. CAMPBELL BLVD
HOPKINSVILLE, KY 42240

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bell engineering — 107 Forbes Drive, Hopkinsville, KY 42240

K&S Engineering, PLLC — 134 Hillcrest Drive, Clarksville, TN 37043

WBW Engineering, Inc. — 3040 Canton Street, Hopkinsville, KY 42240

C&T Design and Equipment Co. — 2102 Kotter Avenue, Suite [illegible], Evansville, IN 47715

KEYPLAN

Revisions: [illegible]

Designed By: MJB | Drawn By: SDB | Checked By: MJB

Sheet title: FIRST FLOOR ENLARGED ELECTRICAL PLAN - MAIN KITCHEN AREA "H"

Architect's Project No: 2106-204 | Date: May, 20[illegible]

Drawing No: E7.3

Kentucky Mirror+ Plate Glass
722 E 2nd Street, Owensboro, KY

TO: Alliance Corporation
Attn: Kevin Hitchel

JOB NAME: **Hopkinsville Christian County Academy**

Date: 12/4/2024

CHANGE ORDER PR #24 REQUEST

DESCRIPTION OF WORK TO BE DONE, OR CHANGES TO BE MADE (NOT PART OF BASE CONTRACT)

SUBSTITUTE SALTO EXIT DEVICES IN 3 OPENINGS	$	(4,280.00)
DELETE REX, AND POWER SUPPLIES	$	(3,724.00)
CHANGE POWER PANIC HINGES TO ELECTRIC STRIKE ON REMOVABLE MULLION ONE PER ACTIVE LEAF	$	2,300.00
CHANGE FRAMES TO INCLUDE WIRE RUN FROM EDGE OF FRAMES PER ON SITE MEETING	$	2,400.00
DELETE CYLINDER DOGGING ON ALL DOORS	$	(1,711.00)
LABOR TO INSTALL ADDITIONAL HORIZONTALS, WIRE CHASE, AND BREAK METAL 42 HOURS AT $60.00 PER HOUR	$	2,520.00
Tax 6%:	$	(149.70)
Subtotal:		($2,645)
Total:		($2,645)
Total Change **Deduct**		**($2,645)**

TOTAL AMOUNT of this CHANGE ORDER: **($2,645)**
(incl. Materials, Tax & Labor)

AUTHORIZED BY: _____ **DATE:** _____

CONTRACT AMOUNT:	$	1,234,393.00
APPROVED C/O'S TO DATE:	$	54,259.00
REVISED AMOUNT:	$	1,288,652.00
PENDING C/O'S:	$	(2,645.00)
TOTAL REVISED CONTRACT AMOUNT:	$	1,286,007.00

ISSUED BY: Jeff McCain
TITLE: Project Manager - KY Mirror & Plate Glass

PLEASE SIGN, DATE & RETURN (1) COPY OF THIS FORM ALONG WITH YOUR FORMAL C/O ASAP TO AVOID ANY UNNECESSARY DELAYS.

Kentucky Mirror+ Plate Glass

722 E 2nd Street, Owensboro, KY

TO: Alliance Corporation
Attn: Kevin Hitchel

JOB NAME: **Hopkinsville Christian County Academy**

Date: 12/4/2024

CHANGE ORDER ASI 028 REQUEST

DESCRIPTION OF WORK TO BE DONE, OR CHANGES TO BE MADE (NOT PART OF BASE CONTRACT)

MOVE HORIZONTAL BY 6" AT EVERY WINDOW OPENING W40 AND ADD 6" OF SPANDREL IN LIEU OF VISION GLASS AT THESE AREAS.

DELETE 120 SQUARE FEET OF VISION GLASS	$	(1,230.00)
ADD ADDITIONAL 120 SQUARE FEET OF SPANDREL GLASS	$	2,298.00
Tax 6%:	$	64.08
Subtotal:		$1,132
Total:		$1,132
Total Change **Add:**		**$1,132**

TOTAL AMOUNT of this CHANGE ORDER: **$1,132**
(incl. Materials, Tax & Labor)

AUTHORIZED BY: _____ **DATE:** _____

CONTRACT AMOUNT:	$	1,234,393.00
APPROVED C/O'S TO DATE:	$	54,259.00
REVISED AMOUNT:	$	1,288,652.00
PENDING C/O'S:	$	(1,513.00)
TOTAL REVISED CONTRACT AMOUNT:	$	1,287,139.00

ISSUED BY: Jeff McCain
TITLE: Project Manager - KY Mirror & Plate Glass

PLEASE SIGN, DATE & RETURN (1) COPY OF THIS FORM ALONG WITH YOUR FORMAL C/O ASAP TO AVOID ANY UNNECESSARY DELAYS.

FACPAC Contract Change Order Supplemental Information Form (Ref# 61460)

Form Status: Saved

Tier 1 Project: Consolidated High School
BG Number: 22-104 District: Christian County (HB678) (115)
Status: Active Phase: Project Initiation (View Checklist)

Contract: Kentucky Mirror & Plate Glass Co., Inc. , 0084, Alum Frame Entrances, Storefronts, Glazed Alum Curtain Wall
Type: CM Bid Package Proposed

Change Order Number	4
Time Extension Required	No
Date Of Change Order	12/12/2024
Change Order Amount To Date	Decrease

Construction Contingency

Calculations below are project wide. Remaining negative Construction Contingency may require the submission of a revised BG1.

Current Approved Amount	$6,320,436.60
Net Approved COs	$365,699.78
Remaining After Approved COs	$5,954,736.82
Net All COs	$218,519.27
Remaining After All COs	$6,101,917.33

This Requested Change Order Amount ($1,513.00)
+/-
Change In A/E Fee This Change Order
+/-
Change In CM Fee This Change Order $0.00
+/-
Remaining Construction Contingency Balance $6,101,917.33
Contract Change Requested By Architect/Engineer; Construction Manager
Contract Change Reason Code Reduction of Scope

Change Order Description And Justification

Access control modifications per PR #24.

Cost Benefit To Owner

This will result in a cost savings to the owner.

Contract unit prices have been utilized to support the cost associated with this No

change order.

Detailed Cost Breakdown

Contract unit prices have not been utilized, provide a detailed cost breakdown which separates labor, material, profit and overhead.

Detail Item	Amount	Percent of Total
Labor	($2,645.00)	174.82%
Materials	$1,132.00	-74.82%
Profit and Overhead		0.00%
Bond Insurance		0.00%
Cost Breakdown Total:	$-1,513.00	

Cost for this Change Order supported by an alternate bid or competitive price quote: No

Explain Why

Executed contract with contractor.

Change Order Supplemental Information Form Signature Page (Online Form Ref# 61460)

Architect	Date
Construction Manager	Date
Finance Officer	Date
Local Board of Education Designee	Date