design west | architects

date:	5.17.24
project:	Nibley Middle School
by:	Michael Rigby
subject:	Addendum 03

CONTRACT ADDENDUM 03

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents. Prior to proceeding in accordance with these instructions, indicate your acceptance of these instructions for minor change to the work as consistent with the Contract Documents and return a copy to the Architect.

NOTICE: The last day to submit questions will be Thursday, May 23rd end of day. The last day for addendum release will be Tuesday, May 28th.

QUESTIONS:

Answers to questions from DWA. Electrical and civil updates/changes. Mechanical/Plumbing changes/updates. Clarification and changes to the plans and interior elevations.

01 DWA **QUESTION 1**: *Sheet C204 shows keynote 10 in the middle of the roadway. That keynote is for a BB standard. Is that where you want it? Or should it be keynote 14.*

ANSWER: See Hyde Park Civil Items, Addendum 3

02 DWA **QUESTION 2**: *There is no site electrical plan for the Nibley Middle School. Please provide.*

ANSWER: See update in Electrical items

03 DWA **QUESTION 3**: *In spec section 11 6643, 2.3, it calls to provide advertising/team logo area 12" x 12" minimum. The Nevco product specified does not have the space on the face of the scoreboard. One option provided would be to have a non-backlit panel in place of that (see attached from Daktronics). Please advise on how to proceed.*

ANSWER: See updated Specification 116643

04 DWA **QUESTION 4**: *There has been some changes made to sheet C301 that have not been noted (see attached from Oldcastle). As these were bid during bid package #1 , our supplier is asking if these items need to be modified by ASI for bid package #1, included in bid package #2, or if this needs to be addressed as a RFI for bid package #1. Please clarify.*

ANSWER: See Hyde Park Civil Items, Addendum 3

05 DWA **QUESTION 5**: *On the specs 096466 Page 2 under 2.05 Accessories, it calls for aluminum 4" with a 4in toe in aluminum and under that it calls for a Rubber Vent Cove Base. We have either 2-1/2" by 2-1/2" Aluminum OR we have 3" x 4" Rubber Cove Base. Please advise on how to proceed.*

ANSWER: See updated Specification 09 6466

06 DWA **QUESTION 6**: *On sheet A611 for both schools, there are 2 wall types listed as EF8B. Please clarify if this is correct or which wall type should be changed.*

ANSWER: See updated wall types

07 DWA **QUESTION 7**: *The alternate spec for these schools calls for a .60 mil PVC but requiring a 30-year warranty. A 30-year warranty will require an .80 mil PVC. The base bid only requires a 20-year warranty. Please advise on how to proceed*.

ANSWER: See updated warranty information in Alternate Specifications

08 DWA **QUESTION 8**: *This wall type S3G calls to be a 1 hour rated wall. U433 has drywall on each side of the wall to achieve the 1 hour rating. Please advise.*

ANSWER: See item 03.31, fire rating removed from wall type.

09 DWA **QUESTION 9**: *Trying to determine the type and brand of drywall for wall type S6H. We looked up the testing source RAL-TL-84-150. This is a proprietary assembly calling for a 1/2" USG type C board. Please verify for bidding purposes as this material does not match wall type and will determine finished wall thickness.*

ANSWER: The testing source lists a minimum thickness, but any thickness greater does not affect the wall assembly. Use the 5/8” type C board as per our assembly.

10 DWA **QUESTION 9**: *Trying to determine the type and brand of drywall for wall types S6H, S6N, S6P, S6Q2 and S6A2. We looked up the testing source RAL-TL-84-150 and USG 810940. This is a proprietary assembly calling for a 1/2" USG type C board. Please verify for bidding purposes as this material does not match wall types. They call for 5/8 type X and will determine finished wall thickness and sound rating.*

ANSWER: The testing source lists a minimum thickness, but any thickness greater does not affect the wall assembly. The RAL-TL-84-150 does list a minimum thick panel at 5/8”. Use the 5/8” thickness shown in our wall assemblies.

SPECIFICATIONS:

03.01 00 6000 Project Forms
- Replaced forms with Nibley versions

03.02 DC B Design Criteria
- Updated COMcheck

03.03 07 5400 Thermoplastic (KEE) Membrane Roofing
- 2.04 Poly-iso corrected to 20 psi
- 2.06 Clarified glass mat gyp cover board requirements, parapets and wall caps only

03.04 07 5419 Single-ply PVC Thermoplastic Roofing
- 1.07 Corrected warranty from 30 year to 20 year
- 2.01 Corrected manufacturers substitutions from not allowed to Substitutions allowed per 01 6000
- 2.04 Removed paragraph heading referencing Decking Sheathing and Cover Boards to read Cover Boards. No decking sheathing is desired.
- 2.04 Clarified glass mat gyp cover board requirements, parapets and wall caps only

- 2.05 Clarified insulation requirements.

03.05 09 5100 Acoustical Ceilings
- 2.02,B,11a Corrected product
- 2.02,C,11a Corrected product

03.06 09 6466 Wood Athletic Flooring
- 2.05 A Base corrected to Rubber 4” x 3”

03.07 10 2800 Toilet, Bath, and Laundry Accessories
- 2.04,F,3 Corrected to no charge, no coin slots
- 2.05 Added Electric Hand Dryer

03.08 11 6643 Interior Electronic Scoreboard
- 2.03,A,3h Removed 12” x 12” Logo requirement

SHEETS:

03.09 Mechanical/Plumbing – See updates.

03.10 Electrical – See updates.

03.11 G-007 – PLAN - CODE
- MDF D136 room corrected
- Custodial C119 room corrected
- Electrical D118 room corrected

03.12 G-008 – PLAN – CODE
- Storage C212 room corrected
- Classroom C204 corrected
- IDF A220 room corrected
- Custodial C204 room change

03.13 A-114.4 – PLAN – LEVEL 01 – AREA D – REFLECTED CEILING PLAN
- Added lights to corridor D121
- Added detail to lower ceiling in band D119

03.14 A-115.0 – PLAN – LEVEL 01 – AREA E – SLAB & FOUNDATION
- Rough Opening in ICF along grid H updated

03.15 A-116.0 – PLAN – LEVEL 01 – AREA F – SLAB & FOUNDATION
- Rough Opening in ICF along grid 9 updated

03.16 A-116.2 – PLAN – LEVEL 01 – AREA F - ANNOTATION
- Doors F104A and F104B frame types changed to HMB

03.17 A-121.1 – PLAN – LEVEL 02 – AREA 1 – DIMENSION PLAN
- Update to A204 changed to custodial

03.18 A-121.2 – PLAN – LEVEL 02 – AREA 1 – ANNOTATION PLAN
- Update to A204 changed to custodial

03.19 A-121.3 – PLAN – LEVEL 02 – AREA 1 – FINISH PLAN
- Update to A204 changed to custodial

03.20 A-121.4 – PLAN – LEVEL 02 – AREA 1 – REFLECTED CEILING PLAN
- Update to A204 changed to custodial

03.21 A-416 – ENLARGED VIEWS
- D1 – Carpet added to wall under stair

03.22 A-417 – ENLARGED VIEWS
- A1 – Change to instrument storage cabinets
- A4 – Change to min. clear dimension
- B1 – Carpet added to the wall under the stair
- C1 – Removed acoustical panels and staff lines on whiteboard

03.23 A-419 – ENLARGED VIEWS
- Elevations of all the lockers were added

03.24 A-425 – INTERIOR ELEVATION
- C3 – Add finish tag to the CMU walls
- B1 – Tagged and dimensioned reception desk

03.25 A-427 – INTERIOR ELEVATION
- B4 – hiding projector screen so you can see the wall mounted TV displays behind

03.26 A-428 – INTERIOR ELEVATION
- B1 – Corrected ceiling detail callout
- C1 – Corrected ceiling detail callout
- B4 – added finish tag
- C4 - added finish tag

03.27 A-431 – INTERIOR ELEVATION
- C2 – Finish tag added to the CMU wall under the trophy case

03.28 A-432 – INTERIOR ELEVATION
- C2 – Interior elevation cleanup

03.29 A-433 – INTERIOR ELEVATIONS
- A3 – added finish tag

03.30 A-434 – INTERIOR ELEVATIONS
- B2 – added finish tag

03.31 A-535 – DETAILS - BUILDING
- B3 – Detail updated.

03.32 A-561 – SCHEDULE – DOOR & TYPE NOTES
- Doors F104A and F104B frame type changed to HMB

03.33 A-581 – DETAILS - CEILING
- C2 – added detail for lower ceiling and bulkhead.

03.34 A-591 – DETAILS - MILLWORK
- A6 – Fixed detail showing metal bar going up ½” instead of down
- E4 – Fixed detail showing metal bar going up ½” instead of down

03.35 A-593 – DETAILS - MILLWORK
- B5 – Fixed detail showing metal bar going up ½" instead of down

03.36 A-594 – DETAILS – INTERIOR
- C6 – dashed line removed. No barrier under wood floor
- D3 – Typical Tile Pattern added
- E3 – Fabric Acoustic Panel thickness and design updated

03.37 A-595 – DETAILS – INTERIOR – WALL PANELS
- C6 – Corner of Tectum panels rounded, use factory edge on front edges.

03.38 A-611 – ASSEMBLIES – EXTERIOR WALLS, FLOORS, ROOFS
- Removed two unused wall types

03.39 A-612 – ASSEMBLIES – INTERIOR WALLS
- S3G fire rating removed

03.40 A-691 – SCHEDULE – FINISH
- Install information at T6 and T7 changed from "SEE ELEVATIONS" to "AS PER D3/594"
- Size information at AW1, AW2, AW3, AW4, AW5, and AW7, changed from "CUSTOM" to "SEE C1/A-595"
- Size information at AW6 changed from "CUSTOM" to "4' X 4'"
- Size information at AW8 and AW9 changed from "CUSTOM" to "SEE D4/A-415"

03.41 A-692 –SCHEDULE FINISH
- Updated 2B description
- Updated 2I description

Sheets:
G-007 – PLAN - CODE
G-008 – PLAN – CODE
A-114.4 – PLAN – LEVEL 01 – AREA D – REFLECTED CEILING PLAN
A-115.0 – PLAN – LEVEL 01 – AREA E – SLAB & FOUNDATION
A-116.0 – PLAN – LEVEL 01 – AREA F – SLAB & FOUNDATION
A-116.2 – PLAN – LEVEL 01 – AREA F - ANNOTATION
A-121.1 – PLAN – LEVEL 02 – AREA 1 – DIMENSION PLAN
A-121.2 – PLAN – LEVEL 02 – AREA 1 – ANNOTATION PLAN
A-121.3 – PLAN – LEVEL 02 – AREA 1 – FINISH PLAN
A-121.4 – PLAN – LEVEL 02 – AREA 1 – REFLECTED CEILING PLAN
A-416 – ENLARGED VIEWS
A-417 – ENLARGED VIEWS
A-419 – ENLARGED VIEWS
A-425 – INTERIOR ELEVATION
A-427 – INTERIOR ELEVATION
A-428 – INTERIOR ELEVATION
A-431 – INTERIOR ELEVATION
A-432 – INTERIOR ELEVATION
A-433 – INTERIOR ELEVATIONS
A-434 – INTERIOR ELEVATIONS
A-535 – DETAILS - BUILDING
A-561 – SCHEDULE – DOOR & TYPE NOTES
A-581 – DETAILS – CEILING
A-591 – DETAILS – MILLWORK

A-593 – DETAILS – MILLWORK
A-594 – DETAILS – INTERIOR
A-595 – DETAILS – INTERIOR – WALL PANELS
A-611 – ASSEMBLIES – EXTERIOR WALLS, FLOORS, ROOFS
A-612 – ASSEMBLIES – INTERIOR WALLS
A-691 – SCHEDULE – FINISH
A-692 –SCHEDULE FINISH
Mechanical/Plumbing sheets
Electrical sheets

Michael Rigby	5.17.24		
ISSUED BY Architect	Date	ACCEPTED BY Contractor	Date

BID FORM

CCSD Nibley & Hyde Park Middle Schools – Site and Building
Bid Package #2

This bid form must be completed in its entirety for the bid to be considered.

Company Name: _____

Address: _____

Contractor's License number: _____

Phone Number: _____ Fax number: _____

Email Address: _____

Name of Contact: _____

BID TO: DWA Construction, Inc.
76 West 2400 North
P.O. Box 3448
Logan, Utah 84323-3448
Phone: 435-752-6860 Fax: 435-752-7606
E-mail: dwanate.h@dwaconstruct.com or dennis@dwaconstruct.com

PLEASE NOTE that this project is tax exempt – DO NOT include sales tax.
If you are bidding more than one specification section,
Please attach additional breakdown information.

Acknowledge addendums: (list each separately) ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___.

Base Bid per construction documents, including storm drain, landscaping and irrigation, base materials, asphalt paving, concrete work, building construction, and all other work relative to complete the entire project. This includes the bid alternates for the 8-classroom wing and ballistic film for all first-floor windows.

Note to Bidders: There is no requirement to bid on both schools. Subcontractors and suppliers may bid on either of the schools or both schools. If you are bidding on both schools, please list each school separately along with a combined price including any cost savings if you are awarded both schools.

Bidding Section(s): _____

_____

_____

_____

Nibley Middle School Base Bid: ($_____)

Written amount: _____**dollars**

Hyde Park Middle School Base Bid: ($_____)

Written amount: _____**dollars**

Combined Bid for Both Schools: ($_____)

Written amount: _____**dollars**

(Please provide a combined price with any cost savings if subcontractor/supplier is awarded both schools)

BID ALTERNATES:

Deductive Alternate #1: Classroom Wing (8 Classrooms)

Bid alternate includes the completed building envelope, all utilities inside the classroom wing, all interior finishes and furnishings as required by the bidding documents. Please list the price for one school only!

Bidding Section(s): _____

Bid Alternate #1: DEDUCT ($_____)

Written amount: _____**dollars**

Alternate #2: Ballistic Film

Bid alternate includes the cost to furnish and install ballistic film on all first-floor windows as required by the bidding documents and specification section 08 0723. Please list the price for one school only!

Bid Alternate #2: ($_____)

Written amount: _____**dollars**

Alternate #3: 60 Mil PVC Roofing Materials

Bid alternate includes the cost to furnish and install a 60 Mil PVC roofing membrane, mechanically fastened system, in lieu of the 45 mil Fibertite system listed as the base bid. Please list the price for one school only!

Bid Alternate #3: ($_____)

Written amount: _____**dollars**

Alternate #4: Interior/Exterior Lighting Controls (Excluding Theatrical Lighting Controls)

Lutron Lighting Controls is specified as the base bid. The district will also consider using Cooper, nLight, and Wattstopper as alternates for lighting controls(subject to approval). Please specify below if you are proposing one of the alternates

Base Bid: Lutron **($_____)**

Written amount: _____dollars

Bid Alternate #4: Specify One of the following: Cooper nLight Wattstopper

($_____)

Written amount: _____dollars

(In case of discrepancy between the written amount and numerical amount, written amount will govern)

End of Alternates

ADDITIONAL BIDDING REQUIREMENTS:

(Failure to respond where required may result in disqualification of bid)

1. Bids shall be priced lump sum to furnish and / or install all material and / or equipment as required by plans and specifications for a complete installation. This project is tac exempt and tax should not be included.

2. The construction duration portion of this project will be 24 months or less. Material and equipment must be delivered and installed in accordance with the Construction Manager's schedule. **Please note that the construction schedule is preliminary in nature and is subject to change during the duration of the project.** Liquidated damages are $1000.00 per day. **See Advertisement for Bids.**

3. COST OF PAYMENT AND PERFORMANCE BOND: $_____.
   Only bids over $50,000.00 will require a performance and payment bond at CM/Owner option.
   (This amount will be added to the base bid amount if payment and performance bonds are required. If no amount is provided, it will be presumed that the bidder is unable to bond for their work on this project and may be cause for rejection).

4. The Construction Manager and Owner reserve the right to accept or reject any and all proposals or alternates with or without cause for any reason determined to be in the owner's best interest and to waive any bidding informality or irregularity.

5. The undersigned bidder, having examined the Drawings, Specifications and related documents in their entirety, and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of labor, hereby proposes to complete the work listed above in accordance with the Contract Documents and within the time set forth, at the price stated above and upon the subcontract form included in the Specifications. The above price is to cover all expenses incurred in performing the work required under the Contract Documents.

6. CONTRACTOR'S QUALIFICATION STATEMENT: Upon request the low bidders shall submit AIA Document A305 Contractor's Qualification Statement. Failure to show a statement satisfactory to the Owner or Construction Manager will be reason to reject the bid as nonresponsive. Past performance on similar projects, the demonstrated ability to complete work on schedule and ability to perform the work on this project to the satisfaction of the Owner and Construction Manager will be a priority.

BY ITS SIGNATURE, BIDDER ACKNOWLEDGES THAT THE BID DOCUMENTS ARE A COMPLETE PACKAGE. BIDDER CERTIFIES IT HAS REVIEWED ALL BID DOCUMENTS TO DETERMINE ITS TOTAL SCOPE OF WORK AND HAVE INCLUDED ALL RELATED COSTS.

_____
Name of Bidder:

_____
Authorized Signature:

_____ Date _____

Printed name of authorized signature: Contact phone number:

COM*check* Software Version COMcheckWeb

Envelope Compliance Certificate

Project Information

Energy Code:	2021 IECC
Project Title:	CCSD Middle School - Nibley
Location:	Nibley (Cache), Utah
Climate Zone:	5b
Project Type:	New Construction
Vertical Glazing / Wall Area:	16%

Construction Site:
3050 s 920 w
Nibley, Utah

Owner/Agent:

Designer/Contractor:

Additional Efficiency Package(s)

Credits: 10.0 Required 44.0 Proposed
Reduced lighting power, 39.0 credit
Enhanced digital lighting controls, 2.0 credit
Energy monitoring, 3.0 credit

Building Area	Floor Area
1-School/University : Nonresidential	160630

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Floor: Unheated Slab-On-Grade, Vertical 3 ft., [Bldg. Use 1 - School/University] (c)	2013	---	10.0	0.510	0.520
Roof: Insulation Entirely Above Deck, [Bldg. Use 1 - School/University]	108491	---	30.0	0.032	0.032
NORTH					
Ext. Wall: Solid Concrete, 8in. Thickness, Normal Density, Furring: None, [Bldg. Use 1 - School/University]	8878	---	24.0	0.039	0.090
Door: Glass (over 50 9.56976e-315lazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID KAWNER 500 WIDE STILE, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	121	---	---	0.380	0.630
Window: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID KAWNEER TRIFAB 450T, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	1900	---	---	0.380	0.360
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - School/University]	788	16.0	10.0	0.054	0.055
Door: Glass (over 50 9.56976e-315lazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID KAWNEER 500 WIDE STILE, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	103	---	---	0.380	0.630
Window: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID KAWNEER TRIFAB 450T, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	290	---	---	0.380	0.360
Ext. Wall: Solid Concrete, 10in. Thickness, Normal Density, Furring: None, [Bldg. Use 1 - School/University]	5222	---	24.0	0.039	0.090
Window: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID KAWNEER TRIFAB 450T, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	192	---	---	0.380	0.360
EAST					

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Ext. Wall: Solid Concrete, 8in. Thickness, Normal Density, Furring: None, [Bldg. Use 1 - School/University]	11288	---	24.0	0.039	0.090
Window: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID KAWNEER TRIFAB 450T, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	2068	---	---	0.380	0.360
Door: Glass (over 50 9.56976e-315lazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID KAWNEER 500 WIDE STYLE, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	126	---	---	0.380	0.630
Door: Insulated Metal, Swinging, [Bldg. Use 1 - School/University]	46	---	---	0.370	0.370
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - School/University]	1026	16.0	10.0	0.054	0.055
Window: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID KAWNEER TRIFAB 450T, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	470	---	---	0.380	0.360
Door: Glass (over 50 9.56976e-315lazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID KAWNEER 500 WIDE STILE, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	26	---	---	0.380	0.630
Ext. Wall: Solid Concrete, 10in. Thickness, Normal Density, Furring: None, [Bldg. Use 1 - School/University]	330	---	24.0	0.039	0.090
SOUTH					
Ext. Wall: Solid Concrete, 10in. Thickness, Normal Density, Furring: None, [Bldg. Use 1 - School/University]	4154	---	24.0	0.039	0.090
Window: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID KAWNEER TRIFAB 450T, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	192	---	---	0.380	0.360
Door: Insulated Metal, Swinging, [Bldg. Use 1 - School/University]	46	---	---	0.370	0.370
Ext. Wall: Solid Concrete, 8in. Thickness, Normal Density, Furring: None, [Bldg. Use 1 - School/University]	9673	---	24.0	0.039	0.090
Window: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID KAWNEER TRIFAB 450T, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	500	---	---	0.380	0.360
Door: Glass (over 50 9.56976e-315lazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID KAWNEER 500 WIDE STYLE, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	50	---	---	0.380	0.630
Door: Insulated Metal, Swinging, [Bldg. Use 1 - School/University]	93	---	---	0.370	0.370
Overhead doors: Insulated Metal, Non-Swinging, [Bldg. Use 1 - School/University]	228	---	---	0.370	0.179
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - School/University]	958	16.0	10.0	0.054	0.055
Window: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID KAWNEER TRIFAB 450T, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	443	---	---	0.380	0.360
WEST					
Ext. Wall: Solid Concrete, 8in. Thickness, Normal Density, Furring: None, [Bldg. Use 1 - School/University]	7900	---	24.0	0.039	0.090
Window: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID KAWNEER TRIFAB 450T, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	1365	---	---	0.380	0.360
Door: Glass (over 50 9.56976e-315lazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID KAWNEER 500 WIDE STILE, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	48	---	---	0.380	0.630
Ext. Wall: Solid Concrete, 10in. Thickness, Normal Density, Furring: None, [Bldg. Use 1 - School/University]	6191	---	24.0	0.039	0.090
Window: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID KAWNEER TRIFAB 450T, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	843	---	---	0.380	0.360
Door: Glass (over 50 9.56976e-315lazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID KAWNEER 500 WIDE STILE, SHGC 0.20, [Bldg. Use 1 - School/University] (b)	100	---	---	0.380	0.630

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.
(c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Envelope PASSES: Design 19% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2021 IECC requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title	Signature	Date

COM*check* Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2021 IECC
Project Title: CCSD Middle School - Nibley
Project Type: New Construction

Construction Site:
3050 s 920 w
Nibley, Utah

Owner/Agent:

Designer/Contractor:

Additional Efficiency Package(s)

Credits: 10.0 Required 44.0 Proposed
Reduced lighting power, 39.0 credit
Enhanced digital lighting controls, 2.0 credit
Energy monitoring, 3.0 credit

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-School/University	160630	0.72	115654
		Total Allowed Watts =	115654

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
1-School/University				
LED: DR1: DOWNLIGHT: Other:	1	45	15	675
LED: DR2: DOWNLIGHT: Other:	1	12	15	180
LED: DR3: DOWNLIGHT: Other:	1	14	10	140
LED: DR4: DOWNLIGHT: Other:	1	7	20	140
LED: DR6: DOWNLIGHT: Other:	1	8	20	160
LED: HB1: HIGH BAY: Other:	1	39	15	585
LED: LP1: LINEAR PENDANT: Other:	1	1000	7	7000
LED: LP1: LINEAR PENDANT: Other:	1	36	7	252
LED: LP2: LINEAR PENDANT: Other:	1	236	7	1652
LED: LP3: LINEAR PENDANT: Other:	1	39	7	273
LED: LP4: LINEAR PENDANT: Other:	1	154	7	1078
LED: LR1: LINEAR RECESSED: Other:	1	160	9	1440
LED: LR2: LINEAR RECESSED: Other:	1	78	5	390
LED: LR3: LINEAR RECESSED: Other:	1	698	8	5584
LED: LR4: LINEAR RECESSED: Other:	1	37	8	296
LED: LS1: LINEAR SURFACE: Other:	1	36	5	180
LED: LS2: LINEAR SURFACE: Other:	1	288	40	11520
LED: LS3: LINEAR SURFACE: Other:	1	30	4	120
LED: LS4: LINEAR SURFACE: Other:	1	961	8	7688
LED: LS5: LINEAR SURFACE: Other:	1	24	8	192
LED: LW1: LINEAR WALL: Other:	1	12	13	156

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
LED: P1: PENDANT: Other:	1	20	15	300
LED: P2: PENDANT: Other:	1	12	15	180
LED: SC1: SCONCE: Other:	1	6	20	120
LED: SL1: STRIP LIGHT: Other:	1	392	12	4704
LED: TR1: 2' X 4' LED TROFFER: Other:	1	163	40	6520
LED: TR2: 2' X 2' LED TROFFER: Other:	1	429	30	12870
LED: TR3: 2' X 2' LED TROFFER: Other:	1	39	40	1560
		Total Proposed Watts =		65955

Interior Lighting PASSES: Design 43% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2021 IECC requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title _____ Signature _____ Date _____

COM*check* Software Version COMcheckWeb

Exterior Lighting Compliance Certificate

Project Information

Energy Code:	2021 IECC
Project Title:	CCSD Middle School - Nibley
Project Type:	New Construction
Exterior Lighting Zone	2 (Residential mixed use area (LZ2))

Construction Site:
3050 s 920 w
Nibley, Utah

Owner/Agent:

Designer/Contractor:

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Entry canopy	6720 ft2	0.25	Yes	1680
Parking area	148336 ft2	0.04	Yes	5933
Walkway < 10 feet wide	1117 ft of	0.5	Yes	558
			Total Tradable Watts (a) =	8172
			Total Allowed Watts =	8172
			Total Allowed Supplemental Watts (b) =	400

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 400 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Entry canopy (6720 ft2): Tradable Wattage				
LED: DR5: CANOPY DOWNLIGHT: Other:	1	29	15	435
LED: WP2: WALL PACK: Other:	1	14	30	420
Parking area (148336 ft2): Tradable Wattage				
LED: AP1: AREA POLE: Other:	1	5	185	925
LED: AP2: AREA POLE: Other:	1	14	185	2590
LED: AP3: AREA POLE: Other:	1	2	185	370
LED: AP4: AREA POLE: Other:	1	1	185	185
LED: WP1: WALL PACK: Other:	1	11	50	550
Walkway < 10 feet wide (1117 ft of walkway length): Tradable Wattage				
LED: AB1: BOLLARD: Other:	1	12	20	240
LED: AP5: AREA POLE: Other:	1	4	65	260
LED: SC3: WALL SCONCE: Other:	1	6	10	60
LED: WP1: WALL SCONCE: Other:	1	9	20	180
			Total Tradable Proposed Watts =	6215

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2021 IECC requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title	Signature	Date

Mechanical Compliance Certificate

Project Information

Energy Code:	2021 IECC
Project Title:	CCSD Middle School - Nibley
Location:	Nibley (Cache), Utah
Climate Zone:	5b
Project Type:	New Construction

Construction Site:
3050 s 920 w
Nibley, Utah

Owner/Agent:

Designer/Contractor:

Additional Efficiency Package(s)

Credits: 10.0 Required 44.0 Proposed
Reduced lighting power, 39.0 credit
Enhanced digital lighting controls, 2.0 credit
Energy monitoring, 3.0 credit

Mechanical Systems List

Quantity	System Type & Description
2	MAU-1 & 2 (Single Zone): Heating: 1 each - Other, Gas, Capacity = 264 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - DX DOAS (Dehumidification), Capacity Unknown, Evaporatively Cooled Condenser, Unknown Economizer No minimum efficiency requirement applies Fan System: MAU | Kitchen -- Compliance (Motor nameplate HP and fan efficiency method) : Passes Fans: SF-MAU-1,2 Supply, Constant Volume, 2981 CFM, 1.5 motor nameplate hp, 1.10 fan energy index EF-MAU-1,2 Exhaust, Constant Volume, 3400 CFM, 1.5 motor nameplate hp, 1.10 fan energy index
1	RTU-1 (Multiple-Zone): Heating: 1 each - Hydronic or Steam Coil, Hot Water, Capacity = 451 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Hydronic Coil, Capacity = 993 kBtu/h, Air Economizer No minimum efficiency requirement applies Fan System: RTU-1 | Classrooms A,B -- Compliance (Brake HP and fan efficiency method) : Passes Fans: SF-RTU-1.3 Supply, Multi-Zone VAV, 5401 CFM, 6.6 motor nameplate hp, 4.5 design brake hp (4.5 max. BHP), 1.30 fan energy index SF-RTU-1.5 Supply, Multi-Zone VAV, 5401 CFM, 6.6 motor nameplate hp, 4.5 design brake hp (4.5 max. BHP), 1.30 fan energy index RF-RTU-1.5 Return, Multi-Zone VAV, 5167 CFM, 3.0 motor nameplate hp, 1.7 design brake hp (1.7 max. BHP), 0.95 fan energy index RF-RTU-1.4 Return, Multi-Zone VAV, 5167 CFM, 3.0 motor nameplate hp, 1.7 design brake hp (1.7 max. BHP), 0.95 fan energy index RF-RTU-1.3 Return, Multi-Zone VAV, 5167 CFM, 3.0 motor nameplate hp, 1.7 design brake hp (1.7 max. BHP), 0.95 fan energy index RF-RTU-1.2 Return, Multi-Zone VAV, 5167 CFM, 3.0 motor nameplate hp, 1.7 design brake hp (1.7 max. BHP), 0.95 fan energy index RF-RTU-1.1 Return, Multi-Zone VAV, 5167 CFM, 3.0 motor nameplate hp, 1.7 design brake hp (1.7 max. BHP), 0.95 fan energy index SF-RTU-1.4 Supply, Multi-Zone VAV, 5401 CFM, 6.6 motor nameplate hp, 4.5 design brake hp (4.5 max. BHP), 1.30 fan energy index RF-RTU-1.6 Return, Multi-Zone VAV, 5167 CFM, 3.0 motor nameplate hp, 1.7 design brake hp (1.7 max. BHP), 0.95 fan energy index SF-RTU-1.1 Supply, Multi-Zone VAV, 5401 CFM, 6.6 motor nameplate hp, 4.5 design brake hp (4.5 max. BHP), 1.30 fan energy index

Quantity	System Type & Description
	SF-RTU-1.2 Supply, Multi-Zone VAV, 5401 CFM, 6.6 motor nameplate hp, 4.5 design brake hp (4.5 max. BHP), 1.30 fan energy index SF-RTU-1.6 Supply, Multi-Zone VAV, 5401 CFM, 6.6 motor nameplate hp, 4.5 design brake hp (4.5 max. BHP), 1.30 fan energy index
1	RTU-2 (Multiple-Zone): Heating: 1 each - Hydronic or Steam Coil, Hot Water, Capacity = 692 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Hydronic Coil, Capacity = 1131 kBtu/h, Air Economizer No minimum efficiency requirement applies Fan System: RTU-2 | Classrooms A,B -- Compliance (Brake HP and fan efficiency method) : Passes Fans: RF-RTU-2.1 Return, Multi-Zone VAV, 6921 CFM, 3.0 motor nameplate hp, 1.9 design brake hp (1.9 max. BHP), 1.53 fan energy index SF-RTU-2.1 Supply, Multi-Zone VAV, 7441 CFM, 10.0 motor nameplate hp, 6.9 design brake hp (6.9 max. BHP), 1.17 fan energy index SF-RTU-2.2 Supply, Multi-Zone VAV, 7441 CFM, 10.0 motor nameplate hp, 6.9 design brake hp (6.9 max. BHP), 1.17 fan energy index SF-RTU-2.3 Supply, Multi-Zone VAV, 7441 CFM, 10.0 motor nameplate hp, 6.9 design brake hp (6.9 max. BHP), 1.17 fan energy index SF-RTU-2.4 Supply, Multi-Zone VAV, 7441 CFM, 10.0 motor nameplate hp, 6.9 design brake hp (6.9 max. BHP), 1.17 fan energy index SF-RTU-2.5 Supply, Multi-Zone VAV, 7441 CFM, 10.0 motor nameplate hp, 6.9 design brake hp (6.9 max. BHP), 1.17 fan energy index RF-RTU-2.5 Return, Multi-Zone VAV, 6921 CFM, 3.0 motor nameplate hp, 1.9 design brake hp (1.9 max. BHP), 1.53 fan energy index RF-RTU-2.4 Return, Multi-Zone VAV, 6921 CFM, 3.0 motor nameplate hp, 1.9 design brake hp (1.9 max. BHP), 1.53 fan energy index RF-RTU-2.2 Return, Multi-Zone VAV, 6921 CFM, 3.0 motor nameplate hp, 1.9 design brake hp (1.9 max. BHP), 1.53 fan energy index RF-RTU-2.3 Return, Multi-Zone VAV, 6921 CFM, 3.0 motor nameplate hp, 1.9 design brake hp (1.9 max. BHP), 1.53 fan energy index
1	RTU-3 (Multiple-Zone): Heating: 1 each - Hydronic or Steam Coil, Hot Water, Capacity = 703 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Hydronic Coil, Capacity = 1064 kBtu/h, Air Economizer No minimum efficiency requirement applies Fan System: RTU-3 | Classrooms C -- Compliance (Brake HP and fan efficiency method) : Passes Fans: RF-RTU-3.5 Return, Multi-Zone VAV, 6392 CFM, 3.0 motor nameplate hp, 1.7 design brake hp (1.7 max. BHP), 1.60 fan energy index RF-RTU-3.4 Return, Multi-Zone VAV, 6392 CFM, 3.0 motor nameplate hp, 1.7 design brake hp (1.7 max. BHP), 1.60 fan energy index RF-RTU-3.3 Return, Multi-Zone VAV, 6392 CFM, 3.0 motor nameplate hp, 1.7 design brake hp (1.7 max. BHP), 1.60 fan energy index SF-RTU-3.5 Supply, Multi-Zone VAV, 6941 CFM, 10.0 motor nameplate hp, 6.3 design brake hp (6.3 max. BHP), 1.18 fan energy index RF-RTU-3.1 Return, Multi-Zone VAV, 6392 CFM, 3.0 motor nameplate hp, 1.7 design brake hp (1.7 max. BHP), 1.60 fan energy index RF-RTU-3.2 Return, Multi-Zone VAV, 6392 CFM, 3.0 motor nameplate hp, 1.7 design brake hp (1.7 max. BHP), 1.60 fan energy index SF-RTU-3.1 Supply, Multi-Zone VAV, 6941 CFM, 10.0 motor nameplate hp, 6.3 design brake hp (6.3 max. BHP), 1.18 fan energy index SF-RTU-3.2 Supply, Multi-Zone VAV, 6941 CFM, 10.0 motor nameplate hp, 6.3 design brake hp (6.3 max. BHP), 1.18 fan energy index SF-RTU-3.3 Supply, Multi-Zone VAV, 6941 CFM, 10.0 motor nameplate hp, 6.3 design brake hp (6.3 max. BHP), 1.18 fan energy index SF-RTU-3.4 Supply, Multi-Zone VAV, 6941 CFM, 10.0 motor nameplate hp, 6.3 design brake hp (6.3 max. BHP), 1.18 fan energy index
1	RTU-4 (Multiple-Zone): Heating: 1 each - Hydronic or Steam Coil, Hot Water, Capacity = 579 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Hydronic Coil, Capacity = 721 kBtu/h, Air Economizer No minimum efficiency requirement applies Fan System: RTU-4 | Cafetorium -- Compliance (Brake HP and fan efficiency method) : Passes Fans:

Quantity	System Type & Description
	RF-RTU-4.5 Return, Multi-Zone VAV, 4209 CFM, 2.0 motor nameplate hp, 1.3 design brake hp (1.3 max. BHP), 1.44 fan energy index RF-RTU-4.4 Return, Multi-Zone VAV, 4209 CFM, 2.0 motor nameplate hp, 1.3 design brake hp (1.3 max. BHP), 1.44 fan energy index RF-RTU-4.3 Return, Multi-Zone VAV, 4209 CFM, 2.0 motor nameplate hp, 1.3 design brake hp (1.3 max. BHP), 1.44 fan energy index RF-RTU-4.1 Return, Multi-Zone VAV, 4209 CFM, 2.0 motor nameplate hp, 1.3 design brake hp (1.3 max. BHP), 1.44 fan energy index RF-RTU-4.2 Return, Multi-Zone VAV, 4209 CFM, 2.0 motor nameplate hp, 1.3 design brake hp (1.3 max. BHP), 1.44 fan energy index SF-RTU-4.4 Supply, Multi-Zone VAV, 4248 CFM, 6.6 motor nameplate hp, 3.6 design brake hp (3.6 max. BHP), 1.38 fan energy index SF-RTU-4.5 Supply, Multi-Zone VAV, 4248 CFM, 6.6 motor nameplate hp, 3.6 design brake hp (3.6 max. BHP), 1.38 fan energy index SF-RTU-4.1 Supply, Multi-Zone VAV, 4248 CFM, 6.6 motor nameplate hp, 3.6 design brake hp (3.6 max. BHP), 1.38 fan energy index SF-RTU-4.3 Supply, Multi-Zone VAV, 4248 CFM, 6.6 motor nameplate hp, 3.6 design brake hp (3.6 max. BHP), 1.38 fan energy index SF-RTU-4.2 Supply, Multi-Zone VAV, 4248 CFM, 6.6 motor nameplate hp, 3.6 design brake hp (3.6 max. BHP), 1.38 fan energy index
1	RTU-5 (Multiple-Zone): Heating: 1 each - Hydronic or Steam Coil, Hot Water, Capacity = 284 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Hydronic Coil, Capacity = 935 kBtu/h, Air Economizer No minimum efficiency requirement applies Fan System: RTU-5 | Kitchen -- Compliance (Brake HP and fan efficiency method) : Passes Fans: SF-RTU-5.1 Supply, Constant Volume, 3290 CFM, 5.0 motor nameplate hp, 2.6 design brake hp (2.6 max. BHP), 1.41 fan energy index RF-RTU-5.1 Return, Constant Volume, 3000 CFM, 1.5 motor nameplate hp, 0.8 design brake hp (0.8 max. BHP), 1.78 fan energy index
1	RTU-6 (Multiple-Zone): Heating: 1 each - Hydronic or Steam Coil, Hot Water, Capacity = 190 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Hydronic Coil, Capacity = 279 kBtu/h, Air Economizer No minimum efficiency requirement applies Fan System: RTU-6 | Music -- Compliance (Brake HP and fan efficiency method) : Passes Fans: RF-RTU-6.1 Return, Multi-Zone VAV, 4403 CFM, 2.0 motor nameplate hp, 1.4 design brake hp (1.4 max. BHP), 1.41 fan energy index RF-RTU-6.2 Return, Multi-Zone VAV, 4403 CFM, 2.0 motor nameplate hp, 1.4 design brake hp (1.4 max. BHP), 1.41 fan energy index SF-RTU-6.2 Supply, Multi-Zone VAV, 4428 CFM, 6.6 motor nameplate hp, 3.5 design brake hp (3.5 max. BHP), 1.37 fan energy index SF-RTU-6.1 Supply, Multi-Zone VAV, 4428 CFM, 6.6 motor nameplate hp, 3.5 design brake hp (3.5 max. BHP), 1.37 fan energy index
1	RTU-7 (Multiple-Zone): Heating: 1 each - Hydronic or Steam Coil, Hot Water, Capacity = 764 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Hydronic Coil, Capacity = 263 kBtu/h, Air Economizer No minimum efficiency requirement applies Fan System: RTU-7 | Admin -- Compliance (Brake HP and fan efficiency method) : Passes Fans: RF-RTU-7.1 Return, Multi-Zone VAV, 5188 CFM, 3.0 motor nameplate hp, 1.9 design brake hp (1.9 max. BHP), 1.20 fan energy index RF-RTU-7.2 Return, Multi-Zone VAV, 5188 CFM, 3.0 motor nameplate hp, 1.9 design brake hp (1.9 max. BHP), 1.20 fan energy index SF-RTU-7.2 Supply, Multi-Zone VAV, 5278 CFM, 6.6 motor nameplate hp, 4.3 design brake hp (4.3 max. BHP), 1.32 fan energy index SF-RTU-7.1 Supply, Multi-Zone VAV, 5278 CFM, 6.6 motor nameplate hp, 4.3 design brake hp (4.3 max. BHP), 1.32 fan energy index
1	RTU-8 (Multiple-Zone): Heating: 1 each - Hydronic or Steam Coil, Hot Water, Capacity = 144 kBtu/h No minimum efficiency requirement applies

Quantity	System Type & Description
	Cooling: 1 each - Hydronic Coil, Capacity = 258 kBtu/h, Air Economizer No minimum efficiency requirement applies Fan System: RTU-8 | Lockers / Health Classroom -- Compliance (Brake HP and fan efficiency method) : Passes Fans: SF-RTU-8.1 Supply, Multi-Zone VAV, 4213 CFM, 5.0 motor nameplate hp, 2.8 design brake hp (2.8 max. BHP), 1.42 fan energy index SF-RTU-8.2 Supply, Multi-Zone VAV, 4213 CFM, 5.0 motor nameplate hp, 2.8 design brake hp (2.8 max. BHP), 1.42 fan energy index RF-RTU-8.1 Return, Multi-Zone VAV, 2803 CFM, 1.0 motor nameplate hp, 0.6 design brake hp (0.6 max. BHP), 1.56 fan energy index RF-RTU-8.2 Return, Multi-Zone VAV, 2803 CFM, 1.0 motor nameplate hp, 0.6 design brake hp (0.6 max. BHP), 1.56 fan energy index
1	RTU-9 (Multiple-Zone): Heating: 1 each - Hydronic or Steam Coil, Hot Water, Capacity = 1450 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Hydronic Coil, Capacity = 933 kBtu/h, Air Economizer No minimum efficiency requirement applies Fan System: RTU-9 | Gymnasium -- Compliance (Brake HP and fan efficiency method) : Passes Fans: SF-RTU-9.1 Supply, Single-Zone VAV, 6000 CFM, 5.0 motor nameplate hp, 2.8 design brake hp (2.8 max. BHP), 1.50 fan energy index SF-RTU-9.2 Supply, Single-Zone VAV, 6000 CFM, 5.0 motor nameplate hp, 2.8 design brake hp (2.8 max. BHP), 1.50 fan energy index SF-RTU-9.3 Supply, Single-Zone VAV, 6000 CFM, 5.0 motor nameplate hp, 2.8 design brake hp (2.8 max. BHP), 1.50 fan energy index SF-RTU-9.4 Supply, Single-Zone VAV, 6000 CFM, 5.0 motor nameplate hp, 2.8 design brake hp (2.8 max. BHP), 1.50 fan energy index SF-RTU-9.5 Supply, Single-Zone VAV, 6000 CFM, 5.0 motor nameplate hp, 2.8 design brake hp (2.8 max. BHP), 1.50 fan energy index RF-RTU-9.1 Return, Single-Zone VAV, 5800 CFM, 1.5 motor nameplate hp, 1.0 design brake hp (1.0 max. BHP), 1.76 fan energy index RF-RTU-9.2 Return, Single-Zone VAV, 5800 CFM, 1.5 motor nameplate hp, 1.0 design brake hp (1.0 max. BHP), 1.76 fan energy index RF-RTU-9.3 Return, Single-Zone VAV, 5800 CFM, 1.5 motor nameplate hp, 1.0 design brake hp (1.0 max. BHP), 1.76 fan energy index RF-RTU-9.4 Return, Single-Zone VAV, 5800 CFM, 1.5 motor nameplate hp, 1.0 design brake hp (1.0 max. BHP), 1.76 fan energy index RF-RTU-9.5 Return, Single-Zone VAV, 5800 CFM, 1.5 motor nameplate hp, 1.0 design brake hp (1.0 max. BHP), 1.76 fan energy index
1	RTU-10 (Multiple-Zone): Heating: 1 each - Hydronic or Steam Coil, Hot Water, Capacity = 354 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Hydronic Coil, Capacity = 246 kBtu/h, Air Economizer No minimum efficiency requirement applies Fan System: RTU-10 | Auxiliary Gymnasium -- Compliance (Brake HP and fan efficiency method) : Passes Fans: SF-RTU-10.1 Supply, Single-Zone VAV, 4348 CFM, 5.0 motor nameplate hp, 2.3 design brake hp (2.3 max. BHP), 1.37 fan energy index SF-RTU-10.2 Supply, Single-Zone VAV, 4348 CFM, 5.0 motor nameplate hp, 2.3 design brake hp (2.3 max. BHP), 1.37 fan energy index RF-RTU-10.1 Return, Single-Zone VAV, 4348 CFM, 1.5 motor nameplate hp, 1.0 design brake hp (1.0 max. BHP), 1.02 fan energy index RF-RTU-10.2 Return, Single-Zone VAV, 4348 CFM, 1.5 motor nameplate hp, 1.0 design brake hp (1.0 max. BHP), 1.02 fan energy index
1	CH-1: Cooling: Water Chiller, Capacity 270 tons, Condenser Water-Cooled, Standard Centrifugal Chiller, Heat Rejection Equipment: Propeller or Axial Fan Open-Circuit Cooling Tower Proposed Efficiency: 0.53 kW/ton-FL, Required Efficiency: 0.61 kW/ton-FL Proposed Part Load Efficiency: 0.41 kW/ton-IPLV, Required Part Load Efficiency: 0.55 kW/ton-IPLV
1	B-1 & 2: Heating: Hot Water Boiler, Capacity 5000 kBtu/h, Gas Proposed Efficiency: 87.00 % Ec, Required Efficiency: 82.00 % Ec

Quantity	System Type & Description
1	WH-1: Gas Instantaneous Water Heater, Capacity: 8 gallons, Input Rating: 500 kBtu/h w/ Circulation Pump Proposed Efficiency: 84.00 % Et, Required Efficiency: 80.00 % Et
1	WH-2: Gas Storage Water Heater, Capacity: 4 gallons, Input Rating: 199 kBtu/h w/ Circulation Pump No minimum efficiency requirement applies

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2021 IECC requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title	Signature	Date

Inspection Checklist

Energy Code: 2021 IECC

Requirements: 0.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR1][1]	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C103.2 [PR2][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical and service water heating systems and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks. Hot water system sized per manufacturer's sizing guide.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C103.2 [PR4][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C103.2 [PR8][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.4.1 [PR10][1]	The vertical fenestration area <= 30 percent of the gross above-grade wall area.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.4.1 [PR11][1]	The skylight area <= 3 percent of the gross roof area.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C402.4.2 [PR14][1]	In enclosed spaces > 2,500 ft2 directly under a roof with ceiling heights >15 ft. and used as an office, lobby, atrium, concourse, corridor, storage, gymnasium/exercise center, convention center, automotive service, manufacturing, non-refrigerated warehouse, retail store, distribution/sorting area, transportation, or workshop, the following requirements apply: (a) the daylight zone under skylights is >= half the floor area; (b) the skylight area to daylight zone is >= 3 percent with a skylight VT >= 0.40; or a minimum skylight effective aperture >= 1 percent.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C406 [PR9][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C303.2 [FO4][2]	Slab edge insulation installed per manufacturer's instructions.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C303.2.1 [FO6][1]	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C105 [FO3][2]	Installed slab-on-grade insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.2.4 [FO7][2]	Slab edge insulation depth/length. Slab insulation extending away from building is covered by pavement or >= 10 inches of soil.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C403.13.2 , C403.13.3 [FO9][3]	Snow/ice melting system and freeze protection systems have sensors and controls configured to limit service for pavement temperature above 50F and outdoor temperature above 40F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Framing / Rough-In Inspection	Complies?	Comments/Assumptions
C303.1.3 [FR12][2]	Fenestration products rated in accordance with NFRC certified and as to performance labels or certificates provided.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.4.3 [FR10][1]	Vertical fenestration SHGC value.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.4.3, C402.4.3.4 [FR8][1]	Installed vertical fenestration U-factor and SHGC consistent with label specifications and as reported in plans and COMcheck reports.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.4.5 [FR14][2]	U-factor of opaque swinging and nonswinging doors associated with the building thermal envelope meets requirements.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.5.1.3 [FR19][1]	The building envelope contains a continuous air barrier that is sealed in an approved manner and material permeability <= 0.004 dfm/ft2. Air barrier penetrations are sealed in an approved manner.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.5.4 [FR18][3]	Factory-built fenestration and doors are labeled as meeting air leakage requirements.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.5, C404.5.1, C404.5.2 [PL6][3]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C404.6.1, C404.6.2 [PL3][1]	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C404.6.3 [PL7][3]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C404.6.1, C404.6.1.1 [PL8][3]	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.2.6 [ME41][3]	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
Table_C403.3.2a [ME57][1]	Heat Rejection Equipment: Minimum Efficiency Requirement >=40.2 gpm/hp .	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
C403.7.7 [ME58][3]	Outdoor air and exhaust systems have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Check gravity dampers where allowed. Reference section language for operational details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.8.1 [ME65][3]	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp or fan system bhp.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
C403.8.2 [ME21][2]	HVAC fan motors not oversized beyond allowable limits.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.8.3 [ME117][2]	Fans have a fan energy index (FEI) >= 1.00. Variable volume fans will have an FEI >= 0.95.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.8.3 [ME117][2]	Fans have a fan energy index (FEI) >= 1.00. Variable volume fans will have an FEI >= 0.95.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.8.3 [ME117][2]	Fans have a fan energy index (FEI) >= 1.00. Variable volume fans will have an FEI >= 0.95.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.8.3 [ME117][2]	Fans have a fan energy index (FEI) >= 1.00. Variable volume fans will have an FEI >= 0.95.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.8.3 [ME117][2]	Fans have a fan energy index (FEI) >= 1.00. Variable volume fans will have an FEI >= 0.95.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.8.3 [ME117][2]	Fans have a fan energy index (FEI) >= 1.00. Variable volume fans will have an FEI >= 0.95.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.8.3 [ME117][2]	Fans have a fan energy index (FEI) >= 1.00. Variable volume fans will have an FEI >= 0.95.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.8.3 [ME117][2]	Fans have a fan energy index (FEI) >= 1.00. Variable volume fans will have an FEI >= 0.95.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.8.3 [ME117][2]	Fans have a fan energy index (FEI) >= 1.00. Variable volume fans will have an FEI >= 0.95.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.8.3 [ME117][2]	Fans have a fan energy index (FEI) >= 1.00. Variable volume fans will have an FEI >= 0.95.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.8.4 [ME142][2]	Motors for fans that are not less than 1/12 hp and less than 1 hp are electronically commutated motors or have a minimum motor efficiency of 70 percent. These motors have the means to adjust motor speed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.8.6 [ME143][2]	Each DX cooling system > 65 kBtu and chiller water/evaporative cooling system with fans > 1/4 hp are designed to vary the indoor fan airflow as a function of load and comply with detailed requirements of this section.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.9 [ME144][2]	Large diameter fans where installed shall be tested and labeled in accordance with AMCA 230.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.3 [ME55][2]	HVAC equipment efficiency verified.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
C403.2.1 [ME112][3]	Zone isolation devices and controls installed where applicable.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.5.5 [ME113][2]	Fault detection and diagnostics installed with air-cooled unitary DX units or VRF units having economizers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.2 [ME59][1]	Natural or mechanical ventilation is provided in accordance with International Mechanical Code Chapter 4. Mechanical ventilation has capability to reduce outdoor air supply to minimum per IMC Chapter 4.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.7.1 [ME59][1]	Demand control ventilation provided for spaces >500 ft2 and >15 people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >3,000 cfm.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.7.2 [ME115][3]	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.7.3 [ME140][3]	Units that provide ventilation air to multiple zones and operate in combination with zone heating and cooling systems do not use heating or heat recovery to warm supply air to a temperature greater than 60°F when representative building loads or outdoor air temperatures indicate that the majority of zones require cooling.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.7.6 [ME141][3]	HVAC systems serving guestrooms in Group R-1 buildings with > 50 guestrooms: Each guestroom is provided with controls that automatically manage temperature setpoint and ventilation (see sections C403.7.6.1 and C403.7.6.2).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.7.4 [ME57][1]	Exhaust air energy recovery on systems meeting Table C403.7.4(1) and C403.7.4(2).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.7.5 [ME116][3]	Kitchen exhaust systems comply with replacement air and conditioned supply air limitations, and satisfy hood rating requirements and maximum exhaust rate criteria.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.5, C403.5.1, C403.5.2 [ME62][1]	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.5.3.3 [ME124][1]	Air economizers automatically reduce outdoor air intake to the design minimum outdoor air quantity when outdoor air intake will not reduce cooling energy usage. See Table C403.5.3.3 for applicable device types and climate zones.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.5.3.4 [ME125][1]	System capable of relieving excess outdoor air during air economizer operation to prevent over pressurizing the building. The relief air outlet located to avoid recirculation into the building.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.5.3.5 [ME126][1]	Return, exhaust/relief and outdoor air dampers used in economizers have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Reference section C403.7.7 for details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.6.1 [ME75][2]	Hydronic and multizone HVAC system controls are VAV fans driven by mechanical or electrical variable speed drive per Table C403.4.1.1.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.6.9 [ME67][2]	VAV fans have static pressure sensors located so controller setpoint <=1.2 w.c..	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.4.1.3 [ME24][2]	Reset static pressure setpoint for DDC controlled VAV boxes reporting to central controller based on the zones requiring the most pressure.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.4.3 [ME69][3]	The heating of fluids in hydronic systems that have been previously mechanically cooled, and the cooling of fluids that have been previously mechanically heated are limited in accordance with Sections C403.4.3.1-C403.4.3.3. Single boiler systems >500,000 Btu/h have multistaged or modulating burner.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.4.3.1 [ME50][2]	Three-pipe hydronic systems using a common return for hot and chilled water are not used.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.3.4 [ME107][3]	System turndown requirement met through multiple single-input boilers, one or more modulating boilers, or a combination of single-input and modulating boilers. Boiler input between 1.0 MBtu/h and 5 MBtu/h has 3:1 turndown ratio, boiler input between 5.0 MBtu/h and 10 MBtu/h has 4:1 turndown ratio, boiler input > 10.0 MBtu/h has 5:1 turndown ratio.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
C403.4.5 [ME26][3]	Chilled water plants with multiple chillers have capability to reduce flow automatically through the chiller plant when a chiller is shut down. Boiler plants with multiple boilers have the capability to reduce flow automatically through the boiler plant when a boiler is shut down.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.10.1 [ME70][3]	Fan systems with total system motor capacity >=5 hp associated with heat rejection equipment configured to automatically modulate the fan speed to control the leaving fluid temperature or condensing temp/pressure of heat rejection device.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.10.2 [ME143][3]	Multiple-cell heat rejection equipment with variable speed fan drives are controlled to operate the maximum number of fans allowed and so that all fans operate at the same fan speed required for the instantaneous cooling duty. The minimum fan speed will be the minimum allowable speed of the fan drive system in accordance with the manufacturer's recommendations.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.10.3 [ME108][1]	Centrifugal fan open-circuit cooling towers having combined rated capacity >= 1100 gpm meets minimum efficiency requirement: >=40.2 gpm/hp.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.10.4 [ME109][1]	Open-circuit cooling towers having water cooled chiller systems and multiple or variable speed condenser pumps, are designed so that tower cells can run in parallel with larger of flow criteria.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
C403.6.1 [ME130][3]	Supply air systems serving multiple zones have VAV systems with controls configured to reduce the volume of air that is reheated, recooled or mixed in each zone. See section for details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.6.2 [ME131][3]	Single-duct VAV systems use terminal devices configured to reduce the supply of primary supply air before reheating or recooling takes place.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.6.3 [ME132][3]	Systems that have 1 warm air duct and 1 cool air duct use terminal devices configured to reduce the flow from one duct to a minimum before mixing of air from the other duct takes place.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.6.4 [ME133][3]	Individual dual-duct or mixing heating and cooling systems with a single fan and with total capacities > 90,000 Btu/h not equipped with air economizers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.6.5 [ME134][3]	Multiple zone HVAC systems have supply air temperature reset controls based on building loads or outside temperatures.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.6.7 [ME136][3]	Parallel-flow fan-powered VAV air terminals have automatic controls configured to 1) turn off the terminal fan except when space heating is required or where required for ventilation, 2) turn on the terminal fan as the first stage of heating before the heating coil is activated, and 3) during heating for warmup or setback temperature control, either operate the terminal fan and heating coil without primary air or, reverse the terminal damper logic and provide heating from the central air handler by primary air.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.6.8 [ME137][3]	Systems with DDC of individual zones reporting to the central control panel configured to reset the static pressure setpoint based on zone requiring the most pressure. The DDC is capable of monitoring zone damper positions or have an alternative method of indicating the need for static pressure. See section for details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.6.9 [ME138][3]	Static pressure sensors used to control VAV fans located such that the controller setpoint is <= 1.2 inches w.c.. Where this results in one or more sensors being located downstream of major duct splits, not less than one sensor located on each major branch.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.4.1.4 [ME63][2]	Heating for vestibules and air curtains with integral heating include automatic controls that shut off the heating system when outdoor air temperatures > 45F. Vestibule heating and cooling systems controlled by a thermostat in the vestibule with heating setpoint <= 60F and cooling setpoint >= 80F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.6.6 [ME135][3]	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
C403.10.5 [ME31][3]	Condenser heat recovery system that can heat water to 85 ºF or provide 60% of peak heat rejection is installed for preheating of service hot water.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.3.3 [ME35][1]	Hot gas bypass limited to: <=240 kBtu/h – 50% >240 kBtu/h – 25%	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C404.2.1 [ME111][2]	Gas-fired water-heating equipment installed in new buildings: where a singular piece of water-heating equipment >= 1,000 kBtu/h serves the entire building, thermal efficiency >= 92 Et. Where multiple pieces of water-heating equipment serve the building with combined rating >= 1,000 kBtu/h, the combined input-capacity-weighted-average thermal efficiency >= 90 Et. Exclude input rating of equipment in individual dwelling units and equipment <= 100 kBtu/h.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.2.1 [ME53][3]	Air outlets and zone terminal devices have means for air balancing.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.2.2 [ME54][3]	HVAC hydronic heating and cooling coils have means to balance and have pressure test connections.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.11.3, C403.11.3.1, C403.11.3.2 [ME123][3]	Refrigerated display cases, walk-in coolers or walk-in freezers served by remote compressors and remote condensers not located in a condensing unit, have fan-powered condensers that comply with Sections C403.11.3.1 and refrigeration compressor systems that comply with C403.11.3.2..	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3.1 [EL22][1]	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1, C405.2.1.1 [EL18][1]	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, corridors, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1.2 [EL19][1]	Occupancy sensors control function in warehouses: In warehouses, the lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more within 20 minutes of when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor. Lights not turned off by occupant sensors is done so by time-switch.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1.3 [EL20][1]	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) general lighting in each zone permitted to turn on upon occupancy in control zone, 3) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 4) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.2, C405.2.2.1 [EL21][2]	Each area not served by occupancy sensors (per C405.2.1.1) have time-switch controls and functions detailed in sections C405.2.2.1.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.4, C405.2.4.1, C405.2.4.2 [EL23][2]	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.5 [EL27][1]	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.7 [EL28][1]	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.7 [EL26][2]	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.8 [EL27][2]	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.9.1, C405.9.2 [EL28][2]	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.10 [EL29][2]	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.1.1 [EL30][2]	At least 90% of dwelling unit permanently installed lighting shall have lamp efficacy >= 65 lm/W or luminaires with efficacy >= 45 lm/W or comply with C405.2.4 or C405.3.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.11, C405.11.1 [EL31][2]	50% of 15/20 amp receptacles installed in enclosed offices, conference rooms, copy rooms, break rooms, classrooms and workstations and > 25% of branch circuit feeders for modular furniture will have automatic receptacle control in accordance with C405.11.1.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Insulation Inspection	Complies?	Comments/Assumptions
C303.1 [IN3][1]	Roof insulation installed per manufacturer's instructions and is labeled with R-value or insulation certificate providing R-value and other relevant data. Blown or poured loose-fill insulation is installed only where the roof slope is <=3 in 12.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.2.1 [IN20][1]	Roof assembly meets minimal thermal resistance installed between roof framing or in a continuous fashion on the roof assembly as stipulated in Table C402.1.3. Requirements for above deck insulation, minimum thickness, suspended ceilings, staggered joints and skylight curbs will be met.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C303.2 [IN7][1]	Above-grade wall insulation installed per manufacturer's instructions.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.1.3 [IN19][3]	Non-swinging opaque doors have R-4.75 insulation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C105 [IN6][1]	Installed above-grade wall insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.2.3 [IN8][2]	Installed floor insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.2.6 [IN18][3]	Radiant panels and associated components, designed for heat transfer from the panel surfaces to the occupants or indoor space are insulated with a minimum of R-3.5.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C105 [IN2][1]	Installed roof insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports. For some ceiling systems, verification may need to occur during Framing Inspection.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.5.1.1 [IN1][1]	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed, weather stripped or wrapped with moisture vapor-permeable wrapping material to minimize air leakage.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [FI17][3]	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C303.3, C408.2.5.3 [FI8][3]	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C401.3 [FI58][1]	A thermal envelope certificate will be supplied and completed by an approved third party.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.5.10 [FI26][3]	Recessed luminaires in thermal envelope to limit infiltration and be IC rated and labeled. Seal between interior finish and luminaire housing.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.5.11 [FI59][1]	Operable openings > 40 ft2 will be interlocked with heating and cooling systems to setback setpoint temperatures within 10 minutes of opening.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.5.8 [FI37][1]	Weatherseals installed on all loading dock cargo door openings and provide direct contact along the top and sides of vehicles parked in the doorway.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.3.1 [FI27][3]	HVAC systems and equipment capacity does not exceed calculated loads.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.4.1 [FI47][3]	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.4.1.2 [FI38][3]	Thermostatic controls have a 5 °F deadband.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.4.1.3 [FI20][3]	Temperature controls have setpoint overlap restrictions.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.4.2 [FI39][3]	Each zone equipped with setback controls using automatic time clock or programmable control system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.4.2.1, C403.4.2.2 [FI40][3]	Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C403.4.2.3 [FI41][3]	Systems include optimum start controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C404.3 [FI11][3]	Heat traps installed on supply and discharge piping of non-circulating systems.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C404.4 [FI25][2]	All piping insulated in accordance with section details and Table C403.12.3.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C404.6.1 [FI12][3]	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank. System return pipe is a dedicated return pipe or a cold water supply pipe.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.5.1 [FI19][1]	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Exterior Lighting fixture schedule for values.*
C406.3 [FI67][1]	Reduced lighting power - this credit specifies that the connected lighting power is >= 10% more efficient than 2021 IECC requirements.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C406.4 [FI54][1]	Enhanced Digital Lighting Controls - Interior lighting has the following enhanced lighting controls in accordance with Sections C405.2.1 through C405.2.3, Luminaires capable of continuous dimming and being addressed individually, at least 8 luminaires controlled in combination in a daylight zone, digital control system for fixtures with load shedding or occupancy sensors, Sequence of Operations documentation, and functional testing per Section C408.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C406.10 [FI63][1]	Energy Monitoring - the building is equipped with an energy management system to monitor, record, and report energy consumption for electrical energy, by end-use category, contain meters, a data acquisition system and employ graphical reports.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.1.1 [FI57][1]	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C408.2.1 [FI28][1]	Commissioning plan developed by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.3.1 [FI31][1]	HVAC equipment, systems and system-to-system relationships have been tested to ensure proper operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.3.2 [FI10][1]	HVAC and service water heating control systems have been tested to ensure proper operation, calibration and adjustment of controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.3.3 [FI32][1]	Economizers have been tested to ensure proper operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.4 [FI29][1]	Preliminary commissioning report completed and certified by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.5 [FI7][3]	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.5 [FI16][3]	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.5.1 [FI43][1]	An air and/or hydronic system balancing report is provided for HVAC systems.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.5.2 [FI30][1]	Final commissioning report due to building owner within 90 days of receipt of certificate of occupancy.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.3 [FI33][1]	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

SECTION 07 5400
THERMOPLASTIC (KEE) MEMBRANE ROOFING - BASE BID

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes:
   1. Mechanically Fastened Membrane Roofing System.
   2. Roof Insulation.
   3. Vapor Retarder.
   4. FiberClad Coated Metal
   5. Tapered Roof Insulation
   6. Coverboard
   7. Walkways

B. Related Sections:
   1. Division 01 – General Conditions.
   2. Division 06 – Wood, Plastics, and Composites.
   3. Division 07 – Thermal and Moisture Protection.
   4. Division 22 – Plumbing.
   5. Division 23 – HVAC.

1.02 REFERENCES

A. Comply with all References in effect, most active, or latest version as of the date of the Contract Documents.

B. American Society of Civil Engineers (ASCE) (www.asce.org) 7 - Minimum Design Loads for Buildings and Other Structures.

C. ASTM International (ASTM) (www.astm.org):
   1. C578 - Standard Specification for Preformed Cellular Polystyrene Thermal Insulation.
   2. C1177 - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing.
   3. C1278 - Standard Specification for Fiber-Reinforced Gypsum Panel.
   4. C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board.
   5. C1549 - Standard Test Method for Determination of Solar Reflectance near Ambient Temperature Using a Portable Solar Reflectometer.
   6. D751 - Standard Test Methods for Coated Fabrics
   7. D882 - Standard Test Method for Tensile Properties of Thin Plastic Sheeting
   8. D1149 - Standard Test Methods for Rubber Deterioration - Cracking in an Ozone Controlled Environment.
   9. D1204 - Standard Test Method for Linear Dimensional Changes for Nonrigid Thermoplastic Sheeting or Film at Elevated Temperature.
   10. D2136 - Standard Test Method for Coated Fabrics - Low-Temperature Bend Test.
   11. D4397 - Standard specification for Polyethylene sheeting for construction, industrial and agricultural applications.
   12. D4434 - Standard Specification for Poly (Vinyl Chloride) Sheet Roofing.
   13. D5635 - Standard Test Method for Dynamic Puncture Resistance of Roofing Membrane Specimens.
   14. D6754 - Standard Specification for Ketone Ethylene Ester Based Sheet Roofing.
   15. E108 - Standard Test Methods for Fire Tests of Roof Coverings.
   16. E1980 - Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces.

D. Energy Star (www.energystar.gov) - Qualified Products.

E. Factory Mutual Insurance Co. (FM) (www.fmglobal.com):
   1. 4470 - Approval Standard for Single-Ply, Polymer-Modified Bitumen Sheet, Built-Up Roof (BUR) and Liquid Applied Roof Assemblies for Use in Class 1 and Noncombustible Roof

Deck Construction.
2. Property Loss Prevention Data Sheet 1-28 - Design Wind Loads.
3. Property Loss Prevention Data Sheet 1-49 - Perimeter Flashing.

F. National Roofing Contractors Association (NRCA) - Roofing and Waterproofing Manual.

G. NSF/ANSI 347 – Sustainability Assessment for Single Ply Membranes.

H. 2010 Americans with Disabilities Act. (ADAAG) (www.ada.gov).

I. 2015 International Building Code. (2015 IBC).

1.03 PERFORMANCE REQUIREMENTS

A. General: Provide installed roofing membrane and base flashings that remain watertight; do not permit the passage of water; and resist specified uplift pressures, thermally induced movement, and exposure to weather without failure.

B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing membrane manufacturer based on testing and field experience.

C. FMG Listing: Provide roofing membrane, base flashings, and component materials that comply with requirements in FMG 4450 and FMG 4470 as part of a membrane roofing system and that are listed in FMG's "Approval Guide" for Class 1 or noncombustible construction, as applicable. Identify materials with FMG markings.
1. Fire/Windstorm Classification: Class 1A-90.
2. Hail Resistance: MH.

D. Roofing System Design: Provide a membrane roofing system that is identical to systems that have been successfully tested by a qualified testing and inspecting agency to resist the factored design uplift pressures calculated according to SPRI's "Wind Load Design Guide for Fully Adhered and Mechanically Fastened Roofing Systems."

1.04 SUBMITTALS

A. Under provisions of Division 01.

B. Product Data: For each type of product indicated.

C. Shop Drawings: For roofing system. Include plans, elevations, sections, details, and attachments to other Work.
1. Base flashings and membrane terminations.
2. Tapered insulation, including slopes.
3. Insulation fastening patterns.

D. Samples for Verification: For the following products:
1. 12 by 12 inch square of sheet roofing, of color specified, including T-shaped side and end lap seam.
2. 12 by 12-inch square of roof insulation.
3. 12 by 12-inch (300-by-300-mm) square of walkway pads or rolls.
4. 12 inch (300-mm) length of metal termination bars.
5. Six (6) fasteners of each type.

E. Installer Certificates: Signed by roofing system Manufacturer certifying that Installer is approved, authorized, or licensed by manufacturer to install roofing system.

F. Manufacturer Certificates: Signed by roofing manufacturer certifying that roofing system complies with requirements specified in "Performance Requirements" Article.
1. Submit evidence of meeting performance requirements.

G. Qualification Data: For Installer and manufacturer.

H. Product Test Reports: Based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, for components of roofing system.

I. Maintenance Data: For roofing system to include in maintenance manuals.

J. Warranties: Special warranties specified in this Section.

K. Inspection Report: Copy of roofing system Manufacturer's inspection report of completed roofing installation.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system Manufacturer to install Manufacturer's product and that is eligible to receive Manufacturer's warranty.

B. Manufacturer Qualifications: A qualified manufacturer with 20 Years experience manufacturing the same membrane without formulation changes. The roofing membrane formulation and system shall be identical to that used for this Project, per applicable change, by law. The membrane and accessories must be produced by the warranted manufacturer. No Private Label Products will be accepted.

C. Source Limitations: Obtain components for membrane roofing system approved by roofing membrane manufacturer.

D. Fire-Test-Response Characteristics: Provide membrane roofing materials with the fire-test-response characteristics indicated as determined by testing identical products per test method below by UL, FMG, or another testing and inspecting agency acceptable to authorities having jurisdiction. Materials shall be identified with appropriate markings of applicable testing and inspecting agency.
   1. Exterior Fire-Test Exposure: Class A; ASTM E108, for application and roof slopes indicated.

E. Pre-installation Conference: Conduct conference at Project site. Comply with requirements in Division 1 Section "Project Management and Coordination." Review methods and procedures related to roofing system including, but not limited to, the following:
   1. Meet with Owner, Architect, Owner's insurer if applicable, testing and inspecting agency representative, roofing Installer, roofing system manufacturer's representative, deck Installer, and installers whose work interfaces with or affects roofing including installers of roof accessories and roof-mounted equipment.
   2. Review methods and procedures related to roofing installation, including manufacturer’s written instructions. Note: Contractor shall have written manufacturer specifications, roof drawings, roof drawing notes and scope of work of work on site during the construction period.
   3. Review and finalize a construction schedule and verification of material availability.
   4. Review structural loading limitations, prior to loading.
   5. Review all details, including base flashings, special details, roof drainage, roof penetration schedule, equipment curb and any conditions that will affect the roofs construction or integrity.
   6. Review Contractors Risk Management Plan and OSHA approved Safety Program
   7. Review roof observation and repair procedures during and after roof installation.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, and directions for storing and mixing with other components.

B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
   1. Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.

C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.

D. Handle and store roofing materials and place equipment in a manner to avoid permanent deflection of deck.

1.07 PROJECT CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.

1.08 WARRANTY

A. Special Warranty: Manufacturer's standard form, without monetary limitation, in which manufacturer agrees to repair or replace components of membrane roofing system that fail in materials or workmanship within specified warranty period. Failure includes roof leaks.
   1. Special warranty includes roofing membrane, base flashings, roofing membrane accessories, roof insulation, fasteners, walkway products and other components of membrane roofing system.
   2. Warranty Period: Twenty (20) Year NDL, Non-Prorated, from date of Substantial Completion.
   3. Warranty shall include a 1inch Hail Warranty and shall have no exclusions for ponding conditions.

B. Special Project Warranty: Submit roofing Installer's warranty, on warranty form at end of this Section, signed by Installer, covering Work of this Section, including all components of membrane roofing system such as roofing membrane, base flashing, roof insulation, fasteners, cover boards, substrate boards, vapor retarders, roof pavers, and walkway products, for the following warranty period:
   1. Warranty Period: Two (2) years from date of Substantial Completion.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

A. Design Basis: Contract Documents and are based on products by:
   1. Seaman Corporation - Fibertite. (www.fibertite.com).
      a. ASTM D6754, Ketone Ethylene Ester (KEE) Sheet Roofing, FiberTite-SM Membrane.

B. Substitutions: Under provisions of Division 01:
   1. Approved Equal: Submitting Manufacturers will be subject to compliance with stated requirements. Substitution request must be submitted 10 days prior to bid date. Provide products, by the manufacturer, that meet or exceed the stated manufacturers qualifications, performance requirements, fire test requirements, physical properties and warranty requirements.
      a. Thickness: 45 mils (1.1 mm), nominal.
      b. Color: Off White/ Thermal Tan.
      c. Inter-ply Reinforcement to be 18 x 19 / 840 X 1,000 denier with reinforced polyester knit fabric that includes an adhesive coating that promotes a molecular bond between the base fabric and the top and bottom membrane facer films.
      d. Maximum sheet width 6 feet (or up to 74 inches).
   2. Substitution request must comply with the following minimum physical properties, Substitutes will only be considered if properties are provided in the same format, as below, for comparison purposes.
      a. Test Method Result

Thickness (nominal)	ASTM D751	0.045 (1.14mm)
Breaking Strength	ASTM D751 Grab	375 x 350 lbs
Tensile Strength	ASTM D882	8500 psi (598 kgf/cm2)
Tear Strength	ASTM D751	100 lbs (445 N)
Dynamic Puncture	ASTM D5635	25 joules
Low Temperature Flex	ASTM D2136	-40 degrees F
Dimensional Stability	ASTM D1204	<1.0%
Seam Strength	ASTM D751	100% of fabric strength
Coating Adhesion	ASTM D751	Cannot initiate coating peel

Hydrostatic Resistance	ASTM D751	750 psi (46 kgf/cm2)
Oil Resistance	MIL-C-20696C	No swelling, cracking, or leaking
Ozone Resistance	ASTM D1149	No effect
Solar Reflectance Index (SRI)	ASTM E1980	98.54

3. All Manufacturers submitting for an approved substitution must produce a membrane which contains the solid state polymer “KEE” or Elvaloy component.

2.02 AUXILIARY MATERIALS

A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with membrane roofing.
   1. Liquid-type auxiliary materials shall meet VOC limits of authorities having jurisdiction.

B. Manufacturer's standard sheet flashing of same material, type, reinforcement, thickness, and color as KEE sheet membrane.

C. Bonding Adhesive: Manufacturers standard solvent based bonding adhesive, for membrane and for base flashing applications.

D. Insulation Adhesive: Manufacturers approved low rise or Two-Part Polyurethane Insulation Adhesive.

E. Manufacturer's standard predrilled stainless-steel or aluminum bars, approximately 1 by 1/8 inch (25 by 3 mm) thick; with anchors.

F. Fasteners: Factory-coated steel fasteners and metal plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening membrane to substrate, and acceptable to membrane roofing system manufacturer.

G. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, termination reglets, cover strips, and other accessories, as required and approved by the manufacturer.

H. FiberClad coated, heat weldable sheet metal capable of being formed into a variety of shapes and profiles. 24 gauge. G90 galvanized metal sheet with a 20 mil (0.5 mm) coating. 4 ft by 8 ft (1.2 m x
   1. m) or 4 ft by 10 ft (1.2 m x 3.0 m).

I. Wall Vents: 24 gauge galvanized or PVC clad steel. Net free area of 39.6 sq.in. each. Shall be shaped to keep out rain water. Shall have 1/8 inch or finer bug screen.

J. Sump Pans: Install a prefabricated insulation sumped drain, 36 by 36 inch min. at each roof drain, overflow drain, and reinforce, per Manufacturers approved detail requirement.

2.03 VAPOR RETARDER

A. Vapor Retarder Type 1: ASTM D4397 Clear polyethylene film for installation on roof deck and directly behind gypsum board in interior wall assemblies, 6 mil thick (concealed locations).

2.04 ROOF INSULATION

A. General: Provide preformed roof insulation boards that comply with requirements and referenced standards, selected from manufacturer's standard sizes and of thicknesses indicated.

B. Polyisocyanurate Board Insulation: ASTM C1289, Type II, 20 psi, felt or glass-fiber mat facer on both major surfaces.

C. Equivalent products by following Manufacturers are acceptable:
   1. Atlas Roofing Corp. (www.atlasroofing.com).
   2. Hunter Panels. (www.hpanels.com).
   3. Substitutions: As approved by the Membrane Manufacturer and under provisions of Division 01.

D. Provide preformed saddles, crickets, tapered edge strips, and other insulation shapes where indicated for sloping to drain. Fabricate to slopes indicated utilizing Polyisocyanurate Insulation.

2.05 INSULATION ACCESSORIES

A. General: Roof insulation accessories recommended by insulation manufacturer for intended use and compatible with membrane roofing.

B. Fasteners: Factory-coated steel fasteners and metal or plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening roof insulation to substrate, and acceptable to roofing system manufacturer.

C. Sump Pans: Install a prefabricated insulation sumped drain, 36 by 36 inch min. at each roof drain, overflow drain, and reinforce, per Manufacturers approved detail requirement.

2.06 COVER BOARDS

A. Cover Board: Glass mat faced gypsum panels, ASTM C1177/C1177M, fire resistant type, 5/8 inch thick.
   1. See Section 09 2116 - Gypsum Board Assemblies
      a. Location: See parapet walls and cap details in drawings.

2.07 WALKWAYS

A. Flexible Walkways: Install contrasting color flexible walkways, fully adhered and acceptable to the membrane roofing system manufacturer, warranted for the duration-equal to the specified system warranty.

PART 3 – EXECUTION

3.01 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with the following requirements and other conditions affecting performance of roofing system:
   1. Verify that roof openings and penetrations are in place and set and braced and that roof drains are securely clamped in place.
   2. Verify that wood blocking, curbs, and nailers are securely anchored to roof deck at penetrations, terminations and that nailers match thicknesses of insulation.
   3. Verify that surface plane flatness and fastening of steel roof deck comply with requirements in Division 5 Section "Steel Decking."

3.02 PREPARATION

A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions. Remove sharp projections.

B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.

C. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at the end of the workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.

3.03 INSULATION INSTALLATION

A. Coordinate installing membrane roofing system components so insulation is not exposed to precipitation or left exposed at the end of the workday.

B. Comply with membrane roofing system manufacturer's written instructions for installing roof insulation.

C. Install tapered insulation under area of roofing to conform to slopes indicated.

D. Install insulation under area of roofing to achieve required LTTR R Value of 34.0 Min. Install two equal layers of insulation, with joints of each succeeding layer staggered from joints of previous layer, half lapped in each direction.

E. Trim surface of insulation where necessary at roof drains so completed surface is flush and does not restrict flow of water.

F. Install insulation with long joints of insulation in a continuous straight line with end joints staggered between rows, abutting edges and ends between boards. Fill gaps exceeding 1/4 inch with insulation.
   1. Cut and fit insulation within 1/4 inch of nailers, projections, and penetrations.
   2. Fasten insulation according to requirements in FMG's "Approval Guide" for specified Windstorm Resistance Classification.
   3. Fasten insulation to resist uplift pressure at corners, perimeter, and field of roof.

G. Sump Pans: Install a prefabricated insulation sumped drain, 36 by 36 inch min. at each roof drain, overflow drain, and reinforce, per Manufacturers approved detail requirement.

3.04 MECHANICALLY FASTENED ROOFING MEMBRANE INSTALLATION

A. Install roofing membrane over area to receive roofing according to roofing system manufacturer's written instructions. Unroll roofing membrane and allow relaxing before installing.

B. Start installation of roofing membrane in presence of roofing system manufacturer's technical personnel.

C. Accurately align roofing membranes and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.

D. Mechanically fasten roofing membrane securely at terminations, penetrations, and perimeter of roofing.

E. Apply roofing membrane with side laps shingled with slope of roof deck where possible.

F. Seams: Clean seam areas, overlap roofing membrane, and hot-air weld side and end laps of roofing membrane according to manufacturer's written instructions to ensure a watertight seam installation.
   1. Test lap edges with probe to verify seam weld continuity. Apply lap sealant to seal cut edges of roofing membrane.
   2. Verify field strength of seams a minimum of twice daily, repair seam sample areas, label with date / location and retain for manufacturers technical manager’s review.
   3. Repair tears, voids, and lapped seams in roofing membrane that does not meet requirements.

G. Spread sealant or mastic bed over deck drain flange at deck drains and securely seal roofing membrane in place with clamping ring.

H. In-Splice Attachment: Secure one edge of roofing membrane using fastening plates or metal battens centered within membrane splice and mechanically fasten roofing membrane to roof deck. Field-splice seam.

3.05 BASE FLASHING INSTALLATION

A. Install sheet flashings and preformed flashing accessories and adhere to substrates according to membrane roofing system manufacturer's written instructions.

B. Apply solvent-based bonding adhesive to substrate and underside of sheet flashing at required rate and allow to partially dry. Do not apply bonding adhesive to seam area of flashing.

C. Flash penetrations and field-formed inside and outside corners with sheet flashing.

D. Clean seam areas and overlap and firmly roll sheet flashings into the adhesive. Weld side and end laps to ensure a watertight seam installation.

E. Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination bars.

3.06 WALKWAY INSTALLATION

A. Flexible Walkways: Install walkway products in locations indicated. Heat weld to substrate or adhere walkway products to substrate with compatible adhesive according to roofing system

manufacturer's written instructions.

3.07 FIELD QUALITY CONTROL

A. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion and submit report to Architect.
   1. Notify Architect or Owner 72 hours in advance of date and time of inspection.

B. Repair or remove and replace components of membrane roofing system where test results or inspections indicate that they do not comply with specified requirements.

C. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

3.08 PROTECTING AND CLEANING

A. Protect membrane roofing system from damage and wear during remainder of construction period. When remaining construction will not affect or endanger roofing, inspect roofing for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.

B. Correct deficiencies in or remove membrane roofing system that does not comply with requirements, repair substrates, and repair or reinstall membrane roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.

C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

3.09 ROOFING INSTALLER'S WARRANTY

A. WHEREAS of , herein called the "Roofing Installer," has performed roofing and associated work ("work") on the following project:
   1. Owner:
   2. Address:
   3. Building Name/Type:
   4. Address:
   5. Area of Work:
   6. Acceptance Date:
   7. Warranty Period:
   8. Expiration Date:

B. AND WHEREAS Roofing Installer has contracted (either directly with Owner or indirectly as a subcontractor) to warrant said work against leaks and faulty or defective materials and workmanship for designated Warranty Period,

C. NOW THEREFORE Roofing Installer hereby warrants, subject to terms and conditions herein set forth, that during Warranty Period he will, at his own cost and expense, make or cause to be made such repairs to or replacements of said work as are necessary to correct faulty and defective work and as are necessary to maintain said work in a watertight condition.

D. This Warranty is made subject to the following terms and conditions:
   1. Specifically excluded from this Warranty are damages to work and other parts of the building, and to building contents, caused by:
      a. lightning;
      b. peak gust wind speed exceeding 70 mph (m/sec);
      c. fire;
      d. failure of roofing system substrate, including cracking, settlement, excessive deflection, deterioration, and decomposition;
      e. faulty construction of parapet walls, copings, chimneys, skylights, vents, equipment supports, and other edge conditions and penetrations of the work;
      f. vapor condensation on bottom of roofing; and

g. Activity on roofing by others, including construction contractors, maintenance personnel, other persons, and animals, whether authorized or unauthorized by Owner.

2. When work has been damaged by any of foregoing causes, Warranty shall be null and void until such damage has been repaired by Roofing Installer and until cost and expense thereof have been paid by Owner or by another responsible party so designated.
3. Roofing Installer is responsible for damage to work covered by this Warranty but is not liable for consequential damages to building or building contents resulting from leaks or faults or defects of work.
4. During Warranty Period, if Owner allows alteration of work by anyone other than Roofing Installer, including cutting, patching, and maintenance in connection with penetrations, attachment of other work, and positioning of anything on roof, this Warranty shall become null and void on date of said alterations, but only to the extent said alterations affect work covered by this Warranty. If Owner engages Roofing Installer to perform said alterations, Warranty shall not become null and void unless Roofing Installer, before starting said work, shall have notified Owner in writing, showing reasonable cause for claim, that said alterations would likely damage or deteriorate work, thereby reasonably justifying a limitation or termination of this Warranty.
5. During Warranty Period, if original use of roof is changed and it becomes used for, but was not originally specified for, a promenade, work deck, spray-cooled surface, flooded basin, or other use or service more severe than originally specified, this Warranty shall become null and void on date of said change, but only to the extent said change affects work covered by this Warranty.
6. Owner shall promptly notify Roofing Installer of observed, known, or suspected leaks, defects, or deterioration and shall afford reasonable opportunity for Roofing Installer to inspect work and to examine evidence of such leaks, defects, or deterioration.
7. This Warranty is recognized to be the only warranty of Roofing Installer on said work and shall not operate to restrict or cut off Owner from other remedies and resources lawfully available to Owner in cases of roofing failure. Specifically, this Warranty shall not operate to relieve Roofing Installer of responsibility for performance of original work according to requirements of the Contract Documents, regardless of whether Contract was a contract directly with Owner or a subcontract with Owner's General Contractor.

E. IN WITNESS THEREOF, this instrument has been duly executed this day of , .
1. Authorized Signature:
2. Name:
3. Title:

END OF SECTION 07 5400

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SECTION 07 5419
SINGLE-PLY PVC THERMOPLASTIC ROOFING - BID ALTERNATE #2

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Mechanically attached PVC thermoplastic roofing membrane.

B. Insulation, flat and tapered.

C. Vapor retarder.

D. Deck sheathing.

E. Roofing cant strips, stack boots, roofing expansion joints, and walkway pads.

1.02 RELATED REQUIREMENTS

A. Section 07 6200 - Sheet Metal Flashing and Trim: Counterflashings, reglets and _____.

1.03 REFERENCE STANDARDS

A. ASCE 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures; Most Recent Edition Cited by Referring Code or Reference Standard.

B. ASTM C1177/C1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing; 2017.

C. ASTM C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2023a.

D. ASTM D4434/D4434M - Standard Specification for Poly(Vinyl Chloride) Sheet Roofing; 2021.

E. FM DS 1-28 - Wind Design; 2015, with Editorial Revision (2024).

F. FM DS 1-29 - Roof Deck Securement and Above-Deck Roof Components; 2016, with Editorial Revision (2022).

G. NRCA (RM) - The NRCA Roofing Manual; 2024.

1.04 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data: Provide manufacturer's written information listed below.
   1. Product data indicating membrane materials, flashing materials, insulation, vapor retarder, surfacing, and fasteners.

C. Shop Drawings: Indicate joint or termination detail conditions, conditions of interface with other materials, and paver layout.

D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

E. Warranty:
   1. Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
   2. Submit installer's certification that installation complies with all warranty conditions for the waterproof membrane.

F. Installer's qualification statement.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver products in manufacturer's original containers, dry, undamaged, with seals and labels intact.

B. Protect products in weather protected environment, clear of ground and moisture.

C. Protect foam insulation from direct exposure to sunlight.

1.06 FIELD CONDITIONS

A. Do not apply roofing membrane during unsuitable weather.

B. Do not apply roofing membrane when ambient temperature is below 40 degrees F or above ____ degrees F.

C. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.

D. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.

1.07 WARRANTY

A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.

B. System Warranty: Provide manufacturer's system warranty agreeing to repair or replace roofing that leaks or is damaged due to wind or other natural causes.
   1. Warranty Term: 20 years.
   2. For repair and replacement include costs of both material and labor in warranty.
   3. Exceptions NOT Permitted:
      a. Damage due to wind of speed greater than 56 mph but less than 90 mph.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Basis of Design: Carlisle SynTec: www.carlisle-syntec.com/#sle.

B. Substitutions: See Section 01 6000 - Product Requirements.

2.02 ROOFING APPLICATIONS

A. PVC Membrane Roofing: One ply membrane, mechanically fastened, over insulation.

B. Roofing Assembly Performance Requirements and Design Criteria:
   1. Wind Uplift:
      a. Designed to withstand wind uplift forces calculated with ASCE 7.
      b. Design Wind Speed: In accordance with local building code and authorities having jurisdiction (AHJ).

2.03 ROOFING MEMBRANE AND ASSOCIATED MATERIALS

A. Membrane:
   1. Material: Polyvinyl chloride (PVC) complying with ASTM D4434/D4434M.
   2. Reinforcing: Internal fabric.
   3. Thickness: 60 mils (0.060 inch), minimum.
   4. Sheet Width: Factory fabricated into largest sheets possible.
   5. Color: White.
   6. Products:
      a. Carlisle SynTec Systems; SureFlex PVC.

B. Seaming Materials: As recommended by membrane manufacturer.

C. Membrane Fasteners: As recommended and approved by membrane manufacturer.
   1. Carlisle SynTec Systems; HP-X Fastener: #15 threaded fastener with #3 Phillips drive. Use with Carlisle SynTec Systems Piranha Fastening Plate for mechanically fastened membrane systems on steel or plywood decks.

D. Vapor Retarder: Material approved by roof manufacturer complying with requirements of fire rating classification; compatible with roofing and insulation materials.
   1. Fire-retardant adhesive.

E. Flexible Flashing Material: Same material as membrane.

2.04 COVER BOARDS

A. Cover Board: Glass mat faced gypsum panels, ASTM C1177/C1177M, fire resistant type, 5/8 inch thick.
   1. Product: See Section 09 2116 Gypsum Board Assemblies
      a. Location: See parapet walls and cap details in drawings.

2.05 INSULATION

A. Polyisocyanurate (ISO) Board Insulation: Complies with ASTM C1289, Type II, Class 2
   1. Grade and Compressive Strength: Grade 2, 20 psi, minimum.

2.06 ACCESSORIES

A. Prefabricated Flashing Accessories:
   1. Corners and Seams: Same material as membrane, in manufacturer's standard thicknesses.
   2. Penetrations: Same material as membrane, with manufacturer's standard cut-outs, rigid inserts, clamping rings, and flanges.
   3. Walkway Rolls: Sure-Flex Heat Weldable Walkway Rolls; 80 mils (0.080 inch) thick; gray membrane.
   4. Contour Rib Profile: Manufacturer's standard extruded PVC; 1-1/4 inch tall, 2-1/8 inch wide, 3/8 inch profile.
   5. Miscellaneous Flashing: Non-reinforced PVC membrane; 80 mils (0.080 inch) thick, in manufacturer's standard lengths and widths.

B. Insulation Fasteners: Appropriate for purpose intended and approved by roofing manufacturer.

C. Membrane Adhesive: As recommended by membrane manufacturer.
   1. Products:

D. Surface Conditioner for Adhesives: Compatible with membrane and adhesives.

E. Sealants: As recommended by membrane manufacturer.
   1. Products:

F. Cleaner: Manufacturer's standard, clear, solvent-based cleaner.

G. Edgings and Terminations: Manufacturer's standard edge and termination accessories.
   1. Snap-On Edge System:
   2. Anchor Bar Fascia System:
   3. Drip Edge:
   4. Coping:
   5. PVC Coated Sheet Metal.
   6. Termination Bar.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that surfaces and site conditions are ready to receive work.

B. Verify deck is supported and secure.

C. Verify deck is clean and smooth, flat, free of depressions, waves, or projections, properly sloped and suitable for installation of roof system.

D. Verify deck surfaces are dry and free of snow or ice.

E. Verify that roof openings, curbs, and penetrations through roof are solidly set, and cant strips are in place.

3.02 INSTALLATION - GENERAL

A. Perform work in accordance with manufacturer's instructions and NRCA (RM) applicable requirements.

B. Do not apply roofing membrane during unsuitable weather.

C. Do not apply roofing membrane when ambient temperature is outside the temperature range recommended by manufacturer.

D. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.

E. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.

3.03 INSTALLATION - GENERAL

A. Perform work in accordance with manufacturer's instructions.

B. Do not apply roofing membrane during unsuitable weather.

C. Do not apply roofing membrane when ambient temperature is outside the temperature range recommended by manufacturer.

D. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.

E. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.

3.04 INSULATION INSTALLATION

A. Attachment of Insulation:
   1. Mechanically fasten insulation to deck in accordance with roofing manufacturer's instructions and Factory Mutual requirements.

B. Lay subsequent layers of insulation with joints staggered minimum 6 inches from joints of preceding layer.

C. Lay boards with edges in moderate contact without forcing, and gap between boards no greater than 1/4 inch. Cut insulation to fit neatly to perimeter blocking and around penetrations through roof.

D. Do not apply more insulation than can be completely waterproofed in the same day.

3.05 MEMBRANE APPLICATION

A. Roll out membrane, free from wrinkles or tears. Place sheet into place without stretching.

B. Shingle joints on sloped substrate in direction of drainage.

C. Seam Welding:
   1. Seam Welding: Overlap edges and ends and seal seams by heat welding, minimum 2 inches.
   2. Cover all seams with manufacturer's recommended joint covers.
   3. Probe all seams once welds have thoroughly cooled. (Approximately 30 minutes.)
   4. Repair all deficient seams within the same day.
   5. Seal cut edges of reinforced membrane after seam probe is complete.

D. Mechanical Attachment:
   1. Apply membrane and mechanical attachment devices in accordance with manufacturer's instructions.

E. At intersections with vertical surfaces:
   1. Extend membrane over cant strips and up a minimum of 4 inches onto vertical surfaces.
   2. Fully adhere flexible flashing over membrane and up to nailing strips.

F. Coordinate installation of roof drains and sumps and related flashings.

G. Daily Seal: Install daily seal per manufacturers instructions at the end of each work day. Prevent infiltration of water at incomplete flashings, terminations, and at unfinished membrane edges.

3.06 FIELD QUALITY CONTROL

A. See Section 01 4000 - Quality Requirements for general requirements for field quality control and inspection.

B. Require site attendance of roofing and insulation material manufacturers daily during installation of the Work.

3.07 CLEANING

A. See Section 01 7000 - Execution and Closeout Requirements for additional requirements.

B. Remove bituminous markings from finished surfaces.

C. In areas where finished surfaces are soiled by work of this section, consult manufacturer of surfaces for cleaning advice and conform to their documented instructions.

D. Repair or replace defaced or damaged finishes caused by work of this section.

3.08 PROTECTION

A. Protect installed roofing and flashings from construction operations.

B. Where traffic must continue over finished roof membrane, protect surfaces using durable materials.

END OF SECTION 07 5419

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SECTION 09 5100
ACOUSTICAL CEILINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Suspended metal grid ceiling system.

B. Acoustical units.

C. Gypsum board units.

D. Cementitious wood fiber pklank acoustical ceiling

1.02 RELATED REQUIREMENTS

1.03 REFERENCE STANDARDS

A. ASTM C635/C635M - Standard Specification for Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings; 2022.

B. ASTM C636/C636M - Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels; 2019.

C. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2023d.

D. ASTM E580/E580M - Standard Practice for Installation of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Subject to Earthquake Ground Motions; 2022.

E. ASTM E1264 - Standard Classification for Acoustical Ceiling Products; 2023.

F. NFPA 286 - Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth; 2024.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Sequence work to ensure acoustical ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.

B. Do not install acoustical units until after interior wet work is dry.

1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data: Provide data on suspension system components and acoustical units.

C. Samples: Submit two samples 4 x 4 inch in size illustrating material and finish of acoustical units.

D. Samples: Submit two samples each, 6 inches long, of suspension system main runner.

E. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. See Section 01 6000 - Product Requirements, for additional provisions.
   2. Extra Acoustical Units: Quantity equal to 5 percent of total installed.

1.06 QUALITY ASSURANCE

A. Suspension System Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

B. Acoustical Unit Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

1.07 FIELD CONDITIONS

A. Maintain uniform temperature of minimum 60 degrees F, and maximum humidity of 40 percent prior to, during, and after acoustical unit installation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Acoustic Tiles/Panels:
   1. Armstrong World Industries, Inc; ____: www.armstrongceilings.com/#sle.
   2. Certainteed Architectural; ____: www.certainteed.com/ceilings-and-walls/#sle.
   3. USG Corporation; ____: www.usg.com/ceilings/#sle.
   4. Substitutions: See Section 01 6000 - Product Requirements.

B. Suspension Systems:
   1. Same as for acoustical units.
   2. Substitutions: See Section 01 6000 - Product Requirements.

2.02 ACOUSTICAL UNITS

A. Acoustical Units - General: ASTM E1264, Class A.

B. Acoustical Panels Type A: Painted mineral fiber,ASTM E1264 Type III, with the following characteristics:
   1. Size: 24 by 48 inches.
   2. Thickness: 3/4 inches.
   3. Composition: Wet felted.
   4. Light Reflectance: 82 percent, determined in accordance with ASTM E1264.
   5. NRC Range: 70 to 75, determined in accordance with ASTM E1264.
   6. Ceiling Attenuation Class (CAC): 42, determined in accordance with ASTM E1264.
   7. Edge: Square.
   8. Surface Color: White.
   9. Surface Pattern: perforated, small holes and fissured.
   10. Suspension System: Exposed grid Type 1.
   11. Products:
      a. Armstrong; Calla: www.armstrong.com/#sle.
      b. Substitutions: See Section 01 6000 - Product Requirements.

C. Acoustical Panels Type B: Painted mineral fiber,ASTM E1264 Type III, with the following characteristics:
   1. Size: 24 by 24 inches.
   2. Thickness: 3/4 inches.
   3. Composition: Wet felted.
   4. Light Reflectance: 82 percent, determined in accordance with ASTM E1264.
   5. NRC Range: 70 to 75, determined in accordance with ASTM E1264.
   6. Ceiling Attenuation Class (CAC): 42, determined in accordance with ASTM E1264.
   7. Edge: Square.
   8. Surface Color: White.
   9. Surface Pattern: Smooth.
   10. Suspension System: Exposed grid Type 1.
   11. Products:
      a. Armstrong; Calla, www.armstrong.com/#sle.
      b. Substitutions: See Section 01 6000 - Product Requirements.
   12. Location: Administration Areas and Offices

D. FRPLay-in Ceiling Panels Type D:
   1. Comply with NFPA 286, Class A, _____.
   2. Surface Burning Characteristics: Flame spread index of 25 or less, smoke developed index of 450 or less, when tested in accordance with ASTM E84.
   3. Surface Texture: white gelcoat.
   4. Composition: FRP plastic.
   5. Panel Edge: Tegular.
   6. Color: White.

7. Suspension System: Exposed grid Type 1.
8. Products:
   a. Queit Technology Systems; ACC-U-SOUND PSD - Pyramidal Shaped Diffusers https://qtechsys.com/.
   b. Substitutions: See Section 01 6000 - Product Requirements.

E. Acoustical Panels Type C:
1. Size: As indicated on drawings.
2. Light Reflectance: 75 percent, determined in accordance with ASTM E1264.
3. Flame spread: ASTM E 1264; Class A
4. Panel Edge: Beveled.
5. Thickness: 1-1/2 inch
6. Surface Color: Natural - to be painted with roof deck.
7. Mounting: Mechanical fastened to bottom of metal deck.
8. Products:
   a. Armstrong World Industries, Inc; Tectum: www.armstrongceilings.com.
   b. Substitutions: See Section 01 6000 - Product Requirements.

F. GypsumLay-in Ceiling Panels Type E at kitchen:
1. Comply with NFPA 286, Class A, _____.
2. Surface Burning Characteristics: Flame spread index of 25 or less, smoke developed index of 450 or less, when tested in accordance with ASTM E84.
3. Size: 24 by 48 inches.
4. Surface Texture: Vinyl-laminated face with sealed back and edges.
5. Light Reflectance: [77] percent, determined in accordance with ASTM E1264.
6. Ceiling Attenuation Class (CAC): [40], determined in accordance with ASTM E1264.
7. Panel Edge: Square.
8. Color: White.
9. Suspension System: Exposed grid Type 1.
10. Products:
    a. USG; Sheetrock Brand Clean Room Lay-in Gypsum Ceiling Panels: https://www.usg.com/content/usgcom/en.html.
    b. Substitutions: See Section 01 6000 - Product Requirements.

2.03 SUSPENSION SYSTEM(S)

A. Metal Suspension Systems - General: Complying with ASTM C635/C635M; die cut and interlocking components, with perimeter moldings, hold down clips, stabilizer bars, clips, and splices as required.

B. Exposed Steel Suspension System Type 1: Formed steel, commercial quality cold rolled; heavy-duty.
1. Profile: Tee; 15/16 inch wide face.
2. Construction: Double web.
3. Finish: White painted.
4. Products:
   a. USG Donn; Brand DX/DXL26: www.usg.com/#sle..
   b. Substitutions: See Section 01 6000 - Product Requirements.

2.04 ACCESSORIES

A. Support Channels and Hangers: Galvanized steel; size and type to suit application, seismic requirements, and ceiling system flatness requirement specified.

B. Hanger Wire: 12 gauge, 0.08 inch galvanized steel wire.

C. Perimeter Moldings: Same metal and finish as grid.
1. At Exposed Grid: Provide L-shaped molding for mounting at same elevation as face of grid.
2. At Clouds: Provide edge trims as listed below and as indicated on the drawings.
   a. Products:

1) Armstrong World Industries, Inc; Axiom Classic 6 inch Extruded Aluminum Trim: www.armstrong.com/#sle..
2) Armstrong World Industries, Inc; Axiom Knife Edge Extruded Aluminum Trim: www.armstrong.com/#sle.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify that layout of hangers will not interfere with other work.

3.02 INSTALLATION - SUSPENSION SYSTEM

A. Install suspension system in accordance with ASTM C636/C636M, ASTM E580/E580M, and manufacturer's instructions and as supplemented in this section.

B. Rigidly secure system, including integral mechanical and electrical components, for maximum deflection of 1:360.

C. Locate system on room axis according to reflected plan.

D. Perimeter Molding: Install at intersection of ceiling and vertical surfaces and at junctions with other interruptions.
   1. Use longest practical lengths.

E. Install after major above-ceiling work is complete. Coordinate the location of hangers with other work.

F. Suspension System, Non-Seismic: Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.

G. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.

H. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.

I. Support fixture loads using supplementary hangers located within 6 inches of each corner, or support components independently.

J. Do not eccentrically load system or induce rotation of runners.
   1. Use longest practical lengths.
   2. Overlap and rivet corners.

K. Install Tectum® Direct-Attached Ceiling Panels in accordance manufacturer’s installation instructions.

L. For seismic installations follow the requirements of the International Building Code, ASCE 7 and ASTM E580 and in install in accordance with the authorities having jurisdiction.

3.03 INSTALLATION - ACOUSTICAL UNITS

A. Install acoustical units in accordance with manufacturer's instructions.

B. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.

C. Fit border trim neatly against abutting surfaces.

D. Install units after above-ceiling work is complete.

E. Install acoustical units level, in uniform plane, and free from twist, warp, and dents.

F. Cutting Acoustical Units:
   1. Make field cut edges of same profile as factory edges.

G. Where round obstructions occur, provide preformed closures to match perimeter molding.

H. Install plastic lay-in panels at following minimum distance from conventional light sources:

3.04 TOLERANCES

A. Maximum Variation from Flat and Level Surface: 1/8 inch in 10 feet.

B. Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads: 2 degrees.

END OF SECTION 09 5100

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SECTION 09 6466
WOOD ATHLETIC FLOORING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Wood athletic flooring.

B. Subflooring.

C. Resilient cushioning.

D. Sheet vapor retarder.

E. Floor finishes.

F. Surface finishing.

1.02 REFERENCE STANDARDS

A. MFMA (SPEC) - Guide Specifications for Maple Flooring Systems; current edition.

1.03 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data for flooring, floor finish materials, and resilient cushion.

C. Shop Drawings: Indicate floor joint pattern and termination details.
   1. Indicate location, size, design, and color of game markings.

D. Samples: Submit two samples 12 by 12 inch in size illustrating floor finish, color, and sheen.

E. Maintenance Data: Include maintenance procedures and recommended maintenance materials.

1.04 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section.
   1. Minimum three years of documented experience.

B. Installer Qualifications: Company specializing in installing products specified in this section.
   1. Minimum three years of documented experience.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials and store off the floor in a well-ventilated, weather-tight space.

1.06 FIELD CONDITIONS

A. Do not install wood flooring until wet construction work is complete and permanent heat and air conditioning is installed and operating.

B. Maintain room temperature between 55 degrees F and 75 degrees F and relative humidity between 35 to 50 percent for a period of seven days prior to delivery of materials to installation space, during installation, and after installation.

C. Acclimate wood flooring materials to installation space a minimum of 48 hours prior to installation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Wood Athletic Flooring:
   1. Action Floor Systems: www.actionfloors.com/#sle.
   2. Connor Sports Flooring; AGA-Neoshok: www.connorfloor.com/#sle.
   3. Robbins Sports Surfaces; Robbins 1st Bio-Cushion Classic: www.robbinsfloor.com/#sle.
   4. Horner Flooring; Safe 2, Safe Panel System.

2.02 WOOD ATHLETIC FLOORING

A. General: Wood athletic flooring, system components provided by single manufacturer.

B. Application: Gymnasium.

C. System Description:
   1. Floating, double layer subfloor system, wood strip flooring.

2.03 COMPONENTS

A. Wood Strip Flooring:
   1. Species: Northern hard maple, kiln dried; tongue and groove edges, end matched.
   2. Grade: Third and better.
   3. Moisture Content: 7 to 9 percent.
   4. Thickness: 25/32 inch.
   5. Width: 2-1/4 inches.
   6. Length: Random, minimum of 9 inches.

B. Subflooring: Two layers of 15/32 inch thick plywood, APA rated, exposure 1, minimum span rating of 32/16.

C. Resilient Cushioning: Manufacturer's standard rubber pads, factory-applied to bottom side of subflooring.
   1. Thickness: 3/4 inch.

D. Vapor Retarder: Polyethylene sheet, 6 mil thick; 2 inch wide tape for sealing sheet seams.

E. Fasteners and Anchors: Manufacturer's standard type and size to suit application.

2.04 FINISHES

A. Floor Finishes: Types recommended by flooring manufacturer and complying with MFMA specifications.
   1. Sealer: Oil based urethane.
   2. Finish Coats: Oil based urethane; high gloss.
   3. Game Marking Paint: Compatible with sealer and finish coats; colors as indicated on drawings.

2.05 ACCESSORIES

A. Ventilating Base: Rubber, 4 inch high with a 3 inch toe, pre-molded outside corners; mill finish.

B. Edge Strip: Rubber Vent Cove Base.

C. Game Socket Devices: Cast aluminum type, with anchors.

D. Adhesives: Types recommended by flooring manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting this work.

B. Verify that concrete subfloor surface is smooth and flat to plus or minus 1/4 inch in 10 feet.

C. Verify that required floor-mounted utilities are in correct location.

3.02 PREPARATION

A. Prepare substrate to receive wood flooring in accordance with manufacturer's and MFMA instructions.

B. Vacuum clean substrate.

3.03 INSTALLATION

A. Place vapor retarder over concrete surface, overlap seams a minimum of 6 inches and seal with tape.

B. Double Layer Plywood Subfloor:
   1. Place first layer at 45 degree angle to direction of finished floor, resilient pad side down.
   2. Fasten second layer (without pads) at 45 degree angle to first layer.
   3. Allow 1/4 inch between plywood subfloor edges.

C. Install solid blocking at doorways, under stacked bleachers, and under locations of heavy equipment, in accordance with flooring manufacturer's recommendations.

D. Wood Flooring:
   1. Install in accordance with manufacturer's and MFMA instructions.
   2. Lay flooring parallel to length of main playing area. Blind nail or staple to subfloor.
   3. Install edge strips at unprotected or exposed edges, and where flooring terminates.
   4. Provide 2 inch expansion space at walls and other interruptions.

E. Install base at floor perimeter to cover expansion space in accordance with manufacturer's instructions. Miter inside corners.

F. Install floor sockets and inserts to a depth sufficient to ensure flush top surface with floor surface.

G. Finishing:
   1. Mask off adjacent surfaces before beginning sanding.
   2. Sand flooring to smooth even finish with no evidence of sander marks. Remove dust by vacuum.
   3. Apply finishes in accordance with floor finish manufacturer's and MFMA instructions.
   4. Apply one sealer coat and three finish coats.
   5. Apply first coat, allow to dry, then buff lightly with recommended pad to remove irregularities. Vacuum clean and wipe with damp, lint-free cloth before applying succeeding coats.
   6. Apply game lines/markers in accordance with layout indicated on drawings.
   7. Apply last coat of finish.

3.04 CLEANING

A. Clean floor surfaces in accordance with floor finish manufacturer's instructions.

3.05 PROTECTION

A. Prohibit traffic on finished floor for 72 hours after installation.

B. Place protective coverings over finished floors; do not remove coverings until Date of Substantial Completion.

END OF SECTION 09 6466

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SECTION 10 2800
TOILET, BATH, AND LAUNDRY ACCESSORIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Commercial toilet accessories.

B. Commercial shower and bath accessories.

C. Electric hand/hair dryers.

D. Diaper changing stations.

E. Utility room accessories.

1.02 RELATED REQUIREMENTS

A. Section 09 2216: Concealed supports for accessories, including in wall framing and plates.

B. Section 10 2113.16 - Plastic-Laminate-Clad Toilet Compartments.

C. Section 22 4000 - Plumbing Fixtures: Under-lavatory pipe and supply covers.

1.03 REFERENCE STANDARDS

A. ADA Standards - 2010 ADA Standards for Accessible Design; 2010.

B. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2017.

C. ASTM A269/A269M - Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service; 2022.

D. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.

E. ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2023.

F. ASTM B86 - Standard Specification for Zinc and Zinc-Aluminum (ZA) Alloy Foundry and Die Castings; 2023.

G. ASTM B456 - Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium; 2017 (Reapproved 2022).

H. ASTM C1036 - Standard Specification for Flat Glass; 2021.

I. ASTM C1503 - Standard Specification for Silvered Flat Glass Mirror; 2024.

J. ASTM F2285 - Standard Consumer Safety Performance Specification for Diaper Changing Tables for Commercial Use; 2022.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordinate the work with the placement of internal wall reinforcement, concealed ceiling supports, and reinforcement of toilet partitions to receive anchor attachments.

1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Submit data on accessories describing size, finish, details of function, and attachment methods.

C. Samples: Submit two samples of each accessory, illustrating color and finish.

D. Manufacturer's Installation Instructions: Indicate special procedures and conditions requiring special attention.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Commercial Toilet, Shower, and Bath Accessories:

1. American Specialties, Inc: www.americanspecialties.com/#sle.

2. Bradley Corporation: www.bradleycorp.com/#sle.
3. Bobrick: www.bobrick.
4. Substitutions: Section 01 6000 - Product Requirements.

2.02 MATERIALS

A. Accessories - General: Shop assembled, free of dents and scratches and packaged complete with anchors and fittings, steel anchor plates, adapters, and anchor components for installation.
   1. Grind welded joints smooth.
   2. Fabricate units made of metal sheet of seamless sheets with flat surfaces.

B. Keys: Provide 2 keys for each accessory to Owner; master key lockable accessories.

C. Stainless Steel Sheet: ASTM A666, Type 304.

D. Stainless Steel Tubing: ASTM A269/A269M, Grade TP304 or TP316.

E. Galvanized Sheet Steel: Hot-dipped galvanized steel sheet, ASTM A653/A653M, with G90/Z275 coating.

F. Zinc Alloy: Die cast, ASTM B86.

G. Mirror Glass: Annealed float glass, ASTM C1036 Type I, Class 1, Quality Q2, with silvering, protective and physical characteristics complying with ASTM C1503.

H. Adhesive: Two component epoxy type, waterproof.

I. Fasteners, Screws, and Bolts: Hot dip galvanized; tamper-proof; security type.

J. Expansion Shields: Fiber, lead, or rubber as recommended by accessory manufacturer for component and substrate.

2.03 FINISHES

A. Stainless Steel: Satin finish, unless otherwise noted.

B. Chrome/Nickel Plating: ASTM B456, SC 2, polished finish, unless otherwise noted.

C. Baked Enamel: Pretreat to clean condition, apply one coat primer and minimum two coats epoxy baked enamel.

D. Galvanizing for Items Other than Sheet: Comply with ASTM A123/A123M; galvanize ferrous metal and fastening devices.

E. Shop Primed Ferrous Metals: Pretreat and clean, spray apply one coat primer and bake.

F. Back paint components where contact is made with building finishes to prevent electrolysis.

2.04 COMMERCIAL TOILET ACCESSORIES

A. Toilet Paper Dispenser: Owner furnished, Contractor installed.

B. Paper Towel Dispenser: Owner furnished, Contractor installed.

C. Soap Dispenser: Owner furnished, Contractor installed.

D. Mirrors: Stainless steel framed, 1/4 inch thick annealed float glass; ASTM C1036.
   1. Annealed Float Glass: Silvering, protective and physical characteristics in compliance with ASTM C1503.
   2. Size: as shown on the drawings.
   3. Frame: 0.05 inchangle shapes, with mitered and welded and ground corners, and tamperproof hanging system; satin finish.
   4. Backing: Full-mirror sized, minimum 0.03 inch galvanized steel sheet and nonabsorptive filler material.

E. Grab Bars: Stainless steel, smooth surface.
   1. Heavy Duty Grab Bars: Floor supports are acceptable if necessary to achieve load rating.
      a. Push/Pull Point Load: Minimum 1000 pound-force, minimum.
      b. Dimensions: 1-1/2 inch outside diameter, minimum 0.125 inch wall thickness, exposed flange mounting, 1-1/2 inch clearance between wall and inside of grab bar.
      c. Length and Configuration: As indicated on drawings.

F. Combination Sanitary Napkin/Tampon Dispenser with Disposal: Stainless steel, surface-mounted.
   1. Door: Seamless 0.05 inch door with returned edges and tumbler lock.
   2. Cabinet: Fully welded, 0.03 inch thick sheet.
   3. Operation: No charge; no coin slots.
   4. Identify dispensers slots without using brand names.
   5. Minimum capacity: 15 napkins and 20 tampons.

G. Sanitary Napkin Disposal Unit: Stainless steel, surface-mounted, self-closing door, locking bottom panel with full-length stainless steel piano-type hinge, removable receptacle.

2.05 COMMERCIAL SHOWER AND BATH ACCESSORIES

A. Folding Shower Seat: Wall-mounted surface; welded tubular seat frame, structural support members, hinges, and mechanical fasteners of Type 304 stainless steel, L-shaped, right hand and L-shaped, left hand seat.
   1. Seat: Phenolic or polymeric composite one-piece seat or seat slats, of Ivory color.
   2. Size: ADA Standards compliant.

B. Wall-Mounted Soap Dish: Heavy duty, seamless stainless steel, surface-mounted with drain holes, without grab bar, satin finish; with concealed mechanical fastening suitable for substrate and backplate.

C. Robe Hook: Heavy-duty stainless steel, double-prong, rectangular-shaped bracket and backplate for concealed attachment, satin finish.

2.06 UNDER-LAVATORY PIPE AND SUPPLY COVERS

A. Specified in 22 4000 - Plumbing Fixtures.

2.07 ELECTRIC HAND/HAIR DRYERS

A. Electric Hand Dryers: Traditional fan-in-case type, with downward fixed nozzle.
   1. Operation: Automatic, sensor-operated on and off.
   2. Mounting: Wall-mounted - surface.
   3. Cover: Nickel.
      a. Tamper-resistant screw attachment of cover to mounting plate.
   4. Electric Hand Dryer Products:
      a. Dyson; Dyson Air blade V (Nickel): www.dyson.com.
      b. Substitutions: Section 01 6000 - Product Requirements.

2.08 DIAPER CHANGING STATIONS

A. Diaper Changing Station: Wall-mounted folding diaper changing station for use in commercial toilet facilities, meeting or exceeding ASTM F2285.
   1. Material: Polyethylene.
   2. Mounting: Surface.
   3. Color: Gray.
   4. Minimum Rated Load: 250 pounds.

2.09 UTILITY ROOM ACCESSORIES

A. Mop and Broom Holder: 0.05 inch thick stainless steel, Type 304, hat-shaped channel.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify exact location of accessories for installation.

C. For electrically-operated accessories, verify that electrical power connections are ready and in the correct locations.

D. Verify that field measurements are as indicated on drawings.

3.02 PREPARATION

A. Deliver inserts and rough-in frames to site for timely installation.

B. Provide templates and rough-in measurements as required.

3.03 INSTALLATION

A. Install accessories in accordance with manufacturers' instructions in locations indicated on drawings.

B. Install plumb and level, securely and rigidly anchored to substrate.

C. Mounting Heights: As required by accessibility regulations, unless otherwise indicated.
   1. Grab Bars: As indicated on drawings.
   2. Other Accessories: As indicated on drawings.

3.04 PROTECTION

A. Protect installed accessories from damage due to subsequent construction operations.

END OF SECTION 10 2800

SECTION 11 6643
INTERIOR ELECTRONIC SCOREBOARD

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes: Interior, electronic, multi-sport basketball scoreboards including control center, and other accessories for complete functional installation.

1.02 REFERENCES

A. American Society for Testing and Materials (ASTM) Publications:
   1. ASTM B221 - Aluminum-Alloy Extruded Bar, Rod, Wire, Shape, and Tube.
   2. National Electrical Code.
   3. Federal Communications Commission, Part 15 Rules & Regulations.
   4. UL and C-UL Standard for Electric Signs

1.03 SUBMITTALS

A. Provide in accordance with Section 01 33 00 - Submittal Procedures:
   1. To minimize the environmental impact of multiple paper copies, product installation prints, instructions and diagrams of manufacturer will be submitted in a paperless fashion. The end user shall receive all pertinent hard-copy documentation at delivery.
   2. Product data for scoreboards, controls, and accessories shall include descriptions of control functions etc.
   3. Installation drawings, face layout, dimensions, construction, electrical wiring diagrams, and method of anchorage. (Paperless when applicable).
   4. Copy of guarantee required by Paragraph 1.5 for review by Architect. (Paperless when applicable).
   5. Manufacturer's installation instructions. (Paperless when applicable).
   6. Finish Samples.

1.04 QUALITY ASSURANCE

A. Source limitation: All components including scoreboard, control center, control cable, and other accessories and installation hardware shall be products of a single manufacturer.

B. Manufacturer qualifications: Company specializing in manufacturing electronic scoreboards with 10 years minimum successful world-wide experience.

C. Scoreboards and other electrical components shall be certified for use in United States and Canada by Underwriter Laboratories, (UL), Inc. and shall bear either UL or C-UL label only.

D. Scoreboards and other electrical components shall be electrically grounded in accordance with National Electrical Code (NEC), Article 600.

1.05 GUARANTEE

A. Provide under provisions of Section 01 78 00 - Closeout Submittals: Guarantee to cover defects in materials and workmanship.
   1. Scoreboards, scoring tables, marquees, message centers, video boards* and Stadium Pro loudspeaker enclosures are guaranteed for a period of five (5) years from the date of invoice against defects in workmanship or materials.
      **Video Board exclusions include 8815, 8825, 8835, 8845.
   2. Wireless components, portable scoreboards and solar power kit carry a two (2) year guarantee from date of invoice. Hand-held controls and switches carry a one (1) year guarantee from date of invoice. The Stadium Pro loudspeaker front printed scrim is guaranteed for one (1) year from the date of invoice. Video Board Models 8815, 8825, 8835, and 8845 are guaranteed for one (1) year from date of invoice, unless additional years of warranty is purchased. For products supplied by third-party suppliers (i.e. cameras, computers, computer monitors, radar guns, loudspeakers, amplifiers and associated electronics), Purchaser agrees to accept the manufacturer’s warranty, if any, in lieu of any warranty by Nevco.
   3. Lifetime telephone support.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Basis of Design: Nevco Inc, 301 East Harris Avenue, Greenville, Illinois 62246; 800-851-4040; www.nevco.com.

B. Requests to use equivalent products of other manufacturers shall be submitted in accordance with Section 01 6000 - Product Requirements.

2.02 MATERIALS

A. Aluminum face and perimeter frame: Fabricated from 0.050 inch minimum thickness, ASTM B221 aluminum sheet.

B. Finish: Acrylic polyurethane paint. Color as selected by Architect from manufacturer's standard range.

C. Electronics: Low voltage, solid state, 2-wire cable, multiplex system, quartz crystal controlled.

D. Provide fiber optic communication interface to reduce threat of damage from electrical storms.

E. LED (light emitting diode) units: Seven-bar, segmented digits in protective aluminum cover, rated typical life 100,000 hours, and designed to provide excellent visibility from all angles and sides.

F. Provide location specific universal power cord with plug for world-wide installation.

G. Junction boxes where required: Sheet metal box and cover, 4-1/2 x 2-1/8 x 2-1/8 inches min. complying with NEMA standards.

2.03 SCOREBOARDS

A. Type: Interior, multi-purpose basketball/volleyball/wrestling electronic scoreboard with two integral horns, LED displays for time, scores, period, bonus, double bonus, and next possession arrows; Model 2702-NL (Non-Lit caption plates, base model) as manufactured by Nevco Inc. Rear-lit (RL) caption plates or Electronic Team Names (ETN) are optional and scoreboard shall be capable of in-the-field retrofit. Only LED lighting shall be used for rear-lit captions, incandescent lighting excluded. No captions shall be applied directly to the face of the scoreboard. All caption plates will be changeable and made of polyvinylchloride with vinyl lettering applied.

1. Size: 10 feet long x 3 feet high x 8 inches deep.
2. Approximate hanging weight: 80 pounds.
3. Large black and white captions providing maximum visibility:
   a. 6 inches high: "Home", "Guests", and "period".
      1) LED displays:
   b. Timing: Super Bright Red or White 13 inches.
   c. Team scores: Super Bright Amber or White 13 inches high digits.
   d. Period: Super Bright Amber or White 9 inches high digits.
   e. Next possession: Super Bright Amber or White arrow for each team.
   f. Include bonus and double bonus in the form of a 4 inch Super Bright Red or White LED “B”.
   g. Rear-lit captions (when specified) shall require zero maintenance.
4. Suspension mounting attachments will be included.
5. Power requirement: All options included: 126 Watts, MAX, 100-240 Volts AC w/Power Factor Correction.

2.04 ACCESSORIES/OPTIONS

A. Provide each scoreboard or accessory with control cable of length required. Electrical junction boxes, conduits, mounting hardware, and other accessories as required for installation are to be provided by others.

B. Electronic Team Names: “HOME” and “GUEST” caption plates to be replaced with programmable Electronic Team Names as manufactured by Nevco Inc.

1. Specify changeable team names as ETN. Shall not require controller upgrade, use of additional accessories, or computer.
2. Specify (R)ed or (A)mber ETN LED's (Example: 27xx ETN-R)

C. Provide for optional Team Name in place of "HOME" if NL/RL is selected.

D. Additional accessories include but are not limited to; please specify quantity required.
   a. Nevco Inc. Shot Clocks / End of Period (EOP) system.

2.05 CONTROL CENTER

A. Type: Wireless, microprocessor based, operator's control center with receiver unit mounted at scoreboard and designed to operate different models of scoreboard by interchange of keyboard overlay; Model MPCW as manufactured by Nevco Inc.. Console will operate earlier scoreboards from Nevco Inc..
   1. Unit shall comply with Part 15 of FCC Rules regarding interference.
   2. Console: High impact, break-resistant gray plastic 11 x 9-1/2 x 4-1/8 inches05 mm].
   3. Features:
      a. Control can be used to operate both wireless and wired scoreboards.
      b. Power on-off switch.
      c. Split and raised 40 key keyboards, internal beeper acknowledging each entry, and bookmark capabilities.
      d. Keyboard overlays for scoreboard or accessory.
      e. Remote hand-held main time switch with integral horn button.
      f. Provide with LED displays, lithium cell battery backup to maintain scoreboard memory and time of day, self test mode, power on-off switch, alternate time control, and multiple scoreboard operation.
      g. Timer features: Time of day display, multiple time out timers with warning, interval horn, upcount auto stop with horn, and 1/10th second display during last minute.
      h. Dimmer control for scoreboard.
   4. Receiver: Sturdy impact resistant construction, 6 x 4 x 1.5 inches with 4 inch2 mm] antenna and mounted at scoreboard.
   5. Maximum range: 1,000 feet305 m] from control center to receiver.
   6. Power adapters: Provide for each control center.
      a. Input: 120 volts, 0.4 amps, 50/60 Hz.
      b. Output: 9 volts, 1.67 amps, 15 watts.
      c. Provide option of battery supply for control operation if utility power not available.
   7. Provide carrying case for control center and hand-held switch; Model CC-3 as manufactured by Nevco Inc.
      a. Size: 18-1/2 x 14-1/2 x 6 inches.
      b. Construction: Double wall, high density black polyethylene with padded interior, mechanical latches, and hinges.

PART 3 - EXECUTION

3.01 PREPARATION

A. Verify exact scoreboard and control center quantities and junction box locations with Architect.

B. Coordinate require ments for electrical power, wall blocking, auxiliary framing and supports, suspension cables, and other components to be provided under other Specification Sections to ensure adequate provisions are made for complete, functional installation of scoreboards.

C. Coordinate scoreboard electrical requirements to ensure proper power source, conduit, wiring, and boxes are provided. Prior to installation, verify type and location of power supply.

3.02 INSTALLATION

A. Install scoreboards and accessories in accordance with manufacturer's instructions and approved installation drawings.

B. Before installation, field test scoreboards and accessories for operating functions. Ensure that scoreboards accurately perform all operations. Correct deficiencies.

C. Rigidly mount scoreboards and accessories level and plumb with brackets and fasteners.

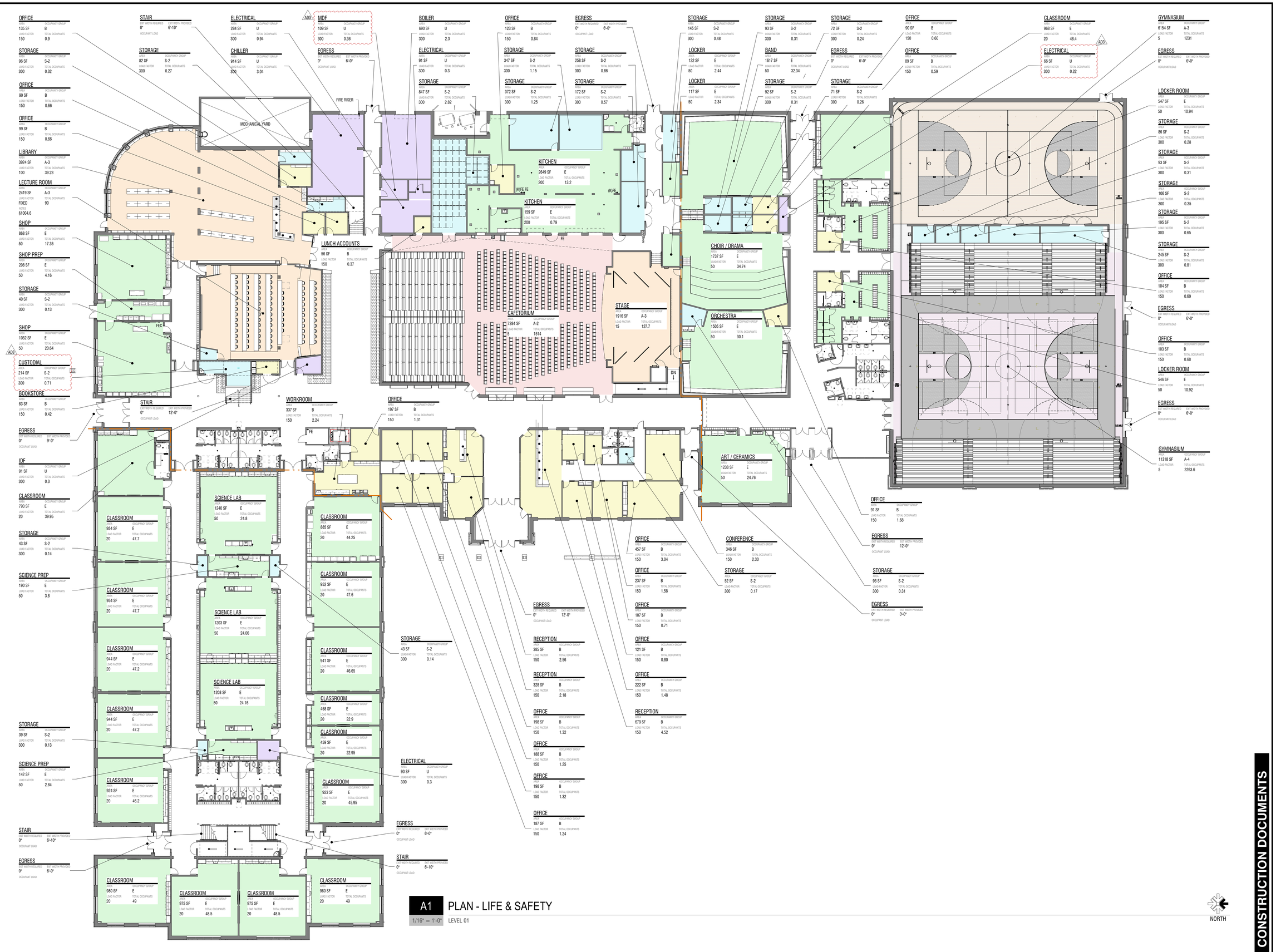
D. Clean exposed surfaces.

E. Protect scoreboards and finishes from other construction operations.

3.03 DEMONSTRATING AND TRAINING

A. In accordance with Section 01 75 00 - Starting, Adjusting, and Demonstrating, provide demonstration and training session for Owner's representative covering operation and maintenance of electronic scoreboard.

END OF SECTION 11 6643



A1 PLAN - LIFE & SAFETY

1/16" = 1'-0" LEVEL 01

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LOGAN, UT 84321
79S NORTH 400 WEST
SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: LEIKIS
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN M WILLIAMS
5/8/2024
LICENSED ARCHITECT

PLAN - CODE

G-007

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A1 PLAN - LIFE & SAFETY

1/16" = 1'-0" LEVEL 02

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A03	MAY 03'24	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: LEIKIS
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN M WILLIAMS
5/2/2024
LICENSED ARCHITECT

CONSTRUCTION DOCUMENTS

PLAN - CODE

G-008

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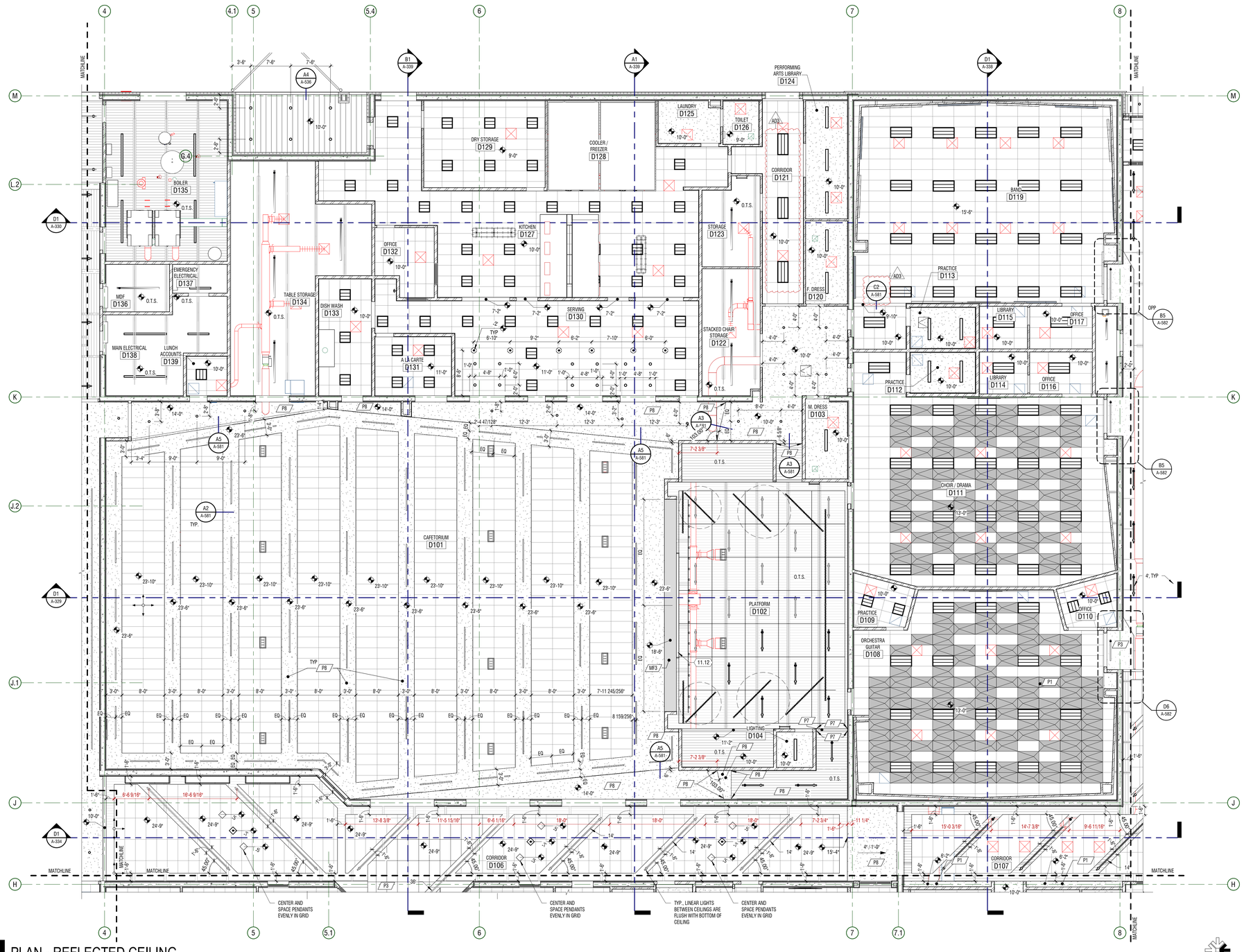


B1 PLAN - REFLECTED CEILING

1/8" = 1'-0" AREA D - LEVEL 01

GENERAL NOTES

1. KEYNOTES: # THE FIRST TWO NUMBERS REPRESENT THE RELATED CSI MASTER FORMAT DIVISION. THE SECOND SET OF NUMBERS REPRESENTS AN IDENTIFYING MARK VALUE. NOT ALL VALUES MAY BE USED OR OCCUR IN THE DOCUMENT SET.

   ADDITIONALLY, KEYNOTES RETAIN THEIR ASSIGNED VALUE UNIVERSALLY THROUGHOUT THE SET. THE KEYNOTES LISTED BELOW, REPRESENT THE KEYNOTES FOUND AND UTILIZED ON THIS SHEET AND EACH LIST WILL DIFFER RESPECTIVE TO ITS' SHEET. THEREFORE, BASED ON ACTUAL KEYNOTES UTILIZED ON A GIVEN SHEET OF DRAWINGS, GAPS IN THE SEQUENCING WILL OCCUR.
2. CONTRACTOR SHALL COORDINATE LAY-OUT OF STRUCTURAL, MECHANICAL, SPRINKLER AND ELECTRICAL. NOTIFY ARCHITECT OF ANY CONFLICTS.
3. ALL INTERIOR DIMENSIONS ARE TO/FROM FACE OF STUD / MASONRY. ALL EXTERIOR DIMENSIONS ARE TO/FROM FACE OF GRID/FOUNDATION. DIMENSIONS MARKED 'CLEAR' OR 'CLR' ARE FROM FACE OF FINISH TO FACE OF FINISH AND SHALL BE MAINTAINED AND CANNOT BE FIELD ADJUSTED WITHOUT PRIOR APPROVAL OF THE ARCHITECT.
4. SEE A-691 LEGEND FOR FINISH LEGEND
5. CEILING HEIGHT IS B.O. FINISHED CEILING HEIGHT ABOVE FINISHED FLOOR
6. MEASUREMENTS SPECIFYING "EQ" = EQUAL LENGTH OR WIDTH TO FILL REMAINDER OF LENGTH REQUIRED
7. CEILINGS WITH NO DIRECT MEASUREMENTS, ASSUME CEILING TO BE EQUALLY DISTANCED ON ALL SIDES OF ROOM
8. FIXTURES IN OPEN TO STRUCTURE AREAS ARE DIMENSIONED FROM WALL OR CENTERLINE OF ROOM
9. LIGHT FIXTURES WITH NO DIMENSIONS ARE TO BE CENTERED ON ROOM UNLESS OTHERWISE NOTED
10. FIXTURES WITHIN A.C.T. TO BE CENTERED IN GRID UNLESS OTHERWISE NOTED
11. FIXTURES ON GRID SHALL BE IN LINE WITH GRID CENTER ON CENTER UNLESS OTHERWISE NOTED
12. ROLLER SHADES PER FINISH PLANS, COORDINATE MANUAL AND POWER LOCATIONS WITH THE ELECTRICAL AND FINISH PLANS.
13. FIRE SPRINKLER HEADS, MOTION DETECTORS, LIGHT SENSORS, ETC. ARE TO BE CENTERED IN THE PANEL.
14. BID ALTERNATE 1 SHEETS SERIES A-800 INDICATED WITH:
15. OPEN TO STRUCTURE CEILINGS TO HAVE GYPSUM AT WALLS EXTEND UP INTO FLUTES OF DECK, ANY MECHANICAL, PLUMBING OR STRUCTURAL PENETRATIONS THROUGH WALLS SHALL BE ENCLOSED, PROVIDED A CLEAN FINISH TIGHT AROUND FIXTURES, BEAMS, PIPES, DUCTS, ETC.

KEYNOTES

# MARK	DESCRIPTION
11.12	WALL MOUNTED MOTERIZED PROJECTION SCREEN

LEGEND

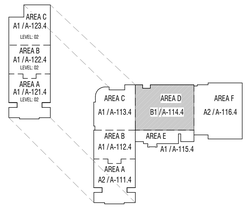
MATERIALS

- 4'-0" x 4'-0" SUSPENDED ACOUSTICAL LAY-IN CEILING SYSTEM
- METAL DECK - O.T.S.
- PAINTED GYPSUM BOARD CEILINGS TYPICAL, U.N.O.
- EXPOSED STRUCTURE TO RECIEVE 1-HR CEMENTITIOUS SPRAY
- 8'-0" x 4'-0" PAINTED TO MATCH DECK ACOUSTIC TECTUM PANEL ATTACHED TO DECK (NO EXPOSED FASTENERS)
- PREFINISHED METAL SOFFIT

SYMBOLS

- 2x2' / 2x4' TROFFERS
- RECESSED FIXTURE
- SUSPENDED HIGHBAY FIXTURE
- SEE PLAN — 4' TYP — SUSPENED LINEAR FIXTURES
- SEE PLAN — SURFACE MOUNTED LINEAR FIXTURES
- SEE PLAN — RECESSED LINEAR FIXTURES
- 8' LINEAR WALL SCONCE
- SQUARE LED LIGHTS
- 2x4 CEILING SOUND DIFFUSER PANEL
- ADJUSTABLE TRACK LIGHTING / DECORATIVE PENDANT LIGHTS
- MOUNTED LAY IN LIGHT FIXTURE
- **AIR GRILLES/ACCESS PANELS:** EXHAUST
- SUPPLY / FRESH
- RETURN / RELIEF
- ACCESS PANEL
- DENOTES CENTER OF ACT TILE AND DIRECTION FOR LAYOUT

KEY PLAN



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CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: FRANKS
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH — STEPHEN M. WILLIAMS — 5/2/2024 — LICENSED ARCHITECT

CONSTRUCTION DOCUMENTS

PLAN - LEVEL 01 - AREA D - REFLECTED CEILING

A-114.4

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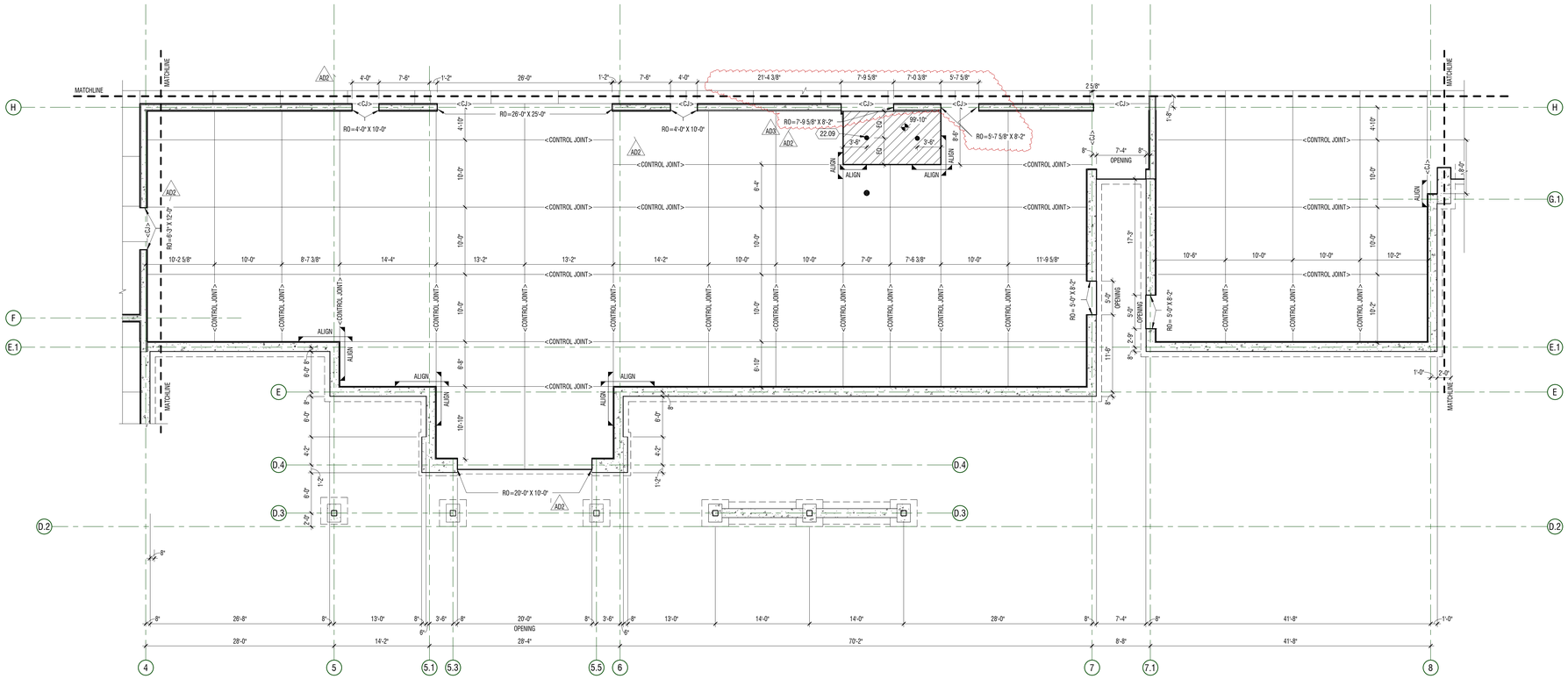
GENERAL NOTES

1. CONTRACTOR SHALL BE FAMILIARIZED WITH THE LAY-OUT OF STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. ANY QUESTIONS SHALL BE SUBMITTED VIA REQUEST FOR INFORMATION (RFI).
2. DIMENSIONS ARE FROM GRID TO CENTERLINE OF COLUMN, DRAINS, ETC., U.N.O. AND EDGE OF ICF FOAM BLOCKS.
3. COORDINATE WITH STRUCTURAL DRAWINGS FOR SIZE AND DEPTH OF FOOTING, METAL DECK, AND OTHER DETAILS.
4. NOT ALL SLAB PENETRATIONS ARE SHOWN ON PLAN. COORDINATE WITH PLUMBING AND MECHANICAL DRAWINGS FOR ADDITIONAL DEVIATIONS.
5. SLOPE ALL SETTING BEDS TO FLOOR DRAINS U.N.O.
6. REVEAL TO OCCUR AT EXTERIOR GRADE. SEE BID PACKAGE 2 FOR PROFILE.
7. (AD2) ROUGH OPENING (RO) INDICATED AT ICF OPENINGS WIDTH X HEIGHT. SEE A1/A-576 FOR HOLLOW METAL DOOR FRAMING STANDARDS. FIELD VERIFY ALL STOREFRONT OPENINGS.

KEYNOTES

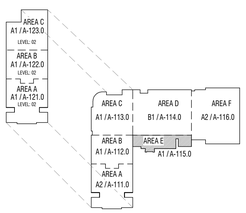
# MARK	DESCRIPTION
22.09	FLOOR DRAIN - SLOPE FLOOR TO DRAIN



LEGEND

- CONCRETE SLAB
- TUBULAR CONCRETE FORM BLOCK-OUTS
- RECESSED SLAB - SEE PLAN FOR ELEVATION
- ELEVATOR PIT
- 2'-0" x 2'-0" x 2'-0" SUMP AT ELEVATOR PIT

KEY PLAN



A1 PLAN - SLAB

1/8" = 1'-0" AREA E - LEVEL 01

NORTH

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MARK:	DATE:	DESCRIPTION:
A02	MAY 07 2024	ADDENDUM 02 - BID PACKAGE 2 RE-RELEASE
A03	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: LOYND
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN W. WILLIAMS
5/8/2024
LICENSED ARCHITECT

CONSTRUCTION DOCUMENTS

PLAN - LEVEL 01 - AREA E - SLAB & FOUNDATION

A-115.0

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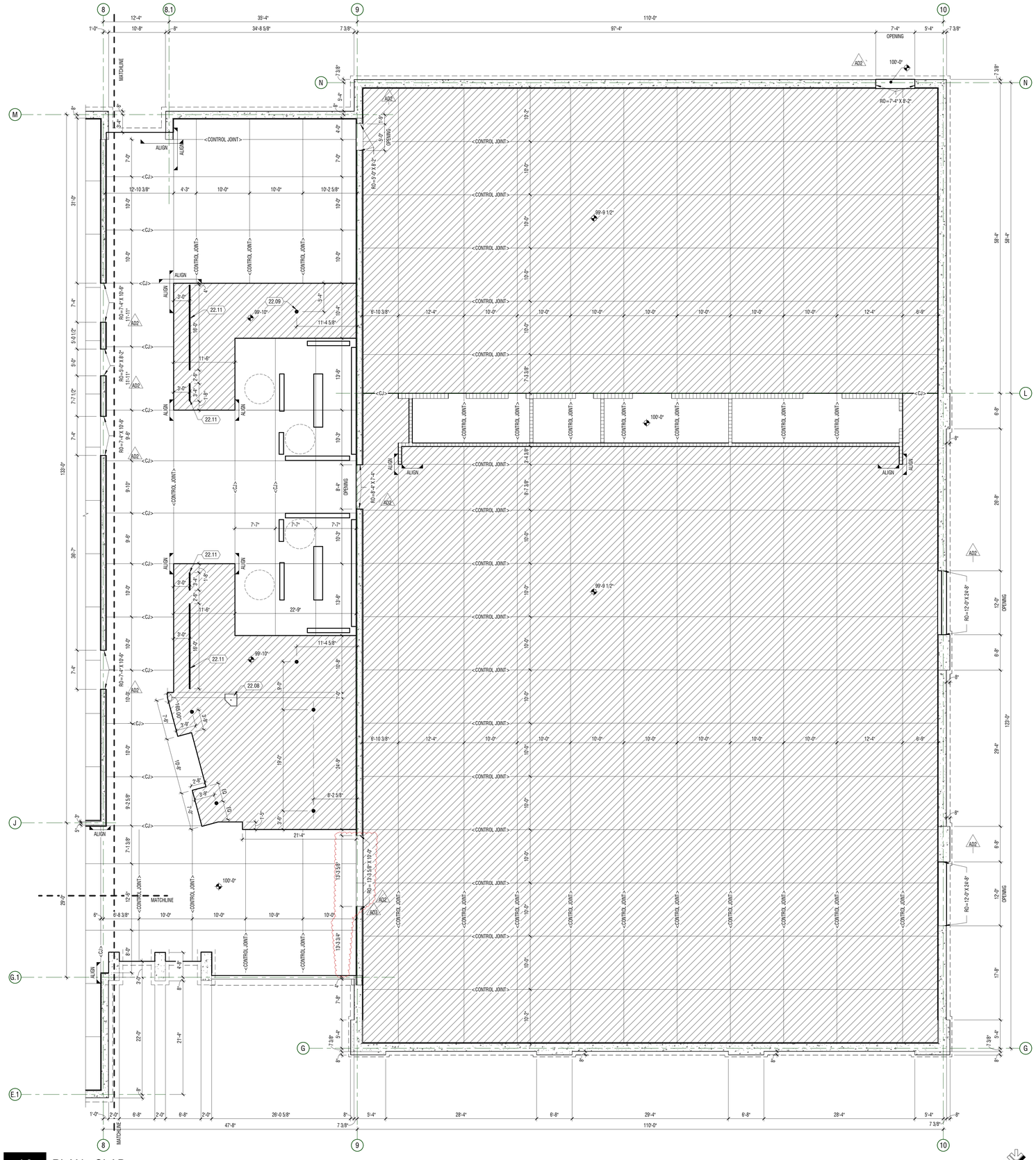


A2 PLAN - SLAB

1/8" = 1'-0" AREA F - LEVEL 01

GENERAL NOTES

1. CONTRACTOR SHALL BE FAMILIARIZED WITH THE LAY-OUT OF STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. ANY QUESTIONS SHALL BE SUBMITTED VIA REQUEST FOR INFORMATION (RFI).
2. DIMENSIONS ARE FROM GRID TO CENTERLINE OF COLUMN, DRAINS, ETC., U.N.O. AND EDGE OF ICF FOAM BLOCKS.
3. COORDINATE WITH STRUCTURAL DRAWINGS FOR SIZE AND DEPTH OF FOOTING, METAL DECK, AND OTHER DETAILS.
4. NOT ALL SLAB PENETRATIONS ARE SHOWN ON PLAN. COORDINATE WITH PLUMBING AND MECHANICAL DRAWINGS FOR ADDITIONAL DEVIATIONS.
5. SLOPE ALL SETTING BEDS TO FLOOR DRAINS U.N.O.
6. REVEAL TO OCCUR AT EXTERIOR GRADE. SEE BID PACKAGE 2 FOR PROFILE.
7. AD2 ROUGH OPENING (RO) INDICATED AT ICF OPENINGS WIDTH X HEIGHT. SEE A1/A-576 FOR HOLLOW METAL DOOR FRAMING STANDARDS. FIELD VERIFY ALL STOREFRONT OPENINGS.

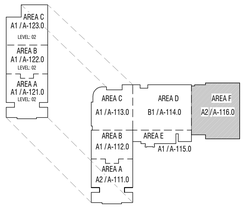
KEYNOTES

# MARK	DESCRIPTION
22.08	MOP SINK
22.09	FLOOR DRAIN - SLOPE FLOOR TO DRAIN
22.11	LINEAR TRENCH DRAIN

LEGEND

- CONCRETE SLAB
- TUBULAR CONCRETE FORM BLOCK-OUTS
- RECESSED SLAB - SEE PLAN FOR ELEVATION
- ELEVATOR PIT
- 2'-0" x 2'-0" x 2'-0" SUMP AT ELEVATOR PIT

KEY PLAN



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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A02	MAY 07 2024	ADDENDUM 02 - BID PACKAGE 2 RE-RELEASE
A03	MAY 2024	ADDENDUM 03

PROJECT #:	123006
DRAWN BY:	LOYND
CHECKED BY:	RIGBY
ISSUED:	05.02.2024

STATE OF UTAH
STEPHEN WILLIAMS
5/2/2024
LICENSED ARCHITECT

CONSTRUCTION DOCUMENTS

PLAN - LEVEL 01
-AREA F - SLAB & FOUNDATION

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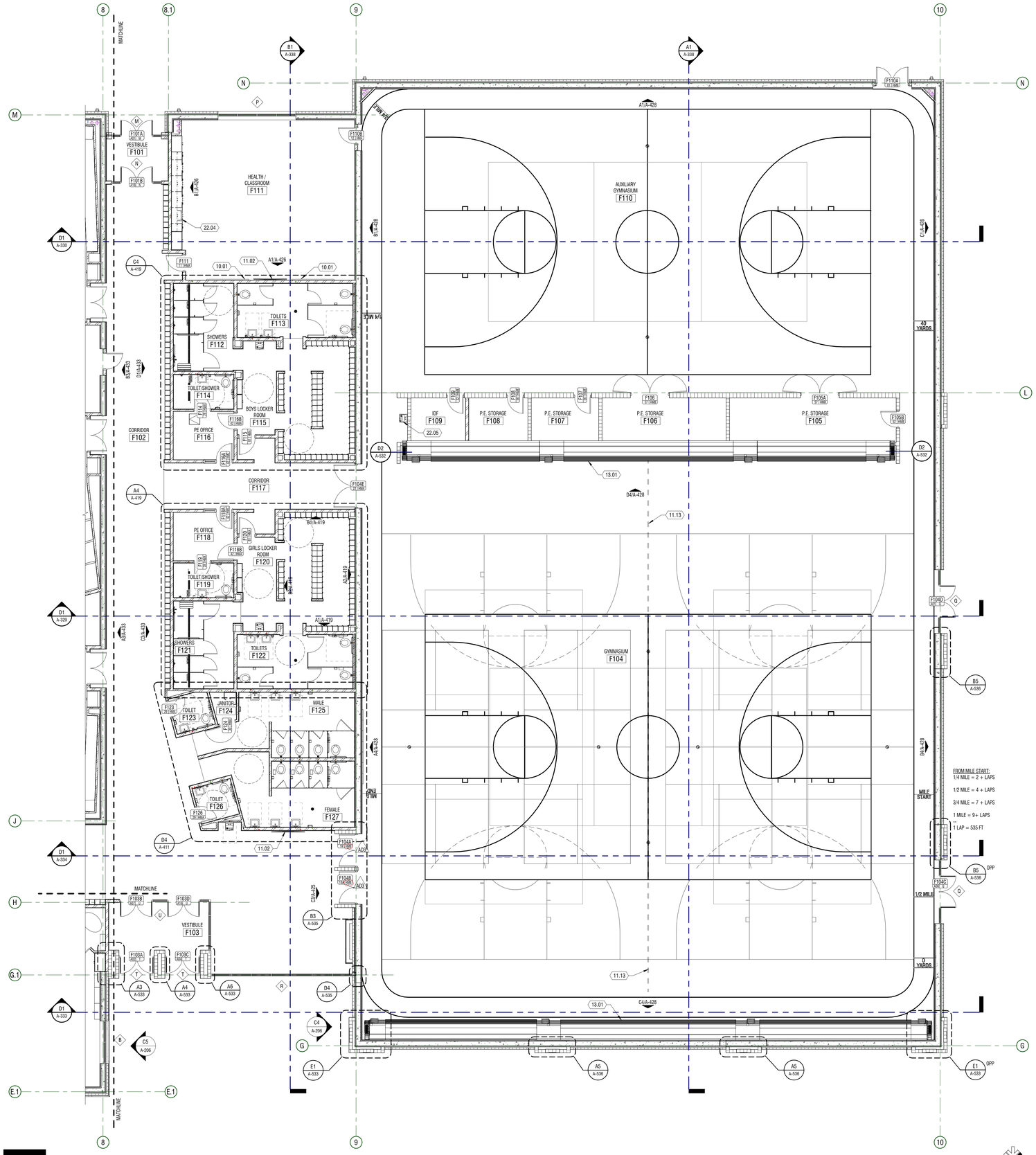


A2 PLAN - ANNOTATION

1/8" = 1'-0" AREA F - LEVEL 01

GENERAL NOTES

1. KEYNOTES: (#) THE FIRST TOW NUMBERS REPRESENT THE RELATED CSI MASTER FORMAT DIVISON. THE SECOND SET OF NUMBERS REPRESENT AN IDENTIFING MARK VALUE. NOT ALL MAY BE USED OR OCCURE IN THE DOCUMENT SET.

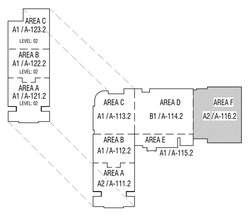
   ADDITIONALLY, KEYNOTES RETAIN THEIR ASSIGNED VALUE UNIVERSALLY THROUGHOUT THE SET. THE KEYNOTES LISTED BELOW, REPRESENT THE KEYNOTES FOUND AND UTLISED ON THIS SHEET AND EACH LIST WILL DIFFER RESPECTIVE TO ITS SHEET. THEREFORE, BASED ON ACTUAL KEYNOTES UTILIZED ON A GIVEN SHEET OF DRAWINGS, GAPS IN THE SEQUENCING WILL OCCUR.
2. CONTRACTOR SHALL VERIFY LAY-OUT OF STRUCTURAL, MECHANICAL, AND ELECTRICAL.
3. ALL INTERIOR DIMENSIONS ARE TO/FROM FACE OF STUD / MASONRY. ALL EXTERIOR DIMENSIONS ARE TO / FROM FACE OF GRID / FOUNDATION. DIMENSIONS MARKED 'CLEAR' OR 'CLR' ARE FROM FACE OF FINISH TO FACE OF FINISH AND SHALL BE MAINTAINED AND CANNOT BE FIELD ADJUSTED WITHOUT PRIOR APPROVAL OF THE ARCHITECT.
4. HOLLOW METAL FRAME AND ALUMINUM WINDOW TYPES (11) ARE SHOWN ON SHEET SERIES A-570. DIMENSIONS TO FRAMES WILL BE TO OUTSIDE EDGE OF FRAME. SEE BOTH THE FLOOR PLAN AND EXTERIOR ELEVATIONS FOR ALL WINDOW TYPE REFERENCES
5. SEE FINISH PLANS FOR SIGNAGE LOCATION, SIGNAGE SYMBOL
6. SEE SHEET SERIES G-004 & A-612 FOR ALL FIRE WALLS, SMOKE WALLS, WALLS TO CEILING LEVEL, SOUND WALLS
7. FEC = FIRE EXTINGUISHER IN SEMI-RECESSED CABINET
8. A1/A-101 INDICATES INTERIOR ROOM ELEVATIONS ON SHEET REFERENCED
9. SEE SITE PLANS FOR EXTERIOR STAIRS, RAILING AND RAMP DETAILS
10. ROLLER SHADES PER FINISH PLANS
11. BID ALTERNATE 1 SHEETS SERIES A-800 INDICATED WITH:

KEYNOTES

(#)

MARK	DESCRIPTION
10.01	WHITEBOARD 8'-0" X 4'-0", HIDDEN TAKLESS PAPER HOLDER ON TOP AND MARKER TRAY ON BOTTOM
11.02	WALL MOUNTED DIGITAL DISPLAY - SEE DETAIL E1/A-591 FOR MOUNTING
11.13	RETRACTABLE GYM CURTAIN
13.01	RETRACTABLE/FIXED BLEACHERS
22.04	SINK
22.05	DRINKING FOUNTAIN

KEY PLAN



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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: NIELSON
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN W. WILLIAMS
5/2/2024
ACTIVE
LICENSED ARCHITECT

PLAN - LEVEL 01 - AREA F - ANNOTATION

A-116.2

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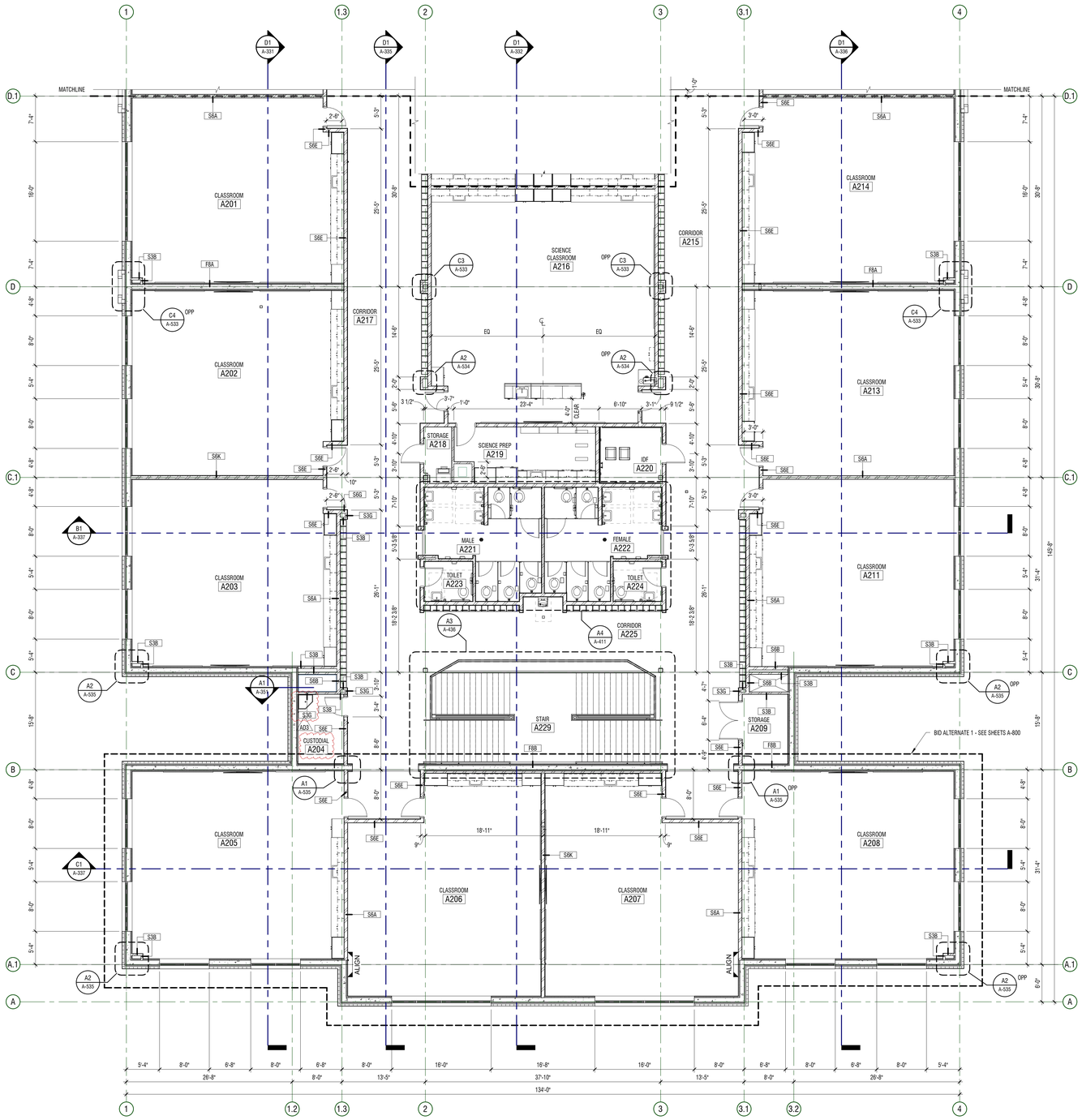
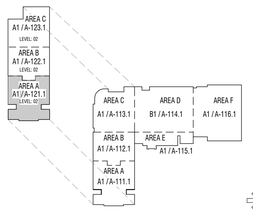


GENERAL NOTES

1. MATERIALS INDICATED ON PLAN WITH SYMBOL (#) SEE SHEETS A-202 FOR SCHEDULE.
2. CONTRACTOR SHALL BE FAMILIARIZED WITH THE LAY-OUT OF STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. ANY QUESTIONS SHALL BE SUBMITTED VIA REQUEST FOR INFORMATION (RFI).
3. ALL INTERIOR DIMENSIONS ARE TO/FROM FACE OF STUD / MASONRY. ALL EXTERIOR DIMENSIONS ARE TO/FROM FACE OF GRID/FOUNDATION. DIMENSIONS MARKED 'CLEAR' OR 'CLR' ARE FROM FACE OF FINISH TO FACE OF FINISH AND SHALL BE MAINTAINED AND CANNOT BE FIELD ADJUSTED WITHOUT PRIOR APPROVAL OF THE ARCHITECT.
4. MIN CLEARANCE REQUIRED ON LATCH SIDE OF DOORS SHALL CONFORM TO ADA REQUIREMENTS
   12" MIN PUSH SIDE
   18" MIN PULL SIDE
   3" STUD SECTION
5. HINGE SIDE OF DOORS AT PERPENDICULAR WALLS TO HAVE 3" STUD SECTION U.N.O
6. BLOCKING TO BE PROVIDED AT SHELVING, CASEWORK, RAILINGS, LIGHT FIXTURE, COUNTERTOP, ACCESSORIES AND MORE PER A-511, TYP
7. PROVIDE 5/8" PLYWOOD BACKING PANELS AT ELECTRICAL ROOMS AND TELEVISION LOCATIONS FOR EQUIPMENT MOUNTING. PAINT TO MATCH WALLS PER A-511
8. PROVIDE CONTINUOUS WOOD BLOCKING OR METAL STRAPPING FOR ANY WALL MOUNTED OR SUPPORTED ITEMS. PROVIDE FIRE RATED BLOCKING FOR ANY FIRE RATED PARTITIONS PER A-511
9. WALL TYPES SHOWN AS — S6A ARE SHOWN ON SHEET A-612. FOR OTHER WALLS SEE BUILDING AND WALL SECTIONS. FOR STANDARD STEEL STUD DETAILS SEE A-511
10. AT RECESSED CABINETS (IE: ELECTRICAL PANELS, FEC AND ETC) IN FIRE RATED WALLS PROVIDE 5 SIDE COVERAGE OF GYP BD IN STUD WALLS TO MAINTAIN INTEGRITY OF FIRE WALL RATING PER A-612
11. ALIGN FURRED WALLS AND STUD WALL FINISH FACE TYPICAL, U.N.O.
12. ADA RESTROOMS MUST COMPLY WITH ADA WATER CLOSET MEASUREMENTS ON SHEET A-512
13. SEE CODE PLAN FOR LOCATION SMOKE AND FIRE RATED PARTITIONS, AND SOUND WALL LOCATIONS
14. SLOPE ALL SETTING BEDS TO FLOOR DRAINS U.N.O.
15. EXTEND ALL WALLS SURROUNDING AN OPEN CEILING AREA TO DECK
16. BID ALTERNATE 1 SHEETS SERIES A-800 INDICATED WITH:

KEY PLAN



TO BE DETERMINED

NORTH

A1 PLAN - DIMENSIONS

1/8" = 1'-0"

AREA A - LEVEL 02

CONSTRUCTION DOCUMENTS

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CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: NIELSON
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN M WILLIAMS
5/8/2024
LICENSED ARCHITECT

PLAN - LEVEL 02 - AREA A - DIMENSION

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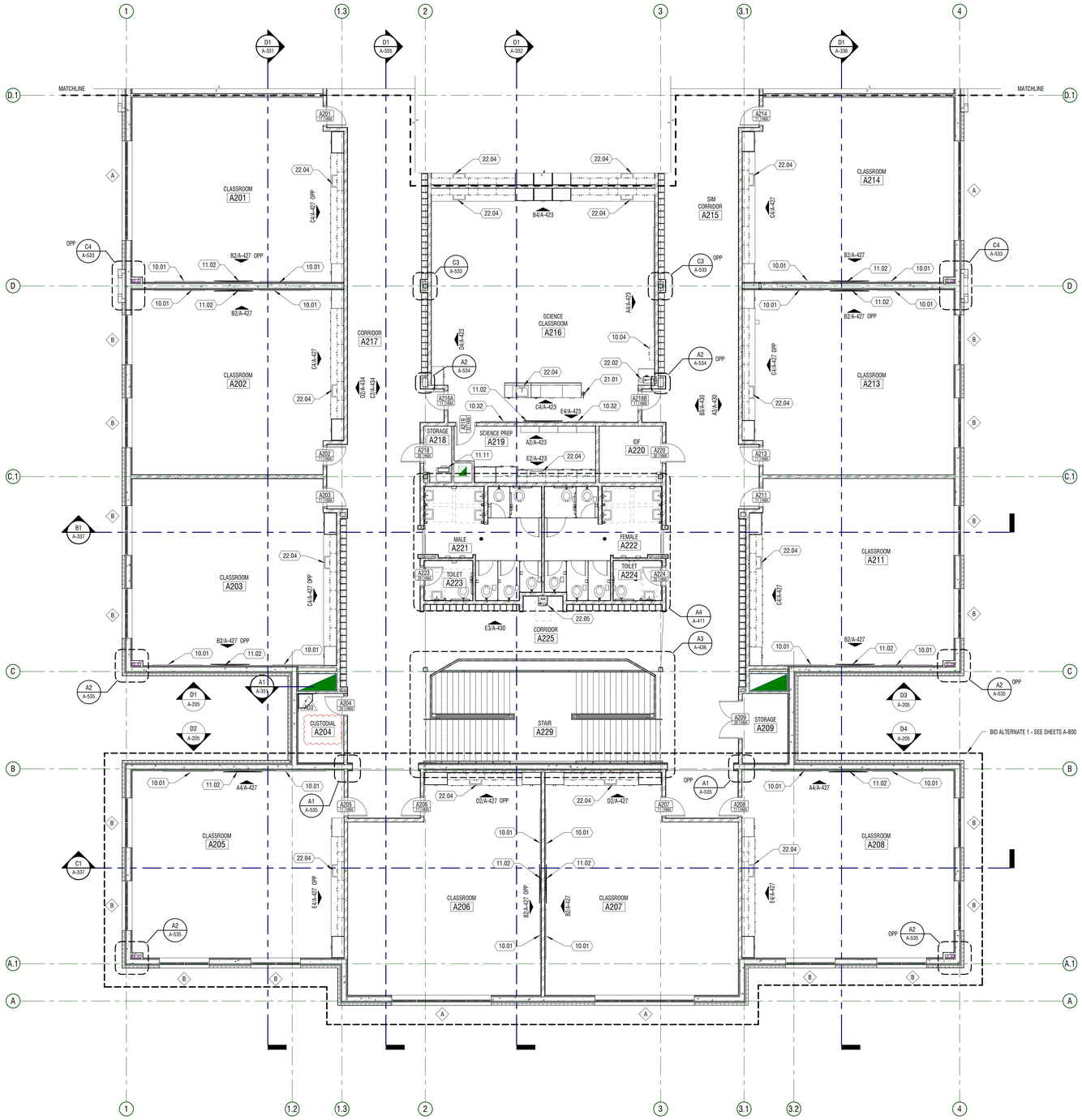

A1 PLAN - ANNOTATION

1/8" = 1'-0" AREA A - LEVEL 02

NORTH

GENERAL NOTES

1. KEYNOTES: # THE FIRST TOW NUMBERS REPRESENT THE RELATED CSI MASTER FORMAT DIVISON. THE SECOND SET OF NUMBERS REPRESENT AN IDENTIFING MARK VALUE. NOT ALL MAY BE USED OR OCCURE IN THE DOCUMENT SET.

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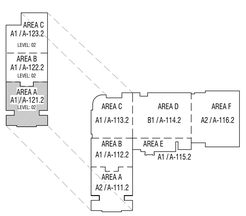
4. HOLLOW METAL FRAME AND ALUMINUM WINDOW TYPES 11 ARE SHOWN ON SHEET SERIES A-570. DIMENSIONS TO FRAMES WILL BE TO OUTSIDE EDGE OF FRAME. SEE BOTH THE FLOOR PLAN AND EXTERIOR ELEVATIONS FOR ALL WINDOW TYPE REFERENCES
5. SEE FINISH PLANS FOR SIGNAGE LOCATION, SIGNAGE SYMBOL
6. SEE SHEET SERIES G-004 & A-612 FOR ALL FIRE WALLS, SMOKE WALLS, WALLS TO CEILING LEVEL, SOUND WALLS
7. FEC = FIRE EXTINGUISHER IN SEMI-RECESSED CABINET
8. A1/A-101 INDICATES INTERIOR ROOM ELEVATIONS ON SHEET REFERENCED
9. SEE SITE PLANS FOR EXTERIOR STAIRS, RAILING AND RAMP DETAILS
10. ROLLER SHADES PER FINISH PLANS
11. BID ALTERNATE 1 SHEETS SERIES A-800 INDICATED WITH:

KEYNOTES

# MARK	DESCRIPTION
10.01	WHITEBOARD 8'-0" X 4'-0". HIDDEN TAKLESS PAPER HOLDER ON TOP AND MARKER TRAY ON BOTTOM
10.04	GOGGLE CLEANING CABINET
10.32	WHITEBOARD 6'-0" X 4'-0". HIDDEN TAKLESS PAPER HOLDER ON TOP AND MARKER TRAY ON BOTTOM
11.02	WALL MOUNTED DIGITAL DISPLAY - SEE DETAIL E1/A-591 FOR MOUNTING
11.11	ICE MAKER - OWNER PROVIDED, CONTRACTOR INSTALLED
21.01	FIRE EXTINGUISHER
22.02	RECESSED FOLD DOWN EMERGENCY EYEWASH STATION
22.04	SINK
22.05	DRINKING FOUNTAIN

KEY PLAN



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CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN A. WILLIAMS
5/1/2024
LICENSED ARCHITECT

PLAN - LEVEL 02 - AREA A - ANNOTATION

A-121.2

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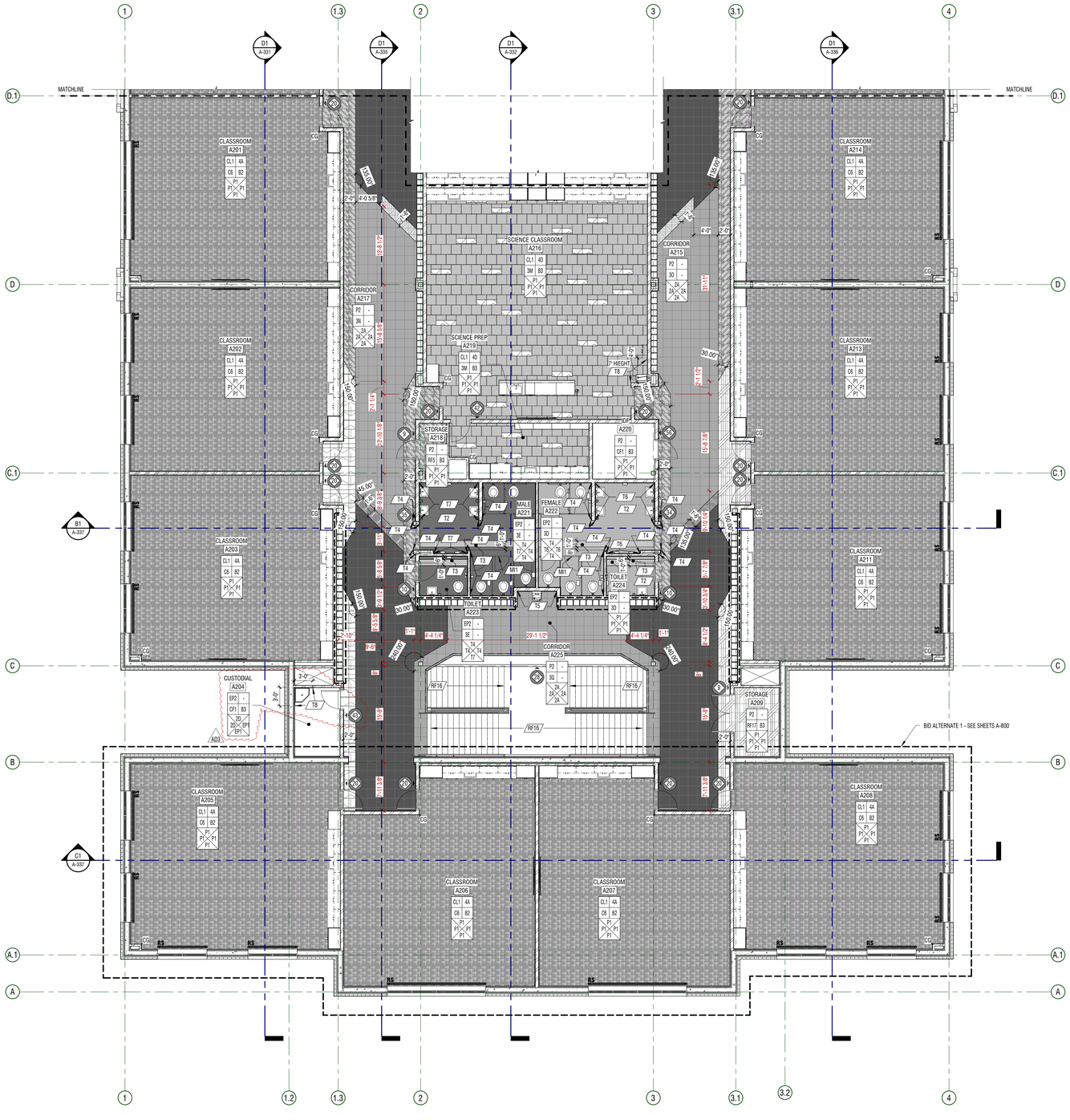


A1 PLAN - FINISH

1/8" = 1'-0" AREA A - LEVEL 02

NORTH

GENERAL NOTES

1. ROOM FINISH TAGS FOR EACH ROOM REPRESENT TYPICAL FINISHES. SPECIFIC WALLS IN SELECTED AREAS MAY HAVE MULTIPLE FINISHES WHICH WILL BE INDICATED IN INTERIOR ELEVATIONS.
2. SEE INTERIOR ELEVATIONS FOR ADDITIONAL FINISH INFORMATION
3. SEE REFLECTED CEILING PLANS FOR ADDITIONAL FINISH INFORMATION
4. FOR FINISH LEGEND SEE A-691,692
5. FLOOR MATERIAL TRANSITIONS WILL OCCUR BELOW DOORS. U.N.O. SEE TYPICAL TRANSITION DETAILS ON SHEET A-594
6. POLISHED OR SEALED CONCRETE DOES EXTEND UNDER CASEWORK OR MILLWORK
7. FLOOR COVERING DOES NOT EXTEND UNDER MILLWORK OR CASEWORK, U.N.O.
8. FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF CASEWORK AND FINISH ASSEMBLIES
9. TILED WALLS TO BE FULL HEIGHT OF WALL, U.N.O.
10. FOR SIGN SCHEDULE SEE A-681
11. FOR TYPICAL FINISH INSTALL DETAILS NOT NOTED ON FINISH PLANS PLEASE SEE A-594

LEGEND

CEILING / FLOOR / WALL / WALL — MILLWORK / BASE / WALL / WALL — ROOM FINISH TAG

C1 — FINISH TAG - INDICATES SPECIFIC APPLIED FINISH

C1 — INDICATES FINISH IS APPLIED TO AREA BETWEEN ARROWS

C1 — INDICATES FINISH IS APPLIED TO FACE OF SURFACE(S)

RS — INDICATES A MANUAL ROLLER SHADE.

RS — INDICATES A MOTORIZED ROLLER SHADE.

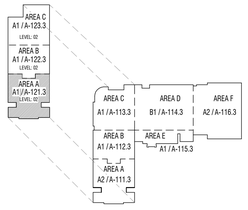
INDICATES SIGNAGE LOCATION

CG — INDICATES CORNER GUARD

FLOORING LEGEND

RF1, RF2, RF3, RF4, RF5, RF6, RF7, RF8, RF9, RF10, RF11, RF12, RF13, RF14, RF15, RF17, RF18, RF19, C1, C2, C3, C4, C5, C6

KEY PLAN



CONSTRUCTION DOCUMENTS

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SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #:	123006
DRAWN BY:	NAVA
CHECKED BY:	RIGBY
ISSUED:	05.02.2024

STATE OF UTAH — STEPHEN M WILLIAMS — 5/2/2024 — LICENSED ARCHITECT

PLAN - LEVEL 02 - AREA A - FINISH

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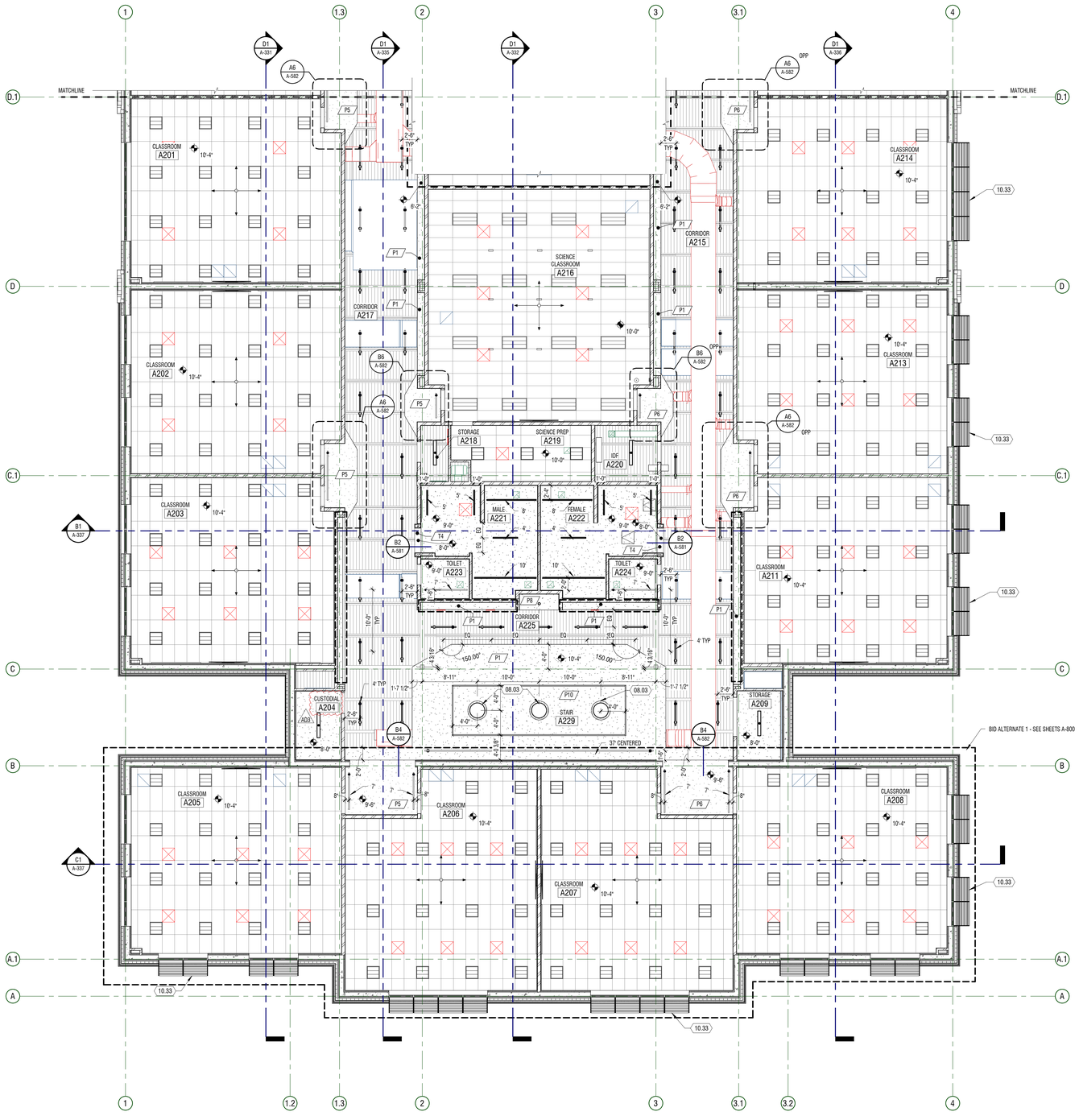

A1 PLAN - REFLECTED CEILING

1/8" = 1'-0" AREA A - LEVEL 02

NORTH

GENERAL NOTES

1. KEYNOTES: # THE FIRST TWO NUMBERS REPRESENT THE RELATED CSI MASTER FORMAT DIVISION. THE SECOND SET OF NUMBERS REPRESENTS AN IDENTIFYING MARK VALUE. NOT ALL VALUES MAY BE USED OR OCCUR IN THE DOCUMENT SET.

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2. CONTRACTOR SHALL COORDINATE LAY-OUT OF STRUCTURAL, MECHANICAL, SPRINKLER AND ELECTRICAL. NOTIFY ARCHITECT OF ANY CONFLICTS.
3. ALL INTERIOR DIMENSIONS ARE TO/FROM FACE OF STUD / MASONRY. ALL EXTERIOR DIMENSIONS ARE TO/FROM FACE OF GRID/FOUNDATION. DIMENSIONS MARKED 'CLEAR' OR 'CLR' ARE FROM FACE OF FINISH TO FACE OF FINISH AND SHALL BE MAINTAINED AND CANNOT BE FIELD ADJUSTED WITHOUT PRIOR APPROVAL OF THE ARCHITECT.
4. SEE A-691 LEGEND FOR FINISH LEGEND
5. CEILING HEIGHT IS B.O. FINISHED CEILING HEIGHT ABOVE FINISHED FLOOR
6. MEASUREMENTS SPECIFYING "EQ" = EQUAL LENGTH OR WIDTH TO FILL REMAINDER OF LENGTH REQUIRED
7. CEILINGS WITH NO DIRECT MEASUREMENTS, ASSUME CEILING TO BE EQUALLY DISTANCED ON ALL SIDES OF ROOM
8. FIXTURES IN OPEN TO STRUCTURE AREAS ARE DIMENSIONED FROM WALL OR CENTERLINE OF ROOM
9. LIGHT FIXTURES WITH NO DIMENSIONS ARE TO BE CENTERED ON ROOM UNLESS OTHERWISE NOTED
10. FIXTURES WITHIN A.C.T. TO BE CENTERED IN GRID UNLESS OTHERWISE NOTED
11. FIXTURES ON GRID SHALL BE IN LINE WITH GRID CENTER ON CENTER UNLESS OTHERWISE NOTED
12. ROLLER SHADES PER FINISH PLANS, COORDINATE MANUAL AND POWER LOCATIONS WITH THE ELECTRICAL AND FINISH PLANS.
13. FIRE SPRINKLER HEADS, MOTION DETECTORS, LIGHT SENSORS, ETC. ARE TO BE CENTERED IN THE PANEL.
14. BID ALTERNATE 1 SHEETS SERIES A-800 INDICATED WITH:
15. OPEN TO STRUCTURE CEILINGS TO HAVE GYPSUM AT WALLS EXTEND UP INTO FLUTES OF DECK, ANY MECHANICAL, PLUMBING OR STRUCTURAL PENETRATIONS THROUGH WALLS SHALL BE ENCLOSED, PROVIDED A CLEAN FINISH TIGHT AROUND FIXTURES, BEAMS, PIPES, DUCTS, ETC.

KEYNOTES

# MARK	DESCRIPTION
08.03	SOLAR LIGHT DOME ON CURB
10.33	WINDOW SHADING DEVICE - SEE DETAIL A-573/E5

LEGEND

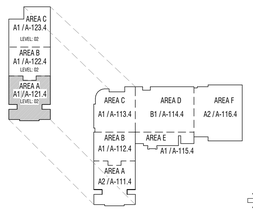
MATERIALS

- 4'-0" x 4'-0" SUSPENDED ACOUSTICAL LAY-IN CEILING SYSTEM
- PAINTED GYPSUM BOARD CEILINGS TYPICAL, U.N.O.
- EXPOSED STRUCTURE TO RECIEVE 1-HR CEMENTITIOUS SPRAY
- 8'-0" x 4'-0" PAINTED TO MATCH DECK ACOUSTIC TECTUM PANEL ATTACHED TO DECK (NO EXPOSED FASTENERS)
- PREFINISHED METAL SOFFIT
- METAL DECK - O.T.S.

SYMBOLS

- 2'x2' / 2'x4' TROFFERS
- RECESSED FIXTURE
- SUSPENDED HIGHBAY FIXTURE
- SEE PLAN / 4' TYP — SUSPENED LINEAR FIXTURES
- SEE PLAN — SURFACE MOUNTED LINEAR FIXTURES
- SEE PLAN — RECESSED LINEAR FIXTURES
- 8' LINEAR WALL SCONCE
- SQUARE LED LIGHTS
- 2x4 CEILING SOUND DIFFUSER PANEL
- ADJUSTABLE TRACK LIGHTING / DECORATIVE PENDANT LIGHTS
- MOUNTED LAY IN LIGHT FIXTURE
- AIR GRILLES/ACCESS PANELS: EXHAUST
- SUPPLY / FRESH
- RETURN / RELIEF
- ACCESS PANEL
- DENOTES CENTER OF ACT TILE AND DIRECTION FOR LAYOUT

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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255 SOUTH 300 WEST LOGAN, UT 84321
759 NORTH 400 WEST SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL
3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: FRANKS
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH STEPHEN M WILLIAMS 5/2/2024 LICENSED ARCHITECT

PLAN - LEVEL 02 - AREA A - REFLECTED CEILING

A-121.4

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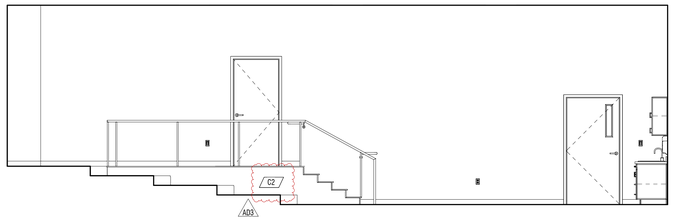
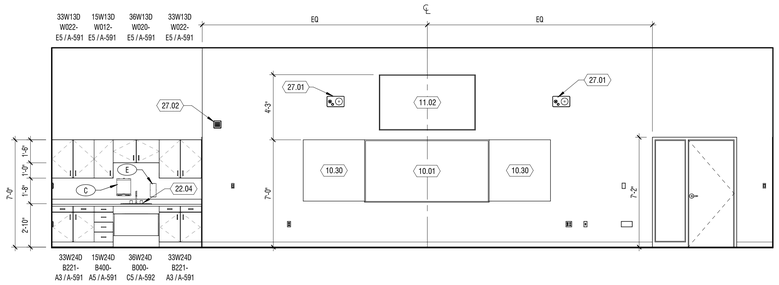


D1 INTERIOR ELEVATION

1/4" = 1'-0"

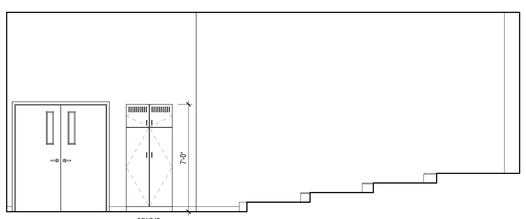
CHOIR / DRAMA D111



C1 INTERIOR ELEVATION

1/4" = 1'-0"

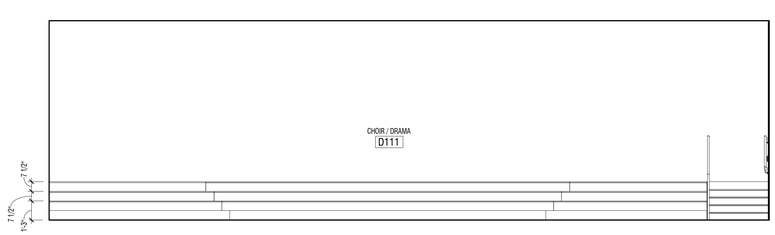
CHOIR / DRAMA D111



B1 INTERIOR ELEVATION

1/4" = 1'-0"

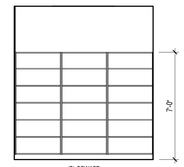
CHOIR / DRAMA D111



A1 INTERIOR ELEVATION

1/4" = 1'-0"

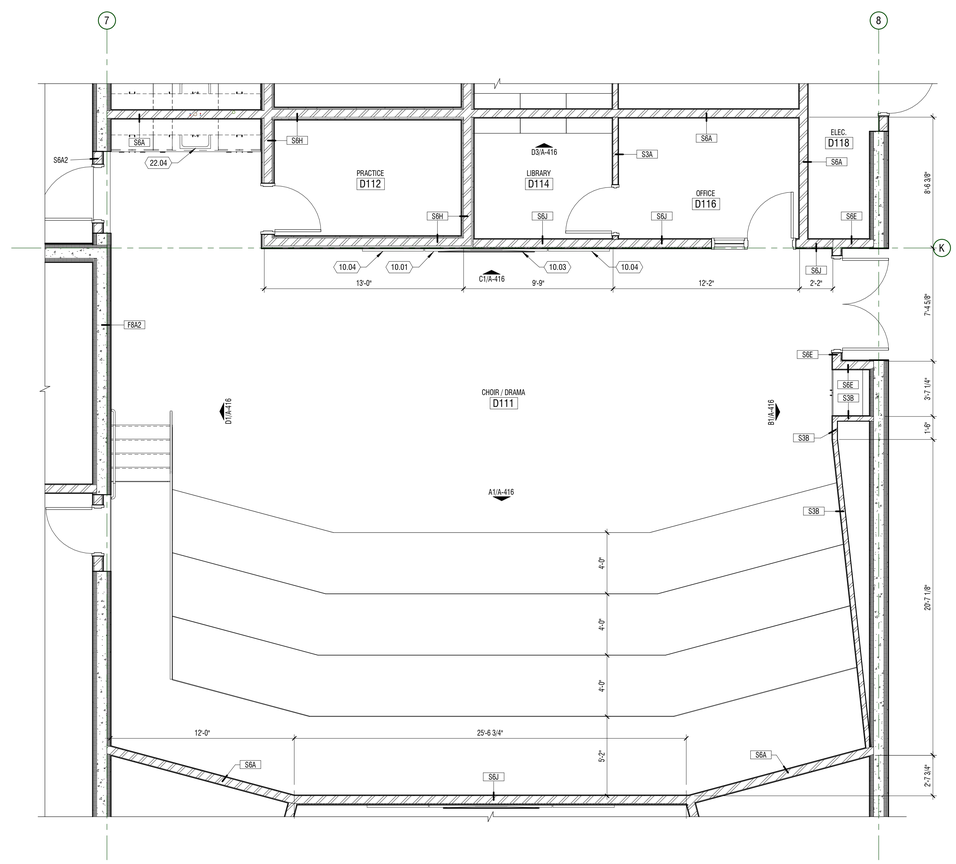
D111 CHOIR / DRAMA



D3 INTERIOR ELEVATION

1/4" = 1'-0"

LIBRARY D114



A3 ENLARGED PLAN

1/4" = 1'-0"

D111 CHOIR / DRAMA

ACCESSORIES

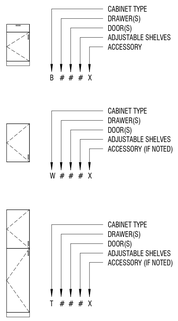
- (A) TOILET TISSUE DISPENSER
  OWNER FURNISHED, CONTRACTOR INSTALLED
- (B) GRAB BAR
  LENGTH INDICATED ON PLAN
- (C) PAPER TOWEL DISPENSER
  OWNER FURNISHED, CONTRACTOR INSTALLED
- (D) MIRROR
  SIZE INDICATED ON PLAN
- (E) UNDER-COUNTER SOAP DISPENSER
  OWNER FURNISHED, CONTRACTOR INSTALLED
- (F) FEMININE NAPKIN VENDOR
- (G) FEMININE NAPKIN DISPOSAL
- (H) ELECTRIC HAND DRYER
- (J) DIAPER CHANGING STATION
- (K) DRAIN PIPE PROTECTION
- (L) NOT USED
- (M) NOT USED
- (N) SHOWER CURTAIN
- (P) SHOWER SEAT

KEYNOTES

(#)

MARK	DESCRIPTION
10.01	WHITEBOARD 8'-0" X 4'-0". HIDDEN TAKLESS PAPER HOLDER ON TOP AND MARKER TRAY ON BOTTOM.
10.03	6'-0" x 4'-0" ACOUSTIC FELT TACK BOARD (FRAMELESS)
10.04	GOGGLE CLEANING CABINET
10.30	4'-0" x 4'-0" ACOUSTIC FELT TACK BOARD (FRAMELESS)
11.02	WALL MOUNTED DIGITAL DISPLAY - SEE DETAIL E1/A-591 FOR MOUNTING
22.04	SINK
27.01	SPEAKER
27.02	SPEAKER TALKBACK

CASEWORK KEY



NOTES:

CABINET TYPE
- B BASE CABINET
- M MOVEABLE CART
- T TALL CABINET
- W WALL CABINET

DRAWER
- # DENOTES NUMBER OF TOTAL DRAWERS

DOOR
- # DENOTES NUMBER OF TOTAL DOORS

ADJUSTABLE SHELVES
- # DENOTES NUMBER OF TOTAL SHELVES

ACCESSORY
- - DENOTES NO ACCESSORY
- D VERTICAL DIVIDER
- F FILE DRAWER(S)
- L LOCKS AT DOOR(S) DRAWER(S)
- R HANGER ROD
- V VENTED DOOR

CASEWORK TAG

18W24D — SIZE
B111- — IDENTIFIER
A1/A-500 — DETAIL REFERENCE

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
759 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
AD3	MAY 2024	ADDENDUM 03

PROJECT #:	123006
DRAWN BY:	NIELSON
CHECKED BY:	RIGBY
ISSUED:	05.02.2024

STATE OF UTAH
STEPHEN M. WILLIAMS
5/2/2024
LICENSED ARCHITECT

ENLARGED VIEWS

A-416

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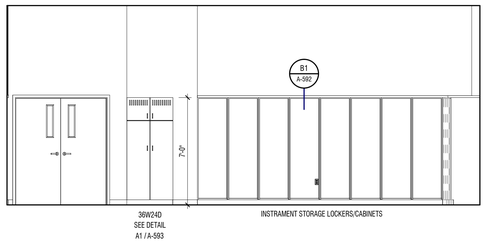
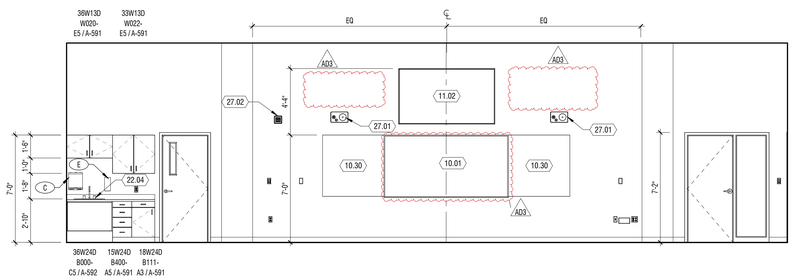


D1 INTERIOR ELEVATION

1/4" = 1'-0"

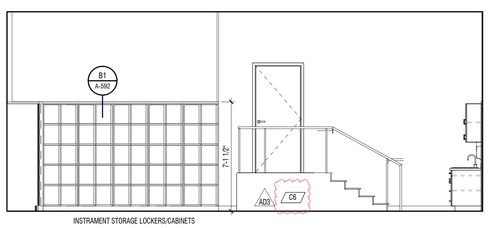
ORCHESTRA GUITAR D108



C1 INTERIOR ELEVATION

1/4" = 1'-0"

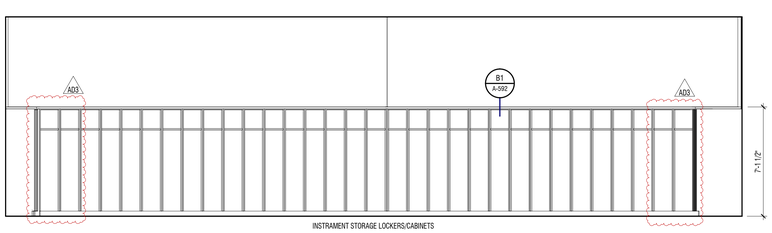
ORCHESTRA GUITAR D108



B1 INTERIOR ELEVATION

1/4" = 1'-0"

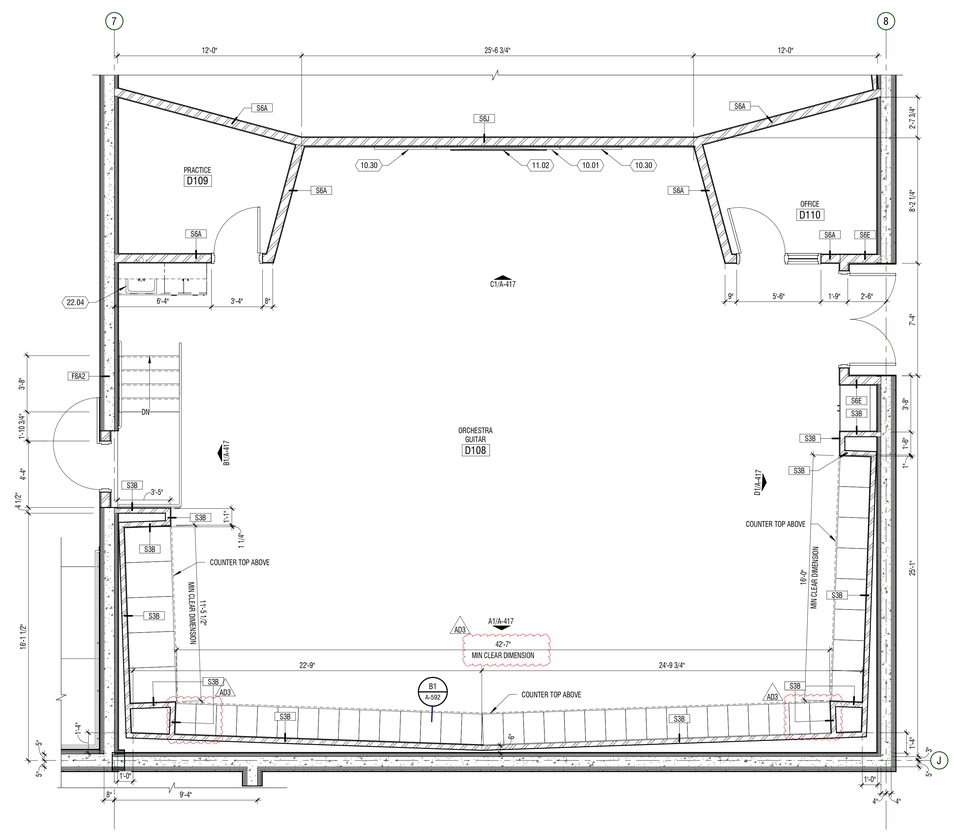
ORCHESTRA GUITAR D108



A1 INTERIOR ELEVATION

1/4" = 1'-0"

ORCHESTRA GUITAR D108



A4 ENLARGED PLAN

1/4" = 1'-0"

ORCHESTRA GUITAR D108

ACCESSORIES

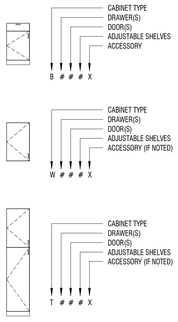
- (A) TOILET TISSUE DISPENSER
  OWNER FURNISHED, CONTRACTOR INSTALLED
- (B) GRAB BAR
  LENGTH INDICATED ON PLAN
- (C) PAPER TOWEL DISPENSER
  OWNER FURNISHED, CONTRACTOR INSTALLED
- (D) MIRROR
  SIZE INDICATED ON PLAN
- (E) UNDER-COUNTER SOAP DISPENSER
  OWNER FURNISHED, CONTRACTOR INSTALLED
- (F) FEMININE NAPKIN VENDOR
- (G) FEMININE NAPKIN DISPOSAL
- (H) ELECTRIC HAND DRYER
- (J) DIAPER CHANGING STATION
- (K) DRAIN PIPE PROTECTION
- (L) NOT USED
- (M) NOT USED
- (N) SHOWER CURTAIN
- (P) SHOWER SEAT

KEYNOTES

(#)

MARK	DESCRIPTION
10.01	WHITEBOARD 8'-0" X 4'-0". HIDDEN TAKLESS PAPER HOLDER ON TOP AND MARKER TRAY ON BOTTOM.
10.30	4'-0" x 4'-0" ACOUSTIC FELT TACK BOARD (FRAMELESS)
11.02	WALL MOUNTED DIGITAL DISPLAY - SEE DETAIL E1/A-591 FOR MOUNTING
22.04	SINK
27.01	SPEAKER
27.02	SPEAKER TALKBACK

CASEWORK KEY



NOTES:

CABINET TYPE
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- T TALL CABINET
- W WALL CABINET

DRAWER
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DOOR
- # DENOTES NUMBER OF TOTAL DOORS

ADJUSTABLE SHELVES
- # DENOTES NUMBER OF TOTAL SHELVES

ACCESSORY
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- D VERTICAL DIVIDER
- F FILE DRAWER(S)
- L LOCKS AT DOOR(S)/DRAWER(S)
- R HANGER ROD
- V VENTED DOOR

CASEWORK TAG

18W24D — SIZE
B111- — IDENTIFIER
A1/A-500 — DETAIL REFERENCE

design west | architects
255 SOUTH 300 WEST
759 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: NIELSON
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN W. WILLIAMS
5/2/2024
LICENSED ARCHITECT

CONSTRUCTION DOCUMENTS

ENLARGED VIEWS

A-417

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ACCESSORIES

- (A) TOILET TISSUE DISPENSER
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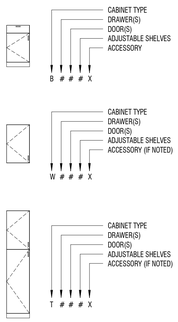
  LENGTH INDICATED ON PLAN
- (C) PAPER TOWEL DISPENSER
  OWNER FURNISHED, CONTRACTOR INSTALLED
- (D) MIRROR
  SIZE INDICATED ON PLAN
- (E) UNDER-COUNTER SOAP DISPENSER
  OWNER FURNISHED, CONTRACTOR INSTALLED
- (F) FEMININE NAPKIN VENDOR
- (G) FEMININE NAPKIN DISPOSAL
- (H) ELECTRIC HAND DRYER
- (J) DIAPER CHANGING STATION
- (K) DRAIN PIPE PROTECTION
- (L) NOT USED
- (M) NOT USED
- (N) SHOWER CURTAIN
- (P) SHOWER SEAT

KEYNOTES

(#)

MARK	DESCRIPTION
10.23	5 TIER WALL LOCKER - SEE DETAIL A-534/C5
10.24	5 TIER BACK TO BACK LOCKER - SEE DETAIL A-534/B6
10.25	2 TIER WALL LOCKER - SEE DETAIL A-534/C5
22.09	FLOOR DRAIN - SLOPE FLOOR TO DRAIN
22.12	SHOWER HEAD

CASEWORK KEY



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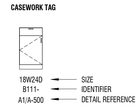
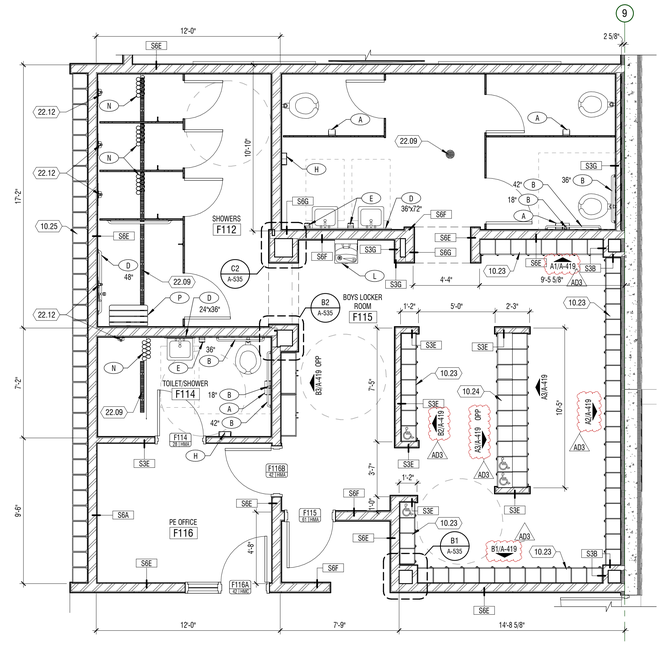
- F FILE DRAWER(S)
- L LOCKS AT DOOR(S)/DRAWER(S)
- R HANGER ROD
- V VENTED DOOR

CASEWORK TAG

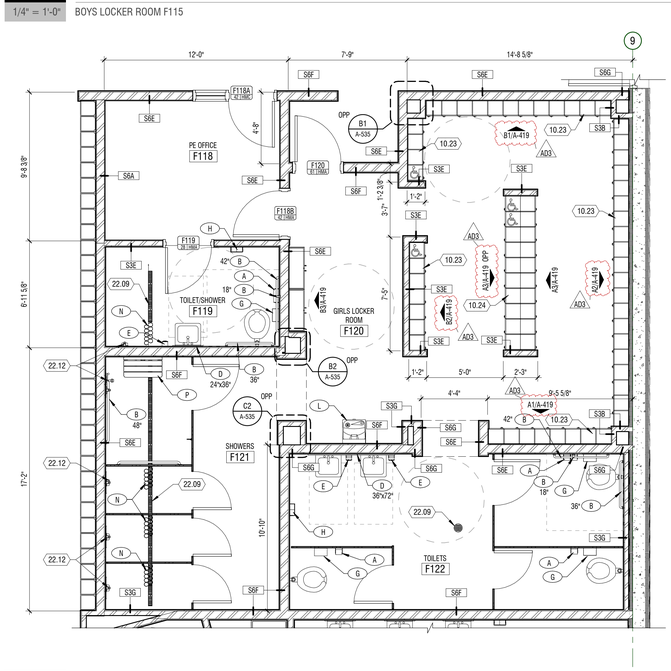




C4 ENLARGED PLAN

1/4" = 1'-0"

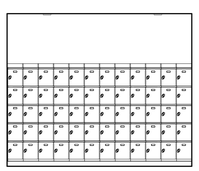
BOYS LOCKER ROOM F115



A4 ENLARGED PLAN

1/4" = 1'-0"

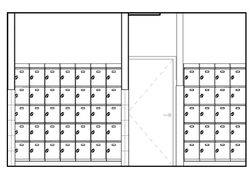
IE - GIRLS LOCKER ROOM F120



B1 INTERIOR ELEVATION

1/4" = 1'-0"

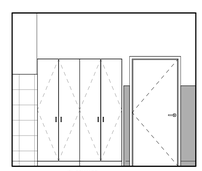
GIRLS LOCKER ROOM F120/BOYS LOCKER ROOM F115



B2 INTERIOR ELEVATION

1/4" = 1'-0"

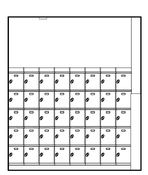
GIRLS LOCKER ROOM F120/BOYS LOCKER ROOM F115



B3 INTERIOR ELEVATION

1/4" = 1'-0"

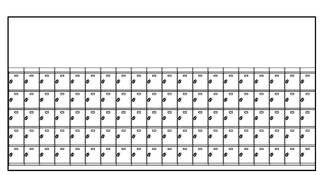
GIRLS LOCKER ROOM F120/BOYS LOCKER ROOM F115



A1 INTERIOR ELEVATION

1/4" = 1'-0"

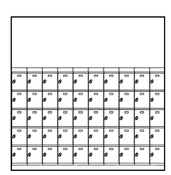
GIRLS LOCKER ROOM F120/BOYS LOCKER ROOM F115



A2 INTERIOR ELEVATION

1/4" = 1'-0"

GIRLS LOCKER ROOM F120/BOYS LOCKER ROOM F115



A3 INTERIOR ELEVATION

1/4" = 1'-0"

GIRLS LOCKER ROOM F120/BOYS LOCKER ROOM F115

design west | architects
255 SOUTH 300 WEST LOGAN, UT 84321
759 NORTH 400 WEST SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH

CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: NIELSON
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN M WILLIAMS
5/2/2024
LICENSED ARCHITECT

ENLARGED VIEWS

A-419

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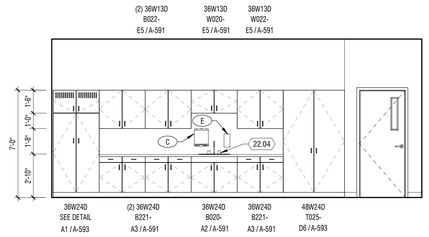
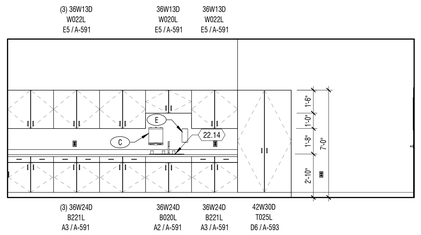


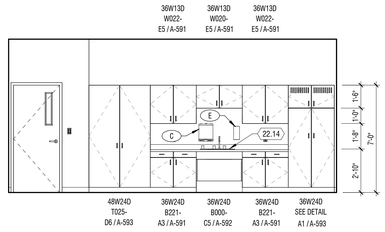
E1 INTERIOR ELEVATION

1/4" = 1'-0" CLASSROOM C218



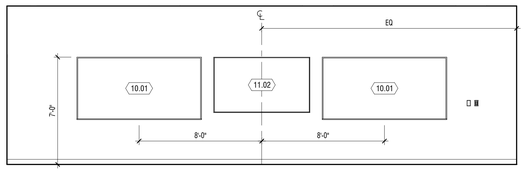
E3 INTERIOR ELEVATION

1/4" = 1'-0" ESSENTIAL ELEMENTS B101



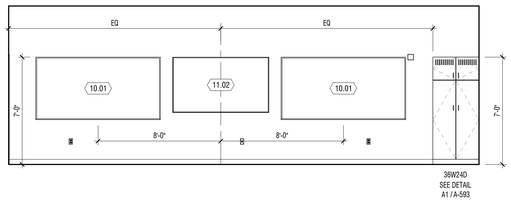
E5 INTERIOR ELEVATION

1/4" = 1'-0" SPECIAL EDUCATION C216



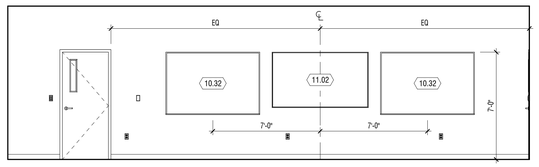
D1 INTERIOR ELEVATION

1/4" = 1'-0" CLASSROOM C218



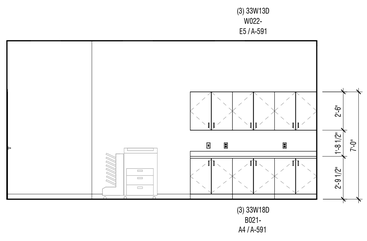
D3 INTERIOR ELEVATION

1/4" = 1'-0" ESSENTIAL ELEMENTS B101



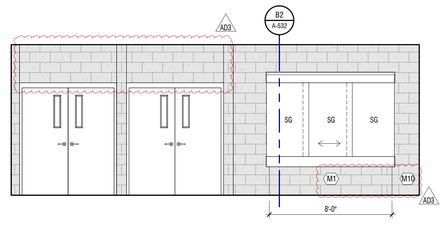
D5 INTERIOR ELEVATION

1/4" = 1'-0" SPECIAL EDUCATION C216



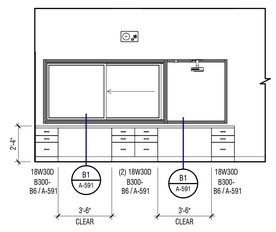
C1 INTERIOR ELEVATION

1/4" = 1'-0" RECEPTION E107



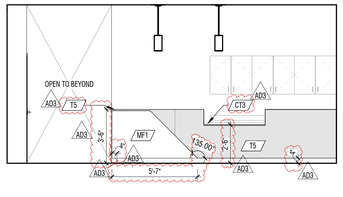
C3 INTERIOR ELEVATION

1/4" = 1'-0" CORRIDOR F102



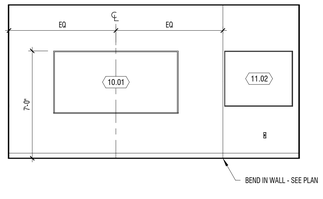
C5 INTERIOR ELEVATION

1/4" = 1'-0" A/V BOOTH C209



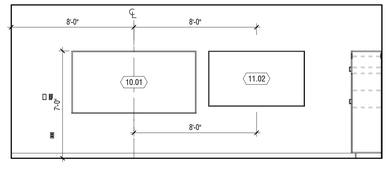
B1 INTERIOR ELEVATION

1/4" = 1'-0" RECEPTION E107 DESK



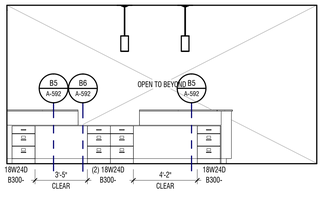
B3 INTERIOR ELEVATION

1/4" = 1'-0" CONFERENCE E112



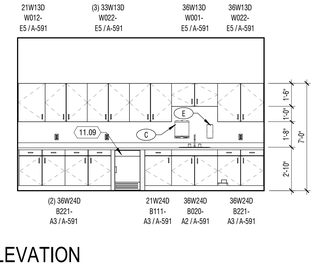
B5 INTERIOR ELEVATION

1/4" = 1'-0" ESL C210/C211



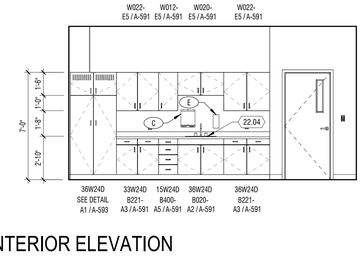
A1 INTERIOR ELEVATION

1/4" = 1'-0" RECPTION E107 DESK



A3 INTERIOR ELEVATION

1/4" = 1'-0" CONFERENCE E112



A5 INTERIOR ELEVATION

1/4" = 1'-0" ESL C210/C211

ACCESSORIES

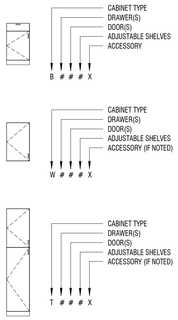
- (A) TOILET TISSUE DISPENSER OWNER FURNISHED, CONTRACTOR INSTALLED
- (B) GRAB BAR LENGTH INDICATED ON PLAN
- (C) PAPER TOWEL DISPENSER OWNER FURNISHED, CONTRACTOR INSTALLED
- (D) MIRROR SIZE INDICATED ON PLAN
- (E) UNDER-COUNTER SOAP DISPENSER OWNER FURNISHED, CONTRACTOR INSTALLED
- (F) FEMININE NAPKIN VENDOR
- (G) FEMININE NAPKIN DISPOSAL
- (H) ELECTRIC HAND DRYER
- (J) DIAPER CHANGING STATION
- (K) DRAIN PIPE PROTECTION
- (L) NOT USED
- (M) NOT USED
- (N) SHOWER CURTAIN
- (P) SHOWER SEAT

KEYNOTES

(#)

MARK	DESCRIPTION
10.01	WHITEBOARD 8'-0" X 4'-0". HIDDEN TAKLESS PAPER HOLDER ON TOP AND MARKER TRAY ON BOTTOM
10.32	WHITEBOARD 6'-0" X 4'-0". HIDDEN TAKLESS PAPER HOLDER ON TOP AND MARKER TRAY ON BOTTOM
11.02	WALL MOUNTED DIGITAL DISPLAY - SEE DETAIL E1/A-591 FOR MOUNTING
11.09	DISHWASHER - OWNER PROVIDED, CONTRACTOR INSTALLED
22.04	SINK
22.14	SINK W/BUBBLER

CASEWORK KEY



NOTES:

CABINET TYPE
- B BASE CABINET
- M MOVEABLE CART
- T TALL CABINET
- W WALL CABINET

DRAWER
- # DENOTES NUMBER OF TOTAL DRAWERS

DOOR
- # DENOTES NUMBER OF TOTAL DOORS

ADJUSTABLE SHELVES
- # DENOTES NUMBER OF TOTAL SHELVES

ACCESSORY
- - DENOTES NO ACCESSORY
- D VERTICAL DIVIDER
- F FILE DRAWER(S)
- L LOCKS AT DOOR(S)/DRAWER(S)
- R HANGER ROD
- V VENTED DOOR

CASEWORK TAG

18W24D — SIZE
B111- — IDENTIFIER
A1/A-500 — DETAIL REFERENCE

design west | architects
255 SOUTH 300 WEST
759 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
AD3	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: NIELSON
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN M WILLIAMS
5/8/2024
LICENSED ARCHITECT

INTERIOR ELEVATIONS

A-425

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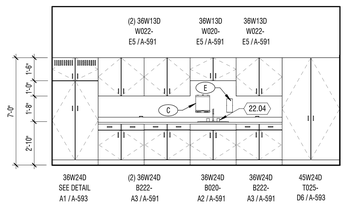
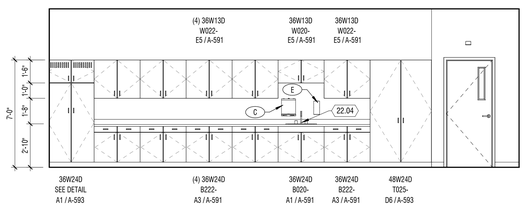
5/10/2024 1:05:00 PM



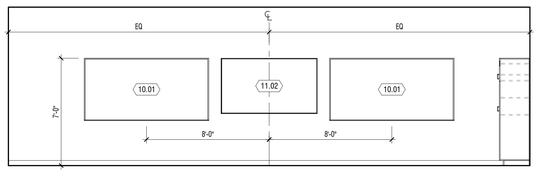
D2 INTERIOR ELEVATION

1/4" = 1'-0" A106 & A206 - MIRROR IN A107 & A207



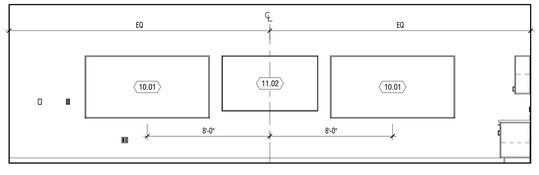
C2 INTERIOR ELEVATION

1/4" = 1'-0" B201



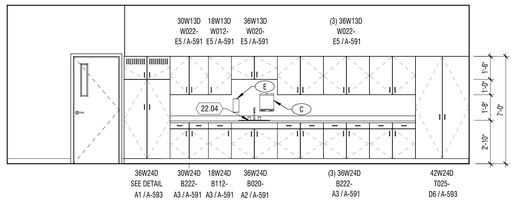
B2 INTERIOR ELEVATION

1/4" = 1'-0" TYPICAL CLASSROOM



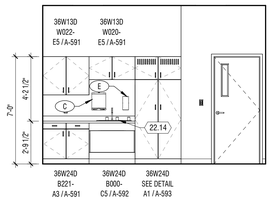
A2 INTERIOR ELEVATION

1/4" = 1'-0" SPECIAL EDUCATION A113, MIRROR FOR A112



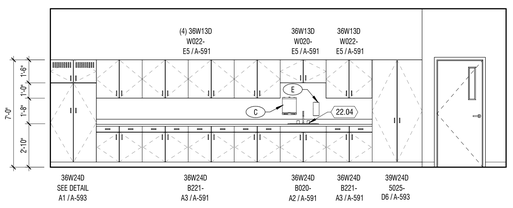
E4 INTERIOR ELEVATION

1/4" = 1'-0" A105 & A205 - MIRROR IN A108 & A208



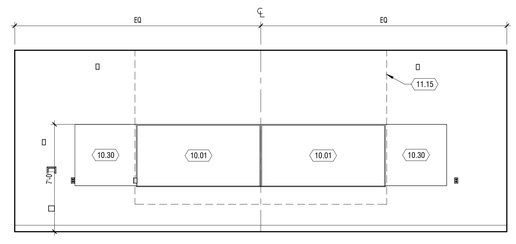
D4 INTERIOR ELEVATION

1/4" = 1'-0" SPECIAL EDUCATION A113, MIRROR FOR A112



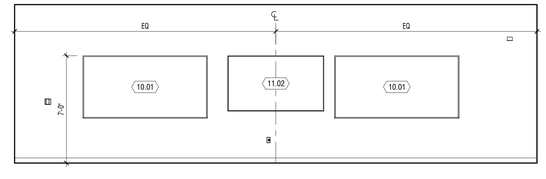
C4 INTERIOR ELEVATION

1/4" = 1'-0" TYPICAL CLASSROOM CASEWORK



B4 INTERIOR ELEVATION

1/4" = 1'-0" C116 FORUM



A4 INTERIOR ELEVATION

1/4" = 1'-0" CLASSROOM A105 & A205, MIRROR A108 & A208

ACCESSORIES

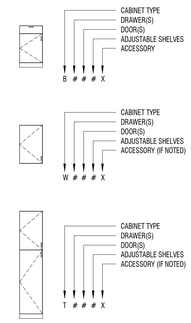
- (A) TOILET TISSUE DISPENSER — OWNER FURNISHED, CONTRACTOR INSTALLED
- (B) GRAB BAR — LENGTH INDICATED ON PLAN
- (C) PAPER TOWEL DISPENSER — OWNER FURNISHED, CONTRACTOR INSTALLED
- (D) MIRROR — SIZE INDICATED ON PLAN
- (E) UNDER-COUNTER SOAP DISPENSER — OWNER FURNISHED, CONTRACTOR INSTALLED
- (F) FEMININE NAPKIN VENDOR
- (G) FEMININE NAPKIN DISPOSAL
- (H) ELECTRIC HAND DRYER
- (J) DIAPER CHANGING STATION
- (K) DRAIN PIPE PROTECTION
- (L) NOT USED
- (M) NOT USED
- (N) SHOWER CURTAIN
- (P) SHOWER SEAT

KEYNOTES

◇ #

MARK	DESCRIPTION
10.01	WHITEBOARD 8'-0" X 4'-0". HIDDEN TAKLESS PAPER HOLDER ON TOP AND MARKER TRAY ON BOTTOM
10.30	4'-0" x 4'-0" ACOUSTIC FELT TACK BOARD (FRAMELESS)
11.02	WALL MOUNTED DIGITAL DISPLAY - SEE DETAIL E1/A-591 FOR MOUNTING
11.15	CEILING MOUNTED MOTERIZED PROJECTOR SCREEN
22.04	SINK
22.14	SINK W/BUBBLER

CASEWORK KEY



NOTES:

CABINET TYPE
- B BASE CABINET
- M MOVEABLE CART
- T TALL CABINET
- W WALL CABINET

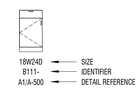
DRAWER
- # DENOTES NUMBER OF TOTAL DRAWERS

DOOR
- # DENOTES NUMBER OF TOTAL DOORS

ADJUSTABLE SHELVES
- # DENOTES NUMBER OF TOTAL SHELVES

ACCESSORY
- - DENOTES NO ACCESSORY
- D VERTICAL DIVIDER
- F FILE DRAWER(S)
- L LOCKS AT DOOR(S)/DRAWER(S)
- R HANGER ROD
- V VENTED DOOR

CASEWORK TAG



CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
79S NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:

PROJECT #:	123006
DRAWN BY:	HARRIS
CHECKED BY:	RIGBY
ISSUED:	05.02.2024

STATE OF UTAH — STEPHEN M WILLIAMS — 5/8/2024 — LICENSED ARCHITECT

INTERIOR ELEVATIONS

A-427

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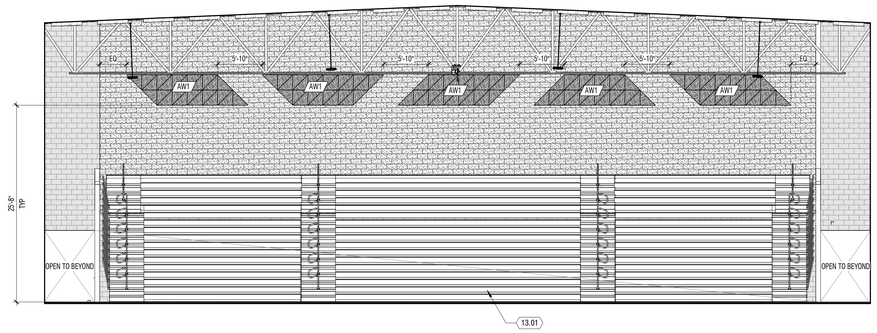
5/10/2024 1:05:12 PM

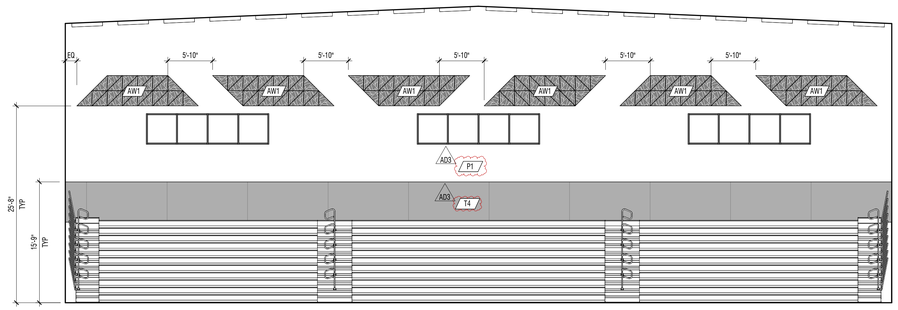
KEYNOTES

# MARK	DESCRIPTION
10.22	SAFETY PADS, MOUNTED TO GYPSUM BOARD. NO ULTRA-COMPACT SURFACE IN THIS AREA.
11.12	WALL MOUNTED MOTERIZED PROJECTION SCREEN
11.18	DIGITAL SCOREBOARD 6'X4', COLOR TO MATCH SCHOOL COLORS (TBD)
13.01	RETRACTABLE/FIXED BLEACHERS



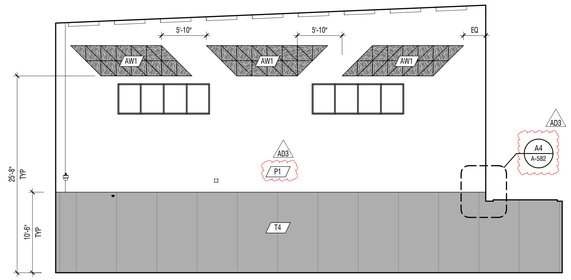
D4 INTERIOR ELEVATION

1/8" = 1'-0" GYMNASIUM F104



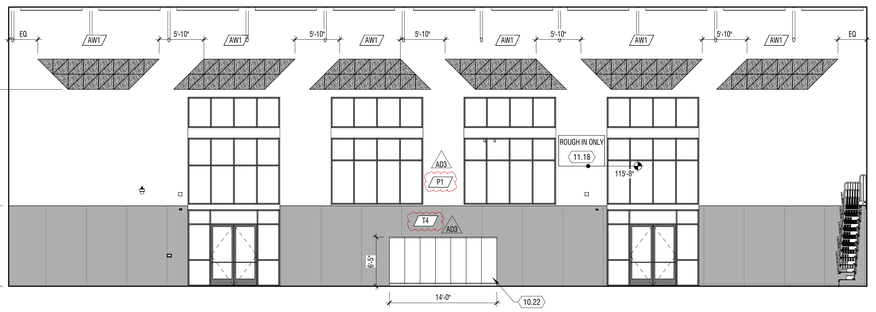
C4 INTERIOR ELEVATION

1/8" = 1'-0" GYMNASIUM F104



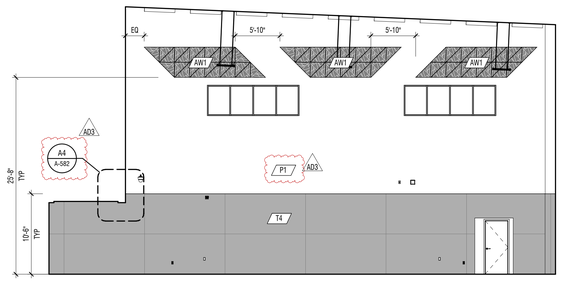
C1 INTERIOR ELEVATION

1/8" = 1'-0" AUXILIARY GYMNASIUM F110



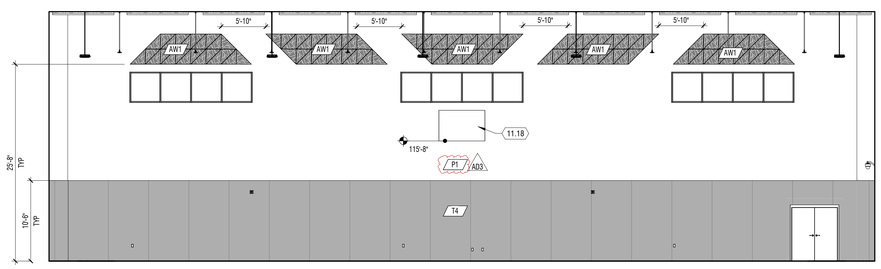
B4 INTERIOR ELEVATION

1/8" = 1'-0" GYMNASIUM F104



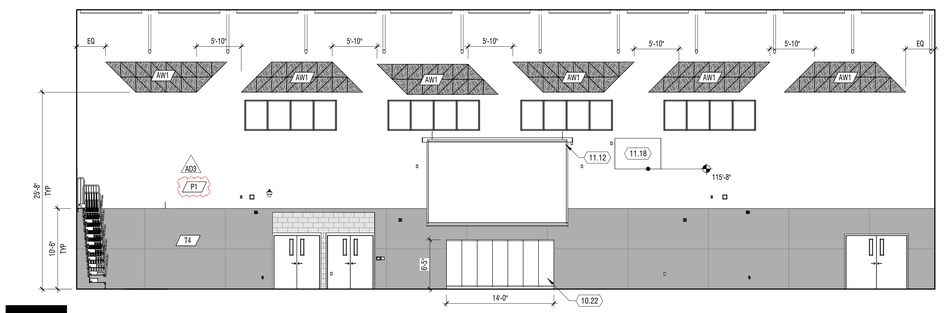
B1 INTERIOR ELEVATION

1/8" = 1'-0" AUXILIARY GYMNASIUM F110



A1 INTERIOR ELEVATION

1/8" = 1'-0" AUXILIARY GYMNASIUM F110



A4 INTERIOR ELEVATION

1/8" = 1'-0" GYMNASIUM F104

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST LOGAN, UT 84321
799 NORTH 400 WEST SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL
3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: NIELSON
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH STEPHEN M. WILLIAMS 5/2/2024 LICENSED ARCHITECT

INTERIOR ELEVATIONS

A-428

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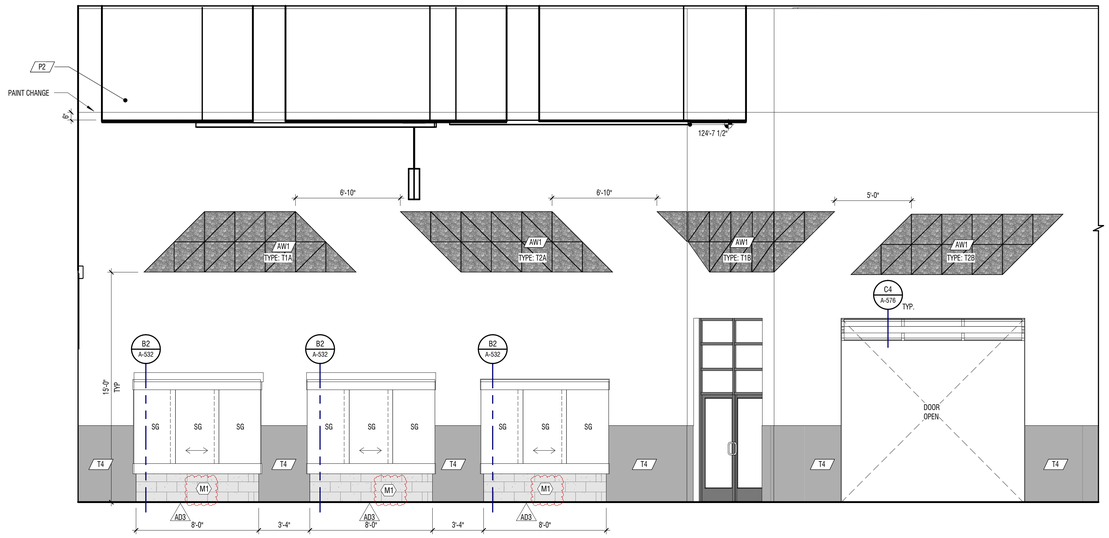
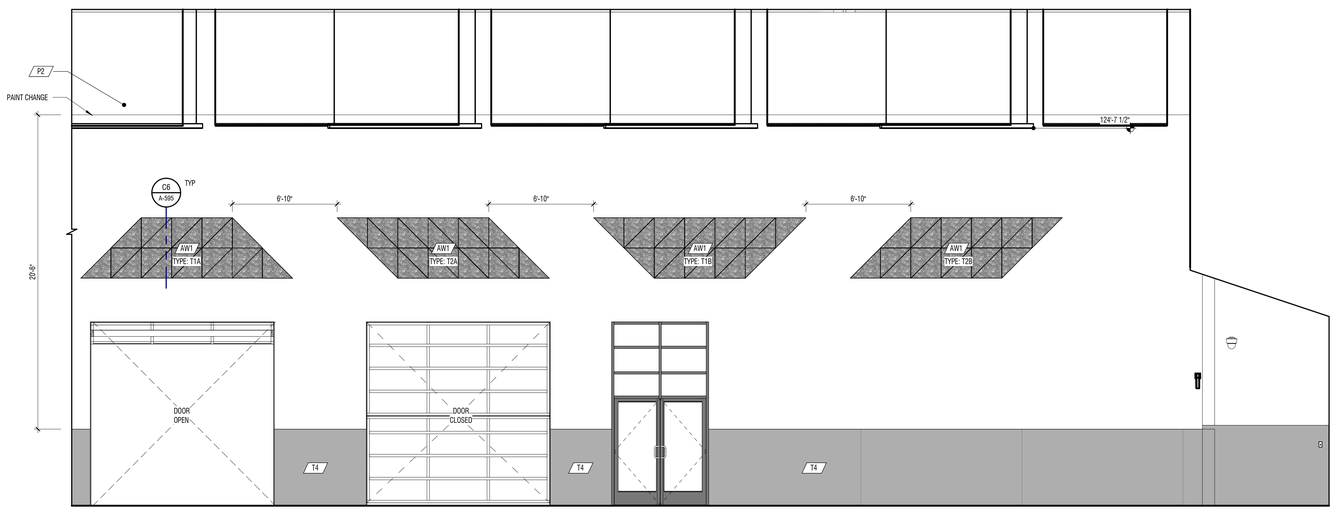
KEYNOTES

MARK	DESCRIPTION
#	



C2 INTERIOR ELEVATION

1/4" = 1'-0" CORRIDOR D106



A2 INTERIOR ELEVATION

1/4" = 1'-0" CORRIDOR D106

design west | architects
255 SOUTH 300 WEST
759 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #:	123006
DRAWN BY:	NAVA
CHECKED BY:	RIGBY
ISSUED:	05.02.2024

STATE OF UTAH
STEPHEN W. WILLIAMS
5/2/2024
ARCHITECT
LICENSED ARCHITECT

CONSTRUCTION DOCUMENTS

INTERIOR ELEVATIONS

A-431

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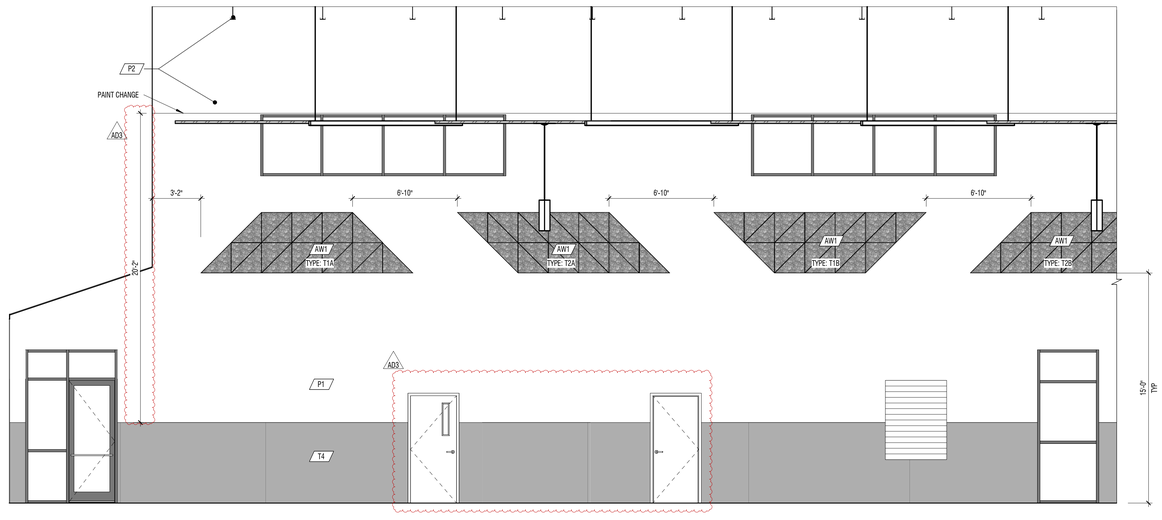
5/1/2024 1:05:32 PM

GENERAL NOTES

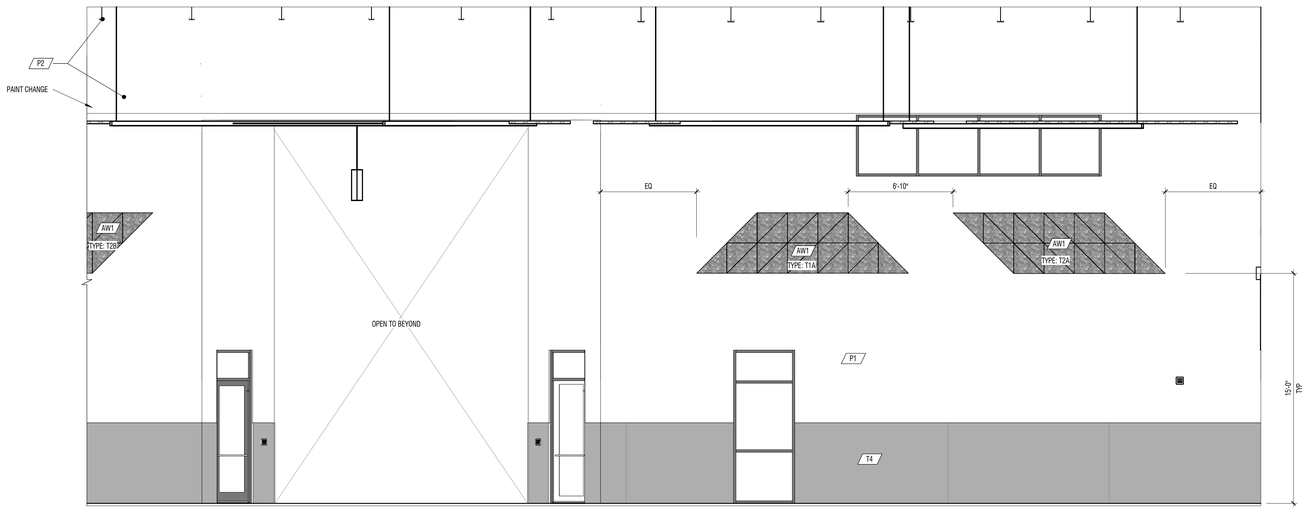
1. ACOUSTIC WALL PANEL DESIGN AND LAYOUT DETAILED ON A-595 BY TYPE. IE: TYPE T1B

AD3



C2 INTERIOR ELEVATION

1/4" = 1'-0" CORRIDOR D106



A2 INTERIOR ELEVATION

1/4" = 1'-0" CORRIDOR D106

design west | architects
255 SOUTH 300 WEST LOGAN, UT 84321
799 NORTH 400 WEST SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
AD3	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: NAVA
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN M. WILLIAMS
5/9/2024
LICENSED ARCHITECT

INTERIOR ELEVATIONS

A-432

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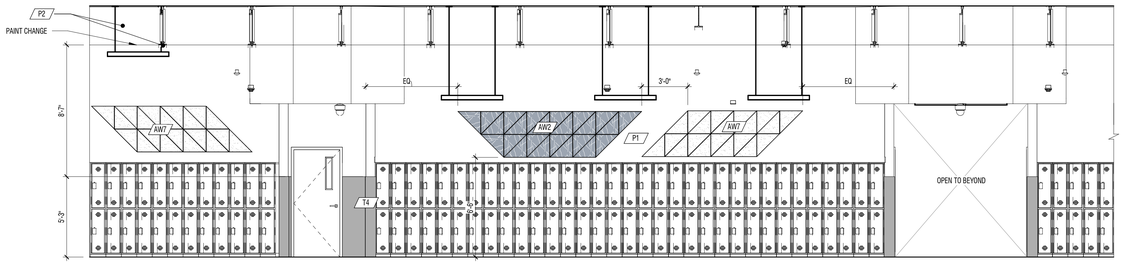

D1 INTERIOR ELEVATION

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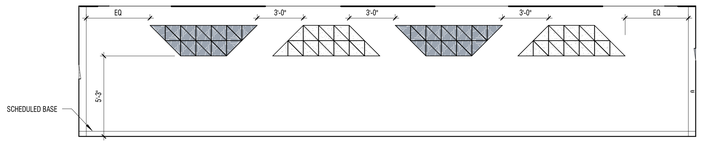
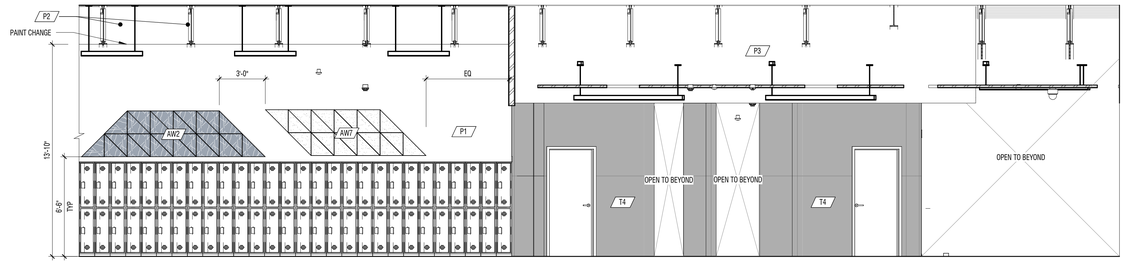


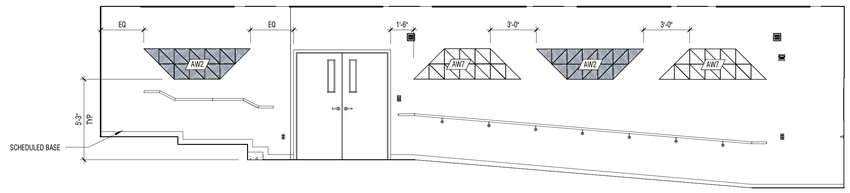
C1 INTERIOR ELEVATION

1/4" = 1'-0" FORUM C116



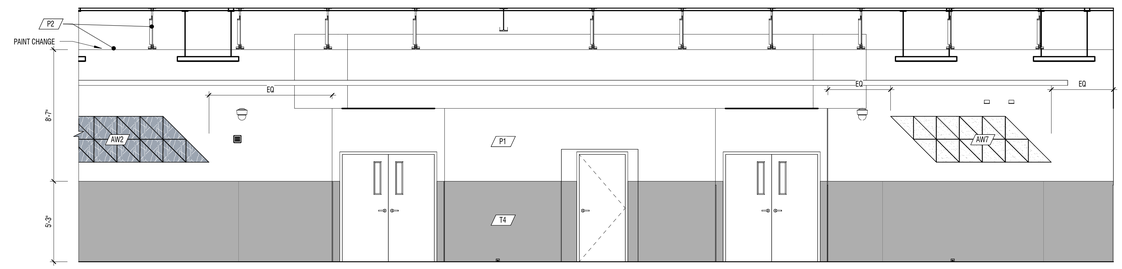
C3 INTERIOR ELEVATION

1/4" = 1'-0" CORRIDOR F102



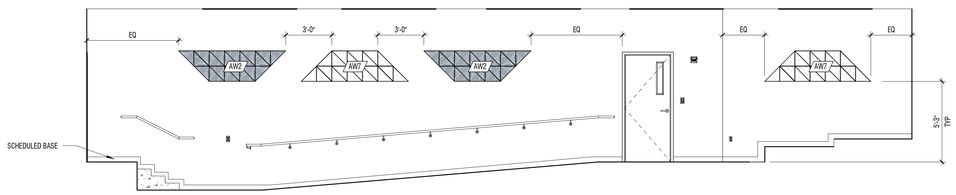
B1 INTERIOR ELEVATION

1/4" = 1'-0" FORUM C116



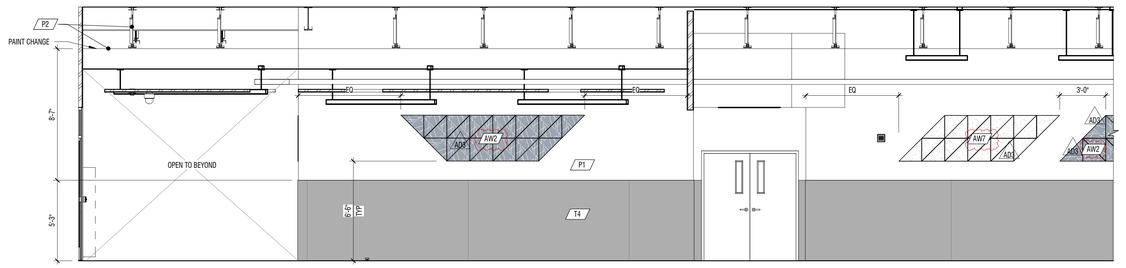
B3 INTERIOR ELEVATION

1/4" = 1'-0" CORRIDOR F102



A1 INTERIOR ELEVATION

1/4" = 1'-0" FORUM C116



A3 INTERIOR ELEVATION

1/4" = 1'-0" CORRIDOR F102

design west | architects
255 SOUTH 300 WEST
LOGAN, UT 84321
739 NORTH 400 WEST
SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: NAVA
CHECKED BY: RBA RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN M. WILLIAMS
5/8/2024
LICENSED ARCHITECT

INTERIOR ELEVATIONS

A-433

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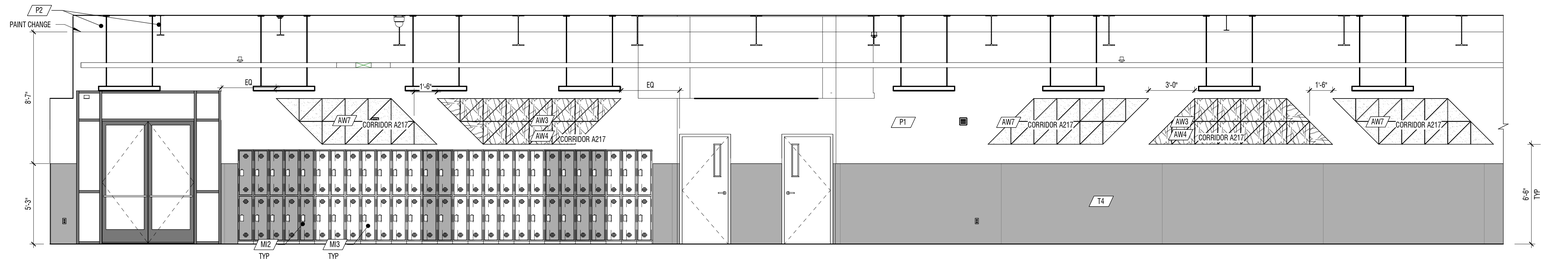
5/10/2024 1:03:48 PM

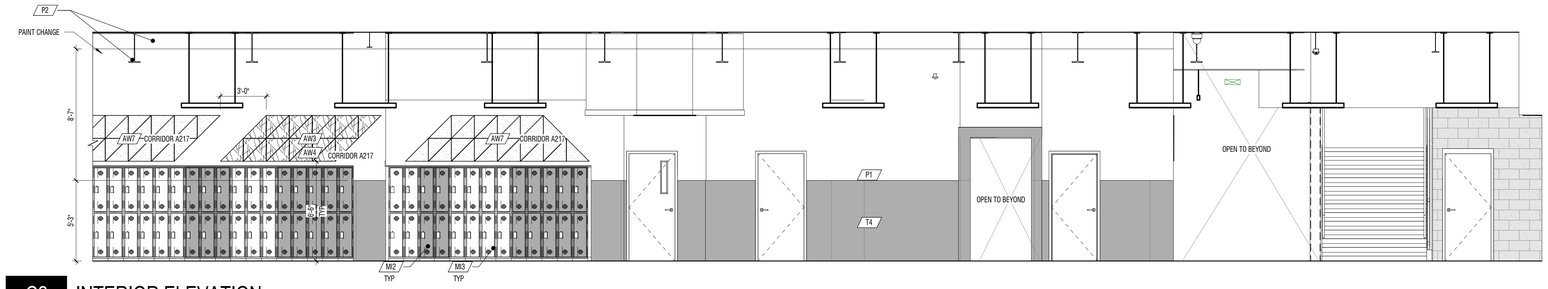
KEYNOTES

MARK	DESCRIPTION
11.02	WALL MOUNTED DIGITAL DISPLAY - SEE DETAIL E1/A-591 FOR MOUNTING



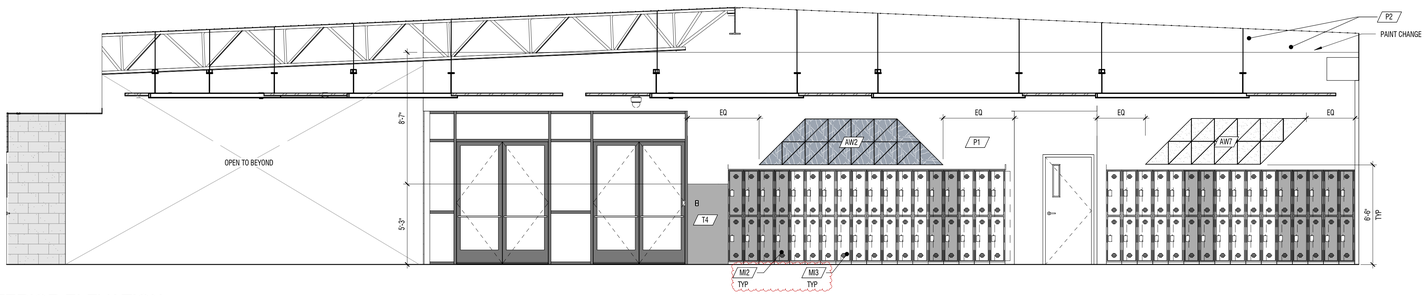
D2 INTERIOR ELEVATION

1/4" = 1'-0" CORRIDOR A117 AND A217



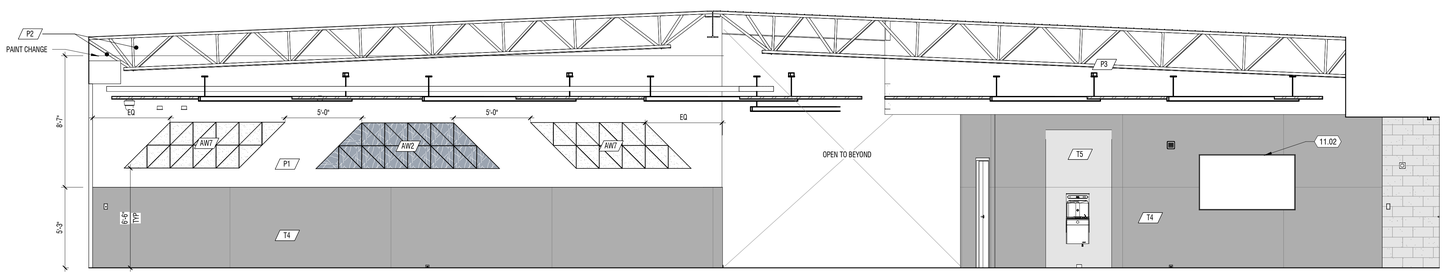
C2 INTERIOR ELEVATION

1/4" = 1'-0" CORRIDOR A117 AND A217



B2 INTERIOR ELEVATION

1/4" = 1'-0" CORRIDOR D107



A2 INTERIOR ELEVATION

1/4" = 1'-0" CORRIDOR D107

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
799 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #:	123006
DRAWN BY:	NAVA
CHECKED BY:	RIGBY
ISSUED:	05.02.2024

STATE OF UTAH
STEPHEN M. WILLIAMS
5/2/2024
6-382018-0301
LICENSED ARCHITECT

INTERIOR ELEVATIONS

A-434

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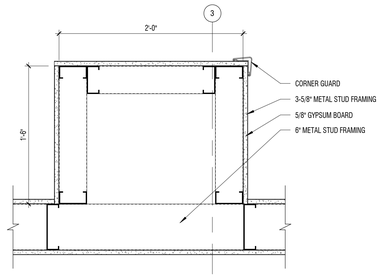
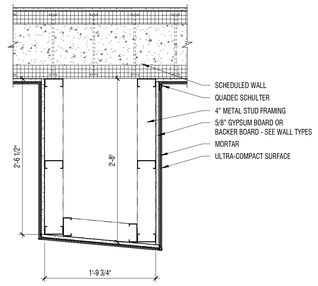
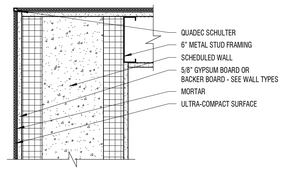
5/10/2024 1:05:08 PM



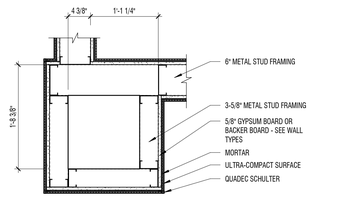
D1 BUILDING DETAIL
1 1/2" = 1'-0"



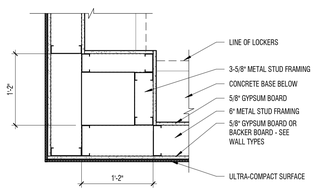
D2 BUILDING DETAIL
1" = 1'-0"



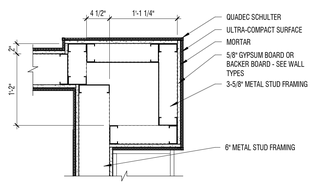
C1 BUILDING DETAIL
1 1/2" = 1'-0"



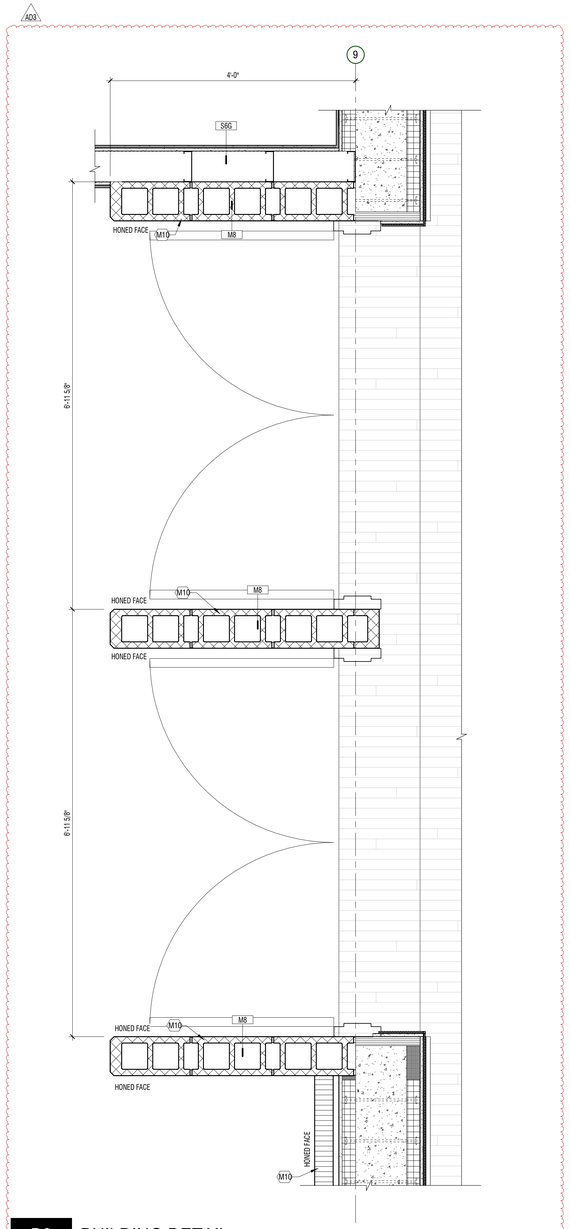
C2 BUILDING DETAIL
1" = 1'-0"
AREA F - LEVEL 1



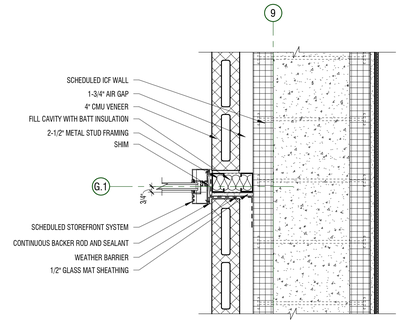
B1 BUILDING DETAIL
1" = 1'-0"
AREA F - LEVEL 1



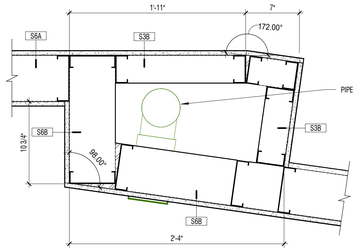
B2 BUILDING DETAIL
1" = 1'-0"
AREA F - LEVEL 1



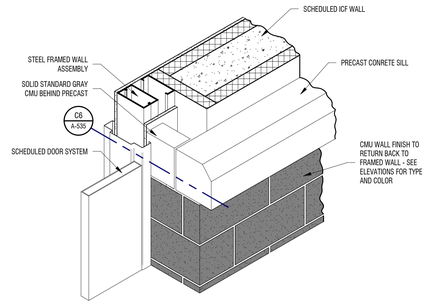
B3 BUILDING DETAIL
1" = 1'-0"
AREA F - LEVEL 01



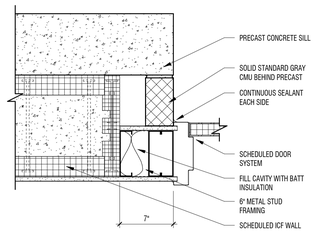
D4 BUILDING DETAIL
1 1/2" = 1'-0"
AREA F - LEVEL 01



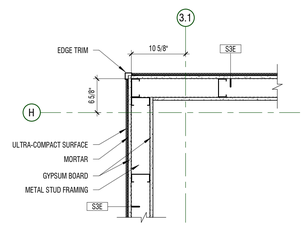
D6 BUILDING DETAIL
1 1/2" = 1'-0"



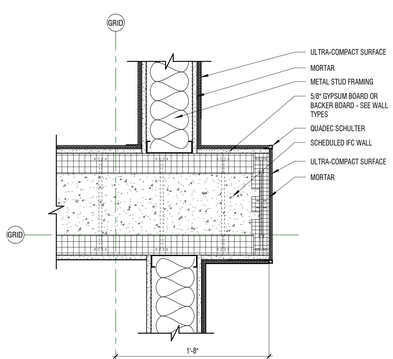
C4 CMU BEHIND PRECAST
NTS



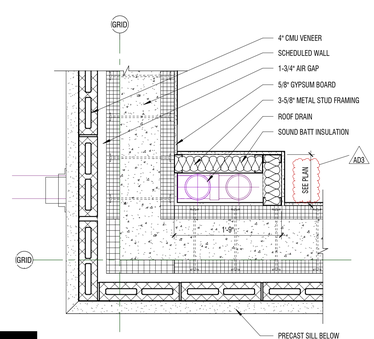
C6 CMU BEHIND PRECAST
1 1/2" = 1'-0"



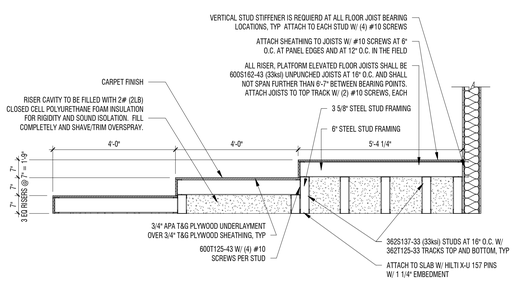
B6 BUILDING DETAIL
1" = 1'-0"
PLAN



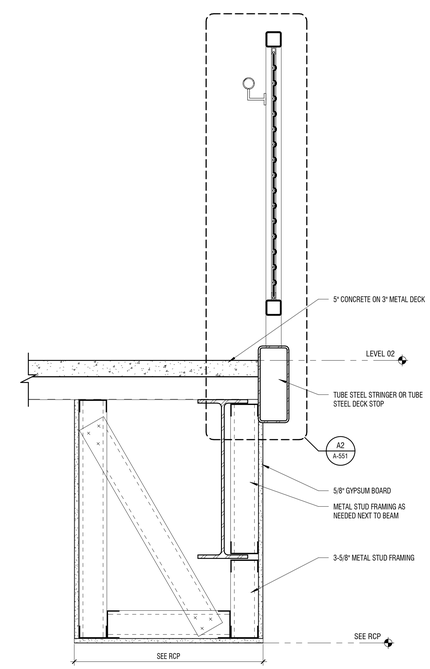
A1 BUILDING DETAIL
1 1/2" = 1'-0"



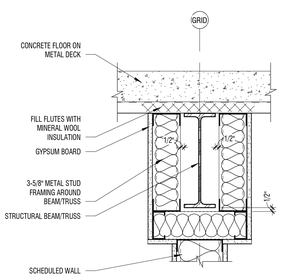
A2 BUILDING DETAIL
1" = 1'-0"



A3 CHOIR PLATFORM DETAIL
1/2" = 1'-0"



A4 BUILDING DETAIL
1 1/2" = 1'-0"



A6 DETAIL SECTION
1 1/2" = 1'-0"
TYPICAL SOUND ISOLATION AROUND BEAM

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST LOGAN, UT 84321
795 NORTH 400 WEST SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL
3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
AD3	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: NIELSON
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN R. WILLIAMS
5/1/2024
LICENSED ARCHITECT

DETAILS - BUILDING
A-535

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DOOR SCHEDULE

MARK	LEAF SIZING (1)			DOOR TYPE (2)	CONSTRUCTION (3)	FINISH (4)	GLAZING (5)	RATING (6)	FRAME TYPE (7)	DETAILS (8)			HARDWARE (9)	NOTES (10)
	W	H	D							HEAD	JAMB	SILL		
A101	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A102	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A103	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A104A	6'-0"	8'-0"	1 3/4"	AL02	AL		SGI(F)	-	C	PER-MANUFACTURE	PER-MANUFACTURE	A6/A-576	A01	
A104B	6'-0"	8'-0"	1 3/4"	AL02	AL		SG	-	D	PER-MANUFACTURE	PER-MANUFACTURE	-	A16	
A105	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A106	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A107	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A108	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A109A	6'-0"	8'-0"	1 3/4"	AL02	AL		SGI	-	C	PER-MANUFACTURE	PER-MANUFACTURE	A6/A-576	A01	
A109B	6'-0"	8'-0"	1 3/4"	AL02	AL		SG	-	D	PER-MANUFACTURE	PER-MANUFACTURE	-	A16	
A111	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A112	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A113	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C5/A-576	B5/A-576	-	11	
A114	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A116A	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A116B	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A118	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	30	
A119	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	52	
A120	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	30	
A123	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	29	
A124	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	29	
A128	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMB	C3/A-576	B3/A-576	-	30	
A129	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMB	C3/A-576	B3/A-576	-	30	
A130	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-577	A5/A-576	35	
A131	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-577	A5/A-576	35	
A201	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A202	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A203	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A204	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	34	
A205	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A206	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A207	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A208	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A209	6'-0"	7'-0"	1 3/4"	WD02	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	39	
A211	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A213	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A214	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A216A	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A216B	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
A218	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	30	
A219	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	52	
A220	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	30	
A223	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	29	
A224	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	29	
B101	3'-6"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
B102	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	60	
B103	3'-6"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	27	
B104	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
B105	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
B106	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
B107	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	08	
B108A	3'-0"	7'-0"	1 3/4"	WD01	SC		-	90 MIN.	HMA	B3/A-577	A3/A-577	A5/A-576	08	
B108B	3'-0"	7'-0"	1 3/4"	WD01	SC		-	90 MIN.	HMA	B3/A-577	A3/A-577	A5/A-576	50	
B109	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	10	
B110	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	30	
B111	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	30	
B113	3'-6"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	36	
B114	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	26	
B115	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	26	
B117	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	29	
B118	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	29	
B120	8'-0"	9'-0"	1 3/4"	HM02	HM		-	90 MIN.	HMA	B3/A-577	C1/A-534	A5/A-576	06	A
B121A	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
B121B	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
B122	8'-0"	9'-0"	1 3/4"	HM02	HM		-	90 MIN.	HMA	B3/A-577	C1/A-534	A5/A-576	06	A
B123	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	30	
B124A	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	52B	
B124B	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	52B	
B125	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	30	
B126A	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
B126B	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
B201	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
B204	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
B205	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
B206	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
B207	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
B208	3'-0"	7'-0"	1 3/4"	HM08	SC		SG	90 MIN.	HMA	B4/A-577	A4/A-577	A5/A-576	11	
B209	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	10A	
B210	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	30	
B213	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	34	
B214	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	26	
B215	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	26	
B217	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	29	
B218	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	29	
B220	8'-0"	9'-0"	1 3/4"	HM02	HM		-	90 MIN.	HMA	C6/A-576	C1/A-534	A5/A-576	06	A
B221A	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
B221B	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
B222	8'-0"	9'-0"	1 3/4"	HM02	HM		-	90 MIN.	HMA	C6/A-576	C1/A-534	A5/A-576	06	A
B224A	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	52B	
B224B	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	52B	
B226A	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
B226B	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
C101	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
C102A	6'-0"	7'-0"	1 3/4"	HM02	HMI		-		HMB	B5/A-577	A5/A-577	A6/A-576	62	
C102B	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	52A	
C102C	4'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	55	
C103	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
C104A	3'-0"	8'-0"	1 3/4"	AL01	AL		SGI(F)		E	PER-MANUFACTURE	B3/A-577	A6/A-576	A09	
C104B	3'-0"	8'-0"	1 3/4"	AL01	AL		SGI(F)		E	PER-MANUFACTURE	PER-MANUFACTURE	A6/A-576	A09	
C104C	3'-0"	8'-0"	1 3/4"	AL01	AL		SGI(F)		E	PER-MANUFACTURE	B3/A-577	A6/A-576	A08	
C104D	3'-0"	8'-0"	1 3/4"	AL01	AL		SG		F	PER-MANUFACTURE	B4/A-576	A5/A-576	A14	
C104E	3'-0"	8'-0"	1 3/4"	AL01	AL		SG		F	PER-MANUFACTURE	PER-MANUFACTURE	A5/A-576	A14	
C104F	3'-0"	8'-0"	1 3/4"	AL01	AL		SG		F	PER-MANUFACTURE	B4/A-576	A5/A-576	A15	
C106	6'-0"	7'-0"	1 3/4"	WD04	HM		SG		HMA	C6/A-576	B6/A-576	A5/A-576	07	
C108	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	42	
C109	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	42	
C110	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	34	
C111	6'-0"	7'-0"	1 3/4"	HM04	HMI		-		HMB	B5/A-577	A5/A-577	A6/A-576	04	
C112A	3'-0"	7'-0"	1 3/4"	HM01	HMI		-		HMB	B5/A-577	A5/A-577	A6/A-576	02	
C112B	8'-8"	10'-0"	2"	OH01	AL		-		-	E4/A-577	C4/A-577	-	64	
C112C	3'-0"	7'-0"	1 3/4"	HM01	HM		-		HMA	C6/A-576	B6/A-577	A5/A-576	37	
C113	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	34	
C114	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	42	
C115A	6'-0"	8'-0"	1 3/4"	AL02	AL		SG	-	AN	PER-MANUFACTURE	PER-MANUFACTURE	-	A17	
C115B	6'-0"	7'-0"	1 3/4"	WD04	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	47	
C115C	3'-0"	8'-0"	1 3/4"	AL01	AL		SGI(F)		G	PER-MANUFACTURE	PER-MANUFACTURE,B3/A-577	-	A10	
C116A	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	24	
C116B	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	23	
C116C	6'-0"	7'-0"	1 3/4"	WD04	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	18	
C117	8'-0"	9'-0"	1 3/4"	HM02	HM		-		HMA	C6/A-576	C3/A-534	A5/A-576	06	A
C118	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	30	
C119	4'-0"	7'-0"	1 3/4"	HM05	SC		-		HMB	C3/A-576	B3/A-576	-	32	
C120	4'-0"	7'-0"	1 3/4"	WD07	SCD		-		HMB	C3/A-576	B3/A-576	-	45	
C121	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	B4/A-577	A4/A-577	A5/A-576	34	
C201	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
C202A	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	52B	
C202B	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	52B	
C203	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C5/A-576	B5/A-576	A5/A-576	11	
C204	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
C206	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	42	
C207	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	42	
C208	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	42	
C209	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	35	
C210	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
C211	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
C212	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	34	
C213	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
C214	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	60	
C215	6'-0"	7'-0"	1 3/4"	HM02	HM		-		HMA	C5/A-576	B5/A-576	-	41	A
C216	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	12	
C217	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	34	
C218	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
C219	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
C220	8'-0"	9'-0"	1 3/4"	HM02	HM		-		HMA	C6/A-576	C3/A-534	A5/A-576	06	A
C221	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	30	
C222	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
C223	8'-0"	9'-0"	1 3/4"	HM02	HM		-		HMA	C6/A-576	C3/A-534	A5/A-576	06	A
C224	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
D101A	6'-0"	7'-0"	1 3/4"	AL02	AL		SG	-	AT	PER-MANUFACTURE	B2/A-577		A18	
D101B	12'-0"	12'-0"	4"	OH01	AL		-		-	E2/A-577	C2/A-577	-	64	
D101C	12'-0"	12'-0"	4"	OH01	AL		-		-	E2/A-577	C2/A-577	-	64	
D101D	12'-0"	12'-0"	4"	OH01	AL		-		-	E2/A-577	C2/A-577	-	64	
D101E	6'-0"	7'-0"	1 3/4"	AL02	AL			-	AT	PER-MANUFACTURE	PER-MANUFACTURE		A18	
D101F	6'-0"	7'-0"	1 3/4"	WD04	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	20	
D103	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	54	
D104	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	30	
D107	12'-0"	12'-0"	2"	OH02	AL		-		-	E2/A-577	C2/A-577	-	64	
D108A	6'-0"	7'-0"	1 3/4"	WD04	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	18	
D108B	3'-0"	7'-0"	1 3/4"	WD01	SC		SG	90 MIN.	HMA	B3/A-577	A3/A-577	A5/A-576	16	
D109	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	48	
D110	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMC	C6/A-576	B6/A-576	A5/A-576	42	
D111A	6'-0"	7'-0"	1 3/4"	WD04	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	18	
D111B	3'-6"	7'-0"	1 3/4"	WD05	SC		SG	90 MIN	HMA	B3/A-577	A3/A-577	A5/A-576	15	
D111C	3'-0"	7'-0"	1 3/4"	WD01	SC		SG	90 MIN.	HMA	B3/A-577	A3/A-577	A5/A-576	16	
D112	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	48	
D113	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	48	
D114	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	49	
D115	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	49	
D116	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMC	C6/A-576	B6/A-576	A5/A-576	42	
D117	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMD	C6/A-576	B6/A-576	A5/A-576	42	
D118	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMB	B4/A-577	A4/A-577	A5/A-576	30	
D119A	6'-0"	7'-0"	1 3/4"	WD04	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	18	
D119B	3'-6"	7'-0"	1 3/4"	WD05	SC		SG	90 MIN	HMA	B3/A-577	A3/A-577	A5/A-576	15	
D120	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	54	
D121A	6'-0"	7'-0"	1 3/4"	WD04	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	20	
D121B	6'-0"	7'-0"	1 3/4"	HM04	HMI		SGI		HMB	C4/A-576	A3/A-576	-	04	
D122	6'-0"	7'-0"	1 3/4"	WD02	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	38	
D123	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	34	
D124	6'-0"	7'-0"	1 3/4"	WD02	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	58	
D125	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	51	
D126	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	28	
D127A	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	59	
D127B	6'-8"	8'-0"	2"	OH02	AL		-		-	E4/A-577	C4/A-577	-	64	
D127C	4'-0"	7'-0"	1 3/4"	HM01	HMI		-		HMA	B5/A-577	A5/A-577	A6/A-576	05	
D129A	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	34	
D129B	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	34	
D130A	6'-8"	8'-0"	2"	OH02	SS		-		-	E2/A-577	C2/A-577	-	64	C
D130B	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	B4/A-577	A4/A-577	A5/A-576	53	
D130C	6'-8"	8'-0"	2"	OH02	SS		-		-	E2/A-577	C2/A-577	-	64	C
D130D	6'-8"	8'-0"	2"	OH02	SS		-		-	E2/A-577	C2/A-577	-	64	C
D130E	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	B4/A-577	A4/A-577	A5/A-576	53	
D131A	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C5/A-577	B5/A-577		52	
D131B	6'-0"	5'-2"	2"	OH02	SS		-		-	E2/A-577	C2/A-577	-	64	C
D132	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	42	
D133	4'-0"	5'-2"	2"	OH02	SS		-	-	-	E2/A-577	C2/A-577	-	64	C
D134	6'-0"	7'-0"	1 3/4"	HM02	SC		-		HMA	B4/A-577	A4/A-577	A5/A-576	38	
D135A	3'-0"	7'-0"	1 3/4"	HM01	HMI		-		HMA	C6/A-576	B6/A-577	A5/A-576	31	
D135B	8'-8"	10'-0"	2"	OH01	AL		-		-	E4/A-577	C4/A-577	-	64	
D135C	3'-0"	7'-0"	1 3/4"	HM01	HM		-		HMA	B3/A-577	A3/A-577	A5/A-576	31	
D136	3'-0"	7'-0"	1 3/4"	HM01	HM		-		HMA	C6/A-576	B6/A-577	A5/A-576	32	
D137	3'-6"	7'-0"	1 3/4"	HM01	HM		-		HMA	C6/A-576	B6/A-577	A5/A-576	33	
D138	3'-6"	7'-0"	1 3/4"	HM01	HM		-		HMA	C5/A-576	B5/A-576,TBD	-	40	
D139	3'-0"	7'-0"	1 3/4"	WD07	SC		-	-	HMA	C5/A-577	B5/A-577	-	46	
E101	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMC	C6/A-576	B6/A-576	A5/A-576	42	
E102	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	-	30	
E103	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMC	C6/A-576	B6/A-576	A5/A-576	42	
E104	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMC	C6/A-576	B6/A-576	A5/A-576	42	
E105	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMC	C6/A-576	B6/A-576	A5/A-576	42	
E106	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	30	
E107	3'-0"	8'-0"	1 3/4"	AL01	AL		SG		AR	C6/A-576	B4/A-576	A5/A-576	A12	
E108	3'-0"	8'-0"	1 3/4"	AL01	AL		SG		AJ	PER-MANUFACTURE	A4/A-576,PER-MANUFACTURE	A5/A-576	A13	
E110A	6'-0"	8'-0"	1 3/4"	AL02	AL		SGI(F)	-	Z	PER-MANUFACTURE	PER-MANUFACTURE	A6/A-576	A02	
E110B	6'-0"	8'-0"	1 3/4"	AL02	AL		SGI(F)	-	Z	PER-MANUFACTURE	PER-MANUFACTURE	A6/A-576	A04	
E110C	6'-0"	8'-0"	1 3/4"	AL02	AL		SG(F)	-	AA	PER-MANUFACTURE	PER-MANUFACTURE	-	A05	
E110D	6'-0"	8'-0"	1 3/4"	AL02	AL		SG(F)	-	AA	PER-MANUFACTURE	PER-MANUFACTURE	-	A03	
E111A	3'-0"	8'-0"	1 3/4"	AL01	AL		SG(F)		AF	PER-MANUFACTURE	B5/A-576,PER-MANUFACTURE	A5/A-576	A12	
E111B	3'-0"	8'-0"	1 3/4"	AL01	AL		SG		AR	C6/A-576	B4/A-576	A5/A-576	A11	
E112	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMC	C6/A-576	B6/A-576	A5/A-576	42	
E113A	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	42	
E113B	4'-0"	5'-2"	2"	OH02	AL		-	-	-	E2/A-577	C2/A-577	-	64	C
E114	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	42	
E115	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMC	C6/A-576	B6/A-576	A5/A-576	42	
E116	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	49	
E117	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	B3/A-577	A3/A-577	A5/A-576	29	
E118	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	29	
E119	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	34	
E121	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	09	
E122	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	48	
E123A	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMC	C6/A-576	B6/A-576	A5/A-576	43	
E123B	3'-0"	7'-0"	1 3/4"	HM01	HMI		-		HMB	B5/A-577	A5/A-577	A6/A-576	03	
E124A	3'-0"	8'-0"	1 3/4"	AL01	AL		SG		AM	PER-MANUFACTURE	A4/A-576,PER-MANUFACTURE	A5/A-576	A14	
E124B	3'-0"	8'-0"	1 3/4"	AL01	AL		SGI		V	PER-MANUFACTURE	B4/A-576,PER-MANUFACTURE	A6/A-576	A19	
E125A	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	13	
E125B	3'-0"	7'-0"	1 3/4"	HM01	HMI		-		HMB	B5/A-577	A5/A-577	A6/A-576	17	
E126	6'-0"	7'-0"	1 3/4"	WD04	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	44	
F101A	6'-0"	8'-0"	1 3/4"	AL02	AL		SGI(F)	-	M	PER-MANUFACTURE	PER-MANUFACTURE	-	A01	
F101B	6'-0"	8'-0"	1 3/4"	AL02	AL		SG	-	N	PER-MANUFACTURE	PER-MANUFACTURE	-	A16	
F103A	6'-4"	8'-0"	1 3/4"	AL02	AL		SGI(F)	-	T	PER-MANUFACTURE	A4/A-533	A6/A-576	A02	
F103B	6'-0"	8'-0"	1 3/4"	AL02	AL		SG	-	U	PER-MANUFACTURE	PER-MANUFACTURE	A5/A-576	A07	
F103C	6'-4"	8'-0"	1 3/4"	AL02	AL		SGI(F)	-	T	PER-MANUFACTURE	A4/A-533	A6/A-576	A04	
F103D	6'-0"	8'-0"	1 3/4"	AL02	AL		SG	-	U	PER-MANUFACTURE	PER-MANUFACTURE	A5/A-576	A16	
F104A	6'-0"	7'-0"	1 3/4"	WD223	HM		SG		HMB	B3/A-577	B3/A-535	-	19	
F104B	6'-0"	7'-0"	1 3/4"	WD223	HM		SG		HMB	B3/A-577	B3/A-535	-	18A	
F104C	6'-0"	8'-0"	1 3/4"	AL02	AL		SGI(F)	-	Q	PER-MANUFACTURE	PER-MANUFACTURE	A6/A-576	A06	
F104D	6'-0"	8'-0"	1 3/4"	AL02	AL		SGI(F)	-	Q	PER-MANUFACTURE	PER-MANUFACTURE	A6/A-576	A01	
F104E	8'-0"	7'-0"	1 3/4"	WD09	HM		-		HMA	B4/A-577	A4/A-577	A5/A-576	22	
F105A	7'-0"	7'-0"	1 3/4"	HM02	HM		-	-	HMB	C3/A-576	B3/A-576	-	57	
F105B	3'-0"	7'-0"	1 3/4"	HM01	HM		-		HMB	C3/A-576	B3/A-576	-	52	
F106	7'-0"	7'-0"	1 3/4"	HM02	HM		-	-	HMB	C3/A-576	B3/A-576	-	57	
F107	3'-0"	7'-0"	1 3/4"	HM01	HM		-		HMB	C3/A-576	B3/A-576	-	56	
F108	3'-0"	7'-0"	1 3/4"	HM01	HM		-		HMB	C3/A-576	B3/A-576	-	56	
F109	3'-0"	7'-0"	1 3/4"	HM01	HM		-		HMB	C3/A-576	B3/A-576	-	32	
F110A	6'-0"	7'-0"	1 3/4"	HM02	HMI		-		HMB	B5/A-577	A5/A-577	A6/A-576	01	
F110B	3'-0"	7'-0"	1 3/4"	HM01	HM		-		HMA	C6/A-576	B6/A-577	A5/A-576	12	
F111	3'-0"	7'-0"	1 3/4"	WD03	SC		SG		HMA	C6/A-576	B6/A-576	A5/A-576	11	
F114	3'-0"	7'-0"	1 3/4"	WD01	FG		-		HMA	C6/A-576	B6/A-576	A5/A-576	28	
F115	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	61	
F116A	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMC	C6/A-576	B6/A-576	A5/A-576	42	
F116B	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	42	
F118A	3'-0"	7'-0"	1 3/4"	WD03	SC		-		HMC	C6/A-576	B6/A-576	A5/A-576	42	
F118B	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	42	
F119	3'-0"	7'-0"	1 3/4"	WD01	FG		-		HMA	C6/A-576	B6/A-576	A5/A-576	28	
F120	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	61	
F123	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	29	
F124	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	30	
F126	3'-0"	7'-0"	1 3/4"	WD01	SC		-		HMA	C6/A-576	B6/A-576	A5/A-576	29	
G101A	3'-0"	7'-0"	1 3/4"	HM01	HM		-		HMB	C3/A-576	B3/A-576	-	02A	
G101B	10'-0"	9'-4"	2"	OH02	SS		-		-	D6/A-577	C5/A-577	-	64	
G102A	3'-0"	7'-0"	1 3/4"	HM01	HM		-		HMB	C3/A-576	B3/A-576	-	02A	
G102B	6'-0"	7'-4"	2"	OH02	SS		-		-	D6/A-577	C5/A-577	-	64	

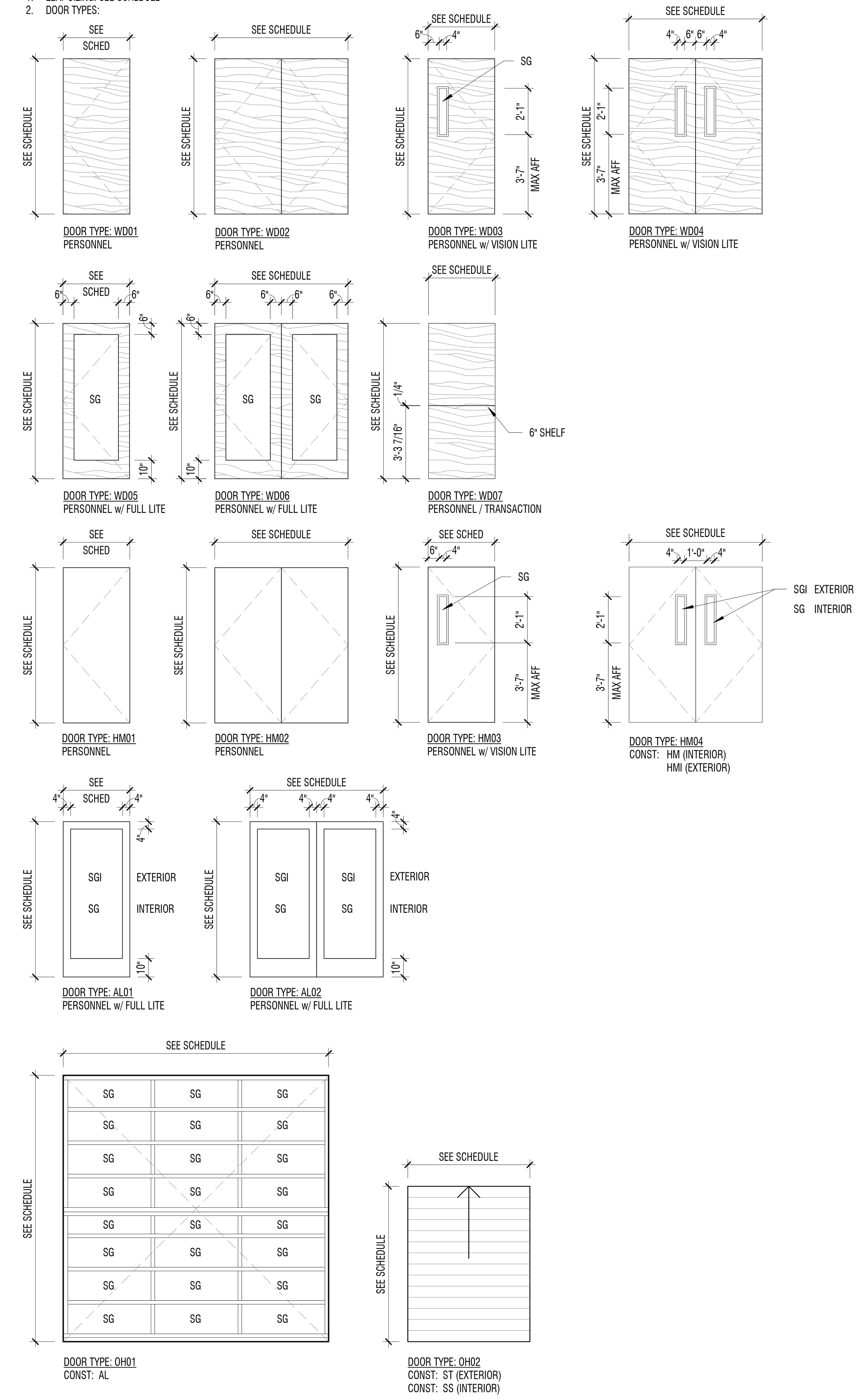
GENERAL NOTES

1. PROVIDE SEALANT AT JOINTS AT DISSIMILAR MATERIAL CONNECTIONS, ISOLATE DISSIMILAR METALS.
2. ALL DIMENSIONS FOR DOOR AND WINDOW OPENINGS TO BE FIELD VERIFIED PRIOR TO MANUFACTURING AND INSTALLATION.
3. UNLESS NOTED OTHERWISE, WHERE OCCURS ALL WINDOWS AND TRANSOMS THAT OCCUR IN RATED CORRIDOR WALL TO BE RATED 45 MIN.
4. PRE-PAINT ALL FRAMES PRIOR TO INSTALLATION.
5. BRAILLE SIGNAGE REQUIRED ON STRIKE SIDE OF FRAME.

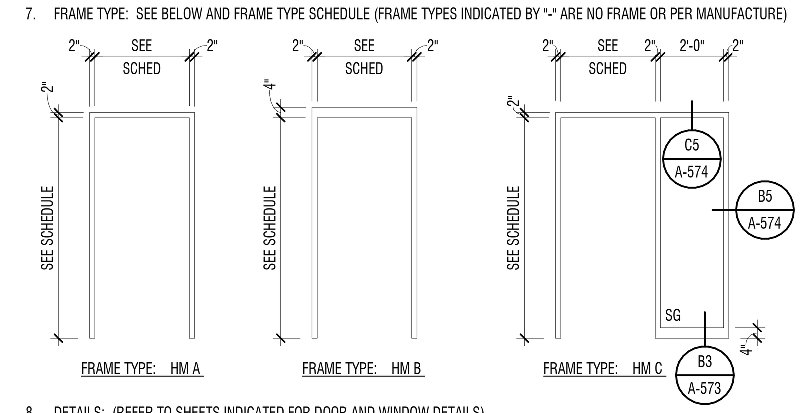
SCHEDULE NOTES

- IF SCHEDULE FIELD SHOWS A HYPHEN (-) OR IS BLANK, THERE ARE NO ITEMS APPLICABLE OR IS DETERMINED BY MANUFACTURER.
- SWING LINES SHOWN BELOW ARE REPRESENTATIONAL AND DO NOT INDICATE ACTUAL SWING. SEE PLANS FOR INDIVIDUAL SWINGS.

1. LEAF SIZING: SEE SCHEDULE
2. DOOR TYPES:



3. CONSTRUCTION:
   - GL GLASS
   - AL ALUMINUM
   - HMI HOLLOW METAL, INSULATED
   - HM HOLLOW METAL
   - SC SOLID CORE
   - SCD SOLID CORE, DUTCH DOOR
   - FG FIBERGLASS
   - SS STAINLESS STEEL
4. FINISH: SEE DOOR FINISHES ON SHEET A-691 & A-692
5. GLAZING: (DOOR AND WINDOW)
   - SG SAFETY GLASS (TEMPERED)
   - SG(F) SAFETY GLASS WITH SAFETY FILM
   - SGI SAFETY GLASS INSULATED, LOW E
   - SGI(F) SAFETY GLASS INSULATED, LOW E, (F) SAFETY FILM
   - CG CLEAR FLOAT GLASS
   - CGI CLEAR FLOAT GLASS INSULATED - LOW E
   - SP SPANDREL PANEL
   - FR FROSTED GLASS
6. RATING: 20, 45, 60 AND ETC. INDICATES FIRE RATING
   NOTE: ALL FIRE RATED DOORS SHALL BE AUTOMATIC CLOSING OR SELF-CLOSING AS PROVIDED IN THE IBC, IN ADDITION SEE THE IBC FOR SPECIAL PROVISIONS RELATING TO DOORS.
7. FRAME TYPE: SEE BELOW AND FRAME TYPE SCHEDULE (FRAME TYPES INDICATED BY "-" ARE NO FRAME OR PER MANUFACTURE)



8. DETAILS: (REFER TO SHEETS INDICATED FOR DOOR AND WINDOW DETAILS)
9. HARDWARE: (GROUP #, SEE SPECIFICATIONS FOR HARDWARE GROUPS)
10. NOTES:
    - A: PROVIDE BLOCKING IN WALL FOR MAG HOLDERS, CORRIDINATE WITH DOOR INSTALLER
    - B: ROUGH OPENING IN ICF PER DETAILS A1/A-576
    - C: THUMB KEY LATCH

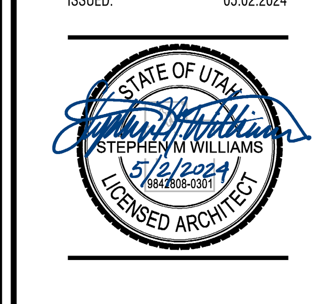
design west architects
255 SOUTH 300 WEST LOGAN UT 84321
795 NORTH 400 WEST SALT LAKE CITY UT 84103

NIBLEY MIDDLE SCHOOL
3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
AD3	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: NIELSON
CHECKED BY: RIGBY
ISSUED: 05.02.2024



SCHEDULE - DOOR & TYPE NOTES

A-561

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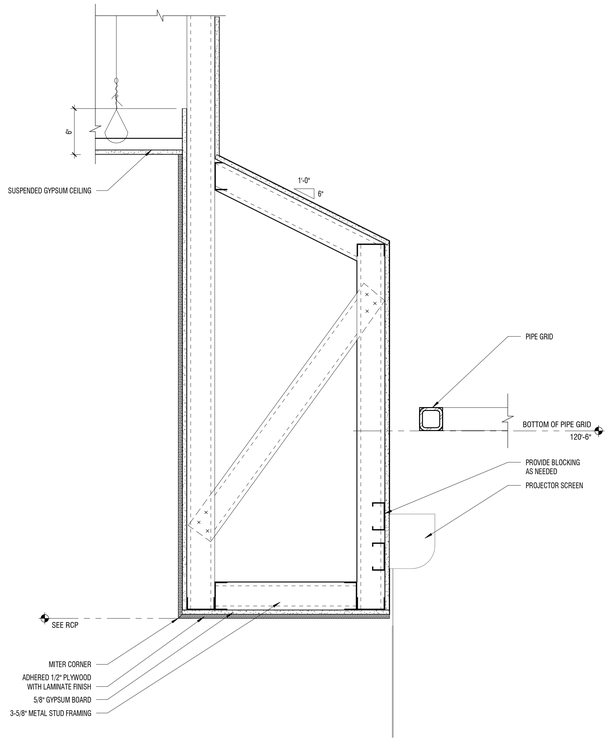
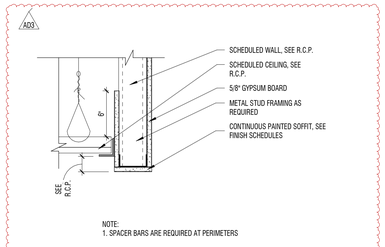
5/16/2024 1:06:14 PM

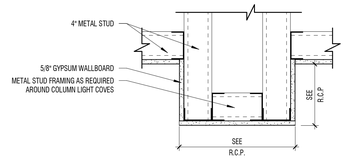


C1 CEILING DETAIL
1 1/2" = 1'-0"

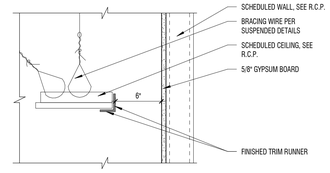


NOTE:
1. SPACER BARS ARE REQUIRED AT PERIMETERS

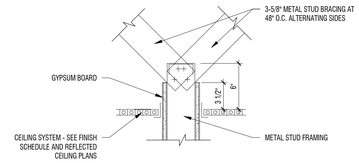
C2 CEILING DETAIL
1 1/2" = 1'-0"



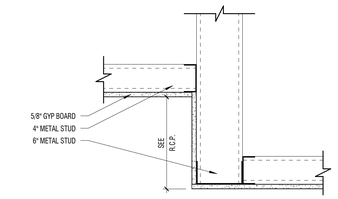
C3 CEILING DETAIL
1 1/2" = 1'-0"



E5 CEILING DETAIL
1 1/2" = 1'-0"

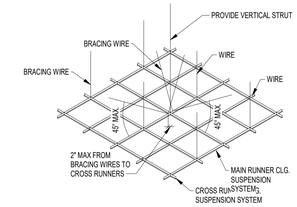


E6 CEILING DETAIL
1 1/2" = 1'-0"



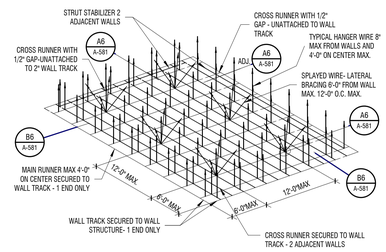
D3 CEILING DETAIL
1 1/2" = 1'-0"

NOTE:
1. T-BAR SYSTEM TO BE HEAVY DUTY
2. SPACER BARS ARE REQUIRED AT PERIMETERS
3. SEISMIC JOINTS BE PROVIDED SUCH THAT NO SINGLE CEILING AREA IS LARGER THAN 2,500 SQUARE FEET
4. GYPSUM CEILING SYSTEM SPACING - MAIN RUNNERS @ 4'-0 O.C. FURRING CHANNELS @ 16" O.C. PERP. TO RUNNERS. ACCEPTABLE ATTACHMENT FOR ACOUSTICAL CEILING GRID & GYPSUM CEILING SUSP. SYSTEM.

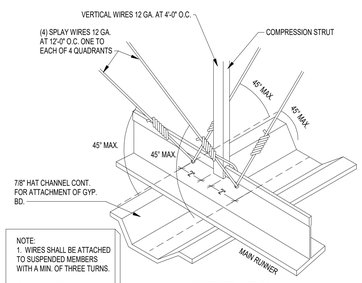


SUSPENDED LAYOUT

NOTE:
1. T-BAR SYSTEM TO BE HEAVY DUTY
2. SPACER BARS ARE REQUIRED AT PERIMETERS
3. SEISMIC JOINTS BE PROVIDED SUCH THAT NO SINGLE CEILING AREA IS LARGER THAN 2,500 SQUARE FEET

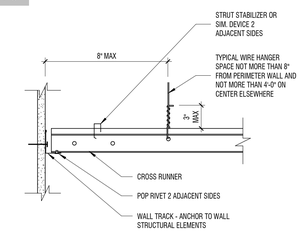


D6 CEILING - LAYOUT
3" = 1'-0"



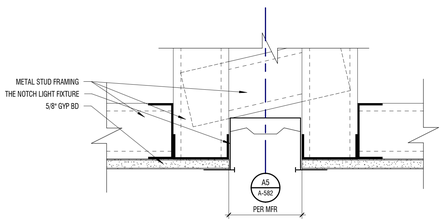
NOTE:
1. WIRES SHALL BE ATTACHED TO SUSPENDED MEMBERS WITH A MIN. OF THREE TURNS.
2. CUT EXCESS WIRE

SUSPENDED GYP. BD.

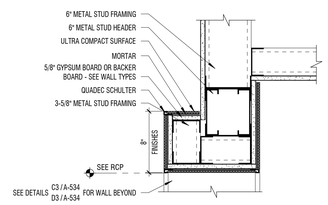


NOTE:
1. SPACER BARS ARE REQUIRED AT PERIMETERS

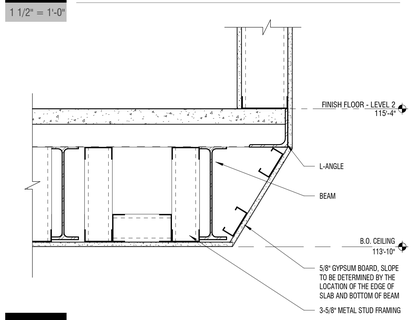
C6 CEILING - CROSS PERIMETER
3" = 1'-0"



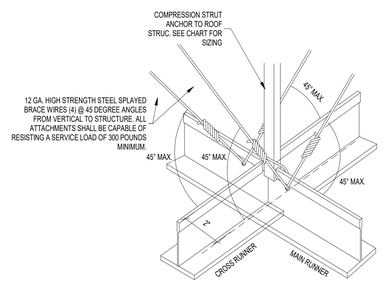
B1 RECESSED LIGHT FIXTURE DETAIL
3" = 1'-0"



B2 CEILING DETAIL
1 1/2" = 1'-0"

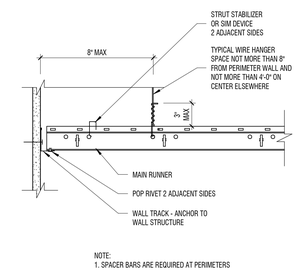


B3 CEILING DETAIL
1 1/2" = 1'-0"



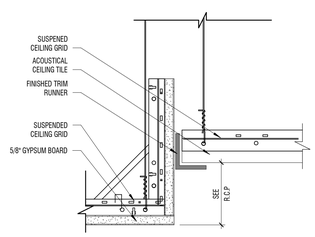
SUSPENDED LAY-IN CEILING

B5 SUSPENDED DETAILS
1/4" = 1'-0"

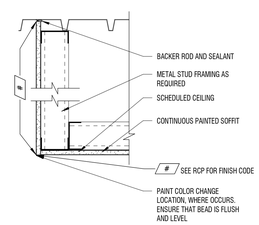


NOTE:
1. SPACER BARS ARE REQUIRED AT PERIMETERS

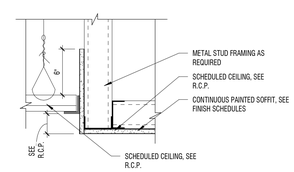
B6 CEILING - MAIN RUNNER
3" = 1'-0"



A2 CEILING DETAIL
3" = 1'-0"

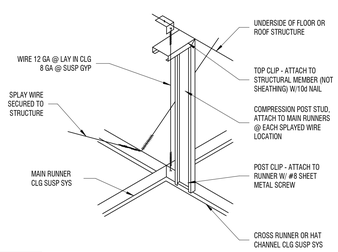


A3 CEILING DETAIL
1 1/2" = 1'-0"



NOTE:
1. SPACER BARS ARE REQUIRED AT PERIMETERS

A5 CEILING DETAIL
1 1/2" = 1'-0"



A6 CEILING - POST RUNNER
3" = 1'-0"

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST LOGAN, UT 84321
795 NORTH 400 WEST SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: NIELSON
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN M WILLIAMS
5/8/2024
LICENSED ARCHITECT

DETAILS - CEILING

A-581

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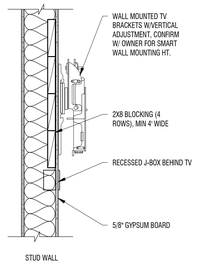
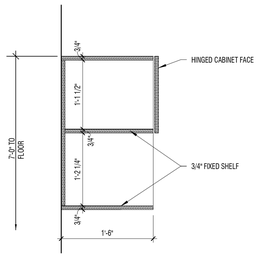
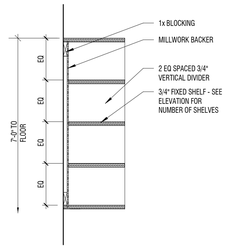
5/10/2024 1:06:20 PM



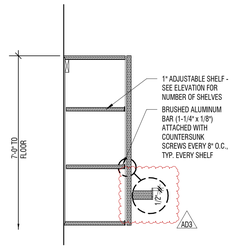
E1 BLOCKING AT TV YOKE
1" = 1'-0"



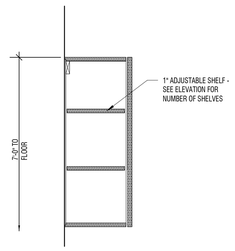
E2 MICROWAVE SHELF
1" = 1'-0"



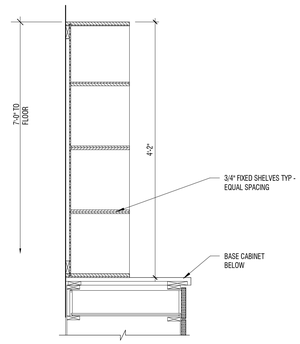
E3 OPEN UPPER CABINET
1" = 1'-0"
FIXED SHELF



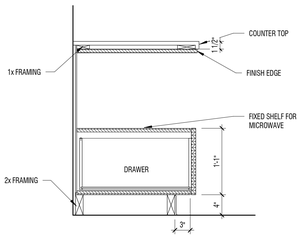
E4 UPPER CABINET
1" = 1'-0"
@SCIENCE PREP ROOMS



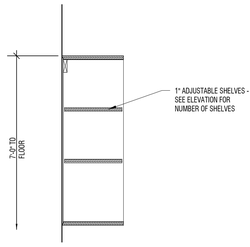
E5 UPPER CABINET
1" = 1'-0"



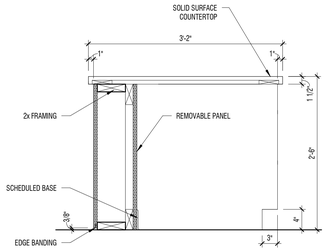
E6 HUTCH CABINET ON BASE
1" = 1'-0"



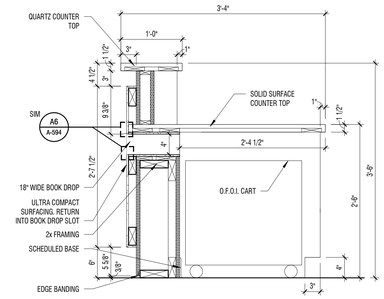
C1 BASE CABINET
1" = 1'-0"
W/ DRAWER



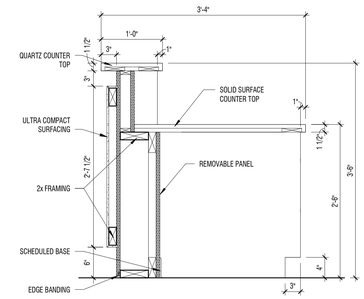
C2 OPEN UPPER CABINET
1" = 1'-0"



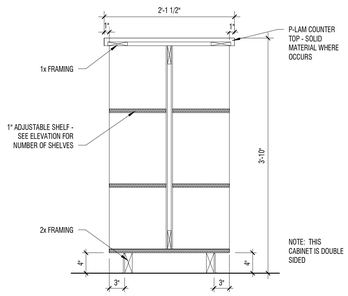
C3 MEDIA CENTER DESK
1" = 1'-0"



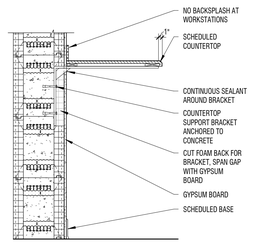
C4 MEDIA CENTER DESK
1" = 1'-0"



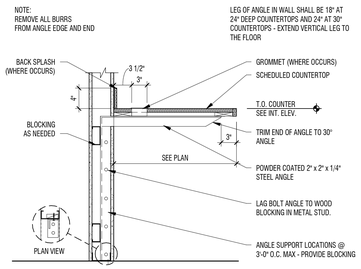
C5 MEDIA CENTER DESK
1" = 1'-0"



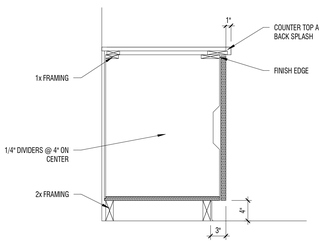
C6 BOOK CASE
1" = 1'-0"



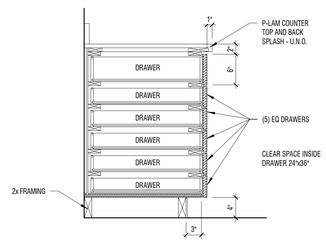
B1 COUNTER SUPPORT
3/4" = 1'-0"



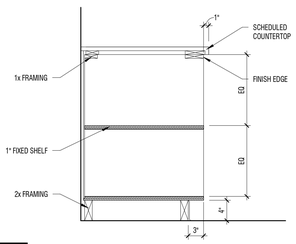
B2 COUNTER SUPPORT
1" = 1'-0"



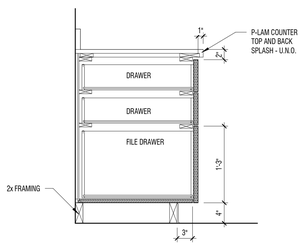
B3 OPEN CABINET BASE
1" = 1'-0"



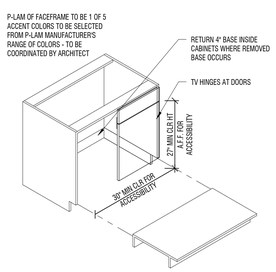
B4 SIX DRAWER BASE
1" = 1'-0"



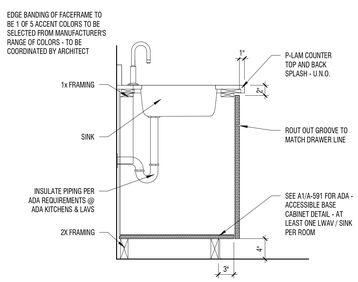
B5 OPEN CABINET BASE
1" = 1'-0"



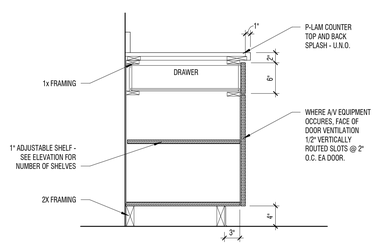
B6 FILE DRAWER BASE
1" = 1'-0"



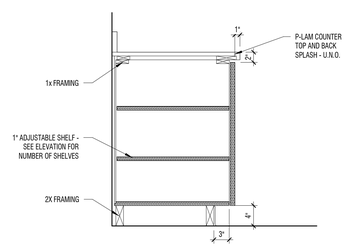
A1 REMOVABLE BASE
1/2" = 1'-0"



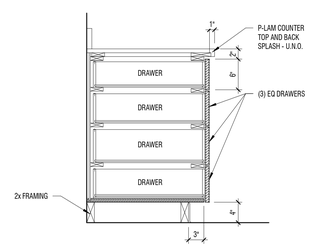
A2 SINK BASE
1" = 1'-0"



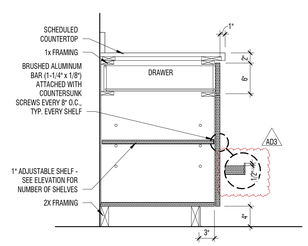
A3 BASE CABINET W/ DRAWER
1" = 1'-0"



A4 BASE CABINET
1" = 1'-0"



A5 FOUR DRAWER BASE
1" = 1'-0"



A6 BASE CABINET W/ DRAWER
1" = 1'-0"
@SCIENCE PREP ROOMS

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST LOGAN, UT 84321
795 NORTH 400 WEST SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL
CONSTRUCTION DOCUMENTS
3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A23	MAY 2024	ADDENDUM 03

PROJECT #:	123006
DRAWN BY:	NIELSON
CHECKED BY:	RIGBY
ISSUED:	05.02.2024

STATE OF UTAH
STEPHEN M WILLIAMS
5/2/2024
LICENSED ARCHITECT

DETAILS - MILLWORK

A-591

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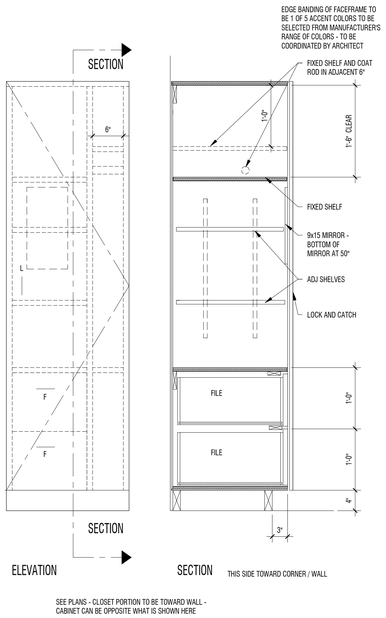
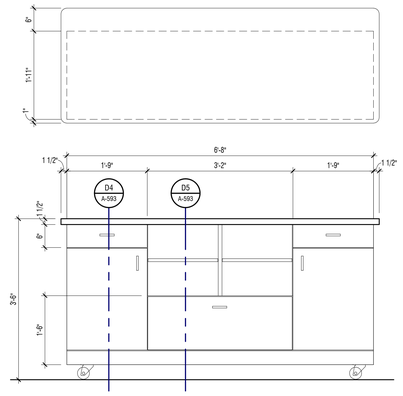
5/10/2024 1:08:26 PM



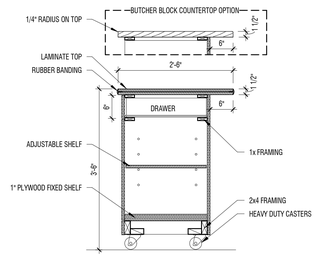
C1 WARDROBE

1" = 1'-0"



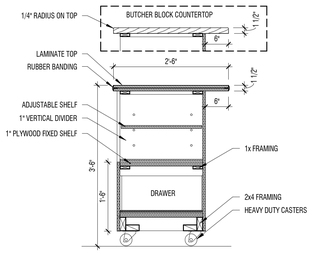
D2 PRESENTATION CART

3/4" = 1'-0"



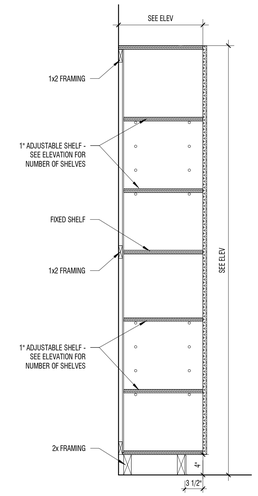
D4 PRESENTATION CART

3/4" = 1'-0"



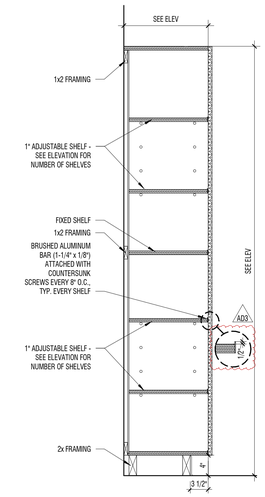
D5 PRESENTATION CART

3/4" = 1'-0"



D6 TALL CABINET

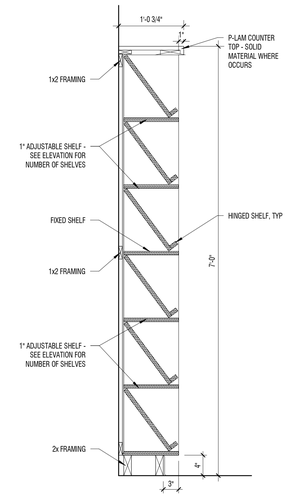
1" = 1'-0"



B5 TALL CABINET

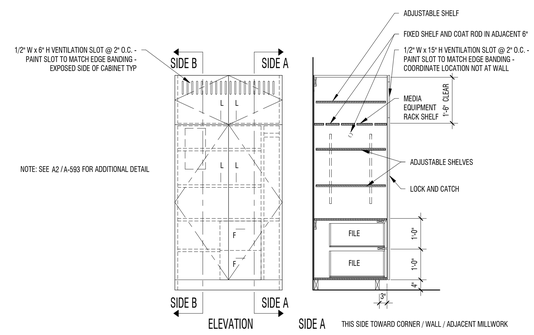
1" = 1'-0"

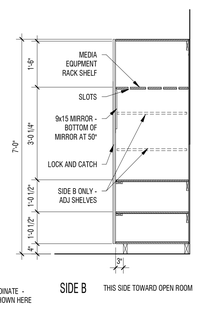
SCIENCE PREP ROOMS



B6 PERIODICAL CABINET

1" = 1'-0"

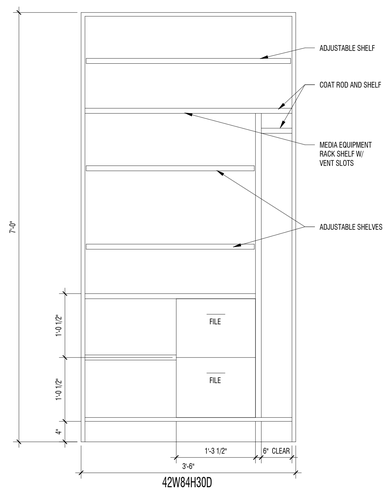




SEE PLANS AND INTERIOR ELEVATIONS TO COORDINATE - SIDE A AND SIDE B CAN BE OPPOSITE WHAT IS SHOWN HERE

A1 TEACHER CABINET

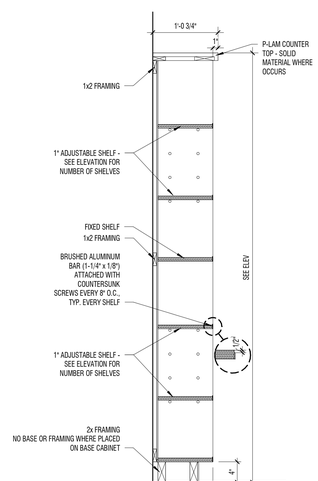
1/2" = 1'-0"



THIS EXAMPLE IS BASED OFF OF THE ABOVE SIZED CABINET - CABINET SIZE MAY VARY BY LOCATION - SEE CONSTRUCTION DOCUMENTS

A2 TEACHER CABINET

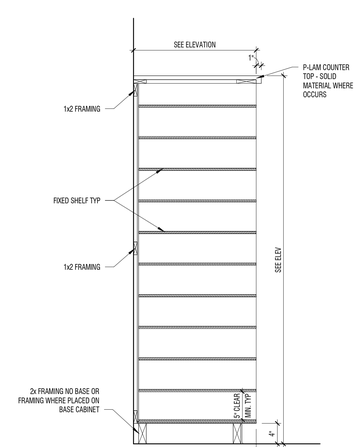
1" = 1'-0"



A4 OPEN STORAGE

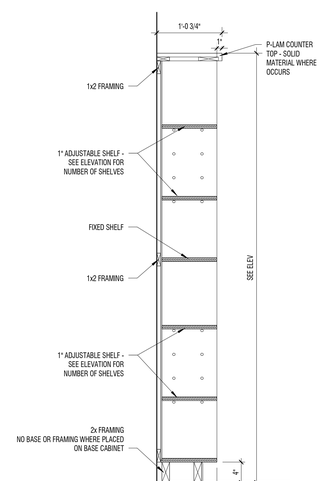
1" = 1'-0"

SCEINCE PREP ROOMS



A5 STUDENT PROJECT STORAGE

1" = 1'-0"



A6 BOOK CASE

1" = 1'-0"

design west | architects
255 SOUTH 300 WEST
759 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL

CONSTRUCTION DOCUMENTS

3050 S 920 W NIBLEY, UTAH

CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
AD3	MAY 2024	ADDENDUM 03

PROJECT #: 123006

DRAWN BY: NIELSON

CHECKED BY: RIGBY

ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN M WILLIAMS
5/8/2024
LICENSED ARCHITECT

CONSTRUCTION DOCUMENTS

DETAILS - MILLWORK

A-593

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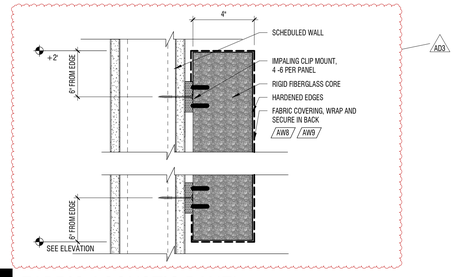
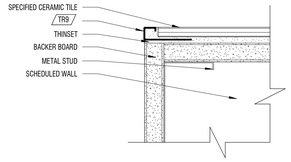
5/10/2024 1:06:39 PM



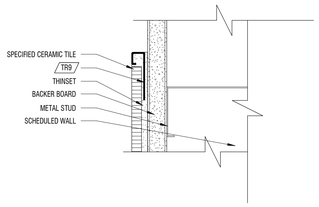
E3 FABRIC ACOUSTIC PANEL

3" = 1'-0"



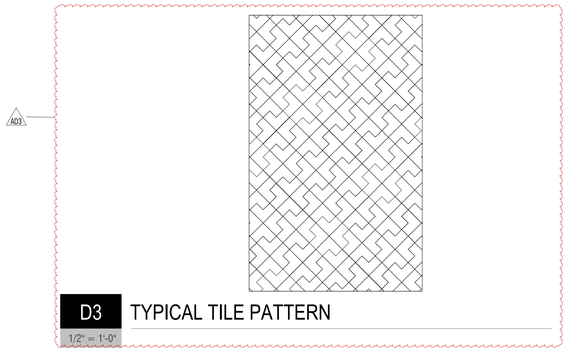
E4 OUTSIDE CORNER DETAIL

6" = 1'-0"



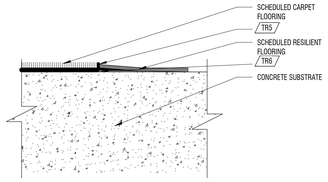
E6 OUTSIDE CORNER DETAIL

6" = 1'-0"



D3 TYPICAL TILE PATTERN

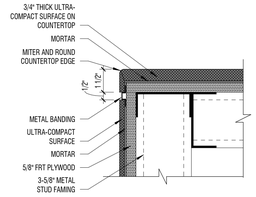
1/2" = 1'-0"



4D FLOOR FINISH TRANSITION

6" = 1'-0"

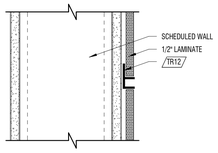
RESILIENT TO WALK OFF CARPET



D6 DETAIL

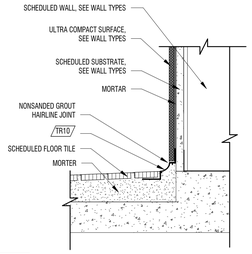
3" = 1'-0"

BENCH SEAT END WALL COUNTERTOP



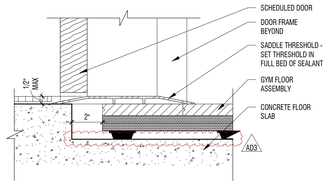
C3 REVEAL DETAIL

3" = 1'-0"



C4 TYPICAL UCS BASE DETAIL

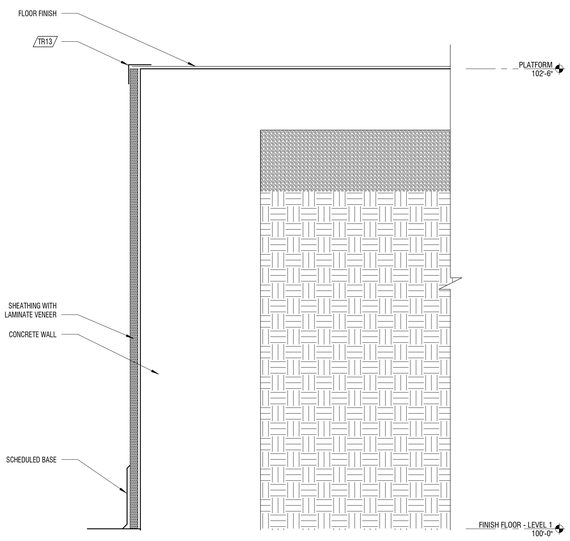
3" = 1'-0"



C6 TRESHOLD DETAIL

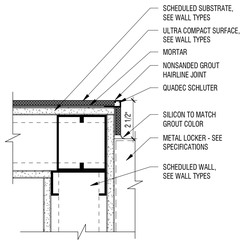
3" = 1'-0"

@ GYM OPENING



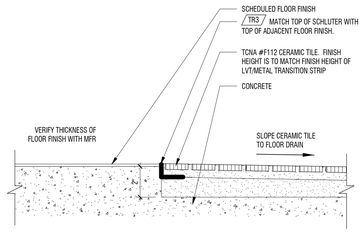
A3 FINISH DETAIL

3" = 1'-0"



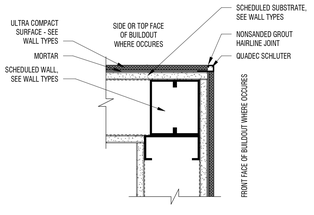
B6 TYP UCS CORNER @ LOCKER

3" = 1'-0"



A4 LVT TO CERAMIC TILE

3" = 1'-0"



A6 TYP UCS OUTSIDE CORNER

3" = 1'-0"

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
795 NORTH 400 WEST
LOGAN UT 84321
SALT LAKE CITY UT 84103

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #:	123006
DRAWN BY:	NAVA
CHECKED BY:	RIGBY
ISSUED:	05.02.2024

STATE OF UTAH
STEPHEN M WILLIAMS
5/2/2024
6348268-0301
LICENSED ARCHITECT

DETAILS - INTERIOR

A-594

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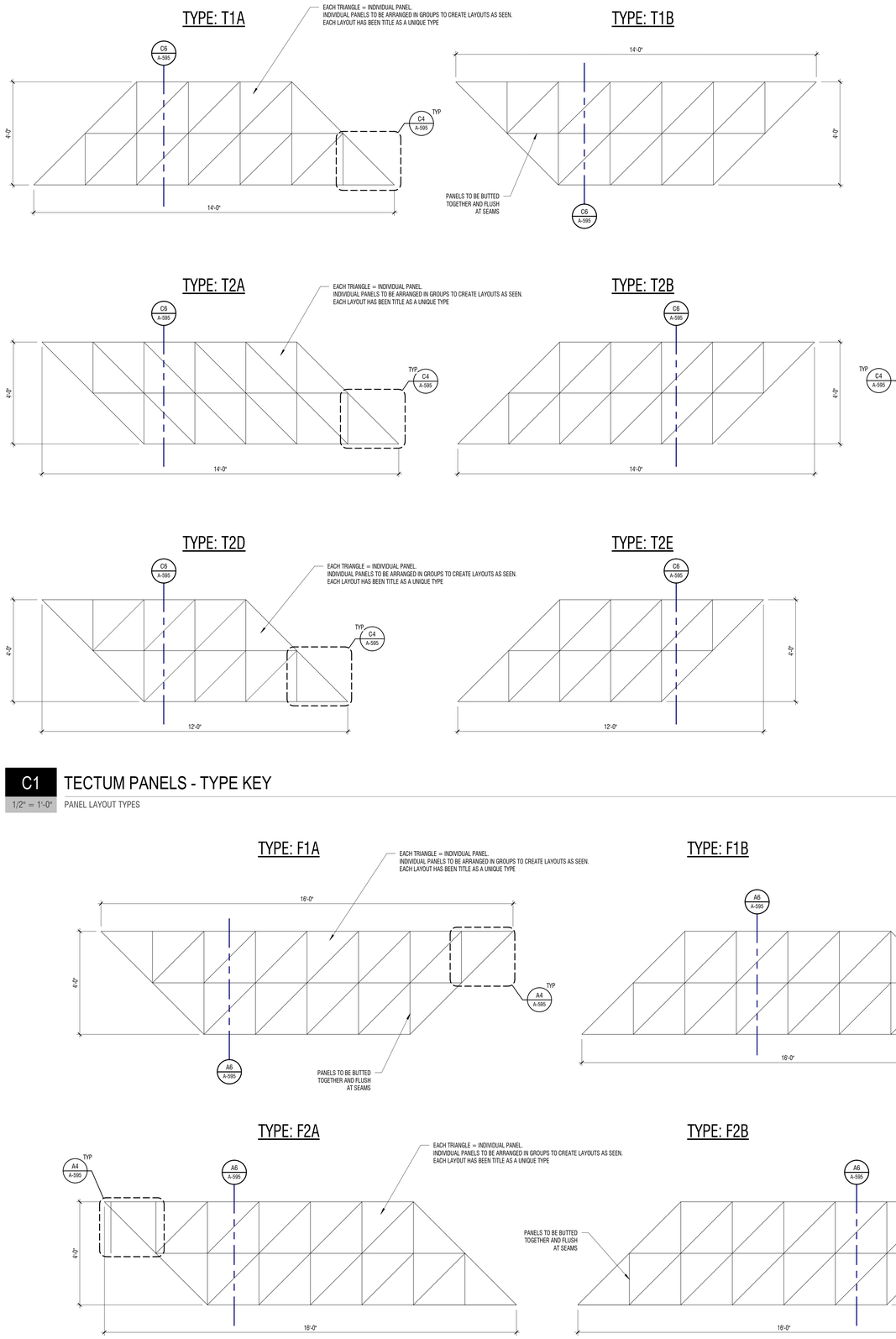
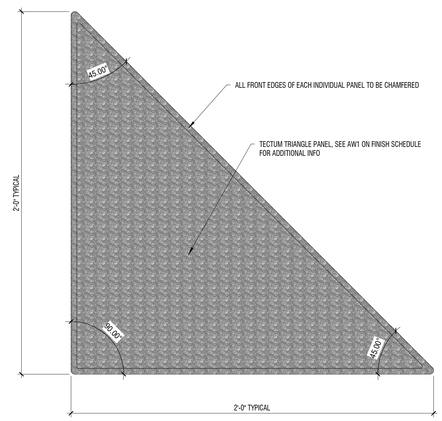
5/16/2024 1:00:16 PM



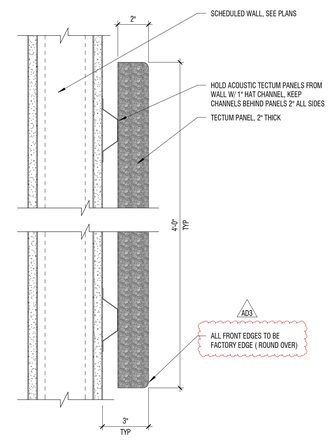
C1 TECTUM PANELS - TYPE KEY

1/2" = 1'-0" PANEL LAYOUT TYPES



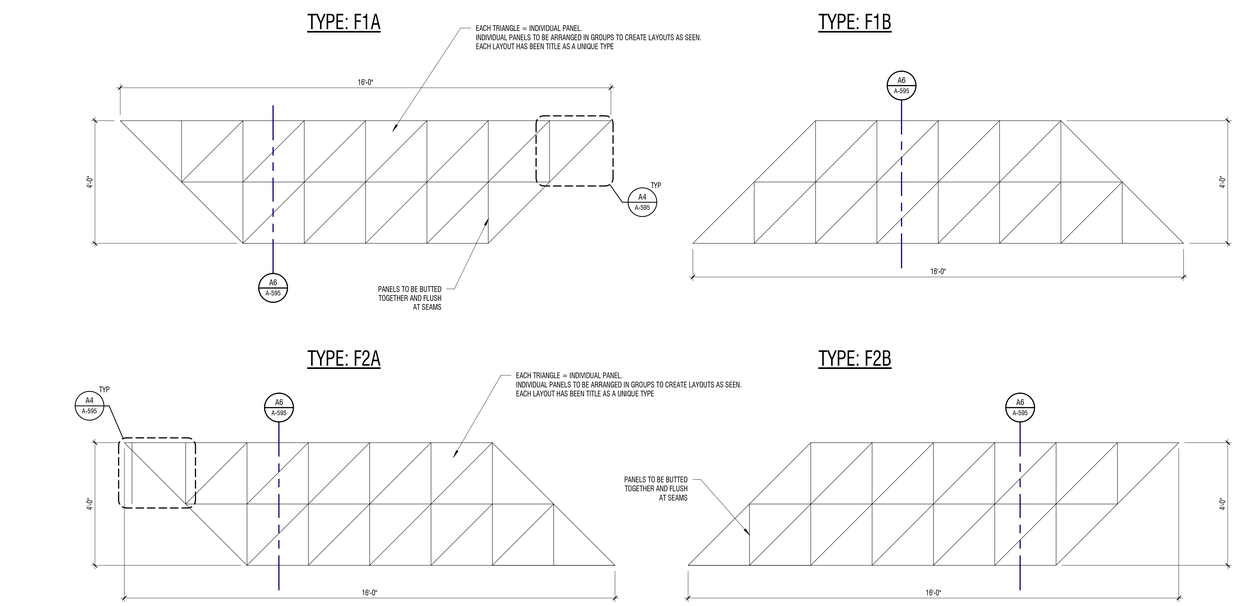
C4 TECTUM PANELS - INDIVIDUAL TRIANGLE

3" = 1'-0" FRONT OF PANEL



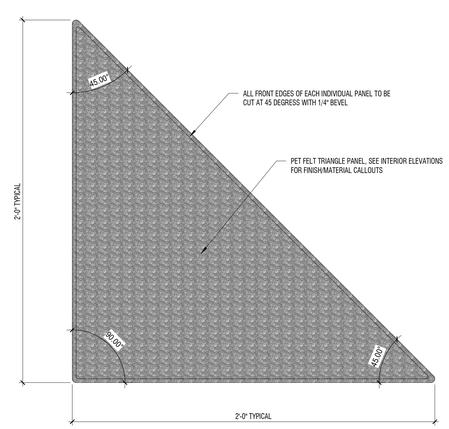
C6 TECTUM PANELS

3" = 1'-0" SECTION



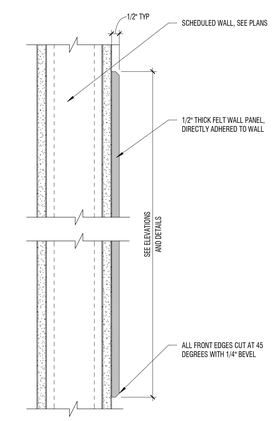
A1 FELT PANELS - TYPE KEY

1/2" = 1'-0" PANEL LAYOUT TYPES



A4 FELT PANELS - INDIVIDUAL TRIANGLE

3" = 1'-0" FRONT OF PANEL



A6 FELT PANELS

3" = 1'-0" SECTION

design west | architects
255 SOUTH 300 WEST
759 NORTH 400 WEST
LOGAN UT 84321
SALT LAKE CITY UT 84103

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
AD3	MAY 2024	ADDENDUM 03

PROJECT #:	123006
DRAWN BY:	NAVA
CHECKED BY:	RIGBY
ISSUED:	05.02.2024

STATE OF UTAH
STEPHEN M WILLIAMS
5/2/2024
LICENSED ARCHITECT

DETAILS - INTERIOR - WALL PANELS

A-595

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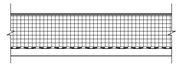
5/10/2024 1:06:36 PM

ROOF ASSEMBLIES

RS1

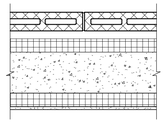
DESCRIPTION	ASSEMBLY	FIRE RATING	STC RATING
ROOF	SINGLE PLY ROOF MEMBRANE 5" MIN. RIGID ROOF INSULATION - R30ci VAPOR BARRIER METAL DECK - SEE STRUCTURAL FOR TYPE	N/A TESTING SOURCE N/A	N/A TESTING SOURCE N/A



EXTERIOR WALL ASSEMBLIES

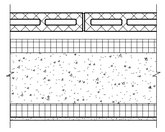
EF8A

DESCRIPTION	ASSEMBLY	FIRE RATING	STC RATING
SHELL WALL	EXTERIOR 4" x 8" x 16" CMU VENEER (SEE ELEVATIONS FOR COLOR, COURSING, AND FACE TYPE) AIR GAP - TYPICAL 1-3/4" WITH 1/2" OFFSETS (SEE SECTIONS) 8" INSULATED CONCRETE FORM 5/8" GYPSUM BOARD (WHERE OCCURS) INTERIOR	1+ TESTING SOURCE PER IBC 722	N/A TESTING SOURCE N/A



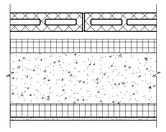
EF10A

DESCRIPTION	ASSEMBLY	FIRE RATING	STC RATING
SHELL WALL	EXTERIOR 4" x 8" x 16" CMU VENEER (SEE ELEVATIONS FOR COLOR, COURSING, AND FACE TYPE) AIR GAP - TYPICAL 1-3/4" WITH 1/2" OFFSETS (SEE SECTIONS) 10" INSULATED CONCRETE FORM 5/8" GYPSUM BOARD (WHERE OCCURS) INTERIOR	1+ TESTING SOURCE PER IBC 722	N/A TESTING SOURCE N/A



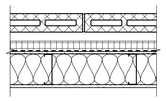
EF10E

DESCRIPTION	ASSEMBLY	FIRE RATING	STC RATING
SHELL WALL NON-WET: TCNA-W243 SEMI-WET: TCNA-W247 WET: TCNA-W422	EXTERIOR 4" x 8" x 16" CMU VENEER (SEE ELEVATIONS FOR COLOR, COURSING, AND FACE TYPE) AIR GAP - TYPICAL 1-3/4" WITH 1/2" OFFSETS (SEE SECTIONS) 10" INSULATED CONCRETE FORM 5/8" TILE BACKER BOARD, 5/8" GYPSUM BOARD ABOVE WHERE OCCURS ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS INTERIOR	1+ TESTING SOURCE PER IBC 722	N/A TESTING SOURCE N/A



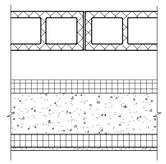
ES6A

DESCRIPTION	ASSEMBLY	FIRE RATING	STC RATING
SHELL WALL	EXTERIOR 4" x 8" x 16" CMU VENEER (SEE ELEVATIONS FOR COLOR, COURSING, AND FACE TYPE) AIR GAP - TYPICAL 1-3/4" WITH 1/2" OFFSETS (SEE SECTIONS) 2" RIGID INSULATION WEATHER BARRIER 1/2" GLASS MAT SHEATHING 6" METAL STUD FRAMING 5/8" GYPSUM BOARD (WHERE OCCURS) INTERIOR	N/A TESTING SOURCE N/A	N/A TESTING SOURCE N/A



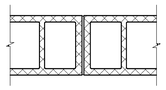
EF8B

DESCRIPTION	ASSEMBLY	FIRE RATING	STC RATING
SHELL WALL	EXTERIOR 8" x 8" x 16" CMU VENEER (SEE ELEVATIONS FOR COLOR, COURSING, AND FACE TYPE) AIR GAP - TYPICAL 5-3/4" WITH 1/2" OFFSETS (SEE SECTIONS) 8" INSULATED CONCRETE FORM 5/8" GYPSUM BOARD (WHERE OCCURS) INTERIOR	1+ TESTING SOURCE PER IBC 722	N/A TESTING SOURCE N/A



EM12

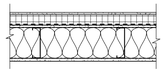
DESCRIPTION	ASSEMBLY	FIRE RATING	STC RATING
EXTERIOR WALL	12" x 8" x 16" CMU WALL (SEE ELEVATIONS FOR COLOR, COURSING, AND FACE TYPE)	N/A TESTING SOURCE N/A	N/A TESTING SOURCE N/A



A23

ES6B

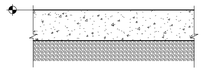
DESCRIPTION	ASSEMBLY	FIRE RATING	STC RATING
SHELL WALL	EXTERIOR ACRYLIC FINISH SYSTEM (SEE PROFILES FOR SIZES) 2" RIGID INSULATION WEATHER BARRIER 1/2" GLASS MAT SHEATHING 6" METAL STUD FRAMING 5/8" GYPSUM BOARD (WHERE OCCURS) INTERIOR	N/A TESTING SOURCE N/A	N/A TESTING SOURCE N/A



FLOOR ASSEMBLIES

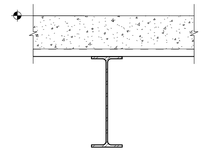
FC1

DESCRIPTION	ASSEMBLY	FIRE RATING	STC RATING
SLAB ON GRADE	CONCRETE SLAB - SEE STRUCTURAL FOR THICKNESS AND REINFORCMENT 4" GRAVEL BASE NOTE: SEE ELEVATIONS / SECTIONS FOR FLOOR LEVEL. SEE SLAB PLAN FOR CONTROL JOINT SPACING.	N/A TESTING SOURCE N/A	N/A TESTING SOURCE N/A



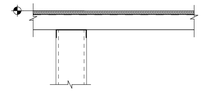
FSD1

DESCRIPTION	ASSEMBLY	FIRE RATING	STC RATING
CONCRETE SLAB ON DECK	CONCRETE SLAB - SEE STRUCTURAL FOR THICKNESS AND REINFORCMENT METAL DECK - SEE STRUCTURAL FOR TYPE NOTE: SEE ELEVATIONS / SECTIONS FOR FLOOR LEVEL. SEE SLAB PLAN FOR CONTROL JOINT SPACING.	N/A TESTING SOURCE N/A	N/A TESTING SOURCE N/A



FSD2

DESCRIPTION	ASSEMBLY	FIRE RATING	STC RATING
FRT PLYWOOD ON DECK @ MEZZANINE	FRT PLYWOOD METAL DECK - SEE STRUCTURAL FOR TYPE NOTE: SEE ELEVATIONS / SECTIONS FOR FLOOR LEVEL.	N/A TESTING SOURCE N/A	N/A TESTING SOURCE N/A



1. WALL TYPE ASSEMBLIES ARE NOT INTENDED TO LOCATE INSULATION FOR INTERIOR PARTITION CONDITIONS, UNLESS REQUIRED AS TESTED AND CERTIFIED FOR A RATED ASSEMBLY. SEE CODE PLANS, WALL SECTIONS, AND DETAILS FOR LOCATIONS INTENDED FOR INSULATION FOR EITHER THERMAL OR SOUND BARRIERS.
2. THE INTERNATIONAL ENERGY CONSERVATION CODE (IECC C403.1.3) REQUIRES ALL ELEMENTS OF THE BUILDING ENVELOPE (WALLS, FLOORS, ROOFS) EXPOSED TO THE EXTERIOR ENVIRONMENT TO RECEIVE PROTECTION. THE INSTALLER/CONTRACTOR MUST PROVIDE A COMPLIANT INSTALLATION. BIDS AND WORK MUST TAKE INTO ACCOUNT THE ENTIRE DOCUMENT SET AND COMPLY WITH ALL APPLICABLE CODES AND BEST PRACTICES. INSTALLERS FINDING ERRORS, OMISSIONS, OR AREAS LACKING CLARITY SHOULD SUBMIT A REQUEST FOR INFORMATION PRIOR TO SUBMITTING BID OR PERFORMING WORK.
3. SEE TESTED ASSEMBLIES SOURCE FOR SEAM OVERLAPS, TAPING, AND FASTENING REQUIREMENTS.

design west | architects
255 SOUTH 300 WEST LOGAN, UT 84321
759 NORTH 400 WEST SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL
3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
A23	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: NIELSON
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN M WILLIAMS
5/2/2024
LICENSED ARCHITECT

ASSEMBLIES - EXTERIOR WALLS, FLOORS, ROOFS

A-611

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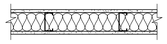
5/10/2024 1:05:37 PM

INTERIOR WALL ASSEMBLIES

S3A

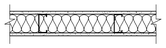
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
PARTITION	5/8" GYPSUM BOARD 3-5/8" METAL STUD FRAMING @16" O.C. 5/8" GYPSUM BOARD	N/A	N/A	49	SA-870717



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S3A1

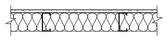
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
FIRE RATED PARTITION	5/8" TYPE 'X' GYPSUM BOARD 3-5/8" METAL STUD FRAMING @16" O.C. 5/8" TYPE 'X' GYPSUM BOARD	1 HOUR	UL U419 OR MEA 81-98-M	49	SA-870717



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S3B

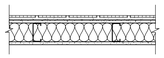
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
	5/8" TYPE 'X' GYPSUM BOARD 3-5/8" METAL STUD FRAMING @16" O.C.	N/A	N/A	N/A	N/A



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S3E

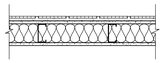
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
PARTITION	ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS 5/8" TILE BACKER BOARD, 5/8" GYPSUM BOARD ABOVE WHERE OCCURS 3-5/8" METAL STUD FRAMING @16" O.C. 5/8" GYPSUM BOARD	N/A	N/A	N/A	N/A



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S3E1

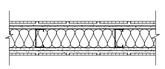
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
FIRE RATED PARTITION NON-WET: TCNA-W243 SEMI-WET: TCNA-W247 WET: TCNA-W422	ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS 5/8" TILE BACKER BOARD, 5/8" TYPE 'X' GYPSUM BOARD ABOVE WHERE OCCURS 3-5/8" METAL STUD FRAMING @16" O.C. 5/8" TYPE 'X' GYPSUM BOARD	1 HOUR	U433	N/A	N/A



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S3F

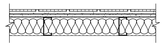
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
PARTITION NON-WET: TCNA-W243 SEMI-WET: TCNA-W247 WET: TCNA-W422	ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS 5/8" TILE BACKER BOARD, 5/8" GYPSUM BOARD ABOVE WHERE OCCURS 3-5/8" METAL STUD FRAMING @16" O.C. 5/8" TILE BACKER BOARD, 5/8" GYPSUM BOARD ABOVE WHERE OCCURS ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS	N/A	N/A	N/A	N/A



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S3G

DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
NON-WET: TCNA-W243 SEMI-WET: TCNA-W247 WET: TCNA-W422	ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS 5/8" TILE BACKER BOARD, 5/8" GYPSUM BOARD ABOVE WHERE OCCURS 3-5/8" METAL STUD FRAMING @16" O.C.	N/A	N/A	N/A	N/A

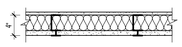


A03

NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

CH4A1

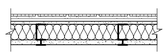
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
FIRE RATED SHAFT WALL	(OUTSIDE OF SHAFT) 5/8" GYPSUM BOARD 4" CH STUD FRAMING @24" O.C. 1" GYPSUM BOARD (INTERIOR OF SHAFT)	1 HOUR	U415 - SYSTEM A	32-36	U415 - SYSTEM A



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

CH4E1

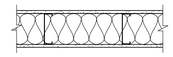
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
FIRE RATED SHAFT WALL NON-WET: TCNA-W243	(OUTSIDE OF SHAFT) ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS 5/8" TILE BACKER BOARD, 5/8" GYPSUM BOARD ABOVE WHERE OCCURS 4" CH STUD FRAMING @24" O.C. 1" GYPSUM BOARD (INTERIOR OF SHAFT)	1 HOUR	U415 - SYSTEM A	N/A	N/A



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S6A

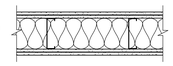
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
PARTITION	5/8" GYPSUM BOARD 6" METAL STUD FRAMING @16" O.C. 5/8" GYPSUM BOARD	N/A	N/A	N/A	N/A



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S6A2

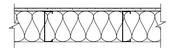
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
FIRE RATED PARTITION	(2 LAYERS) 5/8" TYPE 'X' GYPSUM BOARD 6" METAL STUD FRAMING @16" O.C. (2 LAYERS) 5/8" TYPE 'X' GYPSUM BOARD	2 HOUR	UL U425	49	USG-810940



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S6B

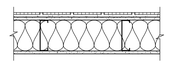
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
	5/8" GYPSUM BOARD 6" METAL STUD FRAMING @16" O.C.	N/A	N/A	N/A	N/A



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S6E

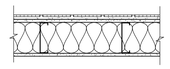
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
PARTITION NON-WET: TCNA-W243 SEMI-WET: TCNA-W247 WET: TCNA-W422	ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS 5/8" TILE BACKER BOARD, 5/8" GYPSUM BOARD ABOVE WHERE OCCURS 3-5/8" METAL STUD FRAMING @16" O.C. 5/8" GYPSUM BOARD	N/A	N/A	N/A	N/A



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S6E1

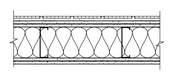
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
FIRE RATED PARTITION NON-WET: TCNA-W243 SEMI-WET: TCNA-W247 WET: TCNA-W422	ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS 5/8" TILE BACKER BOARD, 5/8" TYPE 'X' GYPSUM BOARD ABOVE WHERE OCCURS 3-5/8" METAL STUD FRAMING @16" O.C. 5/8" GYPSUM BOARD	1 HOUR	U433	N/A	N/A



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S6E2

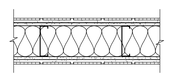
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
FIRE RATED PARTITION NON-WET: TCNA-W243 SEMI-WET: TCNA-W247 WET: TCNA-W422	ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS (2 LAYERS) 5/8" TILE BACKER BOARD, 5/8" TYPE 'X' GYPSUM BOARD ABOVE WHERE OCCURS 3-5/8" METAL STUD FRAMING @16" O.C. (2 LAYERS) 5/8" GYPSUM BOARD	2 HOUR	U433	N/A	N/A



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S6F

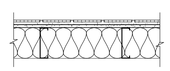
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
PARTITION NON-WET: TCNA-W243 SEMI-WET: TCNA-W247 WET: TCNA-W422	ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS 5/8" TILE BACKER BOARD, 5/8" GYPSUM BOARD ABOVE WHERE OCCURS 3-5/8" METAL STUD FRAMING @16" O.C. 5/8" TILE BACKER BOARD, 5/8" GYPSUM BOARD ABOVE WHERE OCCURS ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS	N/A	N/A	N/A	N/A



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S6G

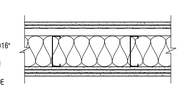
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
PARTITION NON-WET: TCNA-W243 SEMI-WET: TCNA-W247 WET: TCNA-W422	ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS 5/8" TILE BACKER BOARD, 5/8" GYPSUM BOARD ABOVE WHERE OCCURS 3-5/8" METAL STUD FRAMING @16" O.C.	N/A	N/A	N/A	N/A



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S6H

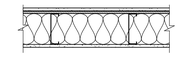
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
SOUND WALL	(2 LAYERS) 5/8" GYPSUM BOARD RC-1 CHANNEL OR EQUIVALENT 6" 20 GAUGE METAL STUD FRAMING @16" O.C. W/ SOUND BATT INSULATION, ACOUSTICAL SEALANT BEAD BETWEEN PANELS AND STUDS, DABS 8" O.C. BETWEEN PANEL LAYERS ON STUD SIDE (3 LAYERS) 5/8" GYPSUM BOARD	N/A	N/A	65	RAL-TL-84-150



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S6J

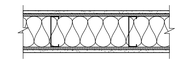
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
PARTITION/ TEACHING WALL	5/8" GYPSUM BOARD 1/2" PLYWOOD SHEATING 6" METAL STUD FRAMING @16" O.C. 5/8" GYPSUM BOARD	N/A	N/A	N/A	N/A



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S6K

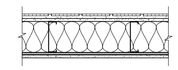
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
PARTITION/ TEACHING WALL	5/8" GYPSUM BOARD 1/2" PLYWOOD SHEATING 6" METAL STUD FRAMING @16" O.C. 1/2" PLYWOOD SHEATHING 5/8" GYPSUM BOARD	N/A	N/A	N/A	N/A



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S6L

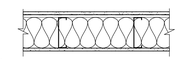
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
PARTITION / TEACHING WALL NON-WET: TCNA-W243 SEMI-WET: TCNA-W247 WET: TCNA-W422	ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS 5/8" TILE BACKER BOARD, 5/8" GYPSUM BOARD ABOVE WHERE OCCURS 3-5/8" METAL STUD FRAMING @16" O.C. 1/2" PLYWOOD SHEATHING 5/8" GYPSUM BOARD	N/A	N/A	N/A	N/A



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S6M1

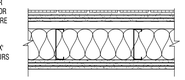
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
FIRE RATED PARTITION	5/8" TYPE 'X' GYPSUM BOARD 1/2" RESILIENT CHANNEL @ 24" O.C. 6" METAL STUD FRAMING @16" O.C. 5/8" TYPE 'X' GYPSUM BOARD NOTE: PERIMETER SEALANT AND PUTTY PACKS AT PENETRATIONS	1 HOUR	UL U419	49	USG-151205



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S6N

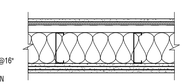
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
SOUND WALL NON-WET: TCNA-W243 SEMI-WET: TCNA-W247 WET: TCNA-W422	ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS 5/8" TILE BACKER BOARD, 5/8" TYPE 'X' GYPSUM BOARD ABOVE WHERE OCCURS 5/8" GYPSUM BOARD RC-1 CHANNEL OR EQUIVALENT 6" 20 GAUGE METAL STUD FRAMING @16" O.C. W/ SOUND BATT INSULATION, ACOUSTICAL SEALANT BEAD BETWEEN PANELS AND STUDS, DABS 8" O.C. BETWEEN PANEL LAYERS ON STUD SIDE (3 LAYERS) 5/8" GYPSUM BOARD	N/A	N/A	65	RAL-TL-84-150



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S6P

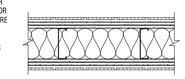
DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
SOUND WALL	5/8" GYPSUM BOARD 5/8" PLYWOOD RC-1 CHANNEL OR EQUIVALENT 6" 20 GAUGE METAL STUD FRAMING @16" O.C. W/ SOUND BATT INSULATION, ACOUSTICAL SEALANT BEAD BETWEEN PANELS AND STUDS, DABS 8" O.C. BETWEEN PANEL LAYERS ON STUD SIDE (3 LAYERS) 5/8" GYPSUM BOARD	N/A	N/A	65	RAL-TL-84-150



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

S6Q2

DESCRIPTION	ASSEMBLY	FIRE RATING	TESTING SOURCE	STC RATING	TESTING SOURCE
FIRE RATED PARTITION	ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS (2 LAYERS) 5/8" TYPE 'X' TILE BACKER BOARD, 5/8" TYPE 'X' GYPSUM BOARD ABOVE WHERE OCCURS 6" METAL STUD FRAMING @16" O.C. (2 LAYERS) 5/8" TYPE 'X' TILE BACKER BOARD, 5/8" TYPE 'X' GYPSUM BOARD ABOVE WHERE OCCURS ULTRA-COMPACT SURFACE TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS	2 HOUR	UL U425	49	USG-810940



NOTE: SEE CODE PLAN FOR CAVITY INSULATION LAYOUT.

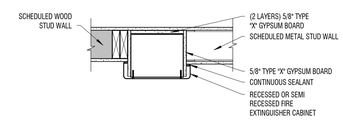
GENERAL NOTES

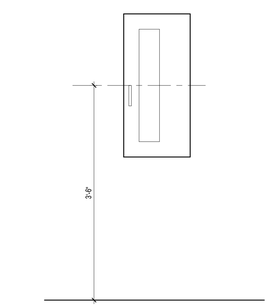
1. WALL TYPES ARE CALLEDOUT ON THE DIMENSION PLANS, ENLARGED PLANS, AND DETAILS.
2. WALL TYPE ASSEMBLIES ARE NOT INTENDED TO LOCATE INSULATION FOR ALL CONDITIONS. THE CODE PLANS ARE USED TO MORE CLEARLY INDICATE THE LOCATION FOR INSULATION FOR THERMAL OR SOUND ISOLATION. SEE CODE PLANS FOR A GENERAL LAYOUT AND DETAILS FOR ADDITIONAL OCCURANCES.
3. SEE SOURCE OF TESTED ASSEMBLIES FOR SEAM OVERLAPS, TAPING, AND FASTENING REQUIREMENTS OF RATED WALL TYPES.
4. WALL TYPE NAMES FOLLOW THESE STANDARDS:
   S=METAL STUD
   M=MASONRY
   F=INSULATED CONCRETE FORM

   # = SIZE OF WALL STRUCTURE
   ie: S3A=3-5/8" METAL STUD
   ie: M8 = 7-5/8" CONCRETE MASONRY UNIT

   LETTER = WALL SUBSTRATE
   A = GYP BD // GYP BD
   B = GYP BD // NONE
   C = GYP BD (#) // GYP BRD (#)
   D = GY BD + SHEATHING // GYP BD
   E = TILE+ GYP BD // GYP BD
   F = TILE + GYP BD // GYP BD + TILE
   G = TILE + GYP BD // NONE
   H = MULTIPLE GYP LAYERS + RC (SOUND WALL)
   K = GYP BD + PLYWOOD // GYP BD (TEACHING WALL)
   L = GYP + PLYWOOD // GYP BD + TILE (TEACHING WALL)
   M =GYP BD + RC // GYP BD (SOUNDWALL)
5. N = TILE + GYP BD // GYP BD (SOUNDWALL)
6. P = GYP + PLYWOOD // GYP BD (SOUNDWALL & TEACHING WALL)

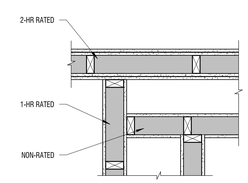
   RATED ASSEMBLIES:
   1=1 HOUR
   2=2 HOUR
   3=NOT USED
   4=SOUND WALL
7. FOR TILE WALLS SEE ASSEMBLY DESCRIPTION FOR TCNA # FOR WET, SEMI-WET, NON-WET WALLS
8. SEE DIMENSION PLANS FOR NOTES ON LOCATION AND USE OF HIGH IMPACT GYPSUM BOARD.





B6 FIRE EXTINGUISHER CABINET

1" = 1'-0" SEMI-RECESSED



NOTE:
1. HIGHER RATED ASSEMBLY SHALL BE MAINTAINED
2. IF CONSTRUCTION SEQUENCING REQUIRES ALL FRAMING TO BE INSTALLED PRIOR TO GYPSUM BOARD, PROPER CLEARANCE FOR GYPSUM BOARD SHALL BE MAINTAINED
3. USE EXTERIOR RATED GYPSUM BOARD IF INSTALLED PRIOR TO DRY-IN

A6 HEIRARCHY OF ASSEMBLIES

1" = 1'-0"

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST LOGAN, UT 84321
795 NORTH 400 WEST SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL
3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: NIELSON
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN M WILLIAMS
5/8/2024
LICENSED ARCHITECT

ASSEMBLIES - INTERIOR WALLS

A-612

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5/10/2024 1:06:37 PM

FINISH SCHEDULE

CARPET

MARK:	C1	C2	C3	C4	C5
TYPE:	WALK OFF CARPET	BROADLOOM	BROADLOOM	BROADLOOM	BROADLOOM
MANUFACTURER:	MILLIKIN	TARKETT	TARKETT	TARKETT	TARKETT
COLLECTION:	OBEX TILE	CALCULATIONS	CALCULATIONS	CALCULATIONS	CALCULATIONS
SERIES:	CUT/CONTOUR	CELESTIAL	CELESTIAL	CELESTIAL	CELESTIAL
COLOR:	CNC123-27 GREY W/ NAVY	LAKESIDE	SALSA VERDE	DUSKY	ASHEN
SIZE:	50 CM X 50 CM	-	-	-	-
INSTALL:	ASHLAR	-	-	-	-
NOTES:		BLUE	GREEN	LIGHT GRAY	DARK GRAY

MARK:	C6
TYPE:	BROADLOOM
MANUFACTURER:	TARKETT
COLLECTION:	CALCULATIONS
SERIES:	CELESTIAL
COLOR:	MUDDY WATERS
SIZE:	-
INSTALL:	-
NOTES:	CLASSROOMS

RESILIENT FLOORING

MARK:	RF1	RF2	RF3	RF4	RF5
TYPE:	VINYL	LVT	LVT	LVT	LVT
MANUFACTURER:	ROPPE	TARKETT	TARKETT	TARKETT	TARKETT
COLLECTION:	PROTECT - ALL FLOORING	EVENT ABSTRACT	EVENT ABSTRACT	EVENT ABSTRACT	EVENT ABSTRACT
SERIES:	-	MELANGE	MELANGE	MELANGE	MELANGE
COLOR:	LIGHT GRAY	ONYX	PIETRO	MIDNIGHT SKY	HYDRA
SIZE:	5' X 8'	18" X 18"	18" X 18"	18" X 18"	18" X 18"
INSTALL:	MONOLITHIC	QUARTER TURN	QUARTER TURN	QUARTER TURN	QUARTER TURN
NOTES:	KITCHEN	DARK GRAY	LIGHT GRAY	DARK BLUE	BLUE

MARK:	RF6	RF7	RF8	RF9	RF10
TYPE:	LVT	LVT	LVT	LVT	VINYL SHEET
MANUFACTURER:	TARKETT	TARKETT	TARKETT	TARKETT	TARKETT
COLLECTION:	EVENT ABSTRACT	CONTOUR ABSTRACT	EVEN PLANE	EVEN PLANE	PERFORMA
SERIES:	MELANGE	AURA	CEMENT	CEMENT	-
COLOR:	LILLY PAD	CUSTOM COLOR	MEDIUM GREY	CHEVRON MEDIUM GREY	GRAY SAND
SIZE:	18" X 18"	18" X 18"	19.7" X 19.7"	9.84" X 39.37"	SHEET
INSTALL:	QUARTER TURN	QUARTER TURN	QUARTER TURN	UNDIRECTIONAL	-
NOTES:	GREEN	TEAL		40%	SICK ROOM

MARK:	RF11	RF12	RF13	RF14	RF15
TYPE:	LVT	LVT	LVT	LVT	LVT
MANUFACTURER:	TARKETT	PATCRAFT	PATCRAFT	PATCRAFT	PATCRAFT
COLLECTION:	ID LATITUDE STONE& CONCRETE	ADMIX	ADMIX	ADMIX	ADMIX
SERIES:	-	-	-	-	-
COLOR:	3519 CHARCOAL	SCALLOP	SOAR	SAND DOLLAR	LUSH
SIZE:	18" X 18"	18" X 36"	18" X 36"	18" X 36"	18" X 36"
INSTALL:	QUARTER TURN	MONOLITHIC	MONOLITHIC	MONOLITHIC	MONOLITHIC
NOTES:	STAGE,PLATFORM	LIGHT GRAY	BLUE	WHITE	GREEN

MARK:	RF16	RF17	RF18	RF19
TYPE:	RUBBER	LVT	LVT	LVT
MANUFACTURER:	ROPPE	TARKETT	TARKETT	TARKETT
COLLECTION:	SYMMETRY	EVENT ABSTRACT	EVENT ABSTRACT	EVENT ABSTRACT
SERIES:	-	MELANGE	MELANGE	MELANGE
COLOR:	S123 CHARCOAL	SPLENDOR	LILLY PAD	LILLY PAD
SIZE:	-	18" X 18"	18" X 18"	18" X 18"
INSTALL:	-	QUARTER TURN	QUARTER TURN	QUARTER TURN
NOTES:	STAIR TREADS, 95 HAMMERED	PURPLE	GREEN	GREEN

TILE

MARK:	T1	T2	T3	T4	T5
MANUFACTURER:	DALTILE	DALTILE	DALTILE	CONSINTINO	CONSINTINO
COLLECTION:	KEYSTONES	KEYSTONES	KEYSTONES	DEKTON	DEKTON
SERIES:	-	-	-	INDUSTRIAL	INDUSTRIAL
COLOR:	DESERT GRAY D014	SUEDE GRAY D182	NAUTICAL BLUE D821	SONE	RADIUM
SIZE:	MOSAIC	MOSAIC	MOSAIC	5'2" H X 4'6W X 0.8 CM	5'2" H X 4'6W X 0.8 CM
INSTALL:	-	-	-	VERTICAL	VERTICAL
GROUT:	MAPEI 107 IRON, 3/16"	MAPEI 47 CHARCOAL, 3/16"	MAPEI 107 IRON, 3/16"	MAPE 107 IRON, 1/8"	MAPEI 10 BLACK, 1/8"
NOTES:	GIRL'S FLOOR TILE	BOY'S FLOOR TILE	BLUE ACCENT,WITH T2 MAPEI CHARCOAL, 3/16"	WAINSCOTING, FULL HEIGHT IN RESTROOMS	ACCENT

MARK:	T6	T7	T8
MANUFACTURER:	WOW	WOW	DALTILE
COLLECTION:	ELLE FLOOR	ELLE FLOOR	COLOR WHEEL
SERIES:	-	-	COLOR WHEEL LINEAR
COLOR:	CONCRETE	GRAPHITE	ARCTIC WHITE RECTANGLE, GLOSS
SIZE:	7.2" X 7.2" A03	7.2" X 7.2" A03	8" X 24"
INSTALL:	AS PER D3/ A-594	AS PER D3/ A-594	FULL HEIGHT
GROUT:	MAPEI 19 PEARL GRAY, 3/16"	MAPEI 10 BLACK, 3/16"	MAPEI 77 FROST, 3/16"
NOTES:	GIRL'S RESTROOM ACCENT WALL	BOY'S RESTROOM ACCENT WALL	KITCHEN, SERVING, A LA CARTE,DISHWASH

CONCRETE FINISH

MARK:	CF1
TYPE:	SEALED CONCRETE
MANUFACTURE:	-
COLOR:	MATCH COLOR-ACIER -244-C4
SHEEN:	WET LOOK
NOTES:	

TRANSITIONS

MARK:	TR1	TR2	TR3	TR4	TR5
TYPE:	NO-LIP RAMP	REDUCERS	TRANSITION	TRANSITION	NO-LIP RAMP
MANUFACTURER:	POWERHOLD	POWERHOLD	SCHLUTER		POWERHOLD
COLOR:	MF	EA	SATIN ANODIZED		MF
MODEL:	LVT 125	LVT 113	JOLLY		LVT 127
LOCATION:	LVT TO LVT	LVT TO CONCRETE	LVT TO TILE	CAFETORIUM	LVT TO WALK OFF CARPET
NOTES:				LVT TO RUBBER	

MARK:	TR6	TR7	TR8	TR9	TR10
TYPE:	SUBFLOOR LEVLER	TRANSITION		TRANSITION	TRANSITION COVE
MANUFACTURER:	ROPPE	SCHLUTER		SCHLUTER	SCHLUTER
COLOR:	-	METALLIC GREY		SATIN ANODIZED	
MODEL:	#304 1/8" X 12"	QUADEC 5/16"		QUADEC 3/8"	DILEX-AHK
LOCATION:	VESTIBULES	WHERE T4 OCCURS		WHERE T8 OCCURS	
NOTES:			WOOD TO LVT		

MARK:	TR11	TR12	TR13
TYPE:	RUBBER	REVEAL	RUBBER
MANUFACTURER:	JOHNSONITE	FRYREGLET	
COLOR:	40 BLACK	CLEAR ANODIZED	
MODEL:	SLN-40 A 1/4"	MILLWORK REVEAL F, 1"	
LOCATION:	PLATFORM D102	CAFETORIUM D101	PLATFORM D102
NOTES:	STAIRS	PROCSENIUM	PLATFORM EDGE

BASE

MARK:	B1	B2	B3	B4	B5
TYPE:	RUBBER	BROADLOOM	RUBBER	RUBBER	RUBBER
MANUFACTURER:	ROPPE	TARKETT	ROPPE	ROPPE	TARKETT
COLOR:	193 BLACK BROWN	C6	178 PEWTER	100 BLACK	VCOC 40 BLACK
SIZE:	6" H	4" H	4" H	4" H	4" H
STYLE:	STANDARD TOE BASE 5/8"	-	STANDARD TOE BASE 5/8"	STANDARD TOE BASE 5/8"	VENT COVE
NOTES:	AT WALK OFF CARPET	CLASSROOMS	LVT IN CLASSROOMS	BLACK, STAGE	GYM

MARK:	B6	B7
TYPE:	BROADLOOM	VINYL SHEET
MANUFACTURER:	TARKETT	TARKETT
COLOR:	C4	RF10
SIZE:	4" H	4" H
STYLE:	-	-
NOTES:		SICK ROOM

CEILING

MARK:	CL1	CL2
TYPE:	ACT	ACT
MANUFACTURER:	ARMSTRONG	ARMSTRONG
MODEL:	CALLA	KITCHEN ZONE
SIZE:	24" X 48"	24" X 48"
COLOR:	WHITE	WHITE
NOTES:		KITCHEN

PAINT

MARK:	P1	P2	P3	P4	P5
MANUFACTURER:	BENJAMIN MOORE	SHERWIN WILLIAMS	BENJAMIN MOORE	BENJAMIN MOORE	BENJAMIN MOORE
COLOR:	PAPER WHITE 1590	GRAY MATTERS	PADDINGTON BLUE 791	BABY FERN 2029-20	BAHAMIAN SEA BLUE 2055-40
SHEEN:	SATIN	SATIN	SATIN	SATIN	SEMI-GLOSS
NOTES:	WALLS SATIN, CEILINGS EGGSHELL	ACCENT	BLUE	GREEN	TEAL

MARK:	P6	P7	P8	P9
MANUFACTURER:	SHERWIN WILLIAMS	BENJAMIN MOORE	SHERWIN WILLAIMS	BENJAMIN MOORE
COLOR:	GENTIAN 6817	UNIVERSAL BLACK 2118-10	PURE WHITE 255-C1	GRAPHITE 1603
SHEEN:	SATIN	SATIN	EGGSHELL	SEMI-GLOSS
NOTES:	PURPLE	BLACK	WHITE CEILING	STAIR RAILS

EPOXY PAINT

MARK:	EP1	EP2	EP3
MANUFACTURER:	BENJAMIN MOORE	SHERWIN WILLIAMS	BENJAMIN MOORE
COLOR:	PAPER WHITE 1590	PURE WHITE	PADDINGTON BLUE 791
SHEEN:	SATIN	EGGSHELL	EGGSHELL
NOTES:	WHITE, WALLS	CEILING	

WOOD FLOOR

MARK:	WF1
MANUFACTURER:	-
COLLECTION:	-
SERIES:	-
COLOR/SPECIES:	MAPLE
SIZE:	-
INSTALL:	-
NOTES:	SEE SPECS

ACOUSTICAL WALL PANELS

MARK:	AW1	AW2	AW3	AW4	AW5
TYPE:	TECTUM	ACOUSTIC PET FELT	ACOUSTIC PET FELT	ACOUSTIC PET FELT	ACOUSTIC PET FELT
MANUFACTURER:	ARMSTRONG	ONNIT	ONNIT	ONNIT	ONNIT
SIZE:	SEE C1/ A-595	SEE A1/ A-595	SEE A1/ A-595	SEE A1/ A-595	SEE A1/ A-595
COLOR:	P3	BLUE JAY	LIME GREEN	BLUE ICE	AMETHYST
NOTES:	1" TECTUM PANEL	BLUE	GREEN	TEAL	PURPLE

MARK:	AW6	AW7	AW8	AW9
TYPE:	ACOUSIC PET FELT	ACOUSICT PANEL	FABRIC ACOUSTIC PANEL	FABRIC ACOUSTIC PANEL
MANUFACTURER:	ONNIT A03	ONNIT	A03 4" D	4" D
SIZE:	4' X 4'	SEE A1/ A-595	SEE D4/ A-415	A03 SEE D4/ A-415
COLOR:	DARK SILVER MARBLE	ARCTIC SEAL	FB1	FB2
NOTES:	TACKBOARDS			

MILLWORK FINISHES

MARK:	MF1	MF2	MF3	MF4
TYPE:	LAMINATE	LAMINATE	LAMINATE	LAMINATE
MANUFACTURER:	FORMICA	FORMICA	WILSONART	NEVAMAR
COLOR:	CAMEL ELM	CITADEL 1097-MC	VINTAGE CHEVRON Y0578K-28	RUSH F56001T
FINISH:	NATURAL GRAIN TEXTURE	MICROIDOT	GLOSSLINE FINISH	TEXTURED
NOTES:	BASE	UPPERS	STAGE PROSCENIUM	STAGE BASE

MILLWORK HARDWARE

MARK:	MH1
MANUFACTURER:	MSERO
COLOR:	BRUSHED CHROME
STYLE:	MADISON
SIZE:	4" CENTER TO CENTER
NOTES:	

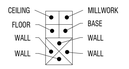
COUNTER TOPS

MARK:	CT1	CT2	CT3
TYPE:	LAMINATE	SOLID SURFACE	SOLID SURFACE
MANUFACTURER:	WILSONART	CONSENTINO - DEKTON	HANEX SOLID SURFACES
COLOR:	ARDEN PARK CARRERA	DOMOOS	ALASKA HL-055
FINISH:	ANTIQUE FINISH	-	-
EDGE:		3.0 CM	
BACKSPLASH:		4" H	
NOTES:		SCIENCE CLASSROOMS	RECEPTION DESK

GENERAL NOTES

1. ROOM FINISH TAGS FOR EACH ROOM REPRESENT TYPICAL FINISHES. SPECIFIC WALLS IN SELECTED AREAS MAY HAVE MULTIPLE FINISHES WHICH WILL BE INDICATED IN INTERIOR ELEVATIONS.
2. SEE INTERIOR ELEVATIONS FOR ADDITIONAL FINISH INFORMATION
3. SEE REFLECTED CEILING PLANS FOR ADDITIONAL FINISH INFORMATION
4. FOR FINISH LEGEND SEE A-691/692
5. FLOOR MATERIAL TRANSITIONS WILL OCCUR BELOW DOORS. U.N.O. SEE TYPICAL TRANSITION DETAILS ON SHEET A-594
6. POLISHED OR SEALED CONCRETE DOES EXTEND UNDER CASEWORK OR MILLWORK
7. FLOOR COVERING DOES NOT EXTEND UNDER MILLWORK OR CASEWORK, U.N.O.
8. FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF CASEWORK AND FINISH ASSEMBLIES
9. TILED WALLS TO BE FULL HEIGHT OF WALL, U.N.O.
10. FOR SIGN SCHEDULE SEE A-681
11. FOR TYPICAL FINISH INSTALL DETAILS NOT NOTED ON FINISH PLANS PLEASE SEE A-594

LEGEND



ROOM FINISH TAG

C1 — FINISH TAG - INDICATES SPECIFIC APPLIED FINISH

INDICATES FINISH IS APPLIED TO AREA BETWEEN ARROWS

INDICATES FINISH IS APPLIED TO FACE OF SURFACE(S)

RS — INDICATES A MANUAL ROLLER SHADE.

RS — INDICATES A MOTORIZED ROLLER SHADE.

INDICATES SIGNAGE LOCATION

CG — INDICATES CORNER GUARD

design west | architects
255 SOUTH 300 WEST
LOGAN, UT 84321
798 NORTH 400 WEST
SALT LAKE CITY, UT 84103

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN H. WILLIAMS
5/2/2024
LICENSED ARCHITECT

SCHEDULE - FINISH

A-691 - N

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FINISH SCHEDULE

MISCELLANEOUS

MARK:	MI1	MI2	MI3	MI4
TYPE:	TOILET PARTITIONS	POWDER COAT	POWDER COAT	VINYL
MANUFACTURER:	LAMINATING TECHNOLOGIES	RAL D2	RAL K7	
MODEL:	SOLID PHENOLIC	-	-	
COLOR:	WOOD BRUSHSTROKE	NAVY BLUE 360 40 40	VERKEHRSGRAU A RAL 7042	
SIZE:	-	-	-	
INSTALL:	-	-	-	
NOTES:	MATTE FINISH, FORMICA	BLUE	GRAY	CONFERENCE ROOM E108

WINDOW COVERINGS

MARK:	WN1	WN2
TYPE:	ROLLAR SHADE	ROLLAR SHADE
MANUFACTURER:	MECHO	MECHO
SIZE:	-	-
COLOR:	EQUINOX BLACKOUT, 0106 DARK	SOHO, 1615 SMOKE
NOTES:	GYM, 0% BLACKOUT	CLASSROOMS, 3%

WALL COVERINGS

MARK:	WC1
TYPE:	PLYWOOD
MANUFACTURER:	-
STYLE:	-
COLOR:	P1
NOTES:	

FABRIC

MARK:	FB1	FB2
TYPE:	POLYESTER	POLYESTER
MANUFACTURER:	GUILFORD OF MAINE	GUILFORD OF MAINE
PATTERN NAME:	FR701	FR701
COLOR:	-	-
BACKING:	-	-
FINISH:	-	-
NOTES:	BLUE	GRAY

FINISH COMBINATIONS

CEILING COMBINATIONS

MARK:	1A	1B	1C
LOCATION:	CAFETORIUM D101, MEDIA CENTER C115	ORCHESTRA D108 AND CHOIR/DRAMA D111	FEMALE F127 AND MALE F125
DESCRIPTION:	CL1 AND GYP	CL1 AND SOUND DIFFUSER PANELS	EP3 IN ENTRANCE TO IDICATED LINE, EP2 REMAIN CEILING

WALL COMBINATIONS

MARK:	2A	2B	2C	2D	2E
LOCATION:	VESTIBULE E124, CORRIDOR F117	CORRIDOR D106	RAMP D105	JANITOR F124, CUSTODIAN C119	STAIR C107
DESCRIPTION:	T4 WAINSCOTING 5'-3" H, P1 TO 7'-8" H THEN P2 ABOVE	T4 WAINSCOTING 5'-3" H, P1 ABOVE, AND P2 20'-2" FROM WAINSCOTING UP TO DECK , SEE INTERIOR ELEVATIONS A03	T4 WAINSCOTING 5'-3" H AND P7 ABOVE	EP1 ON WALLS, T8 UP TO 4'-0" H WHERE NOTED ON FINISH PLAN	T4 WAINSCOTING 5'-3" H AND P3 ABOVE

MARK:	2F	2G	2H	2I
LOCATION:	STAGE,PLATFORM D102	CORRIDOR D107, CORRIDOR F102	CAFETORIUM D101	GYM/NASIUM E104
DESCRIPTION:	5'-3" PLYWOOD WAINSCOT PAINTED P7 AND P7 ABOVE	T4 WAINSCOTING 5'-3" H, P1 ABOVE TO 20'6" H @ CORRIDOR D106 AND 8'-7"H @ CORRIDOR F102,THEN P2 ABOVE	T4 WAINSCOT 5'-3" H AND P1 ABOVE, MF3 @ PROSCENIUM	T4 WAINSCOTING 10'-6" H AND P1 ABOVE, 15'-9" H @ BLEACHER WALL AND P1 ABOVE A03

FLOOR COMBINATIONS

MARK:	3A	3B	3C	3D	3E
LOCATION:	CORRIDOR E109	RECEPTION E111	RECEPTION E107	TOILET E117	TOILET E118
DESCRIPTION:	MIX OF C1, RF2, RF3, RF4, RF5, AND RF6	MIX OF C3, C4, AND C5	MIX OF C4,C5, AND C2	T1 WITH A 1'-0" STRIPE OF T3	T2 WITH A STRIPE OF T3

MARK:	3F	3G	3H	3I	3J
LOCATION:	CORRIDOR D106, D107, F102	CHOIR/DRAMA D111	ORCHASTRA D108	CAFETORIUM D101	GIRL'S LOCKER ROOM F120
DESCRIPTION:	MIX OF RF2, RF3, RF4, RF5, AND RF6	MIX OF C4, C6, AND RF8	C6 AND RF8	RF12, RF13, RF14, AND RF15	RF3 AND RF5 STRIPE

MARK:	3K	3L	3M	3N	3O
LOCATION:	BOY'S LOCKER ROOM	MEDIA CENTER	SCIENCE CLASSROOMS	CORRIDOR A217, B220, C223	CORRIDOR A215, B222,C220
DESCRIPTION:	RF3 AND RF4 STRIPE	C2 AND C4	RF8 AND RF9	MIX OF RF2, RF3, RF5, RF6, AND RF7	MIX OF RF2, RF3, RF5, RF6, AND RF17

MARK:	3P	3Q
LOCATION:	CORRIDOR C205	CORRIDOR A225
DESCRIPTION:	MIX OF RF3, RF5, RF7, AND RF17	RF2, RF3, AND RF5

MILLWORK GROUPING

MARK:	4A	4B	4C	4D	4E
UPPER CABINETS:	MF2	-	-	MF2	-
BACKSPLASH:	CT1 4" H	-	-	CT2 4" H	-
COUNTERTOP:	CT1	CT3	-	CT2	
FRONT EDGE STYLE:	SQUARE	MITERED EDGE	SQUARE	3.0 CM	
BASE CABINETS:	MF1	MF1	MF1	MF1	
HARDWARE:	MH1	-	MH1	MH1	
FRAME CONSTRUCTION:	FRAMELESS	-	FRAMELESS	FRAMELESS	
DOOR INTERFACE STYLE:	FLUSH OVERLAY	-	FLUSH OVERLAY	FLUSH OVERLAY	
NOTES:	CUBBIES MF1,RECEPTION E107	T5 ACCENT, RECEPTION DESK	CUBBIES MF1	SCIENCE CLASSROOMS	BAND ROOM

DOOR FINISHES

MARK:	5A	5B
DOOR FINISH:	P2	MINWAX CLASSIC GRAY 271
FRAME FINISH:	P2	P2
HARDWARE COLOR:	BRUSHED CHROME	BRUSHED CHROME
NOTES:	HOLLOW METAL	WOOD

STAIR FINISHES

MARK:	6A
RISER FINISH:	RF16
TREAD FINISH:	RF16
STRINGER FINISH:	P9
GUARDRAIL FINISH:	P9
HANDRAIL FINISH:	P9
NOTES:	

design west | architects
255 SOUTH 300 WEST
759 NORTH 400 WEST
LOGAN UT 84321
SALT LAKE CITY UT 84103

NIBLEY MIDDLE SCHOOL
3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03

PROJECT #:	123006
DRAWN BY:	Author
CHECKED BY:	RIGBY
ISSUED:	05.02.2024

STATE OF UTAH
STEPHEN M WILLIAMS
5/2/2024
LICENSED ARCHITECT

CONSTRUCTION DOCUMENTS

SCHEDULE - FINISH

A-692 - N

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ADDENDUM 3

DATE: May 15, 2024

PROJECT NO: 23717

PROJECT: Nibley Middle School

The following revision, additions, deletions, and/or items of clarification shall hereby be included as an integral part of the Contract Documents for the above-listed project and shall be fully binding. All other requirements of the original plans and specification shall remain in effect in their respective order.

DIVISION – 22 & 23

DRAWINGS

SHEET – M111.C
1. Add supply air to Storage C113 and Storage C110 as shown. See attached.

SHEET - M111.D
1. Add keyed note 1 as shown. See attached.

SHEET - M111.F
1. Add keyed note 1 as shown. See attached.

SHEET - M112.A
1. Add keyed note 1 as shown. See attached.
2. Modify duct riser in shaft as shown. See attached.

SHEET – M112.B
1. Add exhaust to Custodian B213 as shown. See attached.

SHEET - M112.C
1. Add keyed note 2 as shown. See attached.

SHEET - M401
1. Adjust ductwork as shown. See attached.

SHEET - M402
1. Add motorized dampers as shown. See attached.
2. Add keyed notes to pads as shown. See attached.

SHEET - M403
1. Add motorized dampers as shown. See attached.
2. Add keyed notes to pads as shown. See attached.

SHEET - M504
1. Modify Rooftop Unit details as shown. See attached.

SHEET - M505
1. Add Make-Up Air Handler Detail as shown. See attached.

SHEET - M506
1. Add note to Rooftop Unit Curb On Condrete Pad Detail as shown. See attached.
2. Change curb height on Roof Hood Detail as shown. See attached.
3. Remove detail 5 as shown. See attached.

SHEET - M601
1. Update Cooling Tower Schedule. See attached.

SHEET - M602
1. Update Fan Coil Schedules as shown. See attached.

SHEET - M603
1. Update Sound Trap Schedule as shown. See attached.

SHEET - M707
1. Remove this sheet.

SHEET - MP111.C
1. Add hydronic piping as shown. See attached.

SHEET - MP401
1. Remove extra keyed notes as shown. See attached.

SHEET - MP402
1. Tag FC-1.

SHEET - MP403
1. Add note as shown. See attached.
2. Add hydronic piping as shown. See attached.

SHEET - MP702
1. Modify piping as shown. See attached.

SHEET - P111.A
1. Locate the FDC as shown. See attached.

SHEET - P-111.B
1. Add domestic water piping as shown. See attached.

SHEET - P-111.C
1. Move floor drain in chiller room as shown. See attached.
2. Add condensate drain to fan coil unit as shown. See attached.

SHEET - P-111.D
1. Adjust size of NG pipe. See attached.

SHEET - P401
1. Modify gas piping as shown. See attached.
2. Add condensate drain to fan coil unit as shown. See attached.

SHEET - P407
1. Modify gas piping as shown. See attached.
2. Modify keyed notes as shown. See attached.
3. Modify domestic water piping as shown. See attached.

SHEET - P502
1. Modify detail 8 Gravel Sump Detail as shown. See attached.

SPECIFICATIONS

SECTION - Index
1. Add Section 236500 Cooling Towers.

SECTION - 232112 Hydronic Piping
1. Add section J to Part 2.2 as follows:

J. Grooved Mechanical-Joint Fittings and Couplings:

1. Manufacturers: Subject to compliance with requirements, provide **products by the following provide products by one of the following**:

   a. Victaulic Company.
   b. Anvil International, Inc. (Gruvlok)

2. Joint Fittings: ASTM A 536, Grade 65-45-12 ductile iron; ASTM A 53, Type F, E, or S, Grade B factory-fabricated steel; or ASTM A 234, Grade WPB steel fittings with grooves or shoulders designed and constructed to accept grooved-end couplings.
3. Couplings: Two Ductile- housing and synthetic rubber gasket of central cavity pressure-responsive design; with ASTM A449 electroplated steel nuts and bolts to secure grooved pipe and fittings. Couplings shall comply with ASTM F1476 Standard Specification for the Performance of Gasketed Mechanical Couplings for Use in Piping Applications.
   a. Rigid Type: Coupling housings shall be cast with offsetting, angle-pattern bolt pads to provide joint rigidity and support and hanging in accordance with ANSI B31.1 and B31.9.
   b. Gasket: High temperature EPDM gasket, suitable for water service to +250 deg F, without use of special lubricants.
   c. Flexible Type: For use in locations where vibration attenuation and stress relief are required, and for the elimination of flexible connectors.
   d. 14" and Larger: Two –segment coupling, with lead-in chamfer on housing key and a wide-width gasket having a center-leg.

A. Combinations of grooved mechanical-joint couplings and short nipples may also be used.

SECTION - 236500 Cooling Towers
1. Add section 236500 Cooling Towers.

SECTION - 237313 Custom Air-Handling Units
1. Change description from "Custom indoor air-handling units" to "Custom rooftop air-handling units" in section 1.2 A. 1.
2. Add Electrically commutated motors to section 2.3 C.
3. Remove singe point power connection from section 2.4 J. 1.
4. Change the control panel to NEMA 4 Outdoor in section 2.4 J. 2.
5. Delete section 2.5.
6. Delete section 2.10.
7. Add "Piping shall be installed in an accessible cabinet to protect piping." to section 3.3 B.

PRIOR APPROVALS

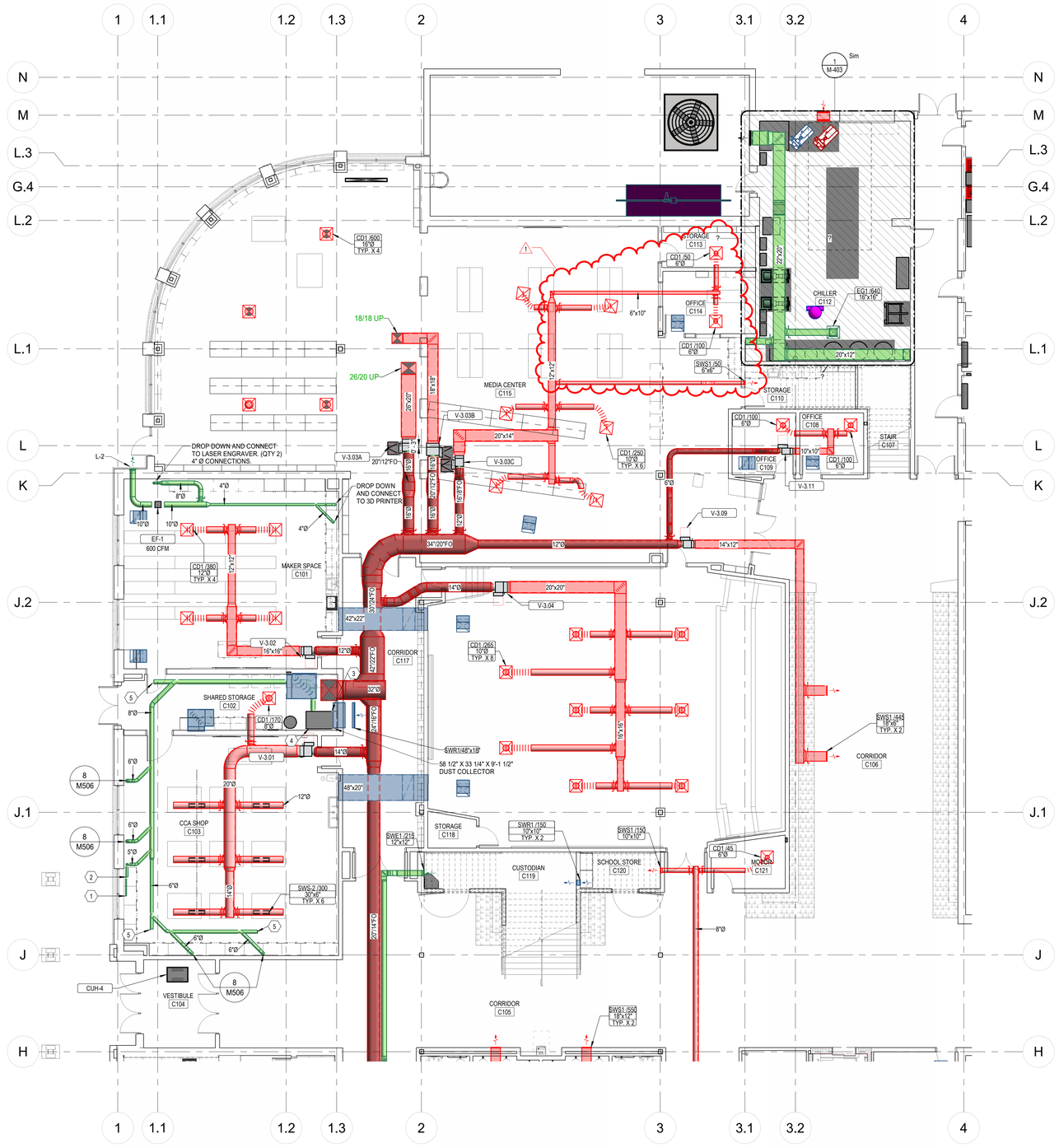
The following manufacturers, trade names and products are allowed to bid on a name brand only basis with the provision that they completely satisfy all and every requirement of the drawings, specifications and all addenda shall conform to the design, quality and standards specified, established, and required for the complete and satisfactory installation and performance of the building and all its respective parts.

Item	Manufacturer	Comments
Expansion Tank	Wessels	Approved
Calibrated Balancing Valves	Nexus	Approved

Air Separators	Wessels/Flamco	Not Approved
Condensing Boilers	Riello	Approved
Water Cooled Chillers	Quantech	Not Approved
Split Systems	Fujitsu	Approved
Air Handlers	Carrier	Approved
Coils	RAE Coils	Approved
Cooling Tower Filters	PEP Amiad	Not Approved
Boilers	Patterson Kelly ST5000	Not Approved
Heat Exchangers	Sondex	Approved
Seismic & Vibration	SRS	Approved
Cabinet Unit Heaters	Rittling	Approved
Check Valves	Titan	Approved
Y-Strainers	Titan	Approved
Thermometers	Miljoco	Approved
Domestic Water Heaters	Laars	Not Approved
Domestic Water Storage Tanks	Laars/Niles	Approved
Make-up Air Units	Captive Air	Approved
Split Systems	LG	Approved
VAV	Price	Approved
Fans	Twin City Fans	Approved
Pressure Relief Dampers	United Enertech	Approved
Barometric Relief Dampers	United Enertech	Approved
Duct Mounted Access Doors	United Enertech	Approved
Flexible Ducts	JP Lamborn	Approved
Custom Air Handling Units	Scott Springfield Mfg.	Not Approved
Package Indirect Fire Outdoor MAU	Thermo Tek	Not Approved
Ductless Fan Coil Units	Mitsubishi	Approved
Cabinet Unit Heaters	Berko	Not Approved
Cooling Tower	BAC	Approved
Condensing Boiler	RBI	Not Approved
Rotary Screw Water Chiller	Dunham Bush	Not Aproved
Fan Coil Units	Whalen	Not Approved
Air Separator	Patterson	Approved
Condensate Neutralizer	JJM	Approved
Chemical Feed System	Patterson	Approved
Expansion Tank	Patterson	Approved
Air Coils	Nationwide Coil	Not Approved
Glycol Fee System	Patterson	Approved
Heat Exchangers	Polaris	Approved
Cabinet Unit Heaters	Beacon Morris, Sigma	Approved
VFD	Franklin Electric	Not Approved
Air Vent	Watson McDaniel	Approved
Water Softener	Water Controls Corp.	Not Approved

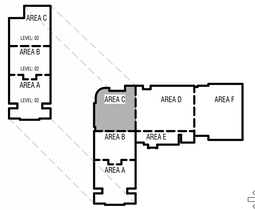
KEYNOTES

1. CONNECT 2" HOSE TO OSCILLATING SANDER
2. CONNECT 4" HOSE TO BELT SANDER
3. CONNECT TO 8" DUST COLLECTOR CONNECTION POINT
4. OWNER PROVIDED CONTRACTOR INSTALLED DUST COLLECTOR
5. SAWDUST DUCT CLEANOUT



1 M-111.C MECHANICAL HVAC PLAN - LEVEL 01 - AREA C
1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
759 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

VBFA
40 W. Cache Valley Blvd.
Building 1, Suite B
Logan, UT
O: (435)752-5081
www.vbfa.com
VBFA Project #: 23717

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	Author
CHECKED BY:	LW
ISSUED:	05/02/2024

LICENSED PROFESSIONAL ENGINEER
No. 8386445-2202
JACEDIAH L. BRAMAN
STATE OF UTAH

MECHANICAL HVAC PLAN - LEVEL 01 - AREA C

M-111.C

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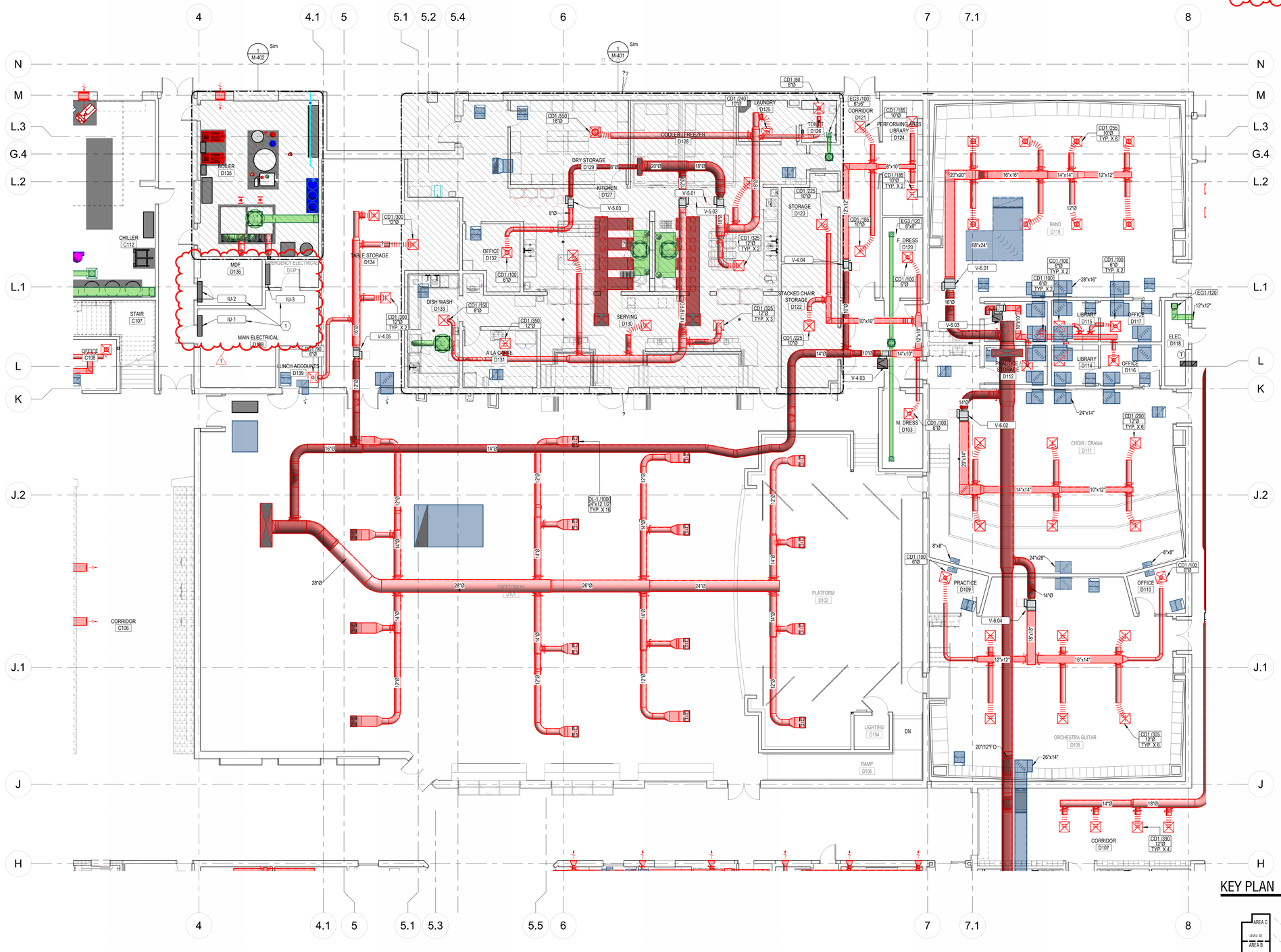
5/15/2024 1:01:03 PM

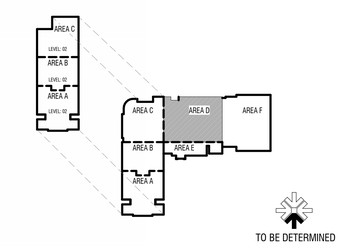
KEYNOTES

1 PIPING INDOOR UNIT TO OUTDOOR UNIT PER MANUFACTURER'S RECOMMENDATIONS. SEAL ROOF PENETRATIONS WATER TIGHT.



1 M-111.D MECHANICAL HVAC PLAN - LEVEL 01 - AREA D
1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST LOGAN, UT 84321
759 NORTH 400 WEST SALT LAKE CITY, UT 84103

VBFA
40 W. Cache Valley Blvd.
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Logan, UT
O: (435)752-5081
www.vbfa.com
VBFA Project #: 23717

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	Author
CHECKED BY:	LW
ISSUED:	05/02/2024

LICENSED PROFESSIONAL ENGINEER
NO. 6369843-2202
JEREDIAH L. STANGER
STATE OF UTAH

MECHANICAL HVAC PLAN - LEVEL 01 - AREA D

M-111.D

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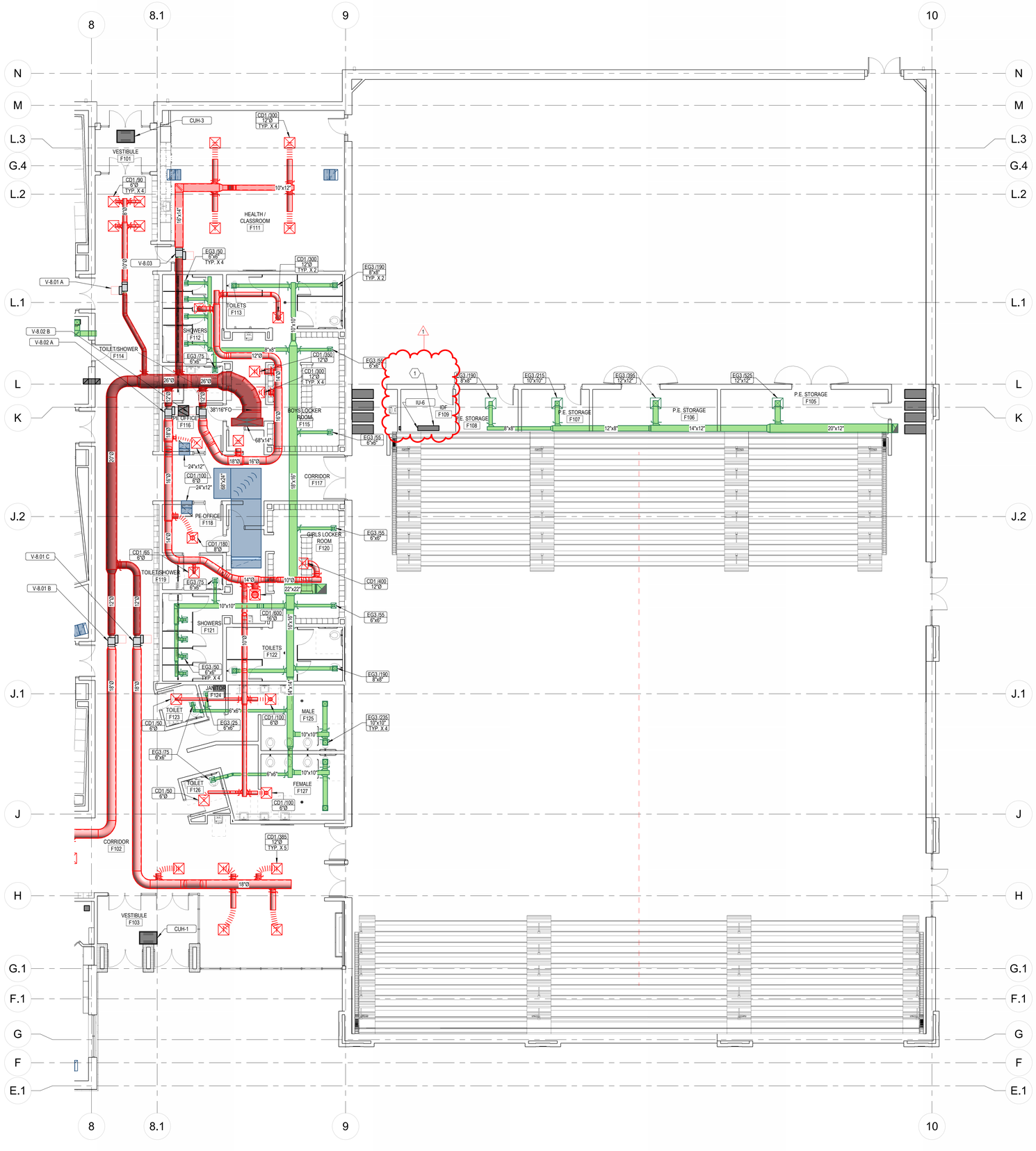
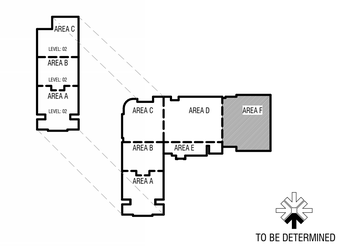


1 M-111.F MECHANICAL HVAC PLAN - LEVEL 01 - AREA F
1/8" = 1'-0"

KEYNOTES

1 PIPING INDOOR UNIT TO OUTDOOR UNIT PER MANUFACTURER'S RECOMMENDATIONS. SEAL ROOF PENETRATIONS WATER TIGHT.

KEY PLAN



CONSTRUCTION DOCUMENTS

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255 SOUTH 300 WEST
799 NORTH 400 WEST
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SALT LAKE CITY UT 84103

VBFA
40 W. Cache Valley Blvd.
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Logan, UT
O: (435)752-5081
www.vbfa.com
VBFA Project #: 23717

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	Author
CHECKED BY:	LW
ISSUED:	05/02/2024

REGISTERED PROFESSIONAL ENGINEER
No. 6390445-2202
MEREDIAN L. JENKINS
STATE OF UTAH

MECHANICAL HVAC PLAN - LEVEL 01 - AREA F

M-111.F

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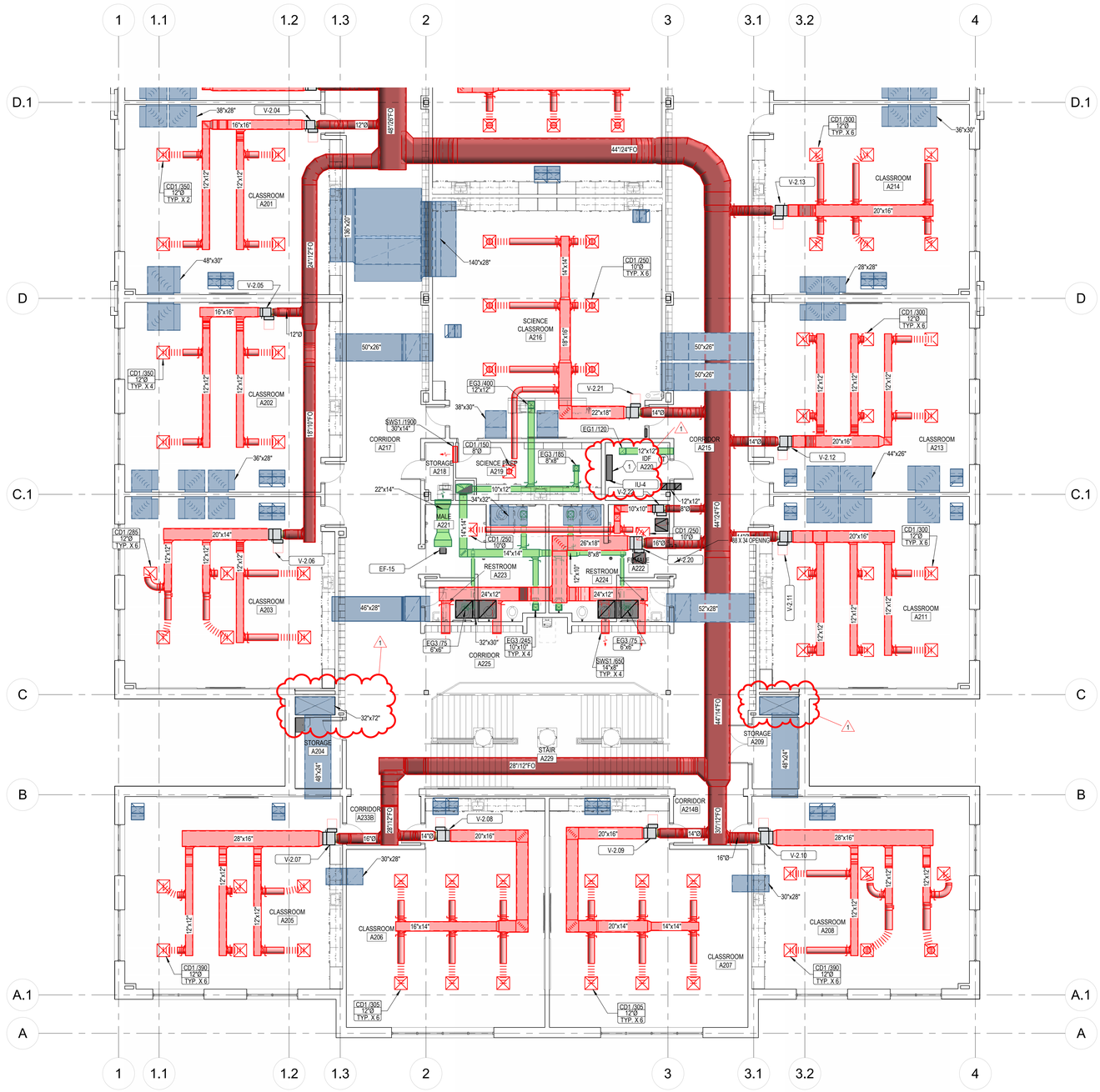
KEYNOTES

1 PIPING INDOOR UNIT TO OUTDOOR UNIT PER MANUFACTURER'S RECOMMENDATIONS. SEAL ROOF PENETRATIONS WATER TIGHT.



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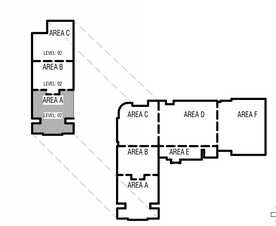

TO BE DETERMINED

CONSTRUCTION DOCUMENTS

1 M-112.A MECHANICAL HVAC PLAN - LEVEL 02 - AREA A
1/8" = 1'-0"

design west | architects
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www.vbfa.com
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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #: 23717
DRAWN BY: Author
CHECKED BY: LW
ISSUED: 05/02/2024

LICENSED PROFESSIONAL ENGINEER
No. 6350640-2202
JEREDIAH L. STEWART
STATE OF UTAH

MECHANICAL HVAC PLAN - LEVEL 02 - AREA A

M-112.A

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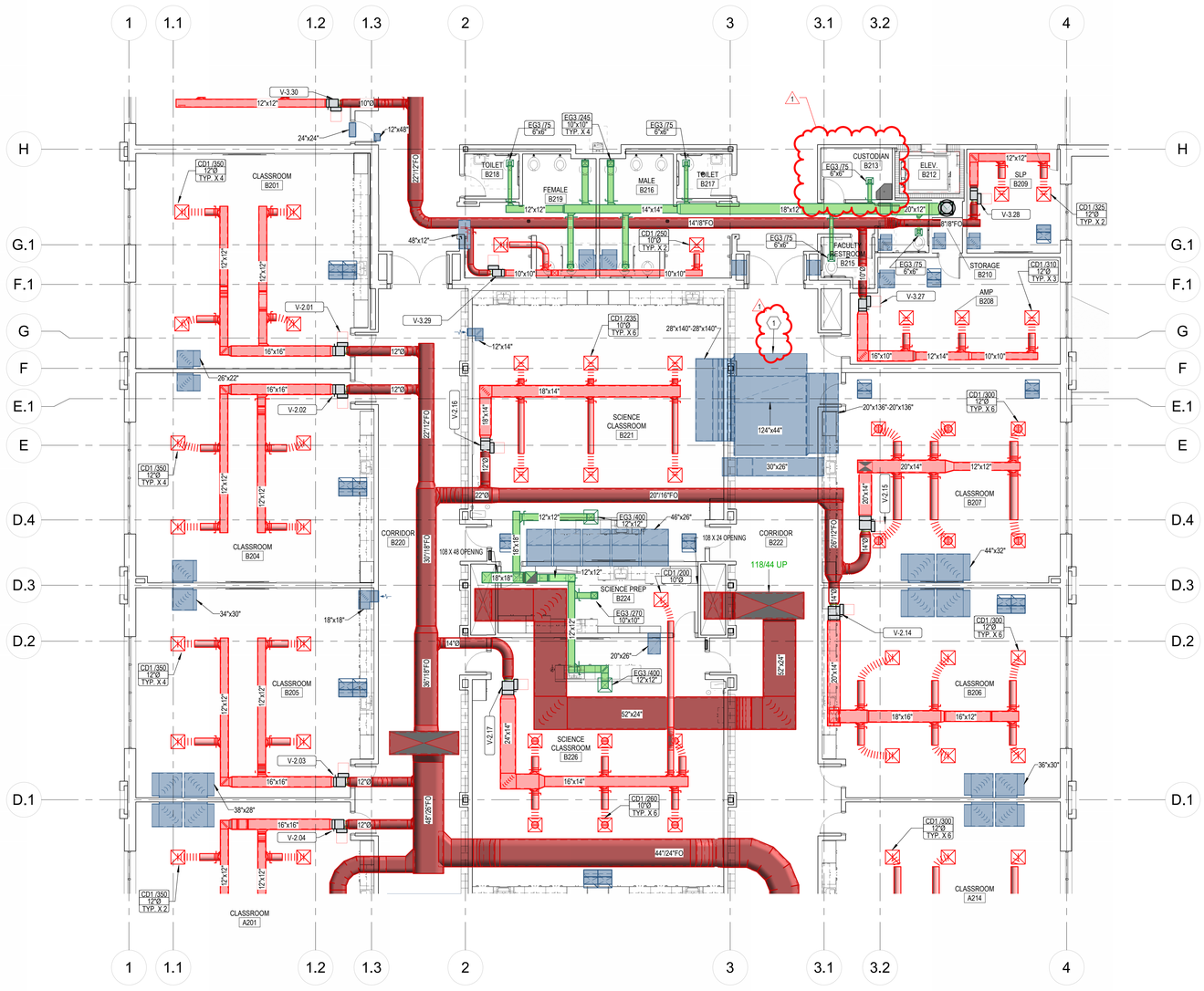
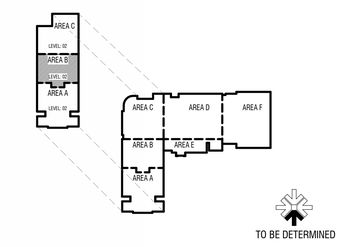
KEYNOTES

1 RETURN DUCT PLENUM CASING SHALL BE 10 GAUGE.



1 M-112.B MECHANICAL HVAC PLAN - LEVEL 02 - AREA B
1/8" = 1'-0"

KEY PLAN



CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
799 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #: 23717
DRAWN BY: Author
CHECKED BY: LW
ISSUED: 05/02/2024

REGISTERED PROFESSIONAL ENGINEER
No. 8389445-2202
JEDIAH L. WHITAKER
STATE OF UTAH

MECHANICAL HVAC PLAN - LEVEL 02 - AREA B

M-112.B

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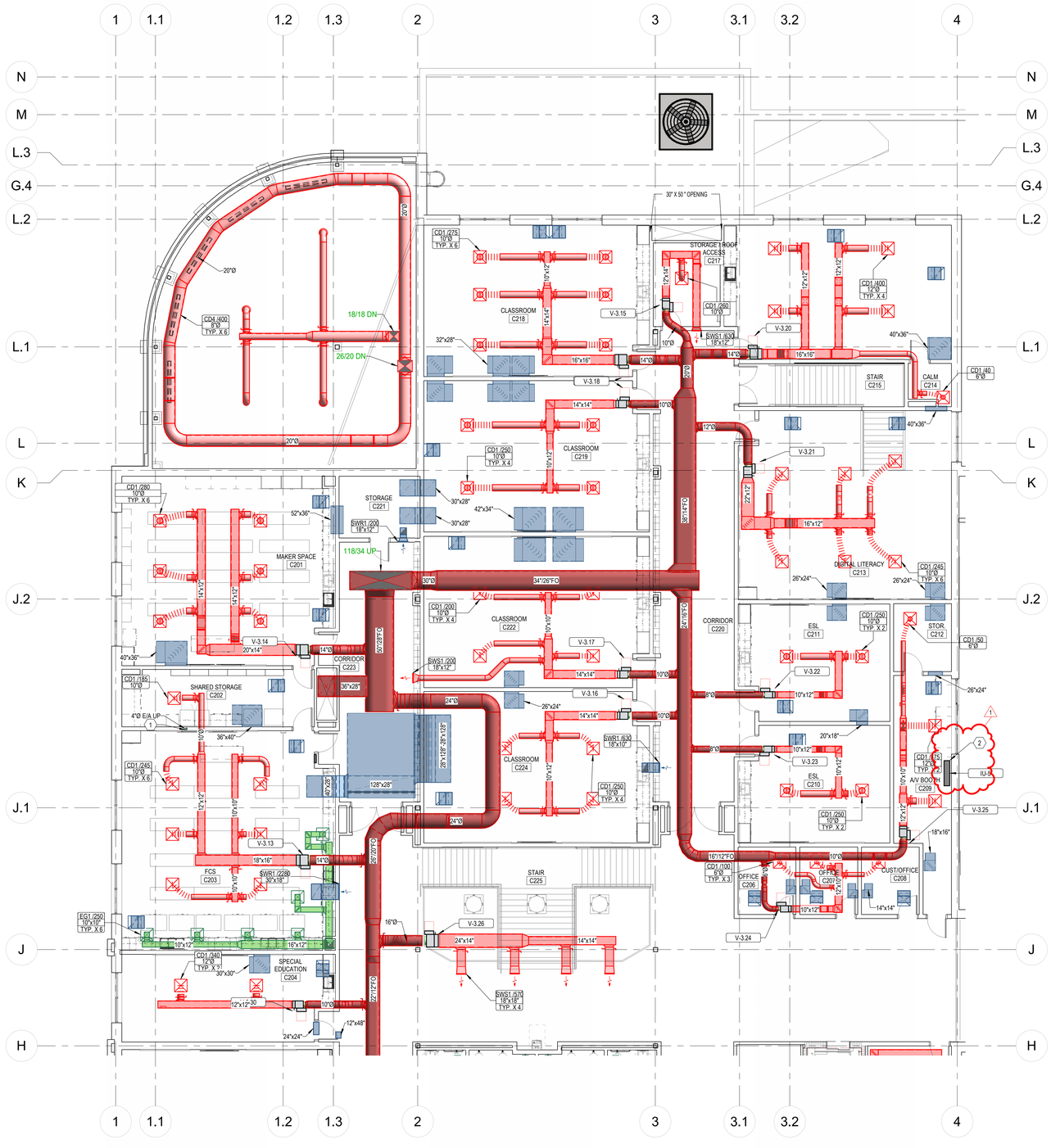
5/15/2024 2:40:31 PM

KEYNOTES

1 INSTALL A RECESSED DRYER VENT BOX IN THE WALL FOR THE CLOTHES DRYER. BOX SHALL BE CENTERED ON THE DRYER AND THE BOTTOM OF THE BOX SHALL BE AT FLOOR LEVEL.

2 PIPING INDOOR UNIT TO OUTDOOR UNIT PER MANUFACTURER'S RECOMMENDATIONS. SEAL ROOF PENETRATIONS WATER TIGHT.



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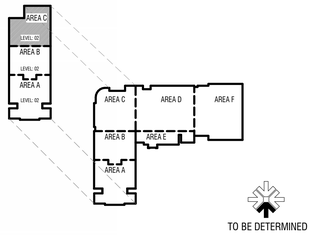

1 M-112.C MECHANICAL HVAC PLAN - LEVEL 02 - AREA C
1/8" = 1'-0"

CONSTRUCTION DOCUMENTS

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255 SOUTH 300 WEST
799 NORTH 400 WEST
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SALT LAKE CITY, UT 84103

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VBFA Project #: 23717

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #: 23717
DRAWN BY: Author
CHECKED BY: LW
ISSUED: 05/02/2024

LICENSED PROFESSIONAL ENGINEER
No. 8389445-2202
MEDIAN L. WINKLER
STATE OF UTAH

MECHANICAL HVAC PLAN - LEVEL 02 - AREA C

M-112.C

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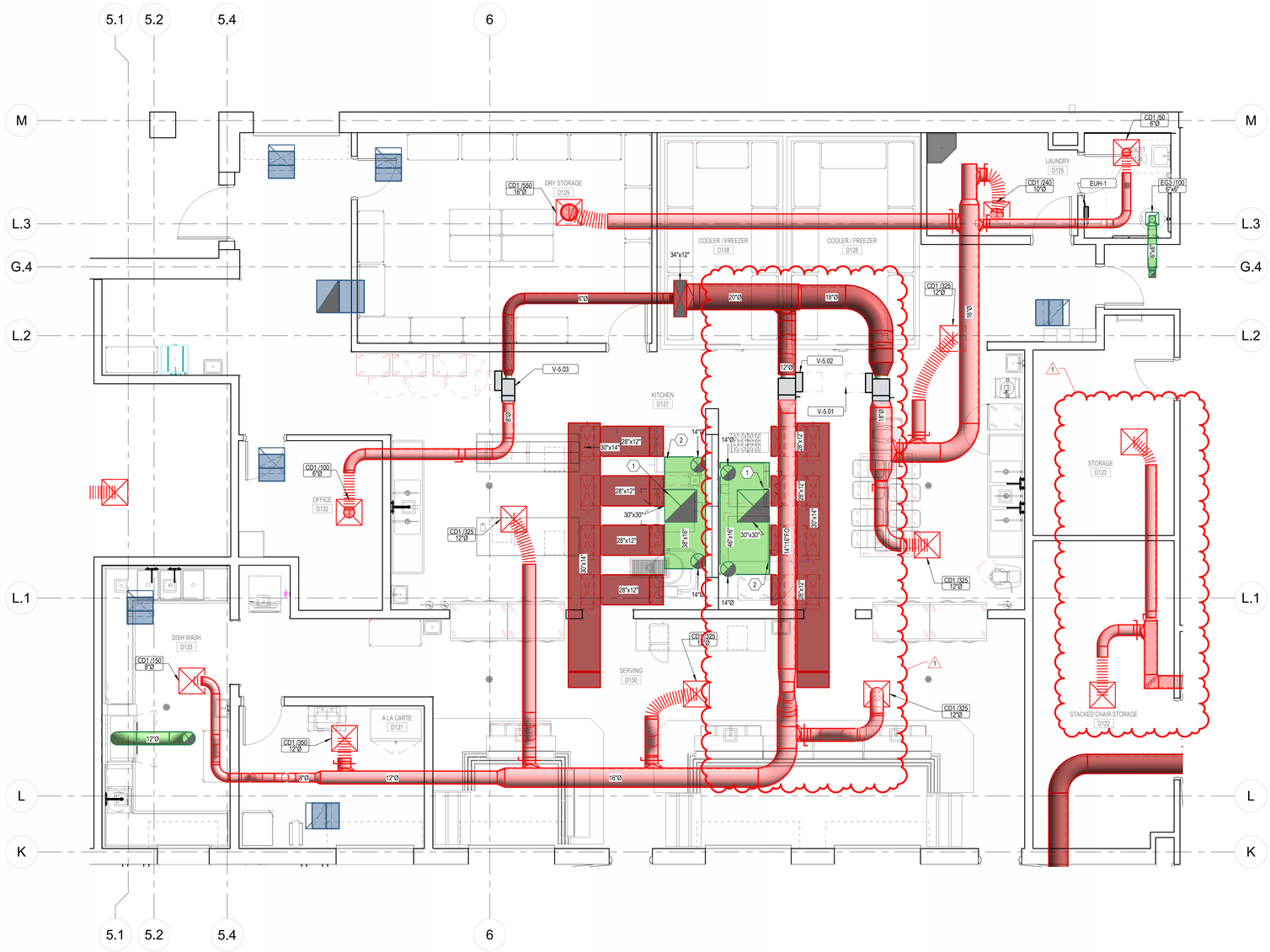
5/15/2024 12:01:25 PM

KEYNOTES

1. GREASE DUCT UP TO EXHAUST FAN ABOVE.
2. GREASE DUCT TEST: ALL DUCT SERVING TYPE 1 EXHAUST HOODS SHALL BE LEAK TESTED IN THE PRESENCE OF CODE OFFICIAL. TESTING SHALL BE CONDUCTED PRIOR TO WRAPPING OR CONCEALING THE DUCTWORK. THE LEAK TEST SHALL BE A LIGHT TEST OR APPROVED ALTERNATE IN ACCORDANCE WITH THE 2021 IMC SECTION 506.3.2.5. THE LEAK TEST SHALL BE PERFORMED ON THE ENTIRE DUCT SYSTEM, INCLUDING THE DUCT HOOD CONNECTION.



1 M-401 ENLARGED MECHANICAL HVAC PLAN - KITCHEN
1/4" = 1'-0"

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
759 NORTH 400 WEST
LOGAN UT 84321
SALT LAKE CITY UT 84103

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O: (435)752-5081
www.vbfa.com
VBFA Project #: 23717

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	Author
CHECKED BY:	LW
ISSUED:	05/02/2024

REGISTERED PROFESSIONAL ENGINEER
No. 8389445-2202
LOREDIAN L. WINKLER
STATE OF UTAH

MECHANICAL
ENLARGED VIEWS

M-401

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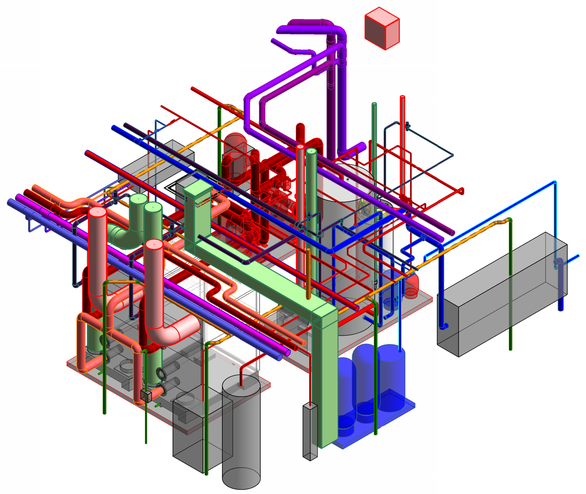
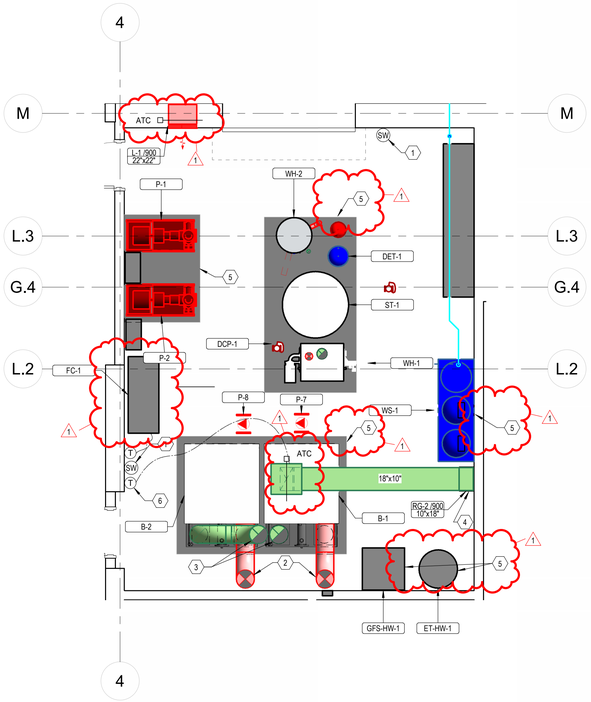
5/15/2024 12:01:26 PM

KEYNOTES

1. EMERGENCY BOILER ROOM SHUTDOWN SWITCH. SWITCH SHALL BE INTERLOCKED WITH ALL GAS FIRED EQUIPMENT IN BOILER ROOM FOR SHUTDOWN. PROVIDE LIFT OPEN CLEAR COVER.
2. 14" COMBUSTION AIR INTAKE DUCT. FLASH AND COUNDERFLASH INTAKE DUCT THRU ROOF. INSTALL WITH GOOSENECK FITTING, IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES TO PREVENT MOISTURE FROM ENTERING DUCT. INTAKE SHALL BE INSTALLED NO LESS THAN 1-FOOT ABOVE POTENTIAL SNOW ACCUMULATION, AND NO LESS THAN 4-FT HORIZONTAL AND 4-FT VERTICAL DISTANCE FROM BOILER FLUE OUTLETS.
3. 14" BOILER FLUE THRU ROOF.
4. MACHINERY ROOM EXHAUST DUCT. DROP DOWN AGAINST WALL AND TERMINATE 1'-0" AFFL.
5. ALL EQUIPMENT IN MECHANICAL ROOM TO BE INSTALLED ON 6" HOUSEKEEPING PADS.
6. MACHINERY ROOM VENTILATION FAN WITH VARIABLE SPEED MOTOR, INTERLOCK WITH THERMOSTAT.



2 / M-402 ISOMETRIC - MECHANICAL HVAC & MECHANICAL PIPING PLAN - BOILER ROOM



1 / M-402 ENLARGED MECHANICAL HVAC PLAN - BOILER ROOM
1/4" = 1'-0"

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST LOGAN, UT 84321
799 NORTH 400 WEST SALT LAKE CITY, UT 84103

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40 W. Cache Valley Blvd.
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Logan, UT
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VBFA Project #: 23717

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	Author
CHECKED BY:	LW
ISSUED:	05/02/2024

REGISTERED PROFESSIONAL ENGINEER
No. 8386644-2202
MEDIAN L. WINTERS
STATE OF UTAH

MECHANICAL
ENLARGED VIEWS

M-402

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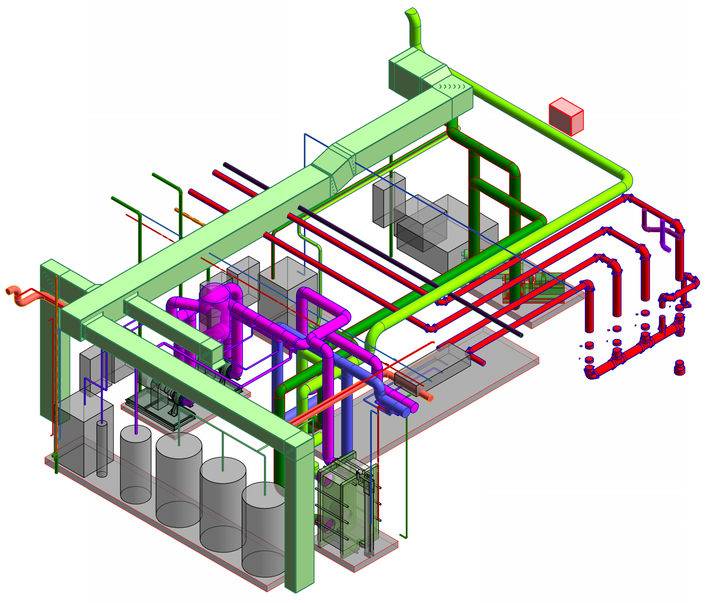
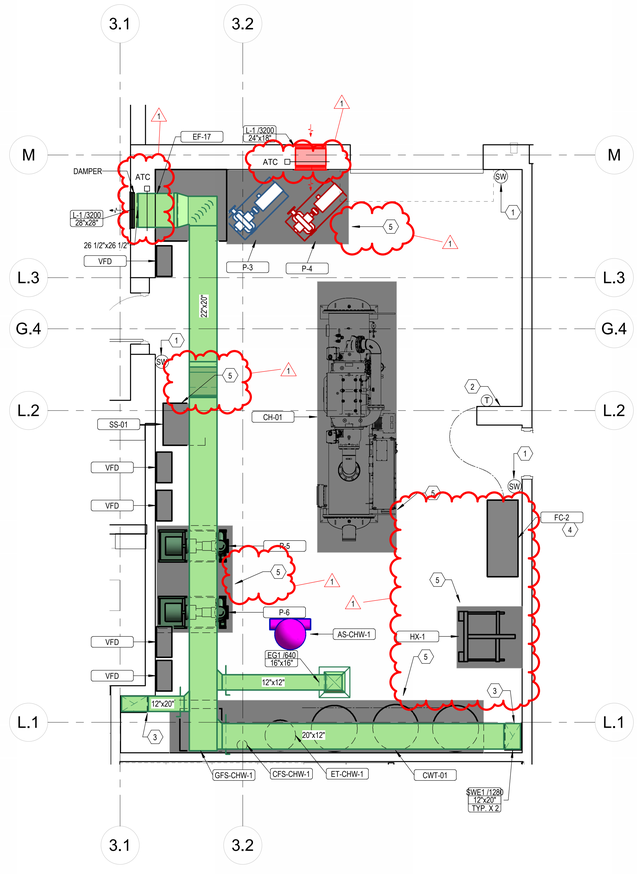
5/15/2024 12:01:34 PM

KEYNOTES

1. EMERGENCY CHILLER SHUT-OFF SWITCH SHALL BE INTERLOCKED WITH ALL EQUIPMENT IN CHILLER ROOM FOR SHUT-OFF. PROVIDE LIFT OPEN CLEAR COVER.
2. REFRIGERANT MONITOR SYSTEM. MOUNT ON WALL NEAR CHILLER. SAMPLING POINT SHALL BE PIPED TO A POINT NEAR THE CHILLER AT AN ELEVATION OF 18-INCHES ABOVE FINISHED FLOOR.
3. MACHINERY ROOM EXHAUST DUCT. DROP DOWN AGAINST WALL AND TERMINATE 1'-0" AFFL.
4. HANG FROM TRUSSES. MOUNT HORIZONTALLY.
5. ALL EQUIPMENT IN MECHANICAL ROOM TO BE INSTALLED ON 6" HOUSEKEEPING PADS.



2 / M-403 ISOMETRIC - MECHANICAL HVAC & MECHANICAL PIPING PLAN - CHILLER ROOM



1 / M-403 ENLARGED MECHANICAL HVAC PLAN - CHILLER ROOM
1/4" = 1'-0"

design west | architects
255 SOUTH 300 WEST
799 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	Author
CHECKED BY:	LW
ISSUED:	05/02/2024

REGISTERED PROFESSIONAL ENGINEER
No. 8300845-2202
MEREDIAN L. SIMMONS
STATE OF UTAH

CONSTRUCTION DOCUMENTS

MECHANICAL
ENLARGED VIEWS

M-403

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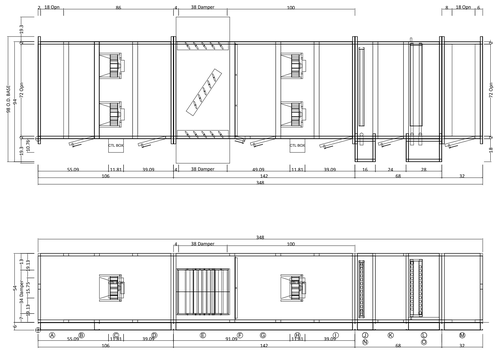
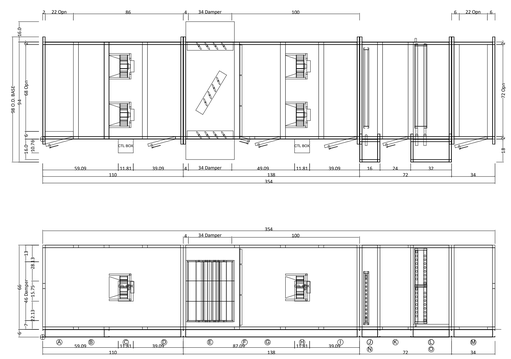


9 M-504 CUSTOM ROOFTOP UNIT RTU- 10
NO SCALE



8 M-504 CUSTOM ROOFTOP UNIT RTU- 7
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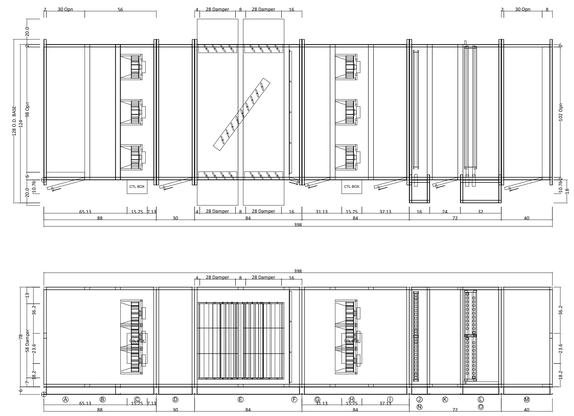
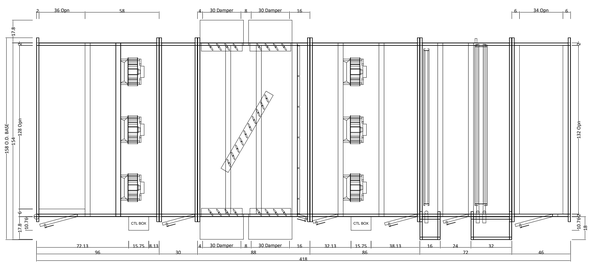
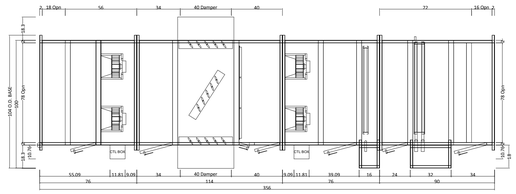


7 M-504 CUSTOM ROOFTOP UNIT RTU- 4
NO SCALE

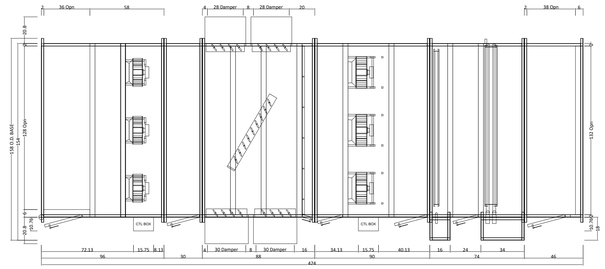
Component Key	
A	Plenum Section
B	Access Section
C	Return Fan
D	Access Section
E	Double Mixing Box
F	Panel Filter
G	Access Section
H	Supply Fan
I	Access Section
J	Hot Water Coil
K	Access Section
L	Chilled Water coil
M	Plenum Section
N	Vestibule Section
O	Vestibule Section



6 M-504 CUSTOM ROOFTOP UNIT RTU- 9
NO SCALE



5 M-504 CUSTOM ROOFTOP UNIT RTU- 6
NO SCALE



4 M-504 CUSTOM ROOFTOP UNIT RTU - 3
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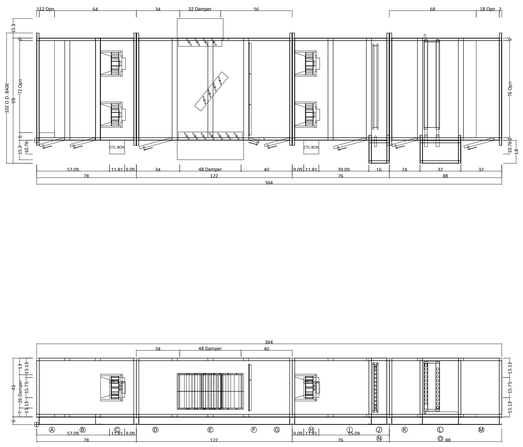

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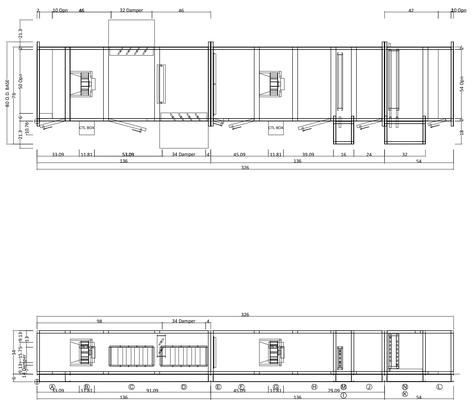

2 M-504 CUSTOM ROOFTOP UNIT RTU- 5
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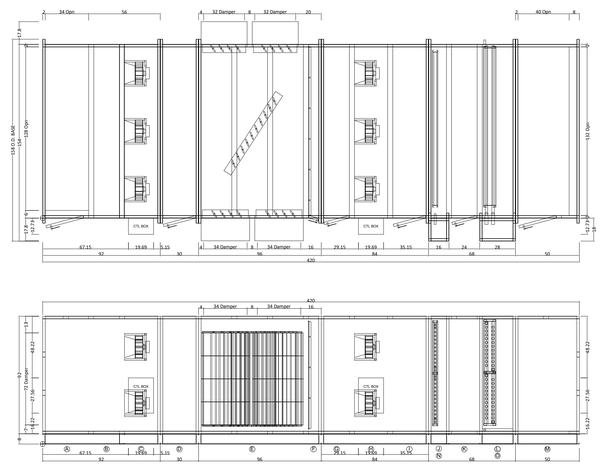

1 M-504 CUSTOM ROOFTOP UNIT RTU'S - 1 & 2
NO SCALE

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
LOGAN, UT 84321
799 NORTH 400 WEST
SALT LAKE CITY UT 84103

VBFA
40 W. Cache Valley Blvd.
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O: (435)752-5081
www.vbfa.com
VBFA Project #: 23717

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	Author
CHECKED BY:	LW
ISSUED:	05/02/2024

LICENSED PROFESSIONAL ENGINEER
No. 8356645-2202
LEONARDO EDIAN L. LAWRENCE
STATE OF UTAH

MECHANICAL DETAILS

M-504

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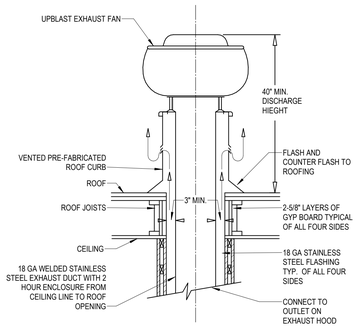
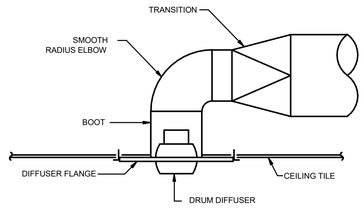
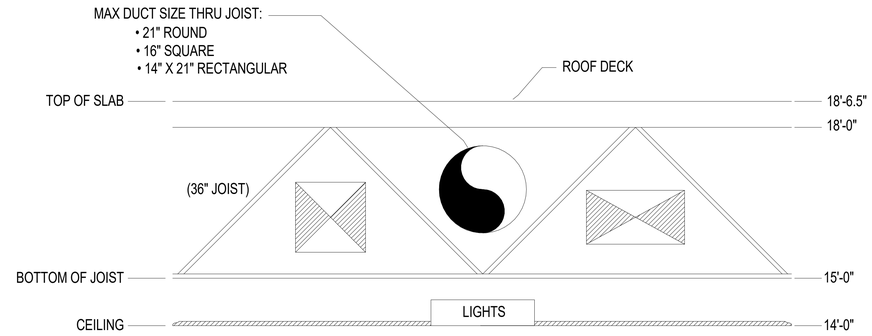
5/15/2024 12:13:39 PM



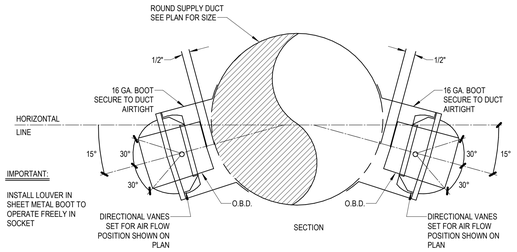
5 M-505 GREASE HOOD DUCT ROOF PENETRATION DETAIL
12" = 1'-0"



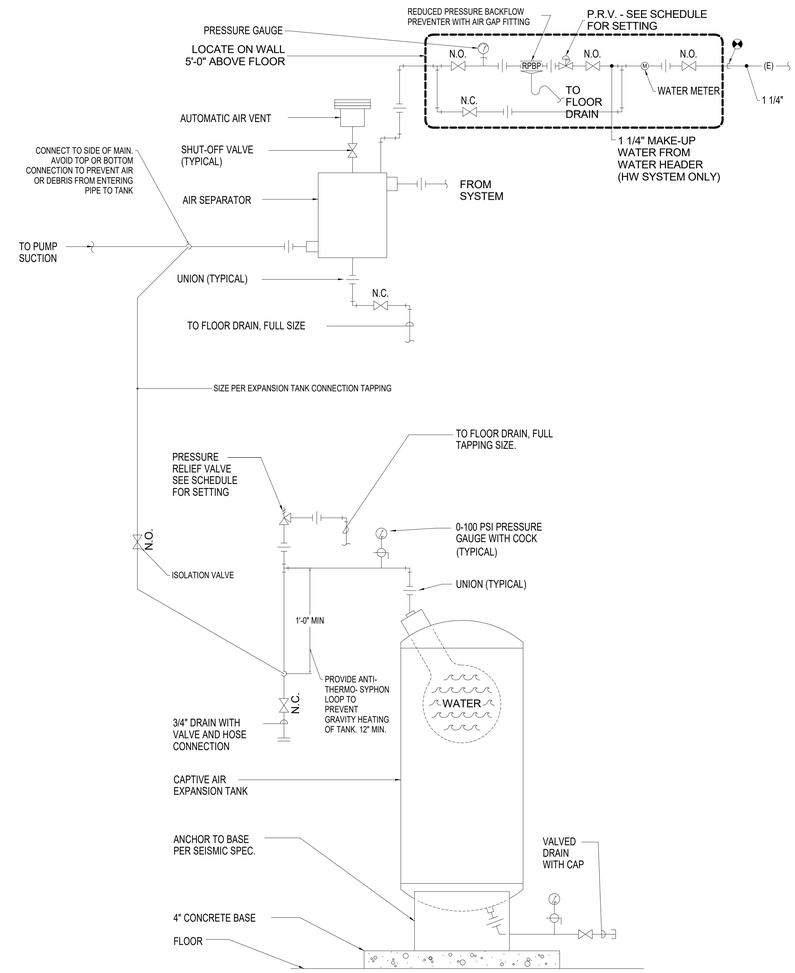
4 M-505 DRUM DIFFUSER DETAIL
NO SCALE



3 M-505 CEILING ALLOCATION CHART
NO SCALE



6 M-505 DRUM LOUVER DETAIL
12" = 1'-0"



1 M-505 EXPANSION TANK DETAIL
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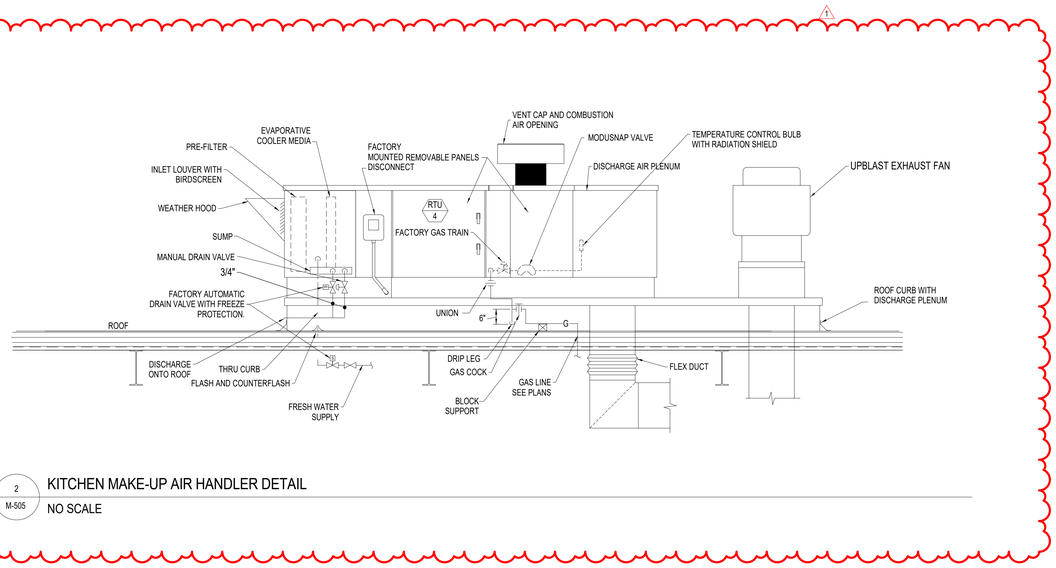

2 M-505 KITCHEN MAKE-UP AIR HANDLER DETAIL
NO SCALE

design west | architects
255 SOUTH 300 WEST
799 NORTH 400 WEST
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SALT LAKE CITY UT 84103

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NIBLEY MIDDLE SCHOOL

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CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	Author
CHECKED BY:	LW
ISSUED:	05/02/2024

REGISTERED PROFESSIONAL ENGINEER
No. 8389445-2202
LEONIDIAS L. JONKOS
STATE OF UTAH

MECHANICAL DETAILS

M-505

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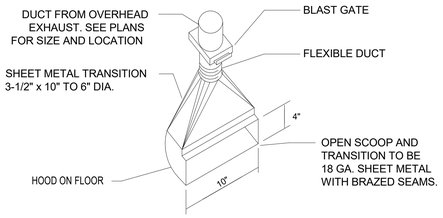
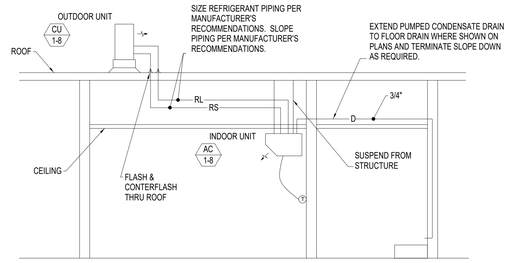


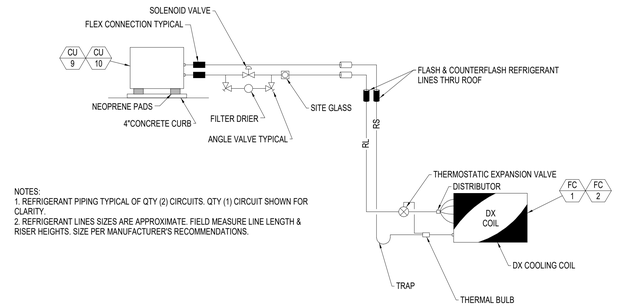
8 / M-506 FLOORSWEEP

NO SCALE



7 / M-506 SPLIT SYSTEM CONDITIONING UNIT DETAIL

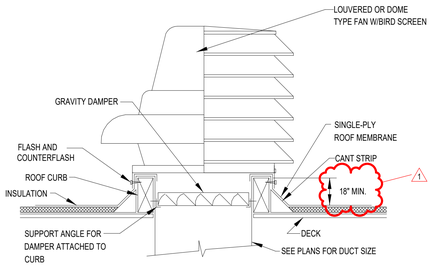
NO SCALE



NOTES:
1. REFRIGERANT PIPING TYPICAL OF QTY (2) CIRCUITS. QTY (1) CIRCUIT SHOWN FOR CLARITY.
2. REFRIGERANT LINES SIZES ARE APPROXIMATE. FIELD MEASURE LINE LENGTH & RISER HEIGHTS. SIZE PER MANUFACTURER'S RECOMMENDATIONS.

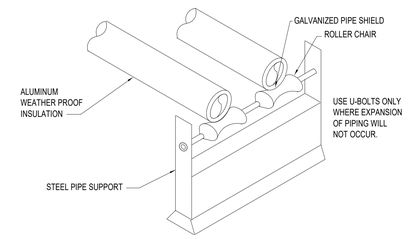
6 / M-506 CONDENSING UNIT/COOLING COIL DETAIL

NO SCALE



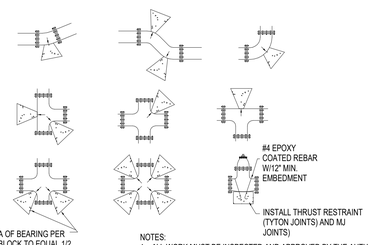
9 / M-506 ROOF HOOD DETAIL

NO SCALE



4 / M-506 CHILLER WATER PIPE SUPPORT AT CHILLER DETAIL

NO SCALE

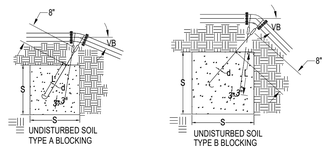


MINIMUM BEARING AREA IN SQ. FT.					
SIZE OF PIPE	TEES, VALVES DEAD ENDS	90° BENDS	45° BENDS	22 1/2° BENDS	11 1/4° BENDS
4"	2	3	2	2	2
6"	4	5.5	3	1.5	1
8"	6.5	9.5	5	2.75	1.5
12"	14	20	11	5.5	3
14"	19	26.5	14.5	7.5	4
16"	24	34	18.5	9.5	6
20"	27	52	28.5	14.5	16
24"	53	74	41	21	53
30"	81	114	62	32	16

NOTES:
1. ALL WORK MUST BE INSPECTED AND APPROVED BY THE AUTHORIZING AUTHORITY PRIOR TO BACKFILL.
2. THRUST BLOCKS OR RESTRAINTS MUST BE POURED AGAINST UNDISTURBED SOIL.
3. CONCRETE MUST HAVE A MINIMUM OF 2,000 P.S.I. COMPRESSIVE STRENGTH IN 28 DAYS.
4. CONCRETE MUST BE ALLOWED TO CURE FOR 5 DAYS PRIOR TO PRESSURIZING WATER LINES OR HAVE ADDITIONAL. APPROVED THRUST RESTRAINTS INSTALLED PRIOR TO PRESSURIZATION OF THE WATER LINE.
5. ALL PIPE JOINTS ARE TO BE LEFT ACCESSIBLE.
6. REINFORCING STEEL BARS ARE TO BE EPOXY COATED IN ACCORDANCE WITH AWWA RECOMMENDATIONS. EPOXY IS TO BE A MINIMUM THICKNESS OF 15 MIL.
7. ALL EXPOSED METAL SURFACES ARE TO BE COATED WITH CHEVRON POLY FM-1 GREASE AND WRAPPED WITH 8 MIL MINIMUM THICKNESS OF POLYETHYLENE SHEETING OR TUBING.
8. THRUST DESIGN FOR PIPE SIZES OR CONFIGURATIONS THAT ARE NOT SHOWN REQUIRE A SPECIAL DESIGN.
9. BEARING AREAS, VOLUMES, AND SPECIAL THRUST BLOCKING OR RESTRAINING DETAILS TAKE PRECEDENCE OVER THIS STANDARD.
10. RESTRAIN SIZING ASSUMES A MAXIMUM OPERATING PRESSURE OF 150 P.S.I., TEST PRESSURE OF 200 P.S.I., AND A 2,000 LBS. SOIL BEARING STRESS. OPERATING PRESSURES IN EXCESS OF 150 P.S.I. OR SOILS WITH LESS THAN A MINIMUM OF 2,000 LBS. BEARING STRESS WILL REQUIRE A SPECIAL DESIGN.
11. MINIMUM YIELD STRENGTH OF THE STEEL TIE DOWNS IS TO BE 70,000 P.S.I.
12. INSTALL APPROPRIATELY SIZED THRUST BLOCKING ON ALL BLIND FLANGES, MJ PLUGS AND CAPS.
13. LOCKING RESTRAINT DEVICES MAY BE USED IN CONJUNCTION WITH CONCRETE THRUST BLOCKING. (AT THE OPTION OF THE ENGINEER)

3 / M-506 DIRECT BEARING THRUST RESTRAINTS

NO SCALE



TYPE A BLOCKING FOR 11 1/4° - 22 1/2° VERT. BENDS					
	VB		S	d	L
PIPE SIZE NOMIN. DIAMETER - INCH	VERTICAL BEND DEGREES	NO. OF CU.FT. OF CONC. BLOCKING	SIDE OF CUBE - FEET	DIAMETER OF SHACK OR REBAR - INCH	DEPTH OF RODS IN CONCRETE FT.
4"	11 1/4°	8	2.0	5/8" #4	1.5
	22 1/2°	15.6	2.5	#4	2.0
6"	11 1/4°	15.6	2.5	#4	2.0
	22 1/2°	34.3	3.25	#4	2.0
8"	11 1/4°	27	3.0	#4	2.0
	22 1/2°	64	4.0	#4	2.0
12"	11 1/4°	64	4.0	#4	2.0
	22 1/2°	125	5.0	#4	3.0
16"	11 1/4°	107	4.25	#5	3.0
	22 1/2°	216	6.0	#5	4.0
20"	11 1/4°	138	5.17	#5	3.5
	22 1/2°	334	6.94	#5	4.0
24"	11 1/4°	240	6.22	#5	4.0
	22 1/2°	476	7.81	#5	4.0
30"	11 1/4°	369	7.17	#5	4.0
	22 1/2°	733	9.02	#5	4.0

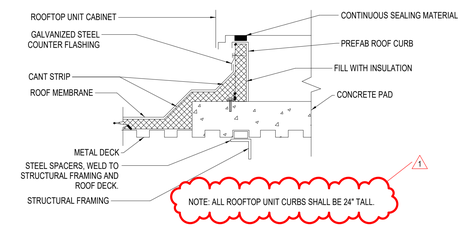
TYPE B BLOCKING FOR 45° VERTICAL BENDS					
	VB		S	d	L
PIPE SIZE NOMIN. DIAMETER - INCH	VERTICAL BEND DEGREES	NO. OF CU.FT. OF CONC. BLOCKING	SIDE OF CUBE - FEET	DIAMETER OF SHACK OR REBAR - INCH	DEPTH OF RODS IN CONCRETE FT.
4"	45°	1	3.0	5/8" #4	2.0
6"		2.37	4.0	5/8" #4	2.5
8"		3.97	4.75	5/8" #4	2.0
12"		9.04	6.25	5/8" #4	4.0
16"		17.24	7.75	#5 #5	4.0
20"		26.52	5.17	#5 #5	4.0
24"		37.82	10.07	#5 #5	4.0
30"		58.26	11.63	#5 #5	4.0

NOTES:
1. ALL WORK MUST BE INSPECTED AND APPROVED BY THE AUTHORIZING AUTHORITY PRIOR TO BACK FILL.
2. THRUST BLOCKS OR RESTRAINS MUST BE PLACED ON UNDISTURBED SOIL.
3. CONCRETE MUST HAVE A MINIMUM OF 2,000 P.S.I. COMPRESSIVE STRENGTH IN 28 DAYS.
4. CONCRETE MUST BE ALLOWED TO CURE FOR 5 DAYS PRIOR TO PRESSURIZING THE WATER LINES OR HAVE ADDITIONAL APPROVED THRUST RESTRAINS INSTALLED PRIOR TO PRESSURIZATION OF THE WATER LINE.
5. MINIMUM YIELD STRENGTH OF THE STAINLESS STEEL TIE DOWNS ARE TO BE 70,000 P.S.I.
6. REINFORCING STEEL BARS TO BE EPOXY COATED IN ACCORDANCE WITH AWWA RECOMMENDATIONS. THE EPOXY IS TO HAVE A MINIMUM THICKNESS OF 15 MILS.
7. ALL EXPOSED METAL SURFACES ARE TO BE COATED WITH CHEVRON POLY FM-1 GREASE AND WRAPPED WITH A MINIMUM OF 8 MILS. THICKNESS OF POLYETHYLENE SHEETING OR TUBING.
8. THRUST DESIGN FOR PIPE SIZES OR CONFIGURATIONS NOT SHOWN REQUIRE A SPECIAL DESIGN.
9. BEARING AREAS, VOLUMES, AND SPECIAL THRUST BLOCKING OR RESTRAINING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER THIS STANDARD.
10. RESTRAINT SIZING ASSUMES A MAXIMUM OPERATING PRESSURE OF 150 P.S.I., OPERATING PRESSURE RANGES IN EXCESS OF 150 P.S.I. WILL REQUIRE A SPECIAL DESIGN.

2 / M-506 TIE DOWN THRUST RESTRAINTS

NO SCALE

NOTE: ANCHOR ROOFTOP UNIT AND PREFAB ROOF CURB PER SEISMIC RESTRAINT REQUIREMENTS.



1 / M-506 ROOFTOP UNIT CURB ON CONCRETE PAD DETAIL

NO SCALE

design west | architects
255 SOUTH 300 WEST LOGAN, UT 84321
759 NORTH 400 WEST SALT LAKE CITY, UT 84103

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PROJECT #:	23717
DRAWN BY:	Author
CHECKED BY:	LW
ISSUED:	05/02/2024

LICENSED PROFESSIONAL ENGINEER
No. 8389445-2202
MEDIAH L. JONKHOUT
STATE OF UTAH

MECHANICAL DETAILS

M-506

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AIR HANDLER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	AIR: SUPPLY AIRFLOW (CFM)	COMPONENTS: FANS	COMPONENTS: COILS	ELECTRICAL: LIGHTING AND OUTLET VOLT/PH/HZ	PHYSICAL: CABINET LENGTH/ WIDTH/HEIGHT (IN)	PHYSICAL: WEIGHT (LB)	NOTES
RTU-1	DAIKIN OAH071GBCM	AREA A,B	32403	SF-RTU-1, RF-RTU-1	CC-RTU-1, HC-RTU-1	120/1/60	420/136/100	16817	1
RTU-2	DAIKIN OAH082GBCM	AREA A,B	37205	SF-RTU-1, RF-RTU-2	CC-RTU-2, HC-RTU-2	120/1/60	426/136/112	18145	1
RTU-3	DAIKIN OAH082GBCM	AREA C	34705	SF-RTU-1, RF-RTU-3	CC-RTU-3, HC-RTU-3	120/1/60	424/136/112	18145	1
RTU-4	DAIKIN OAH045GBCM	AREA D	21240	SF-RTU-1, RF-RTU-4	CC-RTU-4, HC-RTU-4	120/1/60	398/106/84	11504	1
RTU-5	DAIKIN OAH008GBCM	AREA D	3290	SF-RTU-1, RF-RTU-5	CC-RTU-5, HC-RTU-5	120/1/60	326/58/40	4179	1
RTU-6	DAIKIN OAH021GBCM	AREA D	8856	SF-RTU-1, RF-RTU-6	CC-RTU-6, HC-RTU-6	120/1/60	356/82/58	6817	1
RTU-7	DAIKIN OAH025GBCM	AREA E	10555	SF-RTU-1, RF-RTU-7	CC-RTU-7, HC-RTU-7	120/1/60	354/76/72	7061	1
RTU-8	DAIKIN OAH018GBCM	AREA F	8425	SF-RTU-1, RF-RTU-8	CC-RTU-8, HC-RTU-8	120/1/60	364/80/52	6717	1
RTU-9	DAIKIN OAH071GBCM	AREA F	30000	SF-RTU-1, RF-RTU-9	CC-RTU-9, HC-RTU-9	120/1/60	418/136/100	17235	1
RTU-10	DAIKIN OAH020GBCM	AREA F	8695	SF-RTU-1, RF-RTU-10	CC-RTU-10, HC-RTU-10	120/1/60	348/76/60	6510	1

1. UNIT COMPLETE WITH 2" FILTERS.

AIR SEPARATOR SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLUID: FLOW (GPM)	FLUID: WORKING FLUID	FLUID: HEAD LOSS (FT)	FLUID: SYSTEM PRESSURE (PSIG)	PHYSICAL: DIA./ HEIGHT (IN)	NOTES
AS-CHW-01	TACO AC08F-125	CHILLER ROOM C112	TANK, INLINE, STRAINER	1037.8	30% P GLY	3	60	20/45.5	1
ASHW-1	TACO 4908AD-125	BOILER ROOM D135	TANK, HIGH EFF, AIR/DIRT	662.9	30% P GLY	3	60	18/41.5	1

1. ASME CERTIFIED

MAKE-UP AIR HANDLER UNIT SCHEDULE

ID	MANUFACTURER	MODEL NO	LOCATION	OUTSIDE AIR FLOW RATE (CFM)	EXTERNAL STATIC PRESSURE DROP (IN H20)	HEATING: ENTER/ LEAVING AIR TEMP. DB (DEG. F)	HEATING: INPUT HEATING LOAD (MBH)	HEATING: OUTPUT HEATING LOAD (MBH)	HEATING: FUEL TYPE	MAX DIMENSIONS L x W x H (IN)	MAX OPERATING WEIGHT (LBS)	EVAP COOLER	MOTOR: HP	MOTOR: VOLT/PH/HZ	NOTES
MAU-1	GREENHECK	IGX-P116-H22-MF	KITCHEN	2981	0.75	-20	287.7	233.1	NAT GAS	133 X 44 X 45	1700	YES	1.5	460/3/60	(1)(2)(3)(4)(5)(6)
MAU-2	GREENHECK	IGX-P116-H22-MF	KITCHEN	2981	0.75	-20	287.7	233.1	NAT GAS	133 X 44 X 45	1700	YES	1.5	460/3/60	(1)(2)(3)(4)(5)(6)

(1) ALL CAPACITIES BASED AT 4,800 FEET ELEVATION.

(2) UNIT COMPLETE WITH SPRING VIBRATION ISOLATED ROOF CURB. MATCH ROOF CURB TO SUPPORT UNIT.

(3) SUPPLIED WITH VENT CAP AND COMBUSTION AIR OPENING.

(4) INTERLOCK UNIT WITH KITCHEN HOOD CONTROL PANEL, DIV. 26.

(5) EQUIPPED WITH FACTORY MOUNTED STARTER & DISCONNECT.

(6) TYPE UNIT: 100% OUTSIDE AIR ROOFTOP MAKE-UP AIR HANDLING UNIT, COMPLETE WITH THE FOLLOWING OPTIONS:

A) DOWN DISCHARGE PLENUM.

B) STAINLESS STEEL HEAT EXCHANGER.

C) MODULATING GAS VALVE DOWN TO 30% AND DUCT TEMPERATURE SENSOR. SET TEMPERATURE SENSOR AT 65 DEG-F LEAVING AIR TEMPERATURE.

D) EVAPORATIVE COOLER TO BLOWER FAN TRANSITION.

E) FACTORY MOUNTED DISCONNECT.

AIR HANDLER HYDRONIC COIL SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	USAGE	AIR: AIRFLOW RATE (CFM)	AIR: LOAD (BTU/H)	AIR: SENSIBLE LOAD (BTU/H)	AIR: ENTERING TEMP. DB/WB (°F)	AIR: LEAVING TEMP. DB/WB (°F)	AIR: STATIC PRESSURE (IN. H2O)	HYDRONIC: FLOW RATE (GPM)	HYDRONIC: ENTERING/ LEAVING TEMP. (°F)	HYDRONIC: WORKING FLUID	HYDRONIC: HEAD LOSS (FT)	PHYSICAL: NO. COILS	PHYSICAL: MINIMUM FACE AREA (FT²)	PHYSICAL: MINIMUM NO. ROWS/ FINS PER INCH	NOTES
CC-RTU-1	DAIKIN	RTU-1	COOLING	32403	992870	889533	81.8/62.2	51.8/50.6	0.57	170.7	42/54.1	30% P GLY	16.3	2	66.62	6/10	
CC-RTU-2	DAIKIN	RTU-2	COOLING	37205	1131106	1005771	81.4/62.2	51.9/50.7	0.56	194.1	42/54.2	30% P GLY	15.8	2	76.88	6/10	
CC-RTU-3	DAIKIN	RTU-3	COOLING	34705	1063615	965902	82.5/62.2	52.1/50.6	0.47	187.6	42/53.8	30% P GLY	14.9	2	76.88	6/9	
CC-RTU-4	DAIKIN	RTU-4	COOLING	21240	720509	620259	83.8/63.7	51.9/51.2	0.67	127.5	42/53.8	30% P GLY	10.2	2	42.62	6/12	
CC-RTU-5	DAIKIN	RTU-5	COOLING	3290	93487	81263	79/61.8	52/51.1	0.46	15.9	42/54.2	30% P GLY	12.5	1	7.5	5/12	
CC-RTU-6	DAIKIN	RTU-6	COOLING	8856	278770	246816	82.3/62.6	51.9/50.8	0.46	47.5	42/54.2	30% P GLY	14.6	1	20.12	5/12	
CC-RTU-7	DAIKIN	RTU-7	COOLING	10555	262590	240695	76.6/60	51.7/50.3	0.46	46.8	42/53.7	30% P GLY	9.7	2	23.62	6/9	
CC-RTU-8	DAIKIN	RTU-8	COOLING	8425	257842	235773	82.4/62	51.8/50.4	0.62	44.8	42/54	30% P GLY	12.3	1	16.75	8/7	
CC-RTU-9	DAIKIN	RTU-9	COOLING	30000	933250	830187	82.4/62.5	52.2/50.8	0.46	165.3	42/53.8	30% P GLY	15.3	2	66.62	6/9	
CC-RTU-10	DAIKIN	RTU-10	COOLING	8695	245623	229421	80.6/61	51.8/50.1	0.5	43.8	42/53.7	30% P GLY	14	1	18.38	6/9	
HC-RTU-1	DAIKIN	RTU-1	HEATING	23885	451084	451084	39.5	60.1	0.09	23.6	160/119.8	30% P GLY	3.3	2	65	1/8	
HC-RTU-2	DAIKIN	RTU-2	HEATING	32960	691642	691642	37.4	60.3	0.12	35.9	160/119.4	30% P GLY	6.3	2	70	1/11	
HC-RTU-3	DAIKIN	RTU-3	HEATING	27108	703424	703424	31.5	59.8	0.19	37.2	160/120.2	30% P GLY	4.5	2	70	1/12	
HC-RTU-4	DAIKIN	RTU-4	HEATING	21240	578538	578538	30.6	60.3	0.14	30.1	160/119.5	30% P GLY	1.5	2	41.25	2/7	
HC-RTU-5	DAIKIN	RTU-5	HEATING	3290	28421	28421	50.6	60	0.14	2	160/129.9	30% P GLY	0.2	1	4.38	1/7	
HC-RTU-6	DAIKIN	RTU-6	HEATING	8230	190387	190387	34.6	59.9	0.07	10	160/119.9	30% P GLY	3.6	1	19.25	1/7	
HC-RTU-7	DAIKIN	RTU-7	HEATING	6950	76391	76391	50	62	0.11	4.3	160/122.5	30% P GLY	0.3	1	16.25	1/6	
HC-RTU-8	DAIKIN	RTU-8	HEATING	4645	144102	144102	26.7	60.6	0.13	7.1	160/117.4	30% P GLY	2.7	1	16	1/6	
HC-RTU-9	DAIKIN	RTU-9	HEATING	30000	1450254	1450254	36.8	89.6	0.15	76.8	160/120.3	30% P GLY	3	2	65	2/10	
HC-RTU-10	DAIKIN	RTU-10	HEATING	8540	353636	353636	44.5	89.7	0.17	19.3	160/121.5	30% P GLY	3.3	1	17.5	2/9	

CONDENSATE NEUTRALIZER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	QTY	TYPE	CONDENSATE DEVICE: INPUT LOAD (BTU/H)	CONDENSATE DEVICE: EFFICIENCY (%)	PHYSICAL: LENGTH/ WIDTH/ HEIGHT (IN)	PHYSICAL: NPT FITTING (IN)	NOTES
CN-1	AXIOM NT25	BOILER ROOM D135	1	STANDARD	5000000	96	17.5/13.5/8	1	
CN-2	AXIOM NT25	BOILER ROOM D135	1	STANDARD	5000000	96	17.5/13.5/8	1	

COOLING TOWER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FAN AIRFLOW (CFM)	AMBIENT TEMP. DB/WB (°F)	FLUID: FLOW RATE (GPM)	FLUID: ENTERING/ LEAVING TEMP. (°F)	FLUID: WORKING FLUID	FLUID: INLET/ OUTLET HEAD LOSS (FT)	ELECTRICAL, FAN: MOTOR QUAN.	ELECTRICAL, FAN: MOTOR SIZE (HP)	ELECTRICAL, FAN: MOTOR SPEED (RPM)	ELECTRICAL, FAN: TOWER AND CONTROL CIRCUIT VOLT/PH/HZ	PHYSICAL: OPERATING WEIGHT (LB)	PHYSICAL: LENGTH/ WIDTH/ HEIGHT (IN)	NOTES
CT-01 CELL A	EVAPCO AT 19-2J9	MECH. YARD	OPEN, COUNTERFLOW, AXIAL	50800	95/96	810	90/80	WATER	5	1	15	1750	460/3/60 - 120/1/60	7090	107.5/101.5/140.4	1-7

1
1. UNIT PROVIDED WITH LOW SOUND FAN.
2. BASIN SHALL BE ALL 304 STAINLESS STEEL CONSTRUCTION.
3. PROVIDE BASIN PLATFORM, LADDERS, LADDER EXTENSIONS AS REQUIRED.
4. PROVIDE WITH VIBRATION SWITCHES.
5. UNIT COMLPETE WITH A 10 KW, 480V/3PH SUMP HEATER. PROVIDE TRANSFORMER FOR A CONTROL CIRCUIT AT 120V/1PH.
6. TOWER SITS ON SUPPORT. SEE STRUCTURAL DRAWINGS.
7. UNIT COMPLETE WITH SUMP SWEEPER PIPING, MINIMUM SWEEPER FLOW RATE 89 GPM AT 20 PSI.

HYDRONIC BOILER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FUEL TYPE	MINIMUM INPUT LOAD (BTU/H)	MINIMUM INPUT FLOW (CFH)	OUTPUT LOAD (BTU/H)	FLUID: FLOW RATE (GPM)	FLUID: ENTERING/ LEAVING TEMP. (°F)	FLUID: WORKING FLUID	FLUID: HEAD LOSS (FT)	ELECTRICAL: MOTOR QUAN.	ELECTRICAL: MOTOR SIZE (HP)	ELECTRICAL: MOTOR VOLT/PH/HZ	ELECTRICAL: CONTROL CIRCUIT VOLT/PH/HZ	PHYSICAL: STACK DIAMETER (IN)	PHYSICAL: LENGTH/ WIDTH/ HEIGHT (IN)	NOTES
B-1	CLEAVER-BROOKS CFC-E 5000	BOILER ROOM D135	COND, FORCED, DUAL RET	NAT GAS	5000000	5000	4400000	282.4	126.7/160	30% P GLY	5	1	10.73	460/3/60	120/1/60	1@14	80.6/58.7/93.6	1
B-2	CLEAVER-BROOKS CFC-E 5000	BOILER ROOM D135	COND, FORCED, DUAL RET	NAT GAS	5000000	5000	4400000	282.4	126.7/160	30% P GLY	5	1	10.73	460/3/60	120/1/60	1@14	80.6/58.7/93.6	1

1. ASME CERTIFIED

CHEMICAL FEED SYSTEM SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLUID: WORKING FLUID	FLUID: TOTAL VOLUME (GAL)	FLUID: STATIC FILL PRESSURE (PSIG)	FLUID: PRESSURE RATING (PSIG)	ELECTRICAL: VOLT/PH/HZ	ELECTRICAL: ALARM PANEL	PHYSICAL: LENGTH/ WIDTH/ HEIGHT (IN)	PHYSICAL: NPT FITTING (IN)	PHYSICAL: TANK SIZE (GAL)	NOTES
CWT-01	WEST CONDENSER WATER TREATMENT	CHILLER ROOM C112	CHEMICAL FEEDER	WATER	1688.4	4	0	120/1/60	-----	108/36/66	1	50	1-3

1. PROVIDE THREE DOUBLE WALL CONTAINMENT POLY TANKS: (1) SCALE INHIBITOR, (2) BIOCIDE, ONE INJECTION PUMP PER TANK MOUNTED ON SS SHELF ABOVE TANKS
2. WALL MOUNTED CONTROLLER. SOLIDS SEPARATOR BLOW DOWN SHALL BE CONTROLLED BY TOWER TREATMENT CONTROLLER
3. ESTIMATED WEIGHT: 50 LBS.

WATER-COOLED CHILLER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	REFRIG.	LOAD (TONS)	FLUID: DESCRIPTION	FLUID: FLOW RATE (GPM)	FLUID: ENTERING/ LEAVING TEMP. (°F)	FLUID: WORKING FLUID	FLUID: HEAD LOSS (FT)	ELECTRICAL: MAX KW	ELECTRICAL: TOTAL MCA	ELECTRICAL: TOTAL MOCP	ELECTRICAL: MAXIMUM UNIT EFFICIENCY (KW/TON)	ELECTRICAL: EFFICIENCY RATING	CHILLER AND CONTROL CIRCUIT VOLT/PH/HZ	PHYSICAL: LENGTH/ WIDTH/ HEIGHT (IN)	NOTES
CH-1	CARRIER 19MV-21L21K259E35	CHILLER RM	MAG BEARING	R513A	270	EVAPORATOR	686.9	54/44	30% P GLY	18.2	150	252	450	0.542	0.5330 (NPLV)	460/3/60 - 120/1/60	158/52/100	1-7
						CONDENSER	749	80/90	WATER	14.6								

1. WITH FACTORY SOUND ATTENUATION, STARTER AND DISCONNECT
2. UNIT WITH MODULATION CAPACITY DOWN TO 15% OF MAXIMUM LOAD AND RUN AT 55 CHWS AND 59 CHWR
3. UNIT WITH FACTORY VSD/DISCONNECT, FILTER, BACNET NETWORK INTERFACE CARD
4. MINIMUM EVAPORATOR FLOW = 350 GPM, CONDENSER = 375.4 GPM.
5. UNIT COMPLETE WITH ECONOMIZER.
6. UNIT WITH INLET GUIDE VANES, VFD AND MAGNETIC BEARING COMPRESSORS
7. PROVIDE WITH MARINE BOX ON CONDENSER WATER INLET.

GRILLES, REGISTERS AND DIFFUSERS

ID	MANUFACTURER	MODEL	MAX NC	DESCRIPTION
CD-1	PRICE	SPD	30	SQUARE PLAQUE FACE CEILING DIFFUSERS. REMOVABLE FACE, FRAME SHALL BE FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED BY CEILING TYPE. LAY-IN FRAMES SHALL BE 24" x 24" OR 12" x 12" AS REQUIRED TO FIT CEILING TILE SPACE AVAILABLE. COLOR AND FINISH AS SELECTED BY ARCHITECT FROM STANDARD COLORS
CD-2	PRICE	SDS 100	30	2 SLOT LINEAR CEILING DIFFUSER WITH FULLY ADJUSTABLE AIR PATTERN AND FLOW CONTROL VANES FOR ONE OR TWO WAY THROW PATTERN. UNITS SHALL HAVE 1" SLOTS AND INSULATED PLENUM WITH ROUND DUCT CONNECTION. FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED. UNIT SHALL BE CURVED FACE FOR EXPOSED DUCT MOUNTING AS REQUIRED.
CD-3	PRICE	SDS 100	30	3 SLOT LINEAR CEILING DIFFUSER WITH FULLY ADJUSTABLE AIR PATTERN AND FLOW CONTROL VANES FOR ONE OR TWO WAY THROW PATTERN. UNITS SHALL HAVE 1" SLOTS AND INSULATED PLENUM WITH ROUND DUCT CONNECTION. FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED. UNIT SHALL BE CURVED FACE FOR EXPOSED DUCT MOUNTING AS REQUIRED.
CD-4	PRICE	SDS 100	30	4 SLOT LINEAR CEILING DIFFUSER WITH FULLY ADJUSTABLE AIR PATTERN AND FLOW CONTROL VANES FOR ONE OR TWO WAY THROW PATTERN. UNITS SHALL HAVE 1" SLOTS AND INSULATED PLENUM WITH ROUND DUCT CONNECTION. FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED. UNIT SHALL BE CURVED FACE FOR EXPOSED DUCT MOUNTING AS REQUIRED.
DV-1	SEIHO SFZ 4	--		EXTERNAL DRYER VENT, ALL ALUMINUM CONSTRUCTION, CLEAR ANODIZED FINISH.
RG-1	PRICE	PDDR	30	PERFORATED FACE RETURN AIR UNIT, REMOVABLE FACE & CORE. FRAME SHALL BE FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED BY CEILING TYPE. LAY-IN FRAMES SHALL BE 24" x 24", 24" x 12" OR 12" x 12" AS REQUIRED TO FIT CEILING TILE SPACE AVAILABLE. AIR QUANTITY SHALL MATCH ROOM SUPPLY OR EXHAUST AIR QUANTITY. COLOR AND FINISH AS SELECTED BY ARCHITECT.
RG-2	PRICE	90	30	HEAVY DUTY RETURN GYM GRILLE. PERFORATED FACE RETURN AIR UNIT, REMOVABLE FACE & CORE. FRAME SHALL BE FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED BY CEILING TYPE. STEEL OPPOSED BLADE DAMPER. INCLUDING 30° BLADE DEFLECTION.
EG-1	PRICE	80	30	CRATE TYPE CEILING EXHAUST AIR UNIT, WITH OBD. REMOVABLE FACE AND CORE. FRAME SHALL BE FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED BY CEILING TYPE. LAY-IN FRAMES SHALL BE 24" x 24", 24" x 12" OR 12" x 12" AS REQUIRED TO FIT CEILING TILE SPACE AVAILABLE. UNITS SHALL HAVE 1/2" x 1/2" x 1/2" SQUARES.
SWE-1	PRICE	535	30	SIDEWALL RETURN AIR GRILLE. HORIZONTAL STATIONARY 45° DEFLECTION VANES SET ON 1/2 INCH CENTER. COLOR AND FINISH AS SELECTED BY ARCHITECT
SWR-1	PRICE	535	30	SIDEWALL RETURN AIR GRILLE. HORIZONTAL STATIONARY 45° DEFLECTION VANES SET ON 1/2 INCH CENTER. COLOR AND FINISH AS SELECTED BY ARCHITECT
SWS-1	PRICE	520	30	DOUBLE DEFLECTION HIGH SIDEWALL SUPPLY REGISTER. VERTICAL FRONT WITH HORIZONTAL REAR DEFLECTION ADJUSTABLE VANES SPACED AT 3/4 INCH O.C. COMPLETE WITH OBD AND REMOVABLE CORE. COLOR AND FINISH AS SELECTED BY ARCHITECT.
SWS-2	PRICE	HCD1	30	DRUM LOUVER SUPPLY GRILLE WITH ROTATABLE DRUM HAVING MECHANISM TO FIX DRUM ANGLE. VARIABLE VOLUME, STEEL FRAME, ALUMINUM VANES AND DRUM. MOUNTING FRAME C/W COUNTER SUNK HOLES FOR DUCT MOUNTING. ADJUSTABLE THROUGH 60 DEGREES.

1. PROVIDE CD-1 FOR ALL CEILING SUPPLY DIFFUSERS UNLESS NOTED OTHERWISE.
2. PROVIDE RG-1 FOR ALL CEILING RETURN GRILLES UNLESS NOTED OTHERWISE.
3. PROVIDE EG-1 FOR ALL CEILING EXHAUST GRILLES UNLESS NOTED OTHERWISE.

EXPANSION TANK SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLUID: WORKING FLUID	FLUID: MIN. TANK/ ACCEPTANCE VOLUME (GAL)	FLUID: MINIMUM FILL PRESSURE (PSIG)	FLUID: MAXIMUM WORKING PRESSURE (PSIG)	FLUID: RELIEF VALVE PRESSURE (PSIG)	PHYSICAL: TANK SIZE (GAL)	PHYSICAL: DIA./ HEIGHT (IN)	PHYSICAL: NPT FITTING (IN)	NOTES
ET-CHW-01	TACO CA300-125	CHILLER ROOM C112	VERT, BLADDER, FULL	30% P GLY	64.3/33.8	19.2	54	60	79	24/59	1.5	1
ET-HW-1	TACO CA800-125	BOILER RROM D135	VERT, BLADDER, FULL	30% P GLY	192.9/101.3	19.2	54	60	211	30/89	1.5	1

1. ASME CERTIFIED

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VBFA Project #: 23717

NIBLEY MIDDLE SCHOOL
3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

CONSTRUCTION DOCUMENTS

PROJECT #: 23717
DRAWN BY: Author
CHECKED BY: LW
ISSUED: 05/02/2024

REGISTERED PROFESSIONAL ENGINEER No. 8388845-2202 JEDEDIAH L JENKINS STATE OF UTAH

MECHANICAL SCHEDULES

M-601

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FAN COIL SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	AIR: MAXIMUM AIRFLOW RATE (CFM)	FAN: EXTERNAL STATIC PRESSURE (IN. H2O)	COILS: COOLING COIL MEDIUM	HEATING COIL MEDIUM	ELECTRICAL: TOTAL MCA	MOTOR QTY & SIZE (HP)	VOLT/PH/HZ	PHYSICAL: LENGTH/ WIDTH/ HEIGHT (IN)	NOTES
FC-1	IEC CXB08-D7*-C*-*6	BOILER D135	HORIZONTAL, CABINET	840	0.15	HYDRONIC	HYDRONIC	2.5	1@0.167	120/1/60	43.3/17.5/10	
FC-2	IEC CXB08-DY*-C*-*6	CHILLER C112	HORIZONTAL, CABINET	690	0.15	HYDRONIC	HYDRONIC	2.5	1@0.167	120/1/60	43.3/17.5/10	

FAN COIL, HYDRONIC COIL SCHEDULE

ID	USAGE	AIR: AIRFLOW RATE (CFM)	LOAD (BTU/H)	SENSIBLE LOAD (BTU/H)	ENTERING TEMP. DB/WB (°F)	LEAVING TEMP. DB/WB (°F)	HYDRONIC: FLOW RATE (GPM)	ENTERING/ LEAVING TEMP. (°F)	WORKING FLUID	HEAD LOSS (FT)	PHYSICAL: MINIMUM NO. ROWS/ FINS PER INCH	NOTES
FC-1	HEATING	485	16587	16587	60	98	1.75	160/140	30% P GLY	5		
	COOLING	485	8300	8100	75/60.7	56/54.2	2.2	44/52	30% P GLY	5	2/10	
FC-2	HEATING	465	15903	15903	60	98	1.7	160/140	30% P GLY	5		
	COOLING	465	7900	7800	75/60.7	56/54.2	2.1	44/52	30% P GLY	5	2/10	

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EXHAUST AIR FAN SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	QTY	TYPE	AIR: MAXIMUM AIRFLOW RATE (CFM)	TOTAL STATIC PRESSURE (IN. H2O)	EXTERNAL STATIC PRESSURE (IN. H2O)	MAX AIR TEMP. (°F)	FAN: FAN SPEED (RPM)	FAN WHEEL DIA. (IN)	STATIC EFF. (%)	ELECTRICAL: MOTOR SIZE (HP)	MOTOR BHP (HP)	MOTOR SPEED (RPM)	VOLT/PH/HZ	PHYSICAL: LENGTH/ WIDTH/ HEIGHT (IN)	NOTES
EF-1	TWIN CITY BCRD 160D	SCIENCE A	1	ROOF, DOME DOWNBLAST, BELT	3665	0.45	0.45	75	1459	16.5	32.7	1	0.788	1800	460/3/60	33.8/33.8/35.3	1,2,3,6
EF-2	TWIN CITY BCRD 160D	SCIENCE B	1	ROOF, DOME DOWNBLAST, BELT	2685	0.45	0.45	75	1157	16.5	46	0.5	0.41	1800	120/1/60	33.8/33.8/35.3	1,2,3,6
EF-3	TWIN CITY BCRD 160D	TOILET B	1	ROOF, DOME DOWNBLAST, BELT	3280	0.45	0.45	75	1271	16.5	40.8	0.75	0.534	1800	460/3/60	33.8/33.8/35.3	1,2,3,6
EF-4	TWIN CITY BCRD 120D	DISHWASHER	1	ROOF, DOME DOWNBLAST, BELT	1050	0.37	0.37	75	1081	13.5	50.2	0.25	0.123	1800	120/1/60	30.9/30.9/33.4	1,2,4,5
EF-5	TWIN CITY BCRUR 180BMP	KITCHEN HOOD	1	ROOF, DOME UPBLAST, BELT, KIT	3400	1	1	75	1368	18.25	47.3	1.5	1.132	1800	460/3/60	37/37/37	1,7,8,9
EF-6	TWIN CITY BCRUR 180BMP	KITCHEN HOOD	1	ROOF, DOME UPBLAST, BELT, KIT	3400	1	1	75	1368	18.25	47.3	1.5	1.132	1800	460/3/60	37/37/37	1,7,8,9
EF-7	TWIN CITY BCRD 085D	DRESSING	1	ROOF, DOME DOWNBLAST, BELT	500	0.42	0.42	75	1495	10.5	54.9	0.25	0.06	1800	120/1/60	27.9/27.9/28	1,2,3,6
EF-8	TWIN CITY BCRD 160D	LOCKERS	1	ROOF, DOME DOWNBLAST, BELT	3305	0.45	0.45	75	1345	16.5	37.2	1	0.625	1800	460/3/60	33.8/33.8/35.3	1,2,3,6
EF-9	ENVIROVENT 2	KILN	1	FORWARD CURVED VENT SET	140	0.57	0.57	160	-	-	-	0.25	0.216	-	115/1/60	-	10
EF-10	TWIN CITY BCRD 070D	ADMIN	1	ROOF, DOME DOWNBLAST, BELT	200	0.42	0.42	75	1654	8.5	31.5	0.25	0.042	1800	120/1/60	25.9/25.9/25.3	1,2,3,6
EF-11	GREENHECK SP-LP0511	ELEC A120	1	CEILING/WALL, CENTRIF, DIRECT	80	0.25	0.25	75	773	-	60	.1	0.01	773	120/1/60	10/10/4	1,3,11
EF-12	GREENHECK SP-LP0511	ELEC D118	1	CEILING/WALL, CENTRIF, DIRECT	80	0.25	0.25	75	773	-	60	.1	0.01	773	120/1/60	10/10/4	1,3,11
EF-13	GREENHECK CUBE-160	FCS 203	1	ROOF, UPBLAST, BELT	1500	0.5	0.5	75	875	-	57	0.25	0.25	1750	115/1/60	29/29/42	1,2,3,6
EF-14	GREENHECK CSP-A2150	A120	1	INLINE FAN	1900	0.27	0.27	75	790		14	0.63	0.63	790	115/1/60	15/35/15	1,3
EF-15	GREENHECK CSP-A2150	A220	1	INLINE FAN	1900	0.27	0.27	75	790		14	0.63	0.63	790	115/1/60	15/35/15	1,3
EF-16	TWIN CITY BCRD 1200	PE STORAGE	1	ROOF, DOME DOWNBLAST, BELT	1325	0.33	0.33	72	1566	13.5	55.8	0.5	0.385	1800	208/3/60	30.9/30.9/33.4	1,2,3,6
EF-17	GREENHECK AER-20-VG	CHILLER C112	1	AXIAL SIDE WALL, DIRECT	3200	0.283	0.283	72	1696	-	39	0.5	0.36	1750	115/1/60	32.43/26.33/26.33	1,3,12
EF-18	GREENHECK GB-140	BOILER D135	1	ROOF, DOME DOWNBLAST, BELT	900	0.3	0.3	72	799	-	50	0.25	0.11	1750	115/1/60	28/28/36	1,2,3,6
EF-19	GREENHECK SP-A200	RECEPTION/COPIER	1	CEILING, CENTRIF, DIRECT	220	0.22	0.22	75	900	-	31	0.02	0.02	-	115\60\1	12/14/2011	1,3

1. ALL CAPACITIES AT 4800 FT ELEVATION.
2. ROOF MOUNTED EXHAUST FAN. COMPLETE WITH 18" PRE-FAB ROOF CURB, MOTORIZED BACKDRAFT DAMPER, BIRD SCREEN, & INTERNAL THERMAL OVERLOAD PROTECTION. DISCONNECT BY DIV. 26.
3. CONTROL: ATC
4. STATIC PRESSURE & AIRFLOW BASED ON PRELIMINARY DISHWASHER EXHAUST HOOD REQUIREMENTS OF 1050 CFM & 0.37" W.G. S.P. DUCT CONNECTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE SUPPLIED HOOD EXHAUST AND PRESSURE REQUIREMENTS PRIOR TO SUBMITTING EXHAUST FAN FOR APPROVAL.
5. CONTROL: INTERLOCK WITH DISHWASHER BY DIV. 26.
6. INTERLOCK WITH MOTORIZED DAMPER.
7. ROOF MOUNTED KITCHEN GREASE HOOD EXHASUT FAN (UL-762 RATED), COMPLETE WITH HINGED PREFABRICATED ROOF CURB, FAN DISCHARGE TO BE 40 IN. MIN. FROM WALL, EXHAUST DUCT INSIDE CURB TO EXTEND 18 IN MIN ABOVE ROOF DECK, PROVIDE INTEGRAL OVERLOAD PROTECTION AND GREASE TERMINATOR KIT.
8. UNIT COMPLETE WITH CLEANOUT PORT, GREASE TRAP AND DRAIN CONNECTION, STARTER AND DISCONNECT.
9. HOOD EXHAUST: EXTERNAL STATIC PRESSURE LISTED IS BASED ON THE COORDINATED HOOD PRESSURE DROPS. HOOD PROVIDED BY OTHERS. CONTRACTOR SHALL COORDINATE ACTUAL AIRFLOW AND STATIC PRESSURE DROP. WITH KITCHEN SUPPLIER PRIOR TO SUBMITTING EXHAUST FAN FOR APPROVAL.
10. UNIT COMLPLETE WITH ENVIROLINK FAN INTERLOCK, DUAL INTAKE KIT, AND EXTENSION KITS AS REQUIRED. CONTRACTOR SHALL INTERLOCK FAN CONTROLS WITH KILN CONTROLS. INSTALL PER MANUFACTURER REQUIREMENTS.
11. UNIT COMPLETE WITH GRILLE.
12. UNIT COMPLETE WITH GRAVITY BACKDRAFT DAMPER, VARI-GREEN MOTOR AND CONTROL, AND WALL HOUSING.

HOOD SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	AIR TYPE	AIR: MAXIMUM AIRFLOW RATE (CFM)	STATIC PRESSURE (IN. WATER)	PHYSICAL: INLET HEIGHT ABOVE ROOF (IN)	TOTAL HEIGHT (IN)	THROAT LENGTH / WIDTH (IN)	NOTES
H-1	GREENHECK GRSR 8	AREA E ROOF	GRAVITY	EXHAUST	140	0.015	18	37	8/8	1,2
H-2	GREENHECK GRSI 24	BOILER RM ROOF	GRAVITY	INTAKE	900	0.014	18	41	24/24	1,2

1. HOOD COMPLETE WITH 18" ROOF CURB.
2. HOOD COMPLETE WITH GRAVITY BACK DRAFT DAMPER.

LOUVER SCHEDULE

ID	MANUFACTURER	MODEL	DESCRIPTION
L-1	AIROLITE	K6776	WALL LOUVER , STATIONARY 6 INCH THICK 35 BLADE, 12 GA., EXT. ALUMINUM BLADES, 8 GA, EXT. ALUMINUM JAMBS. CHANNEL FRAME. COLOR BY ARCHITECT.
L-2	SEIHO	SFX-N 10	ALUMINUM ROUND VENT CAP WITH INSECT SCREEN. COLOR BY ARCHITECT.

RETURN/RELIEF AIR FAN SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	QTY	TYPE	AIR: MAXIMUM AIRFLOW RATE (CFM)	TOTAL STATIC PRESSURE (IN. H2O)	EXTERNAL STATIC PRESSURE (IN. H2O)	FAN: FAN SPEED (RPM)	FAN WHEEL DIA. (IN)	ELECTRICAL: MOTOR BHP (HP)	MAX MOTOR SPEED (RPM)	VOLT/PH/HZ	NOTES
RF-RTU-1	DAIKIN	RTU-1	6	FORWARD CURVED	5167	0.84	0.7	1846	17.71	4	2600	460/3/60	
RF-RTU-2	DAIKIN	RTU-2	5	FORWARD CURVED	6921	1.1	0.96	1377	22.05	6.1	1700	460/3/60	
RF-RTU-3	DAIKIN	RTU-3	5	FORWARD CURVED	6392	1.09	0.96	1309	22.05	6.1	1700	460/3/60	
RF-RTU-4	DAIKIN	RTU-4	5	FORWARD CURVED	4290	1.09	0.96	1662	17.71	4	2140	460/3/60	
RF-RTU-5	DAIKIN	RTU-5	1	FORWARD CURVED	3000	1.12	1	1403	17.71	2.3	1730	460/3/60	
RF-RTU-6	DAIKIN	RTU-6	2	FORWARD CURVED	4403	1.12	0.99	1716	17.71	6.6	2600	460/3/60	
RF-RTU-7	DAIKIN	RTU-7	2	FORWARD CURVED	5188	1.12	0.99	1919	17.71	4	2140	460/3/60	
RF-RTU-8	DAIKIN	RTU-8	2	FORWARD CURVED	2803	0.84	0.71	1256	17.71	4	2140	460/3/60	
RF-RTU-9	DAIKIN	RTU-9	5	FORWARD CURVED	5800	0.62	0.5	1113	22.05	6.1	1700	460/3/60	
RF-RTU-10	DAIKIN	RTU-10	2	FORWARD CURVED	4348	0.63	0.5	1564	17.71	6.6	2600	460/3/60	

AIR HANDLER SUPPLY AIR FAN SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	QTY	TYPE	AIR: MAXIMUM AIRFLOW RATE (CFM)	TOTAL STATIC PRESSURE (IN. H2O)	EXTERNAL STATIC PRESSURE (IN. H2O)	FAN: FAN SPEED (RPM)	FAN WHEEL DIA. (IN)	ELECTRICAL: MOTOR BHP (HP)	MAX MOTOR SPEED (RPM)	VOLT/PH/HZ	NOTES
SF-RTU-1	DAIKIN	RTU-1	6	PLENUM, CENTRIFUGAL	5401	3.44	2.06	2490	17.71	6.6	2600	460/3/60	
SF-RTU-2	DAIKIN	RTU-2	5	PLENUM, CENTRIFUGAL	7441	3.48	2.06	1744	24.8	11.6	1950	460/3/60	
SF-RTU-3	DAIKIN	RTU-3	5	PLENUM, CENTRIFUGAL	6941	3.45	2.06	1950	24.8	11.6	1950	460/3/60	
SF-RTU-4	DAIKIN	RTU-4	5	PLENUM, CENTRIFUGAL	4248	3.6	2.06	2302	17.71	6.6	2600	460/3/60	
SF-RTU-5	DAIKIN	RTU-5	1	PLENUM, CENTRIFUGAL	3290	3.38	2.06	2094	17.71	6.6	2600	460/3/60	
SF-RTU-6	DAIKIN	RTU-6	2	PLENUM, CENTRIFUGAL	4428	3.35	2.06	2281	17.71	6.6	2600	460/3/60	
SF-RTU-7	DAIKIN	RTU-7	2	PLENUM, CENTRIFUGAL	5278	3.34	2.06	2444	17.71	6.6	2600	460/3/60	
SF-RTU-8	DAIKIN	RTU-8	2	PLENUM, CENTRIFUGAL	4213	2.79	1.31	2115	17.71	6.6	2600	460/3/60	
SF-RTU-9	DAIKIN	RTU-9	5	PLENUM, CENTRIFUGAL	6000	2.08	0.75	1495	22.05	6.1	1700	460/3/60	
SF-RTU-10	DAIKIN	RTU-10	2	PLENUM, CENTRIFUGAL	4348	2.13	0.75	1979	17.71	6.6	2600	460/3/60	

FLUID FILTER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	ELECTRICAL: MOTOR (HP)	VOLT/PH/HZ	FLUID: FLOW RATE (GPM)	WORKING FLUID	HEAD LOSS (FT)	PHYSICAL: CONNECT SIZE (IN)	NOTES
SS-01	PUROFLUX PF64-020	CHILLER ROOM	CENTRIFUGAL	5	480/3/60	100	WATER	16	2	1,2,3

(1) SKID MOUNTED PUMP; BASKET PRE-STRAINER, AND AUTOMATIC BALL VALVE WITH TIMER FOR SOLIDS REMOVAL.

(2) INLET AND OUTLET PRESSURE GUAGES; FULLY ASSEMBLED ON SKID; ALL INTERCONNECTING PIPING AND VALVES; UL LISTED NEMA 4X ENCLOSURE STARTER AND CONTROLS.

(3) UNIT COMPLETE WITH INLET & OUTLET ISOLATION VALVES; AUTOMATIC BALL VALVE; PLC; PREMIUM EFFICIENT MOTOR.

GLYCOL FEED SYSTEM SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLUID: WORKING FLUID	TOTAL VOLUME (GAL)	STATIC FILL PRESSURE (PSIG)	PRESSURE RATING (PSIG)	ELECTRICAL: VOLT/PH/HZ	ALARM PANEL	PHYSICAL: LENGTH/ WIDTH/ HEIGHT (IN)	NPT FITTING (IN)	TANK SIZE (GAL)	NOTES
GFS-HW-01	AXIOM SF100-L	BOILER D135	STANDARD	30% P GLY	3090.5	25.7	125	120/1/60	-----	33/33/53	0.5	100	1
GFS-CHW-01	AXIOM SF100-L	CHILLER C112	STANDARD	30% P GLY	1586.4	19.2	125	120/1/60	-----	33/33/53	0.5	100	1

1. PROVIDE WITH PRESSURE SWITCH PER MANUFACTURER'S REQUIREMENTS. CONTROLS CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR TO PROVIDE REQUIRED POWER TO PRESSURE SWITCH.

HYDRONIC-TO-HYDRONIC HEAT EXCHANGER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	USAGE	LOAD (BTU/H)	SOURCE MEDIUM (HYDRONIC): FLOW RATE (GPM)	ENTERING/ LEAVING TEMP. (°F)	WORKING FLUID	HEAD LOSS (FT)	TRANSFER MEDIUM (HYDRONIC): FLOW RATE (GPM)	ENTERING/ LEAVING TEMP. (°F)	WORKING FLUID	HEAD LOSS (FT)	PHYSICAL: DIA./ LENGTH/ NO. PLATES (IN/IN)	SURFACE AREA (FT²)	NOTES
HX-1	TACO PF 130-131-1-XX	CHILLER ROOM C112	PLATE & FRAME	COOLING	2232000	808.4	44/49.5	WATER	15	937.5	58/53	30% P GLY	15	/43.7/131	1805.11	

SPLIT SYSTEM INDOOR UNIT SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	USAGE	AIR: AIRFLOW RATE (CFM)	LOAD (BTU/H)	SENSIBLE LOAD (BTU/H)	ENTERING TEMP. DB/WB (°F)	LEAVING TEMP. DB/WB (°F)	FAN: EXTERNAL STATIC PRESSURE (IN. H2O)	VRF: REFRIGERANT	ELECTRICAL: TOTAL MCA	VOLT/PH/HZ	PHYSICAL: LENGTH/ WIDTH/ HEIGHT (IN)	NOTES
IU-1	DAIKIN FTX36WVJU9	D138	WALL MOUNTED	COOLING	635	36,000	22890	80/67	56/54.2	0	R-410A	16.6	208/1/60	10/47/13	1,2
IU-2	DAIKIN FTX36WVJU9	D136	WALL MOUNTED	COOLING	635	36,000	22890	80/67	56/54.2	0	R-410A	16.6	208/1/60	10/47/13	1,2
IU-3	DAIKIN FTX36WVJU9	D137	WALL MOUNTED	COOLING	635	36,000	22890	80/67	56/54.2	0	R-410A	16.6	208/1/60	10/47/13	1,2
IU-4	DAIKIN FTX36WVJU9	A220	WALL MOUNTED	COOLING	635	36,000	22890	80/67	56/54.2	0	R-410A	16.6	208/1/60	10/47/13	1,2
IU-5	DAIKIN FTX30WVJU9	C209	WALL MOUNTED	COOLING	611	30,000	19940	80/67	56/54.2	0	R-410A	16.6	208/1/60	10/47/13	1,2
IU-6	DAIKIN FTX36WVJU9	F109	WALL MOUNTED	COOLING	635	36,000	22890	80/67	56/54.2	0	R-410A	16.6	208/1/60	10/47/13	1,2

1. UNIT COMPLETE WITH INLINE CONDENSATE PUMP, WIRELESS REMOTE, AND DIII-NET/BACNET MS/TP COMMUNICATION ADAPTOR.
2. INDOOR UNIT IS POWERED BY THE OUTDOOR UNIT.

SPLIT SYSTEM OUTDOOR UNIT SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	REFRIG.	USAGE	LOAD (BTU/H)	AIR: AMBIENT ENTERING TEMP. DB/WB (°F)	ELECTRICAL: TOTAL MCA	SEER2	HEAT PUMP CIRCUIT VOLT/PH/HZ	PHYSICAL: LENGTH/ WIDTH/ HEIGHT (IN)	NOTES
CU-1	DAIKIN POLARA RK36WMVJU9	SEE DRAWINGS	SCREW	R-410A	HEATING	0	0	16.6	15.9	208/1/60	12/34/28	1
					COOLING	36,000	95/75					
CU-2	DAIKIN POLARA RK36WMVJU9	SEE DRAWINGS	SCREW	R-410A	HEATING	0	0	16.6	15.9	208/1/60	12/34/28	1
					COOLING	36,000	95/75					
CU-3	DAIKIN POLARA RK36WMVJU9	SEE DRAWINGS	SCREW	R-410A	HEATING	0	0	16.6	15.9	208/1/60	12/34/28	1
					COOLING	36,000	95/75					
CU-4	DAIKIN POLARA RK36WMVJU9	SEE DRAWINGS	SCREW	R-410A	HEATING	0	0	16.6	15.9	208/1/60	12/34/28	1
					COOLING	36,000	95					
CU-5	DAIKIN POLARA RK30WMVJU9	SEE DRAWINGS	SCREW	R-410A	HEATING	0	0	16.6	17.5	208/1/60	12/34/28	1
					COOLING	30,000	95/75					
CU-6	DAIKIN POLARA RK36WMVJU9	SEE DRAWINGS	SCREW	R-410A	HEATING	0	0	16.6	15.9	208/1/60	12/34/28	1
					COOLING	36,000	94.1/64.7					

1. UNIT COMPLETE WITH LOW AMBIENT KIT AND HAIL GUARD.

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST LOGAN UT 84321
795 NORTH 400 WEST SALT LAKE CITY UT 84103

VBFA
40 W. Cache Valley Blvd.
Building 1, Suite B
Logan, UT
O: (435)752-5081
www.vbfa.com
VBFA Project #: 23717

NIBLEY MIDDLE SCHOOL
3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK	DATE	DESCRIPTION
	5-15-2024	Addendum 3

PROJECT #: 23717
DRAWN BY: Author
CHECKED BY: LW
ISSUED: 05/02/2024

REGISTERED PROFESSIONAL ENGINEER
No. 8388845-2202
JEDEDIAH L JENKINS
STATE OF UTAH

MECHANICAL SCHEDULES

M-602

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PUMP SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLUID: FLOW RATE (GPM)	FLUID: WORKING FLUID	FLUID: HEAD LOSS (FT)	PUMP: EFFICIENCY (%)	PUMP: CONSTRUCTION CASING / IMPELLER	ELECTRICAL: MOTOR SIZE (HP)	ELECTRICAL: MOTOR BHP (HP)	ELECTRICAL: MOTOR SPEED (RPM)	ELECTRICAL: VOLT/PH/HZ	NOTES
P-1	TACO FI4013D	BOILER RM	BASE-MOUNTED, END SUCTION	662.9	30% P GLY	96	81	IRON / BRONZE	25	24.18	1760	460/3/60	1,4
P-2	TACO FI4013D	BOILER RM	BASE-MOUNTED, END SUCTION	662.9	30% P GLY	96	81	IRON / BRONZE	25	24.18	1760	460/3/60	1,4
P-3	TACO TA1224	CHILLER RM	HORIZ, SPLIT CASE, DBL SUCTION, SINGLE-STAGE	811.2	WATER	48	82	IRON / BRONZE	15	11.9	1760	460/3/60	2-3
P-4	TACO TA1224	CHILLER RM	HORIZ, SPLIT CASE, DBL SUCTION, SINGLE-STAGE	811.2	WATER	48	82	IRON / BRONZE	15	11.9	1760	460/3/60	2-3
P-5	TACO FI5011D	CHILLER RM	BASE-MOUNTED, END SUCTION	955	30% P GLY	103	86	IRON / BRONZE	30	29.9	1760	460/3/60	4-5
P-6	TACO FI5011D	CHILLER RM	BASE-MOUNTED, END SUCTION	955	30% P GLY	103	86	IRON / BRONZE	30	29.9	1760	460/3/60	4-5
P-7	TACO KV4007D	BOILER RM	VERTICAL, CLOSE COUPLED	315	30% P GLY	22	77	IRON / BRONZE	3	2.26	1760	460/3/60	4
P-8	TACO KV4007D	BOILER RM	VERTICAL, CLOSE COUPLED	315	30% P GLY	22	77	IRON / BRONZE	3	2.26	1760	460/3/60	4

1. UNIT COMPLETE WITH SUCTION DIFFUSER.
2. VFD BY ELECTRICAL, PROVIDE IN ACCORDANCE WITH DIV 26 SPECIFICATION. VFD TO BE PROTECTED BY NEMA 3R ENCLOSURE.
3. PROVIDE WITH TOTALLY ENCLOSED FAN COOLED (TEFC) MOTOR.
4. VFD BY ELECTRICAL, PROVIDE IN ACCORDANCE WITH DIV 26 SPECIFICATION
5. SUCTION DIFFUSER MODEL (SUCTION SIDE): SD050050, NON-GROOVED

SOUND TRAP SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	CASING (GA)	PERFORATED LINER (GA)	TYPE	AIR: MAXIMUM AIRFLOW RATE (CFM)	AIR: STATIC PRESSURE (IN. H2O)	OCTAVE BAND 1 63 HZ (DB)	OCTAVE BAND 2 125 HZ (DB)	OCTAVE BAND 3 250 HZ (DB)	OCTAVE BAND 4 500 HZ (DB)	OCTAVE BAND 5 1000 HZ (DB)	OCTAVE BAND 6 2000 HZ (DB)	OCTAVE BAND 7 4000 HZ (DB)	OCTAVE BAND 8 8000 HZ (DB)	PHYSICAL: LENGTH/ WIDTH/ HEIGHT (IN)	NOTES
DST-1	PRICE RH36/XE HTL2	AH-1 RETURN	10	22	LINEAR	32403	0.12	6	8	12	16	13	10	9	7	36/124/44	(1)
DST-2	PRICE RH36/ZD HTL1	AH-2 RETURN	16	22	LINEAR	37205	0.1	6	8	9	12	10	9	8	6	36/48/124	(1)
DST-3	PRICE RH36/UB HTL2	AH-3 RETURN	10	22	LINEAR	34705	0.1	4	6	9	14	11	8	6	6	36/128/28	(1)
DST-4	PRICE ERM96/9B CL2	AH-4 RETURN	18	22	ELBOW	21240	0.12	11	16	23	36	37	32	27	22	96/30/98	(1)
DST-5	PRICE ERM68/XC CL2	AH-5 RETURN	18	22	ELBOW	3290	0.13	10	15	18	24	26	25	22	19	68/20/30	(1)
DST-6	PRICE ERM78/6E CL2	AH-6 RETURN	18	22	ELBOW	8856	0.22	12	20	31	39	45	37	31	25	78/24/68	(1)
DST-7	PRICE ERM58/YB HTL1	AH-7 RETURN	16	22	ELBOW	10555	0.15	10	13	15	19	21	21	18	16	58/22/68	(1)
DST-8	PRICE ERM84/5D CL2	AH-8 RETURN	18	22	ELBOW	8425	0.15	12	18	29	39	46	39	33	26	84/22/68	(1)
DST-9	PRICE RL36/WB CL2	AH-9 RETURN	18	22	LINEAR	30000	0.09	6	7	10	15	12	8	7	6	36/36/128	(1)
DST-10	PRICE RM36/ZD	AH-10 RETURN	18	22	LINEAR	8695	0.1	7	9	10	14	11	9	7	6	36/24/70	(1)

(1) UNIT SHALL BE GALVANIZED, PERFERATED LINER, FIBERGLASS INSULATION.

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ELECTRIC UNIT HEATER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	USE TYPE	AIR: AIRFLOW RATE (CFM)	AIR: HEATING CAPACITY (BTU/H)	AIR: HEATING CAPACITY (KW)	ELECTRICAL: MOTOR SIZE (HP)	ELECTRICAL: MOTOR SPEED (RPM)	ELECTRICAL: VOLT/PH/HZ	PHYSICAL: CABINET DIMENSIONS LxWxH (IN)	WEIGHT (LBS)	NOTES
EUH-1	QMARK AWH4404F	TOILET D126	ELECTRIC	HEATING	100	5118	1.5	1/8	1550	208/1/60	4x15.75X19.252	25	(1)(2)(3)

(1) CAPACITY BASED AT 4,300 FEET ELEVATION.
(2) COMPLETE WITH FACTORY MOUNTED DISCONNECT AND BUILT-IN THERMOSTAT. SET TO 60F. FUSE PROTECTION BY DIVISION 26.
(3) UNIT COMPLETE WITH SURFACE MOUNTED BOX AND ACCESSORIES.

HYDRONIC UNIT HEATER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	USAGE	AIR: AIRFLOW RATE (CFM)	AIR: LOAD (BTU/H)	AIR: ENTERING TEMP. DB (°F)	AIR: LEAVING TEMP. DB (°F)	FLUID: FLOW RATE (GPM)	FLUID: ENTERING/ LEAVING TEMP. (°F)	FLUID: WORKING FLUID	FLUID: HEAD LOSS (FT)	ELECTRICAL: MOTOR QUAN	ELECTRICAL: MOTOR SIZE (HP)	ELECTRICAL: VOLT/PH/HZ	PHYSICAL: MINIMUM NO. ROWS	NOTES
CUH-1	MODINE CW 0065	VESTIBULE F103	CAB, CEILING, MS	HEATING	495	25700	50	107.7	2	160/134	30% P GLY	2	1	0.4	120/1/60	1	1
CUH-2	MODINE CW 0045	VESTIBULE E124	CAB, CEILING, LS	HEATING	270	12000	50	99.4	1	160/145.9	30% P GLY	2	1	0.4	120/1/60	1	1
CUH-3	MODINE CW 0065	VESTIBULE F101	CAB, CEILING, MS	HEATING	495	25700	50	107.7	2	160/151	30% P GLY	2	1	0.4	120/1/60	1	1
CUH-4	MODINE CW 0065	VESTIBULE C104	CAB, CEILING, MS	HEATING	495	25700	50	107.7	2	160/150	30% P GLY	2	1	0.4	120/1/60	1	1
CUH-5	MODINE CW 0065	VESTIBULE A104	CAB, CEILING, MS	HEATING	495	25700	50	107.7	2	160/149.2	30% P GLY	2	1	0.4	120/1/60	1	1
CUH-6	MODINE CW 0065	VESTIBULE A109	CAB, CEILING, MS	HEATING	495	25700	50	107.7	2	160/150.5	30% P GLY	2	1	0.4	120/1/60	1	1
CUH-7	MODINE CW 0060	VESTIBULE E110	CAB, WALL, MS	HEATING	495	25700	50	107.7	2	160/134	30% P GLY	2	1	0.4	120/1/60	1	1
CUH-8	MODINE CW 0060	VESTIBULE E110	CAB, WALL, MS	HEATING	495	25700	50	107.7	2	160/134	30% P GLY	2	1	0.4	120/1/60	1	1

(1) UNIT COMPLETE WITH HIGH STATIC PSC MOTOR.

HYDRONIC SINGLE DUCT TERMINAL UNIT SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	INLET SIZE (IN)	USAGE	AIR: HEATING AIRFLOW (CFM)	AIR: MAXIMUM AIRFLOW (CFM)	AIR: MINIMUM AIRFLOW (CFM)	AIR: LOAD (BTU/H)	AIR: ENTERING TEMP. DB (°F)	AIR: LEAVING TEMP. DB (°F)	AIR: STATIC PRESSURE (IN. H2O)	FLUID: FLOW RATE (GPM)	FLUID: ENTERING/ LEAVING TEMP. (°F)	FLUID: WORKING FLUID	FLUID: HEAD LOSS (FT)	PHYSICAL: MINIMUM NO. ROWS/ FINS PER INCH	SOUND: NC LEVEL: RADIATED/ DISCHARGE	NOTES
V-1.01	TITUS DESV 12	ESSENTIAL ELEMENTS B101, CALM B102, RESTROOM B103	BASIC, NO ATTEN	12	HEATING	1500	1550	428	56400	55	95.4	0.65	3.3	160/124	30% P GLY	2	3/10	20/15	
V-1.02	TITUS DESV 12	CLASSROOM B104	BASIC, NO ATTEN	12	HEATING	1600	1600	428	59300	55	94.8	0.65	3.5	160/124.3	30% P GLY	2	3/10	20/15	
V-1.03	TITUS DESV 12	CLASSROOM B105	BASIC, NO ATTEN	12	HEATING	1400	1420	428	56400	55	95.4	0.65	3.3	160/124	30% P GLY	2	3/10	18/14	
V-1.04	TITUS DESV 12	CLASSROOM A101	BASIC, NO ATTEN	12	HEATING	700	1420	315	26900	55	96.2	0.65	1.7	160/126.1	30% P GLY	2	2/10	22/20	
V-1.05	TITUS DESV 12	CLASSROOM A102	BASIC, NO ATTEN	12	HEATING	700	1420	428	27200	55	96.7	0.65	1.8	160/128	30% P GLY	2	2/10	21/17	
V-1.06	TITUS DESV 12	CLASSROOM A103	BASIC, NO ATTEN	12	HEATING	1400	1420	428	56400	55	95.4	0.65	3.3	160/124	30% P GLY	2	3/10	18/14	
V-1.07	TITUS DESV 14	CLASSROOM A105	BASIC, NO ATTEN	14	HEATING	1915	1920	559	73800	55	96.4	0.65	4.7	160/127.3	30% P GLY	2	3/10	15/14	
V-1.08	TITUS DESV 14	CLASSROOM A106	BASIC, NO ATTEN	14	HEATING	805	1660	315	31000	55	96.3	0.65	2.6	160/134.7	30% P GLY	2	2/10	24/22	
V-1.09	TITUS DESV 14	CLASSROOM A107	BASIC, NO ATTEN	14	HEATING	830	1660	315	32000	55	96.4	0.65	2.7	160/135	30% P GLY	2	2/10	24/22	
V-1.10	TITUS DESV 16	CLASSROOM A108	BASIC, NO ATTEN	16	HEATING	1930	2060	428	74400	55	96.4	0.65	4.8	160/127.6	30% P GLY	2	3/10	22/17	
V-1.11	TITUS DESV 12	SPECIAL EDUCATION A111	BASIC, NO ATTEN	12	HEATING	785	1565	219	30200	55	96.3	0.65	2.5	160/134.4	30% P GLY	2	2/10	20/18	
V-1.12	TITUS DESV 10	SPECIAL EDUCATION A112	BASIC, NO ATTEN	10	HEATING	355	975	219	14300	55	98.4	0.65	1.7	160/142.3	30% P GLY	2	2/10	20/18	
V-1.13	TITUS DESV 10	CLASSROOM A113	BASIC, NO ATTEN	10	HEATING	710	975	428	27600	55	96.7	0.65	2.3	160/134.8	30% P GLY	2	3/10	20/15	
V-1.14	TITUS DESV 14	CLASSROOM A114	BASIC, NO ATTEN	14	HEATING	710	1680	428	27600	55	96.7	0.65	2.3	160/134.8	30% P GLY	2	2/10	20/15	
V-1.15	TITUS DESV 14	CLASSROOM B106	BASIC, NO ATTEN	14	HEATING	720	1685	428	27700	55	96.4	0.65	2.3	160/134.6	30% P GLY	2	2/10	20/15	
V-1.16	TITUS DESV 12	TEACHER LOUNGE B107	BASIC, NO ATTEN	12	HEATING	660	1485	315	25400	55	96.3	0.65	2.4	160/137.5	30% P GLY	2	2/10	22/20	
V-1.17	TITUS DESV 14	SCIENCE CLASSROOM B121	BASIC, NO ATTEN	14	HEATING	1700	1800	428	63000	55	94.8	0.65	3.8	160/125.1	30% P GLY	2	3/10	20/15	
V-1.18	TITUS DESV 16	SCIENCE CLASSROOM B126, SCIENCE PREP B134	BASIC, NO ATTEN	16	HEATING	1935	2150	428	72400	55	95.2	0.65	4.7	160/127.6	30% P GLY	2	3/10	21/15	
V-1.19	TITUS DESV 14	SCIENCE CLASSROOM A116, SCIENCE PREP A119	BASIC, NO ATTEN	14	HEATING	2040	2040	428	78600	55	95.2	0.65	5.4	160/129.4	30% P GLY	2	3/10	22/17	
V-1.21	TITUS DESV 16	CORRIDOR A125, CORRIDOR B122, STAIR A126, CORRIDOR A117, STAIR A127, CORRIDOR A115, CORRIDOR A133A, STORAGE A128, CUSTODIAN A129, CORRIDOR A114A, CORRIDOR B120	BASIC, NO ATTEN	16	HEATING	220	2130	428	8200	55	95	0.65	1.4	160/147.7	30% P GLY	2	2/10	22/17	
V-2.01	TITUS DESV 12	CLASSROOM B201	BASIC, NO ATTEN	12	HEATING	1120	1400	315	43200	55	96.4	0.65	2.9	160/128.4	30% P GLY	2	3/10	23/21	
V-2.02	TITUS DESV 12	CLASSROOM B204	BASIC, NO ATTEN	12	HEATING	1120	1400	428	56400	55	95.4	0.65	3.3	160/124	30% P GLY	2	3/10	18/14	
V-2.03	TITUS DESV 12	CLASSROOM B205	BASIC, NO ATTEN	12	HEATING	1120	1400	428	56400	55	95.4	0.65	3.3	160/124	30% P GLY	2	3/10	18/14	
V-2.04	TITUS DESV 12	CLASSROOM A201	BASIC, NO ATTEN	12	HEATING	1095	1400	315	42200	55	96.4	0.65	2.8	160/128.1	30% P GLY	2	3/10	23/21	
V-2.05	TITUS DESV 12	CLASSROOM A202	BASIC, NO ATTEN	12	HEATING	1400	1400	428	56400	55	95.4	0.65	3.3	160/124	30% P GLY	2	3/10	18/14	
V-2.06	TITUS DESV 14	CLASSROOM A203	BASIC, NO ATTEN	14	HEATING	1700	1710	559	74500	55	95	0.65	4.9	160/128	30% P GLY	2	3/10	16/14	
V-2.07	TITUS DESV 16	CLASSROOM A205	BASIC, NO ATTEN	16	HEATING	2340	2340	559	89700	55	96.4	0.65	4.5	160/118.5	30% P GLY	2	3/10	17/16	
V-2.08	TITUS DESV 14	CLASSROOM A206	BASIC, NO ATTEN	14	HEATING	1235	1830	428	48500	55	97.2	0.65	2.8	160/123.5	30% P GLY	2	2/10	21/15	
V-2.09	TITUS DESV 14	CLASSROOM A207	BASIC, NO ATTEN	14	HEATING	1240	1830	428	47800	55	96.4	0.65	3.8	160/133.7	30% P GLY	2	2/10	21/15	
V-2.10	TITUS DESV 16	CLASSROOM A208	BASIC, NO ATTEN	16	HEATING	2300	2340	559	90300	55	97.2	0.65	4.5	160/118.4	30% P GLY	2	3/10	17/16	
V-2.11	TITUS DESV 14	CLASSROOM A211	BASIC, NO ATTEN	14	HEATING	1690	1800	428	65100	55	96.4	0.65	3.9	160/125.2	30% P GLY	2	3/10	21/15	
V-2.12	TITUS DESV 14	CLASSROOM A213	BASIC, NO ATTEN	14	HEATING	1800	1800	559	74500	55	95	0.65	4.9	160/128	30% P GLY	2	3/10	16/14	
V-2.13	TITUS DESV 14	CLASSROOM A214	BASIC, NO ATTEN	14	HEATING	1800	1800	559	70600	55	94.9	0.65	4.5	160/127	30% P GLY	2	3/10	15/14	
V-2.14	TITUS DESV 14	CLASSROOM B206	BASIC, NO ATTEN	14	HEATING	1105	1810	428	42600	55	96.4	0.65	3.2	160/132.2	30% P GLY	2	2/10	21/15	
V-2.15	TITUS DESV 14	CLASSROOM B207	BASIC, NO ATTEN	14	HEATING	1300	1810	428	49100	55	95.6	0.65	2.8	160/123	30% P GLY	2	2/10	21/15	
V-2.16	TITUS DESV 12	SCIENCE CLASSROOM B221	BASIC, NO ATTEN	12	HEATING	800	1400	315	30000	55	95.3	0.65	2.5	160/134.8	30% P GLY	2	2/10	20/18	
V-2.17	TITUS DESV 14	SCIENCE CLASSROOM B226, SCIENCE PREP B224	BASIC, NO ATTEN	14	HEATING	1760	1760	559	82900	55	95.1	0.65	5.6	160/128.9	30% P GLY	2	3/10	17/16	
V-2.20	TITUS DESV 16	CORRIDOR A225, CORRIDOR B222, STORAGE A204, CORRIDOR A217, CORRIDOR A233B, CORRIDOR A215, CORRIDOR A214B, CORRIDOR B220, STORAGE A218, STAIR A229, STORAGE A209	BASIC, NO ATTEN	16	HEATING	1465	2600	559	28300	55	75.7	0.65	2.9	160/140	30% P GLY	2	3/10	23/22	
V-2.21	TITUS DESV 14	SCIENCE CLASSROOM A216, SCIENCE PREP A219	BASIC, NO ATTEN	14	HEATING	1650	1650	428	80100	55	95	0.65	5.3	160/128.3	30% P GLY	2	2/10	22/17	
V-2.22	TITUS DESV 10	RESTROOM A223, MALE A221, FEMALE A222, RESTROOM A224	BASIC, NO ATTEN	10	HEATING	500	500	315	37400	55	94.8	0.65	2.4	160/127.2	30% P GLY	2	2/10	19/18	
V-3.01	TITUS DESV 14	SHARED STORAGE C102, CCA SHOP C103	BASIC, NO ATTEN	14	HEATING	1095	1975	428	42100	55	96.3	0.65	3.2	160/132.3	30% P GLY	2	2/10	21/15	
V-3.02	TITUS DESV 12	MAKER SPACE C101	BASIC, NO ATTEN	12	HEATING	800	1510	428	31200	55	96.9	0.65	2.3	160/131.5	30% P GLY	2	2/10	18/14	
V-3.03.A	TITUS DESV 16	MEDIA CENTER C115, STORAGE C113, OFFICE C114	BASIC, NO ATTEN	16	HEATING	2084	2400	0	28200	55	71.6	0.65	2.9	160/140	30% P GLY	2	3/10	0/0	
V-3.03.B	TITUS DESV 16	MEDIA CENTER C115, STORAGE C113, OFFICE C114	BASIC, NO ATTEN	16	HEATING	2084	2400	0	28200	55	71.6	0.65	2.9	160/140	30% P GLY	2	3/10	0/0	
V-3.03.C	TITUS DESV 12	MEDIA CENTER C115, STORAGE C113, OFFICE C114	BASIC, NO ATTEN	12	HEATING	1316	1500	0	28200	55	71.6	0.65	2.9	160/140	30% P GLY	2	3/10	0/0	
V-3.04	TITUS DESV 14	FORUM C116, STORAGE C118	BASIC, NO ATTEN	14	HEATING	2100	2100	559	80800	55	95	0.65	5.4	160/128.5	30% P GLY	2	3/10	17/15	
V-3.05	TITUS DESV 12	SCHOOL STORE C120, FACULTY RESTROOM B115, FACULTY RESTROOM B114, CUSTODIAN C119, CORRIDOR C117, CORRIDOR C105	BASIC, NO ATTEN	12	HEATING	320	1320	315	11900	55	94.8	0.65	1.9	160/146.9	30% P GLY	2	1/10	22/20	
V-3.06	TITUS DESV 6	FEMALE B119, TOILET B118, MALE B116, TOILET B117	BASIC, NO ATTEN	8	HEATING	500	500	315	37400	55	94.8	0.65	2.4	160/127.2	30% P GLY	2	3/10	19/18	
V-3.07	TITUS DESV 06	COUNSELOR/ RESOURCE OFFICER B109, STORAGE B111	BASIC, NO ATTEN	6	HEATING	100	100	79	5600	55	95	0.65	1.9	160/153.8	30% P GLY	2	1/10	10/0	
V-3.08	TITUS DESV 6	FACULTY WORKROOM B108, STORAGE B110	BASIC, NO ATTEN	6	HEATING	240	240	140	12300	55	95.7	0.65	1.2	160/138.5	30% P GLY	2	2/10	14/15	
V-3.09	TITUS DESV 10	CORRIDOR C106, STAIR C107	BASIC, NO ATTEN	10	HEATING	820	890	315	30800	55	95.4	0.65	2.6	160/135.1	30% P GLY	2	3/10	18/17	
V-3.11	TITUS DESV 06	OFFICE C108, OFFICE C109, STORAGE C110, CORRIDOR C111	BASIC, NO ATTEN	6	HEATING	135	345	79	5100	55	95.6	0.65	1.2	160/151.2	30% P GLY	2	1/10	15/14	
V-3.13	TITUS DESV 14	FCS C203, SHARED STORAGE C202	BASIC, NO ATTEN	14	HEATING	1510	1645	428	58300	55	96.4	0.65	3.4	160/124	30% P GLY	2	2/10	19/14	
V-3.14	TITUS DESV 14	MAKER SPACE C201	BASIC, NO ATTEN	14	HEATING	1685	1680	428	65000	55	96.4	0.65	3.9	160/125.2	30% P GLY	2	3/10	20/15	
V-3.15	TITUS DESV 10	STORAGE / ROOF ACCESS C217, STAIR C215, CORRIDOR C220	BASIC, NO ATTEN	10	HEATING	890	890	315	29500	55	96.4	0.65	2.4	160/134	30% P GLY	2	3/10	17/15	
V-3.16	TITUS DESV 10	CLASSROOM C224	BASIC, NO ATTEN	10	HEATING	700	1000	315	26300	55	95.4	0.65	2.1	160/133.7	30% P GLY	2	3/10	18/17	
V-3.17	TITUS DESV 10	CLASSROOM C222	BASIC, NO ATTEN	10	HEATING	700	1000	315	26300	55	95.4	0.65	2.1	160/133.7	30% P GLY	2	3/10	18/17	
V-3.18	TITUS DESV 10	CLASSROOM C219	BASIC, NO ATTEN	10	HEATING	770	1000	315	28500	55	94.8	0.65	2.3	160/133.9	30% P GLY	2	3/10	17/15	
V-3.19	TITUS DESV 14	CLASSROOM C218	BASIC, NO ATTEN	14	HEATING	1635	1650	428	63000	55	96.4	0.65	3.8	160/125	30% P GLY	2	2/10	20/15	
V-3.20	TITUS DESV 14	STOR. C214, SPECIAL EDUCATION C216	BASIC, NO ATTEN	14	HEATING	1610	1640	428	62000	55	96.4	0.65	3.7	160/124.7	30% P GLY	2	2/10	20/15	
V-3.21	TITUS DESV 12	DIGITAL LITERACY C213	BASIC, NO ATTEN	12	HEATING	800	1475	315	30800	55	96.3	0.65	2.5	160/134.8	30% P GLY	2	2/10	22/20	
V-3.22	TITUS DESV 8	ESL C211	BASIC, NO ATTEN	8	HEATING	500	500	219	22200	55	94.8	0.65	3	160/144.5	30% P GLY	2	3/10	20/18	
V-3.23	TITUS DESV 8	ESL C210	BASIC, NO ATTEN	8	HEATING	500	500	219	22200	55	94.8	0.65	3	160/144.5	30% P GLY	2	3/10	20/18	
V-3.24	TITUS DESV 06	OFFICE C206, CUST/OFFICE C208, OFFICE C207	BASIC, NO ATTEN	6	HEATING	300	300	79	5000	55	95	0.65	1.2	160/151.2	30% P GLY	2	2/10	13/11	
V-3.25	TITUS DESV 10	A/V BOOTH C209, STOR. C212	BASIC, NO ATTEN	8	HEATING	283	800	140	10900	55	96.4	0.65	1.2	160/141.2	30% P GLY	2	2/10	23/20	
V-3.26	TITUS DESV 16	CUSTODIAN B213, CORRIDOR C223, FACULTY RESTROOM B215, STORAGE C221, STAIR C225, FACULTY RESTROOM B214, COORIDOR C205	BASIC, NO ATTEN	16	HEATING	1911	2280	559	73700	55	96.4	0.65	4.7	160/127.3	30% P GLY	2	3/10	17/16	
V-3.27	TITUS DESV 10	AMP B208, STORAGE B210	BASIC, NO ATTEN	10	HEATING	550	920	219	21200	55	96.3	0.65	2.1	160/139.4	30% P GLY	2	2/10	20/18	
V-3.28	TITUS DESV 08	SLP B209	BASIC, NO ATTEN	8	HEATING	430	650	140	16100	55	95.3	0.65	1.7	160/140.1	30% P GLY	2	2/10	20/18	
V-3.29	TITUS DESV 6	FEMALE B219, TOILET B218, MALE B216, TOILET B217	BASIC, NO ATTEN	6	HEATING	349	500	219	14200	55	98.7	0.65	1.7	160/142.5	30% P GLY	2	3/10	23/20	
V-3.30	TITUS DESV 10	SPECIAL EDUCATION C204	BASIC, NO ATTEN	10	HEATING	680	680	219	26200	55	96.4	0.65	2.5	160/138.5	30% P GLY	2	3/10	20/19	
V-4.03	TITUS DESV 10	STACKED CHAIR STORAGE D122, STORAGE D123, M. DRESS D103, F. DRESS D120	BASIC, NO ATTEN	10	HEATING	650	650	140	19700	55	87.8	0.65	1.9	160/137.9	30% P GLY	2	3/10	22/19	
V-4.04	TITUS DESV 10	PERFORMING ARTS LIBRARY D124, CORRIDOR D121	BASIC, NO ATTEN	10	HEATING	725	725	140	22200	55	87.8	0.65	1.8	160/134	30% P GLY	2	3/10	23/20	
V-4.05	TITUS DESV 10	LUNCH ACCOUNTS D139, TABLE STORAGE D134	BASIC, NO ATTEN	10	HEATING	990	990	219	30200	55	87.8	0.65	1.9	160/127.3	30% P GLY	2	3/10	22/19	
V-5.01	TITUS DESV 14	DISH WASH D133, A LA CARTE D131, SERVING D130, KITCHEN D127, LAUNDRY D125, TOILET D126, DRY STORAGE 129	BASIC, NO ATTEN	12	HEATING	1490	1490	559	73500	55	96.4	0.65	4.7	160/127.4	30% P GLY	2	3/10	18/17	
V-5.02	TITUS DESV 14	DISH WASH D133, A LA CARTE D131, SERVING D130, KITCHEN D127, LAUNDRY D125, TOILET D126	BASIC, NO ATTEN	14	HEATING	1475	1475	559	73500	55	96.4	0.65	4.7	160/127.4	30% P GLY	2	2/10	18/17	
V-5.03	TITUS DESV 6	OFFICE D132	BASIC, NO ATTEN	6	HEATING	100	100	219	21200	55	96.4	0.65	1.9	160/136.2	30% P GLY	2	1/10	20/17	
V-6.01	TITUS DESV 16	BAND D119	BASIC, NO ATTEN	16	HEATING	2040	2040	428	94000	55	95.4	0.65	4.8	160/118.7	30% P GLY	2	3/10	23/18	
V-6.02	TITUS DESV 14	CHOIR / DRAMA D111	BASIC, NO ATTEN	14	HEATING	1200	1750	428	48100	55	98.1	0.65	2.8	160/123.8	30% P GLY	2	2/10	21/15	
V-6.03	TITUS DESV 10	OFFICE D117, OFFICE D116, LIBRARY D115, PRACTICE / STORAGE D112, LIBRARY D114, PRACTICE D113	BASIC, NO ATTEN	10	HEATING	400	600	79	14900	55	95.1	0.65	1.2	160/133.8	30% P GLY	2	2/10	23/20	
V-6.04	TITUS DESV 14	OFFICE D110, PRACTICE D109, ORCHESTRA GUITAR D108	BASIC, NO ATTEN	14	HEATING	1665	2021	428	64000	55	96.3	0.65	3.8	160/124.9	30% P GLY	2	3/10	22/17	
V-6.05	TITUS DESV 16	ART / CERAMICS E125	BASIC, NO ATTEN	16	HEATING	2465	2465	559	95100	55	96.5	0.65	4.8	160/118.6	30% P GLY	2	3/10	18/17	
V-7.01	TITUS DESV 6	COUNSELOR E101, COUNSELOR E104	BASIC, NO ATTEN	6	HEATING	170	300	107	6300	55	95	0.65	1.1	160/147.9	30% P GLY	2	1/10	14/15	
V-7.02	TITUS DESV 10	COUNSELOR E105, COUNSELOR E103	BASIC, NO ATTEN	10	HEATING	790	820	219	30300	55	96.3	0.65	2.5	160/134.3	30% P GLY	2	3/10	20/18	
V-7.03	TITUS DESV 10	CONFERENCE E108, STORAGE E106	BASIC, NO ATTEN	10	HEATING	620	930	219	23900	55	96.5	0.65	2.5	160/140.4	30% P GLY	2	3/10	22/19	
V-7.04	TITUS DESV 08	RECEPTION E107, CORRIDOR E100, STORAGE E102	BASIC, NO ATTEN	8	HEATING	325	590	140	12400	55	96	0.65	1.4	160/141.7	30% P GLY	2	2/10	19/18	
V-7.05	TITUS DESV 14	RECEPTION E111, STORAGE E119, HEAD SEC E113, NURSE E114, TOILET E118, CORRIDOR E120, TOILET E117, CORRIDOR E121, SICK E116	BASIC, NO ATTEN	14	HEATING	1085	1815	428	41700	55	96.3	0.65	3.2	160/132.4	30% P GLY	2	2/10	21/15	
V-7.06	TITUS DESV 14	ASSISTANT PRINCIPAL E115, ASSISTANT PRINCIPAL E112	BASIC, NO ATTEN	14	HEATING	980	1720	428	37700	55	96.4	0.65	2.8	160/131.5	30% P GLY	2	2/10	20/15	
V-7.07	TITUS DESV 12	PRINCIPAL E123	BASIC, NO ATTEN	12	HEATING	1240	1600	428	48600	55	97.1	0.65	2.8	160/123.5	30% P GLY	2	3/10	20/15	
V-7.08	TITUS DESV 12	CONFERENCE E122	BASIC, NO ATTEN	12	HEATING	565	1200	315	21700	55	96.3	0.65	1.9	160/136.5	30% P GLY	2	2/10	20/18	
V-7.09	TITUS DESV 12	CORRIDOR E109, CORRIDOR D106	BASIC, NO ATTEN	12	HEATING	1175	1600	428	45200	55	96.4	0.65	3.1	160/129.1	30% P GLY	2	3/10	20/15	
V-8.01 A	TITUS DESV 16	CORRIDOR F117, CORRIDOR F102, CORRIDOR D107	BASIC, NO ATTEN	6	HEATING	250	360	838	92700	55	96.4	0.65	4.6	160/118.2	30% P GLY	2	2/10	39/27	
V-8.01 B	TITUS DESV 16	CORRIDOR F117, CORRIDOR F102, CORRIDOR D107	BASIC, NO ATTEN	16	HEATING	1077	1550	838	92700	55	96.4	0.65	4.6	160/118.2	30% P GLY	2	2/10	39/27	
V-8.01 C	TITUS DESV 16	CORRIDOR F117, CORRIDOR F102, CORRIDOR D107	BASIC, NO ATTEN	16	HEATING	1077	1550	838	92700	55	96.4	0.65	4.6	160/118.2	30% P GLY	2	2/10	39/27	
V-8.02 A	TITUS DESV 16	TOILET/SHOWER F119, PE OFFICE F118, TOILETS F122, TOILET F126, TOILET F123, JANITOR F124, SHOWERS F121, MALE F125, FEMALE F127, GIRLS LOCKER ROOM F120	BASIC, NO ATTEN	16	HEATING	1180	1550	559	47400	55	98.1	0.65	3.4	160/130.7	30% P GLY	2	2/10	22/21	
V-8.02 B	TITUS DESV 16	TOILET/SHOWER F114, TOILETS F113, PE OFFICE F116, SHOWERS F112, BOYS LOCKER ROOM F115	BASIC, NO ATTEN	16	HEATING	1180	1550	559	47400	55	98.1	0.65	3.4	160/130.7	30% P GLY	2	2/10	22/21	
V-8.03	TITUS DESV 12	HEALTH / CLASSROOM F111	BASIC, NO ATTEN	12	HEATING	1060	1200	315	40800	55	96.4	0.65	2.6	160/127.8	30% P GLY	2	3/10	20/18	

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CACHE COUNTY SCHOOL DISTRICT

MARK	DATE	DESCRIPTION
	5-15-2024	Addendum 3

PROJECT #: 23717
DRAWN BY: Author
CHECKED BY: LW
ISSUED: 05/02/2024

CONSTRUCTION DOCUMENTS

MECHANICAL SCHEDULES

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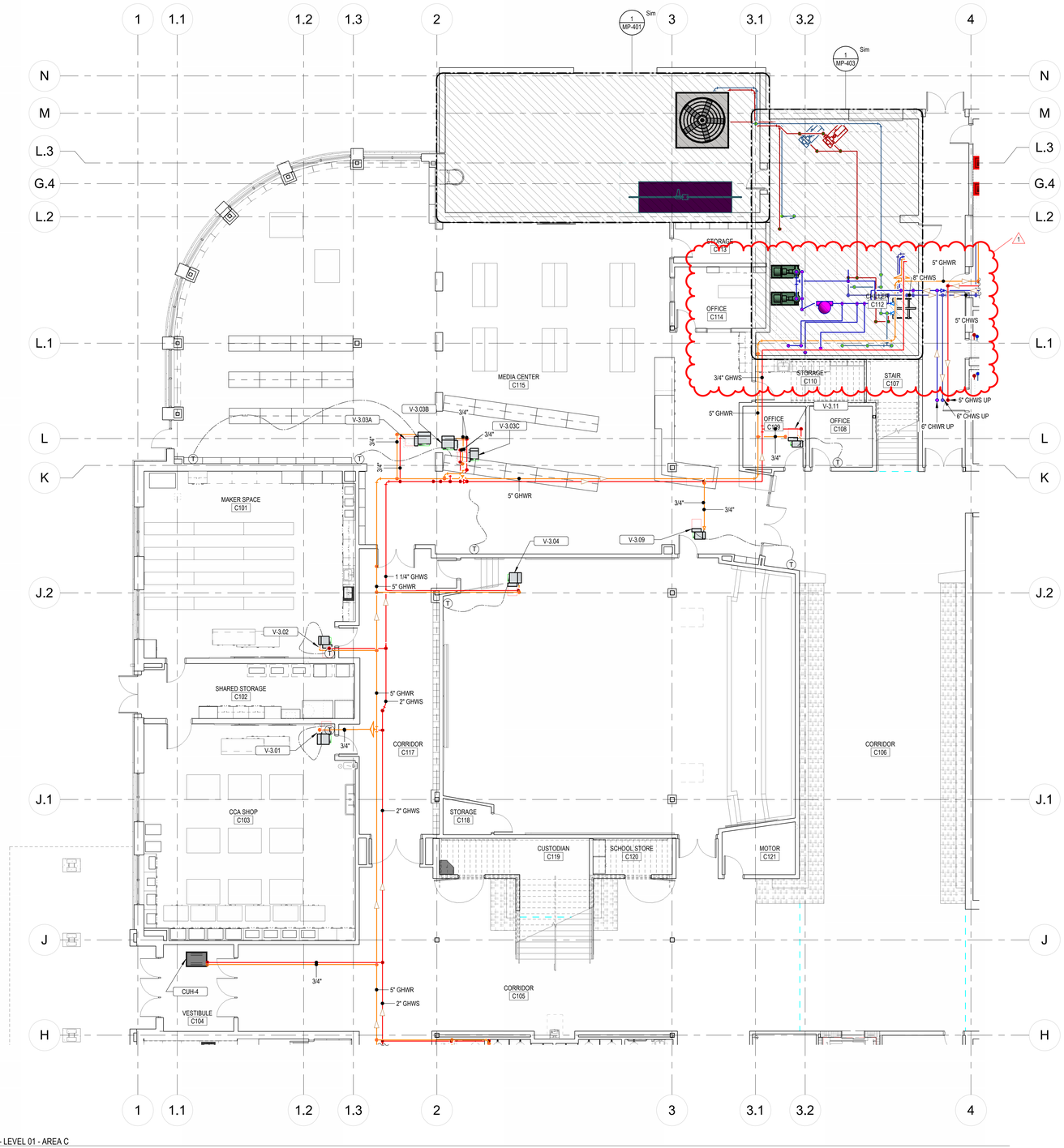
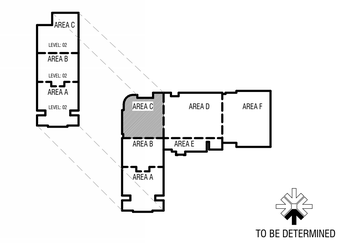
KEYNOTES



1 MP-111.C MECHANICAL PIPING PLAN - LEVEL 01 - AREA C
1/8" = 1'-0"

KEY PLAN



CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
799 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

VBFA
40 W. Cache Valley Blvd.
Building 1, Suite B
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O: (435)752-5081
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VBFA Project #: 23717

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	Author
CHECKED BY:	LW
ISSUED:	05/02/2024

LICENSED PROFESSIONAL ENGINEER
No. 8386445-2202
MEDIAN L. WAHLEN
STATE OF UTAH

MECHANICAL PIPING PLAN - LEVEL 01 - AREA C

MP-111.C

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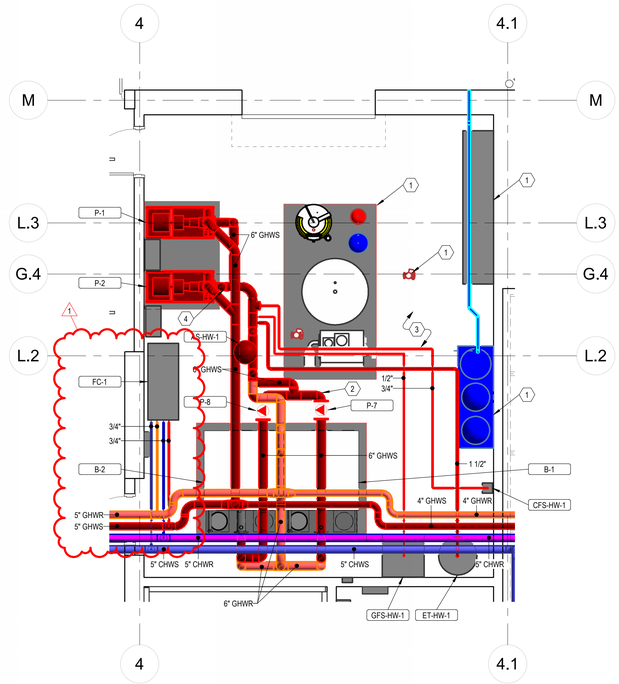
5/10/2024 12:52:01 PM

KEYNOTES

1. PLUMBING EQUIPMENT. SEE PLUMBING PLANS.
2. MINIMUM OVERHEAD PIPE OR DUCT CLEARANCE TO BE 7'-6", TYPICAL.
3. MAINTAIN PROPER CLEARANCE IN ISLE FOR FUTURE REPLACEMENT OF BOILERS AND OTHER EQUIPMENT.
4. REFER TO PIPING SCHEMATIC FOR ALL PIPING COMPONENTS AND DETAILS, TYPICAL.



1 / MP-402 ENLARGED MECHANICAL PIPING PLAN - BOILER ROOM
1/4" = 1'-0"

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST LOGAN, UT 84321
759 NORTH 400 WEST SALT LAKE CITY, UT 84103

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	Author
CHECKED BY:	LW
ISSUED:	05/02/2024

REGISTERED PROFESSIONAL ENGINEER
No. 8356445-2202
MEDIAN L. BINKHORST
STATE OF UTAH

MECHANICAL PIPING
ENLARGED VIEWS

MP-402

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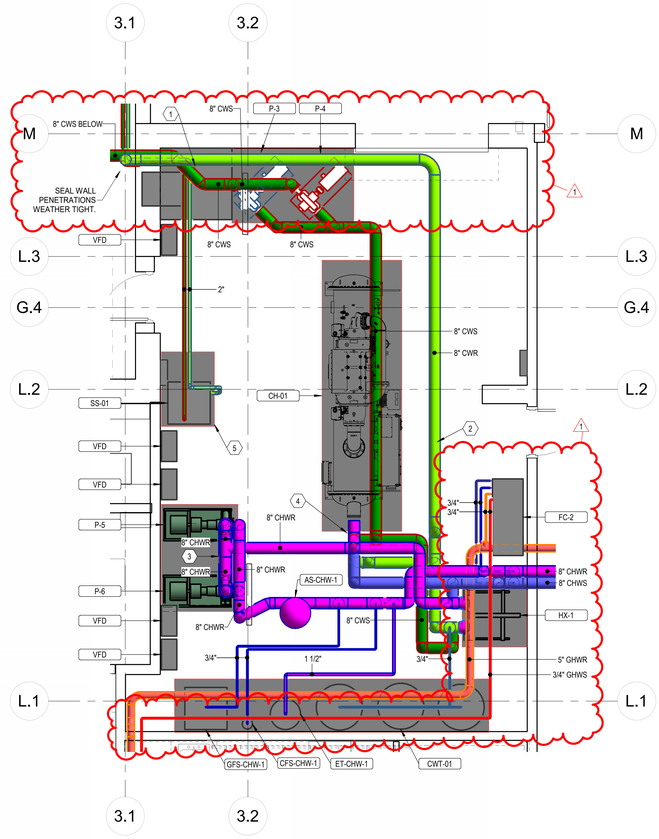
5/15/2024 12:02:24 PM

KEYNOTES

1. SUMP FOR COOLING TOWER. SEE PLUMBING PLANS.
2. MINIMUM OVERHEAD PIPE OR DUCT CLEARANCE TO BE 7'-6", TYPICAL.
3. BYPASS LINE BELOW 8" CHWR. SEE COOLING SYSTEM SCHEMATIC.
4. REFER TO PIPING SCHEMATIC FOR ALL PIPING COMPONENTS AND DETAILS, TYPICAL.
5. ALL EQUIPMENT IN MECHANICAL ROOM TO BE INSTALLED ON 6" HOUSEKEEPING PADS.



1 / MP-403 ENLARGED MECHANICAL PIPING PLAN - CHILLER ROOM
1/4" = 1'-0"

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255 SOUTH 300 WEST
759 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	Author
CHECKED BY:	LW
ISSUED:	05/02/2024

REGISTERED PROFESSIONAL ENGINEER
No. 6369645-2202
LAWRENCE L. WINKNES
STATE OF UTAH

CONSTRUCTION DOCUMENTS

MECHANICAL PIPING ENLARGED VIEWS

MP-403

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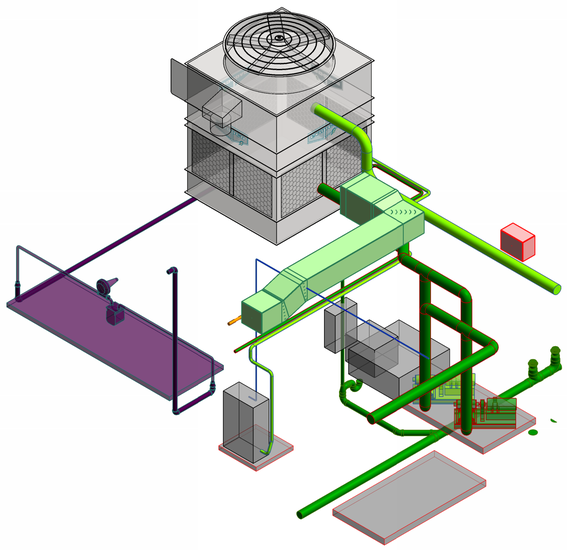
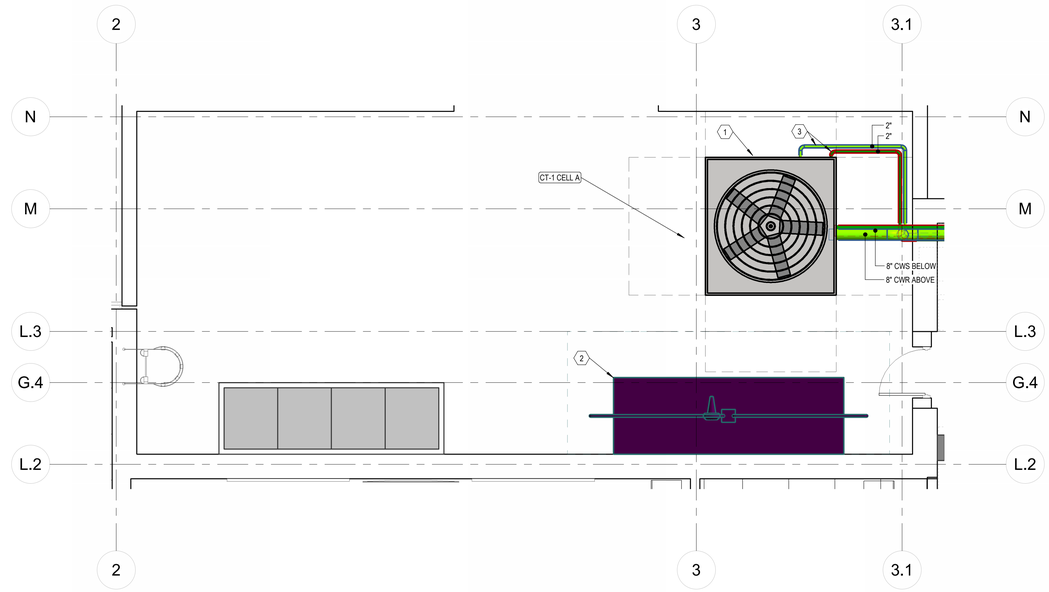
KEYNOTES

1. INSTALL COOLING TOWER ON STRUCTURAL SUPPORTS. TOP OF COOLING TOWER SHALL BE EVEN WITH THE TOP OF MECHANICAL YARD WALL.
2. NATURAL GAS METER.
3. 2" PIPING FROM FLUID FILTER SERVES BASIN SWEEPER PIPING AT COOLING TOWER. COORDINATE FINAL CONNECTIONS WITH FURNISHED EQUIPMENT.



2 MP-401 ISOMETRIC - MECHANICAL HVAC & MECHANICAL PIPING - COOLING TOWER



1 MP-401 ENLARGED MECHANICAL PIPING PLAN - COOLING TOWER
1/4" = 1'-0"

design west | architects
255 SOUTH 300 WEST
799 NORTH 400 WEST
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SALT LAKE CITY, UT 84103

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	Author
CHECKED BY:	LW
ISSUED:	05/02/2024

REGISTERED PROFESSIONAL ENGINEER
NO. 8389445-2202
LOREDIAN L. WINKLER
STATE OF UTAH

CONSTRUCTION DOCUMENTS

MECHANICAL PIPING
ENLARGED VIEWS

MP-401

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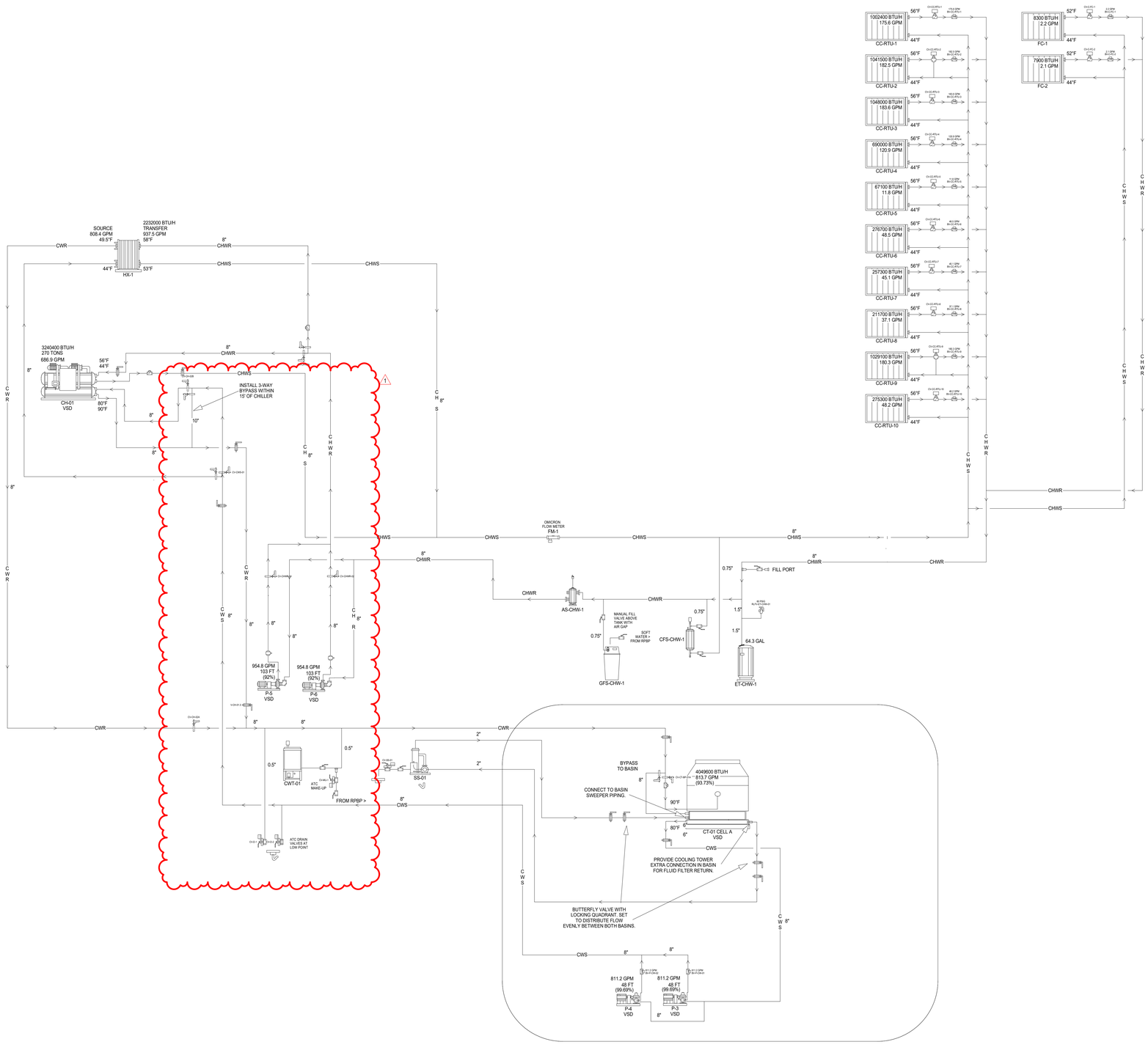

COOLING SYSTEM

design west | architects
255 SOUTH 300 WEST
795 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

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NIBLEY MIDDLE SCHOOL
3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

CONSTRUCTION DOCUMENTS

PROJECT #:	23717
DRAWN BY:	Author
CHECKED BY:	LW
ISSUED:	05/02/2024

REGISTERED PROFESSIONAL ENGINEER
No. 8389445-2202
LAWRENCE D. WEIRICH
STATE OF UTAH

MECHANICAL PIPING SCHEMATICS

MP-702

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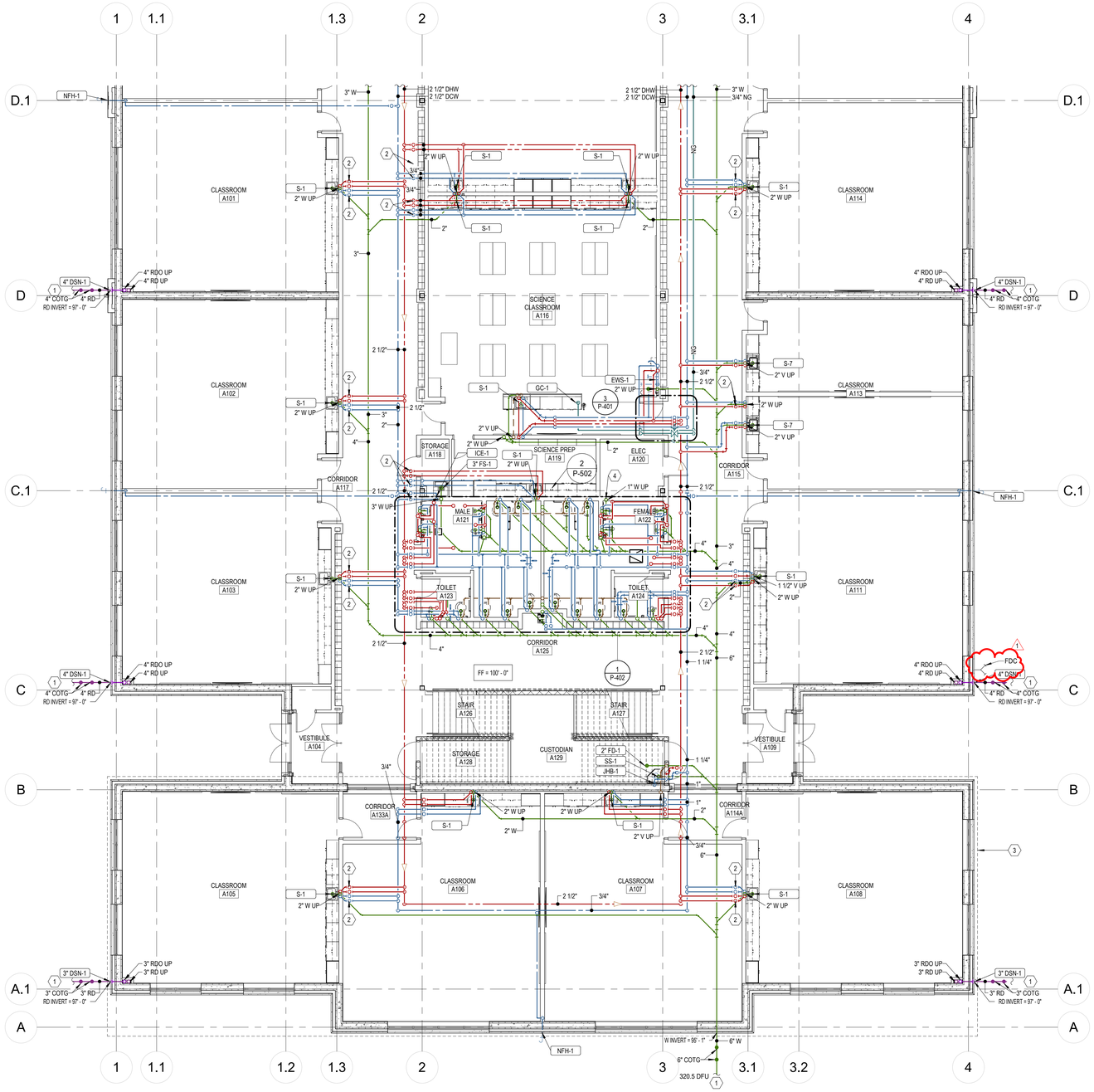
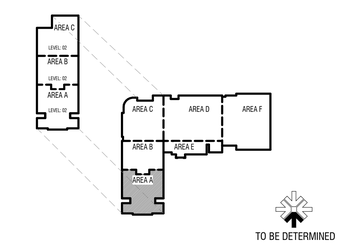
KEYNOTES

1. SEE CIVIL PLANS FOR CONTINUATION.
2. DOMESTIC WATER SERVES FIXTURE ABOVE. TAG VALVE WITH ROOM NUMBER SERVED.
3. BID ALTERNATE 1: THE DEFINED AREA IS BID ALTERNATE 1 AND SHALL BE REMOVED IF THE BID ALTERNATE IS NOT ACCEPTED.
4. CONDENSATE WALL BOX. SEE DETAIL 7/P-502. SEE ARCHITECT FOR MOUNTING HEIGHT.



1 P-111.A PLUMBING PLAN - LEVEL 01 - AREA A
1/8" = 1'-0"

KEY PLAN



CONSTRUCTION DOCUMENTS

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255 SOUTH 300 WEST
799 NORTH 400 WEST
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SALT LAKE CITY, UT 84103

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VBFA Project #: 23717

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	DB
CHECKED BY:	LW
ISSUED:	05/02/2024

LICENSED PROFESSIONAL ENGINEER
No. 8386445-2202
BENJAMIN L. WAYMAN
STATE OF UTAH

PLUMBING PLAN - LEVEL 01 - AREA A

P-111.A

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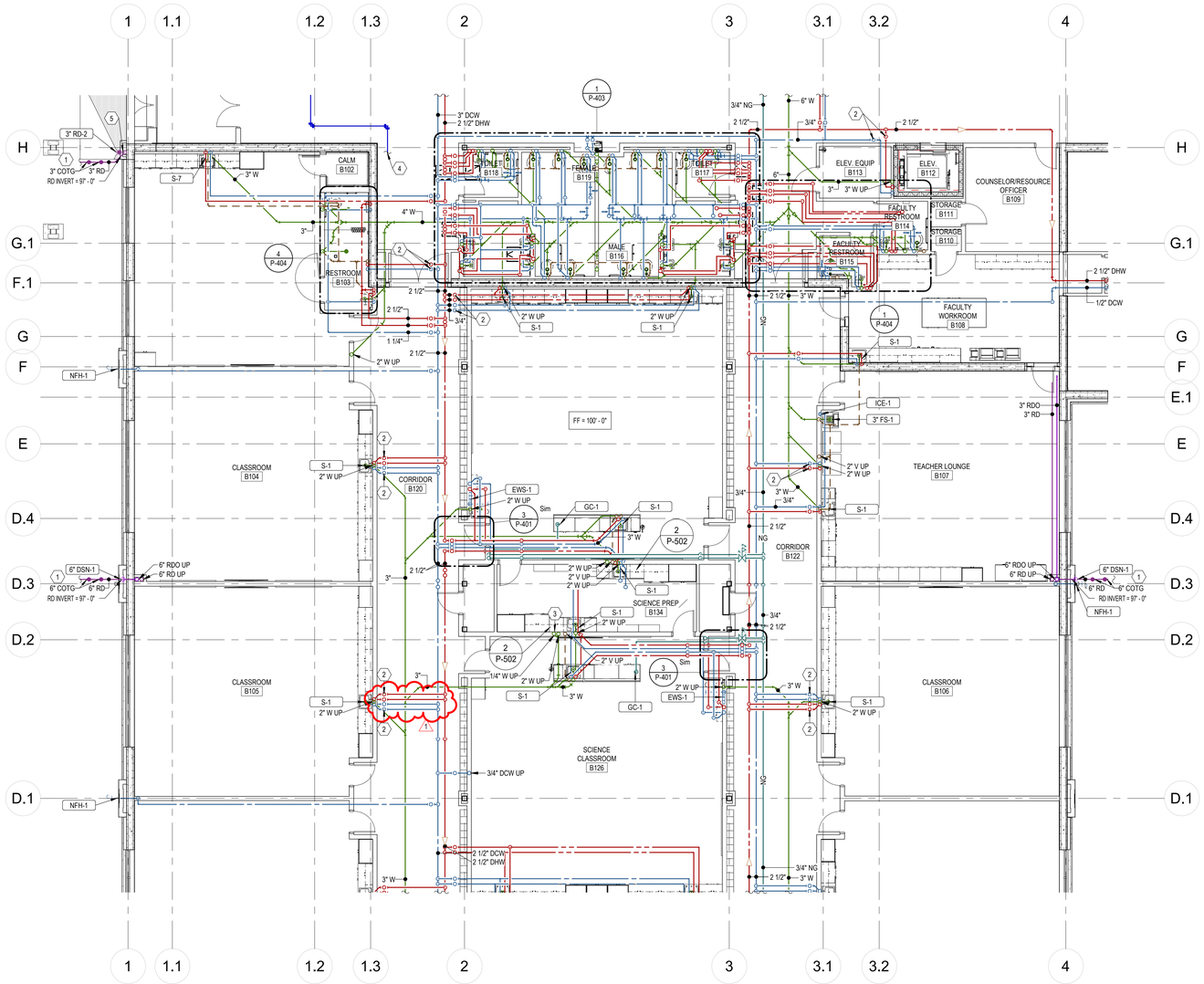
5/10/2024 12:21:18 PM

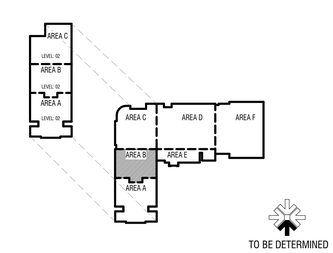
KEYNOTES

1. SEE CIVIL PLANS FOR CONTINUATION.
2. DOMESTIC WATER SERVES FIXTURE ABOVE. TAG VALVE WITH ROOM NUMBER SERVED.
3. CONDENSATE WALL BOX. SEE DETAIL 7/P-502. SEE ARCHITECT FOR MOUNTING HEIGHT.
4. FIRE PROTECTION MAIN CONTINUES TO SERVE ALL SPRINKLER IN CLASSROOM FIRE ZONE.
5. HEAT TRACE RD PIPING. 3 WATTS PER LINEAL FOOT. APPROXIMATELY 45 WATTS.



1 P-111.B PLUMBING PLAN - LEVEL 01 - AREA B
1/8" = 1'-0"

KEY PLAN



CONSTRUCTION DOCUMENTS

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255 SOUTH 300 WEST
759 NORTH 400 WEST
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SALT LAKE CITY, UT 84103

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	DB
CHECKED BY:	LW
ISSUED:	05/02/2024

REGISTERED PROFESSIONAL ENGINEER
No. 6369645-2202
MEDIAN L. JENKINS
STATE OF UTAH

PLUMBING PLAN - LEVEL 01 - AREA B

P-111.B

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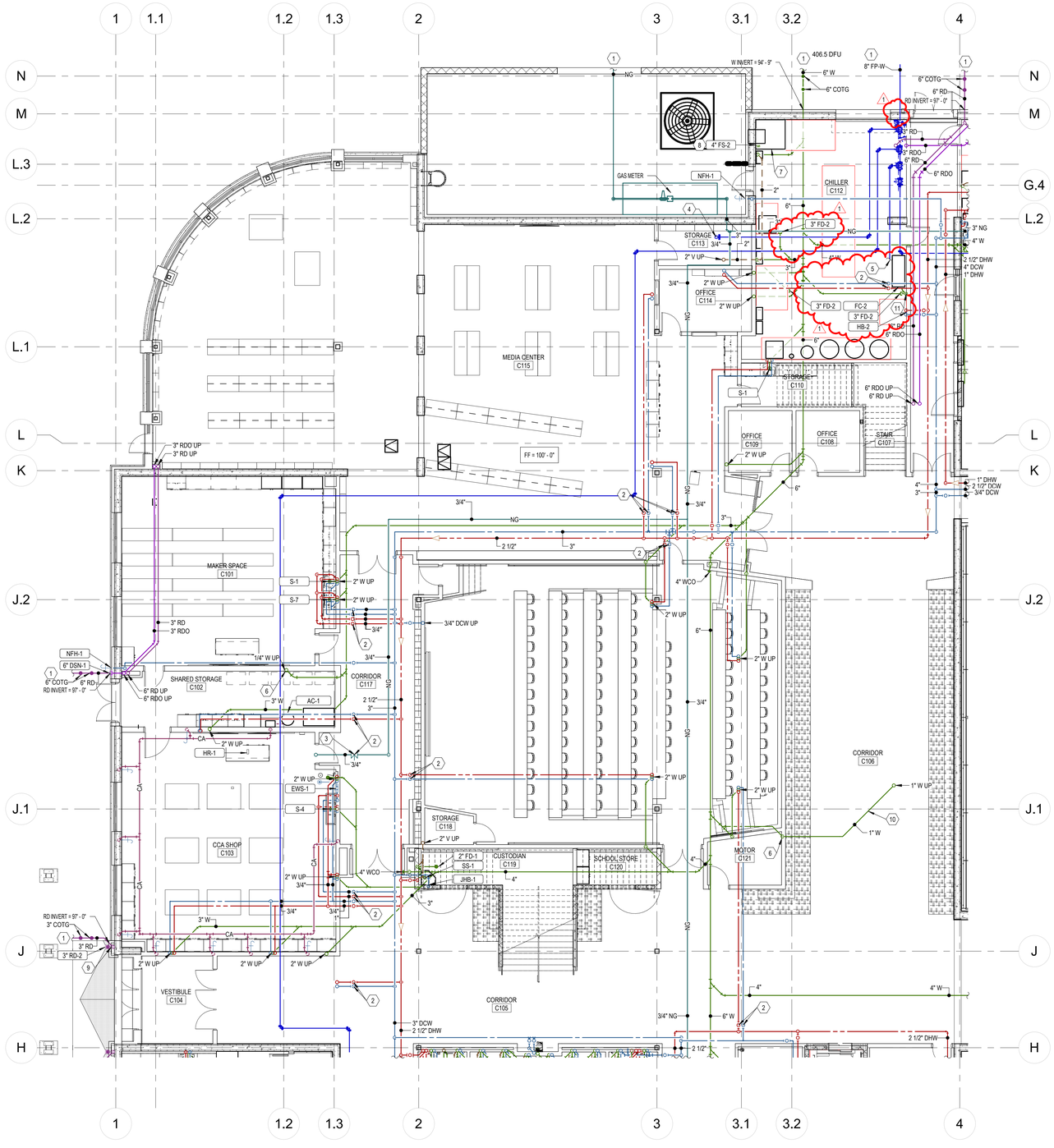
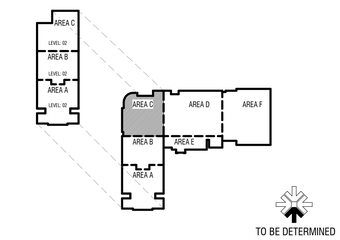
KEYNOTES

1. SEE CIVIL PLANS FOR CONTINUATION.
2. DOMESTIC WATER SERVES FIXTURE ABOVE. TAG VALVE WITH ROOM NUMBER SERVED.
3. 2 PSIG TO 4 OZ GAS PRESSURE REGULATOR. 34 CFH. VENT TO OUTSIDE.
4. RISE TO SERVER SECOND FLOOR FIRE SPRINKLERS.
5. CONTINUES TO SERVE SPRINKLERS IN THE AUDITORIUM FIRE AREA.
6. CONDENSATE WALL BOX. SEE DETAIL 7/P-502. SEE ARCHITECT FOR MOUNTING HEIGHT.
7. 4'X4'X2' DEEP, ABOVE GROUND, SUMP FOR COOLING TOWER DRAIN. 4" OUTLET DRAIN.
8. 4" FS-2 AT BOTTOM OF COOLING TOWER DRAIN SUMP. FLOOR SINK TO HAVE DEEP SEAL P-TRAP AND TRAP GUARD.
9. HEAT TRACE RD PIPING. 3 WATTS PER LINEAL FOOT. APPROXIMATELY 45 WATTS.
10. SLOPE CONDENSATE DRAIN 1% TO DROP.
11. 3/4" CONDENSATE DRAIN LINE. SLOPE TO WALL. DROP DOWN WALL EXPOSED ON WALL. EXTEND TO FLOOR DRAIN.



1 PLUMBING PLAN - LEVEL 01 - AREA C
P-111.C 1/8" = 1'-0"

KEY PLAN



CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
759 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

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NIBLEY MIDDLE SCHOOL

3050 S 9201 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	DB
CHECKED BY:	LW
ISSUED:	05/02/2024

LICENSED PROFESSIONAL ENGINEER
No. 6360445-2202
MERIDIAN L. WIMMER
STATE OF UTAH

PLUMBING PLAN - LEVEL 01 - AREA C

P-111.C

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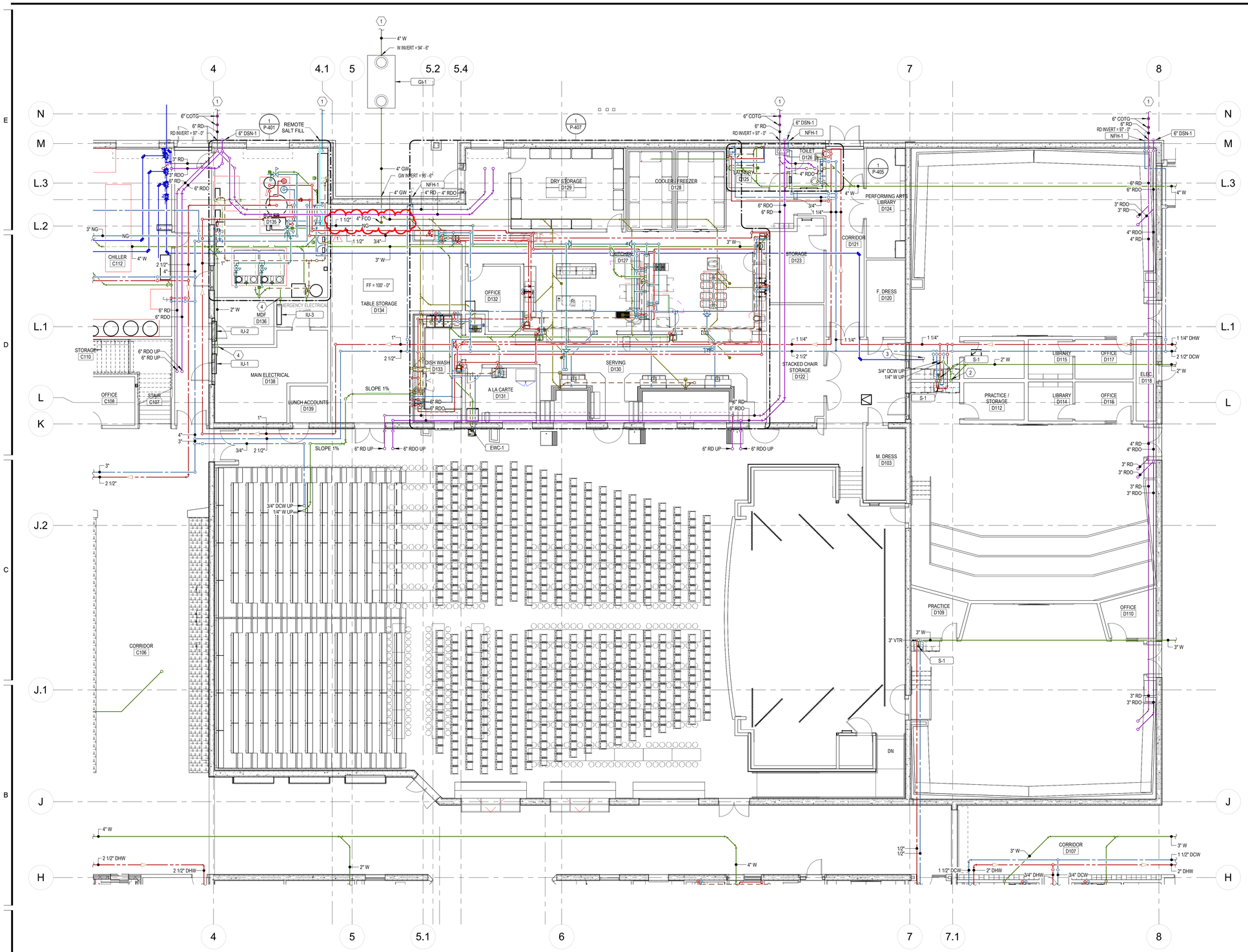
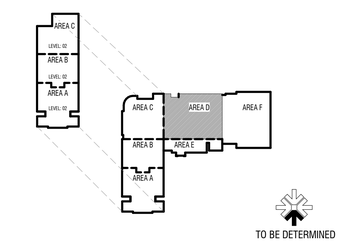


1 P-111.D/ PLUMBING PLAN - LEVEL 01 - AREA D
1/8" = 1'-0"

KEYNOTES

1. SEE CIVIL PLANS FOR CONTINUATION.
2. DROP DRAIN LINE DOWN IN WALL AND STUB OUT AND EXTEND TO FLOOR SINK.
3. FIRE PROTECTION MAIN CONTINUES TO SERVE ALL SPRINKLER IN GYM FIRE ZONE.
4. CONDENSATE WALL BOX. SEE DETAIL 7/P-502. SEE ARCHITECT FOR MOUNTING HEIGHT.

KEY PLAN



CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST LOGAN, UT 84321
799 NORTH 400 WEST SALT LAKE CITY, UT 84103

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40 W. Cache Valley Blvd.
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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
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LICENSED PROFESSIONAL ENGINEER
No. 8386445-2202
LAUREDIAN L. WAYNES
STATE OF UTAH

PLUMBING PLAN - LEVEL 01 - AREA D

P-111.D

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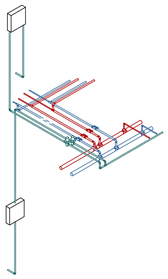
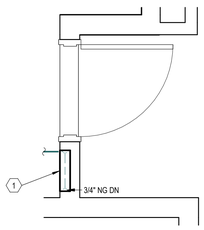
KEYNOTES

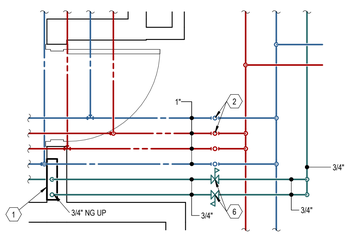
1. PROVIDE AND INSTALL METCRAFT GAS VALVE MODEL A605QR ENCLOSURE WITH STAINLESS STEEL DOOR, FLUSH MOUNT 16" X 16" X 4" STANDARD ASSEMBLY WITH GROMMETS OR EQUIVALENT. SEE DETAIL 3/P-502.
2. DOMESTIC WATER SERVES FIXTURE ABOVE. TAG VALVE WITH ROOM NUMBER SERVED.
3. 2 PSIG TO 4 OZ GAS PRESSURE REGULATOR. 5682 CFH. VENT TO OUTSIDE.
4. 2 PSIG TO 4 OZ GAS PRESSURE REGULATOR. 568 CFH. VENT TO OUTSIDE.
5. 2 PSIG TO 4 OZ GAS PRESSURE REGULATOR. 226 CFH. VENT TO OUTSIDE.
6. 2 PSIG TO 4 OZ GAS PRESSURE REGULATOR. 34 CFH. VENT TO OUTSIDE.
7. SEE CIVIL PLANS FOR CONTINUATION.
8. OUTDOOR BOTTLE FILLING STATION. SEE ARCHITECT FOR EXACT LOCATION. DRAIN TO GRAVEL SUMP, BY CIVIL, SEE DETAIL 8/P-502.
9. SLEEVE WALL FOR 2" SALT FILL LINE. SEAL PENETRATION WEATHER TIGHT. PROVIDE AND INSTALL SALT FILL CONNECTION AND CAP.
10. SALT FILL PIPING SHALL BE SOLID CORE PVC WITH LONG SWEEP STAINLESS STEEL ELBOWS.
11. 3/4" CONDENSATE DRAIN LINE. SLOPE TO WALL. DROP DOWN WALL EXPOSED ON WALL. EXTEND TO FLOOR DRAIN.



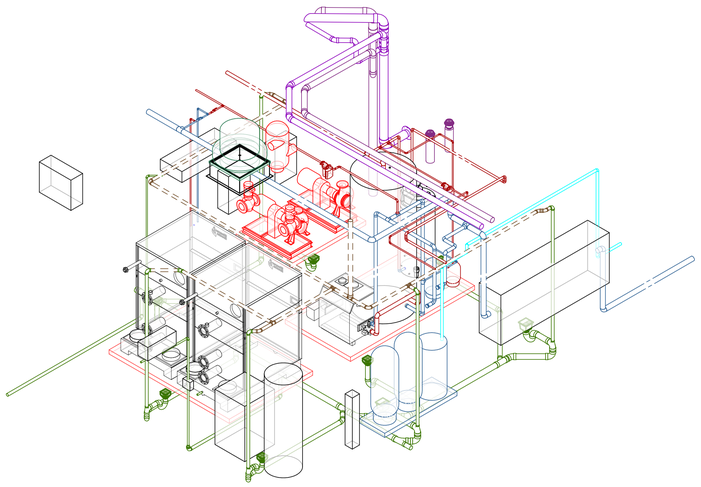
5 / P-401 SCIENCE CLASSROOM PLUMBING VALVES



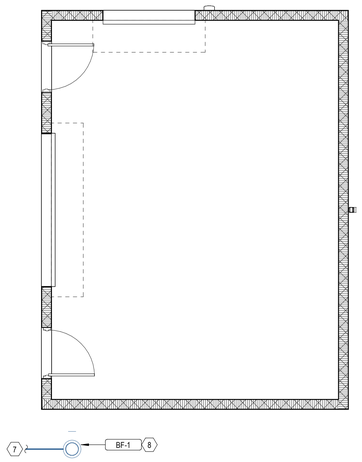
4 / P-401 LEVEL 2 SCIENCE CLASSROOM TYPICAL PLUMBING
1/2" = 1'-0"



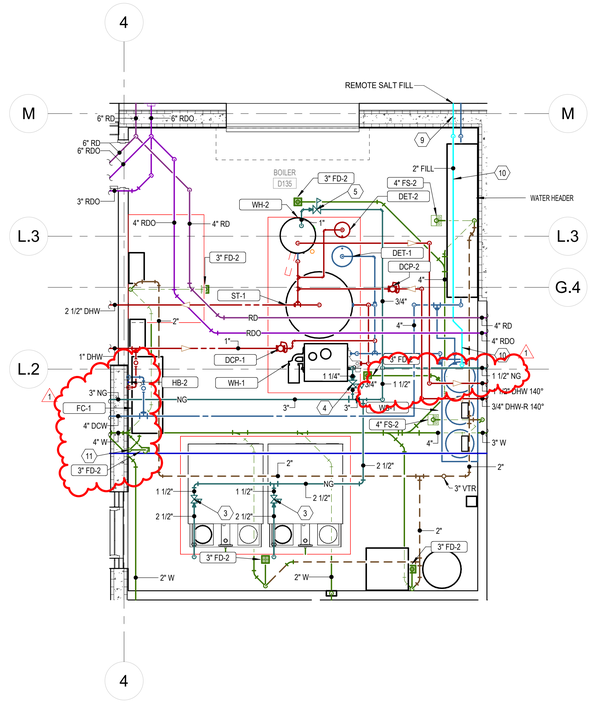
3 / P-401 LEVEL 1 SCIENCE CLASSROOM TYPICAL PLUMBING
1/2" = 1'-0"



2 / P-401 BOILER ROOM



6 / P-401 MAINTENANCE SHED PLUMBING PLAN
1/4" = 1'-0"



1 / P-401 BOILER ROOM PLUMBING PLAN
1/4" = 1'-0"

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
759 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

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O: (435)752-5081
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VBFA Project #: 23717

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	DB
CHECKED BY:	LW
ISSUED:	05/02/2024

LICENSED PROFESSIONAL ENGINEER
No. 8386485-2202
LAWRENCE DEAN L. WARNICK
STATE OF UTAH

PLUMBING
ENLARGED VIEWS

P-401

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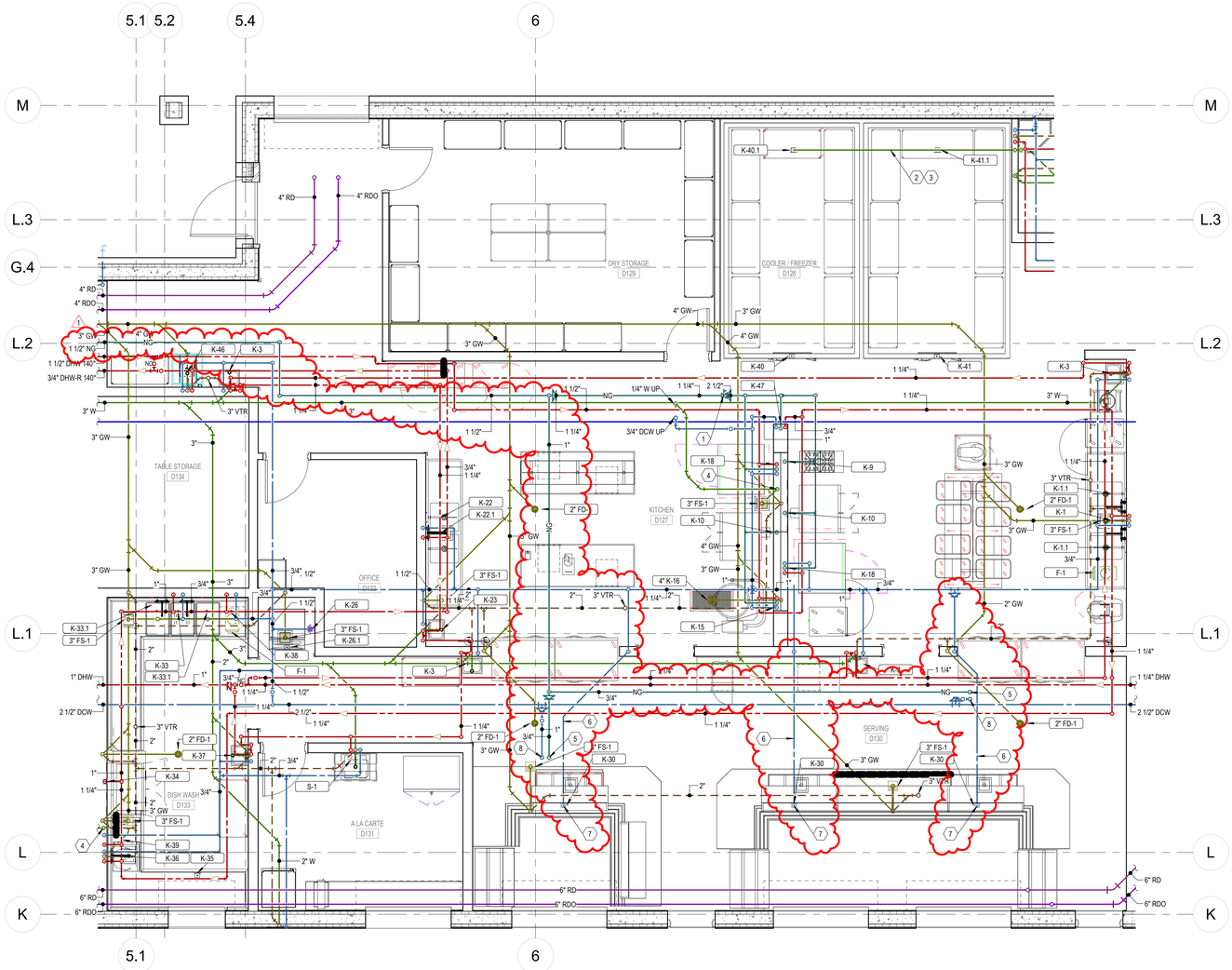
KEYNOTES

1. 2 PSIG TO 4 OZ GAS PRESSURE REGULATOR. 1545 CFH. VENT TO OUTSIDE.
2. HEAT TRACE AND INSULATE CONDENSATE DRAIN 3 WATTS PER LINEAL FOOT THROUGH COOLER/FREEZER. APPROXIMATELY 50 WATTS.
3. SLOPE CONDENSATE DRAIN TO SERVICE SINK. DROP IN WALL AND STUB OUT 6" ABOVE THE RIM OF THE SERVICE SINK. ELBOW DOWN INTO SINK.
4. ~~PROVIDE AND INSTALL NW 1 1/2" DRAIN UP AND OVER TO FLOOR SINK.~~
5. GAS PIPING UP THRU ROOF. FLASH AND SEAL WATER TIGHT. ISOLATION VALVE AND PRV ABOVE ROOF. SEE DETAIL. 327 CFH.
6. PROVIDE AND INSTALL ASSE 1024 DOUBLE CHECK VALVE BACKFLOW PREVENTOR.
7. RUN PIPING BELOW GRADE IN 2" PVC SLEEVE.
8. 1" MAKE UP WATER UP THRU ROOF TO MAU. FLASH AND SEAL ROOF PENETRATION WATER TIGHT.

GENERAL NOTES

1. FLOOR SINKS SHALL BE MOUNTED FLUSH WITH THE FLOOR.



1 / P-407 KITCHEN PLUMBING PLAN
1/4" = 1'-0"

design west | architects
255 SOUTH 300 WEST LOGAN, UT 84321
759 NORTH 400 WEST SALT LAKE CITY, UT 84103

VBFA
40 W. Cache Valley Blvd.
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O: (435)752-5081
www.vbfa.com
VBFA Project #: 23717

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	DB
CHECKED BY:	LW
ISSUED:	05/02/2024

REGISTERED PROFESSIONAL ENGINEER
No. 8389445-2202
JEDEDIAH L. JONKER
STATE OF UTAH

PLUMBING
ENLARGED VIEWS

P-407

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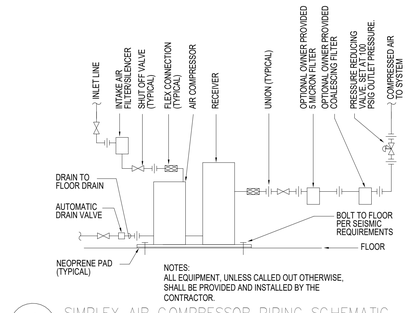
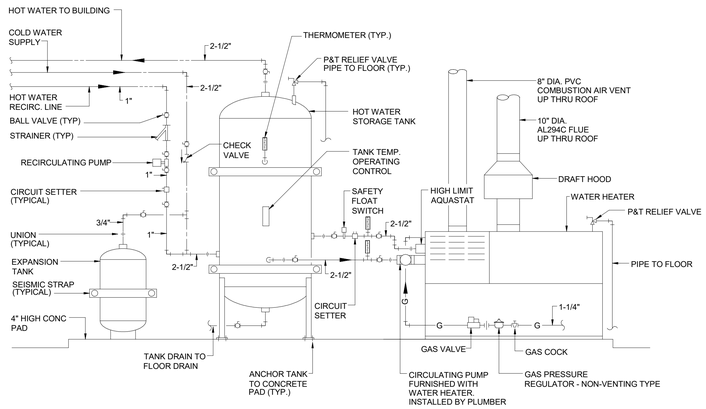


NOTES:
ALL EQUIPMENT, UNLESS CALLED OUT OTHERWISE, SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR.

12 / P-502 SIMPLEX AIR COMPRESSOR PIPING SCHEMATIC
NO SCALE

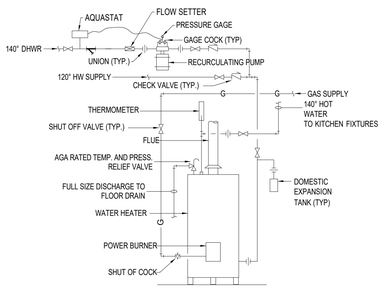


5 / P-502 WATER HEATER PIPING DIAGRAM
NO SCALE

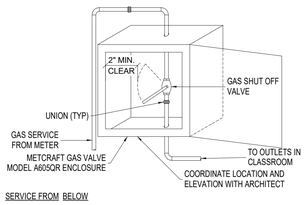
6 / P-502 WATER LINE BLOW OUT DETAIL
NO SCALE

7 / P-502 CONDENSATE DRAIN DETAIL
NO SCALE

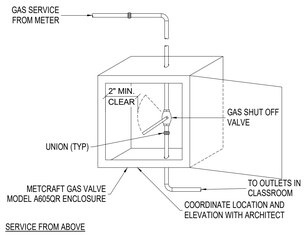
8 / P-502 GRAVEL SUMP DETAIL
NO SCALE



4 / P-502 WATER HEATER PIPING DIAGRAM
NO SCALE



SERVICE FROM BELOW

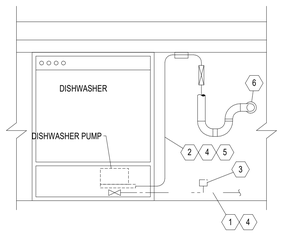


SERVICE FROM ABOVE

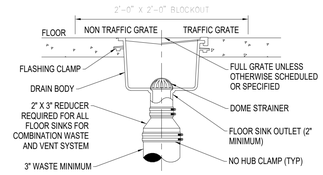
3 / P-502 VALVE ACCESS BOX PIPING DETAIL
NO SCALE

KEYED NOTES

1. INSTALL 3/8" (MINIMUM) ANNEALED COPPER TUBING FROM HOT WATER SUPPLY TO DISHWASHER INLET VALVE.
2. 5/8" WASTE HOSE FROM DISHWASHER PUMP TO AIR GAP FITTING. USE STAINLESS STEEL CLAMPS TO PROVIDE WATERTIGHT CONNECTIONS. USE RUBBER INCREASER AT AIR GAP CONNECTION.
3. WATER HAMMER ARRESTOR IN ACCESSIBLE LOCATION, J.R. SMITH #5005, SIZE 'A'.
4. SIZES OF HOSE AND TUBING SHALL BE INCREASED IF RECOMMENDED BY DISHWASHER MANUFACTURER.
5. RUBBER HOSE SHALL BE RATED FOR 200° F. WATER.
6. PROVIDE ESCUTCHEON AT WALL PENETRATION. DROP 1-1/2" WASTE LINE DOWN WALL. TRANSITION TO TWO INCH WASTE PRIOR TO PENETRATING FLOOR AND EXTEND BELOW SLAB TO MAIN AS SHOWN ON PLANS.



2 / P-502 DISHWASHER CONNECTION DETAIL
NO SCALE



1 / P-502 FLOOR SINK
NO SCALE

CONSTRUCTION DOCUMENTS

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
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MARK:	DATE:	DESCRIPTION:
	5-15-2024	Addendum 3

PROJECT #:	23717
DRAWN BY:	DB
CHECKED BY:	LW
ISSUED:	05/02/2024

REGISTERED PROFESSIONAL ENGINEER
No. 8386845-2202
LARS DEDIAN L. WARNKE
STATE OF UTAH

PLUMBING DETAILS

P-502

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SECTION 236500 - COOLING TOWERS

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. Section Includes:

1. Open-circuit, induced-draft, counterflow cooling towers.

1.3 DEFINITIONS

A. BMS: Building management system.

B. FRP: Fiber-reinforced polyester.

1.4 PERFORMANCE REQUIREMENTS

A. Delegated Design: Design cooling tower support structure **and seismic restraints**, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.

B. Seismic Performance: Cooling towers shall withstand the effects of earthquake motions determined according to **SEI/ASCE 7**.

1. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified."

1.5 ACTION SUBMITTALS

A. Product Data: For each type of product indicated. Include rated capacities, pressure drop, fan performance data, rating curves with selected points indicated, furnished specialties, and accessories.

1. Maximum flow rate.
2. Minimum flow rate.
3. Drift loss as percent of design flow rate.
4. Sound power levels in eight octave bands for operation with fans off, fans at minimum, and design speed.
5. Performance curves for the following:

a. Varying entering-water temperatures from design to minimum.

b. Varying ambient wet-bulb temperatures from design to minimum.
c. Varying water flow rates from design to minimum.
d. Varying fan operation (off, minimum, and design speed).

6. Fan airflow, brake horsepower, and drive losses.
7. Pump flow rate, head, brake horsepower, and efficiency.
8. Motor amperage, efficiency, and power factor at 100, 75, 50, and 25 percent of nameplate horsepower.
9. Electrical power requirements for each cooling tower component requiring power.

B. Shop Drawings: Complete set of manufacturer's prints of cooling tower assemblies, control panels, sections and elevations, and unit isolation. Include the following:

1. Assembled unit dimensions.
2. Weight and load distribution.
3. Required clearances for maintenance and operation.
4. Sizes and locations of piping and wiring connections.
5. Wiring Diagrams: For power, signal, and control wiring.

C. Delegated-Design Submittal: For cooling tower support structure indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1. Detail fabrication and assembly of support structure.
2. Vibration Isolation Base Details: Detail fabrication including anchorages and attachments to structure and to supported equipment. Include adjustable motor bases, rails, and frames for equipment mounting.
3. **Design Calculations:** Calculate requirements for selecting vibration isolators **and seismic restraints** and for designing vibration isolation bases.

1.6 INFORMATIONAL SUBMITTALS

A. Coordination Drawings: Floor plans, drawn to scale, on which the following items are shown and coordinated with each other, using input from Installers of the items involved:

1. Structural supports.
2. Piping roughing-in requirements.
3. Wiring roughing-in requirements, including spaces reserved for electrical equipment.
4. Access requirements, including working clearances for mechanical controls and electrical equipment, and tube pull and service clearances.

B. Certificates: For certification required in "Quality Assurance" Article.

C. Seismic Qualification Certificates: For cooling towers, accessories, and components, from manufacturers.

1. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.
2. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.
3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.

D. Source quality-control reports.

E. Field quality-control reports.

F. Startup service reports.

G. Warranty: Sample of special warranty.

1.7 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For each cooling tower to include in emergency, operation, and maintenance manuals.

1.8 QUALITY ASSURANCE

A. **Testing Agency Qualifications: Certified by CTI**.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

C. ASHRAE/IESNA 90.1 Compliance: Applicable requirements in ASHRAE/IESNA 90.1, Section 6 - "Heating, Ventilating, and Air-Conditioning."

D. ASME Compliance: Fabricate and label heat-exchanger coils to comply with ASME Boiler and Pressure Vessel Code: Section VIII, Division 1.

E. CTI Certification: Cooling tower thermal performance according to CTI STD 201, "Certification Standard for Commercial Water-Cooling Towers Thermal Performance."

F. FMG approval and listing in the latest edition of FMG's "Approval Guide."

1.9 COORDINATION

A. Coordinate sizes and locations of concrete bases with actual equipment provided.

B. Coordinate sizes, locations, and anchoring attachments of structural-steel support structures.

C. Coordinate sizes and locations of roof curbs, equipment supports, and roof penetrations with actual equipment provided.

1.10 WARRANTY

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

1. Fan assembly including fan, drive, and motor.
2. All components of cooling tower.
3. Warranty Period: **Five** years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 OPEN-CIRCUIT, INDUCED-DRAFT, COUNTERFLOW COOLING TOWERS

A. Subject to compliance with requirements, provide one of the following:

1. Baltimore Aircoil Company.
2. Evapco Inc.
3. Marley Cooling Technologies, an SPX Corporation.

B. Fabricate cooling tower mounting base with reinforcement strong enough to resist cooling tower movement during a seismic event when cooling tower is anchored to field support structure.

C. Cooling tower designed to resist wind load of **30 lbf/sq. ft.**

D. Casing and Frame:

1. **Casing and Frame Material: Galvanized steel, ASTM A 653, G235 coating.**
2. **Fasteners: Galvanized** steel.
3. Joints and Seams: Sealed watertight.
4. Welded Connections: Continuous and watertight.

E. Collection Basin:

1. Material:
   a. **Stainless steel, 304.**
2. **Strainer:** Removable **strainer** with openings smaller than nozzle orifices.
3. Overflow and drain connections.
4. Makeup water connection.
5. Outlet Connection: ASME B16.5, **Class 150** flange.
6. Basin Sweeper Distribution Piping and Nozzles:
   a. Pipe Material: **PVC**.
   b. Nozzle Material: **Plastic**.
   c. Configure piping and nozzles to minimize sediment from collecting in the collection basin.

F. Pressure Reducing Valve: Field installed Direct Type Water Pressure-Reducing Valve. ASME 1003. 150-psig rated working pressure. Bronze body.

G. Electric/Electronic, **Collection Basin Water-Level Controller** with Solenoid Valve:

1. **Enclosure:** NEMA 250, **Type 4**.
2. **Sensor:** Solid-state controls with multiple electrode probes and relays factory wired to a terminal strip to provide **control of water makeup valve, low- and high-level alarms, and output for shutoff of pump on low level .**.
3. Electrode Probes: Stainless steel.
4. **Water Stilling Chamber: PVC pipe.**
5. **Solenoid Valve:** Controlled and powered through level controller in response to water-level set point:

a. Slow closing **with stainless-steel body**.
6. Electrical Connection Requirements: 120 V, single phase, 60 Hz.

H. Electric **Basin Heater**:

1. Stainless-Steel Electric Immersion Heaters: Installed in a threaded coupling on the side of the collection basin.
2. Heater Control Panel: Mounted on the side of each cooling tower cell.
3. **Enclosure:** NEMA 250, **Type 4**.
4. Magnetic contactors controlled by a temperature sensor/controller to maintain collection basin water-temperature set point. Water-level probe shall monitor cooling tower water level and de-energize the heater when the water reaches low-level set point.
5. Control-circuit transformer with primary and secondary side fuses.
6. Terminal blocks with numbered and color-coded wiring to match wiring diagram.
7. **Single-point**, field-power connection to a **circuit breaker** and heater branch circuiting complying with NFPA 70.
8. Factory Wiring Method: Metal raceway for factory-installed wiring outside of enclosures, except make connections to each electric basin heater with liquidtight conduit.

I. Pressurized Water Distribution Piping: Main header and lateral branch piping designed for even distribution over heat-exchanger coil or fill throughout the flow range without the need for balancing valves and for connecting individual, removable, nonclogging spray nozzles.

1. **Pipe Material:**
   a. PVC.
2. **Spray Nozzle Material:**
   a. PVC.
3. Piping Supports: Corrosion-resistant hangers and supports to resist movement during operation and shipment.

J. Fill:

1. Materials: Resistant to rot, decay, and biological attack;
   a. **PVC**.
   b. Maximum flame-spread index according to ASTM E 84:
      1) **5**.
2. Minimum Thickness before forming:
   a. **20 mils**.
3. Fabrication: Fill-type sheets, fabricated, formed, and bonded together after forming into removable assemblies that are factory installed by manufacturer.
4. Fill Material Operating Temperature: Suitable for entering-water temperatures up through **120 deg F**.

K. Drift Eliminator:

1. **Material:** Resistant to rot, decay, and biological attack;
   a. FRP or PVC.
2. Maximum flame-spread index of according to ASTM E 84.
   a. **5**.
3. UV Treatment: Inhibitors to protect against damage caused by UV radiation.
4. Configuration: Multipass, designed and tested to reduce water carryover to achieve performance indicated.

L. Air-Intake Louvers:

1. **Material: Matching casing**.
2. Louver Blades: Arranged to uniformly direct air into cooling tower, to minimize air resistance, and to prevent water from splashing out of tower during all modes of operation including operation with fans off.

M. **Removable** Air-Intake Screens:

1. **Galvanized-**steel wire mesh.

N. Axial Fan: Balanced at the factory after assembly.

1. **Blade Material: Aluminum**. Low Sound.
2. **Hub Material: Aluminum.**
3. Protective Enclosure: Removable, galvanized-steel, wire-mesh screens, complying with OSHA regulations.
4. **Fan Shaft Bearings:** Self-aligning ball or roller bearings with moisture-proof seals and premium, moisture-resistant grease suitable for temperatures between **minus 20 and plus 300 deg F**.
   a. Bearings designed for an L-10 life of **50,000** hours.
5. Bearings Grease Fittings: Extended lubrication lines to an easily accessible location.

O. Belt Drive:

1. Service Factor: **1.5** based on motor nameplate horsepower.
2. Sheaves: Fan and motor shafts shall have taper-lock sheaves fabricated from corrosion-resistant materials.
   a. **Belt:** Multiple V-belt design with a matched set of **cogged** belts.
   b. Belt Material: Oil resistant, nonstatic conducting, and constructed of neoprene polyester cord.
   c. Belt-Drive Guard: Comply with OSHA regulations.

P. Fan Motor:

1. General Requirements for Fan Motors: Comply with NEMA designation and temperature-rating requirements specified in Division 23 "Common Motor Requirements for HVAC Equipment" and not indicated below.
2. **Motor Enclosure: Totally enclosed air over (TEAO)**.
3. **Energy Efficiency: Comply with ASHRAE/IESNA 90.1**.
4. Service Factor: **1.15**.
5. **Insulation: Class F.**
6. Variable-Speed Motors: Inverter-duty rated per NEMA MG-1, Section IV, "Performance Standard Applying to All Machines," Part 31, "Definite-Purpose, Inverter-Fed, Polyphase Motors."
7. **Motor Location:** Mounted **outside** of cooling tower casing and cooling tower discharge airstream.
8. Motor Base: Adjustable, or other suitable provision for adjusting belt tension.

Q. Fan Discharge Stack:

1. **Material** shall match casing, **manufacturer's standard** design.
2. Stack Termination: Wire-mesh, galvanized-steel screens; complying with OSHA regulations.

R. Vibration Switch: For each fan drive.

1. **Enclosure:** NEMA 250, **Type 4X**.
2. Vibration Detection: Sensor with a field-adjustable, acceleration-sensitivity set point in a range of 0 to 1 g and frequency range of **0 to 3000 cycles per minute**. Cooling tower manufacturer shall recommend switch set point for proper operation and protection.
3. **Provide switch**; **Field connection to a BMS and** hardwired connection to fan motor electrical circuit.
4. Switch shall, on sensing excessive vibration, **signal an alarm through the BMS and** shut down the fan.

S. Controls: Comply with requirements in Division 23 "Instrumentation and Control for HVAC."

T. Personnel Access Components:

1. Doors: Large enough for personnel to access cooling tower internal components from both cooling tower end walls. Doors shall be operable from both sides of the door.
2. External Ladders with Safety Cages: Aluminum, galvanized- or stainless-steel, fixed ladders with ladder extensions to access external platforms and top of cooling tower from adjacent grade without the need for portable ladders. Comply with 29 CFR 1910.27.

2.2 SOURCE QUALITY CONTROL

A. Verification of Performance: Test and certify cooling tower performance according to CTI STD 201, "Certification Standard for Commercial Water-Cooling Towers Thermal Performance."

B. Factory pressure test heat exchangers after fabrication and prove to be free of leaks.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Before cooling tower installation, examine roughing-in for tower support, anchor-bolt sizes and locations, piping, and electrical connections to verify actual locations, sizes, and other conditions affecting tower performance, maintenance, and operation.

1. Cooling tower locations indicated on Drawings are approximate. Determine exact locations before roughing-in for piping and electrical connections.

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

3.2 INSTALLATION

A. Install cooling towers on support structure indicated.

B. Equipment Mounting:

1. Install cooling towers on cast-in-place concrete equipment bases. Comply with requirements for equipment bases and foundations specified in:
   a. Section 033000 "Cast-in-Place Concrete."
2. Comply with requirements for vibration isolation and seismic control devices specified in Division 23 "Vibration and Seismic Controls for HVAC."
3. Comply with requirements for vibration isolation devices specified in Division 23 "Vibration Controls for HVAC."

C. Install anchor bolts to elevations required for proper attachment to supported equipment.

D. Maintain manufacturer's recommended clearances for service and maintenance.

E. Loose Components: Install electrical components, devices, and accessories that are not factory mounted.

3.3 CONNECTIONS

A. Piping installation requirements are specified in other Sections. Drawings indicate general arrangement of piping, fittings, and specialties.

B. Install piping adjacent to cooling towers to allow service and maintenance.

C. Install flexible pipe connectors at pipe connections of cooling towers mounted on vibration isolators.

D. Provide drain piping with valve at cooling tower drain connections and at low points in piping.

E. Connect cooling tower overflows and drains, and piping drains to sanitary sewage system.

F. Domestic Water Piping: Comply with applicable requirements in Division 22 "Domestic Water Piping." Connect to water-level control with shutoff valve and union, flange, or mechanical coupling at each connection.
   1. Install fill line PRV in a heated or freeze proof location. Set pressure to ensure fill to just below the topmost piping point and chiller condenser is always flooded.

G. Supply and Return Piping: Comply with applicable requirements in Division 23 "Hydronic Piping" and Division 23 Hydronic Piping Specialties." Connect to entering cooling tower connections with shutoff valve, balancing valve, thermometer, plugged tee with pressure gage, **flow meter,** and drain connection with valve. Connect to leaving cooling tower connection with shutoff valve. Make connections to cooling tower with a:

   1. Union.

H. Equalizer Piping: Piping requirements to match supply and return piping. Connect an equalizer pipe, full size of cooling tower connection, between tower cells. Connect to cooling tower with shutoff valve.

3.4 FIELD QUALITY CONTROL

A. **Testing Agency: Owner will engage** a qualified testing agency to perform tests and inspections.

B. Manufacturer's Field Service: Engage a factory-authorized service representative to perform field tests and inspections.

C. Perform tests and inspections.

1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.

D. Tests and Inspections: Comply with;

1. ASME PTC 23, "ASME Performance Test Codes - Code on Atmospheric Water Cooling Equipment.

E. Cooling towers will be considered defective if they do not pass tests and inspections.

F. Prepare test and inspection reports.

3.5 STARTUP SERVICE

A. **Engage a factory-authorized service representative to perform** startup service.

B. Inspect field-assembled components, equipment installation, and piping and electrical connections for proper assemblies, installations, and connections.

C. Obtain performance data from manufacturer.

1. Complete installation and startup checks according to manufacturer's written instructions and perform the following:

a. Clean entire unit including basins.
b. Verify that accessories are properly installed.
c. Verify clearances for airflow and for cooling tower servicing.
d. Check for vibration isolation and structural support.
e. Lubricate bearings.
f. Verify fan rotation for correct direction and for vibration or binding and correct problems.
g. Adjust belts to proper alignment and tension.
h. Verify proper oil level in gear-drive housing. Fill with oil to proper level.
i. Operate variable-speed fans through entire operating range and check for harmonic vibration imbalance. Set motor controller to skip speeds resulting in abnormal vibration.
j. Check vibration switch setting. Verify operation.
k. Verify water level in tower basin. Fill to proper startup level. Check makeup water-level control and valve.
l. Verify operation of basin heater and control.
m. Verify that cooling tower air discharge is not recirculating air into tower or HVAC air intakes. Recommend corrective action.
n. Replace defective and malfunctioning units.
o. Adjust fill PRV to ensure flooded piping and condenser.

D. Start cooling tower and associated water pumps. Follow manufacturer's written starting procedures.

E. For systems with galvanized components, perform an anti-corrosion passivation rinse with appropriate acid-solution. Follow correct procedure to rinse acid-solution away as required.

F. Prepare a written startup report that records the results of tests and inspections.

3.6 ADJUSTING

A. Set and balance water flow to each tower inlet.

B. Adjust water-level control for proper operating level.

3.7 DEMONSTRATION

A. **Engage a factory-authorized service representative to train** Owner's maintenance personnel to adjust, operate, and maintain cooling towers.

1. Field performance test to include:
   a. Verification of capacity at several load steps
   b. Demonstration of fan control across full range of VFD output, showing the ability of the system to avoid any fan harmonics that are potentially damaging.

END OF SECTION 236500

ENVISION ENGINEERING

ELECTRICAL ADDENDUM

ADDENDUM #03

To:	Stephen Williams, AIA, NCARB	**From:**	Philip Borup
Company:	Design West Architects	**Phone:**	801-534-1130
Date:	05/15/2024		
Project	Nibley Middle School	**Project #:**	2023-268

Specifications:

27 1100 Communications Equipment Room Fittings: Section 2.3B - 2-post racks have changed to 4-post racks.

Approved Bidders:

1. Wattstopper has been added as an approved bidder for the lighting controls. Lutron and Wattstopper are approved as the basis of design. Any additional manufacturers are allowed to bid as an unapproved system. Those manufacturers will be reviewed by the district at bid time. The cost for each lighting control manufacturer is to be broken out separately on the bid form.

Clarifications:

1. Theatrical lighting is to be bid in division 11, not division 26. Theatrical lighting integrators are to provide a cost for theatrical lighting as shown on sheets E-132, and E-141, and specification section 11 5561. The electrical contractor is to provide the house lighting, including power and DMX control wiring as shown on sheet E-114. Electrician is to coordinate this work closely with the theatrical lighting integrator.

Drawings:

E-101 – Site Plan – Electrical:

1. The Hyde Park site plan was included in the bid set on accident. The site plan has been updated to show the correct Nibley site plan.

E-113 – Level 1 – Area C – Lighting:

1. Additional motion sensors added in Media Center C115.

E-114 – Level 1 – Area D – Lighting:

1. Added an additional relay for LR1 light fixtures in Cafetorium.
2. Added an additional relay for SL2 light fixtures at stage ramp and stairs.
3. Added an SL2 light fixture at stage stairs.
4. Changed work lights on stage to SL2.

E-115 – Level 1 – Area E – Lighting:

1. Added a relay for the lighting in Vestibule E110.
2. Deleted a DR1 downlight and a motion sensor in Vestibule E110.
3. Added keyed note L3 to DMX controller in Reception E111.

E-116 – Level 1 – Area F – Lighting:

1. Modified the LS4 light fixtures in the restroom entries.

E-131 – Level 1 – Enlarged Lighting Plans:

1. Added lighting zones on enlarged classroom lighting plan.

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WEB
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info@envisioneng.com
EMAIL

E-132 – Cafetorium Theatrical Lighting Plan:

1. Fixture types, relays and control locations have been added.

E-141 – Theatrical Lighting Riser:

1. An additional preset control station has been added.
2. Schedules have been updated.

E-251 – One-Line Diagram:

1. One-Line diagram has been updated.

E-261 – Panel Schedules:

1. Panel schedules have been updated with metering information to meet the new IECC 2021 requirements.

E-262 – Panel Schedules:

1. Panel schedules have been updated with metering information to meet the new IECC 2021 requirements.

E-263 – Panel Schedules:

1. Panel schedules have been updated with metering information to meet the new IECC 2021 requirements.

E-264 – Panel Schedules:

1. Panel schedules have been updated with metering information to meet the new IECC 2021 requirements.

E-411 – Level 1 – Area A – Systems:

1. Conduit stubs from cable tray have been revised.

E-412 – Level 1 – Area B – Systems:

1. Conduit stubs from cable tray have been revised.

E-413 – Level 1 – Area C – Systems:

1. Conduit stubs from cable tray have been revised.

E-414 – Level 1 – Area D – Systems:

1. Conduit stubs from cable tray have been revised.

E-415 – Level 1 – Area E – Systems:

1. Conduit stubs from cable tray have been revised.

E-421 – Level 2 – Area A – Systems:

1. Conduit stubs from cable tray have been revised.

E-422 – Level 2 – Area B – Systems:

1. Conduit stubs from cable tray have been revised.

E-423 – Level 2 – Area C – Systems:

1. Conduit stubs from cable tray have been revised.
2. Cable tray has been modified.

E-611 – Level 1 – Area A – Intercom:

1. Intercom speakers have been modified. See drawings for changes.

E-612 – Level 1 – Area B – Intercom:

1. Intercom speakers have been modified. See drawings for changes.

E-613 – Level 1 – Area C – Intercom:

1. Intercom speakers have been modified. See drawings for changes.

E-614 – Level 1 – Area D – Intercom:

1. Intercom speakers have been modified. See drawings for changes.

E-615 – Level 1 – Area E – Intercom:

1. Intercom speakers have been modified. See drawings for changes.

E-616 – Level 1 – Area F – Intercom:

1. Intercom speakers have been modified. See drawings for changes.

E-621 – Level 2 – Area A – Intercom:

1. Intercom speakers have been modified. See drawings for changes.

E-622 – Level 2 – Area B – Intercom:

1. Intercom speakers have been modified. See drawings for changes.

E-623 – Level 2 – Area C – Intercom:

1. Intercom speakers have been modified. See drawings for changes.

E-651 – Intercom Details:

1. Volume control detail has been added.

E-671 – Intercom – Risers & Equip List:

1. Intercom risers and equipment list has been updated.

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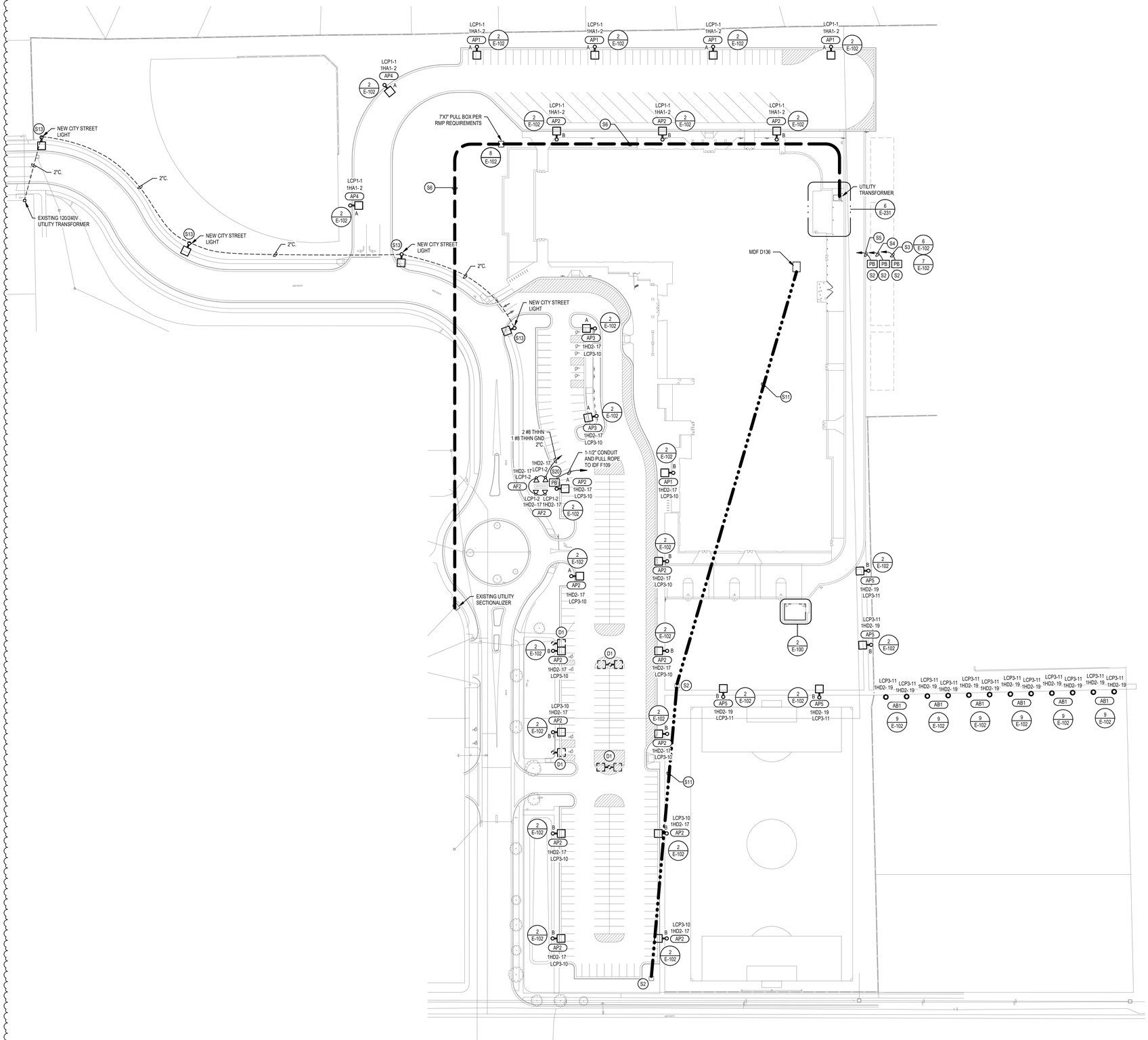


1 **NIBLEY SITE PLAN - ELECTRICAL**
SCALE: **1" = 50'-0"**

SITE GENERAL NOTES:

1. PROVIDE ALL REQUIRED BACKFILLING, ETC. FOR ALL CONDUITS, PROVIDE REQUIRED BACKFILL MATERIAL AS DIRECTED BY EACH UTILITY.
2. COORDINATE ALL LOCATIONS AND ROUTING WORK IN THE FIELD.
3. ROUTE CONDUITS A MINIMUM OF 2' BELOW THE BUILDING FLOOR SLAB.
4. MINIMUM CONDUIT FOR SITE WORK SHALL BE 1".
5. CONDUIT ROUTING SHOWN IS SCHEMATIC AND FOR CLARIFICATION COORDINATE LOCATION WITH ALL AFFECTED TRADES.
6. PROVIDE A MINIMUM OF 12" SEPARATION BETWEEN POWER AND COMMUNICATION CONDUITS.
7. ALL CONDUITS THAT EXTEND THROUGH CONCRETE SHALL BE GALVANIZED RIGID CONDUIT AND WRAPPED WITH TWO (2) LAYERS OF PVC TAPE.
8. ALL ELBOWS THAT ARE UNDER THE FINISHED GRADE SHALL BE GALVANIZED RIGID CONDUIT AND WRAPPED WITH TWO (2) LAYERS OF PVC TAPE.

UTILITY COORDINATION REQUIREMENTS:

THE ELECTRICAL CONTRACTOR SHALL COORDINATE AND VERIFY ALL REQUIREMENTS AND LOCATIONS TO EXTEND CONDUITS FOR UTILITY USE WITHIN 2 WEEKS OF THE CONTRACT AWARD. THE CONTRACTOR SHALL NOT ROUGH-IN ANY CONDUITS UNTIL THE UTILITY COORDINATION IS COMPLETE AND ALL LOCATIONS ARE KNOWN. THE CONTRACTOR SHALL PROVIDE THE ARCHITECT AND THE ENGINEER A WRITTEN SIGNED STATEMENT, INCLUDING A SKETCH OF LOCATIONS, FROM THE UTILITY COMPANY NOTIFYING THEM THAT THEY HAVE COORDINATED AND VERIFIED ALL REQUIREMENTS. IF THE CONTRACTOR DOES NOT COORDINATE AND VERIFY THE REQUIREMENTS WITH THE UTILITIES OR PROVIDE A WRITTEN STATEMENT FROM THE UTILITY COMPANY TO THE ARCHITECT AND ENGINEER ALL CHANGES DO TO LACK OF COORDINATION WILL BE DONE AT NO ADDITIONAL EXPENSE TO THE OWNER.

THE ELECTRICAL CONTRACTOR SHALL ORGANIZE A PRE-CONSTRUCTION MEETING INCLUDING THE UTILITY AND GENERAL CONTRACTOR TO COORDINATE AND VERIFY ALL REQUIREMENTS. WITHIN 2 WEEKS OF THE CONTRACT AWARD. COORDINATION ITEMS INCLUDE BUT ARE NOT LIMITED TO;

- GENERAL UTILITY REQUIREMENTS AND DIVISION OF SCOPE OF WORK
- CONDUIT AND TRENCHING REQUIREMENTS
- CONDUIT ROUTING
- UTILITY EQUIPMENT PADS AND SUB-BASE REQUIREMENTS
- UTILITY CLEARANCE REQUIREMENTS
- EQUIPMENT SCREEN WALLS, EQUIPMENT ENCLOSURES, AND EQUIPMENT YARDS
- COORDINATION WITH OTHER UTILITIES OR EXISTING CONDITIONS
- AVAILABLE FAULT CURRENT CALCULATIONS (POWER UTILITY ONLY)
- UTILITY REQUIRED SITE OBSERVATIONS
- SCHEDULING OF UTILITY INSTALLATIONS

THE CONTRACTOR SHALL NOT ROUGH-IN ANY CONDUITS, EQUIPMENT PADS, OR SIMILAR ITEMS UNTIL THE UTILITY COORDINATION IS COMPLETE AND ALL THE LOCATIONS ARE KNOWN. THE CONTRACTOR SHALL PROVIDE THE ARCHITECT AND ENGINEER A WRITTEN, SIGNED STATEMENT, INCLUDING A SKETCH OF EQUIPMENT AND CONDUIT LOCATIONS, FROM THE UTILITY COMPANY NOTIFYING THEM THAT THEY HAVE COORDINATED AND VERIFIED ALL REQUIREMENTS WITH THE UTILITIES AND PROVIDE A WRITTEN STATEMENT FROM THE UTILITY COMPANY TO THE ARCHITECT AND ENGINEER, ALL CHANGES DUE TO LACK OF COORDINATION WILL BE PROVIDED AT NO

UTILITY REQUIREMENTS:

1. BURY CONDUITS PER UTILITY REQUIREMENTS. REFER TO SITE DETAIL SHEETS FOR TRENCHING REQUIREMENTS.
2. VERIFY AND COMPLY WITH ALL POWER UTILITY AND TELECOMMUNICATIONS PROVIDER REQUIREMENTS.
3. INCLUDE IN BID ALL LINE EXTENSION FEES, UNDERGROUND FEES, AND ALL MISC. FEES CHARGED BY ROCKY MOUNTAIN POWER, CENTURYLINK, AND GOOGLE FIBER.

KEYED NOTES (#)

D1 DEMOLITION NOTE TEXT GOES HERE.

S2 PROVIDE HUBBELL QUAZITE 24" X 36" PG STYLE IN-GRADE JUNCTION BOX WITH HEAVY DUTY COVER. CONFIRM PLACEMENT WITH OWNER PRIOR TO ROUGH-IN. REFER TO THE SITE DETAILS FOR MORE INFORMATION.

S3 RUN (4) 3" CONDUITS TO SWITCHBOARD 'DPLD' FOR POWER TO FUTURE PORTABLES. PROVIDE PULL ROPE AND LABEL BOTH ENDS OF CONDUIT.

S4 RUN (3) 2" CONDUITS TO IDF F109 FOR DATA, INTERCOM, AND FIRE ALARM TO FUTURE PORTABLES. PROVIDE PULL ROPE AND LABEL BOTH ENDS OF CONDUIT.

S5 RUN (2) 2" CONDUITS TO MDF D136 FOR FIRE ALARM TO FUTURE PORTABLES. PROVIDE PULL ROPE AND LABEL BOTH ENDS OF CONDUIT.

S6 SEE ONE LINE DIAGRAM FOR MORE INFORMATION.

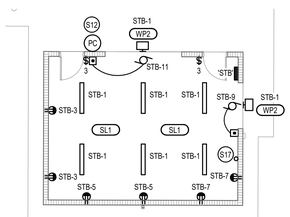
S11 SEE TELECOM RISER DIAGRAM FOR MORE INFORMATION.

S12 LINE VOLTAGE PHOTOCELL TO CONTROL EXTERIOR WP2 LIGHT FIXTURES.

S13 CITY STREET LIGHT WILL BE FURNISHED BY THE CITY AND INSTALLED BY ROCKY MOUNTAIN POWER. ELECTRICAL CONTRACTOR IS TO RUN 2" CONDUIT BETWEEN THE STREET LIGHTS AS SHOWN. INSERT PULL STRING AND LABEL. COORDINATE EXACT LOCATIONS WITH NIBLEY CITY.

S17 RUN A 1-1/2" CONDUIT FROM IDF F109 FOR FUTURE DATA. PROVIDE PULL ROPE AND LABEL BOTH ENDS OF CONDUIT.

S20 PROVIDE HUBBELL QUAZITE 18" X 18" PG STYLE IN-GRADE JUNCTION BOX WITH HEAVY DUTY COVER. CONFIRM PLACEMENT WITH OWNER PRIOR TO ROUGH-IN. REFER TO THE SITE DETAILS FOR MORE INFORMATION.



2 **ENLARGED STORAGE BUILDING - NIBLEY**
SCALE: **1/8" = 1'-0"**

UTILITY PROVIDER:
JENNIFER PETERSEN
Tele: (C) 801-391-7084
Email: JENNIFER.PETERSEN@PACIFICORP.COM
WO# 7194949

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #:	123006
DRAWN BY:	Author
CHECKED BY:	Checker
ISSUED:	04.26.2024

LICENSED PROFESSIONAL ENGINEER 774411 04-26-2024 STATE OF UTAH

SITE PLAN - NIBLEY - ELECTRICAL

E-101

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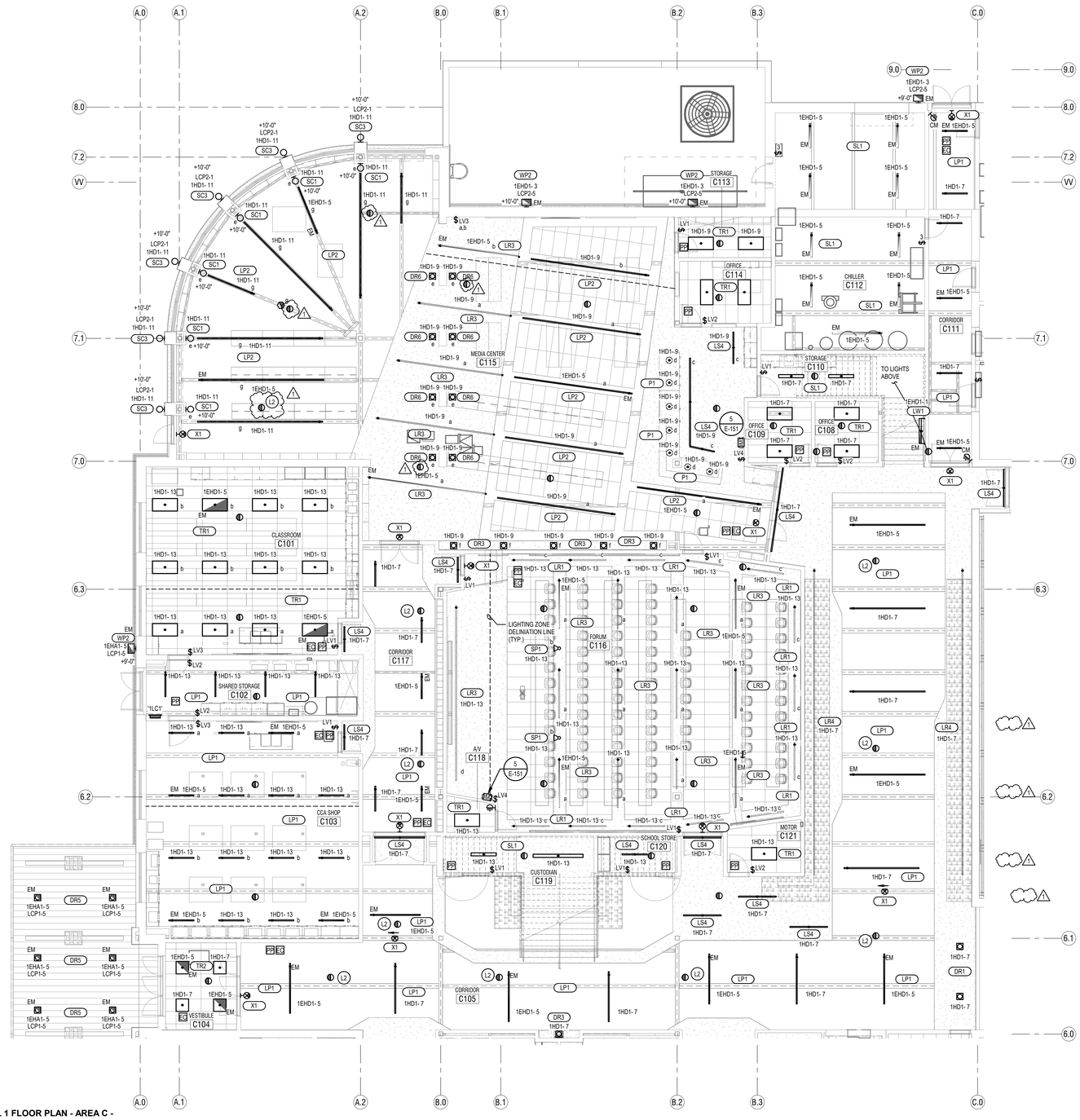
LIGHTING GENERAL NOTES:

1. REFER TO LIGHTING DETAILS SHEETS FOR TYPICAL CONTROL WIRING DIAGRAMS. PROVIDE COMPLETE SYSTEM WITH ALL REQUIRED CONDUIT, WIRING, SWITCHES, SENSORS, POWER PACK, ETC.
2. LOCATE POWER PACKS AND ROOM CONTROLLERS ABOVE ACCESSIBLE CEILING NEAR ROOM ENTRANCES.
3. CONFIRM ALL LOCATIONS OF LIGHT FIXTURES WITH ARCHITECT PRIOR TO INSTALLATION.
4. PROVIDE UNSWITCHED HOT FOR ALL EMERGENCY LIGHTS AND BATTERY PACKS.
5. REFER TO ARCHITECTURAL CEILING PLANS FOR EXACT LOCATIONS OF ALL LIGHT FIXTURES. PROVIDE AN RFI FOR ANY CONFLICTS BETWEEN LIGHTING PLANS AND ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO ORDERING LIGHT FIXTURES.

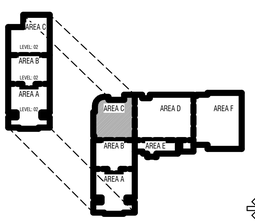
KEYED NOTES (#)

L2 PENDANT MOUNT MOTION SENSOR ON THREADED ROD AT THE SAME HEIGHT AS LIGHT FIXTURES.



LEVEL 1 FLOOR PLAN - AREA C - LIGHTING
SCALE: 1/8" = 1'-0"

KEY PLAN



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PROJECT #: 123006
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CHECKED BY: Checker
ISSUED: 04.26.2024

LEVEL 1 - AREA C - LIGHTING

E-113

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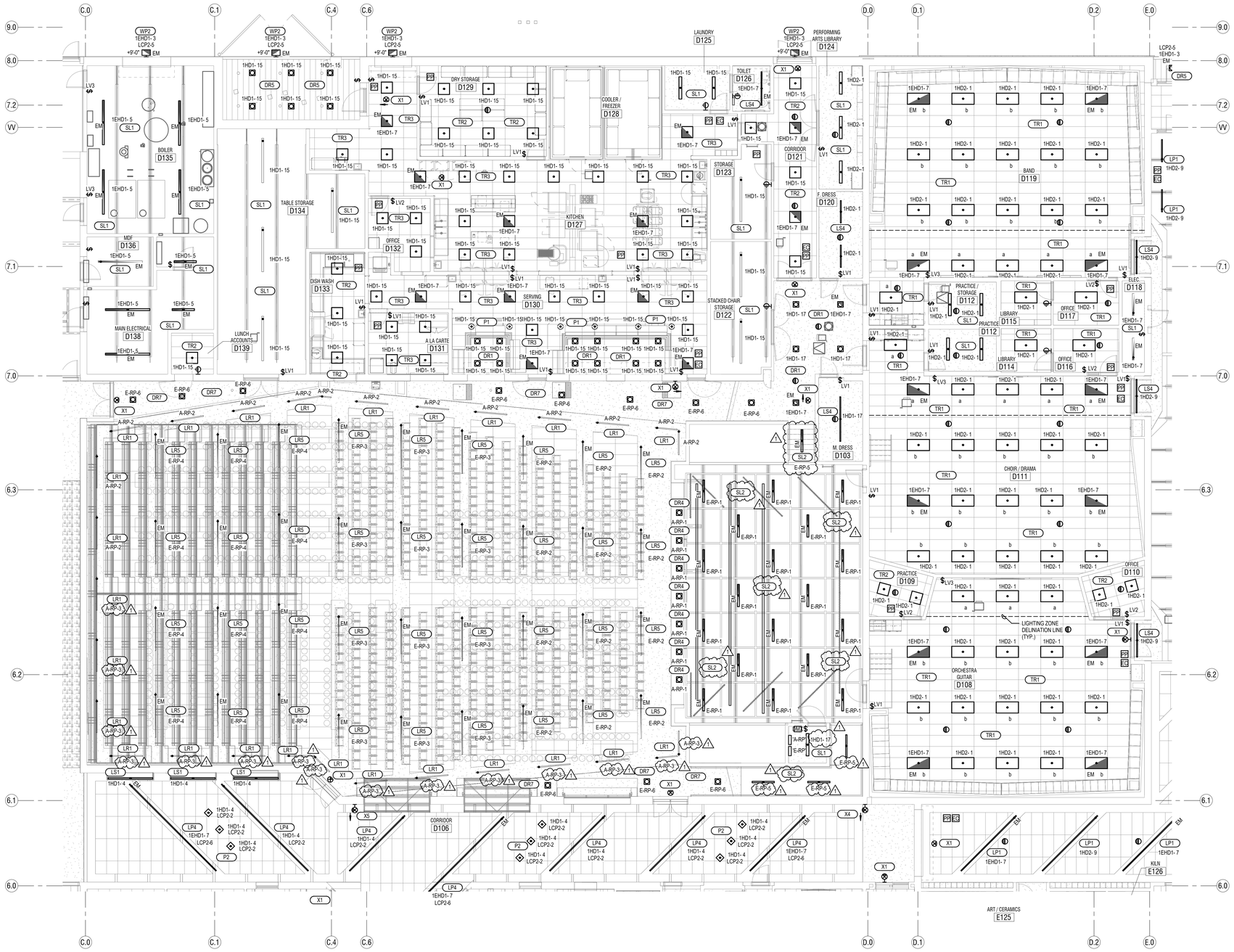
LIGHTING GENERAL NOTES:

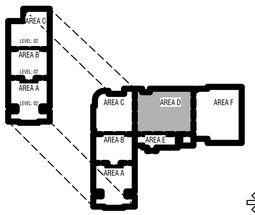
1. REFER TO LIGHTING DETAILS SHEETS FOR TYPICAL CONTROL WIRING DIAGRAMS. PROVIDE COMPLETE SYSTEM WITH ALL REQUIRED CONDUIT, WIRING, SWITCHES, SENSORS, POWER PACK, ETC.
2. LOCATE POWER PACKS AND ROOM CONTROLLERS ABOVE ACCESSIBLE CEILING NEAR ROOM ENTRANCES.
3. CONFIRM ALL LOCATIONS OF LIGHT FIXTURES WITH ARCHITECT PRIOR TO INSTALLATION.
4. PROVIDE UNSWITCHED HOT FOR ALL EMERGENCY LIGHTS AND BATTERY PACKS.
5. REFER TO ARCHITECTURAL CEILING PLANS FOR EXACT LOCATIONS OF ALL LIGHT FIXTURES. PROVIDE AN RFI FOR ANY CONFLICTS BETWEEN LIGHTING PLANS AND ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO ORDERING LIGHT FIXTURES.

KEYED NOTES #



1 **LEVEL 1 FLOOR PLAN - AREA D - LIGHTING**
SCALE: **1/8" = 1'-0"**

KEY PLAN



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NIBLEY MIDDLE SCHOOL

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DRAWN BY:	Author
CHECKED BY:	Checker
ISSUED:	04.26.2024

REGISTERED PROFESSIONAL ENGINEER
04-26-2024
STATE OF UTAH

LEVEL 1 - AREA D - LIGHTING

E-114

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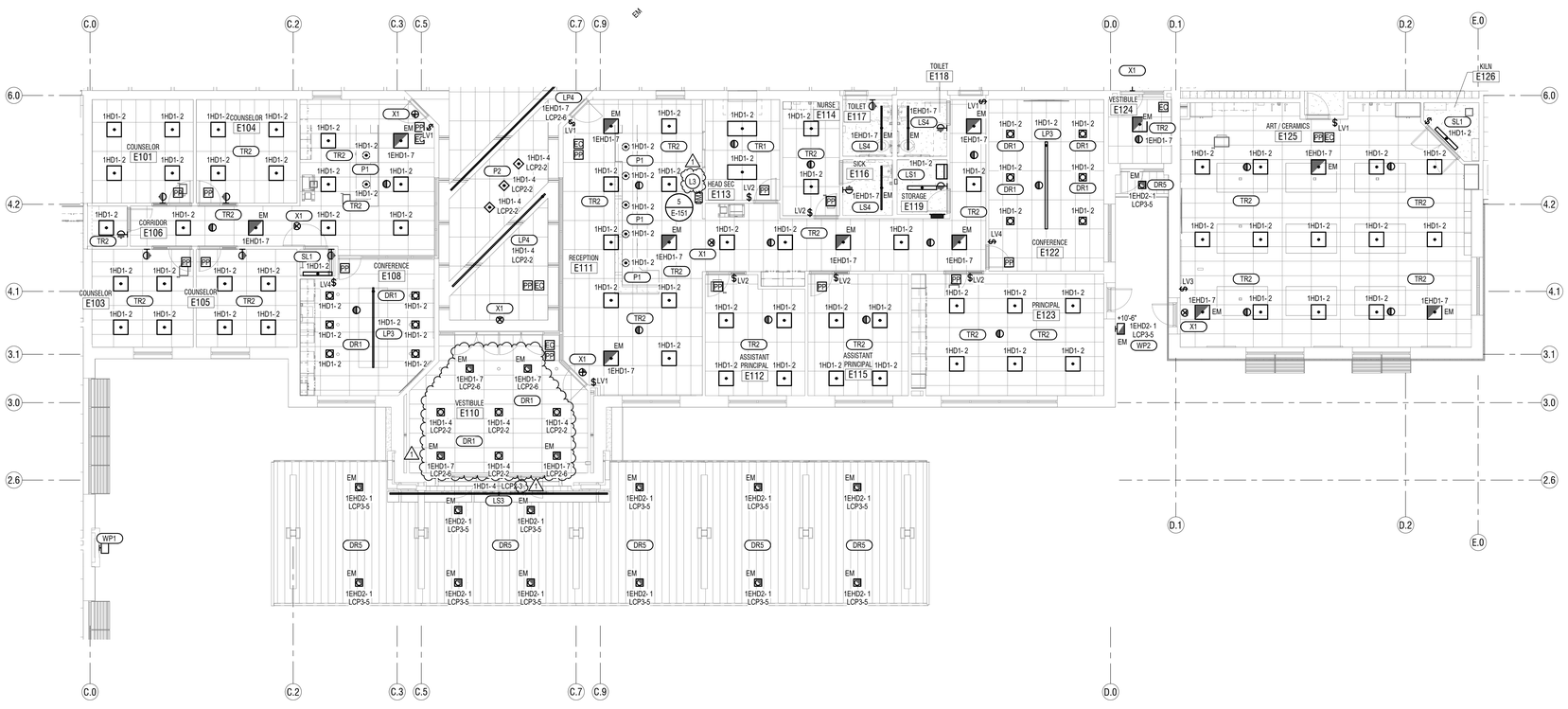
LIGHTING GENERAL NOTES:

1. REFER TO LIGHTING DETAILS SHEETS FOR TYPICAL CONTROL WIRING DIAGRAMS. PROVIDE COMPLETE SYSTEM WITH ALL REQUIRED CONDUIT, WIRING, SWITCHES, SENSORS, POWER PACK, ETC.
2. LOCATE POWER PACKS AND ROOM CONTROLLERS ABOVE ACCESSIBLE CEILING NEAR ROOM ENTRANCES.
3. CONFIRM ALL LOCATIONS OF LIGHT FIXTURES WITH ARCHITECT PRIOR TO INSTALLATION.
4. PROVIDE UNSWITCHED HOT FOR ALL EMERGENCY LIGHTS AND BATTERY PACKS.
5. REFER TO ARCHITECTURAL CEILING PLANS FOR EXACT LOCATIONS OF ALL LIGHT FIXTURES. PROVIDE AN RFI FOR ANY CONFLICTS BETWEEN LIGHTING PLANS AND ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO ORDERING LIGHT FIXTURES.

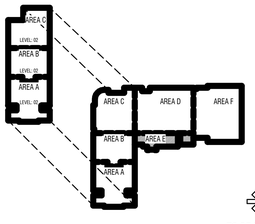
KEYED NOTES (#)

1 L3 DMX CONTROLLER TO CONTROL RGB LIGHTS IN BOTH STAIRS AND RGB LIGHTS IN CORRIDOR C106.



1 LEVEL 1 FLOOR PLAN - AREA E - LIGHTING
SCALE: 1/8" = 1'-0"

KEY PLAN



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NIBLEY MIDDLE SCHOOL

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CACHE COUNTY SCHOOL DISTRICT

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PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
04-26-2024

LEVEL 1 - AREA E - LIGHTING

E-115

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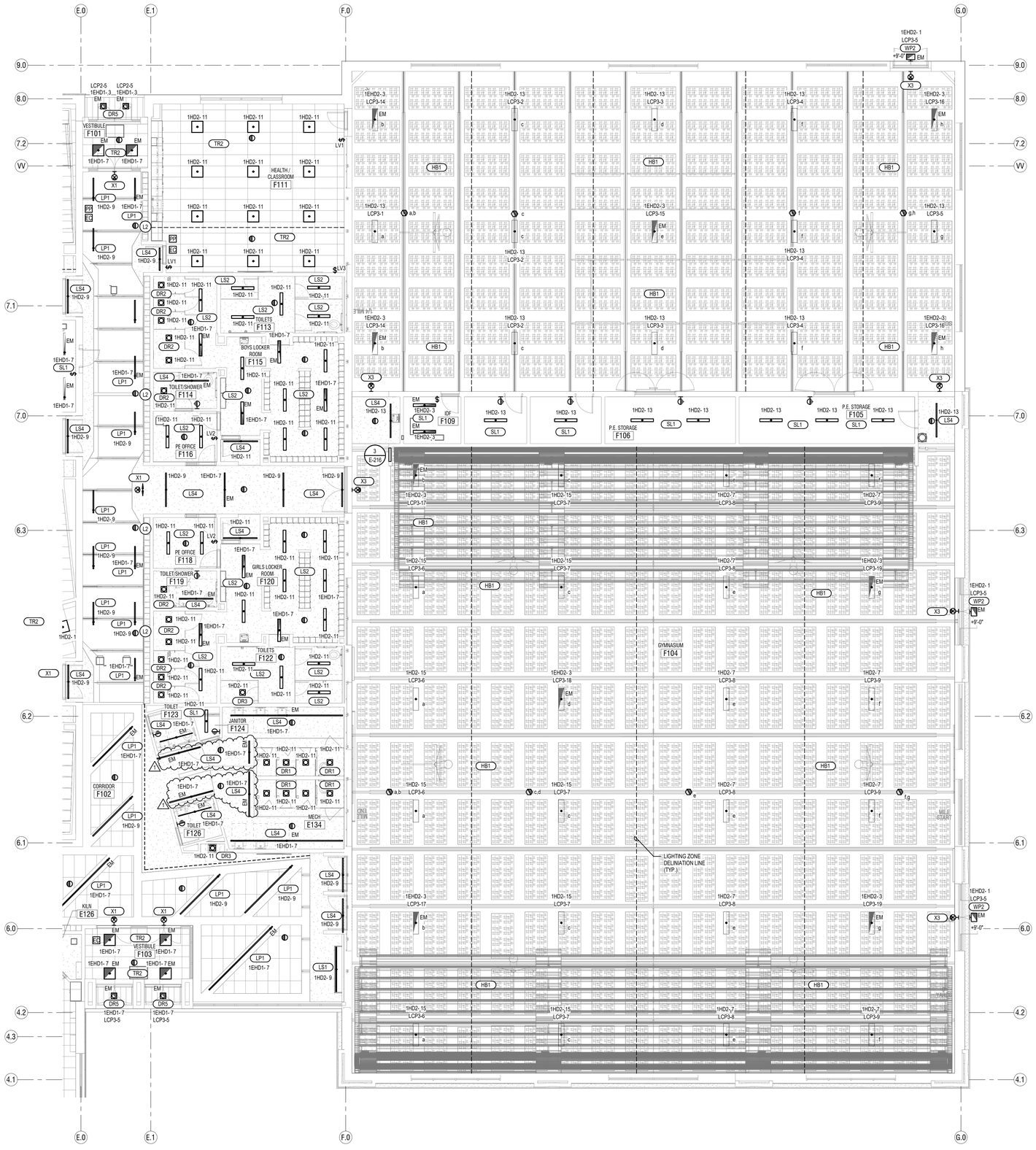


1 LEVEL 1 FLOOR PLAN - AREA F - LIGHTING
SCALE: 1/8" = 1'-0"

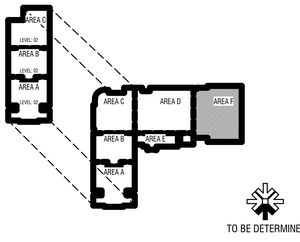
LIGHTING GENERAL NOTES:

1. REFER TO LIGHTING DETAILS SHEETS FOR TYPICAL CONTROL WIRING DIAGRAMS. PROVIDE COMPLETE SYSTEM WITH ALL REQUIRED CONDUIT, WIRING, SWITCHES, SENSORS, POWER PACK, ETC.
2. LOCATE POWER PACKS AND ROOM CONTROLLERS ABOVE ACCESSIBLE CEILING NEAR ROOM ENTRANCES.
3. CONFIRM ALL LOCATIONS OF LIGHT FIXTURES WITH ARCHITECT PRIOR TO INSTALLATION.
4. PROVIDE UNSWITCHED HOT FOR ALL EMERGENCY LIGHTS AND BATTERY PACKS.
5. REFER TO ARCHITECTURAL CEILING PLANS FOR EXACT LOCATIONS OF ALL LIGHT FIXTURES. PROVIDE AN RFI FOR ANY CONFLICTS BETWEEN LIGHTING PLANS AND ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO ORDERING LIGHT FIXTURES.

KEYED NOTES (#)

L2 PENDANT MOUNT MOTION SENSOR ON THREADED ROD AT THE SAME HEIGHT AS LIGHT FIXTURES.

KEY PLAN



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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
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DRAWN BY:	Author
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ISSUED:	04.26.2024

LEVEL 1 - AREA F - LIGHTING

E-116

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LIGHTING GENERAL NOTES:

1. REFER TO LIGHTING DETAILS SHEETS FOR TYPICAL CONTROL WIRING DIAGRAMS. PROVIDE COMPLETE SYSTEM WITH ALL REQUIRED CONDUIT, WIRING, SWITCHES, SENSORS, POWER PACK, ETC.
2. LOCATE POWER PACKS AND ROOM CONTROLLERS ABOVE ACCESSIBLE CEILING NEAR ROOM ENTRANCES.
3. CONFIRM ALL LOCATIONS OF LIGHT FIXTURES WITH ARCHITECT PRIOR TO INSTALLATION.
4. PROVIDE UNSWITCHED HOT FOR ALL EMERGENCY LIGHTS AND BATTERY PACKS.
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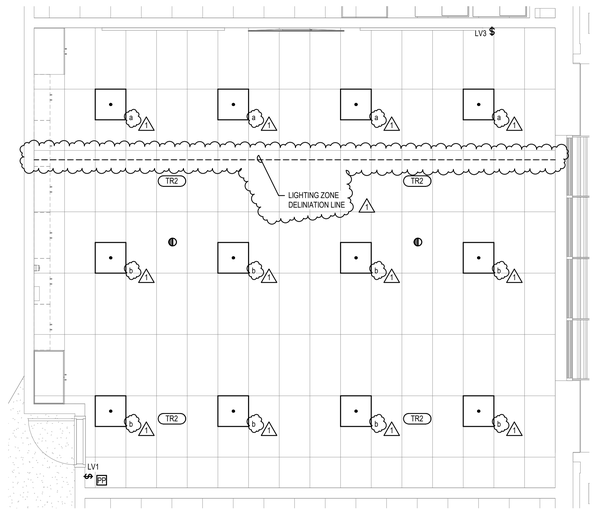

1 **ENLARGED CLASSROOM - LIGHTING**
SCALE: **1/4" = 1'-0"**

CONSTRUCTION DOCUMENTS

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #:	123006
DRAWN BY:	Author
CHECKED BY:	Checker
ISSUED:	04.26.2024

REGISTERED PROFESSIONAL ENGINEER
17411
04-01-2024
STATE OF UTAH

LEVEL 1 - ENLARGED LIGHTING PLANS

E-131

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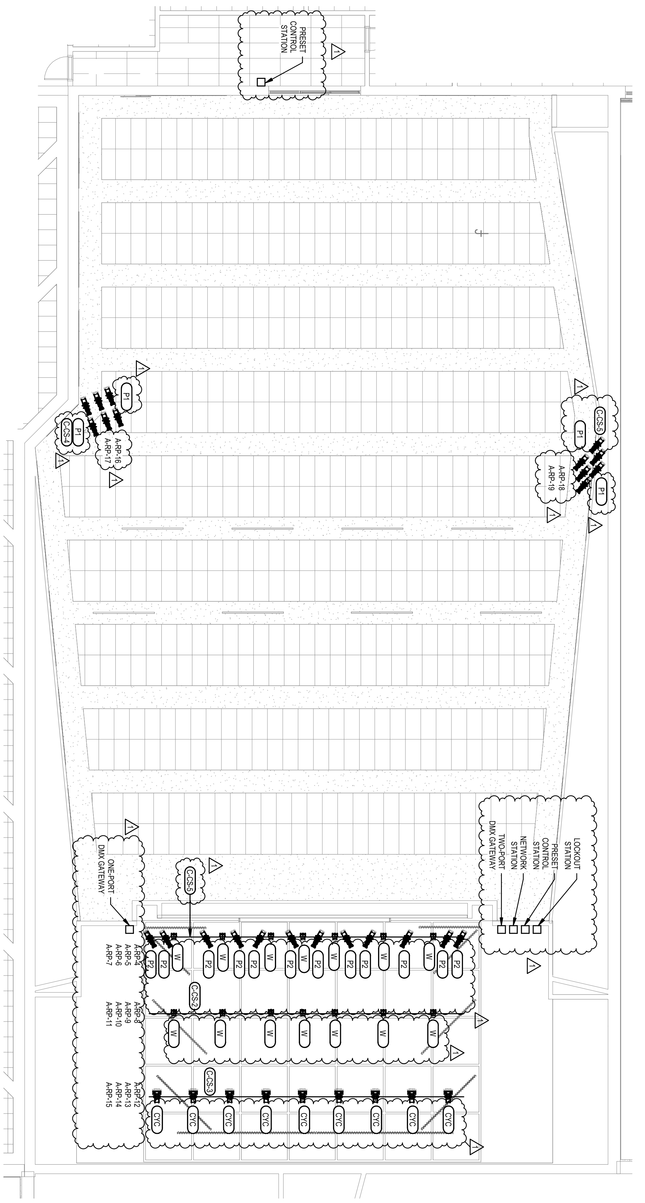

CAFETORIUM THEATRICAL LIGHTING PLAN
1 SCALE: 1/8" = 1'-0"

CONSTRUCTION DOCUMENTS

CAFETORIUM THEATRICAL LIGHTING PLAN

E-132

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STATE OF UTAH REGISTERED PROFESSIONAL ENGINEER

MARK:	DATE:	DESCRIPTION:
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PROJECT #: 122006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

NIBLEY MIDDLE SCHOOL

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CACHE COUNTY SCHOOL DISTRICT

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THEATRICAL LIGHT FIXTURE SCHEDULE

DESCRIPTION	TYPE	MFG	PART NUMBER	NOTES
LED WASH FIXTURE	W	ETC OVATION	CSPAR-A,400CC,400SC,SELLXX-7.5	NOTE 1
LED PROFILE FIXTURE WITH 15-30 DEGREE ZOOM LENS	P1	ETC OVATION	CSSPOT, 400CC, 400SC, 400PH-A	NOTE 2
LED PROFILE FIXTURE WITH 25-50 DEGREE ZOOM LENS	P2	ETC OVATION	CSSPOT,JR, 400CC, 400SC	NOTE 3
LED CYC FIXTURE	CYC	ETC OVATION	CSCYC, 400CC, 400SC	NOTE 4

NOTES:

1. LED WASH FIXTURE INCLUDES POWER CABLE, DMX CABLE, PBG CONNECTOR, C-CLAMP, SAFETY CABLE. CONTRACTOR TO VERIFY LENGTH OF POWER CABLE AND DMX CABLE PRIOR TO ORDERING. COORDINATE EXACT FIXTURE LOCATIONS WITH THE SCHOOLS THEATER TEACHER.
2. LED PROFILE FIXTURES INCLUDES POWER CABLE, DMX CABLE, PBG CONNECTOR, C-CLAMP, SAFETY CABLE, SIZE A PATTERN HOLDER, AND 15-30 DEGREE ZOOM LENS. CONTRACTOR TO VERIFY LENGTH OF POWER CABLE AND DMX CABLE PRIOR TO ORDERING. COORDINATE EXACT LOCATIONS WITH THE SCHOOLS THEATER TEACHER.
3. LED PROFILE FIXTURES INCLUDES POWER CABLE, DMX CABLE, PBG CONNECTOR, C-CLAMP, SAFETY CABLE, AND 25-50 DEGREE ZOOM LENS. CONTRACTOR TO VERIFY LENGTH OF POWER CABLE AND DMX CABLE PRIOR TO ORDERING. COORDINATE EXACT LOCATIONS WITH THE SCHOOLS THEATER TEACHER.
4. LED CYC FIXTURE INCLUDES POWER CABLE, DMX CABLE, PBG CONNECTOR, C-CLAMP, SAFETY CABLE. CONTRACTOR TO VERIFY LENGTH OF POWER CABLE AND DMX CABLE PRIOR TO ORDERING. COORDINATE EXACT FIXTURE LOCATIONS WITH THE SCHOOLS THEATER TEACHER.

THEATRICAL CONTROLS

TYPE	DESCRIPTION
C-CS-1, 2, 3	CONNECTOR STRIP, (1) 50' CONNECTOR STRIP, (24) PBG OUTLETS, SURFACE MOUNTED TO STRUCTURE, HANGING BRACKETS, (4) SWITCHED CIRCUITS, (1) DMX OUTPUT GATEWAY
C-CS-4, 5	CONNECTOR STRIP, (1) 16' CONNECTOR STRIP, (8) PBG OUTLETS, MOUNTED TO ETC MOTORIZED HOIST, HANGING BRACKETS, (2) SWITCHED CIRCUITS, (1) DMX OUTPUT GATEWAY

RELAY PANEL: E-RP

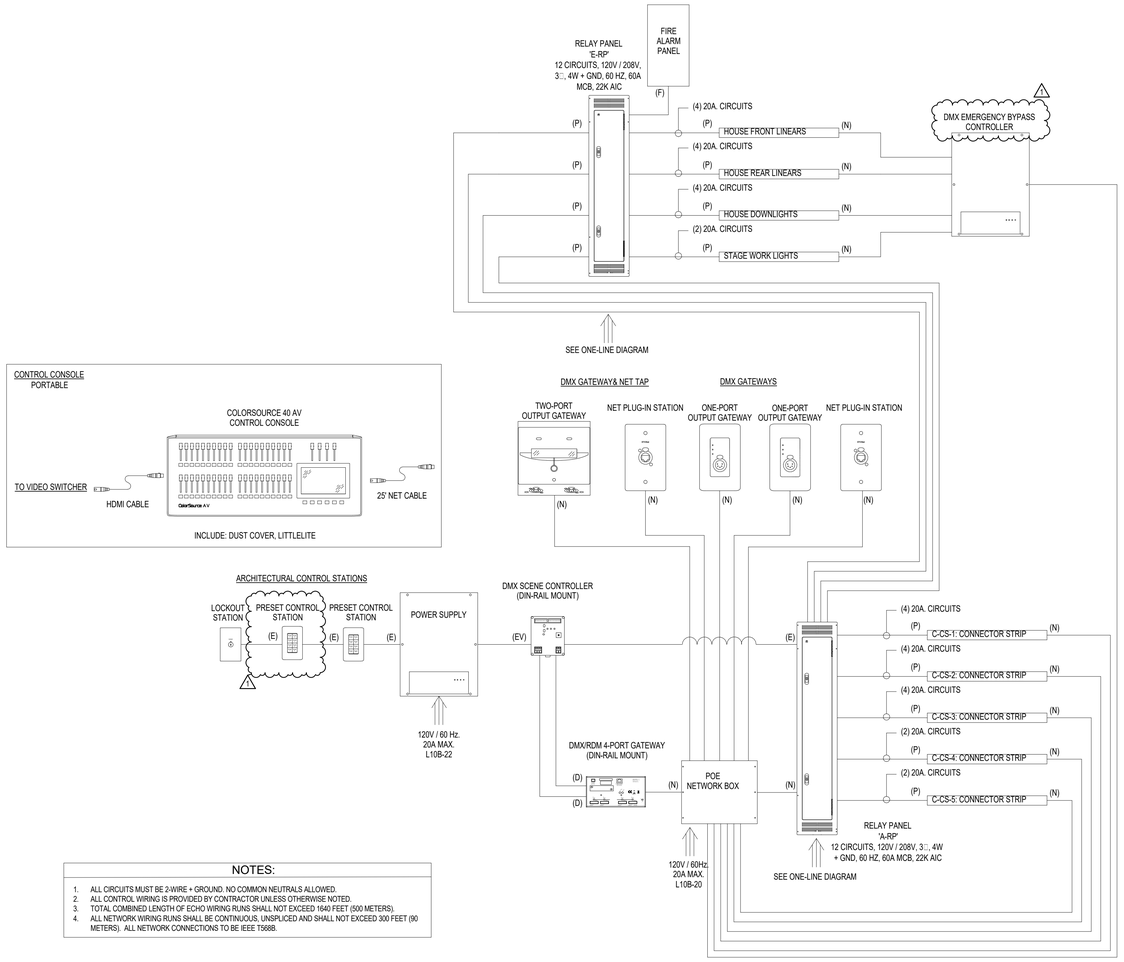
CKT	CONTROL ZONE	LOAD TYPE	CONTROL METHOD
1	STAGE LIGHTS	LED	DMX
2	CAFETORIUM LR3	LED	DMX
3	CAFETORIUM LR5	LED	DMX
4	CAFETORIUM LR5	LED	DMX
5	STAGE RAMP LIGHTS	LED	DMX
6	CAFETORIUM DR7	LED	DMX
7	SPARE	LED	DMX
8	SPARE	LED	DMX

RELAY PANEL: A-RP

CKT	CONTROL ZONE	LOAD TYPE	CONTROL METHOD
1	PROSCENIUM DR4	LED	DMX
2	CAFETORIUM LR1	LED	DMX
3	CAFETORIUM LR1	LED	DMX
4	C-CS-1	LED	DMX
5	C-CS-1	LED	DMX
6	C-CS-1	LED	DMX
7	C-CS-1	LED	DMX
8	C-CS-2	LED	DMX
9	C-CS-2	LED	DMX
10	C-CS-2	LED	DMX
11	C-CS-2	LED	DMX
12	C-CS-3	LED	DMX
13	C-CS-3	LED	DMX
14	C-CS-3	LED	DMX
15	C-CS-3	LED	DMX
16	C-CS-4	LED	DMX
17	C-CS-4	LED	DMX
18	C-CS-5	LED	DMX
19	C-CS-5	LED	DMX
20	SPARE	LED	DMX
21	SPARE	LED	DMX
22	SPARE	LED	DMX
23	SPARE	LED	DMX
24	SPARE	LED	DMX

WIRING LEGEND

SYMBOL	WIRE TYPE	SIGNAL
(D)	(1) BELDEN 9729	DMX
(N)	(1) BELDEN 1583A	NETWORK
(E)	(1) BELDEN 8471 (1) #14 AWG. STRANDED	120V POWER
(P)	2#12 AWG 1#12 AWG GND. (UPSIZE FOR VOLTAGE DROP)	120V POWER
(EV)	(1) BELDEN 8471 (1) #14 AWG STRANDED (2) #16 AWG STRANDED	120V POWER



NOTES:

1. ALL CIRCUITS MUST BE 2-WIRE + GROUND. NO COMMON NEUTRALS ALLOWED.
2. ALL CONTROL WIRING IS PROVIDED BY CONTRACTOR UNLESS OTHERWISE NOTED.
3. TOTAL COMBINED LENGTH OF ECHO WIRING RUNS SHALL NOT EXCEED 1640 FEET (500 METERS).
4. ALL NETWORK WIRING RUNS SHALL BE CONTINUOUS, UNSPLICED AND SHALL NOT EXCEED 300 FEET (90 METERS). ALL NETWORK CONNECTIONS TO BE IEEE T568B.

2 COMMONS THEATRICAL LIGHTING RISER DIAGRAM

SCALE: NTS

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 200 WEST LOGAN, UT 84321
750 NORTH 400 WEST SALT LAKE CITY, UT 84103

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #: 123006
DRAWN BY: SB
CHECKED BY: AH
ISSUED: 04.26.2024

THEATRICAL LIGHTING RISER

E-141

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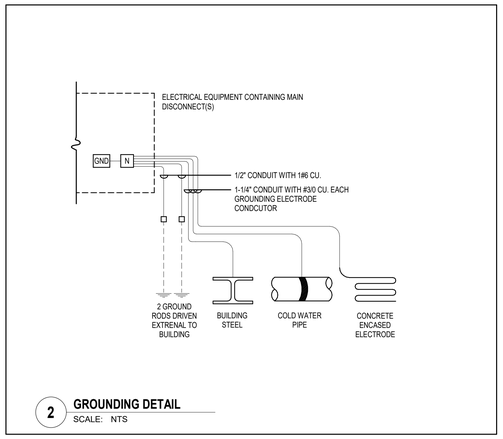
TRANSFORMER SCHEDULE

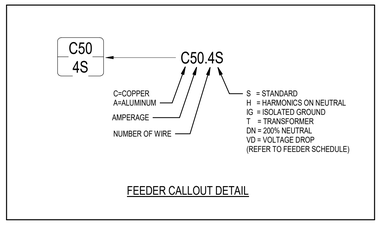
NAME	TYPE	KVA	PRIMARY VOLTAGE	PRIMARY CONNECTION	SECONDARY VOLTAGE	SECONDARY CONNECTION	GROUNDING ELECTRODE CONDUCTOR SIZE	GROUNDING ELECTRODE CONDUCTOR TYPE	GROUNDING ELECTRODE CONDUCTOR K FACTOR	ELECTRO-STATIC SHIELD	MOUNTING	REMARKS
'T1'	HIGH-EFFICIENCY, US DEPARTMENT OF ENERGY CSL-3	150	480	DELTA	120/208	WYE	#2/0, 3/4" C.	THWN, CU. / EMT	4	YES	FLOOR	POWERSMITHS E-SAVER C3L OR PRIOR-APPROVED EQUIVALENT
'T2'	HIGH-EFFICIENCY, US DEPARTMENT OF ENERGY CSL-3	300	480	DELTA	120/208	WYE	#3/0, 3/4" C.	THWN, CU. / EMT	4	YES	FLOOR	POWERSMITHS E-SAVER C3L OR PRIOR-APPROVED EQUIVALENT
'T3'	HIGH-EFFICIENCY, US DEPARTMENT OF ENERGY CSL-3	300	480	DELTA	120/208	WYE	#3/0, 3/4" C.	THWN, CU. / EMT	4	YES	FLOOR	POWERSMITHS E-SAVER C3L OR PRIOR-APPROVED EQUIVALENT
'TM'	HIGH-EFFICIENCY, US DEPARTMENT OF ENERGY CSL-3	45	480	DELTA	120/208	WYE	#4, 3/4" C.	THWN, CU. / EMT	4	YES	WALL	POWERSMITHS E-SAVER C3L OR PRIOR-APPROVED EQUIVALENT

FEEDER SCHEDULE

FEEDER	# OF SETS	CONDUIT DIAMETER	CONDUCTOR #	CONDUCTOR SIZE	EQ GND COND (CU)	ISOLATED GROUND	SYSTEM BONDING JUMPER
C50.4S	1	1	4	6	10	-	-
C80.4S	1	1-1/4	4	4	10	-	-
C70.3S	1	1-1/4	3	4	8	-	-
C100.4S	1	1-1/2	4	2	8	-	-
A150.4H	1	2-1/2	3	4/0	6	-	-
A175.4S	1	2-1/2	4	4/0	6	-	-
A225.3S	1	3-1/2	3	300	4	-	-
A225.4S	1	3-1/2	4	300	4	-	-
A225.4H	1	3-1/2	5	300	4	-	-
A400.4S	2	3	4	250	3	-	-
A400.4H	2	3	5	250	3	-	-
A500.3S	2	3	3	350	2	-	-
A500.4HT	2	3	5	350	-	-	1/0
A1000.4HT	4	3-1/2	5	350	-	-	3/0
A1600.4S	6	3-1/2	4	500	3/0	-	-



2 **GROUNDING DETAIL**
SCALE: NTS



FEEDER CALLOUT DETAIL

GENERAL ONE-LINE NOTES:

1. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE AVAILABLE FAULT CURRENT WITH THE OWNER PRIOR TO BIDDING AND PROVIDE EQUIPMENT RATED ACCORDINGLY. SUBMIT FAULT CURRENT CALCULATIONS WITH SHOP DRAWINGS SUBMITTAL.
2. PROVIDE FULL LENGTH VERTICAL BUSSING ALL IN ALL SWITCHBOARDS, DISTRIBUTION PANELBOARDS, AND PANELBOARDS.
3. COORDINATE SPACE WITH ALL OTHER TRADES TO MAINTAIN ALL CODE-REQUITED CLEARANCES.

SELECTIVE COORDINATION REQUIREMENTS:

A. CONTRACTOR SHALL PROVIDE ALL OF THE FOLLOWING FOR THE ENTIRE SYSTEM:
   a. FAULT CURRENT ANALYSIS.
   b. ARC-FLASH STUDY.
   c. SELECTIVE COORDINATION STUDY AND SETTINGS OF ALL ADJUSTABLE TRIP OVERCURRENT PROTECTION DEVICES.

B. THE SELECTIVE COORDINATION OF THE SYSTEM (DOWN TO THE SMALLEST OVERCURRENT PROTECTIVE DEVICE) SHALL BE COORDINATED TO A LEVEL OF 0.1 SECONDS.

C. CONTRACTOR SHALL PROVIDE BUSSMAN QUIK-SPEC FUSIBLE PANELBOARD (OR APPROVED EQUIVALENT), ELECTRONIC SOLID STATE ADJUSTABLE TRIP (LSI) CIRCUIT BREAKERS, AND/OR CIRCUIT BREAKERS WITH LARGER FRAME SIZES AS NECESSARY TO ENSURE PROPER SELECTIVE COORDINATION. REFER TO SPECIFICATIONS FOR ADDITIONAL SELECTIVE COORDINATION REQUIREMENTS ON EMERGENCY, LEGALLY REQUIRED STANDBY, AND OPTIONAL STANDBY POWER SYSTEMS.

D. A PRELIMINARY SELECTIVE COORDINATION STUDY AND DEVICE SETTINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL. NO ELECTRICAL EQUIPMENT SUBMITTAL SHALL BE SUBMITTED FOR APPROVAL PRIOR TO SUBMITTING THE PRELIMINARY SELECTIVE COORDINATION STUDY AND DEVICE SETTINGS OF THE PROPOSED ELECTRICAL DISTRIBUTION EQUIPMENT AND ASSOCIATED OVERCURRENT DEVICES. THE STUDY SHALL BE SUBMITTED FOR REVIEW BY THE ELECTRICAL ENGINEER AND OWNER TO ENSURE CONFORMANCE TO THE CONSTRUCTION DOCUMENTS. NO ELECTRICAL DISTRIBUTION EQUIPMENT SHALL BE ELEASED UNTIL THE SELECTIVE COORDINATION STUDY SHOWS PROPER COORDINATION OF ALL SYSTEM ELEMENTS.

E. AT THE END OF THE PROJECT A COMPLETE FAULT CURRENT, ARC-FLASH, AND SELECTIVE COORDINATION STUDY SHALL BE SUBMITTED FOR REVIEW.

F. ONCE PRELIMINARY SELECTIVE COORDINATION STUDY IS COMPLETED, THE WITHSTAND RATING FOR THE AUTOMATIC TRANSFER SWITCHES (ATS) SHALL BE COORDINATED WITH THE SPECIFIC BREAKERS FEEDING ATS THAT ARE PROVIDED.

FEEDER GENERAL NOTES:

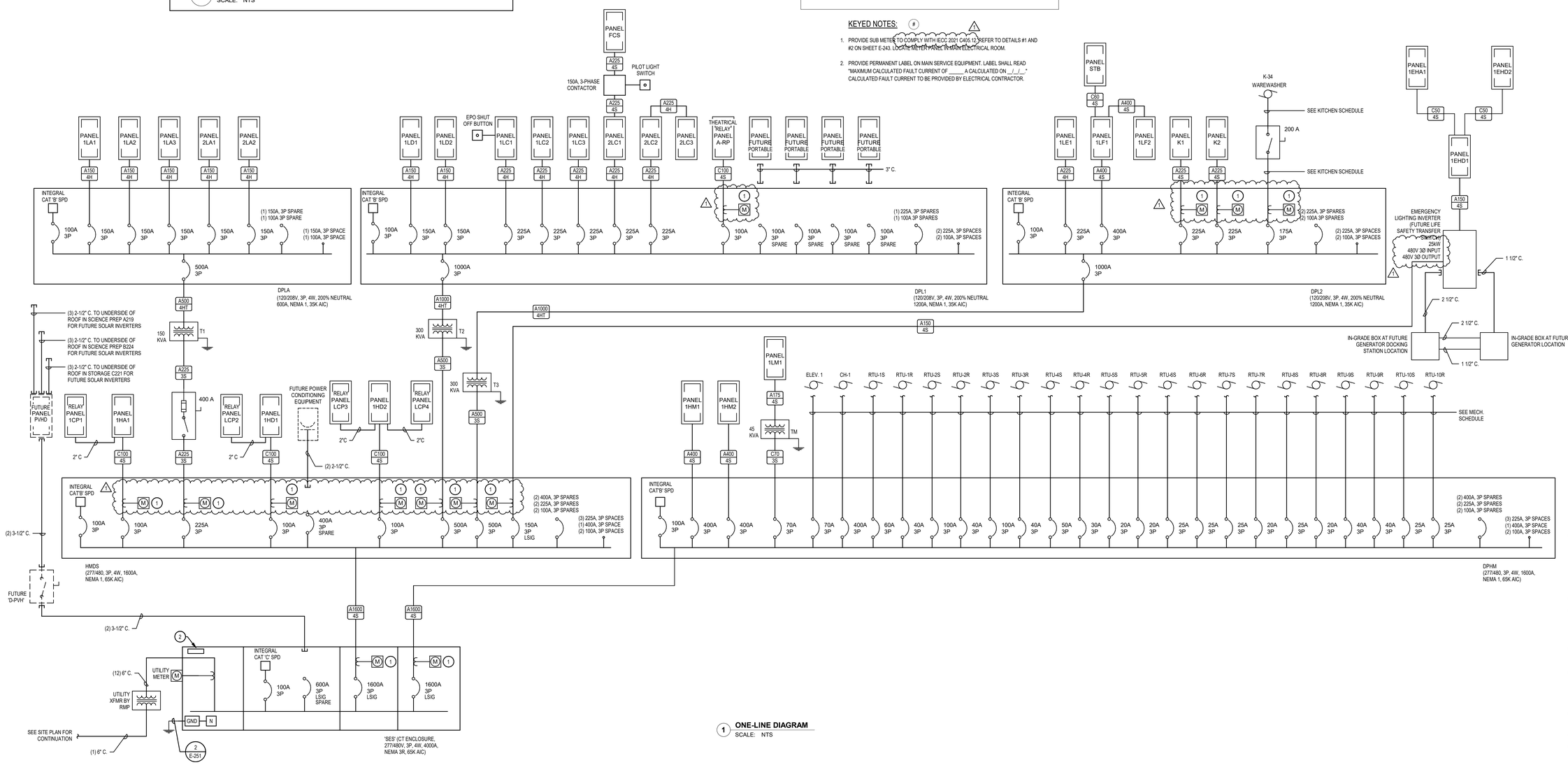
1. CONTRACTOR SHALL REVIEW ONE-LINE DIAGRAM AND CONFIRM FEEDER WIRE SIZES. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER PRIOR TO BID. IF DISCREPANCIES EXIST, CONTRACTOR SHALL PROVIDE CORRECT WIRE SIZE BASED ON ACTUAL BREAKER SIZE AND ANY VOLTAGE DROP ADJUSTMENTS. SEE NEC 210.19, 215.2, 250.112, AND 310.15.
2. ALL GROUNDING WIRES SHOWN IN FEEDER SCHEDULE ARE COPPER WIRES.
3. ALL SYSTEM BONDING JUMPER CONDUCTORS SHOWN ARE TO BE RUN IN EACH PARALLEL FEEDER SET.

ONE-LINE SYMBOLS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
PANEL 'A'	LIGHTING AND APPLIANCE PANEL BOARD		POWER FACTOR CORRECTION CAPACITOR & ENCLOSURE
PANEL 'A'	LOAD CENTER		TRANSFORMER
? ?	CIRCUIT BREAKER		AUTOMATIC TRANSFER SWITCH
	CIRCUIT BREAKER & ENCLOSURE		GROUNDING ELECTRODE & CONDUCTOR
			CURRENT TRANSFORMER
G	GENERATOR	M	METER
	MOTOR		FUSED DISCONNECT SWITCH
SPD	SURGE SUPPRESSION DEVICE		
	DISCONNECT SWITCH		
			ISOLATION BYPASS AUTOMATIC TRANSFER SWITCH

KEYED NOTES:

1. PROVIDE SUB METER TO COMPLY WITH IECC 2021 C405.12. REFER TO DETAILS #1 AND #2 ON SHEET E-243. LOCATE METER PANEL IN MAIN ELECTRICAL ROOM.
2. PROVIDE PERMANENT LABEL ON MAIN SERVICE EQUIPMENT. LABEL SHALL READ "MAXIMUM CALCULATED FAULT CURRENT OF _____ A CALCULATED ON __/__/__." CALCULATED FAULT CURRENT TO BE PROVIDED BY ELECTRICAL CONTRACTOR.



1 **ONE-LINE DIAGRAM**
SCALE: NTS

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 200 WEST
750 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

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NIBLEY MIDDLE SCHOOL
3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #: 123006
DRAWN BY: SB
CHECKED BY: AH
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER 377441 04-26-2024 STATE OF UTAH

ONE-LINE DIAGRAM
E-251

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PANELBOARD SCHEDULE

PANEL NAME: 1EHA1

MOUNTING: SURFACE | VOLTAGE: 480/277 Wye | LOCATION: ELEC A120 | FEED FROM: 1EHD1
ENCLOSURE: NEMA 1 | PHASE: 3 | MAIN TYPE: MLO | SPD: CAT 'A'
DOOR TYPE: DOOR-IN-DOOR | WIRES: 4 | BUS RATING: 100 A | NEUTRAL RATING: 100 %
Min. A.I.C. RATING: 35K AIC | MCB RATING: N/A | ISOLATED GROUND: NONE
BUS MATERIAL: ALUMINUM

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	EM LTG - LEVEL 1 AREAS A,B	20 A	1	L	1	1846 VA	--					2	--	1	--	-SPACE ONLY-	
	EM LTG - LEVEL 2 AREAS A,B	20 A	1	L	3			1674 VA	--			4	--	1	--	-SPACE ONLY-	
	EM LTG - BUILDING EXTERIOR	20 A	1	L	5					656 VA	--	6	--	1	--	-SPACE ONLY-	
	EM LTG - ELEVATOR B112	20 A	1	L	7	160 VA	--					8	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	9			0 VA	--			10	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	11					0 VA	--	12	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	13	0 VA	--					14	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	15			0 VA	--			16	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	17					0 VA	--	18	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	19	0 VA	--					20	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	21			0 VA	--			22	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	23					0 VA	--	24	--	1	--	-SPACE ONLY-	

	A	B	C
TOTAL CONNECTED LOAD PER PHASE (VA)	2006 VA	1674 VA	656 VA
TOTAL CONNECTED CURRENT PER PHASE (AMPS)	8 A	7 A	2 A

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	0 VA	0.00%	0 VA	Total Conn. Load:	4336 VA
L	Lighting	4336 VA	125.00%	5420 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	5420 VA
E	Equipment	0 VA	0.00%	0 VA	Total Conn. Current:	5 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	7 A
K	Kitchen	0 VA	0.00%	0 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1EHD1

MOUNTING: SURFACE | VOLTAGE: 480/277 Wye | LOCATION: EMERGENCY ELECTRICAL D137 | FEED FROM: HMDS
ENCLOSURE: NEMA 1 | PHASE: 3 | MAIN TYPE: MLO | SPD: CAT A
DOOR TYPE: DOOR-IN-DOOR | WIRES: 4 | BUS RATING: 225 A | NEUTRAL RATING: 100%
Min. A.I.C. RATING: 35 K AIC | MCB RATING: N/A | ISOLATED GROUND: NONE
BUS MATERIAL: ALUMINUM

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	EM. LTG - LEVEL 2 AREA C	20 A	1	L	1	1522 VA	2006 VA					2	P	3	50 A	1EHA1	
	EM. LTG - BUILDING EXTERIOR	20 A	1	L	3			414 VA	1674 VA			4	--	--	--	--	--
	EM. LTG - LEVEL 1 AREA C	20 A	1	L	5					3216 VA	656 VA	6	--	--	--	--	--
	EM. LTG - AREA D	20 A	1	L	7	4504 VA	616 VA					8	P	3	50 A	1EHD2	
	-SPARE-	20 A	1	--	9			0 VA	2930 VA			10	--	--	--	--	--
	-SPARE-	20 A	1	--	11					0 VA	0 VA	12	--	--	--	--	--
	-SPARE-	20 A	1	--	13	0 VA	--					14	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	15			0 VA	--			16	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	17					0 VA	--	18	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	19	0 VA	--					20	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	21			0 VA	--			22	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	23					0 VA	--	24	--	1	--	-SPACE ONLY-	

	A	B	C
TOTAL CONNECTED LOAD PER PHASE (VA)	8648 VA	5018 VA	3872 VA
TOTAL CONNECTED CURRENT PER PHASE (AMPS)	32 A	19 A	14 A

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	0 VA	0.00%	0 VA	Total Conn. Load:	17538 VA
L	Lighting	17538 VA	125.00%	21923 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	21923 VA
E	Equipment	0 VA	0.00%	0 VA	Total Conn. Current:	21 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	26 A
K	Kitchen	0 VA	0.00%	0 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1EHD2

MOUNTING: SURFACE | VOLTAGE: 480/277 Wye | LOCATION: ELEC. D118 | FEED FROM: 1EHD1
ENCLOSURE: NEMA 1 | PHASE: 3 | MAIN TYPE: MLO | SPD: CAT 'A'
DOOR TYPE: DOOR-IN-DOOR | WIRES: 4 | BUS RATING: 100 A | NEUTRAL RATING: 100%
Min. A.I.C. RATING: 35K AIC | MCB RATING: N/A | ISOLATED GROUND: NONE
BUS MATERIAL: ALUMINUM

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	EM. LTG - BUILDING EXTERIOR	20 A	1	L	1	616 VA	--					2	--	1	--	-SPACE ONLY-	
	EM. LTG - GYMNASIUMS	20 A	1	L	3			2930 VA	--			4	--	1	--	-SPACE ONLY-	
					5						--	6	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	7	0 VA	--					8	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	9			0 VA	--			10	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	11					0 VA	--	12	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	13	0 VA	--					14	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	15			0 VA	--			16	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	17					0 VA	--	18	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	19	0 VA	--					20	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	21			0 VA	--			22	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	23					0 VA	--	24	--	1	--	-SPACE ONLY-	

	A	B	C
TOTAL CONNECTED LOAD PER PHASE (VA)	616 VA	2930 VA	0 VA
TOTAL CONNECTED CURRENT PER PHASE (AMPS)	3 A	11 A	0 A

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	0 VA	0.00%	0 VA	Total Conn. Load:	3546 VA
L	Lighting	3546 VA	125.00%	4433 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	4433 VA
E	Equipment	0 VA	0.00%	0 VA	Total Conn. Current:	4 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	5 A
K	Kitchen	0 VA	0.00%	0 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1HA1

MOUNTING: SURFACE | VOLTAGE: 480/277 Wye | LOCATION: ELEC A120 | FEED FROM: HMDS
ENCLOSURE: NEMA 1 | PHASE: 3 | MAIN TYPE: MLO | SPD: NONE
DOOR TYPE: DOOR-IN-DOOR | WIRES: 4 | BUS RATING: 100 A | NEUTRAL RATING: 100%
Min. A.I.C. RATING: 35K AIC | MCB RATING: N/A | ISOLATED GROUND: NONE
BUS MATERIAL: ALUMINUM

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	-SPARE-	20 A	1	--	1	0 VA	3145 VA					2	L	1	20 A	LTG - SITE POLES - NIBLEY	
	-SPARE-	20 A	1	--	3			0 VA	2528 VA			4	L	1	20 A	LTG - LEVEL 1 AREA A	
	-SPARE-	20 A	1	--	5					0 VA	3470 VA	6	L	1	20 A	LTG - LEVEL 1 AREA A	
	-SPARE-	20 A	1	--	7	0 VA	3136 VA					8	L	1	20 A	LTG - LEVEL 1 AREA A	
	-SPARE-	20 A	1	--	9			0 VA	1395 VA			10	L	1	20 A	LTG - LEVEL 1 AREA B	
	-SPARE-	20 A	1	--	11					0 VA	3360 VA	12	L	1	20 A	LTG - LEVEL 1 AREA B	
	-SPARE-	20 A	1	--	13	0 VA	2466 VA					14	L	1	20 A	LTG - LEVEL 2 AREA B	
	-SPARE-	20 A	1	--	15			0 VA	3072 VA			16	L	1	20 A	LTG - LEVEL 2 AREA B	
	-SPARE-	20 A	1	--	17					0 VA	2920 VA	18	L	1	20 A	LTG - LEVEL 2 AREA A	
	-SPARE-	20 A	1	--	19	0 VA	2908 VA					20	L	1	20 A	LTG - LEVEL 2 CORRIDORS	
	-SPARE-	20 A	1	--	21			0 VA	2112 VA			22	L	1	20 A	LTG - LEVEL 2 ALT. BID...	
	-SPARE-	20 A	1	--	23					0 VA	128 VA	24	L	1	20 A	LTG - MONUMENT SIGN	

	A	B	C
TOTAL CONNECTED LOAD PER PHASE (VA)	11655 VA	9107 VA	9878 VA
TOTAL CONNECTED CURRENT PER PHASE (AMPS)	43 A	33 A	36 A

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	0 VA	0.00%	0 VA	Total Conn. Load:	30640 VA
L	Lighting	30640 VA	125.00%	38300 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	38300 VA
E	Equipment	0 VA	0.00%	0 VA	Total Conn. Current:	37 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	46 A
K	Kitchen	0 VA	0.00%	0 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1HD1

MOUNTING: SURFACE | VOLTAGE: 480/277 Wye | LOCATION: MAIN ELECTRICAL D138 | FEED FROM: HMDS
ENCLOSURE: NEMA 1 | PHASE: 3 | MAIN TYPE: MLO | SPD: NONE
DOOR TYPE: DOOR-IN-DOOR | WIRES: 4 | BUS RATING: 100 A | NEUTRAL RATING: 100%
Min. A.I.C. RATING: 35K AIC | MCB RATING: N/A | ISOLATED GROUND: NONE
BUS MATERIAL: ALUMINUM

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	LTG - LEVEL 2 AREA C	20 A	1	L	1	3052 VA	2913 VA					2	L	1	20 A	LTG - LEVEL 1 AREA E CORR.	
	LTG - LEVEL 2 AREA C	20 A	1	L	3			1790 VA	1872 VA			4	L	1	20 A	LTG - LEVEL 1 AREA D CORR.	
	LTG - LEVEL 2 AREA C CORR.	20 A	1	L	5					2049 VA	0 VA	6	--	1	20 A	-SPARE-	
	LTG - LEVEL 1 AREA C CORR.	20 A	1	L	7	2298 VA	0 VA					8	--	1	20 A	-SPARE-	
	LTG - LEVEL 1 MEDIA CENTER	20 A	1	L	9			1900 VA	0 VA			10	--	1	20 A	-SPARE-	
	LTG - LEVEL 1 MEDIA CENTER	20 A	1	L	11					1344 VA	0 VA	12	--	1	20 A	-SPARE-	
	LTG - LEVEL1 AREA C CLASS	20 A	1	L	13	2181 VA	0 VA					14	--	1	20 A	-SPARE-	
	LTG - LEVEL 1 AREA D	20 A	1	L	15			2602 VA	0 VA			16	--	1	20 A	-SPARE-	
	LTG - LEVEL 1 CAFETORIUM	20 A	1	L	17					200 VA	0 VA	18	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	19	0 VA	0 VA					20	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	21			0 VA	0 VA			22	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	23					0 VA	0 VA	24	--	1	20 A	-SPARE-	

	A	B	C
TOTAL CONNECTED LOAD PER PHASE (VA)	10444 VA	8164 VA	3593 VA
TOTAL CONNECTED CURRENT PER PHASE (AMPS)	40 A	32 A	13 A

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	0 VA	0.00%	0 VA	Total Conn. Load:	22201 VA
L	Lighting	22201 VA	125.00%	27751 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	27751 VA
E	Equipment	0 VA	0.00%	0 VA	Total Conn. Current:	27 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	33 A
K	Kitchen	0 VA	0.00%	0 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1HD2

MOUNTING: SURFACE | VOLTAGE: 480/277 Wye | LOCATION: ELEC. D118 | FEED FROM: HMDS
ENCLOSURE: NEMA 1 | PHASE: 3 | MAIN TYPE: MLO | SPD: NONE
DOOR TYPE: DOOR-IN-DOOR | WIRES: 4 | BUS RATING: 100 A | NEUTRAL RATING: 100%
Min. A.I.C. RATING: 35K AIC | MCB RATING: N/A | ISOLATED GROUND: NONE
BUS MATERIAL: ALUMINUM

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	LTG - LEVEL 1 AREA D CLASS	20 A	1	L	1	2812 VA	0 VA					2	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	3			0 VA	0 VA			4	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	5					0 VA	0 VA	6	--	1	20 A	-SPARE-	
	LTG - LEVEL 1 AREA F GYM	20 A	1	L	7	2850 VA	0 VA					8	--	1	20 A	-SPARE-	
	LTG - LEVEL 1 AREA F CORR.	20 A	1	L	9			1276 VA	0 VA			10	--	1	20 A	-SPARE-	
	LTG - LEVEL 1 AREA F	20 A	1	L	11					2224 VA	0 VA	12	--	1	20 A	-SPARE-	
	LTG - LEVEL 1 AREA F GYM	20 A	1	L	13	3226 VA	0 VA					14	--	1	20 A	-SPARE-	
	LTG - LEVEL 1 AREA F GYM	20 A	1	L	15			2565 VA	0 VA			16	--	1	20 A	-SPARE-	
	LTG - SITE POLES	20 A	1	L	17					3828 VA	0 VA	18	--	1	20 A	-SPARE-	
	LTG - SITE BOLLARDS	20 A	1	L	19	1124 VA	0 VA					20	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	21			0 VA	0 VA			22	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	23					0 VA	0 VA	24	--	1	20 A	-SPARE-	

	A	B	C
TOTAL CONNECTED LOAD PER PHASE (VA)	10012 VA	3841 VA	6052 VA
TOTAL CONNECTED CURRENT PER PHASE (AMPS)	37 A	14 A	23 A

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	0 VA	0.00%	0 VA	Total Conn. Load:	19905 VA
L	Lighting	19905 VA	125.00%	24881 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	24881 VA
E	Equipment	0 VA	0.00%	0 VA	Total Conn. Current:	24 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	30 A
K	Kitchen	0 VA	0.00%	0 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1LA1

MOUNTING: SURFACE | VOLTAGE: 120/208 Wye | LOCATION: ELEC A120 | FEED FROM: DPLA
ENCLOSURE: NEMA 1 | PHASE: 3 | MAIN TYPE: MLO | SPD: CAT 'A'
DOOR TYPE: DOOR-IN-DOOR | WIRES: 4 | BUS RATING: 225 A | NEUTRAL RATING: 200%
Min. A.I.C. RATING: 22K AIC | MCB RATING: N/A | ISOLATED GROUND: NONE
BUS MATERIAL: ALUMINUM

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	RCPT TEACHER LOUNGE 636	20 A	1	R	1	360 VA	360 VA					2	R	1	20 A	RCPT SPECIAL ED. 687	
	RCPT TEACHER LOUNGE 636	20 A	1	R	3			180 VA	360 VA			4	R	1	20 A	RCPT SPECIAL ED. 687	
	RCPT TEACHER LOUNGE 636	20 A	1	R	5					1500 VA	360 VA	6	R	1	20 A	RCPT SPECIAL ED. 687	
	RCPT TEACHER LOUNGE 636	20 A	1	R	7	1500 VA	360 VA					8	R	1	20 A	RCPT CLASSROOM 688	
	REFRIGERATOR LOUNGE B107	20 A	1	E	9			1200 VA	360 VA			10	R	1	20 A	RCPT CLASSROOM 688	
	REFRIGERATOR LOUNGE B107	20 A	1	E	11					1200 VA	360 VA	12	R	1	20 A	RCPT CLASSROOM 688	
	VENDING LOUNGE B107	20 A	1	E	13	1200 VA	360 VA					14	R	1	20 A	RCPT CLASSROOM 690	
	VENDING LOUNGE B107	20 A	1	E	15			1200 VA	360 VA			16	R	1	20 A	RCPT CLASSROOM 690	
	RCPT TEACHER LOUNGE B107	20 A	1	R	17					720 VA	360 VA	18	R	1	20 A	RCPT CLASSROOM 690	
	RCPT TEACHER LOUNGE B107	20 A	1	R	19	540 VA	360 VA					20	R	1	20 A	RCPT CLASSROOM 691	
	RCPT CORRIDOR 109, 645	20 A	1	R	21			1080 VA	360 VA			22	R	1	20 A	RCPT CLASSROOM 691	
	RCPT CLASSROOM 637	20 A	1	R	23					360 VA	360 VA	24	R	1	20 A	RCPT CLASSROOM 691	
	RCPT CLASSROOM 637	20 A	1	R	25	360 VA	900 VA					26	R	1	20 A	RCPT RESTROOM 736	
	RCPT CLASSROOM 637	20 A	1	R	27			360 VA	900 VA			28	R	1	20 A	RCPT RESTROOM 737	
	RCPT CLASSROOM 638	20 A	1	R	29					360 VA	1080 VA	30	R	1	20 A	RCPT CORRIDOR 108, 645	
	RCPT CLASSROOM 638	20 A	1	R	31	360 VA	600 VA					32	R	1	20 A	DRINKING FOUNTAIN CORR. 645	1
	RCPT CLASSROOM 638	20 A	1	R	33			360 VA	720 VA			34	R	1	20 A	RCPTS - SPECIAL ED. A111	
	RCPT CLASSROOM 639	20 A	1	R	35					360 VA	1080 VA	36	E	1	20 A	A/V CAB. -SPECIAL ED. A111	
	RCPT CLASSROOM 639	20 A	1	R	37	360 VA	720 VA					38	R	1	20 A	RCPTS - SPECIAL ED. A112	
	RCPT CLASSROOM 639	20 A	1	R	39			360 VA	720 VA			40	R	1	20 A	RCPTS - SPECIAL ED. A112	
	RCPT SPECIAL ED. 689	20 A	1	R	41					360 VA	1080 VA	42	E	1	20 A	A/V CAB. -SPECIAL ED. A112	
	RCPT SPECIAL ED. 689	20 A	1	R	43	360 VA	0 VA					44	--	1	20 A	-SPARE-	
	RCPT SPECIAL ED. 689	20 A	1	R	45			360 VA	0 VA			46	--	1	20 A	-SPARE-	
	RCPTS - SPECIAL ED. A111	20 A	1	R	47					720 VA	0 VA	48	--	1	20 A	-SPARE-	
	ICE MAKER TEACHER LNGE...	20 A	1	E	49	750 VA	0 VA					50	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	51			0 VA	0 VA			52	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	53					0 VA	0 VA	54	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	55	0 VA	0 VA					56	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	57			0 VA	0 VA			58	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	59					0 VA	0 VA	60	--	1	20 A	-SPARE-	

	A	B	C
TOTAL CONNECTED LOAD PER PHASE (VA)	9450 VA	8880 VA	10260 VA
TOTAL CONNECTED CURRENT PER PHASE (AMPS)	79 A	74 A	86 A

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	10800 VA	96.30%	10400 VA	Total Conn. Load:	28590 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	26345 VA
E	Equipment	11640 VA	100.00%	11640 VA	Total Conn. Current:	79 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	73 A
K	Kitchen	6150 VA	70.00%	4305 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1LA2

MOUNTING: SURFACE | VOLTAGE: 120/208 Wye | LOCATION: ELEC A120 | FEED FROM: DPLA
ENCLOSURE: NEMA 1 | PHASE: 3 | MAIN TYPE: MLO | SPD: CAT 'A'
DOOR TYPE: DOOR-IN-DOOR | WIRES: 4 | BUS RATING: 225 A | NEUTRAL RATING: 200%
Min. A.I.C. RATING: 22K AIC | MCB RATING: N/A | ISOLATED GROUND: NONE
BUS MATERIAL: ALUMINUM

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	RCPT SCIENCE CLASSROOM...	20 A	1	R	1	360 VA	360 VA					2	R	1	20 A	RCPT SCIENCE CLASSROOM...	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	3			360 VA	360 VA			4	R	1	20 A	RCPT SCIENCE CLASSROOM...	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	5					360 VA	360 VA	6	R	1	20 A	RCPT SCIENCE CLASSROOM...	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	7	360 VA	360 VA					8	R	1	20 A	RCPT SCIENCE CLASSROOM...	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	9			360 VA	360 VA			10	R	1	20 A	RCPT SCIENCE CLASSROOM...	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	11					360 VA	360 VA	12	R	1	20 A	RCPT SCIENCE CLASSROOM...	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	13	360 VA	360 VA					14	R	1	20 A	RCPT SCIENCE CLASSROOM...	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	15			360 VA	360 VA			16	R	1	20 A	RCPT SCIENCE CLASSROOM...	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	17					360 VA	360 VA	18	R	1	20 A	RCPT SCIENCE CLASSROOM...	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	19	360 VA	360 VA					20	R	1	20 A	RCPT SCIENCE CLASSROOM...	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	21			360 VA	540 VA			22	R	1	20 A	RCPT SCIENCE PREP 722	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	23					360 VA	540 VA	24	R	1	20 A	RCPT SCIENCE PREP 722	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	25	360 VA	540 VA					26	R	1	20 A	RCPT SCIENCE PREP 682	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	27			360 VA	540 VA			28	R	1	20 A	RCPT SCIENCE PREP 682	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	29					360 VA	360 VA	30	R	1	20 A	RCPT CLASSROOM A108	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	31	360 VA	360 VA					32	R	1	20 A	RCPT CLASSROOM A108	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	33			360 VA	720 VA			34	R	1	20 A	RCPT CLASSROOM A106	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	35					360 VA	1080 VA	36	R	1	20 A	RCPT CLASSROOM A106	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	37	360 VA	720 VA					38	R	1	20 A	A/V CABINET CLASSROOM A106	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	39			360 VA	720 VA			40	R	1	20 A	RCPT CLASSROOM A107	
	RCPT CLASSROOM A105	20 A	1	R	41					360 VA	1080 VA	42	R	1	20 A	RCPT CLASSROOM A107	
	RCPT CLASSROOM A105	20 A	1	R	43	360 VA	720 VA					44	R	1	20 A	A/V CABINET CLASSROOM A107	
	RCPT CLASSROOM A105	20 A	1	R	45			360 VA	1200 VA			46	R	1	20 A	DISHWASHER SCIENCE A119	
	RCPT CLASSROOM A108	20 A	1	R	47					360 VA	1200 VA	48	R	1	20 A	DISHWASHER SCIENCE B124	
	-SPARE-	20 A	1	--	49	0 VA	1200 VA					50	R	1	20 A	DISHWASHER SCIENCE B124	
	-SPARE-	20 A	1	--	51			0 VA	0 VA			52	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	53					0 VA	0 VA	54	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	55	0 VA	0 VA					56	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	57			0 VA	0 VA			58	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	59					0 VA	0 VA	60	--	1	20 A	-SPARE-	

	A	B	C
TOTAL CONNECTED LOAD PER PHASE (VA)	7860 VA	7680 VA	8220 VA
TOTAL CONNECTED CURRENT PER PHASE (AMPS)	66 A	64 A	69 A

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	7200 VA	100.00%	7200 VA	Total Conn. Load:	23760 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	23400 VA
E	Equipment	12960 VA	100.00%	12960 VA	Total Conn. Current:	66 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	65 A
K	Kitchen	3600 VA	90.00%	3240 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1LA3

MOUNTING: SURFACE | VOLTAGE: 120/208 Wye | LOCATION: ELEC A120 | FEED FROM: DPLA
ENCLOSURE: NEMA 1 | PHASE: 3 | MAIN TYPE: MLO | SPD: CAT 'A'
DOOR TYPE: DOOR-IN-DOOR | WIRES: 4 | BUS RATING: 225 A | NEUTRAL RATING: 200%
Min. A.I.C. RATING: 22K AIC | MCB RATING: N/A | ISOLATED GROUND: NONE
BUS MATERIAL: ALUMINUM

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	HAND DRYER - TOILET A124	20 A	1	E	1	1500 VA	1680 VA					2	E	1	20 A	RACK OUTLET - IDF A220	
	HAND DRYER - FEMALE A122	20 A	1	E	3			1500 VA	1680 VA			4	E	1	20 A	RACK OUTLET - IDF A220	
	HAND DRYER - FEMALE A122	20 A	1	E	5					1500 VA	1680 VA	6	E	1	20 A	RACK OUTLET - IDF A220	
	HAND DRYER - FEMALE A122	20 A	1	E	7	1500 VA	1680 VA					8	E	1	20 A	RACK OUTLET - IDF A220	
	HAND DRYER - TOILET A123	20 A	1	E	9			1500 VA	500 VA			10	P	1	20 A	ACCESS CONTROL PANEL	
	HAND DRYER - MALE A121	20 A	1	E	11					1500 VA	500 VA	12	P	1	20 A	FIRE ALARM PANEL	
	HAND DRYER - MALE A121	20 A	1	E	13	1500 VA	500 VA					14	P	1	20 A	FIRE ALARM PANEL	
	HAND DRYER - MALE A121	20 A	1	E	15			1500 VA	800 VA			16	O	1	20 A	VAV BOXES	
	ICE MAKER - STORAGE A118	20 A	1	E	17					750 VA	800 VA	18	O	1	20 A	VAV BOXES	
	RCPTS - ESSENT. ELEMNTS...	20 A	1	R	19	1080 VA	0 VA					20	--	1	20 A	-SPARE-	
	A/V CAB. ESSENT. ELEMNTS...	20 A	1	E	21			720 VA	0 VA			22	--	1	20 A	-SPARE-	
	RCPTS - ESSENT. ELEMNTS...	20 A	1	R	23					900 VA	0 VA	24	--	1	20 A	-SPARE-	
	RCPT CORRIDOR B120	20 A	1		25	720 VA	0 VA					26	--	1	20 A	-SPARE-	
	HAND DRYER - RESTROOM B103	20 A	1	E	27			1500 VA	0 VA			28	--	1	20 A	-SPARE-	
△1	ADA HOIST -RESTROOM B103	20 A	1	E	29					1000 VA	0 VA	30	--	1	20 A	-SPARE-	
	RECEPTACLE	20 A	1		31	720 VA	0 VA					32	--	1	20 A	-SPARE-	
9	(CUH-5)	20 A	1	M	33			1176 VA	0 VA			34	--	1	20 A	-SPARE-	
9	(CUH-6)	20 A	1	M	35					1176 VA	0 VA	36	--	1	20 A	-SPARE-	
9	(EF-11)	20 A	1	M	37	396 VA	0 VA					38	--	1	20 A	-SPARE-	
	RCPT IDF A220	20 A	1	R	39			360 VA	0 VA			40	--	1	20 A	-SPARE-	
	RCPT IDF A220	20 A	1	R	41					360 VA	0 VA	42	--	1	20 A	-SPARE-	
	RCPT IDF A220	20 A	1	R	43	360 VA	0 VA					44	--	1	20 A	-SPARE-	
	RCPT IDF A220	20 A	1	R	45			360 VA	0 VA			46	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	47					0 VA	0 VA	48	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	49	0 VA	0 VA					50	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	51			0 VA	0 VA			52	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	53					0 VA	0 VA	54	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	55	0 VA	0 VA					56	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	57			0 VA	0 VA			58	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	59					0 VA	0 VA	60	--	1	20 A	-SPARE-	

	A	B	C
TOTAL CONNECTED LOAD PER PHASE (VA)	11636 VA	11596 VA	10166 VA
TOTAL CONNECTED CURRENT PER PHASE (AMPS)	99 A	98 A	85 A

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	13300 VA	87.59%	11650 VA	Total Conn. Load:	33398 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	32141 VA
E	Equipment	15100 VA	100.00%	15100 VA	Total Conn. Current:	93 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	89 A
K	Kitchen	750 VA	100.00%	750 VA		
O	Other	1500 VA	100.00%	1500 VA		

PANELBOARD SCHEDULE KEYED NOTE:

1. PROVIDE CLASS A GROUND FAULT INTERRUPTER TYPE CIRCUIT BREAKER.
2. PROVIDE ARC FAULT CIRCUIT INTERRUPTER TYPE CIRCUIT BREAKER.
3. PROVIDE 30 MILLIAMPERE EQUIPMENT GROUND FAULT PROTECTOR TYPE CIRCUIT BREAKER.
4. PROVIDE SHUNT TRIP CIRCUIT BREAKER WITH 120 V COIL.
5. PROVIDE HACR RATED CIRCUIT BREAKER.
6. PROVIDE HANDLE CLAMP FOR HOLDING CIRCUIT BREAKER IN THE "ON" OR "OFF" POSITION.
7. PROVIDE SWITCHING RATED CIRCUIT BREAKER.
8. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANELBOARD (WHERE PANEL IS LABELED AS EXISTING) OF SAME MANUFACTURER AND A.I.C. RATING AS EXISTING.
9. PROVIDE INDIVIDUAL METERING OF BRANCH CIRCUITS TO COMPLY WITH IECC 2021 C405.12. △1

PANEL LEGEND

1EHA1	1EHD1	1EHD2
1HA1	1HD1	1HD2
1LA1	1LA2	1LA3

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3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK: 1 | DATE: 08/15/24 | DESCRIPTION: ADDENDUM 3

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

PANEL SCHEDULES

E-261

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PANELBOARD SCHEDULE

PANEL NAME: 1LC1

MOUNTING: RECESSED | ENCLOSURE: NEMA 1 | DOOR TYPE: DOOR-IN-DOOR
VOLTAGE: 120/208 Wye | PHASE: 3 | WIRES: 4 | Min. A.I.C. RATING: 35K AIC
LOCATION: SHARED STORAGE C102 | MAIN TYPE: MCB/SHUNT TR. | BUS RATING: 225 A | MCB RATING: 225 A | BUS MATERIAL: ALUMINUM
FEED FROM: DPL2 | SPD: CAT 'A' | NEUTRAL RATING: 200% | ISOLATED GROUND: NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
9	DUST COLLECTOR - CCA SHOP	20 A	2	E	1	1248 VA	540 VA					2	R	1	20 A	RCPT SHARED STORAGE C102	
--	--	--	--	--	3			1248 VA	250 VA			4	E	2	20 A	AIR COMP. STORAGE C102	
	RCPTS - CCA SHOP 103	20 A	1	R	5					1920 VA	250 VA	6	--	--	--	--	--
	TV'S - CCA SHOP C103	20 A	1	E	7	900 VA	360 VA					8	E	1	20 A	RCPT SHARED STORAGE C102	
	DRILL PRESS - CCA SHOP C103	20 A	1	E	9			1500 VA	1656 VA			10	E	1	20 A	BELT SANDER CCA SHOP C103	
	DRILL PRESS - CCA SHOP C103	20 A	1	E	11					1500 VA	1176 VA	12	E	1	20 A	OSC. SANDER CCA SHOP C103	
	CORD DROP - CCA SHOP C103	20 A	1	E	13	1200 VA	0 VA					14	E	1	20 A	DOWNDRAFT CCA SHOP C103	
	CORD DROP - CCA SHOP C103	20 A	1	E	15			1200 VA	0 VA			16	E	1	20 A	DOWNDRAFT CCA SHOP C103	
	CORD DROP - CCA SHOP C103	20 A	1	E	17					1200 VA	1176 VA	18	E	1	20 A	LATHE CCA SHOP C103	
	CORD DROP - CCA SHOP C103	20 A	1	E	19	1200 VA	1176 VA					20	E	1	20 A	LATHE CCA SHOP C103	
	CORD DROP - CCA SHOP C103	20 A	1	E	21			1200 VA	1176 VA			22	E	1	20 A	LATHE CCA SHOP C103	
	CORD DROP - CCA SHOP C103	20 A	1	E	23					1200 VA	1176 VA	24	E	1	20 A	LATHE CCA SHOP C103	
	CORD DROP - CCA SHOP C103	20 A	1	E	25	1200 VA	1800 VA					26	E	1	20 A	SCROLL SAW CCA SHOP C103	
	CORD DROP - CCA SHOP C103	20 A	1	E	27			1200 VA	1800 VA			28	E	1	20 A	SCROLL SAW CCA SHOP C103	
	CORD DROP - CCA SHOP C103	20 A	1	E	29					1200 VA	1800 VA	30	E	1	20 A	SCROLL SAW CCA SHOP C103	
	SCROLL SAW CCA SHOP C103	20 A	1	E	31	1800 VA	1000 VA					32	E	1	20 A	SCROLL SAW CCA SHOP C103	
	SCROLL SAW CCA SHOP C103	20 A	1	E	33			1000 VA	1656 VA			34	M	1	20 A	(EF-14) EXHAUST FAN	9
	TABLE SAW STORAGE C102	20 A	1	E	35					2880 VA	0 VA	36	O	1	20 A	EM. SHUT OFF - CCA SHOP C103	
	BAND SAW STORAGE C102	20 A	1	E	37	0 VA	0 VA					38	--	1	20 A	-SPARE-	
	BAND SAW STORAGE C102	20 A	1	E	39			2400 VA	0 VA			40	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	41					0 VA	0 VA	42	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	43	0 VA	0 VA					44	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	45			0 VA	0 VA			46	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	47					0 VA	0 VA	48	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	49	0 VA	0 VA					50	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	51			0 VA	0 VA			52	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	53					0 VA	0 VA	54	--	1	20 A	-SPARE-	
	TOTAL CONNECTED LOAD PER PHASE (VA)					12424 VA		16286 VA		15478 VA							
	TOTAL CONNECTED CURRENT PER PHASE (AMPS)					104 A		140 A		133 A							

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	5520 VA	100.00%	5520 VA	Total Conn. Load:	44188 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	44602 VA
E	Equipment	34016 VA	100.00%	34016 VA	Total Conn. Current:	123 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	124 A
K	Kitchen	2996 VA	100.00%	2996 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1LC2

MOUNTING: SURFACE | ENCLOSURE: NEMA 1 | DOOR TYPE: DOOR-IN-DOOR
VOLTAGE: 120/208 Wye | PHASE: 3 | WIRES: 4 | Min. A.I.C. RATING: 22K AIC
LOCATION: MAIN ELECTRICAL D138 | MAIN TYPE: MLO | BUS RATING: 225 A | MCB RATING: N/A | BUS MATERIAL: ALUMINUM
FEED FROM: DPL2 | SPD: CAT 'A' | NEUTRAL RATING: 200% | ISOLATED GROUND: NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	RCPT RESTROOM 181, 699	20 A	1	R	1	540 VA	720 VA					2	R	1	20 A	RCPT OFFICE C108	
	RCPT FACULTY WORKROOM...	20 A	1	R	3			540 VA	720 VA			4	R	1	20 A	RCPT OFFICE C109	
	RCPT FACULTY WORKROOM...	20 A	1	R	5					360 VA	540 VA	6	R	1	20 A	RCPT MEDIA CNTR DESK C115	
	RCPT FACULTY WORKROOM...	20 A	1	R	7	540 VA	900 VA					8	R	1	20 A	RCPT ROOM C114, C113, C115	
	RCPT FACULTY WORKROOM...	20 A	1	R	9			1500 VA	1080 VA			10	R	1	20 A	RCPT MEDIA CENTER C115	
	RCPT FACULTY WORKROOM...	20 A	1	R	11					1500 VA	1260 VA	12	R	1	20 A	RCPT FORUM C116	
	RCPT CNSLR RSRCE OFF 634	20 A	1	R	13	720 VA	1080 VA					14	R	1	20 A	RCPTS - CORRIDOR C105	
	PLUGSTRIP MEDIA CENTER...	20 A	1	R	15			720 VA	900 VA			16	R	1	20 A	RECEPTACLES	
	PLUGSTRIP MEDIA CENTER...	20 A	1	R	17					720 VA	180 VA	18	R	1	20 A	RCPT ELEV. B112	
	RCPTS - MEDIA CENTER C115	20 A	1	R	19	720 VA	720 VA					20	R	1	20 A	RCPT A/V CABINET C115	
	RCPTS - MEDIA CENTER C115	20 A	1	R	21			900 VA	360 VA			22	R	1	20 A	RCPT MEDIA CENTER C115	
	A/V CAB. - STORAGE C118	20 A	1	E	23					1000 VA	180 VA	24	R	1	20 A	RCPT ELEV. EQUIP B113	
	RCPTS - FORUM C116	20 A	1	R	25	1080 VA	1200 VA					26	M	1	20 A	MOTORIZED SHADES - C115	9
	RCPTS - SCHOOL STORE C120	20 A	1	R	27			1080 VA	720 VA			28	R	1	20 A	RCPT MOTOR C121	
	RCPTS - CORRIDOR C111	20 A	1	R	29					900 VA	0 VA	30	--	1	20 A	-SPARE-	
	RCPTS - LUNCH ACCOUNTS...	20 A	1	R	31	720 VA	0 VA					32	--	1	20 A	-SPARE-	
	ADA DOOR MOTOR - VEST. C104	20 A	1	M	33			100 VA	0 VA			34	--	1	20 A	-SPARE-	
9	(CUH-4)	20 A	1	M	35					1176 VA	0 VA	36	--	1	20 A	-SPARE-	
	ADA DOOR MOTOR - VEST. C104	20 A	1	M	37	100 VA	0 VA					38	--	1	20 A	-SPARE-	
	RCPTS - CORRIDOR C105	20 A	1	R	39			1260 VA	0 VA			40	--	1	20 A	-SPARE-	
	WATER FOUNTAIN OFFICE 221	20 A	1	R	41					600 VA	0 VA	42	--	1	20 A	-SPARE-	
	VAV BOXES	20 A	1	E	43	400 VA	0 VA					44	--	1	20 A	-SPARE-	
	VAV BOXES	20 A	1	E	45			200 VA	0 VA			46	--	1	20 A	-SPARE-	
	PROJ. SCREEN FORUM C116	20 A	1	E	47					1000 VA	0 VA	48	--	1	20 A	-SPARE-	
	PROJECTOR FORUM C116	20 A	1	E	49	1200 VA	0 VA					50	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	51			0 VA	0 VA			52	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	53					0 VA	0 VA	54	--	1	20 A	-SPARE-	
	TOTAL CONNECTED LOAD PER PHASE (VA)					10640 VA		10080 VA		9416 VA							
	TOTAL CONNECTED CURRENT PER PHASE (AMPS)					90 A		85 A		78 A							

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	20920 VA	73.90%	15460 VA	Total Conn. Load:	30136 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	24970 VA
E	Equipment	5040 VA	100.00%	5040 VA	Total Conn. Current:	84 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	69 A
K	Kitchen	0 VA	0.00%	0 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1LC3

MOUNTING: SURFACE | ENCLOSURE: NEMA 1 | DOOR TYPE: DOOR-IN-DOOR
VOLTAGE: 120/208 Wye | PHASE: 3 | WIRES: 4 | Min. A.I.C. RATING: 22K AIC
LOCATION: MAIN ELECTRICAL D138 | MAIN TYPE: MLO | BUS RATING: 225 A | MCB RATING: N/A | BUS MATERIAL: ALUMINUM
FEED FROM: DPL2 | SPD: CAT 'A' | NEUTRAL RATING: 200% | ISOLATED GROUND: NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
9	LAZER ENGRAVER	20 A	2	E	1	250 VA	525 VA					2	E	1	20 A	MITER SAW	
--	--	--	--	--	3			250 VA	1680 VA			4	E	1	20 A	RACK OUTLET - MDF D136	
	RCPT CLASSROOM C101	20 A	1	R	5					1260 VA	1680 VA	6	E	1	20 A	RACK OUTLET - MDF D136	
	RCPT CLASSROOM C101	20 A	1	E	7	1260 VA	1680 VA					8	E	1	20 A	RACK OUTLET - MDF D136	
	RCPTS - CLASSROOM C101	20 A	1	R	9			1200 VA	1680 VA			10	E	1	20 A	RACK OUTLET - MDF D136	
	RCPT CLASSROOM C101	20 A	1	R	11					180 VA	1680 VA	12	E	1	20 A	RACK OUTLET - MDF D136	
	RCPT CLASSROOM C101	20 A	1	R	13	180 VA	1680 VA					14	E	1	20 A	RACK OUTLET - MDF D136	
	RCPT CLASSROOM C101	20 A	1	R	15			180 VA	900 VA			16	R	1	20 A	RCPTS - MDF D136	
	RCPT CLASSROOM C101	20 A	1	R	17					180 VA	720 VA	18	R	1	20 A	RCPTS - MDF D136	
	RCPT CLASSROOM C101	20 A	1	R	19	180 VA	1500 VA					20	E	1	20 A	HAND DRYER - TOILET B118	
	RCPT CLASSROOM C101	20 A	1	R	21			180 VA	1500 VA			22	E	1	20 A	HAND DRYER - FEMALE B119	
	RCPT CLASSROOM C101	20 A	1	R	23					180 VA	1500 VA	24	E	1	20 A	HAND DRYER - FEMALE B119	
	RCPT CLASSROOM C101	20 A	1	R	25	180 VA	1500 VA					26	E	1	20 A	HAND DRYER - FEMALE B119	
	3D PRINTER CLASSROOM C101	20 A	1	E	27			1500 VA	540 VA			28	R	1	20 A	RCPT - FEMALE B119	
	3D PRINTER CLASSROOM C101	20 A	1	E	29					1500 VA	1500 VA	30	E	1	20 A	HAND DRYER - TOILET B117	
1	3D PRINTER CLASSROOM C101	20 A	1	E	31	1500 VA	1500 VA					32	E	1	20 A	HAND DRYER - MALE B116	
	ACCESS CONTROL PANEL	20 A	1	E	33			0 VA	1500 VA			34	E	1	20 A	HAND DRYER - MALE B116	
	FIRE ALARM PANEL	20 A	1	E	35					0 VA	1500 VA	36	E	1	20 A	HAND DRYER - MALE B116	
	FIRE ALARM PANEL	20 A	1	E	37	0 VA	540 VA					38	R	1	20 A	RCPT - MALE B116	
	-SPARE-	20 A	1	--	39			0 VA	0 VA			40	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	41					0 VA	0 VA	42	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	43	0 VA	0 VA					44	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	45			0 VA	0 VA			46	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	47					0 VA	0 VA	48	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	49	0 VA	0 VA					50	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	51			0 VA	0 VA			52	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	53					0 VA	0 VA	54	--	1	20 A	-SPARE-	
	TOTAL CONNECTED LOAD PER PHASE (VA)					12475 VA		11110 VA		11880 VA							
	TOTAL CONNECTED CURRENT PER PHASE (AMPS)					105 A		93 A		100 A							

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	16740 VA	79.87%	13370 VA	Total Conn. Load:	35465 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	32095 VA
E	Equipment	18225 VA	100.00%	18225 VA	Total Conn. Current:	98 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	89 A
K	Kitchen	500 VA	100.00%	500 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1LD1

MOUNTING: SURFACE | ENCLOSURE: NEMA 1 | DOOR TYPE: DOOR-IN-DOOR
VOLTAGE: 120/208 Wye | PHASE: 3 | WIRES: 4 | Min. A.I.C. RATING: 22K AIC
LOCATION: MAIN ELECTRICAL D138 | MAIN TYPE: MLO | BUS RATING: 225 A | MCB RATING: N/A | BUS MATERIAL: ALUMINUM
FEED FROM: DPL2 | SPD: CAT 'A' | NEUTRAL RATING: 200% | ISOLATED GROUND: NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	RCPTS - BOILER D135	20 A	1	R	1	900 VA						2					
9	O.H. DOOR - BOILER D135	20 A	1	M	3			1000 VA	540 VA			4	R	1	20 A	RECEPTACLE CAFETORIUM...	
	RCPTS - CHILLER C112	20 A	1	R	5					720 VA	540 VA	6	R	1	20 A	RECEPTACLE PLATFORM D102	
9	O.H. DOOR - CHILLER C112	20 A	1	M	7	1000 VA	540 VA					8	R	1	20 A	RECEPTACLE CAFETORIUM...	
	RCPTS - COURTYARD	20 A	1	R	9			360 VA	540 VA			10	R	1	20 A	RECEPTACLE PLATFORM D102	
	SPRINKLER CONTROLLER	20 A	1	E	11					180 VA	180 VA	12	R	1	20 A	RECEPTACLE	
9	CAFETERIUM BLEACHERS	30 A	1	E	13	2500 VA	360 VA					14	R	1	20 A	RECEPTACLE	
9	CAFETERIUM BLEACHERS	30 A	1	E	15			2500 VA	540 VA			16	R	1	20 A	RECEPTACLE CAFETORIUM...	
	ROOF OUTLETS	20 A	1	R	17					900 VA	720 VA	18	R	1	20 A	RECEPTACLE CAFETORIUM...	
	ROOF OUTLETS	20 A	1	R	19	180 VA	180 VA					20	R	1	20 A	RECEPTACLE CAFETORIUM...	
9	O.H. DOOR - CAFETORIUM D101	20 A	1	M	21			1000 VA	720 VA			22	R	1	20 A	RECEPTACLE M. DRESS D103	
9	O.H. DOOR - CAFETORIUM D101	20 A	1	M	23					1000 VA	200 VA	24	E	1	20 A	EQUIPMENT	
9	O.H. DOOR - CAFETORIUM D101	20 A	1	M	25	1000 VA	900 VA					26	R	1	20 A	RECEPTACLE CORRIDOR D121	
	RCPTS - CAFETORIUM D101	20 A	1	R	27			900 VA	0 VA			28	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	29					0 VA	0 VA	30	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	31	0 VA	0 VA					32	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	33			0 VA	0 VA			34	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	35					0 VA	0 VA	36	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	37	0 VA	0 VA					38	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	39			0 VA	0 VA			40	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	41					0 VA	0 VA	42	--	1	20 A	-SPARE-	
	TOTAL CONNECTED LOAD PER PHASE (VA)					7560 VA		8100 VA		4440 VA							
	TOTAL CONNECTED CURRENT PER PHASE (AMPS)					67 A		72 A		37 A							

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	9900 VA	100.00%	9900 VA	Total Conn. Load:	20100 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	20100 VA
E	Equipment	5200 VA	100.00%	5200 VA	Total Conn. Current:	56 A
M	Motor	5000 VA	100.00%	5000 VA	Total Est. Demand Current:	56 A
K	Kitchen	0 VA	0.00%	0 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1LD2

MOUNTING: SURFACE | ENCLOSURE: NEMA 1 | DOOR TYPE: DOOR-IN-DOOR
VOLTAGE: 120/208 Wye | PHASE: 3 | WIRES: 4 | Min. A.I.C. RATING: 22K AIC
LOCATION: ELEC. D118 | MAIN TYPE: MLO | BUS RATING: 225 A | MCB RATING: N/A | BUS MATERIAL: ALUMINUM
FEED FROM: DPL2 | SPD: CAT 'A' | NEUTRAL RATING: 200% | ISOLATED GROUND: NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	RCPT ORCHESTRA GUITAR...	20 A	1	R	1	720 VA	600 VA					2	R	1	20 A	RTU-6 LTG/RCPT	
	RCPT ORCHESTRA GUITAR...	20 A	1	R	3			720 VA	180 VA			4	R	1	20 A	ROOF OUTLET	
	RECEPTACLE ORCHESTRA...	20 A	1	R	5					720 VA	1000 VA	6	E	1	20 A	FIRE DOOR CORR. D106	
	RCPT PRACTICE D109	20 A	1	R	7	720 VA	0 VA					8	--	1	20 A	-SPARE-	
	RCPT OFFICE D110	20 A	1	R	9			720 VA	0 VA			10	--	1	20 A	-SPARE-	
	RCPT CHOIR / DRAMA D111	20 A	1	R	11					900 VA	0 VA	12	--	1	20 A	-SPARE-	
	RCPT CHOIR / DRAMA D111	20 A	1	R	13	720 VA	0 VA					14	--	1	20 A	-SPARE-	
	RCPT CHOIR / DRAMA D111	20 A	1	R	15			540 VA	0 VA			16	--	1	20 A	-SPARE-	
	RCPT CHOIR / DRAMA D111	20 A	1	R	17					540 VA	0 VA	18	--	1	20 A	-SPARE-	
	RCPT PRACTICE D112	20 A	1	R	19	720 VA	0 VA					20	--	1	20 A	-SPARE-	
	RCPT LIBRARY D114	20 A	1	R	21			900 VA	0 VA			22	--	1	20 A	-SPARE-	
	RCPT OFFICE D117	20 A	1	R	23					900 VA	0 VA	24	--	1	20 A	-SPARE-	
	RCPT PRACTICE / STORAGE...	20 A	1	R	25	720 VA	0 VA					26	--	1	20 A	-SPARE-	
	RCPT BAND D119	20 A	1	R	27			540 VA	0 VA			28	--	1	20 A	-SPARE-	
	RCPT BAND D119	20 A	1	R	29					540 VA	0 VA	30	--	1	20 A	-SPARE-	
	RCPT A / V RACK BAND D119	20 A	1	R	31	720 VA	0 VA					32	--	1	20 A	-SPARE-	
	RCPT BAND D119	20 A	1	R	33			720 VA	0 VA			34	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	35					0 VA	0 VA	36	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	37	0 VA	0 VA					38	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	39			0 VA	0 VA			40	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	41					0 VA	0 VA	42	--	1	20 A	-SPARE-	
	TOTAL CONNECTED LOAD PER PHASE (VA)					4920 VA		4320 VA		4600 VA							
	TOTAL CONNECTED CURRENT PER PHASE (AMPS)					41 A		36 A		39 A							

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	12240 VA	90.85%	11120 VA	Total Conn. Load:	13840 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	12720 VA
E	Equipment	0 VA	0.00%	0 VA	Total Conn. Current:	38 A
M	Motor	1000 VA	100.00%	1000 VA	Total Est. Demand Current:	35 A
K	Kitchen	0 VA	0.00%	0 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1LE1

MOUNTING: RECESSED | ENCLOSURE: NEMA 1 | DOOR TYPE: DOOR-IN-DOOR
VOLTAGE: 120/208 Wye | PHASE: 3 | WIRES: 4 | Min. A.I.C. RATING: 22K AIC
LOCATION: STORAGE E119 | MAIN TYPE: MLO | BUS RATING: 225 A | MCB RATING: N/A | BUS MATERIAL: ALUMINUM
FEED FROM: DPL2 | SPD: CAT 'A' | NEUTRAL RATING: 200% | ISOLATED GROUND: NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	RCPT VESTIBULE E110	20 A	1	R	1	1080 VA	860 VA					2	R	1	20 A	RCPT CONFERENCE E122	
	RCPT CONFERENCE 648	20 A	1	R	3			860 VA	900 VA			4	R	1	20 A	RCPT CONFERENCE E122	
	REFRIGERATOR CONF 108	20 A	1	R	5					600 VA	540 VA	6	R	1	20 A	RCPT ART / CERAMICS E125	
	RCPTS - CONFERENCE E108	20 A	1	R	7	360 VA	1260 VA					8	R	1	20 A	RCPT ROOM F103, E125	
	RCPT COUNSELOR E105	20 A	1	R	9			900 VA	720 VA			10	R	1	20 A	RCPT A/V ART / CERAMICS E125	
	RCPT COUNSELOR E103	20 A	1	R	11					720 VA	100 VA	12	O	1	20 A	EM. SHUT OFF - KILN E126	
	RCPT COUNSELOR E101	20 A	1	R	13	720 VA	5644 VA					14	E	3	60 A	(K-1) ELECTRIC KILN	9
	RCPT COUNSELOR E104	20 A	1	R	15			720 VA	5644 VA			16	--	--	--	--	--
	RCPT RECEPTION E107	20 A	1	R	17					360 VA	5644 VA	18	--	--	--	--	--
	RCPT RECEPTION E107	20 A	1	R	19	360 VA	--					20	--	1	--	-SHUNT TRIP-	
	COPIER RECEPTION E107	20 A	1	R	21			1500 VA	0 VA			22	M	1	20 A	ADA MOTOR - VESTIBULE F103	
	RCPT RECEPTION E111	20 A	1	R	23					540 VA	0 VA	24	M	1	20 A	ADA MOTOR - VESTIBULE F103	
	RCPT RECEPTION E111	20 A	1	R	25	720 VA	1176 VA					26	M	1	20 A	(CUH-7) CABINET UNIT HEATER	9
	RCPT HEAD SEC E113	20 A	1	R	27			1080 VA	1176 VA			28	M	1	20 A	(CUH-2) CABINET UNIT HEATER	9
	EQUIPMENT RECEPTION E111	20 A	1	E	29					1500 VA	696 VA	30	M	1	20 A	EXHAUST FAN (EF-10)	9
	RCPT NURSE E114	20 A	1	R	31	720 VA	400 VA					32	O	1	20 A	VAV BOXES	
	REFRIGERATOR NURSE E114	20 A	1	R	33			600 VA	1176 VA			34	M	1	20 A	(CUH-8) CABINET UNIT HEATER	9
	RCPT E116, E117, E118, E119	20 A	1	R	35					1080 VA	200 VA	36	O	1	20 A	FIRE DOOR - CORRIDOR D106	
	RCPT ASST. PRINCIPAL E112	20 A	1	R...	37	720 VA	180 VA					38	R	1	20 A	ROOF OUTLET	
	RCPT ASST. PRINCIPAL E115	20 A	1	R	39			720 VA	1200 VA			40	R	1	20 A	CORD REEL ART / CERAMICS	
	RCPT PRINCIPAL E123	20 A	1	R	41					1220 VA	1200 VA	42	R	1	20 A	CORD REEL ART / CERAMICS	
	RCPT - CONFERENCE E108	20 A	1	R	43	180 VA	1200 VA					44	R	1	20 A	CORD REEL ART / CERAMICS	
	ADA MOTOR -CORRIDOR E109	20 A	1	M	45			0 VA	1200 VA			46	R	1	20 A	CORD REEL ART / CERAMICS	
	RCPTS - RECEPTION E107	20 A	1	R	47					360 VA	1200 VA	48	R	1	20 A	CORD REEL ART / CERAMICS	
	RCPTS - RECEPTION E111	20 A	1	R	49	720 VA	1200 VA					50	R	1	20 A	CORD REEL ART / CERAMICS	
	RCPT	20 A	1	R	51			1080 VA	1200 VA			52	R	1	20 A	CORD REEL ART / CERAMICS	
9	(CUH-1)	20 A	1	M	53					1176 VA	1200 VA	54	R	1	20 A	CORD REEL ART / CERAMICS	
9	(PM-1) PUG MILL	20 A	2	M	55	1664 VA	1200 VA					56	R	1	20 A	CORD REEL ART / CERAMICS	
--	--	--	--	--	57			1664 VA	360 VA			58	R	1	20 A	RCPT DATA RACK ADMIN 119	
	~~RTU-7 LTG/RCPT~~	~~20 A~~	~~1~~	~~R~~	~~59~~					~~600 VA~~	~~0 VA~~	~~60~~	~~--~~	~~1~~	~~20 A~~	~~-SPARE-~~	
	-SPARE-	20 A	1	--	61	0 VA	0 VA					62	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	63			0 VA	0 VA			64	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	65					0 VA	0 VA	66	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	67	0 VA	0 VA					68	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	69			0 VA	0 VA			70	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	71					0 VA	0 VA	72	--	1	20 A	-SPARE-	
	TOTAL CONNECTED LOAD PER PHASE (VA)					20364 VA		22700 VA		18936 VA							
	TOTAL CONNECTED CURRENT PER PHASE (AMPS)					172 A		191 A		158 A							

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	18540 VA	76.97%	14270 VA	Total Conn. Load:	62001 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	58199 VA
E	Equipment	33061 VA	100.00%	33061 VA	Total Conn. Current:	172 A
M	Motor	200 VA	100.00%	200 VA	Total Est. Demand Current:	162 A
K	Kitchen	1200 VA	100.00%	1200 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1LF1

MOUNTING: SURFACE | ENCLOSURE: NEMA 1 | DOOR TYPE: DOOR-IN-DOOR
VOLTAGE: 120/208 Wye | PHASE: 3 | WIRES: 4 | Min. A.I.C. RATING: 22K AIC
LOCATION: ELEC. D118 | MAIN TYPE: MLO / FTL | BUS RATING: 400 A | MCB RATING: N/A | BUS MATERIAL: ALUMINUM
FEED FROM: DPL2 | SPD: CAT 'A' | NEUTRAL RATING: 200% | ISOLATED GROUND: NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	RCPT HEALTH F111	20 A	1	R	1	1080 VA	708 VA					2	P	3	60 A	PANEL 'STB'	
	RECEPTACLE HEALTH F111	20 A	1	R	3			900 VA	360 VA			4	--	--	--	--	--
	HEALTH / CLASSROOM F111	20 A	1	R	5					720 VA	360 VA	6	--	--	--	--	--
	HAND DRYER TOILETS F113	30 A	1	E	7	1500 VA	720 VA					8	R	1	20 A	RCPT GYMNASIUM	
	RCPT ROOM F113, F115	20 A	1	R	9			900 VA	720 VA			10	R	1	20 A	RCPT GYMNASIUM	
1	WATER FOUNTAIN LOCKER...	20 A	1	R	11					600 VA	1080 VA	12	R	1	20 A	RCPT PE STORAGE F106	
	RCPT ROOM F116, F114	20 A	1	R	13	900 VA	360 VA					14	R	1	20 A	RCPT P.E. STORAGE F105	
	HAND DRYER TOILET F114	30 A	1	E	15			1500 VA	720 VA			16	R	1	20 A	RCPT GYMNASIUM F104	
	RCPT ROOM F115	20 A	1	R	17					1080 VA	360 VA	18	R	1	20 A	RCPT GYMNASIUM F104	
1	WATER FOUNTAIN GYM F104	20 A	1	R	19	600 VA	360 VA					20	R	1	20 A	RCPT GYMNASIUM F104	
	RECEPTACLE ROOM F119, F118	20 A	1	R	21			540 VA	2402 VA			22	E	3	30 A	GYM BLEACHERS	9
	HAND DRYER TOILET F119	30 A	1	R	23					1500 VA	2402 VA	24	--	--	--	--	--
	RCPT GIRLS LOCKER F120	20 A	1	R	25	1080 VA	2402 VA					26	--	--	--	--	--
	HAND DRYER TOILETS F122	30 A	1	E	27			1500 VA	720 VA			28	R	1	20 A	RCPTS - IDF F109	
1	WATER FOUNTAIN GIRLS F120	20 A	1	R	29					600 VA	720 VA	30	R	1	20 A	RECEPTACLE IDF F109	
	RCPT ROOM F123, F122, F124	20 A	1	R	31	1080 VA	2402 VA					32	E	3	30 A	GYM BLEACHERS	9
	HAND DRYER RESTROOM F125	20 A	1	E	33			1500 VA	2402 VA			34	--	--	--	--	--
	RCPT ROOM F126, E134, F102	20 A	1	R	35					720 VA	2402 VA	36	--	--	--	--	--
	HAND DRYER RESTROOM 126	30 A	1	E	37	1500 VA	1500 VA					38	E	1	20 A	HAND DRYER TOILET F126	
1	WATER FOUNTAIN CORR. F102	20 A	1	R	39			600 VA	1500 VA			40	E	1	20 A	HAND DRYER TOILET F126	
	HAND DRYER RESTROOM 126	20 A	1	E	41					1500 VA	0 VA	42	--	1	20 A	-SPARE-	
	HAND DRYER RESTROOM F125	20 A	1	E	43	1500 VA	0 VA					44	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	45			0 VA	0 VA			46	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	47					0 VA	0 VA	48	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	49	0 VA	0 VA					50	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	51			0 VA	0 VA			52	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	53					0 VA	0 VA	54	--	1	20 A	-SPARE-	
	TOTAL CONNECTED LOAD PER PHASE (VA)					32162 VA		29444 VA		25578 VA							
	TOTAL CONNECTED CURRENT PER PHASE (AMPS)					273 A		250 A		213 A							

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	23640 VA	71.15%	16820 VA	Total Conn. Load:	87183 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	80951 VA
E	Equipment	55195 VA	100.00%	55195 VA	Total Conn. Current:	242 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	225 A
K	Kitchen	0 VA	0.00%	0 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1LF2

MOUNTING: SURFACE | ENCLOSURE: NEMA 1 | DOOR TYPE: DOOR-IN-DOOR
VOLTAGE: 120/208 Wye | PHASE: 3 | WIRES: 4 | Min. A.I.C. RATING: 22K AIC
LOCATION: ELEC. D118 | MAIN TYPE: MLO | BUS RATING: 400 A | MCB RATING: N/A | BUS MATERIAL: ALUMINUM
FEED FROM: 1LF1 | SPD: NONE | NEUTRAL RATING: 200% | ISOLATED GROUND: NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A	A	B	B	C	C	CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	IDF F109 DATA RACK	20 A	1	R	1	1680 VA	900 VA					2	R	1	20 A	ROOF OUTLETS	
	IDF F109 DATA RACK	20 A	1	R	3			1680 VA	600 VA			4	R	1	20 A	RTU-10 LTG/RCPT	
	IDF F109 DATA RACK	20 A	1	R	5					1680 VA	600 VA	6	R	1	20 A	RTU-9 LTG/RCPT	
	IDF F109 DATA RACK	20 A	1	R	7	1680 VA	600 VA					8	R	1	20 A	RTU-8 LTG/RCPT	
	ACCESS CONTROL PANEL	20 A	1	E	9			0 VA	1176 VA			10	M	1	20 A	(EF-16)	9
	FIRE ALARM PANEL	20 A	1	E	11					0 VA	1726 VA	12	M	2	25 A	(CU-F.1.1)	9
	FIRE ALARM PANEL	20 A	1	E	13	0 VA	1726 VA					14	--	--	--	--	--
9	MOTORIZED SHADES- GYM	20 A	1	M	15			600 VA	400 VA			16	M	1	20 A	MOTORIZED SHADES - GYM	9
9	MOTORIZED SHADES - GYM	20 A	1	M	17					400 VA	400 VA	18	M	1	20 A	MOTORIZED SHADES - GYM	9
9	MOTORIZED SHADES - GYM	20 A	1	M	19	600 VA	1176 VA					20	M	1	20 A	(CUH-3)	9
	SCOREBOARD ROUGH-IN GYM	20 A	1	E	21			2400 VA	396 VA			22	M	1	20 A	EXHAUST FANS ELEC. D118	9
	SCOREBOARD GYM	20 A	1	E	23					2400 VA	1176 VA	24	E	1	20 A	BASKETBALL HOOP GYM F104	9
	PROJECTOR SCREEN GYM	20 A	1	E	25	2400 VA	1176 VA					26	E	1	20 A	BASKETBALL HOOP GYM F104	9
	SCOREBOARD AUX GYM	20 A	1	E	27			2400 VA	1176 VA			28	E	1	20 A	BASKETBALL HOOP GYM F104	9
9	MOTORIZED SHADES - GYM	20 A	1	M	29					800 VA	1176 VA	30	E	1	20 A	BASKETBALL HOOP GYM F104	9
	RCPT PTZ CAMERA - GYM	20 A	1	R	31	180 VA	1176 VA					32	E	1	20 A	BASKETBALL HOOP GYM F104	9
	-SPARE-	20 A	1	--	33			0 VA	1176 VA			34	E	1	20 A	BASKETBALL HOOP GYM F104	9
	-SPARE-	20 A	1	--	35					0 VA	1176 VA	36	E	1	20 A	BASKETBALL HOOP GYM F110	9
	-SPARE-	20 A	1	--	37	0 VA	1176 VA					38	E	1	20 A	BASKETBALL HOOP GYM F110	9
	-SPARE-	20 A	1	--	39			0 VA	1176 VA			40	E	1	20 A	DIVIDER CURTAIN GYM F104	9
	-SPARE-	20 A	1	--	41					0 VA	0 VA	42	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	43	0 VA	0 VA					44	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	45			0 VA	0 VA			46	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	47					0 VA	0 VA	48	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	49	0 VA	0 VA					50	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	51			0 VA	0 VA			52	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	53					0 VA	0 VA	54	--	1	20 A	-SPARE-	
	TOTAL CONNECTED LOAD PER PHASE (VA)					14470 VA		13180 VA		11534 VA							
	TOTAL CONNECTED CURRENT PER PHASE (AMPS)					123 A		112 A		96 A							

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	7800 VA	100.00%	7800 VA	Total Conn. Load:	39185 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	39773 VA
E	Equipment	23384 VA	100.00%	23384 VA	Total Conn. Current:	109 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	110 A
K	Kitchen	0 VA	0.00%	0 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE KEYED NOTE:

1. PROVIDE CLASS A GROUND FAULT INTERRUPTER TYPE CIRCUIT BREAKER.
2. PROVIDE ARC FAULT CIRCUIT INTERRUPTER TYPE CIRCUIT BREAKER.
3. PROVIDE 30 MILLIAMPERE EQUIPMENT GROUND FAULT PROTECTOR TYPE CIRCUIT BREAKER.
4. PROVIDE SHUNT TRIP CIRCUIT BREAKER WITH 120 V COIL.
5. PROVIDE HACR RATED CIRCUIT BREAKER.
6. PROVIDE HANDLE CLAMP FOR HOLDING CIRCUIT BREAKER IN THE "ON" OR "OFF" POSITION.
7. PROVIDE SWITCHING RATED CIRCUIT BREAKER.
8. ~~PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANELBOARD (WHERE PANEL IS LABELED AS EXISTING)~~ OF SAME MANUFACTURER AND A.I.C. RATING AS EXISTING.
9. PROVIDE INDIVIDUAL METERING OF BRANCH CIRCUITS TO COMPLY WITH IECC 2021 C405.12.

PANEL LEGEND

1LC1	1LC2	1LC3
1LD1	1LD2	1LE1
1LF1	1LF2	

CONSTRUCTION DOCUMENTS

design west | architects
LOGAN UT 84321 / SALT LAKE CITY UT 84103
255 SOUTH 300 WEST / 795 NORTH 400 WEST

ENVISION ENGINEERING
240 E. MORRIS AVE. SUITE 200
SALT LAKE CITY, UT 84115
P (801) 534-1130
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www.envisioneng.com

NIBLEY MIDDLE SCHOOL
3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER JEFFREY P. [illegible] No. 77411 05-01-2024 STATE OF UTAH

PANEL SCHEDULES

E-262

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PANELBOARD SCHEDULE

PANEL NAME: 2LA1

MOUNTING: SURFACE **ENCLOSURE:** NEMA 1 **DOOR TYPE:** DOOR-IN-DOOR
VOLTAGE: 120/208 Wye **PHASE:** 3 **WIRES:** 4 **Min. A.I.C. RATING:** 22K AIC
LOCATION: ELEC A120 **MAIN TYPE:** MLO **BUS RATING:** 225 A **MCB RATING:** N/A **BUS MATERIAL:** ALUMINUM
FEED FROM: DPLA **SPD:** CAT 'A' **NEUTRAL RATING:** 200% **ISOLATED GROUND:** NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A		B		C		CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	RCPT CLASSROOM B204	20 A	1	R	1	360 VA	360 VA					2	R	1	20 A	RCPT CLASSROOM A211	
	RCPT CLASSROOM B204	20 A	1	R	3			360 VA	360 VA			4	R	1	20 A	RCPT CLASSROOM A211	
	RCPT CLASSROOM B204	20 A	1	R	5					360 VA	360 VA	6	R	1	20 A	RCPT CLASSROOM A211	
	RCPT CLASSROOM B205	20 A	1	R	7	360 VA	360 VA					8	R	1	20 A	RCPT CLASSROOM A212	
	RCPT CLASSROOM B205	20 A	1	R	9			360 VA	360 VA			10	R	1	20 A	RCPT CLASSROOM A212	
	RCPT CLASSROOM B205	20 A	1	R	11					360 VA	360 VA	12	R	1	20 A	RCPT CLASSROOM A212	
	RCPT CLASSROOM A201	20 A	1	R	13	360 VA	360 VA					14	R	1	20 A	RCPT CLASSROOM A213	
	RCPT CLASSROOM A201	20 A	1	R	15			360 VA	360 VA			16	R	1	20 A	RCPT CLASSROOM A213	
	RCPT CLASSROOM A201	20 A	1	R	17					360 VA	360 VA	18	R	1	20 A	RCPT CLASSROOM A213	
	RCPT CLASSROOM A202	20 A	1	R	19	360 VA	360 VA					20	R	1	20 A	RCPT CLASSROOM B206	
	RCPT CLASSROOM A202	20 A	1	R	21			360 VA	360 VA			22	R	1	20 A	RCPT CLASSROOM B206	
	RCPT CLASSROOM A202	20 A	1	R	23					360 VA	360 VA	24	R	1	20 A	RCPT CLASSROOM B206	
	RCPT CLASSROOM A203	20 A	1	R	25	360 VA	360 VA					26	R	1	20 A	RCPT CLASSROOM B207	
	RCPT CLASSROOM A203	20 A	1	R	27			360 VA	360 VA			28	R	1	20 A	RCPT CLASSROOM B207	
	RCPT CLASSROOM A203	20 A	1	R	29					360 VA	360 VA	30	R	1	20 A	RCPT CLASSROOM B207	
	RCPT RESTROOM A220	20 A	1	R	31	540 VA	750 VA					32	E	1	20 A	ICE MAKER - STORAGE A218	
	RCPT RESTROOM A225	20 A	1	R	33			540 VA	360 VA			34	R	1	20 A	RCPT CLASSROOM B201	
	RCPT SCIENCE PREP A217	20 A	1	R	35					360 VA	360 VA	36	R	1	20 A	RCPT CLASSROOM B201	
	RCPT SCIENCE PREP A217	20 A	1	R	37	540 VA	360 VA					38	R	1	20 A	RCPT CLASSROOM B201	
	RCPT ROOM 611, 433	20 A	1	R	39			900 VA	1500 VA			40	E	1	20 A	HAND DRYER	
	RCPT SPACE 611	20 A	1	R	41					900 VA	1500 VA	42	E	1	20 A	HAND DRYER	
	WATER FOUNTAIN SPACE 611	20 A	1	R	43	600 VA	1200 VA					44	R	1	20 A	DISHWASHER SCIENCE A219	
	RCPT SCIENCE PREP B233	20 A	1	R	45			540 VA	600 VA			46	R	1	20 A	RTU-2 LTG/RCPT	9
	RCPT SCIENCE PREP B233	20 A	1	R	47					540 VA	600 VA	48	R	1	20 A	RTU-1 LTG/RCPT	9
9	SPLIT SYSTEM UNIT	25 A	2	M	49	1726 VA	540 VA					50	R	1	20 A	ROOF OUTLETS	
--	--	--	--	--	51			1726 VA	0 VA			52	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	53					0 VA	0 VA	54	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	55	0 VA	0 VA					56	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	57			0 VA	0 VA			58	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	59					0 VA	0 VA	60	--	1	20 A	-SPARE-	

	A	B	C
TOTAL CONNECTED LOAD PER PHASE (VA)	9856 VA	9766 VA	7860 VA
TOTAL CONNECTED CURRENT PER PHASE (AMPS)	85 A	84 A	66 A

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	5400 VA	100.00%	5400 VA	Total Conn. Load:	27483 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	27483 VA
E	Equipment	15480 VA	100.00%	15480 VA	Total Conn. Current:	76 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	76 A
K	Kitchen	1950 VA	100.00%	1950 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 2LA2

MOUNTING: SURFACE **ENCLOSURE:** NEMA 1 **DOOR TYPE:** DOOR-IN-DOOR
VOLTAGE: 120/208 Wye **PHASE:** 3 **WIRES:** 4 **Min. A.I.C. RATING:** 22K AIC
LOCATION: ELEC A120 **MAIN TYPE:** MLO **BUS RATING:** 225 A **MCB RATING:** N/A **BUS MATERIAL:** ALUMINUM
FEED FROM: DPLA **SPD:** CAT. 'A' **NEUTRAL RATING:** 200% **ISOLATED GROUND:** NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A		B		C		CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	RCPT SCIENCE CLASSROOM...	20 A	1	R	1	360 VA	360 VA					2	R	1	20 A	RCPT SPACE 626	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	3			360 VA	360 VA			4	R	1	20 A	RCPT SPACE 626	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	5					360 VA	360 VA	6	R	1	20 A	RCPT SPACE 626	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	7	360 VA	360 VA					8	R	1	20 A	RCPT SPACE 626	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	9			360 VA	360 VA			10	R	1	20 A	RCPT SPACE 626	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	11					360 VA	360 VA	12	R	1	20 A	RCPT SPACE 626	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	13	360 VA	360 VA					14	R	1	20 A	RCPT SPACE 626	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	15			360 VA	360 VA			16	R	1	20 A	RCPT SPACE 626	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	17					360 VA	360 VA	18	R	1	20 A	RCPT SPACE 626	
	RCPT SCIENCE CLASSROOM...	20 A	1	R	19	360 VA	360 VA					20	R	1	20 A	RCPT SPACE 626	
	RCPT SPACE 625	20 A	1	R	21			360 VA	360 VA			22	R	1	20 A	RCPT CLASSROOM A205	
	RCPT SPACE 625	20 A	1	R	23					360 VA	360 VA	24	R	1	20 A	RCPT CLASSROOM A205	
	RCPT SPACE 625	20 A	1	R	25	360 VA	360 VA					26	R	1	20 A	RCPT CLASSROOM A208	
	RCPT SPACE 625	20 A	1	R	27			360 VA	360 VA			28	R	1	20 A	RCPT CLASSROOM A208	
	RCPT SPACE 625	20 A	1	R	29					360 VA	360 VA	30	R	1	20 A	RCPT CLASSROOM A208	
	RCPT SPACE 625	20 A	1	R	31	360 VA	720 VA					32	R	1	20 A	RCPT CLASSROOM A206	
	RCPT SPACE 625	20 A	1	R	33			360 VA	1080 VA			34	R	1	20 A	RCPT CLASSROOM A206	
	RCPT SPACE 625	20 A	1	R	35					360 VA	720 VA	36	R	1	20 A	RCPT CLASSROOM A206	
	RCPT SPACE 625	20 A	1	R	37	360 VA	720 VA					38	R	1	20 A	RCPT CLASSROOM A207	
	RCPT SPACE 625	20 A	1	R	39			360 VA	1080 VA			40	R	1	20 A	RCPT CLASSROOM A207	
	RCPT CLASSROOM A205	20 A	1	R	41					360 VA	720 VA	42	R	1	20 A	RCPT CLASSROOM A207	
	HAND DRYER	20 A	1	E	43	1500 VA	1500 VA					44	E	1	20 A	HAND DRYER	
	HAND DRYER	20 A	1	E	45			1500 VA	1500 VA			46	E	1	20 A	HAND DRYER	
	HAND DRYER	20 A	1	E	47					1500 VA	1176 VA	48	M	1	20 A	EXHAUST FANS (EF-2)	9
	HAND DRYER	20 A	1	E	49	1500 VA	1000 VA					50	E	1	20 A	HEAT TRACE WEST ENTRANCE	3
	RCPT CORR. LEVEL 2 AREA B	20 A	1	R	51			540 VA	1200 VA			52	R	1	20 A	DISHWASHER SCIENCE B224	
	RCPT CORR. LEVEL 2 AREA B	20 A	1	R	53					540 VA	1200 VA	54	R	1	20 A	DISHWASHER SCIENCE B224	
	-SPARE-	20 A	1	--	55	0 VA	0 VA					56	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	57			0 VA	0 VA			58	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	59					0 VA	0 VA	60	--	1	20 A	-SPARE-	

	A	B	C
TOTAL CONNECTED LOAD PER PHASE (VA)	11260 VA	11220 VA	10176 VA
TOTAL CONNECTED CURRENT PER PHASE (AMPS)	95 A	95 A	85 A

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	6120 VA	100.00%	6120 VA	Total Conn. Load:	32656 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	32950 VA
E	Equipment	22960 VA	100.00%	22960 VA	Total Conn. Current:	91 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	91 A
K	Kitchen	2400 VA	100.00%	2400 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 2LC1

MOUNTING: RECESSED **ENCLOSURE:** NEMA 1 **DOOR TYPE:** DOOR-IN-DOOR
VOLTAGE: 120/208 Wye **PHASE:** 3 **WIRES:** 4 **Min. A.I.C. RATING:** 22K AIC
LOCATION: SHARED STORAGE C202 **MAIN TYPE:** MLO / FTL **BUS RATING:** 225 A **MCB RATING:** N/A **BUS MATERIAL:** ALUMINUM
FEED FROM: DPL2 **SPD:** CAT 'A' **NEUTRAL RATING:** 200% **ISOLATED GROUND:** NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A		B		C		CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	RECEPTACLE FCS C203	20 A	1	R	1	900 VA	1540 VA					2	E	1	20 A	TV's FCS C203	
	RECEPTACLE FCS C203	20 A	1	R	3			360 VA	1200 VA			4	E	1	20 A	CORD DROP C203	
	RECEPTACLE FCS C203	20 A	1	R	5					540 VA	360 VA	6	R	1	20 A	RECEPTACLE FCS C203	
	RECEPTACLE FCS C203	20 A	1	R	7	360 VA	2500 VA					8	E	2	30 A	DRYER SHARED STORAGE C202	
	RECEPTACLE FCS C203	20 A	1	R	9			540 VA	2500 VA			10	--	--	--	--	--
	FRIDGE - SHARED STORAGE	20 A	1	K	11					1500 VA	1500 VA	12	E	1	20 A	WASHER SHARED STORAGE...	
	FRIDGE - SHARED STORAGE	20 A	1	K	13	1500 VA	360 VA					14	R	1	20 A	RCPTS - CLASSROOM C201	
	RCPTS - SHARED STORAGE...	20 A	1	R	15			900 VA	360 VA			16	R	1	20 A	RCPTS - CLASSROOM C201	
	SPECIAL EDUCATION C204	20 A	1	R	17					540 VA	1080 VA	18	R	1	20 A	RCPTS - CLASSROOM C201	
	RCPT SPECIAL EDUCATION...	20 A	1	R	19	860 VA	1000 VA					20	E	1	20 A	TV'S CLASSROOM C201	
	A/V SPECIAL EDUCATION C204	20 A	1	R	21			720 VA	540 VA			22	E	1	20 A	A/V CAB. - CLASSROOM C201	
	RCPT CORRIDOR 493	20 A	1	R	23					1620 VA	180 VA	24	E	1	20 A	RCPTS - CLASSROOM C201	
	-SPARE-	20 A	1	--	25	0 VA	1200 VA					26	E	1	20 A	CORD DROP CLASS. C201	
	-SPARE-	20 A	1	--	27			0 VA	0 VA			28	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	29					0 VA	0 VA	30	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	31	0 VA	0 VA					32	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	33			0 VA	0 VA			34	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	35					0 VA	0 VA	36	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	37	0 VA	0 VA					38	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	39			0 VA	0 VA			40	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	41					0 VA	0 VA	42	--	1	20 A	-SPARE-	

	A	B	C
TOTAL CONNECTED LOAD PER PHASE (VA)	26220 VA	23120 VA	23320 VA
TOTAL CONNECTED CURRENT PER PHASE (AMPS)	219 A	193 A	195 A

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	13260 VA	87.71%	11630 VA	Total Conn. Load:	72660 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	52480 VA
E	Equipment	4900 VA	100.00%	4900 VA	Total Conn. Current:	202 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	146 A
K	Kitchen	53000 VA	65.00%	34450 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: FCS

MOUNTING: RECESSED **ENCLOSURE:** NEMA 1 **DOOR TYPE:** DOOR-IN-DOOR
VOLTAGE: 120/208 Wye **PHASE:** 3 **WIRES:** 4 **Min. A.I.C. RATING:** 22K AIC
LOCATION: SHARED STORAGE C202 **MAIN TYPE:** MLO **BUS RATING:** 225 A **MCB RATING:** N/A **BUS MATERIAL:** ALUMINUM
FEED FROM: 2LC1 **SPD:** NONE **NEUTRAL RATING:** 100% **ISOLATED GROUND:** NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A		B		C		CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	RANGE FCS C203	50 A	2	K	1	4000 VA	4000 VA					2	K	2	50 A	RANGE FCS C203	
--	--	--	--	--	3			4000 VA	4000 VA			4	--	--	--	--	--
	RANGE FCS C203	50 A	2	K	5					4000 VA	4000 VA	6	K	2	50 A	RANGE FCS C203	
--	--	--	--	--	7	4000 VA	4000 VA					8	--	--	--	--	--
	RANGE FCS C203	50 A	2	K	9			4000 VA	4000 VA			10	K	2	50 A	RANGE FCS C203	
--	--	--	--	--	11					4000 VA	4000 VA	12	--	--	--	--	--
	-SPACE ONLY-	--	1	--	13	--	--					14	--	1	--	-SPACE ONLY-	
	-SPACE ONLY-	--	1	--	15			--	--			16	--	1	--	-SPACE ONLY-	
	-SPACE ONLY-	--	1	--	17					--	--	18	--	1	--	-SPACE ONLY-	

	A	B	C
TOTAL CONNECTED LOAD PER PHASE (VA)	16000 VA	16000 VA	16000 VA
TOTAL CONNECTED CURRENT PER PHASE (AMPS)	133 A	133 A	133 A

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	0 VA	0.00%	0 VA	Total Conn. Load:	48000 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	31200 VA
E	Equipment	0 VA	0.00%	0 VA	Total Conn. Current:	133 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	87 A
K	Kitchen	48000 VA	65.00%	31200 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 2LC2

MOUNTING: RECESSED **ENCLOSURE:** NEMA 1 **DOOR TYPE:** DOOR-IN-DOOR
VOLTAGE: 120/208 Wye **PHASE:** 3 **WIRES:** 4 **Min. A.I.C. RATING:** 22K AIC
LOCATION: STORAGE / ROOF ACCESS C217 **MAIN TYPE:** MLO / FTL **BUS RATING:** 225 A **MCB RATING:** N/A **BUS MATERIAL:** ALUMINUM
FEED FROM: DPL2 **SPD:** CAT 'A' **NEUTRAL RATING:** 200% **ISOLATED GROUND:** NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A		B		C		CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	RCPTS - CLASSROOM C224	20 A	1	R	1	360 VA	360 VA					2	R	1	20 A	RCPTS - CLASSROOM C219	
	RCPTS - CLASSROOM C224	20 A	1	R	3			360 VA	360 VA			4	R	1	20 A	RCPTS - CLASSROOM C219	
	RCPTS - CLASSROOM C224	20 A	1	R	5					360 VA	360 VA	6	R	1	20 A	RCPTS - CLASSROOM C219	
	RCPTS - CLASSROOM C224	20 A	1	R	7	360 VA	360 VA					8	R	1	20 A	RCPTS - CLASSROOM C219	
	RCPTS - CLASSROOM C222	20 A	1	R	9			360 VA	360 VA			10	R	1	20 A	RCPTS - CLASSROOM C218	
	RCPTS - CLASSROOM C222	20 A	1	R	11					360 VA	360 VA	12	R	1	20 A	RCPTS - CLASSROOM C218	
	RCPTS - CLASSROOM C222	20 A	1	R	13	360 VA	360 VA					14	R	1	20 A	RCPTS - CLASSROOM C218	
	RCPTS - CLASSROOM C222	20 A	1	R	15			360 VA	360 VA			16	R	1	20 A	RCPTS - CLASSROOM C218	
	-SPARE-	20 A	1	--	17					0 VA	900 VA	18	R	1	20 A	RCPT CORRIDOR 496	
	-SPARE-	20 A	1	--	19	0 VA	860 VA					20	E	1	20 A	A/V CAB. - SPECIAL ED. C216	
	-SPARE-	20 A	1	--	21			0 VA	900 VA			22	R	1	20 A	RCPTS -SPECIAL ED. C216	
	-SPARE-	20 A	1	--	23					0 VA	720 VA	24	R	1	20 A	RCPTS - SPECIAL ED. C216	
	-SPARE-	20 A	1	--	25	0 VA	360 VA					26	E	1	20 A	TV'S - SPECIAL EDUCATION...	
	-SPARE-	20 A	1	--	27			0 VA	600 VA			28	R	1	20 A	RCPT DRINKING FOUNTAIN...	
	-SPARE-	20 A	1	--	29					0 VA	0 VA	30	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	31	0 VA	0 VA					32	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	33			0 VA	0 VA			34	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	35					0 VA	0 VA	36	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	37	0 VA	0 VA					38	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	39			0 VA	0 VA			40	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	41					0 VA	0 VA	42	--	1	20 A	-SPARE-	

	A	B	C
TOTAL CONNECTED LOAD PER PHASE (VA)	14900 VA	13810 VA	11530 VA
TOTAL CONNECTED CURRENT PER PHASE (AMPS)	127 A	118 A	96 A

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	20880 VA	73.95%	15440 VA	Total Conn. Load:	40240 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	34800 VA
E	Equipment	18860 VA	100.00%	18860 VA	Total Conn. Current:	112 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	97 A
K	Kitchen	500 VA	100.00%	500 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 2LC3

MOUNTING: RECESSED **ENCLOSURE:** NEMA 1 **DOOR TYPE:** DOOR-IN-DOOR
VOLTAGE: 120/208 Wye **PHASE:** 3 **WIRES:** 4 **Min. A.I.C. RATING:** 22K AIC
LOCATION: STORAGE / ROOF ACCESS C217 **MAIN TYPE:** MLO **BUS RATING:** 225 A **MCB RATING:** N/A **BUS MATERIAL:** ALUMINUM
FEED FROM: 2LC2 **SPD:** NONE **NEUTRAL RATING:** 200% **ISOLATED GROUND:** NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A		B		C		CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	RCPT -DIGITAL LITERACY C213	20 A	1	E	1	360 VA	1260 VA					2	R	1	20 A	RCPTS - ESL C210	
	RCPT -DIGITAL LITERACY C213	20 A	1	E	3			360 VA	720 VA			4	E	1	20 A	A/V CAB. - ESL C210	
	RCPT -DIGITAL LITERACY C213	20 A	1	E	5					360 VA	360 VA	6	R	1	20 A	RCPTS - ESL C210	
	RCPT -DIGITAL LITERACY C213	20 A	1	E	7	360 VA	720 VA					8	R	1	20 A	RCPT ROOM 470, 433	
	A/V CAB. - DIGITAL LITERACY...	20 A	1	E	9			720 VA	720 VA			10	R	1	20 A	RCPT OFFICE 517	
	RCPTS -DIGITAL LITERACY C213	20 A	1	R	11					1080 VA	720 VA	12	R	1	20 A	RCPT CUST OFFICE 390	
	RCPT -DIGITAL LITERACY C213	20 A	1	E	13	360 VA	900 VA					14	R	1	20 A	RCPTS - A/V BOOTH C209	
	RCPT -DIGITAL LITERACY C213	20 A	1	E	15			360 VA	360 VA			16	E	1	20 A	RECEPTACLE - A/V BOOTH C209	
	RCPT -DIGITAL LITERACY C213	20 A	1	E	17					360 VA	360 VA	18	E	1	20 A	RECEPTACLE A/V BOOTH C209	
	RCPT -DIGITAL LITERACY C213	20 A	1	E	19	360 VA	360 VA					20	E	1	20 A	RECEPTACLE A/V BOOTH C209	
	A/V CAB. - ESL C211	20 A	1	E	21			720 VA	250 VA			22	E	2	20 A	PROJECTOR A/V BOOTH C209	
	RCPTS - ESL C211	20 A	1	R	23					360 VA	250 VA	24	--	--	--	--	--
	RCPTS - ESL C211	20 A	1	R	25	1260 VA	1080 VA					26	R	1	20 A	RCPT RESTROOM B214, B215	
	HAND DRYER B219	20 A	1	E	27			1500 VA	900 VA			28	R	1	20 A	RCPT AMP B208	
	HAND DRYER B219	20 A	1	E	29					1500 VA	1080 VA	30	R	1	20 A	RCPT SLP B209	
	HAND DRYER B219	20 A	1	E	31	1500 VA	0 VA					32	--	1	20 A	-SPARE-	
	HAND DRYER B217	20 A	1	E	33			1500 VA	0 VA			34	--	1	20 A	-SPARE-	
	RCPT FEMALE B224	20 A	1	R	35					540 VA	0 VA	36	--	1	20 A	-SPARE-	
	HAND DRYER B216	20 A	1	E	37	1500 VA	0 VA					38	--	1	20 A	-SPARE-	
	HAND DRYER B216	20 A	1	E	39			1500 VA	0 VA			40	--	1	20 A	-SPARE-	
	HAND DRYER B216	20 A	1	E	41					1500 VA	0 VA	42	--	1	20 A	-SPARE-	
	HAND DRYER B218	20 A	1	E	43	1500 VA	0 VA					44	--	1	20 A	-SPARE-	
	RCPT MALE B235	20 A	1	R	45			540 VA	0 VA			46	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	47					0 VA	0 VA	48	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	49	0 VA	0 VA					50	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	51			0 VA	0 VA			52	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	53					0 VA	0 VA	54	--	1	20 A	-SPARE-	

	A	B	C
TOTAL CONNECTED LOAD PER PHASE (VA)	11520 VA	10150 VA	8470 VA
TOTAL CONNECTED CURRENT PER PHASE (AMPS)	98 A	87 A	71 A

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	17640 VA	78.34%	13820 VA	Total Conn. Load:	30140 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	26320 VA
E	Equipment	12000 VA	100.00%	12000 VA	Total Conn. Current:	84 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	73 A
K	Kitchen	500 VA	100.00%	500 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: STB

MOUNTING: SURFACE **ENCLOSURE:** NEMA 1 **DOOR TYPE:** DOOR-IN-DOOR
VOLTAGE: 120/208 Wye **PHASE:** 3 **WIRES:** 4 **Min. A.I.C. RATING:** 22K AIC
LOCATION: OUTDOOR STORAGE **MAIN TYPE:** MLO **BUS RATING:** 100 A **MCB RATING:** NONE **BUS MATERIAL:** ALUMINUM
FEED FROM: 1LF1 **SPD:** NONE **NEUTRAL RATING:** 100% **ISOLATED GROUND:** NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A		B		C		CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	LTG - STORAGE BUILDING	20 A	1	--	1	348 VA	--					2	--	1	--	-SPACE ONLY-	
	RCPTS - STORAGE BUILDING	20 A	1	R	3			360 VA	--			4	--	1	--	-SPACE ONLY-	
	RCPTS - STORAGE BUILDING	20 A	1	R	5					360 VA	--	6	--	1	--	-SPACE ONLY-	
	RCPTS - STORAGE BUILDING	20 A	1	R	7	360 VA	--					8	--	1	--	-SPACE ONLY-	
	O.H. DOOR - STORAGE...	20 A	1	M	9			0 VA	--			10	--	1	--	-SPACE ONLY-	
	O.H. DOOR - STORAGE...	20 A	1	M	11					0 VA	--	12	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	13	0 VA	--					14	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	15			0 VA	--			16	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	17					0 VA	--	18	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	19	0 VA	--					20	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	21			0 VA	--			22	--	1	--	-SPACE ONLY-	
	-SPARE-	20 A	1	--	23					0 VA	--	24	--	1	--	-SPACE ONLY-	

	A	B	C
TOTAL CONNECTED LOAD PER PHASE (VA)	708 VA	360 VA	360 VA
TOTAL CONNECTED CURRENT PER PHASE (AMPS)	6 A	3 A	3 A

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	1080 VA	100.00%	1080 VA	Total Conn. Load:	1428 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	1428 VA
E	Equipment	0 VA	0.00%	0 VA	Total Conn. Current:	4 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	4 A
K	Kitchen	0 VA	0.00%	0 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE KEYED NOTE:

1. PROVIDE CLASS A GROUND FAULT INTERRUPTER TYPE CIRCUIT BREAKER.
2. PROVIDE ARC FAULT CIRCUIT INTERRUPTER TYPE CIRCUIT BREAKER
3. PROVIDE 30 MILLIAMPERE EQUIPMENT GROUND FAULT PROTECTOR TYE CIRCUIT BREAKER.
4. PROVIDE SHUNT TRIP CIRCUIT BREAKER WITH 120 V COIL.
5. PROVIDE HACR RATED CIRCUIT BREAKER.
6. PROVIDE HANDLE CLAMP FOR HOLDING CIRCUIT BREAKER IN THE "ON" OR "OFF" POSITION.
7. PROVIDE SWITCHING RATED CIRCUIT BREAKER.
8. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANELBOARD (WHERE PANEL IS LOCATED AS EXISTING) OF SAME MANUFACTURER AND A.I.C. RATING AS EXISTING.
9. PROVIDE INDIVIDUAL METERING OF BRANCH CIRCUITS TO COMPLY WITH IECC 2021 C405.12

PANEL LEGEND

2LA1	2LA2	2LC1
2LC2	2LC3	FCS
		STB

design west | architects
255 SOUTH 300 WEST LOGAN UT 84321
795 NORTH 400 WEST SALT LAKE CITY UT 84103

ENVISION ENGINEERING
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NIBLEY MIDDLE SCHOOL
3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK: DATE: 05/15/24 DESCRIPTION: ADDENDUM 3

PROJECT #: 123006
DRAWN BY: SB
CHECKED BY: AH
ISSUED: 04.26.2024

CONSTRUCTION DOCUMENTS

PANEL SCHEDULES

E-263

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PANELBOARD SCHEDULE

PANEL NAME: K1

MOUNTING: RECESSED | **ENCLOSURE:** NEMA 4X | **DOOR TYPE:** DOOR-IN-DOOR
VOLTAGE: 120/208 Wye | **PHASE:** 3 | **WIRES:** 4 | **Min. A.I.C. RATING:** 22K AIC
LOCATION: KITCHEN D127 | **MAIN TYPE:** MLO | **BUS RATING:** 225 A | **MCB RATING:** N/A | **BUS MATERIAL:** ALUMINUM
FEED FROM: DPL2 | **SPD:** NONE | **NEUTRAL RATING:** 100% | **ISOLATED GROUND:** NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A		B		C		CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	UTILITY DISTRIBUTION SYSTEM	100 A	3	P	1	4804 VA	1200 VA					2	M	1	20 A	OVERHEAD DOOR	
--	--	--	--	--	3			4804 VA	1200 VA			4	M	1	20 A	OVERHEAD DOOR	
--	--	--	--	--	5					4804 VA	1200 VA	6	K	1	20 A	(K-44) CASHIER COUNTER	
	SHUNT TRIP	--	1	--	7	--	324 VA					8	K	1	20 A	(K-32) MILK COOLER	1
	HOOD	20 A	1	K	9			1200 VA	1897 VA			10	K	3	25 A	(K-30) HOT FOOD WELL	
	HOOD	20 A	1	K	11					1200 VA	1897 VA	12	--	--	--	--	--
	GAS SHUT OFF	20 A	1	K	13	100 VA	1897 VA					14	--	--	--	--	--
	O.H. DOOR - KITCHEN D127	20 A	1	M	15			100 VA	1500 VA			16	K	2	20 A	(K-25) PASS THRU HEATED CAB.	
	RCPTS - KITCHEN D127	20 A	1	R	17					1260 VA	1500 VA	18	--	--	--	--	--
	RCPTS - OFFICE D132	20 A	1	R	19	720 VA	708 VA					20	K	1	20 A	(K-24) PASS THRU FRIDGE	1
	(K-26) ICE CUBER	20 A	1	K	21			1428 VA	420 VA			22	K	1	20 A	(K-17) FOOD PROCESSOR	
	(K-36) WASTE COLLECTOR	20 A	2	K	23					572 VA	1200 VA	24	K	1	20 A	(K-14) CAN OPENER	1
--	--	--	--	--	25	572 VA	1200 VA					26	K	1	20 A	(K-44) CASHIER COUNTER	
	OVERHEAD DOOR	20 A	1	M	27			1200 VA	504 VA			28	K	1	20 A	(K-42) FRENCH FRY WARMER	
	RCPTS - SERVING D130	20 A	1	R	29					540 VA	1200 VA	30	K	1	20 A	(K-44) CASHIER COUNTER	
	(K-31) COLD WELL	20 A	1	K	31	504 VA	0 VA					32	--	1	20 A	-SPARE-	
	(K-52) WARMING CABINET	20 A	1	K	33			1440 VA	0 VA			34	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	35					0 VA	0 VA	36	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	37	0 VA	0 VA					38	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	39			0 VA	0 VA			40	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	41					0 VA	0 VA	42	--	1	20 A	-SPARE-	
	TOTAL CONNECTED LOAD PER PHASE (VA)					12029 VA		15693 VA		15373 VA							
	TOTAL CONNECTED CURRENT PER PHASE (AMPS)					100 A		135 A		132 A							

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	2520 VA	100.00%	2520 VA	Total Conn. Load:	43095 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	30189 VA
E	Equipment	0 VA	0.00%	0 VA	Total Conn. Current:	120 A
M	Motor	3700 VA	100.00%	3700 VA	Total Est. Demand Current:	84 A
K	Kitchen	36875 VA	65.00%	23969 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: K2

MOUNTING: RECESSED | **ENCLOSURE:** NEMA 4X | **DOOR TYPE:** DOOR-IN-DOOR
VOLTAGE: 120/208 Wye | **PHASE:** 3 | **WIRES:** 4 | **Min. A.I.C. RATING:** 22K AIC
LOCATION: KITCHEN D127 | **MAIN TYPE:** MLO | **BUS RATING:** 225 A | **MCB RATING:** N/A | **BUS MATERIAL:** ALUMINUM
FEED FROM: DPL2 | **SPD:** NONE | **NEUTRAL RATING:** 100% | **ISOLATED GROUND:** NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A		B		C		CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	WASHER/DRYER LAUNDRY D125	20 A	1	E	1	1500 VA	132 VA					2	K	1	20 A	COOLER EVAPORATOR	
	DRYER - LAUNDRY D125	30 A	2	E	3			2500 VA	1500 VA			4	K	2	20 A	(K-25) PASS THRU HEAT...	
--	--	--	--	--	5					2500 VA	1500 VA	6	--	--	--	--	--
	RCPTS - LAUNDRY D125	20 A	1	R	7	900 VA	708 VA					8	K	1	20 A	(K-24) PASS THRU FRIDGE	1
	(K-5) PROOFER CABINET	30 A	1	K	9			2004 VA	360 VA			10	R	1	20 A	RCPTS - SERVING D130	
	(K-7) 20 QT MIXER	25 A	1	K	11					960 VA	1897 VA	12	K	3	25 A	(K-30) HOT FOOD WELL	
	(K-21) 30 QT MIXER	20 A	1	K	13	1140 VA	1897 VA					14	--	--	--	--	--
	(K-41) FREEZER	20 A	1	K	15			350 VA	1897 VA			16	--	--	--	--	--
	(K-40) COOLER	20 A	1	K	17					350 VA	324 VA	18	K	1	20 A	(K-32) MILK COOLER	1
	FREEZER CONDENSER	25 A	3	K	19	1969 VA	1200 VA					20	M	1	20 A	OVERHEAD DOOR	
--	--	--	--	--	21			1969 VA	1200 VA			22	M	1	20 A	OVERHEAD DOOR	
--	--	--	--	--	23					1969 VA	1897 VA	24	K	3	25 A	(K-30) HOT FOOD WELL	
	COOLER CONDENSER	20 A	3	K	25	600 VA	1897 VA					26	--	--	--	--	--
--	--	--	--	--	27			600 VA	1897 VA			28	--	--	--	--	--
--	--	--	--	--	29					600 VA	324 VA	30	K	1	20 A	(K-32) MILK COOLER	1
	FREEZER EVAPORATOR	20 A	2	K	31	1019 VA	1498 VA					32	K	2	20 A	(K-48) MICROWAVE	
--	--	--	--	--	33			1019 VA	1498 VA			34	--	--	--	--	--
	HAND DRYER TOILET D126	20 A	1	R	35					1500 VA	0 VA	36	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	37	0 VA	0 VA					38	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	39			0 VA	0 VA			40	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	41					0 VA	0 VA	42	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	43	0 VA	0 VA					44	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	45			0 VA	0 VA			46	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	47					0 VA	0 VA	48	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	49	0 VA	0 VA					50	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	51			0 VA	0 VA			52	--	1	20 A	-SPARE-	
	-SPARE-	20 A	1	--	53					0 VA	0 VA	54	--	1	20 A	-SPARE-	
	TOTAL CONNECTED LOAD PER PHASE (VA)					14462 VA		16796 VA		13823 VA							
	TOTAL CONNECTED CURRENT PER PHASE (AMPS)					121 A		141 A		115 A							

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	1260 VA	100.00%	1260 VA	Total Conn. Load:	45080 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	33383 VA
E	Equipment	6500 VA	100.00%	6500 VA	Total Conn. Current:	125 A
M	Motor	2400 VA	100.00%	2400 VA	Total Est. Demand Current:	93 A
K	Kitchen	33420 VA	65.00%	21723 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1HM1

MOUNTING: SURFACE | **ENCLOSURE:** NEMA 1 | **DOOR TYPE:** DOOR-IN-DOOR
VOLTAGE: 480/277 Wye | **PHASE:** 3 | **WIRES:** 4 | **Min. A.I.C. RATING:** 35K AIC
LOCATION: CHILLER C112 | **MAIN TYPE:** MLO | **BUS RATING:** 400 A | **MCB RATING:** N/A | **BUS MATERIAL:** ALUMINUM
FEED FROM: DPHM | **SPD:** NONE | **NEUTRAL RATING:** 100% | **ISOLATED GROUND:** NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A		B		C		CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	EXHAUST FAN (EF-1)	20 A	3	M	1	582 VA	5820 VA					2	M	3	40 A	PUMP (P-3)	
--	--	--	--	--	3			582 VA	5820 VA			4	--	--	--	--	--
--	--	--	--	--	5					582 VA	5820 VA	6	--	--	--	--	--
	EXHAUST FAN (EF-3)	20 A	3	M	7	443 VA	5820 VA					8	M	3	40 A	PUMP (P-4)	
--	--	--	--	--	9			443 VA	5820 VA			10	--	--	--	--	--
--	--	--	--	--	11					443 VA	5820 VA	12	--	--	--	--	--
	FLUID FILTER (SS-1)	20 A	3	M	13	2106 VA	11085...					14	M	3	80 A	PUMP (P-5)	
--	--	--	--	--	15			2106 VA	11085...			16	--	--	--	--	--
--	--	--	--	--	17					2106 VA	11085...	18	--	--	--	--	--
	-SPARE-	20 A	3	--	19	0 VA	11085...					20	M	3	80 A	PUMP (P-6)	
--	--	--	--	--	21			0 VA	11085...			22	--	--	--	--	--
--	--	--	--	--	23					0 VA	11085...	24	--	--	--	--	--
	-SPARE-	40 A	3	--	25	0 VA	5820 VA					26	M	3	40 A	(CT-1A) COOLING TOWER	
--	--	--	--	--	27			0 VA	5820 VA			28	--	--	--	--	--
--	--	--	--	--	29					0 VA	5820 VA	30	--	--	--	--	--
	-SPARE-	40 A	3	--	31	0 VA	3333 VA					32	M	3	20 A	(CT-1B) COOL. TWR BASIN...	
--	--	--	--	--	33			0 VA	3333 VA			34	--	--	--	--	--
--	--	--	--	--	35					0 VA	3333 VA	36	--	--	--	--	--
	-SPARE-	70 A	3	--	37	0 VA	0 VA					38	--	3	20 A	-SPARE-	
--	--	--	--	--	39			0 VA	0 VA			40	--	--	--	--	--
--	--	--	--	--	41					0 VA	0 VA	42	--	--	--	--	--
	TOTAL CONNECTED LOAD PER PHASE (VA)					46094 VA		46094 VA		46094 VA							
	TOTAL CONNECTED CURRENT PER PHASE (AMPS)					166 A		166 A		166 A							

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	0 VA	0.00%	0 VA	Total Conn. Load:	138283 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	147033 VA
E	Equipment	0 VA	0.00%	0 VA	Total Conn. Current:	166 A
M	Motor	0 VA	0.00%	0 VA	Total Est. Demand Current:	177 A
K	Kitchen	0 VA	0.00%	0 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1HM2

MOUNTING: SURFACE | **ENCLOSURE:** NEMA 1 | **DOOR TYPE:** DOOR-IN-DOOR
VOLTAGE: 480/277 Wye | **PHASE:** 3 | **WIRES:** 4 | **Min. A.I.C. RATING:** 35K AIC
LOCATION: BOILER D135 | **MAIN TYPE:** MLO | **BUS RATING:** 400 A | **MCB RATING:** N/A | **BUS MATERIAL:** ALUMINUM
FEED FROM: DPHM | **SPD:** NONE | **NEUTRAL RATING:** 100% | **ISOLATED GROUND:** NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A		B		C		CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	EXHAUST FAN (EF-5)	20 A	3	M	1	831 VA	4434 VA					2	M	3	20 A	BOILER (B-2)	
--	--	--	--	--	3			831 VA	4434 VA			4	--	--	--	--	--
--	--	--	--	--	5					831 VA	4434 VA	6	--	--	--	--	--
	EXHAUST FAN (EF-6)	20 A	3	M	7	831 VA	7482 VA					8	M	3	80 A	IRRIGATION PUMP (IP-1)	
--	--	--	--	--	9			831 VA	7482 VA			10	--	--	--	--	--
--	--	--	--	--	11					831 VA	7482 VA	12	--	--	--	--	--
	MAKE UP AIR UNIT (MAU-1)	20 A	3	M	13	942 VA	9422 VA					14	M	3	70 A	PUMP (P-1)	
--	--	--	--	--	15			942 VA	9422 VA			16	--	--	--	--	--
--	--	--	--	--	17					942 VA	9422 VA	18	--	--	--	--	--
	MAKE UP AIR UNIT (MAU-2)	20 A	3	M	19	942 VA	9422 VA					20	M	3	70 A	PUMP (P-2)	
--	--	--	--	--	21			942 VA	9422 VA			22	--	--	--	--	--
--	--	--	--	--	23					942 VA	9422 VA	24	--	--	--	--	--
	EXHAUST FAN (EF-8)	20 A	3	M	25	582 VA	1330 VA					26	M	3	20 A	(P-7) PUMP	
--	--	--	--	--	27			582 VA	1330 VA			28	--	--	--	--	--
--	--	--	--	--	29					582 VA	1330 VA	30	--	--	--	--	--
	BOILER (B-1)	20 A	3	M	31	4434 VA	1330 VA					32	M	3	20 A	(P-8) PUMP	
--	--	--	--	--	33			4434 VA	1330 VA			34	--	--	--	--	--
--	--	--	--	--	35					4434 VA	1330 VA	36	--	--	--	--	--
	-SPARE-	20 A	3	--	37	0 VA	0 VA					38	--	3	70 A	-SPARE-	
--	--	--	--	--	39			0 VA	0 VA			40	--	--	--	--	--
--	--	--	--	--	41					0 VA	0 VA	42	--	--	--	--	--
	TOTAL CONNECTED LOAD PER PHASE (VA)					41985 VA		41985 VA		41985 VA							
	TOTAL CONNECTED CURRENT PER PHASE (AMPS)					152 A		152 A		152 A							

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	0 VA	0.00%	0 VA	Total Conn. Load:	125955 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	133645 VA
E	Equipment	0 VA	0.00%	0 VA	Total Conn. Current:	152 A
M	Motor	22447 VA	100.00%	22447 VA	Total Est. Demand Current:	161 A
K	Kitchen	0 VA	0.00%	0 VA		
O	Other	0 VA	0.00%	0 VA		

PANELBOARD SCHEDULE

PANEL NAME: 1LM1

MOUNTING: SURFACE | **ENCLOSURE:** NEMA 1 | **DOOR TYPE:** DOOR-IN-DOOR
VOLTAGE: 120/208 Wye | **PHASE:** 3 | **WIRES:** 4 | **Min. A.I.C. RATING:** 22K AIC
LOCATION: MAIN ELECTRICAL D138 | **MAIN TYPE:** MCB | **BUS RATING:** 200 A | **MCB RATING:** 175 A | **BUS MATERIAL:** ALUMINUM
FEED FROM: TM | **SPD:** CAT 'A' | **NEUTRAL RATING:** 100% | **ISOLATED GROUND:** NONE

BRANCH BREAKERS

KEYED NOTE	CIRCUIT DESCRIPTION	AMP	POLE	Load Type	CKT #	A		B		C		CKT #	Load Type	POLE	AMP	CIRCUIT DESCRIPTION	KEYED NOTE
	(EF-9) EXHAUST FAN	20 A	1	M	1	696 VA	240 VA					2	M	1	20 A	(CT-1C) C. TOWER FILTER	
	(EF-7) EXHAUST FAN	20 A	1	M	3			696 VA	180 VA			4	E	1	20 A	GAS METER	
	(EF-4) EXHAUST FAN	20 A	1	M	5					696 VA	500 VA	6	L	1	20 A	ELEV. CAB LIGHTS	
	(CU-2) SPLIT SYSTEM	25 A	2	M	7	1726 VA	1656 VA					8	M	1	20 A	(EF-15) EXHAUST FAN	
--	--	--	--	--	9			1726 VA	540 VA			10	R	1	20 A	ROOF OUTLETS	
	(CU-1) SPLIT SYSTEM	25 A	2	M	11					1726 VA	600 VA	12	R	1	20 A	RTU-3 LTG/RCPT	
--	--	--	--	--	13	1726 VA	1726 VA					14	M	2	25 A	(CU-5) SPLIT SYSTEM	
	RTU-5 LTG/RCPT	20 A	1	R	15			600 VA	1726 VA			16	--	--	--	--	--
	RTU-4 LTG/RCPT	20 A	1	R	17					600 VA	600 VA	18	O	1	20 A	VAV BOXES	
	BOILER CONTROL CIRCUITS	20 A	1	O	19	480 VA	696 VA					20	M	1	20 A	(EF-18) EXHAUST FAN	
	(DCP-1) RECIRC. PUMP	20 A	2	M	21			562 VA	300 VA			22	M	1	20 A	(FC-2) FAN COIL UNIT	
--	--	--	--	--	23					562 VA	696 VA	24	M	1	20 A	(CWT-1) CHEMICAL FEED	
	WATER HEATER (WH-1)	20 A	1	M	25	1800 VA	1726 VA					26	M	2	25 A	(CU-3) SPLIT SYSTEM	
	(WS-1) WATER SOFTENER	20 A	1	M	27			500 VA	1726 VA			28	--	--	--	--	--
	(GFS-1) GLYCOL FEED SYSTEM	20 A	1	M	29					696 VA	250 VA	30	M	2	20 A	(EUH-1) ELECTRIC UNIT HEATER	
	(DCP-2) RECIRC. PUMP	20 A	1	M	31	528 VA	250 VA					32	--	--	--	--	--
	WATER HEATER (WH-2)	20 A	1	M	33			1800 VA	0 VA			34	--	1	20 A	-SPARE-	
	(GFS-2) GLYCOL FEED SYSTEM	20 A	1	M	35					696 VA	0 VA	36	--	1	20 A	-SPARE-	
	(EF-13) EXHAUST FAN	20 A	1	M	37	696 VA	0 VA					38	--	1	20 A	-SPARE-	
	(FC-1) FAN COIL UNIT	20 A	1	M	39			300 VA	0 VA			40	--	1	20 A	-SPARE-	
	(EF-17) EXHAUST FAN	20 A	1	M	41					1176 VA	0 VA	42	--	1	20 A	-SPARE-	
	TOTAL CONNECTED LOAD PER PHASE (VA)					13947 VA		10657 VA		8798 VA							
	TOTAL CONNECTED CURRENT PER PHASE (AMPS)					119 A		91 A		73 A							

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
P	Panel	0 VA	0.00%	0 VA		
R	Receptacle	720 VA	100.00%	720 VA	Total Conn. Load:	33402 VA
L	Lighting	0 VA	0.00%	0 VA	25% OF LARGEST MOTOR:	
C	Continuous	0 VA	0.00%	0 VA	Total Est. Demand:	34096 VA
E	Equipment	1296 VA	100.00%	1296 VA	Total Conn. Current:	93 A
M	Motor	980 VA	100.00%	980 VA	Total Est. Demand Current:	95 A
K	Kitchen	0 VA	0.00%	0 VA		
O	Other	1392 VA	100.00%	1392 VA		

PANEL LEGEND

K1	K2	1HM1
1HM2	1LM1	

PANELBOARD SCHEDULE KEYED NOTE:

1. PROVIDE CLASS A GROUND FAULT INTERRUPTER TYPE CIRCUIT BREAKER.
2. PROVIDE ARC FAULT CIRCUIT INTERRUPTER TYPE CIRCUIT BREAKER
3. PROVIDE 30 MILLIAMPERE EQUIPMENT GROUND FAULT PROTECTOR TYE CIRCUIT BREAKER.
4. PROVIDE SHUNT TRIP CIRCUIT BREAKER WITH 120 V COIL.
5. PROVIDE HACR RATED CIRCUIT BREAKER.
6. PROVIDE HANDLE CLAMP FOR HOLDING CIRCUIT BREAKER IN THE "ON" OR "OFF" POSITION.
7. PROVIDE SWITCHING RATED CIRCUIT BREAKER.
8. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANELBOARD (WHERE PANEL IS LOCATED AS EXISTING) OF SAME MANUFACTURER AND A.I.C. RATING AS EXISTING.
9. PROVIDE INDIVIDUAL METERING OF BRANCH CIRCUITS TO COMPLY WITH IECC 2021 C405.12

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NIBLEY MIDDLE SCHOOL
3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK: | DATE: | DESCRIPTION:

PROJECT #: 123006
DRAWN BY: SB
CHECKED BY: AH
ISSUED: 04.26.2024

CONSTRUCTION DOCUMENTS

PANEL SCHEDULES
E-264

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SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
3. ALL CONDUITS THAT TERMINATE ABOVE THE CEILING SHALL TERMINATE WITH NYLON BUSHING.
4. CONTRACTOR SHALL COORDINATE ALL CEILING MOUNTED DEVICES WITH THE LIGHTING PLANS. RELOCATE DEVICES AS NECESSARY. RELOCATED DEVICES SHALL COMPLY WITH ALL NFPA SPACING REQUIREMENTS.

KEYED NOTES (#)

Y1 UNDER THE BASE BID, INCLUDE ALL WORK IN THIS AREA AS SHOWN ON THE PLANS. UNDER ALTERNATE #1, THIS AREA WILL BE REMOVED FROM THE PROJECT. PROVIDE A SEPARATE COST TO BE ISSUED AS A CREDIT FOR ALL WORK IN THIS AREA AS SHOWN ON THE PLANS.

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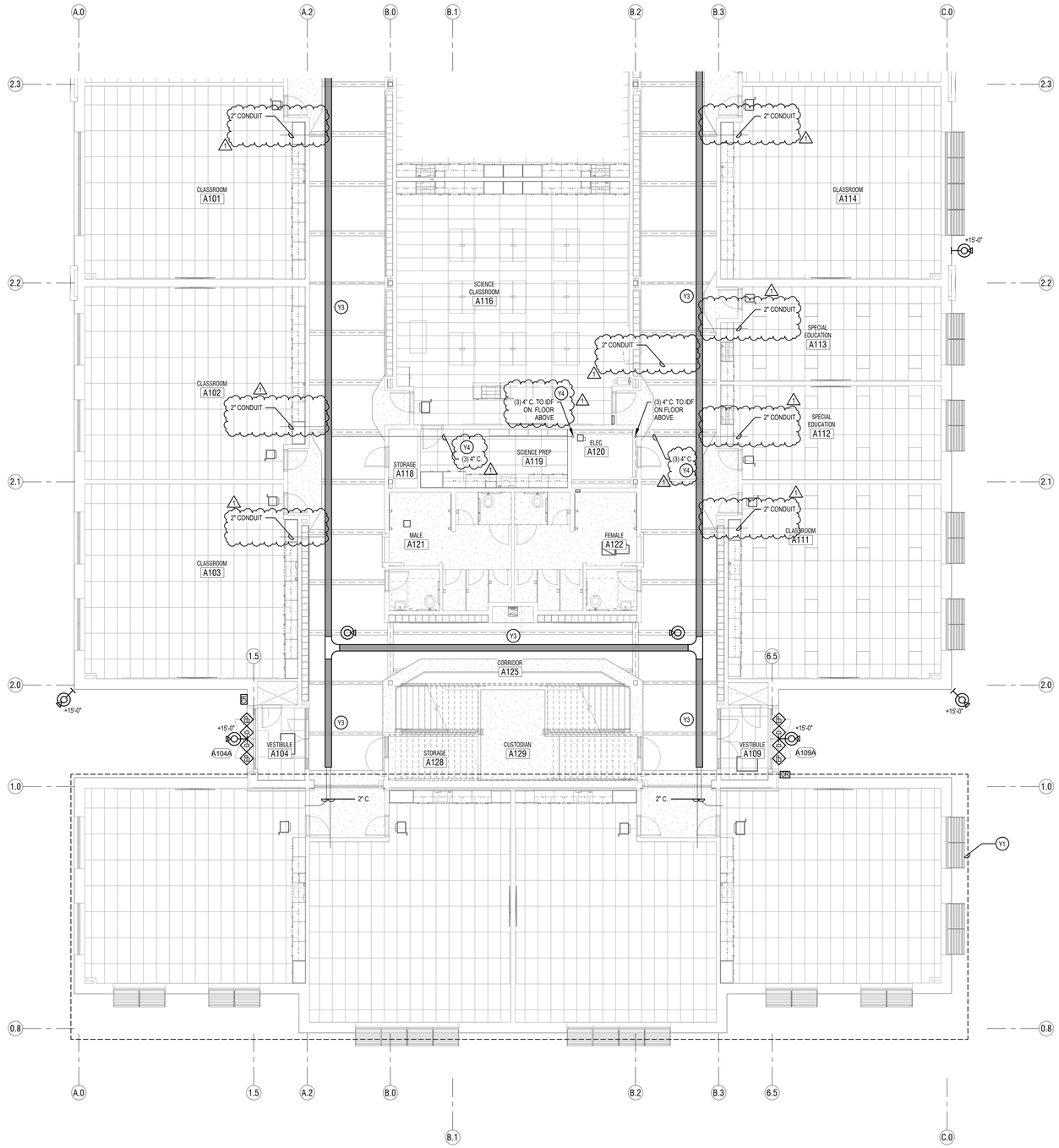
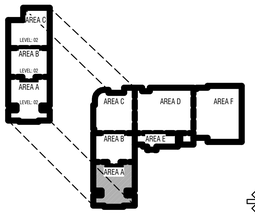
Y4 KEEP ONE CONDUIT EMPTY FOR FUTURE USE. PROVIDE PULL STRING AND LABEL.



1 LEVEL 1 FLOOR PLAN - AREA A - SYSTEMS
SCALE: 1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #:	123006
DRAWN BY:	Author
CHECKED BY:	Checker
ISSUED:	04.26.2024

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
04-26-2024

LEVEL 1 - AREA A - SYSTEMS

E-411

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SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
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4. CONTRACTOR SHALL COORDINATE ALL CEILING MOUNTED DEVICES WITH THE LIGHTING PLANS. RELOCATE DEVICES AS NECESSARY. RELOCATED DEVICES SHALL COMPLY WITH ALL NFPA SPACING REQUIREMENTS.

KEYED NOTES (#)

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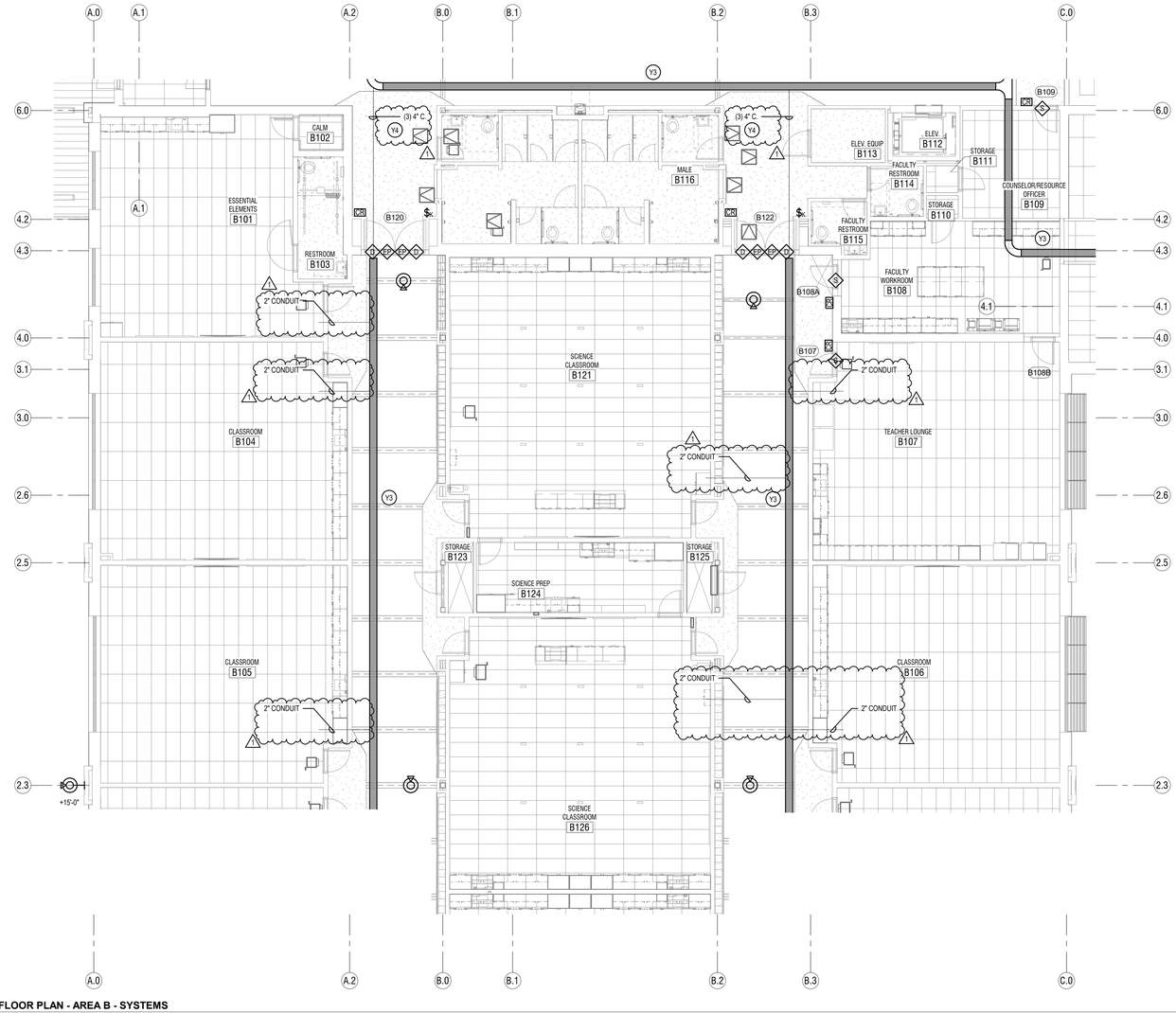
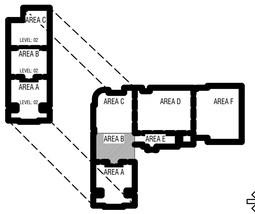


1 **LEVEL 1 FLOOR PLAN - AREA B - SYSTEMS**
SCALE: 1/8" = 1'-0"

KEY PLAN



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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

LEVEL 1 - AREA B - SYSTEMS

E-412

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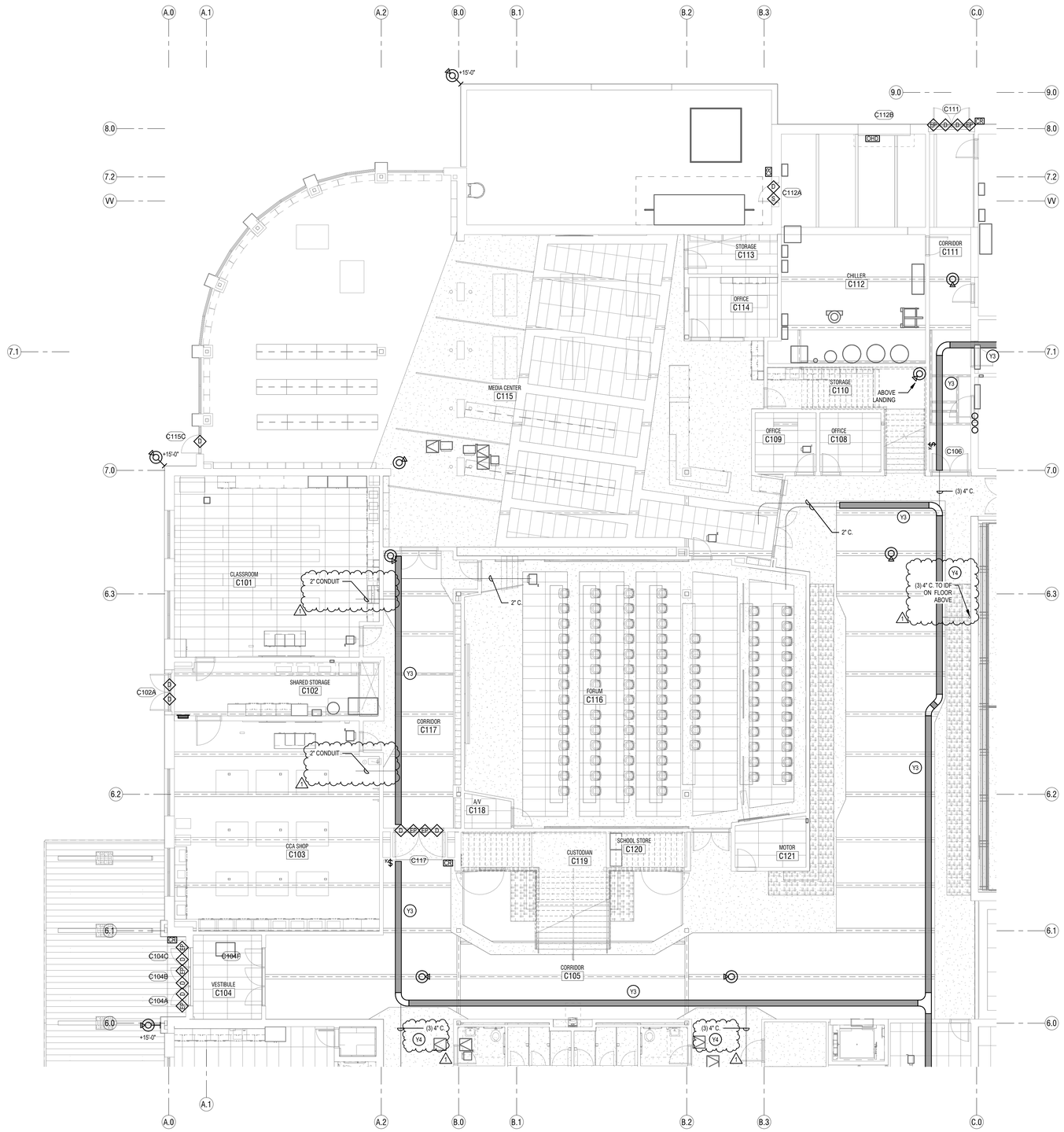

1 **LEVEL 1 FLOOR PLAN - AREA C - SYSTEMS**
SCALE: **1/8" = 1'-0"**

SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
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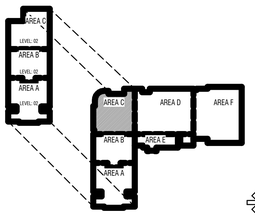
KEY PLAN



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CONSTRUCTION DOCUMENTS

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #:	123006
DRAWN BY:	Author
CHECKED BY:	Checker
ISSUED:	04.26.2024

REGISTERED PROFESSIONAL ENGINEER
05-2-2024
STATE OF UTAH

LEVEL 1 - AREA C - SYSTEMS

E-413

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5/15/2024 1:43:05 PM

SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
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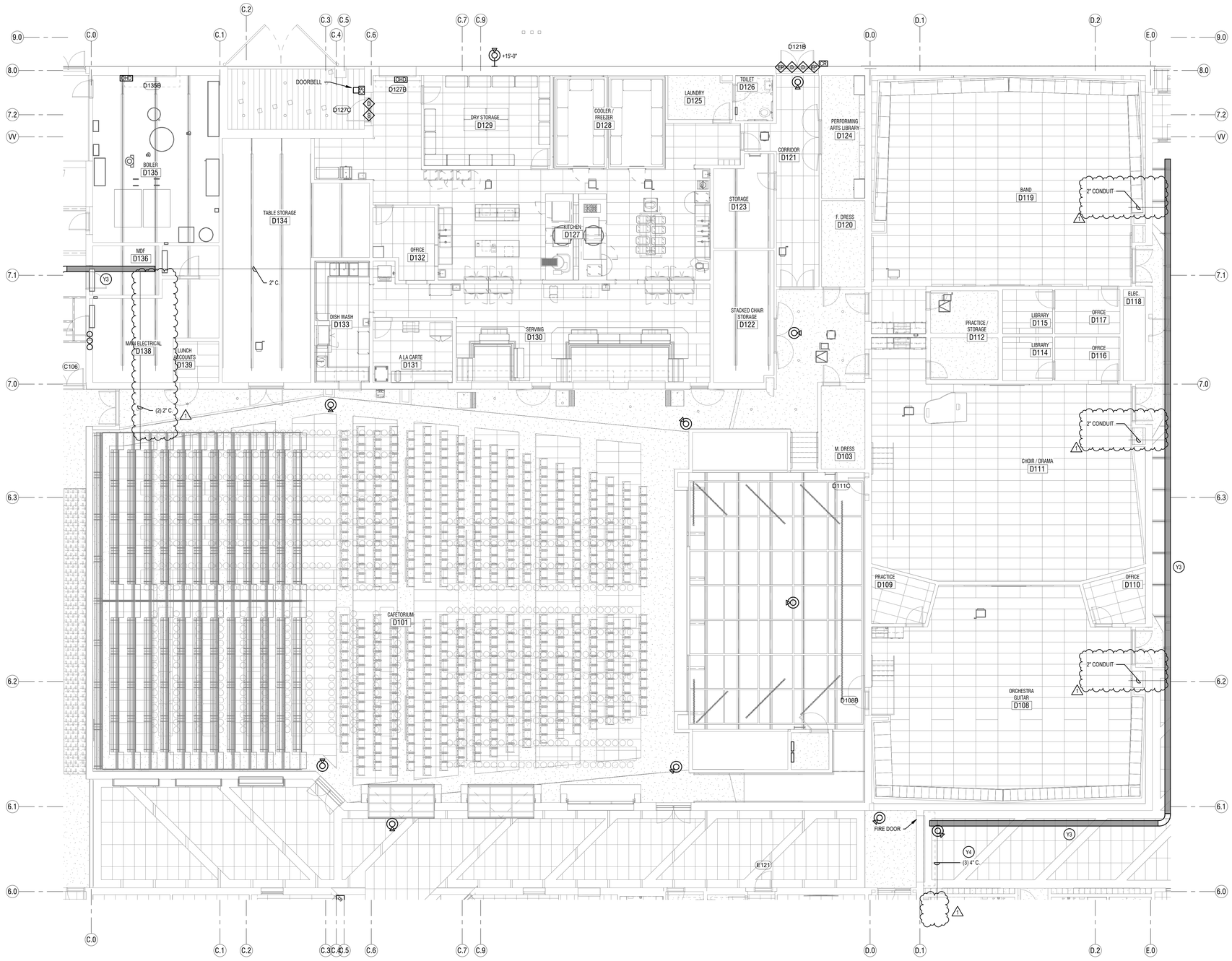

1 LEVEL 1 FLOOR PLAN - AREA D - SYSTEMS
SCALE: 1/8" = 1'-0"

KEYED NOTES

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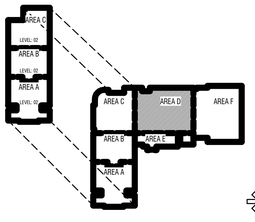
KEY PLAN



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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #:	123006
DRAWN BY:	Author
CHECKED BY:	Checker
ISSUED:	04.26.2024

LEVEL 1 - AREA D - SYSTEMS

E-414

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SYSTEMS GENERAL NOTES:

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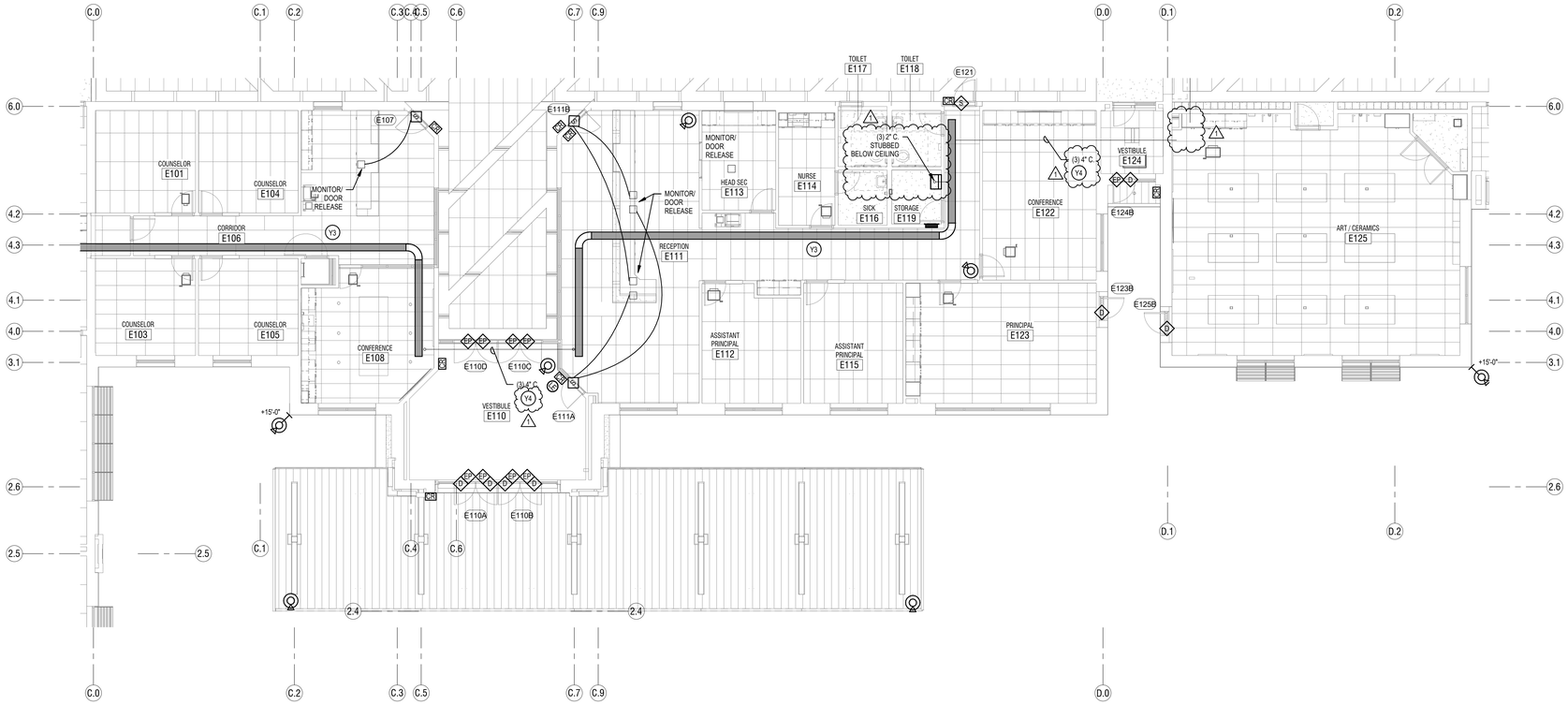
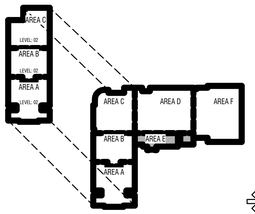


1 **LEVEL 1 FLOOR PLAN - AREA E - SYSTEMS**
SCALE: **1/8" = 1'-0"**

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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255 SOUTH 300 WEST
759 NORTH 400 WEST
LOGAN UT 84321
SALT LAKE CITY UT 84103

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER 377411 04-26-2024 STATE OF UTAH

LEVEL 1 - AREA E - SYSTEMS

E-415

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SYSTEMS GENERAL NOTES:

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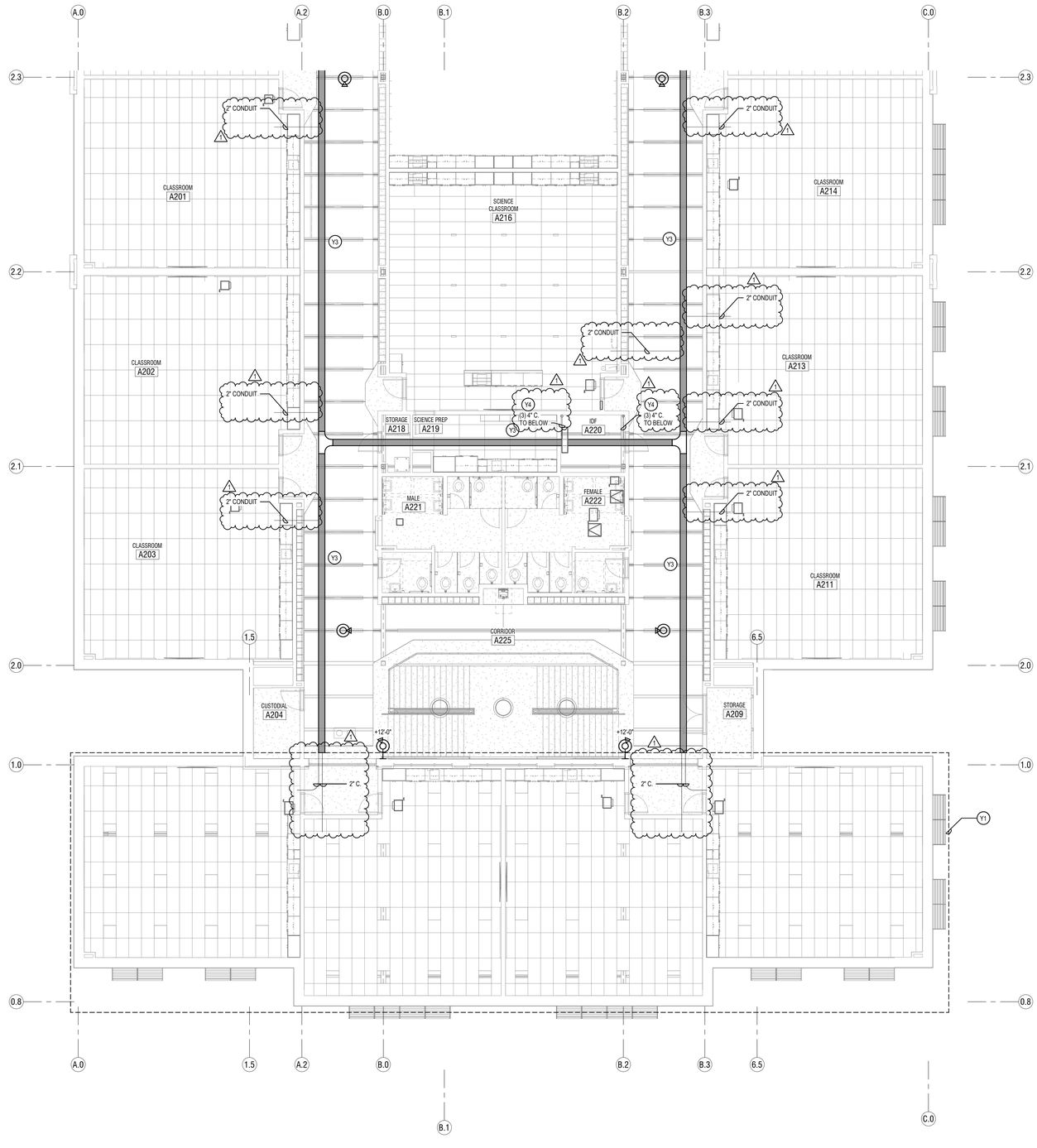
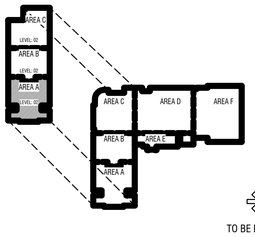


1 **LEVEL 2 FLOOR PLAN - AREA A - SYSTEMS**
SCALE: **1/8" = 1'-0"**

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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255 SOUTH 200 WEST LOGAN, UT 84321
759 NORTH 400 WEST SALT LAKE CITY, UT 84103

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
04-26-2024

LEVEL 2 - AREA A - SYSTEMS

E-421

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SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
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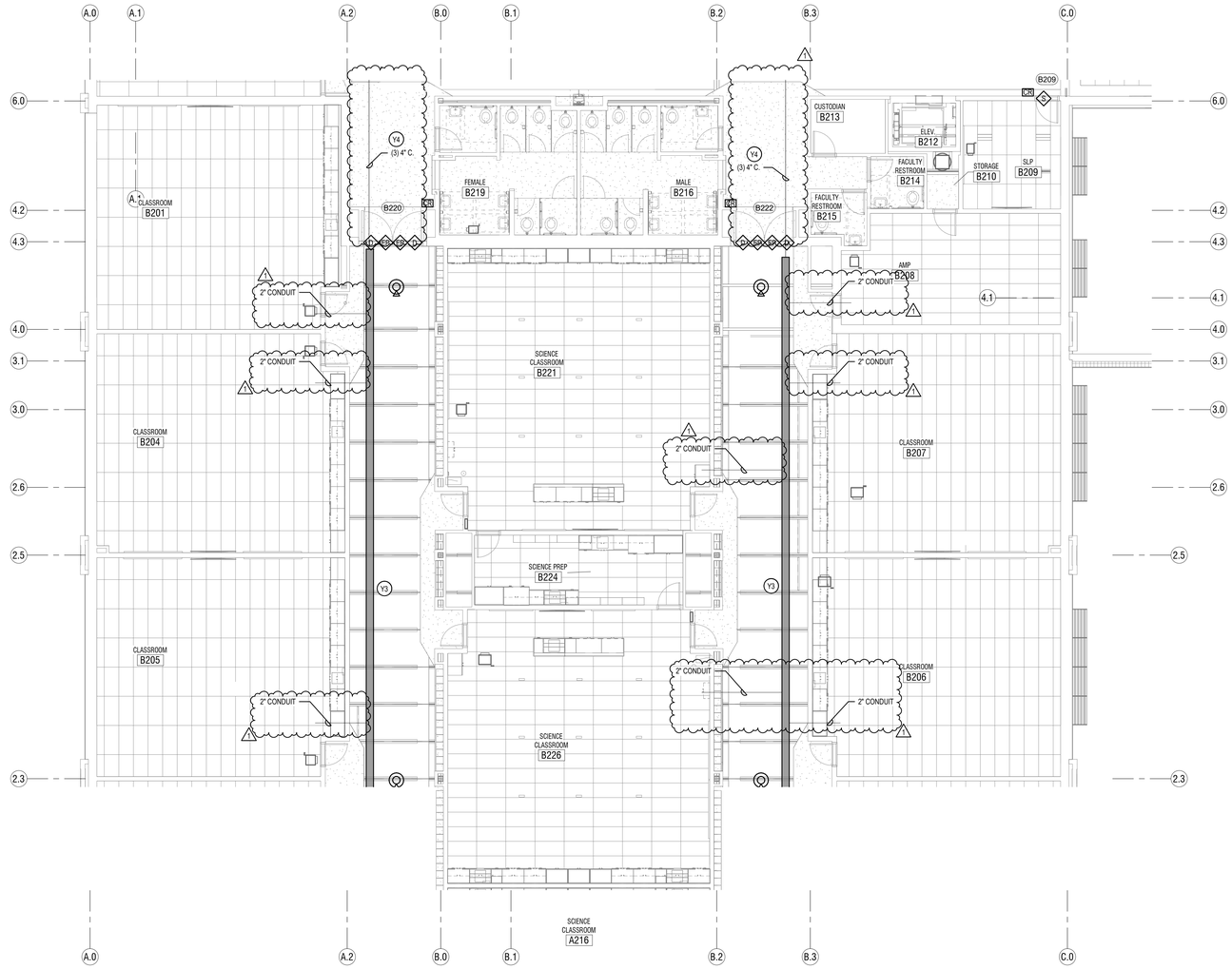
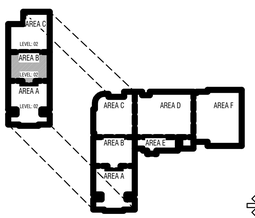
Y3 PROVIDE 12" WIDE BY 4" HIGH BASKET TYPE CABLE TRAY AS SHOWN. PROVIDE SOLID BOTTOM AND SOLID TOP COVER IN CABLE TRAYS IN ALL AREAS THAT ARE OPEN TO STRUCTURE. SEE DETAILS AND SPECIFICATIONS FOR MORE INFORMATION. MOUNT CABLE TRAY 4" ABOVE ACCESSIBLE CEILINGS. IN OPEN CEILINGS, MOUNT CABLE TRAY AT 10'-0" TO BOTTOM OF TRAY. IN LOCATIONS WHERE DUCTWORK IS IN THE WAY, LOWER CABLE TRAY SO THERE IS 4" OF CLEAR SPACE BETWEEN THE TOP OF THE CABLE TRAY AND THE DUCTWORK.

Y4 KEEP ONE CONDUIT EMPTY FOR FUTURE USE. PROVIDE PULL STRING AND LABEL.



1 LEVEL 2 FLOOR PLAN - AREA B - SYSTEMS
SCALE: 1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 200 WEST LOGAN, UT 84321
759 NORTH 400 WEST SALT LAKE CITY, UT 84103

ENVISION ELECTRICAL ENGINEERING
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www.envisionengineering.com

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

LEVEL 2 - AREA B - SYSTEMS

E-422

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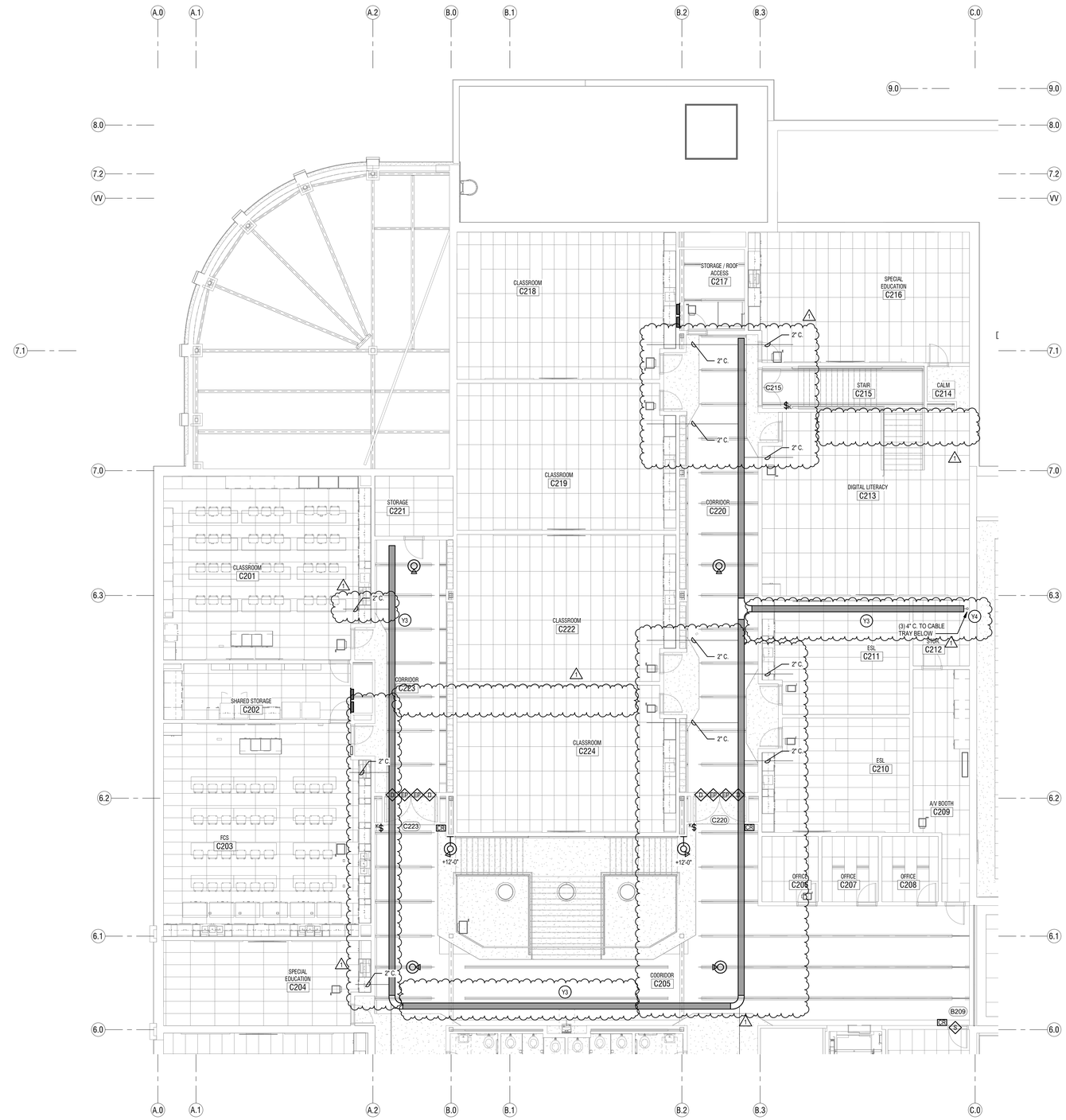
SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
3. ALL CONDUITS THAT TERMINATE ABOVE THE CEILING SHALL TERMINATE WITH NYLON BUSHING.
4. CONTRACTOR SHALL COORDINATE ALL CEILING MOUNTED DEVICES WITH THE LIGHTING PLANS. RELOCATE DEVICES AS NECESSARY. RELOCATED DEVICES SHALL COMPLY WITH ALL NFPA SPACING REQUIREMENTS.

KEYED NOTES (#)

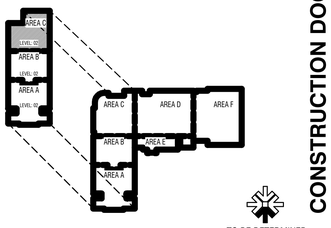
Y3 PROVIDE 12" WIDE BY 4" HIGH BASKET TYPE CABLE TRAY AS SHOWN. PROVIDE SOLID BOTTOM AND SOLID TOP COVER IN CABLE TRAYS IN ALL AREAS THAT ARE OPEN TO STRUCTURE. SEE DETAILS AND SPECIFICATIONS FOR MORE INFORMATION. MOUNT CABLE TRAY 4" ABOVE ACCESSIBLE CEILINGS. IN OPEN CEILINGS, MOUNT CABLE TRAY AT 10'-0" TO BOTTOM OF TRAY. IN LOCATIONS WHERE DUCTWORK IS IN THE WAY, LOWER CABLE TRAY SO THERE IS 4" OF CLEAR SPACE BETWEEN THE TOP OF THE CABLE TRAY AND THE DUCTWORK.

Y4 KEEP ONE CONDUIT EMPTY FOR FUTURE USE. PROVIDE PULL STRING AND LABEL.



1 LEVEL 2 FLOOR PLAN - AREA C - SYSTEMS
SCALE: 1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST SALT LAKE CITY UT 84101
759 NORTH 400 WEST LOGAN UT 84321

ENVISION ELECTRICAL ENGINEERING
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P (801) 534-1130
F (801) 534-1580
www.envisionengineering.com

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER 6-21-2024 STATE OF UTAH

LEVEL 2 - AREA C - SYSTEMS

E-423

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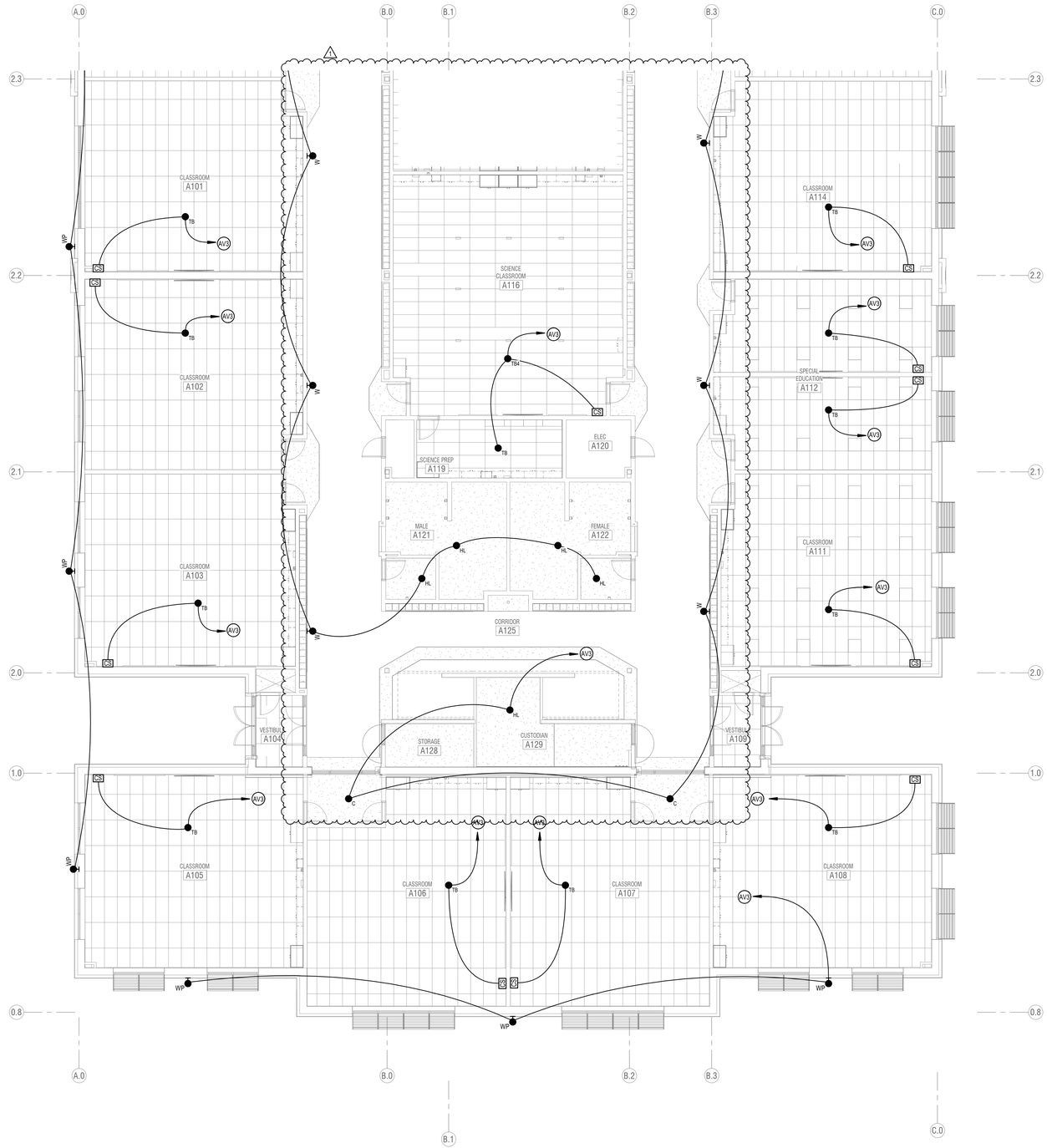


1 **LEVEL 1 FLOOR PLAN - AREA A - INTERCOM**
SCALE: **1/8" = 1'-0"**

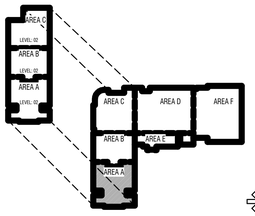
INTERCOM GENERAL NOTES:

1. RUN 1 CAT6 CABLE WITH CONDUIT FROM THE INTERCOM MAIN CONTROLLER TO THE DIGITAL TELEPHONE HEADEND EQUIPMENT. PROGRAM THE OWNER SUPPLIED TELEPHONE SYSTEM SO THAT A DIGITAL TELEPHONE CAN PERFORM THE CALL CLASSROOM INTERCOM SYSTEM & PAGING FUNCTIONS OF AN INTERCOM CONSOLE.
2. WIRE ALL VOLUME CONTROLS SO THEY CONTROL ONLY SINGLE SPEAKER.
3. INTERCOM SYSTEM RISER DIAGRAMS, LAYOUTS, AND EQUIPMENT LISTS ARE BASED ON SIGNAL FLOWS OF AUDIO ENHANCEMENT EQUIPMENT. IF APPROVED ALTERNATE EQUIPMENT IS CHOSEN, LAYOUTS AND DIAGRAMS MAY BE DIFFERENT THAN THOSE SHOWN ON DRAWINGS. ADDITIONAL BOXES, PLATES, CABLES, RACK SPACES, AND POWER OUTLETS MAY BE REQUIRED AS DETERMINED BY THE INTEGRATOR WHO CHOOSES THE ALTERNATE EQUIPMENT. ALTERNATE EQUIPMENT INTEGRATOR SHALL BE RESPONSIBLE TO COORDINATE ALL CHANGES REQUIRED BY ALTERNATE EQUIPMENT TO ENSURE TURN-KEY SYSTEM WITH SIMILAR FUNCTIONALITY TO THAT SPECIFIED.
4. PROGRAM AND INSTALL REQUIRED RELAY CABLES AND CONDUITS BETWEEN THE ACCESS CONTROL SYSTEM AND THE INTERCOM SYSTEM AS DESIRED BY OWNER. PROGRAM THE INTERCOM SYSTEM SO THAT THE SYSTEM MAY TRIGGER ACCESS CONTROL SYSTEM WHEN RELAYS ARE ENERGIZED OR DE-ENERGIZED.
5. AV SYSTEMS INTEGRATORS WHO WISH TO BID ON THIS PROJECT MUST BE TRAINED AND CERTIFIED BY CLASSROOM VOICE LIFT SYSTEM MANUFACTURER SPECIFIED FOR THIS PROJECT.
6. PROVIDE #6 AWG THHN WIRE W/ GREEN INSULATION FROM EACH AV EQUIPMENT CABINET TO THE NEAREST MAIN BUILDING GROUND. CONNECT GROUNDING WIRE TO BARE METAL ON EQUIPMENT CABINET.
7. COLORS OF ALL EXPOSED INTERCOM DEVICES INCLUDING INPUT & OUTPUT PLATES, VOLUME CONTROLS, SWITCHES, SPEAKERS, AND SPEAKER ENCLOSURES SHALL BE REVIEWED BY OWNER PRIOR TO ORDERING.
8. CLASSROOM AMPLIFIERS MAY BE LOCATED ON WALL, CEILINGS, OR IN MILLWORK CABINETS. REFER TO PLANS FOR SPECIFIC DEVICE LOCATIONS.
9. ~~INSTALL CLOCKS CENTERED 6" ABOVE TOP OF DOOR FRAME.~~
10. CONFIGURE INTERCOM AND CSAS SYSTEMS TO PROVIDE EMERGENCY SIGNALING FROM CSAS TO INTERCOM.

KEYED NOTES

1 AV3 TO DATA RACK IN NEAREST MDF/IDF CLOSET.

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST SALT LAKE CITY UT 84101
759 NORTH 400 WEST LOGAN UT 84321

ENVISION ENGINEERING
24 E. MORRIS AVE. SUITE 200
SALT LAKE CITY, UT 84115
P (801) 534-1130
F (801) 534-1169
www.envisioneng.com

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER 772441 04-26-2024 STATE OF UTAH

LEVEL 1 - AREA A - INTERCOM

E-611

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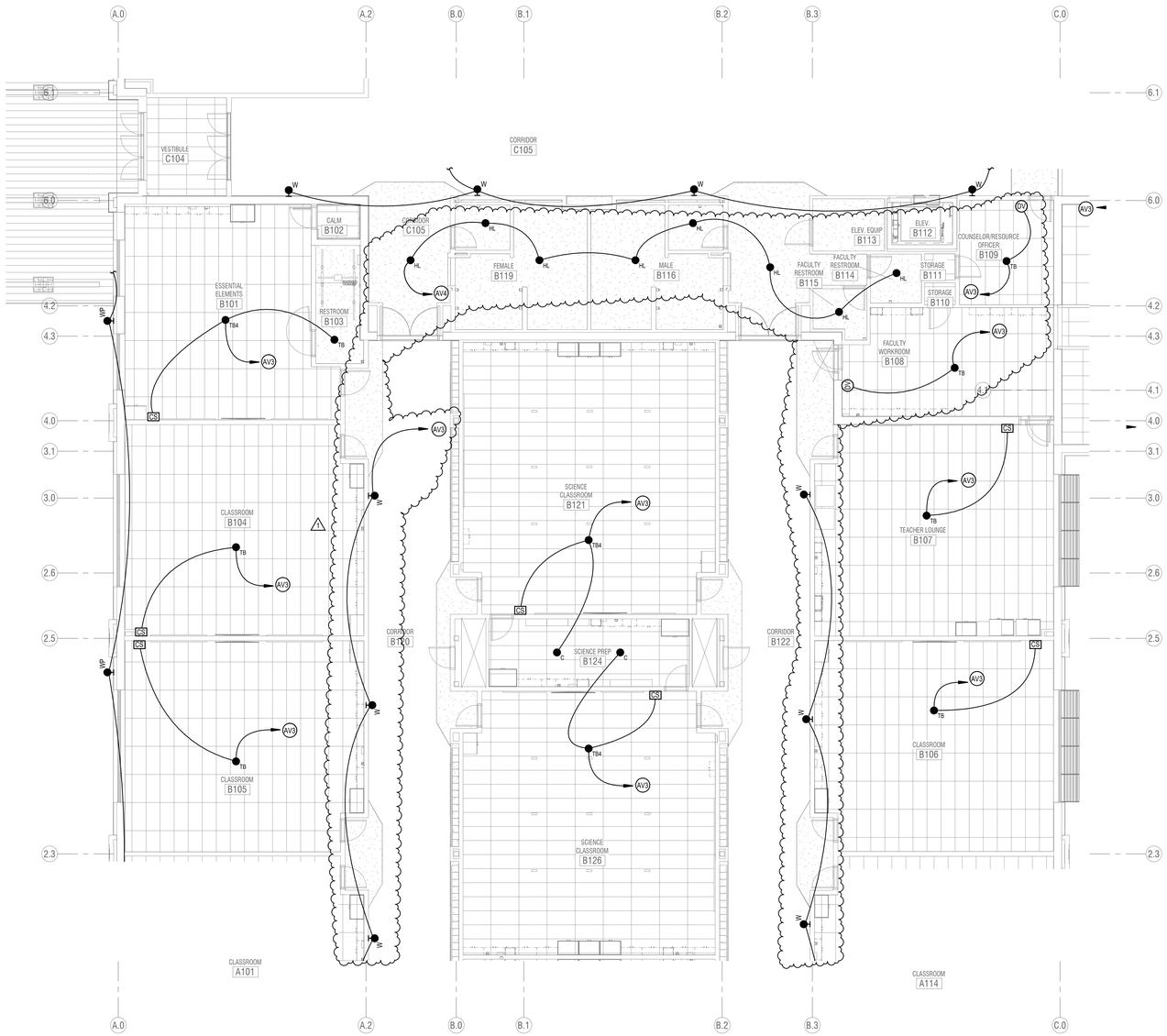


1 **LEVEL 1 FLOOR PLAN - AREA B - INTERCOM**
SCALE: **1/8" = 1'-0"**

INTERCOM GENERAL NOTES:

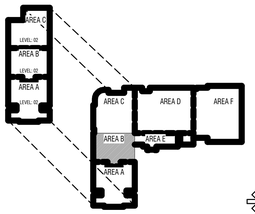
1. RUN 1 CAT6 CABLE WITH CONDUIT FROM THE INTERCOM MAIN CONTROLLER TO THE DIGITAL TELEPHONE HEADEND EQUIPMENT. PROGRAM THE OWNER SUPPLIED TELEPHONE SYSTEM SO THAT A DIGITAL TELEPHONE CAN PERFORM THE CALL CLASSROOM INTERCOM SYSTEM & PAGING FUNCTIONS OF AN INTERCOM CONSOLE.
2. WIRE ALL VOLUME CONTROLS SO THEY CONTROL ONLY SINGLE SPEAKER.
3. INTERCOM SYSTEM RISER DIAGRAMS, LAYOUTS, AND EQUIPMENT LISTS ARE BASED ON SIGNAL FLOWS OF AUDIO ENHANCEMENT EQUIPMENT. IF APPROVED ALTERNATE EQUIPMENT IS CHOSEN, LAYOUTS AND DIAGRAMS MAY BE DIFFERENT THAN THOSE SHOWN ON DRAWINGS. ADDITIONAL BOXES, PLATES, CABLES, RACK SPACES, AND POWER OUTLETS MAY BE REQUIRED AS DETERMINED BY THE INTEGRATOR WHO CHOOSES THE ALTERNATE EQUIPMENT. ALTERNATE EQUIPMENT INTEGRATOR SHALL BE RESPONSIBLE TO COORDINATE ALL CHANGES REQUIRED BY ALTERNATE EQUIPMENT TO ENSURE TURN-KEY SYSTEM WITH SIMILAR FUNCTIONALITY TO THAT SPECIFIED.
4. PROGRAM AND INSTALL REQUIRED RELAY CABLES AND CONDUITS BETWEEN THE ACCESS CONTROL SYSTEM AND THE INTERCOM SYSTEM AS DESIRED BY OWNER. PROGRAM THE INTERCOM SYSTEM SO THAT THE SYSTEM MAY TRIGGER ACCESS CONTROL SYSTEM WHEN RELAYS ARE ENERGIZED OR DE-ENERGIZED.
5. AV SYSTEMS INTEGRATORS WHO WISH TO BID ON THIS PROJECT MUST BE TRAINED AND CERTIFIED BY CLASSROOM VOICE LIFT SYSTEM MANUFACTURER SPECIFIED FOR THIS PROJECT.
6. PROVIDE #6 AWG THHN WIRE W/ GREEN INSULATION FROM EACH AV EQUIPMENT CABINET TO THE NEAREST MAIN BUILDING GROUND. CONNECT GROUNDING WIRE TO BARE METAL ON EQUIPMENT CABINET.
7. COLORS OF ALL EXPOSED INTERCOM DEVICES INCLUDING INPUT & OUTPUT PLATES, VOLUME CONTROLS, SWITCHES, SPEAKERS, AND SPEAKER ENCLOSURES SHALL BE REVIEWED BY OWNER PRIOR TO ORDERING.
8. CLASSROOM AMPLIFIERS MAY BE LOCATED ON WALL, CEILINGS, OR IN MILLWORK CABINETS. REFER TO PLANS FOR SPECIFIC DEVICE LOCATIONS.
9. INSTALL CLOCKS CENTERED, 6" ABOVE TOP OF DOOR FRAME.
10. CONFIGURE INTERCOM AND CSAS SYSTEMS TO PROVIDE EMERGENCY SIGNALING FROM CSAS TO INTERCOM.

KEYED NOTES

AV3 TO DATA RACK IN NEAREST MDF/IDF CLOSET.

AV4 TO INTERCOM PAGING AMPLIFIER IN DATA RACK #D.

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
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LOGAN UT 84321
SALT LAKE CITY UT 84103

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www.envisionengineering.com

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #:	123006
DRAWN BY:	Author
CHECKED BY:	Checker
ISSUED:	04.26.2024

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
12411
04-26-2024

LEVEL 1 - AREA B - INTERCOM

E-612

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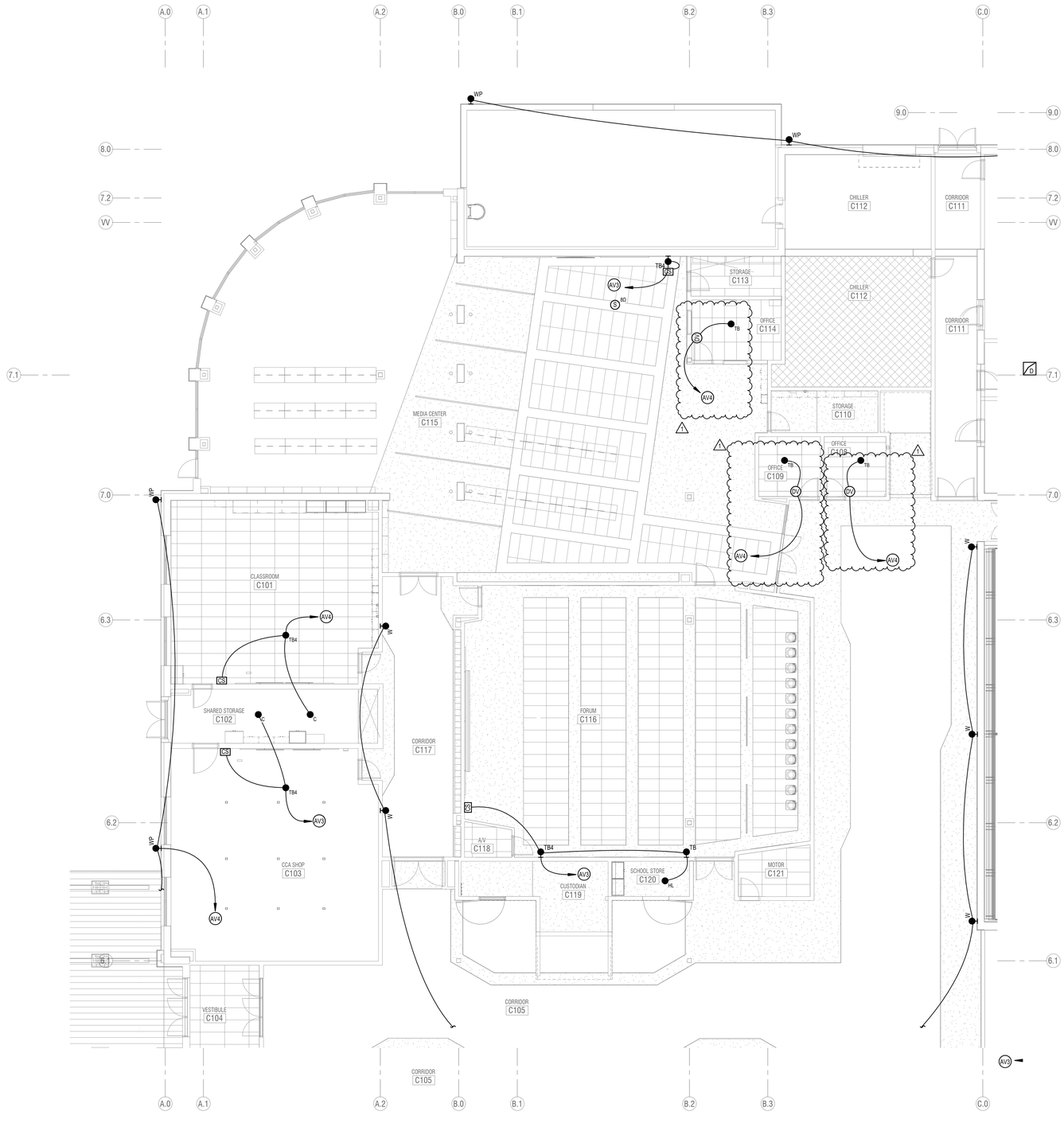

1 **LEVEL 1 FLOOR PLAN - AREA C - INTERCOM**
SCALE: **1/8" = 1'-0"**

INTERCOM GENERAL NOTES:

1. RUN 1 CAT6 CABLE WITH CONDUIT FROM THE INTERCOM MAIN CONTROLLER TO THE DIGITAL TELEPHONE HEADEND EQUIPMENT. PROGRAM THE OWNER SUPPLIED TELEPHONE SYSTEM SO THAT A DIGITAL TELEPHONE CAN PERFORM THE CALL CLASSROOM INTERCOM SYSTEM & PAGING FUNCTIONS OF AN INTERCOM CONSOLE.
2. WIRE ALL VOLUME CONTROLS SO THEY CONTROL ONLY SINGLE SPEAKER.
3. INTERCOM SYSTEM RISER DIAGRAMS, LAYOUTS, AND EQUIPMENT LISTS ARE BASED ON SIGNAL FLOWS OF AUDIO ENHANCEMENT EQUIPMENT. IF APPROVED ALTERNATE EQUIPMENT IS CHOSEN, LAYOUTS AND DIAGRAMS MAY BE DIFFERENT THAN THOSE SHOWN ON DRAWINGS. ADDITIONAL BOXES, PLATES, CABLES, RACK SPACES, AND POWER OUTLETS MAY BE REQUIRED AS DETERMINED BY THE INTEGRATOR WHO CHOOSES THE ALTERNATE EQUIPMENT. ALTERNATE EQUIPMENT INTEGRATOR SHALL BE RESPONSIBLE TO COORDINATE ALL CHANGES REQUIRED BY ALTERNATE EQUIPMENT TO ENSURE TURN-KEY SYSTEM WITH SIMILAR FUNCTIONALITY TO THAT SPECIFIED.
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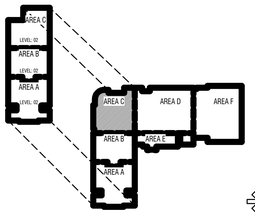
5. AV SYSTEMS INTEGRATORS WHO WISH TO BID ON THIS PROJECT MUST BE TRAINED AND CERTIFIED BY CLASSROOM VOICE LIFT SYSTEM MANUFACTURER SPECIFIED FOR THIS PROJECT.
6. PROVIDE #6 AWG THHN WIRE W/ GREEN INSULATION FROM EACH AV EQUIPMENT CABINET TO THE NEAREST MAIN BUILDING GROUND. CONNECT GROUNDING WIRE TO BARE METAL ON EQUIPMENT CABINET.
7. COLORS OF ALL EXPOSED INTERCOM DEVICES INCLUDING INPUT & OUTPUT PLATES, VOLUME CONTROLS, SWITCHES, SPEAKERS, AND SPEAKER ENCLOSURES SHALL BE REVIEWED BY OWNER PRIOR TO ORDERING.
8. CLASSROOM AMPLIFIERS MAY BE LOCATED ON WALL, CEILINGS, OR IN MILLWORK CABINETS. REFER TO PLANS FOR SPECIFIC DEVICE LOCATIONS.
9. INSTALL CLOCKS CENTERED, 6" ABOVE TOP OF DOOR FRAME.
10. CONFIGURE INTERCOM AND CSAS SYSTEMS TO PROVIDE EMERGENCY SIGNALING FROM CSAS TO INTERCOM.

KEYED NOTES (#)

AV3 TO DATA RACK IN NEAREST MDF/IDF CLOSET.

AV4 TO INTERCOM PAGING AMPLIFIER IN DATA RACK #D.

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
750 NORTH 400 WEST
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SALT LAKE CITY UT 84103

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER 277411 04-26-2024 STATE OF UTAH

LEVEL 1 - AREA C - INTERCOM

E-613

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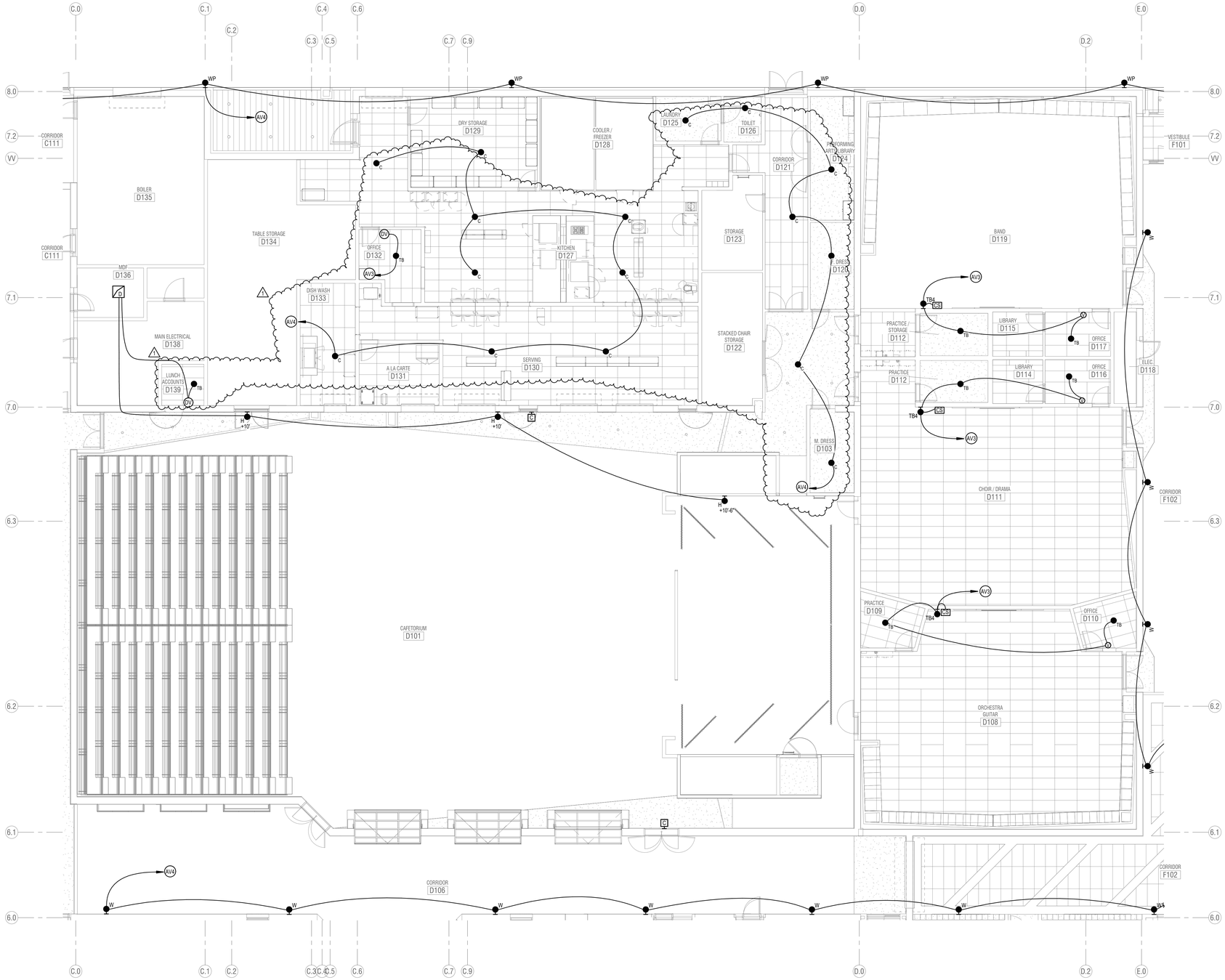

1 **LEVEL 1 FLOOR PLAN - AREA D - INTERCOM**
SCALE: 1/8" = 1'-0"

INTERCOM GENERAL NOTES:

1. RUN 1 CAT6 CABLE WITH CONDUIT FROM THE INTERCOM MAIN CONTROLLER TO THE DIGITAL TELEPHONE HEADEND EQUIPMENT. PROGRAM THE OWNER SUPPLIED TELEPHONE SYSTEM SO THAT A DIGITAL TELEPHONE CAN PERFORM THE CALL CLASSROOM INTERCOM SYSTEM & PAGING FUNCTIONS OF AN INTERCOM CONSOLE.
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5. AV SYSTEMS INTEGRATORS WHO WISH TO BID ON THIS PROJECT MUST BE TRAINED AND CERTIFIED BY CLASSROOM VOICE LIFT SYSTEM MANUFACTURER SPECIFIED FOR THIS PROJECT.
6. PROVIDE #6 AWG THHN WIRE W/ GREEN INSULATION FROM EACH AV EQUIPMENT CABINET TO THE NEAREST MAIN BUILDING GROUND. CONNECT GROUNDING WIRE TO BARE METAL ON EQUIPMENT CABINET.
7. COLORS OF ALL EXPOSED INTERCOM DEVICES INCLUDING INPUT & OUTPUT PLATES, VOLUME CONTROLS, SWITCHES, SPEAKERS, AND SPEAKER ENCLOSURES SHALL BE REVIEWED BY OWNER PRIOR TO ORDERING.
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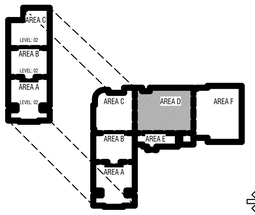
9. INSTALL CLOCKS CENTERED, 6" ABOVE TOP OF DOOR FRAME.
10. CONFIGURE INTERCOM AND CSAS SYSTEMS TO PROVIDE EMERGENCY SIGNALING FROM CSAS TO INTERCOM.

KEYED NOTES (#)

AV3 TO DATA RACK IN NEAREST MDF/IDF CLOSET.

AV4 TO INTERCOM PAGING AMPLIFIER IN DATA RACK #D.

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
750 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

ENVISION
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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #:	123006
DRAWN BY:	Author
CHECKED BY:	Checker
ISSUED:	04.26.2024

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
12-31-2024

LEVEL 1 - AREA D - INTERCOM

E-614

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INTERCOM GENERAL NOTES:

1. RUN 1 CAT6 CABLE WITH CONDUIT FROM THE INTERCOM MAIN CONTROLLER TO THE DIGITAL TELEPHONE HEADEND EQUIPMENT. PROGRAM THE OWNER SUPPLIED TELEPHONE SYSTEM SO THAT A DIGITAL TELEPHONE CAN PERFORM THE CALL CLASSROOM INTERCOM SYSTEM & PAGING FUNCTIONS OF AN INTERCOM CONSOLE.
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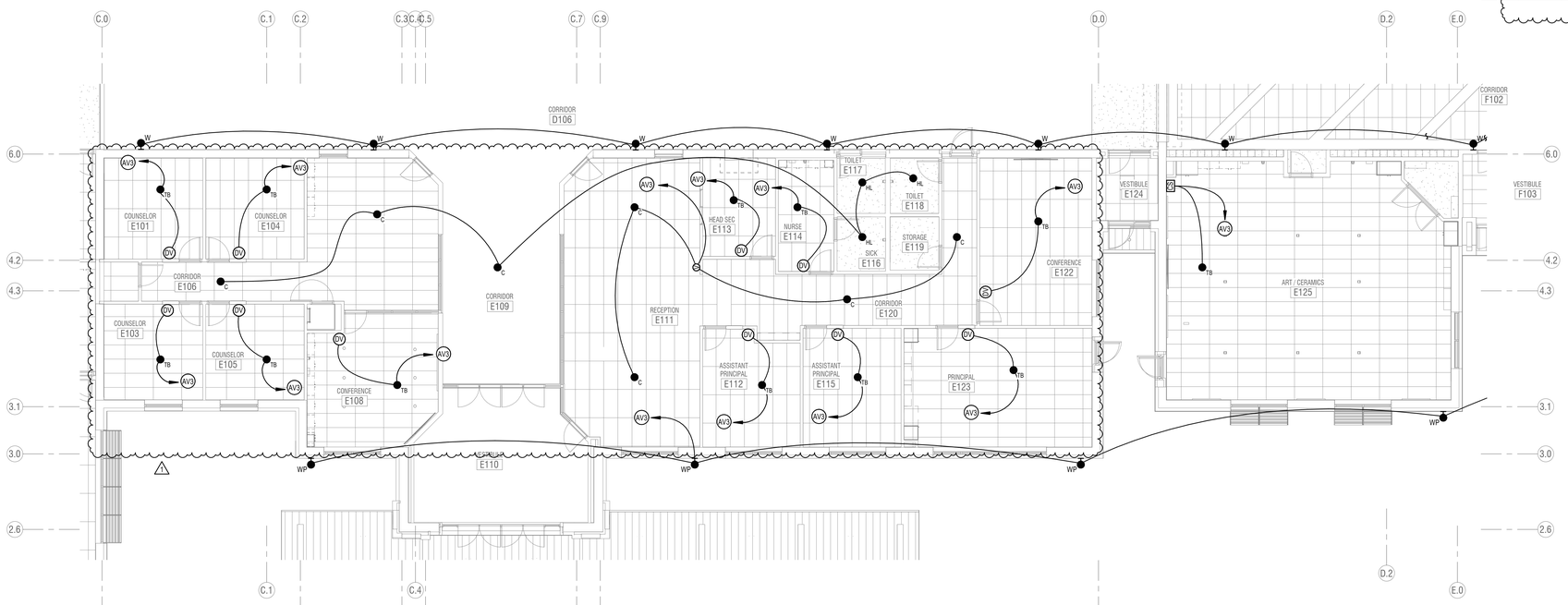
9. INSTALL CLOCKS CENTERED, 6" ABOVE TOP OF DOOR FRAME.
10. CONFIGURE INTERCOM AND CSAS SYSTEMS TO PROVIDE EMERGENCY SIGNALING FROM CSAS TO INTERCOM.

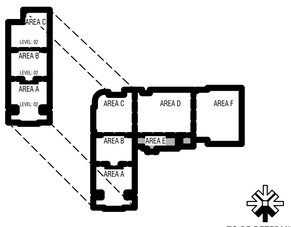
KEYED NOTES (#)

1. AV3 - TO DATA RACK IN NEAREST MDF/IDF CHOSET.



1 **LEVEL 1 FLOOR PLAN - AREA E - INTERCOM**
SCALE: 1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 200 WEST
750 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

ENVISION
ELECTRICAL ENGINEERING
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SALT LAKE CITY, UT 84115
P: (801) 534-1130
F: (801) 534-1169
www.envisioneng.com

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #:	123006
DRAWN BY:	Author
CHECKED BY:	Checker
ISSUED:	04.26.2024

REGISTERED PROFESSIONAL ENGINEER
05-15-2024
STATE OF UTAH

LEVEL 1 - AREA E - INTERCOM

E-615

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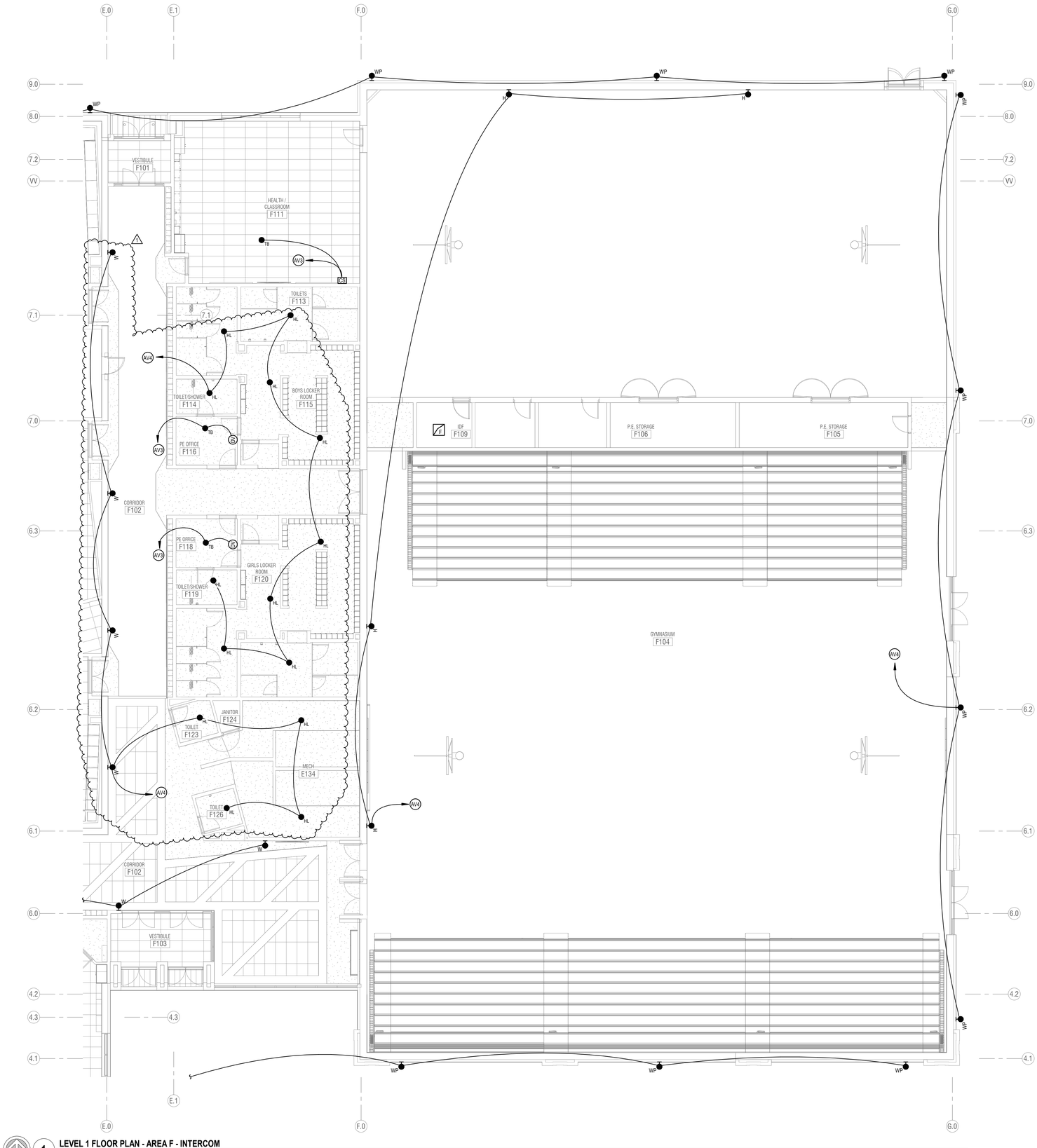
5/15/2024 1:43:41 PM



1 LEVEL 1 FLOOR PLAN - AREA F - INTERCOM
SCALE: NTS

INTERCOM GENERAL NOTES:

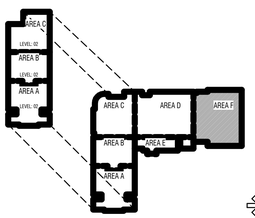
1. RUN 1 CAT6 CABLE WITH CONDUIT FROM THE INTERCOM MAIN CONTROLLER TO THE DIGITAL TELEPHONE HEADEND EQUIPMENT. PROGRAM THE OWNER SUPPLIED TELEPHONE SYSTEM SO THAT A DIGITAL TELEPHONE CAN PERFORM THE CALL CLASSROOM INTERCOM SYSTEM & PAGING FUNCTIONS OF AN INTERCOM CONSOLE.
2. WIRE ALL VOLUME CONTROLS SO THEY CONTROL ONLY SINGLE SPEAKER.
3. INTERCOM SYSTEM RISER DIAGRAMS, LAYOUTS, AND EQUIPMENT LISTS ARE BASED ON SIGNAL FLOWS OF AUDIO ENHANCEMENT EQUIPMENT. IF APPROVED ALTERNATE EQUIPMENT IS CHOSEN, LAYOUTS AND DIAGRAMS MAY BE DIFFERENT THAN THOSE SHOWN ON DRAWINGS. ADDITIONAL BOXES, PLATES, CABLES, RACK SPACES, AND POWER OUTLETS MAY BE REQUIRED AS DETERMINED BY THE INTEGRATOR WHO CHOOSES THE ALTERNATE EQUIPMENT. ALTERNATE EQUIPMENT INTEGRATOR SHALL BE RESPONSIBLE TO COORDINATE ALL CHANGES REQUIRED BY ALTERNATE EQUIPMENT TO ENSURE TURN-KEY SYSTEM WITH SIMILAR FUNCTIONALITY TO THAT SPECIFIED.
4. PROGRAM AND INSTALL REQUIRED RELAY CABLES AND CONDUITS BETWEEN THE ACCESS CONTROL SYSTEM AND THE INTERCOM SYSTEM AS DESIRED BY OWNER. PROGRAM THE INTERCOM SYSTEM SO THAT THE SYSTEM MAY TRIGGER ACCESS CONTROL SYSTEM WHEN RELAYS ARE ENERGIZED OR DE-ENERGIZED.
5. AV SYSTEMS INTEGRATORS WHO WISH TO BID ON THIS PROJECT MUST BE TRAINED AND CERTIFIED BY CLASSROOM VOICE LIFT SYSTEM MANUFACTURER SPECIFIED FOR THIS PROJECT.
6. PROVIDE #6 AWG THHN WIRE W/ GREEN INSULATION FROM EACH AV EQUIPMENT CABINET TO THE NEAREST MAIN BUILDING GROUND. CONNECT GROUNDING WIRE TO BARE METAL ON EQUIPMENT CABINET.
7. COLORS OF ALL EXPOSED INTERCOM DEVICES INCLUDING INPUT & OUTPUT PLATES, VOLUME CONTROLS, SWITCHES, SPEAKERS, AND SPEAKER ENCLOSURES SHALL BE REVIEWED BY OWNER PRIOR TO ORDERING.
8. CLASSROOM AMPLIFIERS MAY BE LOCATED ON WALL, CEILINGS, OR IN MILLWORK CABINETS. REFER TO PLANS FOR SPECIFIC DEVICE LOCATIONS.
9. INSTALL CLOCKS CENTERED, 6" ABOVE TOP OF DOOR FRAME.
10. CONFIGURE INTERCOM AND CSAS SYSTEMS TO PROVIDE EMERGENCY SIGNALING FROM CSAS TO INTERCOM.

KEYED NOTES (#)

AV3 TO DATA RACK IN NEAREST MDF/IDF CLOSET.

AV4 TO INTERCOM PAGING AMPLIFIER IN DATA RACK #D.

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
759 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

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P: (801) 534-1130
F: (801) 534-0890
www.envisionengineering.com

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #:	123006
DRAWN BY:	Author
CHECKED BY:	Checker
ISSUED:	04.26.2024

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
04-26-2024

LEVEL 1 - AREA F - INTERCOM

E-616

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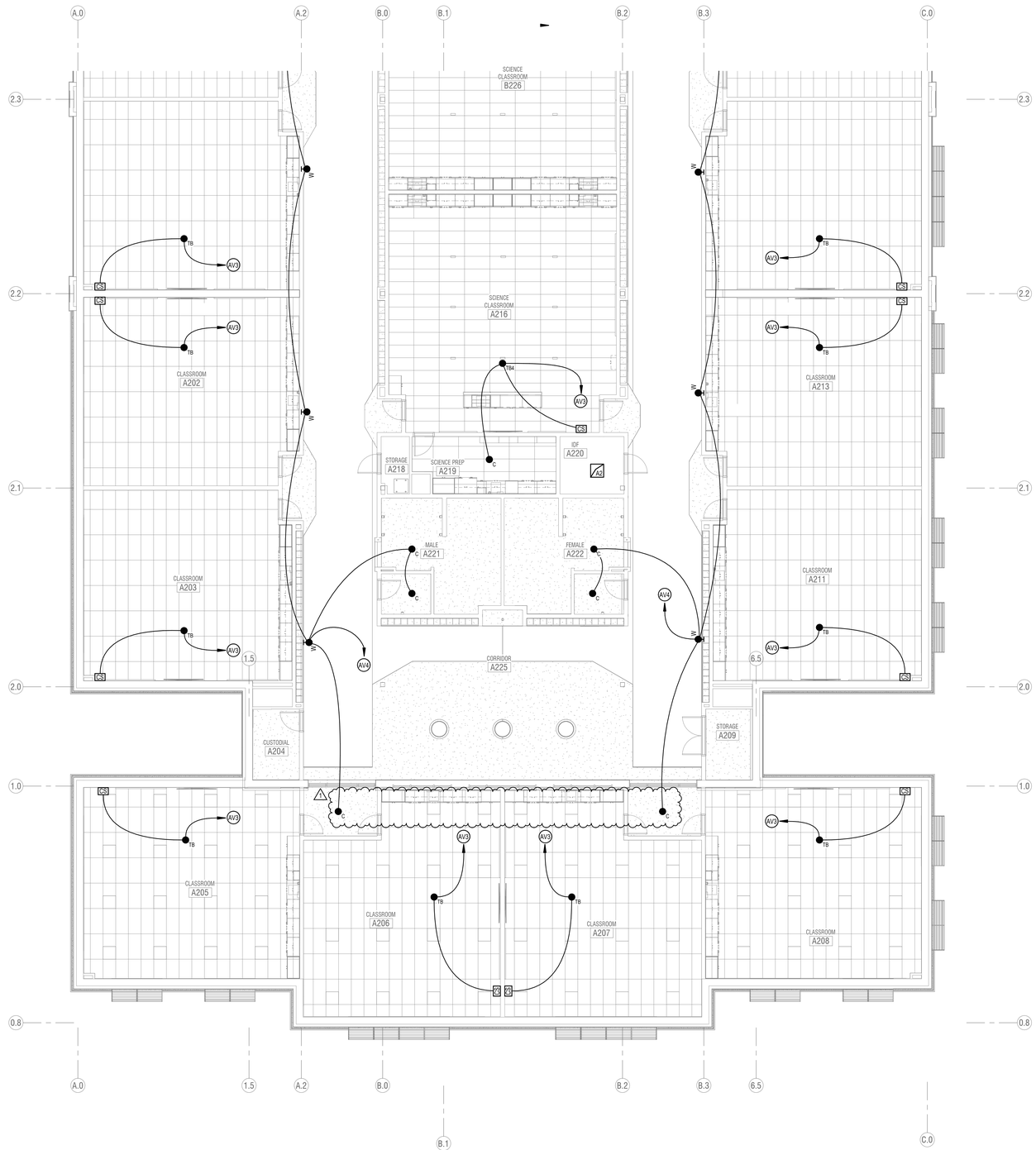

1 **LEVEL 2 FLOOR PLAN - AREA A - INTERCOM**
SCALE: **1/8" = 1'-0"**

INTERCOM GENERAL NOTES:

1. RUN 1 CAT6 CABLE WITH CONDUIT FROM THE INTERCOM MAIN CONTROLLER TO THE DIGITAL TELEPHONE HEADEND EQUIPMENT. PROGRAM THE OWNER SUPPLIED TELEPHONE SYSTEM SO THAT A DIGITAL TELEPHONE CAN PERFORM THE CALL CLASSROOM INTERCOM SYSTEM & PAGING FUNCTIONS OF AN INTERCOM CONSOLE.
2. WIRE ALL VOLUME CONTROLS SO THEY CONTROL ONLY SINGLE SPEAKER.
3. INTERCOM SYSTEM RISER DIAGRAMS, LAYOUTS, AND EQUIPMENT LISTS ARE BASED ON SIGNAL FLOWS OF AUDIO ENHANCEMENT EQUIPMENT. IF APPROVED ALTERNATE EQUIPMENT IS CHOSEN, LAYOUTS AND DIAGRAMS MAY BE DIFFERENT THAN THOSE SHOWN ON DRAWINGS. ADDITIONAL BOXES, PLATES, CABLES, RACK SPACES, AND POWER OUTLETS MAY BE REQUIRED AS DETERMINED BY THE INTEGRATOR WHO CHOOSES THE ALTERNATE EQUIPMENT. ALTERNATE EQUIPMENT INTEGRATOR SHALL BE RESPONSIBLE TO COORDINATE ALL CHANGES REQUIRED BY ALTERNATE EQUIPMENT TO ENSURE TURN-KEY SYSTEM WITH SIMILAR FUNCTIONALITY TO THAT SPECIFIED.
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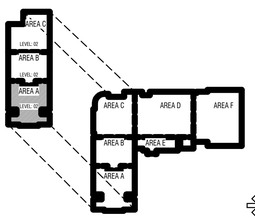
5. AV SYSTEMS INTEGRATORS WHO WISH TO BID ON THIS PROJECT MUST BE TRAINED AND CERTIFIED BY CLASSROOM VOICE LIFT SYSTEM MANUFACTURER SPECIFIED FOR THIS PROJECT.
6. PROVIDE #6 AWG THHN WIRE W/ GREEN INSULATION FROM EACH AV EQUIPMENT CABINET TO THE NEAREST MAIN BUILDING GROUND. CONNECT GROUNDING WIRE TO BARE METAL ON EQUIPMENT CABINET.
7. COLORS OF ALL EXPOSED INTERCOM DEVICES INCLUDING INPUT & OUTPUT PLATES, VOLUME CONTROLS, SWITCHES, SPEAKERS, AND SPEAKER ENCLOSURES SHALL BE REVIEWED BY OWNER PRIOR TO ORDERING.
8. CLASSROOM AMPLIFIERS MAY BE LOCATED ON WALL, CEILINGS, OR IN MILLWORK CABINETS. REFER TO PLANS FOR SPECIFIC DEVICE LOCATIONS.
9. INSTALL CLOCKS CENTERED, 6" ABOVE TOP OF DOOR FRAME.
10. CONFIGURE INTERCOM AND CSAS SYSTEMS TO PROVIDE EMERGENCY SIGNALING FROM CSAS TO INTERCOM.

KEYED NOTES (#)

AV3 TO DATA RACK IN NEAREST MDF/IDF CLOSET.

AV4 TO INTERCOM PAGING AMPLIFIER IN DATA RACK #D.

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
750 NORTH 400 WEST
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SALT LAKE CITY UT 84103

ENVISION
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F (801) 534-1169
www.envisionsl.com

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #:	123006
DRAWN BY:	Author
CHECKED BY:	Checker
ISSUED:	04.26.2024

REGISTERED PROFESSIONAL ENGINEER
PHILIP D. ALLEN
07/24/11
04-26-2024
STATE OF UTAH

LEVEL 2 - AREA A - INTERCOM

E-621

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5/15/2024 1:43:40 PM

INTERCOM GENERAL NOTES:

1. RUN 1 CAT6 CABLE WITH CONDUIT FROM THE INTERCOM MAIN CONTROLLER TO THE DIGITAL TELEPHONE HEADEND EQUIPMENT. PROGRAM THE OWNER SUPPLIED TELEPHONE SYSTEM SO THAT A DIGITAL TELEPHONE CAN PERFORM THE CALL CLASSROOM INTERCOM SYSTEM & PAGING FUNCTIONS OF AN INTERCOM CONSOLE.
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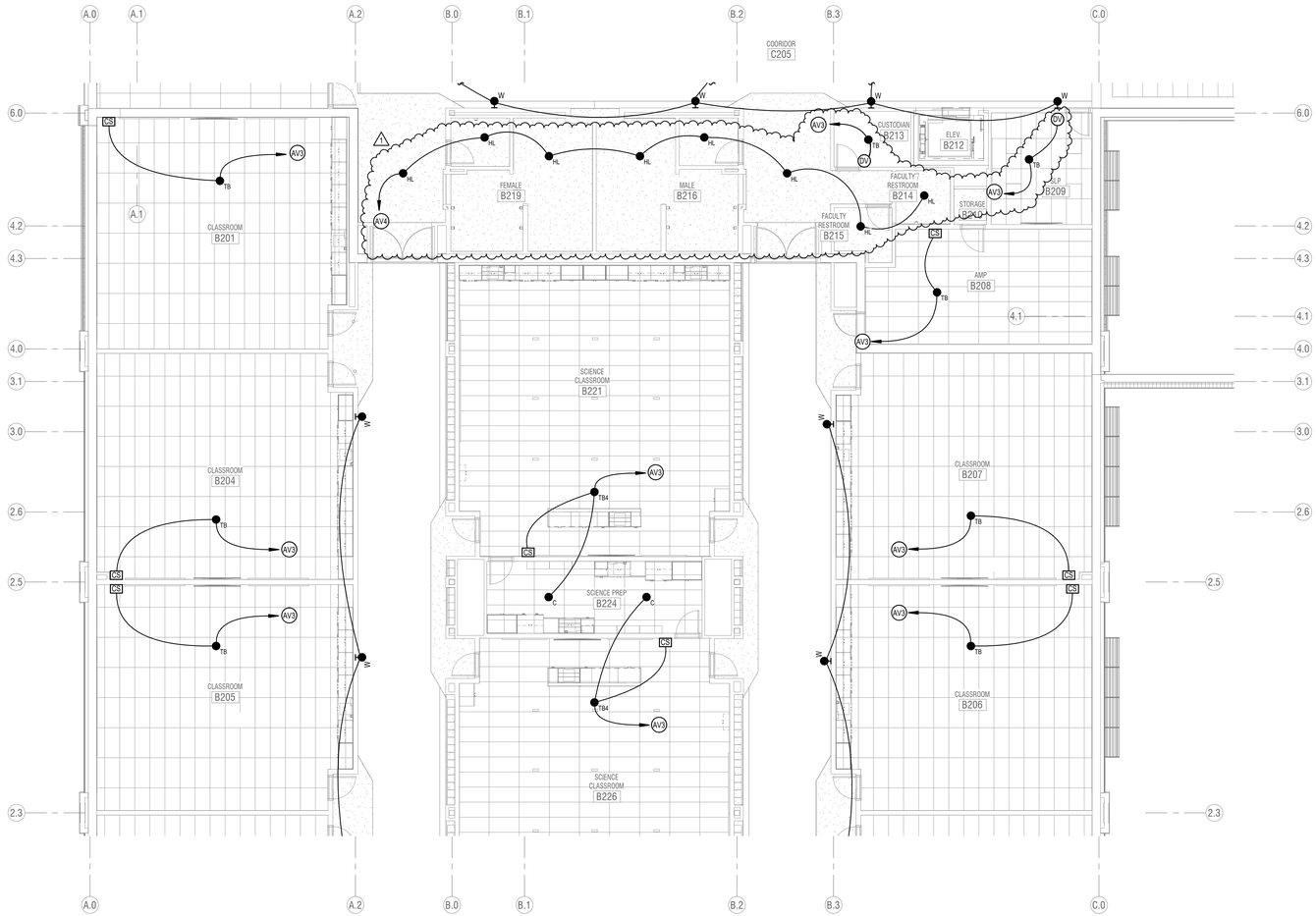
KEYED NOTES (#)

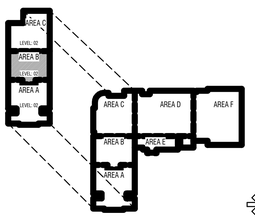
AV3 TO DATA RACK IN NEAREST MDF/IDF CLOSET.

AV4 TO INTERCOM PAGING AMPLIFIER IN DATA RACK #D.



1 **LEVEL 2 FLOOR PLAN - AREA B - INTERCOM**
SCALE: **1/8" = 1'-0"**

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 200 WEST
759 NORTH 400 WEST
LOGAN UT 84321
SALT LAKE CITY UT 84103

ENVISION
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F: (801) 534-1169
www.envisioneng.com

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER
17-411
04-26-2024
STATE OF UTAH

LEVEL 2 - AREA B - INTERCOM

E-622

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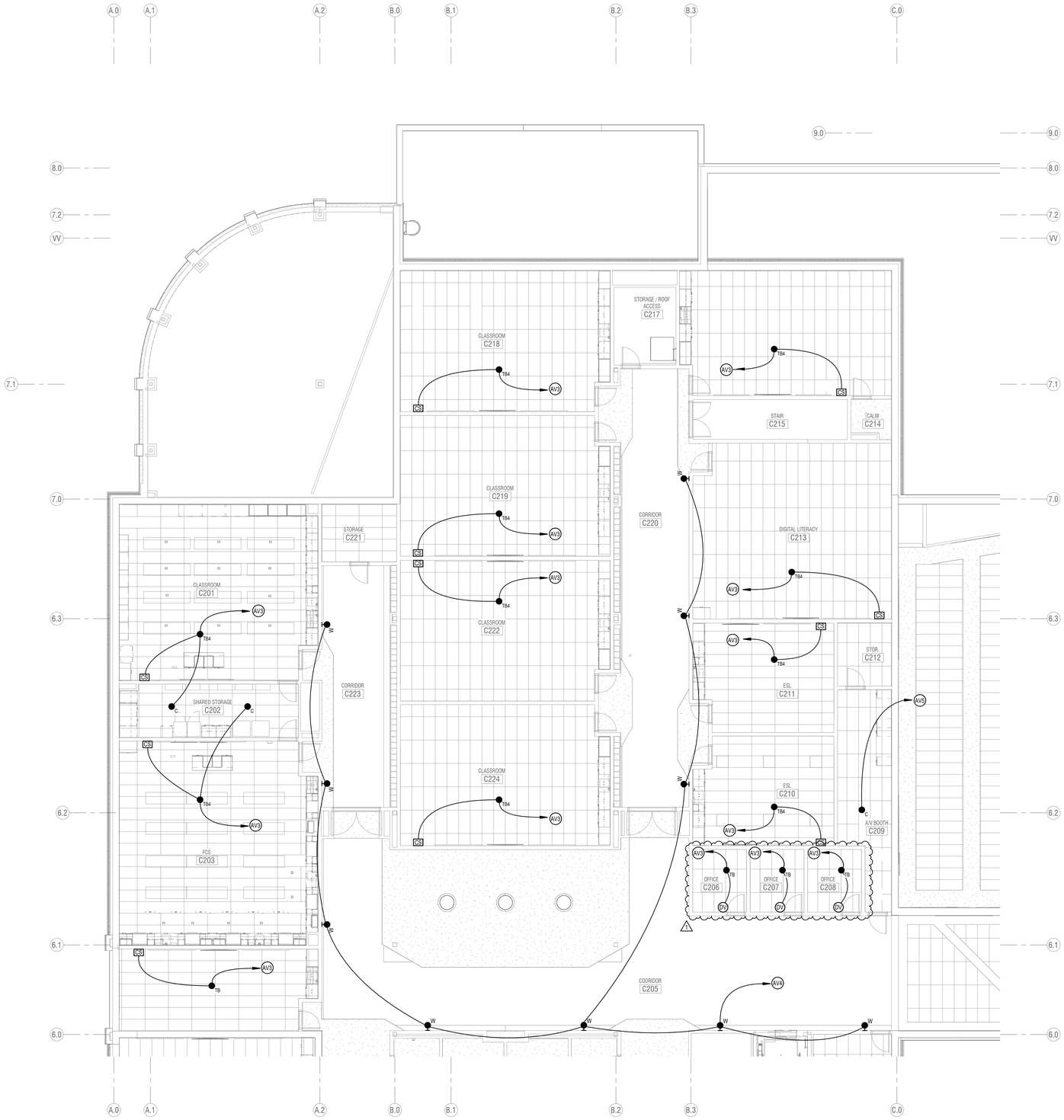
9/19/2024 1:43:51 PM



1 **LEVEL 2 FLOOR PLAN - AREA C - INTERCOM**
SCALE: **1/8" = 1'-0"**

INTERCOM GENERAL NOTES:

1. RUN 1 CAT6 CABLE WITH CONDUIT FROM THE INTERCOM MAIN CONTROLLER TO THE DIGITAL TELEPHONE HEADEND EQUIPMENT. PROGRAM THE OWNER SUPPLIED TELEPHONE SYSTEM SO THAT A DIGITAL TELEPHONE CAN PERFORM THE CALL CLASSROOM INTERCOM SYSTEM & PAGING FUNCTIONS OF AN INTERCOM CONSOLE.
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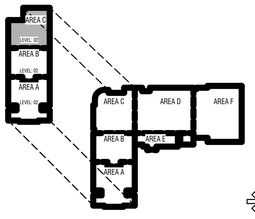
KEYED NOTES (#)

AV3 TO DATA RACK IN NEAREST MDF/IDF CLOSET.

AV4 TO INTERCOM PAGING AMPLIFIER IN DATA RACK #D.

AV5 TO CAFETERIA WALL SPEAKER (SHEET E-525).

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
750 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

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www.envisioneng.com

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #:	123006
DRAWN BY:	Author
CHECKED BY:	Checker
ISSUED:	04.26.2024

REGISTERED PROFESSIONAL ENGINEER 377441 05-01-2024 STATE OF UTAH

LEVEL 2 - AREA C - INTERCOM

E-623

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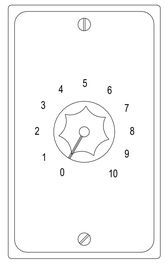
5/15/2024 1:43:06 PM

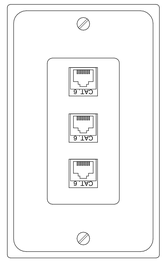


V

1 ATTENUATOR DETAIL 'V'
SCALE: NONE

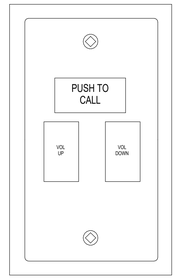
CS

2 CALL SWITCH 'CS'
SCALE: NONE



NUC

3 NETWORK INTERFACE 'NUC'
SCALE: NONE



DV

4 DIGITAL VOLUME CONTROL 'DV'
SCALE: NONE

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 200 WEST
750 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY UT 84103

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NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #:	123006
DRAWN BY:	Author
CHECKED BY:	Checker
ISSUED:	04.26.2024

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
12411
04-26-2024

INTERCOM DETAILS

E-651

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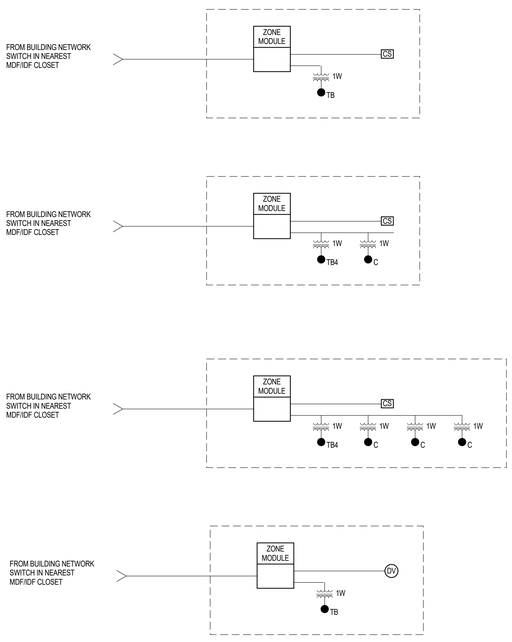
5/15/2024 1:43:58 PM

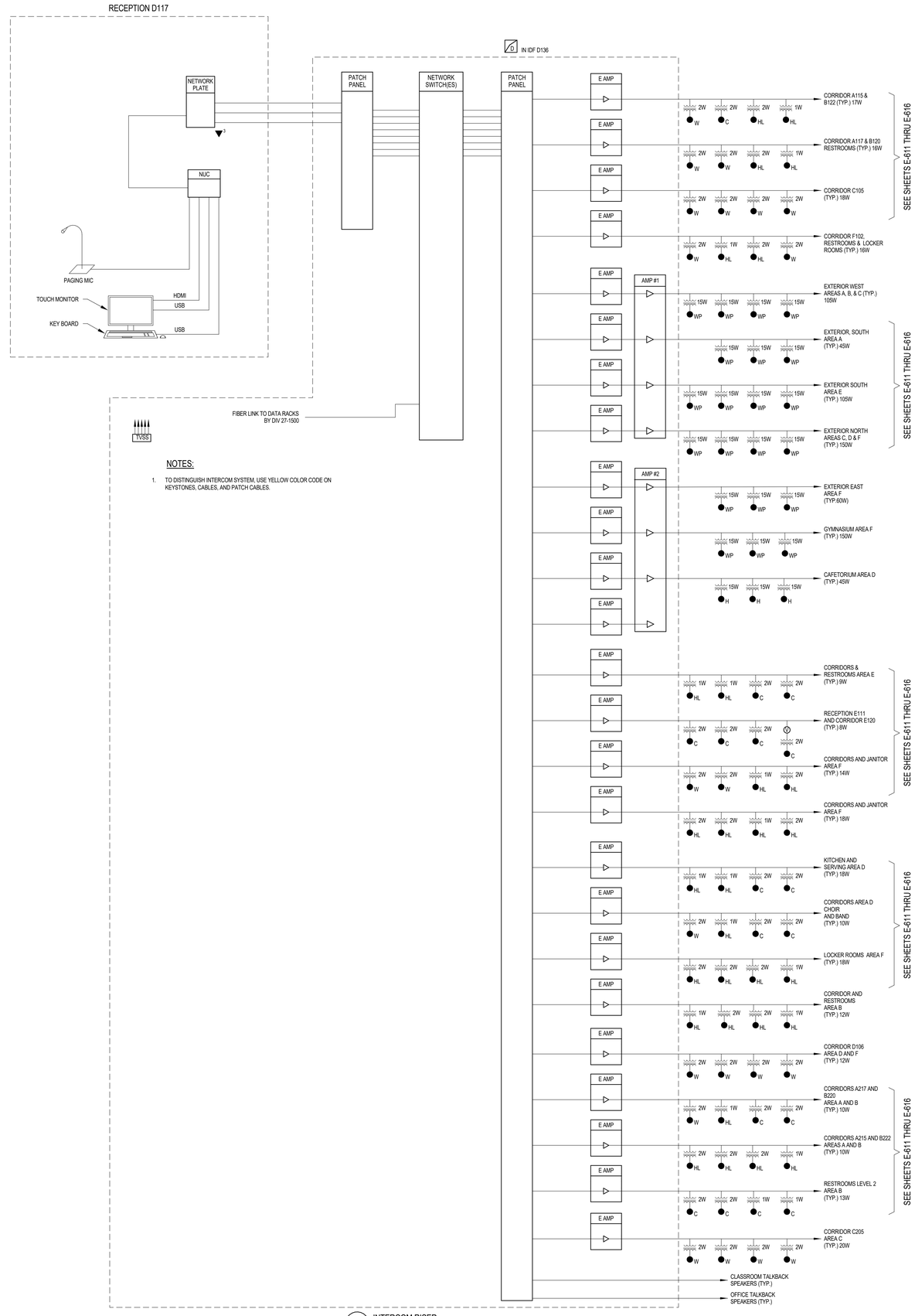
INTERCOM SYSTEM - SCHOOL - EQUIPMENT LIST

SYMBOL	DESCRIPTION	QTY	SUPPLIER	MODEL	ROUGH-IN	CABLE
1 2 3	EQUIPMENT CABINET:	FURNISHED AND INSTALLED BY DIV 27 DATA INSTALLER SEE			(5) 2" C. TO CABLE TRAY	
	POWER CONDITIONER	1	FURMAN	CN-2400N		
	POWER STRIP, RACK MOUNT	1	MIDDLE ATLANTIC	PD-2415SC-NS		
	ZONE MODULE RACK MOUNT KIT	OFP A/R	TELECOR	eAMP	INSTALLS IN RACK.	WEST PENN 254246 - YELLOW YELLOW PATCH CABLES
V	VOLUME CONTROL SWITCH	OFP	TELECORE	ECS-4	1-GANG 3" DEEP SEE ELEVATION	WEST PENN 25225B - YELLOW
TB	TALKBACK SPEAKER,8", ROUND, CEILING RECESSED ZONE MODULE 8" SPEAKER, * GRILL ROUND BACKBOX TILE SUPPORT	OFP	TELECOR	 INCLUDED W/ SPEAKER ES8-TB-MA-R H10 CC1	3/4" C TO ACC. CEILING OR NEXT SPEAKER IN CIRCUIT. PAINT GRILL IN COLOR AS SELECTED BY ARCHITECT	WEST PENN 25225B - YELLOW WEST PENN 254246 - YELLOW
TS	TALKBACK SPEAKER, 8", SQUARE SURFACE MOUNT ZONE MODULE 8" SPEAKER & GRILL SH20-BB	OFP	TELECOR	 INCLUDED W/ SPEAKER ES8-TB-MA-SQ SD72 JG8X	3/4" C. TO ACCESSIBLE CEILING PAINT GRILL IN COLOR AS SELECTED BY ARCHITECT	WEST PENN 25225B - YELLOW
B4	TALKBACK MULTI-SPEAKER, 8", ROUND, CEILING ZONE MODULE 8" SPEAKER, * GRILL ROUND BACKBOX TILE SUPPORT	OFP	TELECOR	 INCLUDED W/ SPEAKER ES8-TB-MA-R H10 CC1	3/4" C TO ACC. CEILING OR NEXT SPEAKER IN CIRCUIT. PAINT GRILL IN COLOR AS SELECTED BY ARCHITECT	WEST PENN 25225B - YELLOW
S4	TALKBACK SPEAKER, 8", SQUARE SURFACE MOUNT ZONE MODULE 8" SPEAKER & GRILL SH20-BB	OFP	TELECOR	 INCLUDED W/ SPEAKER ES8-TB-MA-SQ SD72 JG8X	3/4" C TO ACC. CEILING OR NEXT SPEAKER IN CIRCUIT. PAINT GRILL IN COLOR AS SELECTED BY ARCHITECT	WEST PENN 25225B - YELLOW
W	WALL MOUNT SPEKER, INTERNAL RECESSED WALL MOUNT BOX SPEAKER & GRILLE	OFP	ATLAS IED	 VP-77 VP14MB	3/4" C TO ACC. CEILING OR NEXT SPEAKER IN CIRCUIT.	
WP H	HORN & GRILLE WITH WEATHERPROOF BACK BOX WALL MOUNT RECESSED +8' AFF	OFP	ATLAS IED	VT(F)-157UC MR EXTENSION RING FP MOUNTING PLATE	4-11/16" SQ X 2-1/8" DEEP 3/4" C TO ACC. CEILING OR NEXT SPEAKER IN CIRCUIT. PAINT GRILL IN COLOR AS SELECTED BY ARCHITECT	WEST PENN 25225B - YELLOW
RL	SPEAKER, RECESSED, HARDLID RECESSED ENCLOSURE MOUNTING RING SPEAKER	OFP	ATLAS IED	 CS-95-8 P78-8 SD-72W	3/4" C TO ACC. CEILING OR NEXT SPEAKER IN CIRCUIT.	WEST PENN 25221SB - YELLOW
C	SPEAKER, RECESSED, DROP TILE RECESSED ENCLOSURE TILE BRIDGE SPEAKER	OFP	ATLAS IED	 CS-95-8 81-8R SD-72W	3/4" C TO ACC. CEILING OR NEXT SPEAKER IN CIRCUIT.	WEST PENN 25221SB - YELLOW
AMP#	POWER AMPLIFIER, 4CH, AMP #1, AMP #2	OFP	CROWN	DCI 4|300		
E AMP	AMPLIFIER	OFP	TELECOR	E AMPLIFIER		
NETWORK SWITCH	NETWORK SWITCH	OFP		COORDINATE W/ OWNER	INSTALL IN RACK	WEST PENN 254246 - YELLOW
DPP	PATCH PANEL	A/R	OWNER		INSTALL IN RACK	WEST PENN 254246 - YELLOW YELLOW KEYSTONE JACKS YELLOW PATCH CABLES
	CALL SWITCH	OFP	TELECOR	ECS-11	SEE DETAIL	YELLOW PATCH CABLES
CS	DIGITAL VOLUME CONTROL	OFP	TELCOR	ECS-5		
IV	SIP INTERFACE	OFP	TELECOR	ESIP	INSTALL IN RACK	YELLOW PATCH CABLES
ESIP	DATA JACK SPEAKER	OFP	CUSTOM	SEE DETAIL	1-GANG 3" DEEP (5) 2" C. TO CABLE TRAY	WEST PENN 254246 - YELLOW YELLOW SPEAKER WIRE
3	SYSTEM HEADEND W/ TOUCH MONITOR (BY OWNER) KEYBOARD (BY OWNER) MOUSE (BY OWNER) CONFGURATION PORT MICROPHONE ADMIN CONSOLE SIP INTERFACE MANAGEMENT GATEWAY VISUAL CONSOLE SOFTWARE	 OFCI OFCI OFCI 2 1 1 1 1 1	TELECOR	3500-0500 COORDIANTE W/ OWNER COORDIANTE W/ OWNER COORDIANTE W/ OWNER EPORT MCC-PM-MA E300-MA ESIP EMH eDSKT-1.1		

A/R = AS REQUIRED, NIC = NOT IN CONTRACT, NR = NO REQUIREMENT, OFI = OWNER FURNISHED CONTRACTOR INSTALLED, OFP = OWNER FURNISHED PLANS, OFO = OWNER FURNISHED & INSTALLED



2 TYPICAL CLASSROOM RISER
SCALE: NONE



1 INTERCOM RISER
SCALE: NONE

NOTES:

1. TO DISTINGUISH INTERCOM SYSTEM, USE YELLOW COLOR CODE ON KEYSTONES, CABLES, AND PATCH CABLES.

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST LOGAN, UT 84321
750 NORTH 400 WEST SALT LAKE CITY, UT 84103

ENVISION ELECTRICAL
240 E. MORRIS AVE. SUITE 200
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www.envisionengineering.com

NIBLEY MIDDLE SCHOOL

3050 S 920 W NIBLEY, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3

PROJECT #:	123006
DRAWN BY:	Author
CHECKED BY:	Checker
ISSUED:	04.26.2024

REGISTERED PROFESSIONAL ENGINEER 377441 04-26-2024 STATE OF UTAH

INTERCOM - RISER & EQUIP LIST

E-671

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