ADDENDUM NO. 2

January 20, 2023

Three Rivers Community Schools – Three Rivers Middle School Additions and Renovation
1101 Jefferson Street
Three Rivers, MI 49093

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications, and the Drawings dated December 1, 2022, by GMB Architecture and Engineering. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 2-1 through ADD 2-3, attached, Reissued Specification 00 31 00 - Bid Form, Reissued Guideline Schedule, Phasing, and Logistics Plans, and GMB Architecture and Engineering Addendum No. 2, dated January 19, 2023, consisting of 8 pages, New Specification Section 31 31 16 - Termite Control and Section 33 31 11 - Site Sanitary Utility Sewerage Piping, Reissued Specification 09 65 19 - Resilient Tile Flooring, New Sheets M1.1E, M2.1E, M4.1A, M4.1B, M4.1C, M4.1D, M8.04, E1.1E, and Reissued Sheets G0.00, G2.01, C1.01, C3.01, C8.01, S2.1A, S2.1C, S3.1A, S7.01, A1.1A, A1.1B, A1.1C, A1.1D, A1.1E, A2.1B, A2.1C, A2.1D, A2.1E, A2.30, A5.01, A6.10, A9.1A, A9.1B, A9.1C, M1.1A, M1.1B, M1.1C, M1.1D, M1.1E, M1.80, M1.81, M2.1A, M2.1B, M2.1C, M2.1D, M3.1A, M3.1B, M3.1C, M3.1D, M7.02, ,8.02, M8.03, M8.04, M9.01, M9.02, E2.1A, E2.1B, E2.1E, E4.01, E5.01, E5.02, ES1.01, ES2.01

Notes to All Contractors:
Addendum No. 3 will be issued early in the week of January 23, 2023.
Phasing Plan issued under section 01 32 00 - Schedules and Report supersedes information shown on sheet.

A. SPECIFICATION SECTION 00 00 20 TABLE OF CONTENTS

1. Add the following Specification Sections:

   31 31 16 – Termite Control
   33 31 11 – Site Sanitary Utility Sewerage Piping

B. SPECIFICATION SECTION 00 31 00 – BID FORM

1. Replace with the attached revised Bid Form **Note – Alternate 1 (A-1) Replace Doors and Frames at Vestibule E120 has been added. Alternate 2-7 have changed numerically and have added reference number to align with G0.00 Title Page Reference Numbers.**

C. SPECIFICAITON SECTION 01 12 00 – MULTIPLE CONTRACT SUMMARY

1. Paragraph 3.03 Bid Categories

   A. Bid Category No. 1 Sitework

   1. Add the following Specification Section:

      33 31 11 – Site Sanitary Utility Sewerage

   C. Bid Category No. 3 – Concrete

   2. Add the following Specification Section:

      31 31 16 – Termite Control

D. SPECIFCATION SECTION 01 23 00 ALTERNATES

1. Revised paragraph 1.04 Schedule of Alternates to read as follows: **Note Alternate No. 1 is New; all others have been renumbered for clarity.**

   A. Alternate No. 1 (A-1): Replace Doors and Frames at Vestibule E120.

   B. Alternate No. 2 (G-1): At Men D101 and Women E102, Replace Existing Plumbing Fixtures One for One. Replace Existing Toilet Partitions One for One and Provide New Finishes

   C. Alternate No. 3 (G-2): Rehabilitation (New Fluid Applied Roofing System) of the Existing Roofs at Unit D and E and Parts of Units A and B as Noted on General Roofing Plan.

   D. Alternate No. 4 (M-1): Replacement of All Air Handling Units and Accessories Located in Unit D.

E. Alternate No. 5 (E-1): Adding Cabling (CAT6) to a Quantity of (6) Cameras in Units D and E.

F. Alternate No. 6 (E-2): Furnish and Install a New P.A. Head End System.

G. Alternate No. 7 (E-3): Furnish and Install a New Wireless Clock System in Units A, B, and C.

E. SPECIFCIATON SECTION 01 32 00 SCHEDULES AND REPORTS

1. Reissued Guideline Schedule
2. Reissued Phasing Plan
3. Reissued Site Logistics Plan

Amended for TRCS

CONTRACTOR'S BID FOR PUBLIC WORKS

Three Rivers Middle School Additions & Renovations

Three Rivers Community Schools

St. Joseph County

PART I

(To be completed for all bids)
(Please type or print)

BIDDER (firm) _____

Address _____ P.O. Box _____

City/State/Zip _____
Telephone Number _____ Email Address: _____
Person to contact regarding this Bid: _____
Pursuant to notices given, the undersigned offers to furnish labor and materials necessary to complete the construction work for:

_____
Insert Bid Category No.(s) and Name(s)

of public works project, **Three Rivers Middle School Additions and Renovations**, in accordance with Plans and Specifications prepared by **GMB Architecture + Engineering, 85 E. 8th Street, Suite 200, Holland, MI 49423,** as follows:

BASE BID

For the sum of _____
(sum in words)

_____ DOLLARS ($_____)
(sum in figures)

The undersigned acknowledges receipt of the following Addenda:

Receipt of Addenda No.(s)_____

PROPOSAL TIME

Bidder agrees that this Bid shall remain in force for a period of sixty (60) consecutive calendar days from the due date, and Bids may be accepted or rejected during this period. Bids not accepted within said sixty (60) consecutive calendar days shall be deemed rejected.

Attended pre-bid conference YES _____ NO

Has visited the jobsite YES _____ NO

The Bidder must attach to this bid, the sworn and notarized affidavit (attached at the end of this Bid Form) disclosing any familial relationship between the Owner or an employee of the bidder and any member of the District's Board or the Superintendent of the District.

The Bidder has reviewed the Guideline Schedule in Section 01 32 00 and the intent of the schedule can be met. _____ YES _____ NO

The Skillman Corporation's diversity initiative is to create a program to encourage, assist and measure the active participation of Minority- Owned, Women-Owned, Veteran – Owned and Disabled Individual-Owned Businesses. The Program is to ensure that MWVDBEs are provided full and equal opportunity to participate in all Skillman Corporation's Projects.

Bidder has included:

DBE: YES _____% NO _____
MBE: YES _____% NO _____
WBE: YES _____% NO _____
VBE: YES _____% NO _____

The undersigned further agrees to furnish a bond or certified check with this Bid for an amount specified in the Notice to Bidders. If Alternate Bids apply, submit a proposal for each in accordance with the Plans and Specifications.

ALTERNATE BIDS

A blank entry or an entry of "No Bid", "N/A", or similar entry on any Alternate will cause the bid to be rejected as non-responsive only if that Alternate is selected. If no change in the bid amount is required, indicate "No Change".

****MARK "ADD" OR "DEDUCT" FOR EACH ALTERNATE****

Alternate Bid No. 1 (A-1) – Replace Doors and Frames at Vestibule E120

Change the Base Bid the sum of _____
(sum in words)

_____ DOLLARS($ _____) ADD / DEDUCT
(sum in figures)

Alternate Bid No. 2 (G-1) – At Men D101 and Women E102, Replace existing plumbing fixtures one for one. Replace existing toilet partitions one for one and provide new finishes.

Change the Base Bid the sum of _____
(sum in words)

_____ DOLLARS ($_____) ADD / DEDUCT
(sum in figures)

Alternate Bid No. 3 (G-2) – Rehabilitation (New Fluid Applied Roofing System) of the existing roofs at Units D and E, and parts of Units A and B as noted on the Overall Roof Plan.

Change the Base Bid the sum of _____
(sum in words)

_____ DOLLARS($ _____) ADD / DEDUCT
(sum in figures)

Alternate Bid No. 4 (M-1) – Replacement of all air handling units and accessories located in Unit D.

Change the Base Bid the sum of _____
(sum in words)

_____ DOLLARS($ _____) ADD / DEDUCT
(sum in figures)

Alternate Bid No. 5 (E-1) – Add cabling (CAT6A) to quantity of (6) Cameras in Units D and E.

Change the Base Bid the sum of _____
(sum in words)

_____ DOLLARS($ _____) ADD / DEDUCT
(sum in figures)

<u>MARK "ADD" OR "DEDUCT" FOR EACH ALTERNATE</u>

Alternate Bid No. 6 (E-2) – Provide a new P.A. Head End System.

Change the Base Bid the sum of _____
(sum in words)

_____ DOLLARS ($ _____) ADD / DEDUCT
(sum in figures)

Alternate Bid No. 7 (E-3) – Provide a New Wireless Clock System in Units A, B, and C.

Change the Base Bid the sum of _____
(sum in words)

_____ DOLLARS($ _____) ADD / DEDUCT
(sum in figures)

NON-COLLUSION AFFIDAVIT

The undersigned Bidder or agent, being duly sworn on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to induce anyone to refrain from bidding, and that this Bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firms, or corporations has, have, or will receive directly or indirectly, any rebate, fee, gift, commission, or thing of value on account of such sale.

OATH AND AFFIRMATION

I affirm under the penalties of perjury that the foregoing facts and information are true and correct to the best of my knowledge and belief.

Dated at _____this _____ day of _____, 20___.

_____
(Name of Organization)

By _____
(Title of Person Signing)

ACKNOWLEDGEMENT

STATE OF_____)
) SS:
COUNTY OF _____)

_____ being duly sworn, deposes and says that

he is _____of the above _____
(Title) (Name of Organization)

and that the statements contained in the foregoing Bid, certification and Affidavit are true and correct.

Subscribed and sworn to before me this _____ day of _____ , 20 ___ .

_____
Notary Public

My Commission Expires:_____

County of Residence: _____

PART II

(Complete sections I, II, and III for all state and local public works projects)

These statements to be submitted under oath by each bidder with and as a part of his bid. (Attach additional pages for each section as needed.)

SECTION I EXPERIENCE QUESTIONNAIRE

1. What public works projects has your organization completed?

Contract Amount	Class of Work	When Completed	Name and Address of Owner

2. What public works projects has your organization now in process of construction:

Contract Amount	Class of Work	When Completed	Name and Address of Owner

3. Have you ever failed to complete any work awarded to you?_____If so, where and why?_____

_____

_____

4. List references from private firms for which you have performed work.

_____

_____

_____

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed Work.

2. If you intend to sublet any portion of the Work, state the name and address of each subcontractor, equipment to be used by the subcontractor, and whether you expect to require a bond.

3. What equipment do you intend to use for the proposed Project?

4. Have you made contracts or received offers for all materials within prices used in preparing your proposal? _____ yes _____ no.

SECTION III OATH AND AFFIRMATION

I hereby affirm under the penalties of perjury that the facts and information contained in the foregoing Bid for public works are true and correct to the best of my knowledge and belief.

IN TESTIMONY WHEREOF, The Bidder has hereunto set his hand this

_____ day of _____ , 20 _____ .

Bidder:_____

IN TESTIMONY WHEREOF, The Bidder (a firm) have hereunto set their hands this

_____ day of _____, 20_____.

Firm Name: _____

By:_____

Individual names:_____

IN TESTIMONY WHEREOF, The Bidder (a corporation) has caused this proposal to be signed by its President and Secretary and affixed its corporate seal this_____ day of _____ , 20 _____.
Name of Corporation:

President: _____
Secretary:_____

ACKNOWLEDGEMENT

STATE OF_____)
) SS:
COUNTY OF_____)

_____ being duly sworn, deposes and says that

he is _____ of the above _____
(Title) (Name of Organization)

and that the answers to the questions in the foregoing questionnaires and all statements therein contained are true and correct.

Subscribed and sworn to before me this_____ day of _____, 20 ___.

_____
Notary Public

My Commission Expires: _____
County of Residence: _____

AFFIDAVIT OF BIDDER - FAMILIAL DISCLOSURE

The undersigned, the Owner or authorized officer of _____ (the 'Bidder'), pursuant to the familial disclosure requirement provided in the _____ (the 'School District') advertisement for construction bids, hereby represent and warrant, except as provided below, that no familial relationships exist between the Owner(s) or any employee of _____ and any member of the Board of Education of the School District or the Superintendent of the School District.

List any Familial Relationships:

BIDDER:

_____

By: _____

Its: _____

STATE OF MICHIGAN)
)ss.
COUNTY OF _____)

This instrument was acknowledged before me on the _____ day of _____, 20__, by _____.

_____
, Notary Public

_____ County, Michigan

My Commission Expires: _____

Acting in the County of: _____

CERTIFICATION OF COMPLIANCE – IRAN ECONOMIC SANCTIONS ACT
Michigan Public Act No. 517 of 2012

The undersigned, the owner, or authorized officer of the below-named company (the "Company"), pursuant to the compliance certification requirement provided in the **Three Rivers Community School**'s Request For Proposal (the "RFP"), hereby certifies, represents, and warrants that the Company (which includes its officers, directors and employees) is not an "Iran Linked Business" within the meaning of the Iran Economic Sanctions Act, Michigan Public Act No. 517 of 2012 (the "Act"), and that in the event the Company is awarded a contract by the **Three Rivers Community Schools** as a result of the aforementioned RFP, the Company is not and will not become an "Iran Linked Business" at any time during the course of performing any services under the contract.

The Company further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than $250,000.00 or two (2) times the amount of the contract or proposed contract for which the false certification was made, whichever is greater, the cost of the **Three Rivers Community School**'s investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on a request for proposal for three (3) years from the date that it is determined that the person has submitted the false certification.

BIDDER:

_____

By: _____

Its: _____

STATE OF MICHIGAN)
)ss.
COUNTY OF _____)

This instrument was acknowledged before me on the _____ day of _____, 20__, by _____.

_____
, Notary Public

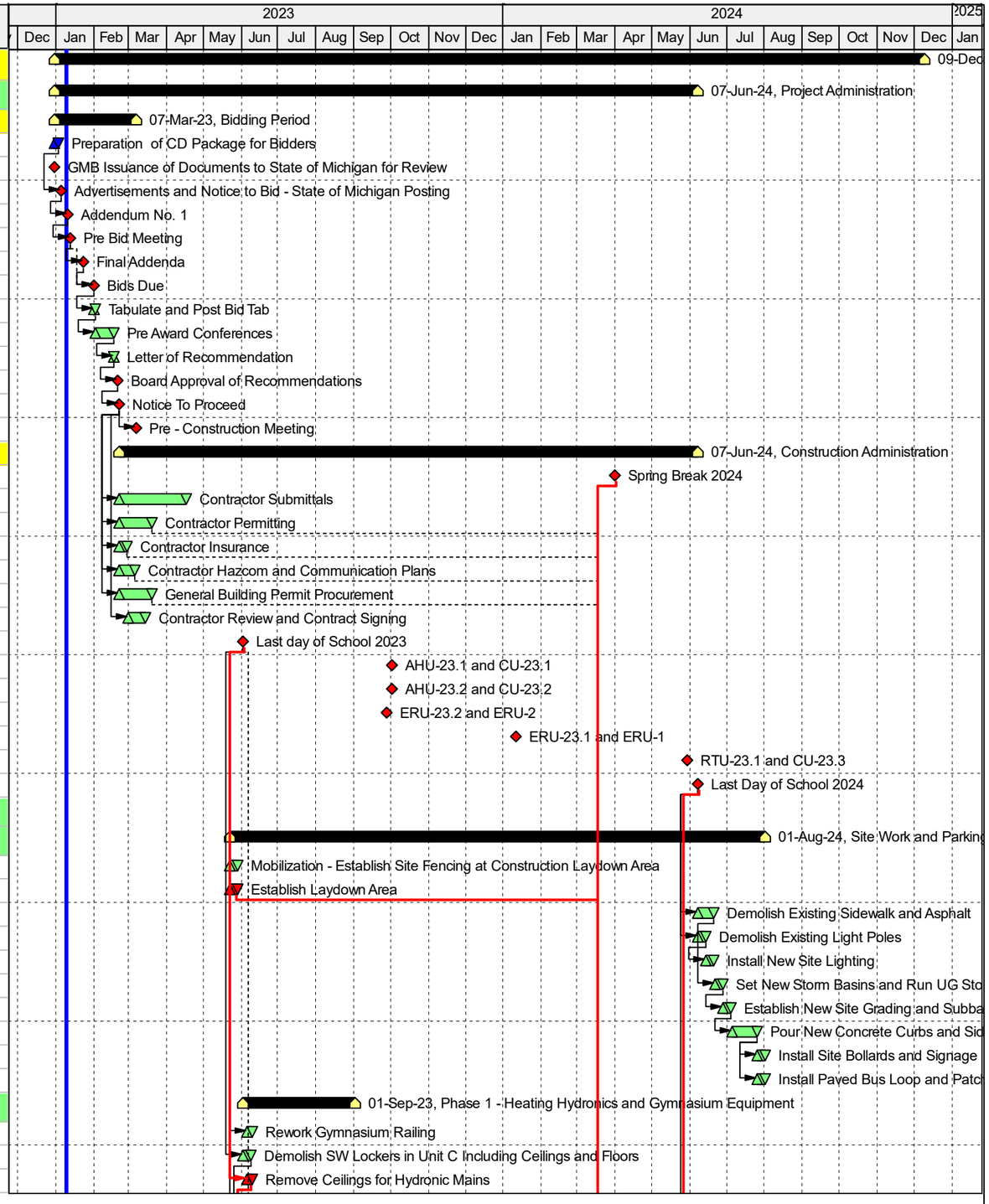
_____ County, Michigan

My Commission Expires: _____

Acting in the County of: _____

END OF SECTION 00 31 00

Activity Name	Original Duration	Start	Finish
Three Rivers Middle School Addition and Reno	500	30-Dec-22 A	09-Dec-24
Project Administration	368	30-Dec-22 A	07-Jun-24
Bidding Period	41	30-Dec-22 A	07-Mar-23
Preparation of CD Package for Bidders	4	30-Dec-22 A	02-Jan-23 A
GMB Issuance of Documents to State of Michigan for Review	0	30-Dec-22 A	
Advertisements and Notice to Bid - State of Michigan Posting	0	05-Jan-23 A	
Addendum No. 1	0	10-Jan-23	
Pre Bid Meeting	0	12-Jan-23	
Final Addenda	0	23-Jan-23	
Bids Due	0		31-Jan-23
Tabulate and Post Bid Tab	1	01-Feb-23	01-Feb-23
Pre Award Conferences	11	02-Feb-23	16-Feb-23
Letter of Recommendation	1	17-Feb-23	17-Feb-23
Board Approval of Recommendations	0	20-Feb-23	
Notice To Proceed	0	21-Feb-23	
Pre - Construction Meeting	0	07-Mar-23	
Construction Administration	337	21-Feb-23	07-Jun-24
Spring Break 2024	0	01-Apr-24*	
Contractor Submittals	40	21-Feb-23	17-Apr-23
Contractor Permitting	20	21-Feb-23	20-Mar-23
Contractor Insurance	5	21-Feb-23	27-Feb-23
Contractor Hazcom and Communication Plans	10	21-Feb-23	06-Mar-23
General Building Permit Procurement	20	21-Feb-23	20-Mar-23
Contractor Review and Contract Signing	10	01-Mar-23	14-Mar-23
Last day of School 2023	0	02-Jun-23*	
AHU-23.1 and CU-23.1	0	02-Oct-23*	
AHU-23.2 and CU-23.2	0	02-Oct-23*	
ERU-23.2 and ERU-2	0	28-Sep-23*	
ERU-23.1 and ERU-1	0	11-Jan-24*	
RTU-23.1 and CU-23.3	0	30-May-24*	
Last Day of School 2024	0	07-Jun-24*	
Pre Installation Meetings	0		
Site Work and Parking Lots	312	23-May-23	01-Aug-24
Mobilization - Establish Site Fencing at Construction Laydown Are	5	23-May-23*	29-May-23
Establish Laydown Area	5	23-May-23*	29-May-23
Demolish Existing Sidewalk and Asphalt	10	07-Jun-24	20-Jun-24
Demolish Existing Light Poles	5	07-Jun-24	13-Jun-24
Install New Site Lighting	5	14-Jun-24	20-Jun-24
Set New Storm Basins and Run UG Storm to West	5	21-Jun-24	27-Jun-24
Establish New Site Grading and Subbase	5	28-Jun-24	04-Jul-24
Pour New Concrete Curbs and Sidewalks	15	05-Jul-24	25-Jul-24
Install Site Bollards and Signage	5	26-Jul-24	01-Aug-24
Install Paved Bus Loop and Patches	5	26-Jul-24	01-Aug-24
Phase 1 - Heating Hydronics and Gymnasium I	65	02-Jun-23	01-Sep-23
Rework Gymnasium Railing	5	05-Jun-23	09-Jun-23
Demolish SW Lockers in Unit C Including Ceilings and Floors	5	02-Jun-23	08-Jun-23
Remove Ceilings for Hydronic Mains	5	05-Jun-23	09-Jun-23



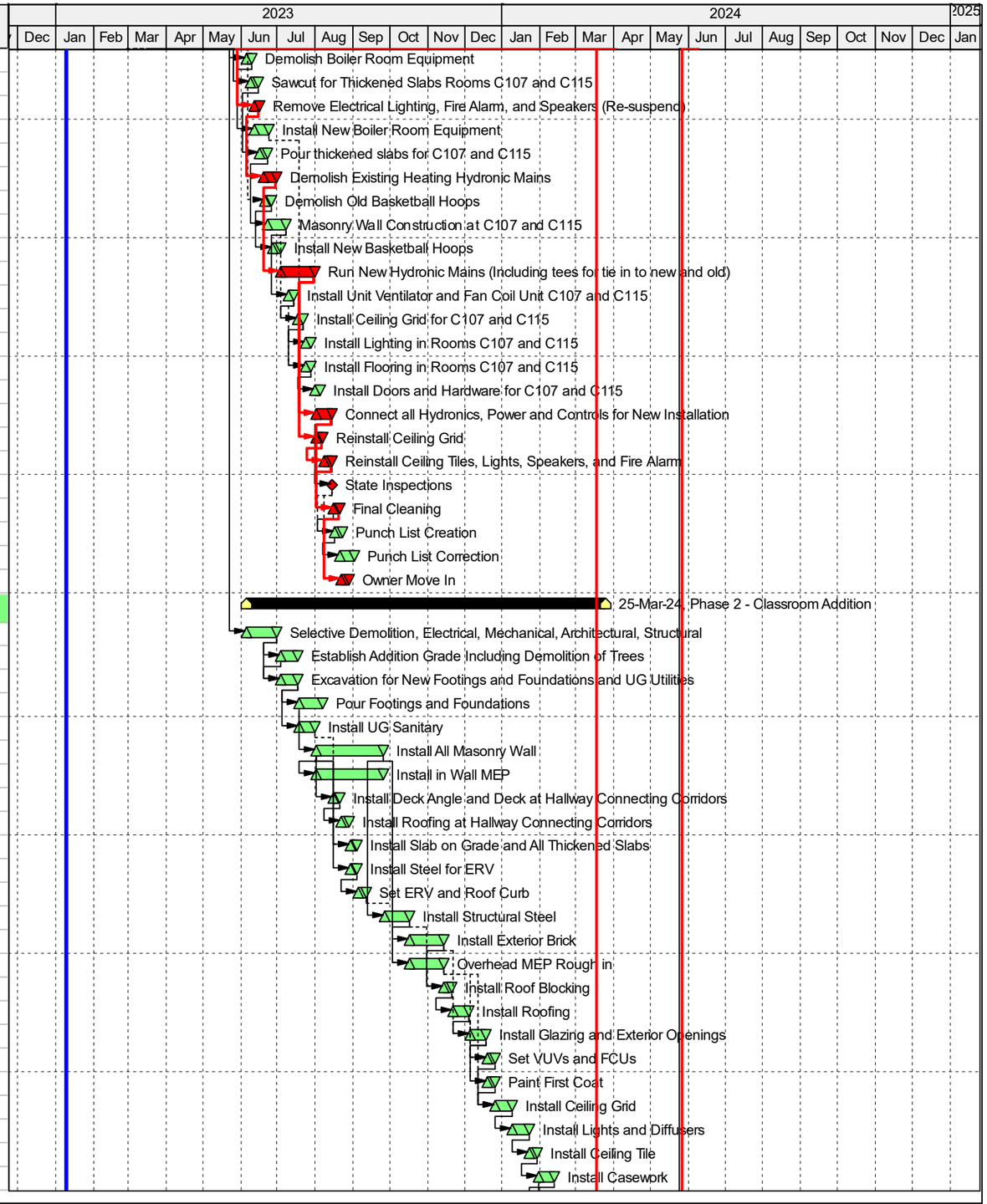
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

Three Rivers Middle School Addition and Renovations - 219050.71

Guideline Schedule (Revised) 20-Jan-23

SKILLMAN

Activity Name	Original Duration	Start	Finish
Demolish Boiler Room Equipment	5	05-Jun-23	09-Jun-23
Sawcut for Thickened Slabs Rooms C107 and C115	5	09-Jun-23	15-Jun-23
Remove Electrical Lighting, Fire Alarm, and Speakers (Re-suspen	5	12-Jun-23	16-Jun-23
Install New Boiler Room Equipment	10	12-Jun-23	23-Jun-23
Pour thickened slabs for C107 and C115	5	16-Jun-23	22-Jun-23
Demolish Existing Heating Hydronic Mains	10	19-Jun-23	30-Jun-23
Demolish Old Basketball Hoops	5	20-Jun-23*	26-Jun-23
Masonry Wall Construction at C107 and C115	10	23-Jun-23	07-Jul-23
Install New Basketball Hoops	5	27-Jun-23	03-Jul-23
Run New Hydronic Mains (Including tees for tie in to new and old)	20	03-Jul-23	31-Jul-23
Install Unit Ventilator and Fan Coil Unit C107 and C115	5	10-Jul-23	14-Jul-23
Install Ceiling Grid for C107 and C115	5	17-Jul-23	21-Jul-23
Install Lighting in Rooms C107 and C115	5	24-Jul-23	28-Jul-23
Install Flooring in Rooms C107 and C115	5	24-Jul-23	28-Jul-23
Install Doors and Hardware for C107 and C115	5	31-Jul-23	04-Aug-23
Connect all Hydronics, Power and Controls for New Installation	10	01-Aug-23	14-Aug-23
Reinstall Ceiling Grid	5	01-Aug-23	07-Aug-23
Reinstall Ceiling Tiles, Lights, Speakers, and Fire Alarm	5	08-Aug-23	14-Aug-23
State Inspections	0		14-Aug-23
Final Cleaning	5	15-Aug-23	21-Aug-23
Punch List Creation	5	17-Aug-23	23-Aug-23
Punch List Correction	10	21-Aug-23	01-Sep-23
Owner Move In	5	22-Aug-23	28-Aug-23*
Phase 2 - Classroom Addition	210	05-Jun-23	25-Mar-24
Selective Demolition, Electrical, Mechanical, Architectural, Structur	20	05-Jun-23	30-Jun-23
Establish Addition Grade Including Demolition of Trees	10	03-Jul-23	17-Jul-23
Excavation for New Footings and Foundations and UG Utilities	10	03-Jul-23	17-Jul-23
Pour Footings and Foundations	15	18-Jul-23	07-Aug-23
Install UG Sanitary	10	18-Jul-23	31-Jul-23
Install All Masonry Wall	40	01-Aug-23	25-Sep-23
Install in Wall MEP	40	01-Aug-23	25-Sep-23
Install Deck Angle and Deck at Hallway Connecting Corridors	5	15-Aug-23	21-Aug-23
Install Roofing at Hallway Connecting Corridors	5	22-Aug-23	28-Aug-23
Install Slab on Grade and All Thickened Slabs	5	29-Aug-23	04-Sep-23
Install Steel for ERV	5	29-Aug-23	04-Sep-23
Set ERV and Roof Curb	5	05-Sep-23	11-Sep-23
Install Structural Steel	15	26-Sep-23	16-Oct-23
Install Exterior Brick	20	17-Oct-23	13-Nov-23
Overhead MEP Rough in	20	17-Oct-23	13-Nov-23
Install Roof Blocking	5	14-Nov-23	20-Nov-23
Install Roofing	10	21-Nov-23	04-Dec-23
Install Glazing and Exterior Openings	10	05-Dec-23	18-Dec-23
Set VUVs and FCUs	5	19-Dec-23	25-Dec-23
Paint First Coat	5	19-Dec-23	25-Dec-23
Install Ceiling Grid	10	26-Dec-23	08-Jan-24
Install Lights and Diffusers	10	09-Jan-24	22-Jan-24
Install Ceiling Tile	5	23-Jan-24	29-Jan-24
Install Casework	10	30-Jan-24	12-Feb-24



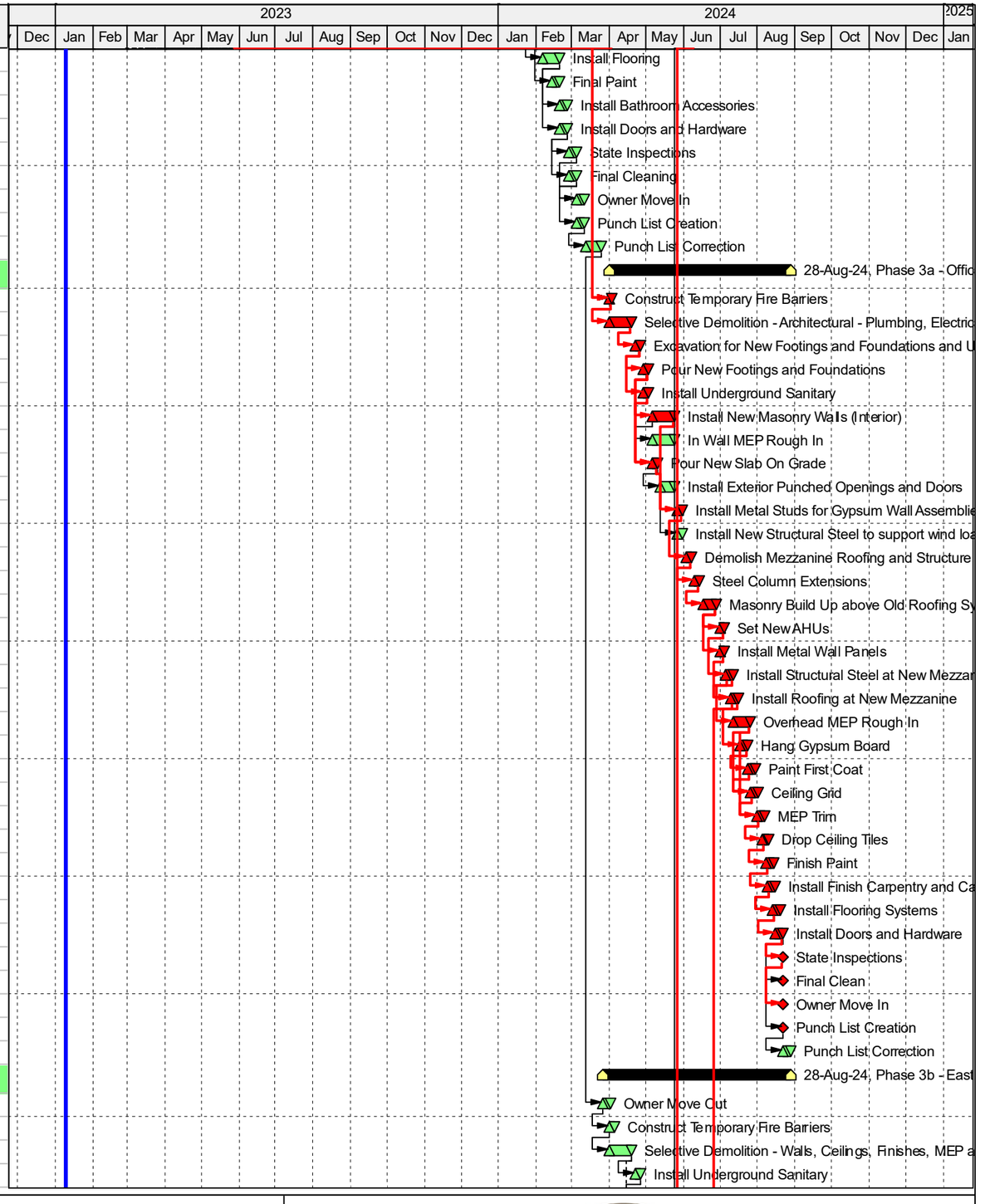
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

Three Rivers Middle School Addition and Renovations - 219050.71

Guideline Schedule (Revised) 20-Jan-23

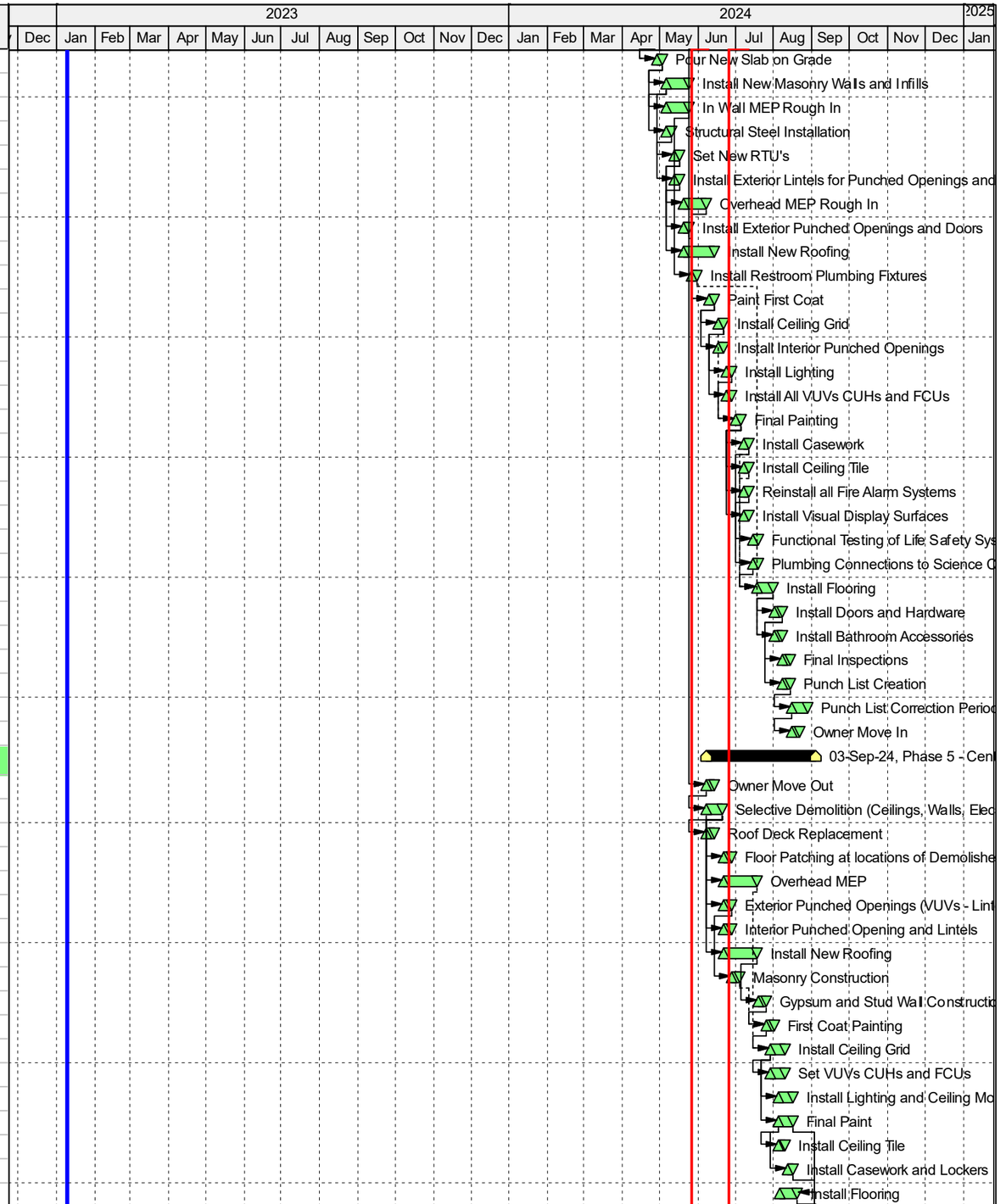
SKILLMAN

Activity Name	Original Duration	Start	Finish
Install Flooring	10	06-Feb-24	19-Feb-24
Final Paint	5	13-Feb-24	19-Feb-24
Install Bathroom Accessories	5	20-Feb-24	26-Feb-24
Install Doors and Hardware	5	20-Feb-24	26-Feb-24
State Inspections	5	27-Feb-24	04-Mar-24
Final Cleaning	5	27-Feb-24	04-Mar-24
Owner Move In	5	05-Mar-24	11-Mar-24
Punch List Creation	5	05-Mar-24	11-Mar-24
Punch List Correction	10	12-Mar-24	25-Mar-24
Phase 3a - Office Renovation (West)	108	01-Apr-24	28-Aug-24
Construct Temporary Fire Barriers	2	01-Apr-24	02-Apr-24
Selective Demolition - Architectural - Plumbing, Electrical, Mechan	15	01-Apr-24	19-Apr-24
Excavation for New Footings and Foundations and UG Sanitary	5	22-Apr-24	26-Apr-24
Pour New Footings and Foundations	5	29-Apr-24	03-May-24
Install Underground Sanitary	5	29-Apr-24	03-May-24
Install New Masonry Walls (Interior)	15	06-May-24	24-May-24
In Wall MEP Rough In	15	06-May-24	24-May-24
Pour New Slab On Grade	5	06-May-24	10-May-24
Install Exterior Punched Openings and Doors	10	13-May-24	24-May-24
Install Metal Studs for Gypsum Wall Assemblies	5	27-May-24	31-May-24
Install New Structural Steel to support wind loads	5	27-May-24	31-May-24
Demolish Mezzanine Roofing and Structure	5	03-Jun-24	07-Jun-24
Steel Column Extensions	5	10-Jun-24	14-Jun-24
Masonry Build Up above Old Roofing System	10	17-Jun-24	28-Jun-24
Set New AHUs	4	01-Jul-24	04-Jul-24
Install Metal Wall Panels	4	01-Jul-24	04-Jul-24
Install Structural Steel at New Mezzanine	5	05-Jul-24	11-Jul-24
Install Roofing at New Mezzanine	5	10-Jul-24	16-Jul-24
Overhead MEP Rough In	10	12-Jul-24	25-Jul-24
Hang Gypsum Board	5	17-Jul-24	23-Jul-24
Paint First Coat	5	24-Jul-24	30-Jul-24
Ceiling Grid	5	26-Jul-24	01-Aug-24
MEP Trim	5	31-Jul-24	06-Aug-24
Drop Ceiling Tiles	5	05-Aug-24	09-Aug-24
Finish Paint	5	08-Aug-24	14-Aug-24
Install Finish Carpentry and Casework	5	09-Aug-24	15-Aug-24
Install Flooring Systems	5	13-Aug-24	19-Aug-24
Install Doors and Hardware	5	15-Aug-24	21-Aug-24
State Inspections	0		21-Aug-24
Final Clean	0		21-Aug-24
Owner Move In	0		21-Aug-24*
Punch List Creation	0		21-Aug-24
Punch List Correction	5	22-Aug-24	28-Aug-24
Phase 3b - East Classrooms	112	26-Mar-24	28-Aug-24
Owner Move Out	5	26-Mar-24	01-Apr-24
Construct Temporary Fire Barriers	5	01-Apr-24	05-Apr-24
Selective Demolition - Walls, Ceilings, Finishes, MEP and Slabs	15	01-Apr-24	19-Apr-24
Install Underground Sanitary	5	22-Apr-24	26-Apr-24



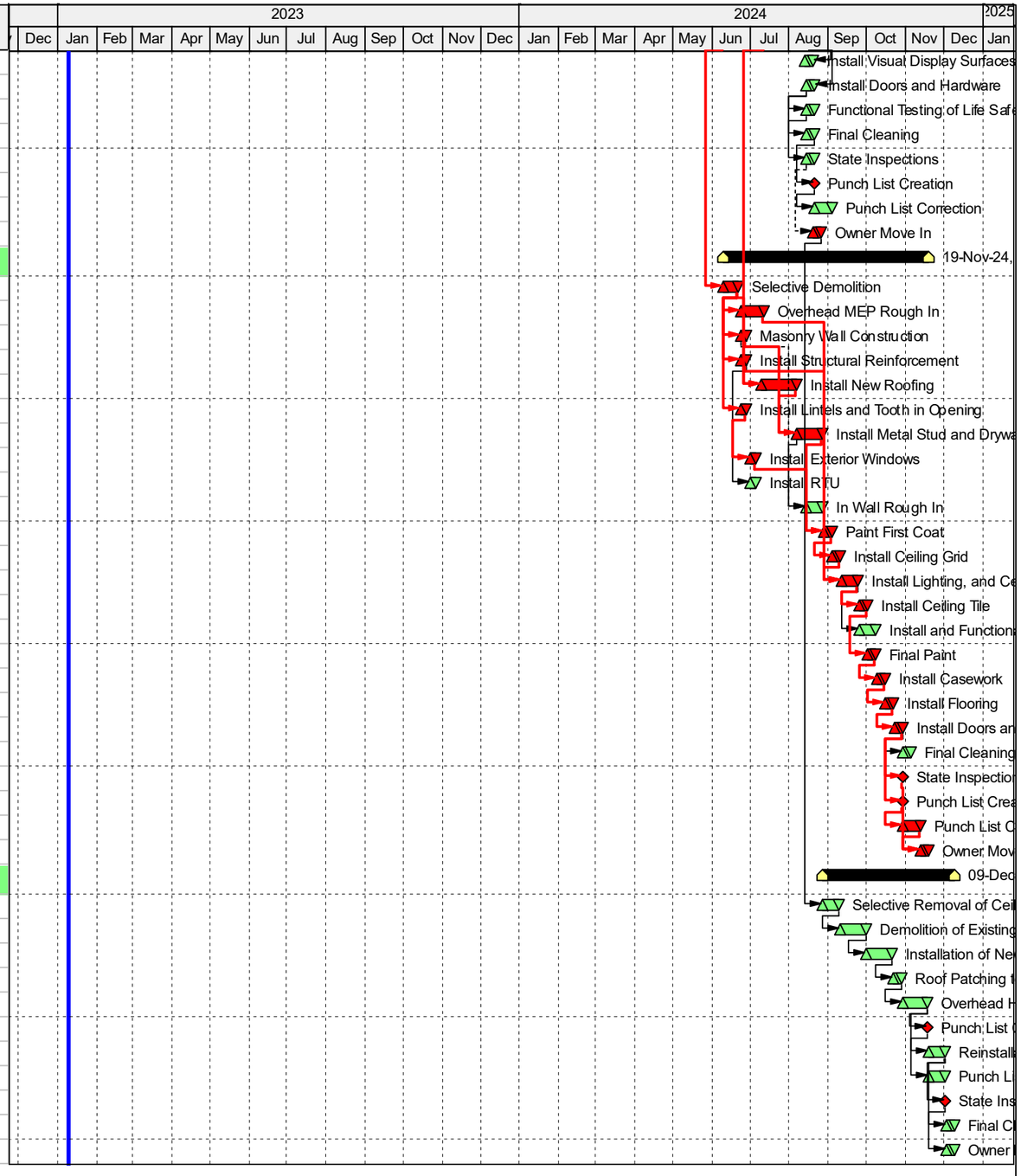
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

Activity Name	Original Duration	Start	Finish
Pour New Slab on Grade	5	29-Apr-24	03-May-24
Install New Masonry Walls and Infills	15	06-May-24	24-May-24
In Wall MEP Rough In	15	06-May-24	24-May-24
Structural Steel Installation	5	06-May-24	10-May-24
Set New RTU's	5	13-May-24	17-May-24
Install Exterior Lintels for Punched Openings and VUV Louvers	5	13-May-24	17-May-24
Overhead MEP Rough In	15	20-May-24	07-Jun-24
Install Exterior Punched Openings and Doors	5	20-May-24	24-May-24
Install New Roofing	20	20-May-24	14-Jun-24
Install Restroom Plumbing Fixtures	5	27-May-24	31-May-24
Paint First Coat	5	10-Jun-24	14-Jun-24
Install Ceiling Grid	5	17-Jun-24	21-Jun-24
Install Interior Punched Openings	5	17-Jun-24	21-Jun-24
Install Lighting	5	24-Jun-24	28-Jun-24
Install All VUVs CUHs and FCUs	5	24-Jun-24	28-Jun-24
Final Painting	5	01-Jul-24	05-Jul-24
Install Casework	5	08-Jul-24	12-Jul-24
Install Ceiling Tile	5	08-Jul-24	12-Jul-24
Reinstall all Fire Alarm Systems	5	08-Jul-24	12-Jul-24
Install Visual Display Surfaces	5	08-Jul-24	12-Jul-24
Functional Testing of Life Safety System	5	15-Jul-24	19-Jul-24
Plumbing Connections to Science Casework	5	15-Jul-24	19-Jul-24
Install Flooring	10	18-Jul-24	31-Jul-24
Install Doors and Hardware	5	01-Aug-24	07-Aug-24
Install Bathroom Accessories	5	01-Aug-24	07-Aug-24
Final Inspections	5	08-Aug-24	14-Aug-24
Punch List Creation	5	08-Aug-24	14-Aug-24
Punch List Correction Period	10	15-Aug-24	28-Aug-24
Owner Move In	5	15-Aug-24	21-Aug-24
Phase 5 - Central Classrooms and Corridors	63	07-Jun-24	03-Sep-24
Owner Move Out	5	07-Jun-24	13-Jun-24
Selective Demolition (Ceilings, Walls, Electrical, Mechanical)	10	07-Jun-24	20-Jun-24
Roof Deck Replacement	5	07-Jun-24	13-Jun-24
Floor Patching at locations of Demolished Walls	5	21-Jun-24	27-Jun-24
Overhead MEP	20	21-Jun-24	18-Jul-24
Exterior Punched Openings (VUVs - Lintels, and Windows)	5	21-Jun-24	27-Jun-24
Interior Punched Opening and Lintels	5	21-Jun-24	27-Jun-24
Install New Roofing	20	21-Jun-24	18-Jul-24
Masonry Construction	5	28-Jun-24	04-Jul-24
Gypsum and Stud Wall Construction	5	19-Jul-24	25-Jul-24
First Coat Painting	5	26-Jul-24	01-Aug-24
Install Ceiling Grid	10	29-Jul-24	09-Aug-24
Set VUVs CUHs and FCUs	10	29-Jul-24	09-Aug-24
Install Lighting and Ceiling Mounted Devices	10	05-Aug-24	16-Aug-24
Final Paint	10	05-Aug-24	16-Aug-24
Install Ceiling Tile	5	05-Aug-24	09-Aug-24
Install Casework and Lockers	5	12-Aug-24	16-Aug-24
Install Flooring	10	06-Aug-24	19-Aug-24



Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

Activity Name	Original Duration	Start	Finish
Install Visual Display Surfaces	5	13-Aug-24	19-Aug-24
Install Doors and Hardware	5	14-Aug-24	20-Aug-24
Functional Testing of Life Safety Systems	5	14-Aug-24	20-Aug-24
Final Cleaning	5	14-Aug-24	20-Aug-24
State Inspections	5	14-Aug-24	20-Aug-24
Punch List Creation	0	21-Aug-24	
Punch List Correction	10	21-Aug-24	03-Sep-24
Owner Move In	5	20-Aug-24	26-Aug-24*
Phase 6 - Office Renovation (East)	117	10-Jun-24	19-Nov-24
Selective Demolition	10	10-Jun-24	21-Jun-24
Overhead MEP Rough In	15	24-Jun-24	12-Jul-24
Masonry Wall Construction	5	24-Jun-24	28-Jun-24
Install Structural Reinforcement	5	24-Jun-24	28-Jun-24
Install New Roofing	20	10-Jul-24	06-Aug-24
Install Lintels and Tooth in Opening	5	24-Jun-24	28-Jun-24
Install Metal Stud and Drywall	15	07-Aug-24	27-Aug-24
Install Exterior Windows	5	01-Jul-24	05-Jul-24
Install RTU	5	01-Jul-24	05-Jul-24
In Wall Rough In	10	14-Aug-24	27-Aug-24
Paint First Coat	5	28-Aug-24	03-Sep-24
Install Ceiling Grid	5	04-Sep-24	10-Sep-24
Install Lighting, and Ceiling Mounted Diffusers and Equipment	10	11-Sep-24	24-Sep-24
Install Ceiling Tile	5	25-Sep-24	01-Oct-24
Install and Functional Testing of Life Safety Systems	10	25-Sep-24	08-Oct-24
Final Paint	5	02-Oct-24	08-Oct-24
Install Casework	5	09-Oct-24	15-Oct-24
Install Flooring	5	16-Oct-24	22-Oct-24
Install Doors and Hardware	5	23-Oct-24	29-Oct-24
Final Cleaning	5	30-Oct-24	05-Nov-24
State Inspections	0		29-Oct-24
Punch List Creation	0	30-Oct-24	
Punch List Correction	10	30-Oct-24	12-Nov-24
Owner Move In	5	13-Nov-24	19-Nov-24*
Phase 7 - Specials and AHU Alternates	75	27-Aug-24	09-Dec-24
Selective Removal of Ceilings to Support Ducting (Alternate)	10	27-Aug-24	09-Sep-24
Demolition of Existing AHUs (Alternate)	15	10-Sep-24	30-Sep-24
Installation of New AHUs and RTUs (Alternate)	15	01-Oct-24	21-Oct-24
Roof Patching to Support RTU Curbs (Alternate)	5	22-Oct-24	28-Oct-24
Overhead Hydronics and Ducting to New AHUs and RTUS (Alterr	15	29-Oct-24	18-Nov-24
Punch List Creation	0		18-Nov-24
Reinstallation of Ceiling Tiles and Ceiling Supported Equipment (A	10	19-Nov-24	02-Dec-24
Punch List Correction	10	19-Nov-24	02-Dec-24
State Inspections	0		02-Dec-24
Final Cleaning	5	03-Dec-24	09-Dec-24
Owner Move In	5	03-Dec-24	09-Dec-24



Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

Phase 1 - June 2023 - August 2023

Phase 2 - June 2023 - March 2024

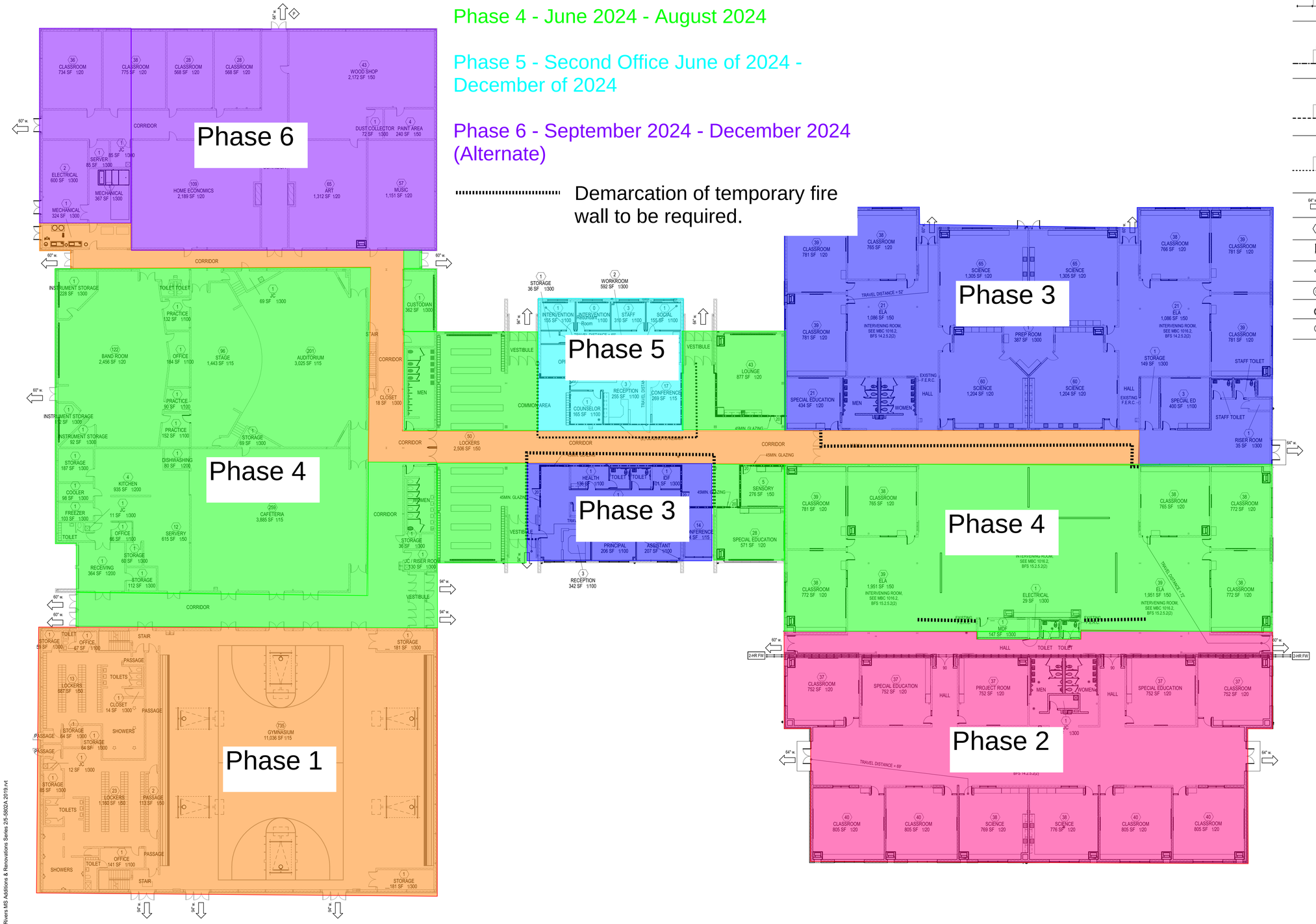
Phase 3 - April 2024 - August 2024

Phase 4 - June 2024 - August 2024

Phase 5 - Second Office June of 2024 - December of 2024

Phase 6 - September 2024 - December 2024 (Alternate)

Demarcation of temporary fire wall to be required.



LEGEND - CODE COMPLIANCE PLAN

FIRE WALLS (IBC SECTION 706)
CREATE SEPARATE BUILDINGS. 2-HOUR FIRE RESISTANCE RATING, STRUCTURALLY ENGINEERED. 90-MINUTE SELF-CLOSING DOORS. GLAZING ONLY ALLOWED IF DESIGNED AND TESTED AS A WALL. GLAZED OPENINGS ARE PERMITTED IF RATED AS A WALL, PER ASTM E119 AND SECTION 716.2 (IBC) IN MAXIMUM SIZE TESTED.

2-HR FIRE BARRIER (IBC SECTION 707 / NFPA 101 - 8.3)
FIRE BARRIER (2-HOUR FIRE RESISTANCE RATING REQUIRED). INSTALL FROM FLOOR SLAB TO UNDERSIDE OF ROOF DECK ABOVE. 90-MINUTE SELF-CLOSING DOORS (100 SQUARE INCHES MAXIMUM DOOR VISION PANEL). GLAZED OPENINGS ARE PERMITTED IF 2-HOUR RATED, PER ASTM E119 AND TABLE 716.5 (IBC) AND TABLE 8.3.4.2 (NFPA 101). OPENING SHALL BE LESS THAN 25% OF THE COMMON CORRIDOR WALL PER ROOM.

1-HR FIRE BARRIER (IBC SECTION 707 / NFPA 101 - 8.3)
FIRE BARRIER (1-HOUR FIRE RESISTANCE RATING REQUIRED). INSTALL FROM FLOOR SLAB TO UNDERSIDE OF ROOF DECK ABOVE. OPENING SHALL BE LESS THAN 25% OF THE WALL. OPENING PROTECTIVES DEPEND ON TYPE OF ASSEMBLY PER TABLE 716.5 (IBC) AND TABLE 8.3.4.2 (NFPA 101).

(CORRIDOR) FIRE BARRIER (IBC SECTION 707 / NFPA 101 - 8.3)
CORRIDOR FIRE BARRIER (1-HOUR FIRE RESISTANCE RATING REQUIRED). INSTALL FROM FLOOR SLAB TO UNDERSIDE OF ROOF DECK ABOVE. 20-MINUTE SELF-CLOSING DOORS. GLAZED OPENINGS ARE PERMITTED IF 3/4-HOUR RATED, PER ASTM E119 IN THE MAXIMUM SIZE TESTED. OPENING SHALL BE LESS THAN 25% OF THE COMMON CORRIDOR WALL PER ROOM.

SMOKE BARRIER (IBC SECTION 709 / NFPA 101 - 8.5)
SMOKE BARRIER (1-HOUR FIRE RESISTANCE RATING REQUIRED). DIVIDE BUILDING INTO COMPARTMENTS TO RESTRICT MOVEMENT OF SMOKE. INSTALL FROM FOOR SLAB TO UNDERSIDE OF ROOF DECK ABOVE 20-MINUTE SELF-CLOSING OR SMOKE ACTIVATED LABEL DOORS. GLAZED OPENINGS ARE PERMITTED IF 3/4-HOUR RATED, PER ASTM E119 IN THE MAXIMUM SIZE TESTED. OPENING SHALL BE LESS THAN 25% OF THE COMMON CORRIDOR WALL PER ROOM.

SMOKE PARTITION (IBC SECTION 710 / NFPA 101 - 8.4)
SMOKE PARTITION (NO FIRE RESISTANCE RATING) FROM FLOOR SLAB TIGHT TO ROOF DECK OR SOLID CEILING ABOVE. GLAZED OPENINGS ARE PERMITTED (NO RATING REQUIRED)

- 64" w. — BUILDING EXIT WITH EGRESS WIDTH
- 46 — OCCUPANT LOAD
- 20 — DENOTES FIRE RESISTANCE RATING OF OPENING PROTECTIVE (IN MINUTES)
- H — DENOTES PANIC HARDWARE DEVICE ON EACH DOOR LEAF
- FE — FIRE EXTINGUISHER
- "ACCESSIBLE" ROUTE/ENTRANCE/EGRESS
- E — EGRESS WINDOW LOCATION

LIFE SAFETY NOTES

1. CODE: NFPA 101, 2012 LIFE SAFETY CODE, AS AMENDED BY STATE FIRE MARSHAL 2015 MICHIGAN BUILDING CODE
2. CONSTRUCTION TYPE: IIB (000)
   PARTIALLY PROTECTED WITH AUTOMATIC FIRE SPRINKLER SYSTEM
   - BUILDING AREA SEPARATED BY NEW FIRE WALL IS FULLY SPRINKLERED
   - EXISTING CLASSROOMS IN UNITS A & B ARE FULLY SPRINKLERED
   - REST OF BUILDING IS UNSPRINKLERED

   HAZARD OF CONTENTS: ORDINARY HAZARD
3. OCCUPANCY: EDUCATIONAL OCCUPANCY (SPACES SUBJECT TO "ASSEMBLY" OCCUPANCY NOTED ON PLAN)
4. AREA & HEIGHT:
   ALLOWABLE AREA: 68,875 SQ. FT. (REFER TO CALCULATIONS ON SHEET)
   - BUILDING AREA (COMBINATION OF EXISTING & NEW PART OF ADDITION) = 15,300 SF

   ALLOWABLE HEIGHT: 1 STORY
   SMOKE COMPARTMENTS: MINIMUM OF 2 COMPARTMENTS, MAXIMUM OF 30,000 SQ. FT. EACH
5. SEPARATION & PROTECTION:
   CORRIDORS SHALL BE SMOKE TIGHT.
   FIRE AREAS: SEPARATED W/ 2-HR FIRE SEPARATION & 90-MIN. OPENING PROTECTIVES.
   BOILER & FURNACE ROOMS, STORAGE AREAS, AND JANITOR CLOSETS: 1 HR-RATED SEPARATION & OPENING PROTECTIVES WHERE REQUIRED.
6. OCCUPANT LOAD: (BASED ON FOLLOWING - SEE PLAN)
   ASSEMBLY (CONFERENCE, DINING, GYMNASIUM): 1/15 SF NET
   BUSINESS: 1/100 SF GROSS
   CLASSROOMS: 1/20 SF NET
   KITCHENS: 1/100 SF GROSS
   LIBRARIES (READING AREAS): 1/50 SF NET
   LIBRARIES (STACK AREAS): 1/100 SF GROSS
   LOCKERS: 1/7 SF NET, OR 1/15 SF GROSS INCLUDING SHOWERS, TOILETS & DRYING
   MECHANICAL EQUIPMENT: 1/300 SF GROSS
   SHOPS, LABS, VOC. ROOMS: 1/50 SF NET
   STAGES: 1/15 SF NET
   STORAGE: 1/300 SF GROSS
7. EGRESS REQUIREMENTS:
   A. 6'-0" MINIMUM CORRIDOR WIDTH (CORRIDOR CAPACITY = OCCUPANT LOAD/REQUIRED NUMBER OF EXITS)
   B. EGRESS WIDTHS - 0.2" PER PERSON (LEVEL OR RAMPED)
   C. 200' MAXIMUM TRAVEL DISTANCE
   D. 20' DEAD-END MAXIMUM TRAVEL IN CORRIDOR.
   E. 75' MAXIMUM COMMON PATH OF TRAVEL
   F. EXITS:
      (1) 2 REMOTE EXITS REQUIRED FOR EDUCATIONAL SPACES >50 PEOPLE OR >1,000 SQ. FT. IN AREA
      (2) MINIMUM NUMBER PER OCCUPANTS: 2 IF < 501, 3 IF < 1001, 4 IF > 1000
      (3) WINDOWS FOR RESCUE REQUIRED IN BUILDINGS NOT PROTECTED BY AUTOMATIC SPRINKLER SYSTEM
      (4) PANIC HARDWARE AT AREAS >100 OCCUPANT LOAD IF DOOR PROVIDED WITH LATCH OR LOCK
      (5) DISCHARGE: ALL EXITS SHALL TERMINATE AT A PUBLIC WAY OR AN EXTERIOR EXIT DISCHARGE
   G. HORIZONTAL EXITS:
      (1) SUBSTITUTED FOR NO MORE THAN ONE-HALF OF REQUIRED EXITS
      (2) FIRE BARRIERS SEPARATING BUILDING AREAS WITH HORIZ. EXITS BETWEEN SHALL BE 2-HOUR RATED
      (3) WHERE SERVING BOTH SIDES OF FIRE BARRIER ADJACENT OPENINGS REQUIRED WITH DOORS SWINGING IN OPPOSITE DIRECTIONS
   H. DOORS:
      (1) MINIMUM CLEAR WIDTH SHALL BE 32"
      (2) SIDE HINGED
      (3) SWING IN DIRECTION OF TRAVEL WHERE OCCUPANT LOAD IS > 50
      (4) SELF-CLOSING OR AUTOMATIC-CLOSING IN FIRE BARRIERS AND HORIZONTAL EXITS
8. INTERIOR FINISH:
   A. EXITS - CLASS A.
   B. ALL OTHER - CLASS A OR B.
   C. INTERIOR WALL & CEILING FINISH IF LESS THAN 10% OF AGGREGATE WALL & CEILING AREAS OF ANY ROOM MAY BE CLASS C.
9. OTHER PROVISIONS:
   BUILDING CONSTRUCTION - MICHIGAN BUILDING CODE 2015
   ELECTRICAL - 2017 NFPA 70 (NEC) AS AMENDED BY MICHIGAN PART 8 RULES
   MECHANICAL - MICHIGAN MECHANICAL CODE 2015
   PLUMBING - MICHIGAN PLUMBING CODE 2015
   FIRE ALARM SYSTEM - NFPA 70 & 72
   FIRE EXTINGUISHERS - NFPA 10
   FIRE SPRINKLERS - NFPA 13

FIRESTOPPING REQUIREMENT

ALL OPENINGS AROUND MECHANICAL, PLUMBING, ELECTRICAL, AND STRUCTURAL PENETRATIONS THRU A FIRE RESISTIVE RATED ASSEMBLY (INCLUDING FLOORS) SHALL BE SEALED WITH FIRE RATED FIRESTOPPING IN COMPLIANCE WITH ASTM E814 AND EQUIVALENT TO FIRE RATING REQUIRED. PENETRATIONS THRU SMOKE RESISTIVE NON-FIRE RATED ROOM, WALLS SHALL BE SEALED SMOKE TIGHT

NORTH

CODE COMPLIANCE PLAN
1/16" = 1'-0"

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

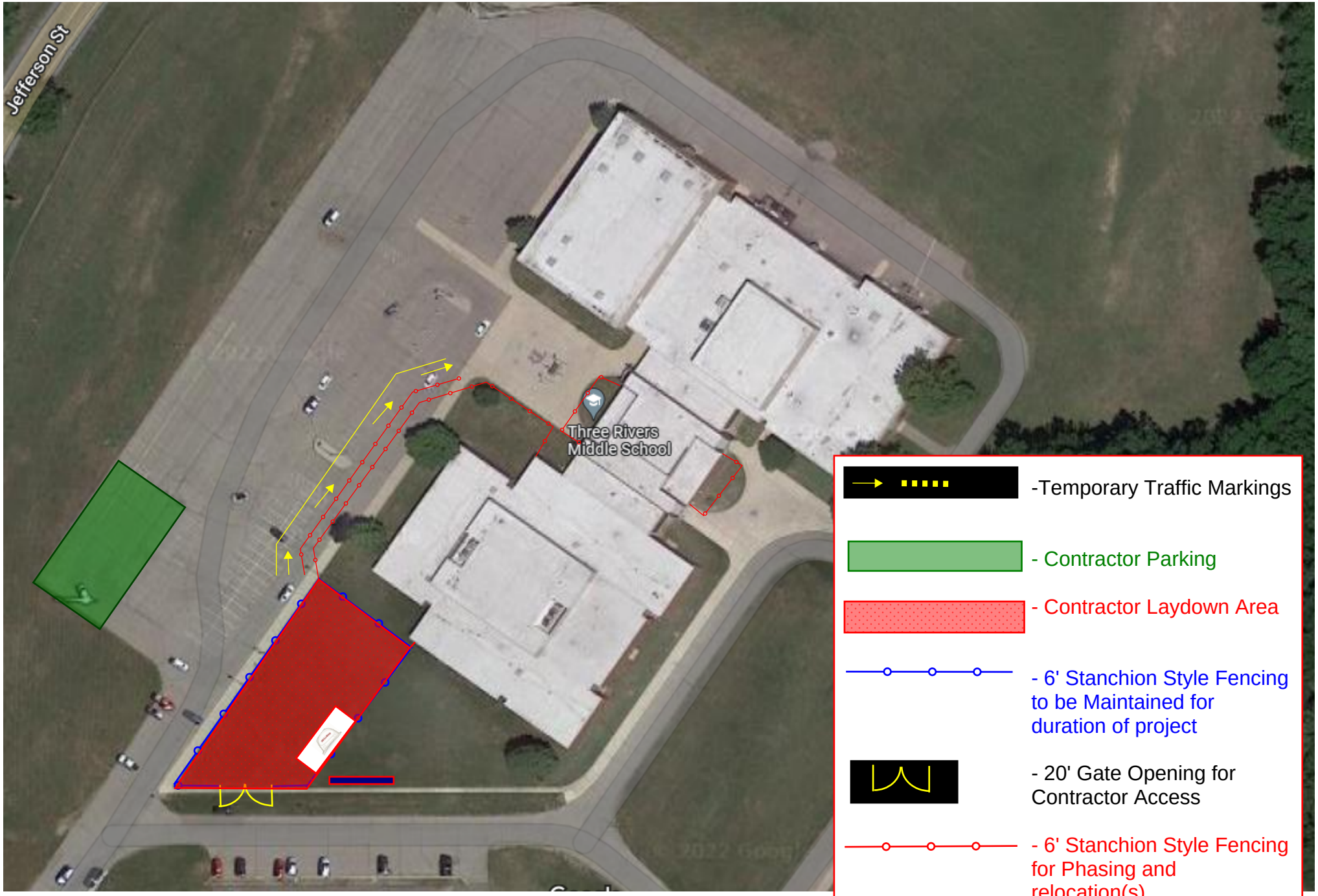
12.01.2022 BIDS & CONSTRUCTION

DRAWN BSE
REVIEWED CMA

PROJECT NO. 5-5802

CODE COMPLIANCE PLAN

G1.01



GMB

SKILLMAN

Site Logistics and Phasing Plan - 1/6/2023

ADDENDUM

OWNER	**THREE RIVERS COMMUNITY SCHOOLS**
PROJECT	MIDDLE SCHOOL ADDITIONS & RENOVATIONS A/E Project 5-5802
PURPOSE	**ADDENDUM 002** THIS ADDENDUM SHALL FORM PART OF THE BIDDING DOCUMENTS. CHANGES, ADDITIONS, CLARIFICATIONS OR DELETIONS HEREIN SUPERSEDE THE DRAWINGS AND SPECIFICATIONS. BIDDERS SHALL INCLUDE ON THE PROPOSAL FORM ACKNOWLEDGEMENT OF THE RECEIPT OF THIS ADDENDUM.
ATTACHMENTS	**New Specifications: 31 31 16, 33 31 11** **Reissued Specifications: 09 65 19** **New Sheets: M1.1E, M2.1E, M4.1A, M4.1B, M4.1C, M4.1D, M8.04, E1.1E** **Reissued Sheets: G0.00, G2.01, C1.01, C3.01, C8.01, S2.1A, S2.1C, S3.1A, S7.01, A1.1A, A1.1B, A1.1C, A1.1D, A1.1E, A2.1B, A2.1C, A2.1D, A2.1E, A2.30, A5.01, A6.10, A9.1A, A9.1B, A9.1C, M1.1A, M1.1B, M1.1C, M1.1D, M1.80, M1.81, M2.1A, M2.1B, M2.1C, M2.1D, M3.1A, M3.1B, M3.1C, M3.1D, M7.02, ,8.02, M8.03, M8.04, M9.01, M9.02, E2.1A, E2.1B, E4.01, E5.01, E5.02, ES1.01, ES2.01**
ARCHITECT-ENGINEER	**GMB** www.gmb.com 616.796.0200
CONSTRUCTION MANAGER	The Skillman Corporation www.skillman.com 269.350.5757

SPECIFICATION CLARIFICATIONS / REVISIONS

ITEM NO. 1 SECTION 09 65 19 – RESILIENT TILE FLOORING (**REISSUED**)

Added in Section 1.8, B. Mockups. We would like to see a 100 sq. ft. mockup of the VCT pattern.

ITEM NO. 2 SECTION 31 31 16 – TERMITE CONTROL (**NEW**)

Added Termite Control specification.

ITEM NO. 3 SECTION 33 31 11 – SITE SANITARY UTILITY SEWERAGE PIPING (**NEW**)

Added site sanitary utility sewerage piping specification.

SHEET CLARIFICATIONS / REVISIONS

ITEM NO. 4 SHEET G0.00 – COVER SHEET **(REISSUED**)

A. Added Alternate A-1 to the Alternate List.
B. Added sheets M1.1E, M2.1E, M4.1A, M4.1B, M4.1C, M4.1D, M8.04 and E1.1E to the Drawing Index.

ITEM NO. 5 SHEET G2.01 – CONSTRUCTION PHASING PLAN **(REISSUED**)

Revised construction phasing plan per Skillman updates.

ITEM NO. 6 SHEET C1.01 – DEMOLITION PLAN **(REISSUED**)

Revised plans to remove 8” crab apple tree

ITEM NO. 7 SHEET C3.01 – GRADING & UTILITY PLAN **(REISSUED**)

Revised storm inverts, added more sanitary sewer information, and adjusted SESC note numbering.

ITEM NO. 8 SHEET C8.01 – DETAIL SHEET **(REISSUED**)

.

Added Detail 15 Downspout Connection Detail.

ITEM NO. 9 SHEET S2.1A - UNIT ‘A’ FOUNDATION PLAN **(REISSUED**)

A. Moved section cuts for Detail 9/S7.01 from line 2 to line 4.
B. Added section cuts for Detail 17/S7.01
C. Added stepped footing as required.
D. Removed existing top of footing elevations callouts.

ITEM NO. 10 SHEET S2.1C - UNIT ‘C’ FOUNDATION PLAN **(REISSUED**)

A. Added section cuts for Details 1 and 18/S7.01.
B. Added footing size.

ITEM NO. 11 SHEET S3,1A – UNIT 'A' ROOF FRAMING PLAN **(REISSUED)**

Added lintels per ductwork update.

ITEM NO. 12 SHEET S7.01 – FOUNDATION WALL DETAILS **(REISSUED)**

Modified Details 9 and 10/S7.01

ITEM NO. 13 SHEET A1.1A – UNIT 'A' FIRST FLOOR DEMOLITION PLAN **(REISSUED)**

Added saw cutting and slab removal locations as shown clouded.

ITEM NO. 14 SHEET A1.1B – UNIT 'B' FIRST FLOOR DEMOLITION PLAN **(REISSUED)**

A. Added saw cutting and slab removal locations as shown clouded.
B. Demolished Doors B115A and B116A. Existing frames to remain.

ITEM NO. 15 SHEET A1.1C – UNIT 'C' FIRST FLOOR DEMOLITION PLAN **(REISSUED)**

A. Added saw cutting and slab removal locations as shown clouded.
B. Demolished the existing doors and frames at Vestibule C101.
C. Demolished the existing doors and frames at Vestibule E120.

ITEM NO. 16 SHEET A1.1D – UNIT 'D' FIRST FLOOR DEMOLITION PLAN **(REISSUED)**

A. Demolished doors D105A, D106B, D106C, D108A, D113B, D121A, D121B, D125A, D125B, D127A, D127B. Existing frames to remain.
B. Demolished existing door and frame for D133A.

ITEM NO. 17 SHEET A1.1E – UNIT 'E' FIRST FLOOR DEMOLITION PLAN **(REISSUED)**

A. Demolished Door E118A. Existing frame to remain.
B. Demolished the existing doors and frames at Vestibule E120.
C. Demolished Doors E106A-E106E. Existing frames to remain.
D. Demolished Doors E101A-E101B. Existing frames to remain.
E. Revised backstop replacement notes as shown clouded.

ITEM NO. 18 SHEET A2.1B – UNIT 'B' FIRST FLOOR PLAN **(REISSUED)**

A. Added new doors B115A and B116A into existing frames.

ITEM NO. 19 SHEET A2.1C – UNIT 'C' FIRST FLOOR PLAN **(REISSUED)**

A. Added new doors and frames at Vestibule C101.
B. Added new doors and frames at Vestibule E120.

ITEM NO. 20 SHEET A2.1D – UNIT 'D' FIRST FLOOR PLAN **(REISSUED)**

A. Replacement of door panels and hardware for D105A, D106C, and D108A.
B. Added new doors D105A, D106B, D106C, D108A, D113B, D121A, D121B, D125A, D125B, D127A, and D127B into existing frames.
C. Added new door and frame for D133A.

ITEM NO. 21 SHEET A2.1E – UNIT 'E' FIRST FLOOR PLAN **(REISSUED)**

A. Added new door E118A into existing frame.
B. Added new doors and frames at Vestibule E120.
C. Added new doors E106A-E106E into existing frames.
D. Added new doors E101A and E101B into existing frames.
E. Revised backstop replacement notes as shown clouded.

ITEM NO. 22 SHEET A2.30 – OVERALL ROOF PLAN **(REISSUED)**

Changed Roof Note 1 to reference proper sheet.

ITEM NO. 23 SHEET A5.01 – DOOR & FRAME SCHEDULE **(REISSUED)**

A. Revised door schedule to reflect existing conditions.
B. Doors B115A and B116A to be replaced, frames to remain per Owner request.
C. E112A removed from scope.
D. Added doors C101A, C101B, C101C, C101D, C101E and C101F to the Unit 'C' Door & Frame Schedule.
E. Added doors E101A, E101B, E106A-E106E, E107B, E118A, E120A, E120B, E120C, E120D, E120E, E120F, E120G, E120H, E120J, E120K, E120L and E120M to the Unit 'E' Door & Frame Schedule.
F. Added Frame Types 10A and 12A to the Frame Type Legend.

ITEM NO. 24 SHEET A6.10 – WALL SECTIONS **(REISSUED)**

Edited note to reflect proper dimension of foundation insulation on wall section AA2.

ITEM NO. 25 SHEET A9.1A – UNIT 'A' FIRST FLOOR FINISH PLAN **(REISSUED)**

Edited note 9 and added note 27.

ITEM NO. 26 SHEET A9.1B – UNIT 'B' FIRST FLOOR FINISH PLAN **(REISSUED)**

Edited note 9 and added note 27.

ITEM NO. 27 SHEET A9.1C – UNIT 'C' FIRST FLOOR FINISH PLAN **(REISSUED)**

Edited note 9 and added note 27.

ITEM NO. 28 SHEET M1.1A UNIT 'A' MECHANICAL DEMOLITION PLAN **(REISSUED)**

Added and revised mechanical keynotes.

ITEM NO. 29 SHEET M1.1B UNIT 'B' MECHANICAL DEMOLITION PLAN **(REISSUED)**

A. Added and revised mechanical keynotes.
B. Added mechanical piping demolition to VAV box.

ITEM NO. 30 SHEET M1.1C UNIT 'C' MECHANICAL DEMOLITION PLAN **(REISSUED)**

A. Added and revised mechanical keynotes
B. Added demolition of electric cabinet unit heaters and refrigeration piping.

ITEM NO. 31 SHEET M1.1D UNIT 'D' MECHANICAL DEMOLITION PLAN **(REISSUED)**

A. Added and revised mechanical keynotes.
B. Revised Mechanical Demo Keynote Legend
C. Added demolition of electric cabinet unit heaters, dust collection system and paint spray booth.
D. Added general note to describe Base Bid and Alternate M-1 work in Unit D.

ITEM NO. 32 SHEET M1.1E UNIT 'E' MECHANICAL DEMOLITION PLAN **(NEW)**

Added Sheet M1.1E to provide mechanical demolition notes and Mechanical Demo Keynote Legend for Unit E.

ITEM NO. 33 SHEET M1.80 ENLARGED MECHANICAL MEZZANINE DEMOLITION PLANS **(REISSUED)**

A. Revised sheet name.
B. Revised Plan 2 name.
C. Added and revised mechanical keynotes.
D. Revised Mechanical Demo Keynote Legend.
E. Added demolition of refrigerant and chilled glycol piping for air cooled chiller equipment.

ITEM NO. 34 SHEET M1.81 ENLARGED MECHANICAL DEMOLITION PLANS **(REISSUED)**

A. Added and revised mechanical keynotes.
B. Revised Mechanical Demo Keynote Legend.
C. Added general note to describe Base Bid and Alternate M-1 work on the drawing.

ITEM NO. 35 SHEET M2.1A UNIT 'A' HVAC PLAN **(REISSUED)**

A. Added mechanical keynotes.
B. Revised Mechanical Keynote Legend.
C. Added ductwork sizes and fire/smoke dampers.

ITEM NO. 36 SHEET M2.1B UNIT 'B' HVAC PLAN **(REISSUED)**

A. Added mechanical keynotes.
B. Revised Mechanical Keynote Legend.
C. Added exhaust ductwork and grilles and added ductwork sizes.

ITEM NO. 37 SHEET M2.1C UNIT 'C' HVAC PLAN **(REISSUED)**

A. Added mechanical keynotes.
B. Added Mechanical Keynote Legend.
C. Added/revised supply, return and exhaust ductwork and added ductwork sizes, Duct Fitting Legend and general VAV box installation notes.

ITEM NO. 38 SHEET M2.1D UNIT 'D' HVAC PLAN **(REISSUED)**

A. Added mechanical keynotes.
B. Added Mechanical Keynote Legend.

C. Added/revised supply, return and exhaust ductwork and added ductwork sizes, Duct Fitting Legend and general VAV box installation notes.
D. Added general note to describe Alternate M-1 work in Unit D.

ITEM NO. 39 SHEET M2.1E UNIT 'E' HVAC PLAN **(NEW)**

Added Sheet M1.1E to provide mechanical key notes, Mechanical Keynote Legend and Alternate M-1 description for Unit E.

ITEM NO. 40 SHEET M3.1A UNIT 'A' HYDRONIC PLAN **(REISSUED)**

A. Added mechanical keynotes.
B. Mechanical Keynote Legend, refrigerant piping, hot water coil circulating pump to energy recovery unit ERU-23.1 and pipe anchors to hot water heating system piping.

ITEM NO. 41 SHEET M3.1B UNIT 'B' HYDRONIC PLAN **(REISSUED)**

A. Added mechanical keynotes.
B. Added Mechanical Keynote Legend.
C. Added refrigerant piping, hot water coil circulating pump to energy recovery unit ERU-23.2 and pipe anchors to hot water heating system piping.

ITEM NO. 42 SHEET M3.1C UNIT 'C' HYDRONIC PLAN **(REISSUED)**

A. Added mechanical keynotes.
B. Added Mechanical Keynote Legend.
C. Added refrigerant piping, hot water heating system piping and sizes, hot water coil circulating pump to rooftop unit RTU-23.1 and pipe anchors/guides/expansion joints to the hot water heating system piping.

ITEM NO. 43 SHEET M3.1D UNIT 'D' HYDRONIC PLAN **(REISSUED)**

A. Added mechanical keynote.
B. Added Mechanical Keynote Legend
C. Added refrigerant piping, hot water heating system piping and sizes, chilled glycol system piping and sizes, pipe anchors/guides/expansion joints to the hot water heating system piping and general note to describe Base Bid and Alternate M-1 work in Unit D.

ITEM NO. 44 SHEET M4.1A UNIT 'A' MECHANICAL PIPING PLAN **(NEW)**

New sheet to show gas piping and condensate piping.

ITEM NO. 45 SHEET M4.1B UNIT 'B' MECHANICAL PIPING PLAN **(NEW)**

New sheet to show gas piping and condensate piping.

ITEM NO. 46 SHEET M4.1C UNIT 'C' MECHANICAL PIPING PLAN **(NEW)**

New sheet to show gas piping and condensate piping.

ITEM NO. 47 SHEET M4.1D UNIT 'D' MECHANICAL PIPING PLAN (NEW)

New sheet to show gas piping and condensate piping.

ITEM NO. 48 SHEET M7.02 MECHANICAL DETAILS **(REISSUED**)

Revised Pumped Coil 3-Way Valve Piping Detail – Inline Pump 4/M7.02 to include coil circulation pump and pipe sizing information in table.

ITEM NO. 49 SHEET M8.02 MECHANICAL CONTROL DIAGRAMS **(REISSUED**)

Revised Mechanical Control Diagrams 1 and 2.

ITEM NO. 50 SHEET M8.03 MECHANICAL CONTROL DIAGRAMS **(REISSUED**)

Revised Mechanical Control Diagrams 2 and 3.

ITEM NO. 51 SHEET M8.04 MECHANICAL CONTROL DIAGRAMS **(NEW**)

Added mechanical control diagrams for rooftop unit and air handling units.

ITEM NO. 52 SHEET M9.01 MECHANICAL SCHEDULES **(REISSUED**)

Revised mechanical equipment schedules.

ITEM NO. 53 SHEET M9.02 MECHANICAL SCHEDULES **(REISSUED**)

Revised/added mechanical equipment schedules.

ITEM NO. 54 SHEET E1.1E UNIT ‘E’ FIRST FLOOR ELECTRICAL DEMOLITION PLAN **(NEW**)

Refer to the plan for the (4) added notes for the disconnect and reconnect of (2) basketball motorized backboards.

ITEM NO. 55 SHEET E2.1A UNIT ‘A’ POWER & COMMUNICATIONS PLAN **(REISSUED**)

Refer to the plan for the (4) added cord reels.

ITEM NO. 56 SHEET E2.1B UNIT ‘B’ POWER & COMMUNICATIONS PLAN **(REISSUED**)

Refer to the plan for the removal of FCU-22.

ITEM NO. 57 SHEET E2.1E UNIT ‘E’ FIRST FLOOR POWER & COMMUNICATIONS PLAN **(REISSUED**)

Refer to the plan for the added (2) basketball hoops and the reconnection of the two replaced hoops.

ITEM NO. 58 SHEET E4.01 POWER DISTRIBUTION ONE-LINE DIAGRAM **(REISSUED**)

Refer to the plan for Transformer ‘T-AD’ and Transformer ‘T-BD’ to change from existing to new transformers.

ITEM NO. 59 SHEET E5.01 POWER DISTRIBUTION EQUIPMENT SCHEDULES **(REISSUED**)

Refer to the plan for the circuit name change from CU-23.13 to CU-23.23 on Panel ‘A’.

ITEM NO. 60 SHEET E5.02 POWER DISTRIBUTION EQUIPMENT SCHEDULES **(REISSUED**)

A. Refer to the plan for the removal of FCU-22 FROM Panel 'AD'.
B. Refer to the plan for two added 20A/1P breakers for the added cord reels.

ITEM NO. 61 SHEET ES1.01 SITE ELECTRICAL DEMOLITION PLAN **(REISSUED**)

Refer to the plan for the correct existing building footprint.

ITEM NO. 62 SHEET ES2.01 SITE ELECTRICAL PLAN **(REISSUED**)

Refer to the plan for the notes to be removed from existing site lighting poles. All existing site lighting poles as per Keynote L02 are to reuse existing concrete bases and underground feeders.

SECTION 09 65 19 - RESILIENT TILE FLOORING
(ADDENDUM 002)

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. Vinyl composition floor tile.

1.3 COORDINATION

A. Coordinate all work with job site superintendent and all applicable trades.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: For each type of resilient floor tile.

1. Include floor tile layouts, edges, columns, doorways, enclosing partitions, built-in furniture, cabinets, and cutouts.

2. Show details of special patterns.

C. Samples: Physical samples are not required and will not be reviewed, unless the product being submitted differs from the original specified product.

1. Provide written confirmation that products are originally specified product.

D. Product Schedule: For floor tile. Use same designations indicated on Drawings.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: For each type of floor tile to include in maintenance manuals.

1.7 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Floor Tile: Furnish one box for every 50 boxes or fraction thereof, of each type, color, and pattern of floor tile installed.

1.8 QUALITY ASSURANCE

A. Installer Qualifications: An entity that employs installers and supervisors who are competent in techniques required by manufacturer for floor tile installation and seaming method indicated.

1. Engage an installer who employs workers for this Project who are trained or certified by floor tile manufacturer for installation techniques required.

B. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution. A installation guide will be issued to show a general intent and a basis of design for this mockup.

1. Coordinate mockups in this Section with mockups specified in other Sections.

a. Size: Minimum 100 sq. ft. for each type, color, and pattern in Corridor C118.

2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Store floor tile and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 50 deg F or more than 90 deg F. Store floor tiles on flat surfaces.

1.10 FIELD CONDITIONS

A. Maintain ambient temperatures within range recommended by manufacturer, but not less than 70 deg F or more than 95 deg F, in spaces to receive floor tile during the following periods:

1. 48 hours before installation.
2. During installation.
3. 48 hours after installation.

B. After installation and until Substantial Completion, maintain ambient temperatures within range recommended by manufacturer, but not less than 55 deg F or more than 95 deg F.

C. Close spaces to traffic during floor tile installation.

D. Close spaces to traffic for 48 hours after floor tile installation.

E. Install floor tile after other finishing operations, including painting, have been completed.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Fire-Test-Response Characteristics: For resilient floor tile, as determined by testing identical products according to ASTM E 648 or NFPA 253 by a qualified testing agency.

1. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.

2.2 VINYL COMPOSITION FLOOR TILE VCT1, VCT2, VCT3

A. Tile Standard: ASTM F 1066, Class 2, through pattern.

B. Wearing Surface: Smooth.

C. Thickness: 0.125 inch.

D. Size: 12 by 12 inches.

E. Colors and Patterns: As indicated on Finish Schedule.

2.3 INSTALLATION MATERIALS

A. Trowelable Leveling and Patching Compounds: Latex-modified, portland-cement-based or blended hydraulic-cement-based formulation provided or approved by floor tile manufacturer for applications indicated.

B. Adhesives: Water-resistant type recommended by floor tile and adhesive manufacturers to suit floor tile and substrate conditions indicated.

C. Floor Polish: Provide protective, liquid floor-polish products recommended by floor tile manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, with Installer present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.

1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of floor tile.

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

3.2 PREPARATION

A. Prepare substrates according to floor tile manufacturer's written instructions to ensure adhesion of resilient products.

B. Concrete Substrates: Prepare according to ASTM F 710.

1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
2. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by floor tile manufacturer. Do not use solvents.
3. Alkalinity and Adhesion Testing: Perform tests recommended by floor tile manufacturer. Proceed with installation only after substrate alkalinity falls within range on pH scale recommended by manufacturer in writing, but not less than 5 or more than 9 pH.
4. Moisture Testing: Perform tests so that each test area does not exceed 1000 sq. ft. and perform no fewer than three tests in each installation area and with test areas evenly spaced in installation areas.
    a. Anhydrous Calcium Chloride Test: ASTM F 1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. in 24 hours.
    b. Relative Humidity Test: Using in-situ probes, ASTM F 2170. Proceed with installation only after substrates have a maximum 75 percent relative humidity level measurement.

C. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound; remove bumps and ridges to produce a uniform and smooth substrate.

D. Do not install floor tiles until materials are the same temperature as space where they are to be installed.

1. At least 48 hours in advance of installation, move resilient floor tile and installation materials into spaces where they will be installed.

E. Immediately before installation, sweep and vacuum clean substrates to be covered by resilient floor tile.

3.3 FLOOR TILE INSTALLATION

A. Comply with manufacturer's written instructions for installing floor tile.

B. Lay out floor tiles from center marks established with principal walls, discounting minor offsets, so tiles at opposite edges of room are of equal width. Adjust as necessary to avoid using cut widths that equal less than one-half tile at perimeter.

1. Lay tiles in pattern indicated.

C. Match floor tiles for color and pattern by selecting tiles from cartons in the same sequence as manufactured and packaged, if so numbered. Discard broken, cracked, chipped, or deformed tiles.

1. Lay tiles with grain running in one direction.

D. Scribe, cut, and fit floor tiles to butt neatly and tightly to vertical surfaces and permanent fixtures including built-in furniture, cabinets, pipes, outlets, and door frames.

E. Extend floor tiles into toe spaces, door reveals, closets, and similar openings. Extend floor tiles to center of door openings.

F. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on floor tiles as marked on substrates. Use chalk or other nonpermanent marking device.

G. Install floor tiles on covers for telephone and electrical ducts, building expansion-joint covers, and similar items in installation areas. Maintain overall continuity of color and pattern between

pieces of tile installed on covers and adjoining tiles. Tightly adhere tile edges to substrates that abut covers and to cover perimeters.

H. Adhere floor tiles to substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.

3.4 CLEANING AND PROTECTION

A. Comply with manufacturer's written instructions for cleaning and protecting floor tile.

B. Perform the following operations immediately after completing floor tile installation:

1. Remove adhesive and other blemishes from surfaces.
2. Sweep and vacuum surfaces thoroughly.
3. Damp-mop surfaces to remove marks and soil.

C. Protect floor tile from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period.

D. Floor Polish: Remove soil, adhesive, and blemishes from floor tile surfaces before applying liquid floor polish.

1. Apply three to five coats in accordance with Manufacturer’s written instructions.

E. Cover floor tile until Substantial Completion.

END OF SECTION

SECTION 31 31 16 - TERMITE CONTROL
(ADDENDUM 002)

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. Chemical soil treatment.

1.3 REFERENCE STANDARDS

A. Title 7, United States Code, 136 through 136y - Federal Insecticide, Fungicide and Rodenticide Act; United States Code; 1947 (Revised 2001).

1.4 COORDINATION

A. Coordinate all work with job site superintendent and all applicable trades.

1.5 SUBMITTALS

A. See Section 01 33 00 – “Submittals and Substitutions”, for submittal procedures.

B. Product Data: Indicate toxicants to be used, composition by percentage, dilution schedule, intended application rate.

C. Test Reports: Indicate regulatory agency approval reports when required.

D. Manufacturer's Application Instructions: Indicate caution requirements.

E. Manufacturer's Certificate: Certify that toxicants meet or exceed specified requirements.

F. Maintenance Data: Indicate re-treatment schedule and for all future requirements.

G. Warranty:

1. Submit warranty and ensure that forms have been completed in Owner's name.
2. The guarantee shall state that the application was made at the concentration, rates and methods which comply with these specifications.
3. Re-treatment, upon evidence of subterranean termite activity, shall be at no charge to the Owner, and in accordance with accepted trade practices.
4. Damage to the building caused by termites shall be corrected without cost to the Owner.
5. The guarantee is non-cancelable by all parties to the contract except the Owner.
6. Draw the guarantee in favor of the Owner and submit a sample form of guarantee to the Architect for approval before beginning the work.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing this type of work and:

1. Having minimum of 2 years documented experience.
2. Approved by manufacturer of treatment materials.
3. Licensed in Michigan.
4. Contractor shall provide at least one person who shall be present at all times during execution of this portion of the work, who shall be thoroughly familiar with the type of materials being installed and the proper materials and methods or their installation and also shall direct all work under this section.

1.7 WARRANTY

A. See Section 01 78 23 – “Operation and Maintenance Data”, for additional warranty requirements.

B. Provide 10 year installer's warranty against damage to building caused by termites.

1. Include coverage for repairs to building and to contents damaged due to building damage. Repair damage and, if required, re-treat.
2. Inspect annually and report in writing to Owner. Provide inspection service for 10 years from Date of Substantial Completion.
3. At the end of the ten (10) year period, the Owner shall be offered a renewable contract (guarantee) on a year-to-year basis, at the Owner's option, at an agreed upon annual fee.

PART 2 - PRODUCTS

2.1 MANUFACTURERS:

A. Bayer Corp; Product Premise: www.nobugs.com.

B. FMC Professional Solutions; Product Baseline Pre-Treat Termiticide: www.fmcprosolutions.com.

C. Syngenta Professional Products; Product DemonMAX, ProBuild TC: www.syngentaprofessionalproducts.com.

D. BASF/Aventis, Product Termidor; www.TermidorHome.com

E. SPECKoZ, Inc.; SPECKoZ Bifenthrin Termiticide/Insecticide.

2.2 TOXICANT CHEMICAL

A. EPA approved; synthetically color dyed to permit visual identification of treated soil.

2.3 DILUENT

A. Recommended by toxicant manufacturer.

2.4 MIXES

A. Mix toxicant to manufacturer's instructions.

2.5 SOURCE QUALITY CONTROL

A. The use of post-construction soil treatment where a chemical termiticide is applied only around the perimeter of the foundation is NOT acceptable.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that soil surfaces are unfrozen, sufficiently dry to absorb toxicant, and ready to receive treatment.

B. Verify final grading is complete.

C. Notify Architect of any concerns detrimental to quality installation.

3.2 INSTALLATION

A. Comply with requirements of U.S. EPA and applicable state and local codes.

B. Coordinate all work with job site superintendent and all applicable trades

C. Apply toxicant in accordance with manufacturer's instructions.

D. Apply toxicant at following locations, or as recommended by manufacturer, whichever is greater.

1. Under Slabs-on-Grade.
2. At Both Sides of Foundation Surface.

E. Under slabs, apply toxicant immediately prior to installation of vapor barrier.

F. At foundation walls, apply toxicant immediately prior to finish grading work outside foundations.

G. Re-treat disturbed treated soil with same toxicant as original treatment.

H. If inspection or testing identifies the presence of termites, re-treat soil and re-test.

3.3 PROTECTION

A. Do not permit soil grading over treated work.

END OF SECTION

SECTION 33 31 11 - SITE SANITARY UTILITY SEWERAGE PIPING
(ADDENDUM 002)

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. Sanitary sewerage drainage piping, fittings, and accessories.
2. Connection of building sanitary drainage system to municipal sewers.

B. Related Sections

1. Section 31 20 00 – Grading, Excavation and Fill: Excavating of trenches; bedding and backfilling.
2. Section 33 05 13 - Manholes and Structures.

1.3 REFERENCE STANDARDS

A. ASTM D 1785 - Standard Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120; 2006.

B. ASTM D 2321 - Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications; 2009.

C. 2015 Michigan Plumbing Code

1.4 COORDINATION

A. Coordinate all work with job site superintendent and all applicable trades.

1.5 SUBMITTALS

A. See Section 01 33 00 – Submittals and Substitutions, for submittal procedures.

B. Product Data: Provide data indicating pipe, pipe accessories.

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

D. Project Record Documents: Record location of pipe runs, connections, catch basins, cleanouts, and invert elevations.

1.6 QUALITY ASSURANCE

A. Regulatory Requirements

1. Conform to applicable code for materials and installation of the Work of this section.
2. Local Agency: Contractor shall be required to contact local agency having jurisdiction for required permits and inspection for project. Coordination and sequence of inspections required shall be the contractor’s responsibility.
3. State of Michigan: Piping on school projects is subject to inspection by the State Plumbing Inspector. Contractor shall obtain plumbing permit and coordinate necessary inspections for work within footprint of building.

PART 2 - PRODUCTS

2.1 SEWER PIPE MATERIALS

A. Plastic Pipe:

1. ASTM D 1785, Schedule 40, Poly (Vinyl Chloride) (PVC) material; inside nominal diameter of 6" and smaller inches, bell and spigot style solvent sealed joint end.
2. ASTM D3034 - SDR35 (PVC) up to 11 feet deep.

B. Service Pipe: Provide minimum 6-inch, same classification as mainline pipe.

C. Plastic Pipe: Provide sealing marks where couplings are used for jointing.

1. Joints: Provide rubber “O” ring.

D. Joint Repair or Connecting to Existing Sewer Pipe of Different Material:

1. Provide Fernco adapter coupling and stainless-steel bands if required.

E. Provide Joint Materials as indicated for the following Pipes:

1. Plastic (PVC): ASTM D3034
2. Plastic (ABS): ASTM D2680

F. Above 4”, contractor may use of SDR 35 ASTM 3034 PVC with push-on rubber joints equal to J-M Ring-Tile PVC gravity sewer pipe and fittings, suitable for depth of bury and soil and compaction conditions.

G. Where sanitary sewer cover is less than 4 feet, place 2-inch-thick 40 psig extruded polystyrene insulation directly above the pipe, using 4 x 8 sheets oriented 4 feet wide over the pipe. Where cover is less than 4 feet at traffic areas, in addition to the insulation, reinforced concrete slabs should be used to span the pipe to resist crushing from overhead traffic.

H. Fittings: Same material as pipe molded or formed to suit pipe size and end design, in required tee, bends, elbows, cleanouts, reducers, traps and other configurations required.

2.2 CLEANOUT MANHOLE

A. Cleanouts shall be East Jordan 1566. Cover for cleanout shall include “S” lettering to designate sewer. Pour 18” diameter x 6” deep concrete ring around cleanout.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Pipes

1. Install pipe, fittings, and accessories in accordance with manufacturer’s instructions. Seal watertight.
   a. Plastic Pipe: Also comply with ASTM D 2321.
2. The trench shall be dry during the pipe laying operation. If dewatering is needed, it shall be this contractor’s responsibility. The trench bottom shall be prepared as previously specified. Bell holes shall be excavated to that after placement, the barrel of the pipe will have full hearing on the trench bottom.
3. Pipe shall be protected during handling against impact shocks and free fall.
4. The laying of the pipe shall commence at the outlet and proceed upgrade with spigot ends pointing in the direction of flow.
5. The socket of the pipe last laid shall be wiped clean and the spigot end of the pipe to be laid shall then be centered and pushed home against the base of the socket. The pipe shall be centered so that they will form a sewer with a uniform invert. The joints shall be made as previously described.
6. All pipe shall be laid to the line and grade called for on the plans or minimum slope necessary to satisfy plumbing code. Each pipe, as laid, shall be checked the contractor with a suitable sighting level beam to ensure that this result is obtained.
7. After the pipe is laid, sharp sand or fine gravel shall be carefully deposited along the sides of the pipe. Backfill shall be carefully tamped under the haunches of the pipe. Care shall be taken during backfilling and tamping so that the line and grade of the pipe are not disturbed. Any pipe found off grade or out of line shall be re-laid properly by the contractor. Additional sand, gravel or stone shall then be placed until the entire width of the trench is filled to not less than one (1) foot above the top of the pipe. If sand is used for back fill around the pipe, it shall be thoroughly compacted with a vibratory compactor; hand

compaction will not be acceptable. The remainder of the backfilling may be done in the manner presented elsewhere in these specifications.

8. Minimum cover for exterior piping shall be four feet (4') unless otherwise specified. Interior piping should have minimum distance of 6 inches from top of pipe to bottom of floor slab except where minimum slope cannot be maintained.
9. Mark all exterior stub end locations noting location, depth, direction of flow and where applicable, slope with a 1" x 2" redwood marker which is to extend vertically from the point marked to within 6" of the finished grade.

B. Trenching

1. Backfill around sides and to top of pipe with cover fill, tamp in place and compact, then complete backfilling.

C. Cleanouts

1. Form bottom of excavation clean and smooth to correct elevation.
2. Form and place cast-in-place concrete base pad, with provision for sanitary sewer pipe end sections.
3. Establish elevations and pipe inverts for inlets and outlets as indicated.
4. Mount lid and frame level in grout, secured to top cone section to elevation indicated.

3.2 CLEANING

A. Sanitary Sewers

1. Verification: Prior to putting systems into use and before the sewer is tested thoroughly flush the sewers and verify that all new and existing sanitary sewers are free of construction debris. If this simple flushing procedure does not readily verify the piping is intact and clean, the sewer shall be cleaned as follows:
    a. The Contractor shall furnish an inflatable rubber ball of a size that will inflate to fit snugly into the sewer to be tested. The ball shall be placed in the upstream manhole and water shall be introduced behind it. The ball shall pass through the pipe with only the force of the water propelling it. All debris flushed out ahead of the ball shall be removed at the first manhole where its presence is noted.
    b. In the event debris stops the ball, the Contractor shall remove the obstruction by further flushing or cleaning. In the event a damaged pipe stops the ball, the Contractor shall take the following action:
        1) New Piping: Repair the sewer as the case may be.
        2) Existing Piping: Report the damaged pipe to the Architect/Engineer for further direction.
    c. Cleaning may also be accomplished by the use of a high-pressure water jet.

3.3 CLOSEOUT

A. Mandrel Testing

1. Contractor shall mandrel test sewer mainlines prior to placing into use. Mandrel shall be per local sewer utility standards and shall be performed not less than 30 days after pipe has been installed. Pipe that does not pass a mandrel will be required to be removed and replaced.

B. Standing Water Testing

1. All portions of the system shall be filled with water.
2. Water shall stand for a period of not less than eight (8) hours.
3. The leak rate shall be as specified by "Sewer Design and Construction" - ACME M&R No. 37. Steel piping systems shall be leak tight.

4. If the system loses water faster than the rate specified, the leaking component shall be repaired, and the system retested.

END OF SECTION

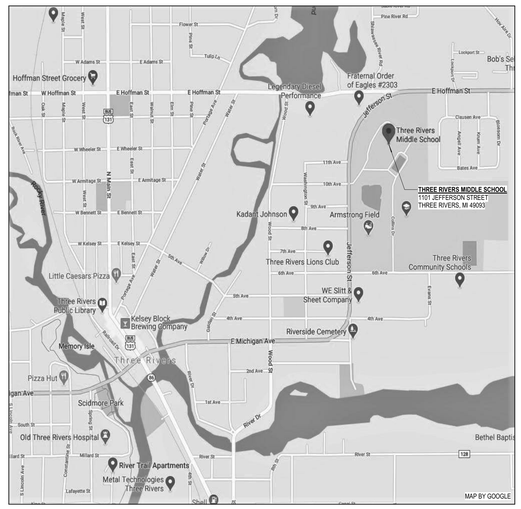
THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

1101 JEFFERSON STREET
THREE RIVERS, MICHIGAN

BIDS & CONSTRUCTION
12.01.2022
GMB PROJECT # 5-5802

VICINITY MAP



ALTERNATES

A-1: REPLACE DOORS AND FRAMES AT VESTIBULE E120.

G-1: AT MEN D101 AND WOMEN E102, REPLACE EXISTING PLUMBING FIXTURES ONE FOR ONE. REPLACE EXISTING TOILET PARTITIONS ONE FOR ONE AND PROVIDE NEW FINISHES.

G-2: ADD ALTERNATE FOR THE REHABILITATION (NEW FLUID APPLIED ROOFING SYSTEM) OF THE EXISTING ROOFS AT UNITS D AND E AND PARTS OF UNITS A AND B AS NOTED ON THE OVERALL ROOF PLAN.

M-1: REPLACEMENT OF ALL AIR HANDLING UNITS AND ACCESSORIES LOCATED IN UNIT D.

E-1: ADDING CABLING (CAT6A) TO A QUANTITY OF (6) CAMERAS IN UNITS D AND E.

E-2: FURNISH & INSTALL A NEW P.A. HEAD END SYSTEM.

E-3: FURNISH & INSTALL A NEW WIRELESS CLOCK SYSTEM IN UNITS A, B AND C.

ALTERNATE SUMMARY. SEE SPECIFICATION SECTION 01 23 00 FOR FULL DESCRIPTIONS

CONSTRUCTION MANAGER
THE SKILLMAN CORPORATION
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WWW.SKILLMAN.COM

OWNER
THREE RIVERS COMMUNITY SCHOOLS
851 SIXTH AVENUE
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WWW.TRSCHOOLS.ORG

ARCHITECT + ENGINEER
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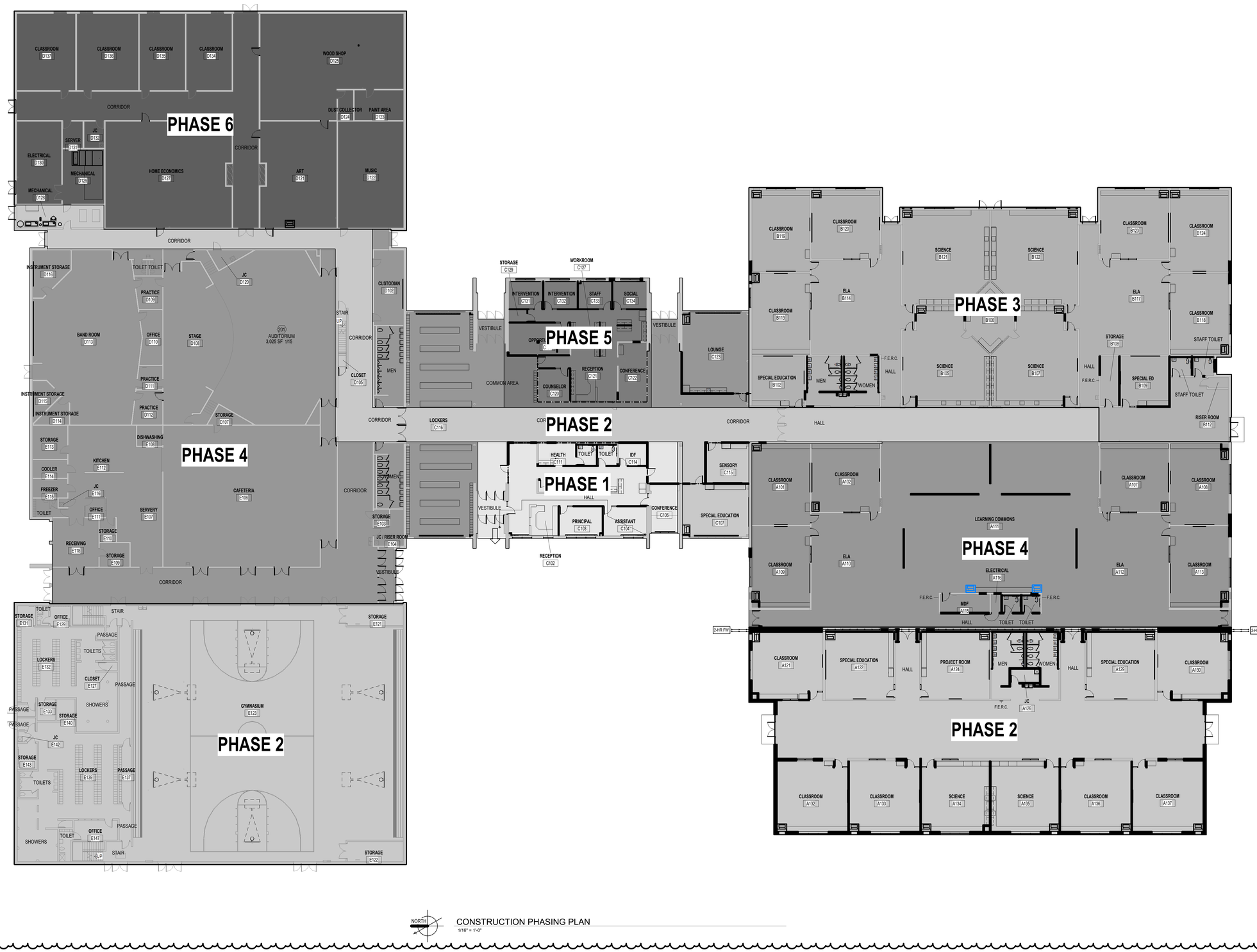

NORTH

CONSTRUCTION PHASING PLAN

1/16" = 1'-0"

NORTH

KEY PLAN

BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 2/5-5802A 2019.rvt
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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	BSE
REVIEWED	CMA
PROJECT NO.	5-5802

CONSTRUCTION PHASING PLAN

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DEMOLITION NOTES:

1. GENERAL: REFERENCE SECTIONS 31 10 00 SITE CLEARING AND 31 20 00 GRADING, EXCAVATION AND FILL OF THE SPECIFICATION BOOK.
2. REMOVE ALL UNUSABLE DEMOLITION MATERIALS AND DEBRIS FROM THE SITE AND DISPOSE OF PROPERLY OFFSITE. WHEREVER POSSIBLE, CONTRACTOR SHALL DIVERT DEMOLISHED MATERIALS FROM LANDFILL AND SEND TO LOCAL RECYCLING FACILITY.
3. BACKFILLING SHALL PROMPTLY FOLLOW UNDERGROUND DEMOLITION OR REMOVAL WORK AND SHALL CONTINUE AS THE DEMOLITION PROGRESSES.
4. DO NOT BURY DEBRIS, ROOTS, TOPSOIL OR OTHER MATERIALS.
5. ALL WORK SHALL COMPLY WITH APPLICABLE REQUIREMENTS OR THE LOCAL CODE OF ORDINANCES AND ACCIDENT/FIRE PREVENTION REGULATIONS.
6. PROTECT THE SITE, ADJACENT PROPERTY AND UTILITY SERVICES FROM DAMAGE OR DISRUPTION OF SERVICE/ACCESS. DAMAGE TO EXISTING STRUCTURES, SITE OR UTILITIES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
7. ALL TREES TO REMAIN SHALL BE CAREFULLY PROTECTED. DO NOT DRIVE HEAVY EQUIPMENT WITHIN 12 FT OF TREE TRUNKS. BRANCHES WHICH ARE DAMAGED DURING DEMOLITION OF STRUCTURES AND/OR SURFACES SHALL BE CUT OUT AS DIRECTED BY THE ARCHITECT/ENGINEER. ANY ROOTS OF TREES BEING SAVED WHICH ARE EXPOSED DUE TO DEMOLITION/REMOVAL SHALL BE COVERED WITHIN 6 HOURS WITH SOIL. DAMAGED TREES MAY BE REPLACED AT THE DISCRETION OF THE ARCHITECT/ENGINEER AT THE EXPENSE OF THE CONTRACTOR RESPONSIBLE FOR THE DAMAGE.
8. UTILITIES SHOWN (IF ANY) ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THIS MAP IS NOT TO BE INTERPRETED AS SHOWING EXACT LOCATIONS OR SHOWING ALL UTILITIES IN THE AREA. SIZE AND INVERTS OF EXISTING PIPE TO BE FIELD VERIFIED BY CONTRACTOR PRIOR TO COMMENCING WORK ON NEW UTILITY CONNECTIONS.
9. DEMOLISH ALL SITE MATERIALS IN ACCORDANCE WITH LOCAL SPECIFICATIONS AND REQUIREMENTS.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS FOR WORK IN ROW AND ON ANY UTILITY CONNECTIONS OR ABANDONMENT PRIOR TO THE START OF CONSTRUCTION.
11. CONTRACTOR SHALL NOTIFY LOCAL BUILDING OFFICIALS MINIMUM 48 HOURS PRIOR TO START OF DEMOLITION.
12. TRAFFIC CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR INCLUDING SIGNAGE, BARRIERS, FLAG PERSONNEL AND ANY ADDITIONAL REQUIREMENTS OF THE LOCAL ROAD COMMISSION OR MUNICIPALITY. CONTRACTOR SHALL FOLLOW MOST RECENT EDITION OF MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
13. WHERE PAVEMENT, CONCRETE OR ASPHALT IS INDICATED TO BE REMOVED, IT SHALL BE SAWCUT FULL DEPTH. ALL CONCRETE CUTS SHALL BE MADE AT NEAREST CONSTRUCTION OR CONTROL JOINT. ALL ASPHALT CUTS SHALL BE MIN. 1 FT PAST EXISTING JOINTS WHEREVER POSSIBLE.
14. CONTRACTORS TO REVIEW ALL SHEETS FOR RELATED INFORMATION.

DEMOLITION KEY

1. DEMO AND REMOVE EXISTING ASPHALT PAVING.
2. DEMO AND REMOVE EXISTING CONCRETE FLATWORK, CURBING, STAIRS, WALLS, ETC. DIVERT ALL REMOVED CONCRETE TO LOCAL CRUSHING/RECYCLING FACILITY.
3. SAWCUT CONCRETE/ASPHALT FOR CLEAN EDGE/JOINT, REMOVE TO NEAREST JOINT LINE
4. REMOVE AND RETURN SIGNS TO OWNER.
5. DEMO AND REMOVE EXISTING CATCH BASINS, MANHOLES AND CONNECTED PIPING.
6. BLACKOUT EXISTING PARKING LOT STRIPING.
7. DEMO AND REMOVE EXISTING VEGETATION.
8. DEMO AND REMOVE EXISTING FLAGPOLE.
9. REFER TO ELECTRICAL SITE PLANS FOR POLE REMOVAL/REPLACEMENT.

DEMOLITION PLAN
SCALE:1" = 20'-0"
SCALE IN FEET
0 20 40

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

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01.19.2023	ADDENDUM 002

DRAWN	NTB
REVIEWED	NTB
PROJECT NO.	5-5802

DEMOLITION PLAN

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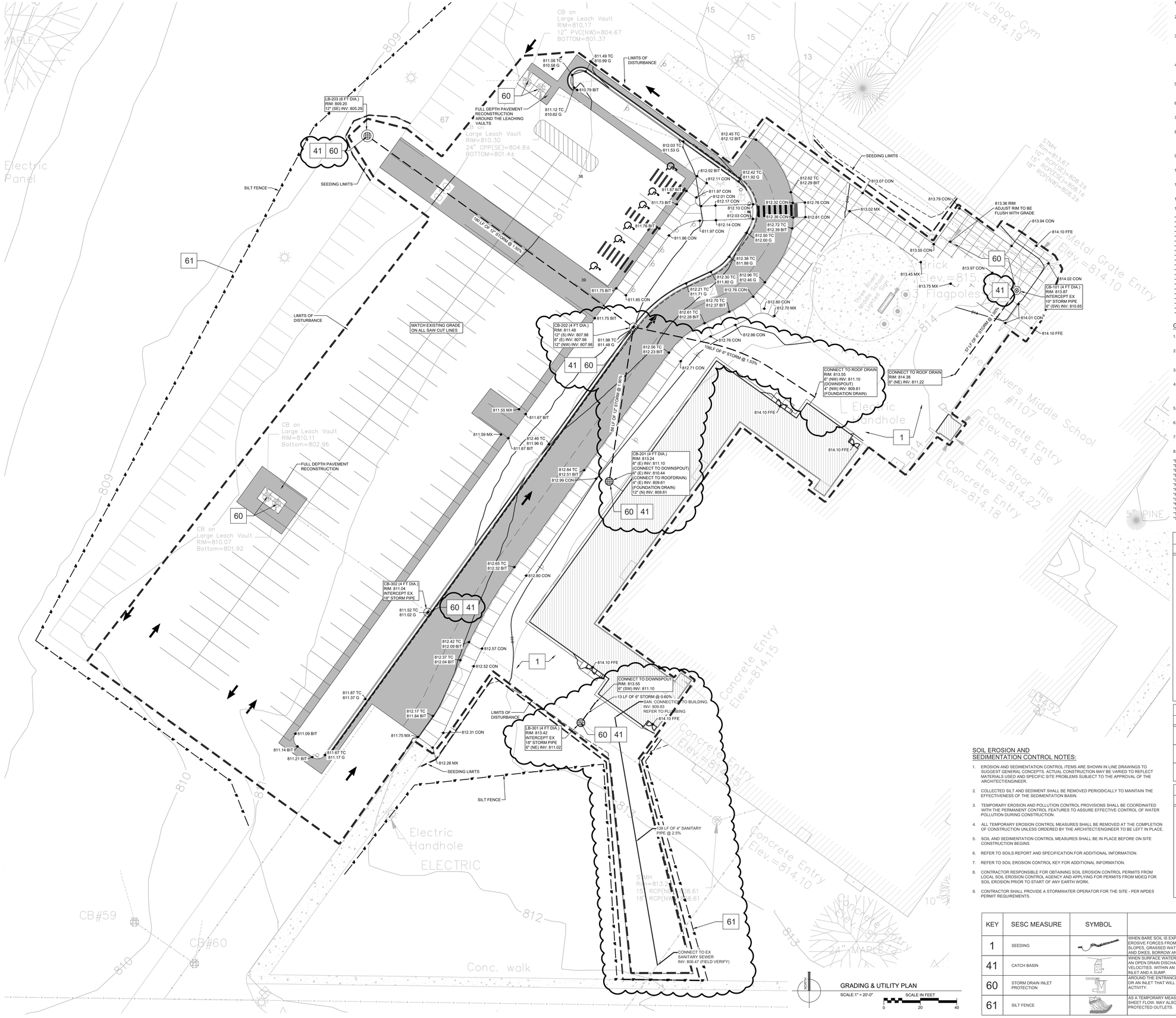

GRADING & UTILITY PLAN

UTILITY NOTES:

1. ALL WORK SHALL COMPLY WITH APPLICABLE REQUIREMENTS OR THE LOCAL CODE, ORDINANCES AND ACCIDENT/FIRE PREVENTION REGULATIONS.
2. PROTECT THE SITE, ADJACENT PROPERTY AND UTILITY SERVICES FROM DAMAGE OR DISRUPTION OF SERVICE/ACCESS. DAMAGE TO EXISTING STRUCTURES, SITE OR UTILITIES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
3. UTILITIES SHOWN (IF ANY) ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THIS MAP IS NOT TO BE INTERPRETED AS SHOWING EXACT LOCATIONS OR SHOWING ALL UTILITIES IN THE AREA. SIZE AND INVERTS OF EXISTING PIPE TO BE FIELD VERIFIED BY CONTRACTOR PRIOR TO COMMENCING WORK ON NEW UTILITY CONNECTIONS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS FOR WORK IN ROW AND ON ANY UTILITY CONNECTIONS OR ABANDONMENT PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL COORDINATE ANY UTILITY/SERVICE INTERRUPTIONS WITH OWNER AT LEAST ONE WEEK IN ADVANCE. CONTRACTOR SHALL ALSO NOTIFY LOCAL UTILITY PROVIDER WHERE APPLICABLE FOR OPERATION/DISCONNECTION OF PUBLIC OWNED EQUIPMENT.
6. CONTRACTOR SHALL ADEQUATELY PROTECT/SHORE ALL OPEN TRENCHES AS REQUIRED BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
7. EXISTING SEWER AND WATERMAIN LINES SHALL BE PROTECTED FROM DEBRIS AND CONSTRUCTION.
8. CONTRACTOR SHALL BE REQUIRED TO CONTACT MISS DIG PRIOR TO STARTING ANY WORK. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS FOR WORK IN ROW AS WELL AS NOTIFYING LOCAL UTILITY OWNERS OF WORK IF PERMITS ARE NOT REQUIRED.
9. LOCATION OF LATERALS TO BE DETERMINED IN THE FIELD AT THE DIRECTION OF THE OWNER. AVOID CONFLICT WITH PROPOSED AND/OR EXISTING FACILITIES.
10. QUANTITIES SHOWN ARE FOR INFORMATION ONLY AND CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL LINES, LEVELS AND DIMENSIONS.
11. CONTRACTOR IS TO VERIFY EXISTING UTILITY ELEVATIONS PRIOR TO STARTING CONSTRUCTION.
12. CONTRACTORS TO REVIEW ALL SHEETS FOR RELATED INFORMATION.
13. LIST OF STANDARD ABBREVIATIONS -

"A.F.F"	=	ABOVE FINISHED FLOOR
"CB"	=	CATCH BASIN
"C/L"	=	CENTER LINE
"C.O."	=	CLEAN OUT (INCL. FROST SLEEVE)
"CY"	=	CUBIC YARDS
"D.I.W.M"	=	DUCTILE IRON WATER MAIN
"F.E.S"	=	FLARED END SECTION (CONC. ONLY)
"FFE/F.F.E"	=	FINISHED FLOOR ELEVATION
"F.V."	=	FIELD VERIFY
"INV."	=	INVERT
"LB"	=	LEACHING BASIN
"LF"	=	LINEAL FEET
"RCP"	=	REINFORCED CONCRETE PIPE
"SAN"	=	SANITARY
"SAN. MH"	=	SANITARY SEWER MANHOLE
"SF"	=	SQUARE FEET
"ST. MH"	=	STORM MANHOLE
"STM"	=	STORM
"SY"	=	SQUARE YARDS
"U.N.O"	=	UNLESS NOTED OTHERWISE
"YD"	=	YARD DRAIN

GRADING NOTES:

1. ALL WORK SHALL COMPLY WITH APPLICABLE REQUIREMENTS OR THE LOCAL CODE, ORDINANCES AND ACCIDENT/FIRE PREVENTION REGULATIONS.
2. PROTECT THE SITE, ADJACENT PROPERTY AND UTILITY SERVICES FROM DAMAGE OR DISRUPTION OF SERVICE/ACCESS. DAMAGE TO EXISTING STRUCTURES, SITE OR UTILITIES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
3. ALL TREES TO REMAIN SHALL BE CAREFULLY PROTECTED. REFER TO GENERAL LANDSCAPING PLAN AND NOTES FOR ADDITIONAL TREE PROTECTION REQUIREMENTS.
4. CONTRACTOR SHALL OBTAIN SOIL EROSION PERMIT(S) INCLUDING SUBMITTING NOTICE OF COVERAGE TO MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY (IF REQUIRED) PRIOR TO DISTURBING ANY SOIL. CONTRACTOR SHALL HAVE TEMPORARY EROSION CONTROLS IN PLACE PRIOR TO STARTING CONSTRUCTION.
5. REFER TO PROJECT SPECIFICATIONS FOR REQUIREMENTS AND RECOMMENDATION RELATED TO SOIL PLACEMENT.
6. CONTRACTOR SHALL BE REQUIRED TO CHECK LINES AND GRADES AGAINST PLANS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES.
7. DO NOT BURY ANY DEBRIS, ROOTS, TOPSOIL OR OTHER DELETERIOUS/UNSUITABLE FILL MATERIALS.
8. LIST OF STANDARD ABBREVIATIONS -

"BIT"	=	PROPOSED BITUMINOUS GRADE
"BOW"	=	BOTTOM OF WALL GRADE
"BOS"	=	BOTTOM OF STAIR
"BW"	=	BACK OF WALK GRADE
"CONC"	=	PROPOSED CONCRETE GRADE
"F.F./FFE"	=	FINISHED FLOOR ELEVATION
"FG"	=	FINISHED GRADE
"FW"	=	FRONT OF WALK GRADE
"G"	=	GUTTER GRADE
"MX"	=	MATCH EXISTING
"TC"	=	TOP OF CURB GRADE
"TOS"	=	TOP OF STAIR GRADE
"TOW"	=	TOP OF WALL GRADE

UTILITY LINETYPE LEGEND

SYMBOL	DESCRIPTION
	SANITARY SEWER
	STORM SEWER
	UNDERDRAIN
G G	EX. GAS SERVICE
STM STM	EX. STORM SEWER
SAN SAN	EX. SANITARY SEWER
	EX. WATERMAIN
E E	EX. ELECTRICAL

UTILITY SYMBOL LEGEND

SYMBOL	DESCRIPTION
	CATCH BASIN OR STORM MANHOLE- REFER TO UTILITY TAG FOR ADDITIONAL INFO
	SANITARY MANHOLE - REFER TO UTILITY TAG FOR ADDITIONAL INFORMATION
C.O.	SANITARY OR STORM CLEANOUT W/ FROST SLEEVE

GRADING LEGEND

SYMBOL	DESCRIPTION
● XXX.XX	PROPOSED SPOT ELEVATION
X.X%	SURFACE FLOW DIRECTION
	PROPOSED CONTOUR
XXX	EX. CONTOUR
	GRADING LIMITS

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

1. EROSION AND SEDIMENTATION CONTROL ITEMS ARE SHOWN IN LINE DRAWINGS TO SUGGEST GENERAL CONCEPTS. ACTUAL CONSTRUCTION MAY BE VARIED TO REFLECT MATERIALS USED AND SPECIFIC SITE PROBLEMS SUBJECT TO THE APPROVAL OF THE ARCHITECT/ENGINEER.
2. COLLECTED SILT AND SEDIMENT SHALL BE REMOVED PERIODICALLY TO MAINTAIN THE EFFECTIVENESS OF THE SEDIMENTATION BASIN.
3. TEMPORARY EROSION AND POLLUTION CONTROL PROVISIONS SHALL BE COORDINATED WITH THE PERMANENT CONTROL FEATURES TO ASSURE EFFECTIVE CONTROL OF WATER POLLUTION DURING CONSTRUCTION.
4. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AT THE COMPLETION OF CONSTRUCTION UNLESS ORDERED BY THE ARCHITECT/ENGINEER TO BE LEFT IN PLACE.
5. SOIL AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE BEFORE ON SITE CONSTRUCTION BEGINS.
6. REFER TO SOILS REPORT AND SPECIFICATION FOR ADDITIONAL INFORMATION.
7. REFER TO SOIL EROSION CONTROL KEY FOR ADDITIONAL INFORMATION.
8. CONTRACTOR RESPONSIBLE FOR OBTAINING SOIL EROSION CONTROL PERMITS FROM LOCAL SOIL EROSION CONTROL AGENCY AND APPLYING FOR PERMITS FROM MDEQ FOR SOIL EROSION PRIOR TO START OF ANY EARTH WORK.
9. CONTRACTOR SHALL PROVIDE A STORMWATER OPERATOR FOR THE SITE - PER NPDES PERMIT REQUIREMENTS.

KEY	SESC MEASURE	SYMBOL	WHERE USED
1	SEEDING		WHEN BARE SOIL IS EXPOSED, TEMPORARILY OR PERMANENTLY, TO EROSIVE FORCES FROM WIND AND OR WATER ON FLAT AREAS, MILD SLOPES, GRASSED WATERWAY AND SPILLWAYS, DIVERSION DITCHES AND DIKES, BORROW AND STOCKPILE AREAS, AND SPOIL PILES.
41	CATCH BASIN		WHEN SURFACE WATER ACCUMULATES AND NEEDS AN OUTLET OR AN OPEN DRAIN DISCHARGES TO A STREAM OR DRAIN AT EROSIVE VELOCITIES. WITHIN AN ENCLOSED DRAIN SYSTEM TO PROVIDE AN INLET AND A SUMP.
60	STORM DRAIN INLET PROTECTION		AROUND THE ENTRANCE TO A NEWLY CONSTRUCTED CATCH BASIN OR AN INLET THAT WILL CAPTURE RUNOFF FROM AN EARTH CHANGE ACTIVITY.
61	SILT FENCE		AS A TEMPORARY MEASURE USED TO CAPTURE SEDIMENT FROM SHEET FLOW. MAY ALSO DIVERT SMALL VOLUMES OF SHEET FLOW TO PROTECTED OUTLETS.

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01.19.2023 ADDENDUM 002

DRAWN HAK
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PROJECT NO. 5-5802

GRADING & UTILITY PLAN

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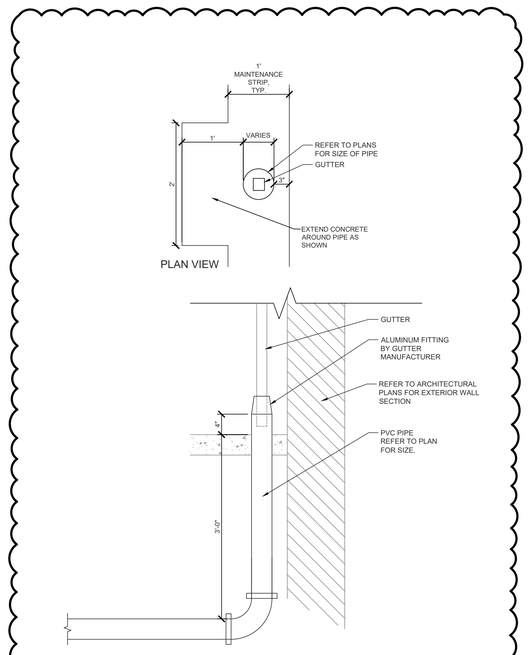
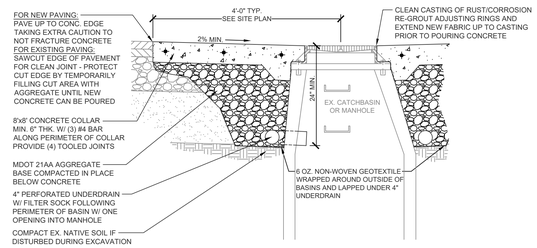
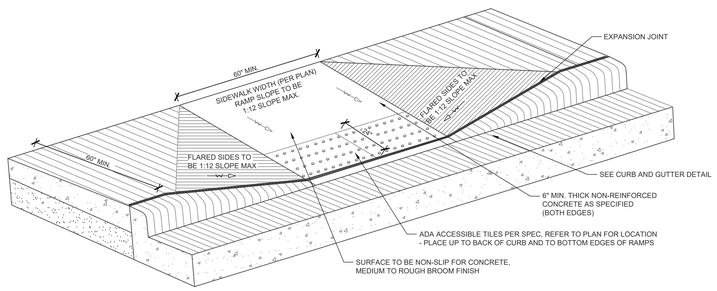


15 C8.01 DOWNSPOUT CONNECTION DETAIL
NOT TO SCALE



14 C8.01 CONCRETE - BASIN COLLAR
NOT TO SCALE



13 C8.01 CONCRETE - CURB RAMP
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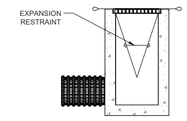
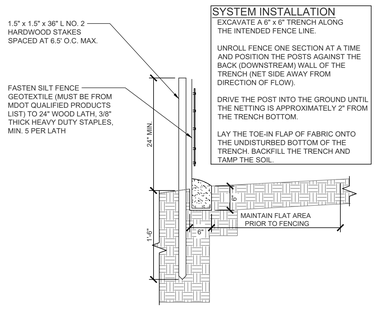


SILTSACK ®

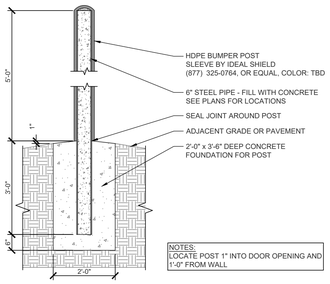
NOTE:
THE SILTSACK WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

HI-FLOW SILTSACK ®		
FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20%
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90%
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1

12 C8.01 CATCH BASIN INLET PROTECTION
NOT TO SCALE



11 C8.01 SILT FENCE
NOT TO SCALE



10 C8.01 BOLLARD - UTILITY - BUMPER
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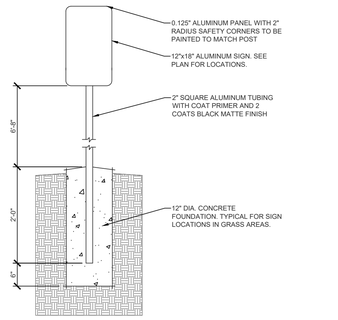

9 C8.01 SIGN - TRAFFIC - POST MOUNTED SIGN
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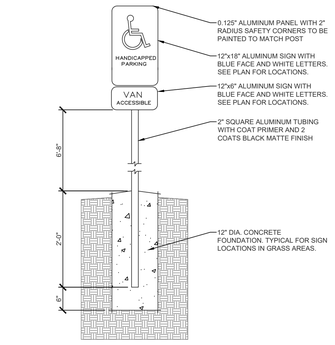

8 C8.01 SIGN - PARKING - BARRIER FREE SIGN
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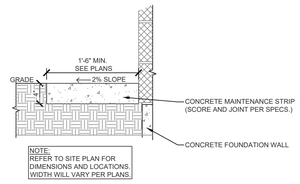

7 C8.01 CONCRETE - MAINTENANCE STRIP
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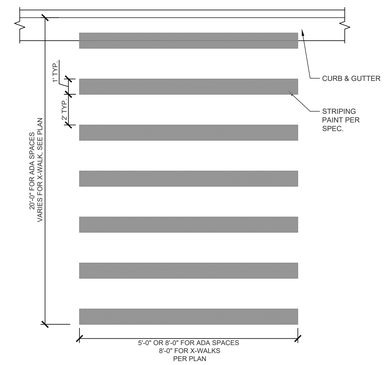
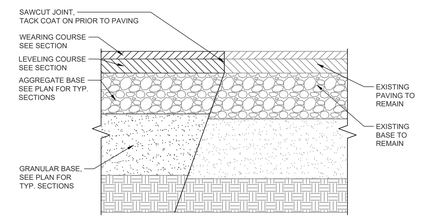


6 C8.01 BARRIER FREE SPACE - X-WALK STRIPING
NOT TO SCALE



5 C8.01 NEW TO EXISTING PAVEMENT TRANSITION
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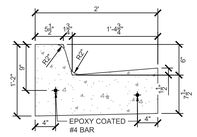

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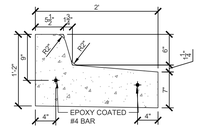

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4 C8.01 MDOT F4 MODIFIED CURB
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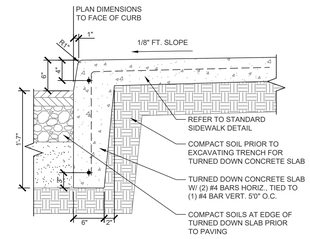
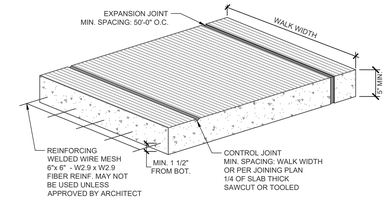
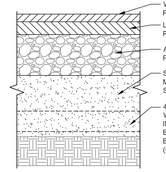


3 C8.01 CONCRETE - CURB - STRAIGHT - INTEGRAL WITH SIDEWALK EDGE
NOT TO SCALE



GENERAL SIDEWALK NOTES
1. ALL SIDEWALK IS 5" THICK UNLESS OTHERWISE NOTED.
2. ALL SIDEWALK SHALL HAVE A MIN. 8" GRANULAR BASE.
3. ALL EDGES MUST BE FINISHED WITH A 1/2" FILLET.
4. REFER TO SPEC. 32 13 13 FOR CONCRETE SPECS.
5. BROOM FINISH ALL SIDEWALK PERPENDICULAR TO WIDTH. REFER ALSO TO SPEC. 32 13 13.
6. WHERE A PERMANENT STRUCTURE IS LOCATED IN SIDEWALK, PLACE EXPANSION MATERIAL AROUND STRUCTURE AND ADJUST JOINT PATTERN TO INTERSECT STRUCTURE.
7. COLD JOINTS - PLACE EXPANSION JOINT AT ALL COLD JOINTS.

2 C8.01 CONCRETE - PAVEMENT - TYPICAL WALK
NOT TO SCALE



PAVEMENT SECTION				
LOCATION	WEARING	LEVELING	AGG. BASE	SAND BASE
HEAVY DUTY	1.5" MDOT 4E3	2.5" MDOT 3E3	8" MDOT 22A	12" MDOT CLASS II
STANDARD DUTY	1.5" MDOT 4E3	1.5" MDOT 3E3	8" MDOT 22A	12" MDOT CLASS II

NOTES:
1. REFER TO ASPHALT PAVING 32 12 16 AND GEOTECH REPORT FOR ADDITIONAL PAVING INFORMATION
2. REFER TO PLANS FOR LOCATION OF UNDERDRAIN PLACEMENT.
3. REFER TO PLANS FOR PAVEMENT MARKINGS AND 32 17 23 FOR TRAFFIC MARKING SPEC.

1 C8.01 STANDARD PAVEMENT SECTION
NOT TO SCALE

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THREE RIVERS, MICHIGAN

ISSUANCES

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01.19.2023	ADDENDUM 002

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PROJECT NO.	5-5802

SITE DETAILS

C8.01

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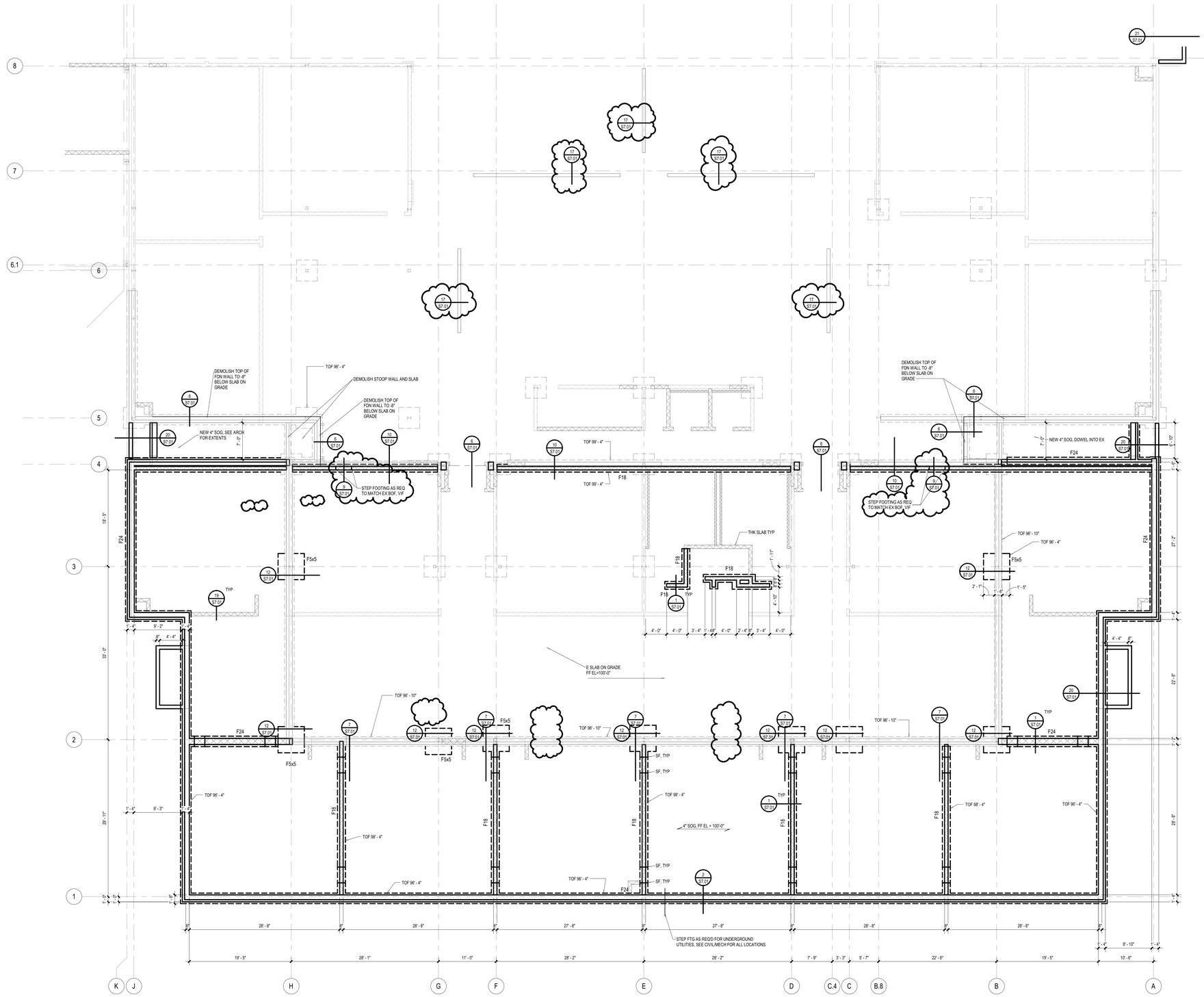
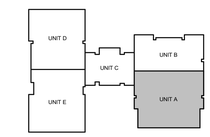


NORTH

UNIT 'A' FOUNDATION PLAN

1/8" = 1'-0"

NOTE: REFER TO THE SOILS REPORT FOR ANY UNSUITABLE SOIL AREAS.



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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

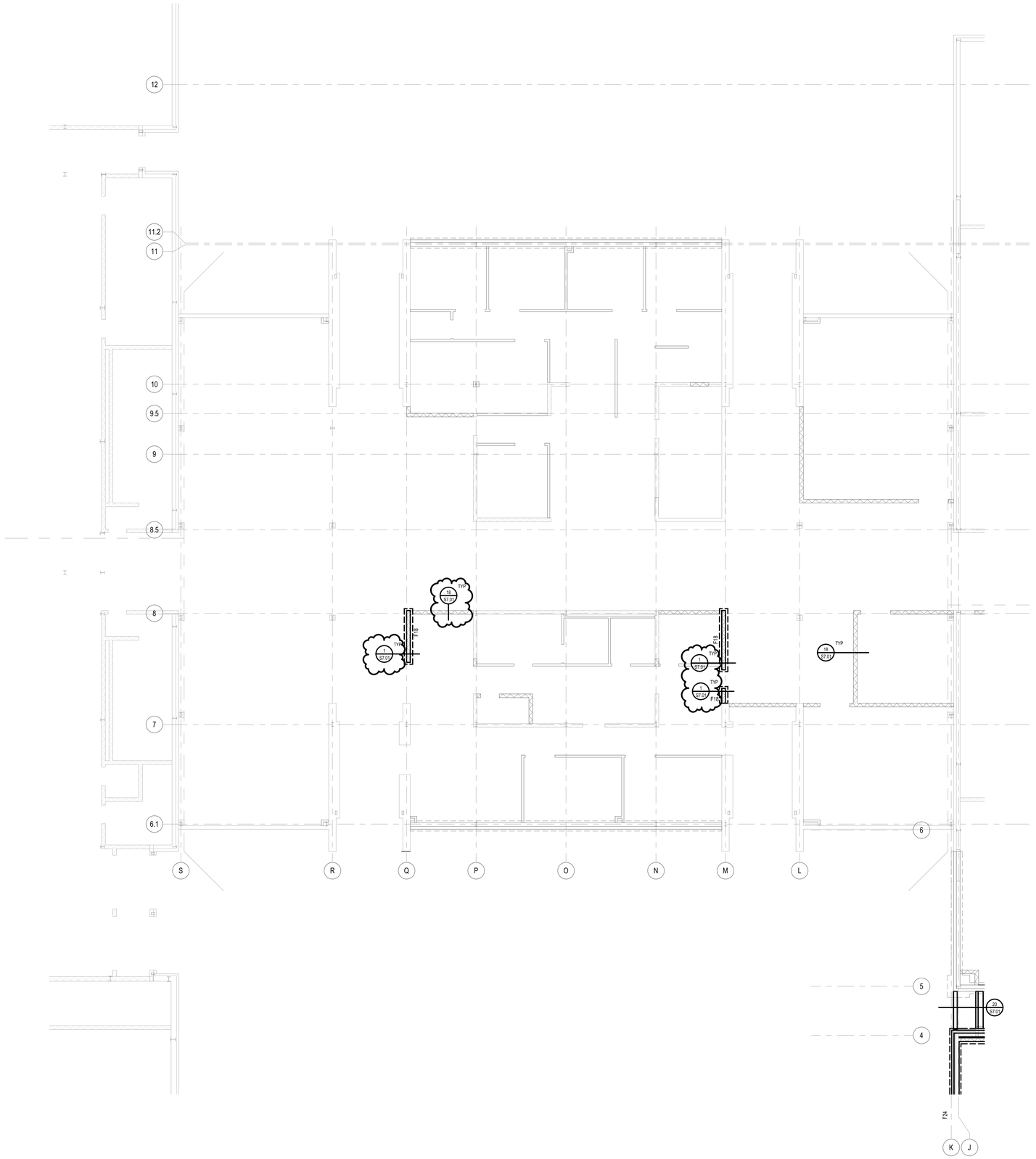
12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	JKB
REVIEWED	PMB
PROJECT NO.	5-5802

UNIT 'A' FOUNDATION PLAN

S2.1A

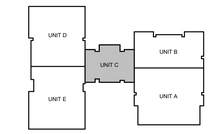
BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 2/5-5802S 2019.rvt
1/19/2023 8:27:32 AM



NORTH

UNIT 'C' FOUNDATION PLAN

1/8" = 1'-0"



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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

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ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
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DRAWN	JKB
REVIEWED	PMB
PROJECT NO.	5-5802

UNIT 'C' FOUNDATION PLAN

S2.1C

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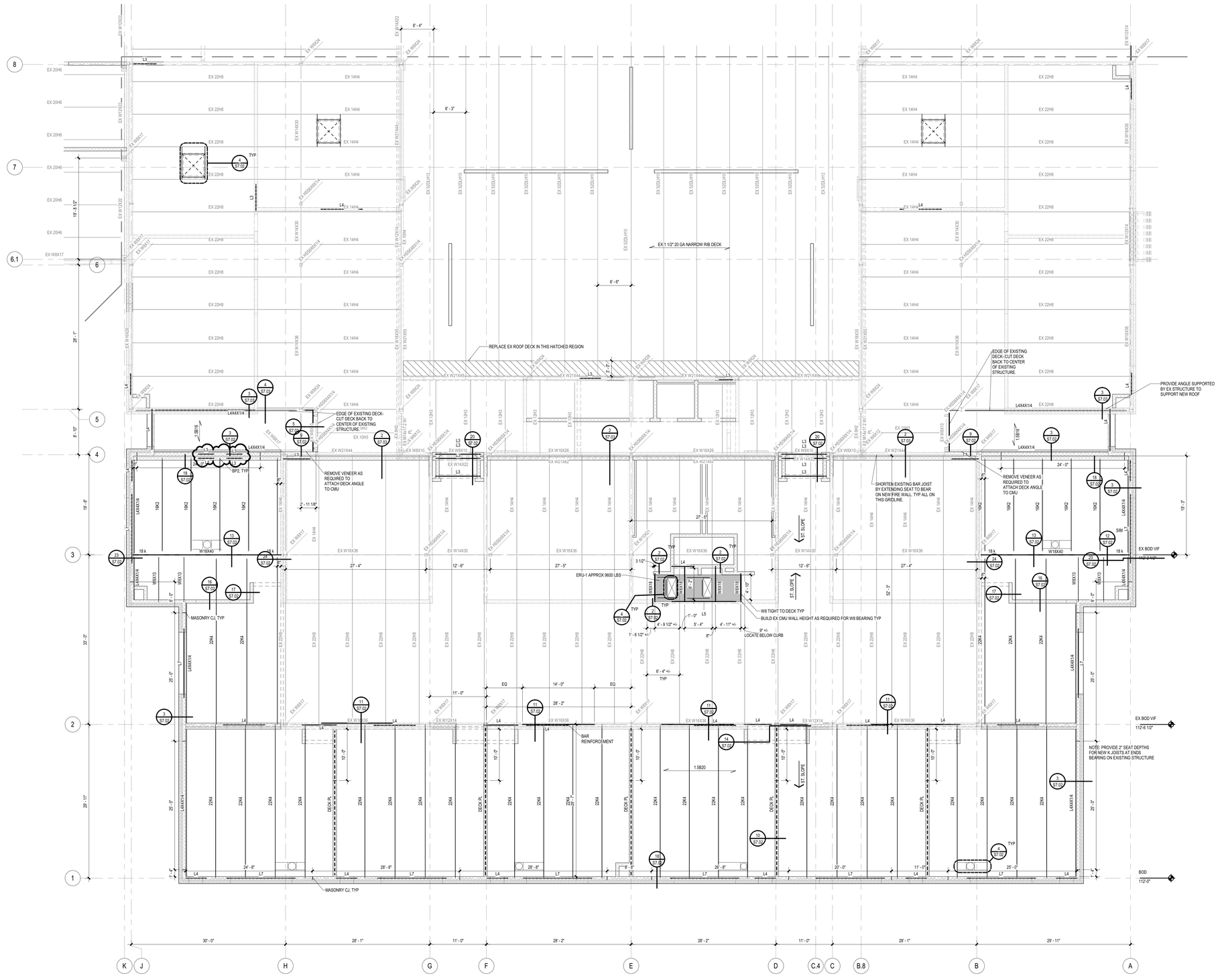
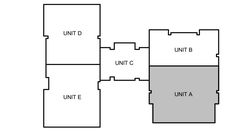


UNIT 'A' ROOF FRAMING PLAN

1/8" = 1'-0"



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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

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THREE RIVERS, MICHIGAN

ISSUANCES

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01.19.2023	ADDENDUM 002

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REVIEWED	PMB
PROJECT NO.	5-5802

UNIT 'A' ROOF FRAMING PLAN

S3.1A

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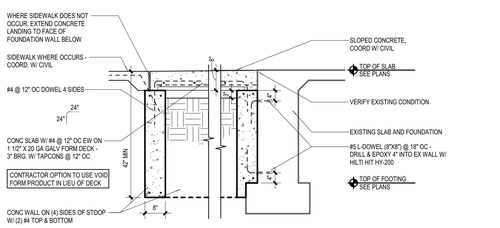
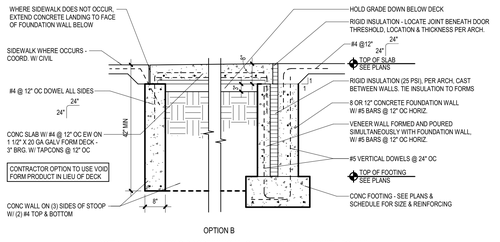


NOTE: COORDINATE THRESHOLD & SIDEWALK SLAB JOINT LOCATIONS & SLOPES WITH ARCHICIVIL

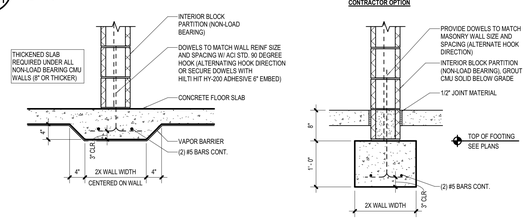
21 S7.01 TYPICAL THRESHOLD DETAIL
1/2" = 1'-0"



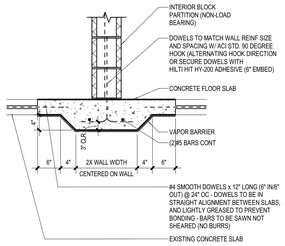
OPTION B

NOTE: COORDINATE THRESHOLD & SIDEWALK SLAB JOINT LOCATIONS & SLOPES WITH ARCHICIVIL

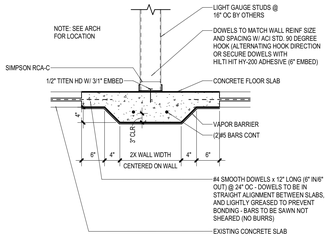
20 S7.01 TYPICAL STOOP DETAIL
1/2" = 1'-0"



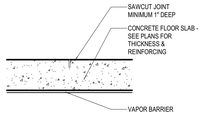
19 S7.01 TYPICAL THICKENED SLAB
3/4" = 1'-0"



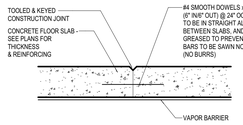
18 S7.01 THICKENED SLAB IN EXISTING
3/4" = 1'-0"



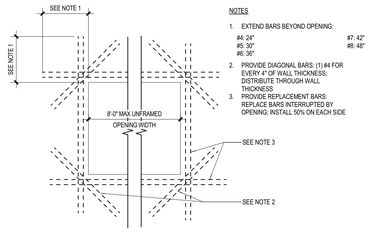
17 S7.01 CANTILEVERED STUD WALL
3/4" = 1'-0"



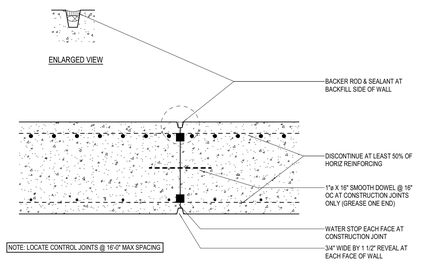
16 S7.01 TYPICAL CONTROL JOINT DETAIL
1 1/2" = 1'-0"



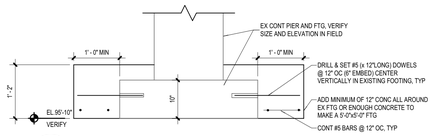
15 S7.01 TYPICAL CONSTRUCTION JOINT DETAIL
1" = 1'-0"



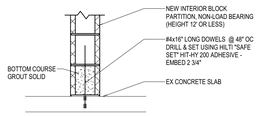
14 S7.01 FOUNDATION WALL PENETRATION
NOT TO SCALE



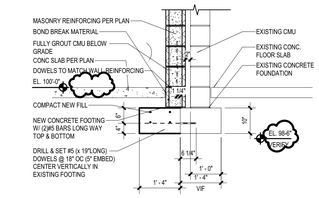
13 S7.01 TYPICAL CONCRETE WALL JOINT
NOT TO SCALE



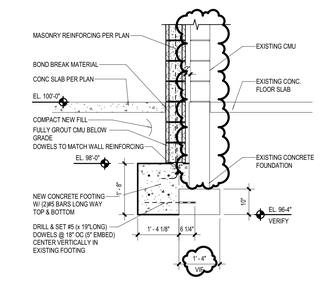
12 S7.01 FOUNDATION DETAIL
3/4" = 1'-0"



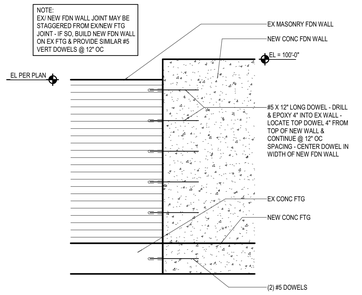
11 S7.01 TYPICAL WALL ON EX SLAB
3/4" = 1'-0"



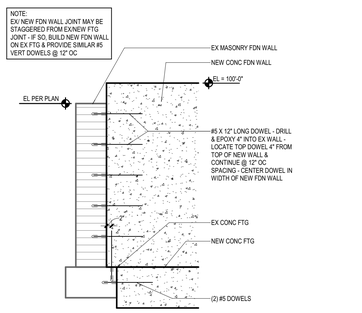
10 S7.01 FOUNDATION DETAIL
1/2" = 1'-0"



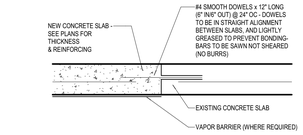
9 S7.01 FOUNDATION DETAIL
1/2" = 1'-0"



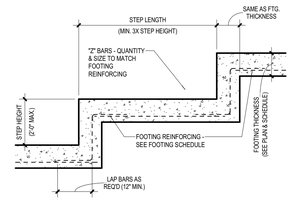
8 S7.01 FOUNDATION TO EXISTING
NOT TO SCALE



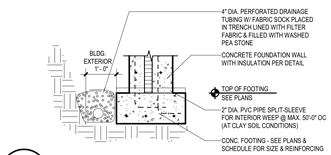
7 S7.01 FOUNDATION TO EXISTING
NOT TO SCALE



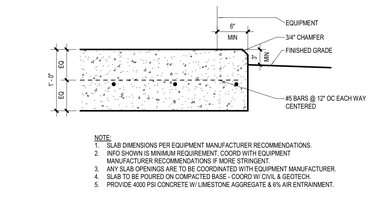
6 S7.01 SLAB CONNECTION DETAIL
1" = 1'-0"



5 S7.01 TYPICAL STEPPED FOOTING DETAIL
3/8" = 1'-0"

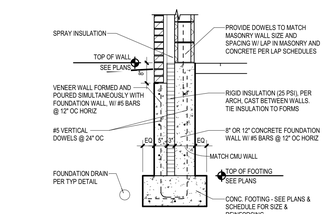


4 S7.01 TYPICAL FOUNDATION DRAIN
1/2" = 1'-0"

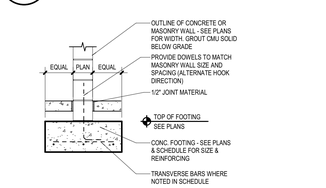


NOTE:
1. SLAB DIMENSIONS PER EQUIPMENT MANUFACTURER RECOMMENDATIONS.
2. INFO SHOWN IS MINIMUM REQUIREMENT. COORD WITH EQUIPMENT MANUFACTURER RECOMMENDATIONS IF MORE STRINGENT.
3. ANY SLAB OPENINGS ARE TO BE COORDINATED WITH EQUIPMENT MANUFACTURER.
4. SLAB TO BE POURED ON COMPACTED BASE - COORD W/ CIVIL & GEOTECH.
5. PROVIDE 4000 PSI CONCRETE W/ LIMESTONE AGGREGATE & 6% AIR ENTRAINMENT.

3 S7.01 EXTERIOR EQUIPMENT PAD DETAIL
1" = 1'-0"



2 S7.01 FOUNDATION WALL WITH VENEER
1/2" = 1'-0"



1 S7.01 TYPICAL STRIP FOOTING
1/2" = 1'-0"

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THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	JKB
REVIEWED	PMB
PROJECT NO.	5-5802

FOUNDATION WALL DETAILS

S7.01

BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 25-5802S 2019.rvt
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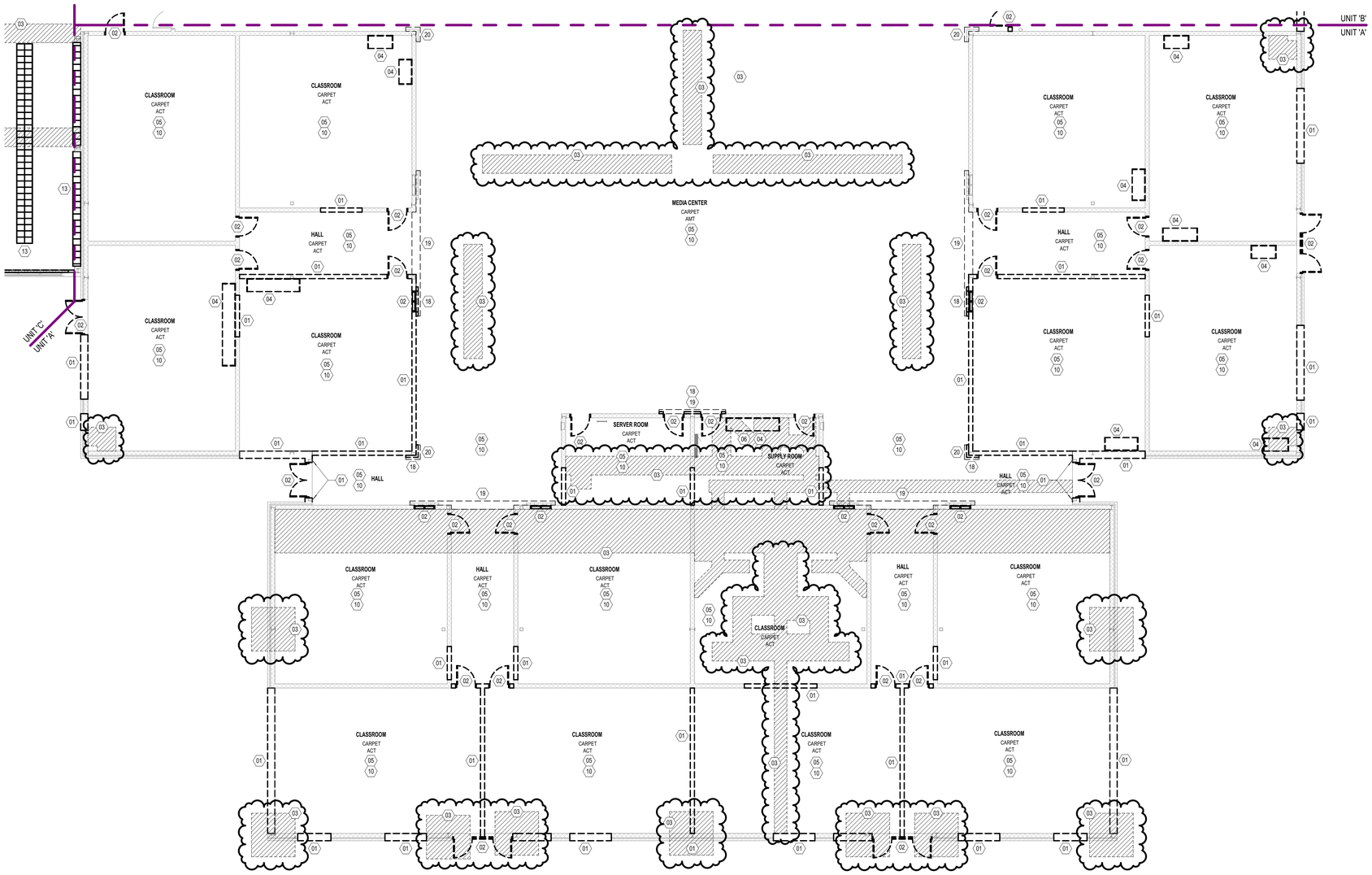


NORTH

UNIT 'A' FIRST FLOOR DEMOLITION PLAN

1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING WALL TO BE DEMOLISHED.
- PORTION OF EXISTING WALL TO BE DEMOLISHED.
- EXISTING OBJECT TO BE DEMOLISHED.
- AREA OF FLOOR CUTTING.
- AREA OF EXISTING ROOF STRUCTURE TO BE REMOVED.
- EXISTING WALL TO REMAIN.
- EXISTING OBJECT TO REMAIN.
- XX — DEMOLITION TAG: SEE DEMOLITION NOTES.
- ROOM NAME / FLOOR FINISH / CEILING FINISH — EXISTING ROOM FINISH INFORMATION: ROOM NAME, FLOORING TYPE, CEILING TYPE

DEMOLITION NOTES

- DEMOLITION CONTRACTOR IS TO STOP WORK IMMEDIATELY IN AREA IF ASBESTOS IS ENCOUNTERED. NOTIFY CONSTRUCTION MANAGER OF SUSPECTED AREA SO PROPER ABATEMENT CAN BE DONE. (UNDER A SEPARATE ASBESTOS ABATEMENT CONTRACT AS NEGOTIATED BY OWNER.)
- ALL MASONRY BLOCK AND BRICK WALLS TO BE REMOVED MUST BE TOOTHED TO RECEIVE NEW MASONRY, UNLESS NOTED OTHERWISE ON DRAWINGS.
- DEMOLITION CONTRACTOR IS TO PROVIDE TEMPORARY SHORING AND BRACING FOR EXISTING ROOF/FLOOR STRUCTURE AS REQUIRED UNTIL PERMANENT WALLS & LINTELS ARE INSTALLED. REFER TO STRUCT. & ARCH. DWGS. FOR BEARING CONDITIONS.
- ALL TRADES ARE TO COORDINATE ANY DEMOLITION, CAPPING OR ABANDONMENT OF EXISTING MECHANICAL, ELECTRICAL, PLUMBING OR ARCHITECTURAL ITEMS.
- ALL ITEMS TO BE SAVED AND/OR RELOCATED ARE TO BE STORED IN A PROPER MANNER SO NO DAMAGE WILL OCCUR TO THESE ITEMS DURING THEIR STORAGE PERIOD.
- ALL DEMOLITION WHICH DAMAGES ADJACENT SURFACES IS TO BE REPAIRED TO MATCH THE EXISTING SURFACE DAMAGED (MATERIALS & FINISHES) AND ALL REPAIR WORK IS TO BE COORDINATED WITH NEW CONSTRUCTION. FOR NEW OPENINGS IN EXISTING WALLS: COORDINATE NEW LINTELS W/ MASONRY CONTRACTOR.
- PATCH WALLS & ROOF TO MATCH EXISTING CONSTRUCTION BEHIND REMOVAL OF WALL LOUVERS, EXHAUST FANS, INTAKE HOODS & CABINET HEATERS. VERIFY SEQUENCE OF REMOVAL W/ CONSTRUCTION MANAGER. SEE MECHANICAL AND ELECTRICAL DEMO SHEETS FOR WALL, ROOF & FLOOR OPENINGS TO BE PATCHED.
- ALL TRADES ARE TO COORDINATE THE REMOVAL OF EXISTING LOOSE EQUIPMENT WITH ARCHITECT AND/OR OWNER. ADDITIONAL EQUIPMENT FOUND THAT IS NOT NOTED ON DEMOLITION PLAN SHALL BE REMOVED AS PART OF GENERAL DEMOLITION AFTER VERIFICATION WITH ARCHITECT/OWNER.

01 REMOVE EXISTING WALL INCLUDING DOORS, WINDOWS, BORROWED LITES, AND ANY EQUIPMENT OR FURNISHINGS ATTACHED TO WALL OR PORTION OF EXISTING WALL AS SHOWN ON FLOOR PLAN (MIN. 4" BELOW FLOOR SLAB) AND AS REQUIRED FOR NEW CONSTRUCTION. FLOOR SURFACE TO BE PATCHED AS REQUIRED TO RECEIVE NEW FLOOR MATERIAL. WALL SURFACE TO BE PATCHED AS REQUIRED TO RECEIVE NEW WALL FINISH. SEE MECHANICAL & ELECTRICAL DEMOLITION NOTES FOR RELATED ITEMS. SUPPORT UNBRACED SECTIONS OF WALL OR ROOF AS REQUIRED.

02 REMOVE EXISTING BORROWED LITE OR DOOR & DOOR FRAME. (DOOR LINTEL TO REMAIN UNLESS OTHERWISE NOTED ON PLAN - SEE STRUCTURAL FOR ADDITIONAL INFORMATION). WHERE DOOR FRAMES ARE TO REMAIN, PROTECT FRAMES FROM DAMAGE. SAND AND PREP FOR NEW PAINT FINISH UNDER SECTION 09 90 00. SEE DOOR SCHEDULE FOR REQUIRED NEW DOORS AND FRAMES OR ONLY NEW DOORS.

03 SAW CUT AND REMOVE FLOOR OR PORTION OF EXISTING FLOOR SLAB AS SHOWN OR DIMENSIONED ON FLOOR PLAN. EXCAVATE, FILL & COMPACT SOIL AS REQUIRED FOR NEW SLAB- COORDINATE WITH MECHANICAL/ ELECTRICAL DEMOLITION NOTES FOR RELATED ITEMS & LOCATIONS. INSTALL NEW SLAB TO MATCH EXIST. ELEVATION. SEE STRUCTURAL FOR ADDITIONAL INFORMATION REGARDING SLAB REMOVAL.

04 REMOVE EXISTING CASEWORK/MILLWORK, COUNTER TOPS & BACK SPLASH. SAVE ITEMS AT OWNER'S REQUEST.

05 REMOVE EXISTING SUSPENDED/PLASTER CEILING-INCLUDING ALL FRAMING, TILES, TEES, HANGERS & WIRES USED TO SUPPORT THAT CEILING. REPLACE PER REFL. CEILING PLANS.

06 SEE MECHANICAL DEMOLITION NOTES FOR REMOVAL OF EXISTING PLUMBING / MECHANICAL (i.e. LAVATORIES, SINKS, WATER CLOSETS, URINALS, FINTUBE, MECH. DUCTWORK, UNIT VENTS, ETC.)

07 REMOVE EXISTING WINDOW. WINDOW WALL WITH ALUMINUM FRAMING WITH METAL PANELS BELOW WINDOW. FRAME, SILL & GLAZING INCLUDING ALL EXISTING WOOD BLOCKING AND FRAMING ABOVE WINDOWS TO ROOF AND/OR MASONRY TIES AT BRICK PIERS AND SIDE WALLS.

08 REMOVE EXISTING EQUIPMENT OR FURNISHINGS SECURED TO FLOOR, WALL OR CEILING AND STORE FOR REUSE BY OWNER.

09 REMOVE EXISTING CHALK, TACK OR WHITE BOARD. REMOVE ALL GLUE RESIDUE, ETC. FROM BLOCK BEHIND BOARD AND PREPARE SURFACE FOR NEW FINISH MATERIALS WHERE REQUIRED.

10 REMOVE EXISTING FLOOR COVERING AND BASE, INCLUDING ALL GLUE RESIDUE, MUDBEDS, ETC. FROM FLOORS & WALLS AND PREPARE SURFACE FOR NEW FINISH MATERIALS, INCLUDING GRINDING, PATCHING AND/OR SELF-LEVELING COMPOUND AS REQUIRED. WALL & FLOOR SURFACE TO RECEIVE NEW FINISH MATERIAL & PATCH TO MATCH EXISTING.

11 REMOVE EXISTING ENTRY ROOF CONSTRUCTION AND ALL RELATED STRUCTURE AS SHOWN ON DEMOLITION PLANS.

12 REMOVE EXISTING TOILET PARTITION, DISPENSERS AND/OR TOILET ACCESSORIES AND REPAIR ADJACENT SURFACES TO RECEIVE NEW FINISHES.

13 REMOVE EXISTING LOCKERS AND LOCKER BASE. CUT SLOPED LOCKER TOP & BASE AS NECESSARY. RE-USE/RELOCATE EXISTING END PANEL AS REQUIRED. REVISE & PREPARE FOR NEW FINISHES.

14 REMOVE EXISTING INTAKE LOUVER AT EXISTING UNIT VENTILATOR. PATCH HOLE WITH NEW FACE BRICK TO MATCH EXISTING. SEE MECHANICAL DRAWINGS.

15 REMOVE EXISTING BASKETBALL BACKBOARD AND ALL RELATED HANGERS, FASTENERS AND FRAMING TO STRUCTURE ABOVE.

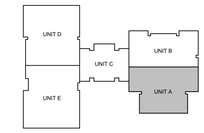
16 REMOVE EXISTING PRECAST CONCRETE ENTRY CANOPY AS SHOWN DASHED. PATCH AND REPAIR ADJACENT WALL SURFACES AS REQUIRED.

17 REMOVE EXISTING DECORATIVE ARCH & WALL BRACKETS AS SHOWN DASHED. PATCH AND REPAIR ADJACENT WALL SURFACES AS REQUIRED.

18 REMOVE EXISTING BURNISHED BLOCK ACCENT TRIM AS SHOWN DASHED. PATCH AND REPAIR ADJACENT WALL SURFACES AS REQUIRED.

19 REMOVE EXISTING GYPSUM BOARD DECORATIVE ARCH AS SHOWN DASHED. PATCH AND REPAIR ADJACENT WALL SURFACES AS REQUIRED.

20 REMOVE EXISTING GYPSUM BOARD DECORATIVE CORNICE AS SHOWN DASHED. PATCH AND REPAIR ADJACENT WALL SURFACES AS REQUIRED.



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KEY PLAN

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THREE RIVERS, MICHIGAN

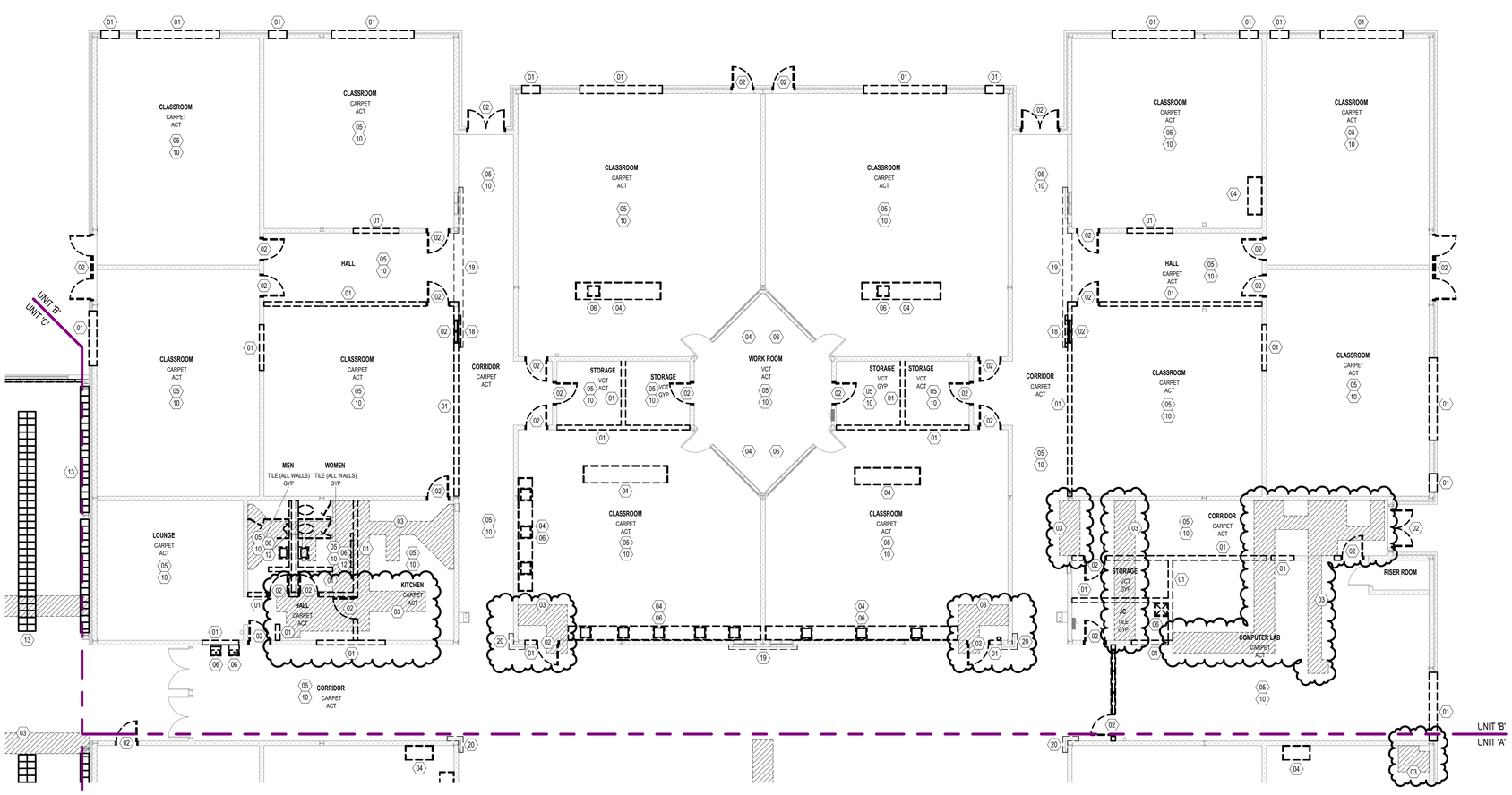
ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	BSE
REVIEWED	CMA
PROJECT NO.	5-5802

UNIT 'A' FIRST FLOOR DEMOLITION PLAN

A1.1A



NORTH

UNIT 'B' FIRST FLOOR DEMOLITION PLAN

1/8" = 1'-0"

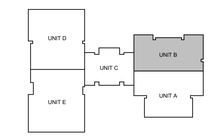
DEMOLITION LEGEND

- EXISTING WALL TO BE DEMOLISHED.
- PORTION OF EXISTING WALL TO BE DEMOLISHED.
- EXISTING OBJECT TO BE DEMOLISHED.
- AREA OF FLOOR CUTTING.
- AREA OF EXISTING ROOF STRUCTURE TO BE REMOVED.
- EXISTING WALL TO REMAIN.
- EXISTING OBJECT TO REMAIN.
- XX — DEMOLITION TAG: SEE DEMOLITION NOTES.
- ROOM NAME / FLOOR FINISH / CEILING FINISH — EXISTING ROOM FINISH INFORMATION: ROOM NAME, FLOORING TYPE, CEILING TYPE

DEMOLITION NOTES

- DEMOLITION CONTRACTOR IS TO STOP WORK IMMEDIATELY IN AREA IF ASBESTOS IS ENCOUNTERED. NOTIFY CONSTRUCTION MANAGER OF SUSPECTED AREA SO PROPER ABATEMENT CAN BE DONE. (UNDER A SEPARATE ASBESTOS ABATEMENT CONTRACT AS NEGOTIATED BY OWNER.)
- ALL MASONRY BLOCK AND BRICK WALLS TO BE REMOVED MUST BE TOOTHED TO RECEIVE NEW MASONRY, UNLESS NOTED OTHERWISE ON DRAWINGS.
- DEMOLITION CONTRACTOR IS TO PROVIDE TEMPORARY SHORING AND BRACING FOR EXISTING ROOF/FLOOR STRUCTURE AS REQUIRED UNTIL PERMANENT WALLS & LINTELS ARE INSTALLED. REFER TO STRUCT. & ARCH. DWGS. FOR BEARING CONDITIONS.
- ALL TRADES ARE TO COORDINATE ANY DEMOLITION, CAPPING OR ABANDONMENT OF EXISTING MECHANICAL, ELECTRICAL, PLUMBING OR ARCHITECTURAL ITEMS.
- ALL ITEMS TO BE SAVED AND/OR RELOCATED ARE TO BE STORED IN A PROPER MANNER SO NO DAMAGE WILL OCCUR TO THESE ITEMS DURING THEIR STORAGE PERIOD.
- ALL DEMOLITION WHICH DAMAGES ADJACENT SURFACES IS TO BE REPAIRED TO MATCH THE EXISTING SURFACE DAMAGED (MATERIALS & FINISHES) AND ALL REPAIR WORK IS TO BE COORDINATED WITH NEW CONSTRUCTION. FOR NEW OPENINGS IN EXISTING WALLS, COORDINATE NEW LINTELS W/ MASONRY CONTRACTOR.
- PATCH WALLS & ROOF TO MATCH EXISTING CONSTRUCTION BEHIND REMOVAL OF WALL LOUVERS, EXHAUST FANS, INTAKE HOODS & CABINET HEATERS. VERIFY SEQUENCE OF REMOVAL W/ CONSTRUCTION MANAGER. SEE MECHANICAL AND ELECTRICAL DEMO SHEETS FOR WALL, ROOF & FLOOR OPENINGS TO BE PATCHED.
- ALL TRADES ARE TO COORDINATE THE REMOVAL OF EXISTING LOOSE EQUIPMENT WITH ARCHITECT AND/OR OWNER. ADDITIONAL EQUIPMENT FOUND THAT IS NOT NOTED ON DEMOLITION PLAN SHALL BE REMOVED AS PART OF GENERAL DEMOLITION AFTER VERIFICATION WITH ARCHITECT/OWNER.

01. REMOVE EXISTING WALL INCLUDING DOORS, WINDOWS, BORROWED LITES, AND ANY EQUIPMENT OR FURNISHINGS ATTACHED TO WALL OR PORTION OF EXISTING WALL AS SHOWN ON FLOOR PLAN (MIN. 4" BELOW FLOOR SLAB) AND AS REQUIRED FOR NEW CONSTRUCTION. FLOOR SURFACE TO BE PATCHED AS REQUIRED TO RECEIVE NEW FLOOR MATERIAL. WALL SURFACE TO BE PATCHED AS REQUIRED TO RECEIVE NEW WALL FINISH. SEE MECHANICAL & ELECTRICAL DEMOLITION NOTES FOR RELATED ITEMS. SUPPORT UNBRACED SECTIONS OF WALL OR ROOF AS REQUIRED.
02. REMOVE EXISTING BORROWED LITE OR DOOR & DOOR FRAME. (DOOR LINTEL TO REMAIN UNLESS OTHERWISE NOTED ON PLAN - SEE STRUCTURAL FOR ADDITIONAL INFORMATION). WHERE DOOR FRAMES ARE TO REMAIN, PROTECT FRAMES FROM DAMAGE. SAND AND PREP FOR NEW PAINT FINISH UNDER SECTION 09 90 00. SEE DOOR SCHEDULE FOR REQUIRED NEW DOORS AND FRAMES OR ONLY NEW DOORS.
03. SAW CUT AND REMOVE FLOOR OR PORTION OF EXISTING FLOOR SLAB AS SHOWN OR DIMENSIONED ON FLOOR PLAN. EXCAVATE, FILL & COMPACT SOIL AS REQUIRED FOR NEW SLAB- COORDINATE WITH MECHANICAL/ ELECTRICAL DEMOLITION NOTES FOR RELATED ITEMS & LOCATIONS. INSTALL NEW SLAB TO MATCH EXIST. ELEVATION. SEE STRUCTURAL FOR ADDITIONAL INFORMATION REGARDING SLAB REMOVAL.
04. REMOVE EXISTING CASEWORK/MILLWORK, COUNTER TOPS & BACK SPLASH. SAVE ITEMS AT OWNERS REQUEST.
05. REMOVE EXISTING SUSPENDED/PLASTER CEILING-INCLUDING ALL FRAMING, TILES, TEES, HANGERS & WIRES USED TO SUPPORT THAT CEILING. REPLACE PER REFL. CEILING PLANS.
06. SEE MECHANICAL DEMOLITION NOTES FOR REMOVAL OF EXISTING PLUMBING / MECHANICAL (i.e. LAVATORIES, SINKS, WATER CLOSETS, URINALS, FINTUBE, MECH. DUCTWORK, UNIT VENTS, ETC.)
07. REMOVE EXISTING WINDOW, WINDOW WALL WITH ALUMINUM FRAMING WITH METAL PANELS BELOW WINDOW, FRAME, SILL & GLAZING INCLUDING ALL EXISTING WOOD BLOCKING AND FRAMING ABOVE WINDOWS TO ROOF AND/OR MASONRY TIES AT BRICK PIERS AND SIDE WALLS.
08. REMOVE EXISTING EQUIPMENT OR FURNISHINGS SECURED TO FLOOR, WALL OR CEILING AND STORE FOR REUSE BY OWNER.
09. REMOVE EXISTING CHALK, TACK OR WHITE BOARD. REMOVE ALL GLUE RESIDUE, ETC. FROM BLOCK BEHIND BOARD AND PREPARE SURFACE FOR NEW FINISH MATERIALS WHERE REQUIRED.
10. REMOVE EXISTING FLOOR COVERING AND BASE, INCLUDING ALL GLUE RESIDUE, MUDBEDS, ETC. FROM FLOORS & WALLS AND PREPARE SURFACE FOR NEW FINISH MATERIALS, INCLUDING GRINDING. PATCHING AND/OR SELF-LEVELING COMPOUND AS REQUIRED. WALL & FLOOR SURFACE TO RECEIVE NEW FINISH MATERIAL & PATCH TO MATCH EXISTING.
11. REMOVE EXISTING ENTRY ROOF CONSTRUCTION AND ALL RELATED STRUCTURE AS SHOWN ON DEMOLITION PLANS.
12. REMOVE EXISTING TOILET PARTITION, DISPENSERS AND/OR TOILET ACCESSORIES AND REPAIR ADJACENT SURFACES TO RECEIVE NEW FINISHES.
13. REMOVE EXISTING LOCKERS AND LOCKER BASE. CUT SLOPED LOCKER TOP & BASE AS NECESSARY. RE-USE/RELOCATE EXISTING END PANEL AS REQUIRED. REVISE & PREPARE FOR NEW FINISHES.
14. REMOVE EXISTING INTAKE LOUVER AT EXISTING UNIT VENTILATOR. PATCH HOLE WITH NEW FACE BRICK TO MATCH EXISTING. SEE MECHANICAL DRAWINGS.
15. REMOVE EXISTING BASKETBALL BACKBOARD AND ALL RELATED HANGERS, FASTENERS AND FRAMING TO STRUCTURE ABOVE.
16. REMOVE EXISTING PRECAST CONCRETE ENTRY CANOPY AS SHOWN DASHED. PATCH AND REPAIR ADJACENT WALL SURFACES AS REQUIRED.
17. REMOVE EXISTING DECORATIVE ARCH & WALL BRACKETS AS SHOWN DASHED. PATCH AND REPAIR ADJACENT WALL SURFACES AS REQUIRED.
18. REMOVE EXISTING BURNISHED BLOCK ACCENT TRIM AS SHOWN DASHED. PATCH AND REPAIR ADJACENT WALL SURFACES AS REQUIRED.
19. REMOVE EXISTING GYPSUM BOARD DECORATIVE ARCH AS SHOWN DASHED. PATCH AND REPAIR ADJACENT WALL SURFACES AS REQUIRED.
20. REMOVE EXISTING GYPSUM BOARD DECORATIVE CORNICE AS SHOWN DASHED. PATCH AND REPAIR ADJACENT WALL SURFACES AS REQUIRED.



NORTH

KEY PLAN

GMB
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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	BSE
REVIEWED	CMA
PROJECT NO.	5-5802

UNIT 'B' FIRST FLOOR DEMOLITION PLAN

A1.1B

BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 2/5-5802A 2019.rvt
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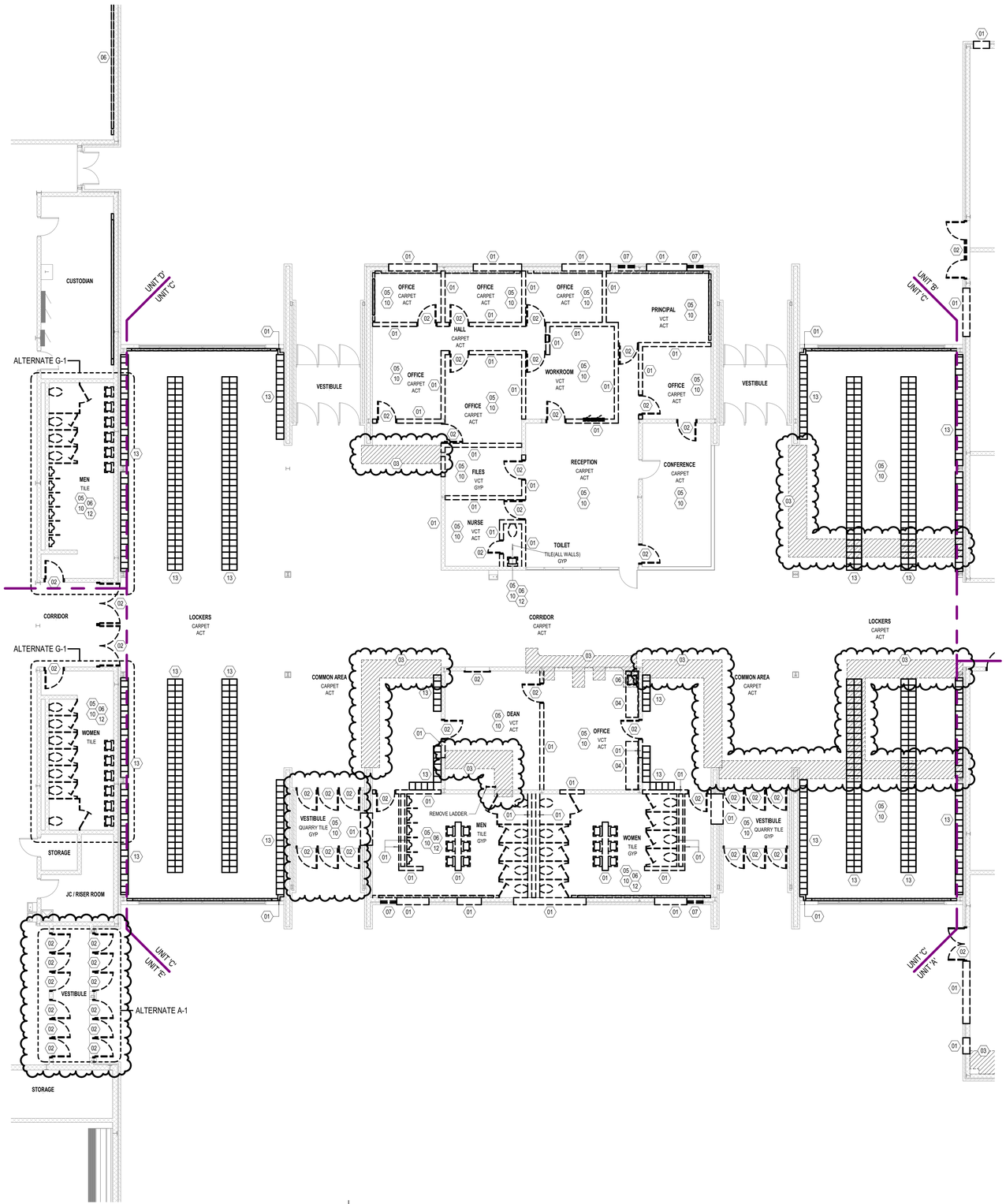

UNIT 'C' FIRST FLOOR DEMOLITION PLAN

1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING WALL TO BE DEMOLISHED.
- PORTION OF EXISTING WALL TO BE DEMOLISHED.
- EXISTING OBJECT TO BE DEMOLISHED.
- AREA OF FLOOR CUTTING.
- AREA OF EXISTING ROOF STRUCTURE TO BE REMOVED.
- EXISTING WALL TO REMAIN.
- EXISTING OBJECT TO REMAIN.
- (XX) DEMOLITION TAG: SEE DEMOLITION NOTES.
- ROOM NAME / FLOOR FINISH / CEILING FINISH — EXISTING ROOM FINISH INFORMATION: ROOM NAME, FLOORING TYPE, CEILING TYPE

DEMOLITION NOTES

- DEMOLITION CONTRACTOR IS TO STOP WORK IMMEDIATELY IN AREA IF ASBESTOS IS ENCOUNTERED. NOTIFY CONSTRUCTION MANAGER OF SUSPECTED AREA SO PROPER ABATEMENT CAN BE DONE. (UNDER A SEPARATE ASBESTOS ABATEMENT CONTRACT AS NEGOTIATED BY OWNER.)
- ALL MASONRY BLOCK AND BRICK WALLS TO BE REMOVED MUST BE TOOTHED TO RECEIVE NEW MASONRY, UNLESS NOTED OTHERWISE ON DRAWINGS.
- DEMOLITION CONTRACTOR IS TO PROVIDE TEMPORARY SHORING AND BRACING FOR EXISTING ROOF/FLOOR STRUCTURE AS REQUIRED UNTIL PERMANENT WALLS & LINTELS ARE INSTALLED. REFER TO STRUCT. & ARCH. DWGS. FOR BEARING CONDITIONS.
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- ALL ITEMS TO BE SAVED AND/OR RELOCATED ARE TO BE STORED IN A PROPER MANNER SO NO DAMAGE WILL OCCUR TO THESE ITEMS DURING THEIR STORAGE PERIOD.
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- PATCH WALLS & ROOF TO MATCH EXISTING CONSTRUCTION BEHIND REMOVAL OF WALL LOUVERS, EXHAUST FANS, INTAKE HOODS & CABINET HEATERS. VERIFY SEQUENCE OF REMOVAL W/ CONSTRUCTION MANAGER. SEE MECHANICAL AND ELECTRICAL DEMO SHEETS FOR WALL, ROOF & FLOOR OPENINGS TO BE PATCHED.
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06. SEE MECHANICAL DEMOLITION NOTES FOR REMOVAL OF EXISTING PLUMBING / MECHANICAL (i.e. LAVATORIES, SINKS, WATER CLOSETS, URINALS, FINTUBE, MECH. DUCTWORK, UNIT VENTS, ETC.)
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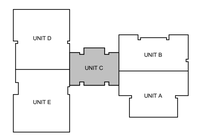

KEY PLAN

GMB
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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	BSE
REVIEWED	CMA
PROJECT NO.	5-5802

UNIT 'C' FIRST FLOOR DEMOLITION PLAN

A1.1C

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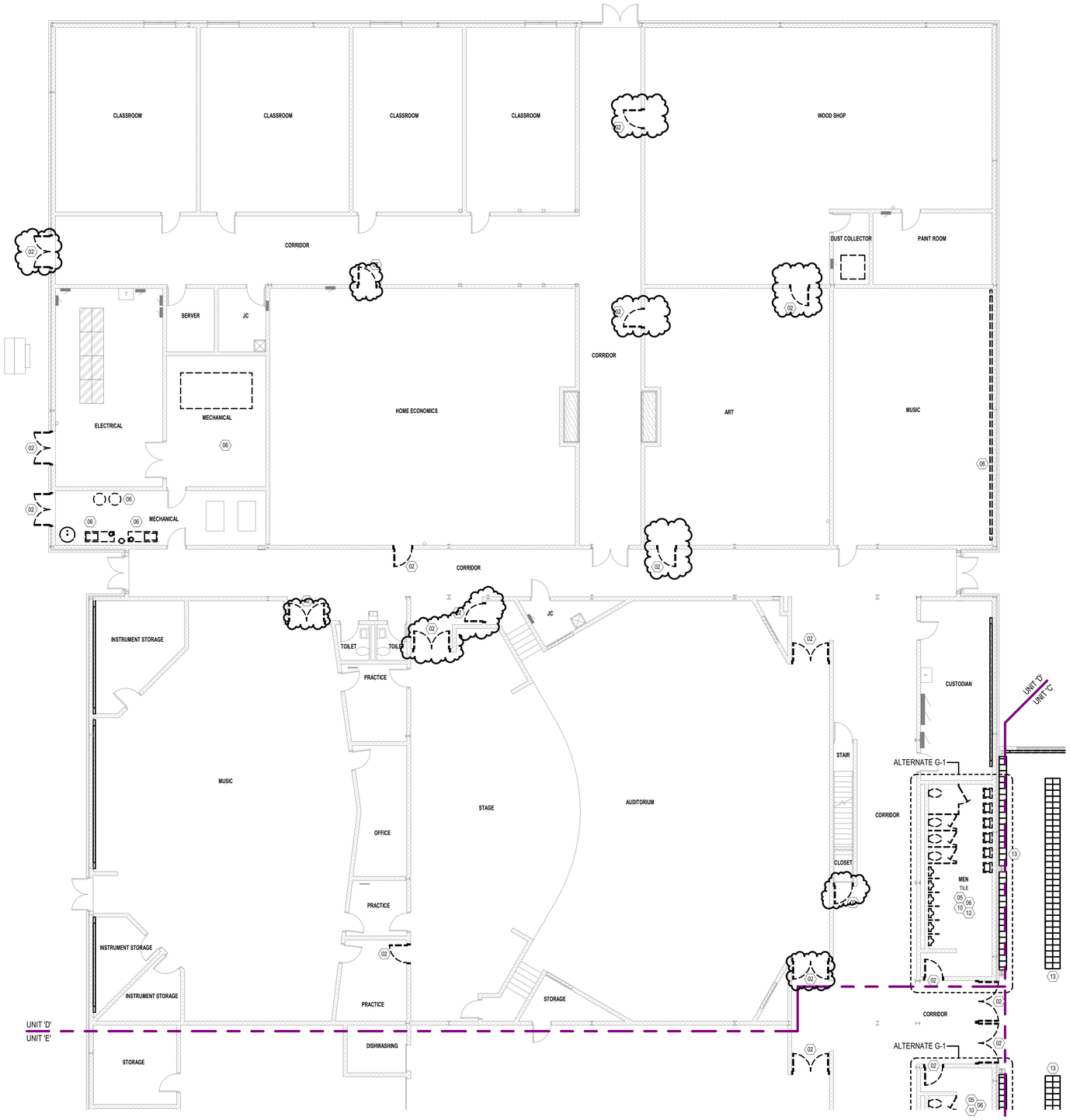
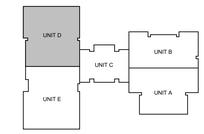


NORTH

UNIT 'D' FIRST FLOOR DEMOLITION PLAN

1/8" = 1'-0"



NORTH

KEY PLAN

DEMOLITION LEGEND

- EXISTING WALL TO BE DEMOLISHED.
- PORTION OF EXISTING WALL TO BE DEMOLISHED.
- EXISTING OBJECT TO BE DEMOLISHED.
- AREA OF FLOOR CUTTING.
- AREA OF EXISTING ROOF STRUCTURE TO BE REMOVED.
- EXISTING WALL TO REMAIN.
- EXISTING OBJECT TO REMAIN.
- (XX) DEMOLITION TAG: SEE DEMOLITION NOTES.
- ROOM NAME / FLOOR FINISH / CEILING FINISH — EXISTING ROOM FINISH INFORMATION: ROOM NAME, FLOORING TYPE, CEILING TYPE

DEMOLITION NOTES

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03. SAW CUT AND REMOVE FLOOR OR PORTION OF EXISTING FLOOR SLAB AS SHOWN OR DIMENSIONED ON FLOOR PLAN. EXCAVATE, FILL & COMPACT SOIL AS REQUIRED FOR NEW SLAB- COORDINATE WITH MECHANICAL/ ELECTRICAL DEMOLITION NOTES FOR RELATED ITEMS & LOCATIONS. INSTALL NEW SLAB TO MATCH EXIST. ELEVATION. SEE STRUCTURAL FOR ADDITIONAL INFORMATION REGARDING SLAB REMOVAL.
04. REMOVE EXISTING CASEWORK/MILLWORK, COUNTER TOPS & BACK SPLASH. SAVE ITEMS AT OWNERS REQUEST.
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THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	BSE
REVIEWED	CMA
PROJECT NO.	5-5802

UNIT 'D' FIRST FLOOR DEMOLITION PLAN

A1.1D

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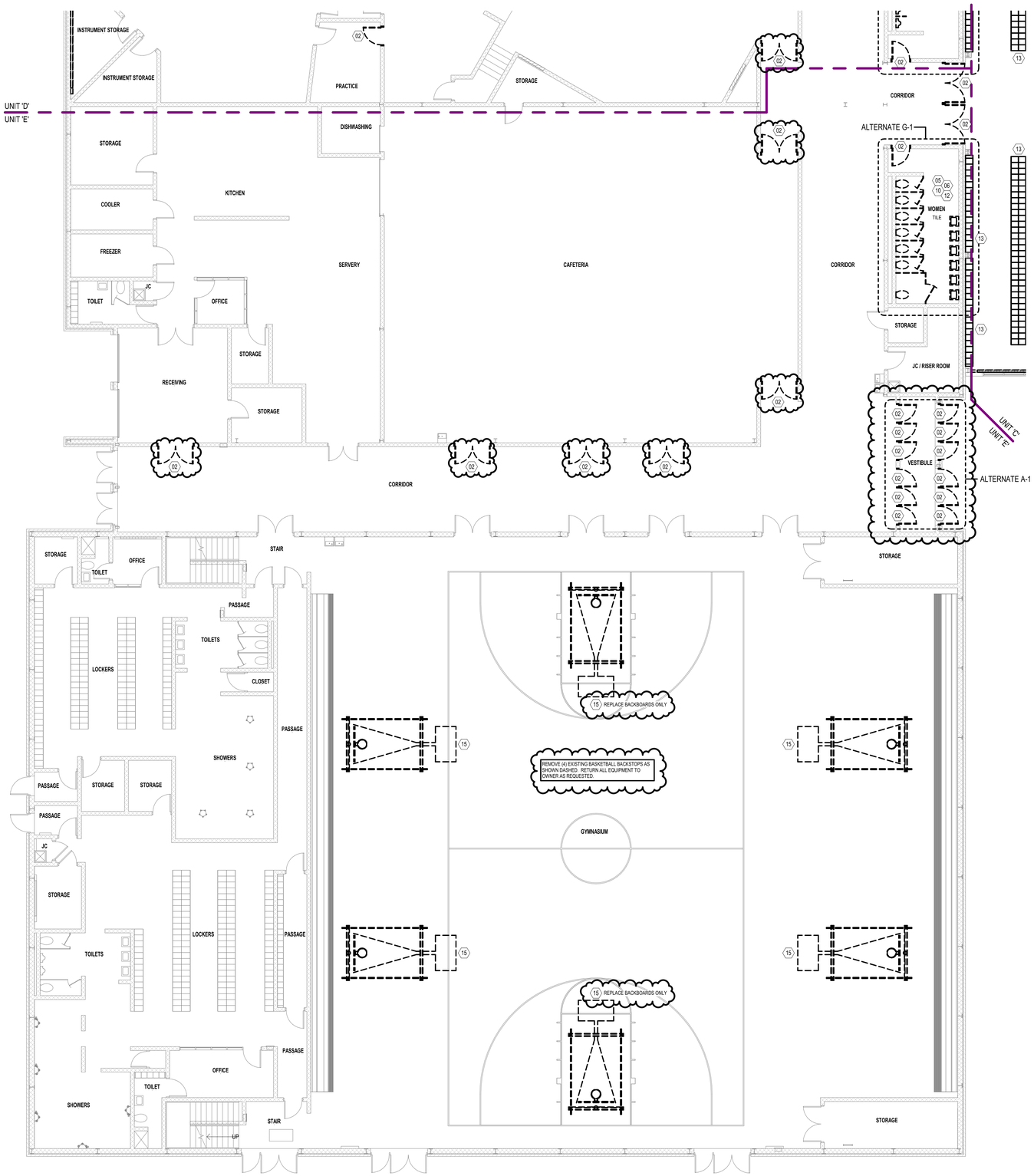

NORTH

UNIT 'E' FIRST FLOOR DEMOLITION PLAN

1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING WALL TO BE DEMOLISHED.
- PORTION OF EXISTING WALL TO BE DEMOLISHED.
- EXISTING OBJECT TO BE DEMOLISHED.
- AREA OF FLOOR CUTTING.
- AREA OF EXISTING ROOF STRUCTURE TO BE REMOVED.
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- (XX) DEMOLITION TAG: SEE DEMOLITION NOTES.
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- ALL TRADES ARE TO COORDINATE ANY DEMOLITION, CAPPING OR ABANDONMENT OF EXISTING MECHANICAL, ELECTRICAL, PLUMBING OR ARCHITECTURAL ITEMS.
- ALL ITEMS TO BE SAVED AND/OR RELOCATED ARE TO BE STORED IN A PROPER MANNER SO NO DAMAGE WILL OCCUR TO THESE ITEMS DURING THEIR STORAGE PERIOD.
- ALL DEMOLITION WHICH DAMAGES ADJACENT SURFACES IS TO BE REPAIRED TO MATCH THE EXISTING SURFACE DAMAGED (MATERIALS & FINISHES) AND ALL REPAIR WORK IS TO BE COORDINATED WITH NEW CONSTRUCTION. FOR NEW OPENINGS IN EXISTING WALLS, COORDINATE NEW LINTELS W/ MASONRY CONTRACTOR.
- PATCH WALLS & ROOF TO MATCH EXISTING CONSTRUCTION BEHIND REMOVAL OF WALL LOUVERS, EXHAUST FANS, INTAKE HOODS & CABINET HEATERS. VERIFY SEQUENCE OF REMOVAL W/ CONSTRUCTION MANAGER. SEE MECHANICAL AND ELECTRICAL DEMO SHEETS FOR WALL, ROOF & FLOOR OPENINGS TO BE PATCHED.
- ALL TRADES ARE TO COORDINATE THE REMOVAL OF EXISTING LOOSE EQUIPMENT WITH ARCHITECT AND/OR OWNER. ADDITIONAL EQUIPMENT FOUND THAT IS NOT NOTED ON DEMOLITION PLAN SHALL BE REMOVED AS PART OF GENERAL DEMOLITION AFTER VERIFICATION WITH ARCHITECT/OWNER.

01 REMOVE EXISTING WALL INCLUDING DOORS, WINDOWS, BORROWED LITES, AND ANY EQUIPMENT OR FURNISHINGS ATTACHED TO WALL OR PORTION OF EXISTING WALL AS SHOWN ON FLOOR PLAN (MIN. 4" BELOW FLOOR SLAB) AND AS REQUIRED FOR NEW CONSTRUCTION. FLOOR SURFACE TO BE PATCHED AS REQUIRED TO RECEIVE NEW FLOOR MATERIAL. WALL SURFACE TO BE PATCHED AS REQUIRED TO RECEIVE NEW WALL FINISH. SEE MECHANICAL & ELECTRICAL DEMOLITION NOTES FOR RELATED ITEMS & LOCATIONS. INSTALL NEW SLAB TO MATCH EXIST. ELEVATION. SEE STRUCTURAL FOR ADDITIONAL INFORMATION REGARDING SLAB REMOVAL.

02 REMOVE EXISTING BORROWED LITE OR DOOR & DOOR FRAME. (DOOR LINTEL TO REMAIN UNLESS OTHERWISE NOTED ON PLAN - SEE STRUCTURAL FOR ADDITIONAL INFORMATION). WHERE DOOR FRAMES ARE TO REMAIN, PROTECT FRAMES FROM DAMAGE. SAND AND PREP FOR NEW PAINT FINISH UNDER SECTION 09 90 00. SEE DOOR SCHEDULE FOR REQUIRED NEW DOORS AND FRAMES OR ONLY NEW DOORS.

03 SAW CUT AND REMOVE FLOOR OR PORTION OF EXISTING FLOOR SLAB AS SHOWN OR DIMENSIONED ON FLOOR PLAN. EXCAVATE, FILL & COMPACT SOIL AS REQUIRED FOR NEW SLAB- COORDINATE WITH MECHANICAL/ ELECTRICAL DEMOLITION NOTES FOR RELATED ITEMS & LOCATIONS. INSTALL NEW SLAB TO MATCH EXIST. ELEVATION. SEE STRUCTURAL FOR ADDITIONAL INFORMATION REGARDING SLAB REMOVAL.

04 REMOVE EXISTING CASEWORK/MILLWORK, COUNTER TOPS & BACK SPLASH. SAVE ITEMS AT OWNERS REQUEST.

05 REMOVE EXISTING SUSPENDED/PLASTER CEILING-INCLUDING ALL FRAMING, TILES, TEES, HANGERS & WIRES USED TO SUPPORT THAT CEILING. REPLACE PER REFL. CEILING PLANS.

06 SEE MECHANICAL DEMOLITION NOTES FOR REMOVAL OF EXISTING PLUMBING / MECHANICAL (i.e. LAVATORIES, SINKS, WATER CLOSETS, URINALS, FINTUBE, MECH. DUCTWORK, UNIT VENTS, ETC.)

07 REMOVE EXISTING WINDOW, WINDOW WALL WITH ALUMINUM FRAMING WITH METAL PANELS BELOW WINDOW, FRAME, SILL & GLAZING INCLUDING ALL EXISTING WOOD BLOCKING AND FRAMING ABOVE WINDOWS TO ROOF AND/OR MASONRY TIES AT BRICK PIERS AND SIDE WALLS.

08 REMOVE EXISTING EQUIPMENT OR FURNISHINGS SECURED TO FLOOR, WALL OR CEILING AND STORE FOR REUSE BY OWNER.

09 REMOVE EXISTING CHALK, TACK OR WHITE BOARD. REMOVE ALL GLUE RESIDUE, ETC. FROM BLOCK BEHIND BOARD AND PREPARE SURFACE FOR NEW FINISH MATERIALS WHERE REQUIRED.

10 REMOVE EXISTING FLOOR COVERING AND BASE, INCLUDING ALL GLUE RESIDUE, MUDBEDS, ETC. FROM FLOORS & WALLS AND PREPARE SURFACE FOR NEW FINISH MATERIALS, INCLUDING GRINDING, PATCHING AND/OR SELF-LEVELING COMPOUND AS REQUIRED. WALL & FLOOR SURFACE TO RECEIVE NEW FINISH MATERIAL & PATCH TO MATCH EXISTING.

11 REMOVE EXISTING ENTRY ROOF CONSTRUCTION AND ALL RELATED STRUCTURE AS SHOWN ON DEMOLITION PLANS.

12 REMOVE EXISTING TOILET PARTITION, DISPENSERS AND/OR TOILET ACCESSORIES AND REPAIR ADJACENT SURFACES TO RECEIVE NEW FINISHES.

13 REMOVE EXISTING LOCKERS AND LOCKER BASE. CUT SLOPED LOCKER TOP & BASE AS NECESSARY. RE-USE/RELOCATE EXISTING END PANEL AS REQUIRED. REVISE & PREPARE FOR NEW FINISHES.

14 REMOVE EXISTING INTAKE LOUVER AT EXISTING UNIT VENTILATOR. PATCH HOLE WITH NEW FACE BRICK TO MATCH EXISTING. SEE MECHANICAL DRAWINGS.

15 REMOVE EXISTING BASKETBALL BACKBOARD AND ALL RELATED HANGERS, FASTENERS AND FRAMING TO STRUCTURE ABOVE.

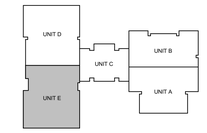
16 REMOVE EXISTING PRECAST CONCRETE ENTRY CANOPY AS SHOWN DASHED. PATCH AND REPAIR ADJACENT WALL SURFACES AS REQUIRED.

17 REMOVE EXISTING DECORATIVE ARCH & WALL BRACKETS AS SHOWN DASHED. PATCH AND REPAIR ADJACENT WALL SURFACES AS REQUIRED.

18 REMOVE EXISTING BURNISHED BLOCK ACCENT TRIM AS SHOWN DASHED. PATCH AND REPAIR ADJACENT WALL SURFACES AS REQUIRED.

19 REMOVE EXISTING GYPSUM BOARD DECORATIVE ARCH AS SHOWN DASHED. PATCH AND REPAIR ADJACENT WALL SURFACES AS REQUIRED.

20 REMOVE EXISTING GYPSUM BOARD DECORATIVE CORNICE AS SHOWN DASHED. PATCH AND REPAIR ADJACENT WALL SURFACES AS REQUIRED.



NORTH

KEY PLAN

GMB
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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	BSE
REVIEWED	CMA
PROJECT NO.	5-5802

UNIT 'E' FIRST FLOOR DEMOLITION PLAN

A1.1E

BIM 360://5-5802 Three Rivers MS' Additions & Renovations Series 2/5-5802A 2019.rvt
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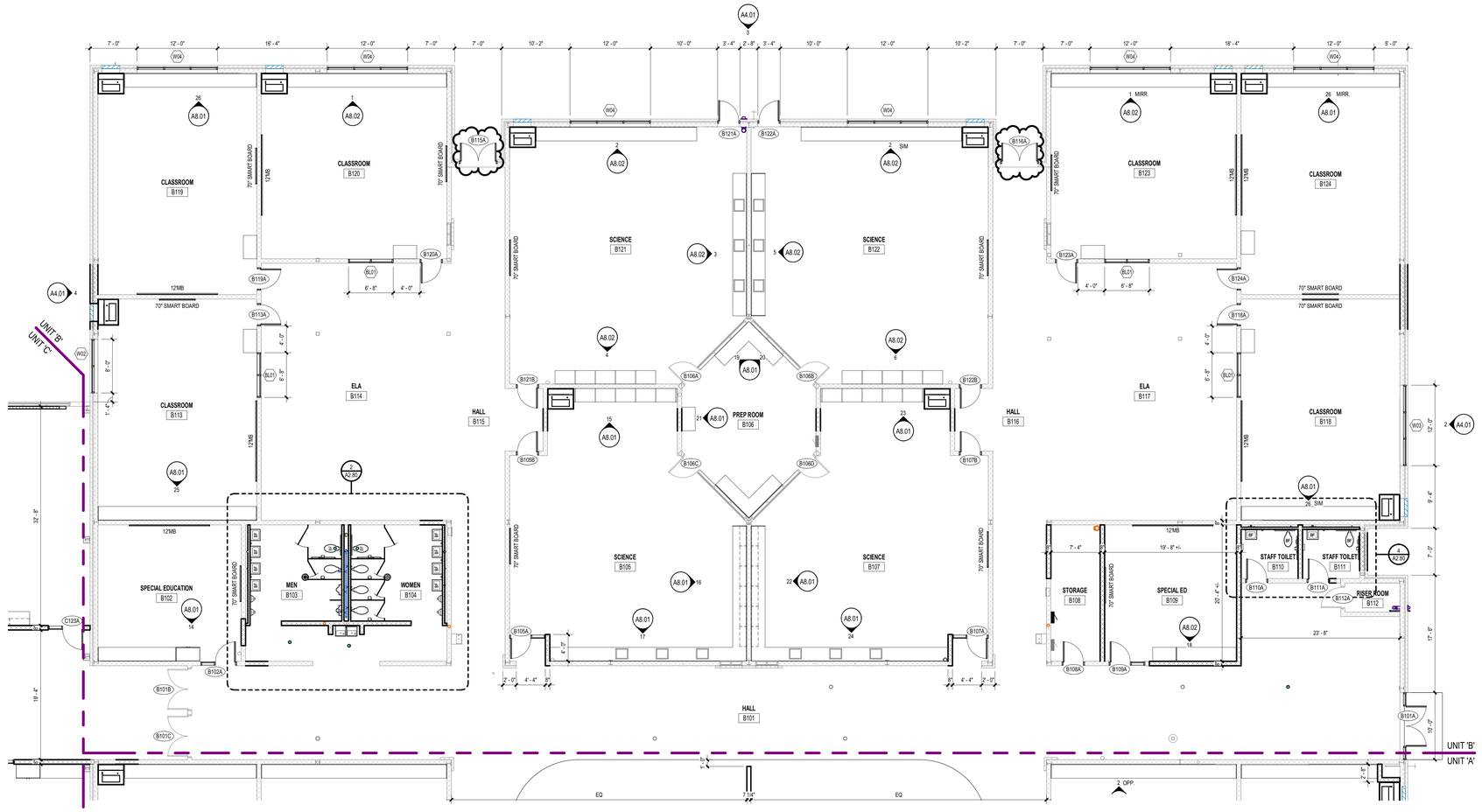


UNIT 'B' FIRST FLOOR PLAN

1/8" = 1'-0"

GENERAL FLOOR PLAN NOTES:

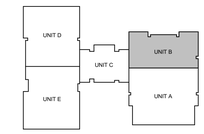
1. DIMENSIONS GIVEN ARE TO THE FACE OF MASONRY UNITS OR TO THE FINISHED FACE OF METAL STUD PARTITION WALLS.
2. REFERENCE STRUCTURAL DRAWINGS FOR CONCRETE SLAB SIZES AND SLAB RELATED INFORMATION.
3. INTERIOR STUD WALLS ARE TO USE 3 5/8" METAL STUD FRAMING UNLESS OTHERWISE NOTED.
4. TURN UP VAPOR RETARDER MATERIAL AT JOINTS BETWEEN FLOOR SLAB AND FOUNDATION WALL UNLESS NOTED OTHERWISE.
5. SEE FOUNDATION PLANS FOR FLOOR SLAB RECESSES FOR TILE, WOOD FLOOR, ETC. (VERIFY RECESS REQUIRED BY MFR.)
6. EXTEND ALL INTERIOR WALL PARTITIONS (MASONRY OR STUDS) TO BOTTOM OF DECK ABOVE UNLESS NOTED OTHERWISE.
7. REFERENCE STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL FOR ITEMS NOT SHOWN. COORDINATE AS REQUIRED INCLUDING NECESSARY FRAMING, BLOCKING, ETC.
8. FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF ANY CABINETRY, FRAMES, STRUCTURAL ITEMS, ETC.
9. PROVIDE PAINTED ACCESS PANELS IN WALLS AND CEILINGS TO PROVIDE ACCESS TO CONCEALED ITEMS INCLUDING BUT NOT LIMITED TO VALVES, CONTROLS, MECH. EQUIPMENT ETC. ACCESS PANELS MAY NOT ALWAYS BE SHOWN ON PLANS. IT IS THE SUB CONTRACTOR RESPONSIBILITY TO DETERMINE LOCATIONS. COORDINATE LOCATIONS WITH OTHER GENERAL CONTRACTOR / SITE SUPERVISOR.
10. COORDINATE WALLS WITH COLUMNS AND OTHER ENCASED ITEMS. COLUMNS ARE TO BE CONTAINED WITHIN WALLS. THE FRAMING CONTRACTOR SHALL INCREASE FRAMING SIZE TO ACCOMMODATE COLUMNS, DRAIN LEADERS, PIPING, ELECTRICAL PANELS, ETC. WHERE WALLS REQUIRE EXTRA WIDTH THE ENTIRE WALL SHALL BE WIDENED UNLESS APPROVED BY ARCHITECT.
11. ALL GUARDRAILS AND HANDRAILS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH ALL REQUIREMENTS OF THE 2015 M.B.C., ANSI ICC A117.1-2009 & AMERICANS WITH DISABILITIES ACT GUIDELINES. THE MOST STRONGENT SHALL PREVAIL.
12. PROVIDE MINIMUM CLEARANCES AT ALL DOORS PER DETAILS. SEE G0.01 FOR REQUIREMENTS.
13. FOR ALL CABINETRY, SEE INTERIOR ELEVATIONS FOR LAYOUTS. FIELD VERIFY CLEAR WIDTHS PRIOR TO FABRICATION.
14. ALL EXTERIOR BLOCK CORNERS ARE TO BE BULLNOSE BLOCK EXCEPT CONCRETE BLOCK COLUMNS, PIERS AND WALLS TO RECEIVE TILE - UNLESS NOTED OTHERWISE.
15. CONTRACTOR TO MAINTAIN / REPAIR RATING OF EXISTING PARTITIONS AS AFFECTED BY DEMOLITION / NEW CONSTRUCTION. TYPICAL THROUGHOUT.
16. SEAL ALL PENETRATIONS IN FIRE RATED FLOORS AND WALLS WITH APPROVED FIRESTOPPING.
17. WHERE SPECIALTY BLOCK IS REQUIRED AT THE SAME HEIGHT ON BOTH SIDES OF A WALL USE (2) SPECIALTY BLOCKS BACK TO BACK TO MAINTAIN THE FINISHED WALL APPEARANCE BOTH SIDES OF THE WALL. COORDINATE WITH STRUCTURE FOR LINTELS CONDITIONS PER SPECIFICATIONS.
18. WALLS TO BE PATCHED WITH LIKE MATERIALS WHERE EXISTING WALLS HAVE BEEN COMPROMISED FROM DEMOLITION. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO REMOVAL AND REINSTALLATION OF CASEWORK AND WALL MOUNTED EQUIPMENT IN ORDER TO ACHIEVE SAID PATCH. IN AREAS WHERE BLOCK OR BRICK HAVE BEEN USED, NEW MASONRY TO BE TOOTHED IN AND MATCH EXISTING. AREAS AND FINISHES IN QUESTION SHALL BE COORDINATED WITH ARCHITECT.
19. SEE STRUCTURAL FRAMING PLANS FOR ADDITIONAL WALL REINFORCING REQUIREMENTS. MINIMUM REINFORCING (FOR ALL WALLS NOT OTHERWISE NOTED ON STRUCTURAL PLANS) :
    A. ALL BEARING WALLS SHALL RECEIVE A MINIMUM REINFORCING OF R1-5-48.
    B. ALL EXTERIOR WALLS SHALL RECEIVE A MINIMUM REINFORCING OF R1-5-48.
    C. ALL INTERIOR NON-BEARING WALLS OVER 16'-0" HIGH SHALL RECEIVE A MINIMUM REINFORCING OF R1-5-48.

WALL LEGEND

	7 7/8"	5/8" GYP. BOARD BOTH SIDES 3 5/8" LIGHT GA. METAL FRAMING AT 16" O.C. SOUND BATT FULL HEIGHT OF WALL. WALLS TO BOTTOM OF DECK UNLESS NOTED OTHERWISE
	7 1/4"	5/8" GYP. BOARD BOTH SIDES 6" LIGHT GA. METAL FRAMING AT 16" O.C. SOUND BATT FULL HEIGHT OF WALL. WALLS TO BOTTOM OF DECK UNLESS NOTED OTHERWISE
SEE PLAN	SEE PLAN	CMU WALL SEE FLOOR PLANS FOR REQUIRED WALL REINFORCING. NOMINAL DIMENSIONS GIVEN (8" TYPICAL U.N.O.)
SEE PLAN	SEE PLAN	BRICK AND CMU WALL W/ 2" SPRAY APPLIED INSULATION SEE FLOOR PLANS FOR REQUIRED WALL REINFORCING. NOMINAL DIMENSIONS GIVEN. SEE WALL SECTIONS FOR ADDITIONAL DETAILS, BANDING, ETC. (3 5/8" BRICK & 8" CMU TYPICAL U.N.O.)
SEE PLAN	SEE PLAN	CONCRETE WALL SEE STRUCTURAL PLANS FOR REQUIRED REINFORCING.

-FIRE RATINGS AS CALLED FOR ON CODE COMPLIANCE PLAN

-DIMENSIONS GIVEN ARE TO THE FINISHED FACE OF CMU OR GYPSUM WALL BOARD UNLESS NOTED OTHERWISE



KEY PLAN

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THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	BSE
REVIEWED	CMA
PROJECT NO.	5-5802

UNIT 'B' FIRST FLOOR PLAN

A2.1B

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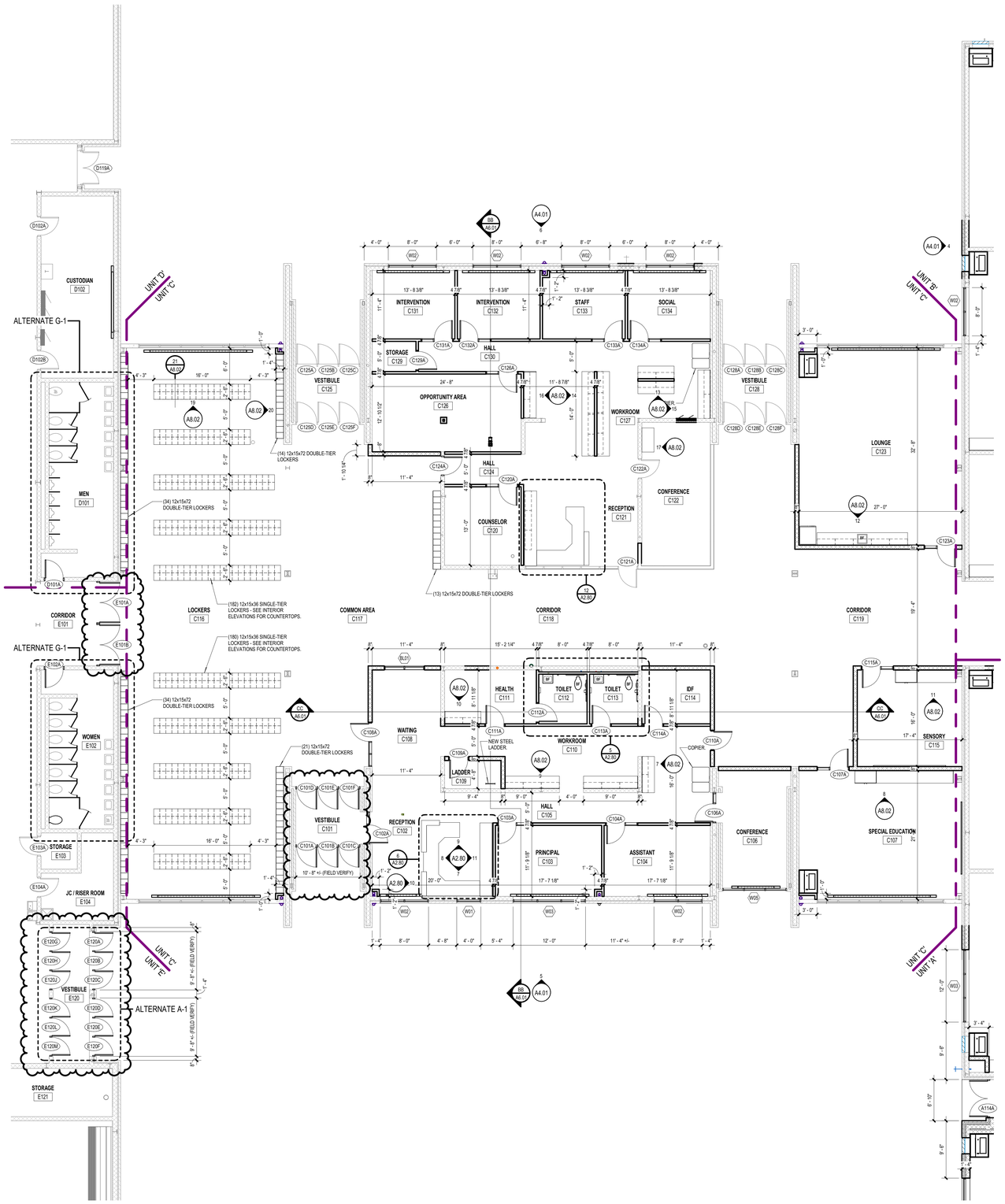

GENERAL FLOOR PLAN NOTES:

1. DIMENSIONS GIVEN ARE TO THE FACE OF MASONRY UNITS OR TO THE FINISHED FACE OF METAL STUD PARTITION WALLS.
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6. EXTEND ALL INTERIOR WALL PARTITIONS (MASONRY OR STUDS) TO BOTTOM OF DECK ABOVE UNLESS NOTED OTHERWISE.
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11. ALL GUARDRAILS AND HANDRAILS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH ALL REQUIREMENTS OF THE 2015 M.B.C., ANSI/ ICC A117.1-2009 & AMERICANS WITH DISABILITIES ACT GUIDELINES. THE MOST STRONGENT SHALL PREVAIL.
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13. FOR ALL CABINETRY, SEE INTERIOR ELEVATIONS FOR LAYOUTS. FIELD VERIFY CLEAR WIDTHS PRIOR TO FABRICATION.
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WALL LEGEND

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- BRICK AND CMU WALL W/ 2" SPRAY APPLIED INSULATION SEE FLOOR PLANS FOR REQUIRED WALL REINFORCING. NOMINAL DIMENSIONS GIVEN. SEE WALL SECTIONS FOR ADDITIONAL DETAILS, BANDING, ETC. (3 5/8" BRICK & 8" CMU TYPICAL U.N.O.)
- CONCRETE WALL SEE STRUCTURAL PLANS FOR REQUIRED REINFORCING.

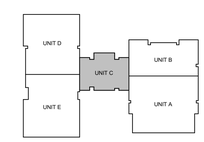
-FIRE RATINGS AS CALLED FOR ON CODE COMPLIANCE PLAN

-DIMENSIONS GIVEN ARE TO THE FINISHED FACE OF CMU OR GYPSUM WALL BOARD UNLESS NOTED OTHERWISE

NORTH

UNIT 'C' FIRST FLOOR PLAN

1/8" = 1'-0"



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KEY PLAN

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

ISSUANCES	
12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	BSE
REVIEWED	CMA
PROJECT NO.	5-5802

UNIT 'C' FIRST FLOOR PLAN

A2.1C

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NORTH

UNIT 'D' FIRST FLOOR PLAN

1/8" = 1'-0"

GENERAL FLOOR PLAN NOTES:

1. DIMENSIONS GIVEN ARE TO THE FACE OF MASONRY UNITS OR TO THE FINISHED FACE OF METAL STUD PARTITION WALLS.
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WALL LEGEND

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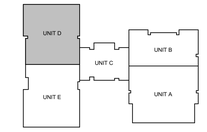
- 5/8" GYP. BOARD BOTH SIDES 6" LIGHT GA. METAL FRAMING AT 16" O.C. SOUND BATT. FULL HEIGHT OF WALL. WALLS TO BOTTOM OF DECK UNLESS NOTED OTHERWISE — 7'-1/4"
- CMU WALL SEE FLOOR PLANS FOR REQUIRED WALL REINFORCING. NOMINAL DIMENSIONS GIVEN (8" TYPICAL U.N.O.) — SEE PLAN
- BRICK AND CMU WALL W/ 2" SPRAY APPLIED INSULATION SEE FLOOR PLANS FOR REQUIRED WALL REINFORCING. NOMINAL DIMENSIONS GIVEN. SEE WALL SECTIONS FOR ADDITIONAL DETAILS, BANDING, ETC. (3 5/8" BRICK & 8" CMU TYPICAL U.N.O.) — SEE PLAN
- CONCRETE WALL SEE STRUCTURAL PLANS FOR REQUIRED REINFORCING. — SEE PLAN

-FIRE RATINGS AS CALLED FOR ON CODE COMPLIANCE PLAN

-DIMENSIONS GIVEN ARE TO THE FINISHED FACE OF CMU OR GYPSUM WALL BOARD UNLESS NOTED OTHERWISE



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ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	BSE
REVIEWED	CMA
PROJECT NO.	5-5802

UNIT 'D' FIRST FLOOR PLAN

A2.1D

BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 2/5-5802A 2019.rvt
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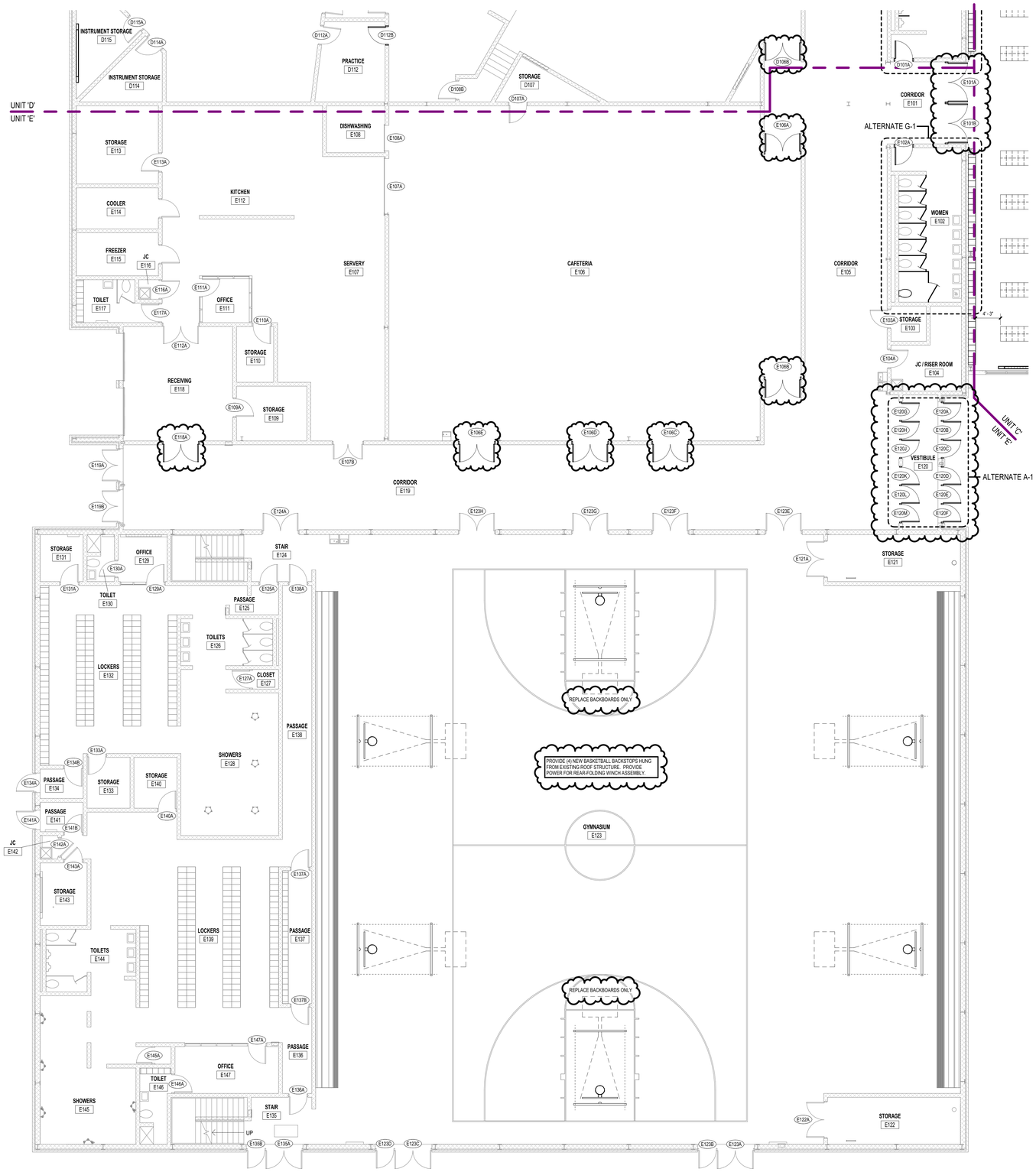


NORTH

UNIT 'E' FIRST FLOOR PLAN

1/8" = 1'-0"

GENERAL FLOOR PLAN NOTES:

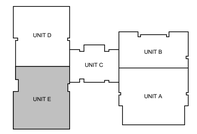
1. DIMENSIONS GIVEN ARE TO THE FACE OF MASONRY UNITS OR TO THE FINISHED FACE OF METAL STUD PARTITION WALLS.
2. REFERENCE STRUCTURAL DRAWINGS FOR CONCRETE SLAB SIZES AND SLAB RELATED INFORMATION.
3. INTERIOR STUD WALLS ARE TO USE 3 5/8" METAL STUD FRAMING UNLESS OTHERWISE NOTED.
4. TURN UP VAPOR RETARDER MATERIAL AT JOINTS BETWEEN FLOOR SLAB AND FOUNDATION WALL UNLESS NOTED OTHERWISE.
5. SEE FOUNDATION PLANS FOR FLOOR SLAB RECESSES FOR TILE, WOOD FLOOR, ETC. (VERIFY RECESS REQUIRED BY MFR.)
6. EXTEND ALL INTERIOR WALL PARTITIONS (MASONRY OR STUDS) TO BOTTOM OF DECK ABOVE UNLESS NOTED OTHERWISE.
7. REFERENCE STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL FOR ITEMS NOT SHOWN. COORDINATE AS REQUIRED INCLUDING NECESSARY FRAMING, BLOCKING, ETC.
8. FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF ANY CABINETRY, FRAMES, STRUCTURAL ITEMS, ETC.
9. PROVIDE PAINTED ACCESS PANELS IN WALLS AND CEILINGS TO PROVIDE ACCESS TO CONCEALED ITEMS INCLUDING BUT NOT LIMITED TO VALVES, CONTROLS, MECH. EQUIPMENT ETC. ACCESS PANELS MAY NOT ALWAYS BE SHOWN ON PLANS. IT IS THE SUB CONTRACTOR RESPONSIBILITY TO DETERMINE LOCATIONS. COORDINATE LOCATIONS WITH OTHER GENERAL CONTRACTOR / SITE SUPERVISOR.
10. COORDINATE WALLS WITH COLUMNS AND OTHER ENCASED ITEMS. COLUMNS ARE TO BE CONTAINED WITHIN WALLS. THE FRAMING CONTRACTOR SHALL INCREASE FRAMING SIZE TO ACCOMMODATE COLUMNS, DRAIN LEADERS, PIPING, ELECTRICAL PANELS, ETC. WHERE WALLS REQUIRE EXTRA WIDTH THE ENTIRE WALL SHALL BE WIDENED UNLESS APPROVED BY ARCHITECT.
11. ALL GUARDRAILS AND HANDRAILS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH ALL REQUIREMENTS OF THE 2015 M.B.C., ANSI ICC A117.1-2009 & AMERICANS WITH DISABILITIES ACT GUIDELINES. THE MOST STRINGENT SHALL PREVAIL.
12. PROVIDE MINIMUM CLEARANCES AT ALL DOORS PER DETAILS. SEE G0.01 FOR REQUIREMENTS.
13. FOR ALL CABINETRY, SEE INTERIOR ELEVATIONS FOR LAYOUTS. FIELD VERIFY CLEAR WIDTHS PRIOR TO FABRICATION.
14. ALL EXTERIOR BLOCK CORNERS ARE TO BE BULLNOSE BLOCK EXCEPT CONCRETE BLOCK COLUMNS, PIERS AND WALLS TO RECEIVE TILE - UNLESS NOTED OTHERWISE.
15. CONTRACTOR TO MAINTAIN / REPAIR RATING OF EXISTING PARTITIONS AS AFFECTED BY DEMOLITION / NEW CONSTRUCTION. TYPICAL THROUGHOUT.
16. SEAL ALL PENETRATIONS IN FIRE RATED FLOORS AND WALLS WITH APPROVED FIRESTOPPING.
17. WHERE SPECIALTY BLOCK IS REQUIRED AT THE SAME HEIGHT ON BOTH SIDES OF A WALL USE (2) SPECIALTY BLOCKS BACK TO BACK TO MAINTAIN THE FINISHED WALL APPEARANCE BOTH SIDES OF THE WALL. COORDINATE WITH STRUCTURE FOR LINTELS CONDITIONS PER SPECIFICATIONS.
18. WALLS TO BE PATCHED WITH LIKE MATERIALS WHERE EXISTING WALLS HAVE BEEN COMPROMISED FROM DEMOLITION. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO REMOVAL AND REINSTALLATION OF CASEWORK AND WALL MOUNTED EQUIPMENT IN ORDER TO ACHIEVE SAID PATCH. IN AREAS WHERE BLOCK OR BRICK HAVE BEEN USED, NEW MASONRY TO BE TOOTHED IN AND MATCH EXISTING. AREAS AND FINISHES IN QUESTION SHALL BE COORDINATED WITH ARCHITECT.
19. SEE STRUCTURAL FRAMING PLANS FOR ADDITIONAL WALL REINFORCING REQUIREMENTS. MINIMUM REINFORCING (FOR ALL WALLS NOT OTHERWISE NOTED ON STRUCTURAL PLANS) :
    A. ALL BEARING WALLS SHALL RECEIVE A MINIMUM REINFORCING OF R1-5-48.
    B. ALL EXTERIOR WALLS SHALL RECEIVE A MINIMUM REINFORCING OF R1-5-48.
    C. ALL INTERIOR NON-BEARING WALLS OVER 16'-0" HIGH SHALL RECEIVE A MINIMUM REINFORCING OF R1-5-48.

WALL LEGEND

7 7/8"	5/8" GYP. BOARD BOTH SIDES 3 5/8" LIGHT GA. METAL FRAMING AT 16" O.C. SOUND BATT FULL HEIGHT OF WALL. WALLS TO BOTTOM OF DECK UNLESS NOTED OTHERWISE
7 1/4"	5/8" GYP. BOARD BOTH SIDES 6" LIGHT GA. METAL FRAMING AT 16" O.C. SOUND BATT FULL HEIGHT OF WALL. WALLS TO BOTTOM OF DECK UNLESS NOTED OTHERWISE
SEE PLAN	CMU WALL SEE FLOOR PLANS FOR REQUIRED WALL REINFORCING. NOMINAL DIMENSIONS GIVEN (8" TYPICAL U.N.O.)
SEE PLAN	BRICK AND CMU WALL W/ 2" SPRAY APPLIED INSULATION SEE FLOOR PLANS FOR REQUIRED WALL REINFORCING. NOMINAL DIMENSIONS GIVEN. SEE WALL SECTIONS FOR ADDITIONAL DETAILS, BANDING, ETC. (3 5/8" BRICK & 8" CMU TYPICAL U.N.O.)
SEE PLAN	CONCRETE WALL SEE STRUCTURAL PLANS FOR REQUIRED REINFORCING.

-FIRE RATINGS AS CALLED FOR ON CODE COMPLIANCE PLAN

-DIMENSIONS GIVEN ARE TO THE FINISHED FACE OF CMU OR GYPSUM WALL BOARD UNLESS NOTED OTHERWISE



NORTH

KEY PLAN

GMB
616.796.0200
www.gmb.com

THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	BSE
REVIEWED	CMA
PROJECT NO.	5-5802

UNIT 'E' FIRST FLOOR PLAN

A2.1E

BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 2/5-5802A 2019.rvt
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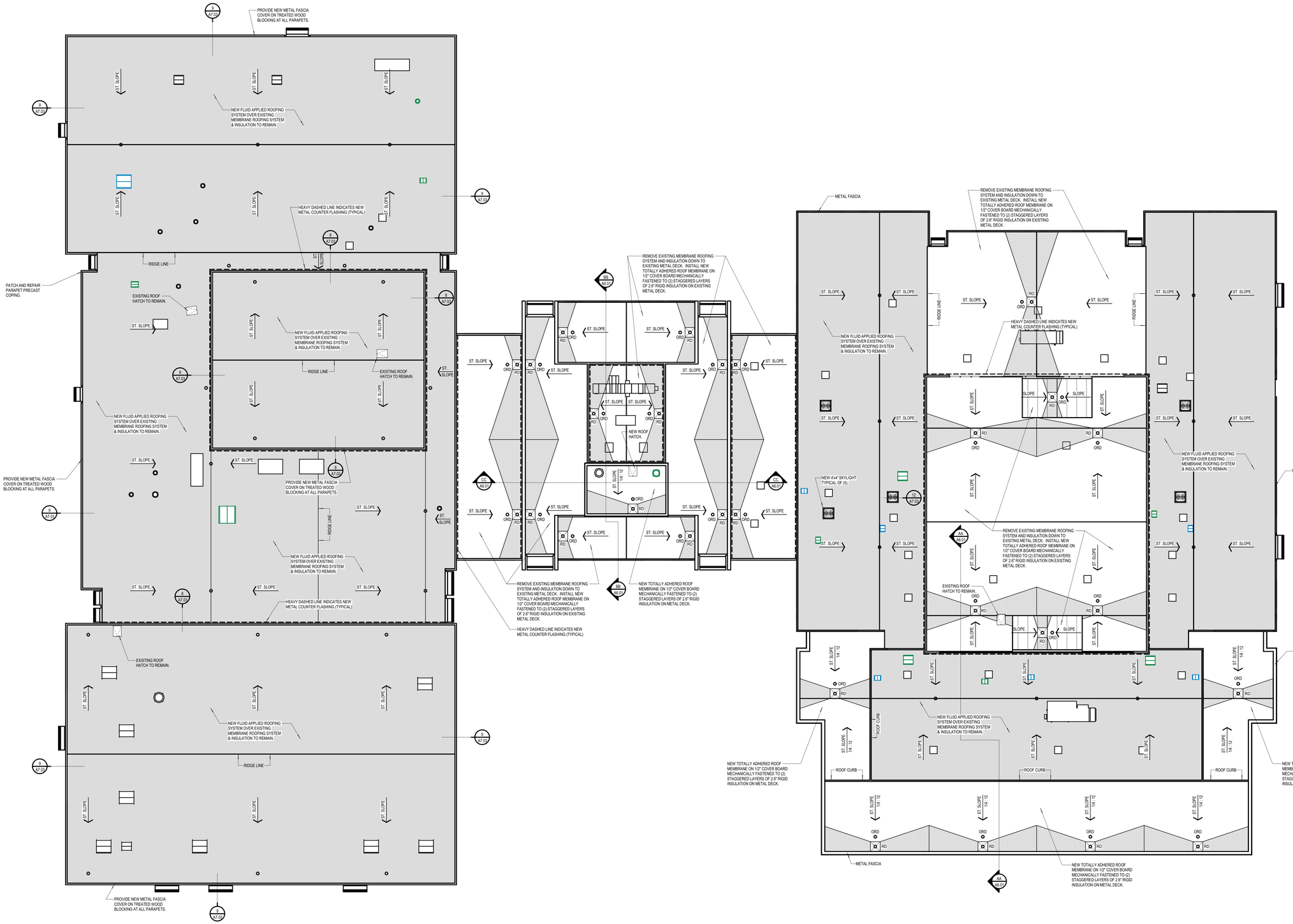
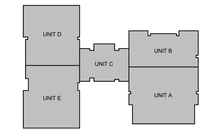


OVERALL ROOF PLAN

1/16" = 1'-0"



KEY PLAN

ROOF LEGEND

- TAPERED RIGID INSULATION (4' SECTIONS) 1/4" PER FOOT SLOPE UNLESS OTHERWISE NOTED.
- TAPERED RIGID INSULATION (4' SECTIONS @ 1/2" SLOPE PER FOOT AT CRICKETS) CRICKETS SLOPE TO ROOF DRAINS.
- SHADED GRAY REGIONS INDICATE ADD ALTERNATE G-2 FOR THE REHABILITATION (NEW FLUID APPLIED ROOFING SYSTEM) OF THE EXISTING ROOFS AT UNITS D & E AND PARTS OF UNITS A & B.
- ST. SLOPE — DIRECTION OF STRUCTURAL ROOF SLOPE. (SEE STRUCTURAL PLANS FOR ROOF FRAMING SLOPES).
- SLOPE — DIRECTION OF ROOF SLOPE WITH TAPERED INSULATION.
- STANDARD ROOF DRAIN OR OVERFLOW DRAIN.
- + 7 1/4" — THICKNESS OF TAPERED INSULATION AT PERIMETER OR DRAIN (NOT INCLUDING BASE INSULATION THICKNESS).
- ROOF HATCH.
- ROOF WALKWAY PAD (SEE SPEC. FOR MATERIAL).

ROOF NOTES

1. ALL ROOF DETAILS LOCATED ON SHEET A7.03.
2. REFER TO PLUMBING DRAWINGS FOR LOCATION AND NUMBER OF PLUMBING VENTS THRU ROOF.
3. REFER TO MECHANICAL DRAWINGS TO COORDINATE ALL ROOF PENETRATIONS & LOCATIONS.
4. PROVIDE 1/2" TAPERED CRICKETS AT ALL ROOF HATCHES AND MECHANICAL ROOF PENETRATIONS UNLESS OTHERWISE NOTED. TAPER SHALL PROVIDE DRAINAGE AROUND HATCH AND EQUIPMENT.
5. SEE SPECIFICATION FOR ROOFING SYSTEM TO BE USED AND ROOF PLAN FOR LOCATIONS OF TAPERED INSULATION AND OR SLOPE CHANGES OF ROOF.
6. CONTRACTOR RESPONSIBLE TO FIELD VERIFY ALL SQUARE FOOTAGE VALUES NOTED ON PLANS.
7. SCUPPER LOCATIONS TO BE COORDINATED SO THAT THEY DO NOT APPEAR OVER DOORS, WINDOWS OR MECHANICAL LOUVERS.
8. ALL EXISTING METAL FASCIA TRIM, GRAVEL STOP AND COPING IS TO BE REMOVED AT REPLACED WITH NEW PREFINISHED METAL FASCIA TRIM, GRAVEL STOP AND COPING.
9. PROVIDE CONT. TERMINATION BAR AND SEALANT AT ALL VERTICAL SURFACES GREATER THAN 30".
10. STANDARD ROOF ABBREVIATIONS
    RD = ROOF DRAIN
    ORD = OVERFLOW ROOF DRAIN
    EF = EXHAUST FAN
    IV = INTAKE VENT
    RTU = ROOF TOP UNIT
    RV = RELIEF VENT
    SC = SCUPPER

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

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THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN BSE
REVIEWED CMA

PROJECT NO. 5-5802

OVERALL ROOF PLAN

A2.30

BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 2/5-5802A 2019.rvt
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DOOR & FRAME SCHEDULE UNIT 'E'

DOOR NUMBER	DOOR SIZE	DOOR TYPE	FRAME TYPE	FIRE RATING	HDWR SET NO.	ELEC. HARDWARE	REMOVABLE MULLION	DETAILS			REMARKS
								HEAD	JAMB	SILL	
E											
E101A	(PR) 3' 4" x 7' 2" x 1 3/4"	W01	02H	45	42			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E101B	(PR) 3' 4" x 7' 2" x 1 3/4"	W01	02H	45	42			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
E102A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
E103A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E104A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E106A	(PR) 3' 0" x 7' 2" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
E106B	(PR) 3' 0" x 7' 2" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
E106C	(PR) 3' 0" x 7' 0" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
E106D	(PR) 3' 0" x 7' 0" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
E106E	(PR) 3' 0" x 7' 0" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
E107A	9' 6" x 7' 4" x 7/8"	R01	R01		40			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E107B	(PR) 2' 6" x 7' 2" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E108A	4' 4" x 7' 4" x 7/8"	R01	R01		40			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E109A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E110A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E111A	3' 0" x 7' 0" x 1 3/4"	W01	99H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E113A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E116A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E117A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E118A	(PR) 3' 0" x 7' 2" x 1 3/4"	W01	02H		24			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
E119A	(PR) 2' 8" x 7' 2" x 1 3/4"	F04	02A		35			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E119B	(PR) 2' 8" x 7' 2" x 1 3/4"	F04	02A		44			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E120A	3' 4" x 7' 2" x 1 3/4"	F04	12A			■		--------	--------	--------	ALTERNATE A-1
E120B	3' 4" x 7' 2" x 1 3/4"	F04	12A			■		--------	--------	--------	ALTERNATE A-1
E120C	3' 4" x 7' 2" x 1 3/4"	F04	12A			■		--------	--------	--------	ALTERNATE A-1
E120D	3' 4" x 7' 2" x 1 3/4"	F04	12A			■		--------	--------	--------	ALTERNATE A-1
E120E	3' 4" x 7' 2" x 1 3/4"	F04	12A			■		--------	--------	--------	ALTERNATE A-1
E120F	3' 4" x 7' 2" x 1 3/4"	F04	12A			■		--------	--------	--------	ALTERNATE A-1
E120G	3' 4" x 7' 2" x 1 3/4"	F04	12A			■		--------	--------	--------	ALTERNATE A-1
E120H	3' 4" x 7' 2" x 1 3/4"	F04	12A			■		--------	--------	--------	ALTERNATE A-1
E120J	3' 4" x 7' 2" x 1 3/4"	F04	12A			■		--------	--------	--------	ALTERNATE A-1
E120K	3' 4" x 7' 2" x 1 3/4"	F04	12A			■		--------	--------	--------	ALTERNATE A-1
E120L	3' 4" x 7' 2" x 1 3/4"	F04	12A			■		--------	--------	--------	ALTERNATE A-1
E120M	3' 4" x 7' 2" x 1 3/4"	F04	12A			■		--------	--------	--------	ALTERNATE A-1
E121A	(PR) 3' 0" x 7' 0" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E122A	(PR) 3' 0" x 7' 0" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E123A	(PR) 3' 1" x 7' 2" x 1 3/4"	F02	98A		44			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E123B	3' 0" x 7' 2" x 1 3/4"	F02	97A		43			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E123C	(PR) 3' 1" x 7' 2" x 1 3/4"	F02	98A		44			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E123D	3' 0" x 7' 2" x 1 3/4"	F02	97A		35			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E123E	(PR) 3' 0" x 7' 0" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E123F	(PR) 3' 0" x 7' 0" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E123G	(PR) 3' 0" x 7' 0" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E123H	(PR) 3' 0" x 7' 0" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E124A	(PR) 3' 0" x 7' 0" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E125A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E127A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E129A	3' 0" x 7' 0" x 1 3/4"	W01	99H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E130A	2' 8" x 7' 0" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E131A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E133A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E134A	3' 0" x 7' 2" x 1 3/4"	F01	01A		43			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E134B	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E135A	(PR) 3' 1" x 7' 2" x 1 3/4"	F02	98A		44			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E135B	3' 0" x 7' 2" x 1 3/4"	F02	97A		43			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E136A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E137A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E137B	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E138A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E140A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E141A	3' 0" x 7' 2" x 1 3/4"	F01	01A		43			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E141B	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E142A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E143A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E145A	2' 8" x 7' 0" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E146A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E147A	3' 0" x 7' 0" x 1 3/4"	W01	99H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E202A	(PR) 3' 0" x 6' 8" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E203A	3' 0" x 7' 0" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E206A	3' 0" x 7' 0" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
E207A	(PR) 3' 0" x 6' 8" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.

DOOR & FRAME SCHEDULE UNIT 'D'

DOOR NUMBER	DOOR SIZE	DOOR TYPE	FRAME TYPE	FIRE RATING	HDWR SET NO.	ELEC. HARDWARE	REMOVABLE MULLION	DETAILS			REMARKS
								HEAD	JAMB	SILL	
D											
D101A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D102A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D102B	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D104A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D105A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
D106A	(PR) 3' 0" x 7' 0" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
D106B	(PR) 3' 0" x 7' 2" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
D106C	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
D107A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D108A	(PR) 3' 0" x 7' 0" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
D108B	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D109A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D109B	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D110A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D111A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D111B	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D112A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D112B	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
D113A	(PR) 2' 8" x 7' 2" x 1 3/4"	F04	02A		44			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D113B	(PR) 3' 0" x 7' 0" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
D114A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D115A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D116A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D117A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D118A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D119A	(PR) 2' 8" x 7' 2" x 1 3/4"	F04	02A		44			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D119B	(PR) 2' 8" x 7' 2" x 1 3/4"	F04	02A		44			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D120A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D121A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
D121B	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
D122A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D123A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D124A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D125A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
D125B	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
D126A	(PR) 3' 1" x 7' 2" x 1 3/4"	F04	96A		44			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D126B	(PR) 3' 0" x 7' 0" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D127A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
D127B	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
D128A	(PR) 2' 8" x 7' 2" x 1 3/4"	F01	02A		38						
D128B	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D129A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D130A	(PR) 2' 8" x 7' 2" x 1 3/4"	F01	02A		38						
D130B	(PR) 3' 0" x 7' 2" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D131A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D132A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D133A	(PR) 2' 8" x 7' 2" x 1 3/4"	F06	02A		44			--------	--------	--------	
D134A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D135A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D136A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D137A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D201A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
D202A	3' 0" x 7' 2" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.

SPECIAL NOTE:
FOR EXISTING DOOR REKEY WORK - CONTRACTOR TO VERIFY EXISTING DOORS & LOCKSETS IN FIELD PRIOR TO BIDDING.

DOOR NUMBERING LEGEND

DOOR NUMBERING
A101A
'A' FIRST DOOR
'B' SECOND DOOR
ROOM NUMBER

DOOR NAME / SIZE
3'-0" x 7'-2" x 1 3/4"
DOOR SIZE

(PR.) 3'-0" x 7'-2" x 1 3/4"
DOOR SIZE
PAIR OF DOORS, NO FIXED MULLION

(2) 3'-0" x 7'-2" x 1 3/4"
DOOR SIZE
TWO DOORS, WITH FIXED MULLION BETWEEN THEM

3'-0" x 7'-2" x 1 3/4" (5'-4")
OVERALL FRAME WIDTH AND / OR HEIGHT SEE FRAME LEGEND
DOOR SIZE

NOTE:
STANDARD DOOR AND FRAME DIMENSIONS ARE GIVEN IN: WIDTH x HEIGHT X THICKNESS

DOOR & FRAME SCHEDULE UNIT 'A'

DOOR NUMBER	DOOR SIZE	DOOR TYPE	FRAME TYPE	FIRE RATING	HDWR SET NO.	ELEC. HARDWARE	REMOVABLE MULLION	DETAILS			REMARKS
								HEAD	JAMB	SILL	
A											
A101A	3' 0" x 7' 0" x 1 3/4"	W04	01H		14			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
A102A	3' 0" x 7' 2" x 1 3/4"	W04	01H		14			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
A107A	3' 0" x 7' 0" x 1 3/4"	W04	01H		14			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
A108A	3' 0" x 7' 0" x 1 3/4"	W04	01H		14			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
A109A	3' 0" x 7' 0" x 1 3/4"	W04	01H		14			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
A113A	3' 0" x 7' 0" x 1 3/4"	W04	01H		14			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
A114A	(PR) 3' 0" x 7' 2" x 1 3/4"	F06	11A		37	■		7/A7.01	6/A7.01	5/A7.01	
A115A	3' 0" x 7' 0" x 1 3/4"	W01	01H		22			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
A116A	3' 0" x 7' 2" x 1 3/4"	W01	01H		18			8/A7.01	8/A7.01	8/A7.01	
A117A	3' 0" x 7' 2" x 1 3/4"	W01	01H		06			3/A7.01	3/A7.01	--------	
A118A	3' 0" x 7' 2" x 1 3/4"	W01	01H		06			3/A7.01	3/A7.01	--------	
A120A	(PR) 3' 0" x 7' 2" x 1 3/4"	F06	11A		37	■		7/A7.01	6/A7.01	5/A7.01	
A121A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		12			4/A7.01	4/A7.01	--------	
A122A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		11			8/A7.01	8/A7.01	8/A7.01	
A123A	(PR) 3' 6" x 7' 10" x 1 3/4"	H03	02H	90	30	■		AA1/A6.10	12/A7.01	--------	
A124A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		11			8/A7.01	8/A7.01	8/A7.01	
A126A	3' 0" x 7' 2" x 1 3/4"	W01	01H		16			3/A7.01	3/A7.01	--------	
A128A	(PR) 3' 6" x 7' 10" x 1 3/4"	H03	02H	90	30	■		AA1/A6.10	12/A7.01	--------	
A129A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		11			8/A7.01	8/A7.01	8/A7.01	
A130A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		12			4/A7.01	4/A7.01	--------	
A131A	(PR) 3' 0" x 7' 2" x 1 3/4" (12'-0")	F06	09A		37	■		7/A7.01	6/A7.01	5/A7.01	
A131B	(PR) 3' 0" x 7' 2" x 1 3/4" (12'-0")	F06	09A		37	■		7/A7.01	6/A7.01	5/A7.01	
A132A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		12			4/A7.01	4/A7.01	--------	
A133A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		12			4/A7.01	4/A7.01	--------	
A134A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		12			4/A7.01	4/A7.01	--------	
A135A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		12			4/A7.01	4/A7.01	--------	
A136A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		12			4/A7.01	4/A7.01	--------	
A137A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		12			4/A7.01	4/A7.01	--------	
A201A	2' 4" x 4' 6" x 1 3/4"	H01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
A201B	2' 8" x 5' 2" x 1 3/4"	H01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
A202A	2' 4" x 4' 6" x 1 3/4"	H01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
A202B	2' 8" x 5' 2" x 1 3/4"	H01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.

DOOR & FRAME SCHEDULE UNIT 'B'

DOOR NUMBER	DOOR SIZE	DOOR TYPE	FRAME TYPE	FIRE RATING	HDWR SET NO.	ELEC. HARDWARE	REMOVABLE MULLION	DETAILS			REMARKS
								HEAD	JAMB	SILL	
B											
B101A	(PR) 3' 0" x 7' 2" x 1 3/4" (10'-0")	F06	09A		37	■		7/A7.01	6/A7.01	5/A7.01	
B101B	(PR) 3' 0" x 7' 0" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
B101C	(PR) 3' 0" x 7' 0" x 1 3/4"	W01	02H		42			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
B102A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		11			8/A7.01	8/A7.01	8/A7.01	
B105A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		28			4/A7.01	4/A7.01	--------	
B105B	3' 0" x 7' 0" x 1 3/4"	W04	01H		27			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
B106A	3' 0" x 7' 0" x 1 3/4"	W01	99H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
B106B	3' 0" x 7' 0" x 1 3/4"	W01	99H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
B106C	3' 0" x 7' 0" x 1 3/4"	W01	99H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
B106D	3' 0" x 7' 0" x 1 3/4"	W01	99H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
B107A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		29			4/A7.01	4/A7.01	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
B107B	3' 0" x 7' 0" x 1 3/4"	W04	01H		27			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
B108A	3' 0" x 7' 0" x 1 3/4"	W04	01H		17			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
B109A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		11			8/A7.01	8/A7.01	8/A7.01	
B110A	3' 0" x 7' 0" x 1 3/4"	W01	01H		06			8/A7.01	8/A7.01	8/A7.01	
B111A	3' 0" x 7' 0" x 1 3/4"	W01	01H		06			8/A7.01	8/A7.01	8/A7.01	
B112A	3' 0" x 7' 0" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
B113A	3' 0" x 7' 0" x 1 3/4"	W04	01H		14			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
B115A	(PR) 2' 8" x 7' 2" x 1 3/4"	F06	02A		44			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
B116A	(PR) 2' 8" x 7' 2" x 1 3/4"	F06	02A		44			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
B118A	3' 0" x 7' 0" x 1 3/4"	W04	01H		14			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
B119A	3' 0" x 7' 0" x 1 3/4"	W04	01H		14			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
B120A	3' 0" x 7' 0" x 1 3/4"	W04	01H		14			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
B121A	3' 0" x 7' 2" x 1 3/4"	F06	01A		39						
B121B	3' 0" x 7' 0" x 1 3/4"	W04	01H		27			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
B122A	3' 0" x 7' 2" x 1 3/4"	F06	01A		39						
B122B	3' 0" x 7' 0" x 1 3/4"	W04	01H		27			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
B123A	3' 0" x 7' 0" x 1 3/4"	W04	01H		14			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
B124A	3' 0" x 7' 0" x 1 3/4"	W04	01H		14			--------	--------	--------	EXISTING FRAME TO REMAIN. PROVIDE NEW DOOR & HARDWARE.
B201A	2' 4" x 4' 6" x 1 3/4"	H01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
B201B	2' 4" x 4' 6" x 1 3/4"	H01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
B201C	2' 8" x 5' 2" x 1 3/4"	H01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.

DOOR & FRAME SCHEDULE UNIT 'C'

DOOR NUMBER	DOOR SIZE	DOOR TYPE	FRAME TYPE	FIRE RATING	HDWR SET NO.	ELEC. HARDWARE	REMOVABLE MULLION	DETAILS			REMARKS
								HEAD	JAMB	SILL	
C											
C101A	3' 4" x 7' 2" x 1 3/4"	F04	10A			■		--------	--------	--------	
C101B	3' 4" x 7' 2" x 1 3/4"	F04	10A			■		--------	--------	--------	
C101C	3' 4" x 7' 2" x 1 3/4"	F04	10A			■		--------	--------	--------	
C101D	3' 4" x 7' 2" x 1 3/4"	F04	10A			■		--------	--------	--------	
C101E	3' 4" x 7' 2" x 1 3/4"	F04	10A			■		--------	--------	--------	
C101F	3' 4" x 7' 2" x 1 3/4"	F04	10A			■		--------	--------	--------	
C102A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W06	05H		20	■					
C103A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		03			2/A7.01	2/A7.01	--------	
C104A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		03			2/A7.01	2/A7.01	--------	
C106A	3' 0" x 7' 2" x 1 3/4" (5'-0")	W01	05H		02						
C107A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H	20	13			4/A7.01	4/A7.01	--------	
C108A	3' 0" x 7' 2" x 1 3/4" (7'-4")	W06	08H	20	26	■		4/A7.01	4/A7.01	--------	
C109A	3' 0" x 7' 2" x 1 3/4"	W01	01H		15			3/A7.01	3/A7.01	--------	
C110A	3' 0" x 7' 2" x 1 3/4"	W02	01H	20	25	■		3/A7.01	3/A7.01	--------	
C111A	3' 0" x 7' 2" x 1 3/4"	W01	01H		07			1/A7.01	1/A7.01	--------	
C112A	3' 0" x 7' 2" x 1 3/4"	W01	01H		04			1/A7.01	1/A7.01	--------	
C113A	3' 0" x 7' 2" x 1 3/4"	W01	01H		05			1/A7.01	1/A7.01	--------	
C114A	3' 0" x 7' 2" x 1 3/4"	W01	01H		15			1/A7.01	1/A7.01	--------	
C115A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H	20	11			4/A7.01	4/A7.01	--------	
C120A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		03			2/A7.01	2/A7.01	--------	
C121A	3' 0" x 7' 0" x 1 3/4"	W01	99H		23			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
C122A	3' 0" x 7' 0" x 1 3/4"	W01	01H		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
C123A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H	20	21			4/A7.01	4/A7.01	--------	
C124A	3' 0" x 7' 2" x 1 3/4"	W02	01H	20	19			8/A7.01	8/A7.01	8/A7.01	
C125A	3' 4" x 7' 2" x 1 3/4"	F04	99A		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
C125B	3' 4" x 7' 2" x 1 3/4"	F04	99A		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
C125C	3' 4" x 7' 2" x 1 3/4"	F04	99A		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
C125D	3' 4" x 7' 2" x 1 3/4"	F04	99A		41			--------	--------	--------	
C125E	3' 4" x 7' 2" x 1 3/4"	F04	99A		41			--------	--------	--------	
C125F	3' 4" x 7' 2" x 1 3/4"	F04	99A		41			--------	--------	--------	
C126A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		01			2/A7.01	2/A7.01	--------	
C128A	3' 4" x 7' 2" x 1 3/4"	F04	99A		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
C128B	3' 4" x 7' 2" x 1 3/4"	F04	99A		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
C128C	3' 4" x 7' 2" x 1 3/4"	F04	99A		41			--------	--------	--------	EXISTING DOOR & FRAME TO REMAIN. REFER TO DOOR HARDWARE SPECIFICATION.
C128D	3' 4" x 7' 2" x 1 3/4"	F04	99A		41			--------	--------	--------	
C128E	3' 4" x 7' 2" x 1 3/4"	F04	99A		41			--------	--------	--------	
C128F	3' 4" x 7' 2" x 1 3/4"	F04	99A		41			--------	--------	--------	
C129A	3' 0" x 7' 2" x 1 3/4"	W01	01H		10			1/A7.01	1/A7.01	--------	
C131A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		01			2/A7.01	2/A7.01	--------	
C132A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		01			2/A7.01	2/A7.01	--------	
C133A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		03			2/A7.01	2/A7.01	--------	
C134A	3' 0" x 7' 2" x 1 3/4" (5'-4")	W01	05H		03			2/A7.01	2/A7.01	--------	

GLAZING NOTES:

ALL EXTERIOR WINDOWS AND DOOR LITES:
1" INSULATED PER SPECIFICATIONS.

INTERIOR DOOR & BORROWED LITES:
1/4" CLEAR TYPICAL EXCEPT FIRE-RATED - SEE SPECIFICATIONS.

GLASS:

GLASS TO BE TEMPERED AS REQUIRED BY SPECIFICATIONS AND APPLICABLE CODES.

MAXIMUM GLASS AREA PER FIRE RATING:
180 MIN. LABEL = NO GLASS
90 MIN. LABEL = 100 SQ.IN.
45 MIN. LABEL = 1296 SQ.IN.
20 MIN. LABEL = AS TESTED

VERIFY COMPLIANCE TO ALL APPLICABLE CODES.

ADJUST LITE SIZE BASED ON SCHEDULED FIRE RATING AS NECESSARY.

NOTE: ALL SIDELITES AND TRANSOMS W/ 20 MIN. DOORS REQUIRE 45 MIN. RATED GLAZING

Ⓔ = EGRESS PANE
(GF) = GRAPHIC FILM
(SA) = SAFETY GLAZING
(SF) = SECURITY FILM
(SE) = SECURITY GLAZING
(ST) = SELF TINTING GLAZING
▨ = SPANDREL PANEL
▤ = LOUVER PANEL

DOOR TYPE LEGEND

1/4" = 1'-0"

BORROWED LITE LEGEND

1/4" = 1'-0"

FRAME TYPE LEGEND

1/4" = 1'-0"

WINDOW TYPE LEGEND

1/4" = 1'-0"

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS
THREE RIVERS COMMUNITY SCHOOLS
THREE RIVERS, MICHIGAN

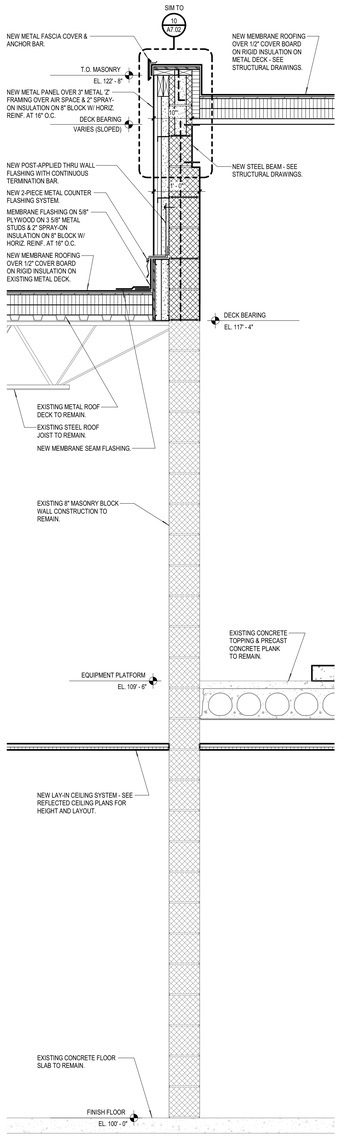
ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

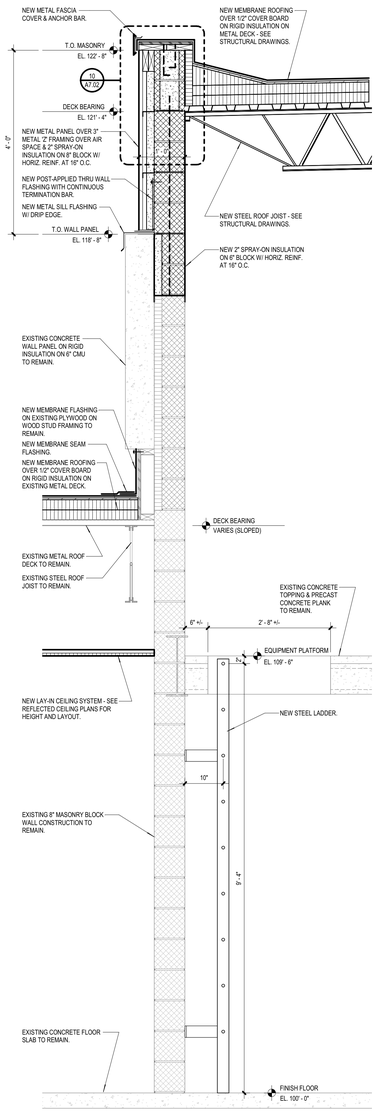
DRAWN BSE
REVIEWED CMA
PROJECT NO. 5-5802

DOOR & FRAME SCHEDULE

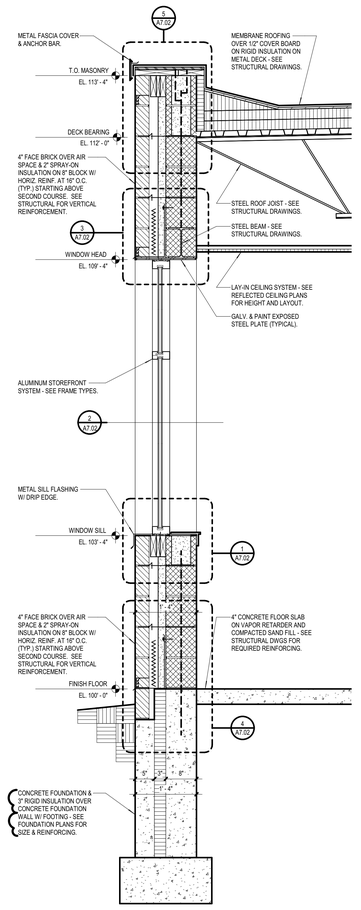
A5.01



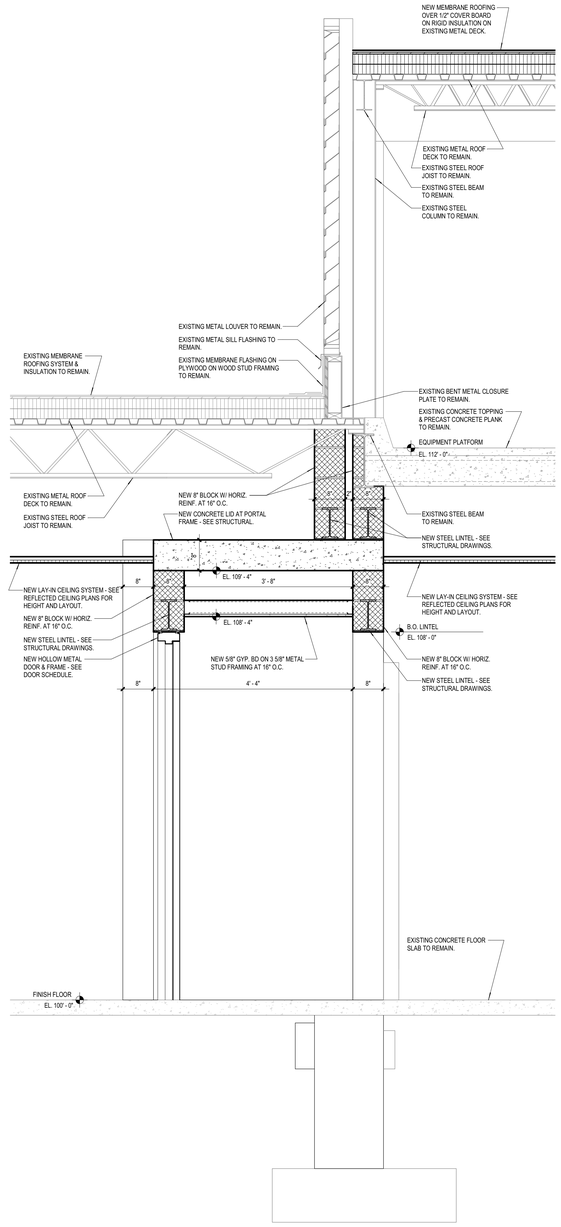
CC1 / A6.10 WALL SECTION CC1
3/4" = 1'-0"



BB1 / A6.10 WALL SECTION BB1
3/4" = 1'-0"



AA2 / A6.10 WALL SECTION AA2
3/4" = 1'-0"



AA1 / A6.10 WALL SECTION AA1
3/4" = 1'-0"

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	BSE
REVIEWED	CMA
PROJECT NO.	5-5802

WALL SECTIONS

A6.10

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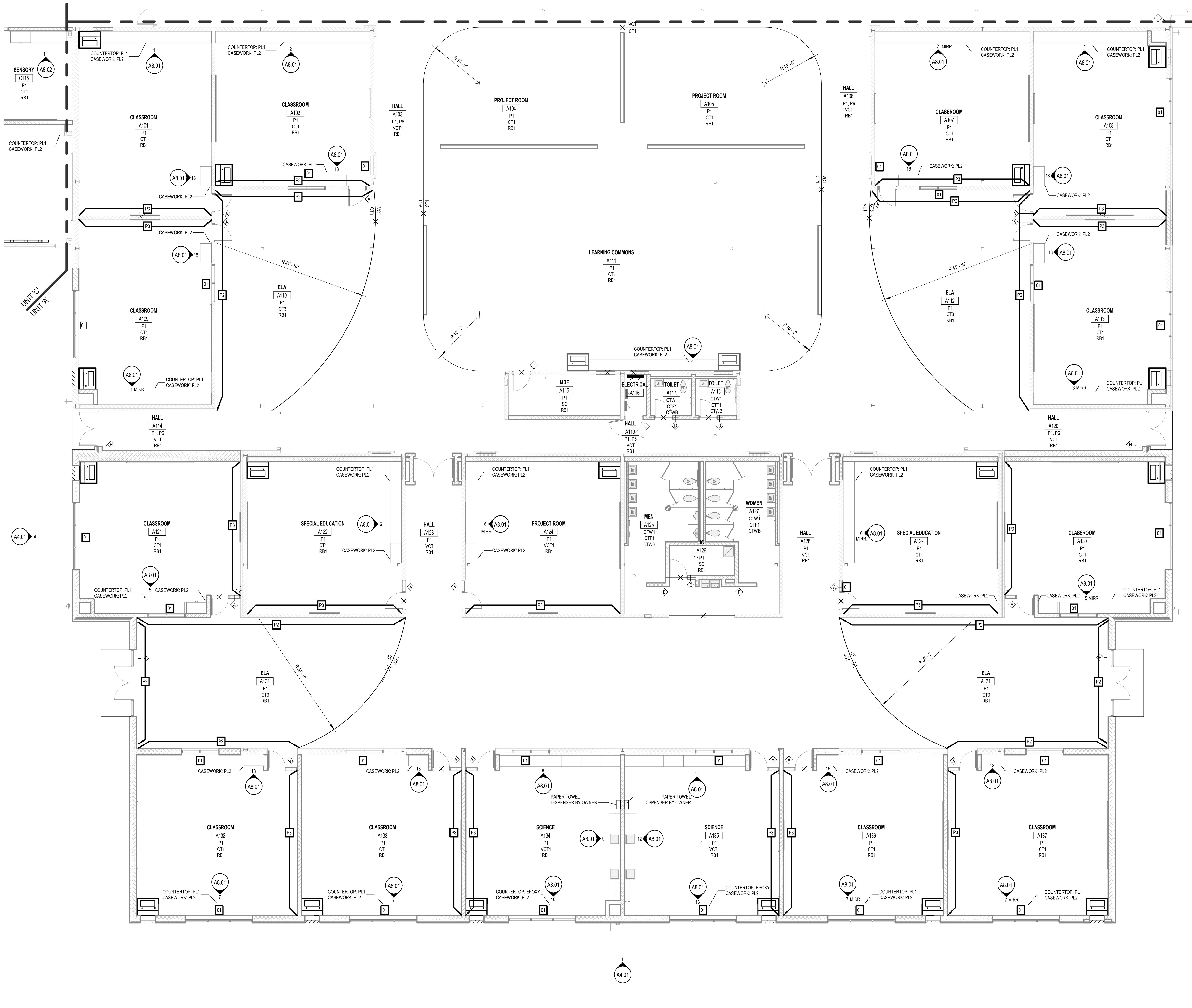


UNIT 'A' FIRST FLOOR FINISH PLAN

1/8" = 1'-0"

GENERAL FINISH NOTES :

1. REFER TO MATERIALS SCHEDULE IN SPECIFICATION FOR SPECIFIED MATERIALS.
2. ALL CERAMIC TILE OR PORCELAIN TILE FLOORS TO RECEIVE CERAMIC TILE BASE; U.N.O.
3. ALL AREAS OF VCT, CARPET, SEALED CONCRETE, OR OTHER RESILIENT FLOORING TO RECEIVE RUBBER BASE; U.N.O. ON FINISH PLANS.
4. IT IS THE RESPONSIBILITY OF ALL TRADES TO COORDINATE PREPARATION OF SURFACES TO RECEIVE FINISH PRODUCT. CONSULT WITH MANUFACTURERS RECOMMENDED PRACTICES.
5. ALL REDUCERS TO COORDINATE APPROPRIATELY WITH ABUTTING MATERIAL HEIGHT.
6. INSTALL 4" H. RUBBER BASE (RB) AT CASEWORK TOE KICKS, INSIDE OF FLOORLESS CASEWORK, AND VERTICAL SUPPORTS.
7. SEE SPECIFICATIONS FOR RESILIENT ACCESSORY INFORMATION.
8. PAINT ALL EXPOSED MECHANICAL AND ELECTRICAL ITEMS INTENDED TO RECEIVE FIELD PAINT TO MATCH ADJACENT SURFACES; U.N.O.
9. ALL DOOR AND WINDOW FRAMES IN UNITS A,B, AND C TO BE PAINTED P7; U.N.O.
10. EXPOSED CEILINGS, DECK, DUCTWORK, STRUCTURE AND OTHER MISC. EXPOSED ITEMS TO BE PAINTED; U.N.O. ON INTERIOR ELEVATIONS, CEILING PLANS OR FINISH PLANS.
11. FACE & UNDERSIDE OF BULKHEADS TO BE PAINTED P1; U.N.O. ON FINISH PLANS OR NOTED ON INTERIOR ELEVATIONS.
12. REFER TO CEILING PLANS & CEILING SPECIFICATIONS FOR SPECIAL CEILING DESIGNATIONS AND ACT TYPES.
13. REFER TO INTERIOR ELEVATION SHEETS FOR MORE DETAILED PAINT AND INTERIOR FINISH INFORMATION.
14. MECHANICAL & ELECTRICAL ROOM FINISHES: AS A TYPICAL; PAINT WALLS, DO NOT PAINT EXPOSED STRUCTURE, DO NOT PROVIDE WALL BASE. TYPICAL UNLESS NOTED OTHERWISE ON FINISH PLANS.
15. WHERE SEALED CONCRETE (SC). IS SPECIFIED, REFER TO SPECIFICATION SECTION 09 90 00 PAINTING, FOR SYSTEM TYPE.
16. REFER TO SPECIFICATIONS FOR ALL PAINT TYPES.
17. ALL PAINTED WALLS IN TOILET ROOMS AND SCIENCE ROOMS SHALL RECEIVE EPOXY PAINT.
18. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF OWNER FURNISHED EQUIPMENT, INCLUDED DIMENSIONS OF SUCH AS THEY RELATE TO THEIR OWN WORK.
19. REMOVE, SALVAGE AND RE-INSTALL EXISTING ROOM SIGNAGE PRIOR TO PAINTING WALLS IN AREAS OF WORK, TYP.
20. REMOVE AND SALVAGE ALL WALL MOUNTED FURNISHINGS AND ARTWORK PRIOR TO PAINTING. COORDINATE SALVAGE AND RE-INSTALLATION WITH OWNER.
21. DO NOT PAINT OVER EXISTING GLAZED FACE BLOCK OR EXPOSED BRICK, U.N.O.
22. PROTECT ALL FINISHES DURING CONSTRUCTION.
25. ALL FLOORING IN SCOPE TO BE PRICED AS TZ1 UNLESS NOTED OTHERWISE
26. ALL WALLS IN SCOPE TO RECEIVE PAINT UNLESS NOTED OTHERWISE.
27. ALL GROUND FACE BLOCK SHOULD BE PAINTED P4.

FINISH SYMBOLS :

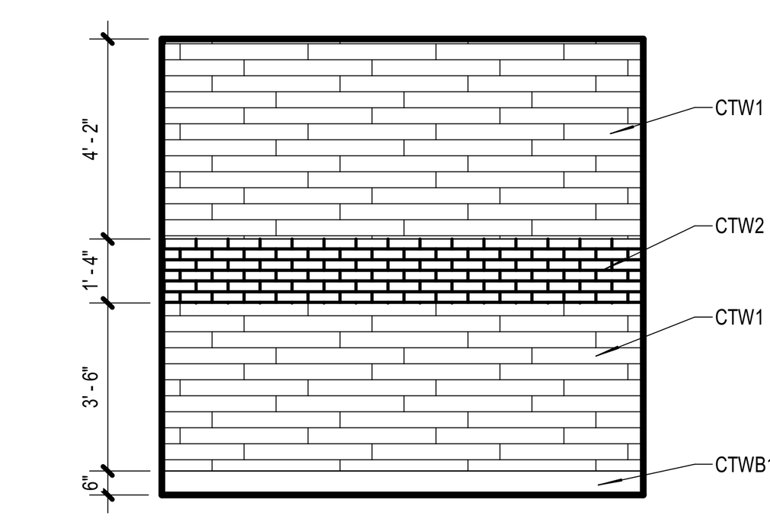
ROOM NAME
WALL FINISH
FLOOR FINISH
BASE FINISH

CPT1 / VCT1 — FLOORING TRANSITION

W.P.1 — WORK POINT

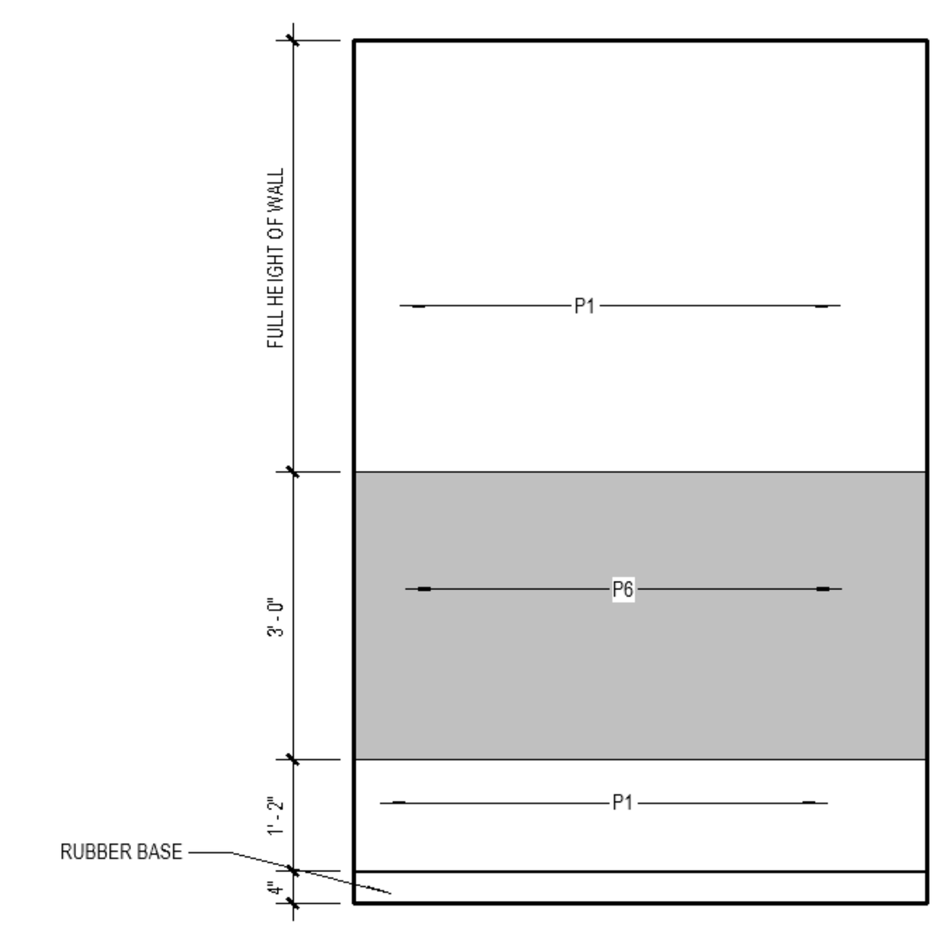
FINISH KEYNOTES :

01 MANUAL ROLLER SHADE LOCATION. PROVIDE FULL WIDTH OF WINDOW ASSEMBLY AT EACH LOCATION. REFER TO SPECIFICATION



WTPA - WALL TILE PATTERN 'A'

1/4" = 1'-0"

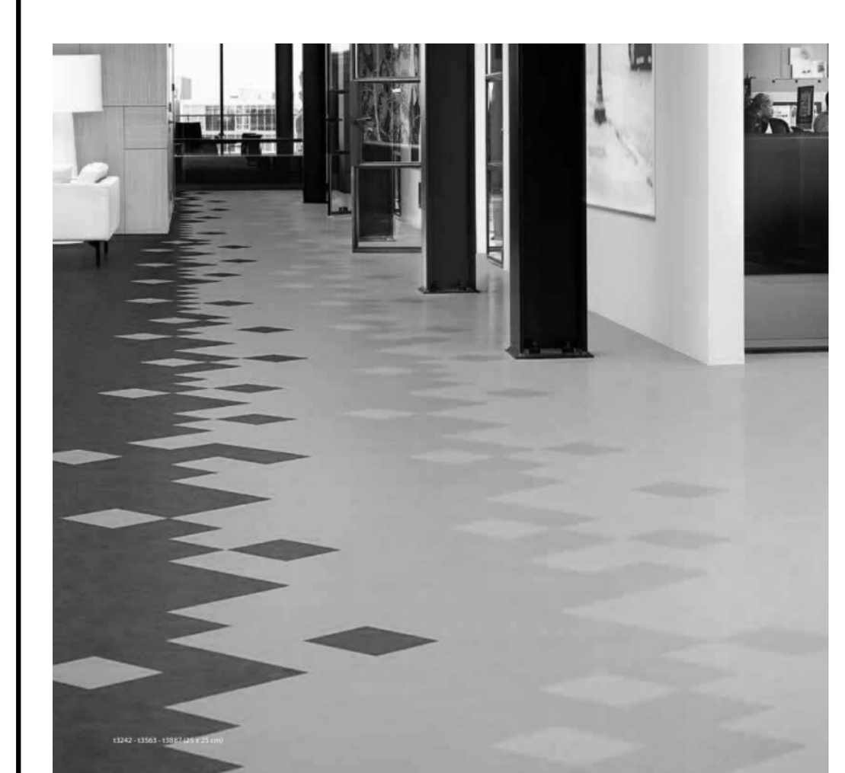


CORRIDOR CMU WALL PAINT TYP

1/2" = 1'-0"

FINISH LEGEND :

ACT1	ACOUSTICAL CEILING TILE MFR: ARMSTRONG STYLE: 2' X 2' ULTIMA TEGULAR W/ PRELUDE XL GRID SYSTEM
CT1	CARPET TILE (CLASSROOMS) MFR: SHAW CONTRACT STYLE: ENDLESS TILE COLOR: UNTAMED SIZE: 9" x 36" INSTALLATION: ASHLAR EAST TO WEST
CT2	CARPET TILE(ADMIN AREAS) MFR: SHAW CONTRACT STYLE: RESPOND TILE COLOR: UNTAMED SIZE: 9" x 36" INSTALLATION: ASHLAR EAST TO WEST
CT3	CARPET TILE (ELA) MFR: SHAW CONTRACT STYLE: DREAM TILE COLOR: INSIGHT SIZE: 24" x 24" INSTALLATION: QUARTER TURN
CTF1	CERAMIC TILE FLOOR MFR: AMERICAN OLEAN STYLE: THEORETICAL COLOR: CREATIVE GRAY SIZE: 12" x 24" GROUT: MAPEI KERAPOXY IN 27 SILVER
CTW1	CERAMIC TILE WALL MFR: VITL STYLE: STUDIO COLOR: FRENCH GRAY SIZE: 2" x 12" GROUT: MAPEI KERAPOXY IN 27 SILVER
CTW2	CERAMIC TILE WALL MFR: AMERICAN OLEAN STYLE: COLOR APPEAL COLOR: PLUM SIZE: 3" x 6" GROUT: MAPEI KERAPOXY IN 27 SILVER
CTWB1	CERAMIC TILE WALL BASE MFR: AMERICAN OLEAN STYLE: THEORETICAL COLOR: CREATIVE GRAY SIZE: 6" X 12" GROUT: MAPEI KERAPOXY IN 27 SILVER
P1	PAINT (GENERAL) MFR: BENJAMIN MOORE COLOR: AF-5 FROSTINE
P2	PAINT (ACCENT) MFR: BENJAMIN MOORE COLOR: 1410 ICED LAVENDER
P3	PAINT (ACCENT) MFR: BENJAMIN MOORE COLOR: CC-950 QUEEN'S WREATH
P4	PAINT (OFFICE) MFR: BENJAMIN MOORE COLOR: AF-705 CINDER
P5	PAINT (OFFICE) MFR: SHERWIN WILLIAMS COLOR: 6544 MESMERIZE
P6	PAINT (ACCENT) MFR: SHERWIN WILLIAMS COLOR: 6825 IZMIR PURPLE
P7	PAINT(TRIM) MFR: SHERWIN WILLIAMS COLOR: MATCH RB1
PL1	PLASTIC LAMINATE (COUNTERTOP) MFR: FORMICA STYLE: FANTASY MARBLE FINISH: SCOVATO
PL2	PLASTIC LAMINATE (CASEWORK) MFR: FORMICA STYLE: FOX TEAKWOOD FINISH: NATURAL GRAIN
PL3	PLASTIC LAMINATE- DECORATIVE METALS MANF: WILSONART COLOR: SATIN BRUSHED SMOKE ALUMINUM
RB1	RUBBER BASE MFR: ROPPE STYLE: PINNACLE RUBBER BASE COLOR: 100 BLACK SIZE: 4" COVE BASE
SC1	SEALED CONCRETE MFR: SEE SPECS
SS1	SOLID SURFACE (WINDOW SILLS/RECEPTION DESK) MFR: WILSONART COLOR: POWDER WHITE
SS2	SOLID SURFACE (LOCKERS) MFR: CORIAN COLOR: OWNER TO SELECT FROM MFR. FULL RANGE
TB1	TACKABLE BULLETIN BOARD ROLL MANF: FORBO COLOR: OYSTER NOTE: PROVIDE EDGE TRIM AT EXPOSED EDGES
VCT1	VINYL COMPOSITION TILE (MAIN) MFR: TARKETT STYLE: VCT II COLOR: STONE GREY QUARTZ SIZE: 12" x 12"
VCT2	VINYL COMPOSITION TILE (ACCENT) MFR: TARKETT STYLE: VCT II COLOR: SOLID WHITE SIZE: 12" x 12"
VCT3	VINYL COMPOSITION TILE (ACCENT) MFR: TARKETT STYLE: VCT II COLOR: SOLID BLACK SIZE: 12" x 12"
VCT	AREAS MARKED 'VCT' WILL BE A PATTERN WITH VCT1, VCT 2, VCT3, A 2D PLAN WILL BE ISSUED IN AN ADDENDUM SEE BELOW A PICTURE FOR INTENT



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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

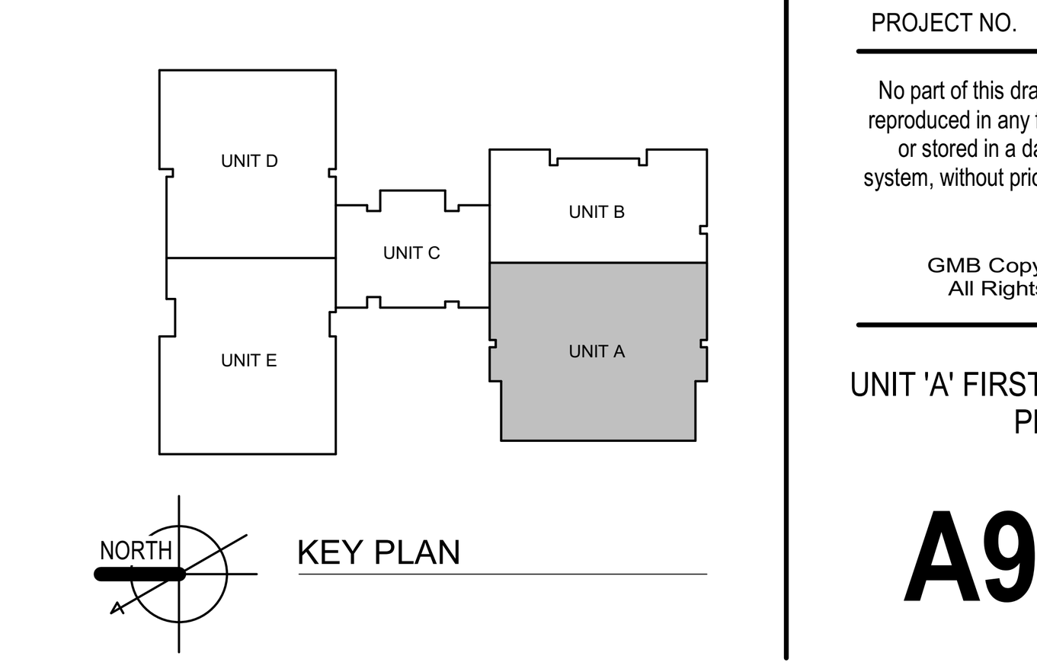
THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	MJO
REVIEWED	CMA
PROJECT NO.	5-5802



KEY PLAN

UNIT 'A' FIRST FLOOR FINISH PLAN

A9.1A

GENERAL FINISH NOTES :

1. REFER TO MATERIALS SCHEDULE IN SPECIFICATION FOR SPECIFIED MATERIALS.
2. ALL CERAMIC TILE OR PORCELAIN TILE FLOORS TO RECEIVE CERAMIC TILE BASE; U.N.O.
3. ALL AREAS OF VCT, CARPET, SEALED CONCRETE, OR OTHER RESILIENT FLOORING TO RECEIVE RUBBER BASE; U.N.O. ON FINISH PLANS.
4. IT IS THE RESPONSIBILITY OF ALL TRADES TO COORDINATE PREPARATION OF SURFACES TO RECEIVE FINISH PRODUCT. CONSULT WITH MANUFACTURERS RECOMMENDED PRACTICES.
5. ALL REDUCERS TO COORDINATE APPROPRIATELY WITH ABUTTING MATERIAL HEIGHT.
6. INSTALL 4" H. RUBBER BASE (RB) AT CASEWORK TOE KICKS, INSIDE OF FLOORLESS CASEWORK, AND VERTICAL SUPPORTS.
7. SEE SPECIFICATIONS FOR RESILIENT ACCESSORY INFORMATION.
8. PAINT ALL EXPOSED MECHANICAL AND ELECTRICAL ITEMS INTENDED TO RECEIVE FIELD PAINTING; U.N.O. ON INTERIOR ELEVATIONS, CEILING PLANS OR FINISH PLANS.
9. ALL DOOR AND WINDOW FRAMES IN UNITS A,B, AND C TO BE PAINTED P7; U.N.O.
10. EXPOSED CEILINGS, DECK, DUCTWORK, STRUCTURE AND OTHER MISC. EXPOSED ITEMS TO BE PAINTED; U.N.O. ON INTERIOR ELEVATIONS, CEILING PLANS OR FINISH PLANS.
11. FACE & UNDERSIDE OF BULKHEADS TO BE PAINTED P1; U.N.O. ON FINISH PLANS OR NOTED ON INTERIOR ELEVATIONS.
12. REFER TO CEILING PLANS & CEILING SPECIFICATIONS FOR SPECIAL CEILING DESIGNATIONS AND ACT TYPES.
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21. DO NOT PAINT OVER EXISTING GLAZED FACE BLOCK OR EXPOSED BRICK, U.N.O.
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FINISH SYMBOLS :

ROOM NAME
WALL FINISH
FLOOR FINISH
BASE FINISH

CPT1 / VCT1 — FLOORING TRANSITION

W.P.1 — WORK POINT

FINISH KEYNOTES :

01 MANUAL ROLLER SHADE LOCATION. PROVIDE FULL WIDTH OF WINDOW ASSEMBLY AT EACH LOCATION. REFER TO SPECIFICATION

FINISH LEGEND :

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CT2	CARPET TILE(ADMIN AREAS) MFR: SHAW CONTRACT STYLE: RESPOND TILE COLOR: UNTAMED SIZE: 9" x 36" INSTALLATION: ASHLAR EAST TO WEST
CT3	CARPET TILE (ELA) MFR: SHAW CONTRACT STYLE: DREAM TILE COLOR: INSIGHT SIZE: 24" x 24" INSTALLATION: QUARTER TURN
CTF1	CERAMIC TILE FLOOR MFR: AMERICAN OLEAN STYLE: THEORETICAL COLOR: CREATIVE GRAY SIZE: 12" x 24" GROUT: MAPEI KERAPOXY IN 27 SILVER
CTW1	CERAMIC TILE WALL MFR: VITL STYLE: STUDIO COLOR: FRENCH GRAY SIZE: 2" x 12" GROUT: MAPEI KERAPOXY IN 27 SILVER
CTW2	CERAMIC TILE WALL MFR: AMERICAN OLEAN STYLE: COLOR APPEAL COLOR: PLUM SIZE: 2" x 8" GROUT: MAPEI KERAPOXY IN 27 SILVER
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P2	PAINT (ACCENT) MFR: BENJAMIN MOORE COLOR: 1410 ICED LAVENDER
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P4	PAINT (OFFICE) MFR: BENJAMIN MOORE COLOR: AF-705 CINDER
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RB1	RUBBER BASE MFR: ROPPE STYLE: PINNACLE RUBBER BASE COLOR: 100 BLACK SIZE: 4" COVE BASE
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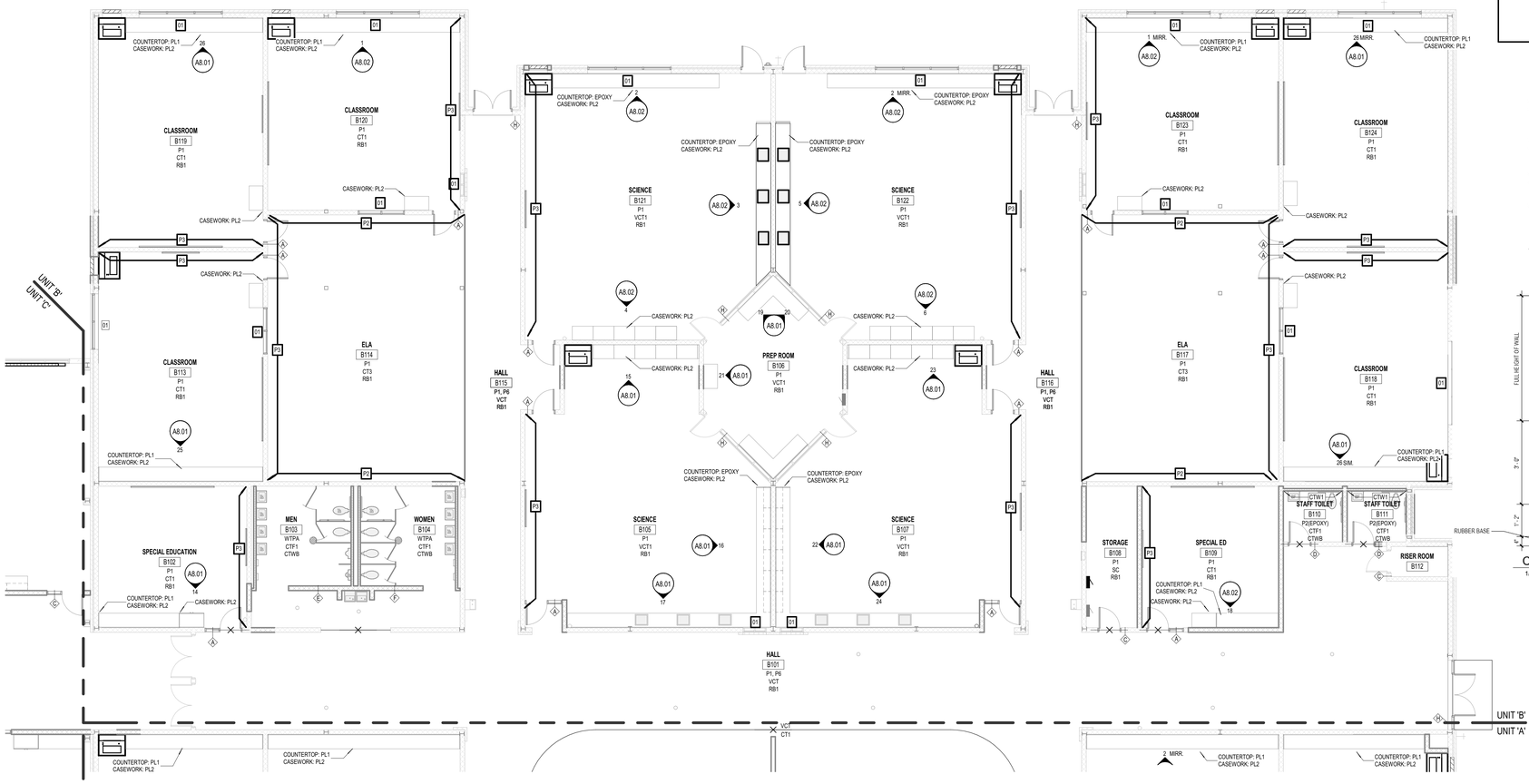
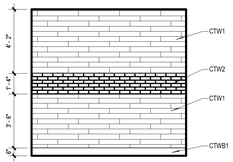
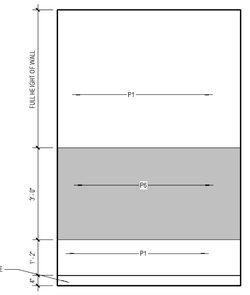


NORTH

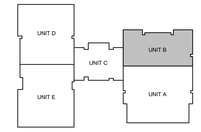
UNIT 'B' FIRST FLOOR FINISH PLAN
1/8" = 1'-0"



WTPA - WALL TILE PATTERN 'A'
1/4" = 1'-0"



CORRIDOR CMU WALL PAINT TYP
1/2" = 1'-0"



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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES	
12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	MJO
REVIEWED	CMA
PROJECT NO.	5-5802

UNIT 'B' FIRST FLOOR FINISH PLAN

A9.1B

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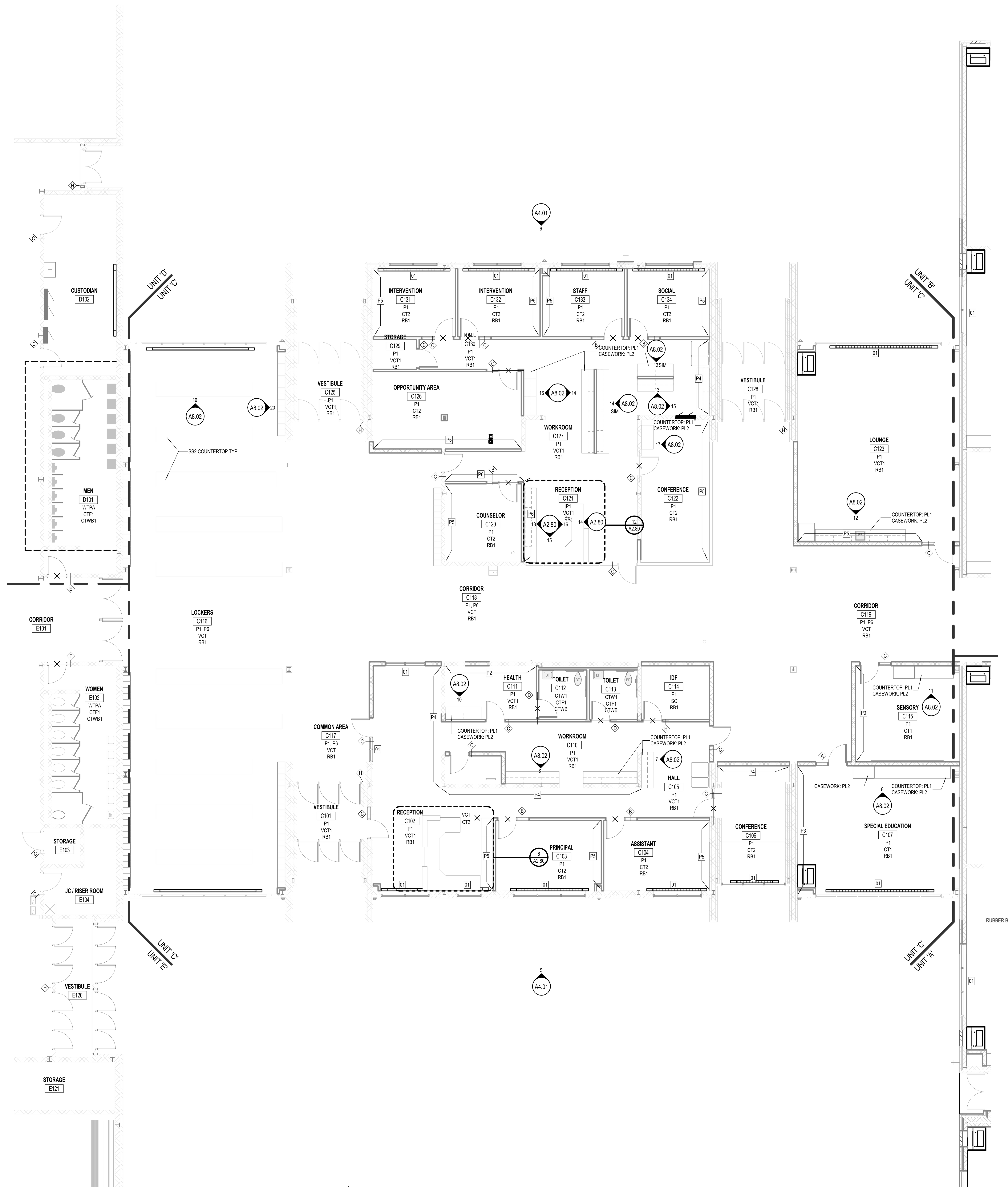
THREE RIVERS, MICHIGAN



UNIT 'C' FIRST FLOOR FINISH PLAN
1/8" = 1'-0"

GENERAL FINISH NOTES :

1. REFER TO MATERIALS SCHEDULE IN SPECIFICATION FOR SPECIFIED MATERIALS.
2. ALL CERAMIC TILE OR PORCELAIN TILE FLOORS TO RECEIVE CERAMIC TILE BASE; U.N.O.
3. ALL AREAS OF VCT, CARPET, SEALED CONCRETE, OR OTHER RESILIENT FLOORING TO RECEIVE RUBBER BASE; U.N.O. ON FINISH PLANS.
4. IT IS THE RESPONSIBILITY OF ALL TRADES TO COORDINATE PREPARATION OF SURFACES TO RECEIVE FINISH PRODUCT. CONSULT WITH MANUFACTURERS RECOMMENDED PRACTICES.
5. ALL REDUCERS TO COORDINATE APPROPRIATELY WITH ABUTTING MATERIAL HEIGHT.
6. INSTALL 4" H. RUBBER BASE (RB) AT CASEWORK TOE KICKS, INSIDE OF FLOORLESS CASEWORK, AND VERTICAL SUPPORTS.
7. SEE SPECIFICATIONS FOR RESILIENT ACCESSORY INFORMATION.
8. PAINT ALL EXPOSED MECHANICAL AND ELECTRICAL ITEMS INTENDED TO RECEIVE FIELD PAINT TO MATCH ADJACENT SURFACES; U.N.O.
9. ALL DOOR AND WINDOW FRAMES IN UNITS A,B, AND C TO BE PAINTED P7; U.N.O.
10. EXPOSED CEILINGS, DECK, DUCTWORK, STRUCTURE AND OTHER MISC. EXPOSED ITEMS TO BE PAINTED; U.N.O. ON INTERIOR ELEVATIONS, CEILING PLANS OR FINISH PLANS.
11. FACE & UNDERSIDE OF BULKHEADS TO BE PAINTED P1; U.N.O. ON FINISH PLANS OR NOTED ON INTERIOR ELEVATIONS.
12. REFER TO CEILING PLANS & CEILING SPECIFICATIONS FOR SPECIAL CEILING DESIGNATIONS AND ACT TYPES.
13. REFER TO INTERIOR ELEVATION SHEETS FOR MORE DETAILED PAINT AND INTERIOR FINISH INFORMATION.
14. MECHANICAL & ELECTRICAL ROOM FINISHES: AS A TYPICAL; PAINT WALLS, DO NOT PAINT EXPOSED STRUCTURE, DO NOT PROVIDE WALL BASE. TYPICAL UNLESS NOTED OTHERWISE ON FINISH PLANS.
15. WHERE SEALED CONCRETE (SC). IS SPECIFIED, REFER TO SPECIFICATION SECTION 09 90 00 PAINTING, FOR SYSTEM TYPE.
16. REFER TO SPECIFICATIONS FOR ALL PAINT TYPES.
17. ALL PAINTED WALLS IN TOILET ROOMS AND SCIENCE ROOMS SHALL RECEIVE EPOXY PAINT.
18. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF OWNER FURNISHED EQUIPMENT, INCLUDED DIMENSIONS OF SUCH AS THEY RELATE TO THEIR OWN WORK.
19. REMOVE, SALVAGE AND RE-INSTALL EXISTING ROOM SIGNAGE PRIOR TO PAINTING WALLS IN AREAS OF WORK, TYP.
20. REMOVE AND SALVAGE ALL WALL MOUNTED FURNISHINGS AND ARTWORK PRIOR TO PAINTING. COORDINATE SALVAGE AND RE-INSTALLATION WITH OWNER.
21. DO NOT PAINT OVER EXISTING GLAZED FACE BLOCK OR EXPOSED BRICK, U.N.O.
22. PROTECT ALL FINISHES DURING CONSTRUCTION.
25. ALL FLOORING IN SCOPE TO BE PRICED AS TZ1 UNLESS NOTED OTHERWISE
26. ALL WALLS IN SCOPE TO RECEIVE PAINT UNLESS NOTED OTHERWISE.
27. ALL GROUND FACE BLOCK SHOULD BE PAINTED P4.

FINISH SYMBOLS :

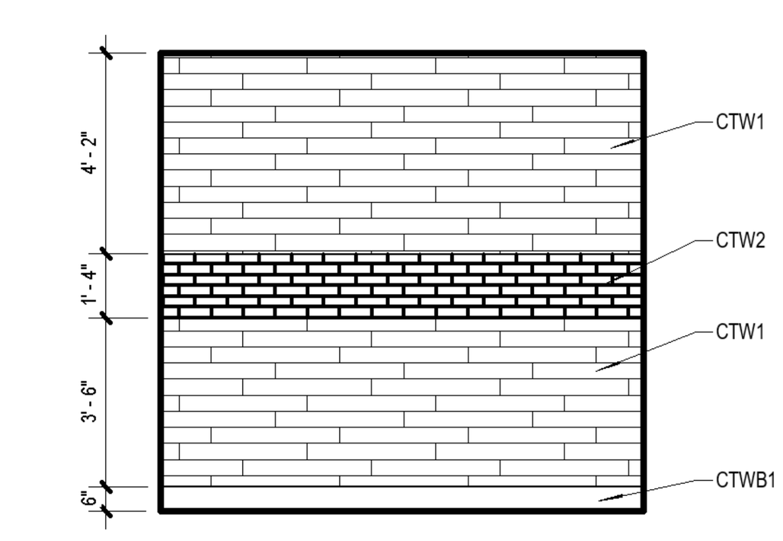
ROOM NAME
WALL FINISH
FLOOR FINISH
BASE FINISH

CPT1 / VCT1 — FLOORING TRANSITION

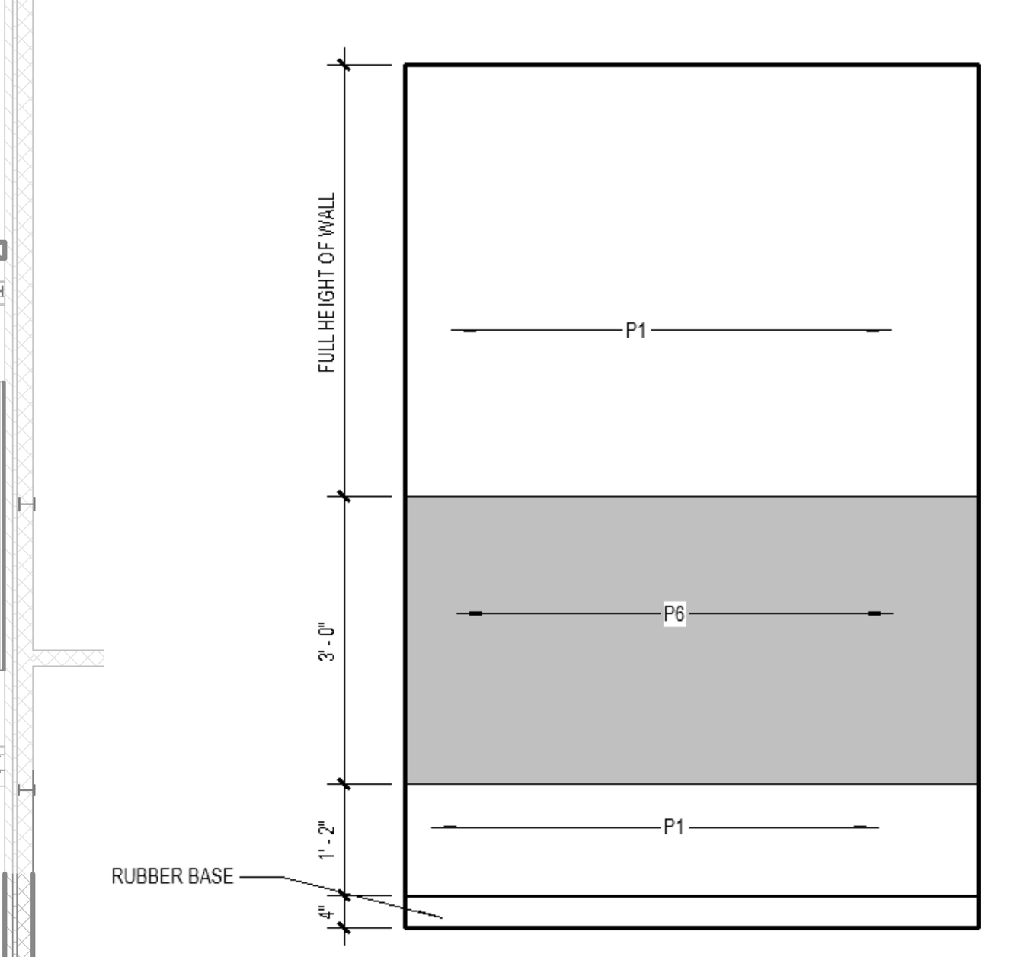
W.P.1 — WORK POINT

FINISH KEYNOTES :

01 MANUAL ROLLER SHADE LOCATION. PROVIDE FULL WIDTH OF WINDOW ASSEMBLY AT EACH LOCATION. REFER TO SPECIFICATION



WTPA - WALL TILE PATTERN 'A'
1/4" = 1'-0"



CORRIDOR CMU WALL PAINT TYP
1/2" = 1'-0"

FINISH LEGEND :

ACT1 ACOUSTICAL CEILING TILE
MFR: ARMSTRONG
STYLE: 2' X 2' ULTIMA TEGULAR W/ PRELUDE XL GRID SYSTEM

CT1 CARPET TILE (CLASSROOMS)
MFR: SHAW CONTRACT
STYLE: ENDLESS TILE
COLOR: UNTAMED
SIZE: 9" x 36"
INSTALLATION: ASHLAR EAST TO WEST

CT2 CARPET TILE(ADMIN AREAS)
MFR: SHAW CONTRACT
STYLE: RESPOND TILE
COLOR: UNTAMED
SIZE: 9" x 36"
INSTALLATION: ASHLAR EAST TO WEST

CT3 CARPET TILE (ELA)
MFR: SHAW CONTRACT
STYLE: DREAM TILE
COLOR: INSIGHT
SIZE: 24" x 24"
INSTALLATION: QUARTER TURN

CTF1 CERAMIC TILE FLOOR
MFR: AMERICAN OLEAN
STYLE: THEORETICAL
COLOR: CREATIVE GRAY
SIZE: 12" x 24"
GROUT: MAPEI KERAPOXY IN 27 SILVER

CTW1 CERAMIC TILE WALL
MFR: VITL
STYLE: STUDIO
COLOR: FRENCH GRAY
SIZE: 2" x 12"
GROUT: MAPEI KERAPOXY IN 27 SILVER

CTW2 CERAMIC TILE WALL
MFR: AMERICAN OLEAN
STYLE: COLOR APPEAL
COLOR: PLUM
SIZE: 3" x 6"
GROUT: MAPEI KERAPOXY IN 27 SILVER

CTWB1 CERAMIC TILE WALL BASE
MFR: AMERICAN OLEAN
STYLE: THEORETICAL
COLOR: CREATIVE GRAY
SIZE: 6" X 12"
GROUT: MAPEI KERAPOXY IN 27 SILVER

P1 PAINT (GENERAL)
MFR: BENJAMIN MOORE
COLOR: AF-5 FROSTINE

P2 PAINT (ACCENT)
MFR: BENJAMIN MOORE
COLOR: 1410 ICED LAVENDER

P3 PAINT (ACCENT)
MFR: BENJAMIN MOORE
COLOR: CC-950 QUEEN'S WREATH

P4 PAINT (OFFICE)
MFR: BENJAMIN MOORE
COLOR: AF-705 CINDER

P5 PAINT (OFFICE)
MFR: SHERWIN WILLIAMS
COLOR: 6544 MESMERIZE

P6 PAINT (ACCENT)
MFR: SHERWIN WILLIAMS
COLOR: 6825 IZMIR PURPLE

P7 PAINT(TRIM)
MFR: SHERWIN WILLIAMS
COLOR: MATCH RB1

PL1 PLASTIC LAMINATE (COUNTERTOP)
MFR: FORMICA
STYLE: FANTASY MARBLE
FINISH: SCOVATO

PL2 PLASTIC LAMINATE (CASEWORK)
MFR: FORMICA
STYLE: FOX TEAKWOOD
FINISH: NATURAL GRAIN

PL3 PLASTIC LAMINATE- DECORATIVE METALS
MANF: WILSONART
COLOR: SATIN BRUSHED SMOKE ALUMINUM

RB1 RUBBER BASE
MFR: ROPPE
STYLE: PINNACLE RUBBER BASE
COLOR: 100 BLACK
SIZE: 4" COVE BASE

SC1 SEALED CONCRETE
MFR: SEE SPECS

SS1 SOLID SURFACE (WINDOW SILLS/RECEPTION DESK)
MFR: WILSONART
COLOR: POWDER WHITE

SS2 SOLID SURFACE (LOCKERS)
MFR: CORIAN
COLOR: OWNER TO SELECT FROM MFR. FULL RANGE

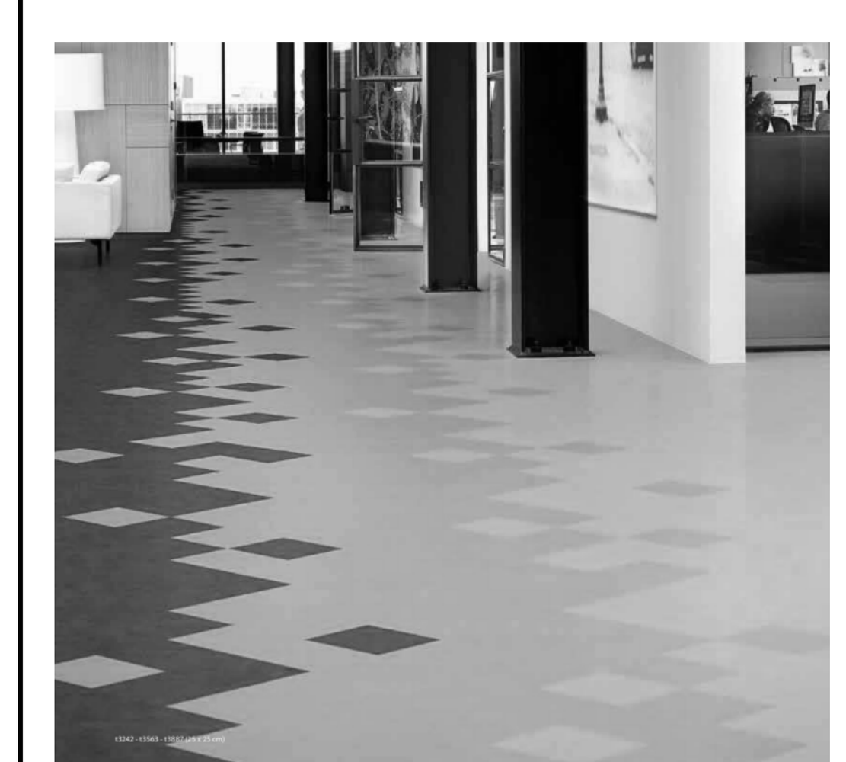
TB1 TACKABLE BULLETIN BOARD ROLL
MANF: FORBO
COLOR: OYSTER
NOTE: PROVIDE EDGE TRIM AT EXPOSED EDGES

VCT1 VINYL COMPOSITION TILE (MAIN)
MFR: TARKETT
STYLE: VCT II
COLOR: STONE GREY QUARTZ
SIZE: 12" x 12"

VCT2 VINYL COMPOSITION TILE (ACCENT)
MFR: TARKETT
STYLE: VCT II
COLOR: SOLID WHITE
SIZE: 12" x 12"

VCT3 VINYL COMPOSITION TILE (ACCENT)
MFR: TARKETT
STYLE: VCT II
COLOR: SOLID BLACK
SIZE: 12" x 12"

VCT AREAS MARKED 'VCT' WILL BE A PATTERN WITH VCT1, VCT 2, VCT3, A 2D PLAN WILL BE ISSUED IN AN ADDENDUM
SEE BELOW A PICTURE FOR INTENT



ISSUANCES

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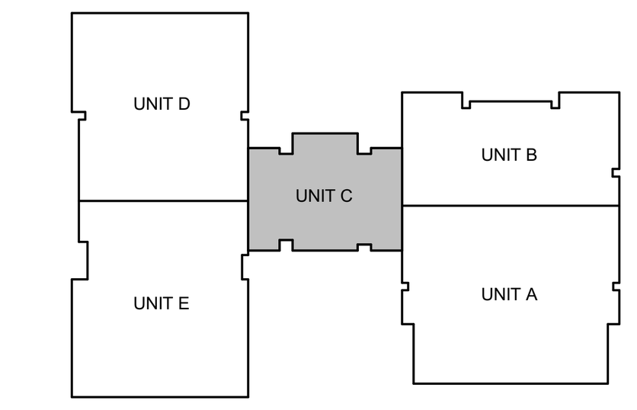

KEY PLAN

DRAWN	MJO
REVIEWED	CMA
PROJECT NO.	5-5802

UNIT 'C' FIRST FLOOR FINISH PLAN

A9.1C

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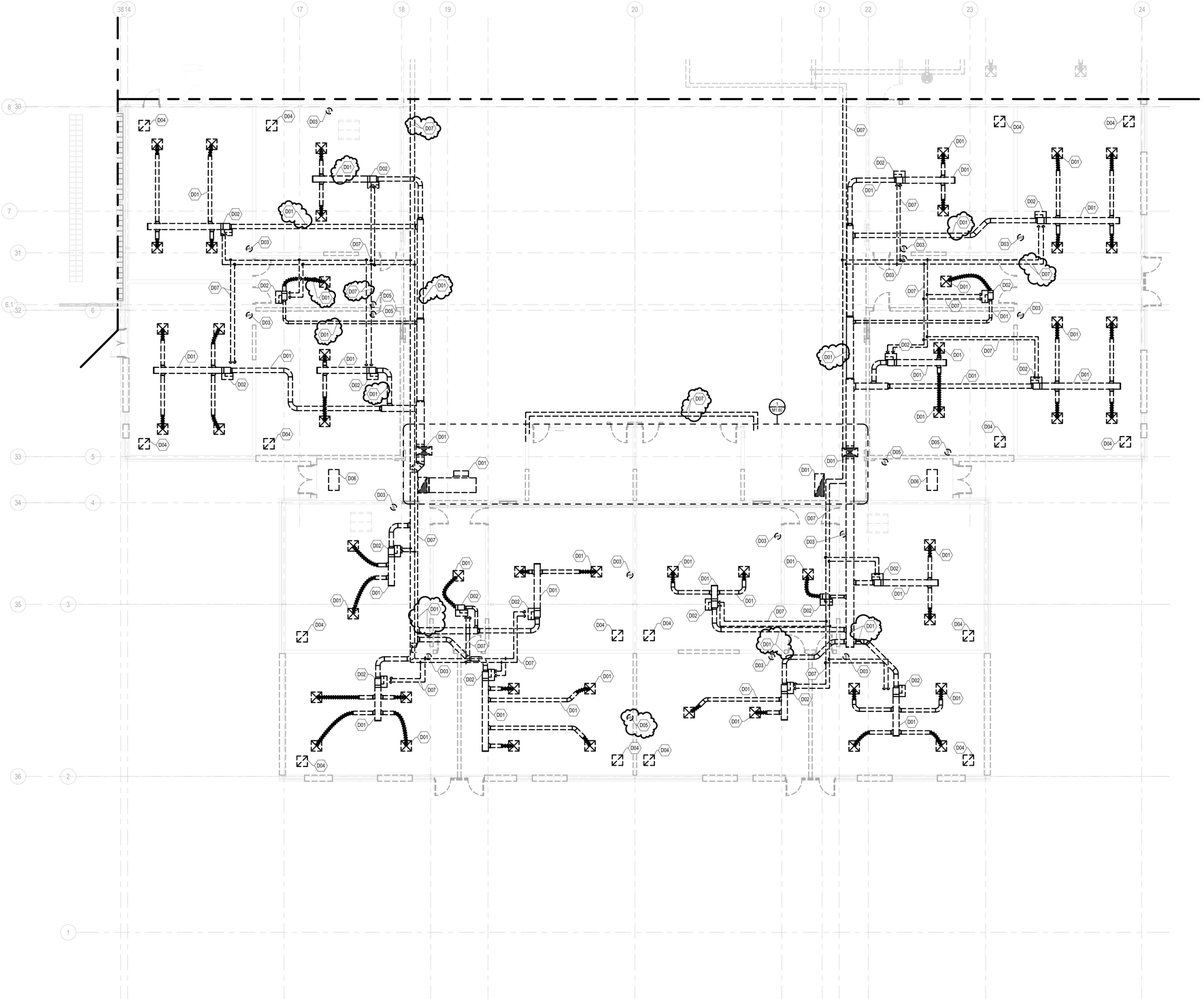
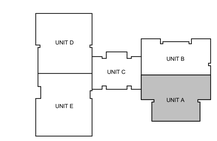


	MECHANICAL DEMO KEYNOTE LEGEND
D01	REMOVE SUPPLY, RETURN, EXHAUST AND OUTSIDE AIR DUCTWORK, INSULATION, DIFFUSERS, GRILLES, HANGERS AND ALL RELATED ACCESSORIES.
D02	REMOVE VAV BOX, DUCTWORK, SUPPORTS, VALVES, PIPING, INSULATION, CONTROLS AND ALL RELATED ACCESSORIES.
D03	REMOVE TEMPERATURE SENSOR/THERMOSTAT AND CONTROL WIRING BACK TO SOURCE. REUSE WALL BOX FOR NEW TEMPERATURE SENSOR OR CAP WITH ALUMINUM WALL PLATE IF NOT REUSED FOR NEW EQUIPMENT.
D04	REMOVE CEILING MOUNTED RETURN GRILLE AND ALL RELATED ACCESSORIES.
D05	REMOVE TEMPERATURE SENSOR/THERMOSTAT AND CONTROL WIRING BACK TO SOURCE.
D06	REMOVE CEILING MOUNTED ELECTRIC CABINET UNIT HEATER, SUPPORTS, CONTROLS AND ALL RELATED ACCESSORIES.
D07	REMOVE HOT WATER HEATING AND CHILLED GLYCOL SUPPLY AND RETURN PIPING, VALVES, INSULATION, SUPPORTS, AND ALL RELATED ACCESSORIES.

NORTH

UNIT 'A' MECHANICAL DEMOLITION PLAN

1/8" = 1'-0"



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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

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12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

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PROJECT NO.	5-5802

UNIT 'A' MECHANICAL DEMOLITION PLAN

M1.1A

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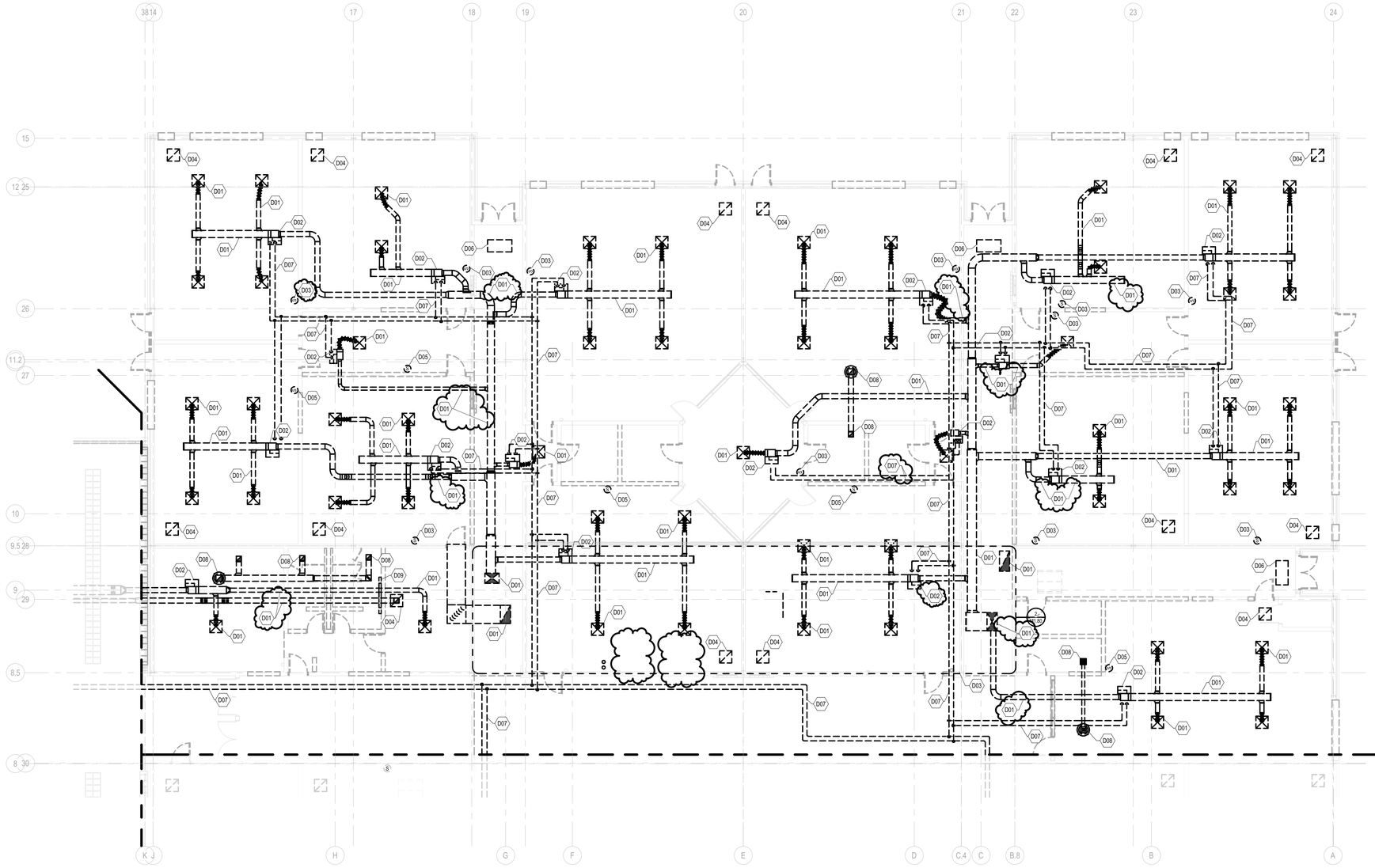

UNIT 'B' MECHANICAL DEMOLITION PLAN
1/8" = 1'-0"

MECHANICAL DEMO KEYNOTE LEGEND	
D01	REMOVE SUPPLY, RETURN, EXHAUST AND OUTSIDE AIR DUCTWORK, INSULATION, DIFFUSERS, GRILLES, HANGERS AND ALL RELATED ACCESSORIES.
D02	REMOVE VAV BOX, DUCTWORK, SUPPORTS, VALVES, PIPING, INSULATION, CONTROLS AND ALL RELATED ACCESSORIES.
D03	REMOVE TEMPERATURE SENSOR/THERMOSTAT AND CONTROL WIRING BACK TO SOURCE. REUSE WALL BOX FOR NEW TEMPERATURE SENSOR OR CAP WITH ALUMINUM WALL PLATE IF NOT REUSED FOR NEW EQUIPMENT.
D04	REMOVE CEILING MOUNTED RETURN GRILLE AND ALL RELATED ACCESSORIES.
D05	REMOVE TEMPERATURE SENSOR/THERMOSTAT AND CONTROL WIRING BACK TO SOURCE.
D06	REMOVE CEILING MOUNTED ELECTRIC CABINET UNIT HEATER, SUPPORTS, CONTROLS AND ALL RELATED ACCESSORIES.
D07	REMOVE HOT WATER HEATING AND CHILLED GLYCOL SUPPLY AND RETURN PIPING, VALVES, INSULATION, SUPPORTS, AND ALL RELATED ACCESSORIES.
D08	REMOVE EXHAUST FAN, ROOF CURB, DUCTWORK, DAMPERS, SUPPORTS AND ALL RELATED ACCESSORIES.
D09	REMOVE FINTUBE ELEMENT, ENCLOSURE, SUPPORTS, VALVES, PIPING, CONTROLS AND ALL RELATED ACCESSORIES.

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THREE RIVERS, MICHIGAN

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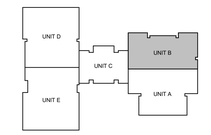
01.19.2023	ADDENDUM 002

DRAWN	RTF
REVIEWED	JBH
PROJECT NO.	5-5802

UNIT 'B' MECHANICAL DEMOLITION PLAN

M1.1B



KEY PLAN

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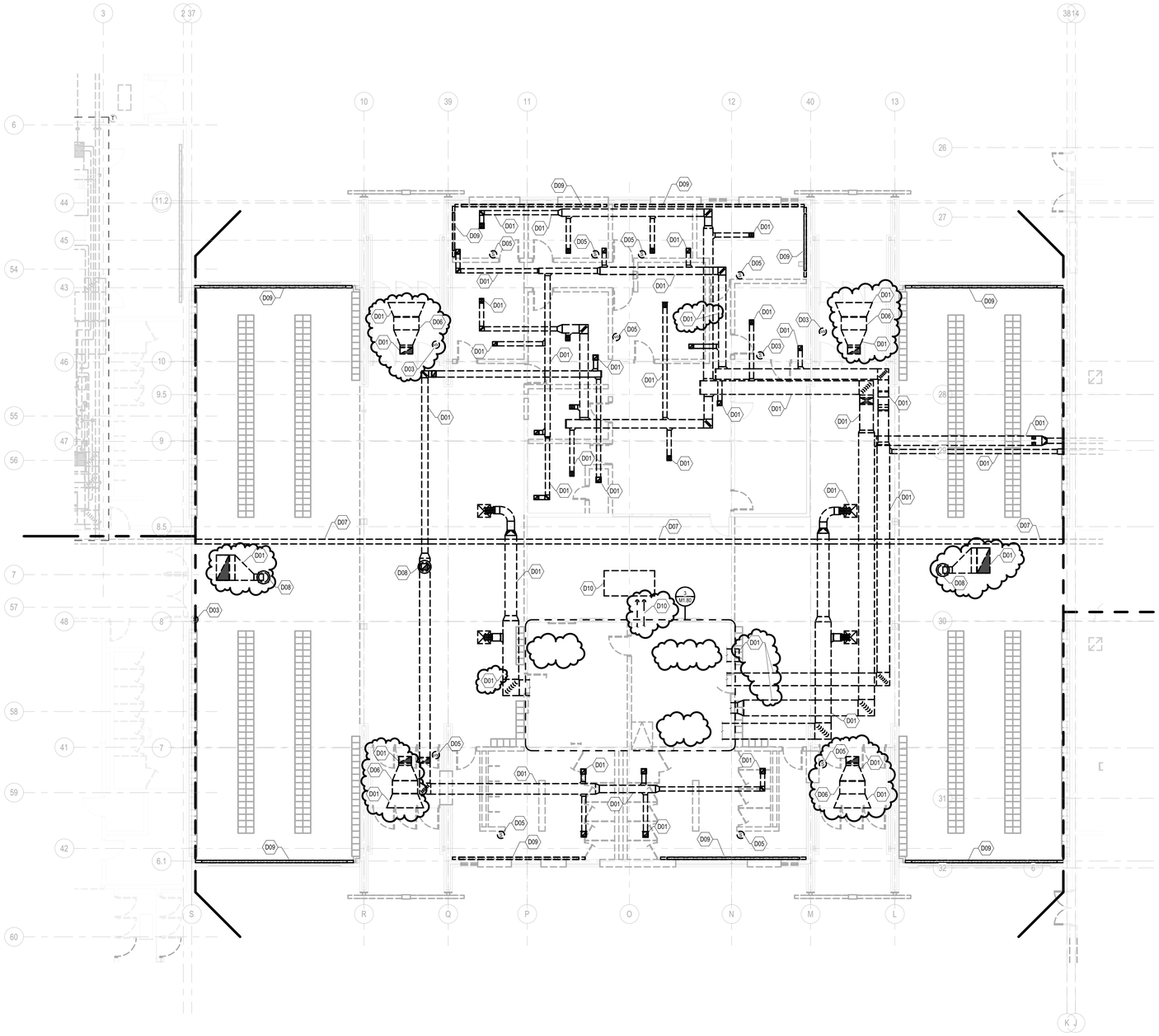

UNIT 'C' MECHANICAL DEMOLITION PLAN

1/8" = 1'-0"

⬡	MECHANICAL DEMO KEYNOTE LEGEND
D01	REMOVE SUPPLY, RETURN, EXHAUST AND OUTSIDE AIR DUCTWORK, INSULATION, DIFFUSERS, GRILLES, HANGERS AND ALL RELATED ACCESSORIES.
D03	REMOVE TEMPERATURE SENSOR/THERMOSTAT AND CONTROL WIRING BACK TO SOURCE. REUSE WALL BOX FOR NEW TEMPERATURE SENSOR OR CAP WITH ALUMINUM WALL PLATE IF NOT REUSED FOR NEW EQUIPMENT.
D05	REMOVE TEMPERATURE SENSOR/THERMOSTAT AND CONTROL WIRING BACK TO SOURCE.
D06	REMOVE CEILING MOUNTED ELECTRIC CABINET UNIT HEATER, SUPPORTS, CONTROLS AND ALL RELATED ACCESSORIES.
D07	REMOVE HOT WATER HEATING AND CHILLED GLYCOL SUPPLY AND RETURN PIPING, VALVES, INSULATION, SUPPORTS, AND ALL RELATED ACCESSORIES.
D08	REMOVE EXHAUST FAN, ROOF CURB, DUCTWORK, DAMPERS, SUPPORTS AND ALL RELATED ACCESSORIES.
D09	REMOVE FINTUBE ELEMENT, ENCLOSURE, SUPPORTS, VALVES, PIPING, CONTROLS AND ALL RELATED ACCESSORIES.
D10	REMOVE ROOF MOUNTED CONDENSING UNIT, REFRIGERANT PIPING, SUPPORTS, INSULATION, CONTROLS AND ALL RELATED ACCESSORIES.

KEY PLAN

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01.19.2023	ADDENDUM 002

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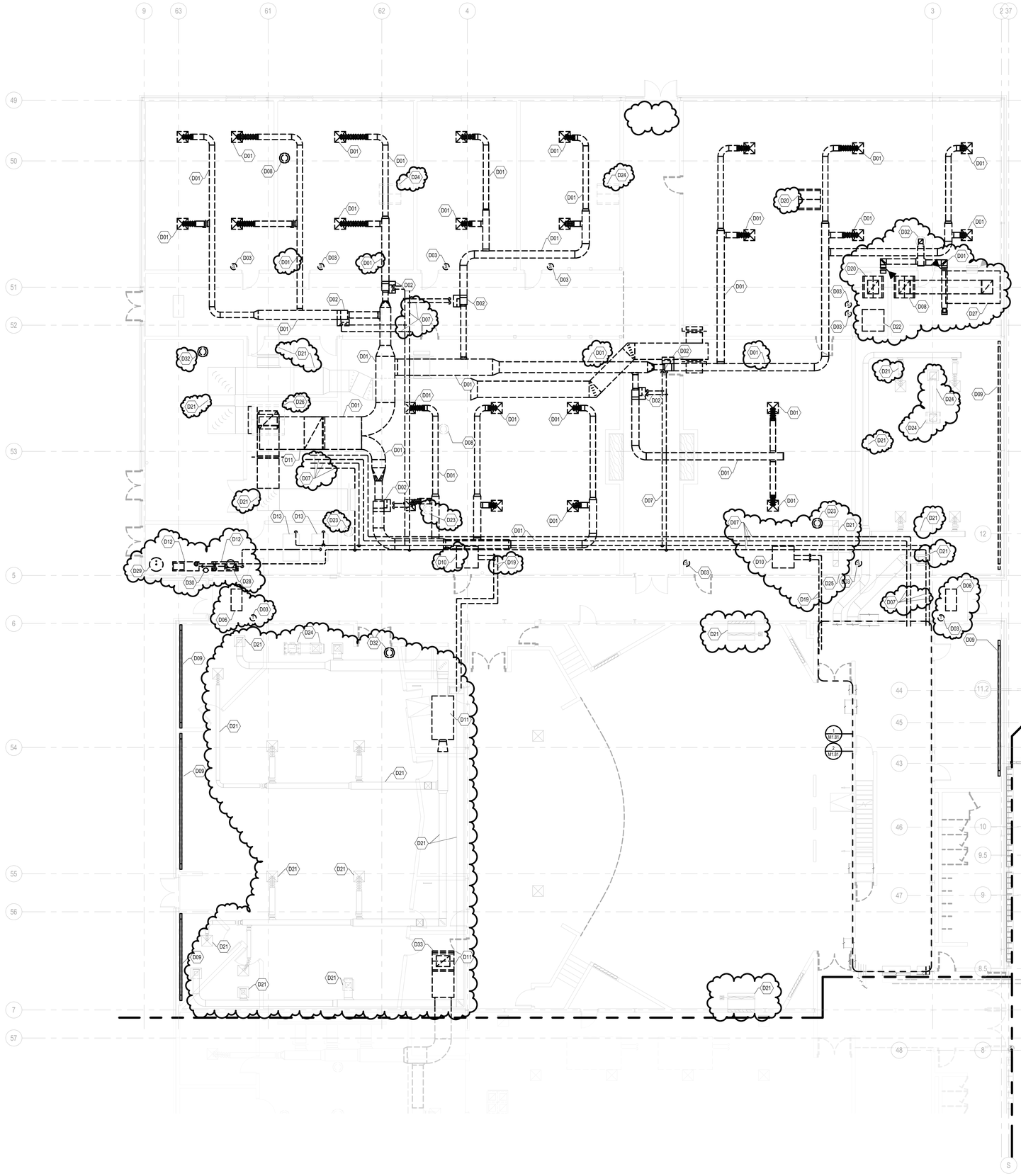
PROJECT NO.	5-5802

UNIT 'C' MECHANICAL
DEMOLITION PLAN

M1.1C



ALL AIR HANDLING UNIT DEMOLITION WORK INCLUDING DUCTWORK, VAV BOXES, PIPING, CONTROLS, AND ALL RELATED ACCESSORIES SHALL BE INCLUDED UNDER ALTERNATE M-1.

ALL HOT WATER HEATING BOILER SYSTEM DEMOLITION WORK INCLUDING PUMPS, AIR SEPARATOR, EXPANSION TANK, POT FEEDER, DISTRIBUTION PIPING, SUPPORTS, INSULATION, CONTROLS AND ALL RELATED ACCESSORIES SHALL BE INCLUDED.

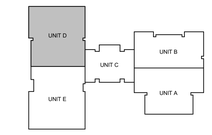
MECHANICAL DEMO KEYNOTE LEGEND

D01	REMOVE SUPPLY, RETURN, EXHAUST AND OUTSIDE AIR DUCTWORK, INSULATION, DIFFUSERS, GRILLES, HANGERS AND ALL RELATED ACCESSORIES.
D02	REMOVE VAV BOX, DUCTWORK, SUPPORTS, VALVES, PIPING, INSULATION, CONTROLS AND ALL RELATED ACCESSORIES.
D03	REMOVE TEMPERATURE SENSOR/THERMOSTAT AND CONTROL WIRING BACK TO SOURCE. REUSE WALL BOX FOR NEW TEMPERATURE SENSOR OR CAP WITH ALUMINUM WALL PLATE IF NOT REUSED FOR NEW EQUIPMENT.
D06	REMOVE CEILING MOUNTED ELECTRIC CABINET UNIT HEATER, SUPPORTS, CONTROLS AND ALL RELATED ACCESSORIES.
D07	REMOVE HOT WATER HEATING AND CHILLED GLYCOL SUPPLY AND RETURN PIPING, VALVES, INSULATION, SUPPORTS, AND ALL RELATED ACCESSORIES.
D08	REMOVE EXHAUST FAN, ROOF CURB, DUCTWORK, DAMPERS, SUPPORTS AND ALL RELATED ACCESSORIES.
D09	REMOVE LOUVER ELEMENT, ENCLOSURE, SUPPORTS, WEATHER BARRIER, FLASHING, AND ALL RELATED ACCESSORIES.
D10	REMOVE ROOF MOUNTED CONDENSING UNIT, REFRIGERANT PIPING, SUPPORTS, INSULATION, CONTROLS AND ALL RELATED ACCESSORIES.
D11	REMOVE AIR HANDLING UNIT, DUCTWORK, PIPING, VALVES, SUPPORTS, CONTROLS, AND ALL RELATED ACCESSORIES.
D12	REMOVE HOT WATER HEATING SYSTEM PUMPS, SHUTOFF VALVES, TRIPLE DUTY VALVES, INSULATION, PIPING AND ALL RELATED ACCESSORIES. THIS WORK SHALL BE INCLUDED IN THE BASE BID.
D13	BOILER, PIPING, VALVES, CONTROLS AND ALL RELATED ACCESSORIES TO REMAIN.
D19	REMOVE REFRIGERANT PIPING, VALVES, INSULATION, SUPPORTS AND ALL RELATED ACCESSORIES.
D20	REMOVE RELIEF HOOD, ROOF CURB, DUCTWORK, INSULATION, HANGERS, DAMPERS AND ALL RELATED ACCESSORIES.
D21	SUPPLY, RETURN, EXHAUST, TRANSFER AIR, OUTSIDE AIR DUCTWORK, DIFFUSERS AND GRILLES TO REMAIN.
D22	REMOVE DUST COLLECTOR, SUPPORTS, DUCTWORK, CONTROLS, DAMPERS AND ALL RELATED ACCESSORIES. THIS WORK SHALL BE INCLUDED UNDER ALTERNATE M-1.
D23	EXHAUST FAN, DUCTWORK, CURB, CONTROLS AND ALL RELATED ACCESSORIES TO REMAIN.
D24	RELIEF HOOD, DUCTWORK, DAMPERS, ROOF CURB AND ALL RELATED ACCESSORIES TO REMAIN.
D25	KILN EXHAUST HOOD, SUPPORTS AND ALLL RELATED ACCESSORIES TO REMAIN.
D26	OUTSIDE AIR INTAKE HOOD, DUCTWORK, DAMPERS, ROOF CURB AND ALL RELATED ACCESSORIES TO REMAIN.
D27	REMOVE PAINT SPRAY HOOD, SUPPORTS, DUCTWORK, CONTROLS, DAMPERS AND ALL RELATED ACCESSORIES. THIS WORK SHALL BE INCLUDED UNDER ALTERNATE M-1.
D28	REMOVE HOT WATER HEATING SYSTEM REMOVE AIR SEPARATOR, PIPING, VALVES, INSULATION, SUPPORTS AND ALL RELATED ACCESSORIES. THIS WORK SHALL BE INCLUDED IN THE BASE BID.
D29	REMOVE HOT WATER HEATING SYSTEM EXPANSION TANK. THIS WORK SHALL BE INCLUDED IN THE BASE BID.
D30	REMOVE HOT WATER HEATING SYSTEM REMOVE POT FEEDER PIPING, VALVES, INSULATION, SUPPORTS, AND ALL RELATED ACCESSORIES. THIS WORK SHALL BE INCLUDED IN THE BASE BID.
D32	REMOVE EXHAUST FAN, ROOF CURB, DUCTWORK, DAMPERS, SUPPORTS AND ALL RELATED ACCESSORIES. REUSE ROOF OPENING FOR NEW EXHAUST FAN.
D33	REMOVE OUTSIDE AIR INTAKE HOOD, DUCTWORK, DAMPERS, ROOF CURB AND ALL RELATED ACCESSORIES.

NORTH

UNIT 'D' MECHANICAL DEMOLITION PLAN

1/8" = 1'-0"



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KEY PLAN

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

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THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

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REVIEWED	JBH
PROJECT NO.	5-5802

UNIT 'D' MECHANICAL DEMOLITION PLAN

M1.1D

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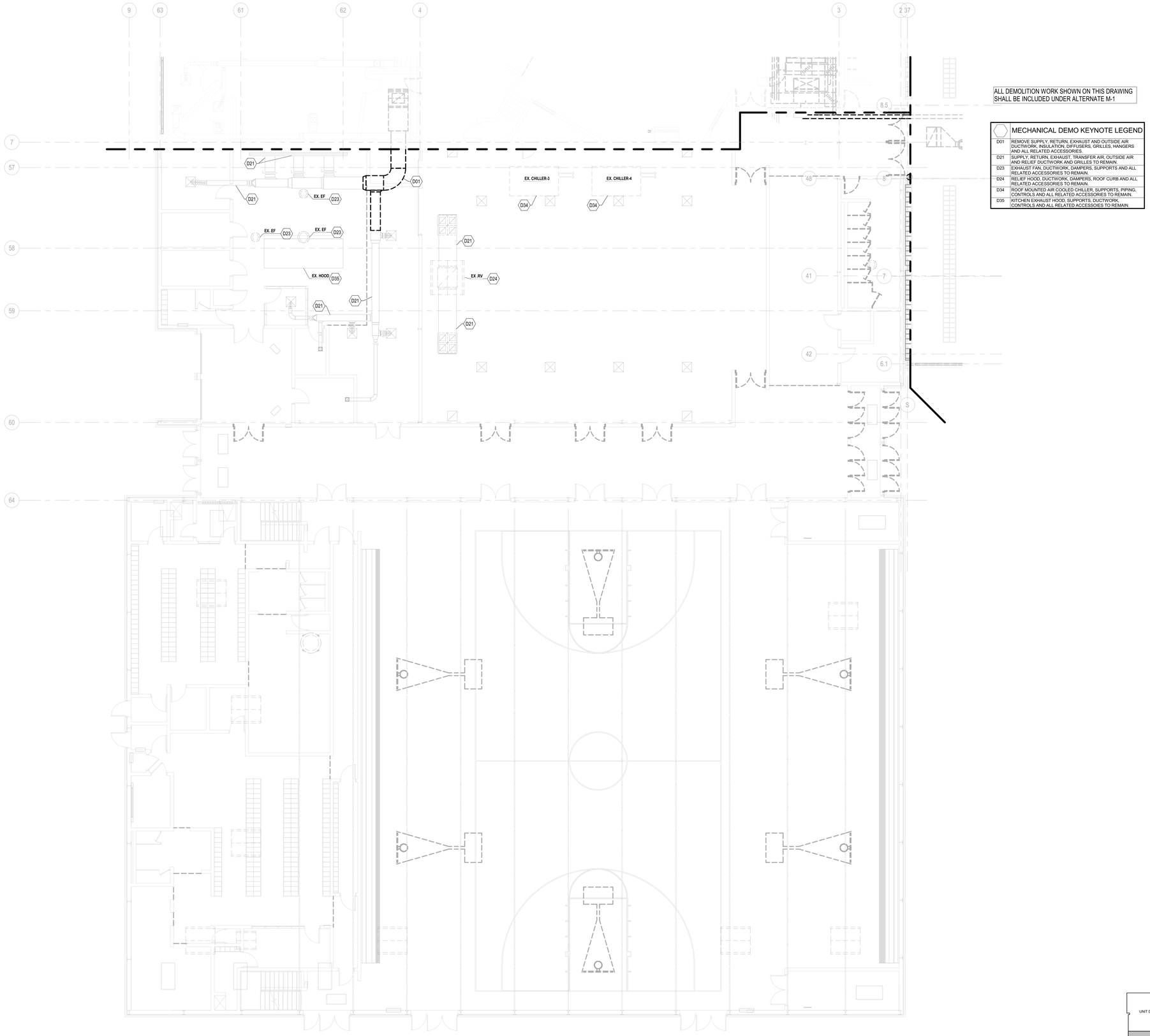


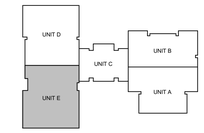
ALL DEMOLITION WORK SHOWN ON THIS DRAWING SHALL BE INCLUDED UNDER ALTERNATE M-1

	MECHANICAL DEMO KEYNOTE LEGEND
D01	REMOVE SUPPLY, RETURN, EXHAUST AND OUTSIDE AIR DUCTWORK, INSULATION, DIFFUSERS, GRILLES, HANGERS AND ALL RELATED ACCESSORIES.
D21	SUPPLY, RETURN, EXHAUST, TRANSFER AIR, OUTSIDE AIR AND RELIEF DUCTWORK AND GRILLES TO REMAIN.
D23	EXHAUST FAN, DUCTWORK, DAMPERS, SUPPORTS AND ALL RELATED ACCESSORIES TO REMAIN.
D24	RELIEF HOOD, DUCTWORK, DAMPERS, ROOF CURB AND ALL RELATED ACCESSORIES TO REMAIN.
D34	ROOF MOUNTED AIR COOLED CHILLER, SUPPORTS, PIPING, CONTROLS AND ALL RELATED ACCESSORIES TO REMAIN.
D35	KITCHEN EXHAUST HOOD, SUPPORTS, DUCTWORK, CONTROLS AND ALL RELATED ACCESSORIES TO REMAIN.

NORTH

UNIT 'E' MECHANICAL DEMOLITION PLAN

1/8" = 1'-0"



NORTH

KEY PLAN

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

01.19.2023 ADDENDUM 002

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PROJECT NO. 5-5802

UNIT 'E' MECHANICAL DEMOLITION PLAN

M1.1E

BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 2/5-5802M 2019.rvt
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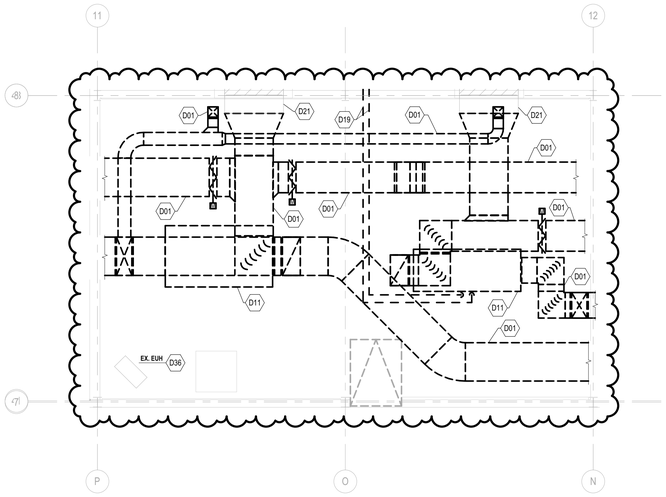
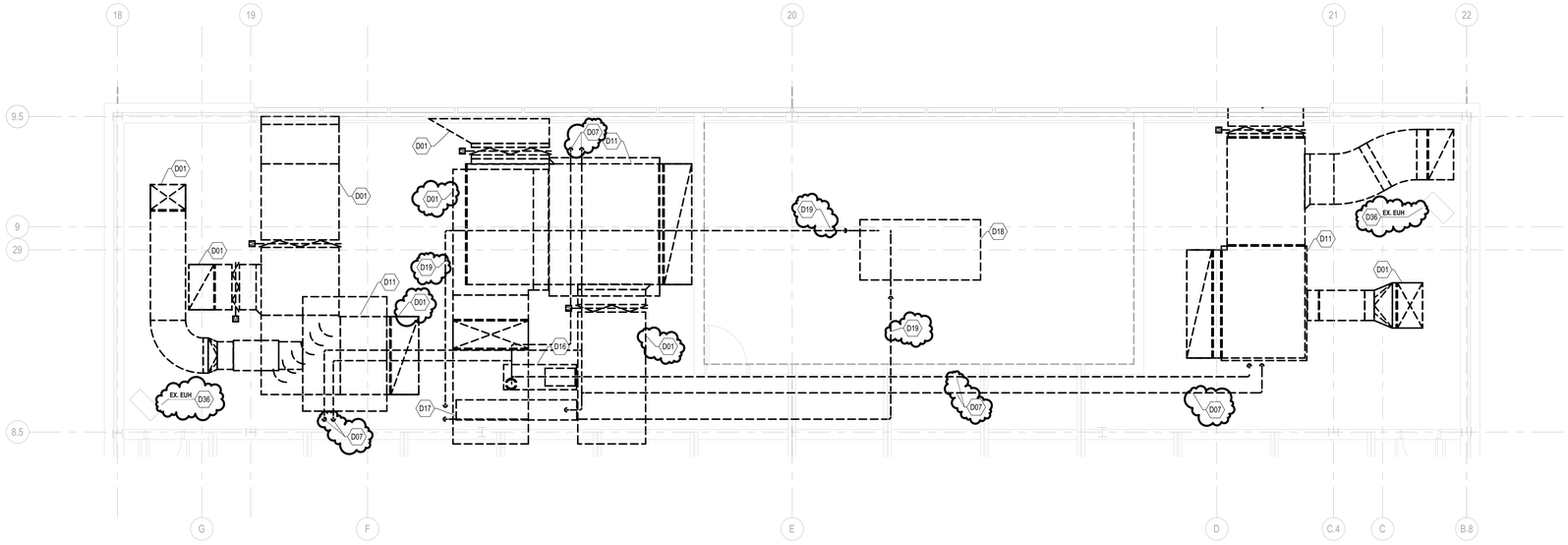


	MECHANICAL DEMO KEYNOTE LEGEND
D01	REMOVE SUPPLY, RETURN, EXHAUST AND OUTSIDE AIR DUCTWORK, INSULATION, DIFFUSERS, GRILLES, HANGERS AND ALL RELATED ACCESSORIES.
D07	REMOVE HOT WATER HEATING AND CHILLED GLYCOL SUPPLY AND RETURN PIPING, VALVES, INSULATION, SUPPORTS, AND ALL RELATED ACCESSORIES.
D11	REMOVE AIR HANDLING UNIT, DUCTWORK, PIPING, VALVES, SUPPORTS, CONTROLS, AND ALL RELATED ACCESSORIES.
D16	REMOVE CHILLED GLYCOL PUMP, PIPING, VALVES, CONTROLS AND ALL RELATED ACCESSORIES.
D17	REMOVE CHILLER EVAPORATOR SECTION, CHILLED GLYCOL, AND REFRIGERANT PIPING, VALVES, INSULATION, CONTROLS AND ALL RELATED ACCESSORIES.
D18	REMOVE CHILLER AIR COOLED CONDENSER, ROOF SUPPORT, REFRIGERANT PIPING, VALVES, INSULATION, CONTROLS AND ALL RELATED ACCESSORIES.
D19	REMOVE REFRIGERANT PIPING, VALVES, INSULATION, SUPPORTS AND ALL RELATED ACCESSORIES.
D21	SUPPLY, RETURN, EXHAUST, TRANSFER AIR, OUTSIDE AIR AND RELIEF DUCTWORK AND GRILLES TO REMAIN.
D36	ELECTRIC UNIT HEATER, SUPPORTS, CONTROLS AND ALL RELATED ACCESSORIES TO REMAIN.

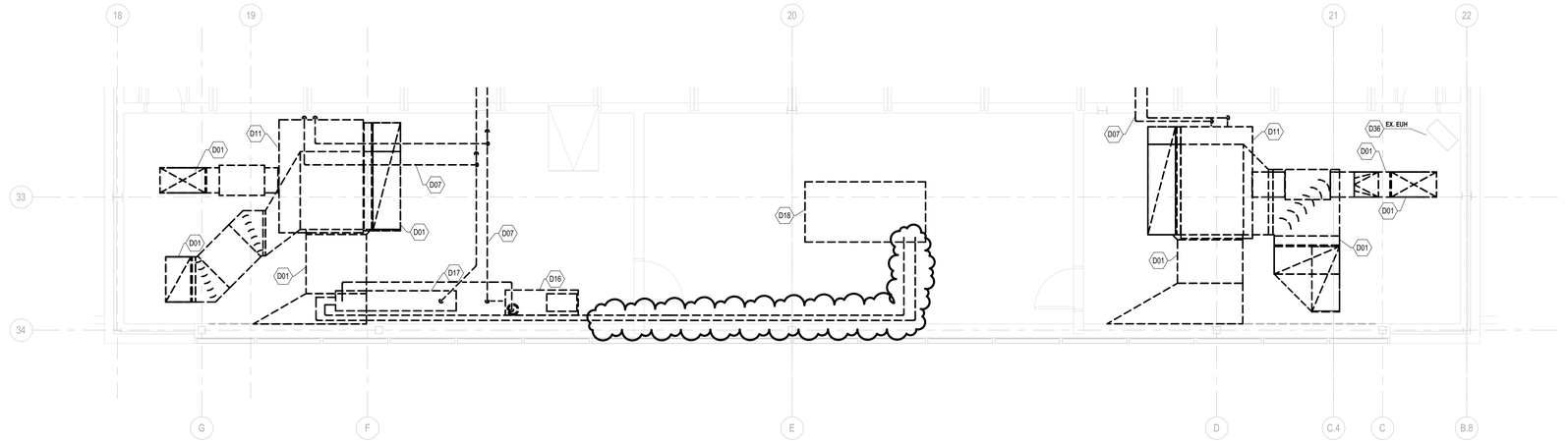
3 M1.80 ENLARGED UNIT 'C' MECHANICAL MEZZANINE DEMOLITION PLAN

1/4" = 1'-0"



2 M1.80 ENLARGED UNIT 'B' MECHANICAL MEZZANINE DEMOLITION PLAN

1/4" = 1'-0"



1 M1.80 ENLARGED UNIT 'A' MECHANICAL MEZZANINE DEMOLITION PLAN

1/4" = 1'-0"

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THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES	
12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

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PROJECT NO.	5-5802

ENLARGED MECHANICAL MEZZANINE DEMOLITION PLANS

M1.80

BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 2/5-5802M 2019.rvt
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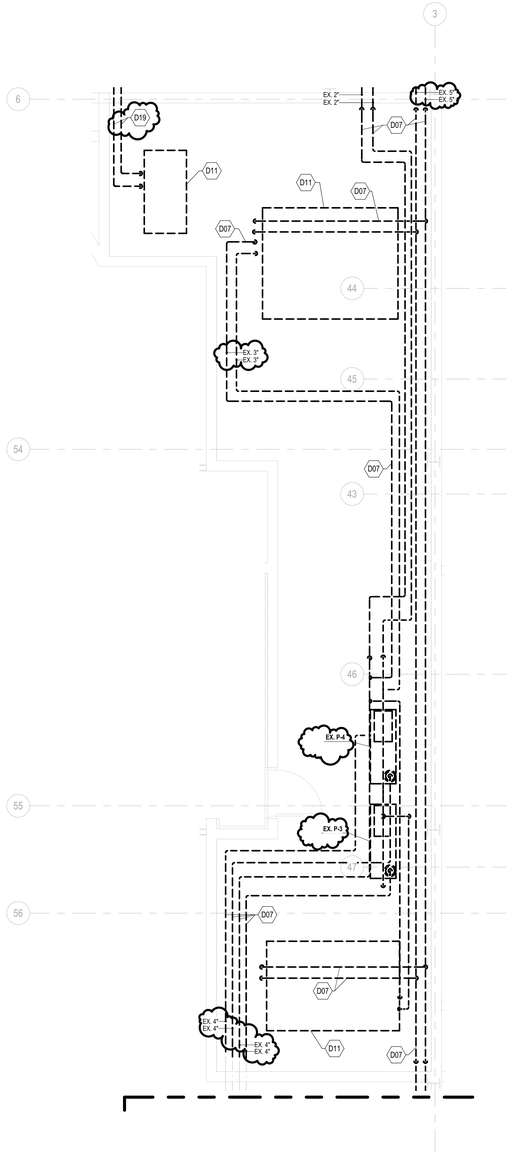
	MECHANICAL DEMO KEYNOTE LEGEND
D01	REMOVE SUPPLY, RETURN, EXHAUST AND OUTSIDE AIR DUCTWORK, INSULATION, DIFFUSERS, GRILLES, HANGERS AND ALL RELATED ACCESSORIES.
D07	REMOVE HOT WATER HEATING AND CHILLED GLYCOL SUPPLY AND RETURN PIPING, VALVES, INSULATION, SUPPORTS, AND ALL RELATED ACCESSORIES.
D11	REMOVE AIR HANDLING UNIT, DUCTWORK, PIPING, VALVES, SUPPORT, CONTROLS, AND ALL RELATED ACCESSORIES.
D19	REMOVE REFRIGERANT PIPING, VALVES, INSULATION, SUPPORTS AND ALL RELATED ACCESSORIES.
D21	SUPPLY, RETURN, EXHAUST, TRANSFER AIR, OUTSIDE AIR AND RELIEF DUCTWORK AND GRILLES TO REMAIN.
D37	REMOVE EXISTING 132"W x 60"H OUTSIDE AIR INTAKE LOUVER TO INSTALL NEW AIR HANDLING UNITS INTO MECHANICAL MEZZANINE. REINSTALL LOUVER IN EXISTING WALL OPENING, SEAL ALL JOINTS AND RECONNECT OUTSIDE AIR INTAKE DUCTWORK AFTER NEW AIR HANDLING UNITS ARE INSTALLED. THIS WORK SHALL BE INCLUDED UNDER ALTERNATE M-1.

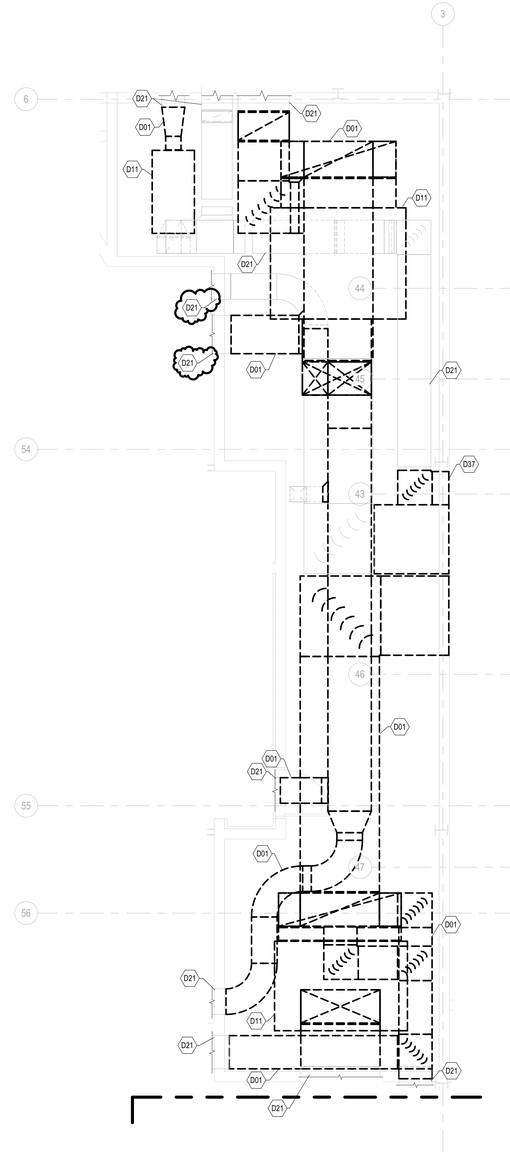


2 M1.81 ENLARGED UNIT 'D' MECHANICAL MEZZANINE HYDRONIC DEMOLITION PLAN

1/4" = 1'-0"

ALL AIR HANDLING UNIT DEMOLITION WORK INCLUDING DUCTWORK, VAV BOXES, PIPING, CONTROLS, AND ALL RELATED ACCESSORIES SHALL BE INCLUDED UNDER ALTERNATE M-1.

ALL HOT WATER HEATING PIPING SYSTEM DEMOLITION WORK INCLUDING PIPING, INSULATION, HANGERS, VALVES, AND RELATED ACCESSORIES SHOWN ON THIS DRAWING SHALL BE INCLUDED UNDER BASE BID. ALL CHILLED GLYCOL PIPING SYSTEM DEMOLITION WORK INCLUDING PUMPS, PIPING, INSULATION, HANGERS, VALVES AND RELATED ACCESSORIES SHOWN ON THIS DRAWING SHALL BE INCLUDED UNDER ALTERNATE M-1



1 M1.81 ENLARGED UNIT 'D' MECHANICAL MEZZANINE HVAC DEMOLITION PLAN

1/4" = 1'-0"

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THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

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PROJECT NO.	5-5802

ENLARGED MECHANICAL DEMOLITION PLANS

M1.81

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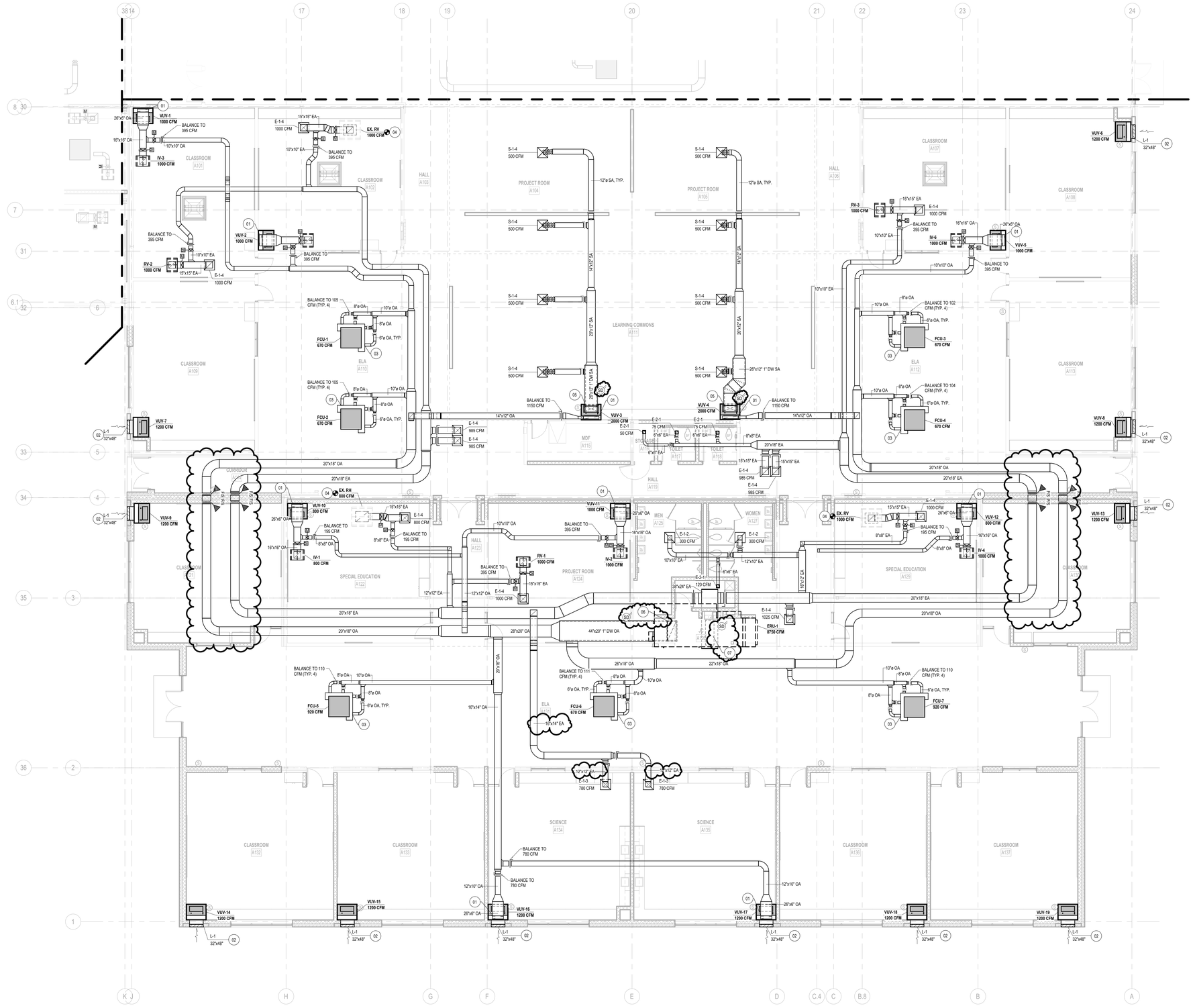


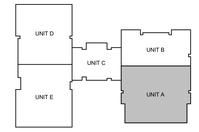
MECHANICAL KEYNOTE LEGEND

01	ROUTE OUTSIDE AIR DUCTWORK DOWN AND CONNECT TO TOP OF VERTICAL UNIT VENTILATOR OUTSIDE AIR INTAKE PLENUM.
02	REFER TO ARCHITECTURAL DRAWINGS FOR LOUVER MOUNTING HEIGHT.
03	PROVIDE AND INSTALL OUTSIDE AIR DUCTWORK PLENUM AROUND FAN COIL UNIT. REFER TO FAN COIL UNIT OUTSIDE AIR PLENUM DETAIL 15/M7.01.
04	ROUTE RELIEF AIR DUCTWORK UP TO EXISTING RELIEF HOOD ON ROOF. TRANSITION TO HOOD THROAT SIZE.
05	1" DOUBLEWALL SUPPLY AIR DUCTWORK DOWN TO UNIT VENTILATOR SUPPLY AIR OPENING. TRANSITION TO UNIT SUPPLY AIR CONNECTION SIZE.
06	1" DOUBLEWALL OUTSIDE AIR DUCTWORK UP TO ENERGY RECOVERY UNIT. TRANSITION TO UNIT OUTSIDE AIR CONNECTION SIZE. PROVIDE AND INSTALL FLEXIBLE DUCTWORK CONNECTION AT OUTSIDE DUCTWORK CONNECTION TO ENERGY RECOVERY UNIT.
07	1" DOUBLEWALL EXHAUST AIR DUCTWORK UP TO ENERGY RECOVERY UNIT. TRANSITION TO UNIT EXHAUST AIR CONNECTION SIZE. PROVIDE AND INSTALL FLEXIBLE DUCTWORK CONNECTION AT EXHAUST DUCTWORK CONNECTION TO ENERGY RECOVERY UNIT.

NORTH

UNIT 'A' HVAC PLAN

1/8" = 1'-0"



NORTH

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

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THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	RTF
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PROJECT NO.	5-5802

UNIT 'A' HVAC PLAN

M2.1A

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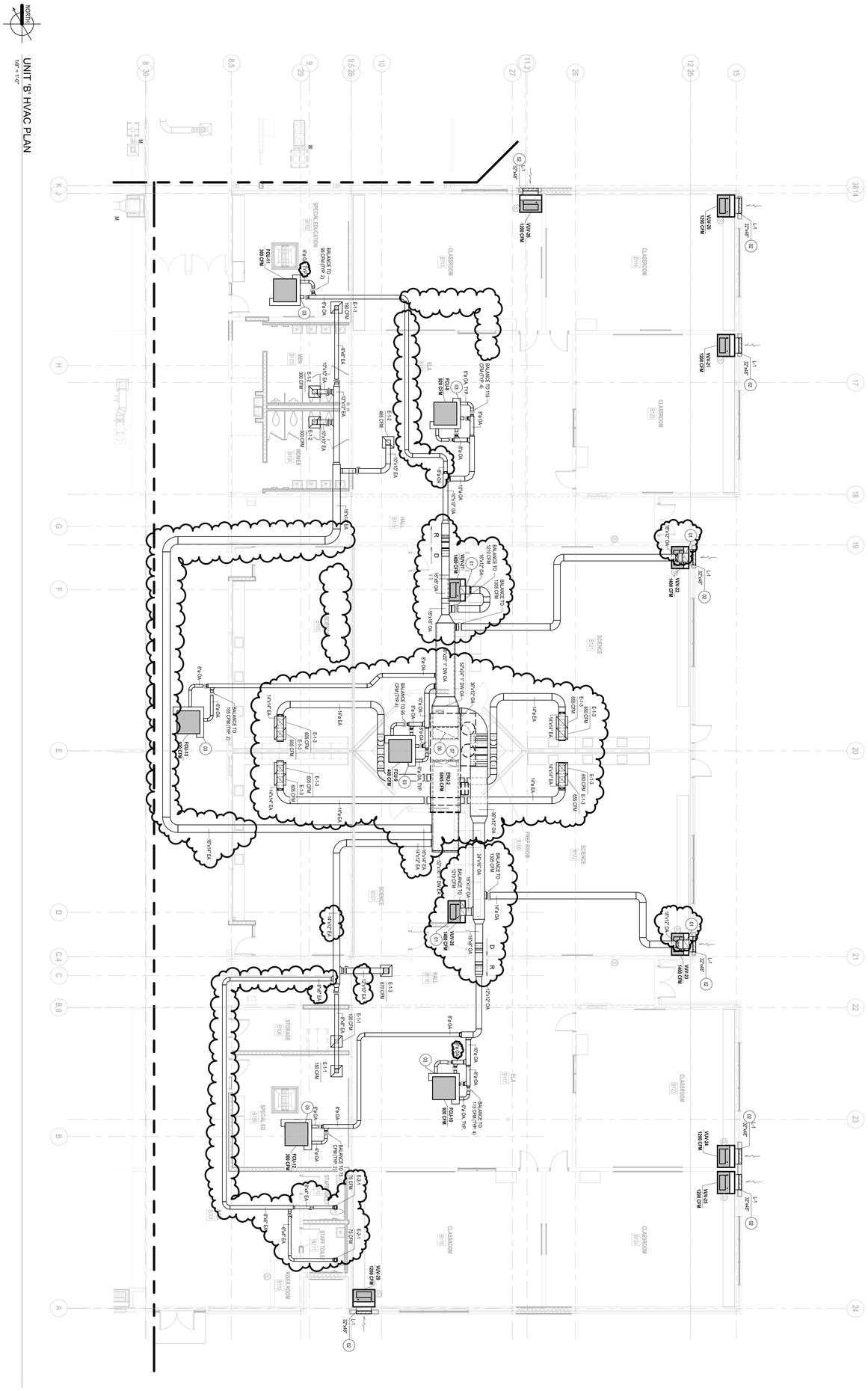

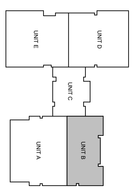

THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

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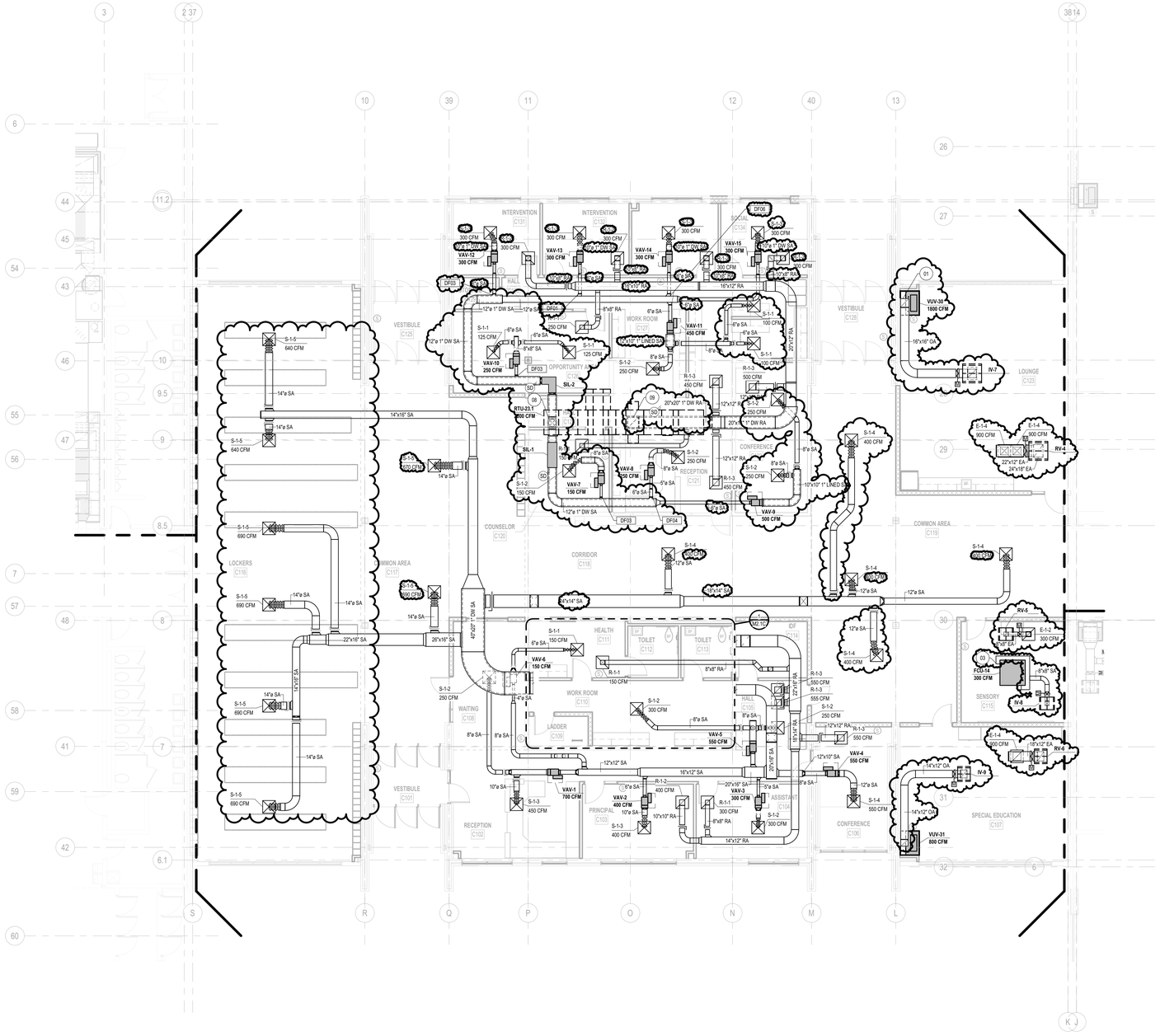
PROJECT NO. 5-5802

UNIT 'B' HVAC PLAN

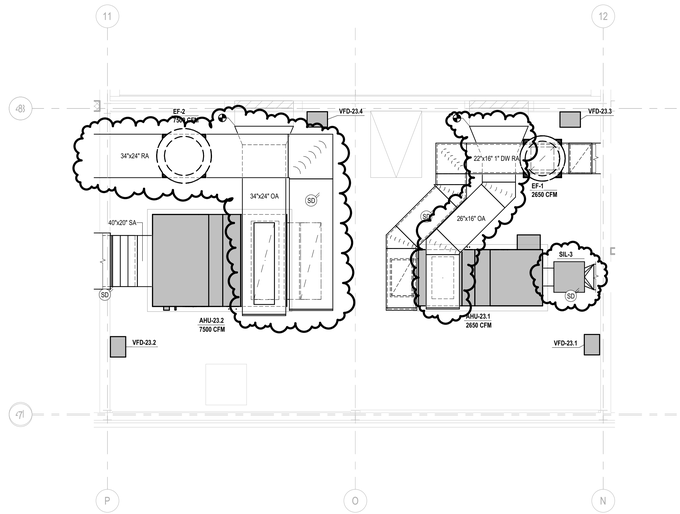
M2.1B



NORTH

UNIT 'C' HVAC PLAN

1/8" = 1'-0"



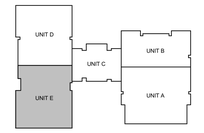
1 / M2.1C ENLARGED UNIT 'C' MECHANICAL MEZZANINE PLAN

1/4" = 1'-0"

	DUCT FITTING LEGEND
DF01	SRT - SINGLE WALL/ROUND/LO-LOSS TEE
DF03	KRTL - DOUBLE WALL/ROUND/LO-LOSS TEE
DF04	KRTLR - DOUBLE WALL/ROUND/REDUCING/LO-LOSS TEE
DF06	SRTC - SINGLE WALL/ROUND/CONICAL TEE

SUPPLY DUCTWORK FROM VAV BOX CONNECTION TO 10'-0" DOWNSTREAM OF BOX SHALL BE SINGLE WALL ROUND WITH 1" DUCT LINER AND PERFORATED INTERNAL METAL WALL.

	MECHANICAL KEYNOTE LEGEND
01	ROUTE OUTSIDE AIR DUCTWORK DOWN AND CONNECT TO TOP OF VERTICAL UNIT VENTILATOR OUTSIDE AIR INTAKE PLENUM.
03	PROVIDE AND INSTALL OUTSIDE AIR DUCTWORK PLENUM AROUND FAN COIL UNIT; REFER TO FAN COIL UNIT OUTSIDE AIR PLENUM DETAIL 15/M7.01
08	1" DOUBLEWALL SUPPLY AIR DUCTWORK UP TO ROOFTOP UNIT. TRANSITION TO UNIT SUPPLY AIR CONNECTION SIZE. PROVIDE AND INSTALL FLEXIBLE DUCTWORK CONNECTION AT SUPPLY DUCTWORK CONNECTION TO ROOFTOP UNIT.
09	16 GA. 1" DOUBLEWALL RETURN AIR DUCTWORK UP TO ROOFTOP UNIT. TRANSITION TO UNIT RETURN AIR CONNECTION SIZE. PROVIDE AND INSTALL FLEXIBLE DUCTWORK CONNECTION AT RETURN DUCTWORK CONNECTION TO ROOFTOP UNIT.



NORTH

KEY PLAN

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

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12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

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UNIT 'C' HVAC PLAN

M2.1C

BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 2/5-5802M 2019.rvt
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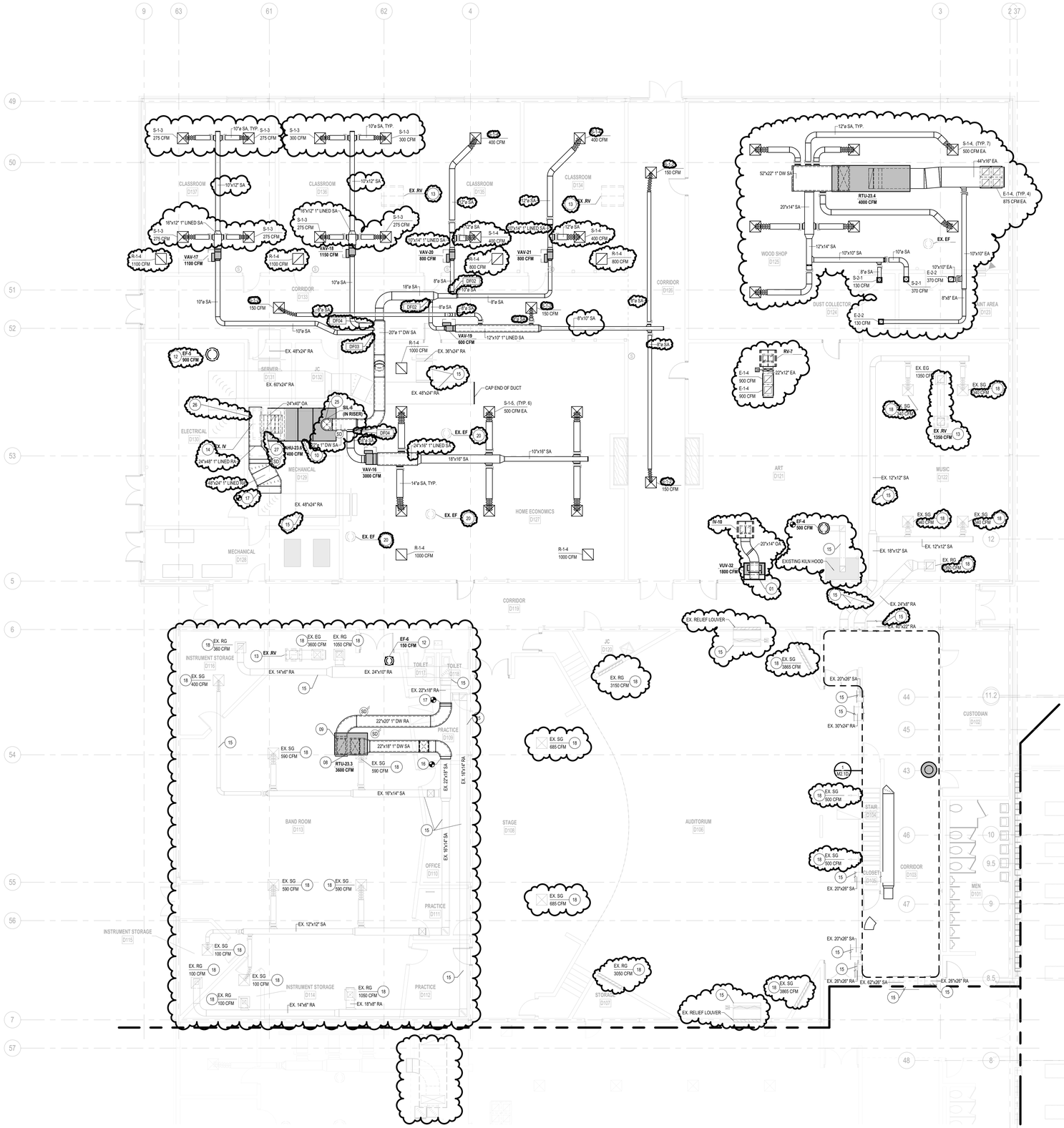
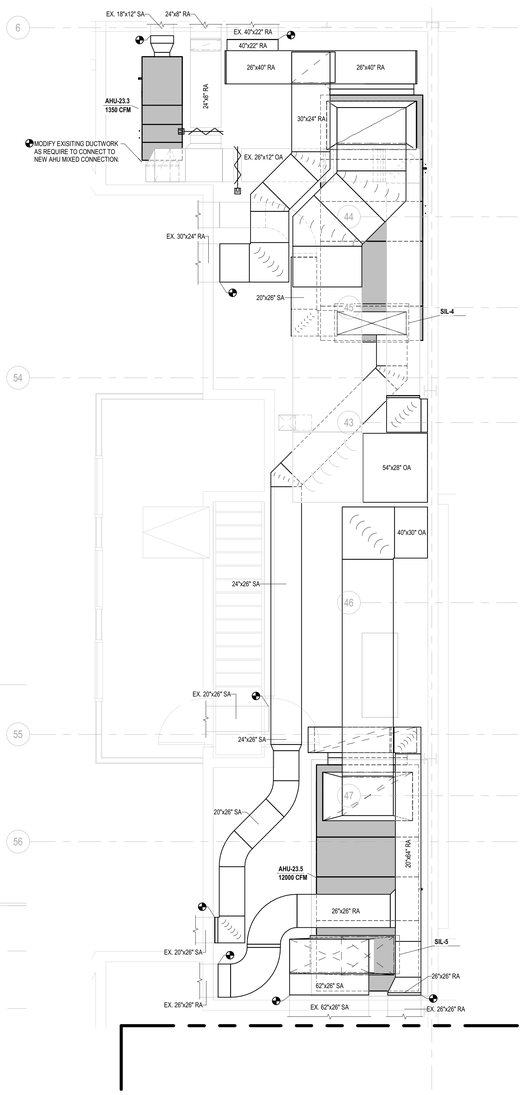




1 M2.1D ENLARGED UNIT 'D' MECHANICAL MEZZANINE HVAC PLAN

1/4" = 1'-0"

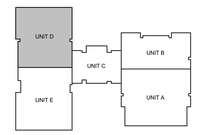
ALL MECHANICAL WORK SHOWN ON THIS DRAWING SHALL BE INCLUDED UNDER ALTERNATE M-1

MECHANICAL KEYNOTE LEGEND

01	ROUTE OUTSIDE AIR DUCTWORK DOWN AND CONNECT TO TOP OF VERTICAL UNIT VENTILATOR OUTSIDE AIR INTAKE PLENUM.
08	1" DOUBLEWALL SUPPLY AIR DUCTWORK UP TO ROOFTOP UNIT, TRANSITION TO UNIT SUPPLY AIR CONNECTION SIZE. PROVIDE AND INSTALL FLEXIBLE DUCTWORK CONNECTION AT SUPPLY DUCTWORK CONNECTION TO ROOFTOP UNIT.
09	16 GA. 1" DOUBLEWALL RETURN AIR DUCTWORK UP TO ROOFTOP UNIT. TRANSITION TO UNIT RETURN AIR CONNECTION SIZE. PROVIDE AND INSTALL FLEXIBLE DUCTWORK CONNECTION AT RETURN DUCTWORK CONNECTION TO ROOFTOP UNIT.
10	INSTALL AIR HANDLING UNIT ON CONCRETE HOUSEKEEPING PAD WITH NEOPRENE VIBRATION ISOLATION PADS INSTALLED UNDER ENTIRE PERIMETER OF UNIT SUPPORT RAIL.
12	INSTALL NEW EXHAUST FAN AND ROOF CURB ON EXISTING ROOF OPENING. RECONNECT TO EXISTING EXHAUST DUCTWORK AS REQUIRED.
13	EXISTING RELIEF HOOD.
14	EXISTING OUTSIDE AIR INTAKE HOOD.
15	EXISTING SUPPLY, OUTSIDE, EXHAUST, TRANSFER AND RETURN AIR DUCTWORK.
16	CONNECT NEW SUPPLY AIR DUCTWORK TO EXISTING AND ROUTE AS SHOWN.
17	CONNECT NEW RETURN AIR DUCTWORK TO EXISTING AND ROUTE AS SHOWN.
18	BALANCE EXISTING SUPPLY DIFFUSER, RETURN GRILLE OR EXHAUST GRILLE TO NEW AIRFLOW AS SHOWN.
20	EXISTING EXHAUST FAN.
26	1" DOUBLEWALL RETURN AIR DUCTWORK DOWN TO AIR HANDLING UNIT. TRANSITION TO UNIT RETURN AIR CONNECTION SIZE. PROVIDE AND INSTALL FLEXIBLE DUCTWORK CONNECTION AT RETURN AIR DUCTWORK CONNECTION TO AIR HANDLING UNIT.
27	OUTSIDE AIR DUCTWORK DOWN TO AIR HANDLING UNIT. TRANSITION TO UNIT OUTSIDE AIR CONNECTION SIZE. PROVIDE AND INSTALL FLEXIBLE DUCTWORK CONNECTION AT OUTSIDE AIR DUCTWORK CONNECTION TO AIR HANDLING UNIT.

DUCT FITTING LEGEND

DF02	SRTR - SINGLE WALL/ROUND/REDUCING/LO-LOSS TEE
DF03	KRTL - DOUBLE WALL/ROUND/LO-LOSS TEE
DF04	KRTLR - DOUBLE WALL/ROUND/REDUCING/LO-LOSS TEE



NORTH KEY PLAN

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

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ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	RTF
REVIEWED	JBH
PROJECT NO.	5-5802

UNIT 'D' HVAC PLAN

M2.1D

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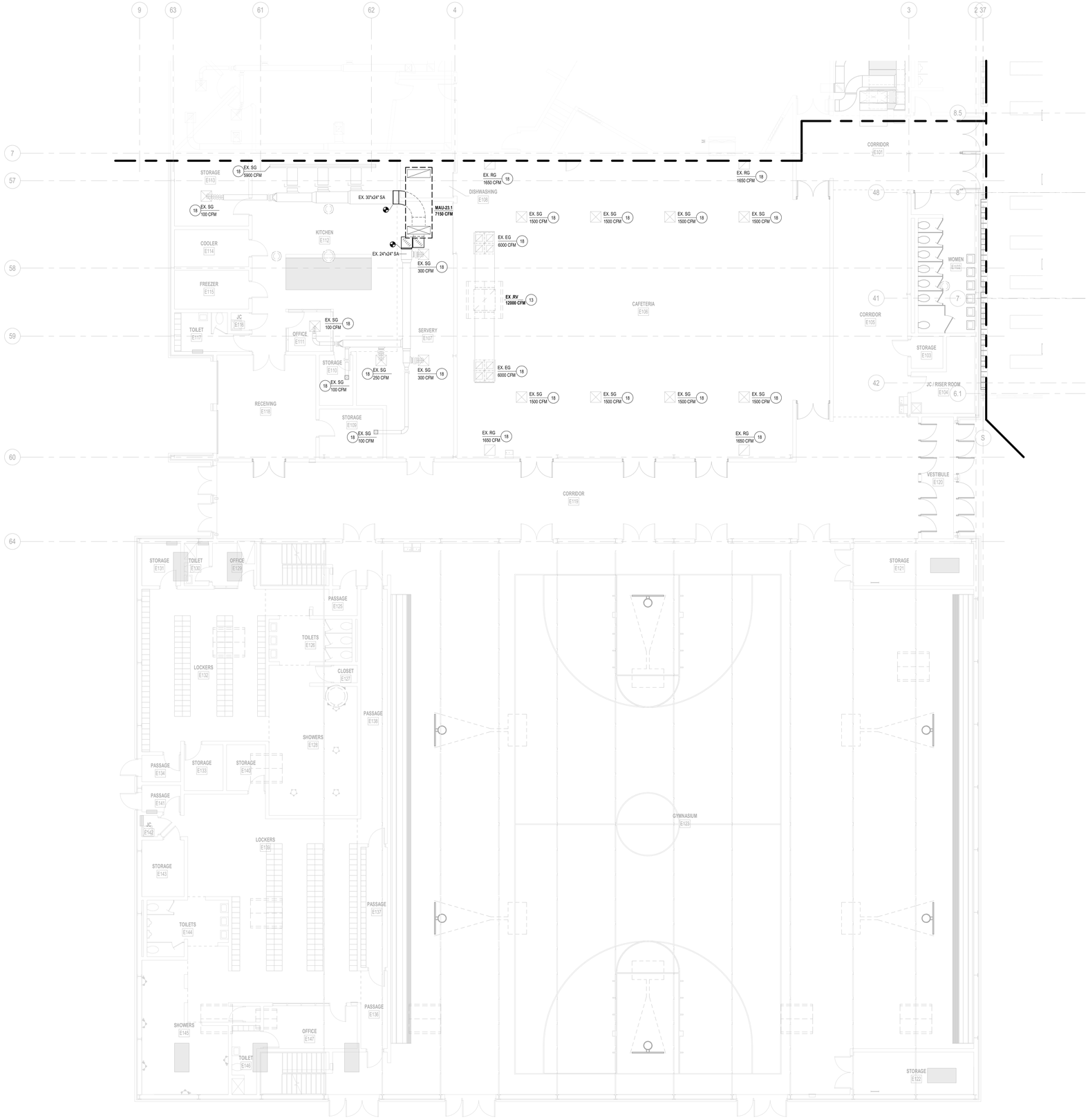


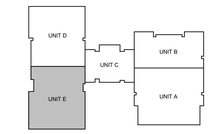
MECHANICAL KEYNOTE LEGEND	
13	EXISTING RELIEF HOOD.
18	BALANCE EXISTING SUPPLY DIFFUSER, RETURN GRILLE OR EXHAUST GRILLE TO NEW AIRFLOW AS SHOWN.

ALL MECHANICAL WORK SHOWN ON THIS DRAWING SHALL BE INCLUDED UNDER ALTERNATE M-1

NORTH

UNIT 'E' HVAC PLAN

1/8" = 1'-0"



NORTH

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

01.19.2023 ADDENDUM 002

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PROJECT NO. 5-5802

UNIT 'E' HVAC PLAN

M2.1E

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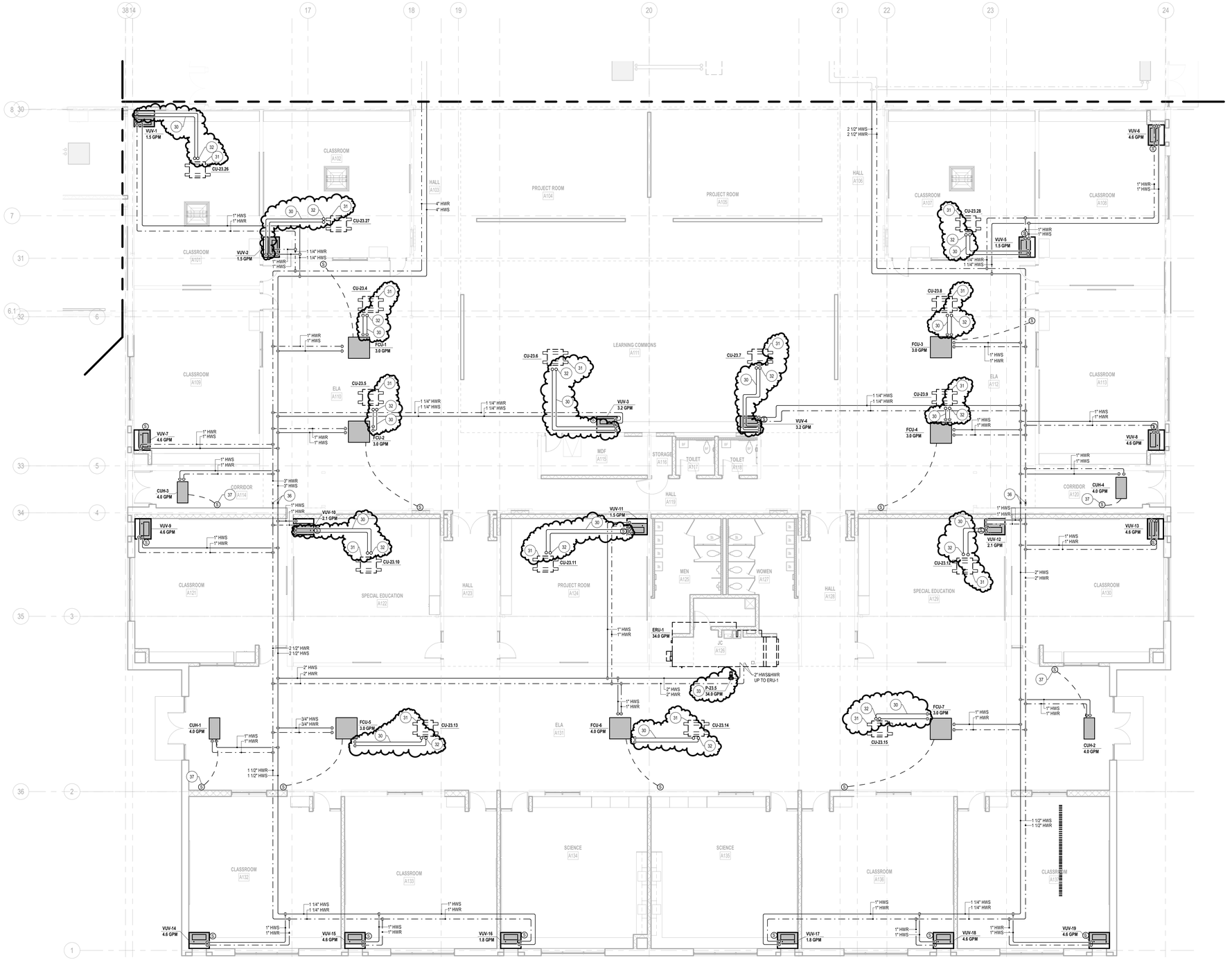
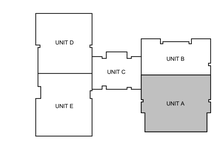


	MECHANICAL KEYNOTE LEGEND
30	ROUTE AND SIZE REFRIGERANT PIPING PER EQUIPMENT MANUFACTURERS RECOMMENDATIONS.
31	INSTALL NEW AIR COOLED CONDENSING UNIT ON ROOF EQUIPMENT SUPPORT CURBS, SPAN A MINIMUM OF TWO (2) ROOF JOISTS.
32	REFRIGERANT PIPING UP THROUGH ROOF PIPE PORTAL. SEAL ALL PENETRATIONS WATERTIGHT.
33	REFER TO PUMPED COIL 3-WAY VALVE PIPING DETAIL 4/M7.02.
36	PIPE ANCHORS, TYPICAL.
37	FLAT PLATE TEMPERATURE SENSOR.

NORTH

UNIT 'A' HYDRONIC PLAN

1/8" = 1'-0"



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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

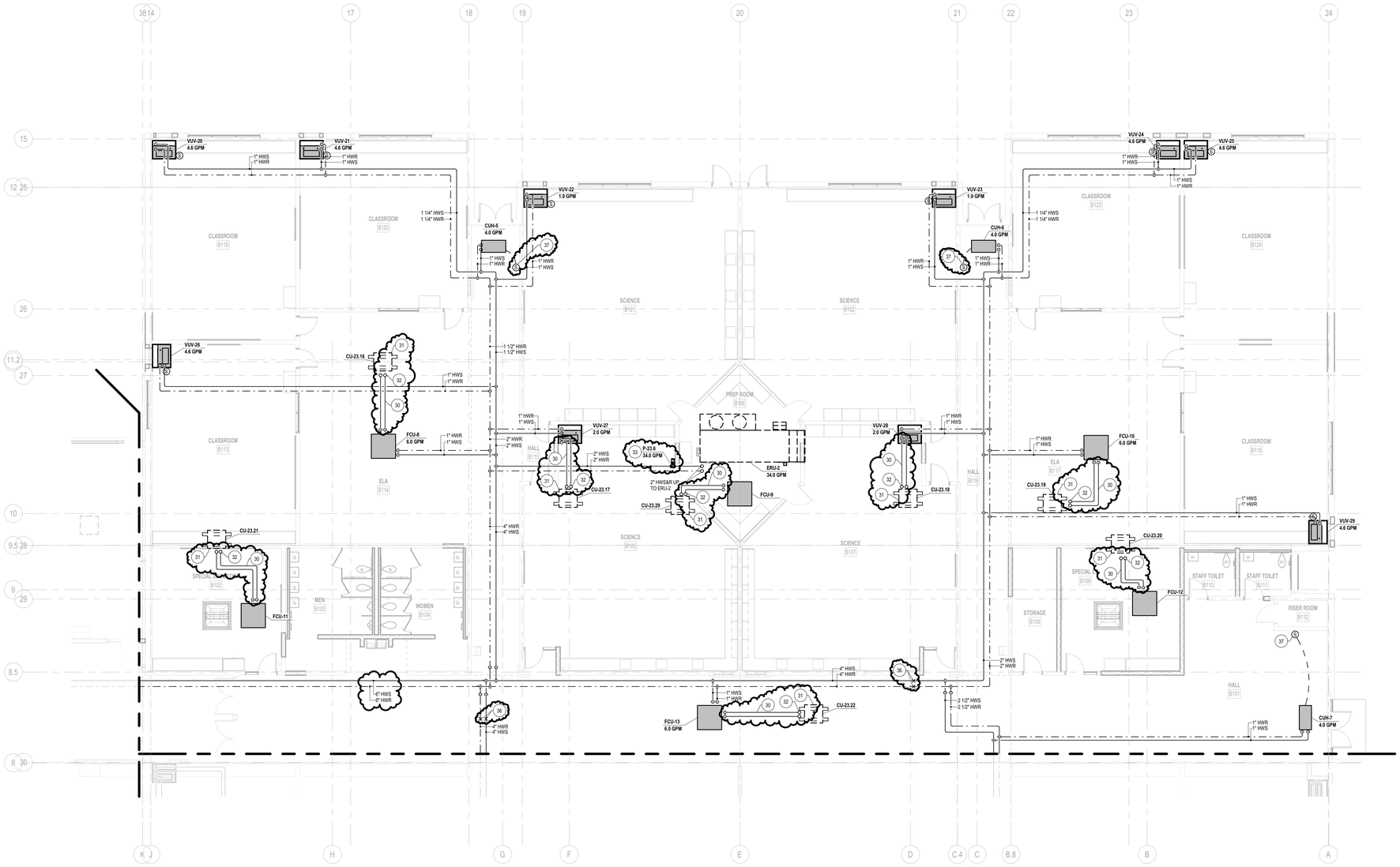
12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	RTF
REVIEWED	JBH
PROJECT NO.	5-5802

UNIT 'A' HYDRONIC PLAN

M3.1A

BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 215-5802M 2019.rvt
1/19/2023 10:30:58 AM



NORTH

UNIT 'B' HYDRONIC PLAN

1/8" = 1'-0"

	MECHANICAL KEYNOTE LEGEND
30	ROUTE AND SIZE REFRIGERANT PIPING PER EQUIPMENT MANUFACTURERS RECOMMENDATIONS.
31	INSTALL NEW AIR COOLED CONDENSING UNIT ON ROOF EQUIPMENT SUPPORT CURBS, SPAN A MINIMUM OF TWO (2) ROOF JOISTS.
32	REFRIGERANT PIPING UP THROUGH ROOF PIPE PORTAL. SEAL ALL PENETRATIONS WATERTIGHT.
33	REFER TO PUMPED COIL 3-WAY VALVE PIPING DETAIL 4/M7.02.
36	PIPE ANCHORS, TYPICAL.
37	FLAT PLATE TEMPERATURE SENSOR.

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THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

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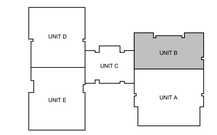
REVIEWED	JBH
PROJECT NO.	5-5802

UNIT 'B' HYDRONIC PLAN

M3.1B



NORTH

KEY PLAN

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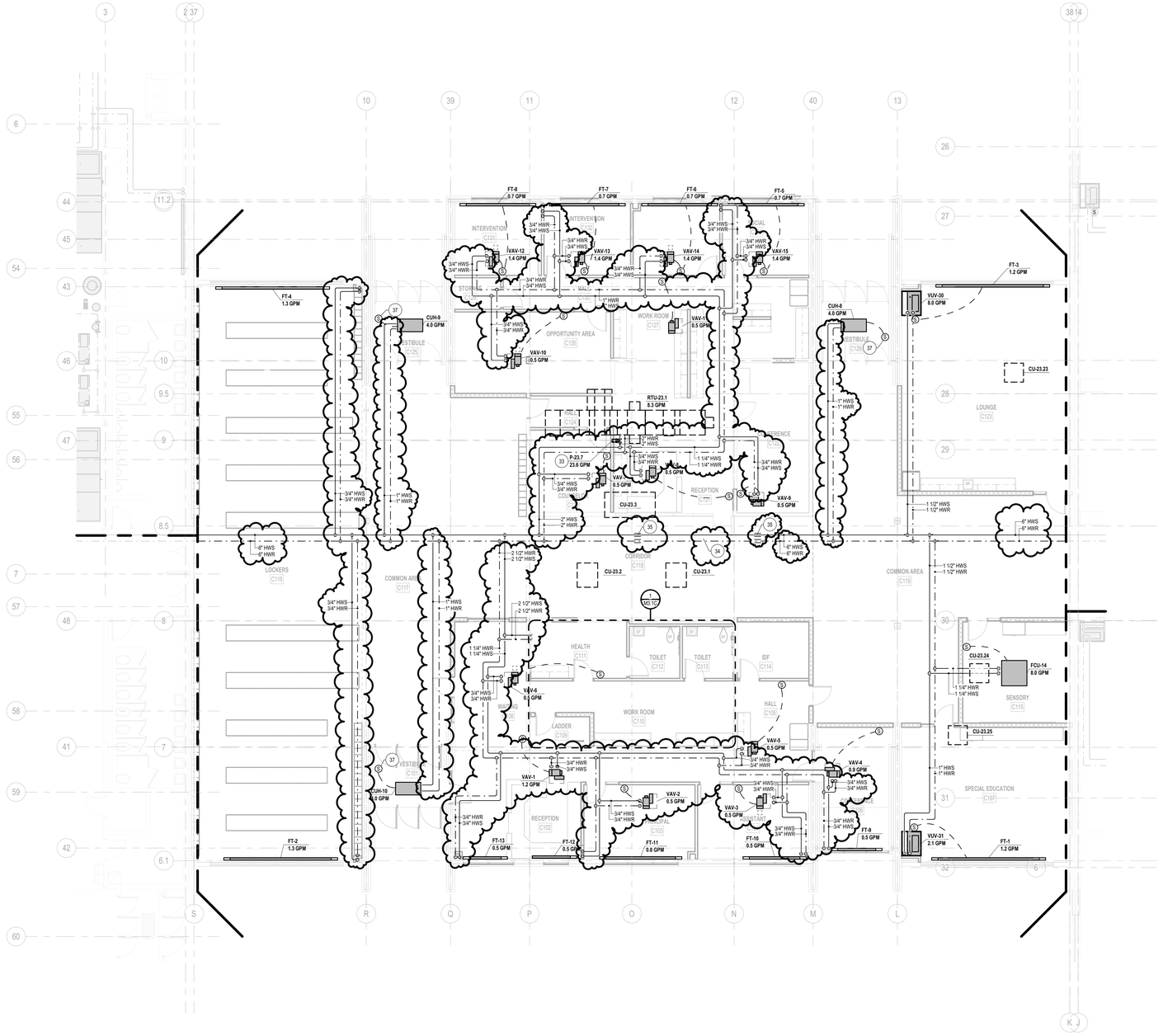
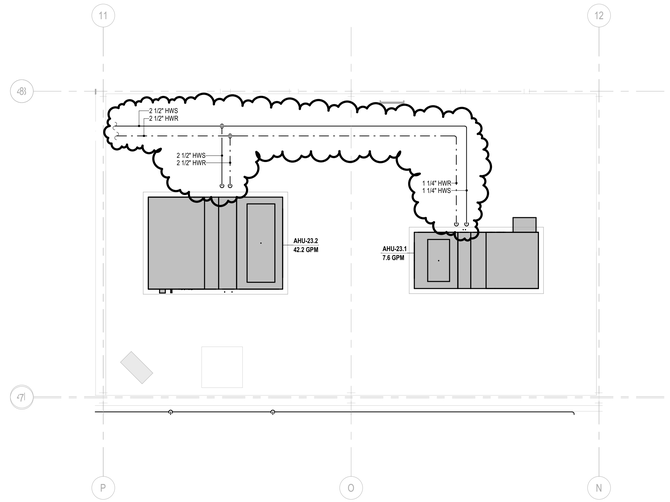
1/19/2023 10:31:05 AM



NORTH

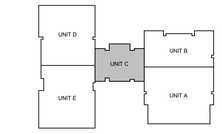
UNIT 'C' HYDRONIC PLAN

1/8" = 1'-0"



1 M3.1C ENLARGED UNIT 'C' MEZZANINE HYDRONIC PLAN

1/4" = 1'-0"



NORTH

KEY PLAN

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

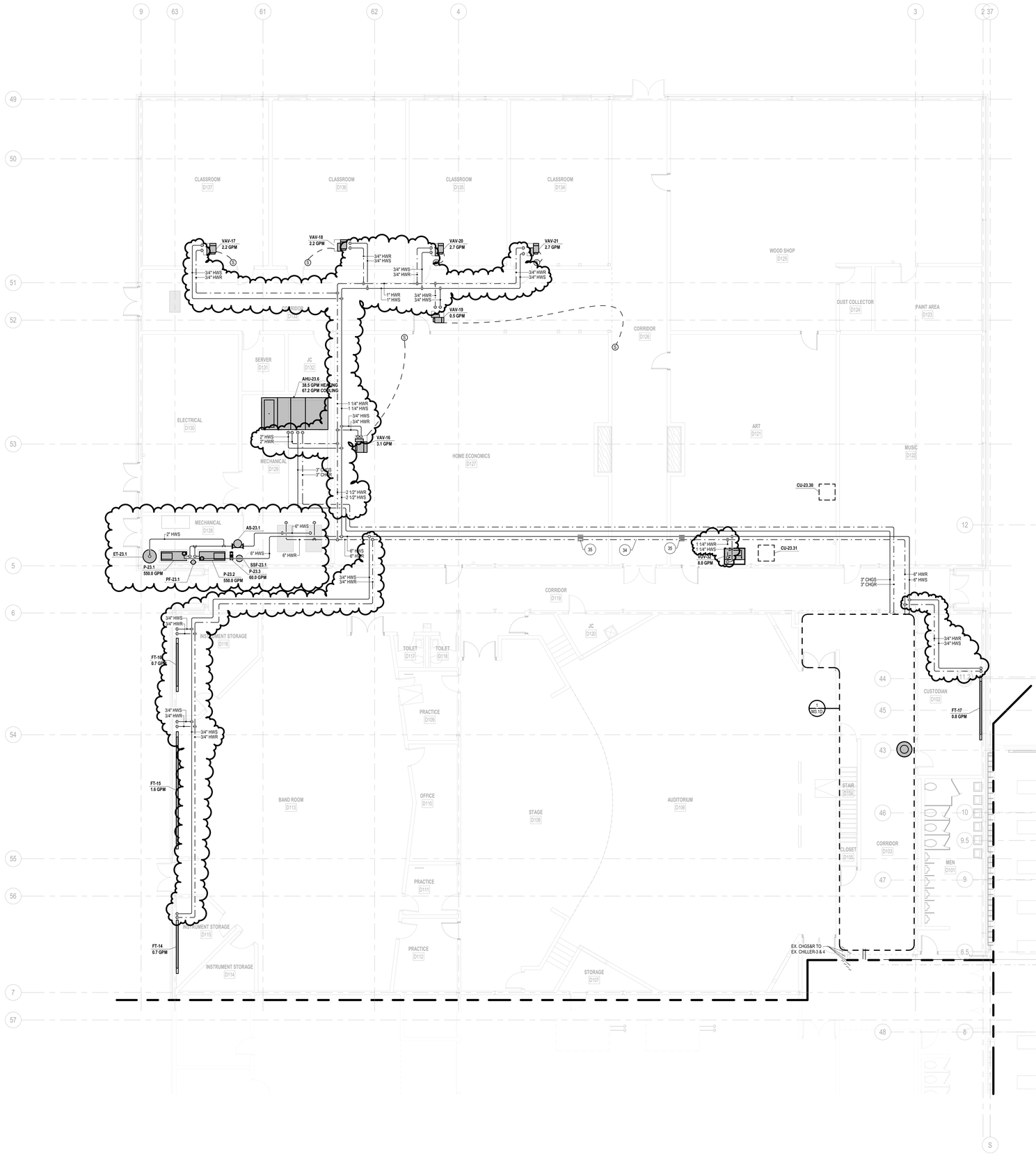
12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

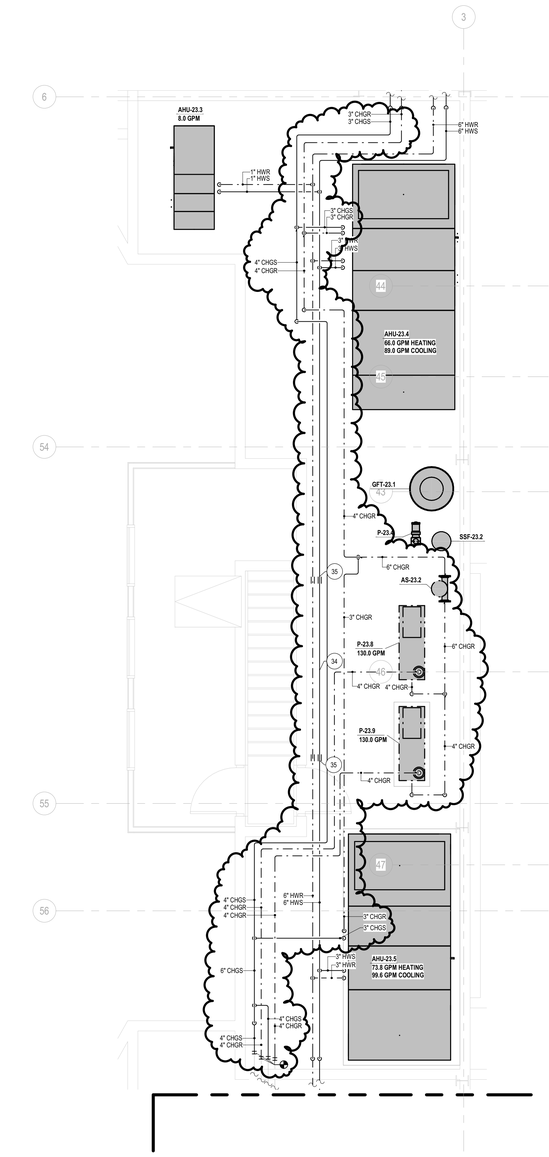
DRAWN	RTF
REVIEWED	JBH
PROJECT NO.	5-5802

UNIT 'C' HYDRONIC PLAN

M3.1C

BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 2/5-5802M 2019.rvt
1/19/2023 10:31:12 AM





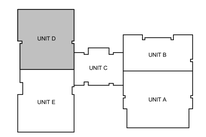
1 M3.1D ENLARGED UNIT 'D' MECHANICAL MEZZANINE HYDRONIC PLAN
1/4" = 1'-0"

ALL NEW HOT WATER HEATING PIPING SYSTEM WORK INCLUDING CONNECTIONS TO EXISTING BOILERS, PIPING, INSULATION HANGERS, VALVES, NEW HEATING EQUIPMENT AND ALL RELATED ACCESSORIES SHOWN ON THIS DRAWING SHALL BE INCLUDED UNDER BASE BID. NEW HOT WATER HEATING PIPING WORK SHALL INCLUDE CONNECTIONS TO EXISTING AIR HANDLING UNIT HOT WATER HEATING COILS THAT SERVE THE AUDITORIUM, CAFETERIA AND EAST CLASSROOMS LOCATED IN UNIT D IF ALTERNATE M-1 IS NOT ACCEPTED.

ALL NEW CHILLED GLYCOL PIPING SYSTEM WORK INCLUDING PUMPS, PIPING, INSULATION, HANGERS, VALVES, NEW CHILLED GLYCOL SYSTEM EQUIPMENT AND ALL RELATED ACCESSORIES SHOWN ON THIS DRAWING SHALL BE INCLUDED UNDER ALTERNATE M-1

NORTH

UNIT 'D' HYDRONIC PLAN
1/8" = 1'-0"



NORTH KEY PLAN

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THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	RTF
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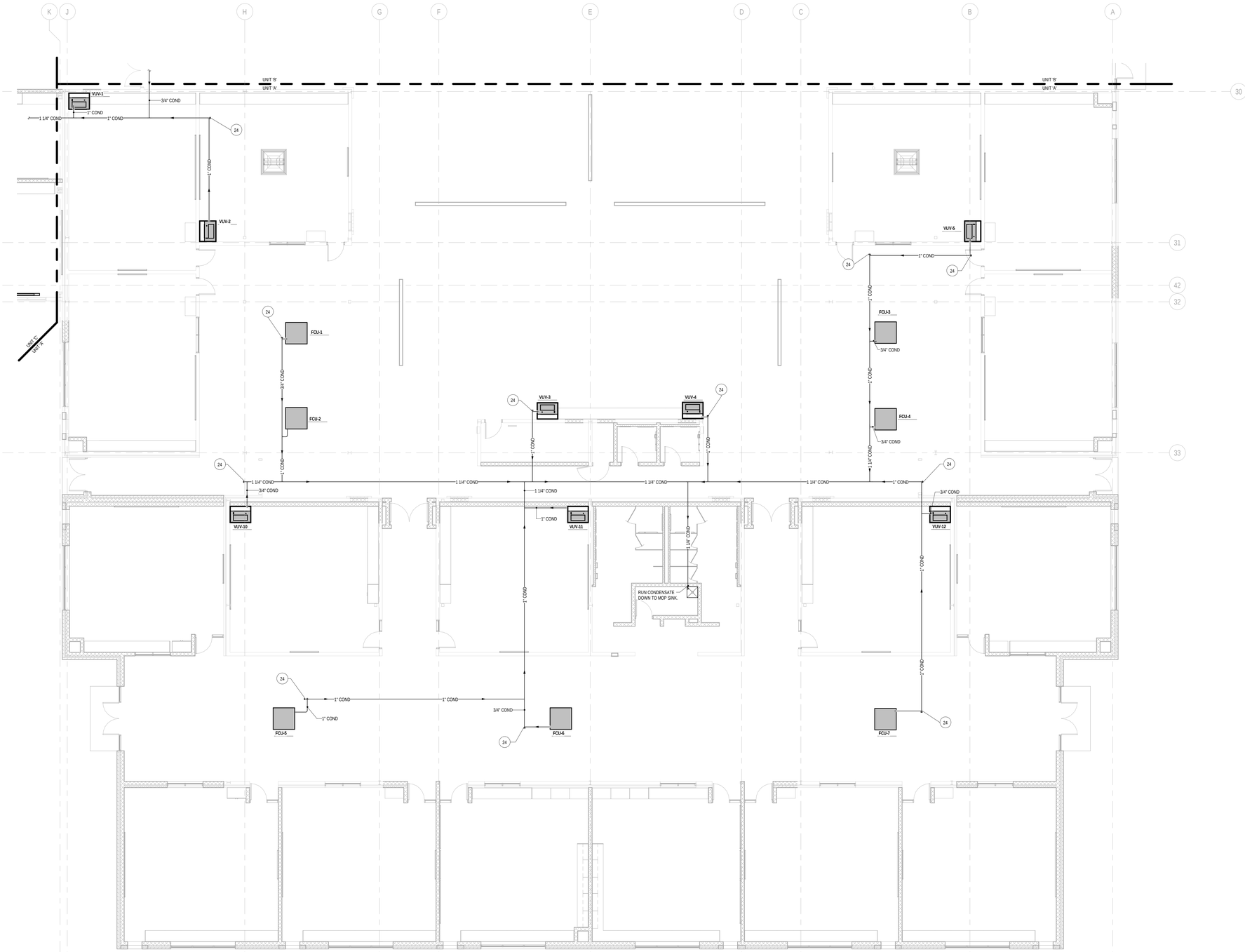
PROJECT NO.	5-5802

UNIT 'D' HYDRONIC PLAN

M3.1D

BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 2I5-5802M 2019.rvt
1/19/2023 10:31:19 AM

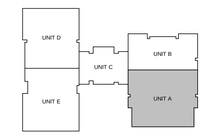
	MECHANICAL KEYNOTE LEGEND
24	INSTALL THREADED CLEANOUT.



NORTH

UNIT 'A' MECHANICAL PIPING PLAN

1/8" = 1'-0"



NORTH

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THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

01.19.2023	ADDENDUM 002

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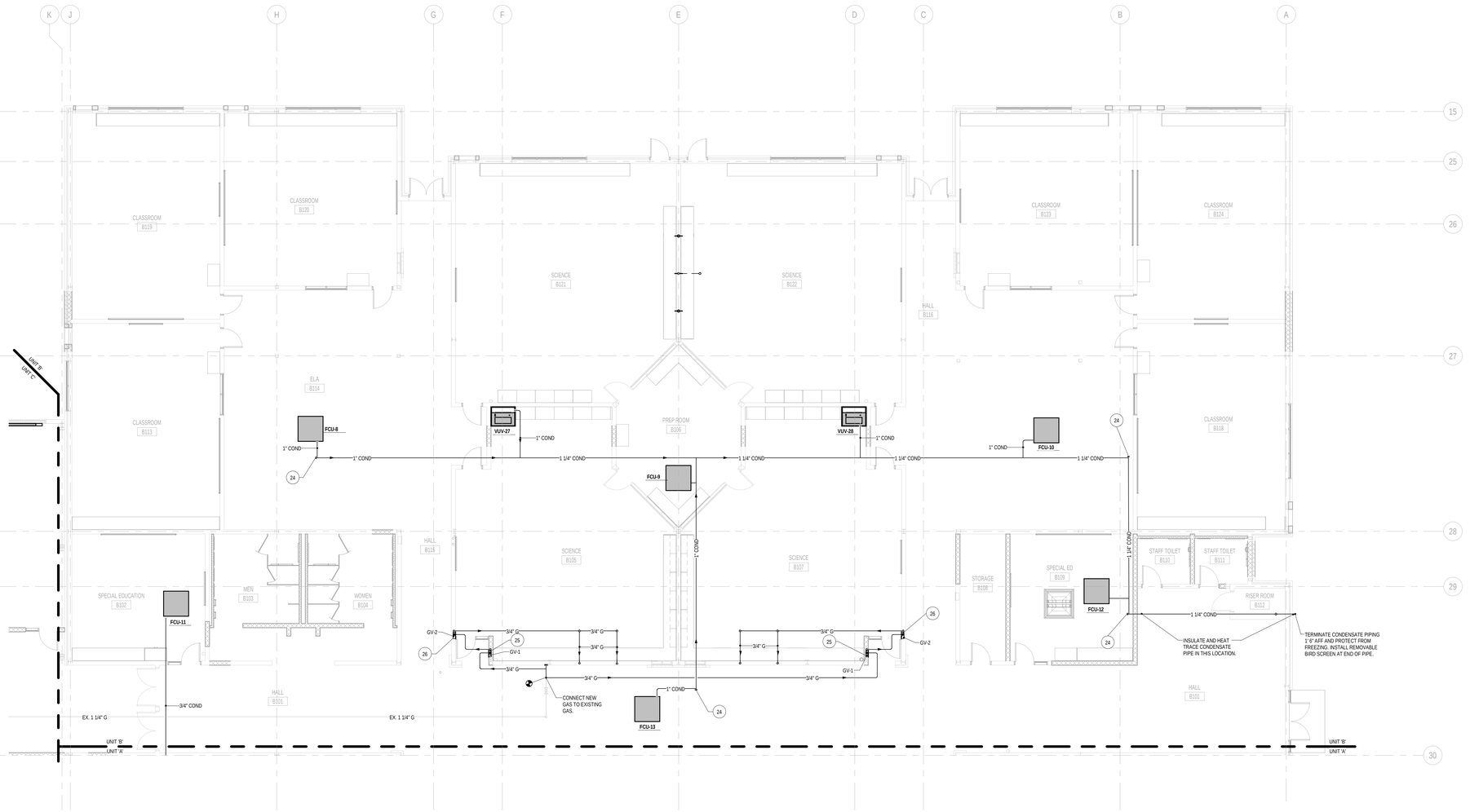
REVIEWED	JBH
PROJECT NO.	5-5802

UNIT 'A' MECHANICAL PIPING PLAN

M4.1A

	MECHANICAL KEYNOTE LEGEND
24	INSTALL THREADED CLEANOUT.
25	GV-1 (CORRIDOR) FURNISH AND INSTALL GAS SHUT OFF VALVE WITH MIFAB SERIES MFRU WALL MOUNT CABINET (12" x12" MIN) WITH TURN RING OPERATOR. MOUNT CENTERLINE OF VALVE AT 48" AFF. COORD WITH OTHER TRADES.
26	GV-2 (INSIDE ROOM) FURNISH AND INSTALL GAS SHUT OFF VALVE WITH MIFAB SERIES MFRU WALL MOUNTED CABINET (12" x12" MIN) WITH TURN RING OPERATOR. MOUNT CENTERLINE OF VALVE AT 48" AFF. COORD WITH OTHER TRADES. LABEL DOOR WITH THE FOLLOWING. "GAS SHUT OFF".



NORTH

UNIT 'B' MECHANICAL PIPING PLAN

1/8" = 1'-0"

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THREE RIVERS, MICHIGAN

ISSUANCES

01.19.2023 ADDENDUM 002

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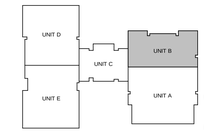
PROJECT NO. 5-5802



NORTH

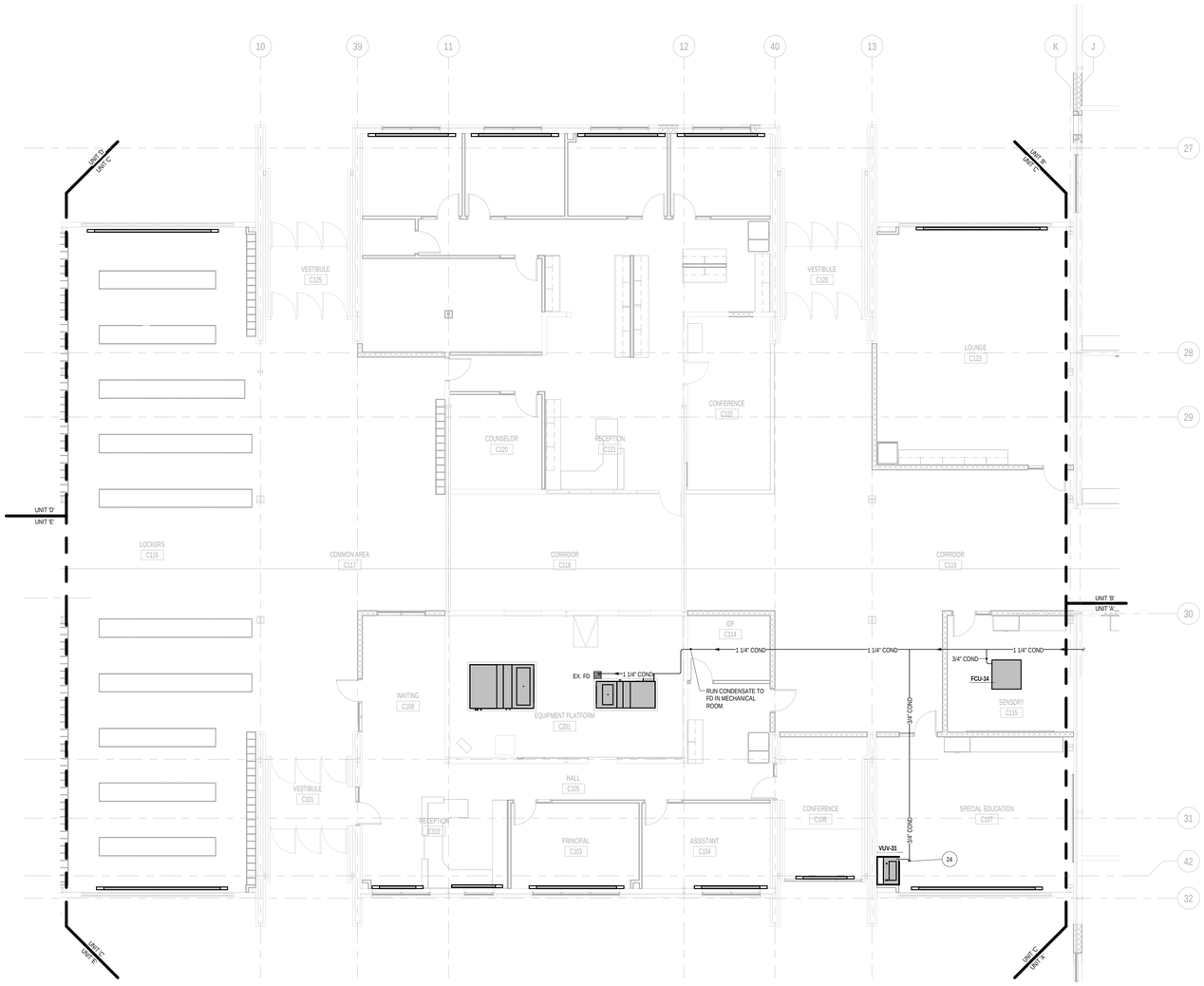
KEY PLAN

UNIT 'B' MECHANICAL PIPING PLAN

M4.1B

BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 2/5-5802P 2019.rvt
1/19/2023 9:46:02 AM

	MECHANICAL KEYNOTE LEGEND
24	INSTALL THREADED CLEANOUT.



NORTH

UNIT 'C' MECHANICAL PIPING PLAN

1/8" = 1'-0"

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

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ISSUANCES

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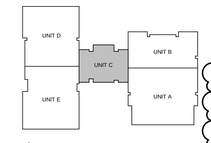

NORTH

KEY PLAN

UNIT 'C' MECHANICAL PIPING PLAN

M4.1C

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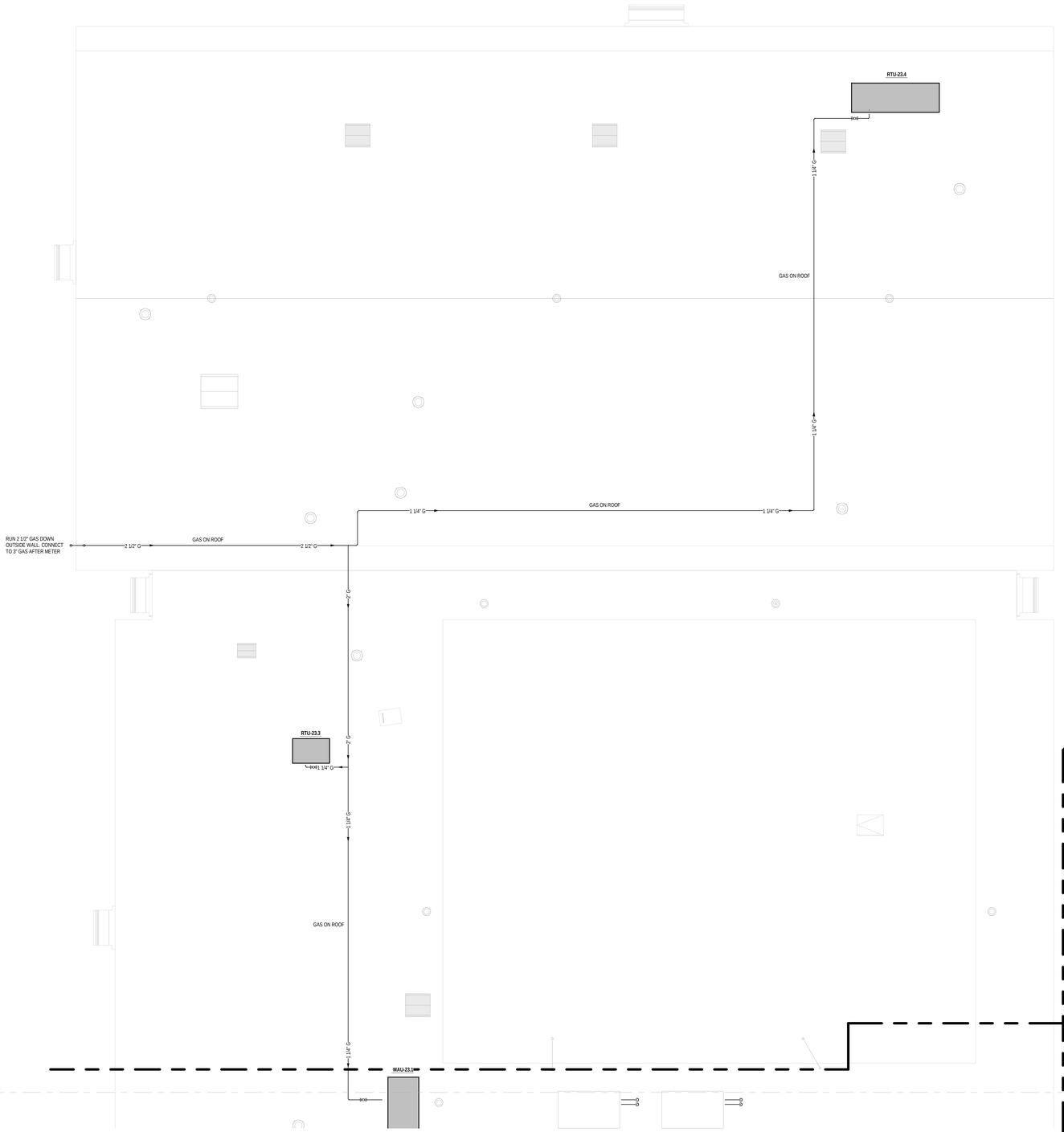
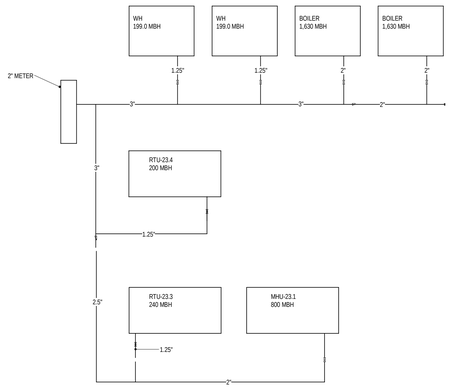
1/19/2023 9:46:03 AM

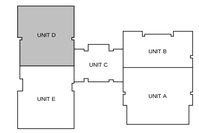




2 M4.1D NATURAL GAS PIPING SCHEMATIC
NOT TO SCALE

NORTH

UNIT 'D' MECHANICAL PIPING PLAN
1/8" = 1'-0"



NORTH

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THREE RIVERS, MICHIGAN

ISSUANCES

01.19.2023 ADDENDUM 002

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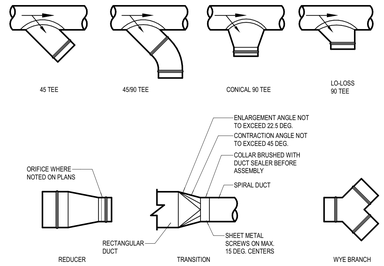
PROJECT NO. 5-5802

UNIT 'D' MECHANICAL PIPING PLAN

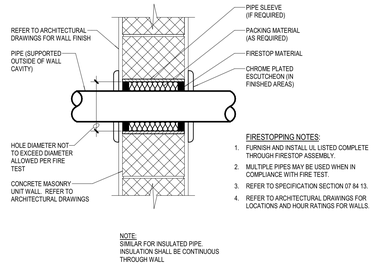
M4.1D

BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 2/5-5802F 2019.rvt
1/19/2023 9:46:04 AM



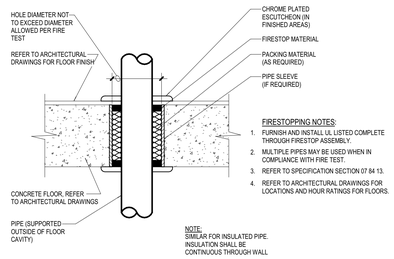
9 M7.02 HIGH PRESSURE ROUND DUCT FITTINGS

NOT TO SCALE



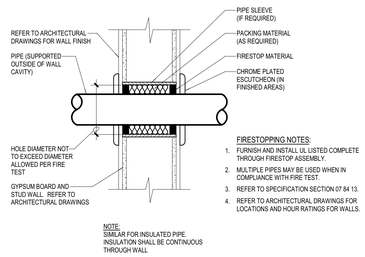
8 M7.02 FIRESTOPPING AT BLOCK WALL PENETRATION DETAIL

NOT TO SCALE



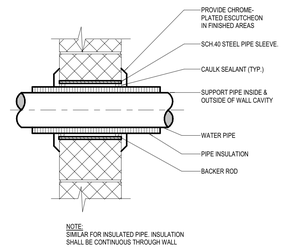
7 M7.02 FIRESTOPPING AT FLOOR PENETRATION DETAIL

NOT TO SCALE



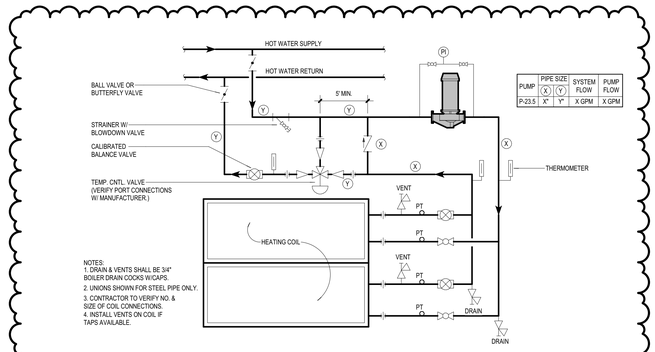
6 M7.02 FIRESTOPPING AT STUD WALL PENETRATION DETAIL

NOT TO SCALE



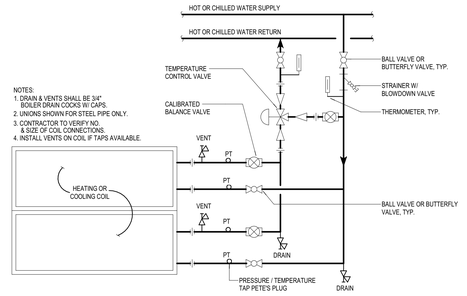
5 M7.02 PIPE WALL SLEEVE (NON-RATED WALL)

NOT TO SCALE



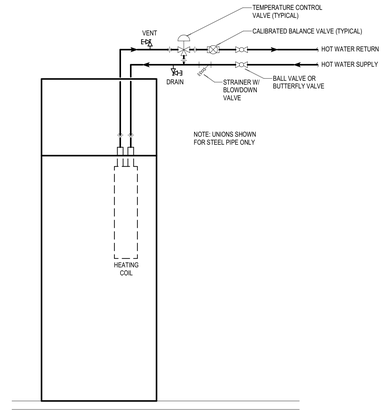
4 M7.02 PUMPED COIL 3-WAY VALVE PIPING DETAIL - IN LINE PUMP

NOT TO SCALE



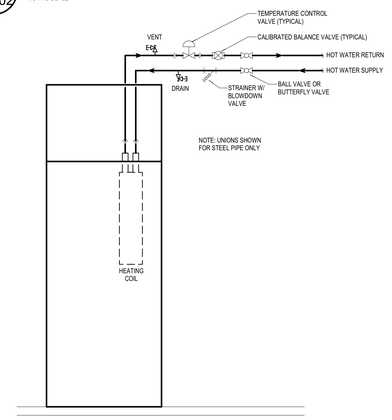
3 M7.02 COIL PIPING DETAIL (3-WAY VALVE)

NOT TO SCALE



2 M7.02 TYPICAL UNIT VENTILATOR PIPING 3-WAY VALVE

NOT TO SCALE



1 M7.02 TYPICAL UNIT VENTILATOR PIPING 2-WAY VALVE

NOT TO SCALE

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ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

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PROJECT NO.	5-5802

MECHANICAL DETAILS

M7.02

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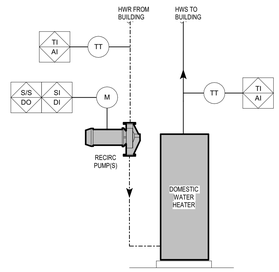
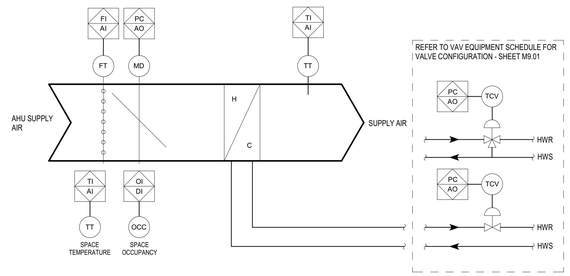
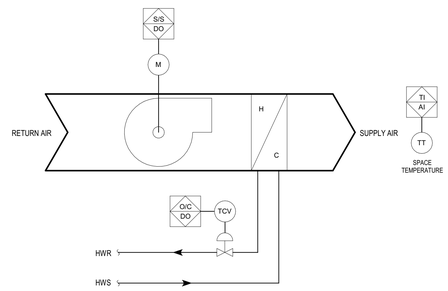
1/19/2023 10:31:25 AM



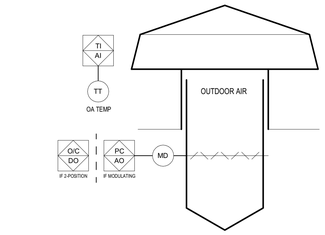
8 M8.02 TYPICAL DWH SYSTEM CONTROL DIAGRAM
NOT TO SCALE



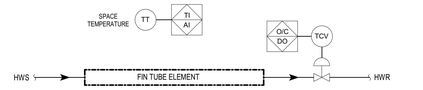
7 M8.02 VAV BOX CONTROL DIAGRAM
NOT TO SCALE



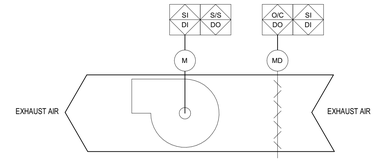
6 M8.02 TYPICAL CABINET AND UNIT HEATER CONTROL DIAGRAM
NOT TO SCALE



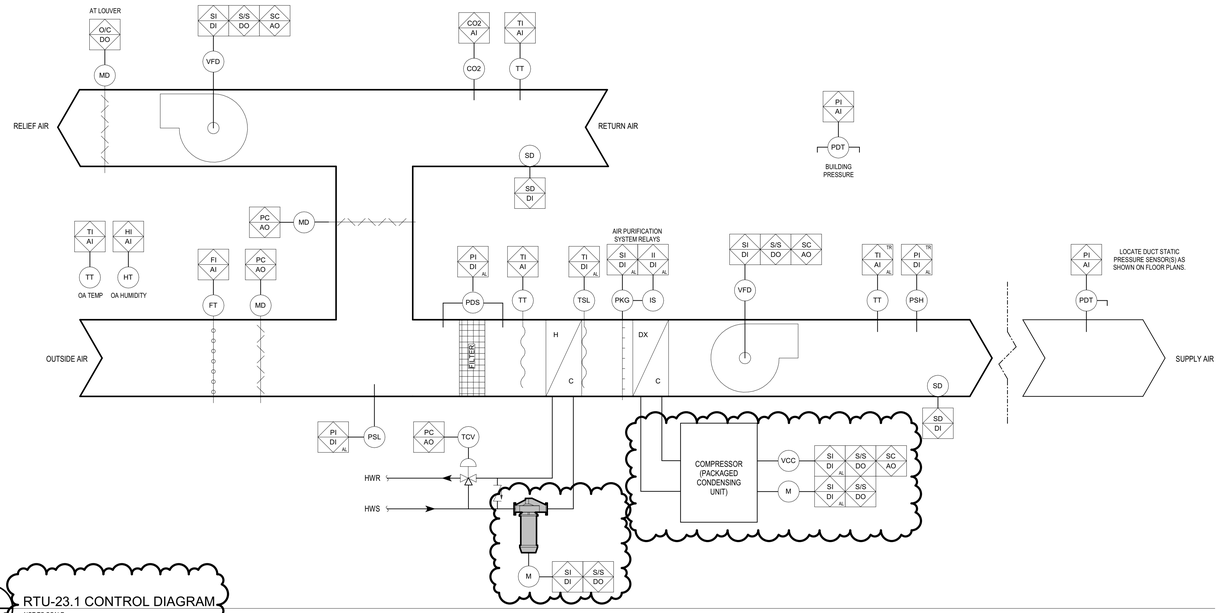
5 M8.02 TYPICAL OUTDOOR AIR HOOD CONTROLS DIAGRAM
NOT TO SCALE



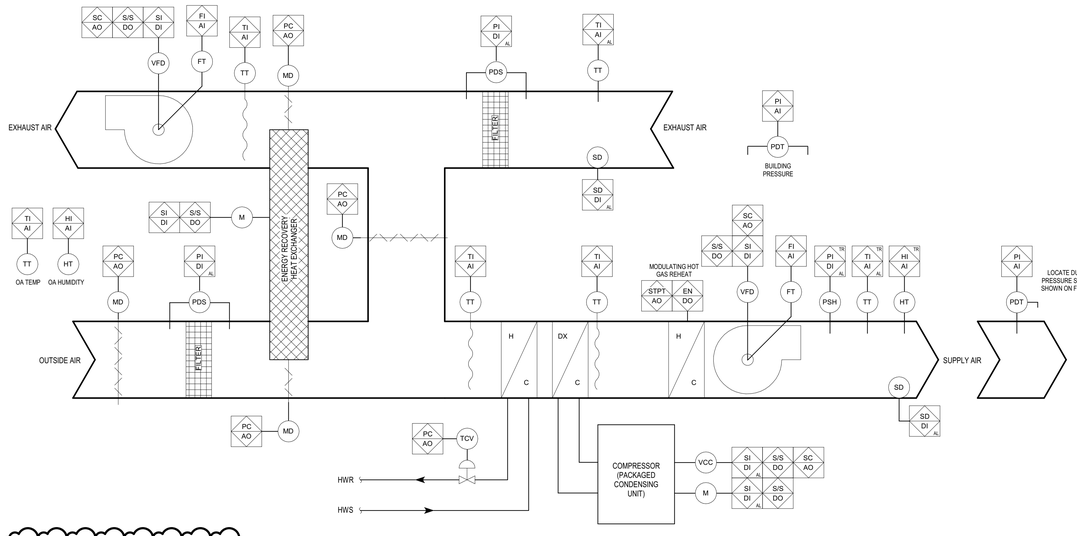
4 M8.02 FINTUBE RADIATION CONTROL DIAGRAM
NOT TO SCALE



3 M8.02 TYPICAL EXHAUST FAN CONTROL DIAGRAM
NOT TO SCALE



2 M8.02 RTU-23.1 CONTROL DIAGRAM
NOT TO SCALE



1 M8.02 ERU-1, ERU-2 CONTROL DIAGRAM
NOT TO SCALE

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THREE RIVERS COMMUNITY SCHOOLS

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ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

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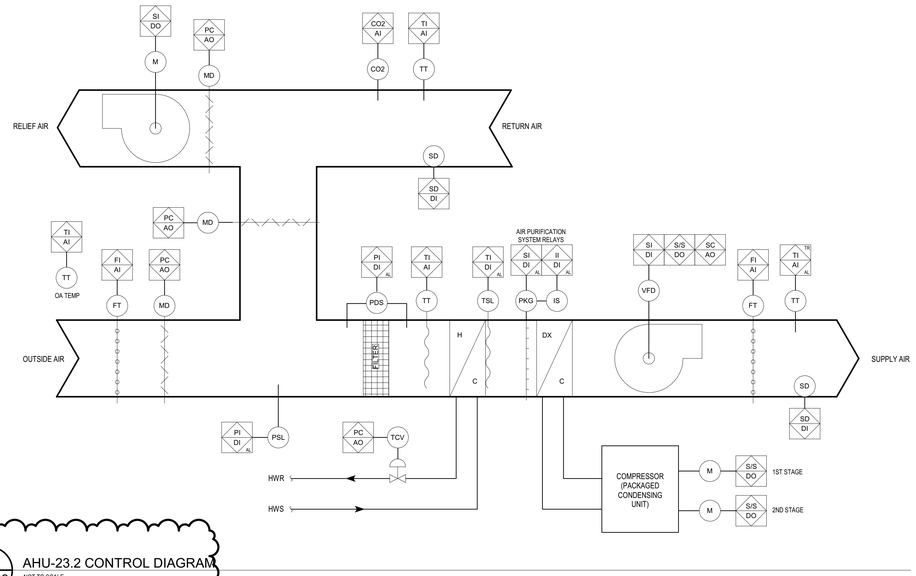
PROJECT NO.	5-5802

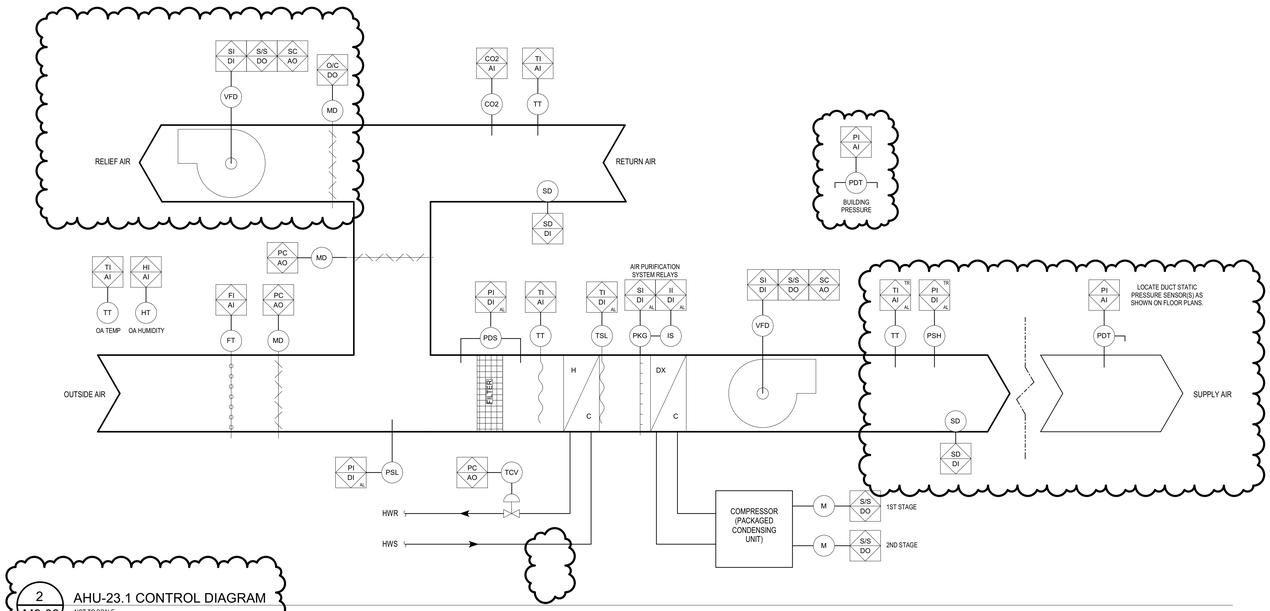
MECHANICAL CONTROL DIAGRAMS

M8.02

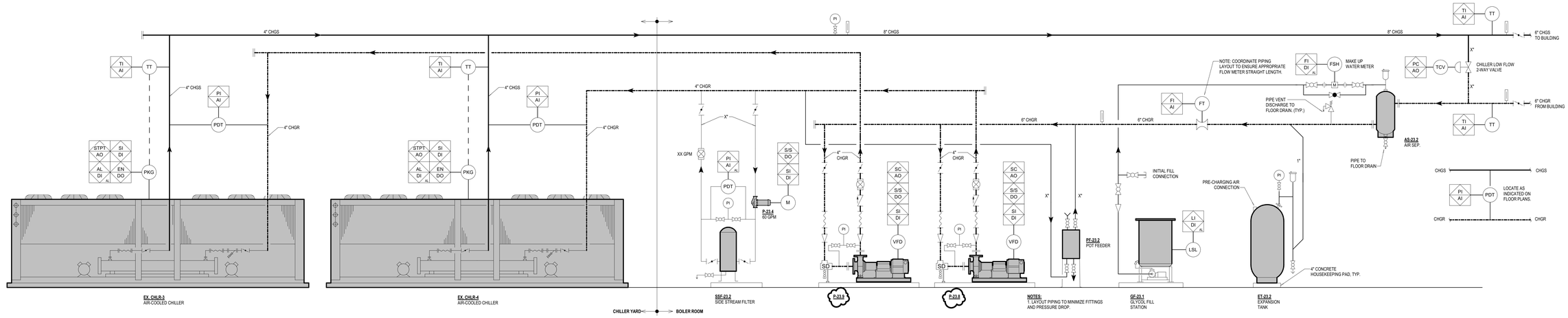
BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 215-5802M 2019.rvt
1/19/2023 10:31:31 AM



3 M8.03 AHU-23.2 CONTROL DIAGRAM
NOT TO SCALE



2 M8.03 AHU-23.1 CONTROL DIAGRAM
NOT TO SCALE



1 M8.03 AIR COOLED CHILLER SYSTEM DIAGRAM
NOT TO SCALE

BIM 360://5-5802 Three Rivers MS Additions & Renovations Series 2/5-5802M 2019.rvt
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ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

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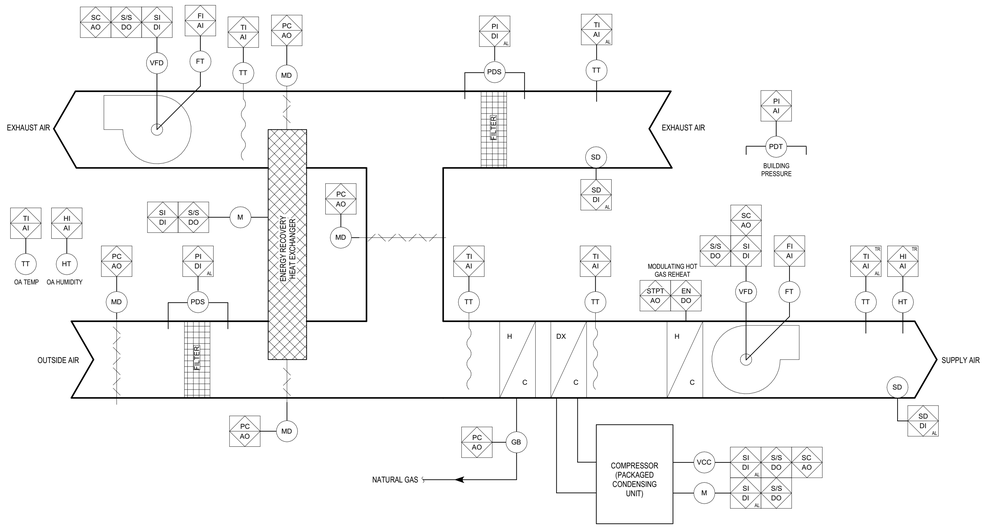
PROJECT NO.	5-5802

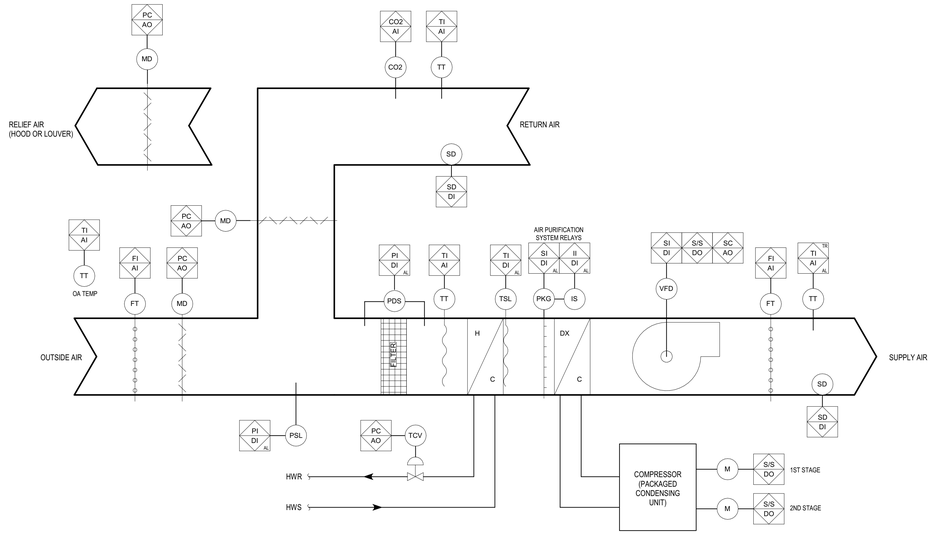
MECHANICAL CONTROL DIAGRAMS

M8.03



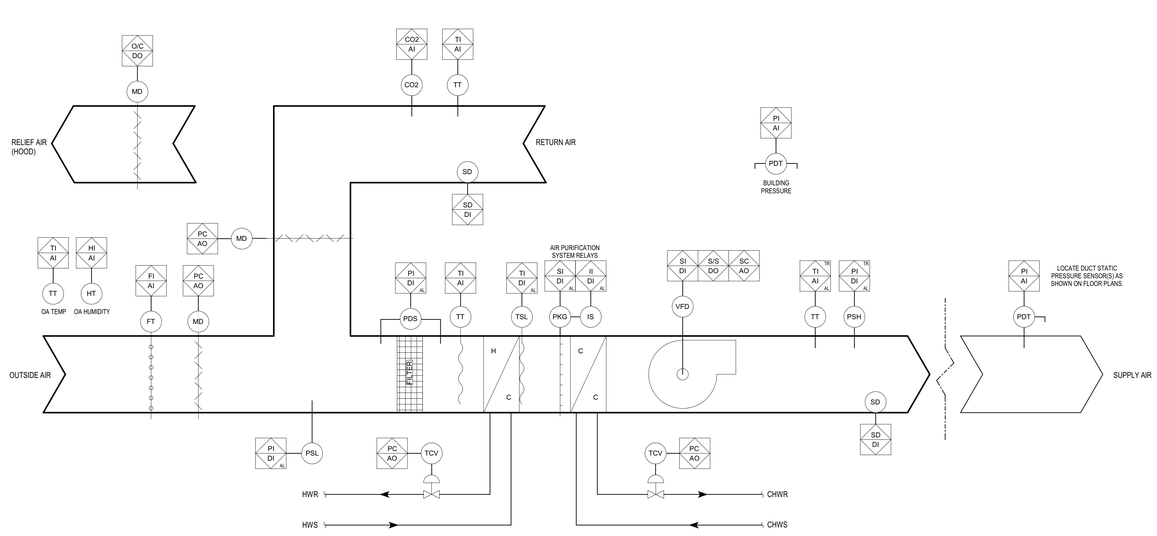
4 M8.04 RTU-23.4 CONTROL DIAGRAM

NOT TO SCALE



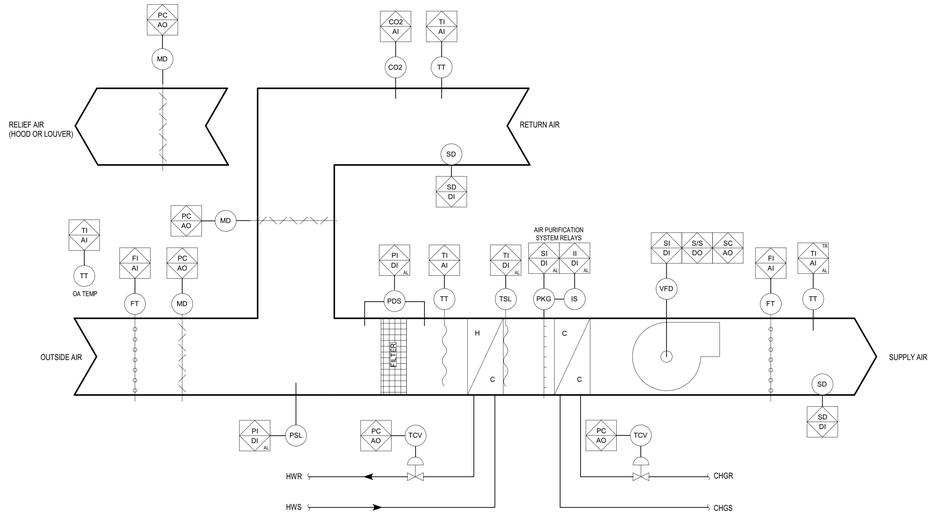
2 M8.04 AHU-23.3 CONTROL DIAGRAM

NOT TO SCALE



3 M8.04 AHU-23.6 CONTROL DIAGRAM

NOT TO SCALE



1 M8.04 AHU-23.4, AHU-23.5 CONTROL DIAGRAM

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ISSUANCES

01.19.2023 ADDENDUM 002

DRAWN RTF

REVIEWED JBH

PROJECT NO. 5-5802

MECHANICAL CONTROL DIAGRAMS

M8.04

UNIT VENTILATOR SCHEDULE W/ SELF CONTAINED DX

MARK	SERVICE	MANUFACTURER	MODEL	MIN. OA CFM	SUPPLY FAN				RELIEF FAN	COOLING COIL				HEATING COIL								FILTER			ELECTRICAL					NOTES
					CONFIGURATION	CFM	ESP (in-wg)	MOTOR HP	CFM	Nominal Tons	EAT (DB °F)	EAT (WB °F)	REFRIGERANT	MBH	EAT (°F)	LAT (°F)	GPM	EWT (°F)	LWT (°F)	WPD (FT)	FLUID TYPE	TYPE	MERV	DEPTH	VOLT	PH	HZ	MCA	MOP	
VUV-6		CHANGE AIR	SOPHOMORE HPA-O	395	UPFLOW	1200	0.50	.5	395	3	79.5	66.3	R-410A	59	45	90	4.6	130	114	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-7		CHANGE AIR	SOPHOMORE HPA-O	395	UPFLOW	1200	0.50	.5	395	3	79.5	66.3	R-410A	59	45	90	4.6	130	114	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-8		CHANGE AIR	SOPHOMORE HPA-O	395	UPFLOW	1200	0.50	.5	395	3	79.5	66.3	R-410A	59	45	90	4.6	130	114	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-9		CHANGE AIR	SOPHOMORE HPA-O	395	UPFLOW	1200	0.50	.5	395	3	79.5	66.3	R-410A	59	45	90	4.6	130	114	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-13		CHANGE AIR	SOPHOMORE HPA-O	395	UPFLOW	1200	0.50	.5	395	3	79.5	66.3	R-410A	59	45	90	4.6	130	114	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-14		CHANGE AIR	SOPHOMORE HPA-O	395	UPFLOW	1200	0.50	.5	395	3	79.5	66.3	R-410A	59	45	90	4.6	130	114	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-15		CHANGE AIR	SOPHOMORE HPA-O	395	UPFLOW	1200	0.50	.5	395	3	79.5	66.3	R-410A	59	45	90	4.6	130	114	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-16		CHANGE AIR	SOPHOMORE HPA-O	780	UPFLOW	1200	0.50	.5	780	3	78.6	63.1	R-410A	29.8	68	90	1.8	130	96.4	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-17		CHANGE AIR	SOPHOMORE HPA-O	780	UPFLOW	1200	0.50	.5	780	3	78.6	63.1	R-410A	29.8	68	90	1.8	130	96.4	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-18		CHANGE AIR	SOPHOMORE HPA-O	395	UPFLOW	1200	0.50	.5	395	3	79.5	66.3	R-410A	59	45	90	4.6	130	114	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-19		CHANGE AIR	SOPHOMORE HPA-O	395	UPFLOW	1200	0.50	.5	395	3	79.5	66.3	R-410A	59	45	90	4.6	130	114	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-20		CHANGE AIR	SOPHOMORE HPA-O	395	UPFLOW	1200	0.50	.5	395	3	79.5	66.3	R-410A	59	45	90	4.6	130	114	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-21		CHANGE AIR	SOPHOMORE HPA-O	395	UPFLOW	1200	0.50	.5	395	3	79.5	66.3	R-410A	59	45	90	4.6	130	114	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-22		CHANGE AIR	SOPHOMORE HPA-O	1305	UPFLOW	1400	0.50	.75	1305	3	80.1	63.3	R-410A	31.8	68	90	1.9	130	96	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-23		CHANGE AIR	SOPHOMORE HPA-O	1305	UPFLOW	1400	0.50	.75	1305	3	80.1	63.3	R-410A	31.8	68	90	1.9	130	96	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-24		CHANGE AIR	SOPHOMORE HPA-O	395	UPFLOW	1200	0.50	.5	395	3	79.5	66.3	R-410A	59	45	90	4.6	130	114	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-25		CHANGE AIR	SOPHOMORE HPA-O	395	UPFLOW	1200	0.50	.5	395	3	79.5	66.3	R-410A	59	45	90	4.6	130	114	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-26		CHANGE AIR	SOPHOMORE HPA-O	395	UPFLOW	1200	0.50	.5	395	3	79.5	66.3	R-410A	59	45	90	4.6	130	114	3	WATER	PLEATED	13	2"	460	3	60	10	15	
VUV-29		CHANGE AIR	SOPHOMORE HPA-O	395	UPFLOW	1200	0.50	.5	395	3	79.5	66.3	R-410A	59	45	90	4.6	130	114	3	WATER	PLEATED	13	2"	460	3	60	10	15	

UNIT VENTILATOR SCHEDULE W/ SPLIT DX

MARK	SERVICE	MANUFACTURER	MODEL	MIN. OA CFM	SUPPLY FAN				COOLING COIL					HEATING COIL								FILTER			ELECTRICAL					NOTES
					CONFIGURATION	CFM	ESP (in-wg)	MOTOR HP	Nominal Tons	EAT (DB °F)	EAT (WB °F)	REFRIGERANT	CONDENSING UNIT	MBH	EAT (°F)	LAT (°F)	GPM	EWT (°F)	LWT (°F)	WPD (FT)	FLUID TYPE	TYPE	MERV	DEPTH	VOLT	PH	HZ	MCA	MOP	
VUV-1		CHANGE AIR	FRESHMAN HRA-B	395	UPFLOW	1000	0.50	.5	2	77.2	62.9	R-410A		24.5	68	90.4	1.5	130	96.9	3	WATER	PLEATED	13	2"	115	1	60	7	15	
VUV-2		CHANGE AIR	FRESHMAN HRA-B	395	UPFLOW	1000	0.50	.5	2	77.2	62.9	R-410A		24.5	68	90.4	1.5	130	96.9	3	WATER	PLEATED	13	2"	115	1	60	7	15	
VUV-3		CHANGE AIR	FRESHMAN HRA-C	1150	UPFLOW	2000	0.50	1	5	78.2	63	R-410A		48.6	68	90	3.2	130	99	3	WATER	PLEATED	13	2"	115	1	60	14	20	
VUV-4		CHANGE AIR	FRESHMAN HRA-C	1150	UPFLOW	2000	0.50	1	5	78.2	63	R-410A		48.6	68	90	3.2	130	99	3	WATER	PLEATED	13	2"	115	1	60	14	20	
VUV-5		CHANGE AIR	FRESHMAN HRA-B	395	UPFLOW	1000	0.50	.5	2	77.2	62.9	R-410A		24.5	68	90.4	1.5	130	96.9	3	WATER	PLEATED	13	2"	115	1	60	7	15	
VUV-10		CHANGE AIR	FRESHMAN HRA-B	195	UPFLOW	800	0.50	.5	2	76.3	62.8	R-410A		34.5	51	90.6	2.1	130	96.6	3	WATER	PLEATED	13	2"	115	1	60	7	15	
VUV-11		CHANGE AIR	FRESHMAN HRA-B	395	UPFLOW	1000	0.50	.5	2	77.2	62.9	R-410A		24.5	68	90.4	1.5	130	96.9	3	WATER	PLEATED	13	2"	115	1	60	7	15	
VUV-12		CHANGE AIR	FRESHMAN HRA-B	195	UPFLOW	800	0.50	.5	2	76.3	62.8	R-410A		34.5	51	90.6	2.1	130	96.6	3	WATER	PLEATED	13	2"	115	1	60	7	15	
VUV-27		CHANGE AIR	FRESHMAN HRA-B	1210	UPFLOW	1400	0.50	.75	3	79.7	63.3	R-410A		33.8	68	90	2	130	95.7	3	WATER	PLEATED	13	2"	115	1	60	11	15	
VUV-28		CHANGE AIR	FRESHMAN HRA-B	1210	UPFLOW	1400	0.50	.75	3	79.7	63.3	R-410A		33.8	68	90	2	130	95.7	3	WATER	PLEATED	13	2"	115	1	60	11	15	
VUV-30		CHANGE AIR	FRESHMAN HRA-C	500	UPFLOW	1800	0.50	1	5	78.8	65.8	R-410A		80	49	90	8	130	109	3	WATER	PLEATED	13	2"	115	1	60	14	20	
VUV-31		CHANGE AIR	FRESHMAN HRA-B	195	UPFLOW	800	0.50	.5	2	76.3	62.8	R-410A		34.5	51	90.6	2.1	130	96.6	3	WATER	PLEATED	13	2"	115	1	60	7	15	
VUV-32		CHANGE AIR	FRESHMAN HRA-C	500	UPFLOW	1800	0.50	1	5	78.8	65.8	R-410A		80	49	90	8	130	109	3	WATER	PLEATED	13	2"	115	1	60	14	20	

GENERAL REQUIREMENTS:

1. SUPPLY AND RELIEF (WHERE REQUIRED) FANS ARE ECM TYPE.
2. FACTORY INSTALLED NONFUSED DISCONNECT SWITCH, SINGLE POINT POWER ELECTRICAL CONNECTION AND TERMINALS FOR A CONTRACTOR FURNISHED TRANSFORMER.
3. 2" DISPOSABLE MERV 13 FILTERS, (3) SETS REQUIRED PER UNIT.
4. 12" DEEP INTERNALLY LINED REAR PLENUM ASSEMBLY WITH TOP EXTENSION PIECE THAT MATCHES THE HEIGHT OF THE TOP CABINET OR SUPPLY PLENUM EXTENSION.
5. PROVIDE AND FACTORY INSTALL HOT WATER COIL SHUTOFF VALVES, STRAINER WITH BLOWDOWN SHUTOFF VALVE AND CAP, BALANCING VALVE, AIR VENTS AND DRAIN VALVES. ALL HOT WATER PIPING INSIDE CABINET OR SUPPLY PLENUM EXTENSION.

CABINET UNIT HEATER SCHEDULE

MARK	MANUFACTURER	MODEL	CONFIGURATION	INLET	DISCHARGE	CFM	CAPACITY MBH	FLUID TYPE	ROWS	GPM	EWT (°F)	LWT (°F)	WPD (FT)	ELECTRICAL			NOTES
														VOLT	PH	MOTOR (W)	
CUH-1	TRANE	FFEB0301	HORZ. RECESSED	BOTTOM STAMPED	BOTTOM STAMPED	400	19.9	WATER	3	4.0	130.0	120.0	15.00	120	1	129	
CUH-2	TRANE	FFEB0301	HORZ. RECESSED	BOTTOM STAMPED	BOTTOM STAMPED	400	19.9	WATER	3	4.0	130.0	120.0	15.00	120	1	129	
CUH-3	TRANE	FFEB0301	HORZ. RECESSED	BOTTOM STAMPED	BOTTOM STAMPED	400	19.9	WATER	3	4.0	130.0	120.0	15.00	120	1	129	
CUH-4	TRANE	FFEB0301	HORZ. RECESSED	BOTTOM STAMPED	BOTTOM STAMPED	400	19.9	WATER	3	4.0	130.0	120.0	15.00	120	1	129	
CUH-5	TRANE	FFEB0301	HORZ. RECESSED	BOTTOM STAMPED	BOTTOM STAMPED	400	19.9	WATER	3	4.0	130.0	120.0	15.00	120	1	129	
CUH-6	TRANE	FFEB0301	HORZ. RECESSED	BOTTOM STAMPED	BOTTOM STAMPED	400	19.9	WATER	3	4.0	130.0	120.0	15.00	120	1	129	
CUH-7	TRANE	FFEB0301	HORZ. RECESSED	BOTTOM STAMPED	BOTTOM STAMPED	400	19.9	WATER	3	4.0	130.0	120.0	15.00	120	1	129	
CUH-8	TRANE	FFEB0301	HORZ. RECESSED	BOTTOM STAMPED	BOTTOM STAMPED	400	19.9	WATER	3	4.0	130.0	120.0	15.00	120	1	129	
CUH-9	TRANE	FFEB0301	HORZ. RECESSED	BOTTOM STAMPED	BOTTOM STAMPED	400	19.9	WATER	3	4.0	130.0	120.0	15.00	120	1	129	
CUH-10	TRANE	FFEB0301	HORZ. RECESSED	BOTTOM STAMPED	BOTTOM STAMPED	400	19.9	WATER	3	4.0	130.0	120.0	15.00	120	1	129	

GENERAL REQUIREMENTS:

1. INCLUDE FACTORY INSTALLED FAN SPEED SWITCH (OFF-HIGH-MED-LOW).
2. INCLUDE 1" THROWAWAY FILTER.
3. DISCONNECT LOCATED IN UNIT.
4. CONTROLLED BY BMS.

CONDENSING UNIT (AIR-COOLED)

MARK	UNIT SERVED	MANUFACTURER	MODEL	NOMINAL TONS	REFRIGERANT	COMPRESSOR DATA		ELECTRICAL				OPER. WEIGHT (LB)	NOTES
						TYPE	NUMBER	VOLT	PH	MCA	MOP		
CU-23.4	FCU-1	AIREDALE	YCE18	1.5	R-410A	-	1	208	1	12.7	20	84	
CU-23.5	FCU-2	AIREDALE	YCE18	1.5	R-410A	-	1	208	1	12.7	20	84	
CU-23.6	VUV-3	TRANE	4TTA3060D4	5	R-410A	SCROLL	1	460	3	10	15	226	
CU-23.7	VUV-4	TRANE	4TTA3060D4	5	R-410A	SCROLL	1	460	3	10	15	226	
CU-23.8	FCU-3	AIREDALE	YCE18	1.5	R-410A	-	1	208	1	12.7	20	84	
CU-23.9	FCU-4	AIREDALE	YCE18	1.5	R-410A	-	1	208	1	12.7	20	84	
CU-23.10	VUV-10	TRANE	4TTR6024	2	R-410A	SCROLL	1	208	1	13	20	162	
CU-23.11	VUV-11	TRANE	4TTR6024	2	R-410A	SCROLL	1	208	1	13	20	162	
CU-23.12	VUV-12	TRANE	4TTR6024	2	R-410A	SCROLL	1	208	1	13	20	162	
CU-23.13	FCU-5	AIREDALE	YCE30	2.5	R-410A	-	1	208	1	18.4	30	118	
CU-23.14	FCU-6	AIREDALE	YCE18	2	R-410A	-	1	208	1	12.7	20	84	
CU-23.15	FCU-7	AIREDALE	YCE30	2.5	R-410A	-	1	208	1	18.4	30	118	
CU-23.16	FCU-8	AIREDALE	YCE30	2.5	R-410A	-	1	208	1	18.4	30	118	
CU-23.17	VUV-27	TRANE	4TTA3048A4	4	R-410A	SCROLL	1	460	3	8	15	203	
CU-23.18	VUV-28	TRANE	4TTA3048A4	4	R-410A	SCROLL	1	460	3	8	15	203	
CU-23.19	FCU-10	AIREDALE	YCE30	2.5	R-410A	-	1	208	1	18.4	30	118	
CU-23.20	FCU-12	MITSUBISHI	NTXCKS09A112AA	.75	R-410A	DC INVERTER ROTARY	2	208	1	14	24	129	
CU-23.21	FCU-11	MITSUBISHI	NTXCKS09A112AA	.75	R-410A	DC INVERTER ROTARY	2	208	1	14	24	129	
CU-23.22	FCU-13	AIREDALE	YCE30	2.5	R-410A	-	1	208	1	18.4	30	118	
CU-23.23	VUV-30	TRANE	4TTA3060D4	5	R-410A	SCROLL	1	460	3	10	15	226	
CU-23.24	FCU-14	AIREDALE	YCE18	1.5	R-410A	-	1	208	1	12.7	20	84	
CU-23.25	VUV-31	TRANE	4TTA3030A4	2.5	R-410A	RECIP	1	460	3	5	15	195	
CU-23.26	VUV-1	TRANE	4TTR6024	2	R-410A	SCROLL	1	208	1	13	20	162	
CU-23.27	VUV-2	TRANE	4TTR6024	2	R-410A	SCROLL	1	208	1	13	20	162	
CU-23.28	VUV-5	TRANE	4TTR6024	2	R-410A	SCROLL	1	208	1	13	20	162	
CU-23.29	FCU-9	MITSUBISHI	NTXCKS12A112AA	1	R-410A	DC INVERTER ROTARY	2	208	1	14	24	129	
CU-23.30	VUV-32	TRANE	4TTA3060D4	5	R-410A	SCROLL	1	460		10	15	226	
CU-23.31	VUV-32	TRANE	4TTA3060D4	5	R-410A	SCROLL	1	460		10	15	226	

GENERAL REQUIREMENTS:

1. LOW AMBIENT HEAD PRESSURE CONTROL
2. 5-YEAR COMPRESSOR WARRANTY.
3. DISCONNECT IS PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR.
4. PROVIDE VIBRATION ISOLATORS.

FAN SCHEDULE

MARK	SERVICE	MANUFACTURER	MODEL	TYPE	CFM	SONES	ESP (in-wg)	RPM	DRIVE	BHP	MOTOR HP	ELECTRICAL			VFD MARK	OPER. WEIGHT (LB)	NOTES
												VOLT	PH	HZ			
EF-1	AHU-23.1	Greenheck	G-180-B	ROOFTOP DOWNBLAST	2650	12.2	1	1040	Direct	0.71	1	208	3	60		95	2,3,4,5,6,7,8
EF-2	AHU-23.2	Greenheck	G-300-C	ROOFTOP DOWNBLAST	[illegible]	14.9	1	688	Direct	2.2	3	460	3	60		341	2,3,4,5,6,7,8
EF-4	KILN HOOD	Greenheck	G-099-VG	ROOFTOP DOWNBLAST	500	6	0.5	1203	Direct	0.08	1/4	120	1	60		37	1,2,3,4,6,7,8
EF-5	ELETRIC D130	Greenheck	G-140-VG	ROOFTOP DOWNBLAST	900	5.1	0.13	681	Direct	0.04	1/4	120	1	60		49	1,2,3,4,6,7,8
EF-6	TOILET	Greenheck	G-070-VG	ROOFTOP DOWNBLAST	150	4.1	0.38	1514	Direct	0.02	1/15	120	1	60		20	1,2,3,4,6,7,8

NOTES:

1. BACKDRAFT DAMPER.
2. PRE-INSULATED ROOF CURB, MATCH ROOF SLOPE.
3. BIRDSCREEN.
4. DISCONNECT SWITCH.
5. MOTORIZED BACKDRAFT DAMPER IS PROVIDED BY TEMPERATURE CONTROLS CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR.
6. SOLID STATE SPEED CONTROLLER.
7. DOWNBLAST FAN.
8. EC MOTOR.

VAV TERMINAL UNIT SCHEDULE

MARK	MANUFACTURER	MODEL	INLET SIZE (IN)	OUTDOOR AIR CFM	COOLING CFM		HEATING COIL											MAX DISCHARGE NC	NOTES
					MAX	MIN	CFM	ROWS	MBH	EAT (°F)	LAT (°F)	EWT (°F)	LWT (°F)	FLUID TYPE	GPM	MAX APD (in-wg)	MAX WPD (in-wg)		
VAV-1	TRANE	VCWF	8	90	700	140	250	2	9.49	55	90	130	114	WATER	1.17	0.50	5.00	35	
VAV-2	TRANE	VCWF	6	15	400	80	150	2	6.02	55	92	130	106	WATER	0.50	0.50	5.00	35	
VAV-3	TRANE	VCWF	5	15	300	60	125	2	5.52	55	95.7	130	108	WATER	0.50	0.50	5.00	35	
VAV-4	TRANE	VCWF	8	40	550	110	200	2	7.59	55	90	130	113	WATER	0.87	0.50	5.00	35	
VAV-5	TRANE	VCWF	8	70	550	110	110	1	4.41	55	90	130	114	WATER	0.54	0.50	5.00	35	
VAV-6	TRANE	VCWF	4	10	150	150	150	2	6.02	55	92	130	106	WATER	0.50	0.50	5.00	35	
VAV-7	TRANE	VCWF	4	10	150	30	50	1	2.62	55	103	130	119	WATER	0.50	0.50	5.00	35	
VAV-8	TRANE	VCWF	5	50	250	50	50	1	2.62	55	103	130	119	WATER	0.50	0.50	5.00	35	
VAV-9	TRANE	VCWF	6	90	500	100	100	1	3.80	55	90	130	118	WATER	0.50	0.50	5.00	35	
VAV-10	TRANE	VCWF	5	15	250	50	50	1	2.62	55	103	130	119	WATER	0.50	0.50	5.00	35	
VAV-11	TRANE	VCWF	6	20	450	90	90	1	3.45	55	90	130	116	WATER	0.50	0.50	5.00	35	
VAV-12	TRANE	VCWF	5	10	300	60	120	1	4.55	55	90	130	123	WATER	1.40	0.50	5.00	35	
VAV-13	TRANE	VCWF	5	10	300	60	120	1	4.55	55	90	130	123	WATER	1.40	0.50	5.00	35	
VAV-14	TRANE	VCWF	5	10	300	60	120	1	4.55	55	90	130	123	WATER	1.40	0.50	5.00	35	
VAV-15	TRANE	VCWF	5	10	300	60	120	1	4.55	55	90	130	123	WATER	1.40	0.50	5.00	35	
VAV-16	TRANE	VCWF	16	485	3000	600	1000	2	37.96	55	90	130	106	WATER	3.10	0.55	5.00	35	
VAV-17	TRANE	VCWF	10	165	1100	220	550	2	20.88	55	90	130	111	WATER	2.21	0.50	5.00	35	
VAV-18	TRANE	VCWF	10	175	1150	220	550	2	20.88	55	90	130	111	WATER	2.21	0.50	5.00	35	
VAV-19	TRANE	VCWF	8	115	600	120	120	1	4.55	55	90	130	113	WATER	0.53	0.50	5.00	35	
VAV-20	TRANE	VCWF	8	125	800	160	400	2	15.18	55	90	130	119	WATER	2.70	0.60	5.00	35	
VAV-21	TRANE	VCWF	8	125	800	160	400	2	15.18	55	90	130	119	WATER	2.70	0.60	5.00	35	

GENERAL REQUIREMENTS:

1. INLET RUNOUTS TO MATCH BOW INLETS EXCEPT WHERE OTHERWISE NOTED.
2. VAV BOXES SHALL HAVE 1" MATTE FACED INSULATION.

NOTES:

1. 2-WAY CONTROL VALVE.
2. 3-WAY CONTROL VALVE.

FAN COIL UNIT SCHEDULE

MARK	MANUFACTURER	MODEL	CONFIGURATION	INLET	DISCHARGE	FAN DATA		COOLING COIL		HEATING COIL					ELECTRICAL				NOTES
						CFM	MOTOR HP	REFRIGERANT	CU MARK	MBH	GPM	EWT (°F)	LWT (°F)	FLUID TYPE	VOLT	PH	MCA	MOP	
FCU-1	AIREDALE	CSD18AACBBFDB	CASSETTE	BOTTOM	BOTTOM	670	1/6	R-410A	CU-23.4	19.6	3	130	117	WATER	115	1	1.1 A	15.0 A	0
FCU-2	AIREDALE	CSD18AACBBFDB	CASSETTE	BOTTOM	BOTTOM	670	1/6	R-410A	CU-23.5	19.6	3	130	117	WATER	115	1	1.1 A	15.0 A	0
FCU-3	AIREDALE	CSD18AACBBFDB	CASSETTE	BOTTOM	BOTTOM	670	1/6	R-410A	CU-23.8	19.6	3	130	117	WATER	115	1	1.1 A	15.0 A	0
FCU-4	AIREDALE	CSD18AACBBFDB	CASSETTE	BOTTOM	BOTTOM	670	1/6	R-410A	CU-23.9	19.6	3	130	117	WATER	115	1	1.1 A	15.0 A	0
FCU-5	AIREDALE	CSD30AACBBFDB	CASSETTE	BOTTOM	BOTTOM	920	1/6 (2)	R-410A	CU-23.13	26.8	3	130	112	WATER	115	1	1.9 A	15.0 A	0
FCU-6	AIREDALE	CSD24AACBFDB	CASSETTE	BOTTOM	BOTTOM	670	1/6	R-410A	CU-23.14	22.0	4	130	119	WATER	115	1	1.4 A	15.0 A	0
FCU-7	AIREDALE	CSD30AACBBFDB	CASSETTE	BOTTOM	BOTTOM	920	1/6 (2)	R-410A	CU-23.15	26.8	3	130	112	WATER	115	1	1.9 A	15.0 A	0
FCU-8	AIREDALE	CSD18AACBBFDB	CASSETTE	BOTTOM	BOTTOM	920	1/6 (2)	R-410A	CU-23.16	30.1	6	130	120	WATER	115	1	1.1 A	15.0 A	0
FCU-10	AIREDALE	CSD18AACBBFDB	CASSETTE	BOTTOM	BOTTOM	920	1/6 (2)	R-410A	CU-23.19	30.1	6	130	120	WATER	115	1	1.1 A	15.0 A	0
FCU-13	AIREDALE	CSD18AACBBFDB	CASSETTE	BOTTOM	BOTTOM	920	1/6 (2)	R-410A	CU-23.22	30.1	6	130	120	WATER	115	1	1.1 A	15.0 A	0
FCU-14	AIREDALE	CSD18AACBBFDB	CASSETTE	BOTTOM	BOTTOM	300	1/6	R-410A	CU-23.24	29.1	8	130	123	WATER	115	1	1.4 A	15.0 A	0

GENERAL REQUIREMENTS:

1. PROVIDE DISCONNECT SWITCH.
2. PROVIDE 115V TO 230V STEP UP TRANSFORMER.
3. PROVIDE BACNET CARD.
4. 2-WAY CONTROL VALVE FOR HOT WATER COILS.

FAN COIL UNIT (HEAT PUMP)

MARK	MANUFACTURER	MODEL	CONFIGURATION	FAN DATA	COOLING COIL		HEAT PUMP - HEATING AT 5 DEG	OPER. WEIGHT (LB)	NOTES
				CFM	CAPACITY BTUH	REFRIGERANT	CAPACITY BTUH		
FCU-9	MITSUBISHI	NTXCKS12A112AA	CEILING CASSETTE	400	12000	R-410A	13800	31	
FCU-11	MITSUBISHI	NTXCKS09A112AA	CEILING CASSETTE	300	9000	R-410A	11000	31	
FCU-12	MITSUBISHI	NTXCKS09A112AA	CEILING CASSETTE	300	9000	R-410A	11000	31	

GENERAL REQUIREMENTS:

1. ELECTRICAL POWER SHALL BE FED FROM OUTDOOR UNIT (BY E.C.)
2. INTEGRAL CONDENSATE PUMP W/ MIN. 27" LIFT.
3. ANTI-SHORT CYCLE PROTECTION.
4. MITSUBISHI MODE PAC-US444CN-1 THERMOSTAT INTERFACE.

PUMP SCHEDULE

MARK	SERVICE	MANUFACTURER	MODEL	TYPE	FLUID TYPE	GPM	HEAD (FT)	SIZE	IMPELLER (DIA)	DRIVE (Y/N)	BHP	RPM	ELECTRICAL				OPER. WEIGHT (LB)	NOTES
													MOTOR HP	VOLT	PH	HZ		
P-23.1	HOT WATER HEATING SYSTEM	BELL & GOSSETT	e-1510	END SUCTION	WATER	550	80	5x4	9.75	Y	14.3	1800	20	460	3	60	602	1,2
P-23.2	HOT WATER HEATING SYSTEM	BELL & GOSSETT	e-1510	END SUCTION	WATER	550	80	5x4	9.75	Y	14.3	1800	20	460	3	60	602	1,2
P-23.3	SSF-23.1	BELL & GOSSETT	e-80	INLINE	30% P.G.	60	70	1.5x1.5x9.5B	8.5	N	2	1800	3	460	3	60	180	
P-23.4	SSF-23.2	BELL & GOSSETT	e-80	INLINE	30% P.G.	60	70	1.5x1.5x9.5B	8.5	N	2	1800	3	460	3	60	180	
P-23.5	HOT WATER COIL	BELL & GOSSETT	PL-100	CIRCULATOR	WATER	34	10		8.5	N	0	3350	2/5	120	1	60	14.5	
P-23.6	HOT WATER COIL	BELL & GOSSETT	PL-100	CIRCULATOR	WATER	34	10		8.5	N	0	3350	2/5	120	1	60	14.5	
P-23.7	HOT WATER COIL	BELL & GOSSETT	PL-100	CIRCULATOR	WATER	23.6	10		8.5	N	0	3350	2/5	120	1	60	14.5	
P-23.8	CHILLED GLYCOL SYSTEM	BELL & GOSSETT	e-1510	END SUCTION	30% P.G.	130	70		9.75		3.31	1800	5	460	3	60	269	1,2
P-23.9	CHILLED GLYCOL SYSTEM	BELL & GOSSETT	e-1510	END SUCTION	30% P.G.	130	70		9.75		3.31	1800	5	460	3	60	269	1,2

GENERAL REQUIREMENTS:

1. GAUGE KITS USING NOT-METALLIC HOSE MATERIAL ARE NOT ALLOWED.
2. DISCONNECT BY ELECTRICAL CONTRACTOR.

NOTES:

1. INCLUDE SUCTION DIFFUSER WITH STRAINER BASKET.
2. VARIABLE FREQUENCY DRIVE IS PROVIDED BY TEMPERATURE CONTROLS CONTRACTOR AND IS INSTALLED BY ELECTRICAL CONTRACTOR.

LOUVER SCHEDULE

MARK	MANUFACTURER	MODEL	DESCRIPTION	SIZE	FRAME TYPE	FREE AREA (SF)
L-1	Ruskin	ELF211D	Drainable Stationary Louver. Extruded Aluminum	32"x48"	FLANGED	10.6

GENERAL REQUIREMENTS:

1. BAKED ENAMEL KYNAR 50% PVDF FINISH TO MEET CUSTOM COLOR SELECTED BY ARCHITECT.
2. 30 DEG. BLADE ANGLE.
3. MECHANICAL CONTRACTOR SHALL INSTALL OUTSIDE AIR INTAKE LOUVERS SUCH THAT THEY ARE REMOVABLE IN ORDER TO CLEAN UNIT VENTILATOR CONDENSER COILS.

FINTUBE RADIATION SCHEDULE

MARK	MANUFACTURER	MODEL	TUBE		FIN		ROWS	AWT (F)	BTU/LF	GPM	ELEMENT LENGTH	ENCLOSURE				MOUNTING		NOTES
			MATERIAL	SIZE	MATERIAL	SIZE						TYPE	GAUGE	LENGTH	HEIGHT	ARRANGEMENT	BOTTOM AFF (IN)	
FT-1	VULCAN	LV3-S11/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	371	1.2 GPM	16' - 0"	1	6	18' - 0"	11"	1	4"	
FT-2	VULCAN	LV3-S/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	404	1.3 GPM	16' - 0"	1	6	18' - 0"	14"	1	4"	
FT-3	VULCAN	LV3-S11/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	371	1.2 GPM	16' - 0"	1	6	18' - 0"	11"	1	4"	
FT-4	VULCAN	LV3-S/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	404	1.3 GPM	16' - 0"	1	6	18' - 0"	14"	1	4"	
FT-5	VULCAN	LV3-S11/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	371	0.7 GPM	10' - 0"	1	6	12' - 0"	11"	1	4"	
FT-6	VULCAN	LV3-S11/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	371	0.7 GPM	10' - 0"	1	6	12' - 0"	11"	1	4"	
FT-7	VULCAN	LV3-S11/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	371	0.7 GPM	10' - 0"	1	6	12' - 0"	11"	1	4"	
FT-8	VULCAN	LV3-S11/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	371	0.7 GPM	10' - 0"	1	6	12' - 0"	11"	1	4"	
FT-9	VULCAN	LV3-S11/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	371	0.5 GPM	6' - 0"	1	6	8' - 0"	11"	1	4"	
FT-10	VULCAN	LV3-S11/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	371	0.5 GPM	8' - 0"	1	6	10' - 0"	11"	1	4"	
FT-11	VULCAN	LV3-S11/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	371	0.8 GPM	11' - 0"	1	6	13' - 0"	11"	1	4"	
FT-12	VULCAN	LV3-S11/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	371	0.5 GPM	6' - 0"	1	6	7' - 0"	11"	1	4"	
FT-13	VULCAN	LV3-S11/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	371	0.5 GPM	5' - 0"	1	6	7' - 0"	11"	1	4"	
FT-14	VULCAN	LV3-S11/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	371	0.7 GPM	8' - 0"	1	6	10' - 0"	11"	1	4"	
FT-15	VULCAN	LV3-S11/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	371	1.6 GPM	20' - 0"	1	6	22' - 0"	11"	1	4"	
FT-16	VULCAN	LV3-S11/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	371	0.7 GPM	8' - 0"	1	6	10' - 0"	11"	1	4"	
FT-17	VULCAN	LV3-S11/VC35	COPPER	1"	ALUMINUM	3-1/4	1	125.0	371	0.8 GPM	10' - 0"	1	6	12' - 0"	11"	1	4"	

GENERAL REQUIREMENTS:

1. CONTRACTOR SHALL FIELD VERIFY LENGTH.
2. INSTALLATION SHALL BE COMPLETE WITH ALL REQUIRED SUPPORTS, ENDCAPS EXTENSIONS, AND OTHER ACCESSORIES.
3. ENCLOSURE COVER SHALL BE SELECTED BY ARCHITECT AT LATER DATE.
4. CONTROL VALVE SHALL BE 2-WAY.
5. BASED ON VULCAN LINOVECTOR-II FINNED TUBE RADIATION.

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ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN RTF
REVIEWED JBH
PROJECT NO. 5-5802

MECHANICAL SCHEDULES

M9.01

AIR HANDLING UNIT SCHEDULE (NO EXHAUST FAN)

MARK	MANUFACTURER	MODEL	TYPE	SUPPLY AIR CFM	MIN. OA CFM	SUPPLY AIR TSP (in-wg)	ESP (in-wg)	NO. FANS	MOTOR HP (EA)	RPM	DRIVE	BHP	VOLT	PH	FLA	MCA	MOP
AHU-23.3	TRANE	CSAA003	INDOOR	1350	400	4.7	3	1	2	3667	DIRECT	1.726	460	3	3.6	4.47	15
AHU-23.4	TRANE	CSAA021	INDOOR	10500	3000	5.2	3	1	15	1890	DIRECT	13.47	460	3	21	26.25	45
AHU-23.5	TRANE	CSAA025	INDOOR	12000	4000	5.1	3	1	15	1684	DIRECT	12.87	460	3	22.3	27.55	45
AHU-23.6	TRANE	CSAA017	INDOOR	7400	2000	6	4	1	15	2278	DIRECT	10.53	460	3	21.65	26.9	45

MARK	COOLING COIL EAT (DB °F)	EAT (WB °F)	LAT (DB °F)	LAT (WB °F)	APD (in-wg)	FLUID TYPE	GPM	EWT (°F)	LWT (°F)	MAX. WPD (FT)	ROWS	TOTAL CAPACITY MBH	SENSIBLE CAPACITY MBH
AHU-23.3	79.7	66.5	56.7	54.9	0.7	DX	0	0.0	0	0	6	48	33.2
AHU-23.4	80	67	54.5	54.2	0.8	30% P.G.	89	45.0	55	8	8	411.6	288.5
AHU-23.5	80	66.9	54.8	54.4	0.7	30% P.G.	99.6	45.0	55	16	6	460.5	325.6
AHU-23.6	81.5	67.9	54.7	54.3	0.7	30% P.G.	67.2	45.0	55	5	8	310.7	213.9

MARK	HEATING COIL EAT (°F)	LAT (°F)	APD (in-wg)	FLUID TYPE	GPM	EWT (°F)	LWT (°F)	WPD (FT)	ROWS	TOTAL CAPACITY MBH	FINAL FILTER MERV	DEPTH (IN)	OPER. WEIGHT (LB)
AHU-23.3	44	100	0.37	WATER	8.0	130	110	0.54	4	80	13	4	881
AHU-23.4	40	100	0.33	WATER	66.0	130	110	2.58	4	666.6	13	2	3917
AHU-23.5	42	100	0.29	WATER	73.8	130	110	2.70	4	736.4	13	2	4210
AHU-23.6	36	85	0.19	WATER	38.5	130	110	0.90	3	383	13	2	2762

GENERAL REQUIREMENTS:

1. FAN MOTORS TO BE PREMIUM EFFICIENT, WITH AEGIS SHAFT GROUNDING RINGS.
2. SUPPLY FAN SHALL BE BACKWARD CURVED BELT DRIVE TYPE.
3. PROVIDE FARR PLEATED PREFILTERS. INCLUDE DWYER SERIES 2000 MAGNAHELIC PRESSURE GAUGE WITH AIR FILTER KIT, 0-3" WATER RANGE. CONTRACTOR SHALL INSTALL AND MAINTAIN (1) SET OF PREFILTERS DURING CONSTRUCTION. UPON SYSTEM START-UP AND BALANCE COMPLETE FILTER SYSTEM SHALL BE INSTALLED. PRIOR TO COMPLETION CONTRACTOR SHALL PROVIDE OWNER WITH (1) SET OF PREFILTERS FOR FUTURE. (3) COMPLETE SETS OF PREFILTERS ARE REQUIRED.
4. CONTRACTOR TO VERIFY COIL CONNECTION AND ACCESS DOOR HAND LOCATIONS PRIOR TO ORDERING UNIT.
5. ESP DOES NOT INCLUDE ANY PRESSURE DROP DUE TO UNIT INTERNAL COMPONENTS. SELECT FAN WITH DIRTY FILTERS.
6. PROVIDE LED LIGHT IN SUPPLY FAN SECTION WITH LIGHT SWITCH MOUNTED ON OUTSIDE OF SUPPLY FAN CASING.
7. PROVIDE INTEGRAL DISCONNECT SWITCH FOR THE SUPPLY FAN.
8. PROVIDE SOUND PERFORATED INNER METAL WALL FOR SUPPLY FAN SECTION.
9. PROVIDE LIGHTS AND FACTORY INSTALLED RECEPTACLES ON SEPARATE 120V/1PH/60HZ CIRCUITS.
10. PROVIDE FACTORY WIRED AND INSTALLED 115V CONVENIENCE OUTLET MOUNTED ON THE OUTSIDE OF SUPPLY FAN SECTION.
11. VARIABLE FREQUENCY DRIVE FOR SUPPLY FAN IS PROVIDED AND INSTALLED BY THE TEMPERATURE CONTROLS CONTRACTOR.

MAKE UP AIR UNIT SCHEDULE

MARK	SERVICE	MANUFACTURER	MODEL	LOCATION	CONFIGURATION	FAN DATA CFM	TSP (in-wg)	ESP (in-wg)	TYPE	RPM	DRIVE	BHP	MOTOR HP
MAU-23.1	KITCHEN	TRANE	GRCA80PFK		DOWNFLOW	7150	2	1.3	FC	1040	BELT	5	7.5

MARK	HEATING SECTION TYPE	INPUT (MBH)	OUTPUT (MBH)	MIN. GAS PRESS. (in-wg)	EAT (°F)	LAT (°F)	FILTER TYPE	MERV	DEPTH (IN)	ELECTRICAL VOLT	PH	FLA	OPER. WEIGHT (LB)
MAU-23.1	INDIRECT	800	640	7	0	82.9	TA	13	2	460	3	11	2156

GENERAL REQUIREMENTS:

1. STAINLESS STEEL HEAT EXCHANGER, BURNER, AND DRIP PAN.
2. MODULATING BURNER CONTROLS.
3. FACTORY INSTALLED AND WIRED VARIABLE FREQUENCY DRIVE.
4. OUTSIDE AIR AND RETURN AIR OPPOSED BLADE DAMPERS.
5. DISCHARGE PLENUM.

ROOFTOP UNIT SCHEDULE (PACKAGED COOLING)

MARK	MANUFACTURER	MODEL	DISCHARGE	SUPPLY AIR CFM	MIN OA CFM	ESP (in-wg)	MOTOR HP	COOLING COIL EAT (DB °F)	EAT (WB °F)	LAT (DB °F)	LAT (WB °F)	TOTAL MBH	SENSIBLE MBH	HEATING COIL EAT (°F)	LAT (°F)	INPUT (MBH)	OUTPUT (MBH)	ELECTRICAL VOLT	PH	MCA	MOP	OPER. WEIGHT (LB)
RTU-23.3	TRANE	YHJ120A4S0H	BOTTOM	3600	600	2.2	3.1	80	66.7	56.3	55.5	114	84.3	43	93	240	194	460	60	29	40	1150

GENERAL REQUIREMENTS:

1. 24" HIGH PREFABRICATED, INSULATED ROOF CURB.
2. THREE (3) SETS OF FILTERS REQUIRED.
3. ULTRA HIGH EFFICIENCY UNIT.
4. DOWNFLOW ARRANGEMENT.
5. NON-FUSED DISCONNECT SWITCH BY ELECTRICAL CONTRACTOR.
6. THROUGH THE BASE ELECTRICAL CONNECTIONS.
7. HINGED ACCESS DOORS.
8. STAINLESS STEEL DRAIN PAN.
9. LOW LEAK ECONOMIZER DAMPERS.
10. BACNET COMMUNICATION INTERFACE.
11. SUPPLY FAN VFD FACTORY INSTALLED AND WIRED.
12. CONDENSER COIL GUARDS.

ROOFTOP UNIT SCHEDULE W/ ENERGY RECOVERY

MARK	MANUFACTURER	MODEL	TYPE	SUPPLY AIR CFM	EXHAUST AIR	SUPPLY AIR TSP (in-wg)	ESP (in-wg)	NO. FANS	MOTOR HP (EA)	RPM	DRIVE	BHP	EXHAUST AIR TSP (in-wg)	ESP (in-wg)	NO. FANS	MOTOR HP (EA)	RPM	DRIVE	BHP
RTU-23.4	TRANE	HAEA012C	OUTDOOR	4000	1935	3.6	1.5	1	5	2002	DIRECT	3.63	1.9	61	1	2	1965	DIRECT	1.24

MARK	COOLING COIL EAT (DB °F)	EAT (WB °F)	LAT (DB °F)	LAT (WB °F)	APD (in-wg)	ROWS	NET TOTAL CAPACITY MBH	NET SENSIBLE CAPACITY MBH	HEATING COIL EAT (°F)	LAT (°F)	APD (in-wg)	INPUT (MBH)	OUTPUT (MBH)	ELECTRICAL VOLT	PH	MCA	MOP	FLA	OPER. WEIGHT (LB)
RTU-23.4	76.6	64.3	53	52.8	0.2	4	126	94.9	62	99	0.40	200	162	460	3	77	125	64	3693

ROOFTOP UNIT ENERGY RECOVERY WHEEL SCHEDULE

SERVICE	MANUFACTURER	MODEL	SUMMER CONDITIONS OA - EAT (DB °F)	OA - EAT (WB °F)	OA - LAT (DB °F)	OA - LAT (WB °F)	EA - EAT (DB °F)	EA - EAT (WB °F)	EA - LAT (DB °F)	EA - LAT (WB °F)	SENSIBLE EFFECT. (%)	LATENT EFFECT. (%)	WINTER CONDITIONS OA - EAT (DB °F)	OA - EAT (WB °F)	OA - LAT (DB °F)	OA - LAT (WB °F)	EA - EAT (DB °F)	EA - LAT (DB °F)	SENSIBLE EFFECT. (%)	LATENT EFFECT. (%)
RTU-23.4	TRANE	ERC-3018C-4M	89.0	73.4	78.9	66.8	75	62.5	85	69.7	.72	.57	0	-1	49.1	40.9	70	21.9	.73	.56

GENERAL REQUIREMENTS:

1. FAN MOTORS TO BE PREMIUM EFFICIENT, WITH AEGIS SHAFT GROUNDINGS RINGS.
2. SUPPLY FAN AND EXHAUST FAN SHALL BE PLENUM TYPE.
3. PROVIDE FARR PLEATED FILTERS. CONTRACTOR SHALL INSTALL AND MAINTAIN (1) SET OF PREFILTERS DURING CONSTRUCTION. UPON SYSTEM UP-START AND BALANCE COMPLETE FILTER SYSTEM SHALL BE INSTALLED. PRIOR TO COMPLETION CONTRACTOR SHALL PROVIDE OWNER WITH (1) SET OF FILTERS FOR FUTURE. (3) COMPLETE SETS OF FILTERS ARE REQUIRED.
4. CONTRACTOR TO VERIFY ACCESS DOOR HAND LOCATIONS PRIOR TO ORDERING UNIT.
5. ESP DOES NOT INCLUDE AND PRESSURE DROP DUE TO INTERNAL COMPONENTS. SELECT FAN WITH DIRTY FILTERS.
6. PROVIDE INTEGRAL NON-FUSED DISCONNECT SWITCH FOR SINGLE POINT UNIT POWER CONNECTION.
7. PROVIDE FACTORY WIRED AND INSTALLED 115V CONVENIENCE OUTLET MOUNTED ON OUTSIDE OF SUPPLY FAN SECTION.
8. PROVIDE PREFABRICATED, INSULATED, VIBRATION ISOLATION CURBS.
9. VARIABLE FREQUENCY DRIVE FOR SUPPLY AND EXHAUST FANS SHALL BE PROVIDED AND FACTORY INSTALLED BY UNIT MANUFACTURER.
10. PROVIDE HAIL GUARDS ON CONDENSER COIL SECTION.

SOUND ATTENUATOR SCHEDULE

MARK	MANUFACTURER	MODEL	TYPE	SIZE HEIGHT (IN)	WIDTH (IN)	DIA (IN)	LENGTH (IN)	CFM	VELOCITY (FPM)	APD (in-wg)
SIL-1	KINETICS	12-KCCS-F-CF-8-BO-48	ROUND			12"	48"	900	1146	.01
SIL-2	KINETICS	12-KCCS-F-CF-8-BO-36	ELBOW	12"	12"		60"	1900	2419	.03
SIL-3	KINETICS	14-KCCS-F-CF-8-BO-48	ROUND			14"	24"	2650	2479	.03
SIL-4	KINETICS	28 KCRS-F-CF/2	RECTANGULAR	28"	56"		48"	10500	964	.2
SIL-5	KINETICS	28 KCRS-F-CF/1.5	RECTANGULAR	28"	68"		48"	12000	964	.2
SIL-6	KINETICS	22-KCCS-F-CF-4-B2-48	ROUND			22"	36"	7400	2803	.23

MARK	DYNAMIC INSERTION LOSS (dB) 63 Hz	125 Hz	250 Hz	500 Hz	1 KHz	2 KHz	4 KHz	8 KHz	SELF GENERATED NOISE (dB) 63 Hz	125 Hz	250 Hz	500 Hz	1 KHz	2 KHz	4 KHz	8 KHz	NOTES
SIL-1	8	16	31	51	53	24	16	13	35	30	20	17	17	17	16	15	
SIL-2	6	12	23	38	41	19	12	9	56	51	41	38	38	38	37	36	
SIL-3	5	11	21	34	34	17	10	7	58	53	43	40	40	40	39	38	
SIL-4	4	8	17	24	25	17	12	6	59	54	47	45	46	47	45	43	
SIL-5	5	9	18	26	26	18	12	7	55	50	43	41	42	43	41	39	
SIL-6	2	7	17	27	40	37	16	11	71	66	56	53	53	53	52	51	

EXPANSION TANK SCHEDULE

MARK	SERVICE	MANUFACTURER	MODEL	TYPE	MOUNTING	TANK VOLUME (GAL)	ACCEPT. VOLUME (GAL)	DIAMETER (IN)	HEIGHT (IN)	WEIGHT WHEN FULL (LB)	CHARGE PRESSURE (PSI)	MAX WORK PRESS (PSI)
ET-23.1	HOT WATER HEATING SYSTEM	Bell & Gossett	D-240V	PRESSURIZED EXPANSION TANK	VERTICAL	140	113.5	24"	78"	1528	40	125

GENERAL REQUIREMENTS:

1. ASME RATED.

AIR SEPARATOR SCHEDULE

MARK	SERVICE	MANUFACTURER	MODEL	SIZE (IN)	GPM	GPM MAX	MAX. WPD	STRAINER
AS-23.1	HOT WATER HEATING SYSTEM	Bell & Gossett	RL-6F	6	550.0	850	0.9 ftH2O	No
AS-23.2	CHILLED GLYCOL SYSTEM	Bell & Gossett	RL-4F	4	200.0	300	0.7 ftH2O	No

GENERAL REQUIREMENTS:

1. FLANGED CONNECTIONS

SIDE-STREAM FILTER SCHEDULE

MARK	SERVICE	MANUFACTURER	MODEL	RATED FLOW	QUANTITY & LENGTH OF CARTRIDGES
SSF-23.1	HOT WATER HEATING SYSTEM	SHELCO	5FOS2SB-316	60	5-20"
SSF-23.2	CHILLED GLYCOL SYSTEM	SHELCO	5FOS2SB-316	60	5-20"

GENERAL REQUIREMENTS:

1. PROVIDE ONE (1) SET OF EXTRA CARTRIDGES TO OWNER.
2. SWING BOLT STYLE ENCLOSURE.
3. PROVIDE VENTED COVER WITH SHUTOFF VALVE.

VENTILATOR (RELIEF) SCHEDULE

MARK	MANUFACTURER	MODEL	CFM	THROAT SIZE (IN x IN)	THROAT AREA (SQ FT)	APD (in-wg)	DAMPER
RV-1	COOK	GR	1000	16" x 16"	1.78	.011	MOTORIZED
RV-2	COOK	GR	1000	16" x 16"	1.78	.011	MOTORIZED
RV-3	COOK	GR	1000	16" x 16"	1.78	.011	MOTORIZED
RV-4	COOK	GR		18" x 24"			
RV-5	COOK	GR		8" x 8"			
RV-6	COOK	GR		12" x 18"			
RV-7	COOK	GR		18" x 24"			

GENERAL REQUIREMENTS:

1. BIRDSCREEN.
2. CONTRACTOR SHALL VERIFY DUCTWORK CONNECTION SIZE AND COORDINATE LOCATION PRIOR TO ORDERING.
3. ANTI-CONDENSATE COATING.
4. PROVIDE PREFABRICATED, INSULATED ROOF CURB.
5. MOTORIZED DAMPERS ARE PROVIDED AND INSTALLED BY THE TEMPERATURE CONTROLS CONTRACTOR.

GLYCOL FILL TANK SCHEDULE

MARK	SERVICE	MANUFACTURER	MODEL	GALLONS	SUPPLY PUMP GPM	DISCHARGE PSI	HP	ELECTRICAL VOLT	PH	HZ
GFT-23.1	CHILLED GLYCOL SYSTEM	WESSELS	GMP-15050	50	1.8	70	1/2	120	1	60

GENERAL REQUIREMENTS:

1. DISCONNECT BY ELECTRICAL CONTRACTOR

DIFFUSER SCHEDULE

MARK	MANUFACTURER	MODEL	DESCRIPTION	MODULE SIZE	BORDER TYPE	MATERIAL	NECK SIZE	NOTES
E-1-1	Titus	PAR-8x8-24x24-1-26	Perforated Square Ceiling Diffuser	24 x 24	Lay-In	Steel - Titus - 26 White	8"x8"	
E-1-2	Titus	PAR-10x10-24x24-1-26	Perforated Square Ceiling Diffuser	24 x 24	Lay-In	Steel - Titus - 26 White	10"x10"	
E-1-3	Titus	PAR-12x12-24x24-1-26	Perforated Square Ceiling Diffuser	24 x 24	Lay-In	Steel - Titus - 26 White	12"x12"	
E-1-4	Titus	PAR-15x15-24x24-1-26	Perforated Square Ceiling Diffuser	24 x 24	Lay-In	Steel - Titus - 26 White	15"x15"	
E-2-1	Titus	350RL	Return Grille with 35 Degree Deflection		Surface Mount	Steel - Titus - 26 White	6"x6"	
E-2-2	Titus	350RL	Return Grille with 35 Degree Deflection		Surface Mount	Steel - Titus - 26 White	10"x10"	
R-1-1	Titus	PAR-8x8-24x24-1-26	Perforated Square Ceiling Diffuser	24 x 24	Lay-In	Steel - Titus - 26 White	[illegible]	
R-1-2	Titus	PAR-10x10-24x24-1-26	Perforated Square Ceiling Diffuser	24 x 24	Lay-In	Steel - Titus - 26 White	10"x10"	
R-1-3	Titus	PAR-12x12-24x24-1-26	Perforated Square Ceiling Diffuser	24 x 24	Lay-In	Steel - Titus - 26 White	12"x12"	
R-1-4	Titus	PAR-15x15-24x24-1-26	Perforated Square Ceiling Diffuser	24 x 24	Lay-In	Steel - Titus - 26 White	22"x22"	
S-1-1	Titus	TMSA-06-24x24-3-26	High Performance Square Cone Diffuser	24 x 24	Lay-In	Steel - Titus - 26 White	6"ø	
S-1-2	Titus	TMSA-08-24x24-3-26	High Performance Square Cone Diffuser	24 x 24	Lay-In	Steel - Titus - 26 White	8"ø	
S-1-3	Titus	TMSA-10-24x24-3-26	High Performance Square Cone Diffuser	24 x 24	Lay-In	Steel - Titus - 26 White	10"ø	
S-1-4	Titus	TMSA-12-24x24-3-26	High Performance Square Cone Diffuser	24 x 24	Lay-In	Steel - Titus - 26 White	12"ø	
S-1-5	Titus	TMSA-14-24x24-3-26	High Performance Square Cone Diffuser	24 x 24	Lay-In	Steel - Titus - 26 White	14"ø	
S-2-1	Titus	300RL	Adjustable Supply Grille with Double Deflection		Surface Mount	Steel - Titus - 26 White	10"x10"	

GENERAL REQUIREMENTS:

1. CONTRACTOR SHALL VERIFY SIZE, LOCATION, AND CEILING TYPE PRIOR RO ORDERING DIFFUSERS AND GRILLES. COORDINATE LOCATIONS OF DIFFUSERS AND GRILLES WITH ALL TRADES.
2. ALL DIFFUSERS LOCATED IN HARD LID CEILINGS SHALL HAVE PLASTER TRIM MOUNTING FRAME FOR CEILING ACCESS.
3. ALL LAY-IN TYPE DIFFUSERS SHALL HAVE A 4-WAY THROW UNLESS OTHERWISE NOTED.
4. PAINT DUCTWORK BEHIND GRILLE/DIFFUSER FLAT BLACK.

NOTES:

1. PROVIDE FACTORY OPPOSED BLADE DAMPER.

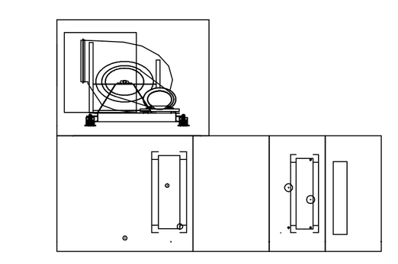
POT FEEDER SCHEDULE

MARK	SERVICE	MANUFACTURER	MODEL	VOLUME	MAX PRESS (PSI)	DIAMETER (IN)	HEIGHT (IN)	CONNECTIONS INLET (IN)	OUTLET (IN)	DRAIN (IN)
PF-23.1	HOT WATER HEATING SYSTEM	ENERCO	SF-5	5 GAL	125	10"	15"	1"	1"	1/2"

GENERAL REQUIREMENTS:

1. PROVIDE FUNNEL, INLET AND OUTLET SHUTOFF VALVES, 1/2" AIR VENT AND 1/2" DRAIN VALVE.

AIR HANDLING UNIT CONFIGURATION (AHU-23.3)



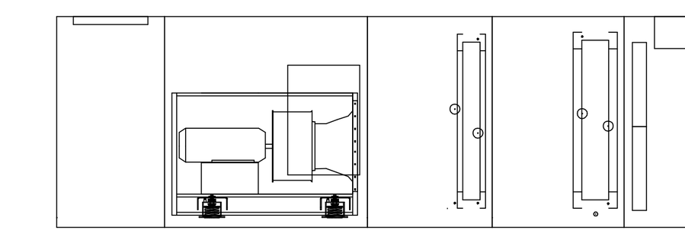
01 FRONT OPENING DISCHARGE
02 SUPPLY FAN
03 COOLING COIL
04 HEATING COIL
05 FLAT FILTER
06 BACK-PARALLEL BLADE DAMPER
07 TOP TRAQ DAMPER
08 ACCESS SECTION
09 ACCESS DOOR (LEFT SIDE WHEN FACING FRONT OF UNIT)

GENERAL SPECIFICATIONS:

OVERALL UNIT LENGTH: 81.0"
OVERALL UNIT WIDTH: 31.5"
OVERALL UNIT HEIGHT: 58"

INSTALLED UNIT WEIGHT:
AHU-23.3 = 881 LBS

AIR HANDLING UNIT CONFIGURATION (AHU-23.4)



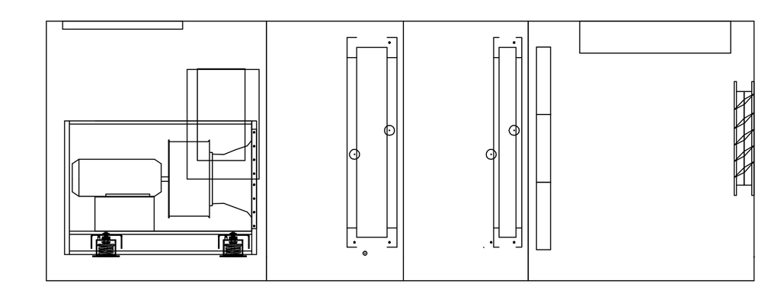
01 TOP OPENING DISCHARGE
02 SUPPLY FAN
03 COOLING COIL
04 HEATING COIL
05 FLAT FILTER
06 BACK-PARALLEL BLADE DAMPER
07 TOP TRAQ DAMPER
08 ACCESS SECTION
09 ACCESS DOOR (RIGHT SIDE WHEN FACING FRONT OF UNIT)

GENERAL SPECIFICATIONS:

OVERALL UNIT LENGTH: 192.1"
OVERALL UNIT WIDTH: 80.0"
OVERALL UNIT HEIGHT: 52.8"

INSTALLED UNIT WEIGHT:
AHU-23.4 = 3917 LBS

AIR HANDLING UNIT CONFIGURATION (AHU-23.5)



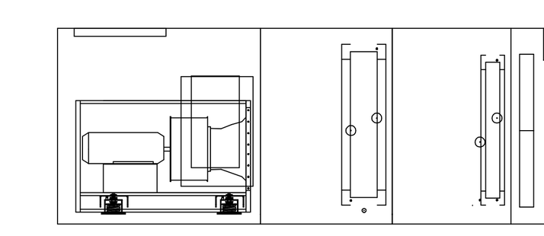
01 TOP OPENING DISCHARGE
02 SUPPLY FAN
03 COOLING COIL
04 HEATING COIL
05 FLAT FILTER
06 BACK-PARALLEL BLADE DAMPER
07 TOP TRAQ DAMPER
08 ACCESS SECTION
09 ACCESS DOOR (LEFT SIDE WHEN FACING FRONT OF UNIT)

GENERAL SPECIFICATIONS:

OVERALL UNIT LENGTH: 177.0"
OVERALL UNIT WIDTH: 80.0"
OVERALL UNIT HEIGHT: 65.0"

INSTALLED UNIT WEIGHT:
AHU-23.5 = 4210 LBS

AIR HANDLING UNIT CONFIGURATION (AHU-23.6)



01 TOP OPENING DISCHARGE
02 SUPPLY FAN
03 COOLING COIL
04 HEATING COIL
05 FLAT FILTER
06 BACK-PARALLEL BLADE DAMPER
07 TOP TRAQ DAMPER
08 ACCESS SECTION
09 ACCESS DOOR (LEFT SIDE WHEN FACING FRONT OF UNIT)

GENERAL SPECIFICATIONS:

OVERALL UNIT LENGTH: 149.3"
OVERALL UNIT WIDTH: 72.0"
OVERALL UNIT HEIGHT: 49.0"

INSTALLED UNIT WEIGHT:
AHU-23.6 = 2762 LBS

AIR PURIFICATION SCHEDULE

MARK	EQUIPMENT SERVED	MAUFACTURER	MODEL	SYSTEM TYPE	SUPPLY CFM	OUTSIDE CFM	VOLTAGE
AP-1	VUV-1	GPS	GPS-FC24AC	CV	1000	395	120 V
AP-2	VUV-2	GPS	GPS-FC24AC	CV	1000	395	120 V
AP-3	VUV-3	GPS	GPS-FC24AC	CV	2000	1150	120 V
AP-4	VUV-4	GPS	GPS-FC24AC	CV	2000	1150	120 V
AP-5	VUV-5	GPS	GPS-FC24AC	CV	1000	395	120 V
AP-6	VUV-6	GPS	GPS-FC24AC	CV	1200	395	120 V
AP-7	VUV-7	GPS	GPS-FC24AC	CV	1200	395	120 V
AP-8	VUV-8	GPS	GPS-FC24AC	CV	1200	395	120 V
AP-9	VUV-9	GPS	GPS-FC24AC	CV	1200	395	120 V
AP-10	VUV-10	GPS	GPS-FC24AC	CV	800	195	120 V
AP-11	VUV-11	GPS	GPS-FC24AC	CV	1200	395	120 V
AP-12	VUV-12	GPS	GPS-FC24AC	CV	800	195	120 V
AP-13	VUV-13	GPS	GPS-FC24AC	CV	1200	395	120 V
AP-14	VUV-14	GPS	GPS-FC24AC	CV	1200	395	120 V
AP-15	VUV-15	GPS	GPS-FC24AC	CV	1200	395	120 V
AP-16	VUV-16	GPS	GPS-FC24AC	CV	1200	780	120 V
AP-17	VUV-17	GPS	GPS-FC24AC	CV	1200	780	120 V
AP-18	VUV-18	GPS	GPS-FC24AC	CV	1200	395	120 V
AP-19	VUV-19	GPS	GPS-FC24AC	CV	1200	395	120 V
AP-20	VUV-20	GPS	GPS-FC24AC	CV	1200	395	120 V
AP-21	VUV-21	GPS	GPS-FC24AC	CV	1200	395	120 V
AP-22	VUV-22	GPS	GPS-FC24AC	CV	1400	1305	120 V
AP-23	VUV-23	GPS	GPS-FC24AC	CV	1400	1305	120 V
AP-24	VUV-24	GPS	GPS-FC24AC	CV	1200	395	120 V
AP-25	VUV-25	GPS	GPS-FC24AC	CV	1200	395	120 V
AP-26	VUV-26	GPS	GPS-FC24AC	CV	1200	395	120 V
AP-27	VUV-27	GPS	GPS-FC24AC	CV	1400	1210	120 V
AP-28	VUV-28	GPS	GPS-FC24AC	CV	1400	1210	120 V
AP-29	VUV-29	GPS	GPS-FC24AC	CV	1200	395	120 V
AP-30	VUV-30	GPS	GPS-FC24AC	CV	1800	500	120 V
AP-31	VUV-31	GPS	GPS-FC24AC	CV	800	195	120 V
AP-32	VUV-32	GPS	GPS-FC24AC	CV	1800	500	120 V
AP-33	FCU-1	GPS	GPS-FC24AC	CV	590	420	120 V
AP-34	FCU-2	GPS	GPS-FC24AC	CV	590	420	120 V
AP-35	FCU-3	GPS	GPS-FC24AC	CV	590	415	120 V
AP-36	FCU-4	GPS	GPS-FC24AC	CV	590	410	120 V
AP-37	FCU-5	GPS	GPS-FC24AC	CV	920	440	120 V
AP-38	FCU-6	GPS	GPS-FC24AC	CV	670	445	120 V
AP-39	FCU-7	GPS	GPS-FC24AC	CV	920	440	120 V
AP-40	FCU-8	GPS	GPS-FC24AC	CV	920	465	120 V
AP-41	FCU-9	GPS	GPS-FC24AC	CV	400	390	120 V
AP-42	FCU-10	GPS	GPS-FC24AC	CV	920	465	120 V
AP-43	FCU-11	GPS	GPS-FC24AC	CV	300	195	120 V
AP-44	FCU-12	GPS	GPS-FC24AC	CV	300	150	120 V
AP-45	FCU-13	GPS	GPS-FC24AC	CV	920	210	120 V
AP-46	FCU-14	GPS	GPS-FC24AC	CV	300	170	120 V
AP-47	AHU-23.1	GPS	GPS-iMOD-42	VAV	2650	380	120 V
AP-48	AHU-23.2	GPS	GPS-iMOD-66	CV	7500	2275	120 V
AP-49	AHU-23.3	GPS	GPS-iMOD-30	CV	1350	400	120 V
AP-50	AHU-23.4	GPS	GPS-iMOD-78	CV	10500	3000	120 V
AP-51	AHU-23.5	GPS	GPS-iMOD-80	CV	12000	4000	120 V
AP-52	AHU-23.6	GPS	GPS-iMOD-66	VAV	7400	2000	120 V
AP-53	RTU-23.1	GPS	GPS-iMOD-42	VAV	2800	420	120 V
AP-54	RTU-23.2	GPS	GPS-iMOD-48	CV	3600	600	120 V
AP-55	RTU-23.3	GPS	GPS-iMOD-48	CV	4000	1965	120 V

GENERAL REQUIREMENTS:

1. IONIZATION POWER SUPPLY SHALL HAVE INTEGRAL BMS ALARM CONTACTS.
2. IONIZATION BARS SHALL BE PROVIDED WITH MOUNTING MAGNETS.
3. IONIZATION SYSTEM SHALL HAVE BEEN TESTED AND CERTIFIED BY UL 2998 AS AN OZONE FREE DEVICE.
4. PROVIDE WITH INTEGRAL SELF CLEANING SYSTEM.

VENTILATOR (INTAKE) SCHEDULE

MARK	MANUFACTURER	MODEL	CFM	THROAT SIZE (IN x IN)	THROAT AREA (SQ FT)	APD (in-wg)	DAMPER
IV-1	COOK	GI	800	16" x 16"	1.78	.017	MOTORIZED
IV-2	COOK	GI	1000	16" x 16"	1.78	.024	MOTORIZED
IV-3	COOK	GI	1000	16" x 16"	1.78	.024	MOTORIZED
IV-4	COOK	GI	1000	16" x 16"	1.78	.024	MOTORIZED
IV-5	COOK	GI	1000	16" x 16"	1.78	.024	MOTORIZED
IV-6	COOK	GI	1000	16" x 16"	1.78	.024	MOTORIZED
IV-7	COOK	GI		18" x 24"			
IV-8	COOK	GI		8" x 8"			
IV-9	COOK	GI		12" x 18"			
IV-10	COOK	GI		18" x 24"			

GENERAL REQUIREMENTS:

1. BIRDSCREEN.
2. CONTRACTOR SHALL VERIFY DUCTWORK CONNECTION SIZE AND COORDINATE LOCATION PRIOR TO ORDERING.
3. ANTI-CONDENSATE COATING.
4. PROVIDE PREFABRICATED, INSULATED ROOF CURB.
5. MOTORIZED DAMPERS ARE PROVIDED BY THE TEMPERATURE CONTROLS CONTRACTOR.

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022 BIDS & CONSTRUCTION
01.19.2023 ADDENDUM 002

DRAWN RTF
REVIEWED JBH

PROJECT NO. 5-5802

MECHANICAL SCHEDULES

M9.02

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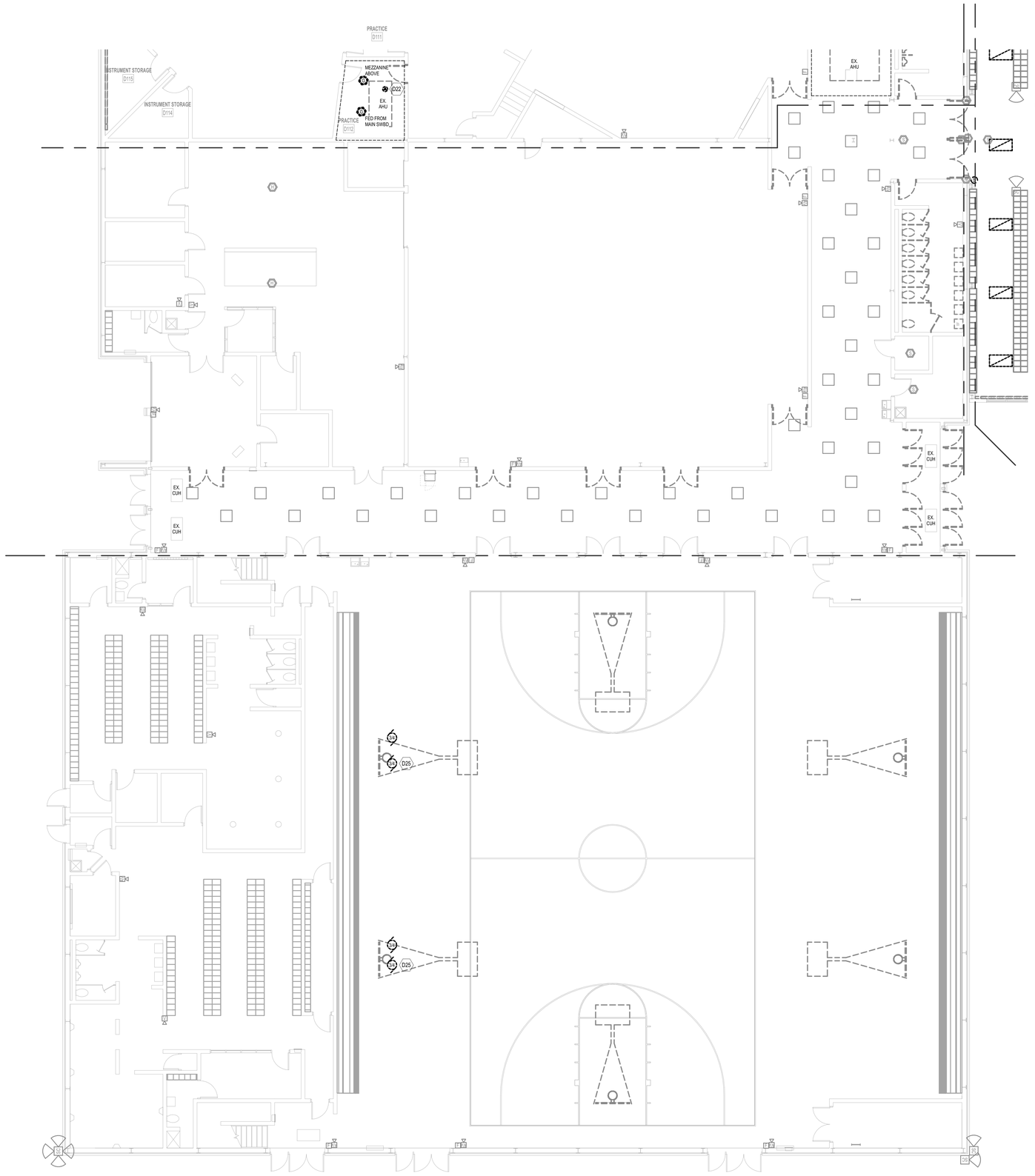


UNIT 'E' FIRST FLOOR ELECTRICAL DEMOLITION PLAN

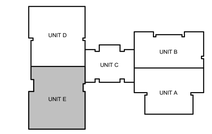
1/8" = 1'-0"

ELECTRICAL DEMOLITION GENERAL NOTES

1. REMOVE ALL ITEMS SHOWN ON DEMO PLAN, UNLESS OTHERWISE NOTED. REMOVE ALL UNUSED CONDUIT, RACEWAYS, WIRE, CABLE, CONTROLS, JUNCTION BOXES, DISCONNECTS, MOUNTS, AND RELATED ELECTRICAL ACCESSORIES COMPLETELY BACK TO SOURCE. REFER TO DEMOLITION SPECIFICATION.
2. MAKE PROVISIONS TO BACKFEED OR RE-CIRCUIT ANY ITEMS THAT ARE EXISTING TO REMAIN WHICH ARE AFFECTED BY THE DEMOLITIONS.
3. THE OWNER RESERVES THE RIGHT TO SALVAGE, WHOLE OR IN PART, ANY EQUIPMENT, SYSTEMS, AND/OR MATERIALS THAT ARE SCHEDULED FOR DEMOLITION PRIOR TO REMOVAL FROM THE BUILDING/SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISCONNECTION AND GATHERING OF SUCH ITEMS TO A CENTRAL LOCATION AGREED UPON BY THE OWNER AND CONTRACTOR. ALL REMAINING EQUIPMENT AND/OR MATERIALS REMOVED AND NOT REUSED ON THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE BUILDING/SITE.
4. ALL EQUIPMENT AND/OR MATERIALS SLATED FOR REUSE SHALL BE CAREFULLY REMOVED AND STORED TO PREVENT DAMAGE AND REINSTALLED AS WORK PROGRESSES.
5. ALL DEMOLITION SHOWN IS GATHERED FROM FIELD OBSERVATION AND/OR RECORD DRAWINGS. INVESTIGATION OF EXISTING SYSTEMS WILL BE REQUIRED BY THE CONTRACTOR AS PART OF THE BID PRICE, SO THAT THE EXACT EXTENT OF DEMOLITION CAN BE ACCURATELY DETERMINED. THE CONTRACTOR'S BID PRICE SHALL ALSO INCLUDE REMOVAL OF SOME PORTIONS OF SYSTEMS NOT EXPLICITLY SHOWN ON THIS DRAWING, BUT DISCOVERED DURING THE INVESTIGATION PROCESS. WHERE THE EXTENT OF DEMOLITION IS UNCLEAR, THE CONTRACTOR SHALL CONSULT WITH THE ARCHITECT/ENGINEER AND OWNER TO DETERMINE WHICH PORTIONS OF EXISTING SYSTEMS MUST REMAIN ACTIVE AND WHICH PORTIONS MUST BE DEMOLISHED.
6. CONTRACTOR SHALL FIELD VERIFY ACTUAL LOCATION AND SIZES OF EXISTING CONDUIT, WIRING, AND EQUIPMENT.
7. IF ASBESTOS OR PCB MATERIAL IS ENCOUNTERED IT WILL BE REMOVED BY THE OWNER.
8. PATCH AND REPAIR ALL FLOOR, WALL AND CEILING OPENINGS DUE TO DEMOLITION WHICH ARE NOT TO BE RE-USED TO MATCH EXISTING CONSTRUCTION.
9. CONTRACTOR SHALL PROTECT ALL WALLS, CEILINGS, FLOORS, LIGHTS, AND OTHER FINISHED SURFACES THAT ARE NOT TO BE REMOVED. IF DAMAGED, CONTRACTOR SHALL REPAIR TO MATCH EXISTING CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
10. EXISTING CONDUIT SYSTEMS MAY BE REUSED FOR THE INSTALLATION OF NEW CONDUCTORS IF THEY ARE DEEMED TO BE IN GOOD CONDITION AND OF ADEQUATE SIZE FOR CODE-COMPLIANT INSTALLATION OF THE NEW CONDUCTORS. REWORK/REROUTE CONDUIT AS NECESSARY TO PROVIDE FEEDS PER POWER AND/OR LIGHTING PLANS.
11. PROVIDE BLANK COVER OVER ANY ABANDONED AND REMAINING ROUGH-INS OR JUNCTION BOXES TO MATCH EXISTING.

ELECTRICAL KEYNOTES

D22	THIS EQUIPMENT IS PART OF THE MECHANICAL ALTERNATE WHICH IS REPLACEMENT OF HVAC UNITS IN UNIT 'D' AS NOTED ON THE PLANS.
D25	THIS IS AN EXISTING MOTORIZED BACKBOARD. THE BACKBOARD IS BEING REPLACED. E.C. TO DISCONNECT AND RECONNECT NEW BACKBOARD. ALL EXISTING CONDUCTORS, RACEWAYS AND SWITCHES TO REMAIN THE SAME.



KEY PLAN

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

01.19.2023 ADDENDUM 002

DRAWN TJO

REVIEWED AAM

PROJECT NO. 5-5802

UNIT 'E' FIRST FLOOR ELECTRICAL DEMOLITION PLAN

E1.1E

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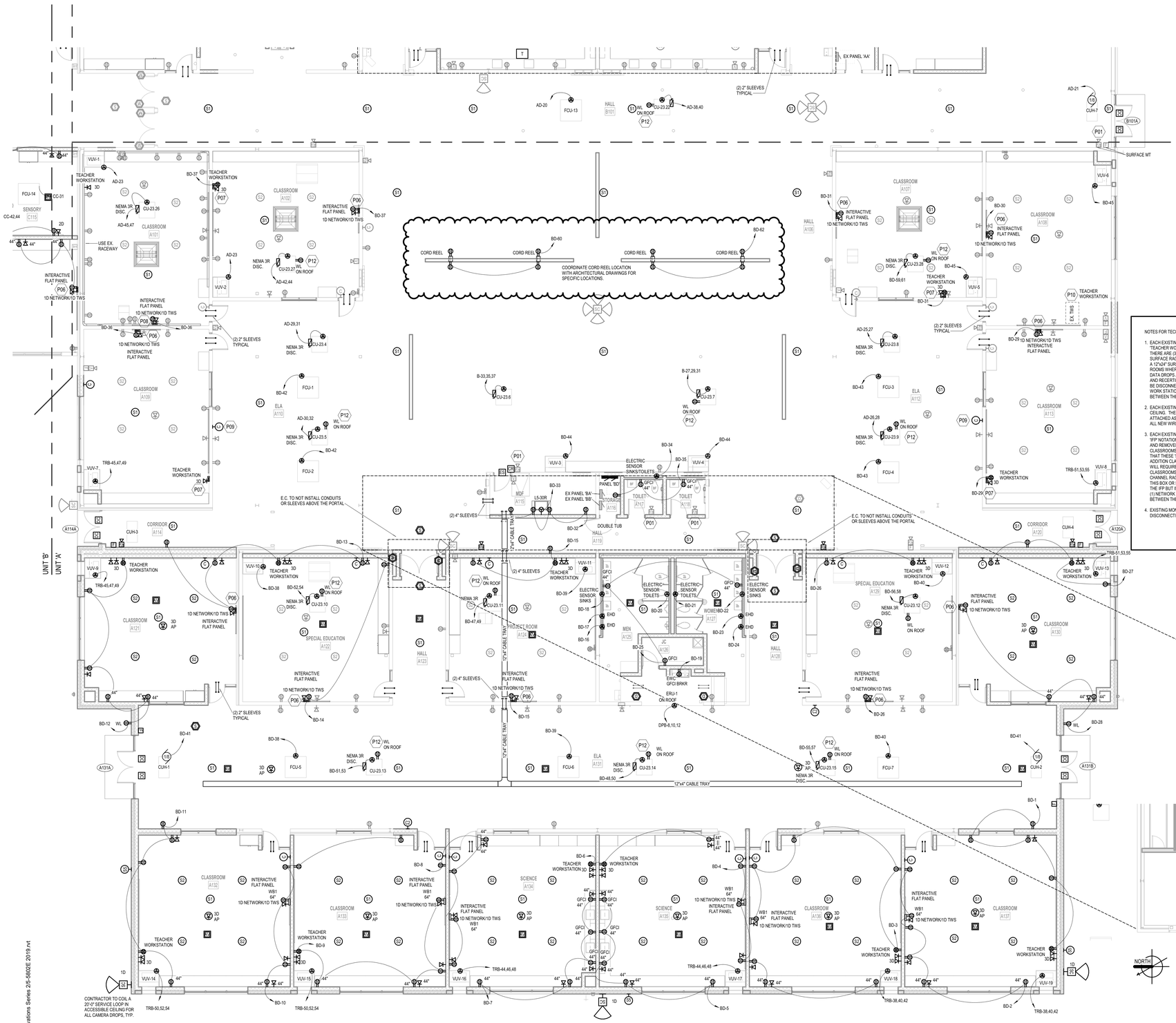
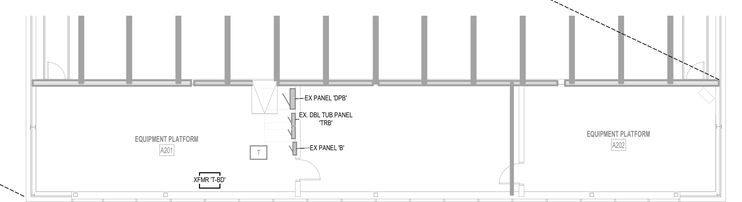


NORTH

UNIT 'A' FIRST FLOOR POWER & COMMUNICATIONS PLAN

1/8" = 1'-0"



NORTH

UNIT 'A' MEZZANINE POWER & COMMUNICATIONS PLAN

1/8" = 1'-0"

POWER & COMMUNICATION GENERAL NOTES

1. REFER TO ELECTRICAL GENERAL NOTES ON SHEET E0.01.
2. REFER TO CODE COMPLIANCE PLAN FOR LOCATIONS AND RATINGS OF VERTICAL AND HORIZONTAL BUILDING ASSEMBLIES. PROVIDE APPROPRIATE FIRESTOPPING SYSTEMS PER SPECIFICATIONS TO MEET ALL APPLICABLE CODES.
3. PROVIDE 120VAC POWER FOR ALL SMOKE DAMPERS AND COMBINATION FIRE/SMOKE DAMPERS.
   A. REFER TO MECHANICAL/HVAC DRAWINGS FOR LOCATIONS AND QUANTITIES OF DAMPERS.
   B. CONNECT TO DEDICATED 20A BRANCH CIRCUIT (WITH BREAKER LOCK-ON ACCESSORY) IN LOCAL PANELBOARD FOR DAMPER(S) IN EACH AREA (DAMPERS MAY BE GROUPED ON EACH CIRCUIT).
   C. TERMINATE W/ BOX-COVER FUSIBLE DISCONNECT SWITCH AT EACH DAMPER.
   D. PROVIDE FIRE ALARM DUCT SMOKE DETECTOR WITHIN 5 FEET OF EACH DAMPER (UNLESS COVERED BY ANOTHER DUCT DETECTOR WITHIN 5 FEET).
   E. PROVIDE FIRE ALARM ADDRESSABLE RELAY(S) FOR INTERLOCKING DAMPER W/ CORRESPONDING HVAC UNIT(S) PER CODE REQUIREMENTS.
4. PROVIDE BOX-COVER FUSIBLE DISCONNECT SWITCH (ON BUILDING INTERIOR IN ACCESSIBLE LOCATION) FOR EACH SMALL (< 1/2 HP) MECHANICAL AND/OR PLUMBING EQUIPMENT MOTOR LOAD WHERE MORE THAN ONE UNIT IS CONNECTED TO A COMMON BRANCH CIRCUIT. TYPICAL EQUIPMENT TYPES INCLUDE BUT ARE NOT LIMITED TO CABINET HEATERS, DAMPERS, EXHAUST FANS, FAN COIL UNITS, PUMPS, UNIT HEATERS, VAV BOXES, ETC.

ELECTRICAL KEYNOTES

P01	CONTRACTOR TO REUSE AND REINSTALL EXISTING FIRE ALARM DEVICE AND WIRE INTO EXISTING FIRE ALARM SYSTEM FOR A COMPLETE AND OPERABLE SYSTEM.
P06	THIS IS AN INTERACTIVE FLAT PANEL LOCATION ON AN EXISTING WALL. INSTEAD OF A RECESSED WALL BOX (WB1) THE CONTRACTOR WILL INSTALL DUAL SURFACE RACEWAY FROM THE CEILING TO 64" AFF WITH A DUPLEX RECEPTACLE AND 2 DATA DROPS. (1) NETWORK DROP AND (1) DROP BETWEEN THE 'IFP' AND 'TWS'. CONTRACTOR SHOULD BID THE CEILING HEIGHT AT 9'-0" AFF.
P07	THIS IS A NEW TEACHER STATION LOCATION. CONTRACTOR TO FURNISH SURFACE DUAL CHANNEL RACEWAY AND RELOCATE AND RETERMINATE THE EXISTING (3) CAT 6 DATA DROPS TO THIS LOCATION WITH ONE ADDED CAT6 DROP BETWEEN THIS LOCATION AND THE 'IFP'. RACEWAY WILL GO FROM CEILING TO 18" AFF. CONTRACTOR TO FURNISH AND INSTALL A 5'-0" PIECE OF RUBBER OVER THE FLOOR RACEWAY FOR TEACHER'S CORDS TO DESK.
P08	THIS IS AN INTERACTIVE FLAT PANEL LOCATION ON AN EXISTING WALL. INSTEAD OF A RECESSED WALL BOX (WB1) THE CONTRACTOR WILL INSTALL DUAL SURFACE RACEWAY FROM THE EXISTING DUAL RACEWAY AT 18" AFF AND TO INSTALL UP BEHIND THE FLAT PANEL TO 64" AFF.
P09	REUSE AND REINSTALL EXISTING CLOCK.
P10	REUSE EXISTING TEACHER STATION. ADD A DATA CONNECTION CAT6 BETWEEN HERE AND THE 'IFP'
P12	THIS IS A SERVICE RECEPTACLE FOR ROOFTOP MECHANICAL EQUIPMENT. CONTRACTOR TO FEED FROM LOCAL 120V CKT. AND MOUNT ON STRUTS ATTACHED TO EQUIPMENT BASE.

NOTES FOR TECHNOLOGY:

1. EACH EXISTING CLASSROOM HAS A 'TWS', WHICH INDICATES THE TEACHER WORK STATION. AT EACH EXISTING TEACHER LOCATION THERE ARE (3) DATA DROPS, WHICH ARE TYPICALLY INSTALLED WITH A SURFACE RACEWAY. ALONG WITH THIS RACEWAY IN SEVERAL ROOMS IS A 12"x24" SURFACE BOX WITH OLD DATA DROPS/EQUIPMENT. IN ALL EXISTING ROOMS WHERE THE TEACHER STATION IS BEING RELOCATED THE EXISTING DATA DROPS ARE TO BE RELOCATED TO THE NEW LOCATION AND TERMINATED AND RECERTIFIED AND THE SURFACE RACEWAY AND JUNCTION BOX ARE TO BE DISCONNECTED AND REMOVED. THESE DROPS ARE CAT6. ALL NEW TEACHER WORK STATION 'TWS' WILL HAVE (3) DATA DROPS WITH (1) ADDITIONAL CAT6 DROP BETWEEN THE 'TWS' AND THE 'IFP'. SEE NOTE 3 BELOW.
2. EACH EXISTING CLASSROOM HAS (3) DATA DROPS TO THE ACCESS POINT IN THE CEILING. THESE WILL REMAIN IN AREAS INDICATED WITH THE ACCESS POINT ATTACHED AS THEY ARE ALL ASSIGNED ADDRESSES. THESE DROPS ARE CAT6. ALL NEW WIRELESS ACCESS POINTS WILL REQUIRE (3) CAT6 DATA DROPS.
3. EACH EXISTING CLASSROOM HAS AN INTERACTIVE FLAT PANEL, INDICATED BY 'IFP' NOTATION. THESE DEVICES WITH THE MOUNTS WILL BE DISCONNECTED AND REMOVED BY THE OWNER. THE ATTACHED SPEAKERS (S2) IN MOST EXISTING CLASSROOMS ARE TO REMAIN WITH WIRE INTACT. THERE ARE (6) LOCATIONS THAT THESE 'S2' SPEAKERS ARE TO BE REMOVED AND REINSTALLED IN THE NEW ADDITION CLASSROOMS. THE 'IFP' LOCATIONS FOR ROOMS WITH NEW WALLS WILL REQUIRE A 'WB1' AS DEFINED IN THE SPECIFICATIONS. 'IFP' LOCATIONS FOR CLASSROOMS WITH EXISTING WALL S WILL HAVE A SURFACE MOUNTED DUAL CHANNEL RACEWAY WITH POWER AND DATA. IN BOTH CASES, THE LOCATION OF THIS BOX OR SURFACE RACEWAY IS NOT TO FALL DIRECTLY CENTERED BEHIND THE IFP BUT INSTEAD BEHIND THE IFP OFF TO ONE SIDE. EACH 'IFP' IS TO HAVE (1) NETWORK CAT6 DROP AND (1) CAT6 CABLE TO BE TERMINATED ON BOTH ENDS BETWEEN THE 'IFP' AND THE 'TWS'.
4. EXISTING MONITORS/T.V.'S. CONTRACTOR SHALL INCLUDE IN THEIR BID THE DISCONNECTION AND REMOVAL OF 25 OLD MONITORS AND MOUNTS.

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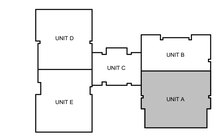
THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS
THREE RIVERS COMMUNITY SCHOOLS
THREE RIVERS, MICHIGAN

ISSUANCES	
12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	TJO
REVIEWED	AAM
PROJECT NO.	5-5802

UNIT 'A' POWER & COMMUNICATIONS PLANS

E2.1A



NORTH

KEY PLAN

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POWER & COMMUNICATION GENERAL NOTES

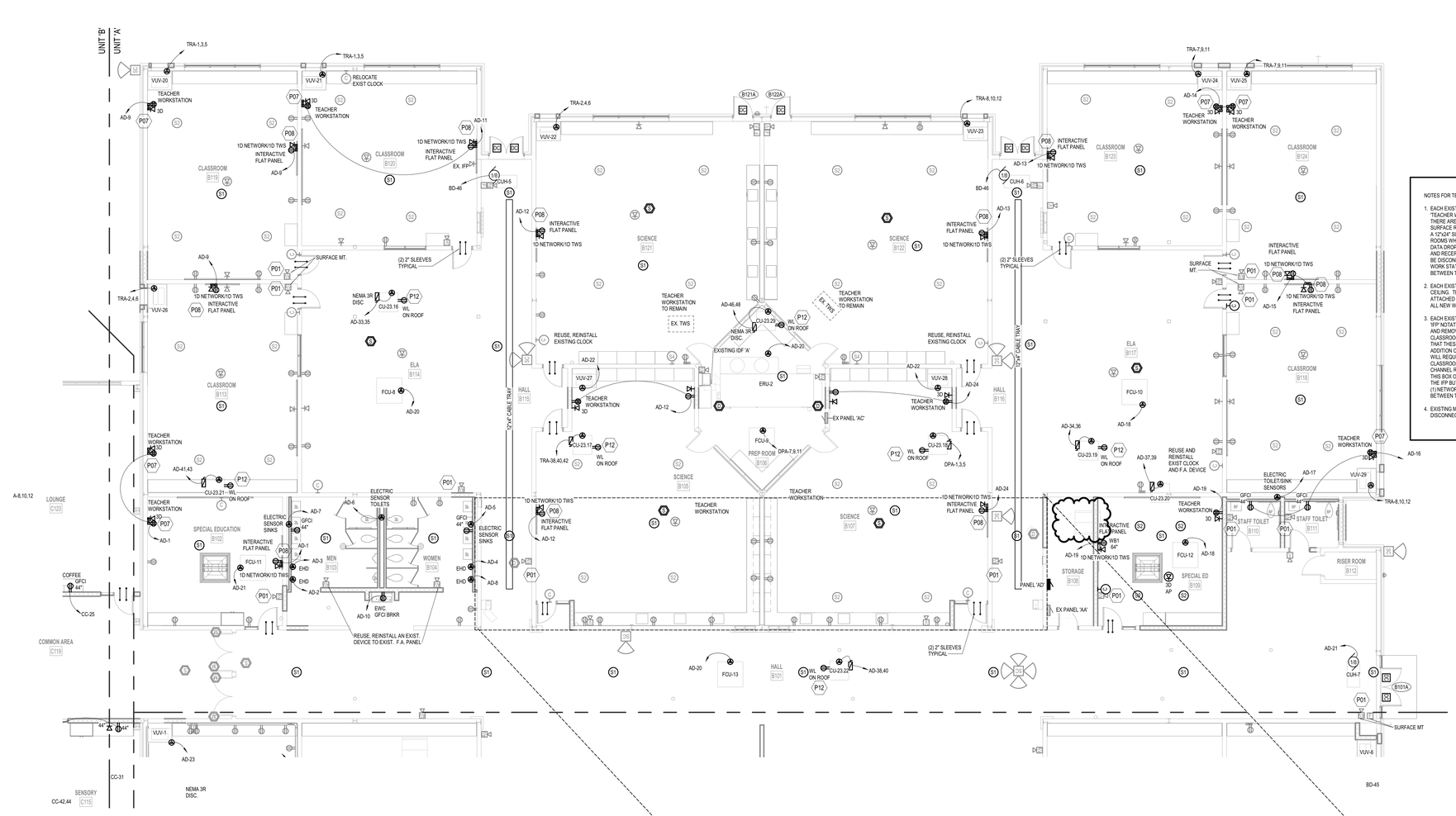
1. REFER TO ELECTRICAL GENERAL NOTES ON SHEET E0.01.
2. REFER TO CODE COMPLIANCE PLAN FOR LOCATIONS AND RATINGS OF VERTICAL AND HORIZONTAL BUILDING ASSEMBLIES. PROVIDE APPROPRIATE FIRESTOPPING SYSTEMS PER SPECIFICATIONS TO MEET ALL APPLICABLE CODES.
3. PROVIDE 120VAC POWER FOR ALL SMOKE DAMPERS AND COMBINATION FIRE/SMOKE DAMPERS.
   A. REFER TO MECHANICAL/HVAC DRAWINGS FOR LOCATIONS AND QUANTITIES OF DAMPERS.
   B. CONNECT TO DEDICATED 20A BRANCH CIRCUIT (WITH BREAKER LOCK-ON ACCESSORY) IN LOCAL PANELBOARD FOR DAMPER(S) IN EACH AREA (DAMPERS MAY BE GROUPED ON EACH CIRCUIT).
   C. TERMINATE W/ BOX-COVER FUSIBLE DISCONNECT SWITCH AT EACH DAMPER.
   D. PROVIDE FIRE ALARM DUCT SMOKE DETECTOR WITHIN 5 FEET OF EACH DAMPER (UNLESS COVERED BY ANOTHER DUCT DETECTOR WITHIN 5 FEET).
   E. PROVIDE FIRE ALARM ADDRESSABLE RELAY(S) FOR INTERLOCKING DAMPER W/ CORRESPONDING HVAC UNIT(S) PER CODE REQUIREMENTS.
4. PROVIDE BOX-COVER FUSIBLE DISCONNECT SWITCH (ON BUILDING INTERIOR IN ACCESSIBLE LOCATION) FOR EACH SMALL (< 1/2 HP) MECHANICAL AND/OR PLUMBING EQUIPMENT MOTOR LOAD WHERE MORE THAN ONE UNIT IS CONNECTED TO A COMMON BRANCH CIRCUIT. TYPICAL EQUIPMENT TYPES INCLUDE BUT ARE NOT LIMITED TO CABINET HEATERS, DAMPERS, EXHAUST FANS, FAN COIL UNITS, PUMPS, UNIT HEATERS, VAV BOXES, ETC.

ELECTRICAL KEYNOTES

P01	CONTRACTOR TO REUSE AND REINSTALL EXISTING FIRE ALARM DEVICE AND WIRE INTO EXISTING FIRE ALARM SYSTEM FOR A COMPLETE AND OPERABLE SYSTEM.
P07	THIS IS A NEW TEACHER STATION LOCATION. CONTRACTOR TO FURNISH SURFACE DUAL CHANNEL RACEWAY AND RELOCATE AND RETERMINATE THE EXISTING (3) CAT 6 DATA DROPS TO THIS LOCATION WITH ONE ADDED CAT6 DROP BETWEEN THIS LOCATION AND THE 'IFP'. RACEWAY WILL GO FROM CEILING TO 16" AFF. CONTRACTOR TO FURNISH AND INSTALL A 5'-0" PIECE OF RUBBER OVER THE FLOOR RACEWAY FOR TEACHER'S CORDS TO DESK.
P08	THIS IS AN INTERACTIVE FLAT PANEL LOCATION ON AN EXISTING WALL. INSTEAD OF A RECESSED WALL BOX (WB1) THE CONTRACTOR WILL INSTALL DUAL SURFACE RACEWAY FROM THE EXISTING DUAL RACEWAY AT 16" AFF AND TO INSTALL UP BEHIND THE FLAT PANEL TO 64" AFF.
P12	THIS IS A SERVICE RECEPTACLE FOR ROOFTOP MECHANICAL EQUIPMENT. CONTRACTOR TO FEED FROM LOCAL 120V CKT AND MOUNT ON STRUTS ATTACHED TO EQUIPMENT BASE.

NOTES FOR TECHNOLOGY:

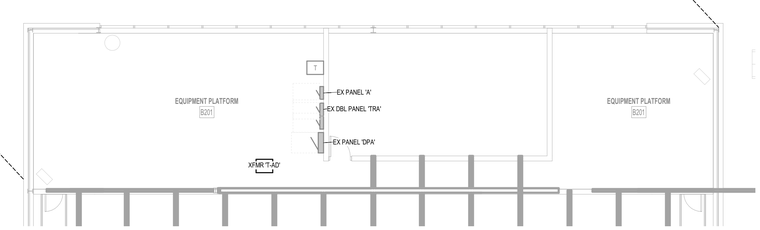
1. EACH EXISTING CLASSROOM HAS A 'TWS', WHICH INDICATES THE 'TEACHER WORK STATION'. AT EACH EXISTING TEACHER LOCATION THERE ARE (3) DATA DROPS, WHICH ARE TYPICALLY INSTALLED WITH A SURFACE RACEWAY. ALONG WITH THIS RACEWAY IN SEVERAL ROOMS IS A 12"x24" SURFACE BOX WITH OLD DATA DROPS/EQUIPMENT. IN ALL EXISTING ROOMS WHERE THE TEACHER STATION IS BEING RELOCATED THE EXISTING DATA DROPS ARE TO BE RELOCATED TO THE NEW LOCATION AND TERMINATED AND RECERTIFIED AND THE SURFACE RACEWAY AND JUNCTION BOX ARE TO BE DISCONNECTED AND REMOVED. THESE DROPS ARE CAT6. ALL NEW TEACHER WORK STATION 'TWS' WILL HAVE (3) DATA DROPS WITH (1) ADDITIONAL CAT6 DROP BETWEEN THE 'TWS' AND THE 'IFP'. SEE NOTE 3 BELOW.
2. EACH EXISTING CLASSROOM HAS (3) DATA DROPS TO THE ACCESS POINT IN THE CEILING. THESE WILL REMAIN IN AREAS INDICATED WITH THE ACCESS POINT ATTACHED AS THEY ARE ALL ASSIGNED ADDRESSES. THESE DROPS ARE CAT6. ALL NEW WIRELESS ACCESS POINTS WILL REQUIRE (3) CAT6 DATA DROPS.
3. EACH EXISTING CLASSROOM HAS AN INTERACTIVE FLAT PANEL, INDICATED BY 'IFP' NOTATION. THESE DEVICES WITH THE MOUNTS WILL BE DISCONNECTED AND REMOVED BY THE OWNER. THE ATTACHED SPEAKERS (S2) IN MOST EXISTING CLASSROOMS ARE TO REMAIN WITH WIRE INTACT. THERE ARE (6) LOCATIONS THAT THESE 'S2' SPEAKERS ARE TO BE REMOVED AND REINSTALLED IN THE NEW ADDITION CLASSROOMS. THE 'IFP' LOCATIONS FOR ROOMS WITH NEW WALLS WILL REQUIRE A 'WB1' AS DEFINED IN THE SPECIFICATIONS. 'IFP' LOCATIONS FOR CLASSROOMS WITH EXISTING WALLS WILL HAVE A SURFACE MOUNTED DUAL CHANNEL RACEWAY WITH POWER AND DATA. IN BOTH CASES, THE LOCATION OF THIS BOX OR SURFACE RACEWAY IS NOT TO FALL DIRECTLY CENTERED BEHIND THE IFP BUT INSTEAD BEHIND THE IFP OFF TO ONE SIDE. EACH 'IFP' IS TO HAVE (1) NETWORK CAT6 DROP AND (1) CAT6 CABLE TO BE TERMINATED ON BOTH ENDS BETWEEN THE 'IFP' AND THE 'TWS'.
4. EXISTING MONITORS/T.V.'S. CONTRACTOR SHALL INCLUDE IN THEIR BID THE DISCONNECTION AND REMOVAL OF 25 OLD MONITORS AND MOUNTS.



NORTH

UNIT 'B' FIRST FLOOR POWER & COMMUNICATIONS PLAN

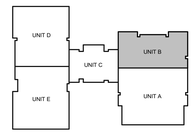
1/8" = 1'-0"



NORTH

UNIT 'B' MEZZANINE POWER & COMMUNICATIONS PLAN

1/8" = 1'-0"



NORTH

KEY PLAN

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022 BIDS & CONSTRUCTION
01.19.2023 ADDENDUM 002

DRAWN TJO
REVIEWED AAM

PROJECT NO. 5-5802

UNIT 'B' POWER & COMMUNICATIONS PLANS

E2.1B

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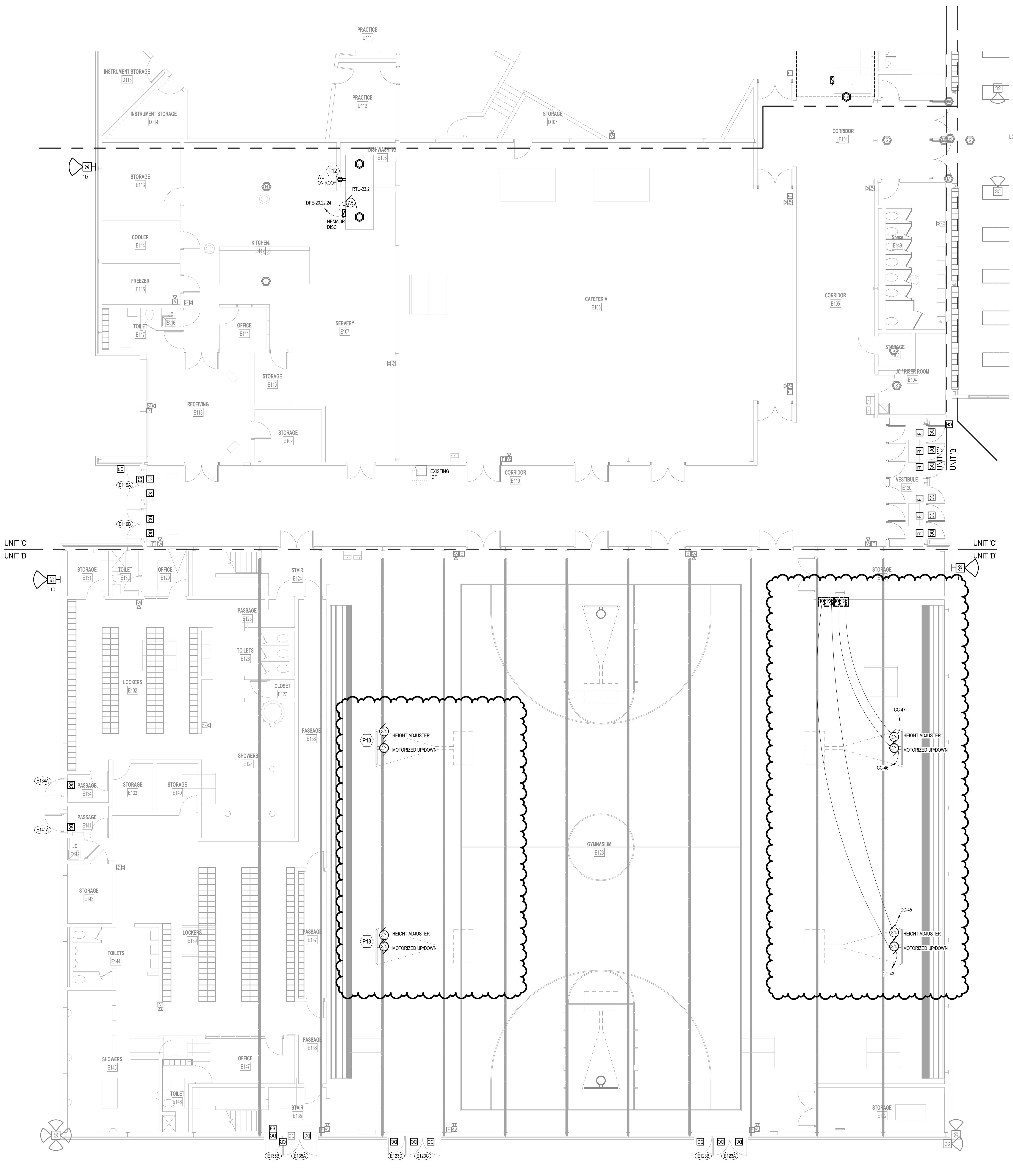


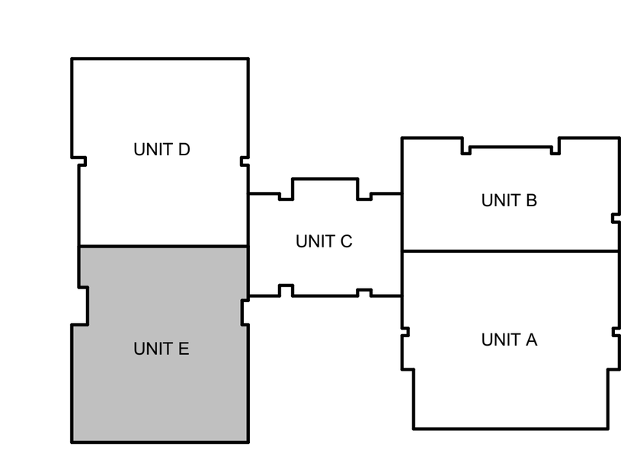
UNIT 'E' FIRST FLOOR POWER & COMMUNICATIONS PLAN

1/8" = 1'-0"

POWER & COMMUNICATION GENERAL NOTES

1. REFER TO ELECTRICAL GENERAL NOTES ON SHEET E0.01.
2. REFER TO CODE COMPLIANCE PLAN FOR LOCATIONS AND RATINGS OF VERTICAL AND HORIZONTAL BUILDING ASSEMBLIES. PROVIDE APPROPRIATE FIRESTOPPING SYSTEMS PER SPECIFICATIONS TO MEET ALL APPLICABLE CODES.
3. PROVIDE 120VAC POWER FOR ALL SMOKE DAMPERS AND COMBINATION FIRE/SMOKE DAMPERS.
   A. REFER TO MECHANICAL/HVAC DRAWINGS FOR LOCATIONS AND QUANTITIES OF DAMPERS.
   B. CONNECT TO DEDICATED 20A BRANCH CIRCUIT (WITH BREAKER LOCK-ON ACCESSORY) IN LOCAL PANELBOARD FOR DAMPER(S) IN EACH AREA (DAMPERS MAY BE GROUPED ON EACH CIRCUIT).
   C. TERMINATE W/ BOX-COVER FUSIBLE DISCONNECT SWITCH AT EACH DAMPER.
   D. PROVIDE FIRE ALARM DUCT SMOKE DETECTOR WITHIN 5 FEET OF EACH DAMPER (UNLESS COVERED BY ANOTHER DUCT DETECTOR WITHIN 5 FEET).
   E. PROVIDE FIRE ALARM ADDRESSABLE RELAY(S) FOR INTERLOCKING DAMPER W/ CORRESPONDING HVAC UNIT(S) PER CODE REQUIREMENTS.
4. PROVIDE BOX-COVER FUSIBLE DISCONNECT SWITCH (ON BUILDING INTERIOR IN ACCESSIBLE LOCATION) FOR EACH SMALL (< 1/2 HP) MECHANICAL AND/OR PLUMBING EQUIPMENT MOTOR LOAD WHERE MORE THAN ONE UNIT IS CONNECTED TO A COMMON BRANCH CIRCUIT. TYPICAL EQUIPMENT TYPES INCLUDE BUT ARE NOT LIMITED TO CABINET HEATERS, DAMPERS, EXHAUST FANS, FAN COIL UNITS, PUMPS, UNIT HEATERS, VAV BOXES, ETC.

	ELECTRICAL KEYNOTES
P12	THIS IS A SERVICE RECEPTACLE FOR ROOFTOP MECHANICAL EQUIPMENT. CONTRACTOR TO FEED FROM LOCAL 120V CKT AND MOUNT ON STRUTS ATTACHED TO EQUIPMENT BASE.
P18	THIS IS AN EXISTING MOTORIZED BACKBOARD. THE BACKBOARD IS BEING REPLACED. E.C. TO DISCONNECT AND RECONNECT NEW BACKBOARD. ALL EXISTING CONDUCTORS, RACEWAYS AND SWITCHES TO REMAIN THE SAME.



KEY PLAN

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES	
12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	TJO
REVIEWED	AAM
PROJECT NO.	5-5802

UNIT 'E' FIRST FLOOR POWER & COMMUNICATIONS PLAN

E2.1E

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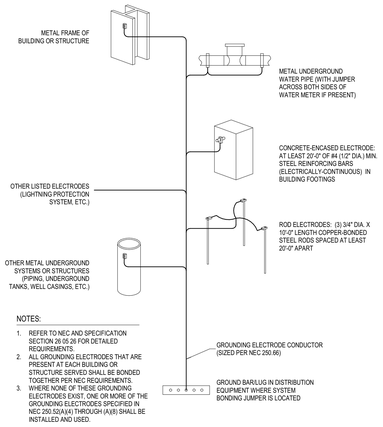
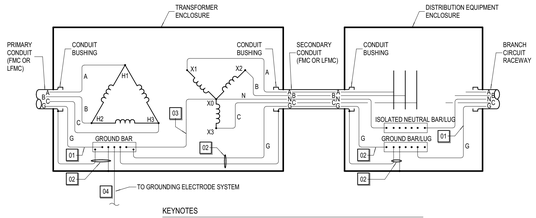


NOTES:

1. REFER TO NEC AND SPECIFICATION SECTION 26 05 26 FOR DETAILED REQUIREMENTS.
2. ALL GROUNDING ELECTRODES THAT ARE PRESENT AT EACH BUILDING OR STRUCTURE SERVED SHALL BE BONDED TOGETHER PER NEC REQUIREMENTS.
3. WHERE NONE OF THESE GROUNDING ELECTRODES EXIST, ONE OR MORE OF THE GROUNDING ELECTRODES SPECIFIED IN NEC 250.52(A)(1) THROUGH (A)(8) SHALL BE INSTALLED AND USED.

3 / E4.01 GROUNDING ELECTRODE SYSTEM DETAIL

1/8" = 1'-0"



KEYNOTES

01	EQUIPMENT GROUNDING CONDUCTOR (SIZED PER NEC 250.122)
02	SUPPLY-SIDE BONDING JUMPER (SIZED PER NEC 250.102)
03	SYSTEM BONDING JUMPER (SIZED PER NEC 250.102)
04	GROUNDING ELECTRODE CONDUCTOR (SIZED PER NEC 250.66)

2 / E4.01 SEPARATELY DERIVED SYSTEM GROUNDING/BONDING SCHEMATIC (SYSTEM BONDING AT SOURCE)

1/8" = 1'-0"

LOW-VOLTAGE FEEDER SCHEDULE

BASED ON NEC TABLE 310.15(B)(16) FOR COMPACT ALUMINUM CONDUCTORS APPLIED AT 75°C RATING

1 PHASE, 3 WIRE WITH GROUND -OR- 3 PHASE, 3 WIRE WITH GROUND		3 PHASE, 4 WIRE WITH GROUND	
TAG	FILL	TAG	FILL
A100G	(3) #1 AWG + (1) #6 AWG GRD IN 1-1/4" CONDUIT	A100NG	(4) #1 AWG + (1) #6 AWG GRD IN 1-1/4" CONDUIT
A120G	(3) #1/0 AWG + (1) #4 AWG GRD IN 1-1/4" CONDUIT	A120NG	(4) #1/0 AWG + (1) #4 AWG GRD IN 1-1/2" CONDUIT
A135G	(3) #2/0 AWG + (1) #4 AWG GRD IN 1-1/2" CONDUIT	A135NG	(4) #2/0 AWG + (1) #4 AWG GRD IN 2" CONDUIT
A155G	(3) #3/0 AWG + (1) #4 AWG GRD IN 1-1/2" CONDUIT	A155NG	(4) #3/0 AWG + (1) #4 AWG GRD IN 2" CONDUIT
A180G	(3) #4/0 AWG + (1) #4 AWG GRD IN 2" CONDUIT	A180NG	(4) #4/0 AWG + (1) #4 AWG GRD IN 2" CONDUIT
A205G	(3) 250 KCMIL + (1) #2 AWG GRD IN 2" CONDUIT	A205NG	(4) 250 KCMIL + (1) #2 AWG GRD IN 2-1/2" CONDUIT
A230G	(3) 300 KCMIL + (1) #2 AWG GRD IN 2-1/2" CONDUIT	A230NG	(4) 300 KCMIL + (1) #2 AWG GRD IN 2-1/2" CONDUIT
A250G	(3) 350 KCMIL + (1) #2 AWG GRD IN 2-1/2" CONDUIT	A250NG	(4) 350 KCMIL + (1) #2 AWG GRD IN 3" CONDUIT
A270G	(3) 400 KCMIL + (1) #2 AWG GRD IN 2-1/2" CONDUIT	A270NG	(4) 400 KCMIL + (1) #2 AWG GRD IN 3" CONDUIT
A310G	(3) 500 KCMIL + (1) #1 AWG GRD IN 3" CONDUIT	A310NG	(4) 500 KCMIL + (1) #1 AWG GRD IN 3" CONDUIT
A340G	(3) 600 KCMIL + (1) #1 AWG GRD IN 3" CONDUIT	A340NG	(4) 600 KCMIL + (1) #1 AWG GRD IN 3-1/2" CONDUIT
A400G	TWO PARALLEL [(3) 250 KCMIL + (1) #1 AWG GRD IN 2" CONDUIT]	A400NG	TWO PARALLEL [(4) 250 KCMIL + (1) #1 AWG GRD IN 2-1/2" CONDUIT]
A500G	TWO PARALLEL [(3) 350 KCMIL + (1) #1/0 AWG GRD IN 2-1/2" CONDUIT]	A500NG	TWO PARALLEL [(4) 350 KCMIL + (1) #1/0 AWG GRD IN 3" CONDUIT]
A600G	TWO PARALLEL [(3) 500 KCMIL + (1) #2/0 AWG GRD IN 3" CONDUIT]	A600NG	TWO PARALLEL [(4) 500 KCMIL + (1) #2/0 AWG GRD IN 3" CONDUIT]
A800G	THREE PARALLEL [(3) 500 KCMIL + (1) #3/0 AWG GRD IN 3" CONDUIT]	A800NG	THREE PARALLEL [(4) 500 KCMIL + (1) #3/0 AWG GRD IN 3-1/2" CONDUIT]
A1000G	FOUR PARALLEL [(3) 350 KCMIL + (1) #4/0 AWG GRD IN 2-1/2" CONDUIT]	A1000NG	FOUR PARALLEL [(4) 350 KCMIL + (1) #4/0 AWG GRD IN 3" CONDUIT]
A1200G	FOUR PARALLEL [(3) 500 KCMIL + (1) 250 KCMIL GRD IN 3" CONDUIT]	A1200NG	FOUR PARALLEL [(4) 500 KCMIL + (1) 250 KCMIL GRD IN 3" CONDUIT]
A1600G	SIX PARALLEL [(3) 500 KCMIL + (1) 350 KCMIL GRD IN 3" CONDUIT]	A1600NG	SIX PARALLEL [(4) 500 KCMIL + (1) 350 KCMIL GRD IN 3-1/2" CONDUIT]
A2000G	SEVEN PARALLEL [(3) 500 KCMIL + (1) 500 KCMIL GRD IN 3-1/2" CONDUIT]	A2000NG	SEVEN PARALLEL [(4) 500 KCMIL + (1) 500 KCMIL GRD IN 3-1/2" CONDUIT]
A2500G	EIGHT PARALLEL [(3) 600 KCMIL + (1) 600 KCMIL GRD IN 3-1/2" CONDUIT]	A2500NG	EIGHT PARALLEL [(4) 600 KCMIL + (1) 600 KCMIL GRD IN 3-1/2" CONDUIT]
A3000G	NINE PARALLEL [(3) 600 KCMIL + (1) 600 KCMIL GRD IN 3-1/2" CONDUIT]	A3000NG	NINE PARALLEL [(4) 600 KCMIL + (1) 600 KCMIL GRD IN 3-1/2" CONDUIT]

NOTE: DESIGNATIONS WITH "NN" (E.G. "A230NNG") SHALL BE SIMILAR TO THE REQUIRED "N" FEEDER EXCEPT WITH DOUBLE (200%) NEUTRAL CONDUCTOR.

LOW-VOLTAGE FEEDER SCHEDULE

BASED ON NEC TABLE 310.15(B)(16) FOR COPPER CONDUCTORS APPLIED AT 75°C RATING

1 PHASE, 3 WIRE WITH GROUND -OR- 3 PHASE, 3 WIRE WITH GROUND		3 PHASE, 4 WIRE WITH GROUND	
TAG	FILL	TAG	FILL
20G	(3) #12 AWG + (1) #12 AWG GRD IN 3/4" CONDUIT	20NG	(4) #12 AWG + (1) #12 AWG GRD IN 3/4" CONDUIT
30G	(3) #10 AWG + (1) #10 AWG GRD IN 3/4" CONDUIT	30NG	(4) #10 AWG + (1) #10 AWG GRD IN 3/4" CONDUIT
50G	(3) #8 AWG + (1) #10 AWG GRD IN 3/4" CONDUIT	50NG	(4) #8 AWG + (1) #10 AWG GRD IN 1" CONDUIT
65G	(3) #6 AWG + (1) #8 AWG GRD IN 1" CONDUIT	65NG	(4) #6 AWG + (1) #8 AWG GRD IN 1" CONDUIT
85G	(3) #4 AWG + (1) #8 AWG GRD IN 1" CONDUIT	85NG	(4) #4 AWG + (1) #8 AWG GRD IN 1-1/4" CONDUIT
100G	(3) #3 AWG + (1) #8 AWG GRD IN 1-1/4" CONDUIT	100NG	(4) #3 AWG + (1) #8 AWG GRD IN 1-1/4" CONDUIT
115G	(3) #2 AWG + (1) #6 AWG GRD IN 1-1/4" CONDUIT	115NG	(4) #2 AWG + (1) #6 AWG GRD IN 1-1/2" CONDUIT
130G	(3) #1 AWG + (1) #6 AWG GRD IN 1-1/2" CONDUIT	130NG	(4) #1 AWG + (1) #6 AWG GRD IN 2" CONDUIT
150G	(3) #1/0 AWG + (1) #6 AWG GRD IN 1-1/2" CONDUIT	150NG	(4) #1/0 AWG + (1) #6 AWG GRD IN 2" CONDUIT
175G	(3) #2/0 AWG + (1) #6 AWG GRD IN 2" CONDUIT	175NG	(4) #2/0 AWG + (1) #6 AWG GRD IN 2" CONDUIT
200G	(3) #3/0 AWG + (1) #6 AWG GRD IN 2" CONDUIT	200NG	(4) #3/0 AWG + (1) #6 AWG GRD IN 2-1/2" CONDUIT
230G	(3) #4/0 AWG + (1) #4 AWG GRD IN 2-1/2" CONDUIT	230NG	(4) #4/0 AWG + (1) #4 AWG GRD IN 2-1/2" CONDUIT
255G	(3) 250 KCMIL + (1) #4 AWG GRD IN 2-1/2" CONDUIT	255NG	(4) 250 KCMIL + (1) #4 AWG GRD IN 3" CONDUIT
285G	(3) 300 KCMIL + (1) #4 AWG GRD IN 2-1/2" CONDUIT	285NG	(4) 300 KCMIL + (1) #4 AWG GRD IN 3" CONDUIT
310G	(3) 350 KCMIL + (1) #3 AWG GRD IN 3" CONDUIT	310NG	(4) 350 KCMIL + (1) #3 AWG GRD IN 3" CONDUIT
335G	(3) 400 KCMIL + (1) #3 AWG GRD IN 3" CONDUIT	335NG	(4) 400 KCMIL + (1) #3 AWG GRD IN 3-1/2" CONDUIT
380G	(3) 500 KCMIL + (1) #3 AWG GRD IN 3" CONDUIT	380NG	(4) 500 KCMIL + (1) #3 AWG GRD IN 3-1/2" CONDUIT
420G	(3) 600 KCMIL + (1) #2 AWG GRD IN 3-1/2" CONDUIT	420NG	(4) 600 KCMIL + (1) #2 AWG GRD IN 3-1/2" CONDUIT
500G	TWO PARALLEL [(3) 250 KCMIL + (1) #2 AWG GRD IN 2-1/2" CONDUIT]	500NG	TWO PARALLEL [(4) 250 KCMIL + (1) #2 AWG GRD IN 3" CONDUIT]
600G	TWO PARALLEL [(3) 350 KCMIL + (1) #1 AWG GRD IN 3" CONDUIT]	600NG	TWO PARALLEL [(4) 350 KCMIL + (1) #1 AWG GRD IN 3" CONDUIT]
800G	TWO PARALLEL [(3) 500 KCMIL + (1) #1/0 AWG GRD IN 3-1/2" CONDUIT]	800NG	TWO PARALLEL [(4) 600 KCMIL + (1) #1/0 AWG GRD IN 3-1/2" CONDUIT]
1000G	THREE PARALLEL [(3) 500 KCMIL + (1) #2/0 AWG GRD IN 3" CONDUIT]	1000NG	THREE PARALLEL [(4) 500 KCMIL + (1) #2/0 AWG GRD IN 3-1/2" CONDUIT]
1200G	FOUR PARALLEL [(3) 350 KCMIL + (1) #3/0 AWG GRD IN 3" CONDUIT]	1200NG	FOUR PARALLEL [(4) 350 KCMIL + (1) #3/0 AWG GRD IN 3" CONDUIT]
1600G	FIVE PARALLEL [(3) 500 KCMIL + (1) #4/0 AWG GRD IN 3" CONDUIT]	1600NG	FIVE PARALLEL [(4) 500 KCMIL + (1) #4/0 AWG GRD IN 3-1/2" CONDUIT]
2000G	SIX PARALLEL [(3) 500 KCMIL + (1) 250 KCMIL GRD IN 3-1/2" CONDUIT]	2000NG	SIX PARALLEL [(4) 500 KCMIL + (1) 250 KCMIL GRD IN 3-1/2" CONDUIT]
2500G	SEVEN PARALLEL [(3) 500 KCMIL + (1) 350 KCMIL GRD IN 3-1/2" CONDUIT]	2500NG	SEVEN PARALLEL [(4) 500 KCMIL + (1) 350 KCMIL GRD IN 3-1/2" CONDUIT]
3000G	EIGHT PARALLEL [(3) 500 KCMIL + (1) 500 KCMIL GRD IN 3-1/2" CONDUIT]	3000NG	EIGHT PARALLEL [(4) 500 KCMIL + (1) 500 KCMIL GRD IN 3-1/2" CONDUIT]

NOTE: DESIGNATIONS WITH "NN" (E.G. "230NNG") SHALL BE SIMILAR TO THE REQUIRED "N" FEEDER EXCEPT WITH DOUBLE (200%) NEUTRAL CONDUCTOR.

ELECTRICAL SERVICE CALCULATION:

EXISTING ELECTRICAL SERVICE MDP SIZE: 3000A AT 480Y/3PH 4W

EXISTING HISTORIC PEAK DEMAND LOAD: 771KVA (928A)

EXISTING LOADS BEING REMOVED:

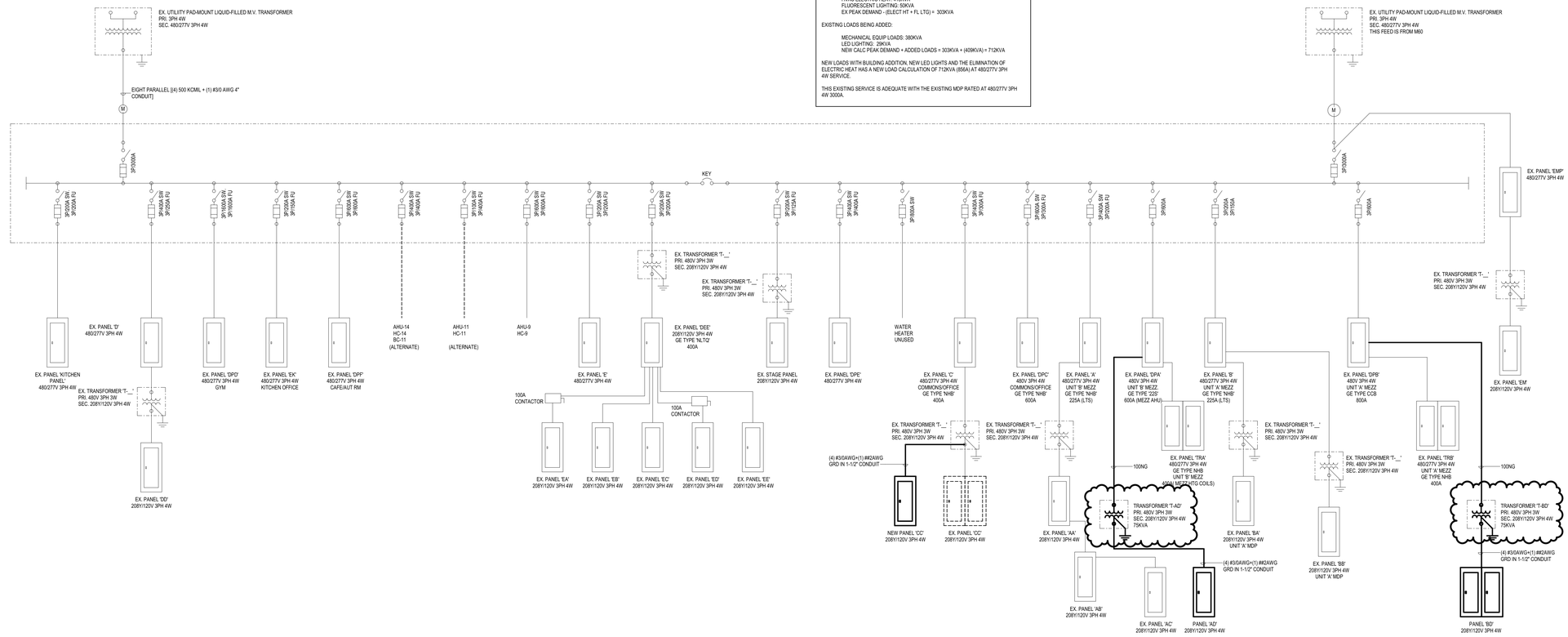
HVAC ELECTRIC HEAT: 418KVA
FLUORESCENT LIGHTING: 50KVA
EX PEAK DEMAND - (ELECT HT + FL LTG) = 303KVA

EXISTING LOADS BEING ADDED:

MECHANICAL EQUIP LOADS: 380KVA
LED LIGHTING: 29KVA
NEW CALC PEAK DEMAND + ADDED LOADS = 303KVA + (409KVA) = 712KVA

NEW LOADS WITH BUILDING ADDITION, NEW LED LIGHTS AND THE ELIMINATION OF ELECTRIC HEAT HAS A NEW LOAD CALCULATION OF 712KVA (856A) AT 480/277V 3PH 4W SERVICE.

THIS EXISTING SERVICE IS ADEQUATE WITH THE EXISTING MDP RATED AT 480/277V 3PH 4W 3000A.



1 / E4.01 POWER DISTRIBUTION ONE-LINE DIAGRAM

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01.19.2023	ADDENDUM 002

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REVIEWED	AAM
PROJECT NO.	5-5802

POWER DISTRIBUTION ONE-LINE DIAGRAM

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PANELBOARD: EX PANEL 'DPA'

LOCATION: EQUIPMENT PLATFORM B201 **DISTRIBUTION SYSTEM:** 480Y/277V 3PH 4W **MAINS TYPE:** MAIN CIRCUIT BREAKER
MOUNTING: SURFACE **SCCR:** 18KA **MAINS RATING:** 600 A
ENCLOSURE: TYPE 1 SUPPLY FROM: **MCB RATING:** 400 A

PROVIDE WITH THE FOLLOWING:

CIRCUIT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		C		POLES	TRIP	CIRCUIT DESCRIPTION	CIRCUIT
DPA-1				2,267									DPA-2
DPA-3	CU-18 (REUSE EXISTING 15A BRKR)	15 A	3			2,267							DPA-4
DPA-5								2,267					DPA-6
DPA-7				14,960									DPA-8
DPA-9	ERU-23.2 (REUSE EX 70A BRKR)	70 A	3			14,960							DPA-10
DPA-11								14,960					DPA-12
DPA-13				16,890	26,267								DPA-14
DPA-15	XFMR 'T-AD' (REUSE EX 100A BRKR)	100 A	3			18,662	26,267			3	225 A	EX DBL PANEL 'TRA'	DPA-16
DPA-17								19,000	26,267				DPA-18
DPA-19					0								DPA-20
DPA-21							0			3	400 A	EXISTING MCB	DPA-22
DPA-23									0				DPA-24
			PHASE LOAD:	60,383 VA		62,155 VA		62,493 VA					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Equipment	177,940 VA	100.00%	177,940 VA		
Motor	432 VA	125.00%	540 VA	TOTAL CONNECTED LOAD:	185.0 kVA
Receptacle	6,660 VA	100.00%	6,660 VA	TOTAL ESTIMATED LOAD:	185.1 kVA
				TOTAL CONNECTED CURRENT:	223 A
				TOTAL EST. DEMAND CURRENT:	223 A

NOTES:

PANELBOARD: EX DBL PANEL 'TRA'

LOCATION: EQUIPMENT PLATFORM B201 **DISTRIBUTION SYSTEM:** 480Y/277V 3PH 4W **MAINS TYPE:** MAIN LUG
MOUNTING: SURFACE **SCCR:** 18KA **MAINS RATING:** 400 A
ENCLOSURE: TYPE 1 SUPPLY FROM: EX PANEL 'DPA'

PROVIDE WITH THE FOLLOWING:

CIRCUIT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		C		POLES	TRIP	CIRCUIT DESCRIPTION	CIRCUIT
TRA-1				6,000	6,000								TRA-2
TRA-3	VUV-20, 21 (REUSE EX 30A/3P BRKR)	30 A	3			6,000	6,000			3	30 A	VUV-26, 22 (REUSE EX 30A/3P BRKR)	TRA-4
TRA-5								6,000	6,000				TRA-6
TRA-7				6,000	6,000								TRA-8
TRA-9	VUV-24, 25 (REUSE EX 30A/3P BRKR)	30 A	3			6,000	6,000			3	30 A	VUV-23, 29 (REUSE EX 30A/3P BRKR)	TRA-10
TRA-11								6,000	6,000				TRA-12
TRA-13				0	0								TRA-14
TRA-15	SPARE	30 A	3			0	0			3	30 A	SPARE	TRA-16
TRA-17								0	0				TRA-18
TRA-19				0	0								TRA-20
TRA-21	SPARE	30 A	3			0	0			3	30 A	SPARE	TRA-22
TRA-23								0	0				TRA-24
TRA-25				0	0								TRA-26
TRA-27	SPARE	30 A	3			0	0			3	30 A	SPARE	TRA-28
TRA-29								0	0				TRA-30
TRA-31	SPARE	40 A	1	0	0								TRA-32
TRA-33						0	0			3	20 A	SPARE	TRA-34
TRA-35	SPARE	40 A	3					0	0				TRA-36
TRA-37				0	2,267								TRA-38
TRA-39						0	2,267			3	15 A	CU-17 (REUSE EXISTING 15A BRKR)	TRA-40
TRA-41	SPARE	30 A	3					0	2,267				TRA-42
TRA-43				0									TRA-44
TRA-45													TRA-46
TRA-47													TRA-48
TRA-49													TRA-50
TRA-51													TRA-52
TRA-53													TRA-54
TRA-55													TRA-56
TRA-57													TRA-58
TRA-59													TRA-60
			PHASE LOAD:	26,267 VA		26,267 VA		26,267 VA					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Equipment	78,800 VA	100.00%	78,800 VA		
				TOTAL CONNECTED LOAD:	78.8 kVA
				TOTAL ESTIMATED LOAD:	78.8 kVA
				TOTAL CONNECTED CURRENT:	95 A
				TOTAL EST. DEMAND CURRENT:	95 A

NOTES: 480V ONLY PANEL

PANELBOARD: EX PANEL 'A'

LOCATION: EQUIPMENT PLATFORM B201 **DISTRIBUTION SYSTEM:** 480Y/277V 3PH 4W **MAINS TYPE:** MAIN LUG
MOUNTING: SURFACE **SCCR:** 18KA **MAINS RATING:** 225 A
ENCLOSURE: TYPE 1 SUPPLY FROM:

PROVIDE WITH THE FOLLOWING:

CIRCUIT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		C		POLES	TRIP	CIRCUIT DESCRIPTION	CIRCUIT
A-1	LIGHTING - GENERAL ROOM A132, A133,...	20 A	1	2,664	3,816					1	20 A	LIGHTING - A131, A123, A128	A-2
A-3	LIGHTING - GENERAL ROOM A110, A112,...	20 A	1			4,414	2,540			1	20 A	LIGHTING A113, A108, A107, A109, A101,...	A-4
A-5	LIGHTING - GENERAL	20 A	1					3,277	3,737	1	20 A	LIGHTING - GENERAL WAITING CIR.	A-6
A-7				0	3,000								A-8
A-9	SPARE	15 A	3			0	3,000			3	15 A	CU-23.23 (REUSE EXISTING 15A BRKR)	A-10
A-11								0	3,000				A-12
A-13				3,000	404					1	20 A	EXTERIOR WALL PACKS	A-14
A-15	CU-23.25 (REUSE EXISTING 15A BRKR)	15 A	3			3,000							A-16
A-17								3,000					A-18
A-19													A-20
A-21							0			1	20 A	EX WATER HEATER	A-22
A-23									0				A-24
A-25					0					3	30 A	EXISTING UNIT HEATER	A-26
A-27							0						A-28
A-29									0				A-30
A-31					0					3	40 A	EXISTING UNIT HEATER	A-32
A-33						0	0						A-34
A-35	SPARE	15 A	3					0	0				A-36
A-37				0	0					3	15 A	SPARE	A-38
A-39	SPARE	20 A	1			0	0						A-40
A-41	SPARE	20 A	1					0					A-42
			PHASE LOAD:	12,884 VA		12,954 VA		13,014 VA					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Equipment	18,000 VA	100.00%	18,000 VA		
Lighting - General	20,852 VA	100.00%	20,852 VA	TOTAL CONNECTED LOAD:	38.9 kVA
				TOTAL ESTIMATED LOAD:	38.9 kVA
				TOTAL CONNECTED CURRENT:	47 A
				TOTAL EST. DEMAND CURRENT:	47 A

NOTES:

PANELBOARD: EX PANEL 'DPB'

LOCATION: **DISTRIBUTION SYSTEM:** 480Y/277V 3PH 4W **MAINS TYPE:** MAIN CIRCUIT BREAKER
MOUNTING: SURFACE **SCCR:** 18KA **MAINS RATING:** 600 A
ENCLOSURE: TYPE 1 SUPPLY FROM: **MCB RATING:** 400 A

PROVIDE WITH THE FOLLOWING:

CIRCUIT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		C		POLES	TRIP	CIRCUIT DESCRIPTION	CIRCUIT
DPB-1				0	0								DPB-2
DPB-3	SPARE	15 A	3			0	0			3	15 A	SPARE	DPB-4
DPB-5								0	0				DPB-6
DPB-7				21,270	23,933								DPB-8
DPB-9	XFMR 'T-BD (REUSE EXISTING 100A BRKR)	100 A	3			21,864	23,933			3	110 A	ERU-23.1	DPB-10
DPB-11								17,924	23,933				DPB-12
DPB-13				30,000	0								DPB-14
DPB-15	EX. DBL TUB PANEL 'TRB'	225 A	3			30,000	0			3	400 A	EXISTING MAIN BREAKER	DPB-16
DPB-17								30,000	0				DPB-18
DPB-19													DPB-20
DPB-21													DPB-22
DPB-23													DPB-24
DPB-25													DPB-26
DPB-27													DPB-28
DPB-29													DPB-30
			PHASE LOAD:	75,203 VA		75,797 VA		71,857 VA					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Equipment	198,440 VA	100.00%	198,440 VA		
Motor	1,728 VA	106.25%	1,836 VA	TOTAL CONNECTED LOAD:	222.9 kVA
Receptacle	22,690 VA	72.04%	16,345 VA	TOTAL ESTIMATED LOAD:	216.6 kVA
				TOTAL CONNECTED CURRENT:	268 A
				TOTAL EST. DEMAND CURRENT:	261 A

NOTES:

PANELBOARD: EX. DBL TUB PANEL 'TRB'

LOCATION: **DISTRIBUTION SYSTEM:** 480Y/277V 3PH 4W **MAINS TYPE:** MAIN LUG
MOUNTING: SURFACE **SCCR:** 18KA **MAINS RATING:** 400 A
ENCLOSURE: TYPE 1 SUPPLY FROM: EX PANEL 'DPB'

PROVIDE WITH THE FOLLOWING:

CIRCUIT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		C		POLES	TRIP	CIRCUIT DESCRIPTION	CIRCUIT
TRB-1				0	0								TRB-2
TRB-3	SPARE	15 A	2			0	0			3	15 A	SPARE	TRB-4
TRB-5								0	0				TRB-6
TRB-7	SPARE	15 A	2	0	0								TRB-8
TRB-9						0	0			3	15 A	SPARE	TRB-10
TRB-11	SPARE	30 A	3					0	0				TRB-12
TRB-13				0	0								TRB-14
TRB-15						0	0			3	20 A	SPARE	TRB-16
TRB-17	SPARE	30 A	3					0	0				TRB-18
TRB-19				0	0								TRB-20
TRB-21						0	0			3	20 A	SPARE	TRB-22
TRB-23	SPARE	30 A	3					0	0				TRB-24
TRB-25				0	0								TRB-26
TRB-27						0	0			3	20 A	SPARE	TRB-28
TRB-29	SPARE	30 A	3					0	0				TRB-30
TRB-31				0	0								TRB-32
TRB-33						0	0			3	20 A	SPARE	TRB-34
TRB-35	SPARE	30 A	3					0	0				TRB-36
TRB-37				0	6,000								TRB-38
TRB-39						0	6,000			3	30 A	VUV-18, 19 (REUSE EX 30A/3P BRKR)	TRB-40
TRB-41	SPARE	30 A	3					0	6,000				TRB-42
TRB-43				0	6,000								TRB-44
TRB-45						6,000	6,000			3	30 A	VUV-16, 17 (REUSE EX 30A/3P BRKR)	TRB-46
TRB-47	VUV-9, 7 (REUSE EX 30A/3P BRKR)	30 A	3					6,000	6,000				TRB-48
TRB-49				6,000	6,000								TRB-50
TRB-51						6,000	6,000			3	30 A	VUV-14, 15 (REUSE EX 30A/3P BRKR)	TRB-52
TRB-53	VUV-13, 8 (REUSE EX 30A/3P BRKR)	30 A	3					6,000	6,000				TRB-54
TRB-55				6,000	0								TRB-56
TRB-57						0	0			3	20 A	SPARE	TRB-58
TRB-59	SPARE	40 A	3					0	0				TRB-60
TRB-61				0									TRB-62
TRB-63													TRB-64
TRB-65													TRB-66
TRB-67													TRB-68
TRB-69													TRB-70
TRB-71													TRB-72
			PHASE LOAD:	30,000 VA		30,000 VA		30,000 VA					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Equipment	90,000 VA	100.00%	90,000 VA		
				TOTAL CONNECTED LOAD:	90.0 kVA
				TOTAL ESTIMATED LOAD:	90.0 kVA
				TOTAL CONNECTED CURRENT:	108 A
				TOTAL EST. DEMAND CURRENT:	108 A

NOTES: GENERAL ELECTRIC TYPE NHB

PANELBOARD: EX PANEL 'B'

LOCATION: **DISTRIBUTION SYSTEM:** 480Y/277V 3PH 4W **MAINS TYPE:** MAIN LUG
MOUNTING: SURFACE **SCCR:** 18KA **MAINS RATING:** 225 A
ENCLOSURE: TYPE 1 SUPPLY FROM:

PROVIDE WITH THE FOLLOWING:

CIRCUIT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		C		POLES	TRIP	CIRCUIT DESCRIPTION	CIRCUIT
B-1	LIGHTING - GENERAL ROOM B114, B117,...	20 A	1	1,863	3,453					1	20 A	LIGHTING - GENERAL ROOM B124, B123,...	B-2
B-3	LIGHTING - GENERAL ROOM B121, B105,...	20 A	1			2,627	0						B-4
B-5								0	0	3	15 A	SPARE	B-6
B-7	SPARE	15 A	3	0	0								B-8
B-9						0							B-10
B-11													B-12
B-13													B-14
B-15													B-16
B-17													B-18
B-19													B-20
B-21							0	0					B-22
B-23	SPARE	15 A	3					0	0	3	30 A	EX PANEL BA	B-24
B-25				0	0								B-26
B-27						2,267	0						B-28
B-29	CU-23.7 (REUSE EXISTING 15A BRKR)	15 A	3					2,267	0	3	50 A	EX. PANEL BB	B-30
B-31				2,267	0								B-32
B-33						2,267							B-34
B-35	CU-23.6 (REUSE EXISTING 15A BRKR)	15 A	3					2,267					B-36
B-37				2,267									B-38
B-39													B-40
B-41													B-42
			PHASE LOAD:	9,849 VA		7,160 VA		4,533 VA					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Equipment	13,600 VA	100.00%	13,600 VA		
Lighting - General	7,943 VA	100.00%	7,943 VA	TOTAL CONNECTED LOAD:	21.5 kVA
				TOTAL ESTIMATED LOAD:	21.5 kVA
				TOTAL CONNECTED CURRENT:	26 A
				TOTAL EST. DEMAND CURRENT:	26 A

NOTES: GENERAL ELECTRIC TYPE NHB USE GE TEF BREAKERS

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12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	AAM
REVIEWED	AAM
PROJECT NO.	5-5802

POWER DISTRIBUTION EQUIPMENT SCHEDULES

E5.01

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PANELBOARD: PANEL 'BD'

LOCATION: STORAGE A116 **DISTRIBUTION SYSTEM:** 208Y/120V 3PH 4W **MAINS TYPE:** MAIN CIRCUIT BREAKER
MOUNTING: SURFACE **SCCR:** 10KA **MAINS RATING:** 225 A
ENCLOSURE: TYPE 1 SUPPLY FROM: XFMR 'T-BD' **MCB RATING:** 200 A

PROVIDE WITH THE FOLLOWING:

CIRCUIT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		C		POLES	TRIP	CIRCUIT DESCRIPTION	CIRCUIT
BD-1	RECEPTACLE CLASSROOM A137	20 A	1	1,080	1,080					1	20 A	RECEPTACLE CLASSROOM A137	BD-2
BD-3	RECEPTACLE CLASSROOM A136	20 A	1			1,080	1,080			1	20 A	RECEPTACLE CLASSROOM A136	BD-4
BD-5	RECEPTACLE SCIENCE A135	20 A	1					900	900	1	20 A	RECEPTACLE SCIENCE A135	BD-6
BD-7	RECEPTACLE SCIENCE A134	20 A	1	900	900					1	20 A	RECEPTACLE SCIENCE A134	BD-8
BD-9	RECEPTACLE CLASSROOM A133	20 A	1			1,080	1,080			1	20 A	RECEPTACLE CLASSROOM A133	BD-10
BD-11	RECEPTACLE CLASSROOM A132	20 A	1					1,080	1,260	1	20 A	RECEPTACLE CLASSROOM A121	BD-12
BD-13	RECEPTACLE CLASSROOM A121	20 A	1	1,080	360					1	20 A	RECEPTACLE SPECIAL EDUCATION A122	BD-14
BD-15	RECEPTACLE PROJECT ROOM A124	20 A	1			900	900			1	20 A	ELECTRIC HAND DRYER	BD-16
BD-17	ELECTRIC HAND DRYER	20 A	1					900	900	1	20 A	ELECTRIC SINKS	BD-18
BD-19	EWC GFCI BRKR	20 A	1	180	900					1	20 A	ELECTRIC TOILET SENSORS	BD-20
BD-21	ELECTRIC TOILET SENSORS	20 A	1			900	900			1	20 A	ELECTRIC SINKS	BD-22
BD-23	ELECTRIC HAND DRYER	20 A	1					900	900	1	20 A	ELECTRIC HAND DRYER	BD-24
BD-25	RECEPTACLE JC A126	20 A	1	540	720					1	20 A	RECEPTACLE SPECIAL EDUCATION A129	BD-26
BD-27	RECEPTACLE CLASSROOM A130	20 A	1			900	720			1	20 A	RECEPTACLE CLASSROOM A130	BD-28
BD-29	RECEPTACLE CLASSROOM A113	20 A	1					540	180	1	20 A	RECEPTACLE CLASSROOM A108	BD-30
BD-31	RECEPTACLE CLASSROOM A107	20 A	1	540	720					1	20 A	RECEPTACLE MDF A115	BD-32
BD-33	RECEPTACLE MDF A115	30 A	1			10	900			1	20 A	ELECTRIC TOILET/SINK SENSORS	BD-34
BD-35	RECEPTACLE TOILET A118	20 A	1					540	360	1	20 A	RECEPTACLE CLASSROOM A109	BD-36
BD-37	RECEPTACLE CLASSROOM A102	20 A	1	540	1,320					1	20 A	VUV-10, FCU-5	BD-38
BD-39	VUV-11, FCU-6	20 A	1			1,320	1,320			1	20 A	VUV-12, FCU-7	BD-40
BD-41	CUH-1, 2	20 A	1					864	480	1	15 A	FCU-1, FCU-2	BD-42
BD-43	FCU-3,4	15 A	1	480	2,160					1	35 A	VUV-3,4	BD-44
BD-45	VUV-5,6	25 A	1			2,160	864			1	20 A	CUH-5,6	BD-46
BD-47	CU-23.11	20 A	2					1,300	1,300	2	25 A	CU-23.14	BD-48
BD-49				1,300	1,300								BD-50
BD-51	CU-23.13	25 A	2			1,300	1,300			2	20 A	CU-23.10	BD-52
BD-53								1,300	1,300				BD-54
BD-55	CU-23.15	25 A	2	1,850	1,300					1	20 A	CU-23.12	BD-56
BD-57						1,850	1,300						BD-58
BD-59	CU-23.28	20 A	2					1,300	720	1	20 A	CORD REELS	BD-60
BD-61				1,300	720					1	20 A	CORD REELS	BD-62
BD-63													BD-64
BD-65													BD-66
BD-67													BD-68
BD-69													BD-70
BD-71													BD-72
BD-73													BD-74
BD-75													BD-76
BD-77													BD-78
BD-79													BD-80
BD-81													BD-82
BD-83													BD-84
		PHASE LOAD:		21,270 VA		21,864 VA		17,924 VA					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Equipment	36,640 VA	100.00%	36,640 VA		
Motor	1,728 VA	106.25%	1,836 VA	TOTAL CONNECTED LOAD:	61.1 kVA
Receptacle	22,690 VA	72.04%	16,345 VA	TOTAL ESTIMATED LOAD:	54.8 kVA
				TOTAL CONNECTED CURRENT:	169 A
				TOTAL EST. DEMAND CURRENT:	152 A

NOTES:

PANELBOARD: EX PANEL 'DPC'

LOCATION: CUSTODIAN D102 **DISTRIBUTION SYSTEM:** 480Y/277V 3PH 4W **MAINS TYPE:** MAIN LUG
MOUNTING: SURFACE **SCCR:** 18KA **MAINS RATING:** 600 A
ENCLOSURE: TYPE 1 SUPPLY FROM:

PROVIDE WITH THE FOLLOWING:

CIRCUIT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		C		POLES	TRIP	CIRCUIT DESCRIPTION	CIRCUIT
DPC-1				3,880	2,106								DPC-2
DPC-3	AHU-23.2	25 A	3			3,880	2,106			3	15 A	AHU-23.1	DPC-4
DPC-5								3,880	2,106				DPC-6
DPC-7				8,667	0								DPC-8
DPC-9	CU-23.1, 23.2	40 A	3			8,667	0			3	150 A	EX LOAD	DPC-10
DPC-11								8,667	0				DPC-12
DPC-13				0	0								DPC-14
DPC-15	EX LOAD	225 A	3			0	0			3	20 A	EX CHILLED WATER PUMP	DPC-16
DPC-17								0	0				DPC-18
DPC-19	EX CHILLED WATER PUMP	20 A	2	0	3,048								DPC-20
DPC-21						0	3,048			3	20 A	RTU-23.1 SUPPLY FAN	DPC-22
DPC-23								942	3,048				DPC-24
DPC-25	RTU-23.1 EXHAUST FAN	15 A	3	942	942								DPC-26
DPC-27						942	942			3	15 A	RTU-23.1 EXHAUST FAN	DPC-28
DPC-29								13,000	942				DPC-30
DPC-31	CU-23.3	60 A	3	13,000	0								DPC-32
DPC-33						13,000	0			3	20 A	EX LOAD	DPC-34
DPC-35									0				DPC-36
DPC-37													DPC-38
DPC-39													DPC-40
DPC-41													DPC-42
		PHASE LOAD:		32,586 VA		32,586 VA		32,586 VA					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Equipment	65,000 VA	100.00%	65,000 VA		
Motor	32,757 VA	108.88%	35,666 VA	TOTAL CONNECTED LOAD:	97.8 kVA
				TOTAL ESTIMATED LOAD:	100.7 kVA
				TOTAL CONNECTED CURRENT:	118 A
				TOTAL EST. DEMAND CURRENT:	121 A

NOTES:

PANELBOARD: PANEL 'AD'

LOCATION: STORAGE B108 **DISTRIBUTION SYSTEM:** 208Y/120V 3PH 4W **MAINS TYPE:** MAIN CIRCUIT BREAKER
MOUNTING: SURFACE **SCCR:** 10KA **MAINS RATING:** 225 A
ENCLOSURE: TYPE 1 SUPPLY FROM: XFMR 'T-AD' **MCB RATING:** 200 A

PROVIDE WITH THE FOLLOWING:

CIRCUIT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		C		POLES	TRIP	CIRCUIT DESCRIPTION	CIRCUIT
AD-1	RECEPTACLE SPECIAL EDUCATION B102	20 A	1	900	900					1	20 A	ELECTRIC HAND DRYER	AD-2
AD-3	ELECTRIC HAND DRYER	20 A	1			900	900			1	20 A	ELECTRIC HAND DRYER	AD-4
AD-5	ELECTRIC SINKS	20 A	1					900	900	1	20 A	ELECTRIC TOILET SENSORS	AD-6
AD-7	ELECTRIC SINKS	20 A	1	900	900					1	20 A	ELECTRIC HAND DRYER	AD-8
AD-9	RECEPTACLE CLASSROOM B113	20 A	1			720	180			1	20 A	EWC GFCI BRKR	AD-10
AD-11	RECEPTACLE CLASSROOM B120	20 A	1					540	900	1	20 A	RECEPTACLE SCIENCE B121	AD-12
AD-13	RECEPTACLE SCIENCE B122	20 A	1	360	720					1	20 A	RECEPTACLE CLASSROOM B123	AD-14
AD-15	RECEPTACLE CLASSROOM B124	20 A	1			360	720			1	20 A	RECEPTACLE CLASSROOM B118	AD-16
AD-17	TOILET/SINK SENSORS	20 A	1					900	480	1	20 A	FCU-12,10	AD-18
AD-19	RECEPTACLE SPECIAL ED B109	20 A	1	540	720					1	20 A	FCU-8,9,13	AD-20
AD-21	CUH-7, FCU-11	20 A	1			672	2,160			1	30 A	VUV-7,8	AD-22
AD-23	VUV-1,2	25 A	1					2,160	720	1	20 A	RECEPTACLE SCIENCE B107	AD-24
AD-25	CU-23.8	20 A	2	1,300	1,300					2	20 A	CU-23.9	AD-26
AD-27						1,300	1,300						AD-28
AD-29	CU-23.4	20 A	2					1,300	1,300	2	20 A	CU-23.5	AD-30
AD-31				1,300	1,300								AD-32
AD-33	CU-23.16	25 A	2			1,850	1,850			2	25 A	CU-23.19	AD-34
AD-35								1,850	1,850				AD-36
AD-37	CU-23.20	30 A	2	1,300	1,850					2	25 A	CU-23.22	AD-38
AD-39						1,300	1,850						AD-40
AD-41	CU-23.21	30 A	2					1,300	1,300	2	20 A	CU-23.27	AD-42
AD-43				1,300	1,300								AD-44
AD-45	CU-23.26	20 A	2			1,300	1,300			2	30 A	CU-23.29	AD-46
AD-47								1,300	1,300				AD-48
AD-49													AD-50
AD-51													AD-52
AD-53													AD-54
		PHASE LOAD:		16,890 VA		18,662 VA		19,000 VA					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Equipment	47,460 VA	100.00%	47,460 VA		
Motor	432 VA	125.00%	540 VA	TOTAL CONNECTED LOAD:	54.6 kVA
Receptacle	6,660 VA	100.00%	6,660 VA	TOTAL ESTIMATED LOAD:	54.7 kVA
				TOTAL CONNECTED CURRENT:	151 A
				TOTAL EST. DEMAND CURRENT:	152 A

NOTES:

PANELBOARD: EX PANEL 'DPE'

LOCATION: ELECTRICAL D130 **DISTRIBUTION SYSTEM:** 480Y/277V 3PH 4W **MAINS TYPE:** MAIN LUG
MOUNTING: SURFACE **SCCR:** 18KA **MAINS RATING:** 400 A
ENCLOSURE: TYPE 1 SUPPLY FROM:

PROVIDE WITH THE FOLLOWING:

CIRCUIT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		C		POLES	TRIP	CIRCUIT DESCRIPTION	CIRCUIT
DPE-1				0	0								DPE-2
DPE-3	EX AIR COMPRESSOR	15 A	3			0	0			3	20 A	EX ACC	DPE-4
DPE-5								0	0				DPE-6
DPE-7				5,120	0								DPE-8
DPE-9	RTU-23.3 (ALTERNATE)	40 A	3			5,120	0			3	20 A	EX ACC	DPE-10
DPE-11								5,120	0				DPE-12
DPE-13				7,482	0								DPE-14
DPE-15	P-1	60 A	3			7,482	0			3	20 A	EX BC	DPE-16
DPE-17								7,482	0				DPE-18
DPE-19				7,482	3,048								DPE-20
DPE-21	P-1	60 A	3			7,482	3,048			3	15 A	RTU-23.2 (ALTERNATE)	DPE-22
DPE-23								7,482	3,048				DPE-24
DPE-25				2,267	5,820								DPE-26
DPE-27	CU-23.20 (ALTERNATE0	15 A	3			2,267	5,820			3	45 A	AHU-23.6 (ALTERNATE)	DPE-28
DPE-29								2,267	5,820				DPE-30
DPE-31				2,267	1,330								DPE-32
DPE-33	CU-23.31 (ALTERNATE)	15 A	3			2,267	1,330			3	15 A	P-23.3 (ALTERNATE)	DPE-34
DPE-35								2,267	1,330				DPE-36
		PHASE LOAD:		34,817 VA		34,817 VA		34,817 VA					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Equipment	28,960 VA	100.00%	28,960 VA		
Motor	75,490 VA	107.43%	81,102 VA	TOTAL CONNECTED LOAD:	104.4 kVA
				TOTAL ESTIMATED LOAD:	110.1 kVA
				TOTAL CONNECTED CURRENT:	126 A
				TOTAL EST. DEMAND CURRENT:	132 A

NOTES:

PANELBOARD: EX PANEL 'ED'

LOCATION: PAINT AREA D123 **DISTRIBUTION SYSTEM:** 208Y/120V 3PH 4W **MAINS TYPE:** MAIN LUG
MOUNTING: FLUSH **SCCR:** 10KA **MAINS RATING:** 225 A
ENCLOSURE: TYPE 1 SUPPLY FROM:

PROVIDE WITH THE FOLLOWING:

CIRCUIT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		C		POLES	TRIP	CIRCUIT DESCRIPTION	CIRCUIT
ED-1	EX RECEPT	20 A	1	0	0								ED-2
ED-3	EX SPOT WELDER	20 A	2			0	0			3	40 A	EX DUST COLLECTOR	ED-4
ED-5								0	0				ED-6
ED-7	EX RECEPT	20 A	1	0	0								ED-8
ED-9	EX RECEPT	20 A	1			0	0			3	20 A	EX EQUIP	ED-10
ED-11	EX RECEPT	20 A	1					0	0				ED-12
ED-13	EX RECEPT	20 A	1	0	0								ED-14
ED-15	EX RECEPT	20 A	1			0	0			3	20 A	EX EQUIP	ED-16
ED-17	EX RECEPT	15 A	2					0	0				ED-18
ED-19				0	1,080					1	20 A	VUV-32 (ALTERNATE)	ED-20
ED-21	EX RECEPT	20 A	1			0	200			1	20 A	AHU-23.3 LIGHTS (ALTERNATE)	ED-22
ED-23	EX RECEPT	20 A	1					0	400	1	20 A	AHU-23.4 LIGHTS & GFT-23.1 (ALTERNATE)	ED-24
ED-25				0	0								ED-26
ED-27	EX EQUIP	15 A	3			0	0			3	100 A	EX BUS DUCT	ED-28
ED-29								0	0				ED-30
ED-31	AHU-23.5 LIGHTS (ALTERNATE)	20 A	1	200									ED-32
ED-33													ED-34
ED-35													ED-36
ED-37													ED-38
ED-39													ED-40
ED-41													ED-42
		PHASE LOAD:		1,280 VA		200 VA		400 VA					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Equipment	1,880 VA	100.00%	1,880 VA		
				TOTAL CONNECTED LOAD:	1.9 kVA
				TOTAL ESTIMATED LOAD:	1.9 kVA
				TOTAL CONNECTED CURRENT:	5 A
				TOTAL EST. DEMAND CURRENT:	5 A

NOTES:

PANELBOARD: PANEL 'CC'

LOCATION: WORK ROOM C127 **DISTRIBUTION SYSTEM:** 208Y/120V 3PH 4W **MAINS TYPE:** MAIN CIRCUIT BREAKER
MOUNTING: SURFACE **SCCR:** 10KA **MAINS RATING:** 225 A
ENCLOSURE: TYPE 1 SUPPLY FROM: **MCB RATING:** 225 A

PROVIDE WITH THE FOLLOWING:

CIRCUIT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		C		POLES	TRIP	CIRCUIT DESCRIPTION	CIRCUIT
CC-1	RECEPTACLE INTERVENTION C131	20 A	1	1,080	1,260					1	20 A	RECEPTACLE INTERVENTION C132	CC-2
CC-3	RECEPTACLE STAFF C133	20 A	1			1,440	1,080			1	20 A	RECEPTACLE WORK ROOM C127	CC-4
CC-5	RECEPTACLE HALL C130	20 A	1					1,260	900	1	20 A	RECEPTACLE COMMON AREA C117	CC-6
CC-7	RECEPTACLE RECEPTION C121	20 A	1	1,080	180					1	20 A	COPY MACHINE	CC-8
CC-9	RECEPTACLE COMMON AREA C117	20 A	1			1,260	1,080			1	20 A	RECEPTACLE HEALTH C111	CC-10
CC-11	IDF C	30 A	2					0	1,080	1	20 A	RECEPTACLE IDF C114	CC-12
CC-13				0	180					1	20 A	COPY MACHINE	CC-14
CC-15	RECEPTACLE RECEPTION C102	20 A	1			360	720			1	20 A	RECEPTACLE RECEPTION C102	CC-16
CC-17	RECEPTACLE HALL C105	20 A	1					900	900	1	20 A	RECEPTACLE WORK ROOM C110	CC-18
CC-19	RECEPTACLE WAITING C108	20 A	1	720	720					1	20 A	RECEPTACLE SENSORY C115	CC-20
CC-21	RECEPTACLE CONFERENCE C106	20 A	1			1,080	900			1	20 A	RECEPTACLE SPECIAL EDUCATION C107	CC-22
CC-23	REFRIGERATOR, GFCI BRKR	20 A	1					180	180	1	20 A	MICROWAVE	CC-24
CC-25	COFFEE MACHINE	20 A	1	180	540					1	20 A	VENDING MACHINE GFCI BRKR	CC-26
CC-27	VENDING MACHINE GFCI BRKR	20 A	1			180	960			1	20 A	VAV-8,9,10,11,12,13,14,15	CC-28
CC-29	VAV-1,2,3,4,5,6,7	20 A	1					960	1,296	1	20 A	CUH-8, CUH-9, CUH-10	CC-30
CC-31	FCU-14, VUV-31	20 A	1	1,320	2,102								CC-32
CC-33						937	2,102			3	35 A	EF-2	CC-34
CC-35	EF-1	15 A	3					937	2,102				CC-36
CC-37				937	480					1	20 A	ADA OPERATOR	CC-38
CC-39	RECEPTACLE EQUIPMENT PLATFORM...	20 A	1			360	180			1	20 A	RECEPTACLE RECEPTION C121	CC-40
CC-41	VUV-30	20 A	1					1,080	1,300	2	20 A	CU-23.24	CC-42
CC-43	MOTORIZED BASKETBALL HOOP	20 A	1	1,656	1,300								CC-44
CC-45	MOTORIZED BASKETBALL HOOP	20 A	1			1,656	1,656			1	20 A	MOTORIZED BASKETBALL HOOP	CC-46
CC-47	MOTORIZED BASKETBALL HOOP	20 A	1					1,656					CC-48
CC-49													CC-50
CC-51													CC-52
CC-53													CC-54
CC-55													CC-56
CC-57													CC-58
CC-59													CC-60
CC-61													CC-62
CC-63													CC-64
CC-65													CC-66
CC-67													CC-68
CC-69													CC-70
CC-71													CC-72
CC-73													CC-74
CC-75													CC-76
CC-77													CC-78
CC-79													CC-80
CC-81													CC-82
CC-83													CC-84
		PHASE LOAD:		13,734 VA		15,950 VA		14,730 VA					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Equipment	7,400 VA	100.00%	7,400 VA		
Motor	17,035 VA	109.25%	18,611 VA	TOTAL CONNECTED LOAD:	44.4 kVA
Receptacle	19,980 VA	75.03%	14,990 VA	TOTAL ESTIMATED LOAD:	41.0 kVA
				TOTAL CONNECTED CURRENT:	123 A
				TOTAL EST. DEMAND CURRENT:	114 A

NOTES:

PANELBOARD: EX PANEL 'DPF'

LOCATION: **DISTRIBUTION SYSTEM:** 480Y/277V 3PH 4W **MAINS TYPE:** MAIN CIRCUIT BREAKER
MOUNTING: SURFACE **SCCR:** 18KA **MAINS RATING:** 600 A
ENCLOSURE: TYPE 1 SUPPLY FROM:

PROVIDE WITH THE FOLLOWING:

CIRCUIT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		C		POLES	TRIP	CIRCUIT DESCRIPTION	CIRCUIT
DPF-1				0	0								DPF-2
DPF-3	EX BC-14	50 A	3			0	0			3	50 A	EX BC 13	DPF-4
DPF-5								0	0				DPF-6
DPF-7				942	20,933								DPF-8
DPF-9	AHU-23.3(REUSE EX BRKR) (ALTERNATE)	15 A	3			942	20,933			3	125 A	RTU-23.4 (ALTERNATE)	DPF-10
DPF-11								942	20,933				DPF-12
DPF-13				0	0								DPF-14
DPF-15	EX NORTH CONDENSING UNIT CH-3	150 A	3			0	0			3	150 A	EX SOUTH CONDENSING UNIT CH-4	DPF-16
DPF-17								0	0				DPF-18
DPF-19				5,820	5,820								DPF-20
DPF-21	AHU-23.4 (ALTERNATE)	45 A	3			5,820	5,820			3	45 A	AHU-23.5 (ALTERNATE)	DPF-22
DPF-23								5,820	5,820				DPF-24
		PHASE LOAD:		33,515 VA		33,515 VA		33,515 VA					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Equipment	62,800 VA	100.00%	62,800 VA		
Motor	37,745 VA	111.56%	42,110 VA	TOTAL CONNECTED LOAD:	100.5 kVA
				TOTAL ESTIMATED LOAD:	104.9 kVA
				TOTAL CONNECTED CURRENT:	121 A
				TOTAL EST. DEMAND CURRENT:	126 A

NOTES:

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THREE RIVERS COMMUNITY SCHOOLS
THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS
THREE RIVERS, MICHIGAN

ISSUANCES

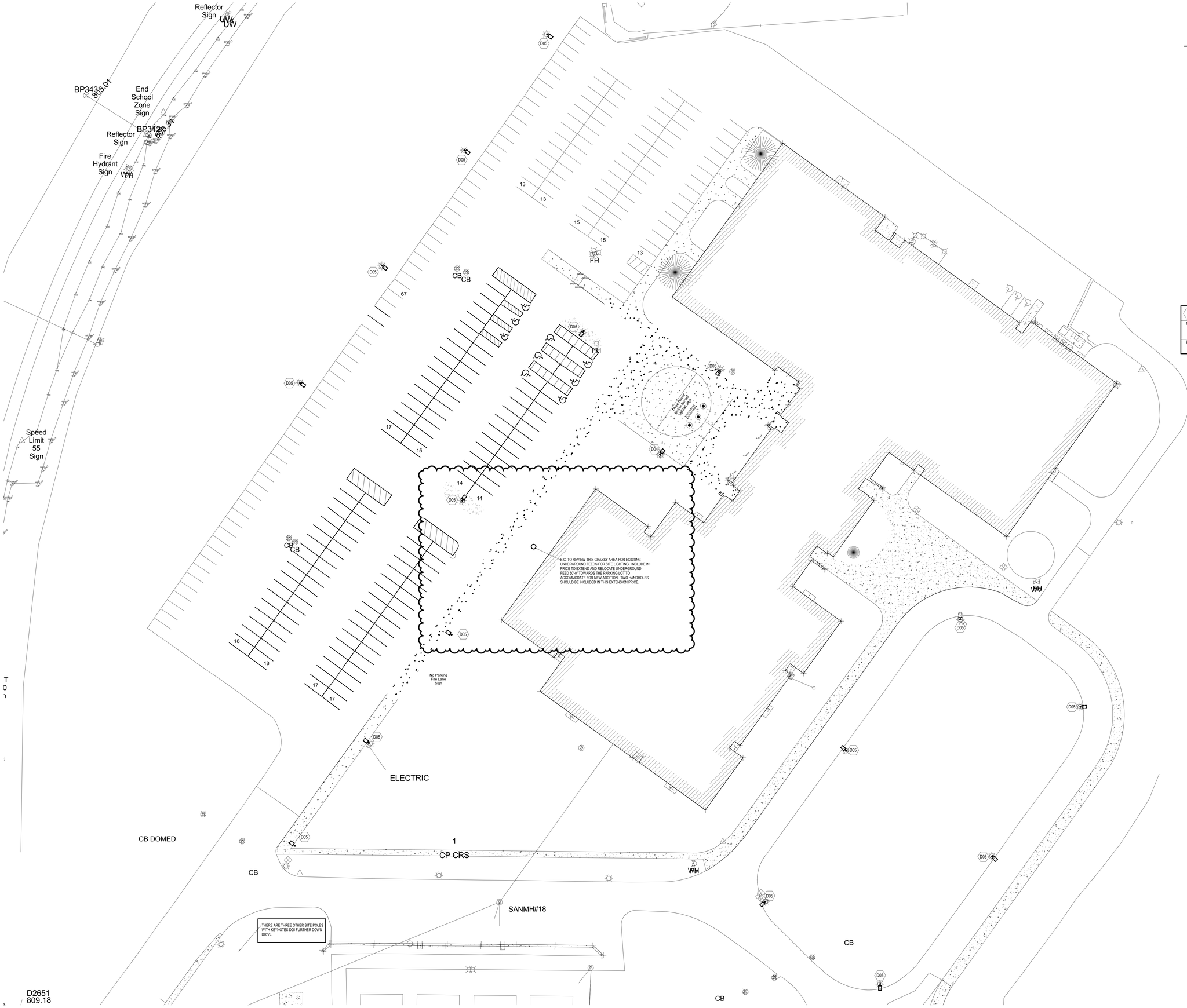
12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN NAM
REVIEWED AAM

PROJECT NO. 5-5802

POWER DISTRIBUTION SCHEDULES

E5.02



NORTH

SITE ELECTRICAL DEMOLITION PLAN

1" = 30'-0"

ELECTRICAL DEMOLITION GENERAL NOTES

1. REMOVE ALL ITEMS SHOWN ON DEMO PLAN, UNLESS OTHERWISE NOTED. REMOVE ALL UNUSED CONDUIT, RACEWAYS, WIRE, CABLE, CONTROLS, JUNCTION BOXES, DISCONNECTS, MOUNTS, AND RELATED ELECTRICAL ACCESSORIES COMPLETELY BACK TO SOURCE. REFER TO DEMOLITION SPECIFICATION.
2. MAKE PROVISIONS TO BACKFEED OR RE-CIRCUIT ANY ITEMS THAT ARE EXISTING TO REMAIN WHICH ARE AFFECTED BY THE DEMOLITIONS.
3. THE OWNER RESERVES THE RIGHT TO SALVAGE, WHOLE OR IN PART, ANY EQUIPMENT, SYSTEMS, AND/OR MATERIALS THAT ARE SCHEDULED FOR DEMOLITION PRIOR TO REMOVAL FROM THE BUILDING/SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISCONNECTION AND GATHERING OF SUCH ITEMS TO A CENTRAL LOCATION AGREED UPON BY THE OWNER AND CONTRACTOR. ALL REMAINING EQUIPMENT AND/OR MATERIALS REMOVED AND NOT REUSED ON THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE BUILDING/SITE.
4. ALL EQUIPMENT AND/OR MATERIALS SLATED FOR REUSE SHALL BE CAREFULLY REMOVED AND STORED TO PREVENT DAMAGE AND REINSTALLED AS WORK PROGRESSES.
5. ALL DEMOLITION SHOWN IS GATHERED FROM FIELD OBSERVATION AND/OR RECORD DRAWINGS. INVESTIGATION OF EXISTING SYSTEMS WILL BE REQUIRED BY THE CONTRACTOR AS PART OF THE BID PRICE, SO THAT THE EXACT EXTENT OF DEMOLITION CAN BE ACCURATELY DETERMINED. THE CONTRACTOR'S BID PRICE SHALL ALSO INCLUDE REMOVAL OF SOME PORTIONS OF SYSTEMS NOT EXPLICITLY SHOWN ON THIS DRAWING, BUT DISCOVERED DURING THE INVESTIGATION PROCESS. WHERE THE EXTENT OF DEMOLITION IS UNCLEAR, THE CONTRACTOR SHALL CONSULT WITH THE ARCHITECT/ENGINEER AND OWNER TO DETERMINE WHICH PORTIONS OF EXISTING SYSTEMS MUST REMAIN ACTIVE AND WHICH PORTIONS MUST BE DEMOLISHED.
6. CONTRACTOR SHALL FIELD VERIFY ACTUAL LOCATION AND SIZES OF EXISTING CONDUIT, WIRING, AND EQUIPMENT.
7. IF ASBESTOS OR PCB MATERIAL IS ENCOUNTERED IT WILL BE REMOVED BY THE OWNER.
8. PATCH AND REPAIR ALL FLOOR, WALL AND CEILING OPENINGS DUE TO DEMOLITION WHICH ARE NOT TO BE RE-USED TO MATCH EXISTING CONSTRUCTION.
9. CONTRACTOR SHALL PROTECT ALL WALLS, CEILINGS, FLOORS, LIGHTS, AND OTHER FINISHED SURFACES THAT ARE NOT TO BE REMOVED. IF DAMAGED, CONTRACTOR SHALL REPAIR TO MATCH EXISTING CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
10. EXISTING CONDUIT SYSTEMS MAY BE REUSED FOR THE INSTALLATION OF NEW CONDUCTORS IF THEY ARE DEEMED TO BE IN GOOD CONDITION AND OF ADEQUATE SIZE FOR CODE-COMPLIANT INSTALLATION OF THE NEW CONDUCTORS. REWORK/REROUTE CONDUIT AS NECESSARY TO PROVIDE FEEDS PER POWER AND/OR LIGHTING PLANS.
11. PROVIDE BLANK COVER OVER ANY ABANDONED AND REMAINING ROUGH-INS OR JUNCTION BOXES TO MATCH EXISTING.

ELECTRICAL KEYNOTES

D04	EXISTING LIGHT FIXTURE AND CONCRETE BASE TO BE DISCONNECTED AND REMOVED. E.C. TO FURNISH AND INSTALL A HANDHOLE AS A JUNCTION BOX FOR THE EXTERIOR SITE LIGHTING UNDERGROUND FEED TO REMAIN.
D05	CONTRACTOR TO DEMOLISH EXISTING SITE LIGHT FIXTURE, CONCRETE BASE AND EXISTING UNDERGROUND FEED TO REMAIN AND BE REUSED.

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	AAM
REVIEWED	AAM
PROJECT NO.	5-5802

SITE ELECTRICAL DEMOLITION PLAN

ES1.01

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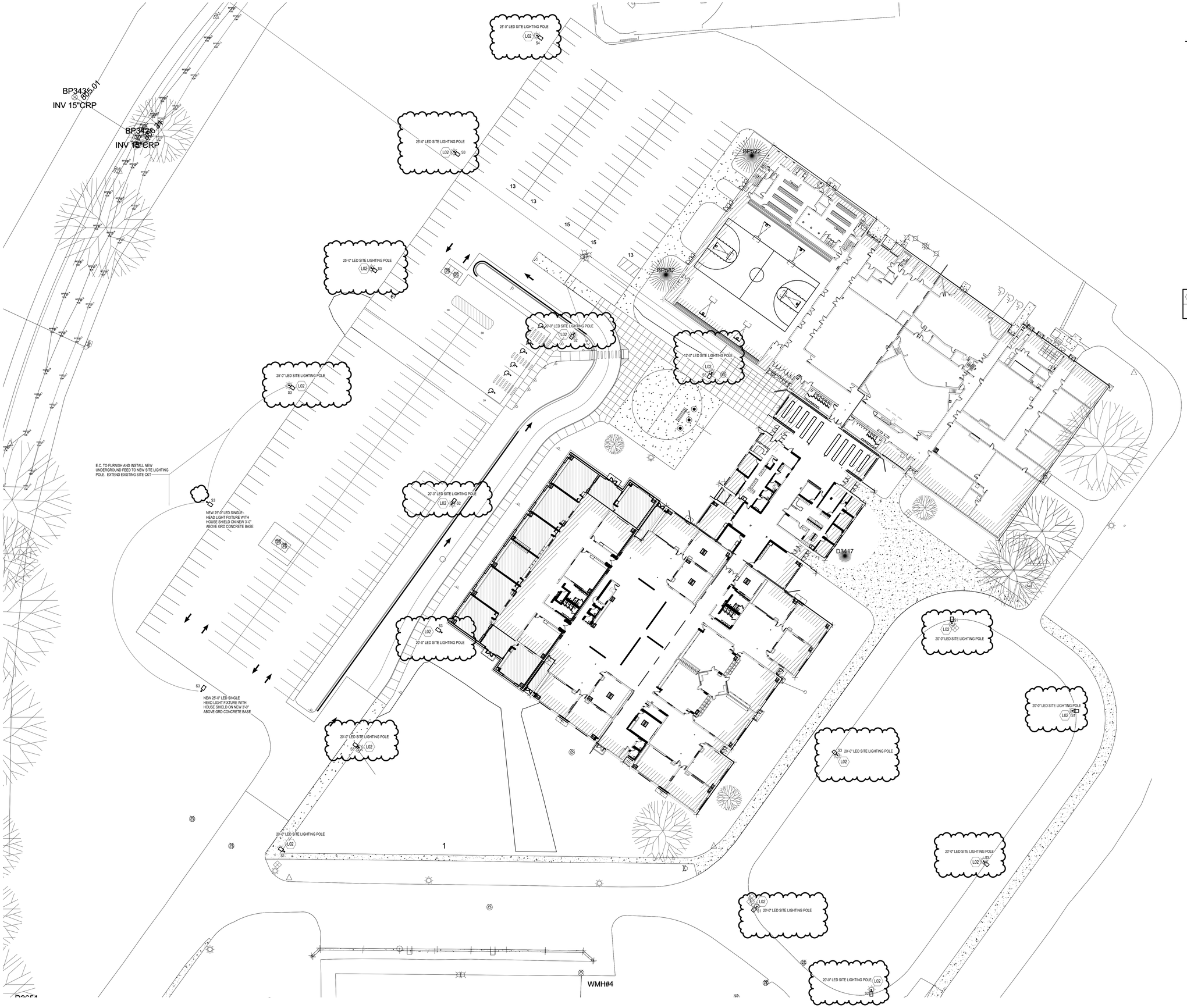

ELECTRICAL SITE GENERAL NOTES

1. REFER TO SITE/CIVIL PLANS FOR ADDITIONAL INFORMATION.
2. LOCATIONS SHOWN FOR EXISTING UTILITIES (IF ANY) ARE APPROXIMATE AND DERIVED FROM GENERAL OBSERVATION AND/OR AVAILABLE RECORDS. THIS PLAN SHALL NOT BE INTERPRETED AS SHOWING EXACT LOCATIONS OR SHOWING ALL UTILITIES IN THE AREA.
3. CONTRACTOR SHALL FIELD-VERIFY LOCATIONS, SIZES, AND TYPES OF ALL EXISTING UNDERGROUND UTILITIES, CONDUITS, AND CABLES PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES TO IDENTIFY PUBLIC UTILITIES. VERIFY ALL PRIVATE UTILITIES WITH OWNER RECORDS AND MAINTENANCE PERSONNEL.
4. PROTECT THE SITE, ADJACENT PROPERTY, AND UTILITY SERVICES FROM DAMAGE OR DISRUPTION OF SERVICE/ACCESS. DAMAGE TO EXISTING STRUCTURES, SITE, OR UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
5. ALL UNDERGROUND CONDUIT SHALL BE RIGID NONMETALLIC (RNC)TYPE. ALL UNDERGROUND BENDS/ELBOWS SHALL BE GALVANIZED RIGID METALLIC (RMC) TYPE, PROTECTED FROM CORROSION PER CONDUIT SPEOIFICATION REQUIREMENTS.
6. INSTALL DETECTABLE UNDERGROUND WARNING TAPE ABOVE ALL UNDERGROUND CONDUITS AND CABLES, COLOR PER APWA UNIFORM COLOR CODE (RED FOR ELECTRIC POWER/LIGHTING, ORANGE FOR COMMUNICATIONS/ALARM/SIGNAL). REFER TO SPECIFICATIONS.
7. ALL EXISTING TREES TO REMAIN SHALL BE CAREFULLY PROTECTED. DO NOT DRIVE HEAVY EQUIPMENT WITHIN 12 FEET OF TREE TRUNKS. BRANCHES WHICH ARE DAMAGED DURING DEMOLITION OR CONSTRUCTION SHALL BE CUT OUT AS DIRECTED BY THE ARCHITECT/ENGINEER. ANY ROOTS OF EXISTING TREES TO REMAIN WHICH ARE EXPOSED DUE TO DEMOLITION SHALL BE COVERED WITHIN 6 HOURS WITH SOIL. DAMAGED TREES SHALL BE REPLACED AT THE DISCRETION OF THE ARCHITECT/ENGINEER AT THE EXPENSE OF THE CONTRACTOR RESPONSIBLE FOR THE DAMAGE.
8. PATCH AND REPAIR GRASS AND/OR OTHER IMPROVED PLANTINGS AS REQUIRED WHERE NEW UNDERGROUND CONDUITS, CABLES, AND/OR DUCTBANKS ARE INSTALLED. CONTRACTOR SHALL BACKFILL TRENCHES, LEVEL OUT SOIL FLUSH WITH GRADE, AND REMOVE ANY EXCESS MATERIAL PRIOR TO SEEDING REPAIR.
9. CONTRACTOR SHALL BE RESPONSIBLE TO PATCH AND REPAIR ANY EXISTING SURFACE FINISHES AND OTHER ITEMS THAT ARE DISTURBED DURING THE COURSE OF DEMOLITION AND CONSTRUCTION, INCLUDING GRASS, CONCRETE, ASPHALT, LANDSCAPING, FENCING, STRUCTURES, IRRIGATION, UNDERGROUND UTILITIES, ETC.

ELECTRICAL KEYNOTES

L02	E.C. TO INSTALL A NEW LED SITE LIGHTING POLE AND HEAD. EXISTING UNDERGROUND FEEDERS AND CONCRETE BASES ARE TO BE REUSED.

NEW SITE ELECTRICAL PLAN

1" = 30'-0"

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THREE RIVERS MIDDLE SCHOOL ADDITIONS & RENOVATIONS

THREE RIVERS COMMUNITY SCHOOLS

THREE RIVERS, MICHIGAN

ISSUANCES

12.01.2022	BIDS & CONSTRUCTION
01.19.2023	ADDENDUM 002

DRAWN	AAM
REVIEWED	AAM
PROJECT NO.	5-5802

SITE ELECTRICAL PLAN

ES2.01

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