POST BID
ADDENDUM
NO. 7

April 9, 2024

Cherry Tree Elementary School Additions & Renovations Mechanical Re-Bid
13989 Hazel Dell Parkway
Carmel, IN 46033

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 February 9, 2024, by Fanning/Howey. 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 7-1, and Fanning/Howey Addendum No. 7, Dated April 9, 2024, consisting of 1 item, 1 page, Revised Drawing Sheets: PD.05, P2.02, P2.03, P2.05, P2.06, P2.07, P2.08, P3.03, P3.04, P4.02, P4.03, MD1.02, M2.02, M2.03, M2.04, M3.02, M3.03, M5.01, M5.02, M6.01, and M6.02

A D D E N D U M N O. 7

Cherry Tree Elementary School Additions and Renovations

Carmel Clay Schools
Carmel, Indiana

Project No. 222011.00

Index of Contents

Addendum No. 7, 1 item, 1 page
Revised Drawing Sheets: PD.05, P2.02, P2.03, P2.05, P2.06, P2.07, P2.08, P3.03, P3.04, P4.02, P4.03, MD1.02, M2.02, M2.03, M2.04, M3.02, M3.03, M5.01, M5.02, M6.01, and M6.02

April 9, 2024

I hereby certify that this Addendum was prepared by me or under my direct supervision and that I am a duly registered Architect/Engineer under the Laws of the State of Indiana.

FANNING/HOWEY ASSOCIATES, INC.
ARCHITECTS/ENGINEERS/CONSULTANTS

Paul A. Miller, License No. AR10800161
Expiration Date: 12/31/2025

TO: ALL BIDDERS OF RECORD

ADDENDUM NO. 7 to Drawings and Project Manual, dated February 9, 2024, for the Cherry Tree Elementary School Additions and Renovations for Carmel Clay Schools, 5201 E. 131st St., Carmel, Indiana 46033; as prepared by Fanning/Howey Associates, Inc., Indianapolis, Indiana.
This Addendum shall hereby be and become a part of the Contract Documents the same as if originally bound thereto.

The following clarifications, amendments, additions, revisions, changes, and modifications change the original Contract Documents only in the amount and to the extent hereinafter specified in this Addendum.

Each bidder shall acknowledge receipt of this Addendum in his proposal or bid.

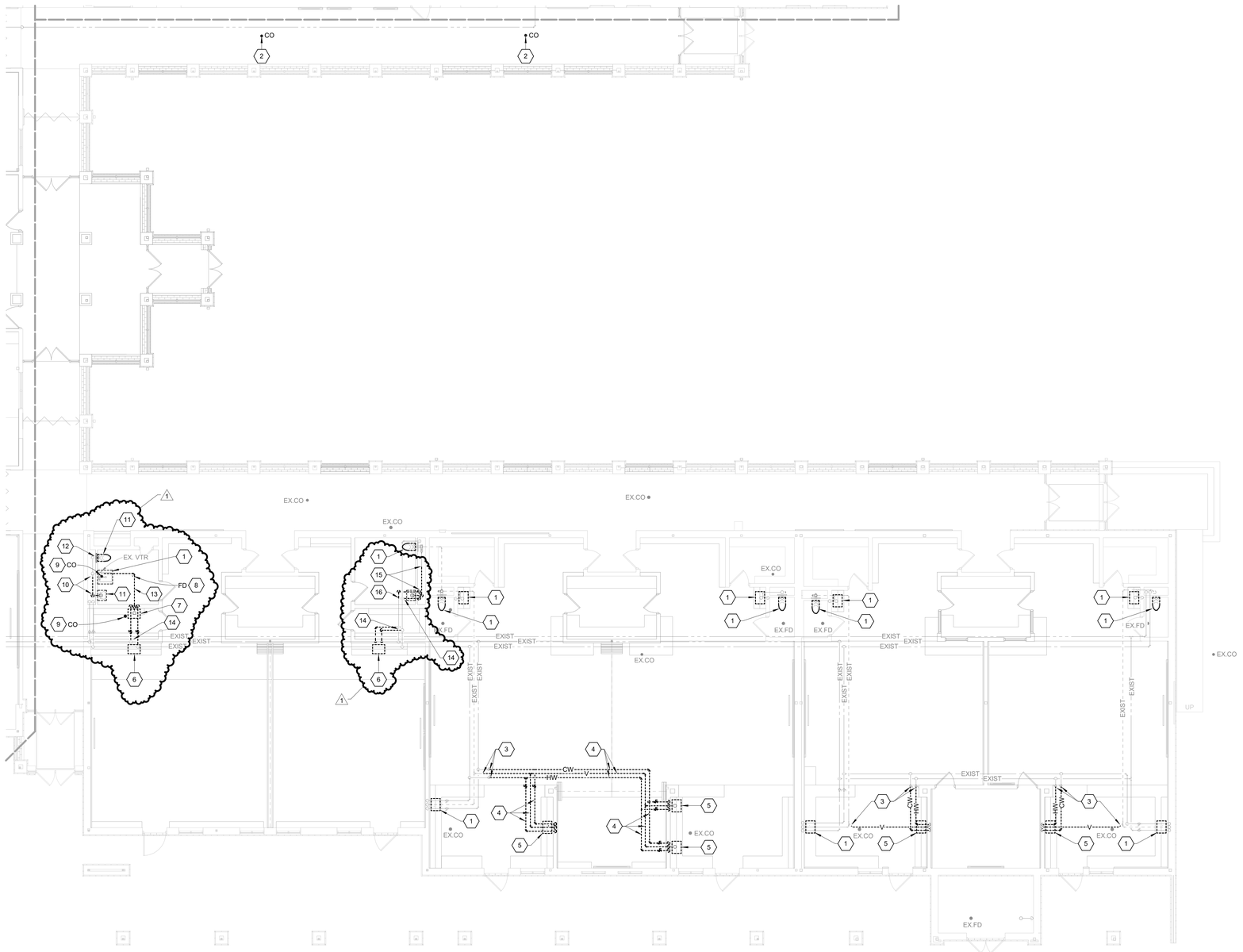
NOTE: Bidders are responsible for becoming familiar with every item of this Addendum. (This includes miscellaneous items at the very end of this Addendum.)

RE: ALL BIDDERS

ITEM NO. 1. REVISED DRAWING SHEETS

A. Drawing Sheets: PD.05, P2.02, P2.03, P2.05, P2.06, P2.07, P2.08, P3.03, P3.04, P4.02, P4.03, MD1.02, M2.02, M2.03, M2.04, M3.02, M3.03, M5.01, M5.02, M6.01, and M6.02 have been revised, dated 4/9/24, and is included with and hereby made a part of this Addendum. These Drawings supersede the original documents.

END OF ADDENDUM



UNIT B - FIRST FLOOR PLUMBING DEMOLITION PLAN

SCALE: 1/8" = 1'-0"

GENERAL CONSTRUCTION NOTE

CONTRACTOR SHALL BE RESPONSIBLE FOR CEILING REMOVAL AND REPLACEMENT AS REQUIRED THROUGHOUT EXISTING AREAS TO ACCOMMODATE NEW PIPING INSTALLATIONS.

UNIT B FIRST FLOOR DEMO PLAN NOTES

1. REMOVE PLUMBING FIXTURE AND ALL ASSOCIATED PIPING COMPLETE. EXISTING WATER AND WASTE ROUGH-INS TO REMAIN. PREPRARE EXISTING ROUGH-INS FOR CONNECTION TO NEW.
2. REMOVE FLOOR CLEANOUT COMPLETE.
3. REMOVE HOT, COLD AND VENT PIPING BACK TO THIS POINT AND CAP.
4. REMOVE PIPING COMPLETE.
5. REMOVE PLUMBING FIXTURE AND ALL ASSOCIATED PIPING COMPLETE. REMOVE WASTE DOWN TO BELOW SLAB AND CAP. PATCH FLOOR TO MATCH EXISTING FINISHES. REMOVE VENT PIPING UP TO ABOVE CEILING.
6. REMOVE PLUMBING FIXTURE AND ALL ASSOCIATED PIPING COMPLETE. REMOVE WASTE DOWN TO BELOW SLAB AND CAP. PATCH FLOOR TO MATCH EXISTING FINISHES. REMOVE WATER AND VENT PIPING UP TO ABOVE CEILING AND CAP AT MAIN(S).
7. REMOVE PLUMBING FIXTURE AND ALL ASSOCIATED PIPING COMPLETE. REMOVE WASTE DOWN TO BELOW SLAB AND CAP. PATCH FLOOR TO MATCH EXISTING FINISHES. REMOVE WATER AND VENT PIPING UP TO ABOVE CEILING AND CAP AT MAIN(S).
8. REMOVE FLOOR DRAIN GRATE AND BODY COMPLETE. CAP OR PLUG WASTE OUTLET. PATCH CONCRETE SLAB TO MATCH EXISTING FINISHES.
9. REMOVE FLOOR CLEANOUT COMPLETE. REMOVE WASTE PIPING TO BELOW SLAB AND CAP.
10. REMOVE WASTE AND VENT PIPING SERVING LAVATORY BACK TO EXISTING SINK CONNECTION AND CAP. EXISTING SINK WASTE AND VENT TO REMAIN.
11. REMOVE PLUMBING FIXTURE AND ALL ASSOCIATED PIPING COMPLETE.
12. REMOVE WATER CLOSET CARRIER COMPLETE. EXISTING WASTE THRU FLOOR AND EXISTING VENT TO REMAIN. RECONFIGURE/ADJUST EXISTING WASTE AND VENT PIPING TO REMAIN ACTIVE AND OPERATIONAL.
13. REMOVE VENT PIPING COMPLETE.
14. REMOVE HOT AND COLD WATER PIPING BACK TO THIS POINT AND CAP.
15. REMOVE WASTE AND VENT PIPING SERVING LAVATORY BACK TO WITHIN CHASE AND PREPARE REMAINING PIPING FOR CONNECTION TO NEW.
16. REMOVE HOT WATER PIPING BACK TO THIS POINT AND PREPARE REMAINING PIPING FOR CONNECTION TO NEW.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

CHERRY TREE ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS

13989 Hazel Dell Pkwy, Carmel, IN 46033

CARMEL CLAY SCHOOLS

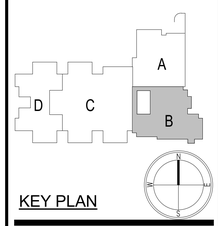
ARCHITECT

FANNING HOWEY

317-848-0966 WWW.FHAI.COM

350 E. NEW YORK ST, INDIANAPOLIS IN 46204

CONSULTANT



KEY PLAN

BIDS

PROJECT MANAGER: SAM

DRAWN BY: JE

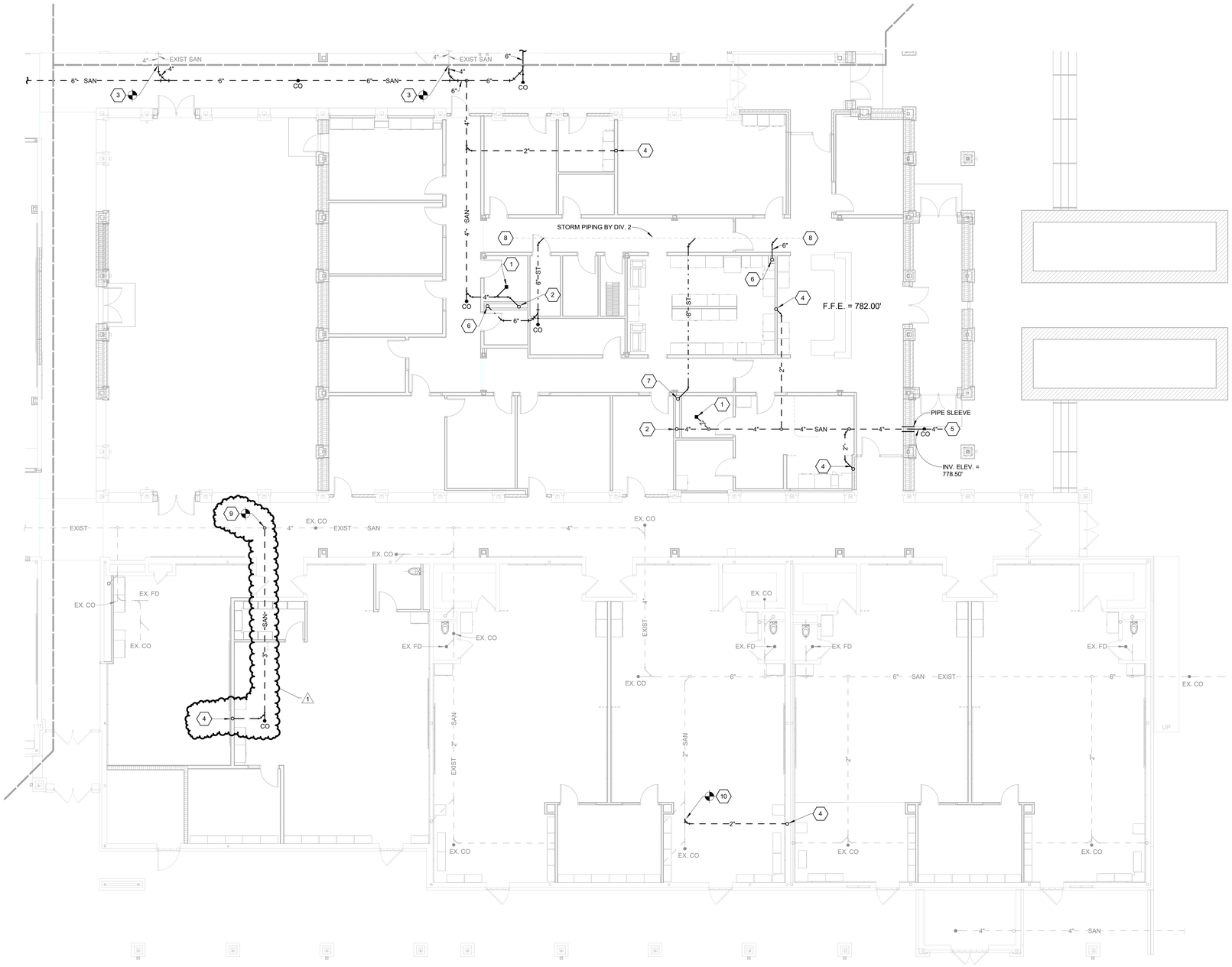
PROJECT NUMBER: 222011.00

PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#7	4.09.2024

UNIT B - FIRST FLOOR PLUMBING DEMOLITION PLAN

PD.05



UNIT B - FOUNDATION PLUMBING PLAN

SCALE: 1/8" = 1'-0"

GENERAL CONSTRUCTION NOTE

CONTRACTOR SHALL PROVIDE CUTTING AND PATCHING OF EXISTING CONCRETE SLAB AS REQUIRED TO ACCOMMODATE INSTALLATION OF UNDERSLAB PIPING SYSTEMS. PATCH CONCRETE SLAB TO MATCH EXISTING FINISHES.

UNIT B FOUNDATION PLAN NOTES

1. 2" WASTE WITH DEEP SEAL P-TRAP FROM FLOOR DRAIN ABOVE.
2. 4" WASTE FROM ABOVE.
3. CONNECT 4" WASTE TO EXISTING 4" WASTE MAIN AT THIS LOCATION.
4. 2" WASTE FROM ABOVE.
5. REFER TO SITE/CIVIL DRAWINGS FOR CONTINUATION.
6. 6" STORM FROM ABOVE.
7. 8" STORM FROM ABOVE.
8. STORM DRAIN PIPE BY DIVISION 2 CONTRACTOR. REFER TO SITE/CIVIL DRAWINGS FOR EXACT SIZE, LOCATION AND MORE INFORMATION.
9. CONNECT 2" WASTE TO EXISTING 4" WASTE MAIN AT THIS LOCATION.
10. CONNECT 2" WASTE TO EXISTING 2" WASTE MAIN AT THIS LOCATION.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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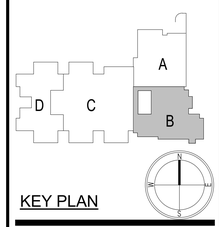


KEY PLAN

BIDS

PROJECT MANAGER: SAM

DRAWN BY: JE

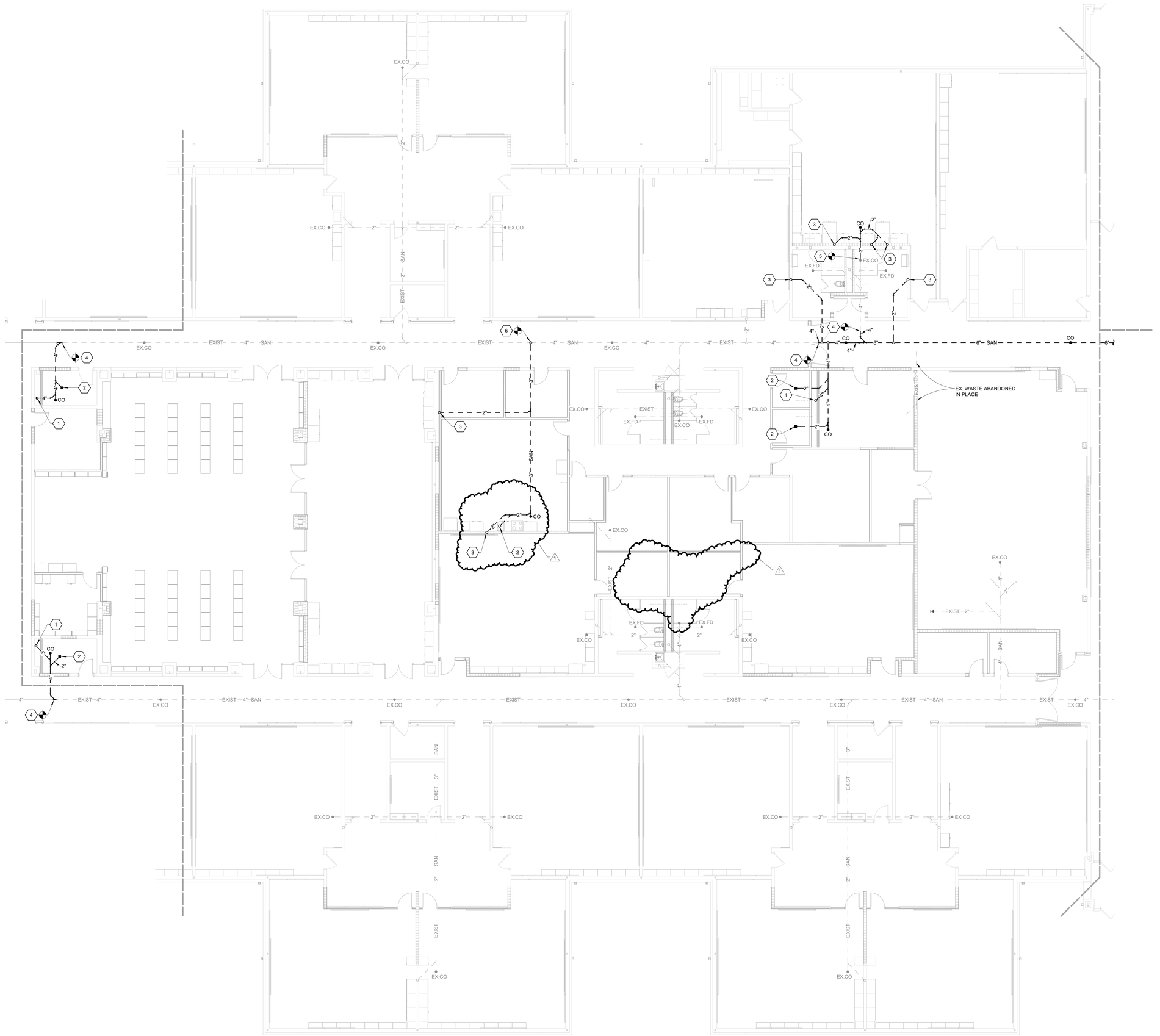
PROJECT NUMBER: 222011.00

PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#7	4.09.2024

UNIT B - FOUNDATION PLUMBING PLAN

P2.02



GENERAL CONSTRUCTION NOTE

CONTRACTOR SHALL PROVIDE CUTTING AND PATCHING OF EXISTING CONCRETE SLAB AS REQUIRED TO ACCOMMODATE INSTALLATION OF UNDERSLAB PIPING SYSTEMS. PATCH CONCRETE SLAB TO MATCH EXISTING FINISHES.

UNIT C FOUNDATION PLAN NOTES

1. 4" WASTE FROM ABOVE.
2. 2" WASTE WITH DEEP SEAL P-TRAP FROM FLOOR DRAIN ABOVE.
3. 2" WASTE FROM ABOVE.
4. CONNECT 4" WASTE TO EXISTING 4" WASTE MAIN AT THIS LOCATION.
5. CONNECT 3" WASTE TO EXISTING 4" WASTE AT FLOOR CLEANOUT.
6. CONNECT 3" WASTE TO EXISTING 4" WASTE MAIN AT THIS LOCATION.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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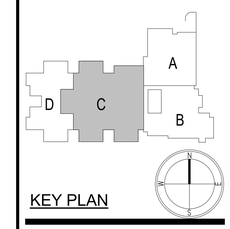

BIDS

PROJECT MANAGER: SAM

DRAWN BY: JE

PROJECT NUMBER: 222011.00

PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#7	4.09.2024

UNIT C - FOUNDATION PLUMBING PLAN

P2.03

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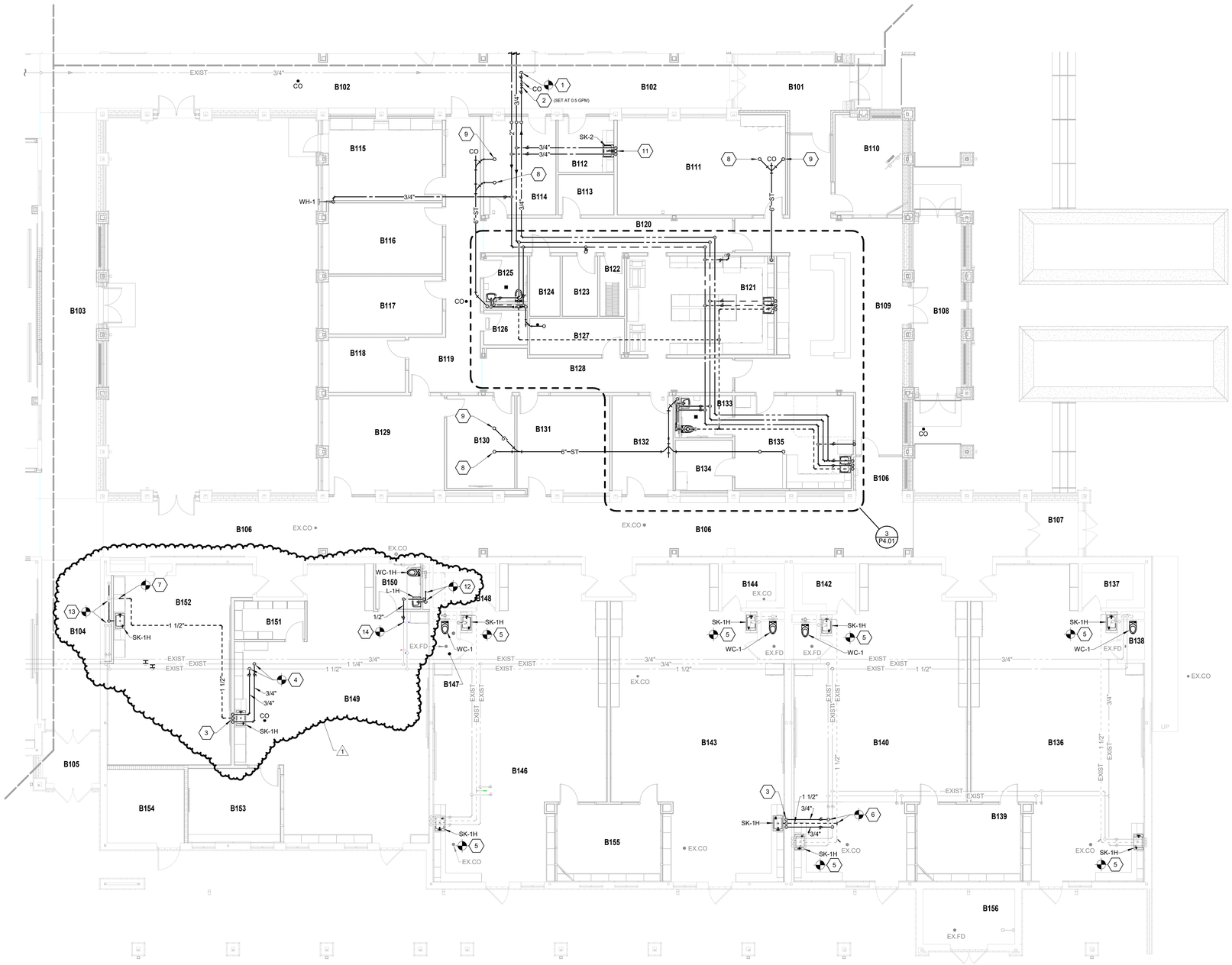
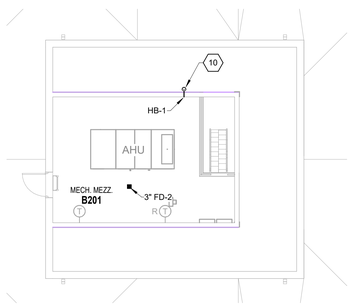


UNIT B - FIRST FLOOR PLUMBING PLAN

SCALE: 1/8" = 1'-0"



UNIT B - MEZZANINE PLUMBING PLAN

SCALE: 1/8" = 1'-0"

ROOM LEGEND - FIRST FLOOR UNIT B

ROOM NO.	ROOM NAME	AREA (SF)
B101	VESTIBULE	216 SF
B102	CORRIDOR	1194 SF
B103	CORRIDOR	625 SF
B104	CORRIDOR	290 SF
B105	VESTIBULE	95 SF
B106	CORRIDOR	1738 SF
B107	VESTIBULE	89 SF
B108	SECURE VESTIBULE	253 SF
B109	RECEPTION	901 SF
B110	SRO OFFICE	189 SF
B111	LARGE CONFERENCE	477 SF
B112	MOTHERS	91 SF
B113	TEST STOR/ QUIET SPACE	65 SF
B114	SPEECH/HEARING	206 SF
B115	OT/PT OFFICE	272 SF
B116	SOCIAL WORKER	235 SF
B117	PSYCHOLOGIST	191 SF
B118	INST COACH OFFICE	123 SF
B119	CORRIDOR	343 SF
B120	CORRIDOR	248 SF
B121	WORKROOM	418 SF
B122	MEZZANINE	43 SF
B123	IDF	62 SF
B124	ELEC	53 SF
B125	RR	58 SF
B126	CALM	44 SF
B127	STORAGE	100 SF
B128	CORRIDOR	261 SF
B129	PRINCIPAL'S OFFICE	332 SF
B130	SMALL CONFERENCE	183 SF
B131	ASST PRINCIPAL'S OFFICE	262 SF
B132	E.C. SPEECH	174 SF
B133	RR	63 SF
B134	EXAM	84 SF
B135	CLINIC	315 SF
B136	KINDER - CR 1	1327 SF
B137	STORAGE	80 SF
B138	TOILET	26 SF
B139	SMALL GROUP	234 SF
B140	KINDER - CR 2	1321 SF
B141	TOILET	24 SF
B142	STORAGE	86 SF
B143	KINDER - CR 3	1329 SF
B144	STORAGE	80 SF
B145	TOILET	27 SF
B146	KINDER - CR 4	1327 SF
B147	TOILET	27 SF
B148	STORAGE	80 SF
B149	KINDER - CR 35	1232 SF
B150	RR	59 SF
B151	STORAGE	79 SF
B152	FLEX ROOM	707 SF
B153	SMALL GROUP	201 SF
B154	OUTDOOR STORAGE	166 SF
B155	SMALL GROUP	234 SF
B156	MECH	149 SF

GENERAL CONSTRUCTION NOTE

CONTRACTOR SHALL BE RESPONSIBLE FOR CEILING REMOVAL AND REPLACEMENT AS REQUIRED THROUGHOUT EXISTING AREAS TO ACCOMMODATE NEW PIPING INSTALLATIONS.

UNIT B FIRST FLOOR PLAN NOTES

1. CONNECT 3/4" HOT WATER RETURN TO EXISTING HOT WATER RETURN MAIN AT THIS LOCATION.
2. HOT WATER RETURN BALANCE STATION. SET AT 0.5 GPM.
3. 3/4" HOT AND COLD WATER DOWN. 2" WASTE DOWN TO BELOW SLAB, 1 1/2" VENT UP TO ABOVE CEILING.
4. CONNECT 3/4" HOT AND COLD WATER TO EXISTING WATER MAINS AT THIS LOCATION.
5. EXTEND 1/2" HOT AND COLD WATER TO EXISTING WATER ROUGH-INS AND MAKE FINAL CONNECTIONS. EXTEND 1 1/2" WASTE TO EXISTING WASTE ROUGH-IN AND MAKE FINAL CONNECTION. REWORK EXISTING ROUGH-INS AS NEEDED TO ACCOMMODATE NEW SINK INSTALLATION.
6. CONNECT 3/4" HOT AND COLD WATER TO EXISTING WATER MAINS AT THIS LOCATION. CONNECT 1 1/2" VENT TO EXISTING VENT HEADER AT THIS LOCATION.
7. CONNECT 1 1/2" VENT TO EXISTING VENT AT THIS LOCATION.
8. 6" STORM FROM ROOF DRAIN ABOVE.
9. 6" STORM FROM OVERFLOW ROOF DRAIN ABOVE.
10. 3/4" COLD WATER FROM BELOW TO HOSE BIBB.
11. 3/4" HOT AND COLD WATER DOWN. 2" WASTE DOWN TO BELOW SLAB, 1 1/2" VENT UP TO 3" VENT THRU ROOF.
12. CONNECT 1/2" COLD WATER TO EXISTING COLD WATER WITHIN CHASE AND EXTEND TO FIXTURE AS REQUIRED. 1/2" HOT WATER DOWN IN CHASE EXTEND TO FIXTURE AS REQUIRED. CONNECT 1 1/2" WASTE AND VENT TO EXISTING WITHIN CHASE AND EXTEND TO NEW SINK AS REQUIRED.
13. CONNECT 1/2" HOT AND COLD WATER TO EXISTING WATER PIPING WITHIN CHASE AND EXTEND TO NEW SINK AS REQUIRED. CONNECT 1 1/2" WASTE AND VENT TO EXISTING WITHIN CHASE AND EXTEND TO NEW SINK AS REQUIRED.
14. CONNECT 1/2" HOT WATER TO EXISTING HOT WATER AT THIS POINT.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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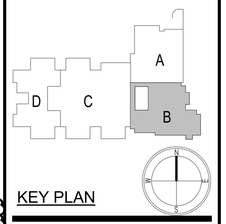
350 E. NEW YORK ST, INDIANAPOLIS IN 46204

CONSULTANT



KEY PLAN

BIDS

MARK Z. HOPF REGISTERED No. PE 12005001 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: SAM

DRAWN BY: JE

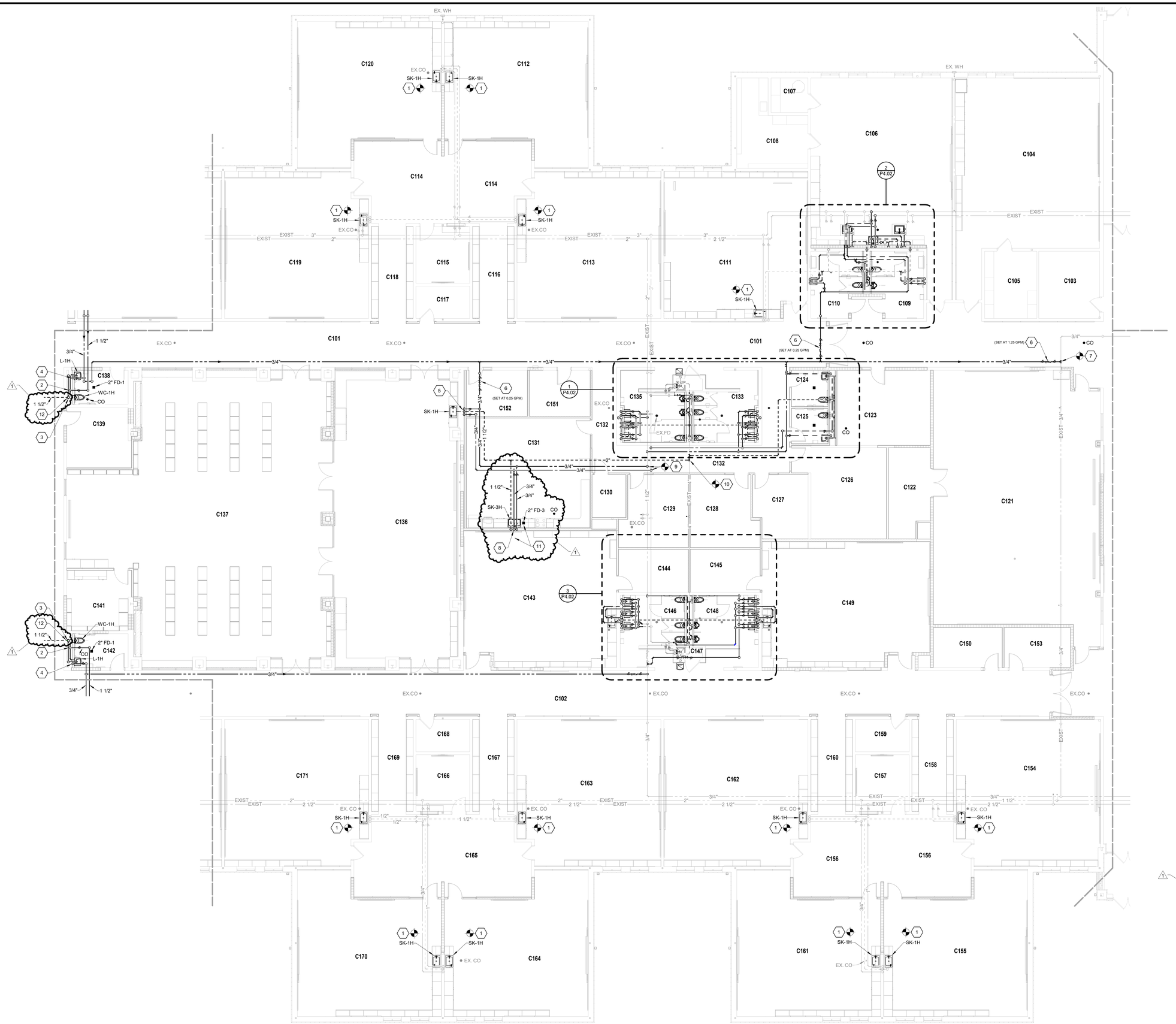
PROJECT NUMBER: 222011.00

PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#7	4.09.2024

UNIT B - FIRST FLOOR PLUMBING PLAN

P2.05



UNIT C - FIRST FLOOR PLUMBING PLAN

SCALE: 1/8" = 1'-0"

ROOM LEGEND - FIRST FLOOR UNIT C

ROOM NO.	ROOM NAME	AREA (SF)
C101	CORRIDOR	2434 SF
C102	CORRIDOR	2017 SF
C103	TV STUDIO	194 SF
C104	CLASSROOM 33 - MUSIC	1227 SF
C105	STORAGE	167 SF
C106	CLASSROOM 32 - ART	1192 SF
C107	KILN	60 SF
C108	STORAGE	235 SF
C109	MEN	151 SF
C110	WOMEN	148 SF
C111	CLASSROOM 31 - 5TH	982 SF
C112	CLASSROOM 29 - 5TH	878 SF
C113	CLASSROOM 30 - 5TH	981 SF
C114	COMMONS	648 SF
C115	SMALL GROUP	145 SF
C116	CUBBIES	189 SF
C117	IDF/ELEC	82 SF
C118	CUBBIES	189 SF
C119	CLASSROOM 27 - 5TH	981 SF
C120	CLASSROOM 28 - 5TH	878 SF
C121	LARGE GROUP INSTRUCTION	1990 SF
C122	LGI STORAGE	170 SF
C123	RESOURCE / IA OFFICES	333 SF
C124	RR	63 SF
C125	RR	61 SF
C126	IT OFFICE/ MDF	352 SF
C127	BHVL THERAPIST	159 SF
C128	MLL/ INTERVENTION	221 SF
C129	ST.V THERAPIST	221 SF
C130	CALM	69 SF
C131	STAFF LOUNGE	645 SF
C132	CORRIDOR	451 SF
C133	GIRLS	195 SF
C134	CUST.	14 SF
C135	BOYS	196 SF
C136	STEAM LAB	1657 SF
C137	DISCOVERY CENTER	2676 SF
C138	RR	87 SF
C139	PTO STORAGE	181 SF
C140	TEACHING AREA	312 SF
C141	DISC CTR STOR	180 SF
C142	RR	86 SF
C143	CLASSROOM 21 - 2ND	971 SF
C144	STORAGE	142 SF
C145	STORAGE	142 SF
C146	GIRLS	196 SF
C147	CUST.	15 SF
C148	BOYS	196 SF
C149	CLASSROOM 20 - 1ST	972 SF
C150	SHARED STORAGE	131 SF
C151	SHARED STORAGE	133 SF
C152	SENSORY	133 SF
C153	SHARED STORAGE	120 SF
C154	CLASSROOM 7 - 1ST	980 SF
C155	CLASSROOM 8 - 1ST	877 SF
C156	COMMONS	649 SF
C157	SMALL GROUP	145 SF
C158	CUBBIES	188 SF
C159	ELEC/STOR	83 SF
C160	CUBBIES	189 SF
C161	CLASSROOM 9 - 1ST	877 SF
C162	CLASSROOM 10 - 1ST	982 SF
C163	CLASSROOM 11 - 2ND	982 SF
C164	CLASSROOM 12 - 2ND	878 SF
C165	COMMONS	649 SF
C166	SMALL GROUP	145 SF
C167	CUBBIES	189 SF
C168	ELEC/STOR	83 SF
C169	CUBBIES	189 SF
C170	CLASSROOM 13 - 2ND	877 SF
C171	CLASSROOM 14 - 2ND	982 SF

GENERAL CONSTRUCTION NOTE

CONTRACTOR SHALL BE RESPONSIBLE FOR CEILING REMOVAL AND REPLACEMENT AS REQUIRED THROUGHOUT EXISTING AREAS TO ACCOMMODATE NEW PIPING INSTALLATIONS.

UNIT C FIRST FLOOR PLAN NOTES

1. EXTEND 1/2" HOT AND COLD WATER TO EXISTING WATER ROUGH-INS AND MAKE FINAL CONNECTIONS. EXTEND 1 1/2" WASTE TO EXISTING WASTE ROUGH-IN AND MAKE FINAL CONNECTION. REWORK EXISTING ROUGH-INS AS NEEDED TO ACCOMMODATE NEW SINK INSTALLATION.
2. 1 1/2" COLD WATER DOWN IN CHASE. EXTEND TO FIXTURES AS REQUIRED. PROVIDE ACCESSIBLE WATER HAMMER ARRESTER TYPE 'A' AT FLUSH VALVE CONNECTION.
3. 4" WASTE DOWN TO BELOW SLAB, 4" VENT UP TO 4" VENT THRU ROOF.
4. 1/2" HOT WATER DOWN.
5. 3/4" HOT AND COLD WATER DOWN IN WALL. EXTEND THRU EXISTING 12" CMU WALL TO SINK. EXTEND 1 1/2" WASTE ARM THRU EXISTING 12" CMU WALL TO SINK. 2" WASTE DOWN TO BELOW SLAB, 1 1/2" VENT UP TO ABOVE CEILING.
6. HOT WATER RETURN BALANCE STATION. REFER TO DETAIL ON DRAWING P3.01 FOR MORE INFORMATION.
7. CONNECT 3/4" HOT WATER RETURN TO EXISTING HOT WATER RETURN MAIN AT THIS LOCATION.
8. 3/4" HOT AND COLD WATER DOWN IN WALL. 2" WASTE DOWN TO BELOW SLAB, 1 1/2" VENT UP TO ABOVE CEILING.
9. CONNECT 3/4" HOT AND COLD WATER TO EXISTING WATER MAINS AT THIS LOCATION.
10. CONNECT 2" VENT TO EXISTING VENT MAIN AT THIS LOCATION.
11. EXTEND 1/2" COLD WATER FROM SINK SUPPLY TO UNDERCOUNTER ICE MAKER THRU SHUTOFF VALVE AND IN-LINE WATER FILTER. MAKE FINAL CONNECTION AS REQUIRED. TERMINATE INDIRECT WASTE OVER FLOOR DRAIN WITH AIR GAP.
12. CONNECT 1 1/2" VENT TO VENT STACK.

VERIFICATION NOTE

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SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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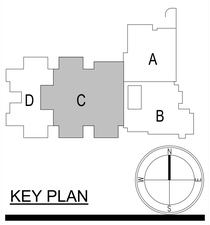

BIDS

MARK Z. HOPF REGISTERED No. PE 12000301 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: SAM

DRAWN BY: JE

PROJECT NUMBER: 222011.00

PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#7	4.09.2024

UNIT C - FIRST FLOOR PLUMBING PLAN

P2.06

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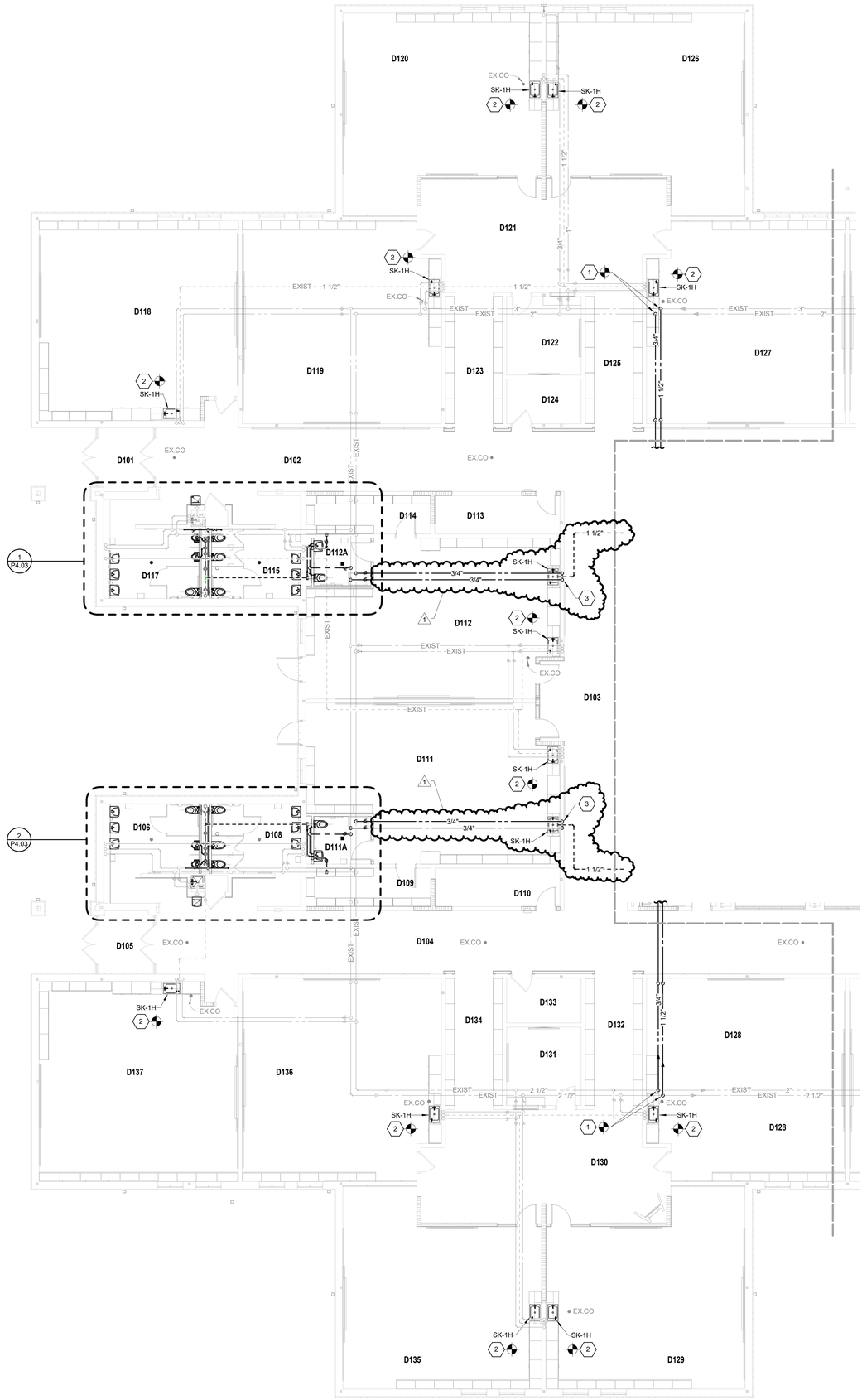


UNIT D - FIRST FLOOR PLUMBING PLAN

SCALE: 1/8" = 1'-0"

ROOM LEGEND - FIRST FLOOR UNIT D

ROOM NO.	ROOM NAME	AREA (SF)
D101	VESTIBULE	86 SF
D102	CORRIDOR	786 SF
D103	CORRIDOR	708 SF
D104	CORRIDOR	1132 SF
D105	VESTIBULE	87 SF
D106	BOYS	206 SF
D107	CUST.	15 SF
D108	GIRLS	203 SF
D109	STORAGE	119 SF
D110	SHARED STORAGE	119 SF
D111	EARLY CHILD - CR 5	905 SF
D111A	RESTROOM	68 SF
D112	EARLY CHILD - CR 6	905 SF
D112A	RESTROOM	68 SF
D113	SHARED STORAGE	120 SF
D114	STORAGE	119 SF
D115	GIRLS	204 SF
D116	CUST.	15 SF
D117	BOYS	205 SF
D118	CLASSROOM 22 - 4TH	965 SF
D119	CLASSROOM 23 - 4TH	981 SF
D120	CLASSROOM 24 - 4TH	878 SF
D121	COMMONS	648 SF
D122	SMALL GROUP	145 SF
D123	CUBBIES	189 SF
D124	STORAGE	83 SF
D125	CUBBIES	189 SF
D126	CLASSROOM 25 - 4TH	878 SF
D127	CLASSROOM 26 - 4TH	981 SF
D128	CLASSROOM 15 - 3RD	982 SF
D129	CLASSROOM 16 - 3RD	877 SF
D130	COMMONS	649 SF
D131	SMALL GROUP	145 SF
D132	CUBBIES	189 SF
D133	IDF/STOR	83 SF
D134	CUBBIES	189 SF
D135	CLASSROOM 17 - 3RD	877 SF
D136	CLASSROOM 18 - 3RD	981 SF
D137	CLASSROOM 19 - 3RD	965 SF

GENERAL CONSTRUCTION NOTE

CONTRACTOR SHALL BE RESPONSIBLE FOR CEILING REMOVAL AND REPLACEMENT AS REQUIRED THROUGHOUT EXISTING AREAS TO ACCOMMODATE NEW PIPING INSTALLATIONS.

UNIT D FIRST FLOOR PLAN NOTES

1 CONNECT 1 1/2" COLD WATER AND 3/4" HOT WATER TO EXISTING WATER MAINS AT THIS LOCATION.

2 EXTEND 1/2" HOT AND COLD WATER TO EXISTING WATER ROUGH-INS AND MAKE FINAL CONNECTIONS. EXTEND 1 1/2" WASTE TO EXISTING WASTE ROUGH-IN AND MAKE FINAL CONNECTION. REWORK EXISTING ROUGH-INS AS NEEDED TO ACCOMMODATE NEW SINK INSTALLATION.

3 3/4" HOT AND COLD WATER DOWN. 2" WASTE DOWN TO BELOW SLAB, 1 1/2" VENT UP TO ABOVE CEILING.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

CHERRY TREE ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS

13989 Hazel Dell Pkwy, Carmel, IN 46033

CARMEL CLAY SCHOOLS

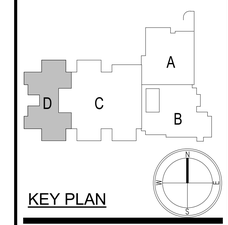
ARCHITECT

FANNING HOWEY

317-848-0966 WWW.FHAI.COM

350 E. NEW YORK ST, INDIANAPOLIS IN 46204

CONSULTANT



KEY PLAN

BIDS

PROJECT MANAGER: SAM

DRAWN BY: JE

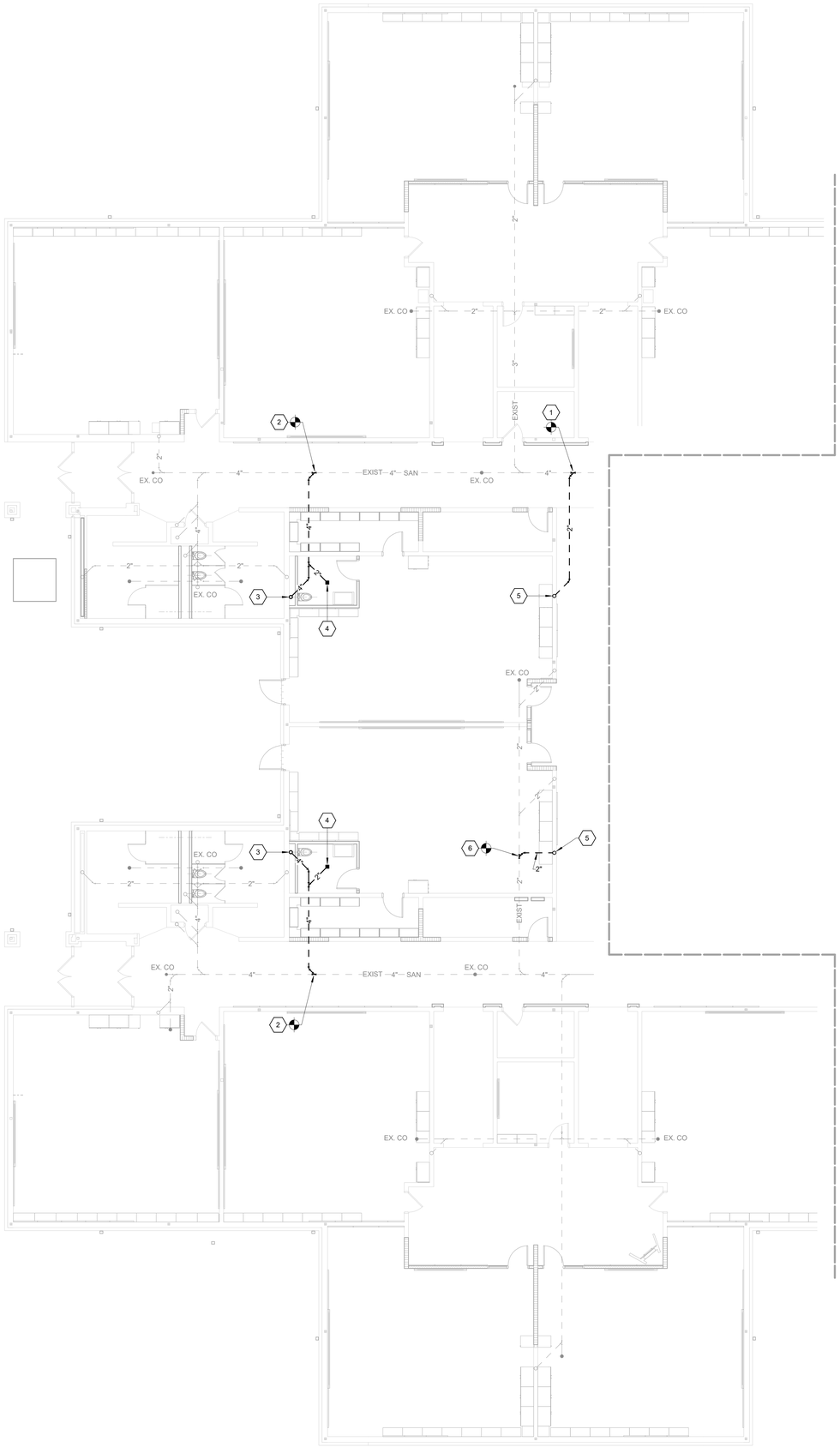
PROJECT NUMBER: 222011.00

PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#7	4.09.2024

UNIT D - FIRST FLOOR PLUMBING PLAN

P2.07



UNIT D - FOUNDATION PLUMBING PLAN

SCALE: 1/8" = 1'-0"

GENERAL CONSTRUCTION NOTE

CONTRACTOR SHALL PROVIDE CUTTING AND PATCHING OF EXISTING CONCRETE SLAB AS REQUIRED TO ACCOMMODATE INSTALLATION OF UNDERSLAB PIPING SYSTEMS. PATCH CONCRETE SLAB TO MATCH EXISTING FINISHES.

UNIT D FOUNDATION PLAN NOTES

1. CONNECT 2" WASTE TO EXISTING 4" WASTE MAIN AT THIS LOCATION.
2. CONNECT 4" WASTE TO EXISTING 4" WASTE MAIN AT THIS LOCATION.
3. 4" WASTE FROM ABOVE.
4. 2" WASTE WITH DEEP SEAL P-TRAP FROM FLOOR DRAIN ABOVE.
5. 2" WASTE FROM ABOVE.
6. CONNECT 2" WASTE TO EXISTING 2" WASTE MAIN AT THIS LOCATION.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

CHERRY TREE ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS

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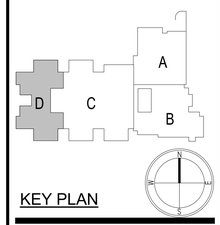


KEY PLAN

BIDS

PROJECT MANAGER: SAM

DRAWN BY: JE

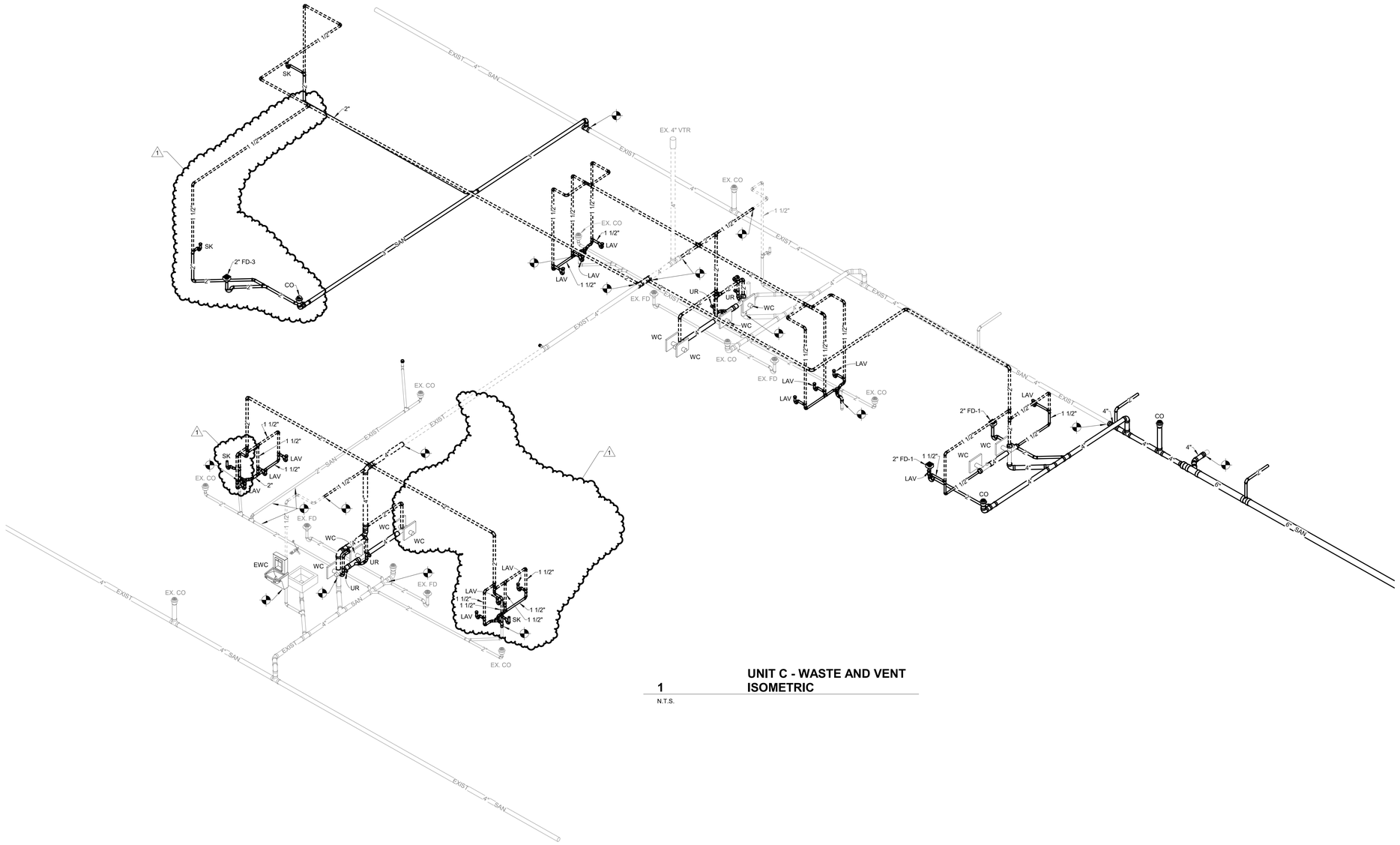
PROJECT NUMBER: 222011.00

PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#7	4.09.2024

UNIT D - FOUNDATION PLUMBING PLAN

P2.08



UNIT C - WASTE AND VENT ISOMETRIC

1 N.T.S.

CHERRY TREE ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS

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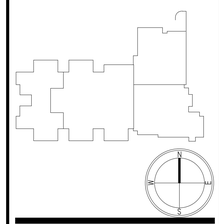


BIDS

MARK Z. HOFF REGISTERED No. PE 12000001 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: SAM

DRAWN BY: JE

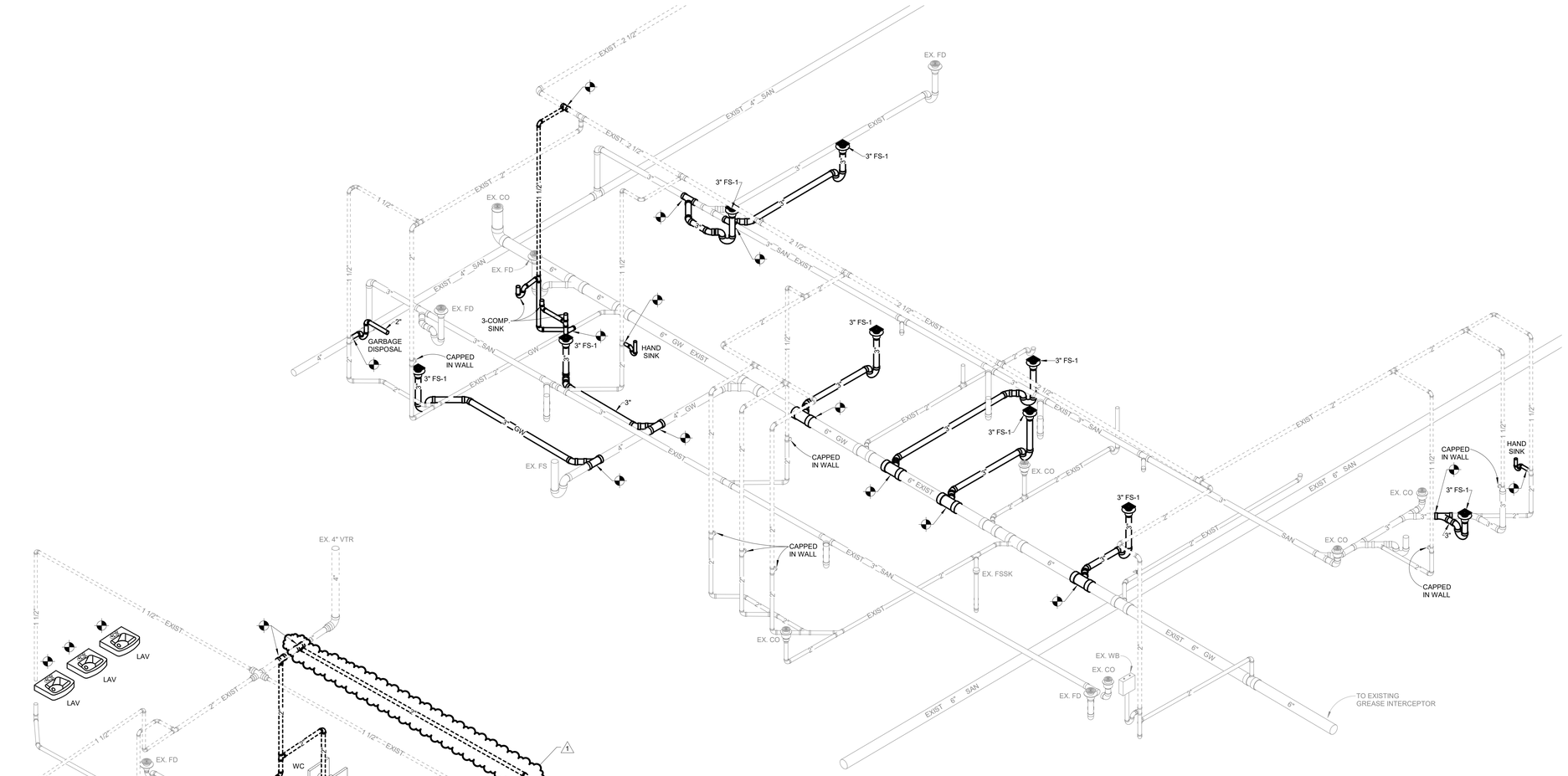
PROJECT NUMBER: 222011.00

PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#7	4.09.2024

PLUMBING ISOMETRICS

P3.03



1 UNIT A - KITCHEN WASTE AND VENT ISOMETRIC

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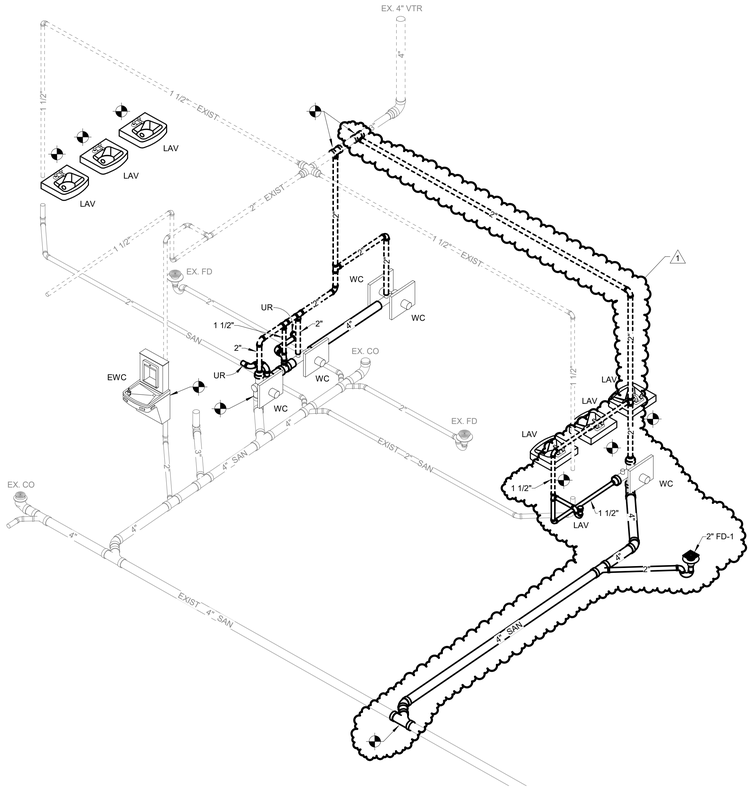
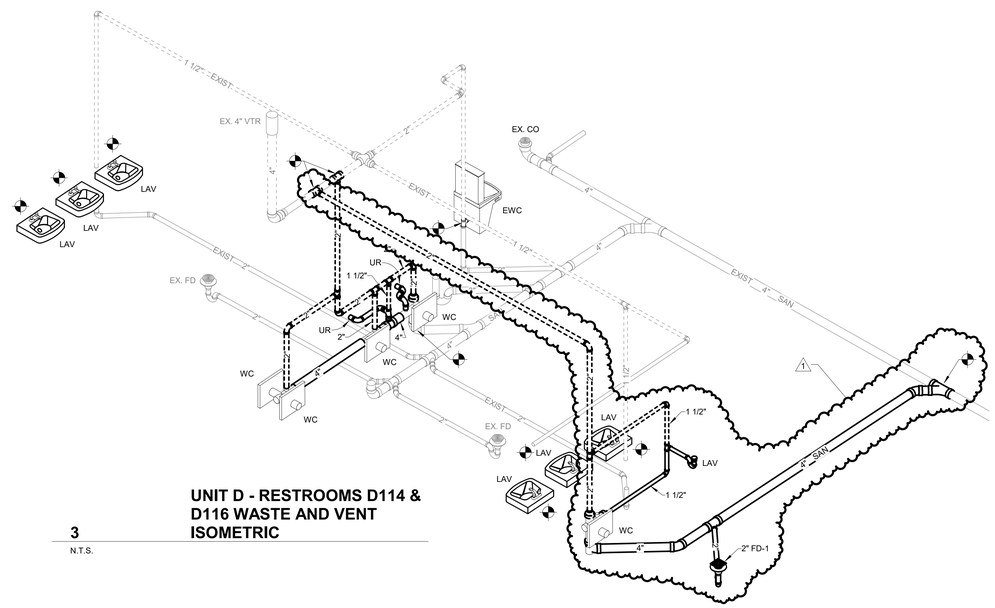


2 UNIT D - RESTROOMS D106 & D108 WASTE AND VENT ISOMETRIC

N.T.S.



3 UNIT D - RESTROOMS D114 & D116 WASTE AND VENT ISOMETRIC

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CHERRY TREE ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS

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BIDS

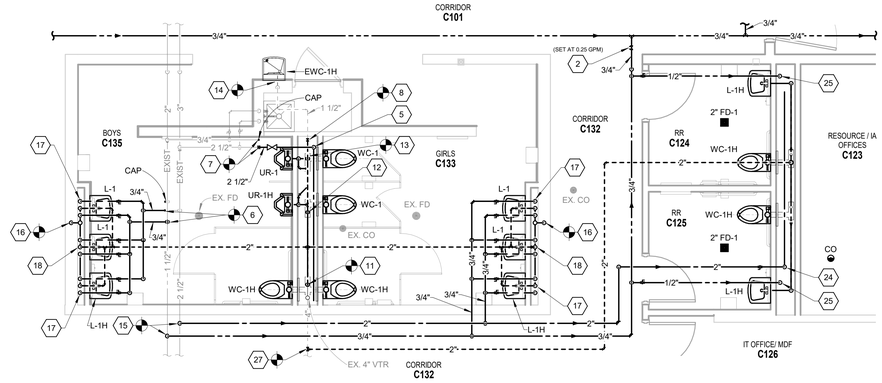
MARK Z. HOPF REGISTERED No. PE 12000001 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: SAM
DRAWN BY: JE
PROJECT NUMBER: 222011.00
PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#7	4.09.2024

PLUMBING ISOMETRICS

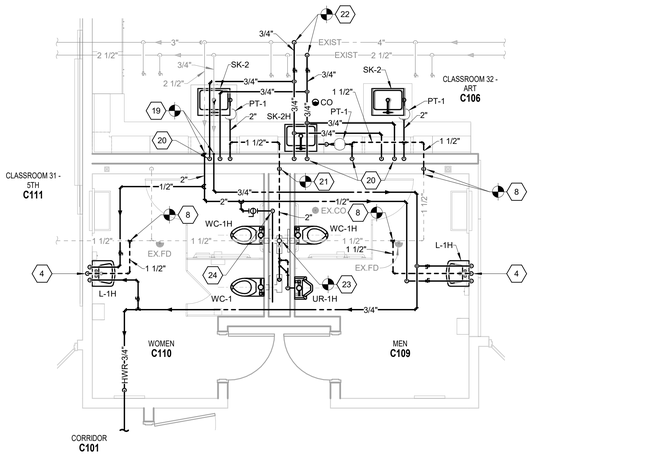
P3.04



UNIT C - ENLARGED RESTROOMS C150 AND C152 PLUMBING PLAN

1

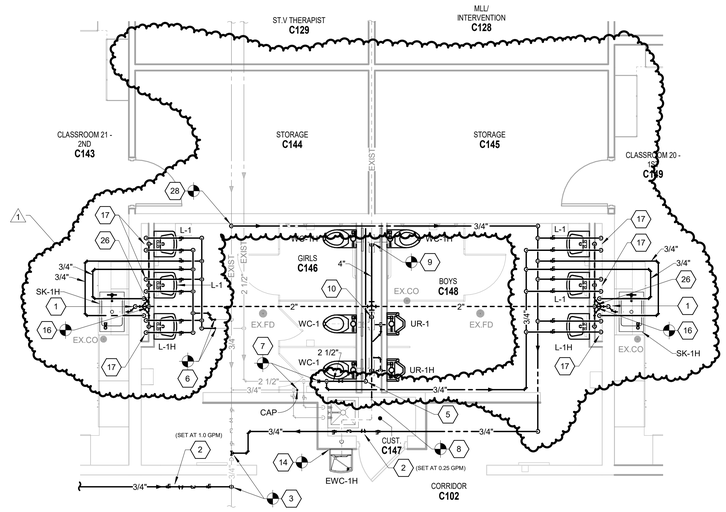
SCALE: 1/4" = 1'-0"



UNIT C - ENLARGED RESTROOMS C109 AND C110 PLUMBING PLAN

2

N.T.S.



UNIT C - ENLARGED RESTROOMS C127 AND C129 PLUMBING PLANS

3

SCALE: 1/4" = 1'-0"

GENERAL CONSTRUCTION NOTE

CONTRACTOR SHALL BE RESPONSIBLE FOR CEILING REMOVAL AND REPLACEMENT AS REQUIRED THROUGHOUT EXISTING AREAS TO ACCOMMODATE NEW PIPING INSTALLATIONS.

PLUMBING PLAN NOTES P402

1. 3/4" HOT AND COLD WATER DOWN. EXTEND TO SINK FAUCET AS REQUIRED. 2" WASTE DOWN TO BELOW SLAB. CONNECT 1 1/2" VENT TO VENT WITHIN CHASE.
2. HOT WATER RETURN BALANCE STATION. REFER TO DETAIL ON DRAWING P3.01 FOR MORE INFORMATION.
3. CONNECT 3/4" HOT WATER RETURN TO EXISTING HOT WATER RETURN MAIN AT THIS LOCATION.
4. 1/2" HOT AND COLD WATER DOWN. 2" WASTE DOWN TO BELOW SLAB, 1 1/2" VENT UP TO ABOVE CEILING.
5. 2 1/2" COLD WATER DOWN IN CHASE. ROUTE COLD WATER HEADER FULL SIZE THRU ENTIRE LENGTH OF CHASE. EXTEND TO FIXTURES AS REQUIRED. PROVIDE ACCESSIBLE WATER HAMMER ARRESTER TYPE 'C' AT LAST FLUSH VALVE CONNECTION.
6. CONNECT 3/4" HOT AND COLD WATER TO EXISTING 3/4" HOT AND COLD WATER AT THIS LOCATION.
7. CONNECT 2 1/2" COLD WATER TO EXISTING WATER MAIN AT THIS LOCATION. CAP HOT WATER PIPE.
8. CONNECT 1 1/2" VENT TO EXISTING 1 1/2" VENT AT THIS LOCATION.
9. CONNECT 4" VENT TO EXISTING 4" VENT AT THIS LOCATION.
10. 4" VENT UP FROM CHASE. ROUTE TO EXISTING 4" VENT MAIN.
11. CONNECT 2" VENT TO EXISTING 4" VENT AT THIS LOCATION.
12. 2" VENT UP FROM CHASE.
13. CONNECT 4" WASTE TO EXISTING 4" WASTE THRU SLAB.
14. MOUNT NEW ELECTRIC WATER COOLER ON EXISTING WALL AND ATTACH TO EXISTING FIXTURE SUPPORT. ADJUST FIXTURE SUPPORT TO ACCOMMODATE FIXTURE. EXTEND COLD WATER AND DRAIN TO EXISTING ROUGH-INS AND MAKE FINAL CONNECTIONS.
15. CONNECT 2" COLD WATER AND 3/4" HOT WATER TO EXISTING WATER MAINS AT THIS LOCATION.
16. CONNECT 2" WASTE TO EXISTING WASTE THRU FLOOR AT THIS LOCATION.
17. 1/2" HOT AND COLD WATER DOWN. 1 1/2" WASTE AND VENT.
18. 1/2" HOT AND COLD WATER DOWN. 1 1/2" WASTE. 2" VENT UP TO ABOVE CEILING.
19. CONNECT 2" COLD WATER AND 3/4" HOT WATER TO EXISTING WATER MAINS AT THIS LOCATION.
20. 3/4" HOT AND COLD WATER DOWN IN EXISTING WALL. EXTEND TO SINK FAUCET AND MAKE FINAL CONNECTIONS AS REQUIRED. 2" WASTE FROM PLASTER TRAP DOWN TO BELOW SLAB, 1 1/2" VENT UP TO ABOVE CEILING.
21. CONNECT 1 1/2" VENT AND 2" VENT TO EXISTING 2" VENT AT THIS LOCATION.
22. CONNECT 3/4" HOT AND COLD WATER TO EXISTING WATER MAINS AT THIS LOCATION.
23. CONNECT 4" WASTE TO EXISTING 4" WASTE THRU SLAB. CONNECT 4" VENT TO EXISTING 4" VENT THRU ROOF.
24. 2" COLD WATER DOWN IN CHASE. ROUTE COLD WATER HEADER FULL SIZE THRU ENTIRE LENGTH OF CHASE. EXTEND TO FIXTURES AS REQUIRED. PROVIDE ACCESSIBLE WATER HAMMER ARRESTER TYPE 'C' AT LAST FLUSH VALVE CONNECTION.
25. 1/2" HOT WATER DOWN IN CHASE. EXTEND TO FIXTURE AS REQUIRED.
26. 2" VENT UP TO ABOVE CEILING.
27. CONNECT 2" VENT TO EXISTING 4" VENT MAIN AT THIS LOCATION.
28. CONNECT 3/4" HOT WATER TO EXISTING HOT WATER MAIN AT THIS LOCATION.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

CHERRY TREE ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS

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CARMEL CLAY SCHOOLS

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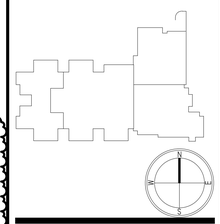


BIDS

PROJECT MANAGER: SAM

DRAWN BY: JE

PROJECT NUMBER: 222011.00

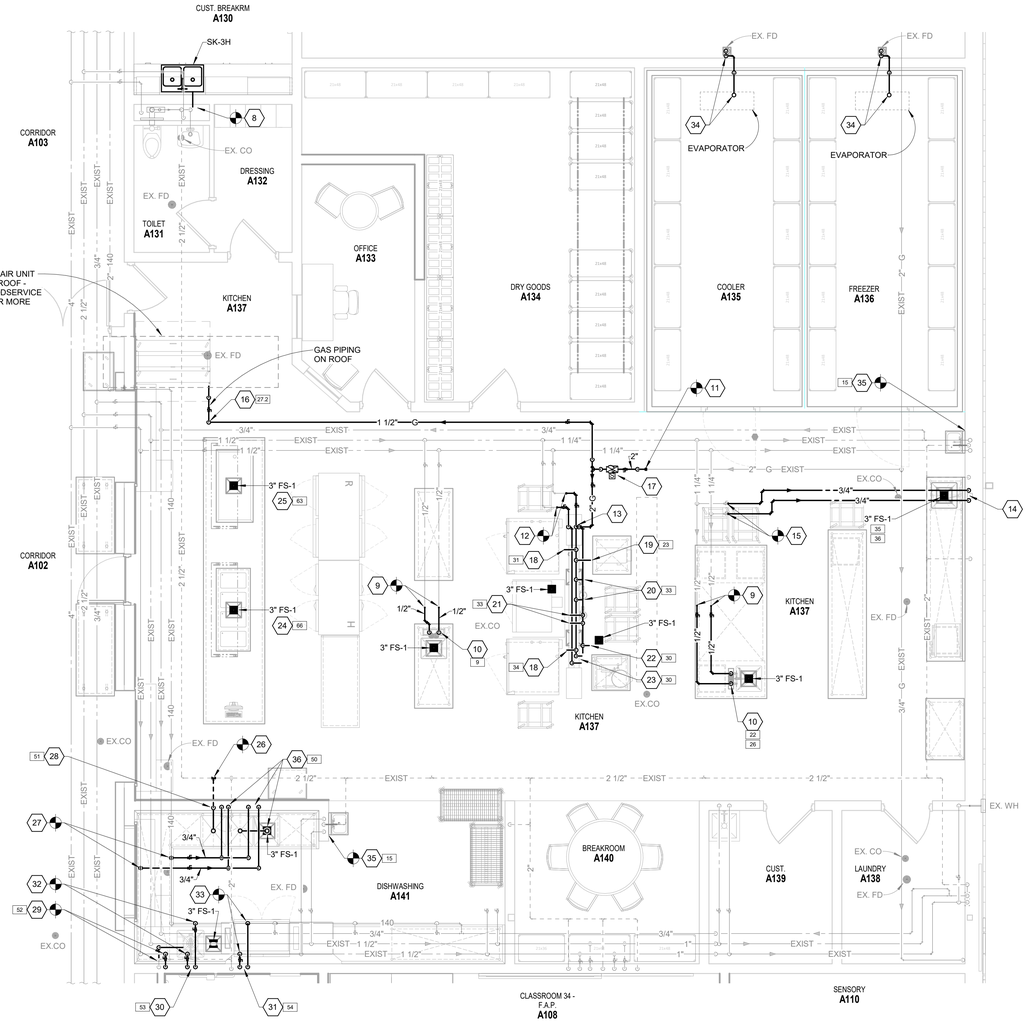
PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#7	4.09.2024

ENLARGED PLUMBING PLANS

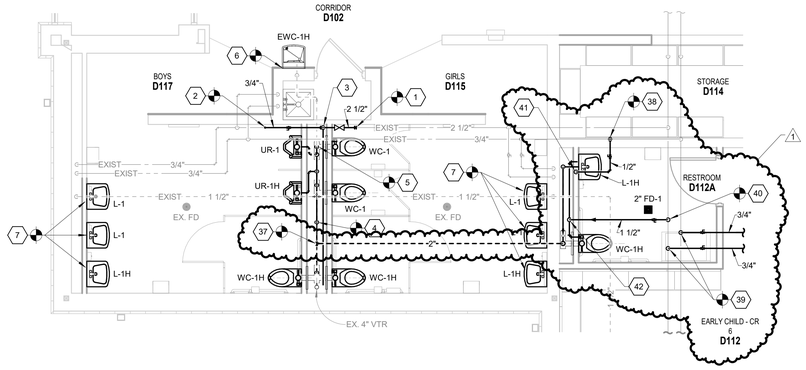
P4.02

NOTE: REFER TO FOODSERVICE DRAWINGS FOR MORE DETAILED EQUIPMENT INFORMATION AND PLUMBING FIXTURE SCHEDULE



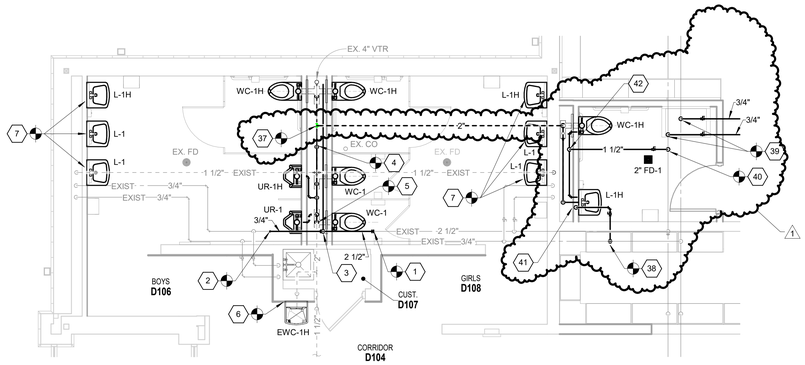
UNIT A - ENLARGED KITCHEN PLUMBING PLAN

3 SCALE: 1/4" = 1'-0"



UNIT D - ENLARGED RESTROOMS D114 AND D116 PLUMBING PLAN

1 SCALE: 1/4" = 1'-0"



UNIT D - ENLARGED RESTROOMS D106 AND D108 PLUMBING PLAN

2 SCALE: 1/4" = 1'-0"

PLUMBING PLAN NOTES P403

37 CONNECT 2" VENT TO EXISTING 4" VENT AT THIS LOCATION.

38 CONNECT 1/2" HOT WATER TO EXISTING HOT WATER AT THIS LOCATION.

39 CONNECT 3/4" HOT AND COLD WATER TO EXISTING WATER MAINS AT THIS LOCATION.

40 CONNECT 1 1/2" COLD WATER TO EXISTING COLD WATER MAIN AT THIS LOCATION.

41 1/2" HOT WATER DOWN. EXTEND TO FIXTURE AS REQUIRED.

42 1 1/2" COLD WATER DOWN INTO CHASE. EXTEND COLD WATER TO FIXTURES AS REQUIRED. PROVIDE ACCESSIBLE WATER HAMMER ARRESTER TYPE'A' AT FLUSH VALVE CONNECTION.

PLUMBING PLAN NOTES P403

32 CONNECT 3/4" 140 DEG. HOT AND COLD WATER TO EXISTING WATER MAINS WITH SHUTOFF VALVES AND CHECK VALVES IN SUPPLIES.

33 CONNECT 1/2" 140 DEG. HOT AND COLD WATER TO EXISTING WATER MAINS.

34 CONNECT 3/4" DRAIN TO WALK-IN COOLER/FREEZER EVAPORATOR COIL DRAIN. ROUTE THRU EXISTING MECHANICAL ROOM WALL AND TERMINATE OVER EXISTING FLOOR DRAIN WITH P-TRAP ASSEMBLY. FIELD VERIFY EXISTING FLOOR DRAIN LOCATION.

35 MOUNT NEW KEC PROVIDED HAND SINK ON EXISTING WALL. EXTEND DRAIN AND WATER SUPPLIES TO EXISTING ROUGH-INS AND MAKE FINAL CONNECTIONS.

36 3/4" HOT AND COLD WATER DOWN IN WALL. EXTEND TO EACH SINK FAUCET AS REQUIRED AND MAKE FINAL CONNECTIONS. MANIFOLD (2) 2" WASTE TOGETHER AND TERMINATE INDIRECT WASTE OVER FLOOR SINK WITH AIR GAP.

GENERAL CONSTRUCTION NOTE

CONTRACTOR SHALL BE RESPONSIBLE FOR CEILING REMOVAL AND REPLACEMENT AS REQUIRED THROUGHOUT EXISTING AREAS TO ACCOMMODATE NEW PIPING INSTALLATIONS.

PLUMBING PLAN NOTES P403

1 CONNECT 2 1/2" COLD WATER TO EXISTING COLD WATER MAIN AT THIS LOCATION.

2 CONNECT 3/4" COLD WATER TO EXISTING 3/4" COLD WATER AT THIS LOCATION.

3 2 1/2" COLD WATER DOWN IN CHASE. ROUTE COLD WATER HEADER FULL SIZE THRU ENTIRE LENGTH OF CHASE. EXTEND TO FIXTURES AS REQUIRED. PROVIDE ACCESSIBLE WATER HAMMER ARRESTER TYPE 'C' AT LAST FLUSH VALVE CONNECTION.

4 2" VENT UP FROM CHASE. CONNECT TO EXISTING 3" VENT HEADER AT THIS LOCATION.

5 CONNECT 4" WASTE TO EXISTING 4" WASTE THRU SLAB.

6 MOUNT NEW ELECTRIC WATER COOLER ON EXISTING WALL AND ATTACH TO EXISTING FIXTURE SUPPORT. ADJUST FIXTURE SUPPORT TO ACCOMMODATE FIXTURE. EXTEND COLD WATER AND DRAIN TO EXISTING ROUGH-INS AND MAKE FINAL CONNECTIONS.

7 EXTEND 1/2" HOT AND COLD WATER TO EACH LAVATORY FAUCET FROM EXISTING WATER ROUGH-INS AND CONNECT AS REQUIRED EXTEND 1 1/2" WASTE FROM EACH LAVATORY TO EXISTING WASTE ROUGH-INS AND CONNECT AS REQUIRED. REWORK EXISTING WASTE AND WATER ROUGH-INS AS REQUIRED TO ACCOMMODATE NEW LAVATORY.

8 EXTEND 1/2" HOT AND COLD WATER FROM EXISTING CHASE TO NEW SINK FAUCET. CONNECT COMPLETE AS REQUIRED. EXTEND 1 1/2" WASTE TO EXISTING WASTE WITHIN CHASE AND CONNECT AS REQUIRED. PATCH CHASE WALL TO MATCH EXISTING FINISHES.

9 CONNECT 1/2" HOT AND COLD WATER TO EXISTING HOT AND COLD WATER AT THIS POINT.

10 1/2" HOT AND COLD WATER DOWN IN STAINLESS STEEL CHASE. EXTEND TO SINK FAUCET AS REQUIRED AND MAKE FINAL CONNECTIONS. TERMINATE 2" INDIRECT WASTE OVER FLOOR SINK WITH AIR GAP.

11 CONNECT 2" GAS TO EXISTING GAS MAIN AT THIS POINT.

12 CONNECT 3/4" HOT AND COLD WATER TO EXISTING 3/4" HOT AND COLD WATER AT THIS LOCATION.

13 3/4" HOT AND COLD WATER DOWN INTO UTILITY DISTRIBUTION SYSTEM CHASE. EXTEND TO EQUIPMENT AS REQUIRED. 2" GAS DOWN INTO UTILITY DISTRIBUTION SYSTEM CHASE. ROUTE 2" HEADER FULL SIZE THRU ENTIRE LENGTH OF CHASE. EXTEND TO EQUIPMENT AS REQUIRED.

14 3/4" HOT AND COLD WATER DOWN IN WALL. EXTEND TO SINK FAUCET AS REQUIRED AND MAKE FINAL CONNECTIONS. TERMINATE 2" INDIRECT WASTE OVER FLOOR SINK WITH AIR GAP.

15 CONNECT 3/4" HOT AND COLD WATER TO EXISTING HOT AND COLD WATER AT THIS POINT.

16 1 1/2" GAS UP THRU ROOF. EXTEND TO ROOFTOP MAKE-UP AIR UNIT WITH SHUTOFF VALVE, MIN. 6" DIRT LEG AND UNION. CONNECT TO UNIT AS REQUIRED. REFER TO FOODSERVICE EQUIPMENT DRAWINGS FOR MORE INFORMATION AND EXACT LOCATION OF ROOFTOP MAKE-UP AIR UNIT.

17 EMERGENCY GAS SHUTOFF SOLENOID VALVE. INTERLOCK WITH HOOD FIRE SUPPRESSION SYSTEM. INSTALL BELOW CEILING FOR ACCESS.

18 EXTEND 3/4" COLD WATER TO COMBI-OVEN AND MAKE FINAL CONNECTION AS REQUIRED. TERMINATE 2" INDIRECT WASTE OVER FLOOR SINK WITH AIR GAP.

19 EXTEND 1/2" COLD WATER TO HOT WATER DISPENSER THRU KEC PROVIDED WATER FILTER. MAKE FINAL CONNECTION AS REQUIRED.

20 EXTEND 1/2" COLD WATER TO KEC PROVIDED REVERSE OSMOSIS SYSTEM. MAKE FINAL CONNECTION AS REQUIRED.

21 EXTEND 3/4" GAS TO DOUBLE-DECK CONVECTION OVEN. MAKE FINAL CONNECTION WITH KEC PROVIDED FLEXIBLE GAS CONNECTION KIT.

22 EXTEND 3/4" GAS TO STATIONARY KETTLE. MAKE FINAL CONNECTION WITH KEC PROVIDED FLEXIBLE CONNECTION KIT.

23 EXTEND 1/2" HOT AND COLD WATER TO STATIONARY KETTLE. MAKE FINAL CONNECTIONS AS REQUIRED. TERMINATE 2" INDIRECT WASTE OVER FLOOR SINK WITH AIR GAP.

24 TERMINATE 1" INDIRECT DRAIN OVER FLOOR SINK WITH AIR GAP.

25 TERMINATE 3/4" INDIRECT DRAIN OVER FLOOR SINK WITH AIR GAP.

26 CONNECT 1 1/2" VENT TO EXISTING VENT AT THIS LOCATION.

27 CONNECT 3/4" 140 DEG. HOT AND COLD WATER TO EXISTING 140 DEG. HOT AND COLD WATER AT THIS POINT.

28 2" WASTE DOWN TO BELOW SLAB, 1 1/2" VENT UP TO ABOVE CEILING.

29 CONNECT 2" WASTE TO EXISTING WASTE ROUGH-IN AND EXTEND TO FOOD WASTER DISPOSER. CONNECT 1/2" COLD WATER TO EXISTING WATER MAIN. 1/2" COLD WATER DOWN IN WALL. EXTEND TO FOOD WASTER DISPOSER THRU KEC PROVIDED VACUUM BREAKER. MAKE FINAL CONNECTION AS REQUIRED.

30 CONNECT 3/4" 140 DEG. HOT AND COLD WATER TO EXISTING WATER MAINS WITH SHUTOFF VALVES AND CHECK VALVES IN SUPPLIES. 3/4" 140 DEG. HOT AND COLD DOWN IN WALL. TERMINATE 2" INDIRECT WASTE OVER FLOOR SINK.

31 CONNECT 1/2" 140 DEG. HOT AND COLD WATER TO EXISTING WATER MAINS. 1/2" 140 DEG. HOT AND COLD WATER DOWN IN WALL. EXTEND 140 DEG. HOT WATER TO DISHMACHINE. MAKE FINAL CONNECTION AS REQUIRED. EXTEND 1/2" COLD WATER TO DISHMACHINE WATER TEMPERING DEVICE. MAKE FINAL CONNECTION AS REQUIRED. TERMINATE 2" INDIRECT WASTE OVER FLOOR SINK WITH AIR GAP.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

CHERRY TREE ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS

13989 Hazel Dell Pkwy, Carmel, IN 46033

CARMEL CLAY SCHOOLS

ARCHITECT

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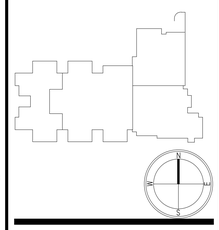


BIDS

MARK Z. HOOF REGISTERED No. PE 12000301 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: SAM

DRAWN BY: JE

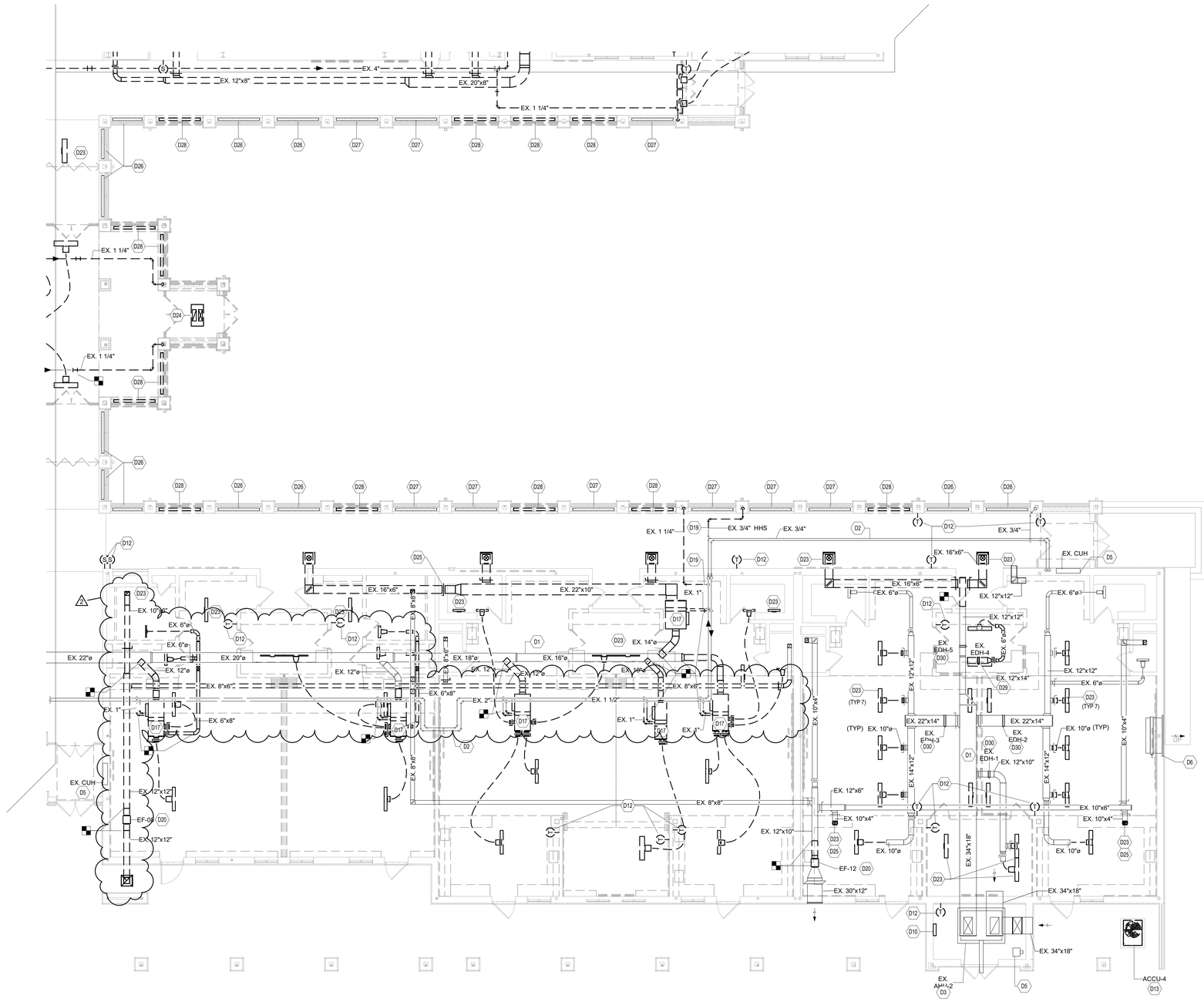
PROJECT NUMBER: 222011.00

PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#7	4.09.2024

ENLARGED PLUMBING PLANS

P4.03



UNIT B - MECHANICAL DEMOLITION PLAN

SCALE: 1/8" = 1'-0"

MECHANICAL DEMOLITION PLAN GENERAL NOTES

A. THE DIVISION 23 CONTRACTOR SHALL VISIT THE PROJECT AND DETERMINE THE EXACT EXTENT OF THE DEMOLITION WORK REQUIRED BEFORE BIDDING THE PROJECT.
B. WHERE BUILDING SURFACES ARE DAMAGED BY THE REMOVAL OF OLD WORK, SAME SHALL BE PATCHED TO MATCH THE ADJACENT SURFACES BY THIS CONTRACTOR.
C. EXISTING OPENINGS WHICH ARE TO BE REUSED SHALL NOT BE REMOVED AND SHALL BE MODIFIED OR ENLARGED AS NEED BE TO SUIT THE NEW SYSTEMS. PROVIDE ALL REQUIRED CUTTING AND PATCHING TO MATCH ADJACENT SURFACES.
D. IF ASBESTOS IS PRESENT CONTACT THE CONSTRUCTION MANAGER. IT WILL BE REMOVED OR RENDERED HARMLESS UNDER SEPERATE CONTRACT BY THE OWNER.
E. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING EXISTING DUCTWORK HEIGHT, LOCATION AND SIZE.
F. THE OWNER SHALL HAVE THE RIGHT TO CLAIM ANY MATERIALS THAT ARE BEING DEMOLISHED PRIOR TO THE CONTRACTOR DISPOSING OF THEM OFF SITE. CONTRACTOR IS REQUIRED TO VERIFY THAT THE OWNER DOES NOT WANT TO CLAIM AN ITEM BEFORE DISPOSING THEM OFF SITE.
G. ALL FLOOR, WALL AND ROOF CUTTING WORK TO BE DONE BY DIVISION 23-HVAC CONTRACTOR UNLESS OTHERWISE NOTED. PATCH ALL FLOOR, WALL AND ROOF OPENINGS THAT ARE NOT REUSED TO MATCH ADJACENT CONSTRUCTION.
H. DIVISION 23 CONTRACTOR IS RESPONSIBLE TO REMOVE EXISTING CEILINGS TO DO WORK ABOVE THE CEILINGS AND REINSTALL THOSE CEILINGS AFTER COMPLETION OF WORK. IF ANY CEILING PADS OR GRIDS ARE DAMAGED, THIS CONTRACTOR SHALL REPLACE WITH NEW.

MECHANICAL DEMOLITION PLAN NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

NO.	DESCRIPTION
D1	EXISTING DUCTWORK TO REMAIN SHALL REMAIN UNLESS NOTED OTHERWISE.
D2	EXISTING HOT WATER PIPING, REFRIGERANT PIPING, VALVES, INSULATION, SUPPORTS, HANGERS, ETC. SHALL REMAIN UNLESS NOTED OTHERWISE.
D3	EXISTING AIR HANDLING UNIT TO REMAIN. INSTALL NEW FILTERS AND CLEAN THE INSIDE OF THE UNITS TO ENSURE PROPER OPERATION.
D5	EXISTING MECHANICAL EQUIPMENT TO REMAIN.
D6	EXISTING RELIEF AIR WALL LOUVER TO BE REMAIN.
D10	EXISTING CONTROL PANELS TO BE REMOVED. DISPOSE OF ALL MATERIAL OFF SITE.
D12	DISCONNNECT AND REMOVE EXISTING PNUEMATIC THERMOSTAT AND ALL ASSOCATED TUBING, ETC. DISPOSE OF ALL MATERIAL OFF SITE.
D13	REMOVE AIR COOLED CONDENSING UNIT INCLUDING PIPING, CONTROLS, INSULATION, HANGERS, SUPPORTS, ETC. AND DISPOSE OF ALL MATERIAL OFF SITE. COORDINATE ALL DISCONNECT REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO REMOVAL.
D17	REMOVE FAN POWERED VARIABLE AIR VOLUME BOX COMPLETELY INCLUDING CONTROLS, VALVES, INSULATION, HANGERS, SUPPORTS, ETC. REMOVE DUCTWORK BACK TO POINT INDICATED. EXISTING DIFFUSERS AND RIGGED/FLEX DUCTWORK ASSOCIATED WITH FPB SHALL BE REMOVED. REMOVE RETURN GRILLES IN ROOM SERVED. REMOVE PIPING BACK TO THE MAIN AND CAPPED WATER-TIGHT. DISPOSED OF ALL MATERIAL OFF SITE. REFER TO NEW WORK PLAN.
D19	REMOVE EXISTING PIPING BACK TO THE POINT INDICATED. REFER TO THE NEW WORK PLAN FOR CONNECTION OF PIPING. DISPOSE OF MATERIAL OFF SITE
D20	REMOVE EXHAUST FAN COMPLETELY INCLUDING CONTROLS. DISPOSE OF ALL MATERIALS OFFSITE.
D23	EXISTING DIFFUSERS / GRILLES TO BE REMOVED. DISPOSE OF ALL MATERIAL OFF SITE.
D24	REMOVE CABINET UNIT HEATER INCLUDING PIPING, VALVES, INSULATION, HANGERS, SUPPORTS, ANCHORS, ETC. DISPOSED OF OFF SITE. REMOVE PIPING BACK TO THE MAIN AND CAPPED WATER-TIGHT. REFER TO NEW WORK PLAN.
D25	CAP EXISTNG DUCTWORK AIR TIGHT.
D26	EXISTING FINNED TUBE TO REMAIN. REFER TO NEW WORK FOR RECONNECTION INTO HEATING HOT WATER SYSTEM.
D27	EXISTING FINNED TUBE TO BE ABANDONED IN PLACE
D28	EXISTING FINNED TUBE TO REMOVED AND DISPOSED OF OFFSITE.
D29	EXISTING ELECTRIC DUCT HEATER AND ASSOCIATED DUCTWORK SHALL BE REMOVED. DISPOSE OF ALL MATERIAL OFF SITE. COORDINATE ALL DISCONNECT REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO REMOVAL.
D30	EXISTING ELECTRIC DUCT HEATER AND ASSOCIATED DUCTWORK TO REMAIN.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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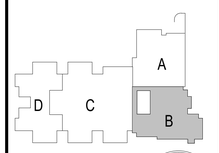


KEY PLAN

BIDS

PROJECT MANAGER: SAM

DRAWN BY: DJA

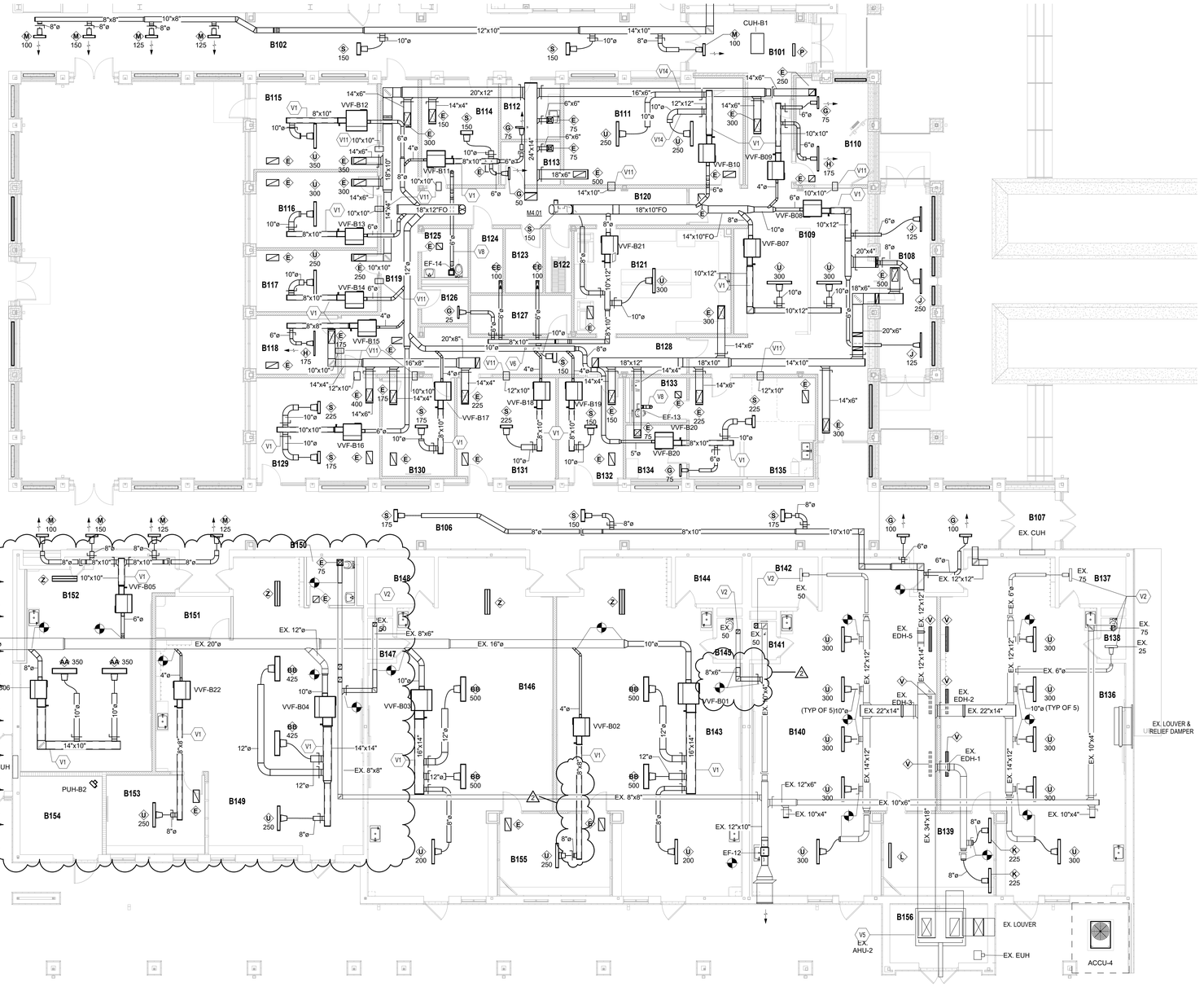
PROJECT NUMBER: 222011.00

PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
2	ADDENDUM#7	4.09.2024

1ST FLR DEMOLITION PLAN - UNIT B

MD1.02



UNIT B - MECHANICAL VENTILATION PLAN

SCALE: 1/8" = 1'-0"

VENTILATION PLAN GENERAL NOTES

A. ALL DUCTWORK, PIPING AND VALVES SHALL BE CONCEALED ABOVE THE CEILING AND WITHIN WALLS, UNLESS OTHERWISE NOTED.
B. REFER TO THE SPECIFICATIONS FOR REQUIREMENTS RELATED TO EQUIPMENT QUALITY, CONSTRUCTION AND FINISH OF MATERIALS.
C. ARRANGE DUCTWORK, PIPING, ETC. TO ALLOW FOR EASY ACCESS TO COILS, VALVES, DAMPERS AND CONTROLS. KEEP AREAS ADJACENT TO ACCESS PANELS FREE AND CLEAR OF ANY OBSTRUCTIONS.
D. SEAL DUCT PENETRATIONS THROUGH THE FLOOR AND/OR WALLS IN ACCORDANCE WITH MECHANICAL CODE AND SMACNA REQUIREMENTS. SEAL DUCT PENETRATIONS THROUGH FIRE RATED FLOORS AND/OR WALLS WITH A MATERIAL HAVING SAME FIRE RATING AS THE WALL AND/OR FLOOR.
E. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR HIS RESPECTIVE WORK FOR REPAIRING AND PATCHING TO MATCH EXISTING SURFACES, SIDEWALKS, STREETS, FLOORS, WALLS, ROOFS, CEILING AND PAVEMENT.
F. ALL RECTANGULAR SHEET METAL DUCT SIZES SHOWN ARE INSIDE FREE AREA DIMENSIONS. ALL ROUND DUCT SIZES SHOWN ARE INSIDE DIAMETERS.
G. PROVIDE BALANCING DAMPER AT EACH DUCT BRANCH, SERVING DIFFUSER, GRILLE AND REGISTER.
H. INSTALL WALL THERMOSTATS, TEMPERATURE SENSORS, HUMIDISTATS, ETC. 44" ABOVE THE FINISH FLOOR IN ACCORDANCE WITH ADA REQUIREMENTS.
I. COORDINATE ALL REQUIRED WALL, ROOF AND FLOOR OPENINGS (BOTH DIMENSIONS AND LOCATIONS) WITH ALL OTHER TRADES.
J. COORDINATE MECHANICAL SYSTEM INSTALLATION WITH STRUCTURE, FIRE PROTECTION AND LIGHTING LAYOUT.
K. PROVIDE ALL NECESSARY TRANSITIONS TO EQUIPMENT FROM SIZES SHOWN ON PLAN.
L. THE CLEARANCE FOR THE DESIGNED FAN-POWERED VAV TERMINAL UNITS IS FROM THE BOTTOM OF THE UNIT. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPROVED FAN-POWERED VAV TERMINAL UNITS WITH ALL TRADES PRIOR TO INSTALLATION.

VENTILATION PLAN NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

V1 DUCTWORK PROVIDED WITH INTERNAL LINED INSULATION. REFER TO SPECIFICATIONS.
V2 EXISTING DIFFUSER TO REMAIN. BALANCE VOLUME DAMPER TO CFM SHOWN.
V5 CONTRACTOR SHALL MODIFY EXISTING AIR HANDLING UNIT TO 4300 CFM.
V6 APPROXIMATE LOCATION OF DUCT STATIC PRESSURE SENSOR.
V8 TRANSITION 6" ROUND DUCTWORK UP THROUGH ROOF. TERMINATE WITH GOOSENECK. COORDINATE WITH STRUCTURAL IN AREA.
V11 AIR TRANSFER WALL OPENING LOCATED ABOVE THE CEILING. COORDINATE EXACT LOCATION WITH ALL TRADES
V14 ROUTE DUCTWORK BETWEEN/THROUGH STRUCTURAL STEEL. COORDINATE EXACT LOCATION WITH STRUCTURAL CONTRACTOR AND ALL OTHER TRADES.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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ARCHITECT

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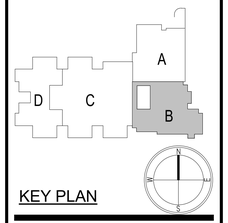

BIDS

PROJECT MANAGER: SAM

DRAWN BY: DJA

PROJECT NUMBER: 222011.00

PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#1	2.23.2024
2	ADDENDUM#7	4.09.2024

1ST FLR VENTILATION PLAN - UNIT B

M2.02

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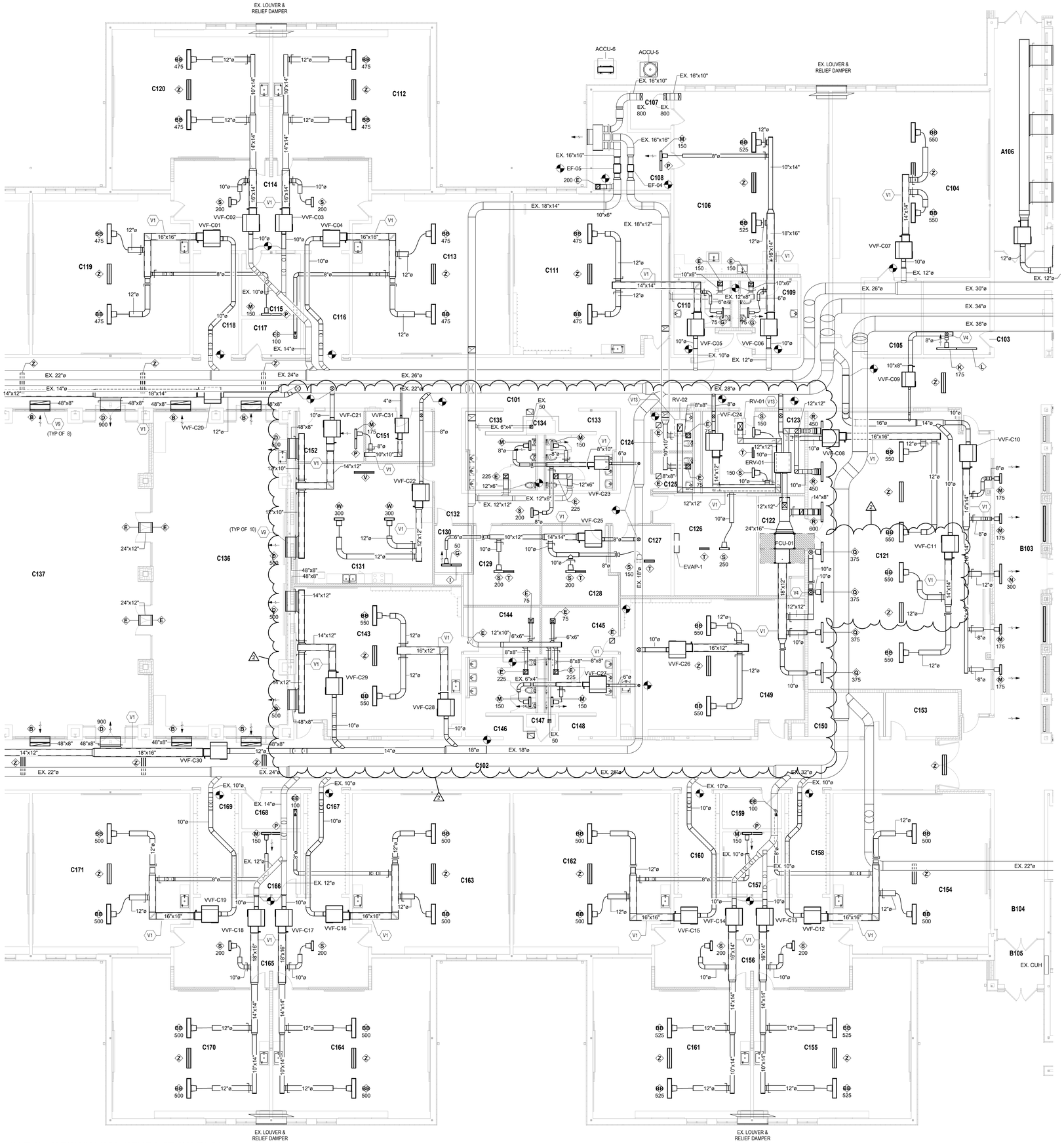

UNIT C - MECHANICAL VENTILATION PLAN

SCALE: 1/8" = 1'-0"

VENTILATION PLAN GENERAL NOTES

A. ALL DUCTWORK, PIPING AND VALVES SHALL BE CONCEALED ABOVE THE CEILING AND WITHIN WALLS, UNLESS OTHERWISE NOTED.
B. REFER TO THE SPECIFICATIONS FOR REQUIREMENTS RELATED TO EQUIPMENT QUALITY, CONSTRUCTION AND FINISH OF MATERIALS.
C. ARRANGE DUCTWORK, PIPING, ETC. TO ALLOW FOR EASY ACCESS TO COILS, VALVES, DAMPERS AND CONTROLS. KEEP AREAS ADJACENT TO ACCESS PANELS FREE AND CLEAR OF ANY OBSTRUCTIONS.
D. SEAL DUCT PENETRATIONS THROUGH THE FLOOR AND/OR WALLS IN ACCORDANCE WITH MECHANICAL CODE AND SMACNA REQUIREMENTS. SEAL DUCT PENETRATIONS THROUGH FIRE RATED FLOORS AND/OR WALLS WITH A MATERIAL HAVING SAME FIRE RATING AS THE WALL AND/OR FLOOR.
E. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR HIS RESPECTIVE WORK FOR REPAIRING AND PATCHING TO MATCH EXISTING SURFACES, SIDEWALKS, STREETS, FLOORS, WALLS, ROOFS, CEILING AND PAVEMENT.
F. ALL RECTANGULAR SHEET METAL DUCT SIZES SHOWN ARE INSIDE FREE AREA DIMENSIONS. ALL ROUND DUCT SIZES SHOWN ARE INSIDE DIAMETERS.
G. PROVIDE BALANCING DAMPER AT EACH DUCT BRANCH, SERVING DIFFUSER, GRILLE AND REGISTER.
H. INSTALL WALL THERMOSTATS, TEMPERATURE SENSORS, HUMIDISTATS, ETC. 44" ABOVE THE FINISH FLOOR IN ACCORDANCE WITH ADA REQUIREMENTS.
I. COORDINATE ALL REQUIRED WALL, ROOF AND FLOOR OPENINGS (BOTH DIMENSIONS AND LOCATIONS) WITH ALL OTHER TRADES.
J. COORDINATE MECHANICAL SYSTEM INSTALLATION WITH STRUCTURE, FIRE PROTECTION AND LIGHTING LAYOUT.
K. PROVIDE ALL NECESSARY TRANSITIONS TO EQUIPMENT FROM SIZES SHOWN ON PLAN.
L. THE CLEARANCE FOR THE DESIGNED FAN-POWERED VAV TERMINAL UNITS IS FROM THE BOTTOM OF THE UNIT. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPROVED FAN-POWERED VAV TERMINAL UNITS WITH ALL TRADES PRIOR TO INSTALLATION.

VENTILATION PLAN NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

V1 DUCTWORK PROVIDED WITH INTERNAL LINED INSULATION. REFER TO SPECIFICATIONS.
V4 PROVIDE VOLUME DAMPER IN VERTICAL DUCTWORK TO AIR DEVICE.
V9 CONTRACTOR SHALL COORDINATE FINAL DIFFUSER/GRILLE COLOR WITH ARCHITECT.
V13 CONTRACTOR SHALL INSTALL ROOF VENTILATOR IN THE EXISTING ROOF IN SUCH A MANNER THAT IT DOES NOT VOID ANY WARRANTY THE OWNER HAS ON THEIR ROOFING SYSTEM.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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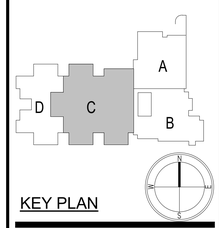


KEY PLAN

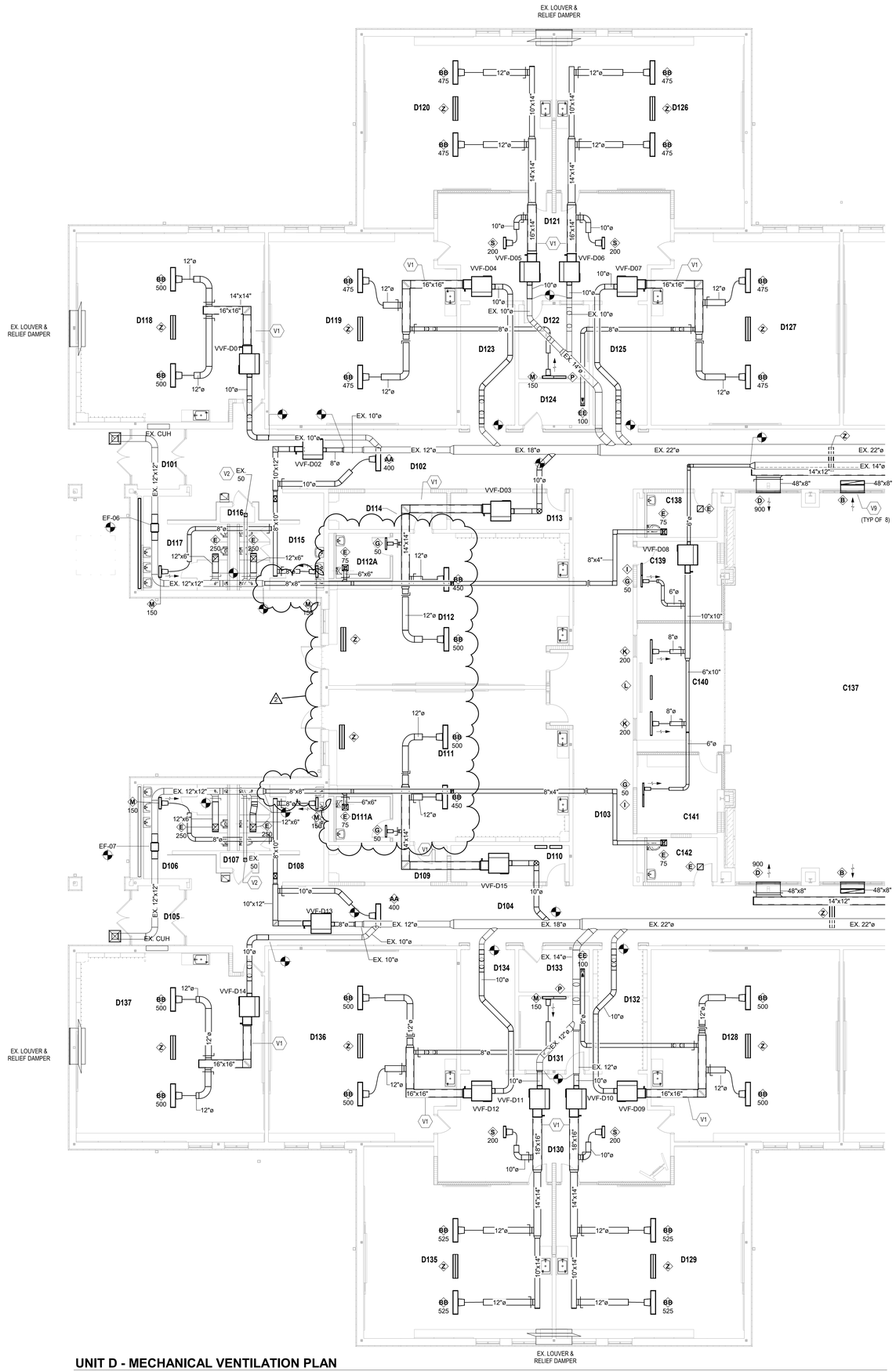
BIDS

PROJECT MANAGER: SAM
DRAWN BY: DJA
PROJECT NUMBER: 222011.00
PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
2	ADDENDUM#7	4.09.2024

1ST FLR VENTILATION PLAN - UNIT C

M2.03



UNIT D - MECHANICAL VENTILATION PLAN

SCALE: 1/8" = 1'-0"

VENTILATION PLAN GENERAL NOTES

A. ALL DUCTWORK, PIPING AND VALVES SHALL BE CONCEALED ABOVE THE CEILING AND WITHIN WALLS, UNLESS OTHERWISE NOTED.
B. REFER TO THE SPECIFICATIONS FOR REQUIREMENTS RELATED TO EQUIPMENT QUALITY, CONSTRUCTION AND FINISH OF MATERIALS.
C. ARRANGE DUCTWORK, PIPING, ETC. TO ALLOW FOR EASY ACCESS TO COILS, VALVES, DAMPERS AND CONTROLS. KEEP AREAS ADJACENT TO ACCESS PANELS FREE AND CLEAR OF ANY OBSTRUCTIONS.
D. SEAL DUCT PENETRATIONS THROUGH THE FLOOR AND/OR WALLS IN ACCORDANCE WITH MECHANICAL CODE AND SMACNA REQUIREMENTS. SEAL DUCT PENETRATIONS THROUGH FIRE RATED FLOORS AND/OR WALLS WITH A MATERIAL HAVING SAME FIRE RATING AS THE WALL AND/OR FLOOR.
E. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR HIS RESPECTIVE WORK FOR REPAIRING AND PATCHING TO MATCH EXISTING SURFACES, SIDEWALKS, STREETS, FLOORS, WALLS, ROOFS, CEILING AND PAVEMENT.
F. ALL RECTANGULAR SHEET METAL DUCT SIZES SHOWN ARE INSIDE FREE AREA DIMENSIONS. ALL ROUND DUCT SIZES SHOWN ARE INSIDE DIAMETERS.
G. PROVIDE BALANCING DAMPER AT EACH DUCT BRANCH, SERVING DIFFUSER, GRILLE AND REGISTER.
H. INSTALL WALL THERMOSTATS, TEMPERATURE SENSORS, HUMIDISTATS, ETC. 44" ABOVE THE FINISH FLOOR IN ACCORDANCE WITH ADA REQUIREMENTS.
I. COORDINATE ALL REQUIRED WALL, ROOF AND FLOOR OPENINGS (BOTH DIMENSIONS AND LOCATIONS) WITH ALL OTHER TRADES.
J. COORDINATE MECHANICAL SYSTEM INSTALLATION WITH STRUCTURE, FIRE PROTECTION AND LIGHTING LAYOUT.
K. PROVIDE ALL NECESSARY TRANSITIONS TO EQUIPMENT FROM SIZES SHOWN ON PLAN.
L. THE CLEARANCE FOR THE DESIGNED FAN-POWERED VAV TERMINAL UNITS IS FROM THE BOTTOM OF THE UNIT. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPROVED FAN-POWERED VAV TERMINAL UNITS WITH ALL TRADES PRIOR TO INSTALLATION.

VENTILATION PLAN NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

V1 DUCTWORK PROVIDED WITH INTERNAL LINED INSULATION. REFER TO SPECIFICATIONS.
V2 EXISTING DIFFUSER TO REMAIN. BALANCE VOLUME DAMPER TO CFM SHOWN.
V9 CONTRACTOR SHALL COORDINATE FINAL DIFFUSER/GRILLE COLOR WITH ARCHITECT.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

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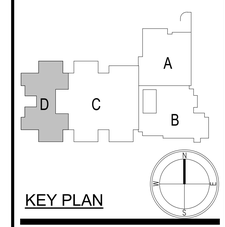


BIDS

PROJECT MANAGER: SAM

DRAWN BY: DJA

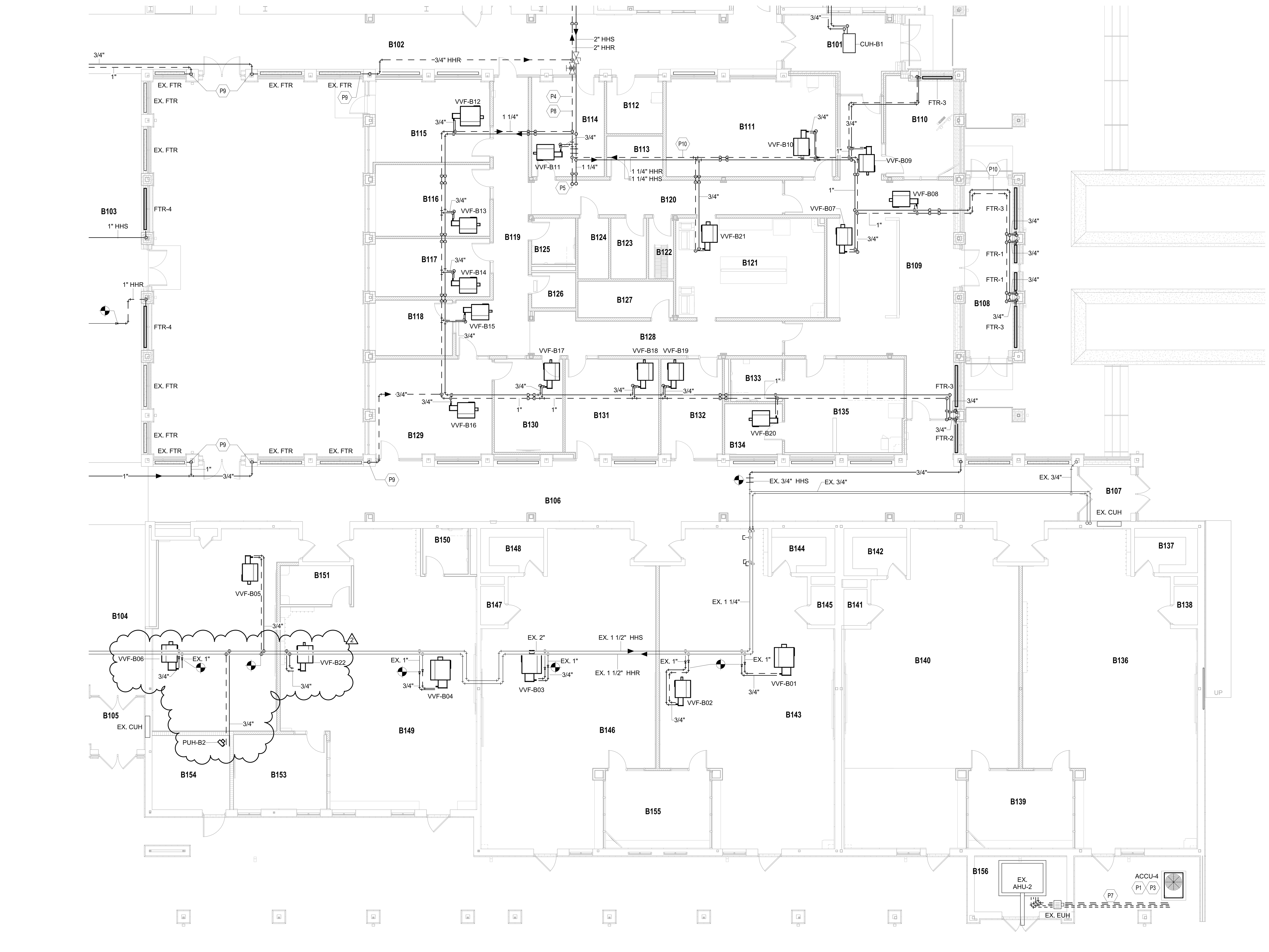
PROJECT NUMBER: 222011.00

PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
2	ADDENDUM#7	4.09.2024

1ST FLR VENTILATION PLAN - UNIT D

M2.04



UNIT B - MECHANICAL PIPING PLAN

SCALE: 1/8" = 1'-0"

HVAC PIPING PLAN GENERAL NOTES

A. ALL PIPING AND VALVES SHALL BE CONCEALED ABOVE THE CEILING AND WITHIN WALLS, UNLESS OTHERWISE NOTED.

B. REFER TO THE SPECIFICATIONS FOR REQUIREMENTS RELATED TO EQUIPMENT QUALITY, CONSTRUCTION AND FINISH OF MATERIALS.

C. ARRANGE PIPING, ETC. TO ALLOW FOR EASY ACCESS TO COILS, VALVES, DAMPERS AND CONTROLS. KEEP AREAS ADJACENT TO ACCESS PANELS FREE AND CLEAR OF ANY OPSTRUCTIONS.

D. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR HIS RESPECTIVE WORK FOR REPAIRING AND PATCHING TO MATCH EXISTING SURFACES, SIDEWALKS, STREETS, FLOORS, WALLS, ROOFS, CEILING AND PAVEMENT.

E. HYDRONIC SUPPLY AND RETURN PIPING SHALL BE THE SAME SIZE UNLESS OTHERWISE NOTED.

HVAC PIPING PLAN NOTES (X)

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

P1 ROUTE REFRIGERANT PIPING FROM OUTDOOR UNIT TO INDOOR EVAPORATOR PER MANUFACTURERS GUIDE. REFRIGERANT PIPING AND ACCESSORIES TO BE SIZED PER UNIT MANUFACTURERS REQUIREMENTS. ALL PIPING ON THE EXTERIOR OF THE BUILDING SHALL BE WRAPPED WITH INSULATION AND THEN COVERED WITH A PVC JACKET PER THE PROJECT MANUAL. PROVIDE PIPE SUPPORTS AS REQUIRED TO PROPERLY SUPPORT THE PIPING.

P3 INSTALL NEW CONDENSING UNIT ON NEW/OR EXISTING CONCRETE HOUSEKEEPING PAD. MOUNT ON ISOLATORS. MAINTAIN UNIT MANUFACTURERS REQUIRED CLEARANCE AROUND CONDENSING UNIT. SIZE REQUIREMENTS MAY VARY BY UNIT MANUFACTURER AND IS THE CONTRACTORS RESPONSIBILITY TO COORDINATE ALL REQUIREMENTS FOR PROVIDED EQUIPMENT.

P4 HOT WATER PIPING SHALL BE ROUTED THROUGH/AROUND STEEL JOISTS/GIRDERS IN AREA. COORDINATE EXACT LOCATION WITH STRUCTURAL CONTRACTOR AND ALL OTHER TRADES.

P5 PIPING ROUTED UP TO MEZZANINE.

P7 INSTALL ALL REFRIGERANT PIPING PER THE MANUFACTURER'S RECOMMENDATIONS.

P8 DIFFERENTIAL PRESSURE TRANSMITTER FOR HEATING WATER VARIABLE VOLUME PUMP CONTROL. TRANSMITTER PROVIDED BY TEMPERATURE CONTROL CONTRACTOR AND INSTALLED BY HVAC CONTRACTOR.

P9 CONNECT INTO EXISTING PIPING IN AREA SERVING EXISTING FINNED-TUBES IN AREA.

P10 HOT WATER PIPING SHALL BE ROUTED THROUGH/UNDER STEEL JOISTS IN AREA. COORDINATE EXACT LOCATION WITH STRUCTURAL CONTRACTOR AND ALL OTHER TRADES.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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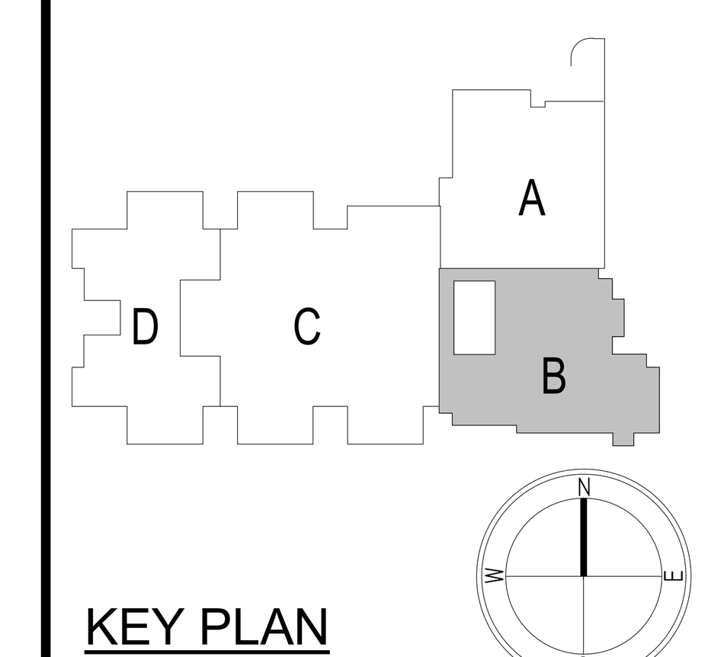
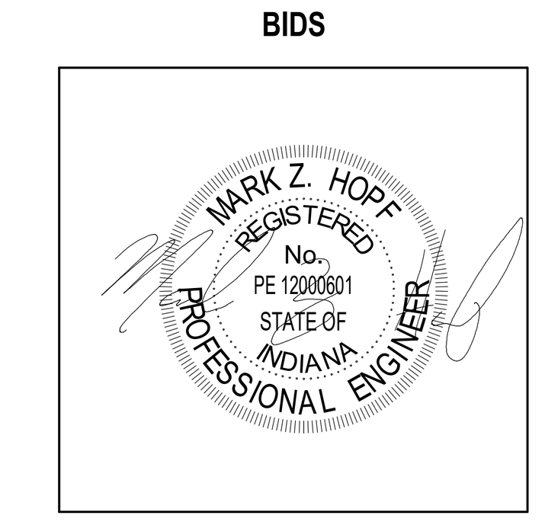


KEY PLAN

BIDS



PROJECT MANAGER: SAM

DRAWN BY: DJA

PROJECT NUMBER: 222011.00

PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
2	ADDENDUM#7	4.09.2024

1ST FLR PIPING PLAN - UNIT B

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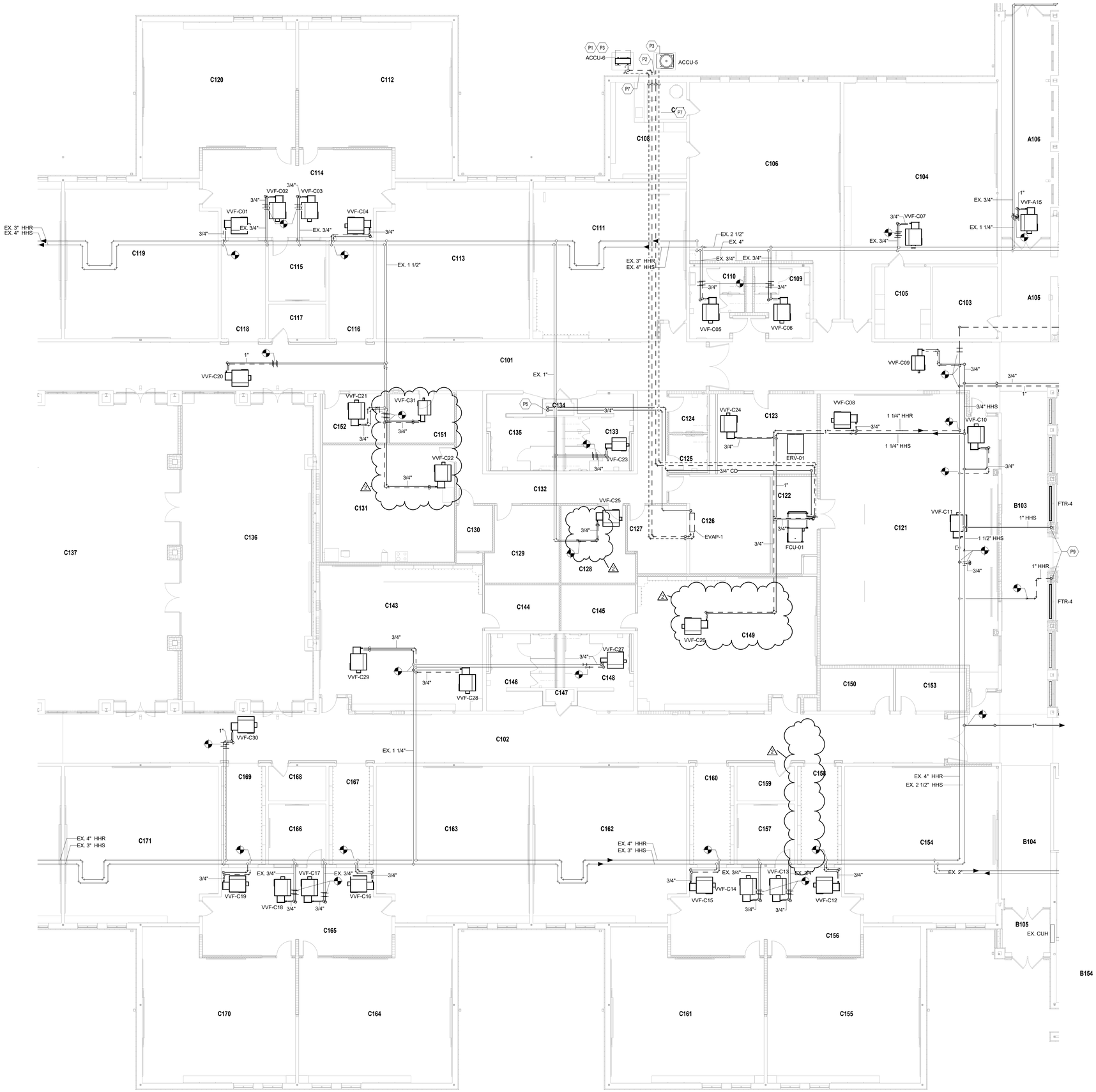

UNIT C - MECHANICAL PIPING PLAN

SCALE: 1/8" = 1'-0"

HVAC PIPING PLAN GENERAL NOTES

A. ALL PIPING AND VALVES SHALL BE CONCEALED ABOVE THE CEILING AND WITHIN WALLS, UNLESS OTHERWISE NOTED.
B. REFER TO THE SPECIFICATIONS FOR REQUIREMENTS RELATED TO EQUIPMENT QUALITY, CONSTRUCTION AND FINISH OF MATERIALS.
C. ARRANGE PIPING, ETC. TO ALLOW FOR EASY ACCESS TO COILS, VALVES, DAMPERS AND CONTROLS. KEEP AREAS ADJACENT TO ACCESS PANELS FREE AND CLEAR OF ANY OPSTRUCTIONS.
D. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR HIS RESPECTIVE WORK FOR REPAIRING AND PATCHING TO MATCH EXISTING SURFACES, SIDEWALKS, STREETS, FLOORS, WALLS, ROOFS, CEILING AND PAVEMENT.
E. HYDRONIC SUPPLY AND RETURN PIPING SHALL BE THE SAME SIZE UNLESS OTHERWISE NOTED.

HVAC PIPING PLAN NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

P1 ROUTE REFRIGERANT PIPING FROM OUTDOOR UNIT TO INDOOR EVAPORATOR PER MANUFACTURERS GUIDE. REFRIGERANT PIPING AND ACCESSORIES TO BE SIZED PER UNIT MANUFACTURERS REQUIREMENTS. ALL PIPING ON THE EXTERIOR OF THE BUILDING SHALL BE WRAPPED WITH INSULATION AND THEN COVERED WITH A PVC JACKET PER THE PROJECT MANUAL. PROVIDE PIPE SUPPORTS AS REQUIRED TO PROPERLY SUPPORT THE PIPING.

P2 PROVIDE WALL SLEEVES FOR REFRIGERANT PIPING. SEAL BOTH SIDES OF THE WALL WATERTIGHT.

P3 INSTALL NEW CONDENSING UNIT ON NEW/OR EXISTING CONCRETE HOUSEKEEPING PAD. MOUNT ON ISOLATORS. MAINTAIN UNIT MANUFACTURERS REQUIRED CLEARANCE AROUND CONDENSING UNIT. SIZE REQUIREMENTS MAY VARY BY UNIT MANUFACTURER AND IS THE CONTRACTORS RESPONSIBILITY TO COORDINATE ALL REQUIREMENTS FOR PROVIDED EQUIPMENT.

P6 ROUTE INSULATED CONDENSATE DRAIN PIPING DOWN WALL IN CUSTODIAL ROOM TO MOP BASIN. SUPPORT PIPING AS REQUIRED. COVER PIPING AND INSULATION WITH PVC COVER. CUT END OF PIPING AT FLOOR SINK WITH 45° ANGLE. PROVIDE CONDENSATE PUMP. COORDINATE POWER WITH DIVISION 26 CONTRACTOR.

P7 INSTALL ALL REFRIGERANT PIPING PER THE MANUFACTURER'S RECOMMENDATIONS.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

CHERRY TREE ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS

13989 Hazel Dell Pkwy, Carmel, IN 46033

CARMEL CLAY SCHOOLS

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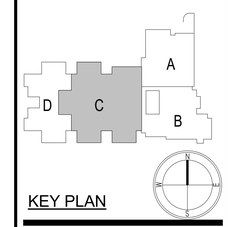

KEY PLAN

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PROJECT MANAGER: SAM
DRAWN BY: DJA
PROJECT NUMBER: 222011.00
PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
2	ADDENDUM#7	4.09.2024

1ST FLR PIPING PLAN - UNIT C

M3.03

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AIR-COOLED CONDENSING UNIT SCHEDULE

MARK	ASSOCAITED EQUIPMENT	TOTAL MBH	SUCTION TEMP	LIQUID TEMP	UNIT ELEC. DATA				WEIGHT (LBS)	COMPRESSOR			NOTES
					VOLTS	PH.	MCA	MOCP		STAGES	QTY	REFRIGERANT	
ACCU-3	AHU-3	145.1	45	115	460	3	25	30	459.0	2	2	R-410A	1,2,3,4,5,6,7
ACCU-4	AHU-2	130.0	45	115	460	3	25	30	459.0	2	2	R-410A	1,2,3,4,6,7
ACCU-5	FCU-1	63.9	40.1	115	460	3	11	15	241.0	1	1	R-410A	1,2,3,4,6,7

NOTES:

1. CONDENSING UNIT AS MANUFACTURED BY TRANE.
2. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
3. INCLUDE THE FOLLOWING ACCESSORIES, HIGH AMBIENT UNLOADER PRESSURE STAT, PROTECTIVE COIL GUARDS COMPLETELY AROUND ENTIRE UNIT, PHASE LOSS/VOLTAGE PROTECTION AND VIBRATION ISOLATORS.
4. UNIT SHALL INCLUDE FROST PREVENTION DEVICE TO BE INSTALLED AT COIL.
5. UNIT SHALL BE INSTALLED ON ROOF SUPPORT RAILS WITH VIBRATION ISOLATORS. COORDINATE EXACT LOCATION IN FIELD.
6. SINGLE POINT POWER CONNECTION. UNIT MANUFACTURER SHALL PROVIDE FACTORY MOUNTED DISCONNECT SWITCH.
7. REFRIGERANT PIPING SIZE AND QUANTITY PER MANUFACTURER'S REQUIREMENTS.

AIR HANDLING UNIT SCHEDULE

TAG	LOCATION	MANF.	MODEL	SUPPLY FAN DATA					HEATING HOT WATER COIL DATA								DX COIL DATA								ELECTRICAL				WEIGHT (LBS)	NOTES
				TOTAL AIR (CFM)	OUTSIDE AIR (CFM)	EXT. S.P.	TOTAL S.P.	HP	HEATING MBH	GPM	HTG EAT (°F)	HTG LAT (°F)	HTG EWT (°F)	HTG LWT (°F)	WPD (FT.HD)	APD (IN WC)	FACE VELOCITY	TOTAL MBH	SENSIBLE MBH	EAT DB (°F)	EAT WB (°F)	LAT DB (°F)	LAT WB (°F)	APD (IN WC)	FACE VELOCITY	FLA	SCCR	SERVICE				
																											VOLTS	HZ	PH		
AHU-3	MECHANICAL MEZZANINE	TRANE	CSAA010	4500	675	1.5	3.75	5	142	7.0	60.9	90.0	180.0	140.0	0.19	0.105	490	145.1	112.0	76.7	63.9	54	52.9	0.92	463	6.7	5	460	60	3	1500	1,2,3,4,5,6,7,8,9,10,11

1. REFER TO PROJECT MANUAL SECTION 23 73 13 FOR ADDITIONAL DETAILS AND SECTION 23 09 93 FOR CONTROL REQUIREMENTS.
2. SUPPLY FAN MOTOR(S) CONTROLLED WITH VARIABLE FREQUENCY CONTROLLERS(S).
3. REFER TO PLANS AND SCHEMATIC SHEETS FOR UNIT LAYOUT DETAILS.
4. MAXIMUM FILTER FACE VELOCITY SHALL BE 550 FPM.
5. MAXIMUM COOLING COIL FACE VELOCITY SHALL BE 550 FPM.
6. PROVIDE FACTORY MOUNTED CONVENIENCE OUTLETS AND INTERNAL LIGHTS AT EACH ACCESS DOOR.
7. PROVIDE CONVENIENCE OUTLET AND LIGHTS ON SEPARATE CIRCUITS.
8. DIRECT EXPANSION REFRIGERANT COOLING COIL CONTAINS R410-A REFRIGERANT.
9. COORDINATE SHIPPING SPLITS WITH FIELD CONDITIONS.
10. SINGLE POINT ELECTRICAL CONNECTION TO UNITS.
11. UNIT SHALL INCLUDE FACTORY MOUNTED BELLMOUTH FITTINGS.

CONDENSING BOILERS SCHEDULE

TAG	MANUFACTURER	MODEL NUMBER	HEAT EXCHANGER CRITERIA & PERFORMANCE							DESIGN & RATED HEATING PERFORMANCE						FUEL			ELECTRICAL CRITERIA & PERFORMANCE					OPERATING WEIGHT (LBS)	NOTES
			SOLUTION TYPE	(%)	HHS FLOW		EWT (°F)	LWT (°F)	WPD	CAPACITY		MAXIMUM			DESIGN EFFICIENCY (%)	GAS TRAIN TYPE	MIN (IN.WC)	MAX (IN.WC)	SINGLE POINT						
					DESIGN (GPM)	MIN (GPM)			DESIGN (FT.HD)	MAX (FT.HD)	DESIGN (MBH)	MIN (%)	TEMP (°F)	RISE (°F)	PRESSURE (PSIG)					SERVICE			FLA (AMPS)	MOCP (AMPS)		
																			(VOLTS)	(HZ)	(PH)				
BLR-1	CONDENSING BOILER	CFC-E-3000	WATER	0	141	0	140	180	10	12	3000	10%	210	60	125	94.0	FM	7	14	120	60	1	2	20	3500	1,2,3,4
																			460	60	3	4	20		
BLR-2	CONDENSING BOILER	CFC-E-3000	WATER	0	141	0	140	180	10	12	3000	10%	210	60	125	94.0	FM	7	14	120	60	1	2	20	3500	1,2,3,4
																			460	60	3	4	20		

NOTES:

1. REFER TO PROJECT MANUAL SECTION.
2. SINGLE POINT POWER CONNECTION
3. ELECTRICAL REQUIREMENTS VARY BY UNIT MANUFACTURER.
4. PROVIDE DEDICATED 120V POWER CONNECTION FOR CONTROL PANEL.

VARIABLE FREQUENCY CONTROLLER SCHEDULE

MARK	EQUIPMENT SERVING	HP	SERVICE			NOTES
			(VOLT)	(HZ)	(PH)	
VFC-HWP-1	HWP-1	5	460	60	3	1,2,3,4
VFC-HWP-2	HWP-2	5	460	60	3	1,2,3,4

NOTES

1. DRIVE PROVIDED AND INSTALLED BY THE DIVISION 23 - HVAC CONTRACTOR.
2. DIVISION 26 - ELECTRICAL CONTRACTOR TO PROVIDE POWER WIRING TO VFC AND FROM VFC TO MOTOR.
3. PROVIDED WITH A FACTORY MOUNTED DISCONNECT.
4. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.

ENERGY RECOVERY VENTILATOR SCHEDULE

TAG	MANUFACTURER	MODEL NUMBER	TYPE	OPERATING WEIGHT (LB.)	GENERAL DATA			SUPPLY FAN DATA					EXHAUST FAN DATA					ENERGY WHEEL														ELECTRICAL			NOTES
																		SUMMER/COOLING								WINTER/HEATING									
																		OA		SA		RA		EA		OA		SA		RA		EA			
					CFM	ESP (IN.)	DRIVE	MOTOR HP	MCA	MOCP	CFM	ESP (IN.)	MOTOR HP	MCA	MOCP	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	VOLTS	HZ	PH	
ERV-1	GREENHECK	MINICORE-10-VG-P	INDOOR / HORIZONTAL	245	900	0.3	DIRECT	3/4	12.2	20	900	0.3	3/4	12.2	20	91.7	75.0	80.3	68.4	74.0	61.7	85.3	69.4	-2.0	-3.4	41.9	34.9	72.0	55.9	28.9	28.8	208	60	1	1,2,3,4,5,6

NOTES:

1. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
2. UNIT PROVIDED WITH FACTORY MOUNTED NON-FUSED DISCONNECT SWITCH.
3. FANS TO BE CONTROLLED BY BAS CONTRACTOR. INTERLOCK WITH FAN COIL UNIT.
4. UNIT PROVIDED WITH TWO MERV 8 FILTERS.
5. VIBRATION ISOLATORS TO BE PROVIDED BY THE MECHANICAL CONTRACTOR.
6. SEQUENCE INTAKE AND EXHAUST DAMPERS WITH ERV.

FAN COIL UNIT SCHEDULE

MARK	SUPPLY FAN				DX COOLING COIL					HEATING COIL							UNIT ELEC. DATA				NOTES
	CFM	EXT. S.P.	TOTAL S.P.	MOTOR HP	TOTAL (MBH)	SENS. (MBH)	EAT (DB/WB)	LAT (DB/WB)	APD	EAT	LAT	MBH	GPM	EWT / LWT		APD	WPD	VOLTS	PH.	MCA	MCA	
FCU-1	1500	0.4	1.25	1	62.2	38.7	77.8/65.8	54.2/51.9	0.33	54.0	92.8	63.1	3.0	180 / 140		0.08	0.40	208	1	9.7	20	1,2,3

NOTES:

1. UNIT TO BE INTERLOCKED WITH ERV-1.
2. UNIT MANUFACTURER SHALL PROVIDE FACTORY MOUNTED DISCONNECT SWITCH.
3. UNIT MANUFACTURER SHALL PROVIDE DISCHARGE ATTENUATOR.

PUMP SCHEDULE

MARK	SYSTEM SERVED	TYPE	MIN FLOW GPM	GPM	HEAD FT.	MIN EFF. %	BHP@ DESIGN FLOW	SUCT. X DISCH.	IMPELLER DIAMETER	MOTOR				MANUF.	MODEL NUMBER	WEIGHT (LBS.)	NOTES
										RPM	HP	VOLT	PH				
HWP-1	HEATING HOT WATER	VARIABLE PRIMARY	37	120	75	69	3.21	2.5x2	8.625	1800	5	460	3	BELL & GOSSETT	E-1510 2BD	270	1,2,3,4,5
HWP-2	HEATING HOT WATER	VARIABLE PRIMARY	37	120	75	69	3.21	2.5x2	8.625	1800	5	460	3	BELL & GOSSETT	E-1510 2BD	270	1,2,3,4,5

NOTES:

1. REFER TO PROJECT MANUAL SECTION 232123.
2. PUMP SHALL BE SELECTED WITH 100% WATER.
3. PUMP CONTROLLED BY VARIABLE FREQUENCY CONTROLLER.
4. PUMPS WILL OPERATE IN PARALLEL. PUMP SHALL BE SIZED SUCH THAT IT DOES NOT RUN OFF ITS CURVE, WHEN OPERATING ALONE OUT AT THE SYSTEM CURVE.
5. SINGLE POINT POWER CONNECTION TO THE PUMP. PUMP DISCONNECT AND WIRING BETWEEN PUMP AND VFC BY DIVISION 26.

SPLIT SYSTEM SCHEDULE

MARK	EVAPORATOR BLOWER						CONDENSER SECTION								NOTES
	CFM	EXT. S.P.	SENS. (MBH)	TOTAL (MBH)	EAT (DB/WB)	MANUFACTURER MODEL NUMBER	MARK	SEER	EAT	VOLTS	PH.	MOCP	MCA	MANUFACTURER MODEL NUMBER	
EVAP-1	635-705-775	0.2	21,000	30,000	80/67	TRANE TPKA0A0301KA70A	ACCU-6	19.8	95	208	1	25	19	TRANE TRUYA0301HA70NA	1-15

NOTES:

1. ENTERING AIR CONDITIONS 75 DB, 50% RH.
2. FURNISH WITH PRO-HEAT PLUS AND BASE PAN HEATER TO ACHIEVE OUTDOOR TEMPERATURE OPERATING RANGES: COOLING: 0°-115°F.
3. FURNISH WITH LOW AMBIENT CONTROL AND ADVANCED WIND BAFFLE KIT TO ACHIEVE OUTDOOR TEMPERATURE OPERATING RANGE: COOLING: -40°-115°F.
4. DIRECT DRIVE FAN.
5. EVAPORATOR SECTION COMPLETE WITH COIL, THERMOSTATIC EXPANSION VALVE AND FILTER DRIER.
6. UNIT SHALL BE COMPLETE WITH REFIRGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS.
7. UNIT SELECTED WITH R410-A REFRIGERANT.
8. INDOOR UNIT TO BE WALL MOUNTED TYPE. SUPPORT UNIT FROM WALL BELOW CEILING. OUTDOOR UNIT SHALL BE MOUNTED ON EXISTING EQUIPMENT PAD SHOWN ON PLAN.
9. VARIABLE SPEED COMPRESSOR.
10. FURNISH WITH WIRELESS REMOTE CONTROLLER.
11. FURNISH WITH HAIL GUARDS.
12. UNIT SHALL INCLUDE SINGLE POINT POWER CONNECITON KIT. ELECTRICAL CONTRACTOR TO PROVIDE DISCONNECT SWITCH.
13. INCOMING POWER SHALL BE TO OUTDOOR UNIT. ELECTRICAL CONTRACTOR SHALL TAP OFF TO INDOOR UNIT.
14. UNIT SHALL BE PROVIDED WITH A CONDENSATE PUMP & OVERFLOW SWITCH, MOUNTED WITHIN THE UNIT COIL PAN. 120v./1□ POWER; 8 FT. HEAD PUMP PRESSURE..
15. REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION.

EXPANSION TANK/AIR SEPARATOR SYSTEM

MARK NO.	SYSTEM	APPROX. ADDED SYSTEM VOLUME GAL.	SYSTEM TEMP. RANGE °F		PRV FILL PRESSURE AT TANK PSIG	MAX. OPERATING PRESSURE PSIG		MIN. TANK VOLUME GAL.	MIN. ACCEPT. VOLUME GAL.	100% OPER. WEIGHT LBS.	AIR SEPARATOR			TANK MANUFACTURER & MODEL NO.
			MIN.	MAX.		RELIEF VALVE	AT EXP. TANK				SIZE	GPM	WPD	
ET-1 ADS-1	HEATING HOT WATER	2100	50	200	12	60	55	128.2	73.6	891	4	250	1.2	BELL & GOSSETT B500

NOTES:

1. AIR SEPARATOR WITH STRAINER SHALL HAVE TANGENTIAL INLET AND OUTLET.
2. REFER TO SPECIFICATION 232113.
3. EXPANSION TANKS SHALL BE SELECTED WITH 100% WATER.

EXHAUST FAN SCHEDULE

MARK	TYPE	CFM	RPM	EXT. S.P.	MAX. SONES	ELEC		CONTROL	MODEL	DRIVE	NOTES
						HP	SERV				
EF-01	ROOF MOUNTED	950	1700	0.30	10.2	1/4	120V	A	G-95-VG	DIRECT	1,2,4,5,6,7,8,9
EF-02	INLINE	225	1675	0.25	5.7	1/6	120V	A	SQ-70-VG	DIRECT	1,2,3,4,6,7,8
EF-04	INLINE	450	1450	0.30	6.5	1/4	120V	A	SQ-90-VG	DIRECT	1,2,3,4,6,7,8
EF-05	INLINE	1350	1425	0.375	10.9	1/4	120V	A	SQ-100-VG	DIRECT	1,2,3,4,6,7,8
EF-06	INLINE	650	1525	0.30	8.0	1/4	120V	A	SQ-95-VG	DIRECT	1,2,3,4,6,7,8
EF-07	INLINE	650	1525	0.30	8.0	1/4	120V	A	SQ-95-VG	DIRECT	1,2,3,4,6,7,8
EF-12	INLINE	300	1350	0.375	5.8	1/6	120V	A	SQ-90-VG	DIRECT	1,2,3,4,6,7,8
EF-13	CEILING MOUNTED	75	900	0.125	2.0	0.16 A	120V	B.1	SP-B80	DIRECT	4,6
EF-14	CEILING MOUNTED	75	900	0.125	2.0	0.16 A	120V	B.1	SP-B80	DIRECT	4,6
EF-15	CEILING MOUNTED	75	900	0.125	2.0	0.16 A	120V	B.1	SP-B80	DIRECT	4,6
EF-16	WALL MOUNTED	350	900	0.125	2.4	1/10	120V	C	CUE-90-VG	DIRECT	1,2,4,5,6,8,10

NOTES

1. INCLUDE FACTORY MOUNTED DISCONNECT SWITCH.
2. INCLUDE BACKDRAFT DAMPER.
3. SUPPORT FROM STRUCTURE ABOVE WITH VIBRATION ISOLATORS.
4. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
5. MOUNT ON 12" HIGH ROOF CURB, UNLESS OTHERWISE NOTED.
6. ALL FAN MODELS SPECIFIED AS MANUFACTURED BY GREENHECK.
7. INCLUDE FACTORY MOUNTED AND WIRED SPEED CONTROL.
8. CUSTOM COLOR AS SELECTED BY ARCHITECT/ENGINEER.
9. MOUNT NEW EXHAUST FAN ON EXISTING ROOF CURB. EXISTING EXHAUST FAN TO BE REMOVED. MODIFY EXISTING ROOF CURB AS REQUIRED TO INSTALL NEW EXHAUST FAN OR REPLACE WITH NEW ROOF CURB.
10. PROVIDE SIDE WALL MOUNTING.

KEY CONTROL
A AUTOMATIC OCCUPIED OPERATION BY LOCAL TEMPERATURE CONTROL ZONE.
B MANUAL CONTROLS BY DIVISION 26.
:1 WITH LOCAL SWITCH
C AUTOMATIC OPERATION BY REVERSE ACTING THERMOSTAT
D 24 HOUR CONTINUOUS OPERATION.

ROOFTOP VENTILATOR/INTAKE HOOD SCHEDULE

MARK	THROAT LENGTH	THROAT WIDTH	MOTORIZED RELIEF CONTROL DAMPER	DRIP PAN	MODEL	NOTES
RV-01	12	18	YES	NO	FGI-12x18	1,2,3,4
RV-02	12	18	YES	NO	FGR-12x18	1,2,3,4

NOTES:

1. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
2. HOODS SCHEDULED ARE AS MANUFACTURED BY GREENHECK (FABRA HOOD)
3. HOODS TO BE MOUNTED ON MINIMUM 18" HIGH ROOF CURB.
4. PROVIDE CUSTOM COLOR TO MATCH EXISTING ROOF.

EXTERIOR WALL LOUVER SCHEDULE

MARK	SIZE W X H	TOP OF LOUVER ELEVATION	TYPE	LOUVER PERF.			NOTES
				FREE AREA (SQ.FT)	MAX AIRFLOW (CFM)	MAX VELOCITY (FT/MIN)	
WL-01	48" X 32"	20'-0" ABOVE 1ST FLOOR	INTAKE	4.8	4500	938	1,2,3,4,5,6,7
WL-04	48" X 32"	20'-0" ABOVE 1ST FLOOR	RELIEF	4.8	2250	469	1,2,3,4,5,6,7
WL-05	48" X 32"	20'-0" ABOVE 1ST FLOOR	RELIEF	4.8	2250	469	1,2,3,4,5,6,7

NOTES:

1. REFER TO PROJECT MANUAL SECTION 089119.
2. SEAL ALL AROUND WITH SILICONE.
3. REFER TO INSTALLATION DETAILS ON ARCHITECTURAL DRAWING.
4. CUSTOM COLOR AS SELECTED BY ARCHITECT/ENGINEER.
5. COORDINATE SIZE AND LOCATION WITH ALL TRADES.
6. INSTALL WALL LOUVER AS HIGH AS POSSIBLE. FIELD VERIFY EXACT ELEVATION.
7. DRIP PAN TO EXTEND A MINIMUM OF 6" ON EACH SIDE OF WALL LOUVER.

CHERRY TREE ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS

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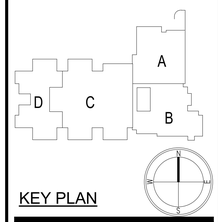

KEY PLAN

BIDS

PROJECT MANAGER: SAM

DRAWN BY: DJA

PROJECT NUMBER: 222011.00

PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#1	2.23.2024
2	ADDENDUM#7	4.09.2024

MECHANICAL SCHEDULES

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DIFFUSER, REGISTER, AND GRILLE SCHEDULE

MARK	TYPE	EXAMPLE MANUFACTUER MODEL NO.	NECK SIZE	OVERALL SIZE L"xW"	MAX CORE/ NECK VEL.(FPM)	MAX. CFM	MAX. NOISE CRITERIA	FRAME/ MOUNTING	REMARKS
A	SQUARE PLAQUE CEILING DIFFUSER	TITUS OMNI	8"	24"x24"	800	300	20	REFER TO REFLECTED CEILING PLAN	4-WAY BLOW DIFFUSERS, UNLESS INDICATED OTHERWISE ON DRAWINGS.
B	SIDEWALL- SUPPLY GRILLE	TITUS 300FL	-	48" x 8"	500	PER PLANS	20	DUCT OR SIDEWALL: REFER TO FLOOR PLAN	45 (DEGREE) DEFLECTION, UNLESS NOTED OTHERWISE ON FLOOR PLAN
C	SIDEWALL- SUPPLY GRILLE	TITUS 300FL	-	48" x 10"	500	PER PLANS	20	DUCT OR SIDEWALL: REFER TO FLOOR PLAN	45 (DEGREE) DEFLECTION, UNLESS NOTED OTHERWISE ON FLOOR PLAN
D	SIDEWALL- RETURN GRILLE	TITUS 300FL	-	48" x 8"	500	PER PLANS	20	DUCT OR SIDEWALL: REFER TO FLOOR PLAN	45 (DEGREE) DEFLECTION, UNLESS NOTED OTHERWISE ON FLOOR PLAN
E	RETURN/AIR TRANSFER GRILLE	TITUS 350FL	-	VARIES	500	1600	20	REFER TO REFLECTED CEILING PLAN	PROVIDE ALUMINUM SURFACE MOUNT BORDER FOR DUCTED INSTALLATIONS.
F	RETURN/AIR TRANSFER GRILLE	TITUS 50F	-	48" x 24"	500	3800	20	REFER TO REFLECTED CEILING PLAN	PROVIDE ALUMINUM SURFACE MOUNT BORDER FOR DUCTED INSTALLATIONS.
G	LINEAR DIFFUSER SUPPLY	TITUS FL-10	6"	24" x 2-3/4"	-	100	20	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	HIGHTHROW W/INSULATED PLENUM 1.0" SLOT WIDTH, TOTAL OF 1 SLOT
H	LINEAR DIFFUSER SUPPLY	TITUS FL-10	6"	48" x 2-3/4"	-	175	20	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	HIGHTHROW W/INSULATED PLENUM 1.0" SLOT WIDTH, TOTAL OF 1 SLOT
I	LINEAR DIFFUSER RETURN	TITUS FL-10	-	24" x 2-3/4"	-	150	20	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	JETTHROW W/UNINSULATED RETURN HOOD 1.0" SLOT WIDTH, TOTAL OF 1 SLOT
J	LINEAR DIFFUSER SUPPLY	TITUS FL-10	8"	48" x 2-3/4"	-	325	25	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	JETTHROW W/INSULATED PLENUM 1.0" SLOT WIDTH, TOTAL OF 1 SLOT
K	LINEAR DIFFUSER SUPPLY	TITUS FL-15	8"	48" x 3-3/4"	-	235	25	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	HIGHTHROW W/INSULATED PLENUM 1.5" SLOT WIDTH, TOTAL OF 1 SLOT
L	LINEAR DIFFUSER RETURN	TITUS FL-15	-	48" x 3-3/4"	-	475	20	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	JETTHROW W/UNINSULATED RETURN HOOD 1.5" SLOT WIDTH, TOTAL OF 1 SLOT
M	LINEAR DIFFUSER SUPPLY	TITUS FL-20	8"	24" x 4-3/4"	-	150	20	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	HIGHTHROW W/INSULATED PLENUM 2.0" SLOT WIDTH, TOTAL OF 1 SLOT
N	LINEAR DIFFUSER SUPPLY	TITUS FL-20	12"	48" x 4-3/4"	-	300	20	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	HIGHTHROW W/INSULATED PLENUM 2.0" SLOT WIDTH, TOTAL OF 1 SLOT
P	LINEAR DIFFUSER RETURN	TITUS FL-20	-	24" x 4-3/4"	-	275	20	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	JETTHROW W/UNINSULATED RETURN HOOD 2.0" SLOT WIDTH, TOTAL OF 1 SLOTS
Q	LINEAR DIFFUSER SUPPLY	TITUS FL-30	10"	48" x 6-3/4"	-	425	25	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	HIGHTHROW W/INSULATED PLENUM 2.0" SLOT WIDTH, TOTAL OF 1 SLOT
R	LINEAR DIFFUSER RETURN	TITUS FL-30	12"	48" x 6-3/4"	-	1200	25	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	JETTHROW W/UNINSULATED RETURN HOOD 2.0" SLOT WIDTH, TOTAL OF 1 SLOT
S	LINEAR DIFFUSER SUPPLY	TITUS FL-10	10"	24" x 5-3/16"	-	225	25	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	HIGHTHROW W/INSULATED PLENUM 1.0" SLOT WIDTH, TOTAL OF 2 SLOTS
T	LINEAR DIFFUSER RETURN	TITUS FL-10	-	24" x 5-3/16"	-	275	20	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	HIGHTHROW W/INSULATED PLENUM 1.0" SLOT WIDTH, TOTAL OF 2 SLOTS
U	LINEAR DIFFUSER SUPPLY	TITUS FL-10	10"	48" x 5-3/16"	-	350	25	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	HIGHTHROW W/INSULATED PLENUM 1.0" SLOT WIDTH, TOTAL OF 2 SLOTS
V	LINEAR DIFFUSER RETURN	TITUS FL-10	-	48" x 5-3/16"	-	650	25	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	JETTHROW W/UNINSULATED RETURN HOOD 1.0" SLOT WIDTH, TOTAL OF 2 SLOTS
W	LINEAR DIFFUSER SUPPLY	TITUS FL-20	12"	24" x 9-3/16"	-	300	25	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	HIGHTHROW W/INSULATED PLENUM 2.0" SLOT WIDTH, TOTAL OF 2 SLOTS
X	LINEAR DIFFUSER RETURN	TITUS FL-20	-	24" x 9-3/16"	-	500	25	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	JETTHROW W/UNINSULATED RETURN HOOD 2.0" SLOT WIDTH, TOTAL OF 2 SLOTS
Y	LINEAR DIFFUSER RETURN	TITUS FL-20	-	48" x 9-3/16"	-	600	25	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	JETTHROW W/UNINSULATED RETURN HOOD 2.0" SLOT WIDTH, TOTAL OF 2 SLOTS
Z	LINEAR DIFFUSER RETURN	TITUS FL-25	-	48" x 11-3/16"	-	1100	20	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	JETTHROW W/UNINSULATED RETURN HOOD 2.5" SLOT WIDTH, TOTAL OF 2 SLOTS
AA	LINEAR DIFFUSER SUPPLY	TITUS FL-25	10"	48" x 11-3/16"	-	500	25	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	HIGHTHROW W/INSULATED PLENUM 2.5" SLOT WIDTH, TOTAL OF 2 SLOTS
BB	LINEAR DIFFUSER SUPPLY	TITUS FL-25	12"	48" x 11-3/16"	-	550	25	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	HIGHTHROW W/INSULATED PLENUM 2.5" SLOT WIDTH, TOTAL OF 2 SLOTS
CC	LINEAR DIFFUSER SUPPLY	TITUS FL-30	12"	48" x 13-3/16"	-	800	30	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	HIGHTHROW W/INSULATED PLENUM 3.0" SLOT WIDTH, TOTAL OF 2 SLOTS
DD	LINEAR DIFFUSER SUPPLY	TITUS FL-30	10"	24" x 13-3/16"	-	400	30	DUCT - W/ SAFETY CHAIN REFER TO FLOOR PLAN	HIGHTHROW W/INSULATED PLENUM 3.0" SLOT WIDTH, TOTAL OF 2 SLOTS
EE	DUCT MOUNTED- SUPPLY GRILLE	TITUS S300FL	-	10" x 3"	800	100	20	DUCT OR SIDEWALL: REFER TO FLOOR PLAN	45 (DEGREE) DEFLECTION, UNLESS NOTED OTHERWISE ON FLOOR PLAN

FAN-POWERED VAV TERMINAL UNIT SCHEDULE

IDENTITY DATA		PRIMARY AIR (CFM)		FAN			UNIT	SOUND		ELECTRICAL						HEATING				HOT WATER COIL							UNIT	
								NC																				
MARK	MFG	MAX FLOW	MIN FLOW	MAX FLOW (CFM)	ESP (IN-WG)	PWR (HP)	APD (IN-WG)	RAD	DISCH	UNIT POWER (W)	VOLT	FREQ (HZ)	PH	MCA (A)	MOCP (A)	CAP. (BTU/H)	EAT (°F)	LAT (°F)	DESCRIPTION	EWT (°F)	LWT (°F)	APD (IN-WG)	WPD (FT-WG)	FLOW (GPM)	ROWS	CIRCUIT	WT (LB)	NOTES
VVF-A01	Enviro Tec Inc.	750	375	750	0.50	1/3	0.07	28	15	166	277	60	1	3	15	30,180	59	97	HOT WATER	180	149	0.07	2.57	2.00	1	2	126	1-5
VVF-A02	Enviro Tec Inc.	2000	1000	2000	0.50	1	0.45	41	35	885	277	60	1	7	15	85,640	59	99	HOT WATER	180	136	0.45	0.37	4.00	2	8	194	1-5
VVF-A03	Enviro Tec Inc.	2000	1000	2000	0.50	1	0.45	41	35	885	277	60	1	7	15	85,640	59	99	HOT WATER	180	136	0.45	0.37	4.00	2	8	194	1-5
VVF-A04	Enviro Tec Inc.	2000	1000	2000	0.50	1	0.45	41	35	885	277	60	1	7	15	85,640	59	99	HOT WATER	180	136	0.45	0.37	4.00	2	8	194	1-5
VVF-A05	Enviro Tec Inc.	350	175	350	0.50	1/3	0.09	32	15	55	277	60	1	3	15	11,650	59	90	HOT WATER	180	148	0.09	0.19	0.75	1	2	123	1-5
VVF-A06	Enviro Tec Inc.	2000	1000	2000	0.50	1	0.44	40	35	854	277	60	1	7	15	88,700	59	100	HOT WATER	180	139	0.44	0.47	4.50	2	8	204	1-5
VVF-A07	Enviro Tec Inc.	1900	950	1900	0.50	1	0.21	39	34	681	277	60	1	7	15	79,900	59	98	HOT WATER	180	142	0.21	0.22	4.25	2	3	194	1-5
VVF-A08	Enviro Tec Inc.	1900	950	1900	0.50	1	0.22	39	34	681	277	60	1	7	15	79,900	59	98	HOT WATER	180	142	0.22	0.22	4.25	2	3	204	1-5
VVF-A09	Enviro Tec Inc.	700	350	700	0.50	1/3	0.06	28	16	152	277	60	1	3	15	27,640	59	95	HOT WATER	180	142	0.06	1.36	1.50	1	2	169	1-5
VVF-A10	Enviro Tec Inc.	800	400	800	0.50	1/3	0.09	28	16	185	277	60	1	3	15	36,430	59	101	HOT WATER	180	137	0.09	0.16	1.75	2	4	176	1-5
VVF-A11	Enviro Tec Inc.	250	125	250	0.50	1/3	0.05	30	18	54	277	60	1	3	15	10,040	59	96	HOT WATER	180	139	0.05	0.57	0.50	1	1	121	1-5
VVF-A12	Enviro Tec Inc.	1800	900	1800	0.50	1	0.26	38	32	613	277	60	1	7	15	75,200	59	97	HOT WATER	180	139	0.26	0.22	3.75	2	6	204	1-5
VVF-A13	Enviro Tec Inc.	1400	700	1400	0.50	1/2	0.24	34	28	367	277	60	1	5	15	51,590	59	93	HOT WATER	180	138	0.24	0.24	2.50	2	4	179	1-5
VVF-A14	Enviro Tec Inc.	1400	700	1400	0.50	1/2	0.24	34	28	367	277	60	1	5	15	51,590	59	93	HOT WATER	180	138	0.24	0.24	2.50	2	4	179	1-5
VVF-A15	Enviro Tec Inc.	1800	900	1800	0.50	1	0.26	38	32	613	277	60	1	7	15	75,200	59	97	HOT WATER	180	139	0.26	0.22	3.80	2	6	204	1-5
VVF-B01	Enviro Tec Inc.	1200	600	1200	0.50	1/2	0.18	34	24	331	277	60	1	5	15	48,940	59	97	HOT WATER	180	140	0.18	0.24	2.50	2	4	179	1-5
VVF-B02	Enviro Tec Inc.	250	125	250	0.50	1/3	0.05	30	18	54	277	60	1	3	15	10,040	59	96	HOT WATER	180	139	0.05	0.57	0.50	1	1	121	1-5
VVF-B03	Enviro Tec Inc.	1200	600	1200	0.50	1/2	0.18	34	24	331	277	60	1	5	15	48,940	59	97	HOT WATER	180	140	0.18	0.24	2.50	2	4	179	1-5
VVF-B04	Enviro Tec Inc.	1100	550	1100	0.50	1/2	0.15	34	21	277	277	60	1	5	15	42,100	59	98	HOT WATER	180	137	0.16	0.19	2.00	2	4	179	1-5
VVF-B05	Enviro Tec Inc.	500	250	500	0.50	1/3	0.15	26	19	123	277	60	1	3	15	20,210	59	96	HOT WATER	180	138	0.15	0.23	1.00	2	2	122	1-5
VVF-B06	Enviro Tec Inc.	700	350	700	0.50	1/3	0.15	32	24	191	277	60	1	3	15	28,130	59	96	HOT WATER	180	141	0.12	0.10	1.50	2	4	123	1-5
VVF-B07	Enviro Tec Inc.	600	300	600	0.50	1/3	0.21	32	20	171	277	60	1	3	15	23,580	59	95	HOT WATER	180	141	0.21	0.27	1.25	2	2	123	1-5
VVF-B08	Enviro Tec Inc.	500	250	500	0.50	1/3	0.3	26	19	144	277	60	1	3	15	23,530	63	106	HOT WATER	180	141	0.30	0.29	1.25	2	3	122	1-5
VVF-B09	Enviro Tec Inc.	250	125	250	0.50	1/3	0.05	30	18	54	277	60	1	3	15	13,700	57	109	HOT WATER	180	142	0.05	0.17	0.75	2	2	121	1-5
VVF-B10	Enviro Tec Inc.	500	250	500	0.50	1/3	0.3	26	19	144	277	60	1	3	15	23,530	59	106	HOT WATER	180	141	0.30	0.29	1.25	2	3	123	1-5
VVF-B11	Enviro Tec Inc.	275	138	275	0.50	1/3	0.06	30	18	59	277	60	1	3	15	11,400	57	97	HOT WATER	180	133	0.06	0.09	0.50	2	2	121	1-5
VVF-B12	Enviro Tec Inc.	350	175	350	0.50	1/3	0.08	24	15	72	277	60	1	3	15	15,580	59	100	HOT WATER	180	137	0.08	0.17	0.75	2	2	122	1-5
VVF-B13	Enviro Tec Inc.	300	150	300	0.50	1/3	0.07	32	15	63	277	60	1	3	15	11,690	59	95	HOT WATER	180	132	0.07	0.09	0.50	2	2	123	1-5
VVF-B14	Enviro Tec Inc.	250	125	250	0.50	1/3	0.05	19	18	54	277	60	1	3	15	11,070	59	100	HOT WATER	180	134	0.05	0.09	0.50	2	2	123	1-5
VVF-B15	Enviro Tec Inc.	175	88	175	0.50	1/3	0.03	24	15	41	277	60	1	3	15	7,850	57	99	HOT WATER	180	148	0.03	0.10	0.50	1	2	121	1-5
VVF-B16	Enviro Tec Inc.	400	200	400	0.50	1/3	0.11	32	16	89	277	60	1	3	15	16,290	59	97	HOT WATER	180	135	0.11	0.17	0.75	2	2	123	1-5
VVF-B17	Enviro Tec Inc.	175	88	175	0.50	1/3	0.03	24	15	41	277	60	1	3	15	7,850	59	99	HOT WATER	180	148	0.03	0.10	0.50	1	2	121	1-5
VVF-B18	Enviro Tec Inc.	225	113	225	0.50	1/3	0.04	28	16	49	277	60	1	3	15	10,800	59	102	HOT WATER	180	136	0.04	0.09	0.50	2	2	121	1-5
VVF-B19	Enviro Tec Inc.	175	88	175	0.50	1/3	0.03	24	15	41	277	60	1	3	15	8,870	59	104	HOT WATER	180	144	0.03	0.57	0.50	1	1	121	1-5
VVF-B20	Enviro Tec Inc.	325	163	325	0.50	1/3	0.07	32	15	67	277	60	1	3	15	15,270	58	101	HOT WATER	180	138	0.07	0.17	0.75	2	2	123	1-5
VVF-B21	Enviro Tec Inc.	725	363	725	0.50	1/3	0.29	32	18	247	277	60	1	3	15	29,000	59	95	HOT WATER	180	140	0.29	2.60	1.50	2	1	123	1-5
VVF-B22	Enviro Tec Inc.	250	125	250	0.50	1/3	0.05	30	18	54	277	60	1	3	15	10,040	59	96	HOT WATER	180	139	0.05	0.57	0.50	1	1	121	1-5
VVF-C01	Enviro Tec Inc.	1100	550	1100	0.50	1/2	0.15	32	20	259	277	60	1	5	15	46,600	59	100	HOT WATER	180	142	0.15	0.24	2.50	2	4	179	1-5
VVF-C02	Enviro Tec Inc.	1150	575	1150	0.50	1/2	0.17	34	22	304	277	60	1	5	15	48,200	59	98	HOT WATER	180	140	0.17	0.24	2.50	2	4	179	1-5
VVF-C03	Enviro Tec Inc.	1150	575	1150	0.50	1/2	0.17	34	22	304	277	60	1	5	15	48,200	59	98	HOT WATER	180	140	0.17	0.24	2.50	2	4	179	1-5
VVF-C04	Enviro Tec Inc.	1050	525	1050	0.50	1/2	0.16	34	21	277	277	60	1	5	15	47,420	59	99	HOT WATER	180	141	0.16	0.24	2.50	2	4	179	1-5
VVF-C05	Enviro Tec Inc.	1025	513	1025	0.50	1/2	0.14	32	19	249	277	60	1	5	15	42,270	59	97	HOT WATER	180	137	0.14	0.19	2.00	2	4	179	1-5
VVF-C06	Enviro Tec Inc.	1275	638	1275	0.50	1/2	0.2	34	25	372	277	60	1	5	15	49,990	59	95	HOT WATER	180	139	0.20	0.24	2.50	2	4	179	1-5
VVF-C07	Enviro Tec Inc.	1100	550	1100	0.50	1/2	0.16	34	21	277	277	60	1	5	15	47,420	59	99	HOT WATER	180	141	0.16	0.24	2.50	2	4	179	1-5
VVF-C08	Enviro Tec Inc.	1100	550	1100	0.50	1/2	0.16	34	21	277	277	60	1	5	15	47,420	59	99	HOT WATER	180	141	0.16	0.24	2.50	2	4	179	1-5
VVF-C09	Enviro Tec Inc.	175	88	175	0.50	1/3	0.03	24	15	41	277	60	1	3	15	7,760	59	100	HOT WATER	180	148	0.03	0.10	0.50	1	2	121	1-5
VVF-C10	Enviro Tec Inc.	1000	500	1000	0.50	1/2	0.21	32	19	264	277	60	1	5	15	43,670	59	99	HOT WATER	180	135	0.22	0.09	2.00	2	8	179	1-5
VVF-C11	Enviro Tec Inc.	1100	550	1100	0.50	1/2	0.16	34	21	277	277	60	1	5	15	47,420	59	99	HOT WATER	180	141	0.16	0.24	2.50	2	4	179	1-5
VVF-C12	Enviro Tec Inc.	1100	550	1100	0.50	1/2	0.17	34	22	304	277	60	1	5	15	48,200	59	98	HOT WATER	180	140	0.17	0.24	2.50	2	4	179	1-5
VVF-C13	Enviro Tec Inc.	1200	600	1200	0.50	1/2	0.18	34	24	331	277	60	1	5	15	48,940	59	97	HOT WATER	180	140	0.18	0.24	2.50	2	4	179	1-5
VVF-C14	Enviro Tec Inc.	1200	600	1200	0.50	1/2	0.18	34	24	331	277	60	1	5	15	48,940	59	97	HOT WATER	180	140	0.18	0.24	2.50	2	4	179	1-5
VVF-C15	Enviro Tec Inc.	1150	575	1150	0.50	1/2	0.16	34	21	277	277	60	1	5	15	47,420	59	99	HOT WATER	180	141	0.16	0.24	2.50	2	4	179	1-5
VVF-C16	Enviro Tec Inc.	1100	550	1100	0.50	1/2	0.17	34	22	304	277	60	1	5	15	48,200	59	98	HOT WATER	180	140	0.17	0.24	2.50	2	4	179	1-5
VVF-C17	Enviro Tec Inc.	1200	600	1200	0.50	1/2	0.18	34	24	331	277	60	1	5	15	48,940	59	97	HOT WATER	180	140	0.18	0.24	2.50	2	4	179	1-5
VVF-C18	Enviro Tec Inc.	1200	600	1200	0.50	1/2	0.18	34	24	331	277	60	1	5	15	48,940	59	97	HOT WATER	180	140	0.18	0.24	2.50	2	4	179	1-5
VVF-C19	Enviro Tec Inc.	1150	575	1150	0.50	1/2	0.16	34	21	277	277	60	1	5	15	47,420	59	99	HOT WATER	180	141	0.16	0.24	2.50	2	4	179	1-5
VVF-C20	Enviro Tec Inc.	1800	900	1800	0.50	3/4	0.2	40	34	637	277	60	1	7	15	70,470	59	95	HOT WATER	180	139	0.20	0.21	3.50	2	6	194	1-5
VVF-C21	Enviro Tec Inc.	1000	500	1000	0.50	1/2	0.22	34	19	264	277	60	1	3	15	43,670	59	99	HOT WATER	180	135	0.22	0.09	2.00	2	8	179	1-5
VVF-C22	Enviro Tec Inc.	600	300	600	0.50	1/3	0.05	25	15	127	277	60	1	3	15	24,160	59	96	HOT WATER	180	147	0.05	0.18	1.50	1	4	169	1-5
VVF-C23	Enviro Tec Inc.	500	250	500	0.50	1/3	0.15	26	19	123	277	60	1	3	15	20,210	59	96	HOT WATER	180	138	0.15	0.23	1.00	2	2	122	1-5
VVF-C24	Enviro Tec Inc.	600	300	600	0.50	1/3	0.05	25	15	127	277	60	1	3	15	24,160	59	96	HOT WATER	180	147	0.05	0.18	1.50	1	4	169	1-5
VVF-C25	Enviro Tec Inc.	600	300	600	0.50	1/3	0.05	25	15	127	277	60	1	3	15	24,160	59	96	HOT WATER	180	147	0.05	0.18	1.50	1	4	169	1-5
VVF-C26	Enviro Tec Inc.	1100	550	1100	0.50	1/2	0.16	34	21	277	277	60	1	3	15	47,420	59	99	HOT WATER	180	141	0.16	0.24	2.50	2	4	179	1-5
VVF-C27	Enviro Tec Inc.	350	175	350	0.50	1/3	0.08	24	15	75	277	60	1	3	15	15,580	59	100	HOT WATER	180	137	0.08	0.17	0.75	2	2	122	1-5
VVF-C28	Enviro Tec Inc.	1100	550	1100	0.50	1/2	0.16	34	21	277	277	60	1	3	15	47,420	59	99	HOT WATER	180	141	0.16	0.24	2.50	2	4	179	1-5
VVF-C29	Enviro Tec Inc.	1000	500	1000	0.50	1/2	0.22	34	19	264	277	60	1	3	15	43,670	59	99	HOT WATER	180	135	0.22	0.09	2.00	2	8	179	1-5
VVF-C30	Enviro Tec Inc.	1800	900	1800	0.50	3/4	0.2	40	34	637	277	60	1	7	15	70,470	59	95	HOT WATER	180	139	0.20	0.21	3.50	2	6	194	1-5
VVF-C31	Enviro Tec Inc.	175	88	175	0.50	1/3	0.03	24	15	41	277	60	1	3	15	7,760	59	100	HOT WATER	180	148	0.03	0.10	0.50	1	2	121	1-5
VVF-D01	Enviro Tec Inc.	1000	500	1000	0.50	1/2	0.22	32	19	264	277	60	1	5	15	43,670	59	99	HOT WATER	180	135	0.22	0.09	2.00	2	8	179	1-5
VVF-D02	Enviro Tec Inc.	700	350	700	0.50	1/3	0.45	32	20	259	277	60	1	3	15	29,320	59	98	HOT WATER	180	140	0.45	0.24	1.50	3	3	126	1-5
VVF-D03	Enviro Tec Inc.	1000	500	1000	0.50	1/2	0.22	34	19	264	277	60	1	5	15	43,670	59	99	HOT WATER	180	135	0.22	0.09	2.00	2	8	179	1-5
VVF-D04	Enviro Tec Inc.	1100	550	1100	0.50	1/2	0.16	34	21	277	277	60	1	5	15	47,420	59	99	HOT WATER	180	141	0.16	0.24	2.50	2	4	179	1-5
VVF-D05	Enviro Tec Inc.	1150	575	1150	0.50	1/2	0.17	34	22	304	277	60	1	5	15	48,200	59	98	HOT WATER	180	140	0.17	0.24	2.50	2	4	179	1-5
VVF-D06	Enviro Tec Inc.	1150	575	1150	0.50	1/2	0.17	34	22	304	277	60	1	5	15	48,200	59	98	HOT WATER	180	140	0.17	0.24	2.50	2	4	179	1-5
VVF-D07	Enviro Tec Inc.	1050	525	1050	0.50	1/2	0.16	34	21	123	277	60	1	5	15	47,420	59	99	HOT WATER	180	141	0.16	0.24	2.50	2	4	179	1-5
VVF-D08	Enviro Tec Inc.	500	250	500	0.50	1/3	0.15	26	19	277	277	60	1	3	15	20,210	59	96	HOT WATER	180	138	0.15	0.23	1.00	2	2	122	1-5
VVF-D09	Enviro Tec Inc.	1100	550	1100	0.50	1/2	0.16	34	21	331	277	60	1	5	15	47,420	59	99	HOT WATER	180	141	0.16	0.24	2.50	2	4	179	1-5
VVF-D10	Enviro Tec Inc.	1200	600	1200	0.50	1/2	0.18	34	24	331	277	60	1	5	15	48,940	59	97	HOT WATER	180	140	0.18	0.24	2.50	2	4	179	1-5
VVF-D11	Enviro Tec Inc.	1200	600	1200	0.50	1/2	0.18	34	24	304	277	60	1	5	15	48,940	59	97	HOT WATER	180	140	0.18	0.24	2.50	2	4	179	1-5
VVF-D12	Enviro Tec Inc.	1150	575	1150	0.50	1/2	0.17	34	22	259	277	60	1	5	15	48,200	59	98	HOT WATER	180	140	0.17	0.24	2.50	2	4	179	1-5
VVF-D13	Enviro Tec Inc.	700	350	700	0.50	1/3	0.45	32	20	264	277	60	1	3	15	29,320	59	98	HOT WATER	180	140	0.45	0.24	1.50	3	3	126	1-5
VVF-D14	Enviro Tec Inc.	1000	500	1000	0.50	1/2	0.22	32	19	264	277	60	1	5	15	43,670	59	99	HOT WATER	180	135	0.22	0.09	2.00	2	8	179	1-5
VVF-D15	Enviro Tec Inc.	1000	500	1000	0.50	1/2	0.22	32	19	264	277	60	1	5	15	43,670	59	99	HOT WATER	180	135	0.22	0.09	2.00	2	8	179	1-5

NOTE:

1 UNIT MANUFACTURER SHALL PROVIDE REQUIRED HANGING BRACKETS TO PROPERLY SUPPORT UNIT. PROVIDE VIBRATION ISOLATION.
2 REFER TO SPECIFICATION SECTION 233600.
3 COILS SHALL BE SELECTED WITH 10' WPD MAXIMUM.

NOTE:

4 DIVISION 26 CONTRACTOR TO SUPPLY 277/1 POWER TO EACH VAV TERMINAL. UNIT SHALL BE PROVIDED WITH A FACTORY MOUNTED CONTROL TRANSFORMER FROM 277/1 VOLT TO 24 VOLT. COORDINATE ALL REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
5 PROVIDE FACTORY MOUNTED DISCONNECT SWITCH.

CABINET/PROPELLER UNIT HEATER SCHEDULE

MARK	CFM	FAN SPEED (RPM)	HP	HEATING 180° EWT						ELEC SERV	TYPE	MANUFACTURER MODEL NUMBER	NOTES
				MBH	EAT	LAT	GPM	WPD	WTD				
CUH-B1	220	1350	1/10	16.2	60	110	1.75	0.2	20	120V	HOT WATER	ZEHNDER-RITTLING RFRC-02	1,2,3,4,6,7
PUH-B1	400	1550	1/30	17.3	60	109	1.75	0.8	20	120v	HOT WATER	ZEHNDER-RITTLING RH-24H01	1,3,4,5,8
PUH-B2	400	1550	1/30	13.0	60	109	1.25	0.8	20	120v	HOT WATER	ZEHNDER-RITTLING RH-18H01	1,3,4,5,8

NOTES:

1. COLOR TO BE AS SPECIFIED BY ARCHITECT.
2. HORIZONTAL CEILING FULLY RECESSED UNIT.
3. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
4. UNIT TO BE PROVIDED WITH FACTORY MOUNTED DISCONNECT SWITCH.
5. SUPPORT HEATER FROM STRUCTURE ABOVE WITH MINIMUM OF TWO (2), 3/8" DIAMETER THREADED RODS AND VIBRATION ISOLATORS.
6. SUPPORT HEATER FROM STRUCTURE ABOVE WITH MINIMUM OF FOUR (4), 3/8" DIAMETER THREADED RODS AND VIBRATION ISOLATORS.
7. PROVIDE WITH 3-SPEED SWITCH.
8. UNIT FURNISHED WITH ADJUSTABLE LOUVER FIN DIFFUSERS TO PROVIDE FOUR-DIRECTION AIR FLOW CONTROL.

FINNED TUBE RADIATION SCHEDULE

HEATING DATA					ELEMENT DATA								
MARK	CAPACITY (BTUH/LF)	AWT (°F)	EAT (°F)	TOTAL CAPACITY (MBH)	MATERIAL (TUBE/FIN)	ENCLOSURE STYLE	LENGTH (FT)	TUBE DIA.	FINS PER FOOT (MIN.)	FINS DIMENSION (IN)	ROWS	GPM	NOTES
FTR-1	1430	170.0	65.0	4.3	CU/AL	EXPOSED	3'-0"	3/4"	48	4-1/4" x 4-1/4"	2	0.5	1,2,3,4,5,6
FTR-2	1430	170.0	65.0	7.15	CU/AL	EXPOSED	5'-0"	3/4"	48	4-1/4" x 4-1/4"	2	0.75	1,2,3,4,5,6
FTR-3	1430	170.0	65.0	10.0	CU/AL	EXPOSED	7'-0"	3/4"	48	4-1/4" x 4-1/4"	2	1.0	1,2,3,4,5,6
FTR-4	1010	170.0	65.0	7.0	CU/AL	EXPOSED	7'-0"	1"	48	4-1/4" x 4-1/4"	1	0.75	1,2,3,4,5,6

NOTES:

1. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
2. FIELD MEASURE ALL LENGTHS PRIOR TO FABRICATION.
3. PROVIDE WALL BRACKETS AS REQUIRED.
4. SEE DETAILS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
5. MOUNTING HEIGHT FOR FINNED TUBE SHALL BE LEVEL WITH EXISTING WINDOW SILL. FIELD VERIFY FINAL HEIGHT REQUIREMENTS.
6. CONTRACTOR SHALL MATCH EXISTING GRILLE FOUND THROUGHOUT THE SCHOOLS EXISTING FINNED TUBES.

EXISTING AIR HANDLING UNIT SCHEDULE - FOR INFORMATIONAL PURPOSES ONLY

	SUPPLY FAN DATA					DX COIL DATA								ELECTRICAL		
														SERVICE		
TAG	TOTAL AIR (CFM)	OUTSIDE AIR (CFM)	EXT. S.P.	TOTAL S.P.	HP	TOTAL MBH	SENSIBLE MBH	EAT DB (°F)	EAT WB (°F)	LAT DB (°F)	LAT WB (°F)	APD (IN WC)	FACE VELOCITY	VOLTS	HZ	PH
AHU-1	68,000	22,000	2.6	4.5	(2) 40	3148	2087	80	67	52.0	51.6	0.81	502	460	60	3
AHU-2	4300	1125	1.5	2.7	5	130	85	78.3	65.4	58.5	55.6	NA	466	460	60	3

EXISTING AIR-COOLED CONDENSING UNIT SCHEDULE - FOR INFORMATIONAL PURPOSES ONLY

MARK	ASSOCAITED EQUIPMENT	TOTAL MBH	SUCTION TEMP	AMBIENT TEMP	UNIT ELEC. DATA				WEIGHT (LBS)	COMPRESSOR			NOTES
					VOLTS	PH.	MCA	MCA		STAGES	QTY	REFRIGERANT	
ACCU-1	AHU-1	1,661	115	45.0	460	3	255	300	2517	4	6	R-410A	1,2,3,4,5,6,7
ACCU-2	AHU-1	1,661	115	45.0	460	3	255	300	2517	4	6	R-410A	1,2,3,4,6,7

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CHERRY TREE ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS

13989 Hazel Dell Pkwy, Carmel, IN
46033

CARMEL CLAY SCHOOLS

ARCHITECT

FANNING
HOWEY

317-848-0966 **WWW.FHAI.COM**
350 E. NEW YORK ST, INDIANAPOLIS IN 46204

CONSULTANT

KEY PLAN

BIDS

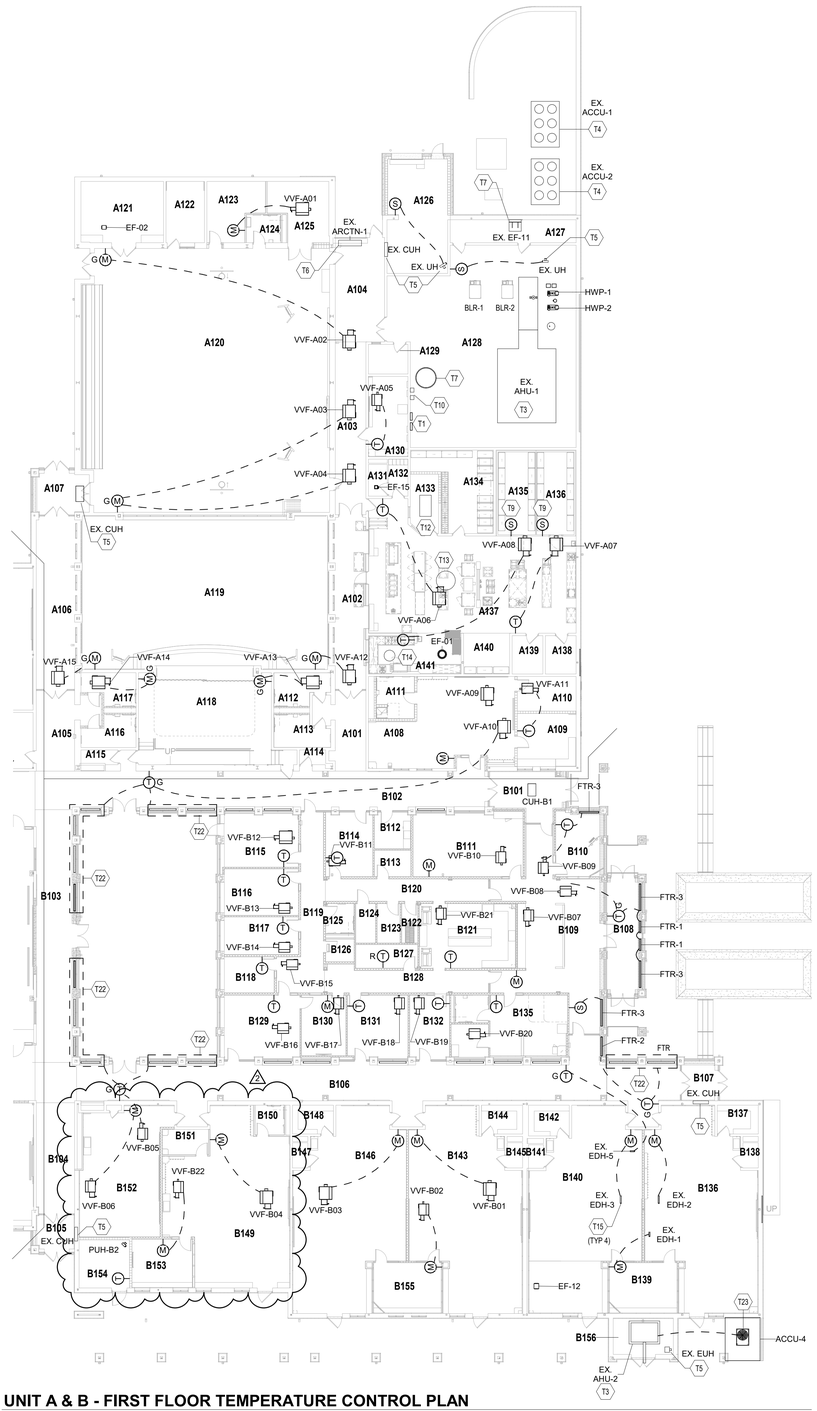
MARK Z. HOPF
PE 12000601

PROJECT MANAGER: SAM
DRAWN BY: DJA
PROJECT NUMBER: 222011.00
PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
2	ADDENDUM#7	4.09.2024

MECHANICAL SCHEDULES

M5.02



UNIT A & B - FIRST FLOOR TEMPERATURE CONTROL PLAN

SCALE: 1/16" = 1'-0"

ROOM LEGEND - UNIT A

ROOM NO.	ROOM NAME	AREA (SF)
A101	CORRIDOR	217 SF
A102	CORRIDOR	416 SF
A103	CORRIDOR	361 SF
A104	RECEIVING	350 SF
A105	CORRIDOR	262 SF
A106	CORRIDOR	522 SF
A107	VESTIBULE	151 SF
A108	CLASSROOM 34 - F.A.P.	728 SF
A109	SMALL GROUP	213 SF
A110	SENSORY	139 SF
A111	RESTROOM	109 SF
A112	WOMEN	112 SF
A113	MEN	109 SF
A114	IDF	29 SF
A115	CUST.	35 SF
A116	BOYS	103 SF
A117	GIRLS	105 SF
A118	STAGE	900 SF
A119	CAFETORIUM	2305 SF
A120	GYMNASIUM	4395 SF
A121	STORAGE	344 SF
A122	P.E. OFFICE	161 SF
A123	PARKS OFFICE	203 SF
A124	FAMILY RR	66 SF
A125	STORAGE	217 SF
A126	OUTDOOR STORAGE	470 SF
A127	ELECTRICAL	197 SF
A128	BOILER ROOM	2306 SF
A129	CUST.. OFFICE	80 SF
A130	CUST. BREAKRM	216 SF
A131	TOILET	41 SF
A132	DRESSING	49 SF
A133	OFFICE	110 SF
A134	DRY GOODS	344 SF
A135	COOLER	235 SF
A136	FREEZER	235 SF
A137	KITCHEN	1480 SF
A138	LAUNDRY	80 SF
A139	CUST..	80 SF
A140	BREAKROOM	128 SF
A141	DISHWASHING	248 SF

ROOM LEGEND - UNIT B

ROOM NO.	ROOM NAME	AREA (SF)
B101	VESTIBULE	216 SF
B102	CORRIDOR	1194 SF
B103	CORRIDOR	625 SF
B104	CORRIDOR	290 SF
B105	VESTIBULE	95 SF
B106	CORRIDOR	1738 SF
B107	VESTIBULE	89 SF
B108	SECURE VESTIBULE	253 SF
B109	RECEPTION	901 SF
B110	SRO OFFICE	189 SF
B111	LARGE CONFERENCE	477 SF
B112	MOTHERS	91 SF
B113	TEST STOR/ QUIET SPACE	65 SF
B114	SPEECH/HEARING	206 SF
B115	OT/PT OFFICE	272 SF
B116	SOCIAL WORKER	235 SF
B117	PSYCHOLOGIST	191 SF
B118	INST COACH OFFICE	123 SF
B119	CORRIDOR	343 SF
B120	CORRIDOR	248 SF
B121	WORKROOM	418 SF
B122	MEZZANINE	43 SF
B123	IDF	62 SF
B124	ELEC	53 SF
B125	RR	58 SF
B126	CALM	44 SF
B127	STORAGE	100 SF
B128	CORRIDOR	261 SF
B129	PRINCIPAL'S OFFICE	332 SF
B130	SMALL CONFERENCE	183 SF
B131	ASST PRINCIPAL'S OFFICE	262 SF
B132	E.C. SPEECH	174 SF
B133	RR	63 SF
B134	EXAM	84 SF
B135	CLINIC	315 SF
B136	KINDER - CR 1	1327 SF
B137	STORAGE	80 SF
B138	TOILET	26 SF
B139	SMALL GROUP	234 SF
B140	KINDER - CR 2	1321 SF
B141	TOILET	24 SF
B142	STORAGE	86 SF
B143	KINDER - CR 3	1329 SF
B144	STORAGE	80 SF
B145	TOILET	27 SF
B146	KINDER - CR 4	1327 SF
B147	TOILET	27 SF
B148	STORAGE	80 SF
B149	KINDER - CR 35	1232 SF
B150	RR	59 SF
B151	STORAGE	79 SF
B152	FLEX ROOM	707 SF
B153	SMALL GROUP	201 SF
B154	OUTDOOR STORAGE	166 SF
B155	SMALL GROUP	234 SF
B156	MECH	149 SF
B201	MECH. MEZZ.	389 SF

TEMPERATURE CONTROL PLAN GENERAL NOTES

A. REFER TO SECTION 23 05 00 GENERAL REQUIREMENTS AND CONDITIONS FOR THE TRANSPORT, STORAGE, DEMOLITION, & INSTALLATION AS DESCRIBED HEREIN.

B. **REPLACE BUILDING TEMPERATURE CONTROLS**: BUILDING TEMPERATURE CONTROL SYSTEM SHALL BE COMPLETE REPLACEMENT & UPGRADE OF EXISTING TO A MODERN ELECTRONIC DIRECT DIGITAL CONTROL (DDC) SYSTEM & COMPONENTS; REPLACEMENT SHALL INCLUDE ITEMS SUCH AS, BUT MAY NOT BE LIMITED TO SHOWN & UNSHOWN, PNEUMATIC SYSTEM COMPRESSOR, COMPONENTS, & ACCESSORIES, EXPOSED PNEUMATIC TUBING, OPERATORS & ACTUATORS, LIMIT SWITCHES, SENSORS, CONTROLLED VALVES, VARIABLE FREQUENCY CONTROLLERS (VFCs / VFDs), LOGIC CONTROLLERS, & OPERATOR INTERFACES. FOR ALL BELOW INDICATED NOTES, ALSO REFER TO SECTIONS 230900 & 230993 FOR ADDITIONAL CLARIFICATION & REQUIREMENTS.

C. **BUILDING HEATING & COOLING PLANT CONTROLS**: TEMPERATURE CONTROL CONTRACTOR SHALL PROVIDE ITEMS SUCH AS, BUT NOT BE LIMITED TO, CONTROL EQUIPMENT, VALVES, ACTUATORS, SENSORS, DEVICES, COMPONENTS, & COORDINATION FOR NEW COMPLETE & FUNCTIONAL BUILDING TEMPERATURE CONTROL SYSTEM.

D. **REMOVAL & SALVAGE**: UNLESS OTHERWISE NOTED, CONTRACTOR IS RESPONSIBLE TO REMOVE ALL UNUSED EQUIPMENT, COMPONENTS, MATERIALS, ETC. FROM SITE. IF ITEMS ARE OF REASONABLE QUALITY & CONDITION, CONFIRM ALL SALVAGED ITEMS w/OWNERS WRITTEN APPROVAL. LEAVE SALVAGED ITEMS IN UNOBSTRUCTING LOCATION NEAR AREA OF REMOVAL.

E. **EX. AIR HANDLER COIL CLEANING**: EXISTING AIR HANDLER COILS SHALL BE THOROUGHLY SWEPT & THEN WET CLEANED WITH A FOAMING, BIODEGRADABLE, ALKALINE COIL CLEANER WITH EPA REGISTERED MOLD AND MILDEW INHIBITORS. PROTECT EQUIPMENT & ADJACENT AREAS FROM DAMAGE DURING CLEANING PROCEDURE. REPLACE FILTERS PRIOR TO REUSE OF EXISTING AIR HANDLERS

F. **EX. CABINET, CONVECTOR, & UNIT HEATER UPGRADES:** REPLACEMENT & ADDITIONAL COMPONENTS SHALL NCLUDE, BUT MAY NOT BE LIMITED TO, TEMPERATURE SENSOR (FLAT PLATE), UNIT CONTROLLER, HEATING CONTROL VALVE, FAN POWER RELAY SWITCH, MOTOR CURRENT SENSOR, WIRE & CABLING.

G. **EX. BUILDING EXHAUST FANS UPGRADES**: REPLACEMENT & ADDITIONAL COMPONENTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, UNIT CONTROLLER, MOTOR CURRENT SENSOR, FAN POWER RELAY SWITCH, TEMPERATURE SENSOR (FLAT PLATE) FOR TEMPERATURE-CONTROLLED FANS, SWITCHES FOR MANUALLY OPERATED FANS, WIRE & CABLING.

H. **EX. WALL/ROOF VENTS**: REPLACEMENT & ADDITIONAL COMPONENTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, UNIT CONTROLLER, PRESSURE SENSOR(S), WIRE & CABLING.

I. **TEMP CONTROL (WALL MTD) SENSORS/THERMOSTATS:** ANTICIPATED REPLACEMENT LOCATIONS FOR EXISTING TEMPERATURE CONTROL SYSTEMS AMBIENT SENSORS & THERMOSTATIC CONTROLLERS ARE SHOWN; SOME OF THESE LOCATIONS MAY BE SHOWN WHERE AN EXISTING DEVICE LOCATION IS UNKNOW OR NOT CONFIRMED w/SITE CONDITIONS. REFER TO SECTIONS 23 09 00 & 23 09 93 FOR DEVICE REQUIREMENT(S) RELEVANT TO EQUIPMENT & ZONE INSTALLATIONS. WHERE NEW INSTALLATION LOCATIONS OF DEVICES ARE NECESSARY, CONTRACTOR IS RESPONSIBLE TO IDENTIFY MOST APPROPRIATE NEW DEVICE LOCATION, CONTACT PROJECT ENGINEER IF CLARIFICATION BECOMES NECESSARY.

J. THE SCHOOL CURRENTLY UTILIZES A PNUEMATIC TEMPERATURE CONTROLS SYSTEM RUN OFF JOHNSON CONTROLS.

K. CONTRACTOR SHALL PROVIDE ALL NEW WIRING, DEVICES AND COMPONENTS.

L. ALL EXISTING TEMPERATURE CONTROLS MATERIAL REMOVED SHALL BE DISPOSED OF OFFSITE

TEMPERATURE CONTROL PLAN NOTES

(X)

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

T3 REMOVE ALL EXISTING AIR HANDLING UNIT CONTROLS, SENSORS, SAFETIES, DAMPER OPERATORS AND CONTROL ACCESSORIES. EXISTING UNIT CONTROL DAMPERS TO REMAIN IN PLACE. DISPOSE OF MATERIAL OFF SITE. PROVIDE NEW CONTROLS, SENSORS, SAFETIES, CONTROL DAMPER OPERATORS, ETC.

T4 CONNECT EXISTING AIR COOLED CONDENSING UNIT INTO NEW BAS. PROVIDE NEW CONTROLS IF REQUIRED.

T5 EXISTING UNIT HEATER EQUIPMENT TO REMAIN. ALL EXISTING TEMPERATURE CONTROLS, VALVES, SENSORS, ETC. SHALL BE REMOVED AND REPLACED WITH NEW DDC CONTROLS, VALVES, SENSORS, ETC.

T6 EXISTING AIR CURTAIN TO REMAIN IN PLACE. ALL EXISTING TEMPERATURE CONTROLS, VALVES, SENSORS, ETC. SHALL BE REMOVED AND REPLACED WITH NEW DDC CONTROLS, VALVES, SENSORS, ETC.

T7 EXISTING EXHAUST FAN TO REMAIN IN PLACE. ALL EXISTING TEMPERATURE CONTROLS SHALL BE REMOVED AND REPLACED WITH NEW DDC CONTROLS.

T9 PROVIDE TEMPERATURE SENSOR IN NEW WALK-IN COOLER/FREEZER FOR MONITORING THROUGH BAS.

T10 EXISTING VFD'S TO REMAIN. TIE INTO NEW BAS.

T12 MAKE-UP AIR UNIT. COORDINATE WITH KITCHEN CONSULTANT FOR ADDITIONAL INFORMATION.

T13 KITCHEN EXHAUST FAN. SEQUENCE WITH KITCHEN EQUIPMENT. COORDINATE WITH KITCHEN CONSULTANT FOR ADDITIONAL INFORMATION.

T14 DISHWASHER EXHAUST FAN. SEQUENCE WITH DISHWASHER. COORDINATE WITH KITCHEN CONSULTANT FOR ADDITIONAL INFORMATION.

T15 EXISTING DUCT MOUNTED ELECTRIC HEATER TO REMAIN IN PLACE. REMOVE ASSOCIATED CONTROLS, SENSORS, ETC. PROVIDE NEW CONTROLS, SENSORS, ETC.

T22 EXISTING FIN-TUBE(S) TO REMAIN IN PLACE. ALL EXISTING TEMPERATURE CONTROLS, VALVES ETC. SHALL BE REMOVED. DISPOSE OF ALL MEATERIAL OFF SITE. PROVIDE NEW CONTROLS, CONTROL VALVES, ISOLATION VALVES, ETC. AS REQUIRED TO BEST CONTROL NEW FIN-TUBE LAYOUT.

T23 TEMPERATURE CONTROL CONTRACTOR SHALL PROVIDE INTERCONNECTING CONTROL WIRING TO OUTDOOR CONDENSING UNIT.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

CHERRY TREE ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS

13989 Hazel Dell Pkwy, Carmel, IN 46033

CARMEL CLAY SCHOOLS

ARCHITECT

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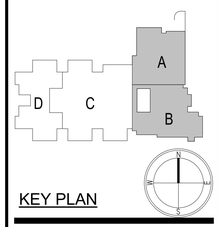

KEY PLAN

BIDS

PROJECT MANAGER: SAM

DRAWN BY: DJA

PROJECT NUMBER: 222011.00

PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#1	2.23.2024
2	ADDENDUM#7	4.09.2024

1ST FLR TEMPERATURE CONTROL PLAN - UNIT A & B

M6.01

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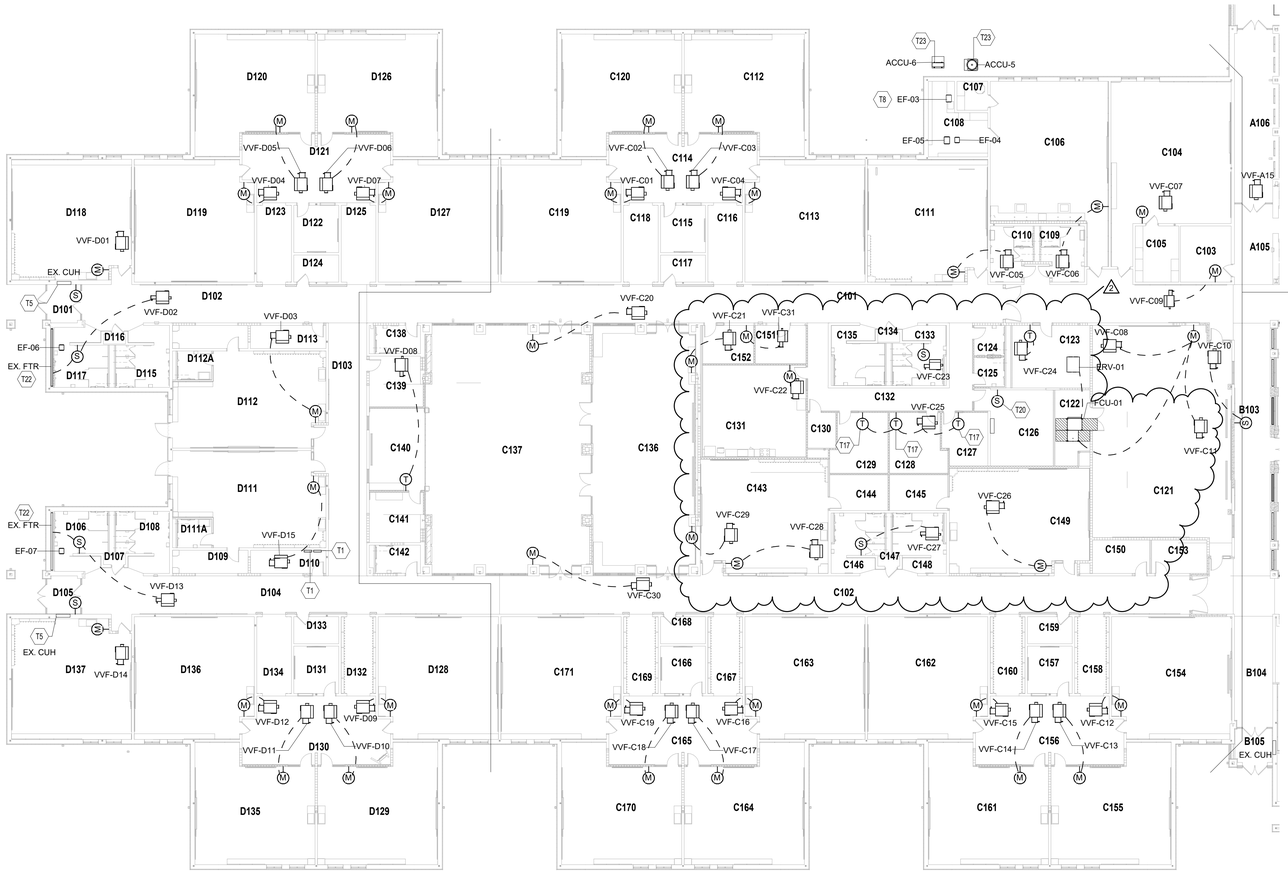

UNIT C & D - FIRST FLOOR TEMPERATURE CONTROL PLAN

SCALE: 1/16" = 1'-0"

ROOM LEGEND - UNIT C

ROOM NO.	ROOM NAME	AREA (SF)
C101	CORRIDOR	2434 SF
C102	CORRIDOR	2017 SF
C103	TV STUDIO	194 SF
C104	CLASSROOM 33 - MUSIC	1227 SF
C105	STORAGE	167 SF
C106	CLASSROOM 32 - ART	1192 SF
C107	KILN	60 SF
C108	STORAGE	235 SF
C109	MEN	151 SF
C110	WOMEN	148 SF
C111	CLASSROOM 31 - 5TH	982 SF
C112	CLASSROOM 29 - 5TH	878 SF
C113	CLASSROOM 30 - 5TH	981 SF
C114	COMMONS	648 SF
C115	SMALL GROUP	145 SF
C116	CUBBIES	189 SF
C117	IDF/ELEC	82 SF
C118	CUBBIES	189 SF
C119	CLASSROOM 27 - 5TH	981 SF
C120	CLASSROOM 28 - 5TH	878 SF
C121	LARGE GROUP INSTRUCTION	1990 SF
C122	LGI STORAGE	170 SF
C123	RESOURCE / IA OFFICES	333 SF
C124	RR	63 SF
C125	RR	61 SF
C126	IT OFFICE/ MDF	352 SF
C127	BHVL THERAPIST	159 SF
C128	MLL/ INTERVENTION	221 SF
C129	ST.V THERAPIST	221 SF
C130	CALM	69 SF
C131	STAFF LOUNGE	645 SF
C132	CORRIDOR	451 SF
C133	GIRLS	195 SF
C134	CUST.	14 SF
C135	BOYS	196 SF
C136	STEAM LAB	1657 SF
C137	DISCOVERY CENTER	2676 SF
C138	RR	87 SF
C139	PTO STORAGE	181 SF
C140	TEACHING AREA	312 SF
C141	DISC CTR STOR	180 SF
C142	RR	86 SF
C143	CLASSROOM 21 - 2ND	971 SF
C144	STORAGE	142 SF
C145	STORAGE	142 SF
C146	GIRLS	196 SF
C147	CUST.	15 SF
C148	BOYS	196 SF
C149	CLASSROOM 20 - 1ST	972 SF
C150	SHARED STORAGE	131 SF
C151	SHARED STORAGE	133 SF
C152	SENSORY	133 SF
C153	SHARED STORAGE	120 SF
C154	CLASSROOM 7 - 1ST	980 SF
C155	CLASSROOM 8 - 1ST	877 SF
C156	COMMONS	649 SF
C157	SMALL GROUP	145 SF
C158	CUBBIES	189 SF
C159	ELEC/STOR	83 SF
C160	CUBBIES	189 SF
C161	CLASSROOM 9 - 1ST	877 SF
C162	CLASSROOM 10 - 1ST	982 SF
C163	CLASSROOM 11 - 2ND	982 SF
C164	CLASSROOM 12 - 2ND	878 SF
C165	COMMONS	649 SF
C166	SMALL GROUP	145 SF
C167	CUBBIES	189 SF
C168	ELEC/STOR	83 SF
C169	CUBBIES	189 SF
C170	CLASSROOM 13 - 2ND	877 SF
C171	CLASSROOM 14 - 2ND	982 SF

ROOM LEGEND - UNIT D

ROOM NO.	ROOM NAME	AREA (SF)
D101	VESTIBULE	86 SF
D102	CORRIDOR	786 SF
D103	CORRIDOR	708 SF
D104	CORRIDOR	1132 SF
D105	VESTIBULE	87 SF
D106	BOYS	206 SF
D107	CUST.	15 SF
D108	GIRLS	203 SF
D109	STORAGE	119 SF
D110	SHARED STORAGE	119 SF
D111	EARLY CHILD - CR 5	905 SF
D111A	RESTROOM	68 SF
D112	EARLY CHILD - CR 6	905 SF
D112A	RESTROOM	68 SF
D113	SHARED STORAGE	120 SF
D114	STORAGE	119 SF
D115	GIRLS	204 SF
D116	CUST.	15 SF
D117	BOYS	205 SF
D118	CLASSROOM 22 - 4TH	965 SF
D119	CLASSROOM 23 - 4TH	981 SF
D120	CLASSROOM 24 - 4TH	878 SF
D121	COMMONS	648 SF
D122	SMALL GROUP	145 SF
D123	CUBBIES	189 SF
D124	STORAGE	83 SF
D125	CUBBIES	189 SF
D126	CLASSROOM 25 - 4TH	878 SF
D127	CLASSROOM 26 - 4TH	981 SF
D128	CLASSROOM 15 - 3RD	982 SF
D129	CLASSROOM 16 - 3RD	877 SF
D130	COMMONS	649 SF
D131	SMALL GROUP	145 SF
D132	CUBBIES	189 SF
D133	IDF/STOR	83 SF
D134	CUBBIES	189 SF
D135	CLASSROOM 17 - 3RD	877 SF
D136	CLASSROOM 18 - 3RD	981 SF
D137	CLASSROOM 19 - 3RD	965 SF

TEMPERATURE CONTROL PLAN GENERAL NOTES

A. REFER TO SECTION 23 05 00 GENERAL REQUIREMENTS AND CONDITIONS FOR THE TRANSPORT, STORAGE, DEMOLITION, & INSTALLATION AS DESCRIBED HEREIN.

B. **REPLACE BUILDING TEMPERATURE CONTROLS**: BUILDING TEMPERATURE CONTROL SYSTEM SHALL BE COMPLETE REPLACEMENT & UPGRADE OF EXISTING TO A MODERN ELECTRONIC DIRECT DIGITAL CONTROL (DDC) SYSTEM & COMPONENTS; REPLACEMENT SHALL INCLUDE ITEMS SUCH AS, BUT MAY NOT BE LIMITED TO SHOWN & UNSHOWN, PNEUMATIC SYSTEM COMPRESSOR, COMPONENTS, & ACCESSORIES, EXPOSED PNEUMATIC TUBING, OPERATORS & ACTUATORS, LIMIT SWITCHES, SENSORS, CONTROLLED VALVES, VARIABLE FREQUENCY CONTROLLERS (VFCs / VFDs), LOGIC CONTROLLERS, & OPERATOR INTERFACES. FOR ALL BELOW INDICATED NOTES, ALSO REFER TO SECTIONS 230900 & 230993 FOR ADDITIONAL CLARIFICATION & REQUIREMENTS.

C. **BUILDING HEATING & COOLING PLANT CONTROLS**: TEMPERATURE CONTROL CONTRACTOR SHALL PROVIDE ITEMS SUCH AS, BUT NOT BE LIMITED TO, CONTROL EQUIPMENT, VALVES, ACTUATORS, SENSORS, DEVICES, COMPONENTS, & COORDINATION FOR NEW COMPLETE & FUNCTIONAL BUILDING TEMPERATURE CONTROL SYSTEM.

D. **REMOVAL & SALVAGE**: UNLESS OTHERWISE NOTED, CONTRACTOR IS RESPONSIBLE TO REMOVE ALL UNUSED EQUIPMENT, COMPONENTS, MATERIALS, ETC. FROM SITE. IF ITEMS ARE OF REASONABLE QUALITY & CONDITION, CONFIRM ALL SALVAGED ITEMS w/OWNERS WRITTEN APPROVAL. LEAVE SALVAGED ITEMS IN UNOBSTRUCTING LOCATION NEAR AREA OF REMOVAL.

E. **EX. AIR HANDLER COIL CLEANING**: EXISTING AIR HANDLER COILS SHALL BE THOROUGHLY SWEPT & THEN WET CLEANED WITH A FOAMING, BIODEGRADABLE, ALKALINE COIL CLEANER WITH EPA REGISTERED MOLD AND MILDEW INHIBITORS. PROTECT EQUIPMENT & ADJACENT AREAS FROM DAMAGE DURING CLEANING PROCEDURE. REPLACE FILTERS PRIOR TO REUSE OF EXISTING AIR HANDLERS

F. **EX. CABINET, CONVECTOR, & UNIT HEATER UPGRADES:** REPLACEMENT & ADDITIONAL COMPONENTS SHALL NCLUDE, BUT MAY NOT BE LIMITED TO, TEMPERATURE SENSOR (FLAT PLATE), UNIT CONTROLLER, HEATING CONTROL VALVE, FAN POWER RELAY SWITCH, MOTOR CURRENT SENSOR, WIRE & CABLING.

G. **EX. BUILDING EXHAUST FANS UPGRADES**: REPLACEMENT & ADDITIONAL COMPONENTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, UNIT CONTROLLER, MOTOR CURRENT SENSOR, FAN POWER RELAY SWITCH, TEMPERATURE SENSOR (FLAT PLATE) FOR TEMPERATURE-CONTROLLED FANS, SWITCHES FOR MANUALLY OPERATED FANS, WIRE & CABLING.

H. **EX. WALL/ROOF VENTS**: REPLACEMENT & ADDITIONAL COMPONENTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, UNIT CONTROLLER, PRESSURE SENSOR(S), WIRE & CABLING.

I. **TMP CONTROL (WALL MTD) SENSORS/THERMOSTATS:** ANTICIPATED REPLACEMENT LOCATIONS FOR EXISTING TEMPERATURE CONTROL SYSTEMS AMBIENT SENSORS & THERMOSTATIC CONTROLLERS ARE SHOWN; SOME OF THESE LOCATIONS MAY BE SHOWN WHERE AN EXISTING DEVICE LOCATION IS UNKNOW OR NOT CONFIRMED w/SITE CONDITIONS. REFER TO SECTIONS 23 09 00 & 23 09 63 FOR DEVICE REQUIREMENT(S) RELEVANT TO EQUIPMENT & ZONE INSTALLATIONS. WHERE NEW INSTALLATION LOCATIONS OF DEVICES ARE NECESSARY, CONTRACTOR IS RESPONSIBLE TO IDENTIFY MOST APPROPRIATE NEW DEVICE LOCATION, CONTACT PROJECT ENGINEER IF CLARIFICATION BECOMES NECESSARY.

J. THE SCHOOL CURRENTLY UTILIZES A PNUEMATIC TEMPERATURE CONTROLS SYSTEM RUN OFF JOHNSON CONTROLS.

K. CONTRACTOR SHALL PROVIDE ALL NEW WIRING, DEVICES AND COMPONENTS.

L. ALL EXISTING TEMPERATURE CONTROLS MATERIAL REMOVED SHALL BE DISPOSED OF OFFSITE

TEMPERATURE CONTROL PLAN NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

T1 APPROXIMATE LOCATION OF TEMPERATURE CONTROL PANEL. COORDINATE EXACT LOCATION WITH ALL TRADES.

T5 EXISTING UNIT HEATER EQUIPMENT TO REMAIN. ALL EXISTING TEMPERATURE CONTROLS, VALVES, SENSORS, ETC. SHALL BE REMOVED AND REPLACED WITH NEW DDC CONTROLS, VALVES, SENSORS, ETC.

T8 EXISTING EXHAUST FAN AND MANUAL CONTROLS TO REMAIN IN PLACE.

T17 TEMPERATURE CONTROL CONTRACTOR SHALL PROVIDE AVERAGING THERMOSTATS.

T20 COMPUTER ROOM AIR CONDITIONER. INSTALL NEW DDC TEMPERTURE SENSOR TO MONITOR SPACE TEMPERATURE THROUGH BAS.

T22 EXISTING FIN-TUBE(S) TO REMAIN IN PLACE. ALL EXISTING TEMPERATURE CONTROLS, VALVES ETC. SHALL BE REMOVED. DISPOSE OF ALL MEATERIAL OFF SITE. PROVIDE NEW CONTROLS, CONTROL VALVES, ISOLATION VALVES, ETC. AS REQUIRED TO BEST CONTROL NEW FIN-TUBE LAYOUT.

T23 TEMPERATURE CONTROL CONTRACTOR SHALL PROVIDE INTERCONNECTING CONTROL WIRING TO OUTDOOR CONDENSING UNIT.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

CHERRY TREE ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS

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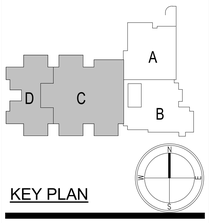

KEY PLAN

BIDS

PROJECT MANAGER: SAM

DRAWN BY: DJA

PROJECT NUMBER: 222011.00

PROJECT ISSUE DATE: 02.09.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#1	2.23.2024
2	ADDENDUM#7	4.09.2024

1ST FLR TEMPERATURE CONTROL PLAN - UNIT B

M6.02

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