

12001 North Central Expressway Suite 1100 Dallas, TX 75243 (972) 788-4222 www.rwb.net TBPE Registered Firm# 2176





MECHANICAL ENGINEER OF RECORD

**ELECTRICAL ENGINEER OF RECORD** 

# RWB CONSULTING ENGINEERS MECHANICAL, PLUMBING & ELECTRICAL ADDENDUM 2 ITEMS FOR T.E. BAXTER ES - HVAC REPLACEMENT MIDLOTHIAN I.S.D.

#### Questions from the Pre-Bid meeting and after:

1. Do the existing gas cocks/plug valves need to be replaced at RTUs as part of new gas connection assembly?

**Response:** Yes, key notes have been revised on DMPE1.01 & MPE1.01 sheets to reflect this in this Addendum.

2. Who is the fire alarm vendor for the project?

**Response:** Existing Fire alarm panel manufacturer is Silent Knight and the company that currently services the school is "Bat Security, George Horn, 214-228-0745". This information has been added to Electrical drawings in this addendum.

3. Would the District consider allowing the bidder to submit the Electronic Flash Drive bid documents by end of the next business day after the bid closing? Since this CSP is a "hard copy" bid, following up later with the flash drive would ease the bidder's burden for a timely bid delivery.

**Response:** A flash drive of completed documents shall be included with the hard copy proposal. The intent of the flash drive is to have the District documents in an electronic form. The bid form (pricing document) is not required to be on the flash drive. All physical original documents supersede any document on the flash drive.

4. There are multiple locations where antenna guide cable is attached to RTUs that are to be replaced. These antennas are not in scope of work for this project. will contractor be responsible for removing and securing these antennae? **Response:** Yes, the contractor is responsible for removing and securing the antennae cables to a temporary location until the new unit is installed and secure back to new RTU after new unit is installed.

5. Is a Payment Bond and Performance Bond required with submission?

**Response:** Yes, both payment bond and performance bond are required with the submission.

The following items modify the Drawings and shall become part of the Contract Documents.

#### **REVISED & REISSUED DRAWINGS**

The following list of drawings notes drawings revised and re-issued in this addendum. Previous versions of these drawings shall be removed and replaced with these revised drawings. For a list of drawings that are revised in this addendum, but not re-issued, refer to the REVISIONS TO DRAWINGS article and the narration provided for the revisions to drawings not re-issued in this addendum.

#### 1. REVISED & REISSUED DRAWINGS

- 1. DM1.01 DEMOLITION FLOOR PLAN AREA 1 HVAC
- 2. DM1.02 DEMOLITION FLOOR PLAN AREA 2 HVAC
- 3. DM1.03 DEMOLITION FLOOR PLAN AREA 3 HVAC
- 4. DM1.04 DEMOLITION FLOOR PLAN AREA 4 HVAC
- 5. MP3.01 SCHEDULES AND LEGEND MECHANICAL & PLUMBING
- 6. E1.01 OVERALL FLOOR PLAN ELECTRICAL

#### **REVISIONS TO DRAWINGS NOT RE-ISSUED**

Please refer to the REVISED & REISSUED DRAWINGS article for a list of all drawings revised in this addendum. Previous versions of these drawings shall be removed and replaced with these revised drawings. The following list of drawings are revised in this addendum, but not re-issued. Refer to the narration provided for the revisions.

#### 1. REVISED (NOT RE-ISSUED) DRAWINGS

- 1. DMPE1.01 DEMOLITION ROOF PLAN MPE
  - A. Refer to Keynote 1 under Notes by Symbol and revise to read as follows:

    "1. REMOVE EXISTING NATURAL GAS ASSEMBLY FEEDING EXISTING ROOFTOP UNIT AND CAP FOR FUTURE CONNECTION TO NEW ROOFTOP UNIT. EXISTING GAS COCK/PLUG VALVE TO BE REMOVED AND REPLACED WITH NEW."
- 2. MPE1.01 ROOF PLAN MPE
  - A. Refer to Keynote 1 under Notes by Symbol and revise to read as follows:

    "1. CONTRACTOR TO REPLACE EXISTING NATURAL GAS ASSEMBLY TO NEW ROOF TOP UNIT. REFER TO DETAIL '1' ON DRAWING MP2.01 FOR GAS CONNECTION TO ROOF TOP UNIT DETAIL. EXTEND PIPING AND ADD ROOF TOP SUPPORTS AS REQUIRED FOR FINAL CONNECTION TO UNIT. PROVIDE NEW GAS COCK/PLUG VALVE AT EACH UNIT IN PLACE OF EXISTING."
- 3. DM1.05 DEMOLITION FLOOR PLAN AREA 5 HVAC
  - A. Refer to Keynote 3 under Notes by Symbol and revise to read as follows:

    "3. EXISTING EXHAUST FAN ON ROOF TO BE REMOVED AND REPLACED WITH NEW.
    DISCONNECT EXISTING DUCTWORK BELOW ROOF FROM EXISTING EXHAUST FAN AND
    CONNECT TO NEW FAN. EXISTING WALL SWITCH INTERLOCKED WITH EXISTING FAN
    TO REMAIN AND BE RE-USED."
  - B. Refer to Keynote 4 under Notes by Symbol and revise to read as follows:

    "4. EXISTING CEILING MOUNTED EXHAUST FAN TO BE REMOVED AND REPLACED WITH NEW. DISCONNECT EXISTING DUCTWORK FROM EXISTING EXHAUST FAN AND CONNECT TO NEW FAN. EXISTING WALL SWITCH INTERLOCKED WITH EXISTING FAN TO REMAIN AND BE RE-USED."

END OF RWB CONSULTING ENGINEERS' ADDENDUM ITEMS

#### Baxter HVAC Replacement Pre-Bid Meeting LA Mills Administration Building May 10, 2023 - 10: 00 AM

Print Name	Signature
Chris Simmons Intinity Contractors	Samo
Dawie Thampson Menhmera Ciston Servi	SES, INC
Naslian Host PWR	Nelger
Nat Gomes MISD	My
Chris , Johnson MISO	State of the state
Jose Martinez M75D	Day Miles
DARIN KASPER MISD	y gwriffing
JASON HAUSKA EAB	all the
Custis Cobusa United Melianical	
David Harrell - EAB	O-D Hamille
TROY Colson - JCA	True Colsen
John Menard	DET hi
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DEMOLITION FLOOR PLAN - AREA 1 - HVAC

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

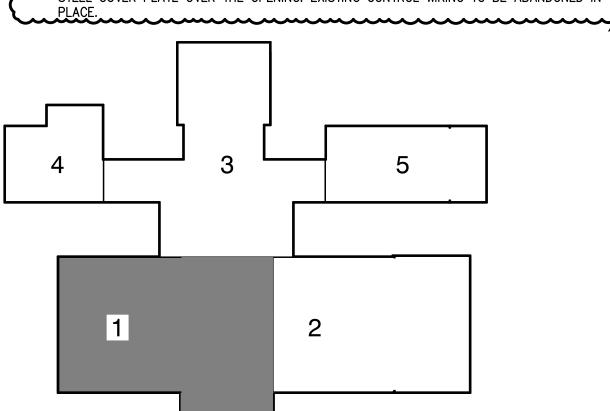
**GENERAL DEMOLITION NOTES:** 

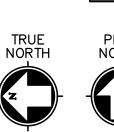
- 1. THE INFORMATION ON THE DEMOLITION DRAWINGS ARE NOT FROM "AS-BUILT" DRAWINGS BUT FROM ORIGINAL DRAWINGS. THIS INFORMATION IS INCLUDED FOR REFERENCE ONLY. CONTRACTOR WILL BE RESPONSIBLE FOR VISITING THE SITE PRIOR TO SUBMITTING A BID TO DETERMINE THE AMOUNT OF WORK THAT WILL BE REQUIRED. CONTRACTOR SHALL EXAMINE THE EXISTING BUILDING AND GENERALLY VERIFY THE LOCATION OF ALL EXISTING WORK AND BECOME INFORMED AS TO THE RELATION TO. AND EFFECT ON. THE WORK REQUIRED BEFORE SUBMITTING A BID. SUBMISSION OF A BID WILL CONSTITUTE EVIDENCE THAT THE CONTRACTOR HAS INSPECTED THE SITE OF THE PROPOSED WORK.
- 2. EXISTING MPE ITEMS TO BE REMOVED SHALL BE RETURNED TO THE OWNER OR DISPOSED OF AS DIRECTED BY THE DESIGNATED OWNER'S REPRESENTATIVE.
- 3. COORDINATE DEMOLITION WORK WITH THE BUILDING MAINTENANCE PERSONNEL AND OTHER TRADES PERFORMING WORK IN THE BUILDING PRIOR TO THE REMOVAL OF ANY ITEMS OF EQUIPMENT OR SYSTEMS THAT WILL EFFECT OTHER SYSTEMS WITHIN THE LIMIT OF NEW CONSTRUCTION OR OTHER AREAS OF THE BUILDING. THE BUILDING WILL BE OCCUPIED DURING CONSTRUCTION; AND, THEREFORE, UTILITIES MUST REMAIN IN OPERATION AT ALL TIMES. ANY REQUIRED OUTAGES MUST BE COORDINATED WITH THE OWNER.
- PRIOR TO THE REMOVAL OF ANY MPE ITEMS OR EQUIPMENT, CONTRACTOR MUST VERIFY THE ORIGIN AND TERMINATION OF THOSE SYSTEMS AND CONFIRM THAT THE ITEMS BEING REMOVED DO NOT SERVE ANY ITEMS THAT ARE TO REMAIN (INCLUDING THOSE IN AREAS OUTSIDE THE
- 5. CONTRACTOR SHALL CONTACT CONTROLS SYSTEM INSTALLER BEFORE ANY DEMOLITION WORK IS STARTED TO ALLOW THEM TO TAG & IDENTIFY ITEMS TO REMAIN AND BE PROTECTED AND ITEMS TO BE REMOVED. THE CONTROLS SYSTEM INSTALLER SHALL COORDINATE WITH THE OWNER FOR ELEMENTS OF THE EXISTING CONTROLS SYSTEM THAT SHALL BE CAREFULLY REMOVED AND GIVEN TO THE OWNER SUCH AS EXISTING TEMPERATURE SENSORS THAT WILL NOT BE RE-USED. ALL EXISTING TEMPERATURE ONLY SENSORS SERVING EXISTING RTUS SHALL BE CAREFULLY REMOVED, SHRINK WRAPPED, PALLETIZED, AND PROVIDED TO OWNER FOR THEIR USE.
- 6. DO NOT ABANDON ANY ITEMS IN PLACE, REMOVE ALL COMPONENTS ASSOCIATED WITH EACH ITEM CALLED OUT TO BE REMOVED. WHERE ITEMS ARE REMOVED PATCH/REPLACE ROOF, WALLS, CEILING OR FLOOR, AS APPLICABLE, TO MATCH EXISTING FINISHES, WHERE NEW FINISHES ARE CALLED FOR PATCHING SHALL MATCH THE NEW FINISH.
- 7. ALL EXISTING FIRE ALARM, SECURITY AND OTHER CEILING MOUNTED DEVICES TO REMAIN IN OPERATION DURING CONSTRUCTION AND BE RE-INSTALLED AS NEEDED. TEMPORARILY SUPPORT
- 8. ALL EXISTING LIGHTS ARE TO BE REUSED AND REMAIN IN PLACE, UNLESS NOTED OTHERWISE. CONTRACTOR TO SUPPORT LIGHTS ABOVE CEILING DURING ANY CEILING DEMOLITION.
- 9. CLEAN EXISTING RE-USED SUPPLY, RETURN AND EXHAUST GRILLES FREE OF ALL DUST AND
- 10. WHERE NEW SENSORS MOUNTED LOWER THAN ORIGINAL OR IN DIFFERENT LOCATION, PROVIDE STAINLESS STEEL COVER PLATE OVER OLD LOCATION, AND PROVIDE NEW WIRING IN GYPSUM OR PLASTER WALLS TO NEW LOCATION OR PROVIDE PANDUIT FROM CEILING TO NEW LOCATION FOR SENSOR INSTALLED ON BRICK OR CMU WALLS. CONTROLS CONTRACTOR TO PROVIDE COVER
- 11. REMOVE AND RE-INSTALL EXISTING LAY-IN AND GYPSUM CEILING AS REQUIRED TO ACCOMODATE NEW DUCTWORK. PROVIDE NEW TILE AND GRID AS NEEDED. PATCH AND REPAIR AREAS OF GYPSUM CEILING TO MATCH EXISTING WHERE REQUIRED. WHERE GYPSUM CEILING IS REMOVED, PAINT ENTIRE ROOM CEILING AFTER PATCHING.
- 12. WATER JET AND CLEAN ALL EXISTING CONDENSATE DRAIN LINES PRIOR TO RE-CONNECTING NEW UNITS TO EXISTING CONDENSATE DRAIN PIPNIG SYSTEM.
- 13. THE MECHANICAL CONTRACTOR / DEMOLITION CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR REGARDING THE SCOPE OF DEMOLITION FOR ELECTRICAL CONNECTIONS. THOSE UNITS BEING REMOVED SHALL BE SAFELY DISCONNECTED FROM EXISTING POWER.
- 14. CONTRACTOR SHALL COORDINATE REMOVAL OF EXISTING UNITS WITH DISTRICT, ALLOWING THE DISTRICT TO REMOVE ANY EXISTING UNIT COMPONENTS FOR SPARE STOCK.
- 15. PROVIDE FLOOR PROTECTION IN ALL AREAS OF DEMOLITION AND NEW WORK THROUGH OUT THE BUILDING FROM WORK AREA TO EXTERIOR. FLOORING PROTECTION TO BE FULL WIDTH OF CORRIDOR AND BE RAM BOARD OR EQUAL TYPE FLOOR PROTECTION.

# NOTES BY SYMBOL ' ::

- 1) EXISTING TEMPERATURE SENSOR TO BE REMOVED AND REPLACED WITH NEW. EXISTING SENSORS SHALL BE CAREFULLY REMOVED, WRAPPED, PALLETIZED, AND RETURNED TO DISTRICT (OWNER).
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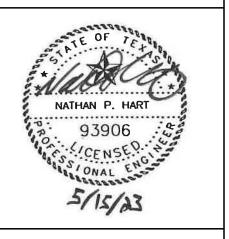
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**Consulting Engineers** 12001 N Central Expy TX Firm #F-2176 Suite 1100 (972) 788-4222 Dallas, TX 75243 Project 22146.00 Suite 1100 Dallas, TX 75243



2023.04.28

ISSUES 01 ISSUE FOR CONSTRUCTION | 2023.04.28 REVISIONS ()1 ADDENDUM 01 02 ADDENDUM 02 2023.05.15

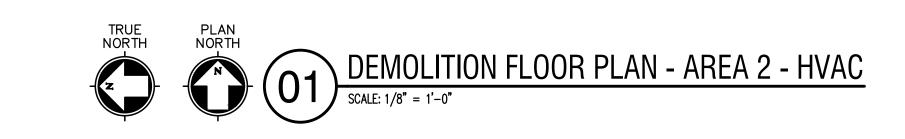


**DEMOLITION FLOOR** 

PLAN - AREA 1 - HVAC

JOB NO.: 22146-00 DRAWN BY: ND CHECKED BY: HV/NH SHEET NO.

DM1.01



## **GENERAL DEMOLITION NOTES:**

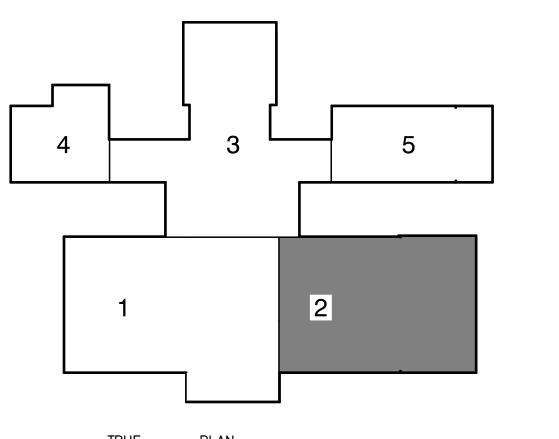
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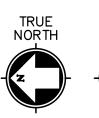
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- 11. REMOVE AND RE-INSTALL EXISTING LAY-IN AND GYPSUM CEILING AS REQUIRED TO ACCOMODATE NEW DUCTWORK. PROVIDE NEW TILE AND GRID AS NEEDED. PATCH AND REPAIR AREAS OF GYPSUM CEILING TO MATCH EXISTING WHERE REQUIRED. WHERE GYPSUM CEILING IS REMOVED, PAINT ENTIRE ROOM CEILING AFTER PATCHING.
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- (8) EXISTING EXHAUST FAN ABOVE CEILING TO BE REMOVED AND REPLACED WITH NEW. DISCONNECT EXISTING DUCTWORK FROM EXISTING EXHAUST FAN AND CONNECT TO NEW FAN EXISTING WALL SWITCH INTERLOCKED WITH EXISTING FAN TO REMAIN AND BE 2
- 9 EXISTING COMBINATION TEMPERATURE/HUMIDITY SENSORS TO REMAIN AND BE RE-USED FOR NEW UNITS.
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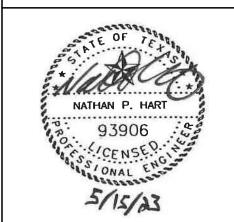






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2023.04.28

01 ISSUE FOR CONSTRUCTION | 2023.04.28

ISSUES

REVISIONS ()1 ADDENDUM 01 O2 ADDENDUM 02 2023.05.15



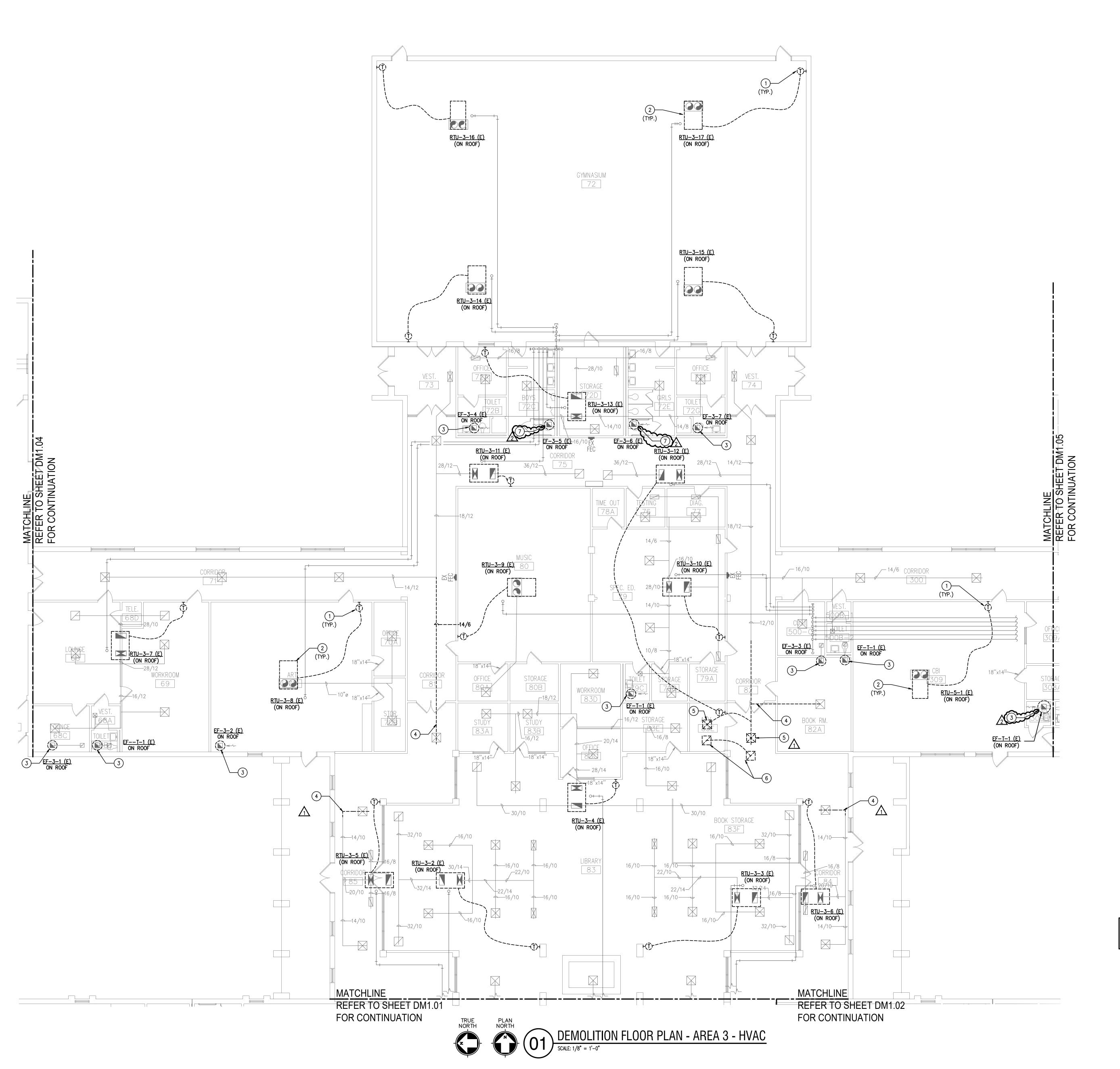


**DEMOLITION FLOOR** PLAN - AREA 2 - HVAC

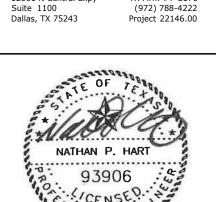
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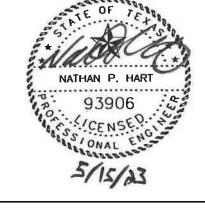
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2023.04.28

ISS	SUES	
01	ISSUE FOR CONSTRUCTION	2023.04.2
RE	VISIONS	
01	ADDENDUM 01	2023.05.0
02	ADDENDUM 02	2023.05.





PAINT ENTIRE ROOM CEILING AFTER PATCHING.

UNITS TO EXISTING CONDENSATE DRAIN PIPNIG SYSTEM.

**GENERAL DEMOLITION NOTES:** 

INSPECTED THE SITE OF THE PROPOSED WORK.

CONTRACT LIMITS).

DIRECTED BY THE DESIGNATED OWNER'S REPRESENTATIVE.

REQUIRED OUTAGES MUST BE COORDINATED WITH THE OWNER.

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DISTRICT TO REMOVE ANY EXISTING UNIT COMPONENTS FOR SPARE STOCK.

CORRIDOR AND BE RAM BOARD OR EQUAL TYPE FLOOR PROTECTION.

PLASTER WALLS TO NEW LOCATION OR PROVIDE PANDUIT FROM CEILING TO NEW LOCATION FOR SENSOR INSTALLED ON BRICK OR CMU WALLS. CONTROLS CONTRACTOR TO PROVIDE COVER

ITEM CALLED OUT TO BE REMOVED. WHERE ITEMS ARE REMOVED PATCH/REPLACE ROOF, WALLS, CEILING OR FLOOR, AS APPLICABLE, TO MATCH EXISTING FINISHES, WHERE NEW FINISHES ARE

OPERATION DURING CONSTRUCTION AND BE RE-INSTALLED AS NEEDED. TEMPORARILY SUPPORT

SHRINK WRAPPED, PALLETIZED, AND PROVIDED TO OWNER FOR THEIR USE.

2. EXISTING MPE ITEMS TO BE REMOVED SHALL BE RETURNED TO THE OWNER OR DISPOSED OF AS

CONTRACTOR WILL BE RESPONSIBLE FOR VISITING THE SITE PRIOR TO SUBMITTING A BID TO DETERMINE THE AMOUNT OF WORK THAT WILL BE REQUIRED. CONTRACTOR SHALL EXAMINE THE EXISTING BUILDING AND GENERALLY VERIFY THE LOCATION OF ALL EXISTING WORK AND BECOME INFORMED AS TO THE RELATION TO, AND EFFECT ON, THE WORK REQUIRED BEFORE SUBMITTING

- 1) EXISTING TEMPERATURE SENSOR TO BE REMOVED AND REPLACED WITH NEW. EXISTING SENSORS SHALL BE CAREFULLY REMOVED, WRAPPED, PALLETIZED, AND RETURNED TO DISTRICT (OWNER).
- 2 EXISTING RTU ON ROOF TO BE REMOVED AND REPLACED WITH NEW. DISCONNECT EXISTING DUCTWORK BELOW ROOF FROM EXISTING RTU AND RECONNECT WITH NEW UNIT.
- 3 EXISTING EXHAUST FAN ON ROOF TO BE REMOVED AND REPLACED WITH NEW.
  DISCONNECT EXISTING DUCTWORK BELOW ROOF FROM EXISTING EXHAUST FAN AND
  CONNECT TO NEW FAN EXISTING WALL SWITCH INTERLOCKED WITH EXISTING FAN TO
  REMAIN AND BE RE-USED.
- 4 EXISTING SUPPLY AIR DUCTWORK TO BE REMOVED FROM DIFFUSER BACK TO APPROXIMATE LOCATION SHOWN AND CAPPED. EXISTING DIFFUSER TO REMAIN AND BE

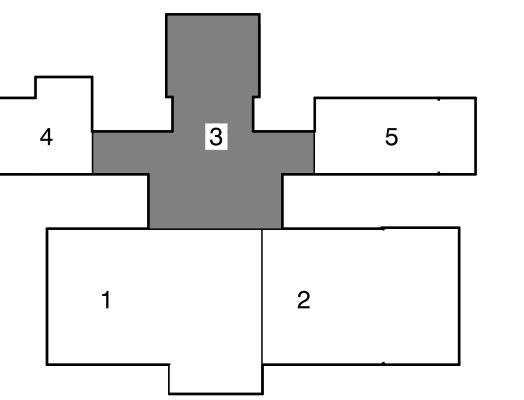
(6) EXISTING TRANSFER AIR GRILLE AND ASSOCIATED DUCTWORK TO BE REMOVED. PROVIDE

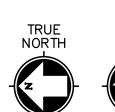
WIRING TO BE ABANDONED IN PLACE.

5 EXISTING SUPPLY AIR DIFFUSER AND ASSOCIATED DUCTWORK TO BE REMOVED BACK TO APPROXIMATE LOCATION SHOWN AND CAPPED.

NEW CEILING TILE IN PLACE OF REMOVED EXISTING TRANSFER AIR GRILLE IN CORRIDOR

SIMILAR TO "USG-FSRD-FC". EXISTING EXHAUST FAN ON ROOF TO BE REMOVED AND REPLACED WITH NEW. DISCONNECT EXISTING DUCTWORK BELOW ROOF FROM EXISTING EXHAUST FAN AND CONNECT TO NEW FAN. REMOVE EXISTING WALL SWITCH INTERLOCKED WITH EXISTING FAN AND PROVIDE STAINLESS STEEL COVER PLATE OVER THE OPENING. EXISTING CONTROL







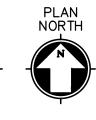
JOB NO.: 22146-00 DRAWN BY: ND CHECKED BY: HV/NH SHEET NO.

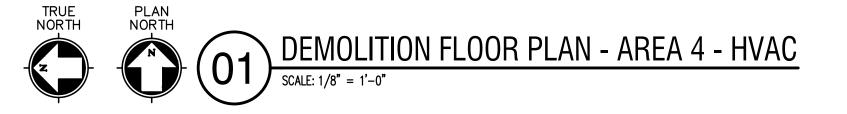
DM1.03

**DEMOLITION FLOOR** 

PLAN - AREA 3 - HVAC











2023.04.28

ISS	SUES	
01	ISSUE FOR CONSTRUCTION	2023.04.2
RE	VISIONS	
01	ADDENDUM 01	2023.05.0
02	ADDENDUM 02	2023.05.1





PAINT ENTIRE ROOM CEILING AFTER PATCHING.

UNITS TO EXISTING CONDENSATE DRAIN PIPNIG SYSTEM.

**GENERAL DEMOLITION NOTES:** 

DIRECTED BY THE DESIGNATED OWNER'S REPRESENTATIVE.

REQUIRED OUTAGES MUST BE COORDINATED WITH THE OWNER.

CALLED FOR PATCHING SHALL MATCH THE NEW FINISH.

INSPECTED THE SITE OF THE PROPOSED WORK.

CONTRACT LIMITS).

PLATES AND PANDUIT.

1. THE INFORMATION ON THE DEMOLITION DRAWINGS ARE NOT FROM "AS-BUILT" DRAWINGS BUT FROM ORIGINAL DRAWINGS. THIS INFORMATION IS INCLUDED FOR REFERENCE ONLY.

A BID. SUBMISSION OF A BID WILL CONSTITUTE EVIDENCE THAT THE CONTRACTOR HAS

3. COORDINATE DEMOLITION WORK WITH THE BUILDING MAINTENANCE PERSONNEL AND OTHER

TRADES PERFORMING WORK IN THE BUILDING PRIOR TO THE REMOVAL OF ANY ITEMS OF EQUIPMENT OR SYSTEMS THAT WILL EFFECT OTHER SYSTEMS WITHIN THE LIMIT OF NEW CONSTRUCTION OR OTHER AREAS OF THE BUILDING. THE BUILDING WILL BE OCCUPIED DURING CONSTRUCTION; AND, THEREFORE, UTILITIES MUST REMAIN IN OPERATION AT ALL TIMES. ANY

4. PRIOR TO THE REMOVAL OF ANY MPE ITEMS OR EQUIPMENT, CONTRACTOR MUST VERIFY THE ORIGIN AND TERMINATION OF THOSE SYSTEMS AND CONFIRM THAT THE ITEMS BEING REMOVED DO NOT SERVE ANY ITEMS THAT ARE TO REMAIN (INCLUDING THOSE IN AREAS OUTSIDE THE

5. CONTRACTOR SHALL CONTACT CONTROLS SYSTEM INSTALLER BEFORE ANY DEMOLITION WORK IS STARTED TO ALLOW THEM TO TAG & IDENTIFY ITEMS TO REMAIN AND BE PROTECTED AND ITEMS TO BE REMOVED. THE CONTROLS SYSTEM INSTALLER SHALL COORDINATE WITH THE OWNER FOR ELEMENTS OF THE EXISTING CONTROLS SYSTEM THAT SHALL BE CAREFULLY REMOVED AND GIVEN TO THE OWNER SUCH AS EXISTING TEMPERATURE SENSORS THAT WILL NOT BE RE-USED. ALL EXISTING TEMPERATURE ONLY SENSORS SERVING EXISTING RTUS SHALL BE CAREFULLY REMOVED,

6. DO NOT ABANDON ANY ITEMS IN PLACE, REMOVE ALL COMPONENTS ASSOCIATED WITH EACH

7. ALL EXISTING FIRE ALARM, SECURITY AND OTHER CEILING MOUNTED DEVICES TO REMAIN IN

8. ALL EXISTING LIGHTS ARE TO BE REUSED AND REMAIN IN PLACE, UNLESS NOTED OTHERWISE. CONTRACTOR TO SUPPORT LIGHTS ABOVE CEILING DURING ANY CEILING DEMOLITION.

9. CLEAN EXISTING RE-USED SUPPLY, RETURN AND EXHAUST GRILLES FREE OF ALL DUST AND

10. WHERE NEW SENSORS MOUNTED LOWER THAN ORIGINAL OR IN DIFFERENT LOCATION, PROVIDE

STAINLESS STEEL COVER PLATE OVER OLD LOCATION, AND PROVIDE NEW WIRING IN GYPSUM OR PLASTER WALLS TO NEW LOCATION OR PROVIDE PANDUIT FROM CEILING TO NEW LOCATION FOR SENSOR INSTALLED ON BRICK OR CMU WALLS. CONTROLS CONTRACTOR TO PROVIDE COVER

11. REMOVE AND RE-INSTALL EXISTING LAY-IN AND GYPSUM CEILING AS REQUIRED TO ACCOMODATE NEW DUCTWORK. PROVIDE NEW TILE AND GRID AS NEEDED. PATCH AND REPAIR AREAS OF GYPSUM CEILING TO MATCH EXISTING WHERE REQUIRED. WHERE GYPSUM CEILING IS REMOVED,

12. WATER JET AND CLEAN ALL EXISTING CONDENSATE DRAIN LINES PRIOR TO RE-CONNECTING NEW

13. THE MECHANICAL CONTRACTOR / DEMOLITION CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR REGARDING THE SCOPE OF DEMOLITION FOR ELECTRICAL CONNECTIONS. THOSE

14. CONTRACTOR SHALL COORDINATE REMOVAL OF EXISTING UNITS WITH DISTRICT, ALLOWING THE

15. PROVIDE FLOOR PROTECTION IN ALL AREAS OF DEMOLITION AND NEW WORK THROUGH OUT THE BUILDING FROM WORK AREA TO EXTERIOR. FLOORING PROTECTION TO BE FULL WIDTH OF

UNITS BEING REMOVED SHALL BE SAFELY DISCONNECTED FROM EXISTING POWER.

DISTRICT TO REMOVE ANY EXISTING UNIT COMPONENTS FOR SPARE STOCK.

CORRIDOR AND BE RAM BOARD OR EQUAL TYPE FLOOR PROTECTION.

ITEM CALLED OUT TO BE REMOVED. WHERE ITEMS ARE REMOVED PATCH/REPLACE ROOF, WALLS, CEILING OR FLOOR, AS APPLICABLE, TO MATCH EXISTING FINISHES, WHERE NEW FINISHES ARE

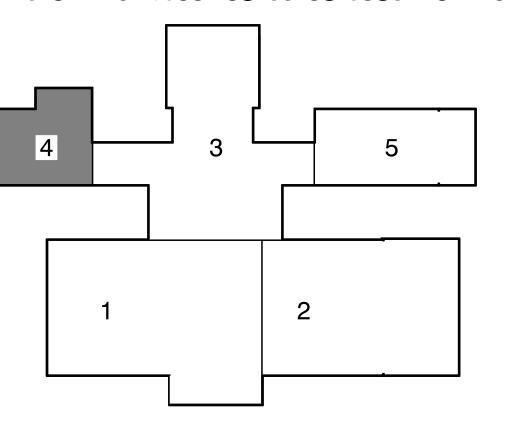
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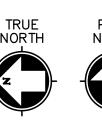
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- 3 EXISTING EXHAUST FAN ON ROOF TO BE REMOVED AND REPLACED WITH NEW. DISCONNECT EXISTING DUCTWORK BELOW ROOF FROM EXISTING EXHAUST FAN AND CONNECT TO NEW FAN. EXISTING WALL SWITCH INTERLOCKED WITH EXISTING FAN TO REMAIN AND BE RE-USED. (4) EXISTING MAKE-UP AIR FAN ON ROOF TO BE REMOVED AND REPLACED WITH NEW.
- DISCONNECT EXISTING DUCTWORK BELOW ROOF FROM EXISTING EXHAUST FAN AND CONNECT TO NEW FAN. 5 REMOVE EXISTING EXTERNAL INSULATION ON EXISTING EXHAUST DUCTWORK FROM
- HOOD CONNECTION BACK TO FAN CONNECTION ON ROOF. 6 REMOVE EXISTING EXTERNAL INSULATION ON EXISTING MAKE-UP AIR DUCTWORK
  - FROM HOOD CONNECTION BACK TO FAN CONNECTION ON ROOF.
- 7) EXISTING RETURN AIR DUCTWORK TO BE REMOVED FROM GRILLE BACK TO RTU CONNECTION ON ROOF.
- (8) EXISTING RETURN AIR GRILLE TO REMAIN AND BE RE-USED. EXISTING EXHAUST FAN ON ROOF TO BE REMOVED AND REPLACED WITH NEW. DISCONNECT EXISTING DUCTWORK BELOW ROOF FROM EXISTING EXHAUST FAN AND CONNECT TO NEW FAN. REMOVE EXISTING WALL SWITCH INTERLOCKED WITH EXISTING FAN AND PROVIDE STAINLESS STEEL COVER PLATE OVER THE OPENING. EXISTING CONTROL WIRING TO BE ABANDONED IN PLACE.







JOB NO.: 22146-00 DRAWN BY: ND CHECKED BY: HV/NH SHEET NO.

DM1.04

DEMOLITION FLOOR PLAN - AREA 4 - HVAC

DESIGNATION	RTU-KITCHEN	RTU-STAGE	RTU-CAFE-NW	RTU-CAFE-SW/ CAFE-SE/ CAFE-NE	RTU-WORKROOM	RTU-ART	RTU-GYM-NE/ GYM-NW /GYM-SE /GYM-SW	, RTU-72D	RTU-75N & 75S	RTU-79	RTU-MUSIC	RTU-LIB-E & W	RTU-LIB-N & S	RTU-84 & 85	RTU-86	RTU-100 /200 /400 /500	RTU-101/102/ 104/105 /106/201 /202/203 /206/207	RTU-103 /204/205	RTU-107	RTU-108	RTU-301/302/ 303/306 /307/308/309	RTU-401/402/ 403/407 /408/409/501 /502/503/507 /508/509	RTU-300B	RTU-304	RTU-305	RTU-B119	RTU-404/405/ 505/506	RTU-406 & 504	RTU-C103	RTU-C106	RTU-A/V
SENCE SENCY SERVING	KITCHEN	STAGE	CAFETORIUM	CAFETORIUM	WORKROOM	ART	GYMNASIUM	GYM OFFICES	CORRIDORS	SPEC. ED.	MUSIC	LIBRARY	LIBRARY	CORRIDOR	CORRIDOR	CORRIDOR	CLASSROOMS/ CONFERENCE RM	CLASSROOMS	E.S.L.	LAB	PRE-K./KINDERG ARTEN/PPCD/CBI	CLASSROOMS	CORRIDOR	KINDERGARTEN & OFFICE	KINDERGARTEN & OFFICE	CORRIDORS	CLASSROOMS	CLASSROOMS	PRINCIPAL	CONF	A/V ROOM
MANUFACTURER	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE
MODEL NO.	YHJ090	YHC067	YHJ090	YHC067	YHC047	YHC047	YHC067	YHC037	YHC047	YHC047	YHC047	YHC047	YHC067	4YCZ5036	YHC037	YHC067	YHC037	YHC047	4YCZ5024	4YCZ5036	YHC047	YHC037	4YCZ5024	YHC047	YHC047	YHC047	YHC037	YHC037	YHC067	YHJ090	4YCZ5024
MAXIMUM WEIGHT, LBS.	1070	1000	1070	1000	980	980	1000	770	980	980	980	980	1000	400	770	1000	770	980	370	400	980	770	370	980	980	980	770	770	1000	1070	370
NOMINAL CAPACITY	7.5	5	7.5	5	4	4	5	3	4	4	4	4	5	3	3	5	3	4	2	3	4	3	2	4	4	4	3	3	5	5	2
		•		•	•	•	1	1			•	1	1			1	1	1		1	•		1		1	1	1	•			
SUPPLY AIR, CFM	3000	1750	2700	2000	1600	1400	1750	1100	1600	1400	1400	1400	1750	1200	1200	2000	1200	1400	800	1200	1400	1200	800	1400	1440	1400	1100	1150	2000	2000	800
MIN. MIN./MIN. MAX./MAX. OUTSIDE AIR, CFM	500/1000/ 3000	400/1750	300/900/2700	250/600/2000	200/1600	400/1400	250/500/1750	300/1100	140/1600	300/1400	380/1400	170/290/1400	250/500/1750	150/1200	150/1200	600/2000	400/1200	350/1400	150/800	250/1200	440/1400	350/1200	100/800	400/1400	450/1440	450/1400	400/1100	390/1150	350/2000	350/2000	150/800
EXTERNAL STATIC PRESSURE, IN. W.G.	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
MAXIMUM FAN RPM	1190	910	1190	980	870	830	910	850	870	830	830	830	910	_	880	980	880	830	-	_	830	880		800	840	830	850	860	980	980	_
MINIMUM MOTOR HP	3.0	1.0	3.0	1.0	1.0	1.0	1.0	0.75	1.0	1.0	1.0	1.0	1.0	0.75	0.75	1.0	0.75	1.0	0.5	0.5	1.0	0.75	0.5	1.0	1.0	1.0	0.75	0.75	0.75	0.75	0.5
		1		1		1						<u></u>	<u></u>						T		_		Ţ			<u></u>		T			
COIL ENTERING AIR, DB/WB -	82.7/66.1	79.6/66.1	81.8/67.1	81.9/66.6	77.0/63.6	82.3/64.9	81.3/65.9	80.9/64.1	75.9/62.1	79.9/65.9	80.7/65.4	80.1/64.8	82.0/65.6	76.6/63.0	77.7/63.7	82.5/65.3	82.5/66.4	81.1/65.9	79.8/65.3	78.6/64.8	83.5/66.3	83.3/66.5	77.0/63.8	82.1/66.9	82.6/67.1	83.6/67.3	83.3/67.4	82.2/67.0	80.5/65.6	80.5/65.6	79.3/63.5
COIL L.A.T., D.B./W.B F°	58.0/57.0	57.0/56.0	59.0/58.0	59.0/58.0	56.0/55.0	56.0/55.0	57.0/56.0	56.0/55.0	55.0/54.0	57.0/56.0	57.0/56.0	57.0/56.0	57.0/56.0	56.0/55.0	56.0/55.0	57.0/56.0	58.0/57.0	58.0/57.0	57.0/56.0	57.0/56.0	57.0/56.0	58.0/57.0	57.0/56.0	57.0/56.0	57.0/56.0	58.0/57.0	57.0/56.0	57.0/56.0	57.5/56.5	57.5/56.5	57.0/56.0
AMBIENT AIR, DB - F*	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
TOTAL CAPACITY,MBH	85.73	55.68	88.83	55.62	41.69	42.65	54.42	30.15	37.66	43.53	41.14	38.24	52.61	26.14	31.70	58.05	35.59	43.53	32.78	22.93	45.55	36.45	19.15	42.90	46.10	45.99	38.90	38.80	57.24	57.24	20.34
SENSIBLE CAPACITY, MBH	80.66	42.94	74.35	49.83	36.44	39.96	46.14	29.78	36.27	34.84	36.11	35.16	47.61	24.59	28.24	55.39	31.93	36.6	28.21	19.87	40.27	33.04	17.35	33.00	36.10	38.94	29.60	29.90	50.04	50.04	20.26
MAX. AIR P.D., IN. W.G.	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
MAX. FACE VELOCITY, FPM	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
STAGES OF COOLING	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
SEER/EER @ ARI CONDITIONS	16.6/12.1	17.2/13.0	16.6/12.1	17.2/13.0	17.5/13.0	17.5/13.0	17.2/13.0	17.5/13.0	17.5/13.0	17.5/13.0	17.5/13.0	17.5/13.0	17.2/13.0	15.0/11.0	17.5/13.0	17.5/13.0	17.5/13.0	17.5/13.0	15.0/11.0	15.0/11.0	17.5/13.0	17.5/13.0	15.0/11.0	17.5 / 13.0	17.5 / 13.0	17.5/13.0	17.5/13.0	17.5/13.0	17.2/13.0	17.2/13.0	15.0/11.0
ENTERING AIR DB — F°	53.3	60.0	55.0	55.0	63.8	55.7	55.7	56.4	65.6	59.3	56.4	59.6	55.7	55.6	63.8	52.9	55.4	57.5	60.6	59.6	54.3	55.4	63.8	48.4	53.4	59.9	51.0	51.9	61.3	55.0	60.6
DESIGN LEAVING AIR DB - F*	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
TYPE OF HEAT	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS		NATURAL GAS		NATURAL GAS	NATURAL GAS		_		NATURAL GAS	NATURAL GAS	+	NATURAL GAS	NATURAL GAS		NATURAL GAS	+	NATURAL GAS	NATURAL GAS
HEATING INPUT, MBTUH	105.0/150.0	80.0	105.0/150.0	80.0	80.0	80.0	80.0	60.0	80.0	80.0	80.0	80.0	80.0	56.0/70.0	60.0	80	60.0	80.0	48.0/60.0	56.0/70.0	80.0	60.0	48.0/60.0	80.0	80.0	60.0	60.0	60.0	80	150	48.0/60.0
HEATING OUTPUT, MBTUH	85.0/121.5	64.0	85.0/121.5	64.0	64.0	64.0	64.0	48.0	64.0	64.0	64.0	64.0	64.0	45.0/56.0	48.0	64	48.0	64.0	38.0/48.0	45.0/56.0	64.0	48.0	38.0/48.0	64.0	64.0	48.0	48.0	48.0	64	121.5	38.0/48.0
STAGES OF CONTROL	2	1	<del>                                     </del>	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	2	1	1	2	1	1	1	1	1	1		2
MINIMUM AFUE EFF. %	81%	80%	81%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	81%	81%	80%	80%	81%	80%	80%	80%	80%	80%	80%	80%	81%
					•				•						•													•			
volts/Phase	460/3	460/3	460/3	460/3	460/3	460/3	460/3	460/3	460/3	460/3	460/3	460/3	460/3	208/1	460/3	460/3	460/3	460/3	208/1	208/1	460/3	460/3	208/1	460/3	460/3	460/3	460/3	460/3	460/3	460/3	208/1

22.9

35.0

1-6-8,10,11 | 2,4,6,9-11,13 | 1-6,10,11 | 1-6,8,10,11

12.0

15.0

15.0

2" - PLEATED | 2" - P

CAMFILL FARR/ CA

15.0

8 (RTU-102,104, 105,202,203,

207)

22.9

35.0

1-6,8,10,11 | 2,4,6,9-11,13 | 2,4,6,9-11,13 | 1-6,8,10,11

. PROVIDE MANUFACTURER FURNISHED, UNIT MOUNTED, NON-FUSED DISCONNECT SWITCH. . PROVIDE ECONOMIZER WITH BAROMETRIC RELIEF DAMPERS OR POWERED EXHAUST. REFER TO SPECIFICATIONS.

15.0

20.0

1-6,8,10,11

21.0

20.0

3. PROVIDE UNIT WITH HOT GAS REHEAT OPTION. 4. MATCH EQUIPMENT NAME TAGS WITH OWNER'S PERMANENT ROOM NUMBERS.

MIN. CIRCUIT AMPS REQUIRED

딕 MAX. OVERCURRENT

터 PROTECTION-AMPS

₹ THICKNESS/DEPTH - TYPE

│ MAX. A.P.D. CLEAN, IN. W.G.

☐ | MANUFACTURER/MODEL NO.

REMARKS

5. PROVIDE ALL UNITS WITH MULTI-SPEED FANS. 6. TWO OUTSIDE AIR VALUES ARE FOR MINIMUM AND ECONOMIZER

8. PROVIDÈ MANUFACTURER FURNISHED NON-POWERED SERVICE OUTLET ON UNIT. 9. PROVIDE RETURN AIR MOUNTED SMOKE DUCT DETECTOR FOR UNIT. COORDINATE WITH FIRE ALARM CONTRACTOR.

10. PROVIDE MANUFACTURER FURNISHED OVERFLOW PROTECTION SWITCH IN DRAIN PAN OF UNIT WITH DRY CONTACTS AND SHALL BE WIRED BY CONTROLS CONTRACTOR. 11. IF UNIT INCLUDES VFD TO MODULATE SUPPLY AIR FAN TO MATCH THE LOAD, MANUFACTURER TO PROVIDE AND LEAVE VFD COVERR FACE TO ALLOW FOR FUTURE ADJUSTMENTS AS NEEDED.

1-5,7-12 | 8 (RTU-CAFE-SE) |

12. THREE OUTSIDE AIR VALUES ARE FOR KITCHEN HOOD MAKE-UP AIR. 13. PROVIDE CONTRACTOR FURNISHED, UNIT MOUNTED, NON-FUSED DISCONNECT SWITCH

. THREE (3) OUTSIDE AIR VALUES ARE FOR CARBON DIOXIDE CONTROL OF OUTSIDE AIR.

25.0

1-5,8-12

FAN SCHED	ULL T	T	Γ	<del></del>		T	T			<del></del>				T	Т
DESIGNATION	EF-RR-100E/100F/ 200E/200F/400E/ 400F/500E/500F	EF-CUST-100C/ 200C/400C/STOR-5 00B	EF-DARK-90B	EF-CUST-88/ LOUNGE-68C/ RR-64A/ RR-65A	EF-ART	EF-CUST-500-C	EF-RR-72B & 72G	EF-RR-72C & 72E	EF-CUST-60	EF-RR-301C/302B/ 303B/306B/307B/ 308B/309B/ 500-B-2/54A/68B /79C/87C/97B/ C107B	EF-RR-B111	EF-MECH-B112	EF-RR-B109/304C/ 305C	KEF-KITCHEN	SF-KIT
AIR SYSTEM	EXHAUST	EXHAUST	EXHAUST	EXHAUST	EXHAUST	EXHAUST	EXHAUST	EXHAUST	EXHAUST	EXHAUST	EXHAUST	EXHAUST	EXHAUST	KITCHEN EXHAUST	MAKE-UP
SERVES	TOILETS	CUST./STORAGE	DARK RM.	CUST./LOUNGE/ TOILETS	ART	CUST.	TOILETS	TOILETS	CUST.	TOILETS	TOILETS	MECH	TOILETS	KITCHEN HOOD	KITCHEN HOOD
MOUNTING	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	CEILING	CEILING	ROOF	ROOF
TYPE	DOWNBLAST	DOWNBLAST	DOWNBLAST	DOWNBLAST	DOWNBLAST	DOWNBLAST	UPBLAST	UPBLAST	DOWNBLAST	DOWNBLAST	DOWNBLAST	INLINE	INLINE	UPBLAST	CENTRIFUGAL
CAPACITY, CFM	450	275	125	150	750	110	100	275	50	75	600	50	75	3780	1500
EXT. SP. IN. W.G.	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.125	0.125	1.0	0.75
DRIVE TYPE	BELT	BELT	BELT	BELT	BELT	BELT	BELT	BELT	BELT	BELT	BELT	DIRECT	DIRECT	BELT	BELT
MIN. WHEEL DIA. IN	12	13.5	12	13.5	12	12	12	13.5	12	12	13.5	_	-	30	10
FAN RPM	900	1050	980	930	930	940	920	820	790	830	1170	560	720	940	920
MIN MOTOR H.P.	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	21.2 WATTS	27.4 WATTS	1-1/2	1/2
VOLTS/PHASE	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	277/1	277/1	208/3	120/1
MFG./MODEL NO.	COOK 120 ACEB OR91	COOK 135 ACEB 0R70	COOK 120 ACEB OR60	COOK 135 ACEB OR60	COOK 120 ACEB OR92	COOK 120 ACEB OR60	COOK 120 ACRUB OR60	COOK 135 ACRUB OR80	COOK 120 ACEB OR60	COOK 120 ACEB OR60	COOK 135 ACEB OR91	COOK GC-146	COOK GC-146	COOK 300 VCR-XP	COOK KSP-B 100KSP-B
CONTROLS	EMS	EXISTING WALL SWITCH	EXISTING WALL SWITCH	EXIST. WALL SWITCH (EF-CUST-88 & LOUNGE-68C) EMS (EF-RR-64A & 65A)	EXISTING WALL SWITCH	EXISTING WALL SWITCH	EXISTING WALL SWITCH	EMS	EXISTING WALL SWITCH	EXISTING WALL SWITCH	EMS	EXISTING WALL SWITCH	EXISTING WALL SWITCH	HOOD/EMS/ INFRARED SENSOR	HOOD/KEF-KITCHEN
COMMENTS			<del></del>		<del>~~~~~</del>				<del>~~~~~</del>	<u>/2</u> \		<del>~~~~~</del>	2	SELECT AT 300 DEG. F	

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8 (RTU-LIB-N

& LIB-W)

1. WALL SWITCHES: REFER TO MOTOR STARTER SWITCHES TO BE FURNISHED UNDER DIVISION 23 AND INSTALLED UNDER DIVISION 26 (RECESSED IN WALL). 2. EMS: FAN TO BE CONTROLLED BY ENERGY MANAGEMENT SYSTEM.

3. MOTOR STARTER CAN SUBSTITUTE AS FAN DISCONNECT WHERE NOT WALL MOUNTED AND LOCATED AT FAN MOTOR. A DISCONNECT CANNOT SUBSTITUTE FOR A MOTOR STARTER.

4. DIRECT DRIVE FANS TO HAVE ECM CONTROLLER. 5. ALL FANS SHALL BE INTERLOCKED WITH SIMILAR CONTROLS METHOD AS EXISTING (EMS/WALL SWITCH). IN CASE THE EXISTING CONTROLS CANNOT BE RE-USED, PROVIDE NEW CONTROLS AS NOTED.

GRILL	ES, REGISTERS AND	DIFFUSERS							
DESIG.	TYPE	MOUNTING TYPE	MATERIAL	FINISH	MAX. N.C. LVL.	OPPOSED DAMPER BLADE	EQUALIZING GRID	MFG. / MODEL	DESCRIPTION/REMARKS
А	RETURN GRILLE	SURFACE OR LAY-IN	ALUMINUM	WHITE	30	NO	NO	TITUS 50F	1/2"x1/2"x1" EGG CRATE WITH FRAMED BORDER. DO NOT STACK 1/2" HIGH GRILLES
В	SUPPLY DIFFUSER - LOUVERED	SURFACE OR LAY-IN	STEEL	WHITE	30	NO	NO	TITUS TMS	24"x24" FACE

——CD——	CONDENSATE DRAIN
——AD——	AUXILIARY DRAIN LINE
RS	REFRIGERANT SUCTION
RL	REFRIGERANT LIQUID
	SLOPE DOWN IN DIRECTION OF ARROW
<del></del>	RISE AND DROP IN PIPIING
<b>——</b>	FLOW IN DIRECTION OF ARROW
•	CONNECT TO EXISTING
	EXISTING WORK TO REMAIN
	NEW WORK
	DEMOLITION WORK
Φ	THERMOSTAT/TEMPERATURE SENSOR
Ф	HUMIDITY SENSOR
©	CARBON DIOXIDE SENSOR
M	CARBON MONOXIDE SENSOR
S	DUCT SMOKE DETECTOR
\$	WALL SWITCH
\$P	WALL SWITCH WITH PUSHBUTTON
<b>—</b>	SUPPLY AIR ARROW
<b>←</b> ^-	RETURN AIR ARROW
R	RISE IN DUCT
D	DROP IN DUCT
	SUPPLY DUCT
	RETURN OR EXHAUST DUCT
	MANUAL DAMPER
M	MOTORIZED DAMPER
<b>▼</b> F.D.	FIRE DAMPER
<b>▼</b> F.S.D	FIRE/SMOKE DAMPER

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| (RTU-402,407, | 2,4,6,9-11,13 | 1-6,10,11

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503,507,508)

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DRAIN, INDIRECT  EXISTING TO REMAIN  X X X EXISTING TO BE REMOVED  GAS METER  ROOF PIPE SUPPORT  PLUG VALVE  CAP  DIRECTION OF SLOPE  DIRECTION OF FLOW  RISE & DROP IN PIPING  C.O.   C.O. CLEANOUT  BALL VALVE  CHECK VALVE  UNION	
EXISTING TO REMAIN  X X EXISTING TO BE REMOVED  GAS METER  ROOF PIPE SUPPORT  PLUG VALVE  CAP  DIRECTION OF SLOPE  DIRECTION OF FLOW  RISE & DROP IN PIPING  C.O.   C.O. CLEANOUT  BALL VALVE  CHECK VALVE  UNION	
X X X GAS METER  GAS METER  ROOF PIPE SUPPORT  PLUG VALVE  CAP  DIRECTION OF SLOPE  DIRECTION OF FLOW  RISE & DROP IN PIPING  C.O.   C.O.   CLEANOUT  BALL VALVE  CHECK VALVE  UNION	
GAS METER  ROOF PIPE SUPPORT  PLUG VALVE  CAP  DIRECTION OF SLOPE  DIRECTION OF FLOW  RISE & DROP IN PIPING  C.O.   C.O.   CLEANOUT  BALL VALVE  CHECK VALVE  UNION	
ROOF PIPE SUPPORT  PLUG VALVE  CAP  DIRECTION OF SLOPE  DIRECTION OF FLOW  RISE & DROP IN PIPING  C.O. CLEANOUT  BALL VALVE  CHECK VALVE  UNION	
PLUG VALVE  CAP  DIRECTION OF SLOPE  DIRECTION OF FLOW  RISE & DROP IN PIPING  C.O., C.O. CLEANOUT  BALL VALVE  CHECK VALVE  UNION	
—————————————————————————————————————	
DIRECTION OF SLOPE  DIRECTION OF FLOW  RISE & DROP IN PIPING  C.O.   C.O.   CLEANOUT  BALL VALVE  CHECK VALVE  UNION	
DIRECTION OF FLOW	
— +○ → → RISE & DROP IN PIPING  C.O.	
BALL VALVE  CHECK VALVE  UNION	
CHECK VALVE UNION	
——————————————————————————————————————	
<u>'</u>	
SHOCK ARRESTOR	
GAUGE COCK	
PRESSURE GAUGE W/GAUGE COC	K
THERMOMETER	
NON-FREEZE ROOF HYDRANT	
NEW CONNECTION TO EXISTING	
CO CLEAN OUT	
WCO WALL CLEAN OUT	
VTR VENT THROUGH ROOF	
(E) EXISTING UTILITIES	

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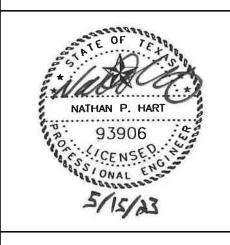
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12001 N Central Expy TX Firm #F-2176 Suite 1100 (972) 788-4222 Dallas, TX 75243 Project 22146.00



2023.04.28

ISS	SUES	
01	ISSUE FOR CONSTRUCTION	2023.04.2
RE	VISIONS	•
01	ADDENDUM 01	2023.05.0
02	ADDENDUM 02	2023.05.

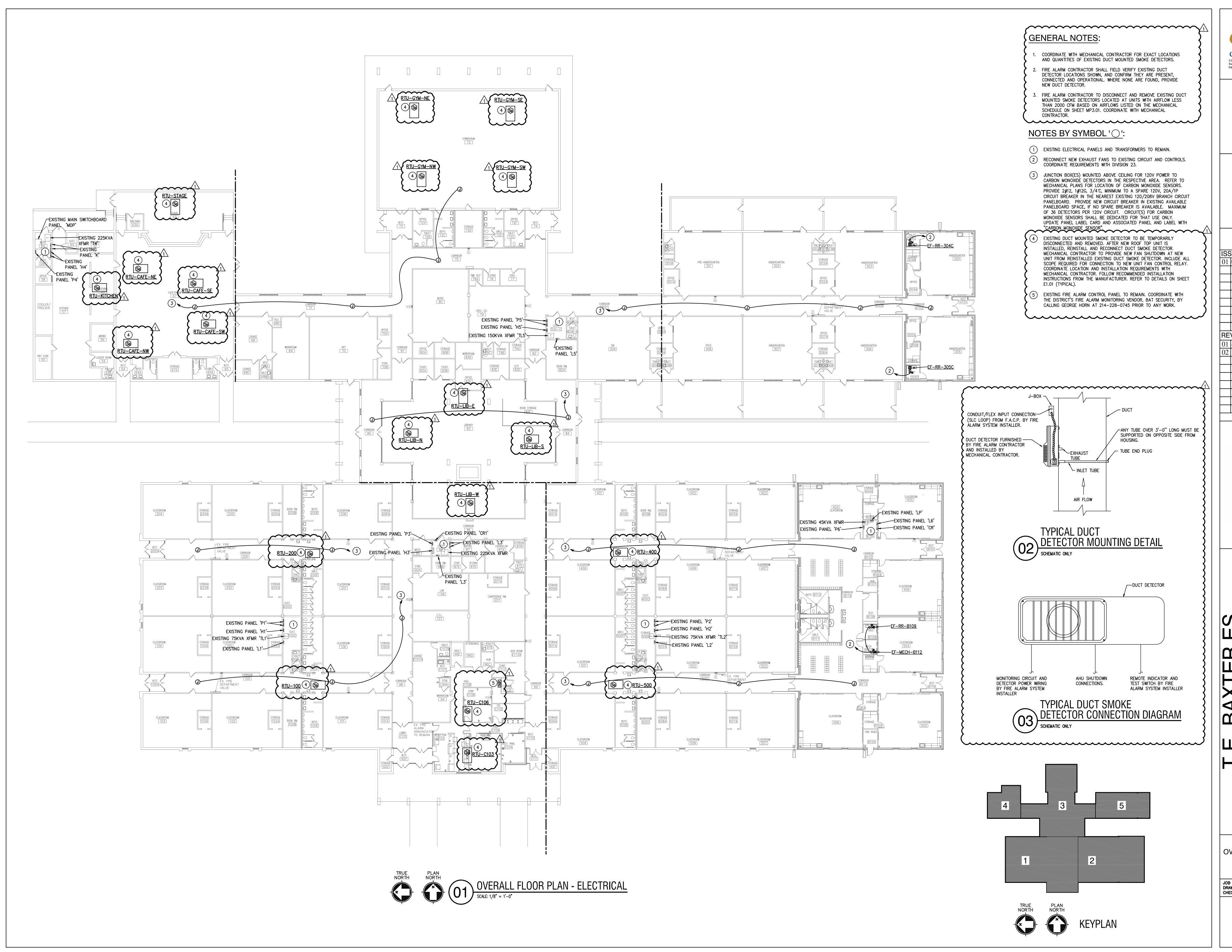




SCHEDULES & LEGEND - MECHANICAL & PLUMBING

JOB NO.: 22146-00 DRAWN BY: ND CHECKED BY: HV/NH

SHEET NO.





**Consulting Engineers** 12001 N Central Expy TX Firm #F-2176 Suite 1100 (972) 788-4222 Dallas, TX 75243 Project 22146.00 Suite 1100 Dallas, TX 75243



2023.04.28

()1 ISSUE FOR CONSTRUCTION | 2023.04.28 REVISIONS 01 ADDENDUM 02





OVERALL FLOOR PLAN
- ELECTRICAL

JOB NO.: 22146-00 DRAWN BY: PT CHECKED BY: DW

SHEET NO.

E1.01