



Building Permit Application

Howard County Maryland
Department of Inspections, Licenses and Permits
3430 Court House Drive
Permits: 410-313-2455
www.howardcountymd.gov

Date Received: **DILP 2018 JUN 6 PM 3:15**

Permit No.: **B18002014**

Building Address: 9915 Gorman Road 9999 WINTER SUN RD.
 City: Laurel State: MD Zip Code: 20723
 Suite/Apt. #: _____ SDP/WP/BA #: _____
 Subdivision: _____
 Lot: _____ Tax Map: 0047 Parcel: 1032

Property Owner's Name: Board of Education, Howard County
 Address: 10910 Clarksville Pike
 City: Ellicott City State: MD Zip Code: 21042
 Phone: 410-313-8203 Fax: _____
 Email: _____

Existing Use: Classroom Building
 Proposed Use: Same
 Estimated Construction Cost: \$46,000
 Description of Work: Replace Louver in Mechanical Room at Gorman Crossing Elementary School

Applicant's Name & Mailing Address, (If other than stated herein)
 Applicant's Name: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Fax: _____
 Email: _____

Contractor Company: Nichols Contracting
 Contact Person: Robert Eggerl
 Address: 508 Olney Sandy Spring Road
 City: Sandy Spring State: MD Zip Code: 20860
 License No.: 05 50403
 Phone: 301-924-5258 Fax: 301-924-5245
 Email: reggerl@nicholscontracting.com

Occupant/Tenant Name: HCPSS GCES
 Was tenant space previously occupied? Yes No
 Contact Name: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Fax: _____
 Email: _____

Engineer/Architect Company: GBEE
 Responsible Design Prof.: Larson Angel
 Address: 8029 Somerville Lane
 City: Elkridge State: MD Zip Code: 21075
 Phone: 410-799-1080 Fax: 410-799-1081
 Email: _____

Commercial Building Characteristics	Residential Building Characteristics
Height: <u>1'</u>	<input type="checkbox"/> SF Dwelling <input type="checkbox"/> SF Townhouse
No. of stories: <u>1</u>	Depth _____ Width _____
Gross area, sq. ft./floor: _____	1 st floor: _____
Area of construction (sq. ft.): <u>200 sf</u>	2 nd floor: _____
Use group: <u>E Type 11B</u>	Basement: _____
<u>Construction type:</u>	<input type="checkbox"/> Finished Basement
<input type="checkbox"/> Reinforced Concrete	<input type="checkbox"/> Unfinished Basement
<input type="checkbox"/> Structural Steel	<input type="checkbox"/> Slab on Grade
<input checked="" type="checkbox"/> Masonry	No. of Bedrooms: _____
<input type="checkbox"/> Wood Frame	<u>Multi-family Dwelling</u>
<input type="checkbox"/> State Certified Modular	No. of efficiency units: _____
	No. of 1 BR units: _____
	No. of 2 BR units: _____
	No. of 3 BR units: _____
	Other Structure: _____
	Dimensions: _____
<input type="checkbox"/> Roadside Tree Project Permit	Footings: _____
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Roof: _____
<input type="checkbox"/> Roadside Tree Project Permit #	<input type="checkbox"/> State Certified Modular
	<input type="checkbox"/> Manufactured Home

Utilities
Electric: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Gas: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Water Supply
<input checked="" type="checkbox"/> Public
<input type="checkbox"/> Private
Sewage Disposal
<input checked="" type="checkbox"/> Public
<input type="checkbox"/> Private
Heating System
<input type="checkbox"/> Electric <input type="checkbox"/> Oil
<input checked="" type="checkbox"/> Natural Gas <input type="checkbox"/> Propane Gas
<input type="checkbox"/> Other: _____
Sprinkler System:
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Grading Permit Number: _____
Building Shell Permit Number: _____

THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT; (3) THAT HE/SHE WILL COMPLY WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES.

Applicant's Signature: Robert M. Eggerl Print Name: Robert M. Eggerl
 reggerl@nicholscontracting.com 5/23/2018 Date: 5/23/2018
 Superintendent Title/Company: _____

RECEIVED
JUN 06 2018
 LICENSES & PERMITS DIVISION

Checks Payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY
 PLEASE WRITE NEATLY & LEGIBLY
 -FOR OFFICE USE ONLY-

AGENCY	DATE	SIGNATURE OF APPROVAL
State Highways		
Building Officials		
PSZA (Zoning)		
PSZA (Engineering)		
Health	<u>5/18/18</u>	<u>[Signature]</u>

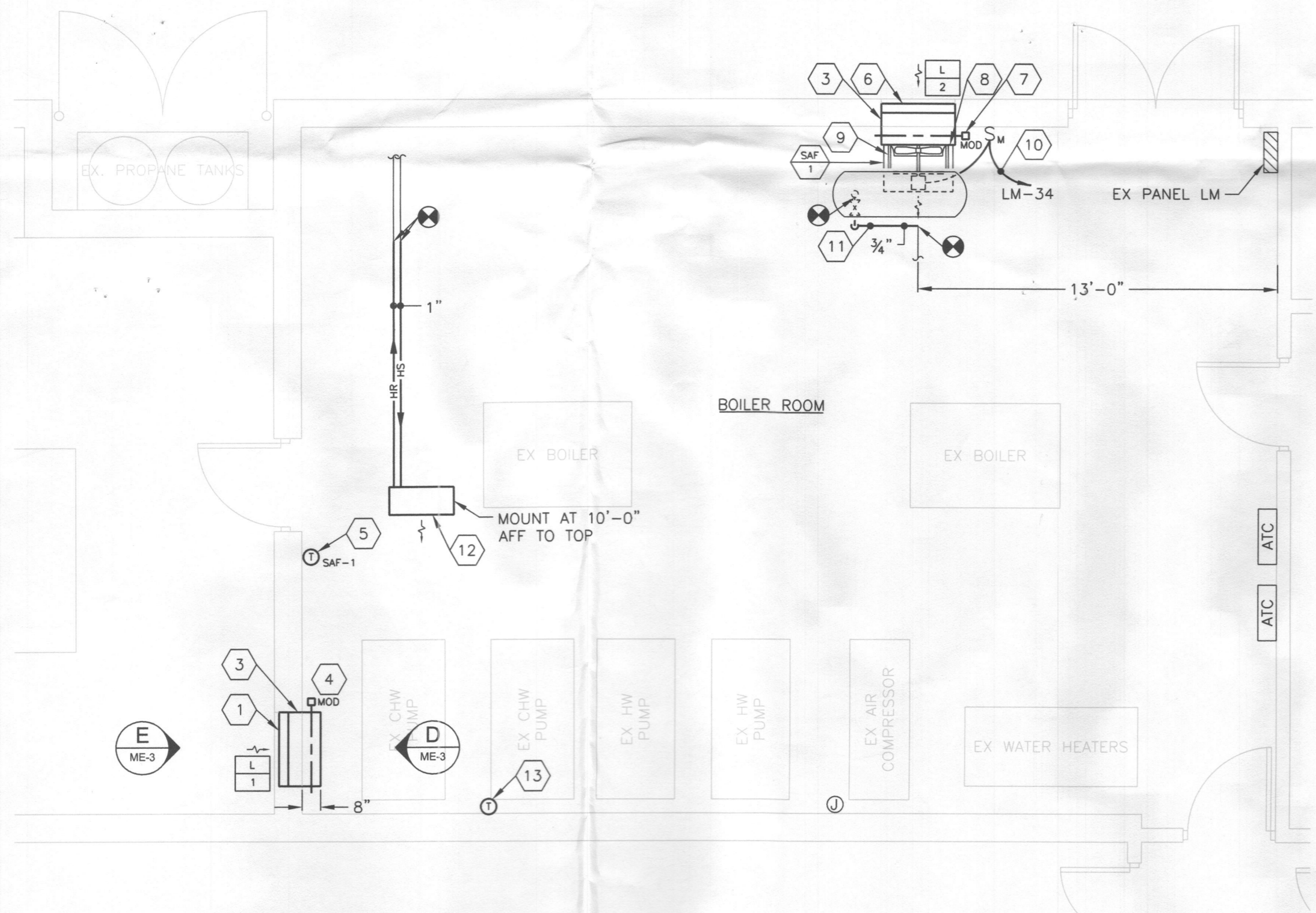
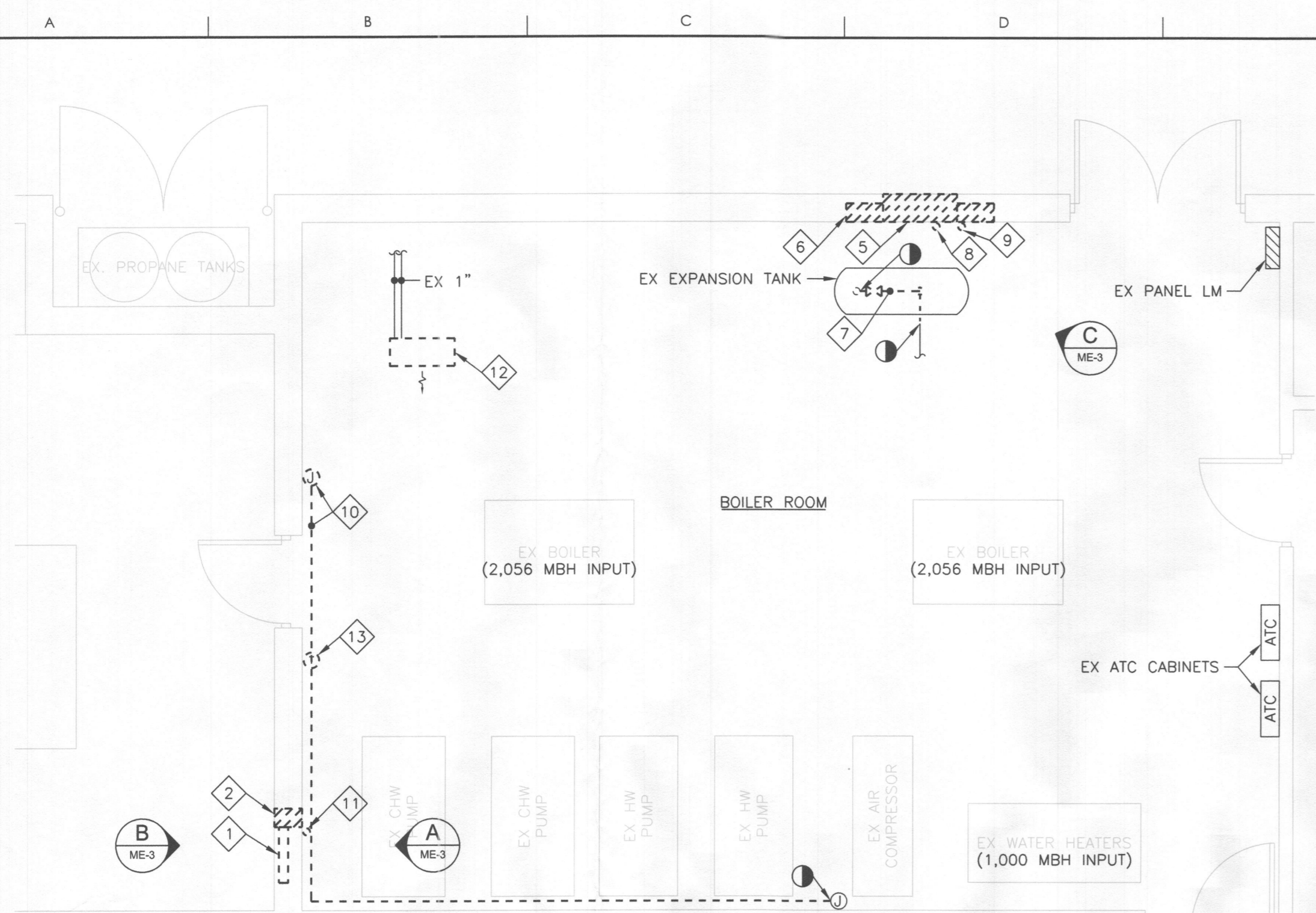
Is Sediment Control approval required for issuance? Yes No
 CONTINGENCY CONSTRUCTION START

DPZ SETBACK INFORMATION

Front: _____
 Rear: _____
 Side: _____
 Side St.: _____
 All minimum setbacks met? Yes No
 Is Entrance Permit Required? Yes No
 Historic District? Yes No
 Lot Coverage for New Town Zone: _____
 SDP/Red-line approval date: _____

Filing Fee	\$	<u>N/A</u>
Permit Fee	\$	<u>N/A</u>
Tech Fee	\$	
Excise Tax	\$	
PSFS	\$	
Guaranty Fund	\$	
Add'l per Fee	\$	
Total Fees	\$	
Sub-Total Paid	\$	
Balance Due	\$	
Check	#	<u>HCPSS</u>

Distribution of Copies: White: Building Officials Green: PSZA, Zoning Yellow: PSZA, Engineering Pink: Health Gold: SHA

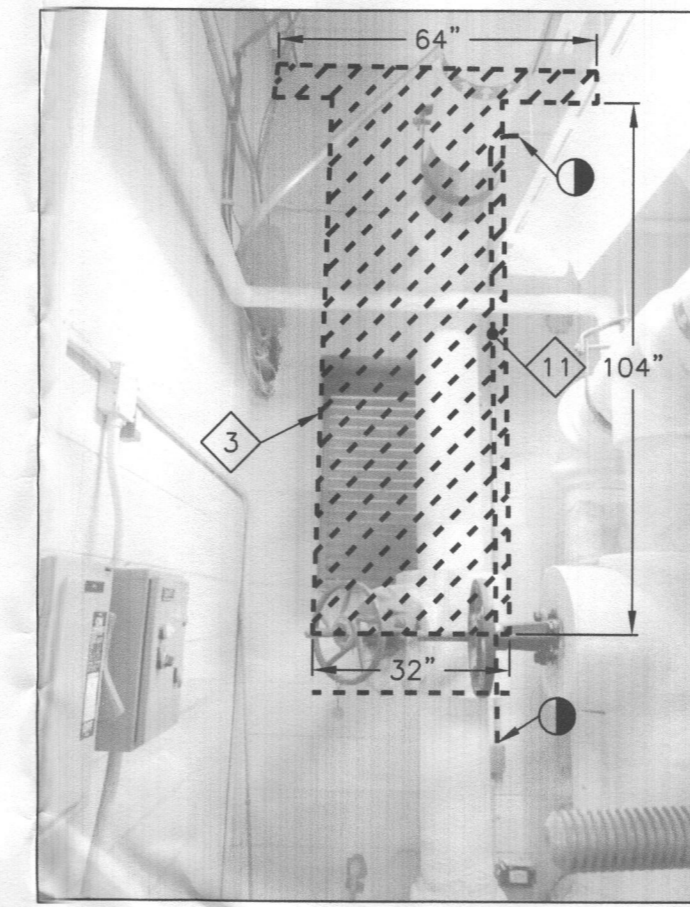


DEMOLITION KEY NOTES

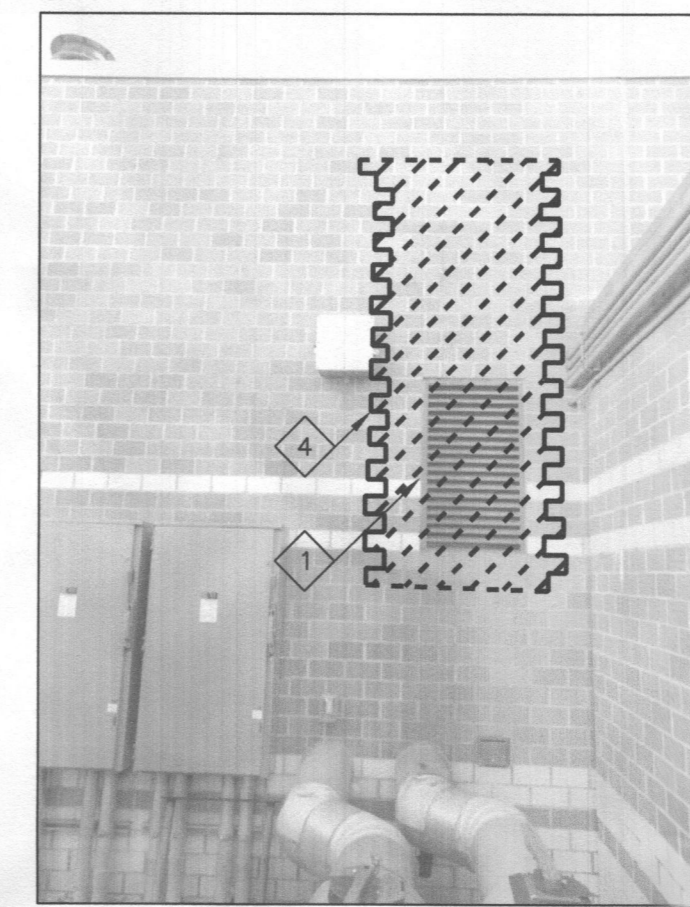
- 1 REMOVE EXISTING 24"W x 40"H COMBUSTION AIR LOUVER.
- 2 REMOVE 8" SECTION OF EXISTING BRICK AND BLOCK WALL (REFER TO PHOTOGRAPHS A AND B).
- 3 REMOVE 32"W x 104"H SECTION OF EXISTING BLOCK WALL PLUS FOUR BLOCKS ABOVE OPENING.
- 4 REMOVE SECTION OF EXISTING BRICK WALL. SAVE BRICKS FOR REUSE.
- 5 REMOVE 32"W x 32"H SECTION OF EXISTING BRICK AND BLOCK WALL AT 10'-8" ABOVE FINISHED FLOOR TO TOP OF OPENING. SAVE BRICKS FOR REUSE.
- 6 REMOVE AN ADDITIONAL FOUR BLOCKS ABOVE OPENING TO ACCOMMODATE LINTEL INSTALLATION.
- 7 REMOVE SECTION OF EXISTING 3/4" EXPANSION TANK PIPING TO POINTS INDICATED. RETAIN EXISTING SHUTOFF VALVE FOR REUSE.

DEMOLITION KEY NOTES (CONT.)

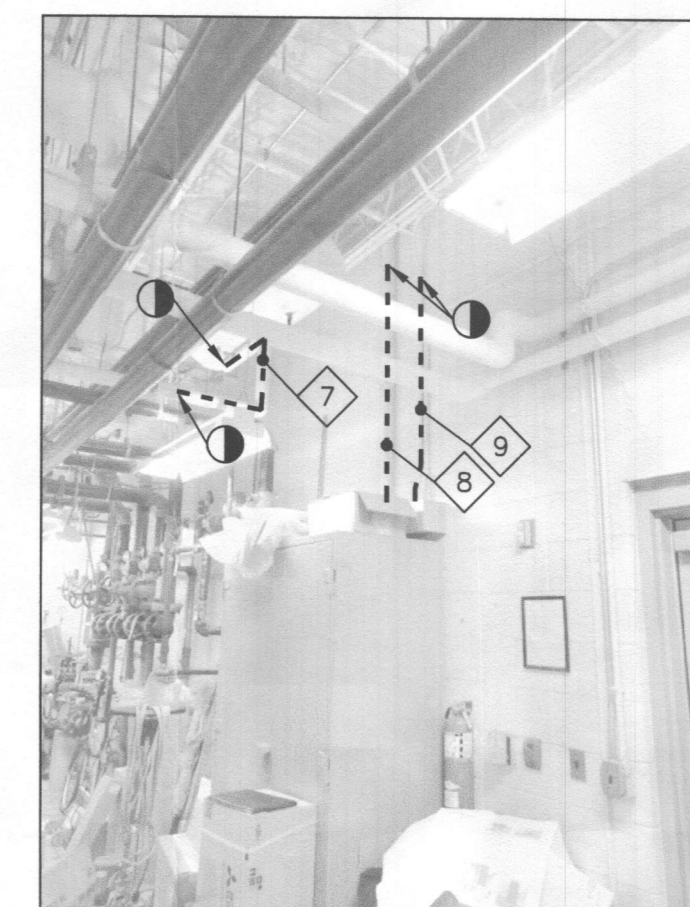
- 8 REMOVE SECTION OF EXISTING 2" EMPTY CONDUIT UP TO AN ELEVATION OF 12'-8" ABOVE FINISHED FLOOR. PROVIDE PLASTIC BUSHING ON END OF CONDUIT.
- 9 RELOCATE SECTION OF EXISTING 3/4" CONDUIT AND WIRE TO ACCOMMODATE SUPPLY AIR FAN INSTALLATION.
- 10 REMOVE EXISTING JUNCTION BOX AND SECTION OF EXISTING 3/4" EMPTY CONDUIT TO POINT INDICATED. PROVIDE PLUG IN EXISTING JUNCTION BOX TO REMAIN.
- 11 RELOCATE SECTION OF EXISTING 3/4" CONDUIT AND WIRE SERVING ELECTRIC HEAT TRACE TO ACCOMMODATE MOTOR OPERATED DAMPER INSTALLATION.
- 12 RELOCATE EXISTING UNIT HEATER. REUSE EXISTING VIBRATION ISOLATION HANGERS FOR UNIT HEATER.
- 13 RELOCATE EXISTING UNIT HEATER THERMOSTAT.



A PHOTO
ME-3 NO SCALE



B PHOTO
ME-3 NO SCALE



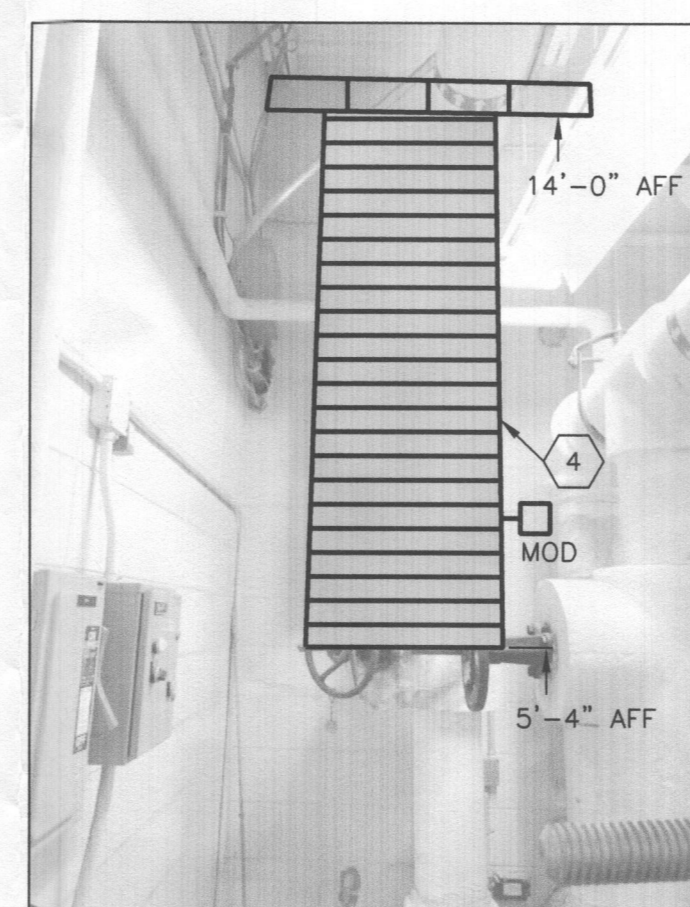
C PHOTO
ME-3 NO SCALE

NEW WORK KEY NOTES

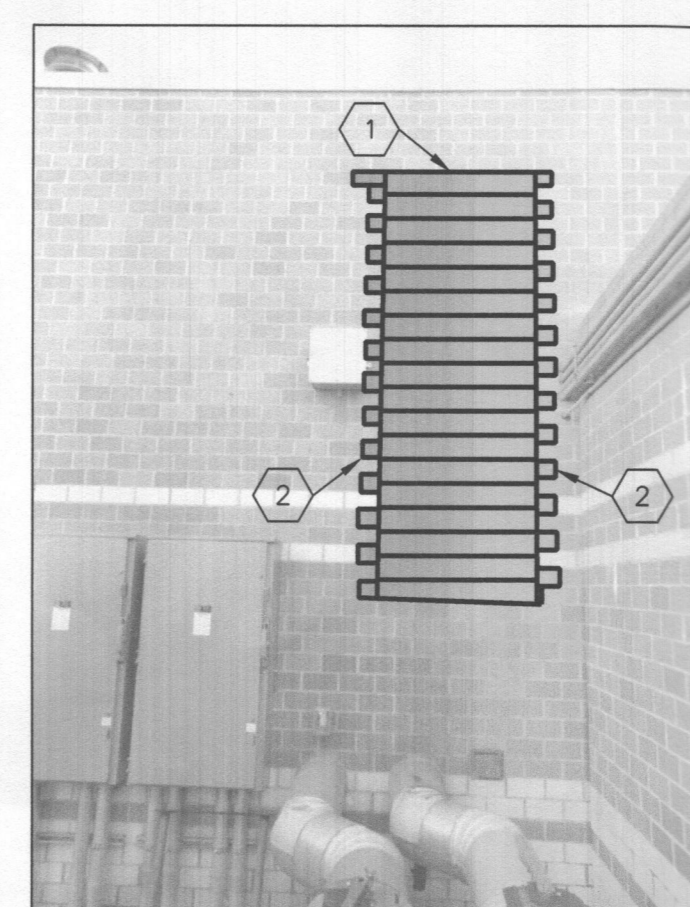
- 1 INSTALL LOUVER AT 14'-0" ABOVE FINISHED FLOOR TO TOP.
- 2 TOOTH-IN BRICK SALVAGED DURING DEMOLITION.
- 3 PROVIDE 14" DEEP, 16 GAUGE SHEET METAL PLENUM ON BACK OF LOUVER.
- 4 32"W x 104"H MOTOR OPERATED DAMPER (MOD) MOUNTED IN SHEET METAL PLENUM. OBTAIN 24VAC POWER FOR MOD FROM EXISTING ATC PANEL. MOD SHALL BE INTERLOCKED WITH OPERATING CONTROLS FOR BOTH BOILERS AND BOTH WATER HEATERS. MOD SHALL OPEN COMPLETELY WHENEVER THE OPERATING CONTROLS CALL FOR EITHER BOILER OR EITHER WATER HEATER TO FIRE. PROVIDE AN END SWITCH MOUNTED ON ONE OF THE MOD BLADES THAT WILL MAKE CONTACT WHEN THE MOD IS FULLY OPEN. (MULTIPLE END SWITCHES ARE REQUIRED IF MULTIPLE MODS ARE USED). BOILERS AND WATER HEATERS SHALL BE LOCKED OUT UNTIL MOD END SWITCH(ES) PROVES THE MOD OPEN.
- 5 SPACE THERMOSTAT MOUNTED ON WALL AT 48" ABOVE FINISHED FLOOR. THERMOSTAT SHALL OPEN THE MOD WHENEVER ITS SETPOINT OF 85°F (ADJUSTABLE) IS EXCEEDED.
- 6 INSTALL LOUVER AT 10'-8" ABOVE FINISHED FLOOR TO TOP. TOOTH-IN BRICK SALVAGED DURING DEMOLITION.
- 7 32"W x 32"H MOTOR OPERATED DAMPER (MOD) MOUNTED IN SHEET METAL PLENUM.

NEW WORK KEY NOTES (CONT.)

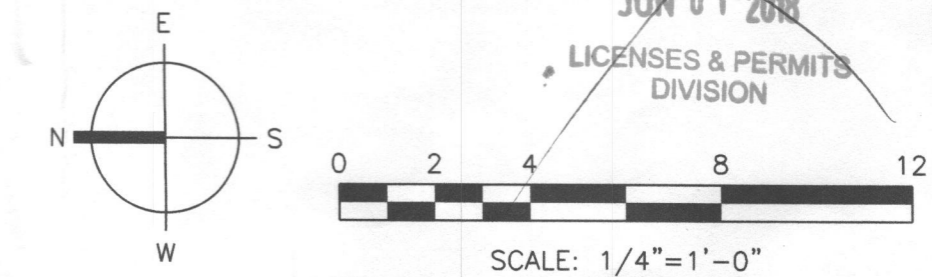
- 8 32"W x 32"H, 16 GAUGE SHEET METAL BLANK-OFF PANEL MOUNTED ON BACK OF SHEET METAL PLENUM WITH 22.5"W x 22.5"H OPENING FOR SUPPLY AIR FAN.
- 9 SUPPLY AIR FAN SAF-1 MOUNTED ON BACK OF SHEET METAL PLENUM. FAN SHALL BE SUPPORTED FROM ROOF STRUCTURE BY A MINIMUM OF TWO VIBRATION ISOLATION HANGERS. FAN SHALL BE CONTROLLED BY SPACE THERMOSTAT AND SHALL BE ENERGIZED WHEN THE END SWITCH ON THE SUPPLY AIR FAN MOTOR OPERATED DAMPER PROVES THE DAMPER OPEN.
- 10 2#12 + #12 GROUND IN 3/4" CONDUIT TO EXISTING PANEL LM. PROVIDE A 15A/1P CIRCUIT BREAKER IN PANEL TO MATCH EXISTING EQUIPMENT. UPDATE PANELBOARD DIRECTORY.
- 11 3/4" EXPANSION TANK PIPING REROUTED TO ACCOMMODATE SUPPLY AIR FAN INSTALLATION. REINSTALL EXISTING SHUTOFF VALVE AND INSULATE PIPING TO MATCH EXISTING.
- 12 RELOCATED UNIT HEATER. EXTEND 120V POWER AND 1" HEATING WATER SUPPLY AND RETURN PIPING TO NEW LOCATION. INSULATE HEATING WATER PIPING WITH 1" FIBERGLASS PIPE INSULATION.
- 13 RELOCATED UNIT HEATER THERMOSTAT. EXTEND 2#12 + #12 GROUND IN 3/4" CONDUIT FROM THERMOSTAT TO RELOCATED UNIT HEATER.



D PHOTO
ME-3 NO SCALE



E PHOTO
ME-3 NO SCALE



GBEE
GREEN BUILDING ENERGY ENGINEERS, LLC
MECHANICAL - ELECTRICAL - PLUMBING
8025 Somerville Lane
Elkridge, MD 21075
TEL: 410-799-1080
FAX: 410-799-1081
If it is ailing, we work with you. www.GreenBuildingEnergyEngineers.com

STATE OF MARYLAND
Professional Engineer
No. 20533

Professional Certification. I certify that these documents were prepared or approved by me, and that I am a duly licensed engineer under the laws of the State of Maryland, License Number 20533, expiration date 8/5/2018.

OWNER
Howard County Public School System
9020 Mendenhall Court
Columbia, MD 21045

PROJECT

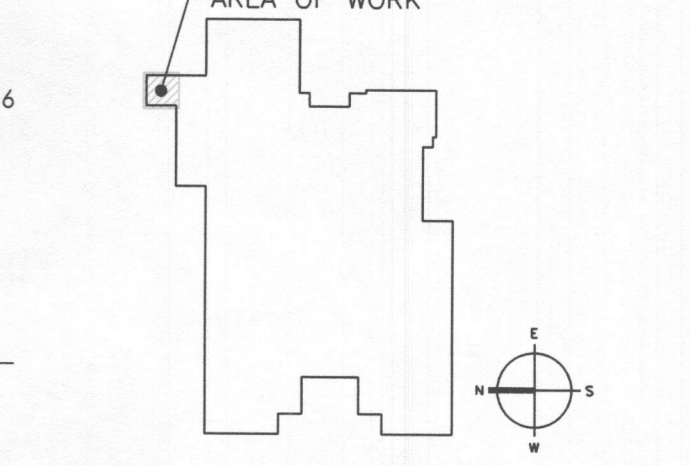
TRIADELPHIA RIDGE, FULTON, AND GORMAN CROSSING ELEMENTARY SCHOOLS COMBUSTION AIR OPENINGS

Gorman Crossing ES
9999 Winter Sun Road
Laurel, MD 20723

Fulton ES
11600 Scaggsville Road
Fulton, MD 20759

Triadelphia Ridge ES
13400 Triadelphia Road
Ellicott City, MD 21042

KEY PLAN



NO.	DESCRIPTION	DATE
01	BID DOCUMENTS	02/16/18

DRAWING

GORMAN CROSSING ES
MECH. AND ELEC. DEMO
AND NEW WORK

DRAWN BY WLA
CHECKED BY WLA
PROJECT NO. 17022
SCALE 1/4"=1'-0"
SHEET

RECEIVED
JUN 06 2018
LICENSES & PERMITS
DIVISION

RECEIVED
JUN 01 2018
LICENSES & PERMITS
DIVISION

ME-3

FILE NAME: C:\WORK\GBEE\Projects\17022_HSES, TRES, GCES\Comp_A\3_Dwg\TRES, FES, GCES\GCES ME-3.DWG PLOTTED: Fri, Feb 16, 2018 @ 11:13am

PRODUCT SPECIFICATIONS

- RELATED DOCUMENTS**
- DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 01 SPECIFICATION SECTIONS, APPLY TO ALL MECHANICAL AND ELECTRICAL WORK.
- STEEL**
- STEEL SHALL CONFORM TO ASTM SPECIFICATION A36.
 - ANGLES SHALL BE SHOP PRIMED WITH A RUST INHIBITIVE PRIMER. EXTERIOR UNTEL SHALL BE FIELD PAINTED WITH A RUST INHIBITIVE PAINT TO MATCH THE LOUVER.
 - ANGLES SHALL HAVE THEIR SHORT LEG OUTSTANDING AND SHALL BE 6" MINIMUM BEARING.
- MASONRY**
- FOR OPENINGS IN EXISTING WALLS, THE EXISTING MASONRY SHALL BE CAREFULLY REMOVED AFTER THE WALL THAT REMAINS ABOVE THE PROPOSED OPENING HAS BEEN TEMPORARILY SUPPORTED. ANY REQUIRED CUTTING BEYOND THE MASONRY OPENING SHALL BE PATCHED WITH MASONRY AND MORTAR.
 - NEW BRICKS AND MORTAR ARE IN GOOD CONDITION. NEW MORTAR SHALL MATCH EXISTING MORTAR. IF NEW BRICKS ARE REQUIRED, THEY SHALL MATCH EXISTING BRICKS. BRICKS SHALL BE TOOTHED INTO THE EXISTING WALL.
- MOTOR OPERATED DAMPERS**
- GALVANIZED STEEL, LOW-LEAKAGE BLADES, OPPOSED BLADE ACTION, 16 GAUGE FRAME, WITH 2-POSITION, 24VAC, NORMALLY-CLOSED SPRING-CLOSURE ACTUATOR AND END SWITCH.
- WIRING AND CONDUIT**
- ALL WIRING SHALL BE A MINIMUM NO. 12 AWG SOFT DRAWN COPPER, 90C CONDUCTIVITY, RATED FOR 75°C (165 °F) INSTALLATION, NEC TYPE THHN OR THWN, INSTALLED IN MINIMUM 3/4" ELECTRICAL METALLIC TUBING (EMT).
- MANUAL MOTOR STARTERS**
- NEMA COS 2, AC GENERAL-PURPOSE CLASS A MANUALLY OPERATED, FULL-VOLTAGE NONREVERSING CONTROLLER FOR FRACTIONAL HORSEPOWER, INDUCTION MOTORS, SINGLE-POLE, TOGGLE OPERATOR, WITH THERMAL OVERLOAD UNIT, EQUAL TO SQUARE D CLASS 2510 TYPE F.
- AUTOMATIC TEMPERATURE CONTROLS**
- ALL ATC WIRING SHALL BE INSTALLED WITHIN EMT CONDUIT.
- SUBMITTALS**
- LOUVER OPERATED DAMPER.
 - ATC SHOP DRAWINGS.
 - SUPPLY AIR FAN.

FAN SCHEDULE

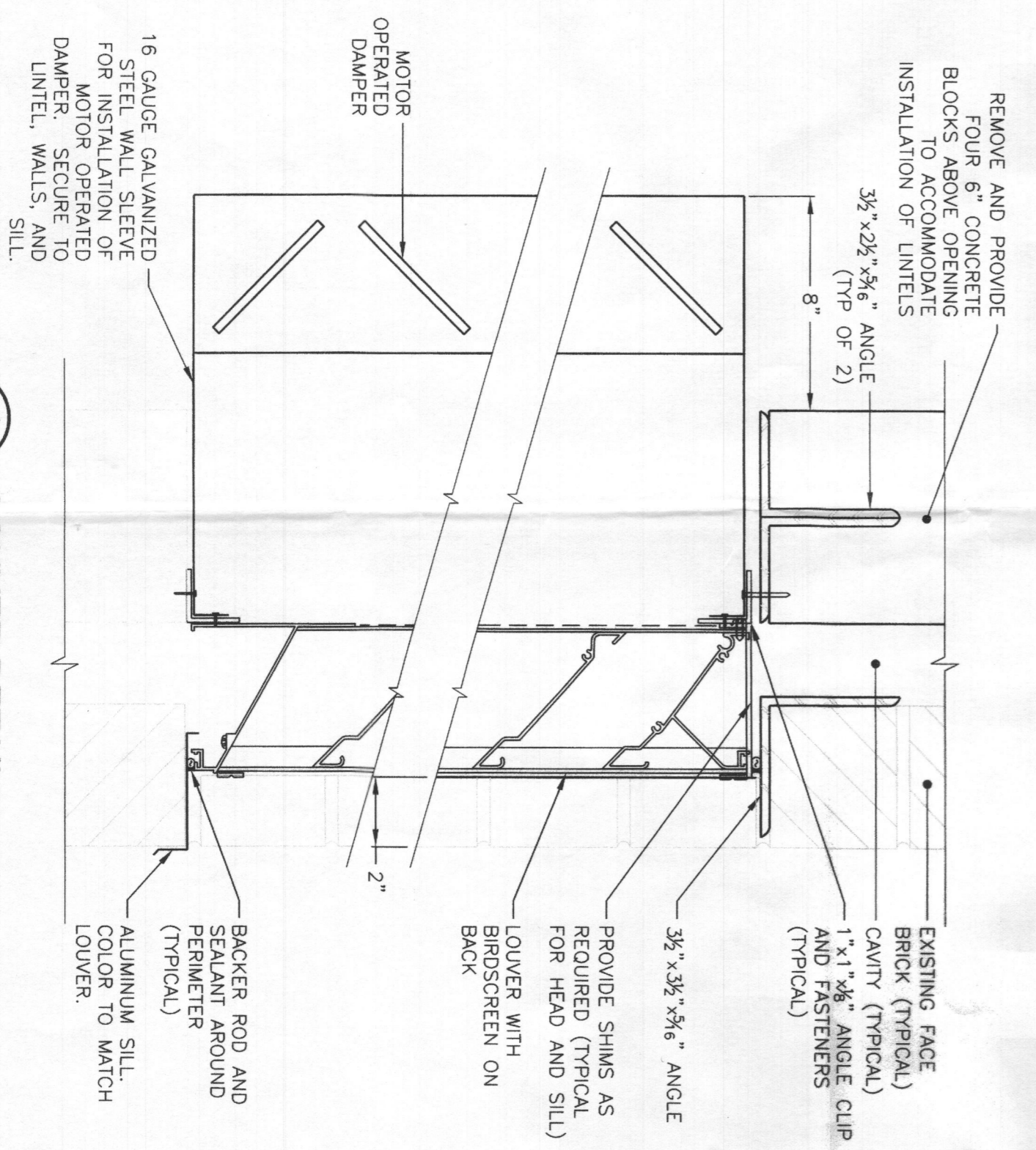
DESIG.	SERVICE	TYPE	DRIVE	AIRFLOW (CFM)	TOTAL S.P. (IN. W.C.)	SPEED (RPM)	MOTOR (HP)	ELEC. (VOLT./PH)	BASIS OF DESIGN	NOTES
SAF-1	SUPPLY AIR	PROPELLER	BELT	2,000	0.125	719	1/4	120/1	GREENHECK SBS-1H20-4	1

NOTES:
1. OSHA MOTOR-SIDE PROTECTIVE GUARD TO COMPLETELY ENCLOSE THE MOTOR AND DRIVE SIDE OF THE FAN.

LOUVER SCHEDULE

DESIG.	SERVICE	TYPE	SIZE (W x H)	DEPTH	FREE AREA (SQ. FT.)	MTC HEIGHT (AFT TO TOP)	BASIS OF DESIGN	NOTES
L-1	COMBUSTION AIR	WEATHER LOUVER	32" x 104"	4"	12.43	SEE PLAN	GREENHECK MODEL ESJ-401	1,2
L-2	INTAKE AIR	WEATHER LOUVER	32" x 32"	4"	3.38	SEE PLAN	GREENHECK MODEL ESJ-401	1,2

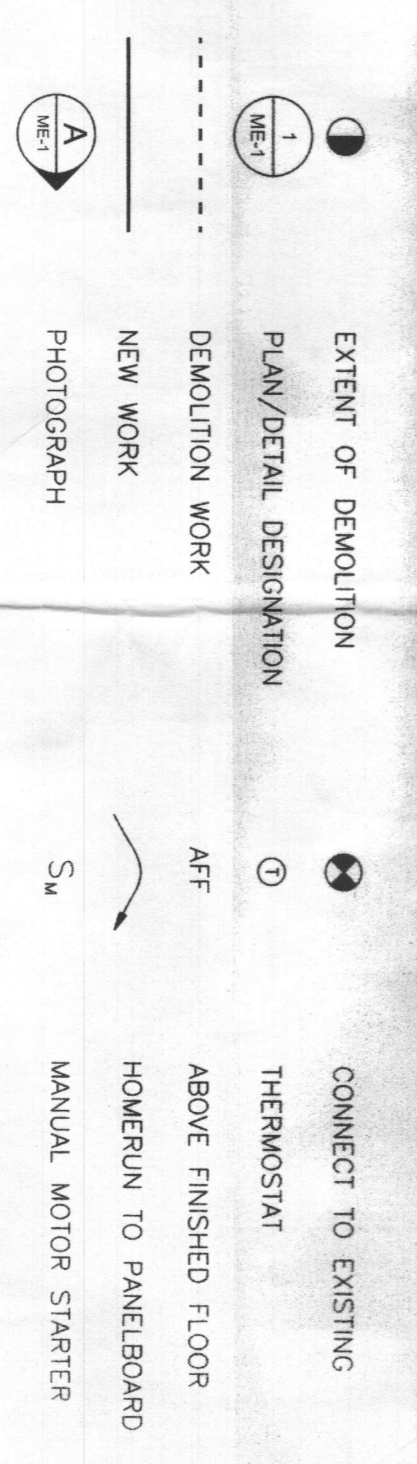
NOTES:
1. COLOR SHALL BE PUEBLO TAN - TRES; SPARTAN BRONZE - FES; CORONADO RED - GCES.
2. PROVIDE BRID SCREEN ON BACK OF LOUVER.



COMBUSTION AIR CALCULATION (EACH SCHOOL)

- COMBINED INPUT OF GAS-FIRED APPLIANCES: 5,112 MBH
 - REQUIRED FREE AREA OF COMBUSTION AIR OPENING: 11.83 SQ. FT.
 - FREE AREA OF COMBUSTION AIR LOUVER: 12.43 SQ. FT.
- NOTE: SUPPLY AIR FAN SAF-1 IS NOT PART OF THE COMBUSTION AIR SYSTEM.

LEGEND



TRIADDELPHIA RIDGE, FULTON, AND GORMAN CROSSING ELEMENTARY SCHOOLS COMBUSTION AIR OPENINGS

Triadelphia Ridge ES
13400 Triadelphia Road
Ellicott City, MD 21042

Fulton ES
11600 Scaggsville Road
Fulton, MD 20759

Gorman Crossing ES
9999 Winter Sun Road
Laurel, MD 20723



Professional Certification. I certify that these documents were prepared or approved by me, the laws of the State of Maryland, License Number 20533, expiration date 8/9/2018.

OWNER
Howard County Public School System
9020 Mendenhall Court
Columbia, MD 21045

PROJECT

01. BID DOCUMENTS 02/18/18
NO. DESCRIPTION DATE
DRAWING
SCHEDULES, DETAILS, AND PRODUCT SPECIFICATIONS

DRAWN BY: WJA
CHECKED BY: WJA
PROJECT NO.: 17022
SCALE: NONE
SHEET: ME-4

RECEIVED
JUN 06 2018
LICENSES & PERMITS DIVISION

ME-4