

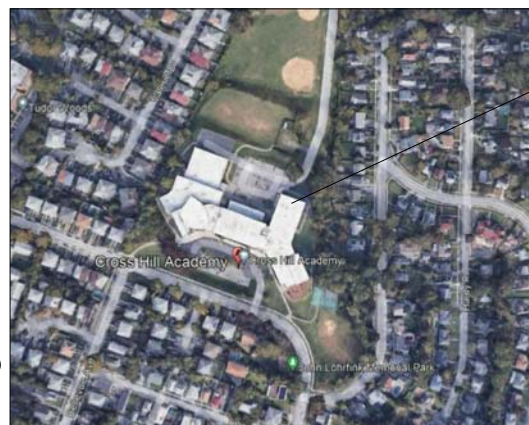
NO.	ISSUANCE	DATE	REVISION
1	S.E.D. SUBMISSION	1/26/2022	
2	ISSUED FOR BID	04/05/2022	

# **LIST OF DRAWINGS**

**ARCHITECTURAL**  
 CHA G1 LOCATION MAP, ABBREVIATIONS, LEGENDS, GENERAL NOTES, GENERAL WINDOW NOTES & GENERAL REMOVAL NOTES  
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 CHA AR-100 CROSS HILL ACADEMY PARTIAL GROUND FLOOR PLAN FIRE DAMAGE REMOVAL PLANS  
 CHA A-100 CROSS HILL ACADEMY PARTIAL GROUND FLOOR PLAN REFLECTED CEILING PLAN  
 CHA A-101 CROSS HILL ACADEMY PARTIAL GROUND FLOOR PLAN FF/E AND FINISH PLANS  
 WINDOW SCHEDULE, DOOR SCHEDULE  
 CHA A-525 CASEWORK DETAILS CEILING DETAILS  
 CHA A-725 WINDOW DETAILS

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 CHA M-001 ABBREVIATIONS AND SYMBOLS  
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 CHA MP-100 PARTIAL GROUND FLOOR PLANS - DEMOLITION  
 CHA MP-101 PARTIAL GROUND FLOOR PLANS - NEW WORK  
 CHA MP-500 DETAILS AND SCHEDULES  
 CHA MP-600 CONTROL SCHEMATICS

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 CHA E-001 ABBREVIATIONS AND SYMBOLS  
 CHA ED-100 PARTIAL GROUND FLOOR PLANS-DEMOLITION  
 CHA E-100 PARTIAL GROUND FLOOR PLANS-NEW WORK - LIGHTING, PARTIAL BASEMENT PLAN - NEW WORK  
 CHA E-101 PARTIAL GROUND FLOOR PLANS-NEW WORK - POWER, PARTIAL BASEMENT PLAN - NEW WORK  
 CHA E-500 SCHEDULES AND DETAILS



**PROJECT LOCATION MAP**  
 SCALE: N.T.S.



## **DESIGN TEAM:**

### **EISENBACH & RUHNKE ENGINEERING, P.C.**

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## **CONSULTANTS:**

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 phone: 914.592.4444

# **YONKERS PUBLIC SCHOOLS**

One Larkin Center, Yonkers, New York 10701

## **FIRE RESTORATIONS CROSS HILL ACADEMY**



## **YONKERS PUBLIC SCHOOLS**

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S.E.D. # 66-23-00-01-0041-011

YPS JOB # 10929

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4-05-2022

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## GENERAL NOTES

### GENERAL NOTES

- FOR ALL ITEMS THAT ARE REQUIRED TO HAVE SEISMIC SUPPORTS OR RESTRAINTS, SEISMIC PLANS AND SEISMIC RESTRAINT CALCULATIONS SHALL BE PROVIDED AND APPROVED BY A LICENSED STRUCTURAL ENGINEER. THE ENGINEER SHALL PROVIDE INSTALLATION SUPERVISION OF ALL SEISMIC SUPPORTS AND RESTRAINTS, UNLESS OTHERWISE NOTED.
- REVIEW AND COORDINATE ALL CONDITIONS (INCLUDING BUT NOT LIMITED TO PENETRATIONS, FABRICATIONS, INSTALLATIONS) FOR CONFORMANCE TO THE PLANS, SPECIFICATIONS, APPLICABLE RESTRAINT STANDARDS AND CODES PROVISIONS OF THE CONTRACT DOCUMENTS, AND COORDINATE WITH ALL OTHER AGENCIES HAVING JURISDICTION OVER THE PROJECT.
- ALL WORK MUST CONFORM TO ALL CODES HAVING JURISDICTION ANY CONFLICT OF OR BETWEEN CODE, THE MORE STRINGENT CODE SHALL SUPERSEDE ALL OTHERS.
- USE ONLY NEW MATERIALS AND EQUIPMENT, WITHOUT DEFECTS FOR THEIR INTENDED USE.
- CONTRACTORS SHALL PROTECT ALL AREAS OF EXISTING CONSTRUCTION AND RELATED ITEMS FROM DAMAGE DURING CONSTRUCTION OPERATIONS.
- ALL OCCUPIED PORTION OF THE SCHOOL BUILDING SHALL ALWAYS COMPLY WITH THE MINIMUM REQUIREMENTS NECESSARY TO MAINTAIN A CERTIFICATE OF OCCUPANCY.
- ALL MEASUREMENTS AND CONDITIONS TO BE VERIFIED AT THE BUILDING BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE THEREFOR.
- ALL CONTRACTORS SHALL MEET THE FOLLOWING MINIMUM SAFETY AND SECURITY STANDARDS FOR CONSTRUCTION PROJECTS:
  - ALL CONSTRUCTION MATERIALS SHALL BE STORED IN A SAFE AND SECURE MANNER.
  - ALL ACCESS TO CONSTRUCTION MATERIALS SHALL BE LIMITED TO AUTHORIZED PERSONNEL ONLY.
  - WORKERS SHALL BE REQUIRED TO WEAR PHOTO IDENTIFICATION BADGES AT ALL TIMES FOR IDENTIFICATION AND SECURITY PURPOSES WHILE WORKING ON SITE.
  - REMOVAL OF ALL DEBRIS SHALL BE THROUGH DESIGNATED, SEPARATED AND PROTECTED AREAS SPACES OF THE BUILDING.
  - ALL OCCUPANCY OF A BUILDING AFFECTED BY CONSTRUCTION ACTIVITY SHALL BE CLEARED AT THE CLOSE OF EACH WORK DAY.
- CONTRACTOR SHALL MAKE THE BUILDING SECURE AT THE END OF EACH WORK DAY. PROVIDE TEMPORARY FLOOD COVERS OVER WINDOW/DOOR OPENINGS AS REQUIRED TO SECURE BUILDING TO THE OWNER'S SATISFACTION.
- CLEANING DURING WINDOW WORK:
  - PROOF TO SWEEP OF WINDOW WORK IN A SPACE. THE CONTRACTOR WILL MAKE ALL FURNITURE, EQUIPMENT AND MATERIALS TO A SPACE OPPOSITE TO THE ROOM FROM THE WINDOW.
  - THE MATERIALS, EQUIPMENT AND FURNITURE WILL BE COVERED WITH SHEETING AT LEAST 1 INCH THICK. THE MATERIALS ARE TO BE PROTECTED THROUGHOUT THE WORK, THROUGHOUT THE PROJECT.
  - ALL MATERIALS TO BE REMOVED FROM THE WORK AREA IMMEDIATELY AFTER THE WORK IS COMPLETED.
  - AT THE COMPLETION OF THE WINDOW WORK, THE MATERIALS, EQUIPMENT AND FURNITURE WILL BE MOVED BACK TO THEIR ORIGINAL LOCATION IN DETECTED CONDITIONS.
  - THE CONTRACTOR SHALL CLEAN MATERIALS, EQUIPMENT AND FURNITURE SURFACES AND BROOM CLEAN THE FLOOR.

### GENERAL REMOVAL NOTES:

- REMOVAL DEMANDS INDICATE ONLY MAJOR SCOPE OF REMOVALS. CONTRACTOR IS REQUIRED TO REMOVE ANY AND ALL ITEMS NOT SHOWN AS REQUIRED TO SATISFY ALL NEW WORK. CONTRACTOR IS REQUIRED TO DEMOLISH, PROTECT AND STORE ANY AND ALL ITEMS SHOWN AS REQUIRED TO SATISFY ALL NEW WORK. COORDINATE W/ OWNER FOR STORING LOCATIONS.
- CONTRACTOR IS TO VERIFY ANY MAJOR CONSTRUCTION DEVIATIONS FROM DEMANDS OR STRUCTURAL OBSTRUCTIONS. THESE SHALL BE BROUGHT TO THE OWNER'S REPRESENTATIVE'S ATTENTION. ALL CONTRACT DEMANDS INDICATE APPROXIMATE DIMENSIONS AND EXISTING CONDITIONS BASED ON FIELD SURVEY AND DEMANDS FURNISHED BY THE OWNER. VARIATIONS MAY EXIST TO FIELD CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DEMANDS WITHIN THE CONTRACT DOCUMENTS.
- ALL SURFACES DISTURBED BY REMOVALS SHALL BE PATCHED/REPAIRED TO MATCH EXISTING ADJACENT FLOORING, CEILING AND FURNITURE SURFACES TO ACCORDANCE WITH NEW FINISHES TO SPEC'S AND MANUFACTURER'S RECOMMENDATIONS.
- GENERAL CONTRACTOR SHALL FILL STOP ALL TRADE RELATED EXISTING OR NEW PENETRATIONS THROUGH FLOORS, PARTITIONS AND WALLS AT ALL LOCATIONS WITH APPROVED MATERIALS AND SYSTEMS.
- ALWAYS WORK IN A MANNER WHICH PROVIDES CONTINUOUS SUPPORT TO STRUCTURE ABOVE. PROVIDE APPROPRIATE LIFTING FOR ALL OPENINGS UNLESS SPECIFIED OTHERWISE.
- REMOVE ALL WINDOW TREATMENTS AND HANGINGS WHERE WINDOWS ARE BEING REPLACED. IF REQUESTED, TURNOVER TO OWNER.
- GENERAL CONTRACTOR TO COORDINATE REMOVALS WITH NEW WORK.
- FOR REMOVAL OF MAJOR WORK, CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING:
  - PROVIDE GUARDS, RAILS, BARRICADES, FENCES, SIGNAGE SHEETS, CATCH PLATING, DECORATIONS, ETC. AS REQUIRED TO PROTECT AREAS AROUND WORK.
  - THE CONTRACTOR SHALL, UNLESS OTHERWISE PROVIDED IN THE CONTRACT DOCUMENTS, SECURE AND PAY FOR REQUIRED INSURANCES, PERMITS, FEES, LICENSE AND INSPECTIONS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.
- ADDITIONAL NOTES WHICH ARE APPLICABLE TO THIS PROJECT MAY BE FOUND THROUGHOUT THE CONTRACT DOCUMENTS.
- SEISMIC RESTRAINTS SHALL BE PROVIDED IN ACCORDANCE TO APPLICABLE CODES.

### MATERIALS LEGEND

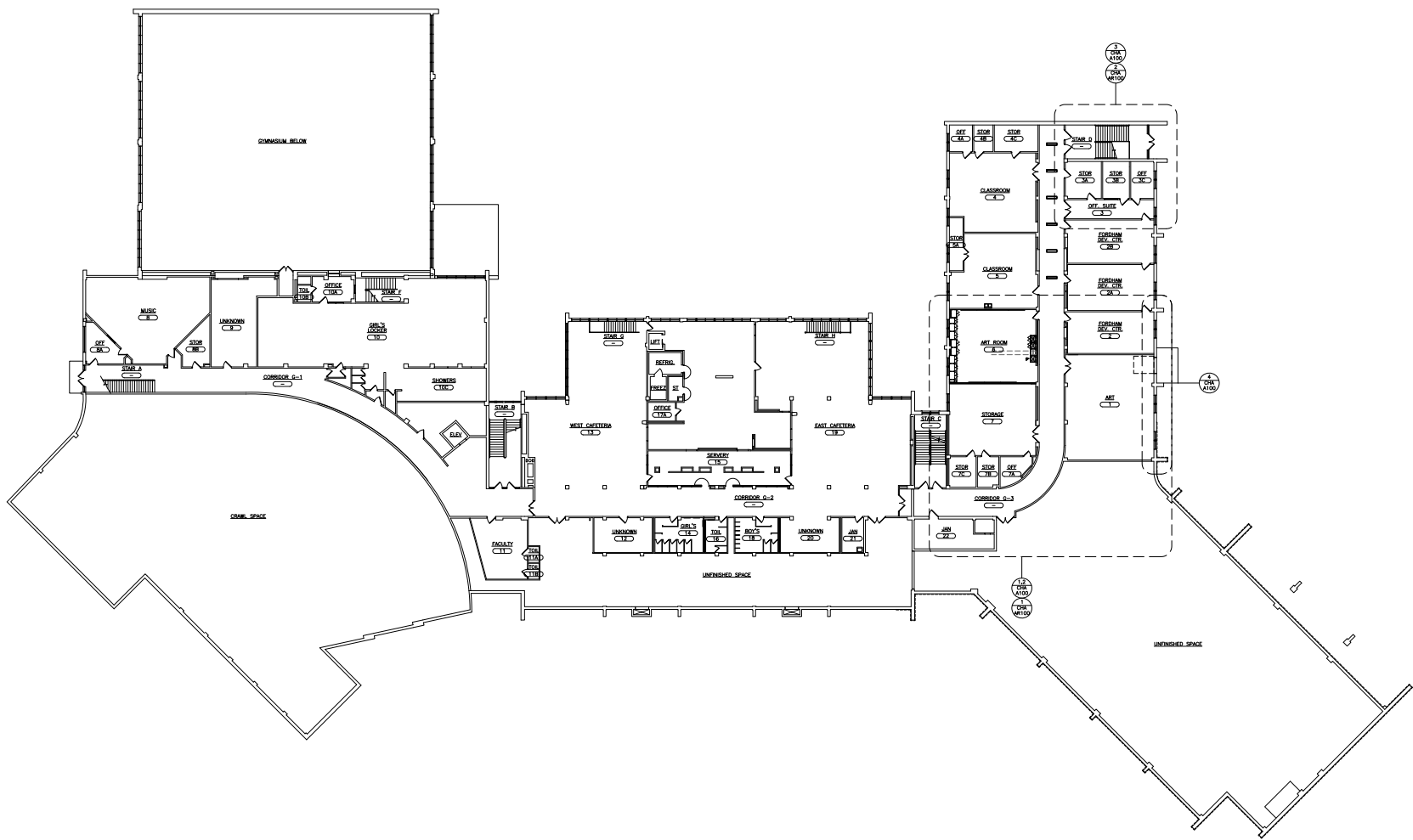
	CONCRETE		PARTICLE BOARD
	CONCRETE MASONRY UNITS		PLYWOOD
	BRICK		ACOUSTICAL TILE
	STONE		CONTINUOUS WOOD FRAMING THROUGH MEMBER
	METALS		WOOD FRAMING THROUGH INTERRUPTED MEMBER
	COMPACTED GRAVEL		FINISHED WOOD
	EARTH/UNIMPROVED SOIL		BATT INSULATION
	DRAINAGE BOARD		RIGID INSULATION

### GENERAL NOTES

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<p><b>ENGINEER</b></p> <p><b>David B. &amp; Barbara Enterprises P.C.</b>          380 Southern Blvd., Suite 300, Long          Pt. 311 - Long Beach, Pa 317-750-4343          Fax 317-750-4343          Lic.# 000000000000000000000000</p> <p><b>CONSULTANT(S)</b></p>	<p><b>STAMP</b></p>	<p><b>YONKERS PUBLIC SCHOOLS          FIRE RESTORATIONS          CROSS HILL ACADEMY</b></p> <p>160 BOLIMIER AVE., YONKERS N.Y. 10703</p>
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CAN PROJECT NO.	YES/NO?	
TYPE NO.	NUMBER	
REVISION	DATE	BY
DRAWN BY		
CHECKED BY		
SHEET SIZE	ARCH D 8 1/2" x 11"	
SCALE		
<b>SHEET TITLE</b>		
LOCATION MAP, ABSTRACTS, ELEVATION PROFILES, SECTION NOTES & GENERAL REMARKS NOTES		
SHEET NO:		
CHA G1		



OVERALL  
GROUND FLOOR PLAN  
1 SCALE: 1/16" = 1'-0"  
0" 2" 4" 8" 16" 32"

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CONSULTANT(S)



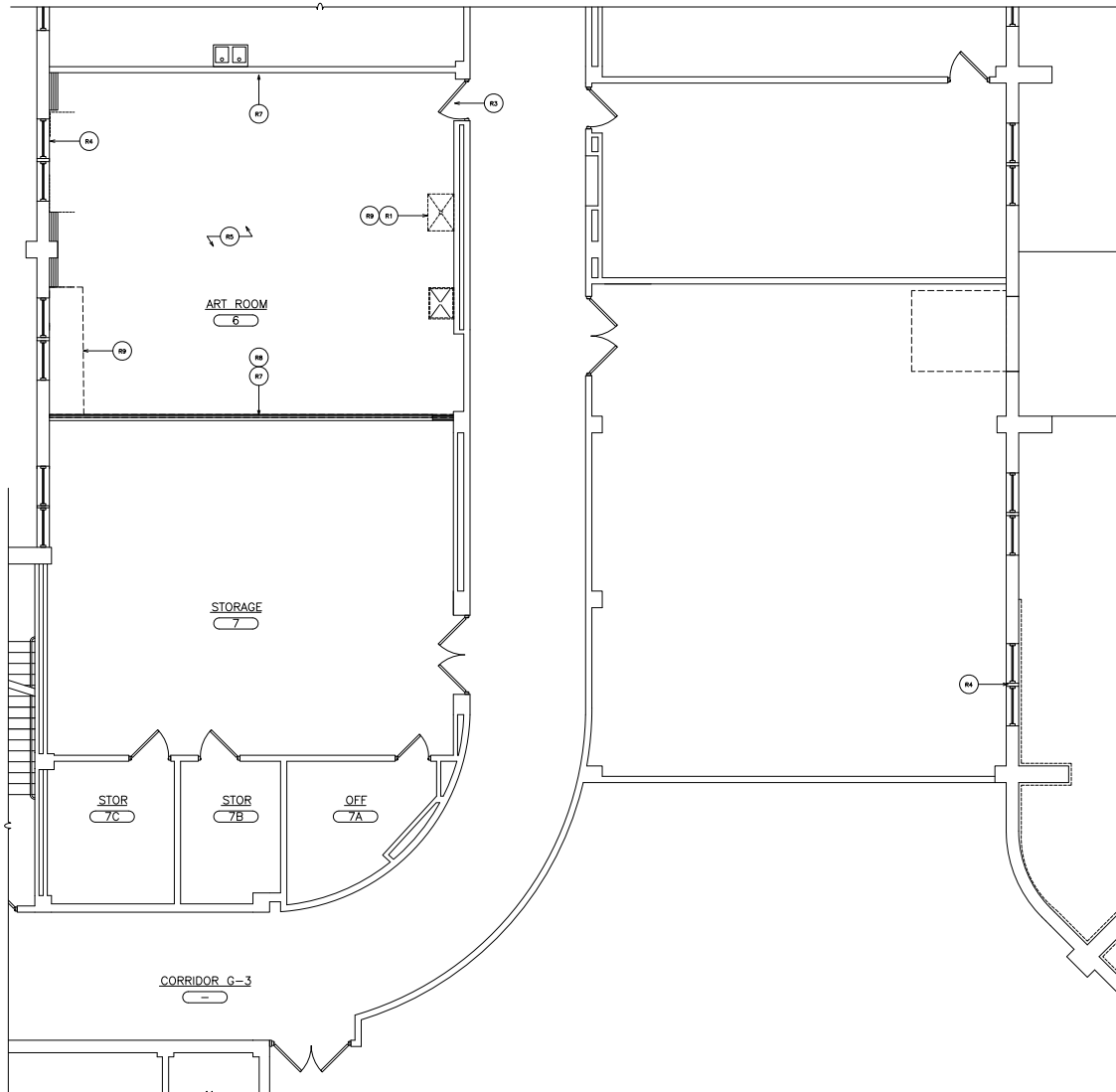
YONKERS PUBLIC SCHOOLS  
FIRE RESTORATIONS  
CROSS HILL ACADEMY  
100 BOLLINGER AVE. YONKERS N.Y. 10710

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YPS NO. 1089

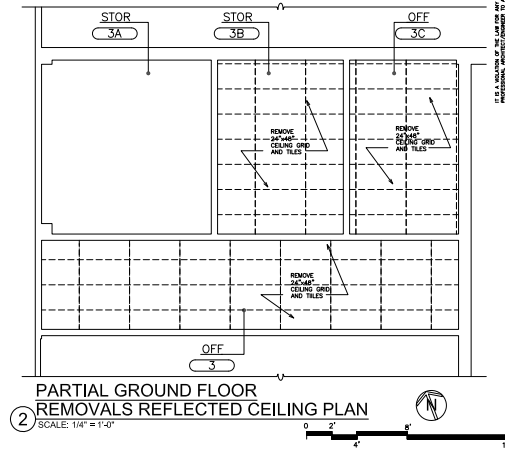
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SHEET TITLE		

CROSS HILL ACADEMY  
CENTRAL GROUND FLOOR PLAN  
FIRE DAMAGE

SHEET NO.  
CHA  
A10



1  
PARTIAL GROUND FLOOR  
REMOVAL PLAN  
SCALE: 1/4" = 1'-0"



2  
PARTIAL GROUND FLOOR  
REMOVALS REFLECTED CEILING PLAN  
SCALE: 1/4" = 1'-0"

- REMOVAL NOTES:
- R1 REMOVE PLUMBING FIXTURES, TRIM AND RELATED ITEMS IN THEIR ENTIRETY. REFER TO PLUMBING DRAWINGS BY P.E.
  - R2 REMOVE MECHANICAL EQUIPMENT. REFER TO MECHANICAL DRAWINGS BY M.E.
  - R3 REMOVE DOOR, DOOR FRAME & DOOR HARDWARE IN ITS ENTIRETY.
  - R4 REMOVE EXISTING WINDOW & WINDOW FRAME IN THEIR ENTIRETY. THE GASKET AT THE PERIMETER OF THE FRAME IS FOR CONTAINING - NOT HAZARDOUS. GLAZING COMPOUND AROUND GLASS ITSELF DOES NOT CONTAIN ASBESTOS OR PCBs.
  - R5 REMOVE EXISTING SUSPENDED ACoustIC TILE CEILING SYSTEM AND RELATED ITEMS IN THEIR ENTIRETY. E.C. SHALL DISCONNECT AND REMOVE LIGHTS AND RELATED WIRING.
  - R6 REMOVE EXISTING SUSPENDED PLASTER, METAL FRAME AND SOFFIT CEILING SYSTEM AND ALL RELATED ITEMS IN THEIR ENTIRETY. E.C. SHALL DISCONNECT AND REMOVE LIGHTS AND RELATED WIRING.
  - R7 REMOVE EXISTING TACKBOARD AND ADHESIVES AND RELATED ITEMS IN THEIR ENTIRETY.
  - R8 REMOVE EXISTING FULL HEIGHT GYPSUM BOARD AND ALL RELATED ITEMS IN THEIR ENTIRETY FROM FLOOR TO STRUCTURE ABOVE DOWN TO STUD.
  - R9 REMOVE EXISTING BUILT-IN CABINETRY, COUNTERTOPS AND RELATED ITEMS IN THEIR ENTIRETY.
  - R10 REMOVE EXISTING TACKBOARD/MARKERBOARDS, ADHESIVES AND RELATED ITEMS IN THEIR ENTIRETY.
  - R11 HE SHALL REMOVE EXISTING OUTCROOK.  
GC SHALL REMOVE EXISTING UPPER 1/2" OF DOUBLE HUNG WINDOWS AND REPLACE WITH 2" INSULATED PANELS WITH DARK BRONZE METAL PANEL FINISH @ EACH SIDE WITHIN EXISTING WINDOW FRAME. PROVIDE SUMP TRIM AND ACCESSORIES AS REQUIRED.

FILE PATH - \\S:\448.00 Yonkers Cross Hill Academy\Johannes\CURRENT\7-Rev\21-448.00 A-10-105-105.dwg

ENGINEER: **FLR**  
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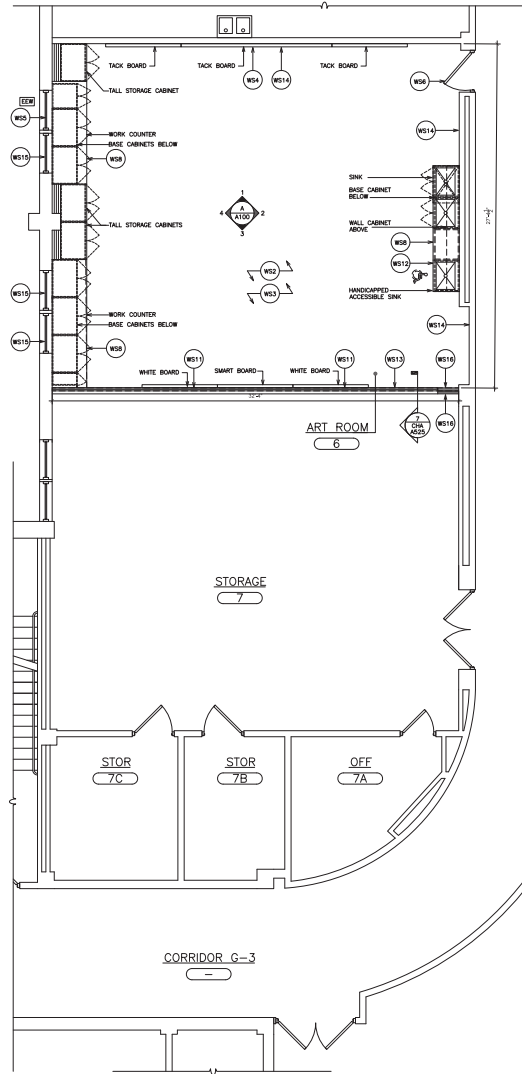
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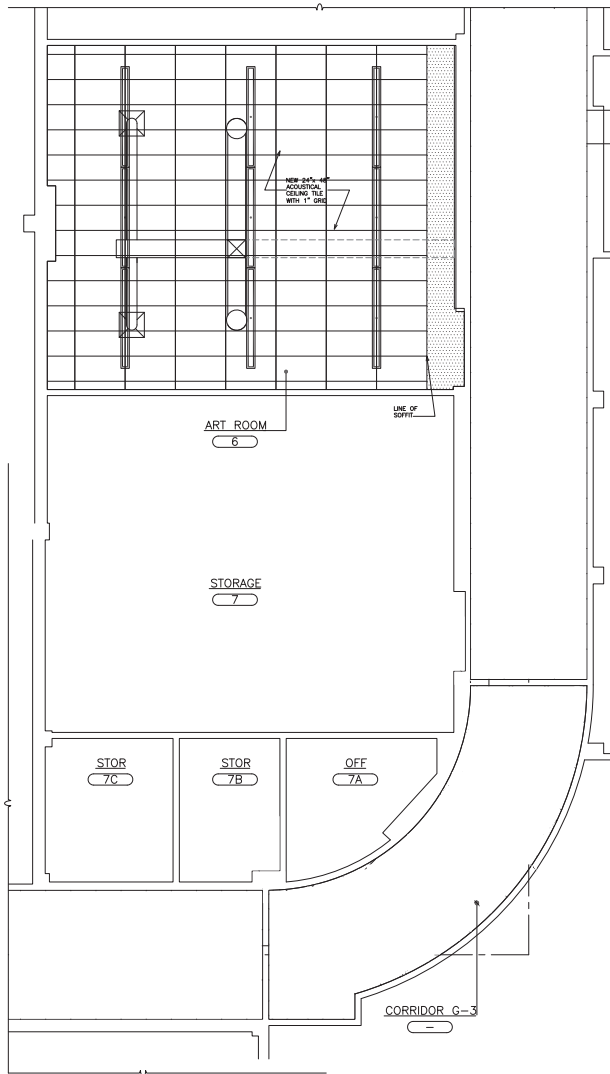
YONKERS PUBLIC SCHOOLS  
FIRE RESTORATIONS  
CROSS HILL ACADEMY  
100 BOLINDER AVE. YONKERS N.Y. 10703  
S.E.D. 186-2400-004-011

REVISION	DATE	BY
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SCALE		
SHEET TITLE		

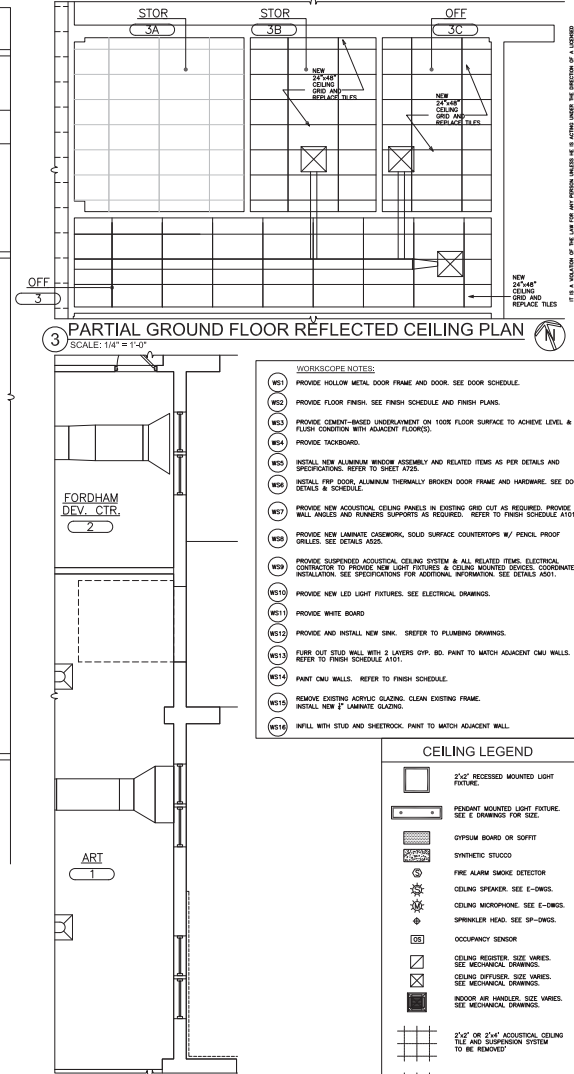
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1 PARTIAL GROUND FLOOR PLAN  
SCALE: 1/4" = 1'-0"



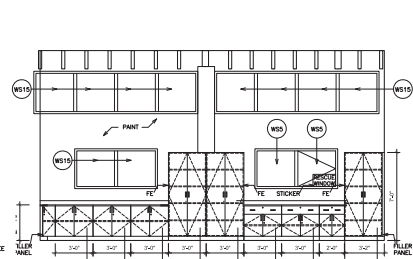
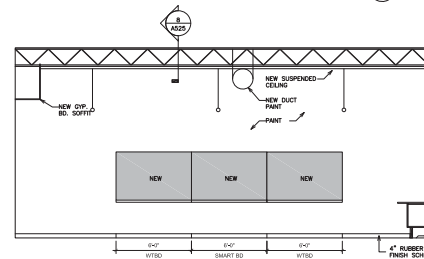
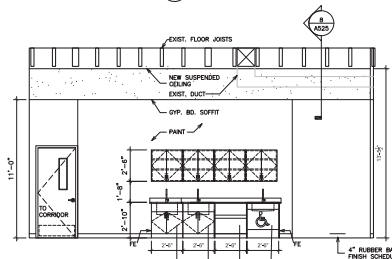
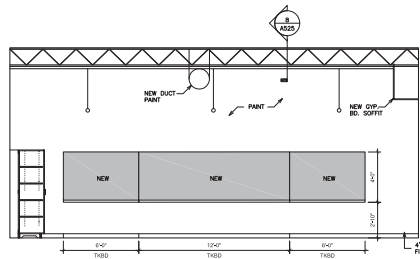
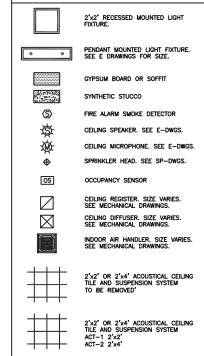
2 PARTIAL GROUND FLOOR REFLECTED CEILING PLAN  
SCALE: 1/4" = 1'-0"



3 PARTIAL GROUND FLOOR REFLECTED CEILING PLAN  
SCALE: 1/4" = 1'-0"

- WORKSCOPE NOTES:**
- (W1) PROVIDE HOLLOW METAL DOOR FRAME AND DOOR. SEE DOOR SCHEDULE.
  - (W2) PROVIDE FLOOR FINISH. SEE FINISH SCHEDULE AND FINISH PLANS.
  - (W3) PROVIDE CEMENT-BASED UNDERLAYMENT ON 100K FLOOR SURFACE TO ACHIEVE LEVEL & FLUSH CONDITION WITH ADJACENT FLOOR(S).
  - (W4) PROVIDE TACKBOARD.
  - (W5) METAL NEW ALUMINUM WINDOW ASSEMBLY AND RELATED ITEMS AS PER DETAILS AND SPECIFICATIONS. REFER TO SHEET A725.
  - (W6) METAL FRP DOOR, ALUMINUM THERMALLY BROKEN DOOR FRAME AND HARDWARE. SEE DOOR DETAILS & SCHEDULE.
  - (W7) PROVIDE NEW ACOUSTICAL CEILING PANELS IN EXISTING GRID CUT AS REQUIRED. PROVIDE WALL ANGLES AND RUNNERS SUPPORTS AS REQUIRED. REFER TO FINISH SCHEDULE A701.
  - (W8) PROVIDE NEW LAMINATE CASEWORK, SOLID SURFACE COUNTERTOPS W/ PENCIL, PROOF GRILLS. SEE DETAILS A85.
  - (W9) PROVIDE SUSPENDED ACOUSTICAL CEILING SYSTEM & ALL RELATED ITEMS. ELECTRICAL CONTRACTOR TO PROVIDE NEW LIGHT FIXTURES & CEILING MOUNTED DEVICES. COORDINATE INSTALLATION. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. SEE DETAILS A801.
  - (W10) PROVIDE NEW LED LIGHT FIXTURES. SEE ELECTRICAL DRAWINGS.
  - (W11) PROVIDE WHITE BOARD.
  - (W12) PROVIDE AND INSTALL NEW SINK. REFER TO PLUMBING DRAWINGS.
  - (W13) FLOOR CUT STUD WALL WITH 2 LAYERS GYP. BD. PAINT TO MATCH ADJACENT CMU WALLS. REFER TO FINISH SCHEDULE A701.
  - (W14) PAINT CMU WALLS. REFER TO FINISH SCHEDULE.
  - (W15) REMOVE EXISTING ACRYLIC GLAZING. CLEAN EXISTING FRAME. INSTALL NEW 2" LAMINATE GLAZING.
  - (W16) INFILL WITH STUD AND SHEETROCK. PAINT TO MATCH ADJACENT WALL.

**CEILING LEGEND**



A ART ROOM - ELEVATIONS  
SCALE: 1/4" = 1'-0"

**YONKERS PUBLIC SCHOOLS**  
**FIRE RESTORATIONS**  
**CROSS HILL ACADEMY**  
100 BOULDER AVE., YONKERS, N.Y. 10703  
S.E.D.# 1622400-0004-011

**CHA A100**

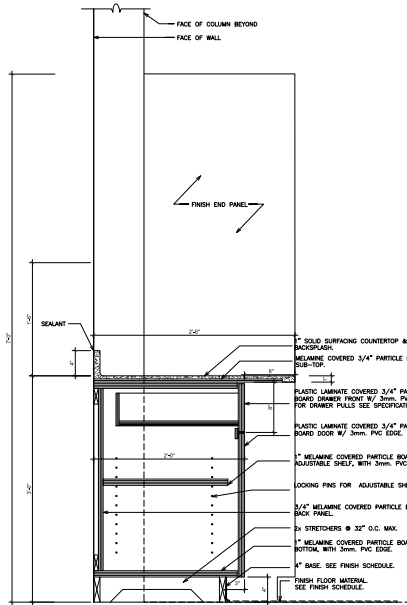
**REVISION**

NO.	DATE	BY
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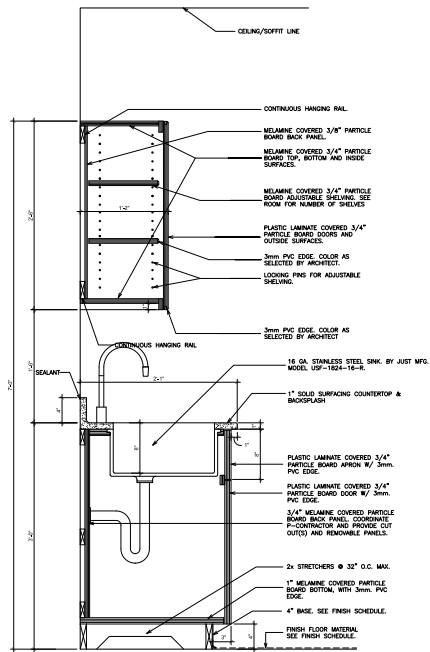
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**DRAWN BY** **CHA A100**  
**CHECKED BY** **CHA A100**  
**SCALE** **CHA A100**

**CHA A100**

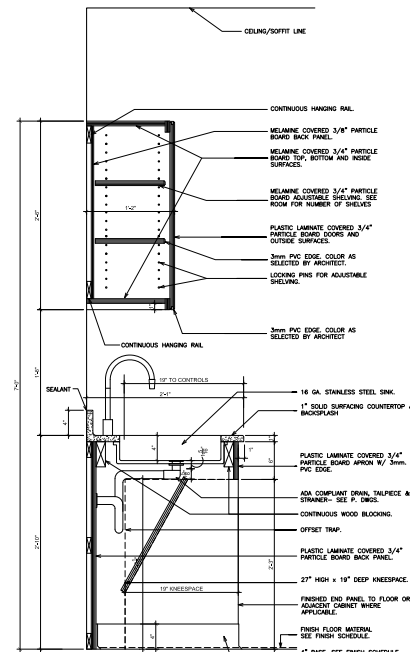




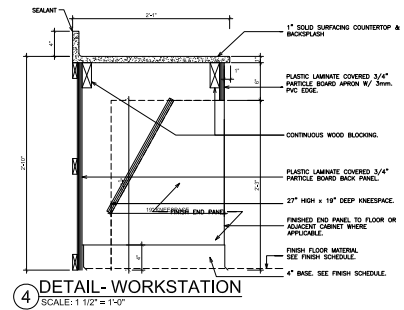
1 DETAIL - BASE AND WALL CABINET  
SCALE: 1 1/2" = 1'-0"



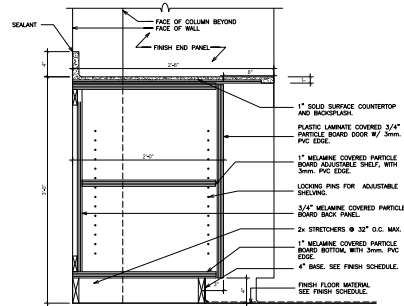
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SCALE: 1 1/2" = 1'-0"



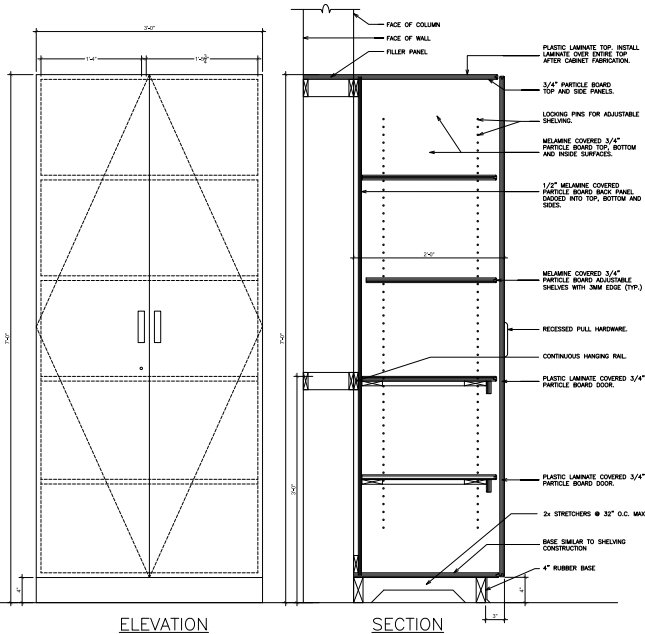
3 DETAIL - ADA SINK ENCLOSURE  
SCALE: 1 1/2" = 1'-0"



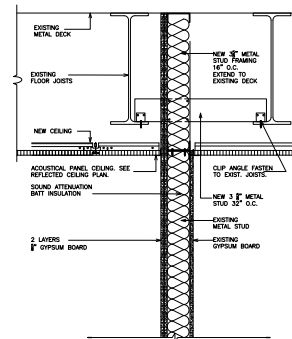
4 DETAIL - WORKSTATION  
SCALE: 1 1/2" = 1'-0"



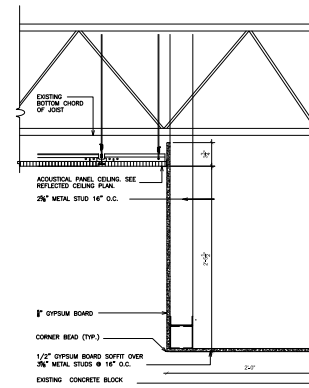
5 DETAIL - BASE CABINET  
SCALE: 1 1/2" = 1'-0"



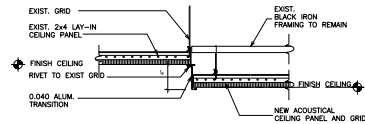
6 DETAIL - STORAGE CABINET  
SCALE: 1 1/2" = 1'-0"



7 DETAIL - PARTITION WALL  
SCALE: 1 1/2" = 1'-0"



8 DETAIL - SOFFIT  
SCALE: 1 1/2" = 1'-0"



9 DETAIL - NEW ACOUSTICAL CEILING TO EXISTING ACOUSTICAL CEILING  
SCALE: 1 1/2" = 1'-0"

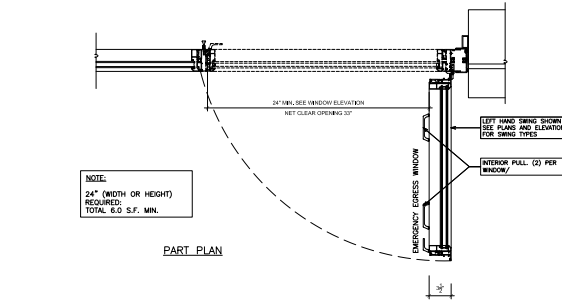
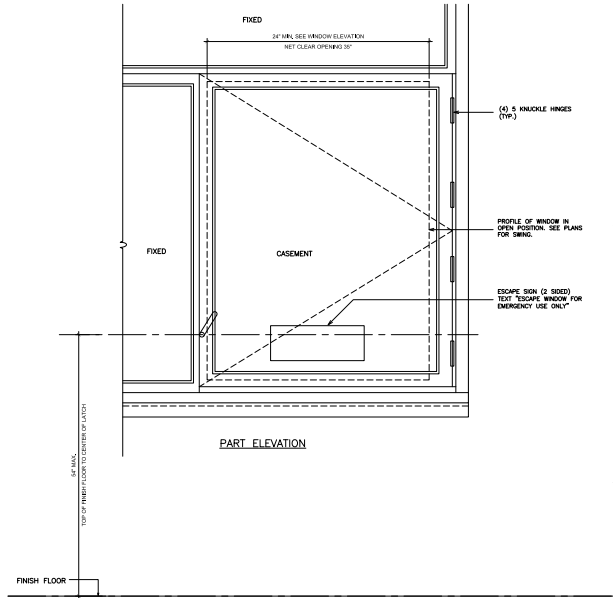
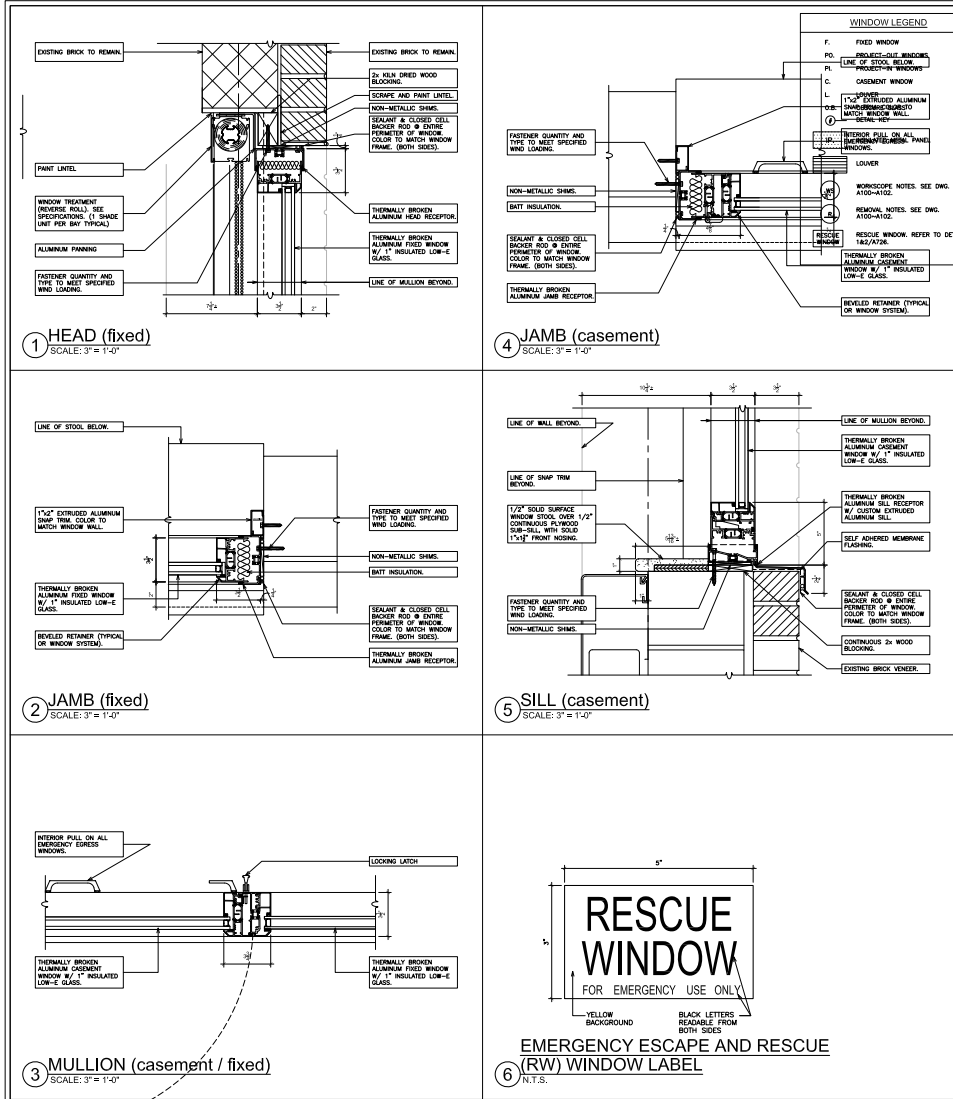


YONKERS PUBLIC SCHOOLS  
FIRE RESTORATIONS  
CROSS HILL ACADEMY

100 BOLIVAR AVE. YONKERS, N.Y. 10710  
914.936.5000 x2000-0501-0111

REVISION DATE BY  
ISSUED FOR BID  
DRAWN BY  
CHECKED BY  
SCALE: 1/8" = 1'-0"  
SHEET TITLE

CHA  
A525



**7 EXTERIOR ELEVATION- TYPICAL EMERGENCY EGRESS WINDOW**  
SCALE: 1 1/2" = 1'-0"

**OWNER:**  
YONKERS PUBLIC SCHOOLS  
FIRE RESTORATIONS  
CROSS HILL ACADEMY  
100 BOLLMER AVE. YONKERS N.Y. 10703  
S.E.D. #62-00001-004-011

**CONSULTANT(S):**

**ENGINEER:**  
Friedman & Finkbeiner Engineering, P.C.  
200 Avenue of the Americas, 10th Floor, New York, NY 10013  
Tel: 212-368-1000 Fax: 212-368-1001  
www.friedman-finkbeiner.com

**DATE:** 08/20/2019

**PROJECT NO.:** 101001

**YES NO.**

**REVISION**

**ISSUED FOR BID**

**DRAWN BY**

**CHECKED BY**

**SHEET SIZE** 18" x 24"

**SCALE**

**SHEET TITLE**

**WINDOW DETAILS**

**CHA A725**



# MECHANICAL GENERAL NOTES:

- DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. IT IS NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, FITTING OR COMPONENT. HOWEVER, CONTRACT DOCUMENTS REQUIRE COMPONENTS AND MATERIALS WHETHER OR NOT INDICATED OR SPECIFICALLY SPECIFIED TO MAKE THE SYSTEMS BEING INSTALLED COMPLETE, CODE COMPLIANT, TESTED AND OPERATIONAL.
- CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS, DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
- ALL MATERIALS, EQUIPMENT, METHODS OF INSTALLATION, REMOVALS AND DISPOSAL SHALL BE IN ACCORDANCE WITH THE STANDARDS, REGULATIONS, CODES, ORDINANCES, AND LAWS OF LOCAL, STATE, AND FEDERAL GOVERNMENTS, AND OTHER AUTHORITIES THAT HAVE LAWFUL JURISDICTION.
- PERFORM WORK, PROVIDE MATERIALS AND EQUIPMENT FOR SYSTEMS SHOWN, SPECIFIED AND DESCRIBED ON DRAWINGS. COMPLETELY COORDINATE ALL TRADES OF THIS CONTRACT AND PROVIDE COMPLETE AND FULLY FUNCTIONAL INSTALLATION. ALL WORK IN THIS SET TO BE COMPLETED UNDER THIS CONTRACT, UNLESS OTHERWISE INDICATED.
- PROTECT ALL EXISTING AND NEW BUILDING ELEMENTS (INSTALLED BY OTHER CONTRACTS) FROM DAMAGE. CONTRACTOR SHALL RESTORE ALL DAMAGED ELEMENTS TO ORIGINAL OR BETTER CONDITION.
- WORK SHALL BE EXECUTED IN A WORKMANLIKE MANNER AND SHALL PRESENT NEAT, RECTILINEAR APPEARANCE WHEN COMPLETED. MAINTAIN MANHOLE ROOM AT ALL TIMES. DO NOT RUN PIPES, DUCTS, AND CONDUIT EXPOSED UNLESS SHOWN AND NOTED TO BE EXPOSED ON DRAWINGS.
- MATERIALS AND EQUIPMENT SHALL BE NEW AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. MAINTAIN MANUFACTURER'S EQUIPMENT CLEARANCES.
- CONTRACTOR IS RESPONSIBLE FOR ALL WORK RELATED TO ISOLATING, SHUTTING DOWN, DRAINING, FILLING AND TESTING SYSTEMS TO ALLOW FOR COMPLETION OF WORK. INTERVENTIONS TO EXISTING SERVICES AND SYSTEMS SHALL BE AS SHORT AS POSSIBLE AND AT A TIME AND DATE DURING THE PROJECT. THE OWNER AND UTILITY AS APPLICABLE, INCLUDE ALL PREMIUM TIME ASSOCIATED WITH INTERRUPTING ALL SYSTEMS. INTERRUPTIONS SHALL BE SCHEDULED WITH OWNER, UTILITY AND COORDINATED WITH OTHER TRADE WORK.
- ALL EQUIPMENT PIPING, WIRING, INSULATION ETC. INSTALLED IN HVAC AIR FLOW SPACES SHALL MEET CODE REQUIREMENTS FOR SMOKE AND COMBUSTIBILITY.
- SEAL ALL PENETRATIONS THROUGH FIRE RATED WALLS, PARTITIONS AND FLOORS WITH UL RATED MATERIALS/METHODS EQUIVALENT TO FIRE RATING OF ASSEMBLY.
- COORDINATE ALL WALL/FOUNDATION PENETRATIONS WITH GENERAL CONTRACT AND SEAL WEATHERING. PROVIDE STAINLESS STEEL ESCUTCHION PLATE/TRIM RING FOR EACH ABOVE GRADE PENETRATION (BOTH SIDES).
- PROVIDE PROPER ACCESS TO EQUIPMENT THAT REQUIRES INSPECTION, REPLACEMENT OR REPAIR. ACCESS PANELS/DOORS SHALL BE A MINIMUM OF 12"x12", UNLESS OTHERWISE NOTED.
- DO NOT SUPPORT EQUIPMENT FROM SUSPENDED CEILING. ALL SUPPORTS SHALL BE FROM BUILDING STRUCTURE. FROM CEILING SUSPENSION SYSTEM WHICH HAS BEEN REINFORCED. SUPPORTS SHALL BE SELECTED AND INSTALLED TO PROVIDE A VIBRATION FREE INSTALLATION.
- CLEANING DURING MECHANICAL WORK: CLEAN THE MECHANICAL ROOM AND ROOMS WORK WILL BE DONE TO MINIMIZE DISTURBANCE IN THE BUILDINGS. WORKERS ARE TO USE PATHWAYS AND FACILITIES AGREED UPON WITH THE DISTRICT DESIGNER IN WRITING. THE AREA OUTSIDE THE BUILDING WHERE CUTTING WELDING OR STORAGE IS ALLOWED IS TO BE FENCED AT ALL TIMES. THE CONTRACTOR WILL ON A DAILY BASIS CLEAN THE GROUNDS AND THE BUILDING OF ANY DEBRIS OR GARBAGE GENERATED BY THEIR WORK.
- MODIFICATIONS TO CONTROLS WILL BE PROVIDED BY EMF CONTROLS. 581 N STATE ROAD, STE 6, BRIARCLIFFE MANOR NY 10510-1556

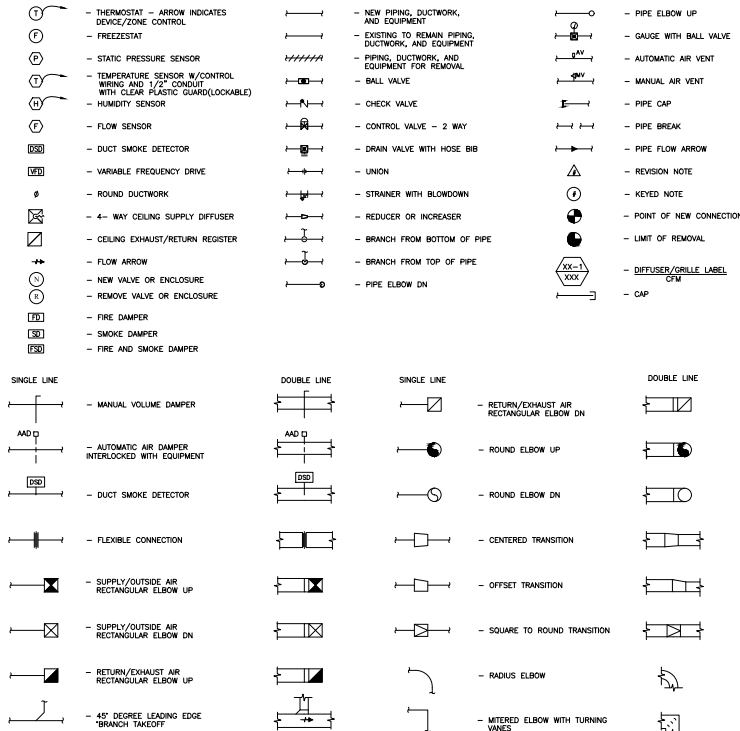
## HVAC REMOVAL NOTES:

- THE SCOPE OF REMOVAL SHOWN ON "REMOVALS" DRAWING IS DIAGRAMMATIC ONLY AND INDICATES THE INTENT OF THE WORK TO BE PERFORMED AND NOT THE COMPLETE SCOPE OF DEMOLITION AND/OR REMOVAL WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE OR RELOCATE ANY RELATED MECHANICAL DEVICES/ITEMS EVEN IF NOT SPECIFICALLY INDICATED TO BE REMOVED ON THESE DRAWINGS IN ORDER TO ACCOMMODATE NEW WORK.
- EQUIPMENT/ITEMS SHOWN CROSS HATCHED ON DRAWINGS ARE ITEMS TO BE REMOVED. ANY DEVICES/ITEMS REMOVED SHALL INCLUDE (BUT SHALL NOT BE LIMITED TO) THE REMOVAL OF ALL ASSOCIATED PIPING, CONTROLS, ETC. THAT ARE NOT INCORPORATED IN THE NEW LAYOUT. THE CONTRACTOR SHALL PERFORM ALL WORK REQUIRED TO INSURE CONTINUITY OF SERVICE TO EXISTING REMAINING EQUIPMENT. NO EXTRA WORK RELATING TO THE SCOPE OF WORK DESCRIBED WILL BE ALLOWED.
- EQUIPMENT, PIPING, ETC. REQUIRED TO RECONNECT SHALL BE INSTALLED CONCEALED WITHIN THE SUSPENDED CEILING, PARTITIONS AND/OR WALLS, FLOORS, NO SURFACE MOUNTED OR EXPOSED EQUIPMENT, PIPING, ETC., SHALL BE PERMITTED, UNLESS SPECIFICALLY INDICATED.
- ALL ITEMS TO BE REMOVED SHALL BE REVIEWED WITH THE OWNER PRIOR TO REMOVAL. OWNER SHALL HAVE FIRST SALVAGE RIGHTS. ITEMS THE OWNER WISHES TO KEEP SHALL BE REMOVED WITH CARE AND STORED AS DIRECTED BY OWNER. ITEMS THE OWNER DOES NOT WISH TO KEEP SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.

## COORDINATION NOTE:

1. COORDINATION: IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL AND MECHANICAL CONTRACTORS TO COORDINATE THEIR WORK. THE HVAC CONTRACTOR SHALL TAKE THE LEAD IN THE COORDINATION EFFORTS AND PREPARE THE COORDINATION DRAWINGS. COORDINATION DRAWINGS SHALL BE SUBMITTED FOR APPROVAL TO THE ENGINEER PRIOR TO STARTING ANY WORK. CEILING SPACE IS VERY LIMITED AND DUCTWORK/PIPING INSTALLATION AND LOCATION IS CRITICAL. THE PURPOSE OF THESE DRAWINGS IS TO COORDINATE THE LOCATIONS OF ALL PIPING, DUCTWORK, AND ASSOCIATED ELECTRICAL EQUIPMENT. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED AND LOCATED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC). MECHANICAL EQUIPMENT CANNOT INFILTRATE THE ELECTRICAL EQUIPMENT'S WORKING CLEARANCE AND WORKING SPACE. NOR CAN IT BE INSTALLED DIRECTLY ABOVE OR BELOW TO THE STRUCTURE, AS IDENTIFIED WITHIN THE NEC, ARTICLE 110 - "REQUIREMENTS FOR ELECTRICAL INSTALLATION". THIS COORDINATION IS REQUIRED FOR ALL PHASES OF THIS PROJECT. FAILURE TO FOLLOW THIS PROCEDURE DOES NOT RELIEVE THE CONTRACTOR FROM THE NOTED VIOLATIONS AND WILL NOT CONSTITUTE A REASON FOR A CHANGE ORDER.

## MECHANICAL SYMBOLS



## HVAC ABBREVIATIONS

AO	AUTOMATIC AIR DAMPER
ACCU	AIR COOLED CONDENSING UNIT
AD	ACCESS DOOR
AHU	AIR HANDLING UNIT
AMP	AMPERAGE
BDS	BIDIRECTIONAL DAMPER
BHP	BRAKE HORSEPOWER
BMS	BUILDING MANAGEMENT SYSTEM
BTU	BRITISH THERMAL UNIT
CFM	CUBIC FEET PER MINUTE
CLG	CEILING
C	CONDENSATE
DB	DRY-BULB TEMPERATURE
DDC	DIRECT DIGITAL CONTROL (SYSTEM)
DEG	DEGREE
DA	DAMPER
DN	DOWN
DP	DEWPOINT TEMPERATURE
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	EXHAUST AIR TEMPERATURE
EF	EXHAUST FAN
EFF	EFFICIENCY
EG	EXHAUST GRILLE
ESP	EXTERNAL STATIC PRESSURE
EXH	EXHAUST
F	FAHRENHEIT
FD	FIRE DAMPER
FF	FAN/FILTER
FLR	FLOOR
FPW	FEET PER MINUTE
FSTAT	FREEZE/STAT
FT	FEET
FT HD	FEET OF HEAD
FT WG	FEET OF WATER GAUGE
FV	FACE VELOCITY
G	GAL
GAL	GALLON
QPM	GALLONS PER MINUTE
HD	HEAD
HP	HORSEPOWER
MAT	MIXED AIR TEMPERATURE
MAU	MAKE-UP AIR UNIT
MBH	1,000 BTU/H
MCA	MINIMUM BRANCH CIRCUIT AMPACITY
OA	OUTSIDE AIR
OD	OUTSIDE AIR INTAKE
PD	PRESSURE DROP
RA	REMOVE
RI	RETURN AIR
RL	REFRIGERANT LIQUID
RPM	ROTATIONS PER MINUTE
RPM	REFRIGERANT SUCTION
S	SATISFACTORY
SAT	SUPPLY AIR TEMPERATURE
SEN	SENSIBLE HEAT
SG	SPECIFIC GRAVITY
SP	STATIC PRESSURE
TB	TESTING, ADJUSTING, BALANCE
TSTAT	THERMOSTAT
TYP	TYPICAL
VD	VOLUME DAMPER
WB	WETBULB
WG	WATER GAUGE
WP	HEAT PUMP
ΔT	TEMPERATURE DIFFERENCE



CONSULTANT(S)



**YONKERS PUBLIC SCHOOLS  
FIRE RESTORATIONS  
CROSS HILL ACADEMY**  
100 BOLIMER AVE. YONKERS N.Y. 10703  
S.E.D.# 68-254001-004-011

DATE PROJECT NO.	107001
YPS NO.	10689
WB	
WG	
WP	
ΔT	

REVISION	DATE	BY
ISSUED FOR BID		
DRAWN BY	AM	
CHECKED BY	AM	
SHEET SIZE	18" x 24"	
SCALE	AS NOTED	

SHEET TITLE

ABBREVIATIONS AND SYMBOLS

SHEET NO.  
**CHA  
M-001**

PLUMBING ABBREVIATIONS			
A/E	ARCHITECT / ENGINEER	INH	INDIRECT WASTE
AD	AREA DRAIN	INH	INSTANTANEOUS WATER HEATER
AD	ACCESS DOOR	KW	KILOWATT
ADA	AMERICANS WITH DISABILITIES ACT	LAV	LAVATORY
AF	ABOVE FINISH FLOOR	M	METER
AFG	ABOVE FINISH GRADE	MC	MECHANICAL CONTRACTOR
ALI	AUTHORITY Having JURISDICTION	MBH	1000 BTUH
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MH	MANHOLE
AP	ACCESS PANEL	NC	NORMALLY CLOSED
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION & AIR CONDITIONING ENGINEERS	NG	NATURAL GAS
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	NC	NOT IN CONTRACT
ASPE	AMERICAN SOCIETY OF PLUMBING ENGINEERS	NM	NOMINAL
AWWA	AMERICAN WATERWORKS ASSOCIATION	NPW	NON POTABLE WATER
BFG	BELOW FINISHED GRADE	NTS	NOT TO SCALE
BHP	BREAK HORSEPOWER	O2	OXYGEN
BOR	BASE OF RISER	OD	OUTSIDE DIAMETER
BTU	BRITISH THERMAL UNIT	OSH	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
BTUH	BRITISH THERMAL UNIT PER HOUR	P	PUMP
C	CELSIUS	PC	PLUMBING CONTRACTOR
CA	COMBUSTION AIR	PD	PUMP DISCHARGE
CA	COMBUSTED AIR	PI	PLUMBING AND DRAINAGE INSTITUTE
CGA	COMPRESSED GAS ASSOCIATION	PF	PLUMBING FIXTURE
CGAS	COMPRESSED GAS ASSOCIATION	PG	PRESSURE GAUGE
CGAS	COMPRESSED GAS ASSOCIATION	PM	PIPS PER MILLION
CO	CLEANOUT	PRS	PRESSURE REDUCING STATION
CO2	CARBON DIOXIDE	PRV	PRESSURE REDUCING VALVE
COND	CONDENSATE	PSI	POUNDS PER SQUARE INCH
CP	CIRCULATING PUMP	PSIA	POUNDS PER SQUARE INCH ATMOSPHERE
CPVC	CHLORINATED POLYVINYL CHLORIDE	PSIG	POUNDS PER SQUARE INCH GAUGE
CJ	COPPER	PVC	POLYVINYL CHLORIDE
CW	COLD WATER (DOMESTIC)	RD	ROOF DRAIN
D	DRAIN	RL	RAIN LEADER
DA	DIAMETER	RG	REVERSE CHECKING WATER
DFU	DRAINAGE FIXTURE UNIT	RPZ	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
DN	DOWN	SAN	SANITARY SEWER
DPCO	DECK PLATE CLEANOUT	SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
DWG	DRAWING	SCFM	STANDARD CUBIC FOOT/MINUTE
DWH	DOMESTIC WATER HEATER	SCW	SOFTENED COLD WATER
DWV	DRAIN WASTE VENT	SP	SUMP PUMP
EC	ELECTRICAL CONTRACTOR	SGFT	SQUARE FEET
EL	ELEVATION	SS	STAINLESS STEEL
ENC	ELECTRIC WATER COOLER	ST	STORM SEWER
EXT	EXTENDING	TAP	TEMPERATURE & PRESSURE (RELIEF VALVE)
F	FAHRENHEIT	TD	TRENCH DRAIN
FD	FLOOR DRAIN	TDH	TOTAL DYNAMIC HEAD
FJ	FIXTURE UNITS	TEMP	TEMPERATURE/TEMPERATURE
FV	FLUSH VALVE	TW	THERMOSTATIC MIXING VALVE
G	NATURAL GAS	TP	TRAP PRIMER
GAL	GALLON	TSTAT	THERMOSTAT
GALV	GALVANIZED	TW	TEMPERED WATER
GC	GENERAL CONTRACTOR	TYP	TYPICAL
GPM	GALLONS PER HOUR	UC	UNDERCUT
GPM	GALLONS PER MINUTE	UH	UNIT HEATER
H&CW	HOT AND COLD WATER	UL	UNDERWATERS LABORATORY
HB	HOSE BIBB	UPC	UNIFORM PLUMBING CODE
HC	HEATING & HVAC CONTRACTOR	UR	URINAL
HD	HUB DRAIN	V	VENT
HP	HORSEPOWER	VB	VACUUM BREAKER
HS	HAND SINK	VTR	VENT THROUGH ROOF
HW	HOT WATER (DOMESTIC)	WC	WATER CLOSET
HW	INVERT	WCO	WALL CLEANOUT
		WH	WALL HYDRANT
		WHA	WATER HAMMER ARRESTER
		WSFU	WATER SUPPLY FIXTURE UNIT
		XA	EXHAUST AIR

PLUMBING SYMBOLS			
	NEW PIPING AND EQUIPMENT		GAUGE WITH BALL VALVE
	EXISTING TO REMAIN PIPING AND EQUIPMENT		AUTOMATIC AIR VENT
	PIPING AND EQUIPMENT FOR REMOVAL		MANUAL AIR VENT
	BALL VALVE		THERMOMETER
	BALL VALVE (HOSE END & CAP)		BUTTERFLY VALVE
	BALANCING VALVE		PIPE CAP
	CHECK VALVE		END OF LINE CLEAN OUT
	CONTROL VALVE - 2 WAY		HOSE BIBB
	DRAIN VALVE WITH HOSE BIBB		FLOOR DRAIN
	FLANGED CONNECTION		FLOOR DRAIN WITH P-TRAP
	FUSIBLE LINK OIL SHUTOFF VALVE		DECK PLATE CLEAN OUT
	FLOW CONTROL VALVE		GAS OUTLET
	GATE VALVE		WATER HAMMER ARRESTOR
	GLOBE VALVE		WALL HYDRANT
	GAS COCK		VACUUM BREAKER
	LUBRICATED PLUG VALVE		INLINE PUMP
	PRESSURE REDUCING VALVE		WATER METER
	RELIEF VALVE		SUCTION DIFFUSER
	STRAINER WITH BLOWDOWN		FLEXIBLE CONNECTOR
	STRAINER WITH BLOWDOWN		PIPE BREAK
	SOLENOID VALVE		PIPE FLOW ARROW
	THREE-WAY CONTROL VALVE		REVISION/KEYED NOTE
	TRIPLE DUTY GLOBE VALVE		KEYED NOTE
	UNION		KEYED NOTE
	REDUCER OR INCREASER		KEYED NOTE
	BRANCH FROM BOTTOM OF PIPE		POINT OF NEW CONNECTION
	BRANCH FROM TOP OF PIPE		LIMIT OF REMOVAL
	PIPE ELBOW DN		SAW CUT FLOOR
	PIPE ELBOW UP		
	PIPE FLOW ARROW		
	BELOW SLAB PIPING		
	COLD WATER PIPING		
	HOT WATER PIPING		
	HOT WATER RECIRC PIPING		
	INDIRECT WASTE PIPING		
	SANITARY PIPING		
	DRAIN PIPING		
	VENT PIPING		
	NATURAL GAS PIPING		
	SANITARY PIPING (BELOW GRADE)		

- GENERAL PLUMBING NOTES:**
- DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. IT IS NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, FITTING OR COMPONENT. HOWEVER, CONTRACT DOCUMENTS REQUIRE COMPONENTS AND MATERIALS WHETHER OR NOT INDICATED OR SPECIFICALLY SPECIFIED TO MAKE THE SYSTEMS BEING INSTALLED COMPLETE, CODE COMPLIANT, TESTED AND OPERATIONAL.
  - CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS, DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
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  - PROTECT ALL EXISTING AND NEW BUILDING ELEMENTS FROM DAMAGE. CONTRACTOR SHALL RESTORE ALL DAMAGED ELEMENTS TO ORIGINAL OR BETTER CONDITION.
  - WORK SHALL BE EXECUTED IN A WORKMANLIKE MANNER AND SHALL PRESENT NEAT, RECTILINEAR APPEARANCE. WHEN COMPLETED, MAINTAIN MAXIMUM HEAD ROOM AT ALL TIMES. DO NOT RUN PIPES, DUCTS, AND CONDUIT EXPOSED UNLESS SHOWN AND NOTED TO BE EXPOSED ON DRAWINGS.
  - MATERIALS AND EQUIPMENT SHALL BE NEW AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. MAINTAIN MANUFACTURER'S EQUIPMENT CLEARANCES.
  - CONTRACTOR IS RESPONSIBLE FOR ALL WORK RELATED TO ISOLATING, SHUTTING DOWN, DRAINING, FILLING AND TESTING SYSTEMS TO ALLOW FOR COMPLETION OF WORK. INTERRUPTIONS TO EXISTING SERVICES AND SYSTEMS SHALL BE AS SHORT AS POSSIBLE AND AT A TIME AND DURATION APPROVED BY THE OWNER AND UTILITY AS APPLICABLE. INCLUDE ALL PREMIUM TIME ASSOCIATED WITH INTERRUPTIONS. ALL SYSTEM INTERRUPTIONS SHALL BE SCHEDULED WITH OWNER, UTILITY AND COORDINATED WITH OTHER TRADE WORK.
  - ALL EQUIPMENT PIPING, WIRING, INSULATION ETC. INSTALLED IN HVAC ARE PLUMBING SPACES SHALL MEET CODE REQUIREMENTS FOR SMOKE AND COMBUSTIBILITY.
  - SEAL ALL PENETRATIONS THROUGH FIRE RATED WALLS, PARTITIONS AND FLOORS WITH UL RATED MATERIALS/METHODS EQUIVALENT TO FIRE RATING OF ASSEMBLY.
  - PROVIDE PROPER ACCESS TO EQUIPMENT THAT REQUIRES INSPECTION, REPLACEMENT OR REPAIR. ACCESS PANELS/DOORS SHALL BE A MINIMUM OF 12"x12", UNLESS OTHERWISE NOTED.
  - DO NOT SUPPORT EQUIPMENT FROM SUSPENDED CEILINGS. ALL SUPPORT SHALL BE FROM BUILDING STRUCTURE OR FROM CEILING SUSPENSION SYSTEM WHICH HAS BEEN REINFORCED. SUPPORTS SHALL BE SELECTED AND INSTALLED TO PROVIDE A VIBRATION FREE INSTALLATION.
  - PLUMBING CONTRACTOR IS RESPONSIBLE FOR JETTING/SNAKING ALL SANITARY WASTE LINES (ALL FLOOR DRAINS) SHOWN ON THE DRAWINGS TO BE FULLY OPERATIONAL.
  - CLEANING DURING PLUMBING WORK: THE MECHANICAL ROOM AND ROOMS WHERE WORK WILL BE DONE TO MINIMIZE DISTURBANCE IN THE BUILDINGS. WORKERS ARE TO USE PATHWAYS AND FACILITIES AGREED UPON WITH THE DISTRICT DESIGNER IN WRITING. THE AREA OUTSIDE THE BUILDING WHERE CUTTING, WELDING OR STORAGE IS ALLOWED IS TO BE FENCED AT ALL TIMES. THE CONTRACTOR WILL ON A DAILY BASIS CLEAN THE GROUNDS AND THE BUILDING OF ANY DEBRIS OR GARBAGE GENERATED BY THEIR WORK.
  - CONTRACTOR TO PROVIDE NECESSARY MODIFICATIONS TO EXISTING PLUMBING TO ACCOMPLISH NEW WORK AND TO PROVIDE A PROPERLY FUNCTIONING SYSTEM. VERIFY IN FIELD.

Fire Restoration & Remediation, Inc.  
100 BOLLINGER AVE. YONKERS, N.Y. 10710  
TEL: 914-942-1111

ENGINEER

CONSULTANT(S)

SEAL

YONKERS PUBLIC SCHOOLS  
FIRE RESTORATIONS  
CROSS HILL ACADEMY  
100 BOLLINGER AVE. YONKERS, N.Y. 10710  
S.E.D. 68-24001-004-011

DATE PROJECT NO. 107001

ISSUED FOR BID

DRAWN BY JH

CHECKED BY JH

SHEET SIZE 18" x 24"

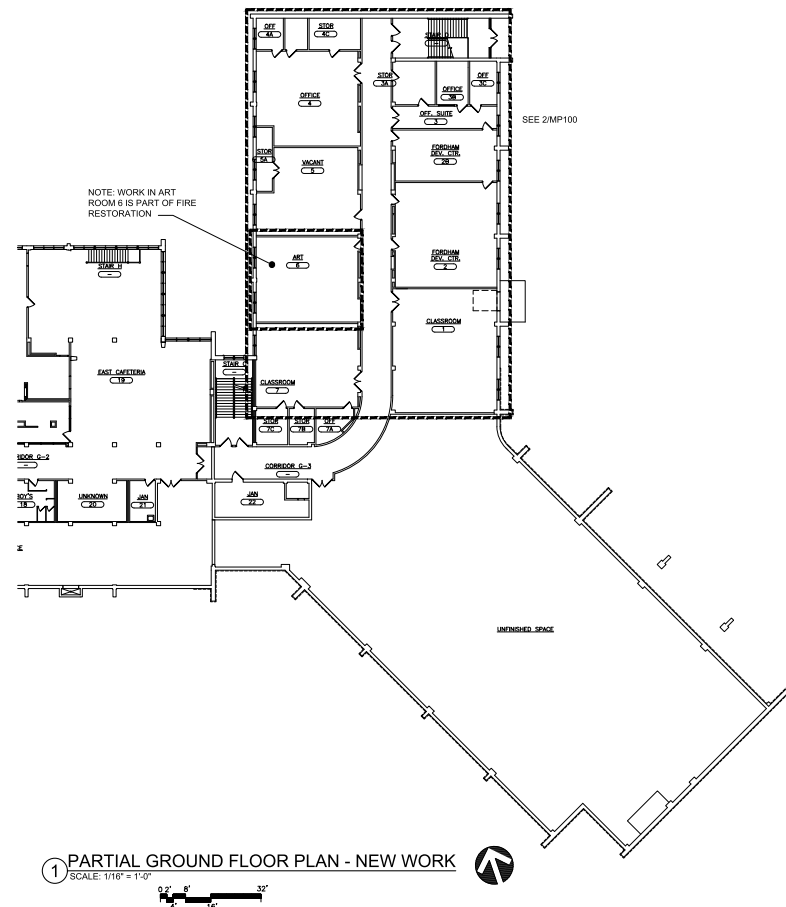
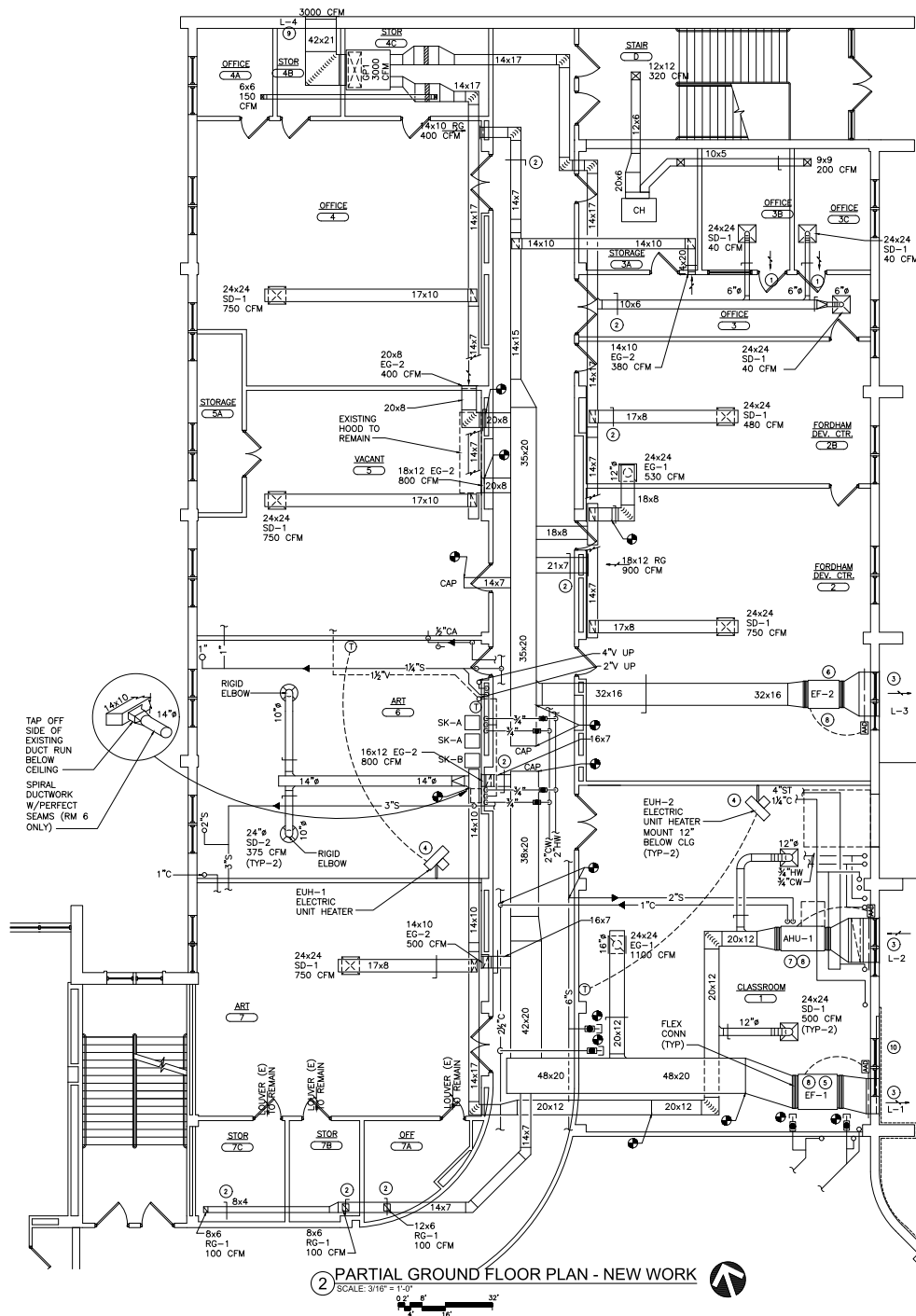
SCALE AS NOTED

SHEET TITLE

ABBREVIATIONS AND SYMBOLS

SHEET NO.

CHA P-001

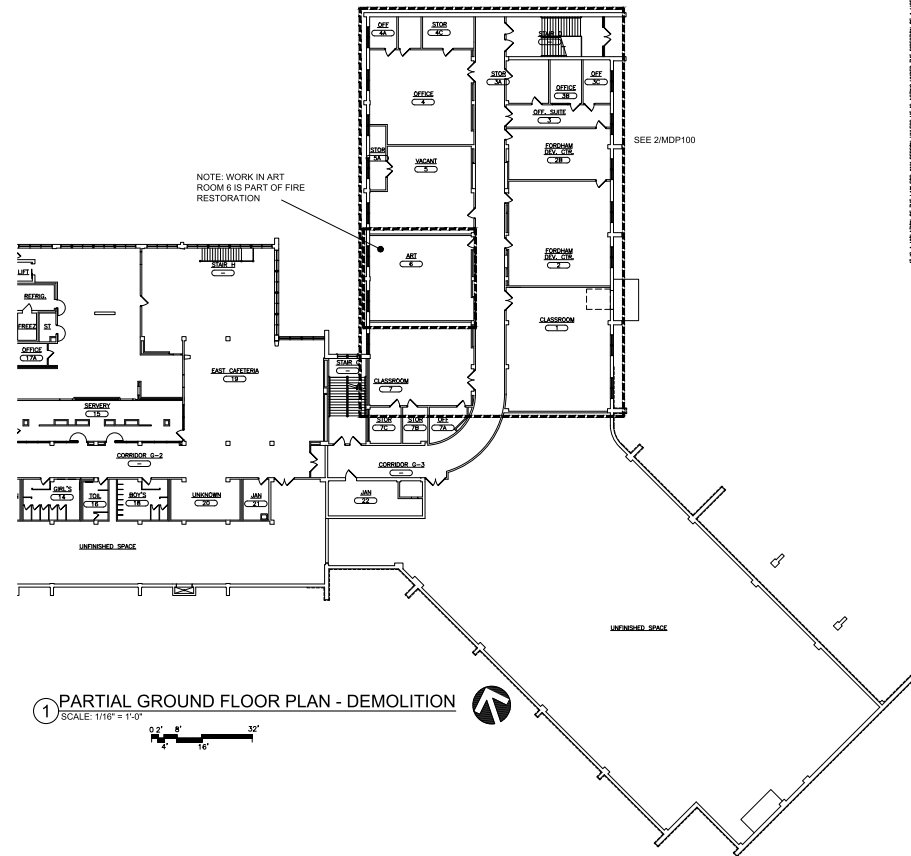
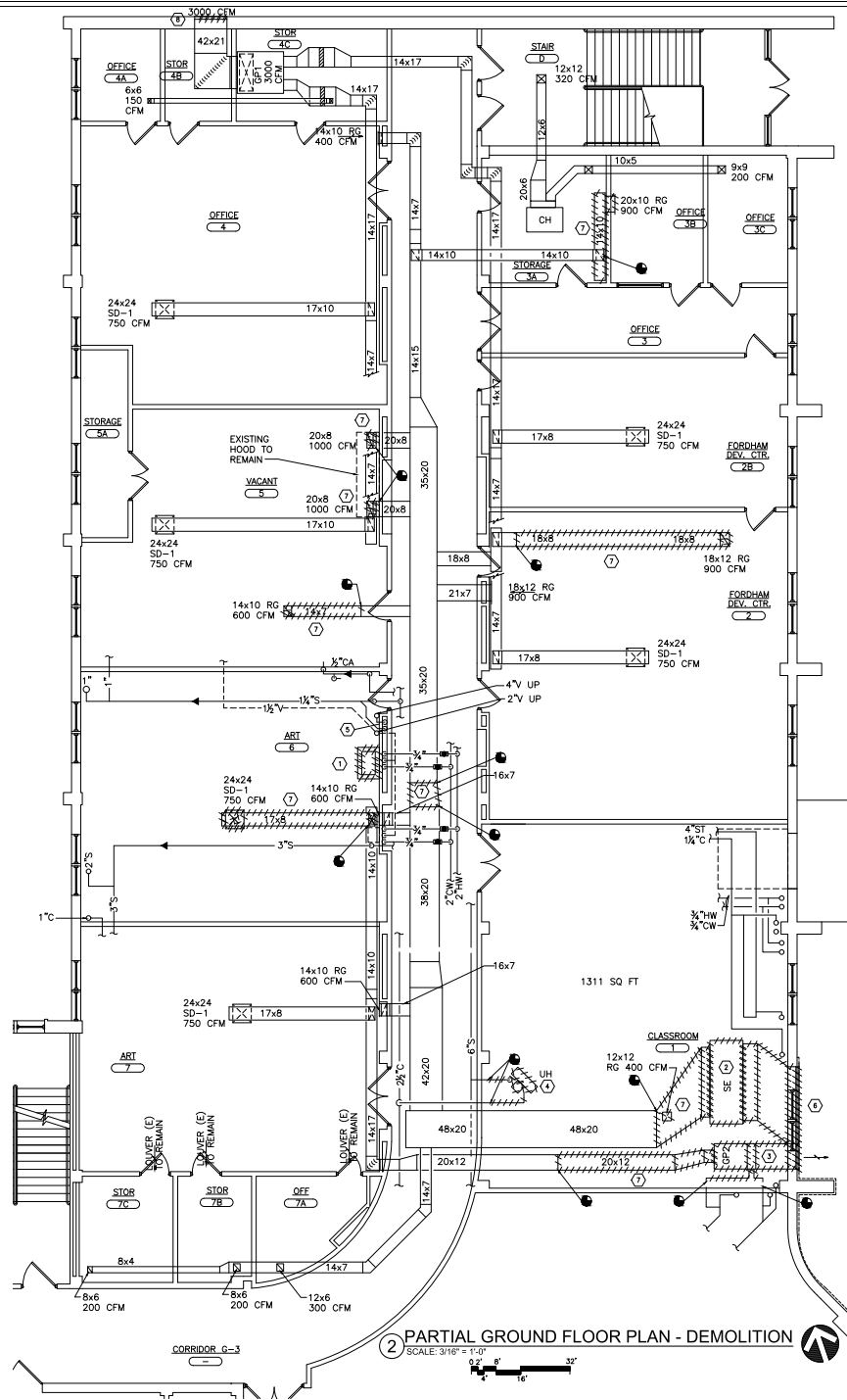


1 PARTIAL GROUND FLOOR PLAN - NEW WORK  
SCALE: 1/16" = 1'-0"

- KEYED NOTES - NEW WORK:**
- 1 PROVIDE ANEMOSTAT DOOR LOUVER 12x12 MODEL AFEL 6" AFF. COLOR BEIGE
  - 2 PROVIDE VOLUME DAMPERS AS SHOWN. REBALANCE AS REQUIRED
  - 3 PROVIDE RUSKIN MODEL ELF375XH 80X80(AH-1) 80X80(EF-2) 11"-5x3-0"(EF-1) PROVIDE LOUVER IN UPPER WINDOWS. BLANK OFF UNFINISHED PORTION AND PAINT TO MATCH ADJACENT SURFACE. SEAL PERIMETER OF LOUVER WATERIGHT. CONTRACTOR TO REMOVE MULLIONS AS NECESSARY FOR INSTALLATION OF NEW GLAZING. DOES NOT CONTAIN PCB'S OR ASBESTOS. THE EXISTING CAULK AROUND PERIMETER OF FRAME CONTAINS PCB'S. DO NOT DISTURB CAULK.
  - 4 PROVIDE ELECTRIC UNIT HEATER QUARK MODEL MUHOS-81 WITH THERMOSTAT. PROVIDE ALL SUPPORTS AS REQUIRED. MOUNT 12" BELOW CEILING. (WIRING BY EC)
  - 5 PROVIDE GREENECK EXHAUST FAN MODEL BCF-212, 994 RPM, 1.25 STATIC PRESSURE. PROVIDE ALL SUPPORTS, VIBRATION ISOLATORS AND ALL APPURTENANCES. MOUNT HIGH AS POSSIBLE FROM STRUCTURE ABOVE. (WIRING BY EC)
  - 6 PROVIDE GREENECK EXHAUST FAN MODEL BCF-212, 1045 RPM, 1.25 STATIC PRESSURE. PROVIDE ALL SUPPORTS, VIBRATION ISOLATORS AND ALL APPURTENANCES. MOUNT HIGH AS POSSIBLE FROM STRUCTURE ABOVE. (WIRING BY EC)
  - 7 PROVIDE DAKIN MODEL LAHOOTA AND ALL APPURTENANCES.
  - 8 BALANCE ALL NEW EQUIPMENT, DIFFUSERS AND RETURN GRILLES TO CFM'S SHOWN
  - 9 PROVIDE NEW LOUVER RUSKIN ELF375XH CUSTOM SIZE 42" 20". SEAL AROUND LOUVER WATERIGHT. CONTRACTOR TO FIELD VERIFY EXACT SIZE BEFORE ORDERING.
  - 10 LOUVER L-1 REQUIRES 48x36 FREE AREA. BLANK OFF UNFINISHED PORTION WITH 4" RIGID INSULATED PANEL AND WITH 22 GAUGE SHEET METAL INTERIOR PANEL. PAINT INTERIOR METAL PANEL TO MATCH ADJACENT SURFACES

NOTE: MECHANICAL CONTRACTOR IS RESPONSIBLE FOR REMOVING CEILINGS AND WALLS FOR THEIR PORTION OF WORK AND TO REINSTALL CEILINGS AND WALLS TO ORIGINAL CONDITIONS.

KEY-PLAN  
SCALE NONE



- KEYED NOTES - DEMOLITION**
- 1 REMOVE SINK(S) IN THEIR ENTIRETY. PREPARE FOR NEW WORK.
  - 2 REMOVE EXHAUST FAN AS SHOWN. PREPARE FOR NEW WORK.
  - 3 REMOVE HEATING UNIT AS SHOWN. PREPARE FOR NEW WORK.
  - 4 REMOVE UNIT HEATER AS SHOWN. PREPARE FOR NEW WORK.
  - 5 REMOVE THERMOSTAT. PREPARE FOR NEW WORK.
  - 6 REMOVE 11'-0"x36" LOUVER. CAULK CONTAINS PCB'S. PREPARE FOR NEW WORK.
  - 7 REMOVE DUCTWORK AND AIR TERMINAL DEVICES AS SHOWN. PREPARE FOR NEW WORK.
  - 8 REMOVE LOUVER. PREPARE FOR NEW WORK.

**OWNER:**  
Yonkers Public Schools  
100 BOULDER AVE. YONKERS N.Y. 10703

**CONSULTANTS:**  
CH&A  
100 BOULDER AVE. YONKERS N.Y. 10703

**STAMP**

**YONKERS PUBLIC SCHOOLS  
FIRE RESTORATIONS  
CROSS HILL ACADEMY**

100 BOULDER AVE. YONKERS N.Y. 10703

8 E.D. 100-21-0001-0001-011

REVISION	ISSUED FOR	DATE	BY
1	CH&A	JUL	JUL

**KEY PLAN**

**CHA  
MPD-100**

1\_27\_2022

# COORDINATION NOTE:

1. COORDINATION - IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL AND MECHANICAL CONTRACTORS TO COORDINATE THEIR WORK. THE HVAC CONTRACTOR SHALL TAKE THE LEAD IN THE COORDINATION EFFORT AND PRODUCE THE COORDINATION DRAWINGS. COORDINATION DRAWINGS SHALL BE SUBMITTED FOR APPROVAL TO THE ENGINEER PRIOR TO STARTING ANY WORK. CEILING SPACE IS VERY LIMITED AND DUCTWORK/PIPING INSTALLATION AND LOCATION IS CRITICAL. THE PURPOSE OF THESE DRAWINGS IS TO COORDINATE THE LOCATIONS OF ALL PIPING, DUCTWORK, AND ASSOCIATED ELECTRICAL EQUIPMENT. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED AND LOCATED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC). MECHANICAL EQUIPMENT CANNOT INFILTRATE THE ELECTRICAL EQUIPMENT'S WORKING CLEARANCE AND WORKING SPACE. NO CR CAN BE INSTALLED DIRECTLY ABOVE OR BELOW TO THE STRUCTURE, AS IDENTIFIED WITHIN THE NEC, ARTICLE 110 - "REQUIREMENTS FOR ELECTRICAL INSTALLATION". THIS COORDINATION IS REQUIRED FOR ALL PHASES OF THIS PROJECT. FAILURE TO FOLLOW THE PROCEDURE DOES NOT RELIEVE THE CONTRACTOR FROM THE DUTIES AND WILL NOT CONSTITUTE A REASON FOR A CHANGE ORDER.

INSULATION SCHEDULE												
TYPE	EQUIPMENT OR SYSTEM SERVED	INSULATION CLASS (a)			JACKETING CLASS (b)			THICKNESS (IN)				
		INTERIOR CONCEALED	INTERIOR EXPOSED	EXTERIOR	INTERIOR GENERAL	EQUIPMENT ROOMS	EXTERIOR	<1"	1"~<1 1/2"	1 1/2"~ <4"	4" ~ <6"	26" & UP
A	DOW COOLING COIL CONDENSATE	FE	--	--	0	--	--	0.5	0.5	1.0	1.0	1.0
		--	FE	--	--	4	--	--	0.5	0.5	1.0	1.0
B	HWS, HWR	FG	--	--	1	--	--	1.5	1.5	2	2	2
		--	FG	--	1	1	--	--	1.5	1.5	2	2
C	DUCTWORK	--	--	UR	--	6	--	1.5	1.5	2	2	2
		FG (a)	--	--	2	--	--	--	--	--	--	1 1/2 (a)
D	LPS/LPC	--	FG (a)	--	2	2	--	--	--	--	--	2 (a)(a)
		--	--	UR(a)	--	--	3	--	--	--	--	2 (a)(a)
		FG	--	--	1	--	--	1.5	1.5	3	3	3
		--	FG	--	1	1	--	--	1.5	1.5	3	3
		--	--	UR	--	--	6	1.5	1.5	3	3	3
(a) FG -- FIBROUS GLASS		(b) 0 -- NONE		(c) SUPPLY AIR			(f) EXCEPT SUPPLY AIR WITHIN CONDITIONED SPACE					
FE -- FLEXIBLE ELASTOMERIC		1 -- ALL SERVICE		1 -- SURFACE AIR			(g) INSULATE EXHAUST AIR 15'-0" FROM RETURN AIR					
CS -- URETHANE		2 -- ALUMINUM FOIL		2 -- MIXED AIR			(h) BLANKET					
CS -- CALCIUM SILICATE		3 -- CAWMS		3 -- RETURN AIR			(i) TWO LAYERS, 3 IN TOTAL					
FE -- FIRE RATED		4 -- POLYVINYL CHLORIDE					(j) INSULATION BELOW 8'-0" TO HAVE PVC W/					
		5 -- STAINLESS STEEL										
		6 -- ALUMINUM										
		7 -- EPDM										
							(k) 1" RIGID BOARD					

ALL INSULATION TO COMPLY WITH 2015 NYS ENERGY CONSERVATION CONSTRUCTION CODE

AIR HANDLING UNIT SCHEDULE										
QTY	MARK	SERVICE	MODEL	NOMINAL CAPACITY	TYPE	VOLTS/HERTZ/PHASE/HP	FLA	ASSOCIATED EQUIPMENT	NOTES	
1	AHU-1	BASEMENT ROOMS	DANSON	1500 CFM	STEAM	208/60/3/2.0	7.8	LAH057A	1,2,3,4,5	

NOTE 1: SECURELY HANG FROM STRUCTURE ABOVE USING STEEL THREADED RODS AND SUPPORT FRAMING W/ VIBRATION ISOLATORS. MUST INSTALL UNIT TO ALLOW FOR MAINTENANCE CLEARANCES AND FILTER CHANGES.

NOTE 2: PROVIDE SUPPLY AIR DUCT SMOKE DETECTOR AND TIE INTO UNIT POWER FEED AND AIR INTAKE DAMPERS. CONNECT TO EXISTING EMS

NOTE 3: TOTAL STATIC .32IN. AIR TEMPERATURE ENTERING DB 35 DEGREES, LEAVING DB 11.4 DEGREES, STEAM PRESSURE 5 PSI, CONDENSATE 135.5 LB/H

NOTE 4: PROVIDE MERV 14 FILTER

NOTE 5: PROVIDE (2) 24"x24"x4" THICK FILTERS

FIXTURE AND EQUIPMENT CONNECTION SCHEDULE										
DESIGNATION	DESCRIPTION	COLD WATER	HOT WATER	WASTE OR SANITARY	VENT	CARRIERS & ACCESSORIES	NOTES			
SK-A	SINK	1/2"	1/2"	1 1/2"	2"	YES	NOTE 1			
SK-B	SINK(HANDICAPPED)	1/2"	1/2"	1 1/2"	2"	YES	NOTE 1			

NOTE: 1. PROVIDE ELKAY SINK LRA0 2022 WITH FAUCET ELKAY LK4101, WATER SUPPLIES MCQUIRE 2167-LK-F AND TRAP MCQUIRE 8912-F ADA COMPLIANT. PROVIDE SOLID INTERCEPTOR MIFAB M-SOLUS-S WITH ALL APPURTENANCES.

2. ALL PLUMBING FIXTURES TO BE PROVIDED WITH A TURN SHUT-OFF VALVES AS SPECIFIED

LOUVER SCHEDULE										
UNIT NO.	LOCATION	SERVICE	CFM	LOUVER	APPROXIMATE SIZE			MAX PD IN W.G.	BIRD SCREEN	DESIGN EQUIPMENT
					LENGTH	DEPTH	HEIGHT			
L-1	ROOM 1	EXHAUST	SEE PLAN	ALUMINUM LOUVER	132	4	36	.05	YES	RUSKIN ELF3750H
L-2	ROOM 1	AIR INTAKE	SEE PLAN	ALUMINUM LOUVER	36	4	36	.05	YES	RUSKIN ELF3750H
L-3	ROOM 2	EXHAUST	SEE PLAN	ALUMINUM LOUVER	60	4	36	.05	YES	RUSKIN ELF3750H
L-4	STOR. 4B	AIR INTAKE	SEE PLAN	ALUMINUM LOUVER	42	4	20.625	.05	YES	RUSKIN ELF3750H

NOTE: PROVIDE FACTORY PAINTED FINISH (COLOR BY OWNER)

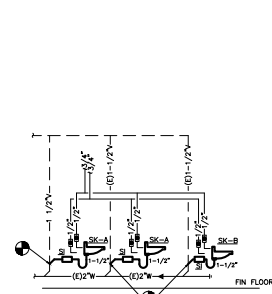
ALL LOUVERS TO HAVE ALUMINUM BIRD SCREENS

REGISTER, GRILLE AND DIFFUSER SCHEDULE										
TYPE	APPLICATION	MATERIAL	FINISH	DESIGN EQUIPMENT	NOTES					
SD-1	SUPPLY	STEEL	WHITE	TITUS MODEL TMS	1,2,3					
SD-2	SUPPLY	STEEL	WHITE	TITUS MODEL R-OMNI	1,3					
ED-1	EXHAUST	STEEL	WHITE	TITUS MODEL 350 RL	1,2,3					
ED-2	EXHAUST	STEEL	WHITE	TITUS MODEL 350-ZRL	3					

NOTE 1: PROVIDE APPROPRIATE SIZED NECK TO CONNECT TO NEW OR EXISTING DUCT. SEAL AND MAKE CONNECTIONS AIR TIGHT.

NOTE 2: PROVIDE GRILLE OR DIFFUSER TO FIT IN A FULL 2X2 CEILING TILE IN ALL DROP CEILING.

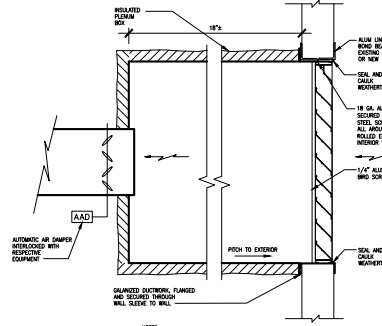
NOTE 3: PROVIDE VOLUME DAMPERS FOR AIR BALANCING.



NOTE: PROVIDE SOLID INTERCEPTOR (S) WITH M-SOLUS-S AND APPURTENANCES OR APPROVED EQUAL

SCALE: NONE

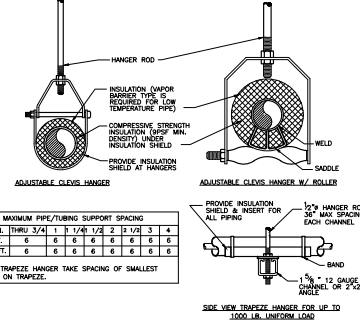
5 PLUMBING RISER DIAGRAM



NOTE: 1. ALL HARDWARE MUST BE CORROSION RESISTANT AND HAVE FINISH TO MATCH ADJACENT SURFACE WHERE EXPOSED TO VIEW.

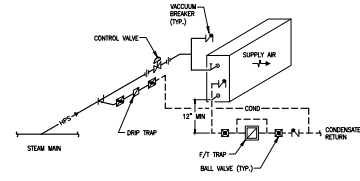
SCALE: NONE

4 LOUVER DETAIL



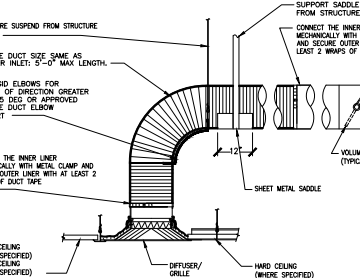
SCALE: NONE

1 PIPE SUPPORT DETAIL



SCALE: NONE

2 STEAM HEATING COIL PIPING DETAIL



SCALE: NONE

3 FLEXIBLE AIR DUCT CONNECTOR



CONSULTANT(S)



SEAL

YONKERS PUBLIC SCHOOLS  
FIRE RESTORATIONS  
CROSS HILL ACADEMY  
100 BOLIVER AVE. YONKERS N.Y. 10703  
S.E.D. #68-24001-0044-011

DATE PROJECT NO. 10/06/21

YPS NO. 10609

REVISION

DATE

BY

ISSUED FOR BID

OWNER BY

DATE

BY

SCALE

NOTED

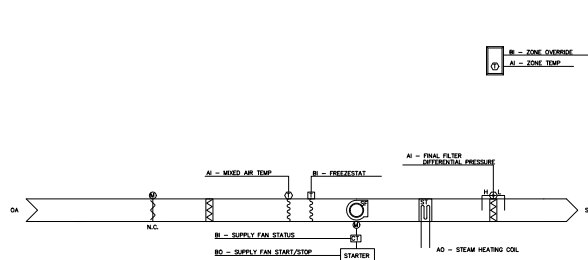
SHEET TITLE

DETAILS AND SCHEDULES

SHEET NO.

CHA

MP-500



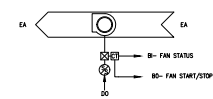
1 AIR HANDLING UNIT CONTROL SCHEMATIC  
SCALE: NONE

**RUN CONDITIONS - SCHEDULED:**  
THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:  
OCCUPIED MODE: THE UNIT SHALL MAINTAIN 70 DEG. F (ADA) COOLING SETPOINT, 70 DEG. F (ADA) HEATING SETPOINT.  
UNOCCUPIED MODE (NIGHT SETBACK): THE UNIT SHALL MAINTAIN 60 DEG. F (ADA) COOLING SETPOINT, 65 DEG. F (ADA) HEATING SETPOINT.  
ALARMS SHALL BE PROVIDED AS FOLLOWS:  
HIGH ZONE TEMP: IF THE ZONE TEMPERATURE IS GREATER THAN THE COOLING SETPOINT BY A USER DEFINABLE AMOUNT (ADA).  
LOW ZONE TEMP: IF THE ZONE TEMPERATURE IS LESS THAN THE HEATING SETPOINT BY A USER DEFINABLE AMOUNT (ADA).  
**ZONE OPTIMAL START:**  
THE UNIT SHALL USE AN OPTIMAL START ALGORITHM FOR MORNING START-UP. THIS ALGORITHM SHALL MINIMIZE THE UNOCCUPIED MAKE-UP OR COOL-DOWN PERIOD WHILE STILL ACHIEVING COMFORT CONDITIONS BY THE START OF SCHEDULED OCCUPIED PERIOD.  
**ZONE UNOCCUPIED OVERRIDE:**  
A ZONE LOCAL OVERRIDE CONTROL SHALL ALLOW AN OCCUPANT TO OVERRIDE THE SCHEDULE AND PLACE THE UNIT INTO AN OCCUPIED MODE FOR AN ADJUSTABLE PERIOD OF TIME AT THE DISCRETION OF THIS TIME, CONTROL OF THE UNIT SHALL AUTOMATICALLY RETURN TO THE SCHEDULE.  
**FREESTAT PROTECTION:**  
THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A FREESTAT STATUS.  
**SUPPLY FAN:**  
THE SUPPLY FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, UNLESS SHUTDOWN OR UNLESS, TO PREVENT SHORT CYCLING, THE SUPPLY FAN SHALL HAVE A USER DEFINABLE (ADA) MINIMUM RUNNING.  
ALARMS SHALL BE PROVIDED AS FOLLOWS:  
SUPPLY FAN FAILURE: COMMANDED ON BUT THE STATUS IS OFF.  
SUPPLY FAN IN HANDS: COMMANDED OFF, BUT THE STATUS IS ON.  
SUPPLY FAN RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADA).  
**HEATING COIL:**  
THE CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND MODULATE THE ELECTRIC HEATING COIL TO MAINTAIN ITS HEATING SET POINT.

THE HEATING SHALL BE ENABLED WHENEVER:  
OUTSIDE AIR TEMPERATURE IS LESS THAN 65 DEG.F (ADA) AND THE ZONE TEMPERATURE IS BELOW HEATING SETPOINT, AND THE SUPPLY FAN STATUS IS ON.  
THE HEATING COIL SHALL OPEN WHENEVER THE FREESTAT (IF PRESENT) IS ON.  
**MINIMUM OUTSIDE AIR VENTILATION - FRIED PERCENTAGE:**  
THE OUTSIDE AIR DAMPERS SHALL MAINTAIN A MINIMUM POSITION (ADA) DURING BUILDING OCCUPIED HOURS AND BE CLOSED DURING UNOCCUPIED HOURS.  
**FINAL FILTER DIFFERENTIAL PRESSURE MONITOR:**  
THE CONTROLLER SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FINAL FILTER.  
ALARMS SHALL BE PROVIDED AS FOLLOWS:  
FINAL FILTER CHANGE REQUIRED: FINAL FILTER DIFFERENTIAL PRESSURE EXCEEDS A USER DEFINABLE LIMIT (ADA).  
**MIXED AIR TEMPERATURE:**  
THE CONTROLLER SHALL MONITOR THE MIXED AIR TEMPERATURE AND USE AS REQUIRED FOR ECONOMIC CONTROL OF PRESENT OR PREHEATING CONTROL OF PRESENT.  
ALARMS SHALL BE PROVIDED AS FOLLOWS:  
HIGH MIXED AIR TEMP: IF THE MIXED AIR TEMPERATURE IS GREATER THAN 80 DEG. F (ADA).  
LOW MIXED AIR TEMP: IF THE MIXED AIR TEMPERATURE IS LESS THAN 45 DEG. F (ADA).

## SEQUENCE OF OPERATION

**EXHAUST FAN(S)**  
RUN CONDITIONS INTERLOCKED:  
THE FAN(S) #1-1, #2-2 SHALL BE INTERLOCKED TO RUN WHENEVER AHU-1 RUNS UNLESS SHUTDOWN ON SAFETIES.  
FAN #1 SHALL HAVE A USER DEFINABLE (ADA) MINIMUM RUNNING FAN STATUS.  
THE CONTROLLER SHALL MONITOR THE FAN STATUS.  
ALARMS SHALL BE PROVIDED AS FOLLOWS:  
FAN FAILURE: COMMANDED ON BUT THE STATUS IS OFF.  
FAN IN HANDS: COMMANDED OFF, BUT THE STATUS IS ON.  
FAN RUNTIME EXCEEDED: FAN STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADA).



2 EXHAUST FAN(S) CONTROL SCHEMATIC  
SCALE: NONE

**CONTROL DRAWING LEGEND:**  
AI = ANALOG INPUT, A PHYSICAL INPUT TO THE CONTROL MODULE.  
AO = ANALOG OUTPUT, A PHYSICAL OUTPUT FROM THE CONTROL MODULE.  
AV = ANALOG VALUE, AN INTERMEDIATE (SOFTWARE) POINT THAT MAY BE EDITABLE OR READ-ONLY. EDITABLE AVS ARE TYPICALLY USED TO ALLOW THE USER TO SET A FIXED CONTROL PARAMETER, SUCH AS A SETPOINT. READ ONLY AVS ARE TYPICALLY USED TO DISPLAY THE STATUS OF A CONTROL OPERATION.  
BI = BINARY INPUT, A PHYSICAL INPUT TO THE CONTROL MODULE.  
BO = BINARY OUTPUT, A PHYSICAL OUTPUT FROM THE CONTROL MODULE.  
BV = BINARY VALUE, AN INTERMEDIATE (SOFTWARE) POINT THAT MAY BE EDITABLE OR READ-ONLY. EDITABLE BVs ARE TYPICALLY USED TO ALLOW THE USER TO SET A FIXED CONTROL PARAMETER, SUCH AS A SETPOINT. READ ONLY BVs ARE TYPICALLY USED TO DISPLAY THE STATUS OF A CONTROL OPERATION.

Firehawk & Bunkley Engineering, P.C.  
100 BOLLINGER AVE. YONKERS N.Y. 10703  
S.E.D.# 69-22-001-0041-011

ENGINEER

CONSULTANT(S)

STAMP

YONKERS PUBLIC SCHOOLS  
FIRE RESTORATIONS  
CROSS HILL ACADEMY  
100 BOLLINGER AVE. YONKERS N.Y. 10703  
S.E.D.# 69-22-001-0041-011

DATE PROJECT NO. 10/20/21

ISSUED FOR BID 10/20/21

DRAWN BY JAW

CHECKED BY JAW

SHEET SIZE 36" x 48"

SCALE AS NOTED

SHEET TITLE  
CONTROL SCHEMATICS

SHEET NO.  
CHA MP-600

SYMBOLS LIST

GENERAL SYMBOLS:

- KEYNOTE
- HEAVY LINE-WEIGHT INDICATES TO PROVIDE DEVICES/EQUIPMENT AS NEW
- HEAVY LINE-WEIGHT WITH HATCH MARKS INDICATES DEVICES/EQUIPMENT TO BE REMOVED
- INDICATES CONNECTION TO EXISTING STATION OUTLET
- INDICATES POINT OF DISCONNECT
- YES' NEXT TO LIGHT LINE-WEIGHT INDICATES EXISTING DEVICES/EQUIPMENT TO REMAIN
- YES' NEXT TO LIGHT LINE-WEIGHT INDICATES EXISTING DEVICES/EQUIPMENT TO BE REMOVED AND RELOCATED. REFER TO DEFINITIONS FOR INFORMATION
- YES' NEXT TO LIGHT LINE-WEIGHT INDICATES EXISTING DEVICES/EQUIPMENT TO BE REINSTALLED. REFER TO DEFINITIONS FOR INFORMATION
- PROVIDE NEW DEVICE COMPATIBLE WITH NEW EQUIPMENT
- MICROPHONE
- REMOVALS (EQUIPMENT, CONDUIT, WIRING, ETC.)
- EXISTING TO REMAIN
- NEW WORK

POWER SYMBOLS:

- DUPLEX RECEPTACLE
- QUAD RECEPTACLE
- SPECIAL RECEPTACLE (NEMA CONFIGURATION AS INDICATED)
- MOTOR CONNECTION (REFER TO EQUIPMENT CONTROL SCHEDULE)
- ELECTRICAL CONNECTION
- CONTACTOR
- JUNCTION BOX
- DISCONNECT SWITCH (NON-FUSED)
- DISCONNECT SWITCH (FUSED)
- PUSH BUTTON
- MANUAL MOTOR STARTER
- COMBINATION MAGNETIC MOTOR STARTER
- VARIABLE FREQUENCY DRIVE
- 208V PANELBOARD (RECESSED)
- 208V PANELBOARD (SURFACE)

TELEPHONE/DATA SYMBOLS:

- DATA RACK
- COMMUNICATIONS OUTLET
- INDICATES NUMBER OF DATA JACKS
- TELEPHONE JACKS
- WIRELESS ACCESS POINT
- INDICATES PRESENTATION STATION OUTLET
- PROJECT - INDICATES PROJECTOR STATION OUTLET

ONE-LINE SYMBOLS:

- CIRCUIT BREAKER
- FUSE
- FUSED DISCONNECT SWITCH
- GROUND
- PANELBOARD

FIRE ALARM SYMBOLS:

- AUDIO/VISUAL SIGNALING DEVICE, NUMBER DENOTES CANDELA RATING
- VISUAL SIGNALING DEVICE, NUMBER DENOTES CANDELA RATING
- PULL STATION
- SMOKE DETECTOR, R SUBSCRIPTS PROVIDE ACCESSORY EQUIPMENT/WIRING/PROGRAMMING FOR ELEVATOR RECALL AND SHUNT TRIP
- HOT DETECTOR
- CONTROL MODULE
- MONITOR MODULE
- DUCT SMOKE DETECTOR
- REMOTE TEST STATION
- MAGNETIC DOOR HOLDER
- TAMPER SWITCH
- FIRE DOOR RELEASE
- FLOW SWITCH
- FAN SHUT-DOWN
- FIRE ALARM CONTROL PANEL
- FIRE ALARM ANNUNCIATOR PANEL
- CARBON MONOXIDE DETECTOR (ELECTROCHEMICAL, 5% LEL) (SYSTEM SENSOR C012241R OR EQUAL) (INSTALL PER MANUFACTURER'S RECOMMENDATION, AND PER NFPA 720)
- CARBON DIOXIDE DETECTOR
- GAS DETECTOR

SPECIAL SYSTEMS SYMBOLS:

- AC SYSTEM CONTROL PANEL
- AC SYSTEM MASTER CONTROL STATION
- CARD READER
- DOOR CONTACT
- ELECTRIC DOOR STRIKE
- REQUEST TO EXIT
- INTERCOM STATION
- CLOCK (NO DESIGNATION DENOTES CLASSROOM CLOCK)
- DENOTES SINGLE FACE HALLWAY CLOCK
- DENOTES DUAL FACE HALLWAY CLOCK
- PUBLIC ADDRESS SPEAKER (CEILING)
- PUBLIC ADDRESS SPEAKER (WALL)
- PUBLIC ADDRESS HORN SPEAKER (WALL)
- CEILING MOUNTED CCTV CAMERA
- WALL MOUNTED CCTV CAMERA

LIGHTING SYMBOLS:

- (REFER TO LIGHTING SCHEDULE)
- LIGHT SWITCH
- D - DIMMER SWITCH
- K - KEYS
- 3 - 3-WAY
- 4 - 4-WAY
- OCCUPANCY SENSOR
- INDICATES CEILING SENSOR TYPE (SCHEDULE TO OCCUPANCY SENSOR SCHEDULE)
- INDICATES WALL SENSOR TYPE (SCHEDULE TO OCCUPANCY SENSOR SCHEDULE)
- CEILING-MOUNTED EXIT LIGHT, HATCH MARKS INDICATES ILLUMINATED FACE, ARROW INDICATES DIRECTION OF TRAVEL
- WALL-MOUNTED EXIT LIGHT, HATCH MARKS INDICATES ILLUMINATED FACE, ARROW INDICATES DIRECTION OF TRAVEL
- DUAL HEAD WALL-MOUNTED EMERGENCY BATTERY PACK LUMINAIRE
- SINGLE HEAD WALL-MOUNTED EMERGENCY BATTERY PACK LUMINAIRE
- 2'x4' CEILING MOUNTED LIGHT FIXTURE, F# INDICATES TYPE
- 2'x2' CEILING MOUNTED LIGHT FIXTURE, F# INDICATES TYPE
- 1'x4' CEILING MOUNTED LIGHT FIXTURE, F# INDICATES TYPE
- CEILING MOUNTED DOWNLIGHT FIXTURE, F# INDICATES TYPE
- 4' WALL MOUNTED LIGHT FIXTURE, F# INDICATES TYPE
- WALL MOUNTED FIXTURE, F# INDICATES TYPE

GENERAL DEMOLITION NOTES:

- DEMOLITION DRAWINGS ARE BASED ON FIELD OBSERVATION. REPORT ANY CONFLICTS TO THE ENGINEER BEFORE DISTURBING EXISTING EQUIPMENT.
- BEGINNING OF DEMOLITION MEANS THE CONTRACTOR ACCEPTS ALL EXISTING CONDITIONS.
- VERIFY SCOPE OF WORK: CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO SUBMITTING A BID TO DETERMINE THE SCOPE OF THE WORK, AND TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS THAT WILL AFFECT THEIR WORK AND, THEREFORE, THEIR BID.
- UNLESS NOTED OTHERWISE, EXISTING ELECTRICAL EQUIPMENT SHOWN ON THESE PLANS ARE A PART OF CONTRACT, TO MAINTAIN DRAWING CLARITY NOT ALL EXISTING ELECTRICAL EQUIPMENT HAS BEEN SHOWN. FIELD VERIFY EXISTING CONDITIONS AND NOTIFY ARCHITECT/ENGINEER OF ANY CONFLICTS.
- UNLESS NOTED OTHERWISE, REMOVE ALL ELECTRICAL ITEMS SHOWN ON THESE PLANS AS INDICATED BY CROSS HATCHED LINES AND/OR KEYED NOTES.
- UNLESS NOTED OTHERWISE, DEMOLITION OF ELECTRICAL EQUIPMENT/DEVICES INCLUDING REMOVAL OF CIRCUITRY BACK TO ASSOCIATED SOURCE/PANEL, THIS INCLUDES REMOVAL OF THE DEVICES, WIRING, CONDUIT, BOXES, CONTROL DEVICES, ETC.
- WHERE POSSIBLE, EXISTING CONDUITS/RACEWAYS (ASSOCIATED WITH REMOVED EQUIPMENT AND WIRING) MAY BE RE-USED FOR NEW CIRCUITING. EXISTING CONDUITS/RACEWAYS MUST BE IN GOOD CONDITION, AND IN COMPLIANCE WITH NEC/SPECIFICATION REQUIREMENTS. NOTIFY ENGINEER PRIOR TO REUSING.
- EXISTING CIRCUIT BREAKERS ASSOCIATED WITH ELECTRICAL EQUIPMENT SCHEDULED FOR DEMOLITION SHALL REMAIN FOR SPARES UNLESS REMOVAL IS REQUIRED TO MAKE ADDITIONAL SPACE (IN EXISTING PANELBOARDS) FOR NEW CIRCUIT BREAKERS.
- MAINTAIN THE ELECTRICAL INTEGRITY OF ALL EXISTING BRANCH CIRCUITS INTERRUPTED BY REMOVAL WORK. PROVIDE ALL WIRING, CONDUIT, AND HARDWARE REQUIRED TO MAINTAIN CONTINUITY OF ELECTRICAL EQUIPMENT REMAINING ON EXISTING BRANCH CIRCUITS NOT BEING COMPLETELY REMOVED OR OUTSIDE WORK AREA.
- UNLESS NOTED OTHERWISE, REMOVE EXISTING ELECTRICAL DEVICES, AND ASSOCIATED CIRCUITRY, LOCATED ON OR IN WALLS SCHEDULED FOR REMOVAL. REFER TO ARCHITECTURAL DRAWINGS FOR DEMOLITION COORDINATION.
- UNLESS NOTED OTHERWISE, REMOVE EXISTING ELECTRICAL DEVICES, AND ASSOCIATED CIRCUITRY, LOCATED ON OR IN CEILINGS SCHEDULED FOR REMOVAL. TO MAINTAIN DRAWING CLARITY, EXISTING CEILING DEVICES SCHEDULED FOR DEMOLITION HAVE NOT BEEN IDENTIFIED ON THIS DRAWING. REFER TO ARCHITECTURAL DRAWINGS FOR DEMOLITION COORDINATION.
- WHERE REMOVALS OCCUR ON SERVICES THAT ARE TO REMAIN IN OPERATION, CARRY OR OTHERWISE TERMINATE THE REMAINING SERVICES BENEATH FINISHED SURFACES.
- ALL CONDUITS STUBBED THRU FLOOR SERVING ITEMS TO BE REMOVED, AND NOT SHOWN OR REQUIRED TO BE REUSED, SHALL BE CUT OFF FLUSH, SLAB LEVEL WITH CONCRETE.
- PORTIONS OF FEEDERS RISERS WHICH REQUIRE REMOVAL DUE TO DEMOLITION WORK, BUT WHICH ARE REQUIRED TO REMAIN DEREGULATED, SHALL BE CUT AT ACCESSIBLE LOCATIONS, DEREGULATED, EXTEND EXISTING FEEDERS AS REQUIRED, MATCH EXISTING FEEDERS IN CONDUCTOR SIZE (AMPACITY RATING), RACEWAY SIZE, ETC.
- CAREFULLY REMOVE, PROTECT AND STORE ALL EQUIPMENT TO BE REUSED IN A SAFE PLACE UNTIL READY FOR REINSTALLATION. CLEAN MATERIALS BEFORE REINSTALLATION AND STORE THEM IN A SAFE PLACE.
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OR RELOCATION OF ITEMS, NOT SHOWN ON THESE DRAWINGS, TO ACCOMMODATE THE RENOVATIONS. CONTRACTOR SHALL INCLUDE, IN BASE BID, AN ALLOWANCE FOR UNFORESEEN CONDITIONS WHEN CONCEALED WORK IS EXPOSED. CLAIMS FOR ADDITIONAL DEMOLITION WORK WILL NOT BE ACCEPTED EXCEPT FOR CERTAIN CASES CONSIDERED JUSTIFIABLE BY THE ARCHITECT/ENGINEER.

FIRE ALARM NOTES:

- CONTRACTOR SHALL VERIFY AND COORDINATE WITH THE BUILDING FIRE ALARM MAINTENANCE VENDOR FOR TYPE OF FIRE ALARM DEVICES TO BE USED.
- CONTRACTOR SHALL BE RESPONSIBLE TO RETAIN AND COORDINATE THE BUILDING FIRE ALARM MAINTENANCE VENDOR FOR PROGRAMMING AND FINAL CONNECTIONS. CONTRACTOR SHALL INCLUDE PROGRAMMING AND FINAL CONNECTION COSTS IN THEIR BID.
- ONCE ALARM WIRING DURING SHOWN REMOVALS, ALL PERMIT COSTS AND INSPECTION FEES SHALL BE INCLUDED AS PART OF THIS CONTRACT.
- PERMITS AND APPROVALS NECESSARY FOR INSTALLATION OF WORK, ALL PERMIT COSTS AND INSPECTION FEES SHALL BE INCLUDED AS PART OF THIS CONTRACT.
- CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN AND PROTECT FIRE ALARM NOTIFICATION DEVICES IN OPERATION AT ALL TIMES. IF ANY PORTION OF FIRE ALARM SYSTEM IS DISABLED, NOTIFY BUILDING CUSTODIAN IMMEDIATELY.
- IN AREAS WHERE DUST AND DIRT WILL BE ABUNDANT DURING DEMOLITION AND CONSTRUCTION THE CONTRACTOR SHALL PROVIDE PLASTIC WRAPOVER SMOKE DETECTORS AND THEN REMOVE ONCE SPACE IS CLEAR. A FIRE ALARM DEVICE IS LOCATED ON A WALL OR CEILING TO BE REMOVED, UNLESS OTHERWISE INDICATED THE DEVICE SHALL BE REMOVED AND STORED. ONCE CONSTRUCTION IS COMPLETE, THE DEVICE SHALL BE REINSTALLED IN ITS ORIGINAL LOCATION OR AS CLOSE TO ITS ORIGINAL LOCATION AS FEASIBLE. REUSE EXISTING WIRING IF POSSIBLE. PROVIDE NEW WIRING IF NECESSARY.
- UNLESS DIRECTED OTHERWISE BY FIRE ALARM SYSTEM MANUFACTURER FIRE ALARM DEVICE WIRING SHALL BE AS FOLLOWS (FOR BIDDING PURPOSES ONLY):
  - SIGNAL WIRING - #14 AWG TWISTED/SHIELDED
  - BELL WIRING - #14 AWG TWISTED CABLE
  - STROBE WIRING - #14 TWISTED CABLETHE WIRING SHALL HAVE THE FOLLOWING CHARACTERISTICS:
  - A. A MINIMUM TEMPERATURE RATING 150°C
  - B. A MINIMUM AVERAGE INSULATION THICKNESS OF 15 MILS
  - C. A MINIMUM AVERAGE JACKET THICKNESS OF 20 MILS
  - D. THE COLOR OF THE CABLE SHALL BE RED
  - E. THE CABLE SHALL BE A TYPE PLP (PLUM TYPE) WHEN CONDUIT IS USED, TO PURCHASING.
  - F. THE CABLE SHALL BE MARKED EXTERNALLY THAT IT MEETS THE ABOVE REQUIREMENTS AND IS LISTED BY UL.
  - G. CONDUIT WIRING TYPE AND QUANTITY WITH FIRE ALARM SYSTEM MANUFACTURER PRICE.
- PROVIDE MC FIRE ALARM CABLE WITH RED STRIPE AS MANUFACTURED BY AFC SERIES 1800 WHEN CABLE IS CONCEALED OR ABOVE HUNG CEILING. WHEN FIRE ALARM CABLE IS RUN EXPOSED IN FINISHED AREAS, CABLE SHALL RUN IN WIREMOLD V-7000. WHEN FIRE ALARM CABLE IS RUN EXPOSED IN UNFINISHED AREAS, PROVIDE PLUMINUM RATED CABLE IN MIN. 1" CONDUIT.
- STROBES SHALL HAVE A MINIMUM LIGHT OUTPUT OF 75 CANDELA AND A FLASH RATE OF 1-3 HZ.
- SHUTDOWN OF HVAC SYSTEM EQUIPMENT (NOT LIMITED TO, ROOF TOP, EXHAUST FANS, ETC.) OF 1000 CFM OR GREATER, SHALL BE PERFORMED VIA A RELAY INTERFACE SYSTEM. SEND SIGNAL TO BUILDING AUTOMATED TEMPERATURE CONTROL (ATC) SYSTEM INDICATING SHUTDOWN HAS OCCURRED. EQUIPMENT RESTART SHALL BE BY BUILDING ATC SYSTEM UPON FIRE ALARM RESET TO NORMAL MODE. RESTART OF EQUIPMENT SHALL BE SEQUENTIAL.
- IF THE SYSTEM MODIFICATIONS ARE COMPLETE TEST ALL COMPONENTS IN ACCORDANCE WITH SEQUENCE OF OPERATION PRIOR TO FIRE DEPARTMENT INSPECTION.
- A CARBON MONOXIDE DETECTORS SHALL BE PROVIDED IN ALL BOILER ROOMS. ACTIVATION INITIATE A SUPERVISORY SIGNAL, AT THE FIRE ALARM CONTROL, PANEL, AND ANNUNCIATOR PANEL WHEN 70 PPM ARE REACHED WITHIN 60-240 MINUTES OR 150 PPM ARE REACHED WITHIN 10-50 SECONDS.

GENERAL NEW WORK NOTES:

- UNLESS NOTED AS EXISTING OR PROVIDED BY OTHERS, CONTRACTOR SHALL PROVIDE ALL MATERIALS SHOWN ON DRAWINGS. ALL MATERIALS PROVIDED SHALL BE NEW, UNUSED CONDITION.
- ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE PROVIDED WITH MINIMUM DISRUPTION TO THE BUILDING SYSTEMS AND SHUT DOWN OF OPERATION OF THE BUILDING SYSTEMS. SCOPE OF WORK AND SHALL BE MAINTAINED THROUGHOUT THE ENTIRE PROJECT. TEMPORARY SHUTDOWN OF SYSTEMS SHALL ONLY BE ALLOWED WITH WRITTEN CONSENT OF OWNER. EXISTING ALARM AND EMERGENCY SYSTEMS SHALL NOT BE DISRUPTED AT ANY TIME DURING THE PROJECT.
- REMOVE & REINSTALL EXISTING CONSTRUCTION (CEILING, LIGHTING, ELECTRICAL EQUIPMENT, FIRE ALARM DEVICES, FURNISHINGS, ETC.) AS NECESSARY TO COMPLETE THE REMOVALS & RENOVATION WORK REQUIRED BY THE DRAWINGS & SPECIFICATIONS. REPLACE ANY ITEMS DAMAGED BY OR DUE TO THIS REMOVAL & REINSTALLATION WITH NEW ITEMS TO MATCH EXISTING (APPLIES TO AREAS WITHIN & OUTSIDE OF THE PROJECT AREA).
- IN AREAS WHERE CEILING IS BEING REMOVED, EXISTING CONDUITS AND CABLEING WHICH ARE NOT INDEPENDENTLY SUPPORTED ABOVE THE CEILING SHALL BE INDEPENDENTLY SUPPORTED FROM THE STRUCTURE ABOVE USING SPECIFIC METHODS.
- SURFACE MOUNT ALL WIRING DEVICES, LIGHTING CONTROLS, TELECOMMUNICATION DEVICES, FIRE ALARM DEVICES, ETC. PER SPECIFICATIONS.
- COVERS ASSOCIATED WITH JUNCTION AND PULL BOXES SHALL BE READY ASSEMBLED.
- PROVIDE PULL BOXES WHERE REQUIRED BY CODE AND WHERE NECESSARY FOR CONDUCTOR INSTALLATION. PROVIDE PULL BOXES EVERY 100' FOR ALL EMPTY RACEWAY RUNS. PRIOR TO INSTALLATION OF PULL BOXES, COORDINATE WITH OTHER TRADES.
- PROVIDE SEPARATE RACEWAYS AND BOXES FOR CONDUCTORS OF NORMAL AND EMERGENCY CIRCUITS.
- DO NOT COMBINE MORE THAN THREE PHASE CONDUCTORS, THREE NEUTRAL CONDUCTORS PLUS THREE GROUND CONDUCTORS, IN ANY ONE BRANCH CIRCUIT CONDUIT, UNLESS OTHERWISE INDICATED ON DRAWINGS.
- THE USE OF NON-METALLIC SURFACE RACEWAY OR EXPOSED NON-METALLIC RACEWAY IN ASSEMBLY SPACES AND MEANS OF EGRESS AREAS IS PROHIBITED.
- THE USE OF SHARED NEUTRALS IN LIGHTING AND RECEPTACLE BRANCH CIRCUITS IS PROHIBITED. PROVIDE SEPARATE NEUTRAL AND GROUND FOR EVERY CIRCUIT.
- PROTECT EXISTING SURFACES.
- WALK-THRU WITH OWNER REPRESENTATIVE AND VERIFY ALL ELECTRICAL DEVICE LOCATIONS PRIOR TO INSTALLATION.
- INSTALL ALL CIRCUITRY PARALLEL OR PERPENDICULAR TO WALLS, FLOOR, AND CEILING.
- REFER TO ELECTRICAL EQUIPMENT AND CONTROL SCHEDULE FOR HVAC/PLUMBING EQUIPMENT CIRCUITRY, CONTROLS & ADDITIONAL INFORMATION.
- TO MAINTAIN DRAWING CLARITY, MOTOR CONTROL DEVICES, FOR HVAC/PLUMBING EQUIPMENT, HAVE NOT BEEN SHOWN. REFER TO ELECTRICAL EQUIPMENT & CONTROL SCHEDULE FOR TYPES, SIZES, AND ADDITIONAL INFORMATION.
- COORDINATE LOCATIONS AND MOUNTING HEIGHTS OF ELECTRICAL EQUIPMENT/DEVICES WITH ARCHITECTURAL PLANS, ELEVATIONS, FURNITURE LAYOUTS, AND WITH OTHER DIVISIONS PRIOR TO INSTALLATION. CORRECT ANY INACCURACY RESULTING FROM FAILURE TO DO SO WITHOUT COST TO OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL SUPPORT HARDWARE FOR SECURELY FASTENING THE ELECTRICAL CONTROL DEVICES AND ENCLOSURES TO THE BUILDING STRUCTURE. THE REQUIRED HARDWARE INCLUDES, BUT IS NOT LIMITED TO, INTERMEDIATE STEEL ANGLE, UNISTRUT, FASTENERS, JOISTS CLAMPS, ETC. MOUNT STARTERS, VFD'S, DISCONNECTS, RELAYS, AND OTHER ELECTRICAL CONTROL DEVICES AND ENCLOSURES AT LOCATION(S) INDICATED IN ELECTRICAL EQUIPMENT & CONTROL SCHEDULE(S). ALLOW MAINTENANCE ACCESS AND SERVICE SPACE AT EACH LOCATION.
- WHERE NEW CIRCUIT BREAKERS ARE REQUIRED FOR INSTALLATION IN EXISTING ELECTRICAL PANELS, CONTRACTOR SHALL PROVIDE CIRCUIT BREAKERS WHICH ARE COMPATIBLE WITH EXISTING ELECTRICAL PANELS, MATCH FRAME SIZES, KIC RATINGS, ETC.
- UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL PROVIDE COMPLETE, TYPE-WRITTEN, AND UP-TO-DATE PANELBOARD DIRECTORIES FOR ALL PANELBOARDS (NEW AND EXISTING) AFFECTED BY THIS PROJECT. PROVIDE OWNER WITH TWO COPIES OF UPDATED PANELBOARD CIRCUIT BREAKER DIRECTORIES.
- EACH RECEPTACLE, SWITCH AND JUNCTION BOX, PROVIDED, OR ALTERED, UNDER THIS CONTRACT, SHALL BE LABELED WITH THE CORRESPONDING POWER PANEL, NAME AND CIRCUIT BREAKER NUMBER. ALL LABELING SHALL BE TYPEWRITTEN USING A LABEL MAKER AND SHALL BE PERMANENTLY AFFIXED TO EACH PANEL. HANDWRITTEN LABELS WILL NOT BE ACCEPTED. PRIOR TO START OF LABELING, MEET WITH OWNER TO DETERMINE LABELING SCHEME TO BE UTILIZED. PROVIDE LABELING TO MEET OWNER REQUIREMENTS.
- ALL ITEMS THAT REQUIRE ACCESS, SUCH AS FOR OPERATING, CLEANING, SERVICING, MAINTENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE BY PERSONS STANDING AT FLOOR LEVEL, OR STANDING ON PERMANENT PLATFORMS, WITHOUT THE USE OF PORTABLE LADDERS. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF SWITCHES, PANELBOARDS, OCCUPANCY SENSORS, CONTROL DEVICES, ETC. PRIOR TO COMMENCING INSTALLATION WORK, REFER CONFLICTS BETWEEN THIS REQUIREMENT AND CONTRACT DRAWINGS TO OWNER FOR RESOLUTION.
- CLEANING DURING ELECTRICAL WORK: CLEAN THE ROOMS AND AREAS OF WORK THAT WILL BE DONE TO MINIMIZE DISTURBANCE IN THE BUILDINGS. WORKERS ARE TO USE PATHWAYS AND FACILITIES AGREED UPON WITH THE DISTRICT DESIGNEE IN WRITING. THE AREA OUTSIDE THE BUILDING WHERE CUTTING WELDING OR STORAGE IS ALLOWED IS TO BE FENCED AT ALL TIMES. THE CONTRACTOR WILL ON A DAILY BASIS CLEAN THE GROUNDS AND THE BUILDING OF ANY DEBRIS OR GARBAGE GENERATED BY THEIR WORK.

COORDINATION NOTE:

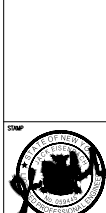
1. COORDINATION - IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL AND MECHANICAL CONTRACTORS TO COORDINATE THEIR WORK. THE HVAC CONTRACTOR SHALL HAVE THE LEAD IN THE COORDINATION EFFORT AND PROVIDE THE COORDINATION DRAWINGS. COORDINATION DRAWINGS SHALL BE SUBMITTED FOR APPROVAL TO THE ENGINEER PRIOR TO STARTING ANY WORK. COORDINATING SPACE IS VERY LIMITED AND OUTDOOR/PIPING INSTALLATION AND LOCATIONS IS CRITICAL. THE PURPOSE OF THESE DRAWINGS IS TO COORDINATE THE LOCATIONS OF ALL PIPING, DUCTWORK, AND ASSOCIATED EQUIPMENT WITH ALL ELECTRICAL EQUIPMENT. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED AND LOCATED IN ACCORDANCE WITH THE FOLLOWING: (N.E.C. MECHANICAL EQUIPMENT CANNOT INSTALL IN THE MECHANICAL EQUIPMENT SPACE UNLESS IT IS IDENTIFIED WITH THE N.E.C. ARTICLE 110-3 REQUIREMENTS FOR ELECTRICAL INSTALLATION. THIS COORDINATION IS REQUIRED FOR ALL PHASES OF THE PROJECT. FAILURE TO FOLLOW THIS PROCEDURE DOES NOT RELIEVE THE CONTRACTOR FROM THE DUTY AND WILL NOT CONSTITUTE A REASON FOR A CHANGE ORDER.

ABBREVIATIONS

EX- EXISTING  
A- AMPERE  
N- NON-FUSED  
EXT- EXTERIOR  
AC- ABOVE COUNTER  
NIC- NOT IN CONTRACT  
FA- FIRE ALARM  
AFF- ABOVE FINISHED FLOOR  
NL- NIGHT LIGHT  
NLS- NOT TO SCALE  
FLOOR  
AHS- AIR HANDLING UNIT  
ON CENTER  
FLA- FULL LOAD AMPS  
A/V- AUDIO/VISUAL  
P- POLE  
FLUOR- FLUORESCENT  
AMERICAN WIRE GAUGE  
PANEL  
GC- GENERAL CONTRACTOR  
AU- AT UNIT  
PRI- PRIMARY  
GFI- GROUND FAULT CIRCUIT BREAKER  
SEC- SECONDARY  
CONDUIT  
SW- SWITCH  
CB- CIRCUIT BREAKER  
HSP- HORSEPOWER  
TEL- TELEPHONE  
CST- CIRCUIT  
HVAC- HEATING VENTILATION & AIR CONDITIONING  
TELEVISION  
CELL  
TYP- TYPICAL  
DEM- DEMOLISH/DEMOLITION  
KVA- KILOVOLT AMPS  
USE- UNDERGROUND ELECTRIC  
DTL- DETAIL  
KW- KILOWATTS  
UNO- UNLESS NOTED OTHERWISE  
DWO- DRAWING  
LTO- LIGHTING  
EA- EACH  
MC- MECHANICAL CONTRACTOR  
ED- ELECTRICAL CONTRACTOR  
MCA- MINIMUM CIRCUIT AMPS  
WG- WIRE GUARD  
EXH- EXHAUST  
MCB- MAIN CIRCUIT BREAKER  
WE- WEATHERPROOF  
EM- EMERGENCY  
MDP- MAIN DISTRIBUTION PANEL  
TRF- TRANSFORMER  
EC- ELECTRICAL CONTRACTOR  
MC- MECHANICAL CONTRACTOR  
PL- PLUMBING CONTRACTOR  
VF- VERIFY IN FIELD  
NOTE: ABBREVIATIONS MAY OR MAY NOT USE PERIODS, EXAMPLE A.F.Z. OR A.F.T.



YONKERS PUBLIC SCHOOLS  
FIRE RESTORATIONS  
CROSS HILL ACADEMY  
100 BOLLINGER AVE. YONKERS N.Y. 10703  
S.E.D. 04-24-2007-04-11-11



YONKERS PUBLIC SCHOOLS  
FIRE RESTORATIONS  
CROSS HILL ACADEMY  
100 BOLLINGER AVE. YONKERS N.Y. 10703  
S.E.D. 04-24-2007-04-11-11

REVISION	DATE	BY
ISSUED FOR BID		
DRAWN BY	AN	
CHECKED BY		
SHEET SIZE	11 1/2" x 17"	
SCALE	AS NOTED	
SHEET TITLE		

ABBREVIATIONS  
AND SYMBOLS

CHAE-001







