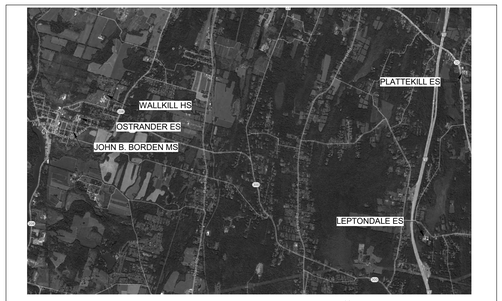
Reconstruction to:

Wallkill Senior High School	62-18-01-06-0-007-018
John G. Borden Middle School	62-18-01-06-0-002-014
Ostrander Elementary School	62-18-01-06-0-003-014
Plattekill Elementary School	62-18-01-06-0-005-015
Leptondale Elementary School	62-18-01-06-0-001-019

Wallkill Central School District
Wallkill, New York



Project Location Map

Drawing List

GENERAL
G002 Title Sheet
G100 Symbols and Abbreviations

Plattekill Elementary School

CODE COMPLIANCE
DG350 Code Compliance Review
DG351 First Floor - Scope of Work and Rescue Window Locations

HAZARDOUS MATERIALS
DHAZ102 Interior Abatement Plan
DHAZ103 First Floor Abatement Plan
DHAZ104 Roof Abatement Plan

ARCHITECTURAL
DA051 Basement and First Floor Key Plans
DA052 Roof Plan
DA100 Basement Floor Demolition Plan
DA101 First Floor Demolition Plan - Area A
DA102 First Floor Demolition Plan - Area B
DA103 First Floor Demolition Plan - Area C
DA130 Basement Floor Plan
DA131 First Floor Plan - Area A
DA132 First Floor Plan - Area B
DA133 First Floor Plan - Area C
DA161 First Floor Reflected Ceiling Plan - Partial Areas A and B
DA400 Enlarged Plans / Interior Elevations
DA600 Door Schedule, Door and Window Types, and Details
DA900 Interior Elevations, Details and Signage

STRUCTURAL
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MECHANICAL
DM051 First Floor Key Plan

Plattekill Elementary School

DM052 Roof Key Plan and Partial Area A Plan
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DM103 Partial Roof Plans - Area B
DM500 Details
DM600 Schedules
DM700 Control Sequences

ELECTRICAL
DE050 First Floor Key Plan
DE101 Partial First Floor Demolition Plans - Areas A and B
DE102 Roof Demolition Plan
DE130 Partial First Floor Lighting Plan - Areas A and B
DE160 Partial Basement and First Floor Power, Communications and Fire Alarm Plan
DE161 Roof Power, Communications and Fire Alarm Plan
DE500 Details
DE501 Details
DE600 Schedules

PLUMBING
DP130 Enlarged Basement Plan, Schedule and Details

Leptondale Elementary School

CODE COMPLIANCE
EG350 Code Compliance Review
EG351 First Floor - Scope of Work and Rescue Window Locations
EG352 Second Floor - Rescue Window Locations

HAZARDOUS MATERIALS
EHAZ105 Partial Roof Abatement Plan - Area C

ARCHITECTURAL
EA051 First Floor Key Plan
EA052 Second Floor Key Plan
EA053 Roof Plan
EA101 First Floor Demolition Plan - Area A
EA102 First Floor Demolition Plan - Area B
EA104 Second Floor Demolition Plan - Partial Area B and Area C
EA131 First Floor Plan - Area A
EA132 First Floor Plan - Area B
EA134 Second Floor Plan - Partial Area B and Area C
EA161 First Floor Reflected Ceiling Plan
EA162 Second Floor Reflected Ceiling Plan
EA400 Enlarged Plans / Interior Elevations
EA600 Door Schedule, Door and Window Types, and Details
EA900 Interior Elevation, Details and Signage

STRUCTURAL
ES130 Partial Roof Framing Plan - Areas B and C, Notes and Schedules
ES500 Typical Details

MECHANICAL
EM051 First and Second Floor Key Plans
EM101 Partial First Floor Plans - Areas A and B
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EM103 Partial Roof Demolition Plans - Areas A, B and C

Leptondale Elementary School

EM104 Partial Roof Plans - Areas A, B and C
EM500 Details
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EM700 Controls

ELECTRICAL
EE051 Key Plans
EE101 Partial First Floor and Demolition Plans Areas B & C
EE102 Partial Second Floor Demolition Plans - Areas B and C
EE103 Roof Demolition Plan
EE130 Partial First Floor Lighting Plan Areas A and B
EE131 Partial Second Floor Lighting Plan - Areas B and C
EE160 Partial First Floor Power, Communications and Fire Flarm Plans Areas A and B
EE161 Partial Second Floor Power, Communications and Fire Alarm Plan - Area B and C
EE163 Roof Power Plan
EE500 Details and Diagrams
EE600 Schedules

Common

ARCHITECTURAL
ZA750 Roof Details

Drawn By:	Date:	Drawing Number:
Author	11/4/2022	AA130
Project No.: 17597-22001		

BUILDING DESIGNATOR
DISCIPLINE DESIGNATOR
SHEET TYPE DESIGNATOR
SHEET SEQUENCE DESIGNATOR

TETRA TECH
ARCHITECTS & ENGINEERS

Architecture Engineering Planning for High Performance Facilities

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

To the best of the Architect's knowledge, information and belief, the design of this project conforms to all applicable provisions of the New York State Uniform Fire Prevention and Building Code, the New York State Energy Conservation Code, and the building standards of the New York State Education Department.

BID SET

VOLUME 2 OF 2

17597-22001
11/4/2022

Set No.

Drawing Number:
G002

Site Symbols

- 83.36 — SPOT ELEVATION
- 99.50 TC / 99.00 BC — TOP OF CURB ELEVATION / BOTTOM OF CURB ELEVATION
- + 83.36 — EXISTING SPOT ELEVATION
- 136 — CONTOUR
- 136 — EXISTING CONTOUR
- TB-1 — SOIL TEST BORING
- TP-1 — TEST PIT LOCATION
- TREE OR SHRUB
- TREE OR SHRUB TO REMAIN
- TREE OR SHRUB TO BE REMOVED
- ASPHALT PAVING OR TOP COURSE
- HEAVY-DUTY ASPHALT PAVING
- REMOVE AND REPLACE ASPHALT PAVING
- CONCRETE PAVING
- CONCRETE SECTION
- CURBING
- CURBING TO REMAIN
- CURBING TO BE REMOVED
- FENCING
- FENCING TO REMAIN
- FENCING TO BE REMOVED
- SILT FENCING
- TEMPORARY CONSTRUCTION FENCING
- HAY BALES
- TEMPORARY TREE PROTECTION
- UTILITY POLE
- UTILITY POLE TO REMAIN
- UTILITY POLE TO BE REMOVED
- NEW OR RELOCATED FIRE HYDRANT
- FIRE HYDRANT TO REMAIN
- DROP INLET
- CATCH BASIN
- STORM/SANITARY MANHOLE
- DROP INLET TO REMAIN
- MANHOLE/CATCH BASIN/DRYWELL TO REMAIN
- DRYWELL W/ GRATE
- DRYWELL W/ SOLID COVER TO GRADE
- DRYWELL W/ COVER BURIED
- ST — STORM LINE WITH HEADWALL
- ST — STORM LINE WITH ENDWALL
- ST — STORM LINE WITH END SECTION
- ST — STORM PIPE
- ST — STORM PIPE TO REMAIN
- ST — STORM PIPE TO BE REMOVED/ABANDONED
- UD — UNDERDRAIN
- UD — UNDERDRAIN TO REMAIN
- UD — UNDERDRAIN TO BE REMOVED/ABANDONED
- SAN — SANITARY LINE
- SAN — SANITARY LINE TO REMAIN
- SAN — SANITARY LINE TO BE REMOVED/ABANDONED
- G — GAS LINE
- G — GAS LINE TO REMAIN
- G — GAS LINE TO BE REMOVED/ABANDONED
- W — WATER LINE
- W — WATER LINE TO REMAIN
- W — WATER LINE TO BE REMOVED/ABANDONED
- CO — STORM/SANITARY CLEANOUT
- GATE VALVE
- SIGN POST
- UNIVERSAL HANDICAP SYMBOL
- REMOVAL
- RIP-RAP

Architectural Symbols

- EXISTING TO REMAIN
- DEMOLITION WORK
- NEW WORK IN EXISTING (MATERIAL INDICATION VARIES)
- NEW WORK (MATERIAL INDICATION VARIES)
- CMU AND BRICK CAVITY WALL
- CMU WALL
- GYPSUM BOARD PARTITION W/ METAL STUD WALL
- OPERABLE PARTITION
- 100 / 1 — DOOR NUMBER (ROOM NO W/ DOOR NO)
- A — WINDOW TYPE
- 126 — RELOCATED EQUIPMENT FURNITURE OR CASEWORK NUMBER
- P3.8 — PARTITION TYPE
- MGM — BOARD UNIT SYMBOL
- FINISH CHANGE

ROOF SYMBOLS

- AREA OF TAPERED INSULATION
- EXISTING ROOF DRAIN WITH RETROFIT ROOF DRAIN INSERT IN NEW FACTORY-TAPERED SUMP
- EJ/CONTROL JOINT
- TAPERED 1/4"/FT — DIRECTION OF DOWNWARD SLOPE AND DEGREE OF SLOPE OF TAPERED INSULATION (MINIMUM 1/8"/FT, TYP UNO)
- OR — DIRECTION OF DOWNWARD SLOPE OF TAPERED INSULATION CRICKET (MINIMUM 1/4"/FT, TYP UNO)
- SLOPE STRU — DIRECTION OF DOWNWARD SLOPE OF ROLLED OR SLOPED STRUCTURE
- +X" — TOTAL THICKNESS OF INSULATION
- +X" FLAT — TOTAL THICKNESS OF AREA OF FLAT INSULATION
- RS-X — DESIGNATES ROOF SYSTEM TYPE
- WALKWAY PAD
- S L — SKYLIGHT (REINSTALLED OR REPLACED)
- SMOKE VENT OR ROOF HATCH
- OR — PIPE PENETRATION
- OR — ROOFTOP HOOD ON CURB, TYP
- ROOFTOP EQUIPMENT ON CURB, TYP (SHAPE AND SIZE VARY)

REFLECTED CEILING SYMBOLS

- A 0'-0" — BOTTOM OF CEILING AFF / CEILING MATERIAL
- CEILING HUNG UNIT VENTILATOR OR CEILING HUNG FAN COIL UNIT
- CEILING RETURN/EXHAUST GRILLE
- CEILING SUPPLY DIFFUSER/GRILLE
- EXIT LIGHT
- 2 X 4 FIXTURE IN 2 X 2 PATTERN

Structural Symbols

- INDICATES AREA IS EXISTING
- INDICATES SLAB IS DEPRESSED OR RECESSED
- [-4'-0] [-3'-0] <-1'-8> — TOP OF FTG ELEVATION FROM DATUM; CONTINUOUS FTG; FOUNDATION WALL; BM POCKET ELEVATION FROM DATUM; STEPPED FOOTING
- P1 (-8) / F4 [-3'-0] — INDICATES PIER TYPE; TOP OF PIER ELEVATION FROM DATUM; TOP OF FOOTING ELEVATION FROM DATUM; INDICATES FOOTING TYPE REFER TO FOOTING SCHEDULE
- RD — INDICATES A FRAMED ROOF OR FLOOR OPNG COORD SIZE AND LOCATION
- INDICATES FRAMED OPNG IS FOR:
  - RD = ROOF DRAIN
  - ME = MECH EQUIP
  - SL = SKYLIGHT
  - SH = SMOKE HATCH
  - AH = ACCESS HATCH
- (-6) W8X15 [14] (GIR) 21K 0.7 21K — ELEVATION FROM DRAWING DATUM; BEAM SIZE; NUMBER OF SHEAR STUDS OVER FULL LENGTH OF BEAM; INDICATES TOP OF BEAM AT ADJ GIRDER ELEV; END REACTION- KIPS; DEFLECTION (INCHES) APPROX W/ WET CONC
- L-2 — LINTEL DESIGNATION SEE SCHEDULE; INDICATES LINTEL CONNECTION TO COLUMN; INDICATES MEMBER IS EXISTING; INDICATES BEAM SPLICE; INDICATES MOMENT CONNECTION; OVER COLUMN; INDICATES SHEAR WALL CONNECTION TO BEAM; INDICATES BM TO HAVE TOP OF WALL CLIPS
- 12K3 — JOIST DESIGNATION; INDICATES BEAM FRAMES / HORIZONTAL BRIDGING; JOIST; DIAGONAL BRIDGING
- MASONRY LOAD BEARING WALL
- SHEAR WALL SEE SCHEDULE
- CFMF BEARING WALL
- FIREWALL
- SW1 — WALL TYPE

Mechanical Symbols

- TAG NO. / VALUE — EQUIPMENT TAG (NON-MOTORIZED); CFM, GPM, CAPACITY
- TAG NO. / VALUE — EQUIPMENT TAG (MOTORIZED)
- TAG NO. / NECK SZ. / CFM — REGISTER, GRILLE, DIFFUSER
- FTR-TYPE / ENC. LENGTH / ELEM. LENGTH / GPM — FIN TUBE RADIATION; ENCLOSURE NOTED AS: W/W: WALL TO WALL, W/U: WALL TO UNIT, W/D: WALL TO DOOR, ETC...
- SUPPLY DUCT - POSITIVE PRESSURE
- RETURN DUCT - NEGATIVE PRESSURE
- EXHAUST DUCT - NEGATIVE PRESSURE
- 8x8 — DUCTWORK, FIRST VALUE IS SIZE OF SIDE IN VIEW
- DUCT TRANSITION
- DUCT OFFSET
- RECTANGULAR ELBOW W/TURNING VANES
- RECTANGULAR ELBOW
- ROUND DUCTWORK W/ MITERED ELBOW
- RADIUS ELBOW W/ TURNING/SPLITTER VANES
- RADIUS ELBOW
- STANDARD BRANCH DUCT W/VOLUME DAMPER
- ACOUSTICALLY LINED DUCTWORK
- ACOUSTICALLY LINED DUCTWORK (UP/DOWN)
- OR — FLEXIBLE DUCT
- VOLUME DAMPER
- FD — FIRE DAMPER
- SD — SMOKE DAMPER
- FSD — FIRE AND SMOKE DAMPER
- AAD — AUTOMATIC AIR DAMPER
- BDD — BACKDRAFT DAMPER
- EXISTING DUCTWORK
- AIR FLOW
- DUCT AIR FLOW
- EXISTING MECHANICAL EQUIPMENT TO BE REMOVED
- EXISTING MECHANICAL EQUIPMENT
- MECHANICAL EQUIPMENT
- ACCESS CLEARANCE

- ATV — ATMOSPHERIC VENT
- BBD — BOILER BLOW DOWN
- CWS — CHILLED WATER SUPPLY
- CWR — CHILLED WATER RETURN
- CGS — CHILLED GLYCOL SUPPLY
- CGR — CHILLED GLYCOL RETURN
- CD — CONDENSATE DRAIN
- C — CONDENSER WATER SUPPLY
- CR — CONDENSER WATER RETURN
- GS — GLYCOL SUPPLY
- GR — GLYCOL RETURN
- HGS — HOT GLYCOL SUPPLY
- HGR — HOT GLYCOL RETURN
- HPWS — HEAT PUMP SUPPLY
- HPWR — HEAT PUMP RETURN
- HWS — HOT WATER SUPPLY
- HWR — HOT WATER RETURN
- HCS — HOT/CHILLED WATER SUPPLY
- HCR — HOT/CHILLED WATER RETURN
- LPS — LOW PRESSURE STEAM
- LPC — LOW PRESSURE CONDENSATE
- LPWC — LOW PRESSURE STEAM WET (FLOODED) CONDENSATE
- MU — MECHANICAL EQUIPMENT MAKE-UP COLD WATER(NON-POTABLE)
- RS — REFRIGERANT SUCTION
- RL — REFRIGERANT LIQUID
- HG — REFRIGERANT HOT GAS
- PD — PUMP DISCHARGE
- REMOVE EXG. DUCT, PIPING, EQUIPMENT
- EXG — EXISTING HVAC PIPE
- BOTTOM PIPE CONNECTION
- TOP PIPE CONNECTION
- PIPE ELBOW DOWN
- PIPE ELBOW UP
- PIPE DOWN WITH CLEANOUT AT BASE
- PIPE DOWN WITH SHUTOFF VALVE
- CAP OR PLUG
- UNION CONNECTION
- FLANGE CONNECTION
- PIPING REDUCER (CONCENTRIC)
- PIPING REDUCER (ECCENTRIC)
- PIPE ANCHOR
- PIPE GUIDE
- EXPANSION COMPENSATOR
- EXPANSION JOINT
- FLEX CONNECTOR
- TEMPERATURE OR PRESSURE PROBE WELL
- THERMOMETER
- P — PRESSURE SWITCH
- P — PRESSURE GAUGE
- TP — TEMPERATURE/ PRESSURE GAUGE
- V — MANUAL AIR VENT
- AV — AUTOMATIC AIR VENT
- SV — STEAM VENT
- VB — VACUUM BREAKER
- F — FLOW SWITCH
- M — FLOW METER
- ORIFICE METER
- VENTURI FLOW METER
- WYE STRAINER
- WYE STRAINER WITH BLOW DOWN VALVE
- DIRECTION OF FLOW
- PIPE BREAK
- M — WATER METER

- BASKET STRAINER
- DUPLEX BASKET STRAINER
- A — AQUASTAT
- D — PITCH PIPING (DOWN)
- AUTOMATIC FLOW CONTROL VALVE
- BACKFLOW PREVENTOR
- B — BALANCING VALVE
- BALL VALVE
- EXISTING BALL VALVE
- BUTTERFLY VALVE
- CHECK VALVE
- 2-WAY CONTROL MODULATING VALVE
- 3-WAY CONTROL, MODULATING VALVE (INSTALL STEM VERTICAL)
- 3-WAY CONTROL, THERMOSTATIC MIXING VALVE (SELF-CONTAINED)
- S — SOLENOID (ELECTRIC) ON/OFF
- M — MOTORIZED MODULATING VALVE
- FUSIBLE LINK VALVE
- GAS PRESSURE REGULATOR VALVE
- TRIPLE DUTY VALVE
- GATE VALVE
- GLOBE VALVE
- OS&Y GATE VALVE
- PLUG VALVE
- PRESSURE REDUCING VALVE
- PRESSURE RELIEF VALVE
- STEAM TRAP
- T — THERMOSTATIC STEAM TRAP
- FT — FLOAT AND THERMOSTATIC STEAM TRAP
- B — BUCKET STEAM TRAP
- AIR SEPARATOR
- CIRCULATING PUMP
- WATER HAMMER ARRESTOR
- CLEANOUT PLUG
- CODP — CLEANOUT DECK PLATE
- F — FIRE RISER VALVE ASSEMBLY
- BS — BURNER SHUT OFF
- H — HUMIDISTAT
- H S — HUMIDITY SENSOR
- H SG — HUMIDITY SENSOR W/ GUARD
- P S — PRESSURE SENSOR
- P SG — PRESSURE SENSOR W/ GUARD
- S — SWITCH
- T — THERMOSTAT
- T G — THERMOSTAT W/ GUARD
- T S — TEMPERATURE SENSOR
- CO2 — CO2 SENSOR
- POC — POINT OF CONNECTION
- FIRE DEPARTMENT CONNECTION

- CONNECTION TO EXISTING PIPING
- PLATE STRAINER
- HOSE BIBB
- CA — COMPRESSED AIR
- LV — LABORATORY VENT
- LW — LABORATORY WASTE
- LW — LABORATORY WASTE (BURIED)
- V — VENT
- SAN — SANITARY (ABOVE GRADE)
- SAN — SANITARY (BURIED)
- IW — INDIRECT WASTE
- ST — STORM (ABOVE GRADE)
- ST — STORM (BURIED)
- SP — FIRE STANDPIPE
- F — FIRE MAIN
- SPRK — FIRE SPRINKLER
- EXISTING COLD WATER
- EXISTING HOT WATER
- EXG HOT WATER RETURN
- 110° HW — EXISTING 110° HOT WATER
- 140° HW — EXISTING 140° HOT WATER
- 180° HW — EXISTING 180° HOT WATER
- COLD WATER
- HOT WATER
- HOT WATER RETURN
- 110° HW — 110° HOT WATER
- 140° HW — 140° HOT WATER
- 180° HW — 180° HOT WATER
- TW — TEMPERED (HOT) WATER
- RAW — RAW WATER
- SW — SOFT WATER
- DE — DEIONIZED WATER
- DI — DISTILLED WATER
- G — GAS
- P — PROPANE
- D — DIESEL FUEL
- U — UNLEADED GASOLINE
- FOS — EXG FUEL OIL SUPPLY
- FOS — FUEL OIL SUPPLY
- FOR — EXG FUEL OIL RETURN
- FOR — FUEL OIL RETURN
- FOV — EXG FUEL OIL VENT
- FOV — FUEL OIL VENT
- MU — MECHANICAL EQUIPMENT MAKE-UP COLD WATER (NON-POTABLE)
- EXISTING ROOF DRAIN
- ROOF DRAIN REPLACING EXG
- ROOF DRAIN
- SCUPPER ROOF DRAIN
- EXG PLUMBING FIXTURE TO BE REMOVED
- EXG PLUMBING FIXTURE
- PLUMBING FIXTURE
- FLOOR DRAINS
- FLOOR SINK
- WALL HYDRANT
- FIRE HOSE CABINET
- UPRIGHT SPRINKLER HEAD
- PENDANT SPRINKLER HEAD
- CONCEALED SPRINKLER HEAD
- RECESSED SPRINKLER HEAD
- SIDEWALL SPRINKLER HEAD

Electrical and Technology Symbols

- LIGHT FIXTURE # DENOTES TYPE
- LIGHT FIXTURE # DENOTES TYPE
- RETROFITTED LIGHT FIXTURE AS NOTED
- COMBINATION EXIT/EMERGENCY LIGHT # DENOTES TYPE
- EMERGENCY LIGHT W/BATTERY PACK # DENOTES TYPE
- EMER. LIGHT/WALL MOUNT # DENOTES TYPE
- EMERGENCY FIXTURE # DENOTES TYPE
- EMERGENCY FIXTURE # DENOTES TYPE
- EXIT LIGHT- CEILING MOUNTED # DENOTES TYPE
- EXIT LIGHT -WALL MOUNTED # DENOTES TYPE
- DLS — DAYLIGHT SENSOR
- AR — AREA OF RESCUE LIGHT FIXTURE # DENOTES TYPE
- POLE MOUNTED SITE LIGHT # DENOTES TYPE
- $ — LIGHT SWITCH (LINE VOLTAGE)
  - K - KEY OPERATED
  - 3 - 3 WAY
  - 4 - 4 WAY
  - D - DIMMER
- LIGHTING CONTROL (LOW VOLTAGE)
- TC — TIME CLOCK
- AP — ACCESS POINT
- OS — OCCUPANCY SENSOR
- VS — VACANCY SENSOR
- PC — PHOTO CELL
- LC — LIGHTING CONTROL
- F — FIRE ALARM MANUAL PULL STATION
- F F — FIRE ALARM BELL- W/STROBE W/0 STROBE
- F F — FIRE ALARM HORN- W/STROBE W/0 STROBE
- S — SMOKE DETECTOR
- B — BEAM SMOKE DETECTOR
- S D — DUCT SMOKE DETECTOR
- H — RATE OF RISE HEAT DETECTOR
- H F — FIXED HEAT DETECTOR
- S — FIRE ALARM STROBE LIGHT
- DH — MAGNETIC DOOR HOLDER
- A — FIRE ALARM / VOICE NOTIFICATION SPEAKER (WALL)
- A — FIRE ALARM / VOICE NOTIFICATION SPEAKER (CEILING)
- A — FIRE ALARM / VOICE NOTIFICATION SPEAKER STROBE (CEILING)
- A — FIRE ALARM / VOICE NOTIFICATION SPEAKER STROBE (WALL)
- A — FIRE ALARM / VOICE NOTIFICATION STROBE (WALL)
- R — RELAY
- RTS — REMOTE INDICATOR TEST SWITCH
- FS — SPRINKLER FLOW SWITCH
- TS — SPRINKLER TAMPER SWITCH
- FAA — FIRE ALARM ANNUNCIATOR PANEL
- FACP — FIRE ALARM CONTROL PANEL
- FAGA — FIRE ALARM GRAPHIC ANNUNCIATOR
- CS — CONTROL STATION- TYPE AS DESCRIBED ON DWGS.
- HCL — HOUSE LIGHTING CONTROL STATION
- DCR — DIMMER CONTROL OUTLET
- AR — AREA OF RESCUE STATION
- MJ — MICROPHONE JACK
- SJ — SPEAKER JACK
- P — HOUSE LIGHT PANIC STATION
- AI — AUDITORIUM INTERCOM
- S — COMBINATION CLOCK/SPEAKER
- CLOCK
- EXISTING TELEPHONE
- TELEPHONE OUTLET
  - W - WALL MOUNT AT 54" AFF
  - IC - INTERCOM SOUND SYSTEM HAND SET
  - BLANK - WALL MOUNT AT 16" AFF
- H — EXTERIOR EVACUATION STROBE (EES)
- LD — LOCK DOWN
- FLOOR TELEPHONE OUTLET
- INTERCOM CALL SWITCH
- TV — TELEVISION OUTLET
- CO — COMPUTER OUTLET
- A/V — AUDIO/VIDEO OUTLET
- PROJECTOR MOUNTING TILE

- CABLE TRAY - LADDER TYPE
- CABLE TRAY - BASKET TYPE
- SR — SURFACE RACEWAY TYPE AS DESCRIBED ON DWGS.
- CI — COMMUNICATION INTERFACE OUTLET
- S — CEILING MOUNT SPEAKER
- S — WALL MOUNT SPEAKER
- VC — VOLUME CONTROL
- H — HORN SPEAKER
- P — PROGRAM BELL
- FB — FLOOR BOX
- DR — DOOR RELEASE
- SE — SECURITY ALARM HORN
- SE — SECURITY SENSOR
  - GB - GLASS BREAK
  - MD - MOTION DETECTOR
  - SD - SOUND DETECTOR
- DC — SECURITY DOOR CONTACT
- KP — SECURITY SYSTEM KEYPAD # DENOTES DESIGNATION
- # — SECURITY CAMERA # DENOTES DESIGNATION
- REX — SECURITY REQUEST TO EXIT SENSOR
- PS — LOW-VOLTAGE POWER SUPPLY # DENOTES DESIGNATION
- ELH — SECURITY ELECTRIC LOCKING HARDWARE
- IC — DOOR INTERCOM CALL STATION # DENOTES DESIGNATION
- CR — ACCESS CONTROL CARD READER # DENOTES DESIGNATION
- ADA — ADA PUSH BUTTON
- MON — SECURITY CCTV MONITOR
- DB — SECURITY DURESS BUTTON
- EXISTING PANEL TO REMAIN
- EXISTING PANEL TO REPLACE
- NEW PANEL
- SPD — SURGE PROTECTION DEVICE
- MOTOR
- LABEL # — NEW MOTOR SEE SCHEDULE FOR DESCRIPTION
- PB — PULL BOX
- J — JUNCTION BOX
- H — HAND/HAIR DRYER
- SINGLE RECEPTACLE
- DUPLEX RECEPTACLE
- DOUBLE DUPLEX RECEPTACLE
- SPECIAL PURPOSE RECEPTACLE
- DUPLEX FLOOR RECEPTACLE
- CR — CORD REEL
- TELE./DATA POWER POLE
- NON-FUSED DISCONNECT SWITCH
- FUSED DISCONNECT SWITCH
- MOTOR STARTER
- COMBINATION STARTER
- C — CONTACTOR
- CB — ENCLOSED CIRCUIT BREAKER
- EQUIPMENT CONNECTION
- EMERGENCY OFF BUTTON
- T# — TRANSFORMER # DENOTES DESIGNATION REFER TO RISER DIAGRAM
- P — UTILITY POLE
- UT — UNDERGROUND TELEPHONE
- T — OVERHEAD TELEPHONE
- UTV — UNDERGROUND TELEVISION
- TV — OVERHEAD TELEVISION
- UL — UNDERGROUND LIGHTING
- L — OVERHEAD LIGHTING
- UE — UNDERGROUND ELECTRIC
- E — OVERHEAD ELECTRIC
- UC — UNDERGROUND COMPUTER
- C — OVERHEAD COMPUTER

Symbol Tags

- AC = ABOVE CEILING
- AUX = AUXILLARY CONTACT
- WP = WEATHERPROOF
- WG = WIRE GUARD
- A = ABOVE (CASEWORK)
- B = BELOW (CASEWORK)
- H = HORIZONTAL
- TK = TOE KICK
- TS = TEACHER STATION
- USB = UNIVERSAL SERIAL BUS

TYPICAL FOR ALL ELEC SYMBOLS:
- F = REMOVE EXISTING
- F E = EXISTING TO REMAIN
- F RL = RELOCATE EXISTING
- F RE = REPLACE EXISTING

Standard Symbols

- 2 / A12 — STANDARD REFERENCE BUBBLE; DETAIL NUMBER; DRAWING NUMBER
- Floor Plan 1/8"=1'-0" — DRAWING TITLE & SCALE
- 2 / A112 — BUILDING SECTION
- CLL — CONTRACT LIMIT LINE
- ADA 5' TURNING RADIUS
- 100'-0" 1st FF — ELEVATION CALL OUT
- 2 / A112 — WALL SECTION
- 2 / A12 — ELEVATION
- 1 / 4 A112 2 / 3 — INTERIOR ELEVATION
- 2 / A112 — DETAIL
- N — NORTH ARROW
- CLASSROOM 101 — ROOM NAME AND NUMBER
- PROPERTY LINE
- CUT LINE
- A — COLUMN CENTER LINE
- CENTER LINE
- A B / A B — MATCH LINE
- 5 — DRAWING REVISION NUMBER
- EARTH
- GRAVEL
- SAND
- CONCRETE
- NEW ASPHALT PAVING OR TOP COURSE
- NEW HEAVY-DUTY ASPHALT PAVING
- REMOVE AND REPLACE ASPHALT PAVING
- BRICK
- CONCRETE MASONRY UNITS
- STONE
- FINISHED WOOD TRIM
- PLYWOOD
- INSULATION (LOOSE OR BATT)
- ROUGH WOOD
- STRUCTURAL GLAZED TILE
- RIGID INSULATION
- METAL, STEEL
- TERRAZZO
- ACOUSTICAL PANEL
- CERAMIC TILE
- RESILIENT FLOORING
- GLASS (LARGE SCALE)
- PLASTER, CEMENT, GROUT, GYPSUM WALL BOARD

S.E.D. Control No. 62-18-01-06-0-007-018
S.E.D. Control No. 62-18-01-06-0-002-014
S.E.D. Control No. 62-18-01-06-0-003-014
S.E.D. Control No. 62-18-01-06-0-005-015
S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

Abbreviations

NOTE: REFER TO FINISH PLANS FOR ROOM FINISH KEY AND ADDITIONAL ABBREVIATIONS AND TYPES

AAC	ASBESTOS ABATEMENT CONTRACTOR
AAD	AUTOMATIC AIR DAMPER
AB	ANCHOR BOLT, AIR BARRIER
AC	AIR CONDITIONING, ALTERNATING CURRENT
ACCMP	ASPHALT COATED CORR METAL PIPE
ACM	ASBESTOS CONTAINING MATERIAL
ACT	ACOUSTICAL CEILING TILE
ACU	AIR CONDITIONING UNIT
AD	AREA DRAIN
ADA	AMERICAN DISABILITIES ACT
ADD	ADDENDUM
ADDL	ADDITIONAL
ADDN	ADDITION
ADH	ADHESIVE
ADJ	ADJACENT
ADR	ACCESS DOOR
AESS	ARCH EXPOSED STRUCTURAL STEEL
AFF	ABOVE FINISH FLOOR
AH	ACCESS HATCH
AHU	AIR HANDLING UNIT
AIB	AIR INFILTRATION BARRIER
ALT	ALTERNATE
ALTB	ACOUSTICALLY LINED TRANSFER BOX
ALTN	ALTERATION ALUM ALUMINUM
AMP	AMPERE
ANOD	ANODIZED
ANT	ACID NEUTRALIZATION TANK
AP	ACCESS PANEL, APPROX, APPROXIMATE(LY)
APC	ARCHITECTURAL PRECAST CONCRETE
ARCH	ARCHITECT (URAL)
A/S	AIR SEPARATOR
ASB	ASBESTOS
ASPH	ASPHALT
ATV	ATMOSPHERIC VENT
AUD	AUDITORIUM
AUTO	AUTOMATIC
AVE	AVERAGE
B	BOILER, BRICK, BOTTOM
BB	BASKETBALL
BBD	BOILER BLOWDOWN
BC	BOTTOM OF CURB
BCU	BLOWER COIL UNIT
BCX	BOTTOM CHORD EXTENSION
BD	BOARD
BDD	BACKDRAFT DAMPER
BF	BACK FLOW PREVENTER
BG	BOTTOM GRILLE
BIT	BITUMINOUS
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BO	BY OTHERS
BOD	BOTTOM OF DUCT
BOF	BOTTOM OF FOOTING
BOS	BOTTOM OF STEEL
BOT	BOTTOM
BPL	BEARING PLATE
BR	BOTTOM REGISTER
BRDG	BRIDGING
BRG	BEARING
BRK	BRICK
BRSH	BRICKSHELF
BRZ	BRONZE
BS	BOTH SIDES, BOTTOM OF STAIR
BSMT	BASEMENT
BSPL	BACKSPLASH
BT	BENT
BTU	BRITISH THERMAL UNITS
BTUH	BRITISH THERMAL UNITS PER HOUR
BUR	BUILT-UP ROOFING
BW	BOTTOM OF WALL
BWC	BACK WATER CHECK VALVE
C	CONDUIT, CONVECTOR, CONDENSOR, COMMON, CARPET
CA	COMPRESSED AIR
CAB	CABINET
CATV	CABLE TELEVISION
CB	CATCH BASIN, CIRCUIT BREAKER, CHALKBOARD
CCTV	CLOSED CIRCUIT TELEVISION
CD	CEILING DIFFUSER, CONDENSATE DRAIN
CEM	CEMENT
CER	CERAMIC CF CUBIC FEET, CEILING FAN
CFM	CUBIC FEET PER MINUTE
CFMF	COLD FORMED METAL FRAMING
CFT	CERAMIC FLOOR TILE
CG	CEILING GRILLE
CHAN	CHANNEL
CHUV	CEILING HUNG UNIT VENTILATOR
CI	CAST IRON
CIP	CAST IN PLACE
CIRC	CIRCUMFERENCE
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLKG	CAULKING
CLL	CONTRACT LIMIT LINE
CLR	CLEAR (ING) (ENCE)
CLRM	CLASSROOM
CMP	CORRUGATED METAL PANEL
CMT	CERAMIC MOSAIC TILE
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
CODP	CLEAN OUT DECK PLATE
COL	COLUMN
COMB	COMBINATION
COMP	COMPRESS (ED) (ION) (IBLE), COMPOSITE
CONC	CONCRETE
COND	CONDENSATE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINOUS
CONTR	CONTRACT (OR)
COORD	COORDINATE
CORR	CORRUGATED, CORRIDOR
COWP	CLEAN OUT WALL PLATE
CPVC	CHLORINATED POLY VINYL CHLORIDE
CR	CEILING REGISTER
CRS	COURSE (S)
CSK	COUNTERSINK
CSMT	CASEMENT
CT	COMPUTER TERMINAL, CERAMIC BASE TILE
CTD	COATED
CTOP	COUNTER TOP
CTR	CENTER
CU	CUBIC
CUH	CABINET UNIT HEATER
CV	CONVECTOR, CURB VALVE
CW	COLD WATER
CWR	CHILLED WATER RETURN
CWS	CHILLED WATER SUPPLY
CWT	CERAMIC WALL TILE
D	DIESEL FUEL, DEPTH
DB	DRY BULB
DC	DIRECT CURRENT
DDC	DIRECT DIGITAL CONTROL
DE	DELONIZED WATER
DEG	DEGREES
DEMO	DEMOLISH
DEP	DEPRESS (ED) (ION)
DET	DETAIL (ED)
DF	DRINKING FOUNTAIN
DH	DOUBLE HUNG
DHU	DEHUMIDIFICATION UNIT
DI	DROP INLET, DUCTILE IRON, DISTILLED WATER
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DISP	DISPENSER
DIST	DISTANCE
DIV	DIVISION
DL	DEAD LOAD
DN	DOWN
DO	DITTO
DP	DAMPPROOF (ING)
DPR	DAMPER
DR	DOOR, DEEP RIB
DWG	DRAWING
DS	DOWNSPOUT, DRAINAGE STRUCTURE
DT	DRAIN TILE
DTA	DOVETAIL ANCHOR
DTL	DETAIL
DW	DUMBWAITER, DISHWASHER
DWL	DOWEL
DWR	DRAWER
E	EAST
EA	EXHAUST AIR, EACH
EAT	ENTERING AIR TEMPERATURE
EB	EXPANSION BOLT
EC	ELECTRICAL CONTRACTOR
ECF	ENHANCED CONCRETE FLOORING
EIFS	EXTERIOR INSULATION SYSTEM
EF	EACH FACE, EXHAUST FAN
EJ	EXPANSION JOINT
ELEC	ELECTRIC (AL)
ELEM	ELEMENT
ELEV	ELEVATION, ELEVATOR
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
ENC	ENCLOSURE
EOD	EDGE OF DECK
EOS	EDGE OF SLAB
EQ	EQUAL, EQUIVALENT
EQC	EQUIPMENT CONTRACTOR
EQUIP	EQUIPMENT
ES	EXPOSED SURFACE, EXPOSED STRUCTURE
ESF	ELASTIC SHEET FLASHING
ESM	ELASTIC SHEET MEMBRANE
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EWT	ENTERING WATER TEMPERATURE
EXH	EXHAUST
EXG	EXISTING
EXP	EXPANSION
EXT	EXTERIOR, EXTERNAL
F	FAHRENHEIT
FA	FIRE ALARM
FAI	FRESH AIR INTAKE
FCU	FAN COOLING UNIT
FD	FLOOR DRAIN, FIRE DAMPER
FDC	FIRE DEPARTMENT CONNECTION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR, FACTORY FINISH
FFE	FINISH FLOOR ELEVATION
FFL	FINISH FLOOR LINE
FG	FLOOR GRILLE
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FIN	FINISH (ED)
FIXT	FIXTURE
FL	FLUSH
FLD	FLOOR DUCT
FLEX	FLEXIBLE
FLG	FLASHING
FLR	FLOOR (ING)
FLUOR	FLUORESCENT
FM	FLOOR MOUNTED
FMC	FLEXIBLE METAL CONDUIT
FND	FOUNDATION
FOB	FREIGHT ON BOARD, FLAT ON BOTTOM
FOG	FUEL OIL GAUGE
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FOT	FLAT ON TOP
FP	FIREPROOF (ING)
FPM	FEET PER MINUTE
FR	FRAME, FLOOR REGISTER
FRA	FRESH AIR
FRC	FIRE RESISTANT COATING
FRP	FIBERGLASS REINFORCED PANEL
FRT	FIRE RETARDANT
FS	FLOOR SINK
FSD	FIRE AND SMOKE DAMPER
FT	FEET, FLOOR TREATMENT
FTG	FOOTING
FTR	FIN TUBE RADIATION
FV	FLUSH VALVE
G	GAS, GLYCOL
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GASK	GASKET (ED)
GC	GENERAL CONTRACT (OR)
GCMU	GLAZED CONCRETE MASONRY UNIT
GCO	GRADE CLEANOUT GF GROUND FACE
GL	GLASS, GLAZING
GND	GROUND
GPM	GALLONS PER MINUTE
GR	GRADE (ING), GLYCOL RETURN
GS	GLYCOL SUPPLY
GVL	GRAVEL
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
H	HEIGHT
HB	HOSE BIB
HBD	HARD BOARD
HC	HEATING CONTRACT (OR), HANDICAP
HCR	HOT/CHILLED RETURN
HCS	HOT/CHILLED SUPPLY
HD	HEAVY DUTY
HDPE	HIGH DENSITY POLYETHYLENE
HDR	HEADER
HDW	HARDWARE
HG	HOT GLYCOL
HIP	HIGH IMPACT PANEL
HM	HOLLOW METAL
HORZ	HORIZONTAL
HP	HORSEPOWER, HIGH PRESSURE, HEAT PUMP
HPS	HEAT PUMP LOOP WATER SUPPLY
HPR	HEAT PUMP LOOP WATER RETURN
HPC	HIGH PERFORMANCE COATING
HPL	HIGH PRESSURE LAMINATE
HR	HANDRAIL, HOUR
HT	HEIGHT
HTG	HEATING
HV	HIGH VOLTAGE
HVAC	HEATING/VENTILATING/AIR CONDITIONING
HVU	HEATING AND VENTILATING UNIT
HW	HOT WATER
HWH	HOT WATER HEATER
HWP	HOT WATER PUMP
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IN	INCHES
INCL	INCLUDE (D) (ING)
INS	INSULATE (D) (ION)
INT	INTERIOR
INV	INVERT
IP	IRON PIPE
IPS	IRON PIPE SIZE
IW	INDIRECT WASTE
J	JANITORS CLOSET
JAN	JANITORS CLOSET
JB	JUNCTION BOX
JC	JANITORS CLOSET
JCT	JUNCTION
JT	JOINT
KW	KILOWATT
KWH	KILOWATT PER HOUR
KV	KILOVOLT
KVA	KILOVOLT AMPERE
L	LENGTH, LONG
LAB	LABORATORY
LAD	LADDER
LAM	LAMINATE (D)
LAT	LEAVING AIR TEMPERATURE
LAV	LAVATORY
LB	POUND
LBL	LABEL
LBP	LEAD BASED PAINT
LC	LANDSCAPE CONTRACTOR (SITE)
LCC	LEAD COATED COPPER
LDR	LEADER
LEV	LEVEL
LV	LABORATORY VENT
LW	LABORATORY WASTE
LF	LINEAR FOOT
LFMC	LIQUID-TIGHT FLEXIBLE METAL CONDUIT
LFNC	LIQUID-TIGHT FLEXIBLE NONMETALLIC CONDUIT
LG	LENGTH, LONG
LGI	LARGE GROUP INSTRUCTION
LH	LEFT HAND
LIN	LINEAR
LKR	LOCKER
LL	LIVE LOAD
LP	LOW PRESSURE
LPC	LOW PRESSURE CONDENSATE
LPS	LOW PRESSURE STEAM
LPT	LOW POINT
LS	LINOLEUM SHEET
LT	LIGHT, LINOLEUM TILE
LTL	LINTEL
LV	LOW VOLTAGE
LVR	LOUVER
LWT	LEAVING WATER TEMPERATURE
MAN	MANUAL
MAS	MASONRY
MAT	MATERIAL
MAU	MAKE UP AIR UNIT
MAX	MAXIMUM
MB	MARKER BOARD
MBH	THOUSAND BTUH
MBR	MEMBER
MD	MOTORIZED DAMPER
ME	MECHANICAL EQUIPMENT
MECH	MECHANICAL (LY)
MED	MEDIUM
MEMB	MEMBRANE
MEZZ	MEZZANINE
MF	MIXING FAUCET
MFR	MANUFACTURE (R)
MH	MAN HOLE
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MOD	MODULE (OR), MODEL
MR	MOP RECEPTOR
MP	MULTICOLOR WALL COATING
MT	MOUNT
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
MTH	MARBLE THRESHOLD
MTR	METER
MULL	MULLION
MVEJ	MASONRY VENEER EXPANSION JOINT
N	NORTH, NO WORK REQUIRED
NAT	NATURAL
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NEG	NEGATIVE
NEUT	NEUTRALIZATION
NIC	NOT IN CONTRACT
NO	NUMBER, NORMALLY OPEN
NOM	NOMINAL
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE
OA	OVERALL, OUTSIDE AIR
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OPNG	OPENING
OPP	OPPOSITE
OPP HD	OPPOSITE HAND
P	PAINT SURFACE(S) INCLUDING SOFFITS
PAR	PARALLEL
PART	PARTITION
PC	PLUMBING CONTRACT (OR), PIGMENTED CONCRETE
PCC	PRECAST CONCRETE
PE	PORCELAIN ENAMEL
PENC	PRE-EXISTING NON-CONFORMING
PERF	PERFORATE (ION) (ED)
PERI	PERIMETER
PERP	PERPENDICULAR
PL	PLATE, PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER, PLASTIC
PLF	POUNDS PER LINEAR FOOT
PLYWD	PLYWOOD
PM	PLUGMOLD
PNL	PANEL
POC	POINT OF CURVATURE, POINT OF CONNECTION
POL	POLISHED
POS	POSITIVE
POT	POINT OF TANGENCY
PR	PAIR
PRE	POWER ROOF EXHAUSTER
PREP	PREPARE (ATION)
PRF	PREFORMED
PROJ	PROJECT
PS	PAINT EXPOSED STRUCTURE/DECK
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT, PORCELAIN TILE
PTD	PAINTED
PTFR	PRESSURE TREATED FIRE RETARDANT
PTP	PRESSURE TREATED PRESERVATIVE
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
PWE	POWER WALL EXHAUSTER
QF	QUARTZ FLOORING
QT	QUARRY TILE
R	RADIUS, RETURN, REFRIGERANT
RA	RETURN AIR
RAD	RADIATION
RAF	RETURN AIR FAN, RESILIENT ATHLETIC FLOORING
RB	RESILIENT BASE
RC	ROOFING CONTRACT (OR)
RCA	RECYCLED CONCRETE AGGREGATE
RCP	REINFORCED CONCRETE PIPE, REFLECTED CEILING PLAN
RCU	REMOTE CONDENSING UNIT
RD	ROOF DRAIN
RECEPT	RECEPTACLE
REF	REFERENCE
REFL	REFLECT (ED) (IVE) (OR)
REFR	REFRIGERATOR
REG	REGISTER
REINF	REINFORCE (D) (ING)
REM	REMOVED
REQD	REQUIRED
RESIL	RESILIENT
RET	RETAINING, RETURN
REV	REVISION, REVISED, REVEAL
RF	RUBBER FLOORING
RFG	ROOFING
RFH	ROOF HATCH
RFM	RECESSED FLOOR MAT
RG	RETURN GRILLE
RGS	RIGID GALVANIZED STEEL
RH	RIGHT HAND
RHC	REHEAT COIL
RI	ROUGH-IN
RL	RAIN LEADER
RLG	RAIL(ING)
RM	ROOM
RMC	RIGID METAL CONDUIT
RNC	RIGID NONMETALLIC CONDUIT
RNT	RUNNING TRAP
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RPM	REVOLUTIONS PER MINUTE
RR	REMOVE EXISTING AND REPLACE WITH NEW
RS	RUBBER STAIR TREAD/RISER
RTH	ROOF TOP HOOD
RTU	ROOF TOP UNIT
RW	RAW WATER
S	SOUTH, SUPPLY, SURGE PROTECTED
SA	SUPPLY AIR
SAN	SANITARY
SAS	SMOOTH ALL SIDES
SC	SOLID CORE, SILL COCK, SEALED CONCRETE
SCHED	SCHEDULE
SCT	STRUCTURAL CLAY TILE
SD	STORM DRAIN, SPLITTER DAMPER, SMOKE DAMPER
SEC	SECTION
SF	SQUARE FEET
SGI	SMALL GROUP INSTRUCTION
SGT	STRUCTURAL GLAZED TILE
SH	SHELF, SHELVING, SMOKE HATCH
SHR	SHOWER, SHEAR WALL
SHT	SHEET
SHTHG	SHEATHING
SIM	SIMILAR
SK	SINK
SL	SOUND LINED, SKYLIGHT
SLC	SILLCOCK
SLV	SLEEVE
SLVR	STORM LOUVER
SMH	SANITARY MANHOLE
SOG	SLAB ON GRADE
SP	STATIC PRESSURE, STANDPIPE, SPACE (ING) (ES)
SPEC	SPECIFICATION (S)
SPKR	SPRINKLER
SPL	SPECIAL
SQ	SQUARE
SS	STAINLESS STEEL
SST	STRUCTURAL STEEL TUBING
ST	STORM, STORAGE
STA	STATION
STC	SHOWER TEMPERATURE CONTROLLER, STAINED CONCRETE
STD	STANDARD
STG	SEATING
STL	STEEL
STN	STAIN (ED)
STOR	STORAGE
STRU	STRUCTURAL
SURF	SURFACE
SUSP	SUSPENDED
SV	SHEET VINYL, STEAM VENT
SW	SWITCH, SOFTENED WATER
SWCI	SERVICE WEIGHT CAST IRON
SYM	SYMMETRICAL
SYN	SYNTHETIC
SYS	SYSTEM
T	TREAD, TOP, TOILET ROOM, TONS, TERRAZZO
TB	TOP AND BOTTOM, TACK BOARD, TERRAZZO BASE
TBD	TO BE DETERMINED
TC	TEMPERATURE CONTROL, TEMPERED CLEAR, TELECOMMUNICATIONS CONTRACTOR, TOP OF CURB
TCX	TOP CHORD EXTENTION
TDV	TRIPLE DUTY VALVE
TEL	TELEPHONE
TEMP	TEMPERATURE
TG	TOP GRILLE, TONGUE AND GROOVE
THK	THICKNESS
THR	THRESHOLD
TME	TO MATCH EXISTING
TMV	THERMOSTATIC MIXING VALVE
TOD	TOP OF DUCT
TOF	TOP OF FASCIA, TOP OF FOOTING
TOL	TOLERANCE
TOM	TOP OF MASONRY
TOP	TOP OF PIPE, TOP OF PIER
TOS	TOP OF STEEL, TOP OF STAIR
TPART	TOILET PARTITION
TR	TOP REGISTER
TRN	TRANSOM
TS	TOP OF STAIR
TV	TELEVISION
TW	TEMPERED WATER, TOP OF WALL
TYP	TYPICAL
UC	UNDERCUT
UD	UNDERDRAIN
UE	UNDERGROUND ELECTRIC
UG	UNDERGROUND
UH	UNIT HEATER
UNF	UNFINISHED
UNIF	UNIFORM
UNO	UNLESS NOTED OTHERWISE
UR	URINAL
UT	UNDERGROUND TELEPHONE
UV	UNIT VENTILATOR
V	VENT, VOLT
VAR	VARIES, VARIABLE
VARN	VARNISH
VAT	VINYL ASBESTOS TILE
VAV	VARIABLE AIR VOLUME
VB	VACUUM BREAKER, VAPOR RETARDER BARRIER, VOLLEYBALL
VCB	VENTED COVE BASE
VCT	VINYL COMPOSITE TILE
VD	VOLUME DAMPER
VERM	VERMICULITE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
VIN	VINYL
VIT	VITREOUS TILE
VNR	VENEER
VOL	VOLUME
VTR	VENT THROUGH ROOF
VWC	VINYL WALL COVERING
W	WEST, WIDTH, WIDE, WASTE, WATT
WB	WET BULB
WC	WATER CLOSET, WALL COVERING
WD	WOOD, WOOD FLOORING
WDW	WINDOW
WDWC	WINDOW CONTRACTOR
WF	WASH FOUNTAIN
WG	WALL GRILLE, WATER GAUGE
WH	WALL HUNG, WALL HYDRANT
WHA	WATER HAMMER ARRESTOR
WI	WROUGHT IRON
WM	WIREMOLD
WP	WATER PROOFING, WORKING POINT
WR	WATER REPELLENT, WIDE RIB, WALL REGISTER
WS	WATER STOP
WSCT	WAINSCOT
WT	WEIGHT
WWHP	WATER TO WATER HEAT PUMP
WWM	WELDED WIRE MESH
W/	WITH
W/O	WITHOUT
XHCI	EXTRA HEAVY CAST IRON
YD	YARD DRAIN, YARD

WALLKILL CENTRAL SCHOOL DISTRICT — Established 1938

complex world | CLEAR SOLUTIONS

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

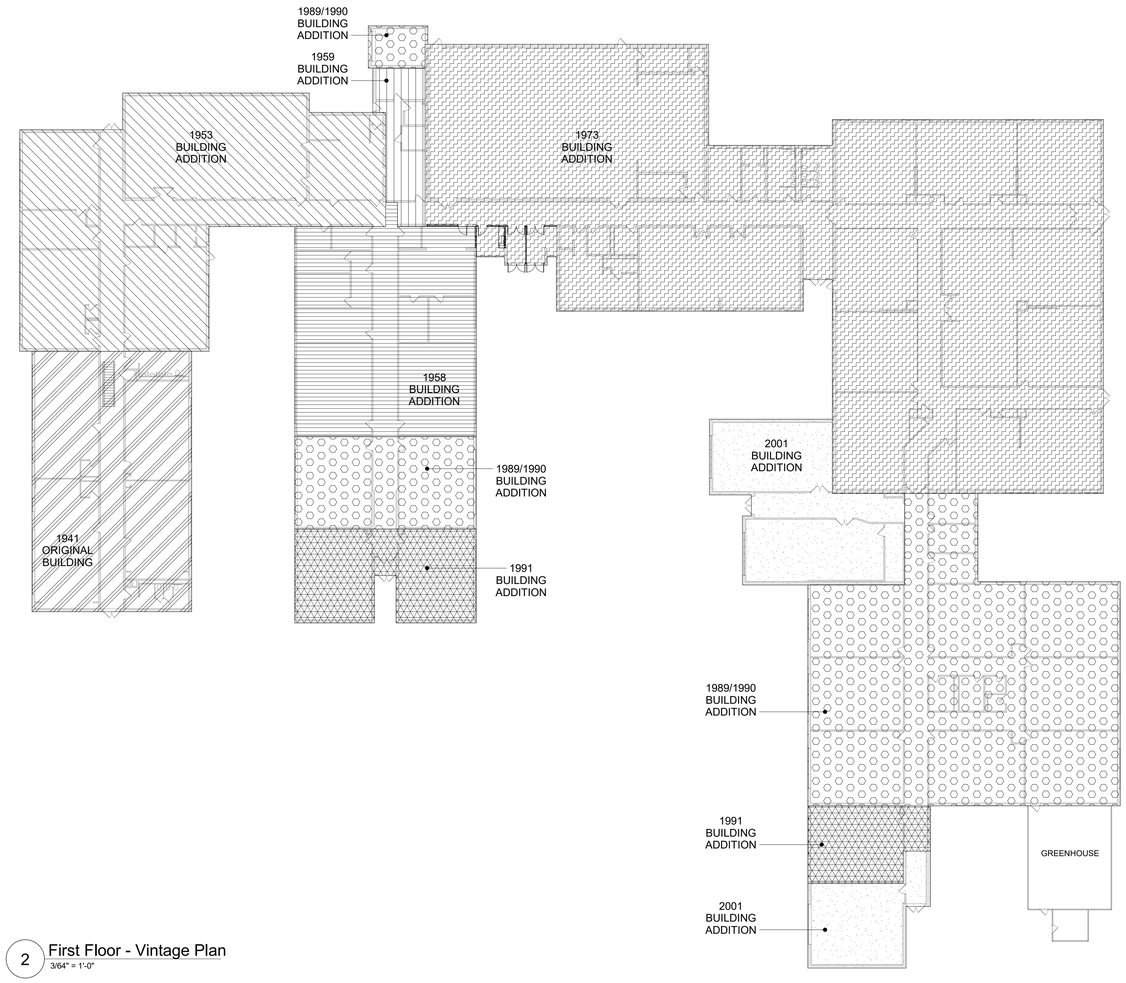
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

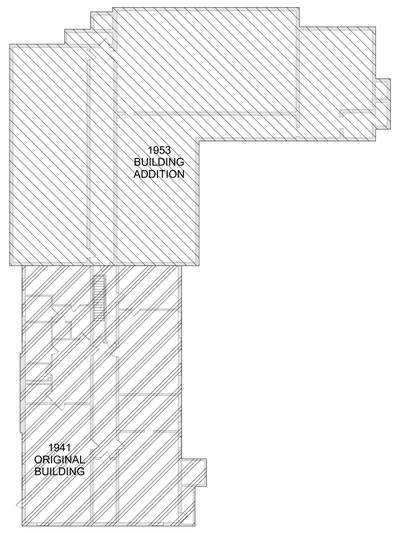
Reconstruction to:
Wallkill Senior High School
John G. Borden Middle School
Ostrander Elementary School
Plattekill Elementary School
Leptondale Elementary School

Symbols and Abbreviations

Drawn By: TTAE
Date: 11/4/2022
Project No.: 17597-22001
Drawing Number: G100



2 First Floor - Vintage Plan
3/64" = 1'-0"



1 Basement Floor - Vintage Plan
3/64" = 1'-0"

Code Compliance Review

PROJECT LOCATION:
1270 NY ROUTE 32, PLATTEKILL, NY 12568
BOUNDED BY NY STATE ROUTE 32 TO THE WEST, HUCKLEBERRY TURNPIKE TO THE NORTH, AND MARCANO LANE TO THE EAST.

PROJECT DESCRIPTION:
THIS PROJECT INCLUDES THE RENOVATION OF THE MAIN ENTRANCE TO CREATE A SECURITY VESTIBULE. THE PROJECT ALSO INCLUDES THE RECOATING AND SELECT REPLACEMENT OF THE EXISTING FOAM ROOF SYSTEM, ROOF STRUCTURE REINFORCEMENT AND ASSOCIATED CEILING WORK, AND REPLACEMENT OF DOOR HARDWARE WITH NEW LOCKDOWN HARDWARE.

WORK GENERALLY CONSISTS OF THE FOLLOWING:
ALTERATIONS - LEVEL 1
- LOCKDOWN DOOR HARDWARE UPGRADES
- ROOF RECOATING AND SELECT REPLACEMENT

ALTERATIONS - LEVEL 2
- RECONFIGURATION OF MAIN ENTRANCE FOR SECURITY
- ROOF STRUCTURAL REINFORCEMENT

APPLICABLE CODES AND STANDARDS:

BASED ON THE NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE INCLUDING APPLICABLE 2018 ICC CODES, 2020 BUILDING CODE of NYS INCLUDING THE 2020 BCNYS, 2020 EBCNYS AND 2020 ECCNYS, ICC A117.1-09 STANDARD FOR ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES AND COMMISSIONER OF EDUCATIONS 155 REGULATIONS (SED MPS-98).

BUILDING DATA:

BUILDING: PLATTEKILL ELEMENTARY SCHOOL
1270 NY ROUTE 32
PLATTEKILL, NY 12568

DESCRIPTION: THREE STORY MASONRY AND REINFORCED CONCRETE BUILDING WITH BASEMENT.

YEAR BUILT: 1941

BUILDING AREA: BASEMENT 5,193 SQFT
1ST FLOOR 61,147 SQFT

TOTAL GROSS AREA= 66,340 SQFT

CODE DATA SUMMARY:

USE GROUP: E : EDUCATION

CONSTRUCTION TYPE -

EXISTING: IIB

NEW: IIB

SPRINKLERED: NO

WORK AREA:

LOCATION	AREA	% OF TOTAL
1ST FLOOR	335 SQFT	0.51%

CORRIDOR DOORS: ALL CORRIDOR DOORS SCHEDULED TO BE REPLACED SHALL HAVE MINIMUM FIRE DOOR ASSEMBLY RATING OF 20 MINUTES IN ACCORDANCE WITH SECTION 716.5

PATH OF CODE COMPLIANCE:

2018 IEBC CODES AND 2020 EXISTING BUILDING CODE of NYS
301.1.2 WORK AREA COMPLIANCE METHOD

CHAPTER 6 - CLASSIFICATION OF WORK
602 ALTERATION - LEVEL 1 (CHAPTER 7)
603 ALTERATION - LEVEL 2 (CHAPTER 8)

NEW CONSTRUCTION WILL COMPLY WITH REQUIREMENTS OF 2018 ICC CODES, 2020 BUILDING CODE of NYS INCLUDING THE 2020 BCNYS, 2020 EBCNYS AND 2020 ECCNYS, ICC A117.1-09 STANDARD FOR ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES AND COMMISSIONER OF EDUCATIONS 155 REGULATIONS (SED MPS-98).

EXIT TRAVEL DISTANCE (PER TABLE 1017.2):
FOR EXIT TRAVEL DISTANCE - SEE BG351.

CORRIDOR ENCLOSURES (PER TABLE 1020.1):
FOR CORRIDOR FIRE RESISTANCE - SEE ENLARGED PLANS, PARTITION TYPES AND DOOR SCHEDULE. ALL CROSS CORRIDOR PARTITIONS ARE SMOKE PARTITIONS AND EXTEND FROM FINISH FLOOR TO DECK ABOVE.

UL DESIGN NUMBERS:

1 HR. STUD PARTITIONS UL# U465

NOTES:
1. RATING PROVIDED BY 4" SOLID CONCRETE MASONRY UNITS - DETERMINATION OF EQUIVALENT THICKNESS OF CMU REQUIRED IS BASED ON SECTION 721 PRESCRIPTIVE FIRE RESISTANCE, TABLE 721.1 (2) RATED FIRE RESISTANCE PERIODS FOR VARIOUS WALLS AND PARTITIONS, ITEM NUMBER 3-1.2

2. ALL CMU CONSTRUCTION SHALL MEET FIRE RESISTANCE REQUIREMENTS INDICATED IN CHART OF SAME NAME ABOVE, BLOCK TYPE AS REQUIRED TO COMPLY WITH UL DESIGN NUMBERS AND AS REQUIRED TO COMPLY WITH RATED WALLS INDICATED ON CODE COMPLIANCE DRAWINGS. PROVIDE MINIMUM 4" SOLID CMU AT SUCH LOCATIONS REGARDLESS IF NOTED AS SUCH ON PLAN DETAILS.

INTERIOR FINISH REQUIREMENTS:

ALL FINISHES IN CORRIDORS AND ASSEMBLY SPACES SHALL HAVE A FIRE HAZARD CLASSIFICATION PER MANUAL OF PLANNING STANDARDS SECTION S202-2, a. THROUGH e.

RESCUE LABEL / SIGNAGE NOTES:

1. REFER TO PLANS FOR RESCUE WINDOW LOCATIONS.
2. REFER TO SPECIFICATION SECTION 10 14 00 AND SIGNAGE DRAWINGS FOR TYPES AND LOCATIONS.

General Code Notes

A. COORDINATE WITH FLOOR PLANS, WALL SECTIONS AND PARTITION TYPES FOR RATED WALL TYPES AND LOCATIONS. IMMEDIATELY NOTIFY ARCHITECT OF ANY WALL RATING DISCREPANCIES BETWEEN DRAWINGS.

B. ALL WALLS, INCLUDING AT CORRIDORS, SHALL EXTEND COMPLETELY TO THE UNDERSIDE OF DECKING, SUPPORTING STRUCTURE OR ROOF ABOVE, TYPICAL UNLESS NOTED OTHERWISE.

C. AT AREAS OF PROJECT WORK, COMPLETELY SEAL ALL PENETRATIONS REQUIRED TO COMPLY WITH FIRE RESISTANCE RATINGS IDENTIFIED ON THE DRAWINGS, REGARDLESS IF WALL IS NEW OR EXISTING, TYPICAL UNLESS NOTED OTHERWISE.

Legend

ALL WALLS, INCLUDING CORRIDOR WALLS, EXTEND TO THE ROOF DECK OR FLOOR DECK ABOVE UNLESS NOTED OTHERWISE.

- 1-HOUR FIRE PARTITION
- XX NUMBER OF OCCUPANTS IN EACH SPACE, UNO
- RW RESCUE WINDOW
- 1941 ORIGINAL BUILDING
- 1953 BUILDING ADDITION
- 1958 BUILDING ADDITION
- 1959 BUILDING ADDITION
- 1973 BUILDING ADDITION
- 1989/1990 BUILDING ADDITION
- 1991 BUILDING ADDITION
- 2001 BUILDING ADDITION

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH
ARCHITECTS & ENGINEERS

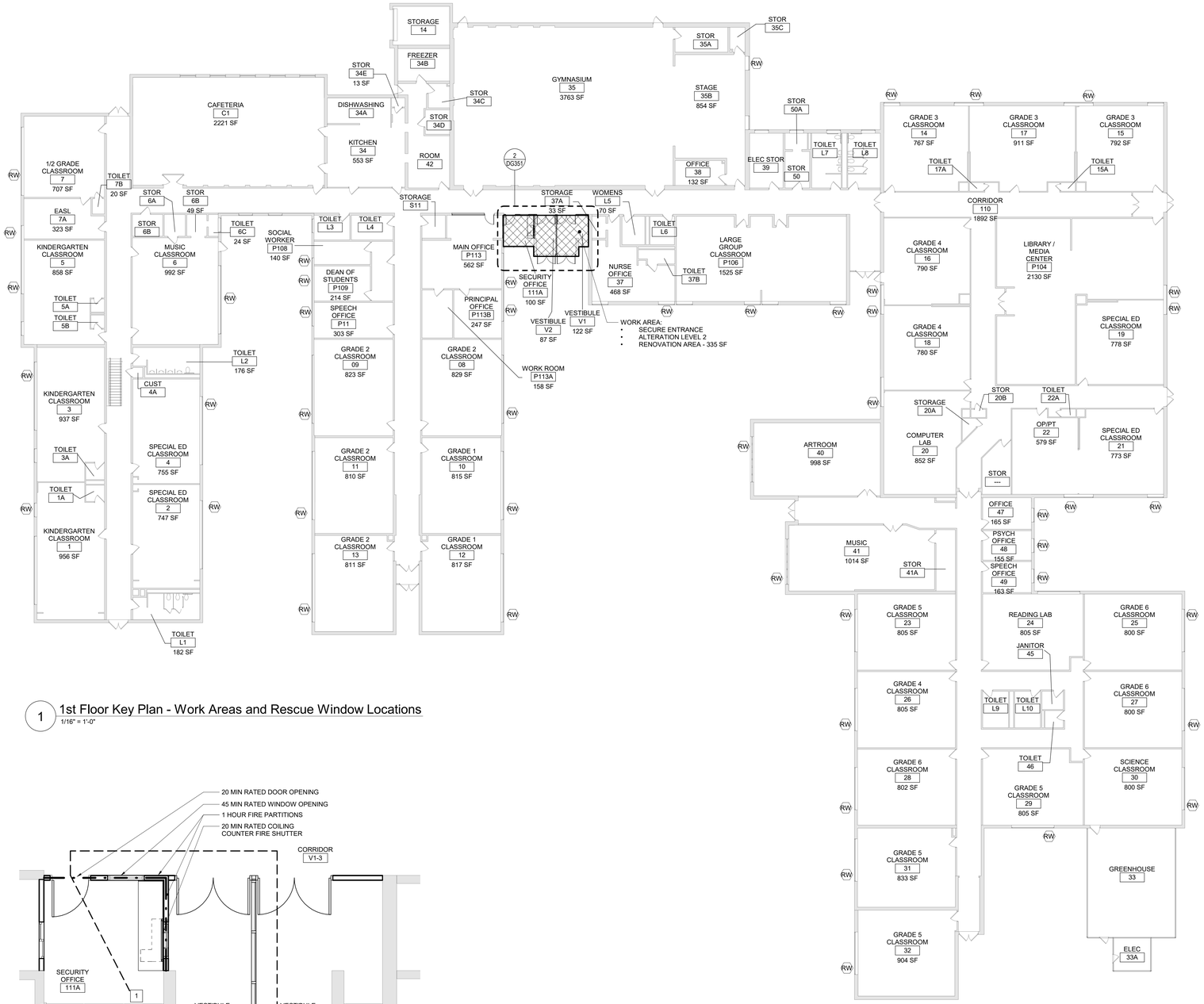
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

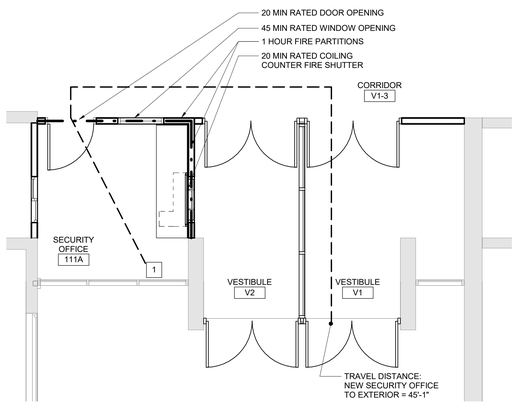
Code Compliance Review

Drawn By:	Date:	Drawing Number:
Author	11/4/2022	DG350

Project No.:
17597-22001



1 1st Floor Key Plan - Work Areas and Rescue Window Locations
1/16" = 1'-0"



2 Enlarged Plan - Entrance Work Area
1/4" = 1'-0"

General Code Notes

A. COORDINATE WITH FLOOR PLANS, WALL SECTIONS AND PARTITION TYPES FOR RATED WALL TYPES AND LOCATIONS. IMMEDIATELY NOTIFY ARCHITECT OF ANY WALL RATING DISCREPANCIES BETWEEN DRAWINGS.

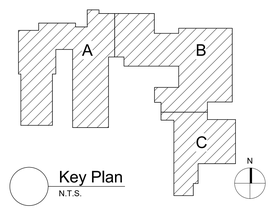
B. ALL WALLS, INCLUDING AT CORRIDORS, SHALL EXTEND COMPLETELY TO THE UNDERSIDE OF DECKING, SUPPORTING STRUCTURE OR ROOF ABOVE, TYPICAL UNLESS NOTED OTHERWISE.

C. AT AREAS OF PROJECT WORK, COMPLETELY SEAL ALL PENETRATIONS REQUIRED TO COMPLY WITH FIRE RESISTANCE RATINGS IDENTIFIED ON THE DRAWINGS, REGARDLESS IF WALL IS NEW OR EXISTING, TYPICAL UNLESS NOTED OTHERWISE.

Legend

ALL WALLS, INCLUDING CORRIDOR WALLS, EXTEND TO THE ROOF DECK OR FLOOR DECK ABOVE UNLESS NOTED OTHERWISE.

- 1-HOUR FIRE PARTITION
- XX NUMBER OF OCCUPANTS IN EACH SPACE, UNO
- RW RESCUE WINDOW
- 1941 ORIGINAL BUILDING
- 1953 BUILDING ADDITION
- 1958 BUILDING ADDITION
- 1959 BUILDING ADDITION
- 1973 BUILDING ADDITION
- 1989/1990 BUILDING ADDITION
- 1991 BUILDING ADDITION
- 2001 BUILDING ADDITION



S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

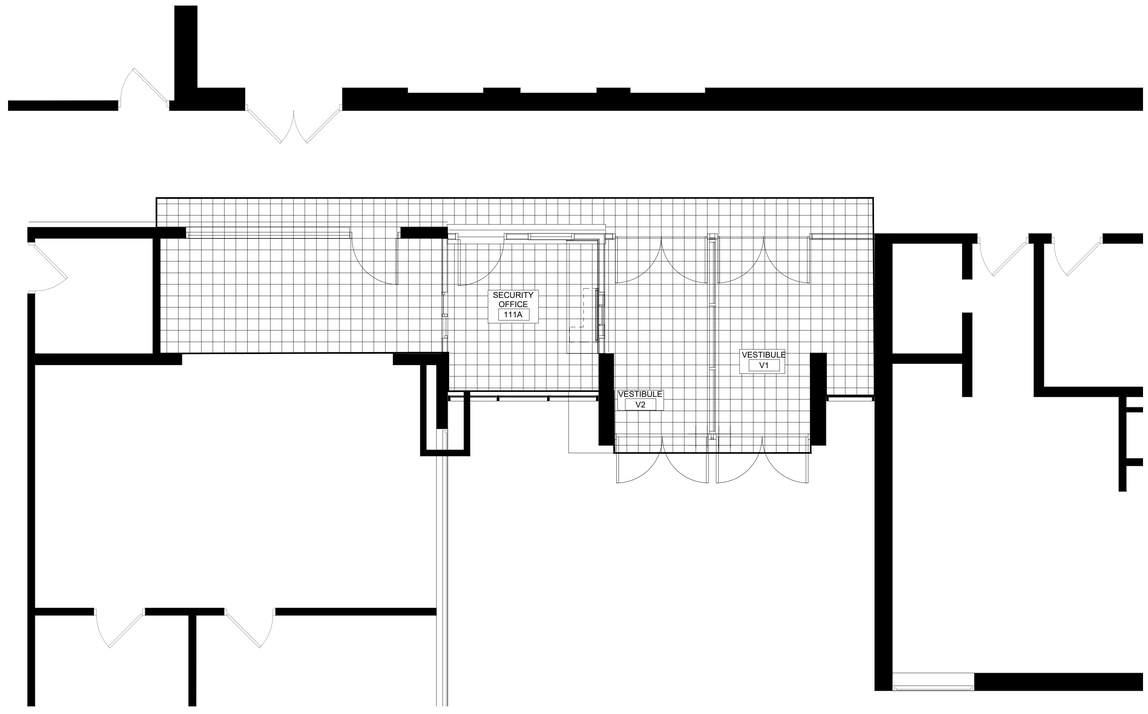
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

First Floor - Scope of Work and Rescue Window Locations

Drawn By:	Date:	Drawing Number:
Author	11/4/2022	DG351
Project No.: 17597-22001		



1 Interior Abatement Plan
1 1/2" = 1'-0"

ASBESTOS ABATEMENT LEGEND

AREA OF WORK ALL LAYERS OF FLOORING TO BE REMOVED TO SUBSTRATE

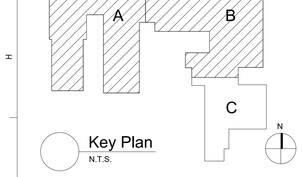
ASBESTOS ABATEMENT NOTES

PLATTEKILL ELEMENTARY SCHOOL – RECONSTRUCTION

LICENSED ASBESTOS ABATEMENT CONTRACTOR RESPONSIBLE FOR TOTAL AND COMPLETE REMOVAL AND DISPOSAL OF APPROXIMATELY 150 SF NON-FRIABLE ASBESTOS-CONTAINING FLOOR TILE ON ACM MASTIC TO THE SUBSTRATE(S). THE LAYERING SYSTEMS IS AS FOLLOWS, FROM THE TOP, CARPET, FLOOR FILLER, ACM FLOOR TILE ON ACM MASTIC, ON CONCRETE. ASBESTOS ABATEMENT CONTRACTOR TO PERFORM REMOVALS UTILIZING MANUAL, WET METHODS TO ENSURE TOTAL AND COMPLETE REMOVAL OF LIMITED EXISTING FLOOR TILE SYSTEMS, INCLUDING ALL ASSOCIATED LAYERS, FILLERS, WOOD ETC. TO BUILDING SUBSTRATE(S). SUBSEQUENT TO FINAL AIR CLEARANCES, THE SUBSTRATE(S) SHALL BE WASHED WITH A NEUTRALIZING AGENT TO PREPARE THE SUBSTRATE TO ACCEPT NEW COVERINGS/FINISH AS WELL AS ELIMINATE RESIDUAL ODORS.

LICENSED ASBESTOS ABATEMENT CONTRACTOR RESPONSIBLE FOR TOTAL AND COMPLETE REMOVAL AND DISPOSAL OF APPROXIMATELY 150LF HVAC DUCTWORK FROM THE CORRIDOR/STAGE/LIBRARY. THE DUCTWORK IS ABOVE SUSPENDED CEILING IN THE CORRIDOR, NO CEILINGS IN THE STAGE AREA, ABOVE SUSPENDED CEILING AND SHEETROCK CEILINGS IN THE LIBRARY. THERE ARE APPROXIMATELY 40 CONNECTION SEAMS WITH APPROXIMATELY 8LF PER SEAM OF NON-FRIABLE ASBESTOS-CONTAINING DUCT SEALANT ON THE METAL DUCT. ASBESTOS ABATEMENT CONTRACTOR TO PERFORM REMOVALS UTILIZING MANUAL, WET METHODS TO ENSURE TOTAL AND COMPLETE REMOVAL OF THE DUCT WORK WITH ACM DUCT SEALANT, INCLUDING ALL ASSOCIATED HANGERS. THE ABATEMENT CONTRACTOR WILL BE REQUIRED TO LEAVE A STRAIGHT CLEAN CUT FOR THE HVAC CONTRACTOR TO CONNECT NEW DUCT OR CAPS AS REQUIRED BY THE MECHANICAL DRAWINGS.

REFER TO SPECIFICATION SECTION 02 08 00 - SECTION 3.17 FOR A DESCRIPTION OF THE WORK.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

R

WALLKILL CENTRAL SCHOOL DISTRICT

BID SET

Quality Environmental Solutions & Technologies, Inc.
1298 NYS Route 9
Wappingers Falls, NY 12590
Tel: (845) 298-6031

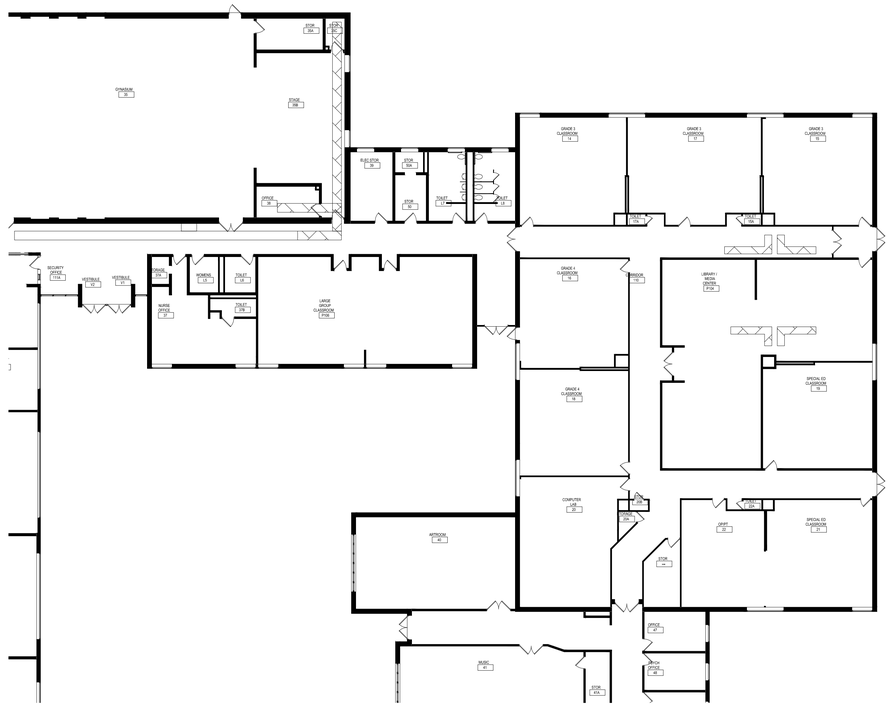
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Interior Abatement Plan

Drawn By:	Date:	Drawing Number:
AM/LG	11/4/2022	DHAZ102

Project No.:
17597-22001



1 First Floor Abatement Plan - Area B

ASBESTOS ABATEMENT LEGEND

POSITIVE ACM HVAC DUCTWORK TO BE REMOVED

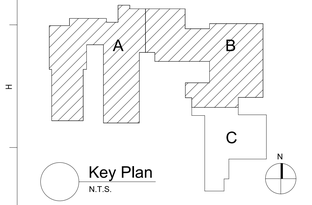
ASBESTOS ABATEMENT NOTES

PLATTEKILL ELEMENTARY SCHOOL – RECONSTRUCTION

LICENSED ASBESTOS ABATEMENT CONTRACTOR RESPONSIBLE TO CUT DUCTWORK BACK TO A CLEAN LOCATION SO HVAC CONTRACTOR CAN CAP THE ABANDONED DUCT WITHOUT DISTURBING ASBESTOS.

LICENSED ASBESTOS ABATEMENT CONTRACTOR RESPONSIBLE FOR TOTAL AND COMPLETE REMOVAL AND DISPOSAL OF APPROXIMATELY 90LF HVAC DUCTWORK FROM THE CORRIDOR/STAGE/LIBRARY. THE DUCTWORK IS ABOVE SUSPENDED CEILING IN THE CORRIDOR, NO CEILINGS IN THE STAGE AREA, ABOVE SUSPENDED CEILING AND SHEETROCK CEILINGS IN THE LIBRARY. THERE ARE APPROXIMATELY 40 CONNECTION SEAMS WITH APPROXIMATELY 8LF PER SEAM OF NON-FRIABLE ASBESTOS-CONTAINING DUCT SEALANT ON THE METAL DUCT. ASBESTOS ABATEMENT CONTRACTOR TO PERFORM REMOVALS UTILIZING MANUAL, WET METHODS TO ENSURE TOTAL AND COMPLETE REMOVAL OF THE DUCT WORK WITH ACM DUCT SEALANT, INCLUDING ALL ASSOCIATED HANGERS. THE ABATEMENT CONTRACTOR WILL BE REQUIRED TO LEAVE A STRAIGHT CLEAN CUT FOR THE HVAC CONTRACTOR TO CONNECT NEW DUCT OR CAPS AS REQUIRED BY THE MECHANICAL DRAWINGS.

REFER TO SPECIFICATION SECTION 02 08 00 - SECTION 3.17 FOR A DESCRIPTION OF THE WORK.



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R

WALLKILL CENTRAL SCHOOL DISTRICT

BID SET

Quality Environmental Solutions & Technologies, Inc.
1298 NYS Route 9
Wappingers Falls, NY 12590
Tel: (845) 298-6031

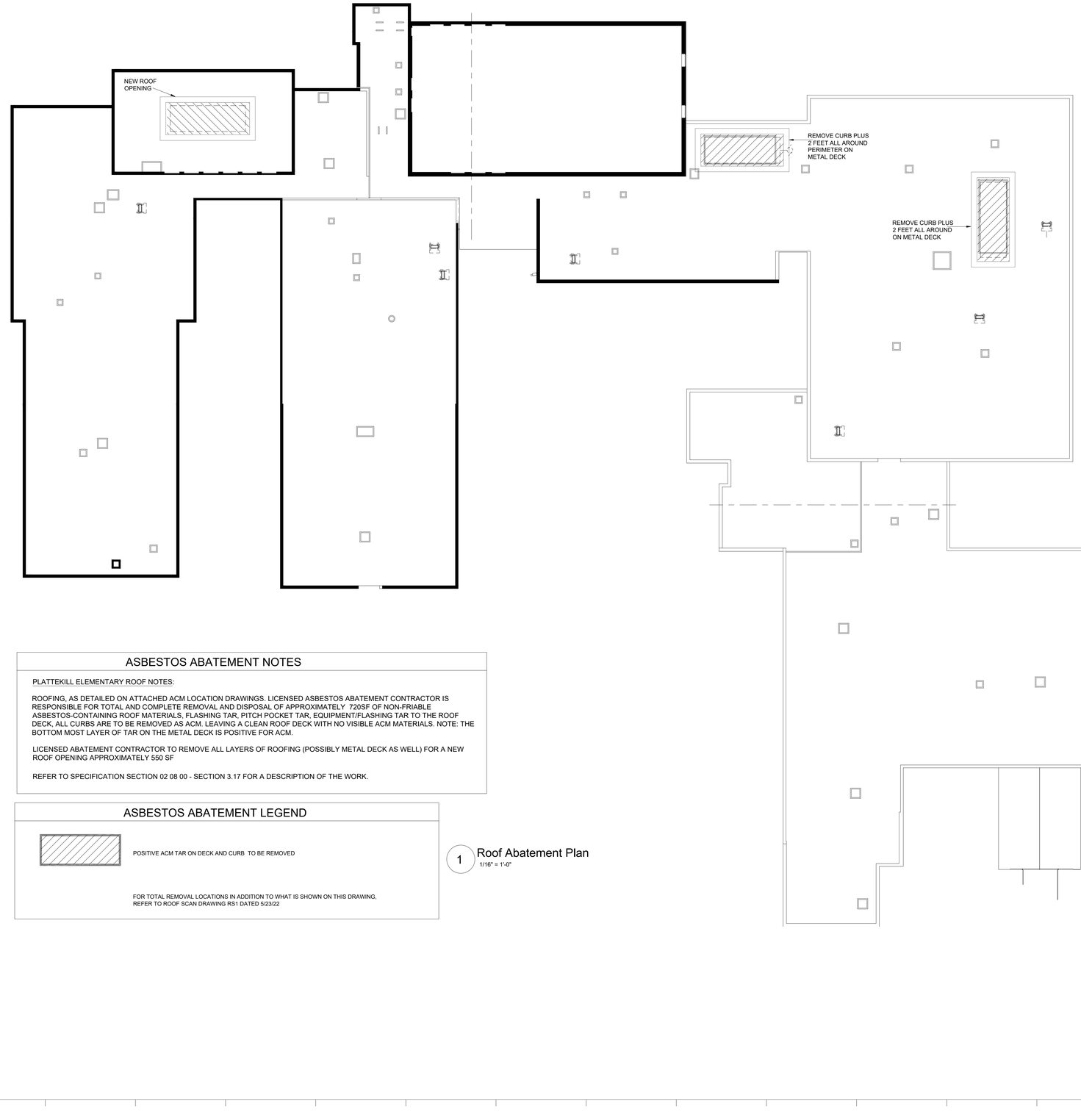
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

First Floor Abatement Plan

Drawn By:	Date:	Drawing Number:
AM/LG	11/4/2022	DHAZ103

Project No.:
17597-22001



ASBESTOS ABATEMENT NOTES

PLATTEKILL ELEMENTARY ROOF NOTES:

ROOFING, AS DETAILED ON ATTACHED ACM LOCATION DRAWINGS. LICENSED ASBESTOS ABATEMENT CONTRACTOR IS RESPONSIBLE FOR TOTAL AND COMPLETE REMOVAL AND DISPOSAL OF APPROXIMATELY 720SF OF NON-FRIABLE ASBESTOS-CONTAINING ROOF MATERIALS, FLASHING TAR, PITCH POCKET TAR, EQUIPMENT/FLASHING TAR TO THE ROOF DECK, ALL CURBS ARE TO BE REMOVED AS ACM. LEAVING A CLEAN ROOF DECK WITH NO VISIBLE ACM MATERIALS. NOTE: THE BOTTOM MOST LAYER OF TAR ON THE METAL DECK IS POSITIVE FOR ACM.

LICENSED ABATEMENT CONTRACTOR TO REMOVE ALL LAYERS OF ROOFING (POSSIBLY METAL DECK AS WELL) FOR A NEW ROOF OPENING APPROXIMATELY 550 SF

REFER TO SPECIFICATION SECTION 02 08 00 - SECTION 3.17 FOR A DESCRIPTION OF THE WORK.

ASBESTOS ABATEMENT LEGEND

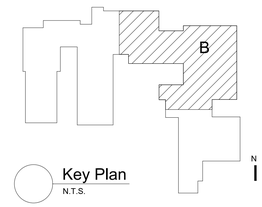
POSITIVE ACM TAR ON DECK AND CURB TO BE REMOVED

FOR TOTAL REMOVAL LOCATIONS IN ADDITION TO WHAT IS SHOWN ON THIS DRAWING, REFER TO ROOF SCAN DRAWING RS1 DATED 5/23/22

1 Roof Abatement Plan
1/16" = 1'-0"

GENERAL NOTES

A. REFER TO DRAWING DE101 FOR GENERAL DEMOLITION NOTES.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

R

WALLKILL CENTRAL SCHOOL DISTRICT

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Quality Environmental Solutions & Technologies, Inc.
1298 NYS Route 9
Wappingers Falls, NY 12590
Tel: (845) 298-6031

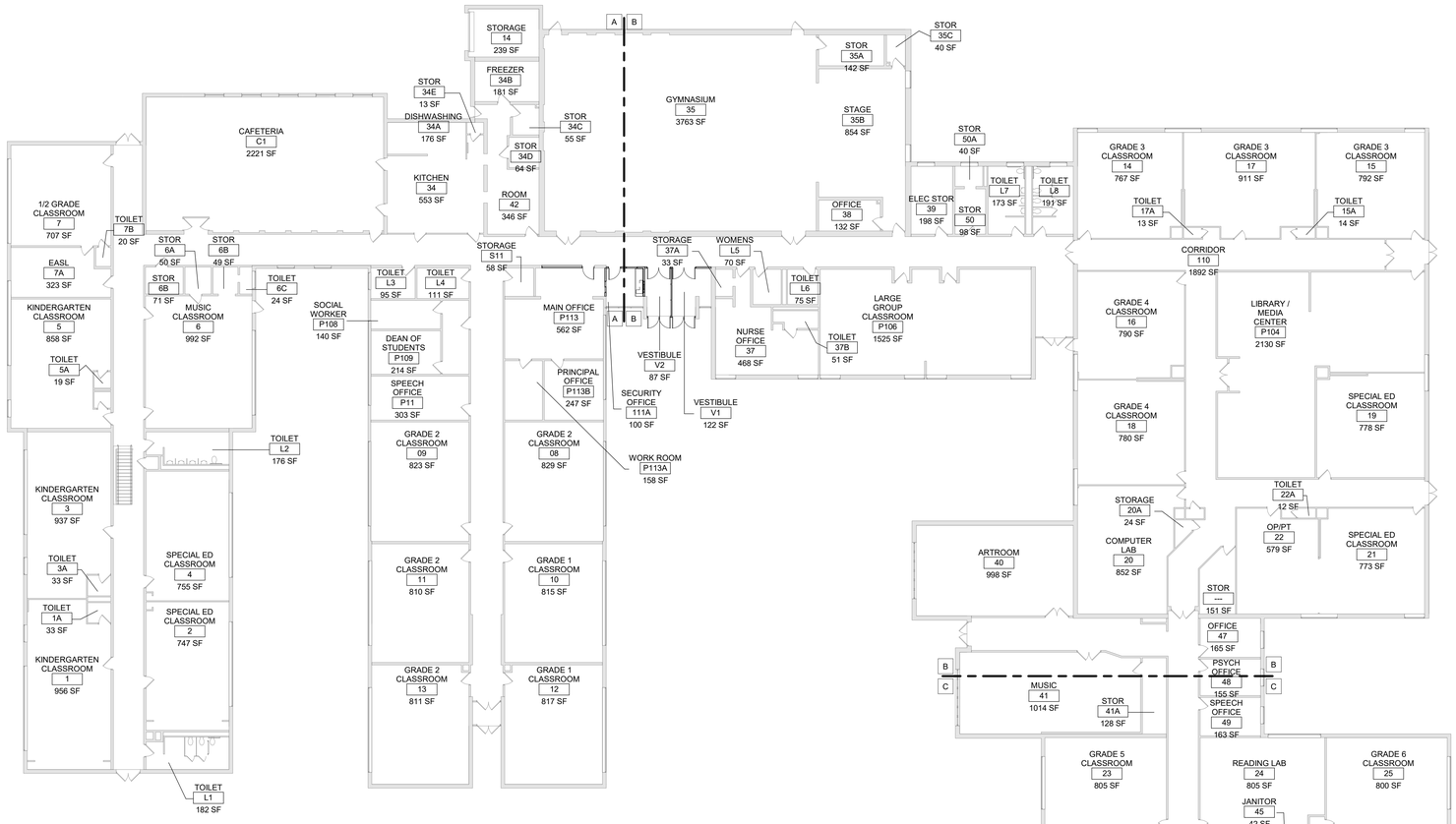
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

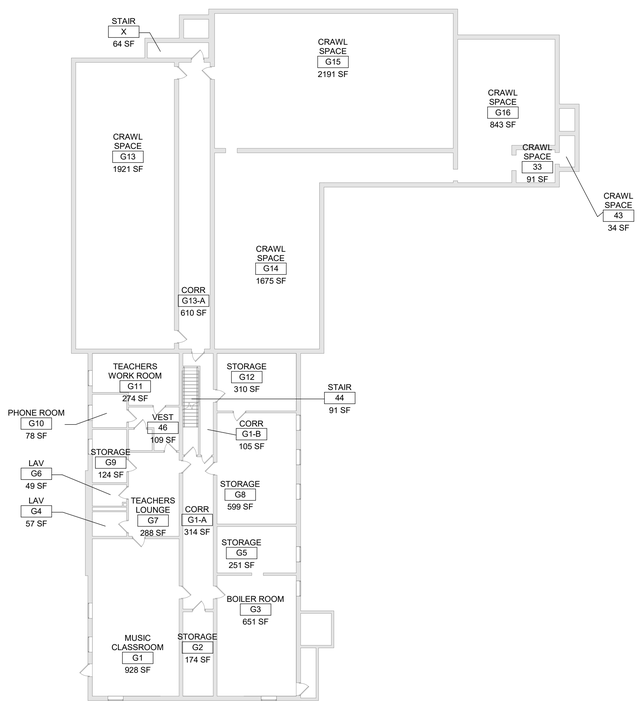
Roof Abatement Plan

Drawn By:	Date:	Drawing Number:
AM/LG	11/4/2022	DHAZ104

Project No.:
17597-22001



1 First Floor - Key Plan
1/16" = 1'-0"



2 Basement Floor - Key Plan
1/16" = 1'-0"

General Notes - Applies to All Drawings

A. DO NOT SCALE DRAWINGS TO OBTAIN DIMENSIONS.

B. TAKE FIELD MEASUREMENTS TO FIT THE WORK PROPERLY. VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD.

C. REFER INCONSISTENCIES TO ARCHITECT PRIOR TO COMMENCING THE WORK IN AFFECTED AREA.

D. ITEMS ARE SHOWN DIAGRAMMATICALLY ON DRAWINGS. VERIFY SPACE REQUIREMENTS AND DIMENSIONS TO FIT THE WORK PROPERLY.

E. NOTES SHOWN ON ONE DRAWING APPLY TO ALL SIMILAR DRAWINGS.

F. DO NOT DISTURB CONSTRUCTION SUSPECTED OF CONTAINING HAZARDOUS MATERIAL. IF ENCOUNTERED, IMMEDIATELY NOTIFY ARCHITECT, CONSTRUCTION MANAGER AND OWNER.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

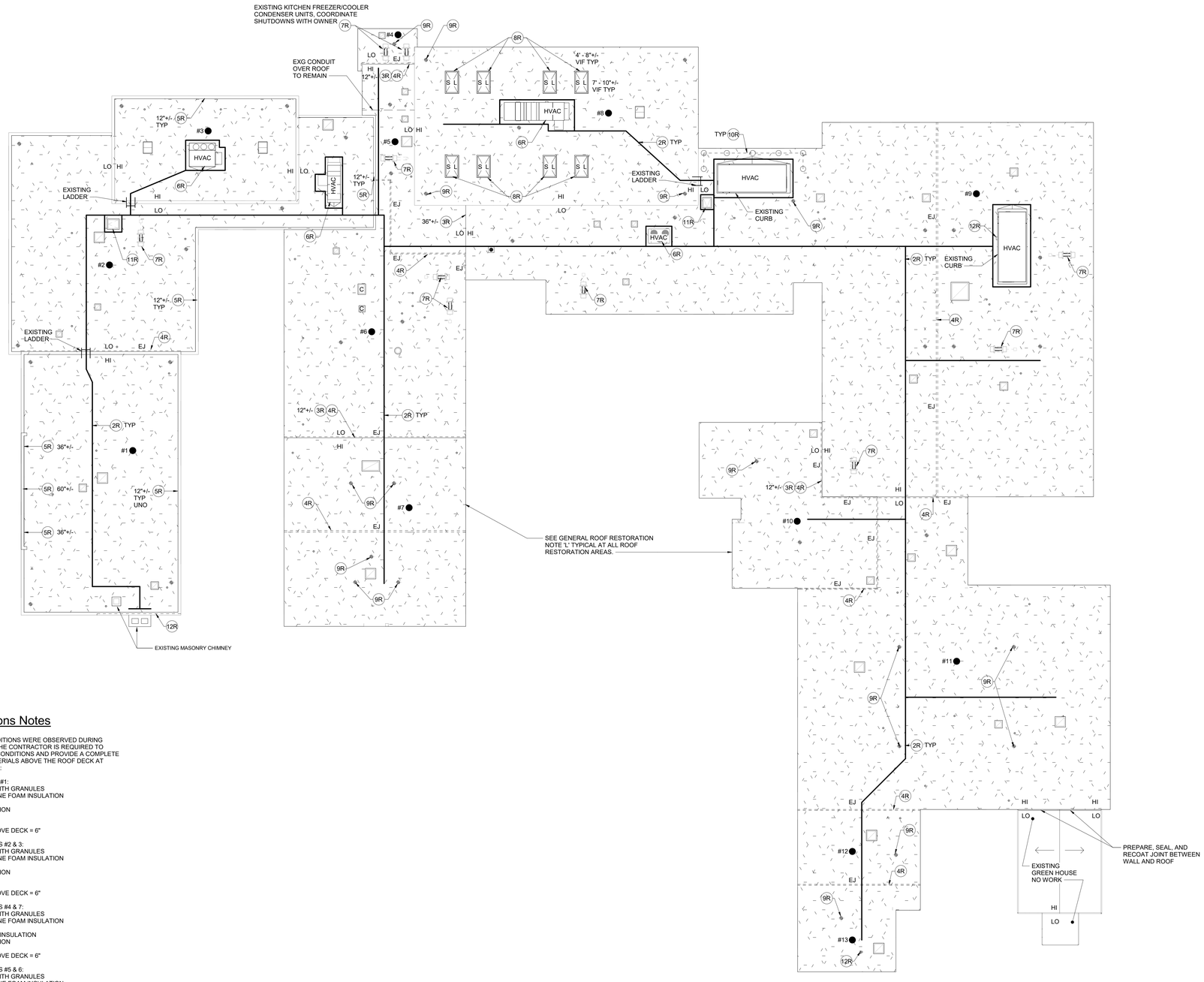
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Basement and First Floor Key Plans

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	DA051
Project No.: 17597-22001		



1 Roof Plan
1/16" = 1'-0"

PROVIDE ROOF RESTORATION AT ALL ROOF AREAS UNLESS NOTED OTHERWISE.
SEE GENERAL ROOF RESTORATION NOTES AND KEYED ROOF RESTORATION NOTE (1R)

Existing Conditions Notes

A. THE FOLLOWING CONDITIONS WERE OBSERVED DURING TEST CUT ANALYSIS. THE CONTRACTOR IS REQUIRED TO VERIFY ALL EXISTING CONDITIONS AND PROVIDE A COMPLETE REMOVAL OF ALL MATERIALS ABOVE THE ROOF DECK AT LOCATIONS INDICATED:

B. TYPICAL AT ROOF CUT #1:
- SILICONE COATING WITH GRANULES
- SPRAY POLYURETHANE FOAM INSULATION
- BUILT-UP ROOFING
- FIBERGLASS INSULATION
- ASPHALTIC TAR
- GYPSUM DECK
TOTAL THICKNESS ABOVE DECK = 6"

C. TYPICAL AT ROOF CUTS #2 & 3:
- SILICONE COATING WITH GRANULES
- SPRAY POLYURETHANE FOAM INSULATION
- BUILT-UP ROOFING
- FIBERGLASS INSULATION
- ASPHALTIC TAR
- CONCRETE DECK
TOTAL THICKNESS ABOVE DECK = 6"

D. TYPICAL AT ROOF CUTS #4 & 7:
- SILICONE COATING WITH GRANULES
- SPRAY POLYURETHANE FOAM INSULATION
- EPDM MEMBRANE
- POLYISOCYANURATE INSULATION
- FIBERGLASS INSULATION
- METAL DECK
TOTAL THICKNESS ABOVE DECK = 6"

E. TYPICAL AT ROOF CUTS #5 & 6:
- SILICONE COATING WITH GRANULES
- SPRAY POLYURETHANE FOAM INSULATION
- FIBERGLASS INSULATION
- TAR PAPER
- TECTUM DECK
TOTAL THICKNESS ABOVE DECK = 6"

F. TYPICAL AT ROOF CUTS #8 & 9:
- SILICONE COATING WITH GRANULES
- SPRAY POLYURETHANE FOAM INSULATION
- FIBERBOARD INSULATION
- ASPHALTIC TAR
- METAL DECK
TOTAL THICKNESS ABOVE DECK = 8"

G. TYPICAL AT ROOF CUTS #10 & 13:
- SILICONE COATING WITH GRANULES
- SPRAY POLYURETHANE FOAM INSULATION
- GYPSUM BOARD
- METAL DECK
TOTAL THICKNESS ABOVE DECK = 4"

H. TYPICAL AT ROOF CUTS #11 & 12:
- SILICONE COATING WITH GRANULES
- SPRAY POLYURETHANE FOAM INSULATION
- EPDM MEMBRANE
- POLYISOCYANURATE INSULATION
- FIBERGLASS INSULATION
- METAL DECK
TOTAL THICKNESS ABOVE DECK = 6"

Keyed Roof Restoration Notes

(1R) PROVIDE COATED FOAMED ROOFING RESTORATION, TYPICAL AT ALL ROOF AREAS INDICATED ON PLAN. SEE SPECIFICATION SECTION 07 57 50 - COATED FOAMED ROOFING RESTORATION INCLUDING ROOF MOISTURE SCANS ATTACHED TO SPECIFICATION AND ROOF TYPE RS-3 DETAIL (16/ZA750).

(2R) PROVIDE CONTINUOUS 30" WIDE ROOF WALKWAY COATING SYSTEM, COORDINATE LOCATIONS WITH EXISTING PENETRATIONS, VERIFY IN FIELD, SEE SECTION 07 57 50 – COATED FOAMED ROOFING RESTORATION.

(3R) PROVIDE COATED FOAMED ROOF RESTORATION AT VERTICAL SURFACE, APPROXIMATE HEIGHT AS INDICATED ON PLAN, SEE SECTION 07 57 50 – COATED FOAMED ROOFING RESTORATION.

(4R) EXISTING EXPANSION JOINT LOCATION, PROVIDE CONTINUOUS 24"MIN. WIDTH MESH REINFORCEMENT, TYPICAL AT ALL EXPANSION JOINTS, CRACKS, WALL BASE FLASHING, AND TERMINATION LOCATIONS, NOT ALL LOCATIONS ARE SHOWN ON PLAN,VERIFY IN FIELD. SEE SECTION 07 57 50 – COATED FOAMED ROOFING RESTORATION AND DETAIL 20/ZA750.

(5R) EXISTING CURB/PARAPET WITH CLAY TILE COPING,APPROXIMATE HEIGHT AS INDICATED ON PLAN. REMOVE ASPHALTIC COATING, PREPARE ALL SURFACES, PROVIDE BUTYL FLEECE TAPE REINFORCING AT ALL SURFACES AND EXTEND COATED FOAMED ROOFING RESTORATION SYSTEM OVER TOP OF COPING. AT ROOF EDGE CONDITIONS, NEATLY MASK AND TERMINATE COATING SYSTEM AT EXTERIOR EDGE.

(6R) NEW PENETRATION AT EXISTING ROOFING SYSTEM. REMOVE EXISTING ROOFING MATERIALS TO ROOF DECK AND PATCH TO MATCH EXISTING MATERIALS AND THICKNESSES AFTER INSTALLATION OF PENETRATION PRIOR TO RECOATING. PROVIDE DECK OPENINGS, INTEGRAL TAPERED DIVERSION CRICKET AT UPSLOPE SIDE OF FRAMES AND CURB, TYPICAL. COORDINATE WITH OTHER PRIME CONTRACTORS. SEE STRUCTURAL DRAWINGS AND DETAILS 21 AND 23/ZA750.

(7R) EXISTING MECHANICAL EQUIPMENT LOOSE OVER ROOF TO BE REMOVED AND REINSTALLED ON SUPPOER SYSTEM BY OTHERS. SEAL ALL PENETRATIONS THROUGH ROOF. COORDINATE WITH OTHER PRIME CONTRACTORS.

(8R) REMOVE EXISTING ROOF SYSTEM AND PLYWOOD INFILL AT FORMER SKYLIGHT OPENING. PROVIDE UNIT SKYLIGHT DIMENSIONS TO MATCH EXISTING OPENING, APPROXIMATE DIMENSIONS ARE INDICATED ON PLAN, VERIFY EXACT DIMENSIONS IN FIELD. PATCH TO MATCH EXISTING MATERIALS AND THICKNESSES AFTER INSTALLATION OF UNIT SKYLIGHT PRIOR TO RECOATING. SEE DETAIL 24/ZA750.

(9R) EXISTING ROOF DRAIN WITH PLASTIC OR MISSING STRAINER. REMOVE AND DISCARD PLASTIC STRAINER AND PROVIDE GALVANIZED CAST IRON ROOF DRAIN DOME

(10R) PROVIDE MOVABLE SAFETY RAILING SYSTEM.

(11R) REMOVE EXISTING ROOF HATCH. PROVIDE ROOF HATCH AND FALL PROTECTION RAIL SYSTEM, APPROX. 30" x 36", VERIFY EXISTING DIMENSIONS IN FIELD. PATCH TO MATCH EXISTING MATERIALS AND THICKNESSES AFTER INSTALLATION OF ROOF HATCH. SEE DETAIL 22/ZA750.

(12R) EXISTING SURFACE MOUNTED ELECTRICAL BOX AND CONDUITS TO BE REMOVED AND REINSTALLED. COORDINATE WITH OTHER PRIME CONTRACTORS.

General Roof Restoration Notes

A. AT AREAS INDICATED FOR ROOF RESTORATION, WORK INCLUDES, BUT IS NOT LIMITED TO: PROVIDING COATED FOAM ROOFING RESTORATION AT ALL ROOF AREAS AND ADJACENT BASE FLASHINGS AND VERTICAL TRANSITIONS AS INDICATED ON ROOF TYPE RS-3 DETAIL AND SPECIFICATION SECTION 07 57 50 - COATED FOAMED ROOFING RESTORATION INCLUDING ROOF MOISTURE SCANS ATTACHED TO SPECIFICATION. ROOFING RESTORATION INCLUDES REMOVAL AND REPLACEMENT OF EXISTING WET, LOOSE, BLISTERED, DELAMINATED, CRACKED, CONTAMINATED OR ROOFING MATERIALS NOT SUITABLE FOR RE-COATING. REPLACEMENT FOAM IS TO BE INSTALLED AT REQUIRED THICKNESS/ELEVATION TO ELIMINATE PONDING AND PROVIDE POSITIVE DRAINAGE. PROVIDE REINFORCING AT ALL EXPANSION JOINTS, CRACKS, WALL BASE FLASHING, AND TERMINATION LOCATIONS AND ROOF WALKWAY SYSTEM AT LOCATIONS SHOWN ON DRAWINGS. SEE ROOF PLANS FOR SPECIFIC NOTES AND DETAILS.

B. DRAWINGS ARE REPRESENTATIVE, AND MAY NOT EXACTLY INDICATE ALL FIELD CONDITIONS. CONTRACTOR IS REQUIRED TO VERIFY ALL EXISTING CONDITIONS IN FIELD. A SITE VISIT/ROOF INSPECTION BY THE CONTRACTOR/INSTALLER PRIOR TO SUBMITTING BIDS IS STRONGLY RECOMMENDED.

C. VERIFY IN FIELD LOCATIONS OF ALL EXISTING ROOF DRAINS AND PENETRATIONS PRIOR TO FIRST SUBMITTAL OF SHOP DRAWINGS.

D. AT AREAS OF EXPOSURE, INSPECT ROOF DECK PRIOR TO ROOFING INSTALLATION. VERIFY THAT EXISTING MATERIALS ARE SOLID AND SECURE. NOTIFY ARCHITECT IMMEDIATELY IF DETERIORATED OR LOOSE MATERIALS ARE DISCOVERED.

E. PROVIDE COMPLETE ROOFING INSTALLATION. PROTECT ALL ADJACENT SURFACES AS REQUIRED. RECONSTRUCT OR REPLACE ALL EXISTING ITEMS NOT SCHEDULED FOR WORK THAT ARE DAMAGED DURING ROOFING WORK.

F. MAINTAIN WATERTIGHT CONDITIONS AT ALL TIMES.

G. PROVIDE ROOFING SYSTEMS AND ALL RELATED COMPONENTS INDICATED BY THE CONTRACT DOCUMENTS AND AS REQUIRED TO ACHIEVE ROOF SYSTEM MANUFACTURER'S WARRANTY.

H. AT EXISTING ROOF DRAIN LOCATIONS; REMOVE, CLEAN AND REINSTALL EXISTING DOME STRAINERS. CLEAN EXISTING DRAIN BOWL AND PIPING AS REQUIRED AND PERFORM HOSE TEST TO ENSURE FUNCTIONAL OPERATION BEFORE BEGINNING CONSTRUCTION. VERIFY DRAIINS AND PIPING IS CLEAR AND IN WORKING ORDER. REPORT ANY OBSTRUCTIONS TO ARCHITECT AND OWNER PRIOR TO BEGINNING WORK. AT DRAIN LOCATIONS WITH MISSING OR PLASTIC STRAINERS, PROVIDE ADJUSTABLE DRAIN GUARD.

I. ALL MATERIALS SHALL COMPLY WITH CHAPTER 15 OF THE 2020 BCNYS.

J. SEE STRUCTURAL DRAWINGS FOR STRUCTURAL LOAD NOTES.

K. ADDITIONAL CONSTRUCTION ACTIVITIES MAY BE TAKING PLACE DURING THIS PROJECT'S DURATION REQUIRING COORDINATION WITH THE DISTRICT AND OTHER PRIME CONTRACTORS.

L. AT ALL ROOF EDGES, CUT 1" 'V' GROOVE AT SPF TERMINATION AGAINST METAL FASCIA AND FILL CONTINUOUS WITH SILICONE SEALANT, TYPICAL. SEE DETAIL 18/ZA750.

M. EXISTING ALARM/DETECTION/SENSORS/DATA WIRES LOOSE OVER ROOF ARE TO BE REMOVED, RELOCATED, AND/OR REPOSITIONED. COORDINATE WITH OTHER PRIME CONTRACTORS.

General Notes - Applies to All Drawings

A. DO NOT SCALE DRAWINGS TO OBTAIN DIMENSIONS.

B. TAKE FIELD MEASUREMENTS TO FIT THE WORK PROPERLY. VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD.

C. REFER INCONSISTENCIES TO ARCHITECT PRIOR TO COMMENCING THE WORK IN AFFECTED AREA.

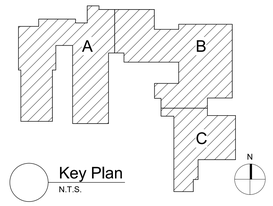
D. ITEMS ARE SHOWN DIAGRAMMATICALLY ON DRAWINGS. VERIFY SPACE REQUIREMENTS AND DIMENSIONS TO FIT THE WORK PROPERLY.

E. NOTES SHOWN ON ONE DRAWING APPLY TO ALL SIMILAR DRAWINGS.

F. DO NOT DISTURB CONSTRUCTION SUSPECTED OF CONTAINING HAZARDOUS MATERIAL. IF ENCOUNTERED, IMMEDIATELY NOTIFY ARCHITECT, CONSTRUCTION MANAGER AND OWNER.

Symbol/Hatch Legend

- INDICATES AREAS OF SPF ROOF SYSTEM TO BE RESTORED
- ROOF DRAIN - EXISTING TO REMAIN, SEE KEYED ROOF RESTORATION NOTE 9R FOR LOCATIONS WITH MISSING OR PLASTIC STRAINER REQUIRING ADJUSTABLE DRAIN GUARD
- C — EQUIPMENT ON CURB (FAN/HOOD/ETC.)
- CURB WITH SOLID COVER, PROVIDE ROOF COATING
- PIPE PENETRATION
- EJ — EXPANSION JOINT
- EQUIPMENT ON SUPPORT RAILS WITH FLEXIBLE PENETRATION
- HVAC — EQUIPMENT ON CURB (RTU)
- ROOF WALKWAY COATING SYSTEM
- ROOF HATCH
- S L — UNIT SKYLIGHT, APPROX. DIMENSIONS INDICATED ON PLAN
- MOVABLE SAFETY RAILING SYSTEM
- #X — TEST CUT LOCATION, SEE EXISTING CONDITIONS NOTES



S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

complex world | CLEAR SOLUTIONS

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH ARCHITECTS & ENGINEERS

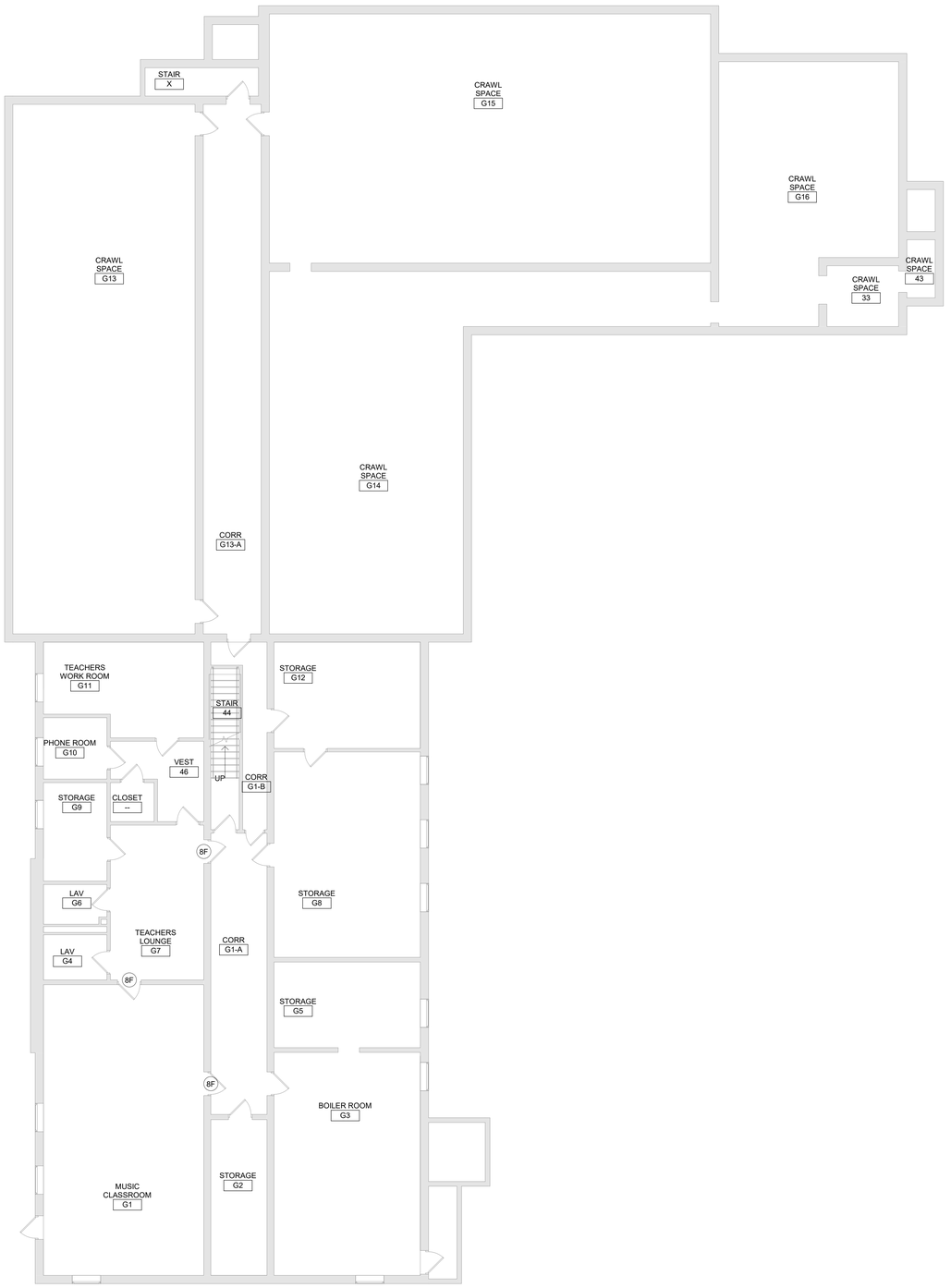
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Roof Plan

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	DA052

Project No.: 17597-22001



1 Basement Floor - Demolition Plan
1/8" = 1'-0"

Demolition Key Notes

- 1G REMOVE INTERIOR PARTITION FULL-HEIGHT, PORTION AS INDICATED OR AS REQUIRED TO PERFORM SCHEDULED WORK. EXISTING STRUCTURE TO REMAIN.
- 1H SAW CUT OPENING IN WALL TO EXTENT REQUIRED TO PERFORM SCHEDULED WORK. PROVIDE LINTEL PER LINTEL SCHEDULE. PATCH EXPOSED SURFACES TO MATCH ADJACENT FINISHES / SURFACES.
- 1N ARTWORK/PLAQUES TO REMAIN - DO NOT DAMAGE. REMOVAL BY OWNER.
- 1M REMOVE EXISTING DIFIBRILATOR CABINET. PROTECT AND STORE FOR REINSTALLATION.
- 1P MODIFY WALL AS REQUIRED TO ACCOMMODATE NEW STRUCTURAL STEEL ROOF REINFORCING. COORDINATE DETAILS AND LOCATIONS WITH STRUCTURAL DRAWINGS. PATCH WALLS TO MATCH EXISTING CONSTRUCTION/FINISHES.
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  SUFFIX KEY (FLOOR FINISH IDENTIFICATIONS):
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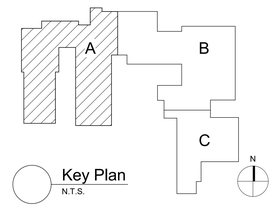

Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

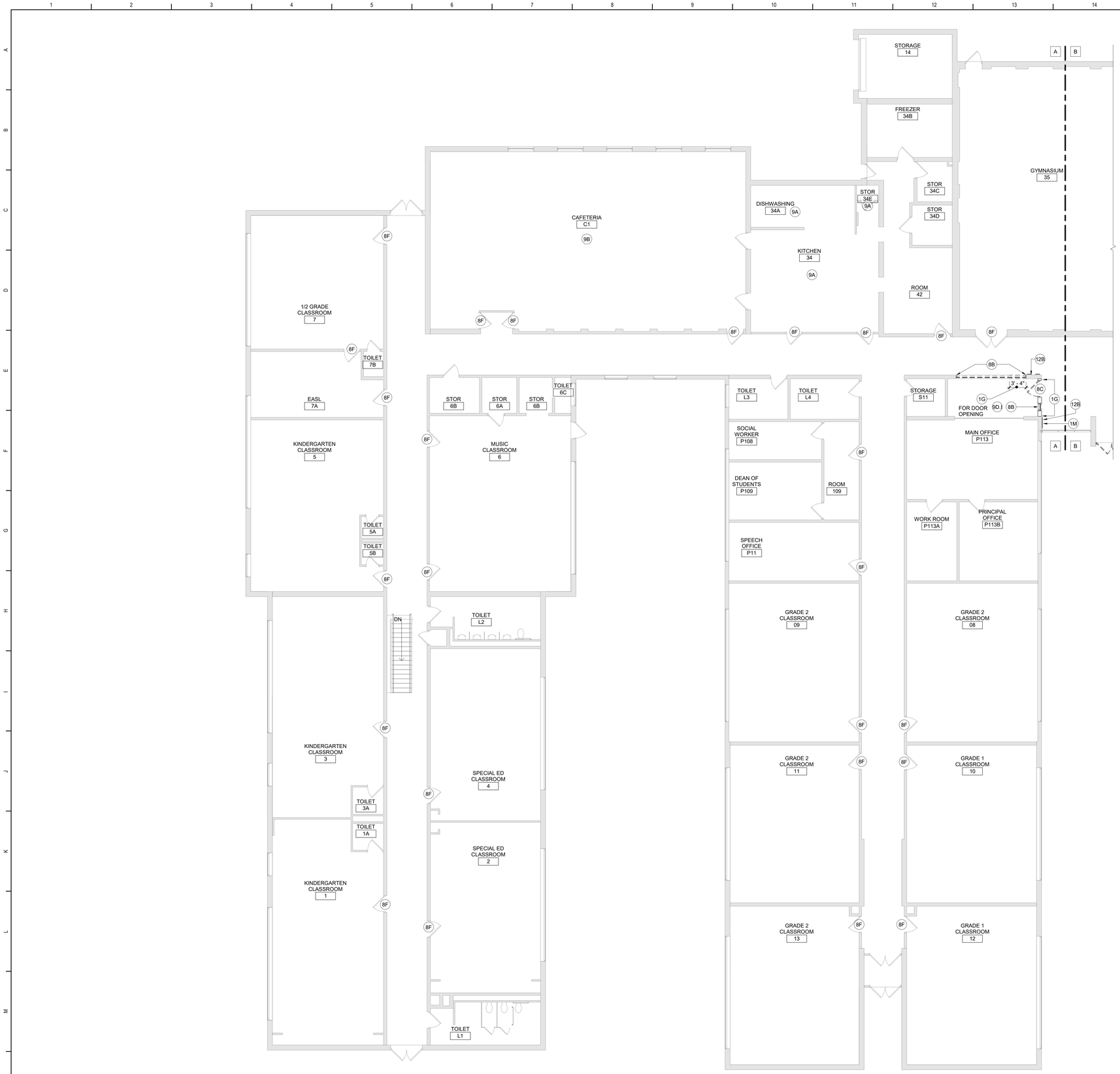
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Basement Floor Demolition Plan

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	DA100
Project No.: 17597-22001		



1 First Floor Demolition Plan - Area A
1/8" = 1'-0"

Demolition Key Notes

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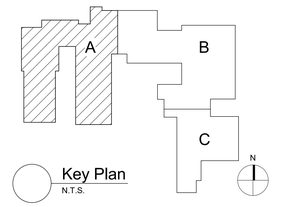

Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

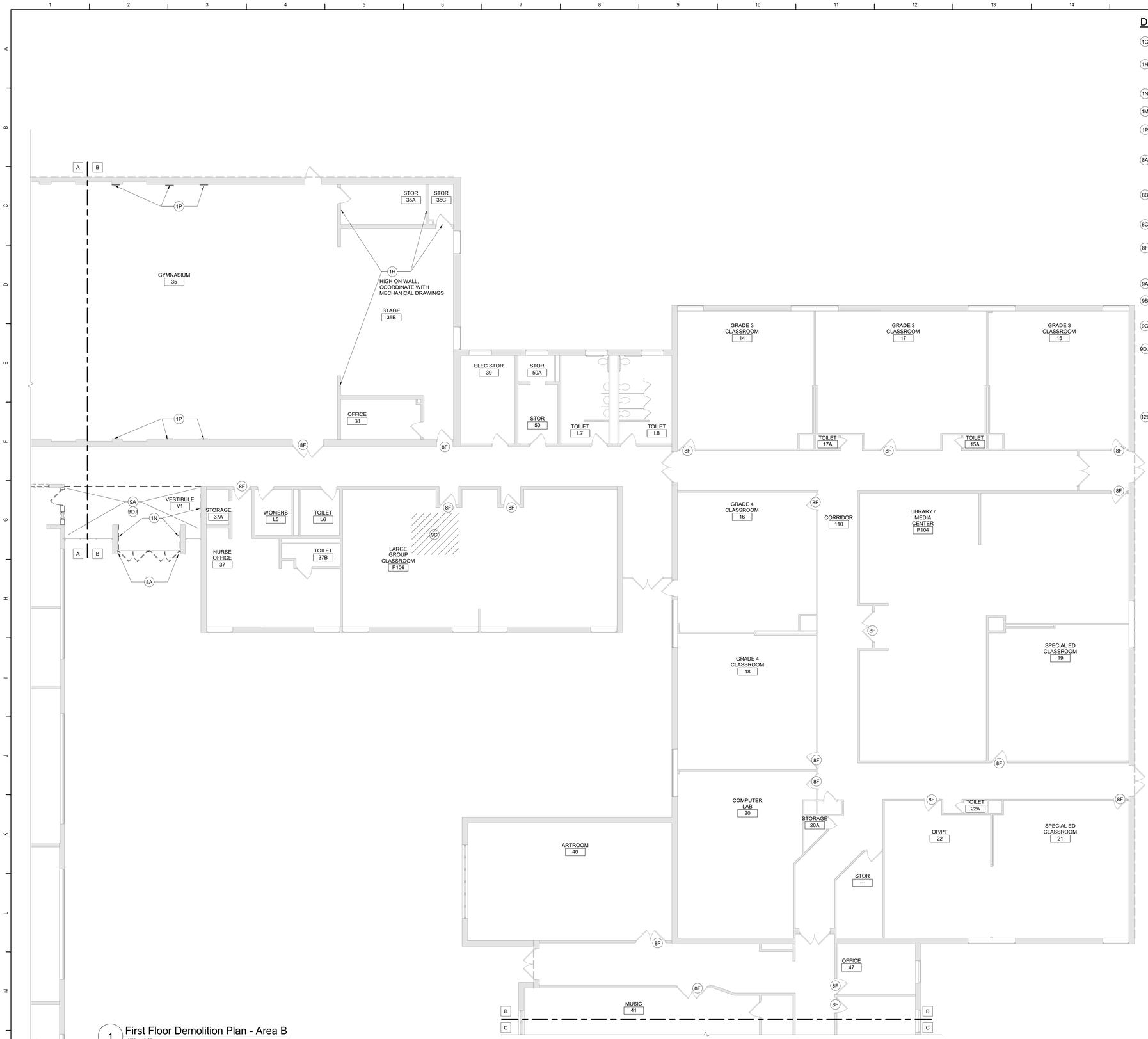
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

First Floor Demolition Plan - Area A

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	DA101
Project No.: 17597-22001		



1 First Floor Demolition Plan - Area B
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S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

complex world CLEAR SOLUTIONS

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

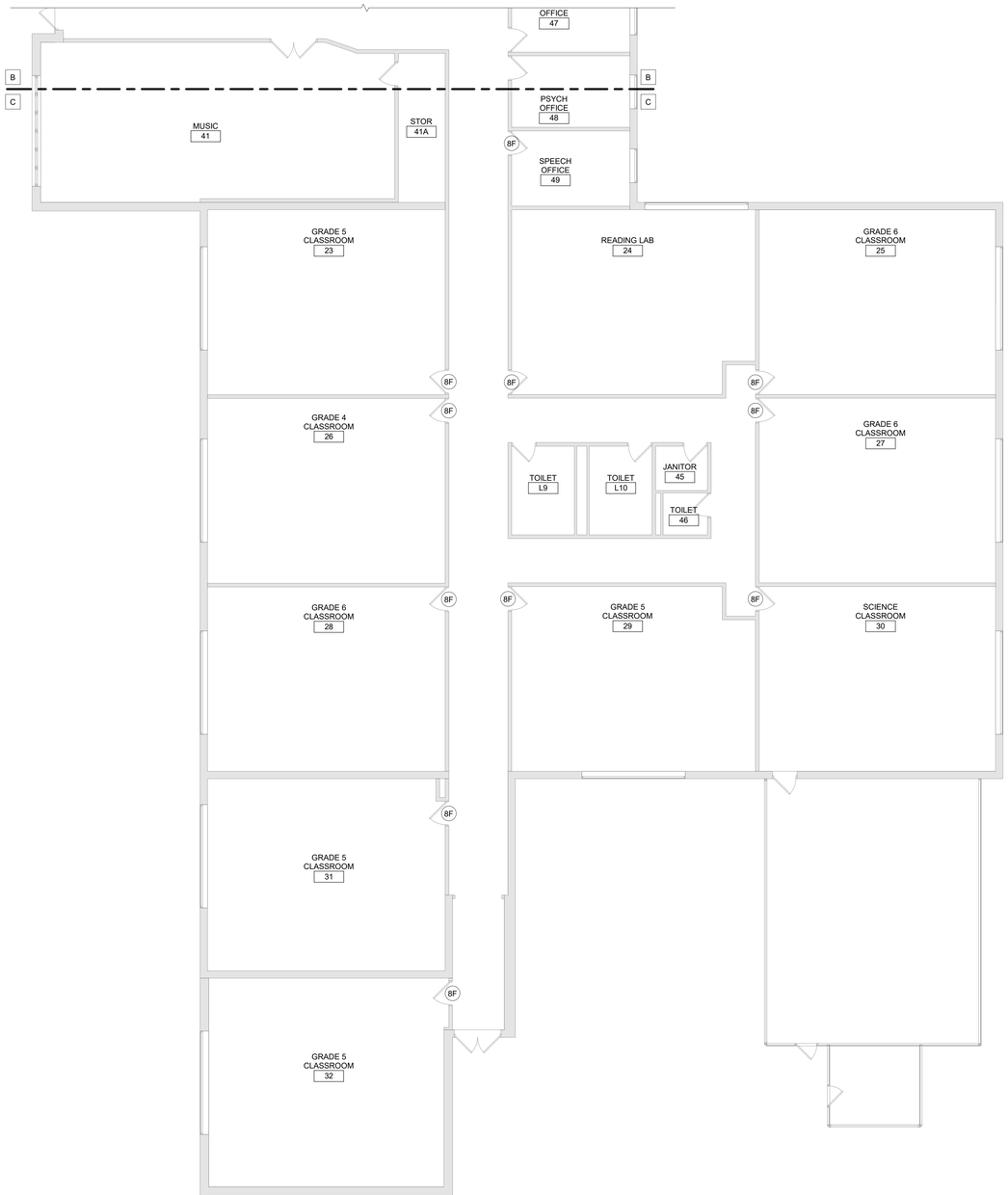
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

First Floor Demolition Plan - Area B

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	DA102
Project No.: 17597-22001		



1 First Floor - Demolition Plan
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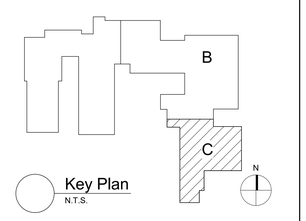

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH ARCHITECTS & ENGINEERS

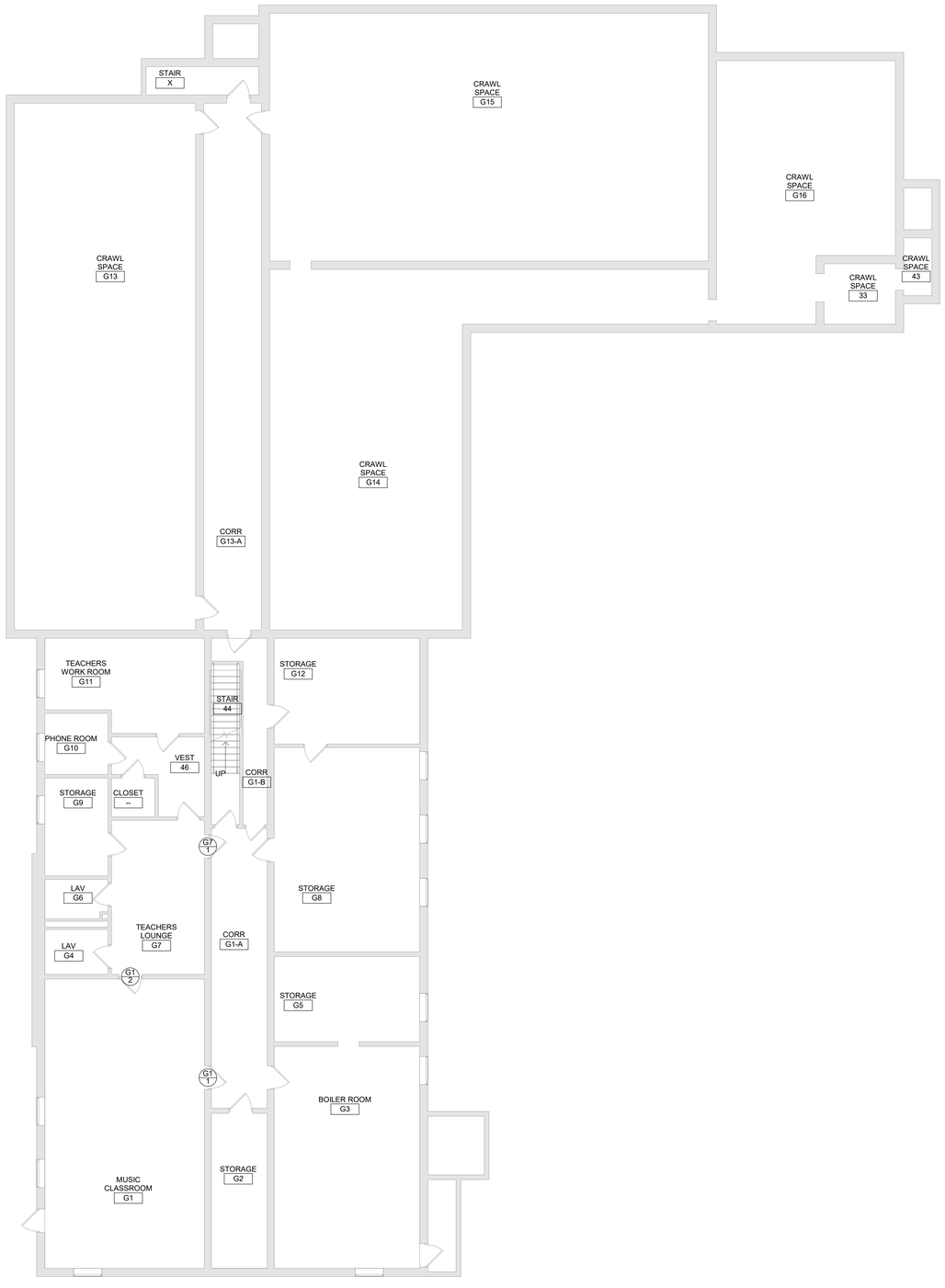
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

First Floor Demolition Plan - Area C

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	DA103

Project No.: 17597-22001



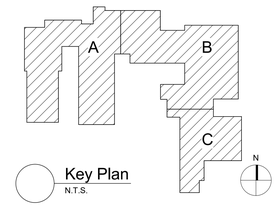
1 Basement - Floor Plan
1/8" = 1'-0"

General Plan Notes

A. WHERE EXISTING CONSTRUCTION IS DAMAGED OR DISTURBED, PATCH AS REQUIRED TO RESTORE SURFACES TO THEIR ORIGINAL CONDITION.

B. PARTITION TYPE TAGS APPLY TO ENTIRE LENGTH OF WALL INDICATED BY THAT TAG, REGARDLESS OF OPENINGS WITHIN THAT WALL, TYPICAL UNLESS NOTED OTHERWISE.

C. INFILL AREAS OF RECESSED FLOOR MAT AND/OR FINISH REMOVALS WITH REPAIR MATERIAL. PROVIDE SUBSTRATE LEVEL AS REQUIRED SO SCHEDULED FINISHED FLOOR WILL MATCH THAT OF EXISTING ADJACENT AREAS.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

complex world | CLEAR SOLUTIONS

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH
ARCHITECTS & ENGINEERS

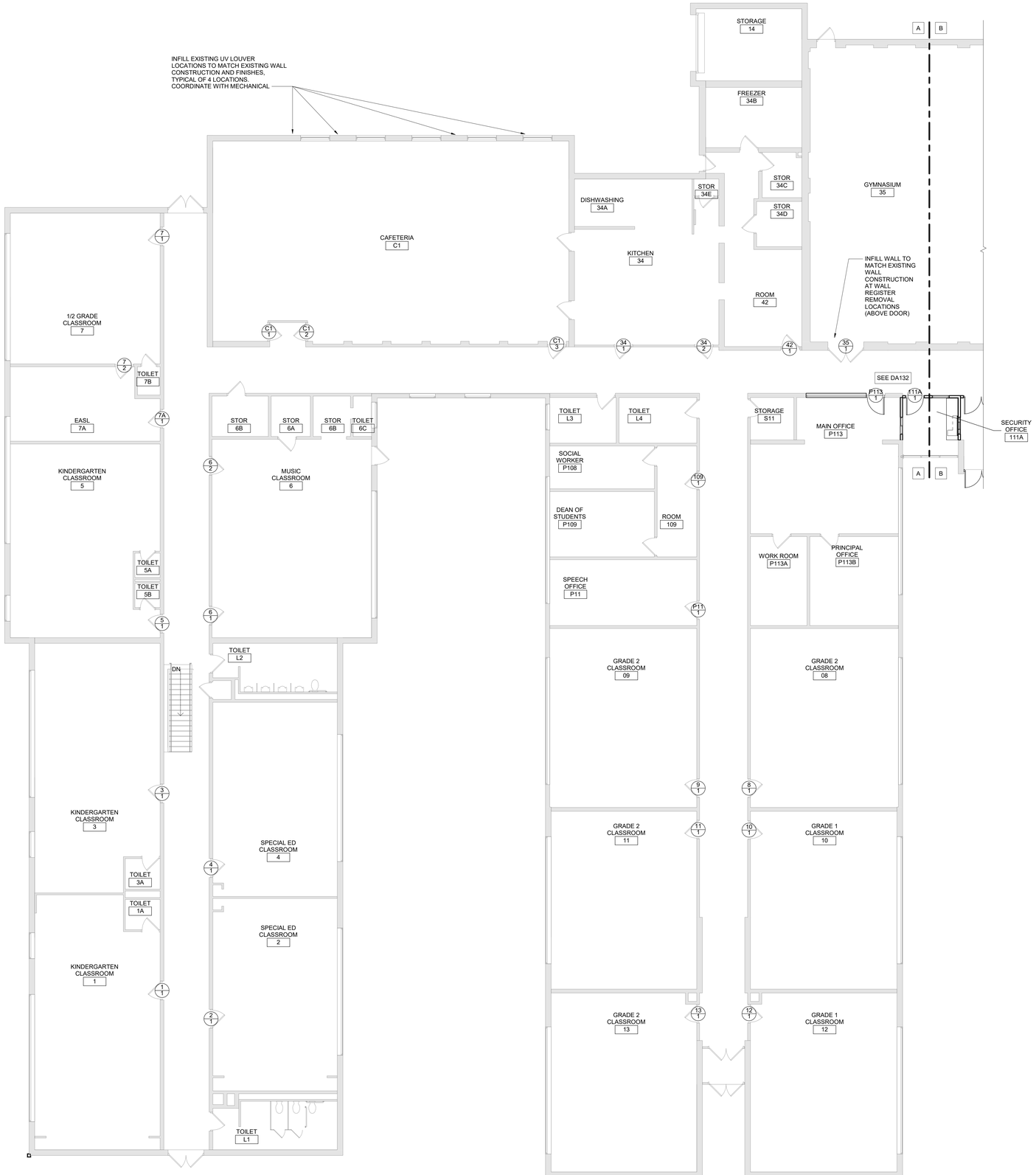
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Basement Floor Plan

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	DA130

Project No.: 17597-22001



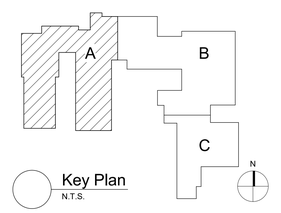
1 First - Floor Plan
1/8" = 1'-0"

General Plan Notes

A. WHERE EXISTING CONSTRUCTION IS DAMAGED OR DISTURBED, PATCH AS REQUIRED TO RESTORE SURFACES TO THEIR ORIGINAL CONDITION.

B. PARTITION TYPE TAGS APPLY TO ENTIRE LENGTH OF WALL INDICATED BY THAT TAG, REGARDLESS OF OPENINGS WITHIN THAT WALL, TYPICAL UNLESS NOTED OTHERWISE.

C. INFILL AREAS OF RECESSED FLOOR MAT AND/OR FINISH REMOVALS WITH REPAIR MATERIAL. PROVIDE SUBSTRATE LEVEL AS REQUIRED SO SCHEDULED FINISHED FLOOR WILL MATCH THAT OF EXISTING ADJACENT AREAS.



S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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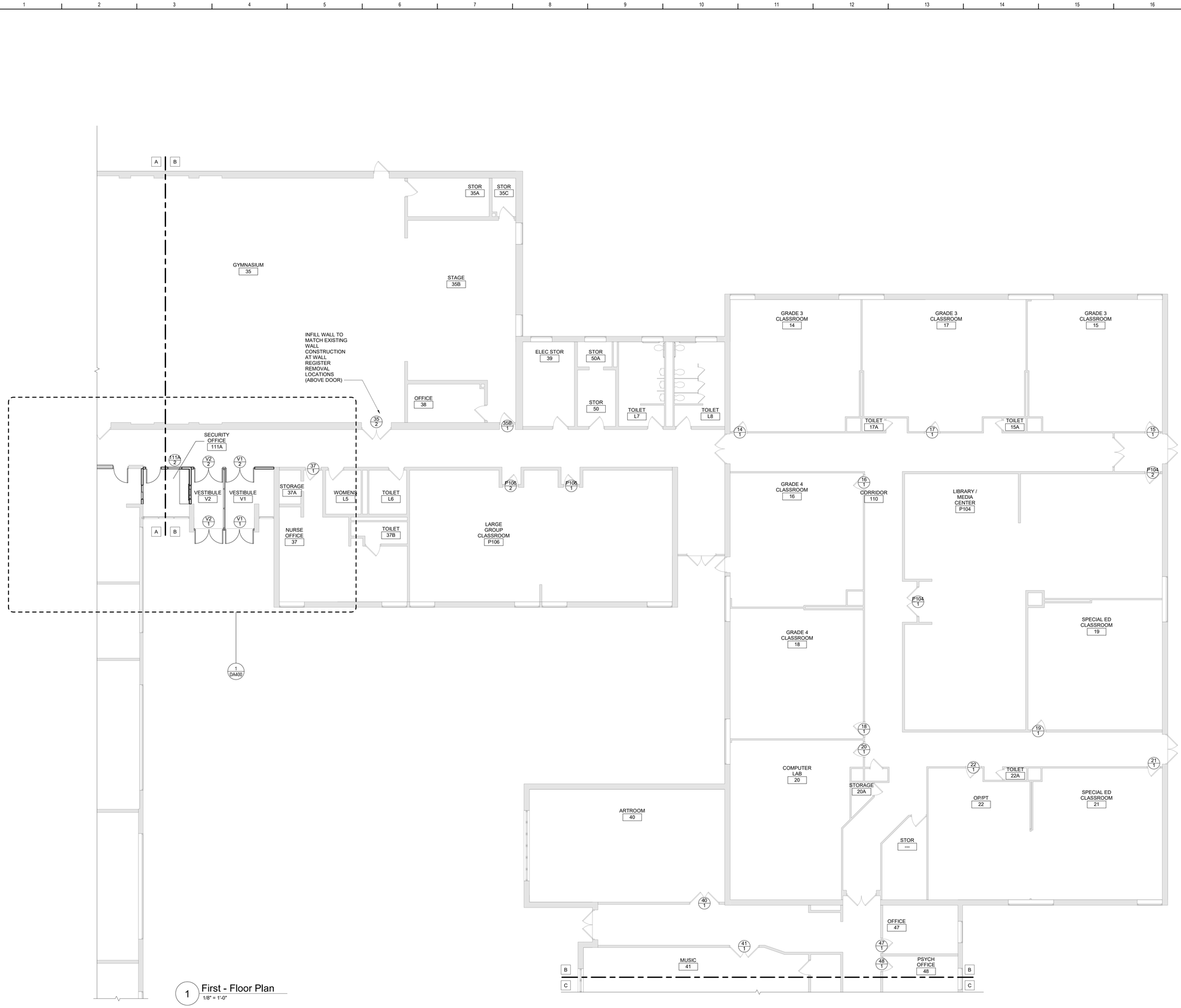
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

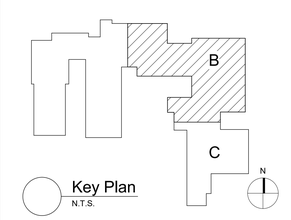
Reconstruction to:
Plattekill Elementary School

First Floor Plan - Area A

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	DA131
Project No.: 17597-22001		



1 First - Floor Plan
1/8" = 1'-0"



S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

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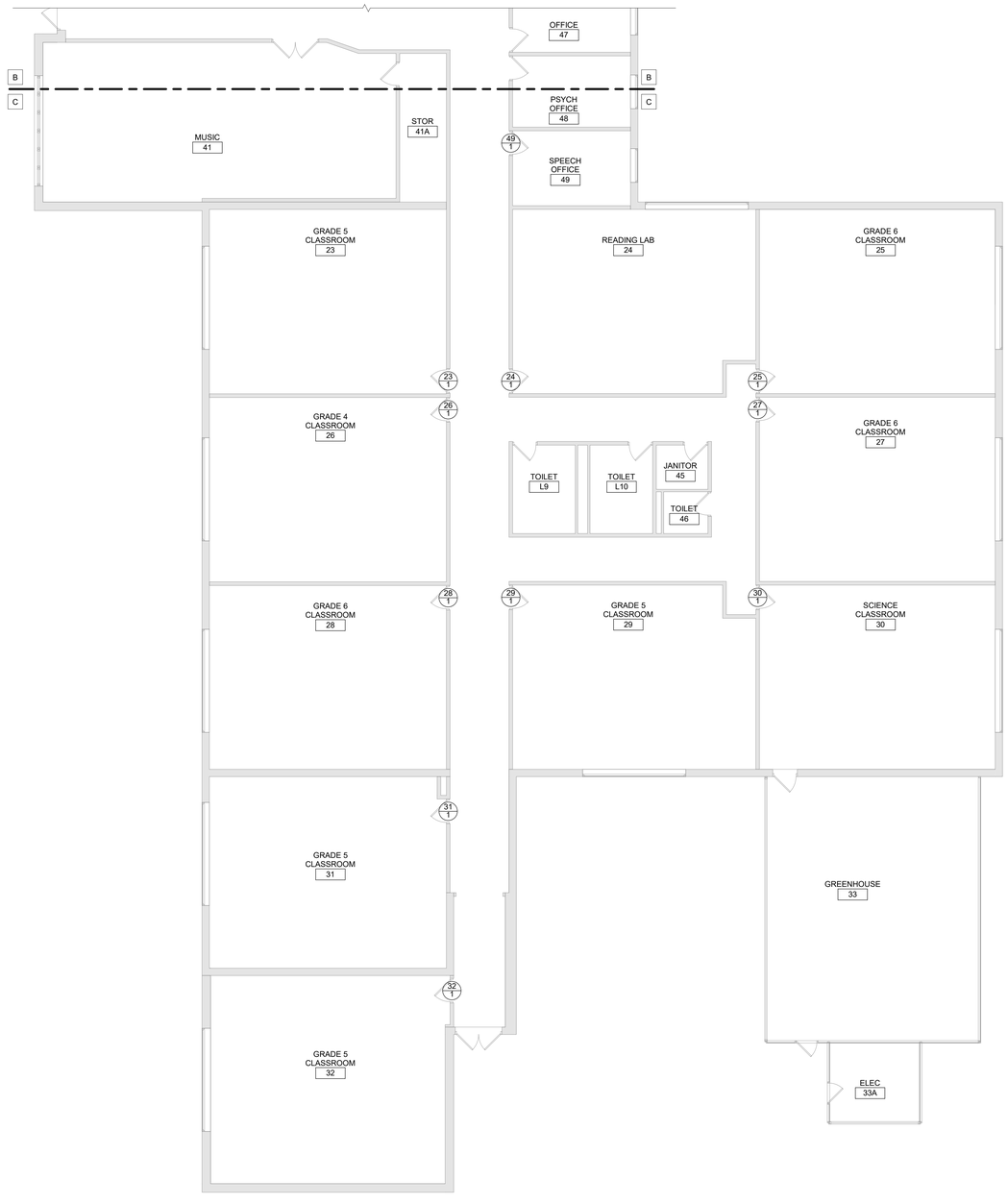
ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

First Floor Plan - Area B

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	DA132
Project No.: 17597-22001		



1 First - Floor Plan
1/8" = 1'-0"

Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

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TETRA TECH
ARCHITECTS & ENGINEERS

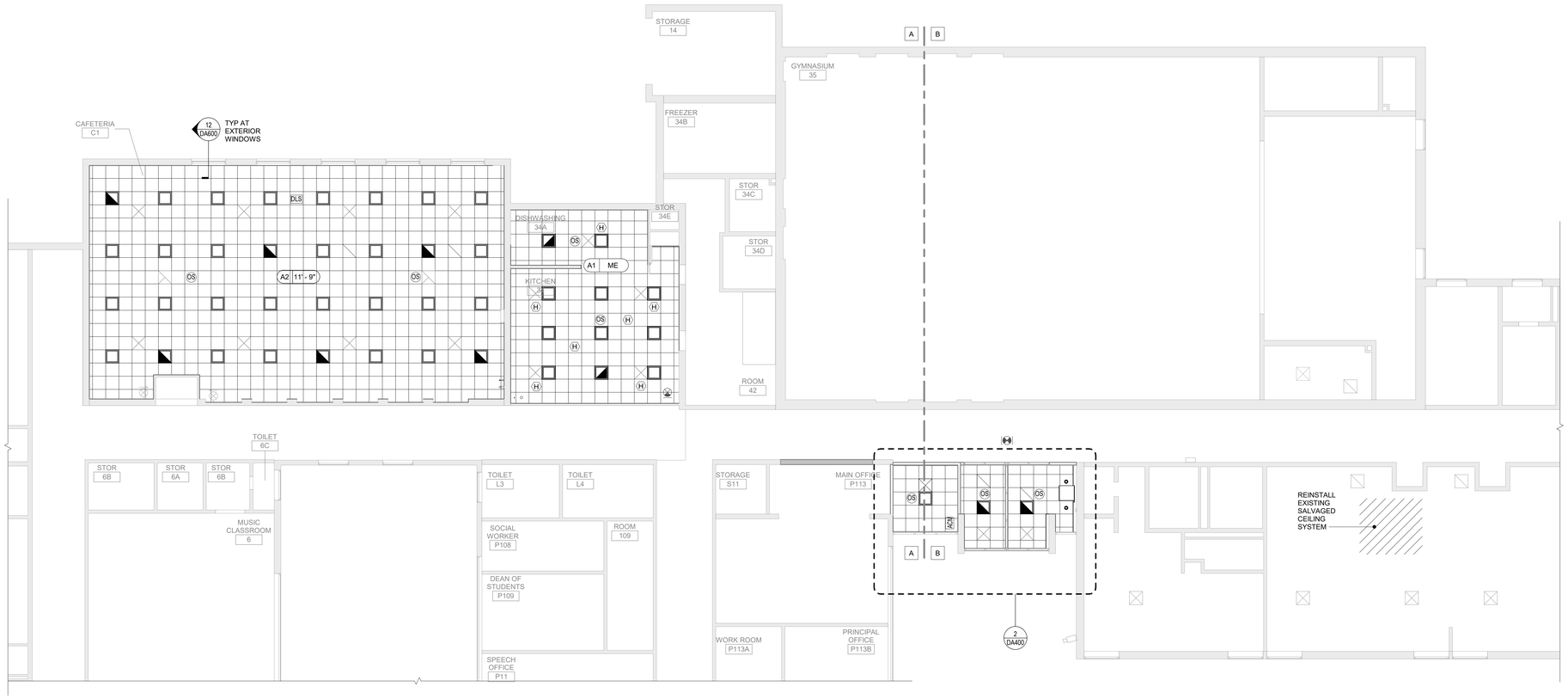
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

First Floor Plan - Area C

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	DA133

Project No.:
17597-22001



1 First Floor - Partial Reflected Ceiling Plan
1/8" = 1'-0"

General Ceiling Notes

A. LIGHTING AND OTHER CEILING-MOUNTED FIXTURES ARE SHOWN FOR DRAWING CLARITY. COORDINATE ALL CEILING WORK PRIOR TO INSTALLATION OF CEILING GRID.

B. CEILING HEIGHT IS 9'-0" ABOVE FINISHED FLOOR (UNO).

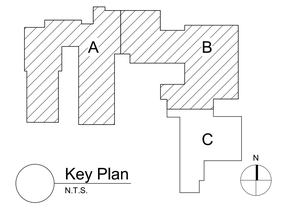
C. CENTER CEILING-MOUNTED ITEMS (LIGHTS, GRILLES, DETECTORS, SPRINKLER HEAD, ETC) WITHIN THE CEILING PANELS AND GRIDS UNLESS THE PANELS ARE SCORED. CENTER TEMS WITHIN THE PATTERN OF SCORED PANELS.

D. PATCH CEILING SYSTEMS TO REMAIN THAT HAVE BEEN DISTURBED BY SCHEDULED WORK TO MATCH ADJACENT ONSTRUCTION PRIOR TO PAINTING.

E. (X | 9'-0") DESIGNATES BOTTOM OF CEILING ABOVE FINISHED FLOOR AT THAT POINT UNO. DESIGNATION "ME" INDICATES MATCH EXISTING CEILING HEIGHT.

Ceiling Types

A1 | X'-X"	ACOUSTIC PANEL CEILING
A2 | X'-X"	ACOUSTIC PANEL CEILING
B | X'-X"	PAINTED 5/8" GYPSUM CEILING ON SUPPORT MATERIALS (GRID SUSPENSION SYSTEM, TYP UNO)



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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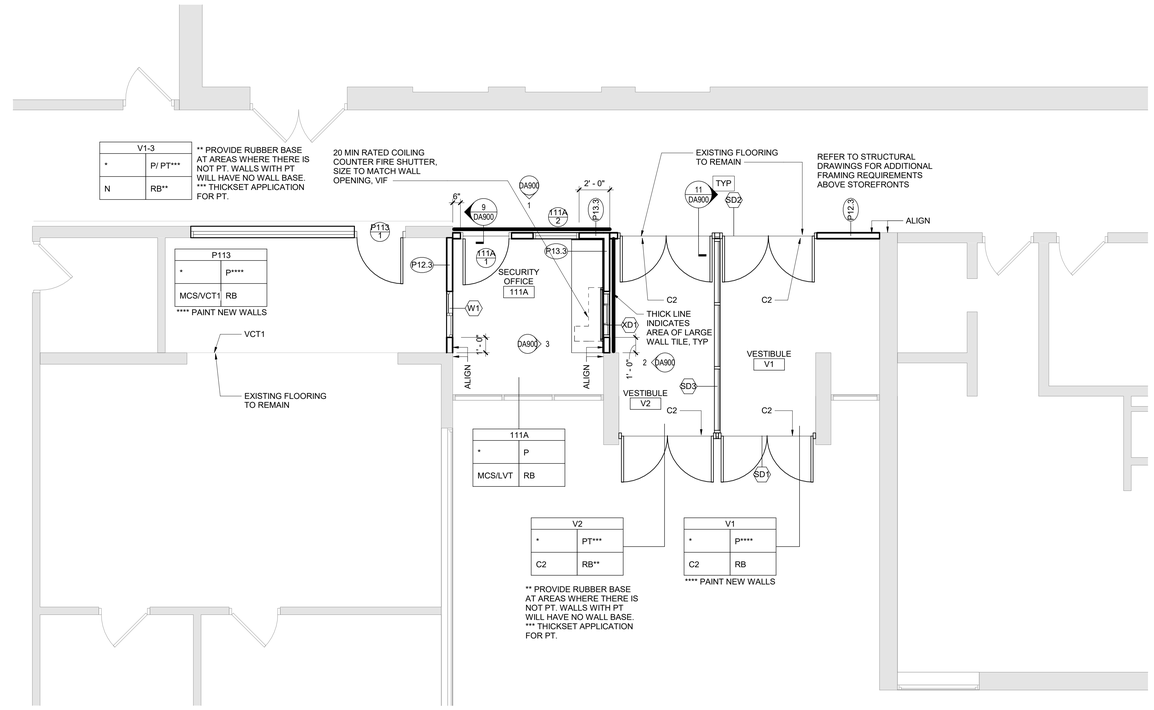
Wallkill Central School District
Wallkill, New York

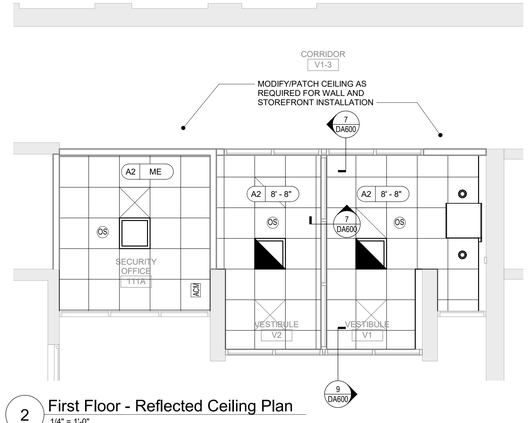
Reconstruction to:
Plattekill Elementary School

First Floor Reflected Ceiling Plan - Partial Areas A and B

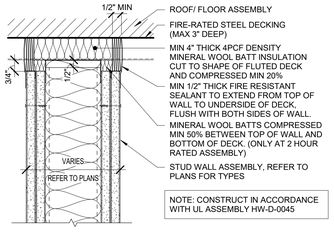
Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	DA161
Project No.: 17597-22001		



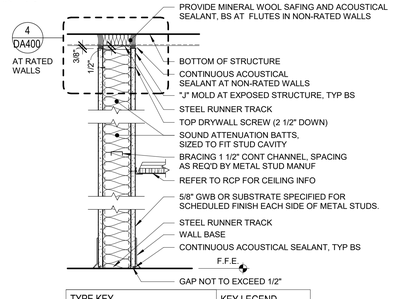
1 Enlarged Plan - Entrance Vestibule
1/4" = 1'-0"



2 First Floor - Reflected Ceiling Plan
1/4" = 1'-0"



4 Typical Top of Wall Assembly (Rated)
3" = 1'-0"



TYPE KEY	KEY LEGEND
P12.3, P12.4, AND P12.6 (NO RATING) P13.3 UL DESIGN #U465 (1 HOUR) P13.4 UL DESIGN #U465 (1 HOUR) P13.6 UL DESIGN #U465 (1 HOUR)	.3 = 3-5/8" MTL STUDS .4 = 4" MTL STUDS .6 = 6" MTL STUDS

3 Partition Types P12 and P13
1 1/2" = 1'-0"

Room Finish Key

C2	CARPET - TYPE 2 ENTRY WALK OFF
HPC	HIGH PERFORMANCE COATING
LVT	LUXURY VINYL TILE
MCS	MOISTURE COMTROL SYSTEM
N	NO WORK REQUIRED
P	PAINT SURFACE(S) INCLUDING SOFFITS
PT	PORCELAIN TILE
RB	RUBBER BASE
VCT1	VINYL COMPOSITION TILE - TYPE 1
*	SEE REFLECTED CEILING PLAN
**	PROVIDE RUBBER BASE AT AREAS WHERE THERE IS NOT PT. WALLS WITH PT WILL HAVE NO WALL BASE.
***	THICKSET APPLICATION FOR PT.
****	PROVIDE PAINT AT NEW WALLS.
	INDICATED CHANGE IN FLOOR FINISH

NOTE: ALL FINISHES LISTED MAY NOT BE REQUIRED FOR THIS PROJECT REFER TO DA900 FOR GENERAL FINISH AND GENERAL CASEWORK NOTES.

FINISHES SHOWN IN ROOM FINISH BOX ARE FOR ALL WALLS AND ENTIRE FLOOR AND CEILING REFER TO EACH ROOM FOR MORE INFORMATION.

RM#	
CLG*	WALL
FLR	BASE

Ceiling Types

A1	X'-X"	ACOUSTIC PANEL CEILING
A2	X'-X"	ACOUSTIC PANEL CEILING
B	X'-X"	PAINTED 5/8" GYPSUM CEILING ON SUPPORT MATERIALS (GRID SUSPENSION SYSTEM, TYP UNO)

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C. CENTER CEILING-MOUNTED ITEMS (LIGHTS, GRILLES, DETECTORS, SPRINKLER HEAD, ETC) WITHIN THE CEILING PANELS AND GRIDS UNLESS THE PANELS ARE SCORED. CENTER TEMS WITHIN THE PATTERN OF SCORED PANELS.

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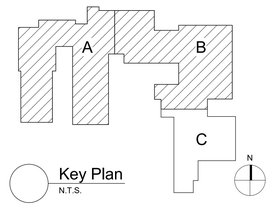
E. X 9'-0" DESIGNATES BOTTOM OF CEILING ABOVE FINISHED FLOOR AT THAT POINT UNO. DESIGNATION "ME" INDICATES MATCH EXISTING CEILING HEIGHT.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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TETRA TECH
ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Enlarged Plans / Interior Elevations

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	DA400

Project No.: 17597-22001

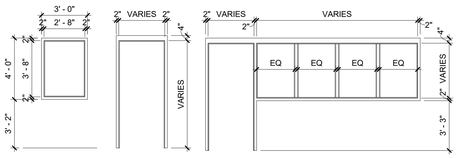
Door Schedule

ROOM NUMBER	DOOR NUMBER	DOOR TYPE	DOOR MATERIAL	DOOR WIDTH	DOOR HEIGHT	DOOR RATING	DOOR GLAZING	FRAME TYPE	FRAME MATERIAL	FRAME WIDTH	FRAME HEIGHT	FRAME RATING	FRAME GLAZING	FRAME HEAD	FRAME JAMB	FRAME SILL	HDW SET	REMARKS
BASEMENT PRE '58																		
G1	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
G1	2	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
G7	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
1st FLOOR																		
1	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
2	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
3	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
4	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
5	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
6	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
6	2	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
7	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P3	
7	2	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P3	
7A	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
8	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P2	NOTE 2
9	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P2	NOTE 2
10	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
11	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
12	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
13	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
14	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
15	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
16	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
17	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
18	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
19	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P2	NOTE 2
20	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
21	1	EXG	EXG	2' - 6"	7' - 0"	-	-	EXG	EXG	2' - 10"	7' - 4"	-	-				P1	NOTE 2
22	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
23	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
24	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
25	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
26	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
27	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
28	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
29	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
30	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
31	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
32	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P2	NOTE 2
34	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P3	
34	2	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P3	
35	1	EXG-PR	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	6' - 4"	7' - 4"	-	-				P4	
35	2	EXG-PR	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	6' - 4"	7' - 4"	-	-				P4	
35B	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	
37	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
40	1	EXG-PR	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	6' - 4"	7' - 4"	-	-				P4	
41	1	EXG-PR	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	6' - 4"	7' - 4"	-	-				P4	
42	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	
47	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
48	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
49	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
109	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
111A	1	N	WD	3' - 0"	7' - 0"	20 MIN	FP	F1	HM	3' - 4"	7' - 4"	20 MIN	-	H14	J14		P5	NOTE 3
111A	2	-	-	0"	0"		-	F22	HM	3' - 0"	4' - 0"	45 MIN	FPC	J13 SIM	J13	J13 SIM		HOLLOW METAL WINDOW
C1	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
C1	2	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
C1	3	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
P11	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
P104	1	EXG-PR	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	6' - 4"	7' - 4"	-	-				P2	NOTE 2
P104	2	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
P106	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
P106	2	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-				P1	NOTE 2
P113	1	N	WD	3' - 0"	7' - 0"	20 MIN	FP	F6	HM	14' - 0"	7' - 4"	20 MIN	FPC	J2	J2		P5	NOTE 2
V1	1	G2-PR	AL	3' - 0"	7' - 0"	-	FCE/SCL	SD1	AL	12' - 10"	8' - 8"	-	FCE/SCL	9/DA600	6/DA600		P8	NOTE 1, NOTE 3
V1	2	G2-PR	AL	3' - 0"	7' - 0"	-	SCL	SD2	AL	13' - 0"	8' - 8"	-	SCL	7/DA600	10/DA600		P7	NOTE 3
V2	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-	7/DA600	6/DA600		P9	NOTE 1, NOTE 3
V2	2	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 4"	-	-	7/DA600	10/DA600		P10	NOTE 3

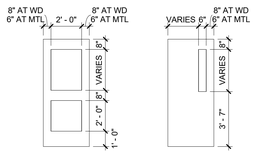
NOTE 1: EXTERIOR DOORS TO RECIEVE MANUFACTURER'S STANDARD ALUMINUM THERMALLY BROKEN DOOR THRESHOLD, SIZED TO FIT OPENING

NOTE 2: MODIFICATION LOCK SUPPLIED AND INSTALLED BY STATE CONTRACT -CYLINDERS AND OTHER LISTED- HARDWARE BY GENERAL CONTRACT

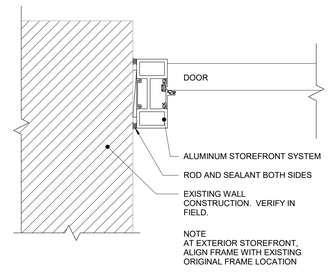
NOTE 3: REFERER TO SECURITY DOCUMENTS FOR ADDITIONAL INFORMATION ON SECURITY HARDWARE



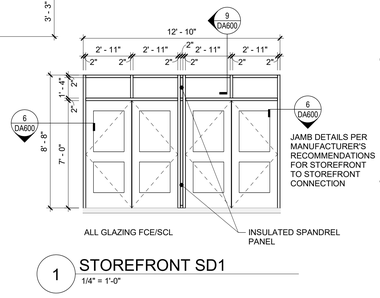
FRAME TYPES



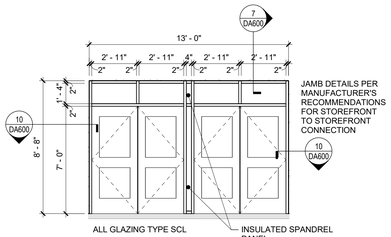
DOOR TYPES



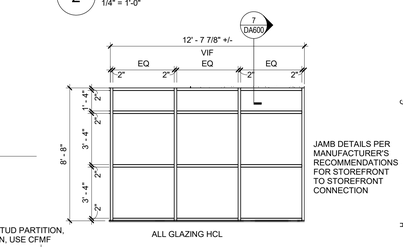
6 Storefront Jamb
3" = 1'-0"

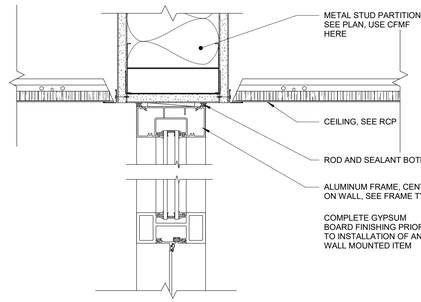


1 STOREFRONT SD1
1/4" = 1'-0"



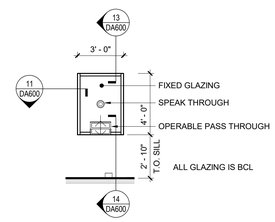
2 STOREFRONT SD2
1/4" = 1'-0"

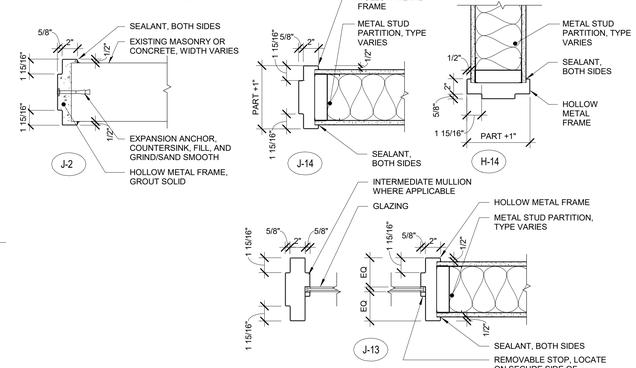




7 Storefront Head Interior
3" = 1'-0"

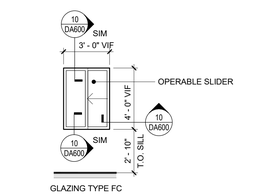
3 STOREFRONT SD3
1/4" = 1'-0"



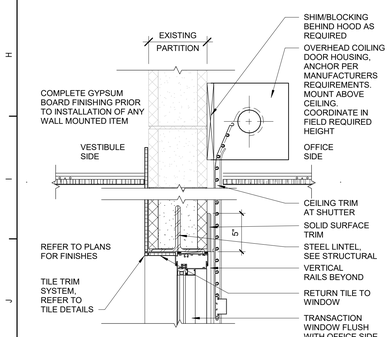


8 Hollow Metal Frame Details
1 1/2" = 1'-0"

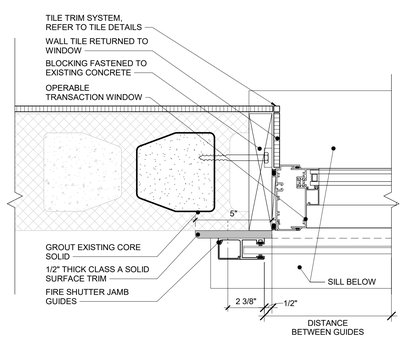
4 SECURITY WINDOW XD1
1/4" = 1'-0"



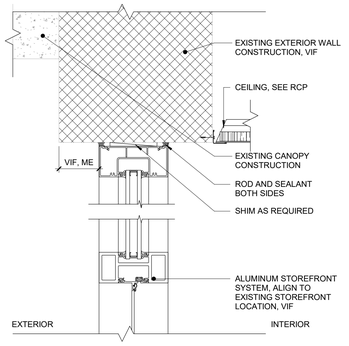
5 STOREFRONT W1
1/4" = 1'-0"



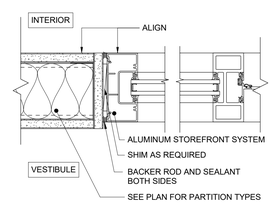
13 Fire Shutter Head Detail
1 1/2" = 1'-0"



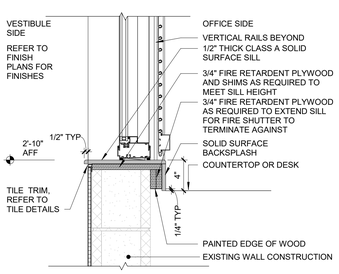
11 Fire Shutter Jamb Detail
3" = 1'-0"



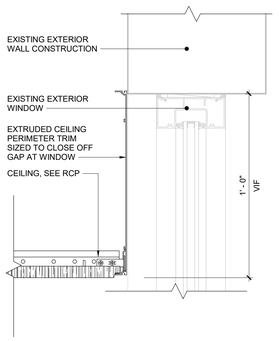
9 Storefront Head Exterior
3" = 1'-0"



10 Storefront Jamb Detail
3" = 1'-0"



14 Fire Shutter Sill Detail
1 1/2" = 1'-0"



12 Ceiling at Window Detail
3" = 1'-0"

General Door Notes

A. HARDWARE ON DOORS FROM SPACES OF PUPIL OCCUPANCY SHALL BE A TYPE WHICH WILL ALWAYS PERMIT THE DOOR TO BE OPENED FROM THE INSIDE WITHOUT DIRECT MANIPULATION OF ANY TYPE LOCKING DEVICE.

B. METAL VISION PANEL TRIM SHALL BE PAINTED SAME COLOR AS DOOR FRAMES.

C. ALL DOORS WITH ELECTRO-MAGNETIC HOLD OPEN DEVICES SHALL SWING TOWARDS ADJACENT WALLS. COORDINATE ALL INSTANCES WITH CONTRACTOR RESPONSIBLE FOR ELECTRICAL WORK, AND SEE ELECTICAL DWGS.

D. ALL DOOR HARDWARE FROM OCCUPIED SPACES SHALL BE OF A TYPE THAT WILL ALWAYS PERMIT THE DOOR TO BE OPENED FROM WITHIN THE SPACE WITHOUT USE OF A KEY.

E. ALL HM FRAMES IN CMU WALLS SHALL BE GROUTED SOLID.

F. APPLY CONTINOUS JOINT SEALANT TO ALL JOINTS BETWEEN FRAMES AND WALLS, TYP ALL.

G. PAINT ALL HM DOORS AND FRAMES IN ACCORDANCE W/ SECTION 099000.

H. PROVIDE LINTELS AT ALL DOOR AND WINDOW OPENINGS IN ACCORDANCE WITH LINTEL SCHEDULE ON STRUCTURAL DWGS.

I. PROVIDE WINDOW TREATMENTS AT SIDELIGHTS, EXCLUDING TRANSOM DIRECTLY ABOVE DOORS. REFER TO WINDOW TREATMENT PLANS FOR LOCATIONS.

J. NOTE THAT DUE TO REQUIREMENTS IN THE BCNYS, SOME FIRE RESISTANCE RATINGS MAY DIFFER BETWEEN DOORS (AND ITS GLASS, IF ANY) AND THAT DOOR'S FRAME ESPECIALLY IF THAT FRAME HAS GLASS (SIDELITES; TRANSOMS; ETC).

General Window Notes

A. INSULATING GLASS UNITS SHALL BE TYPE FCE/SCL, TYP UNO.

B. RESCUE WINDOWS ARE INDICATED BY THE DESIGNATION "RW".

C. PROVIDE ALL ALUMINUM FLASHINGS, RECEIVERS, TRIM AND SILLS REQUIRED FOR A COMPLETE AND FINISHED INSTALLATION REGARDLESS OF IF SHOWN ON DRAWINGS.

D. REFER TO WINDOW TREATMENTS AS SHOWN ON DRAWINGS.

E. GLAZING SYSTEMS FRAME TYPE KEY:

W ALUMINUM WINDOW
F HOLLOW METAL
S ALUMINUM STOREFRONT
X ALUMINUM SECURITY WINDOWS

F. PROVIDE INTERNAL STEEL REINFORCEMENT TO WINDOW, STOREFRONT AND CURTAIN WALL SYSTEMS AS REQUIRED TO COMPLY WITH WIND LOADING OR OTHER DESIGN CRITERIA, OR AS RECOMMENDED BY MANUFACTURER.

G. ALUMINUM WINDOW, STOREFRONT AND CURTAIN WALL FRAME EXTRUSIONS ARE INTENDED AS GENERIC GRAPHIC REPRESENTATIONS ONLY.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

complex world | CLEAR SOLUTIONS

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

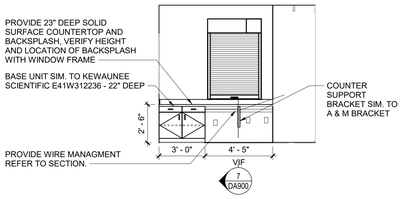
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

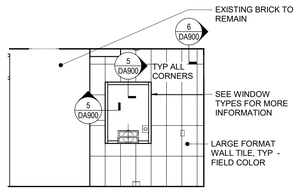
Reconstruction to:
Plattekill Elementary School

Door Schedule, Door and Window Types, and Details

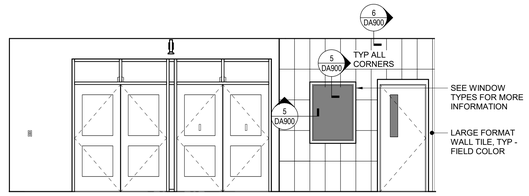
Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	DA600
Project No.: 17597-22001		



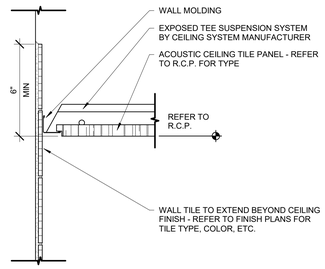
3 Security Office Elevation
1/4" = 1'-0"



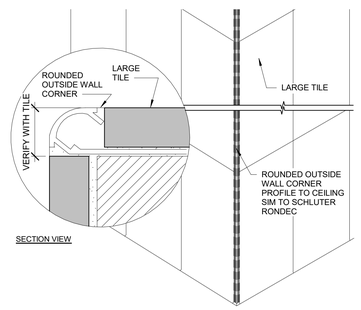
2 Vestibule Security Office Elevation
1/4" = 1'-0"



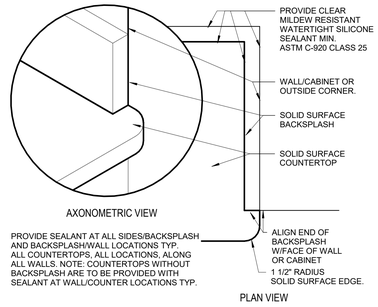
1 Vestibule Tile Elevation
1/4" = 1'-0"



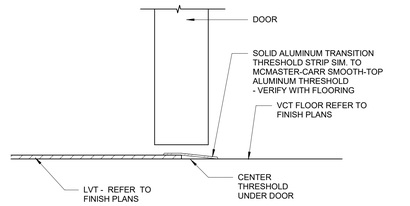
6 Ceramic Wall Tile at Acoustic Ceiling
3" = 1'-0"



5 Outside Corner/ Rounded Profile
3" = 1'-0"

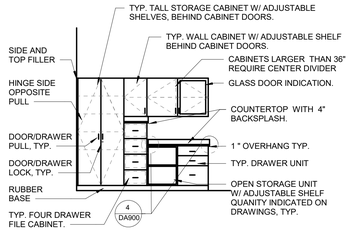


4 Solid Surface Countertop Edge Detail
3" = 1'-0"



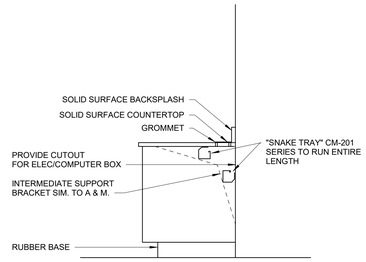
NOTE:
REFER TO SPECIFICATIONS FOR TRANSITION TYPES.
REFER TO FINISH PLANS FOR ALL LOCATIONS, TYPICAL .
THRESHOLD TO MEET ALL ADA CRITERIA
RATED DOOR UNDERCUT DISTANCE TO MEET REQUIRED NFPA CRITERIA.

9 Aluminum Threshold LVT to Floor Finish
6" = 1'-0"



NOTE:
SEE SPECIFICATION SECTION 12 32 16 FOR MORE INFORMATION INCLUDING CONSTRUCTION OF CASEWORK COMPONENTS.

8 Typical Casework Designations
1/4" = 1'-0"



7 Counter Detail
3/4" = 1'-0"

NON-GLARE SURFACE:

*TYPICAL FOR ENTIRE SIGN

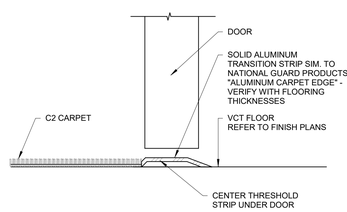
TACTILE CHARACTERS:

*5/8" MINIMUM CAP LETTER HEIGHT
*1" MINIMUM NUMBER HEIGHT
*RAISED 1/32" MINIMUM
*FULL CAPS
*SAN SERIF TYPE STYLE
*CHARACTERS MUST CONSTRAST WITH BACKGROUND

GRADE 2 BRAILLE

TYPE 5 - Typical Permanent Room Plaque

10 Typical Permanent Room Plaque
12" = 1'-0"



NOTE:
REFER TO SPECIFICATIONS FOR TRANSITION TYPES.
REFER TO FINISH PLANS FOR ALL LOCATIONS, TYPICAL.
THRESHOLD TO MEET ALL ADA CRITERIA
RATED DOOR UNDERCUT DISTANCE TO MEET REQUIRED NFPA CRITERIA

11 Aluminum Threshold Detail
6" = 1'-0"

General Wood Casework Notes

FOR ALL CONTRACTOR RESPONSIBILITIES REFER TO SPECIFICATION SECTION 01 11 00/01 12 00.

A. THE CASEWORK SHOWN ON THE DRAWINGS IS BASED ON KEWAUNEE SCIENTIFIC WOOD CASEWORK. REFER TO THE PROJECT MANUAL, SECTION 12 32 13 FOR DETAILED SPECIFICATIONS.

B. ALL STANDARD CASEWORK DIMENSIONS TO BE MODIFIED TO CORRESPOND WITH THE DIMENSIONS NOTED ON THE DRAWINGS. FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF CABINETS

C. MODEL NUMBERS LISTED ON DRAWINGS APPLY TO ELEVATIONS SHOWN. PROVIDE OPPOSITE HAND MODELS WHERE SHOWN.

D. PROVIDE FULL DEPTH SHELVES AT BASE, WALL AND TALL CABINETS, UNLESS NOTED OTHERWISE.

E. BASE AND TALL CABINETS ARE 22 INCHES DEEP. U.N.O. WALL CABINETS ARE 14 INCHES DEEP, UNO BASE CABINET DEPTH DOES NOT INCLUDE 1" COUNTERTOP OVERHANG, TYP.

F. PROVIDE FINISHED ENDS, BACK EXTENSIONS, SCRIBES AND FINISHED FILLER PANELS ON ALL CABINETS. FILLER PANELS ARE NOT TO EXCEED 3" WIDE, UNLESS NOTED OTHERWISE. PROVIDE TOP AND BOTTOM FILLER PANELS AT ALL BASE & WALL UNITS. SUBMIT SHOP DRAWINGS SHOWING DETAILS OF THESE CONDITIONS.

G. ALL COUNTERTOPS TO BE SOLID SURFACE WITH A RADIUS EDGE UNLESS NOTED OTHERWISE. BACKSPLASHES TO BE 4" HIGH, TYP. DO NOT PROVIDE BACKSPLASHES AT UV WALL UNLESS NOTED OTHERWISE. PROVIDE CAULK AT ALL JOINTS PROVIDE MARINE EDGE AT LOUVER LOCATIONS, TYP.

H. RADIUS COUNTERTOPS AT SOLID SURFACE COUNTERTOPS ENDS MEETING TALL SHELVING UNITS WITH A DEPTH LESS THAN COUNTERTOP DEPTH. RADIUS TO BE 1-1/2" UNLESS NOTED OTHERWISE. REFER TO DETAIL 9/EA900.

J. PROVIDE COUNTERTOP CUT-OUTS FOR SINK, FAUCETS, AIR AND/OR GAS COCKS, COORDINATE WITH ALL REQUIRED CONTRACTORS.

K. PROVIDE CUTS AT ALL CONDITIONS THAT INTERFERE WITH COUNTERTOPS/CABINETS: SCRIBE TO FIT.

L. PROVIDE AT ALL UV SHELVING LOCATIONS-REMOVABLE BACKS IN CABINETS AT PLUMBING AND FIN TUBE VALVE LOCATIONS. VERIFY POSITIONS OF VALVES PRIOR TO SHOP FABRICATION OF ALL CABINETS.

M. PROVIDE SHOP DRAWINGS SHOWING LOCATIONS AND DETIALS FOR ALL GRILLES, LOUVERS, REMOVABLE PANELS, VALVE LOCATIONS ECT. ASSOCIATED WITH CASEWORK COORDINATE WITH ALL REQUIRED CONTRACTORS.

N. PROVIDE CABINETS WITH FINISHED SIDES, INCLUDING BUT NOT LIMITED TO, LOCATIONS OF ADJACENT CABINETS OR EQUIPMENT WITH A DEPTH LESS THAN CABINET OR EQUIPMENT.

P. PROVIDE ALL STANDARD FEATURES OF CASEWORK UNITS AS INDICATED BY MODEL NUMBER OR AS SHOWN ON PLANS, DETAILS AND ELEVATIONS, INCLUDED BUT NOT LIMITED TO: OUTLETS, SWITCHES, LIGHTS ETC.

Q. PROVIDE BLOCKING AT NEW AND EXISTING GYPSUM BOARD WALLS PER MANUFACTURER RECOMMENDATIONS FOR SUPPORT OF WALL /TALL MOUNTED UNITS. REFER TO SPECIFICATION SECTION 06 10 00 FOR WOOD BLOCKING RESPONSIBILITIES.

R. PROVIDE LOCKS AT ALL CASEWORK DOORS/DRAWERS AND FILE UNITS TYP.

S. PROVIDE AS NOTED ON DRAWINGS AND DETAILS: 2" GROMMETS AT OPEN BASE COUNTERS 30"/36" OC, WIRE MANAGEMENT, KEY BOARD TRAYS AND CABLE TRAYS.

T. PROVIDE ALL CUTOUTS AS SHOWN ON CASEWORK PLANS AND ELEVATIONS OR AS REQUIRED. CUTOUTS ARE TO INCLUDE BUT NOT LIMITED TO: ALL ELEC BOXES, OUTLETS, AND ASSOCIATED WIRING AND FINAL HOOK-UP.

U. PROVIDE REMOVABLE BACK PANELS AT ALL SINK BASE CABINETS, INCLUDING ADA FUMEHOODS, EYEWASHAND SAFETY STATIONS.

V. REFER TO BOTH 1/8" AND 1/4" PLANS FOR LAYOUTS.

Q. REFER TO SPECIFICATION SECTION 01 23 00 FOR ADDITIONAL INFORMATION REGARDING CASEWORK ALTERNATES.

Signage Notes

A. ALL ROOM NAMES AND NUMBERS ARE SUBJECT TO CHANGE, SUPPLIER TO VERIFY WITH SCHOOL DISTRICT DURING CONSTRUCTION PHASE, PRIOR TO SUBMITTAL PHASE, FOR FINAL ROOM NAMES AND NUMBERS.

B. ALL PERMANENT ROOMS TO RECEIVE ROOM IDENTIFICATION SYSTEM CONTAINING BOTH TEXT AND ROOM NUMBERS.

C.. PROVIDE BARRIER-FREE AND TACTILE SIGNAGE AT ALL LOCATIONS REQUIRED BY CODE AND AS SHOWN ON THE ARCHITECTURAL DRAWINGS.

D. COORDINATE MOUNTING HEIGHTS AS PER CABO/ANSI A117.1 AND AS PER MANUFACTURER'S RECOMMENDATIONS.

E. ALL COLORS TO BE ISSUED DURING CONSTRUCTION.

F. PROVIDE SIGNS AS PER SIGNAGE SCHEDULE AS REQUIRED BY CODE AND SIGNAGE DRAWING.

G. REFER TO SPECIFICATIONS SECTION 10 14 00 FOR MORE INFORMATION.

General Finish Notes

ALL FINISH PRODUCTS ARE TO BE INSTALLED IN ACCORDANCE WITH CONTRACT SPECIFICATION AND MANUFACTURES INSTRUCTIONS. REFER TO SPECIFICATIONS AND FINISH DETAILS FOR ADDITIONAL INFORMATION ON INSTALLATION OF SPECIFIED MATERIALS,

A. ALL PAINTS FOR INTERIOR AND EXTERIOR ARE TO BE APPLIED IN ACCORDANCE WITH SPECIFICATION SECTION 09 91 00 AND 09 96 00.

B. ALL EXPOSED STRUCTURES, INCLUDING BUT NOT LIMITED TO PIPING AND FIREPROOFING, CONDUIT, AND ALL ASSOCIATED EQUIPMENT ARE TO BE PAINTED.

C. APPLY PAINT TO BOTH NEW AND EXISTING ITEMS IN ALL AREAS INDICATED WITH A FINISH BOX AND/OR NOTES - THESE ITEMS ARE INCLUDING BUT ARE NOT LIMITED TO:
- FEC 'S, LADDERS, BEAMS, DOOR/FRAMES - BOTH SIDES GLAZING FRAMES IN DOOR/WALLS- BOTH SIDES, ALL EXPOSED STAIR PARTS INCLUDING RAILINGS, HAND AND GUARD RAILS, STRINGERS AND UNDERSIDES OF STAIRS, ALL ITEMS ARE TO BE ACCENT COLORS.

D. PATTERNS FOR FLOORS AND WALLS ARE AS SHOWN ON DRAWINGS INCLUDING ALL ACCENT LOCATIONS. SUBMIT SHOP DRAWINGS SHOWING DETAILED LAYOUTS OF EACH AREA, INCLUDING EDGES AND TRANSITIONS. ALL LAYOUTS ARE TO BE CENTERED IN EACH ROOM UNO - TYP ALL DRAWINGS. ABOVE REQUIRMENTS ARE TO INCLUDE BUT NOT LIMITED TO:
- CERAMIC TILE, BOTH WALL AND FLOOR.
- TERRAZZO AND BASE
- CARPET
- LVT
- RUBBER

E. FIELD AND ACCENT PAINT AS SHOWN ON DRAWINGS CONTRACTOR IS TO ASSUME ALL FIELD AND ACCENT COLORS ARE DIFFERENT ROOM TO ROOM. AS WELL AS WITHIN EACH ROOM, REQUIREMENTS ARE TO INCLUDE BUT ARE NOT LIMITED TO:
- WALL, FIELD COLOR
- WALL, ACCENT COLOR
- CEILING CLOUDS, ACCENT COLOR
- SOFFITS, ACCENT COLOR
- DOOR AND WINDOW FRAMES, ACCENT COLOR
- EXPOSED COLUMNS, ACCENT COLOR
- GUARDRAILS, ACCENT COLOR
- HANDRAILS, ACCENT COLOR
- EXPOSED DECKS, ACCENT COLOR
- EXPOSED JOISTS, ACCENT COLOR
- EXPOSED DUCTWORK, ACCENT COLOR

F. PAINT MECHANICAL ROOM FLOOR CURBS CAUTION YELLOW.

G. PROVIDE PAINT AT ALL NEW SOFFITS, REFER TO REFLECTIVE CEILING PLANS FOR ADDITIONAL LOCATIONS.

H. ALL EXPOSED BRICK, GROUND FACE BLOCK IS TO REMAIN UNPAINTED, UNO.

J. CONFIRM WITH OWNER AND ARCHITECT PRIOR TO PAINTING OVER MURALS ON EXISTING SURFACES.

K. CERAMIC WALL TILE IS TO RUN FLOOR TO CEILING UNO.

L. PROVIDE PAINT AND RUBBER BASE AT ALL NEW CHASES, REFER TO NEW WORK PLANS FOR ADDITIONAL LOCATIONS.

M. REFER TO STRUCTURAL DRAWINGS FOR LOCATIONS OF SLAB DEPRESSIONS. REFER TO FINISH MATERIAL SPECIFICATION SECTIONS FOR SLAB DEPRESSION DEPTH REQUIREMENTS.

N. REFER TO STRUCTURAL DRAWINGS FOR LOCATIONS OF SLAB DEPRESSIONS. REFER TO FINISH MATERIAL SPECIFICATION SECTIONS FOR SLAB DEPRESSION DEPTH REQUIREMENTS.

P. CARPET IS TO RUN WALL TO WALL, UNDER ALL FURNITURE, MOVEABLE EQUIPMENT AND LIBRARY SHELVING UNITS, INCLUDING ALL UNITS AT THE PERIMETER WALLS.

Q. FOR ALL RENOVATED AREAS REQUIRING FINISH WORK REMOVE, PROTECT AND REINSTALL MOVABLE EQUIPMENT INCLUDING BUT NOT LIMITED TO: BOARD UNITS, LOCKERS GYM EQUIPMENT, SHADES/BLINDS, BOOKCASES ETC. REINSTALL IN ORIGINAL LOCATION, OR AS NOTED ON DRAWINGS, COORDINATE WITH OWNER. REFER TO SPEC SECTION 01 23 00 ALTERATION PROJECT PROCEDURES FOR MORE INFORMATION.

R. FIELD VERIFY ALL CONTROL JOINTS LOCATIONS IN CONCRETE SLAB. LOCATE CONTROL JOINTS IN EXG/NEW FLOOR FINISH MATERIAL DIRECTLY ABOVE SLAB JOINTS OR AS RECOMMENDED BY FLOORING MATERIAL MANUFACTURER.
- AT NEW SLABS REFER TO STRUCTURAL DRAWINGS FOR SLAB CONTROL JOINT LOCATIONS.
- AT EXISTING SLABS, FIELD VERIFY LOCATIONS OF EXISTING SLAB CONTROL JOINTS.
- REFER TO FINISH DRAWINGS AND SPECIFICATIONS FOR NEW FLOOR MATERIALS.
COORDINATE FLOOR PATTERNS WITH CONTROL JOINT PRIOR TO SUBMISSION OF REQUIRED FLOOR PATTERN DRAWINGS.

S. PROVIDE ALL FINISHES AS INDICATED BY ROOM FINISH BOX AND/OR AS NOTED ON DRAWINGS.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Interior Elevations, Details and Signage

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	DA900
Project No.: 17597-22001		

COMPONENTS & CLADDING WIND PRESSURE (PSF)

MEAN ROOF HEIGHT, "h" (FT)	EFFECTIVE WIND AREA (SQ FT)	ROOF										WALLS			
		ZONE 1'		ZONE 1		ZONE 1'/1'	ZONE 2		ZONE 3			ZONE 4		ZONE 5	
		MIDDLE INTERIOR		INTERIOR		OVERHANG	EDGE	OVERHANG	CORNER	OVERHANG		INTERIOR		CORNER	
21.00	≤ 10	-30.8	16.0	-53.7	16.0	-48.5	-70.8	-65.7	-96.5	-91.4		-33.4	30.8	-41.1	30.8
	20	-30.8	16.0	-50.1	16.0	-47.7	-66.3	-59.6	-87.4	-80.7		-32.0	29.5	-38.4	29.5
	50	-30.8	16.0	-45.5	16.0	-46.5	-60.2	-51.6	-75.4	-66.7		-30.2	27.7	-34.8	27.7
	100	-30.8	16.0	-41.9	16.0	-45.7	-55.7	-45.5	-66.3	-56.1		-28.9	26.3	-32.0	26.3
	≥ 500	-20.9	16.0	-33.7	16.0	-31.4	-45.1	-31.4	-45.1	-31.4		-25.7	23.1	-25.7	23.1

NOTES:

1. MEAN ROOF HEIGHT IS MEASURED ABOVE DATUM FFE, ELEVATION = 100'-0".

2. REFER TO ASCE 7-16 FOR DEFINITION OF TERMS. FOR THE DIMENSIONS OF EACH ZONE, REFERENCE FIGURE 30.4-1 IN ASCE 7-16 AND USE "h" FROM ABOVE TABLE TO DETERMINE 0.6h AND 0.2h.

3. THESE TABLES ARE TO BE USED FOR WIND LOAD CONTRIBUTION TO TOTAL LOAD ACTING ON ANY COMPONENT OR CLADDING MEMBER WHICH IS PART OF A ROOF OR EXTERIOR WALL ASSEMBLY. EXAMPLES OF COMPONENTS AND CLADDING INCLUDE, BUT ARE NOT LIMITED TO ROOF JOISTS, WALL STUDS, ROOF DECK FASTENERS, VENEER TIES, WINDOWS, AND THEIR ATTACHMENTS.

4. FOR EFFECTIVE WIND AREA VALUES LISTED IN THE TABLE ABOVE, PRESSURE VALUES MAY INTERPOLATED; OTHERWISE USE THE VALUE ASSOCIATED WITH THE LOWER EFFECTIVE WIND AREA.

5. POSITIVE PRESSURES (+) ACT TOWARDS THE BUILDING, NEGATIVE PRESSURES (-) ACT AWAY FROM THE BUILDING, POSITIVE AND NEGATIVE PRESSURES DO NOT ACT SIMULTANEOUSLY. PRESSURES ARE APPLIED TO THE SURFACE OF THE COMPONENT OR CLADDING.

6. DESIGN VALUES SHOWN IN THIS TABLE ARE ULTIMATE VALUES FOR USE WITH LRFD DESIGN. VALUES MAY BE MULTIPLIED BY 0.6 FOR USE WITH SERVICE LEVEL OR ASD DESIGN. REFER TO THE BUILDING CODE FOR APPLICABLE LOAD COMBINATIONS.

Structural Loads:

A. ROOF LIVE LOADS PER BCNYS 1607.13
MINIMUM ROOF LIVE LOAD — 20 PSF

B. RAIN LOADS PER BCNYS 1611
RAIN INTENSITY, I — 2.75 IN/HR

RAIN SURCHARGE LOAD HAS BEEN APPLIED TO AREAS WHERE PONDING OCCURS IN ACCORDANCE WITH BCNYS 1611.1.

C. SNOW LOADS PER BCNYS 1608

GROUND SNOW, P_g (FIGURE 1608.2)	40 PSF
FLAT ROOF SNOW LOAD, P_f (ASCE 7)	30.8 PSF
SNOW EXPOSURE FACTOR, C_e	1.0
THERMAL FACTOR, C_t	1.0
SLOPE FACTOR, C	1.0
SNOW LOAD IMPORTANCE FACTOR, I_S	1.1
DRIFT SURCHARGE, P_d	
DRIFT A	53.2 PSF
DRIFT B	20.8 PSF
DRIFT C	61.9 PSF
DRIFT D	60.4 PSF
DRIFT WIDTH, w	
DRIFT A	11.5 FT
DRIFT B	6.05 FT
DRIFT C	12.9 FT
DRIFT D	15.9 FT

ADDITIONAL SNOW LOADS HAVE BEEN APPLIED TO AREAS WHERE DRIFTING OCCURS IN ACCORDANCE WITH BCNYS 1608.

D. WIND LOAD DESIGN CRITERIA PER BCNYS 1609

BASIC DESIGN WIND SPEED (3 SECOND GUST), V	120 MPH
ALLOWABLE STRESS DESIGN WIND SPEED, V_{asd}	93 MPH
RISK CATEGORY	I I I
EXPOSURE CATEGORY	C
INTERNAL PRESSURE COEFFICIENT, GC_{Pi}	+/- 0.18

E. SEISMIC DESIGN CRITERIA PER BCNYS 1613

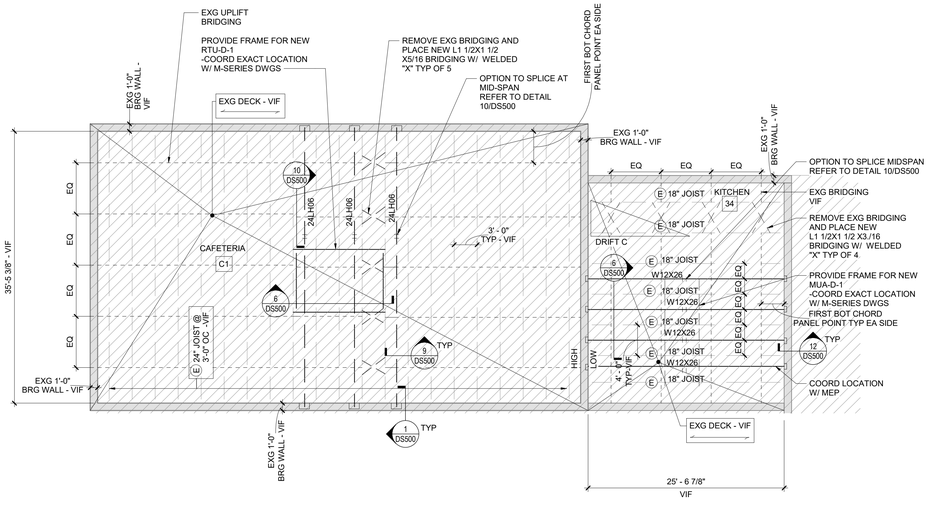
RISK CATEGORY	I I I
SEISMIC IMPORTANCE FACTOR, I_e	1.25
MAPPED SPECTRAL RESPONSE ACCELERATION	
AT SHORT PERIODS, S_S	20.1 %g
AT 1 SECOND PERIODS, S_1	5.4 %g
SITE CLASS	D (*ASSUMED)
DESIGN SPECTRAL RESPONSE ACCELERATION	
AT SHORT PERIODS, S_{DS}	21.4 %g
AT 1 SECOND PERIODS, S_{D1}	8.7 %g
SEISMIC DESIGN CATEGORY	B

F. SPECIAL LOADS PER BCNYS 1603.1.8
MECHANICAL EQUIPMENT DEAD LOADS

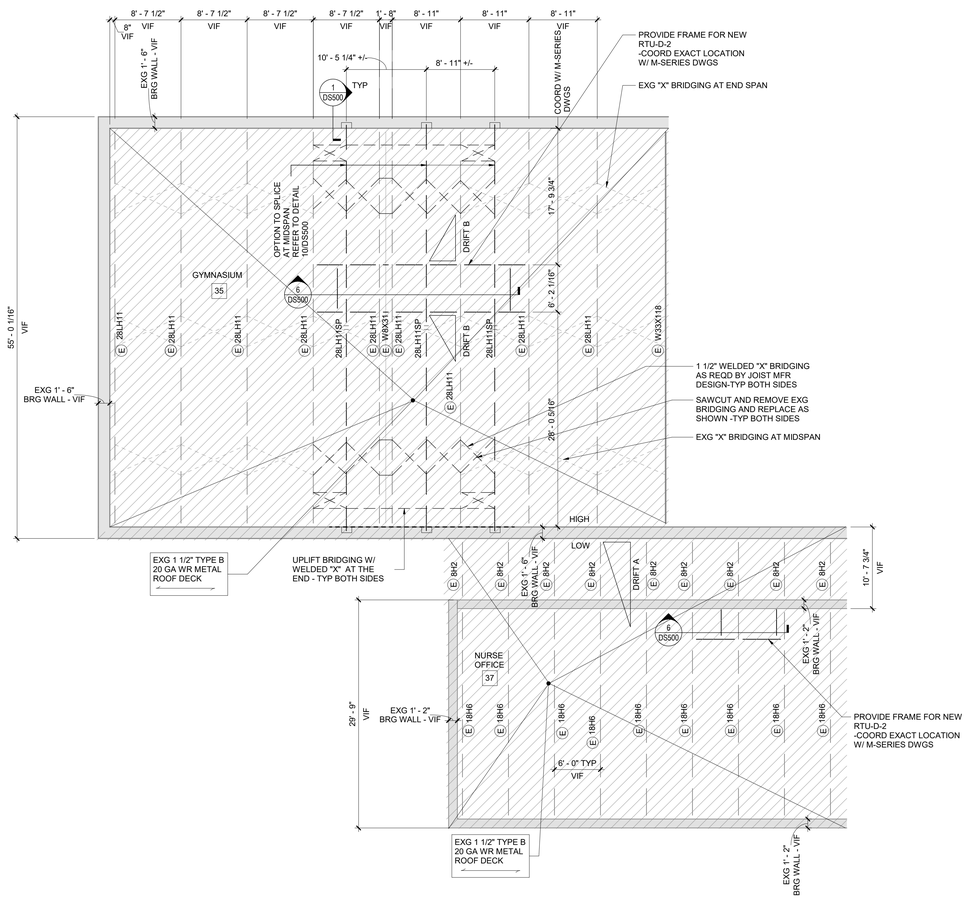
RTU-D-2	6755 LB
RCU-D-2	1872 LB
MUA-D-1	2180 LB
RTU-D-1	3335 LB

General Notes:

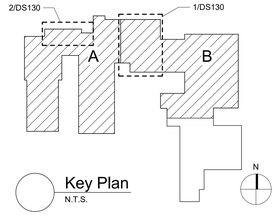
A. DIMENSIONS AND ELEVATIONS SHOWN ON PLAN AS PLUS/MINUS (+/-) AND VIF ARE TO BE CONSIDERED APPROXIMATE. EXACT VALUES FOR ALL (+/-) AND VIF DIMENSIONS ARE TO BE DETERMINED BY THE CONTRACTOR IN THE FIELD THROUGH A PRELIMINARY BUILDING LAYOUT. CONTRACTOR TO VERIFY EXISTING DIMENSIONS, ELEVATIONS AND CONDITIONS AND NOTIFY A/E OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK. COORDINATE INFORMATION WITH OTHER TRADES.



2 Partial Roof Framing Plan - Area A
1/8" = 1'-0"
DATUM FOR EXG TOS HIGH ROOF IS AT 120'-8" - VIF
DATUM FOR EXG TOS LOW ROOF IS AT 113'-4" - VIF



1 Partial Roof Framing Plan - Area B
1/8" = 1'-0"
DATUM FOR EXG TOS HIGH ROOF IS AT 120'-8" - VIF
DATUM FOR EXG TOS LOW ROOF IS AT 113'-4" - VIF



S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT
Established 1909

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH
ARCHITECTS & ENGINEERS

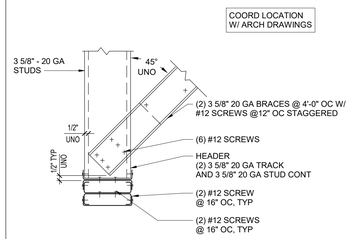
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

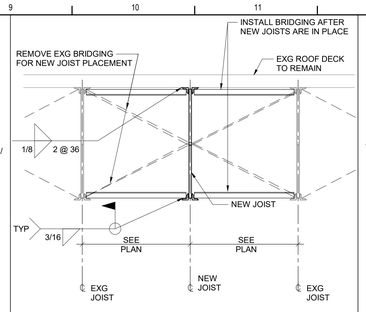
Partial Roof Framing Plan Areas A & B

Drawn By:	Date:	Drawing Number:
NDC/vmm	11/4/2022	DS130

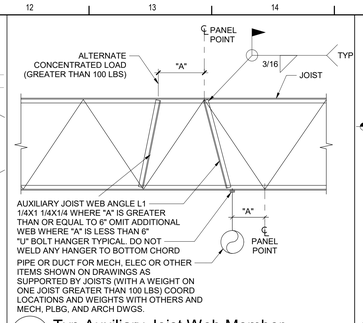
Project No.: 17597-22001



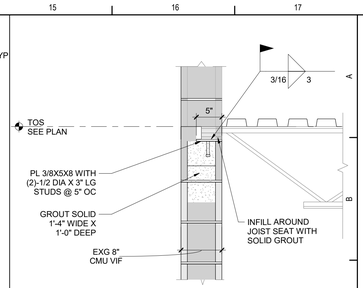
14 Typ CFMF Header Detail
1 1/2" = 1'-0"



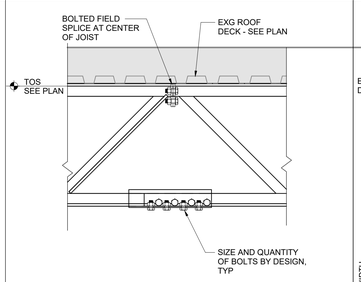
9 New Joist at Exg
1" = 1'-0"



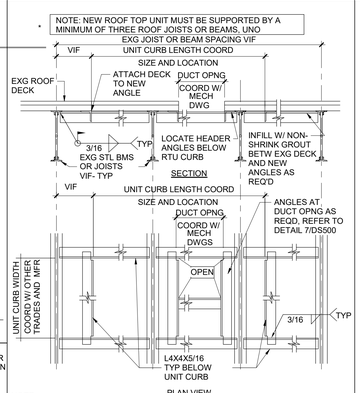
5 Typ Auxiliary Joist Web Member & Hanger
3/4" = 1'-0"



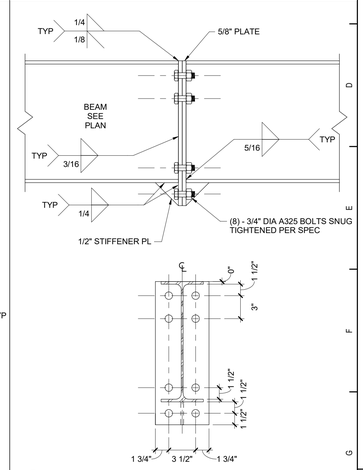
1 Typical Joist Brg @ Exg CMU
1" = 1'-0"



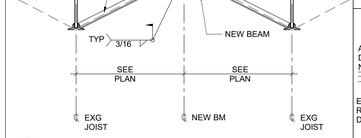
10 Typ Joist Splice Detail
1" = 1'-0"



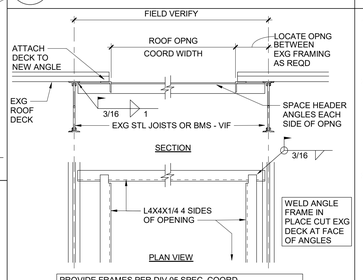
6 Typ Roof Frame at Exg for New RTUs
3/4" = 1'-0"



2 Beam Splice Connection
1 1/2" = 1'-0"



11 Typ Existing Bridging Detail
1" = 1'-0"



7 Typ Roof Frame For New Opn at Exg
3/4" = 1'-0"

1. FOR 4" THICK WALLS

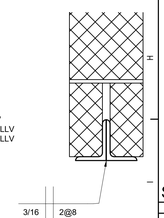
MASONRY OPENING	LINTEL ANGLE
UP TO 6'-4"	MT 6X5.9

2. FOR 6" THICK WALLS

MASONRY OPENING (≤)	LINTEL ANGLE
5'-0"	2- L2 1/2X2 1/2X5/16
6'-0"	2- L3X2 1/2X5/16 LLV
7'-0"	2- L3 1/2X2 1/2X5/16 LLV
8'-0"	2- L3 1/2X2 1/2X5/16 LLV

3. FOR 8", 12", AND 16" THICK WALLS:
FOR EACH 4" THICKNESS OF WALL

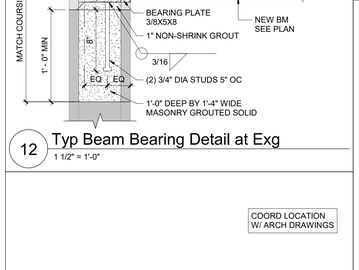
MASONRY OPENING (≤)	LINTEL ANGLE
5'-0"	L3 1/2X3 1/2X5/16
6'-0"	L4X3 1/2X 5/16 LLV
7'-0"	L5X3 1/2X5/16 LLV
8'-0"	L5X3 1/2X5/16 LLV
9'-0"	L6X3 1/2X5/16 LLV
10'-0"	L6X3 1/2X5/16 LLV



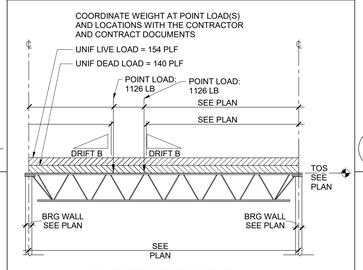
LINTEL NOTES

1. ALL OPENINGS 1'-0" AND OVER REQUIRE LINTELS.
2. STEEL TO BE A36.
3. THIS SCHEDULE IS TYPICAL FOR ALL MASONRY OPENINGS IN NON-LOAD BEARING WALLS UNLESS OTHERWISE NOTED.
4. ALL LINTELS TO HAVE MINIMUM 8" BEARING BOTH ENDS.
5. BACK TO BACK ANGLES ARE TO BE STITCH WELDED TOGETHER BEFORE PLACEMENT.
6. ALL LINTELS ARE TO HAVE BOTH ENDS BEAR ON SOLID MASONRY OR SOLIDLY GROUTED HOLLOW MASONRY.
7. WHERE MINIMUM 8" BEARING LENGTH CANNOT BE PROVIDED DUE TO COLUMN INTERFERENCE, PROVIDE CONNECTION OF LINTEL TO COLUMN.
8. THIS LINTEL SCHEDULE IS APPLICABLE FOR USE IN EXISTING BUILDING. SHORE EXISTING STRUCTURE AND WALL AS REQD FOR INSTALLATION OF NEW MAS AND LINTEL. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF OPENINGS.

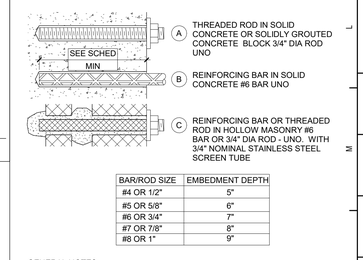
3 Lintel Schedule
12" = 1'-0"



12 Typ Beam Bearing Detail at Exg
1 1/2" = 1'-0"



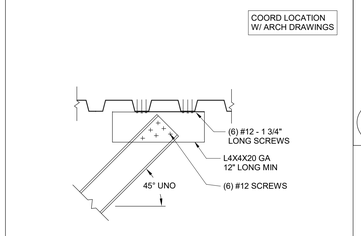
8 Typ 28LH11SP Loading Diagram
NTS



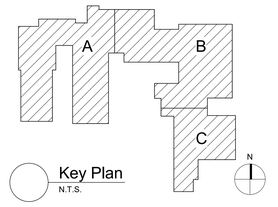
BAR/ROD SIZE	EMBEDMENT DEPTH
#4 OR 1/2"	5"
#5 OR 5/8"	6"
#6 OR 3/4"	7"
#7 OR 7/8"	8"
#8 OR 1"	9"

GENERAL NOTES
1. FOR ACCEPTABLE ADHESIVE PRODUCTS REFER TO SPECIFICATIONS.
2. COMPLY WITH MANUFACTURERS REQUIREMENTS FOR INSTALLATION.

4 Typical Chemical Anchors
3" = 1'-0"



13 Typ CFMF Brace Detail
1 1/2" = 1'-0"



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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BID SET

TETRA TECH
ARCHITECTS & ENGINEERS

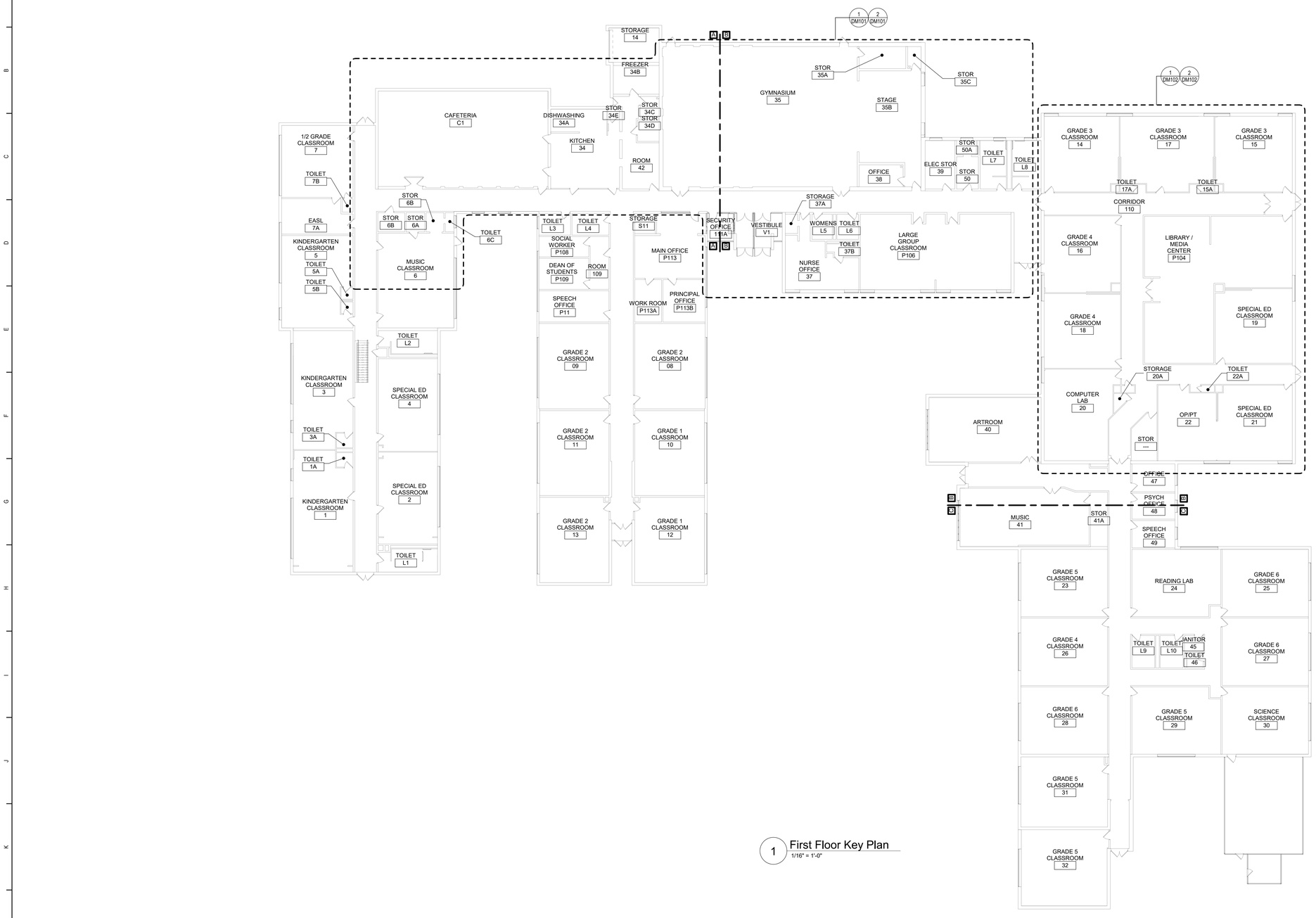
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Typical and Framing Details

Drawn By:	Date:	Drawing Number:
NDC/vmm	11/4/2022	DS500

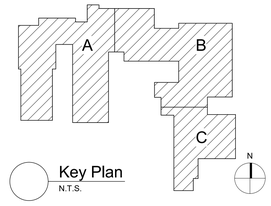
Project No.: 17597-22001



1 First Floor Key Plan
1/16" = 1'-0"

General Notes

A. THE FOLLOWING GENERAL NOTES APPLY TO ALL "DM" SERIES DRAWINGS.
B. REFER TO ALL CONTRACT DOCUMENTS; DRAWINGS AND SPECIFICATIONS, FOR DETAILED STANDARDS AND REQUIREMENTS.
C. REPORT UNSAFE OR UNSATISFACTORY CONDITIONS IN WRITING TO ARCHITECT AND RESOLVE ISSUES BEFORE PROCEEDING.
D. WORK INCLUDES ALL LABOR AND MATERIALS REQUIRED TO PROVIDE COMPLETE WORKING SYSTEMS.
E. COORDINATE PHASING REQUIREMENTS AT JOB MEETINGS AND ON WORK SCHEDULES.
F. DO NOT SCALE DRAWINGS. PIPING AND DUCTWORK ARE SHOWN DIAGRAMMATICALLY. IT IS NOT POSSIBLE TO SHOW EVERY TRANSITION, FITTING, ASPECT RATIO CHANGE, ETC..; PROVIDE AS REQUIRED TO FIT WITHIN STRUCTURAL CONSTRAINTS. EXAMINE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED AND VERIFY ALL ACCESS, LOCATIONS, DIMENSIONS, ARRANGEMENTS, ELECTRICAL CHARACTERISTICS AND INTERFERENCE IN THE FIELD PRIOR TO BID.
G. VERIFY EXTENT OF CEILING WORK SHOWN ELSEWHERE IN THE CONTRACT DOCUMENTS. PROVIDE FOR ADDITIONAL CEILING SYSTEM REMOVAL, PROTECTION, AND REINSTALLATION AS REQUIRED FOR CONTRACT WORK.
H. DEMOLITION DRAWINGS SHOW THE GENERAL SCOPE OF ITEMS AND SYSTEMS TO BE REMOVED. IT IS NOT THE INTENT TO SHOW ALL ITEMS TO BE REMOVED. FIELD VERIFY AND REMOVE ALL ASSOCIATED ITEMS BACK TO POINT OF CONTINUED SERVICE, UNLESS OTHERWISE NOTED. VERIFY WHAT ALL EQUIPMENT SERVES PRIOR TO REMOVAL.
I. GIVE ALL REMOVED EQUIPMENT TO THE OWNER. DELIVER ON SITE WHERE DESIGNATED BY THE OWNER. PROMPTLY REMOVE FROM THE SITE AND LEGALLY DISPOSE OF ANY SUCH ITEMS DECLINED BY OWNER.
J. IF UNANTICIPATED MECHANICAL, ELECTRICAL, OR STRUCTURAL CONFLICTS ARE ENCOUNTERED, INVESTIGATE AND REPORT BOTH NATURE AND EXTENT OF THE CONFLICT. RE-ROUTE WORK AS REQUIRED.
K. CUT, DRILL, OR OTHERWISE CREATE OPENINGS AS NEATLY AS POSSIBLE, AS REQUIRED FOR THE INDICATED CONTRACT WORK. PROVIDE SUPPORT AS REQUIRED FOR AND USE METHODS LEAST LIKELY TO DAMAGE ELEMENTS TO REMAIN. PRIOR TO WORK, VERIFY LOCATIONS OF ALL STRUCTURAL MEMBERS INCLUDING CROSS BRACING, ELECTRICAL WIRING, PLUMBING, ETC. PROMPTLY NOTIFY ARCHITECT OF ANY CONFLICTS. DO NOT CUT ANY STRUCTURAL MEMBERS OR OTHER SERVICES UNTIL SPECIFICALLY DIRECTED TO DO SO. PENDING RECEIPT OF DIRECTIVE, REARRANGE SCHEDULE AS NECESSARY TO CONTINUE OVERALL JOB PROGRESS WITHOUT DELAY.
L. PATCH ALL DISTURBANCES RESULTING FROM DEMOLITION OR NEW WORK TO MATCH SURROUNDING SURFACES. PATCH FOLLOWING DEMOLITION, AND AGAIN FOLLOWING WORK, WHERE HOLES REMAIN FROM REMOVALS, INFILL AND PATCH TO MATCH UNLESS HOLE IS TO BE REUSED.
M. PROTECT ALL CONTRACT EQUIPMENT, ELEMENTS TO REMAIN, OWNER'S BELONGINGS, AND EQUIPMENT TO BE REUSED OR RETAINED BY OWNER DURING ALL CONTRACT WORK. AT NO ADDITIONAL COST TO OWNER, REPAIR OR REPLACE ITEMS WHICH ARE DAMAGED.
N. THOROUGHLY CLEAN FOLLOWING DEMOLITION AND BEFORE BEGINNING CONTRACT INSTALLATIONS. THOROUGHLY CLEAN AGAIN DURING AND FOLLOWING CONTRACT WORK AS REQUIRED. LEAVE ALL WORK AREAS CLEANER THAN FOUND. LEGALLY DISPOSE OF ALL CONSTRUCTION DEBRIS.
O. PROVIDE TEMPORARY PIPING, DUCT, HEAT, WEATHERPROOFING, ETC. TO SERVICES TO REMAIN UNTIL PERMANENT INSTALLATIONS CAN BE MADE.
P. ALL EXCESS MATERIALS AND SCRAPS ARE CONTRACTOR'S PROPERTY. PROMPTLY REMOVE FROM SITE UNLESS SPECIFICALLY DIRECTED OTHERWISE.
Q. EXISTING HVAC COMPONENTS IN THIS BUILDING MAY CONTAIN, BE IN PROXIMITY TO, OR, WORK ON THEM MAY CAUSE DISTURBANCE OF, ASBESTOS CONTAINING OR OTHER HAZARDOUS MATERIALS. REFER TO ABATEMENT SERIES DRAWINGS AND SPECIFICATIONS COMPLETE FOR ADDITIONAL INFORMATION. PROVIDE FOR RE-INSULATION AS SPECIFIED FOR ALL EXISTING TO REMAIN HVAC COMPONENTS WHERE INSULATION IS REMOVED AS A PART OF ABATEMENT WORK.
R. SEAL ALL FLOOR, WALL AND CEILING PENETRATIONS PER FIRE-RESISTANCE RATINGS, NOTED ON DG-SERIES DRAWINGS, BUT NOT LESS THAN 1-HOUR, AND IN ACCORDANCE WITH SECTION 07 84 13 - PENETRATION FIRESTOPPING. THIS INCLUDES ALL NEW PENETRATIONS AND EXISTING UNFIRESTOPPED PENETRATIONS CREATED BY REMOVALS, AS REQUIRED TO PERFORM THE WORK.



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Rev. No.:	Date:	Description:

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BID SET

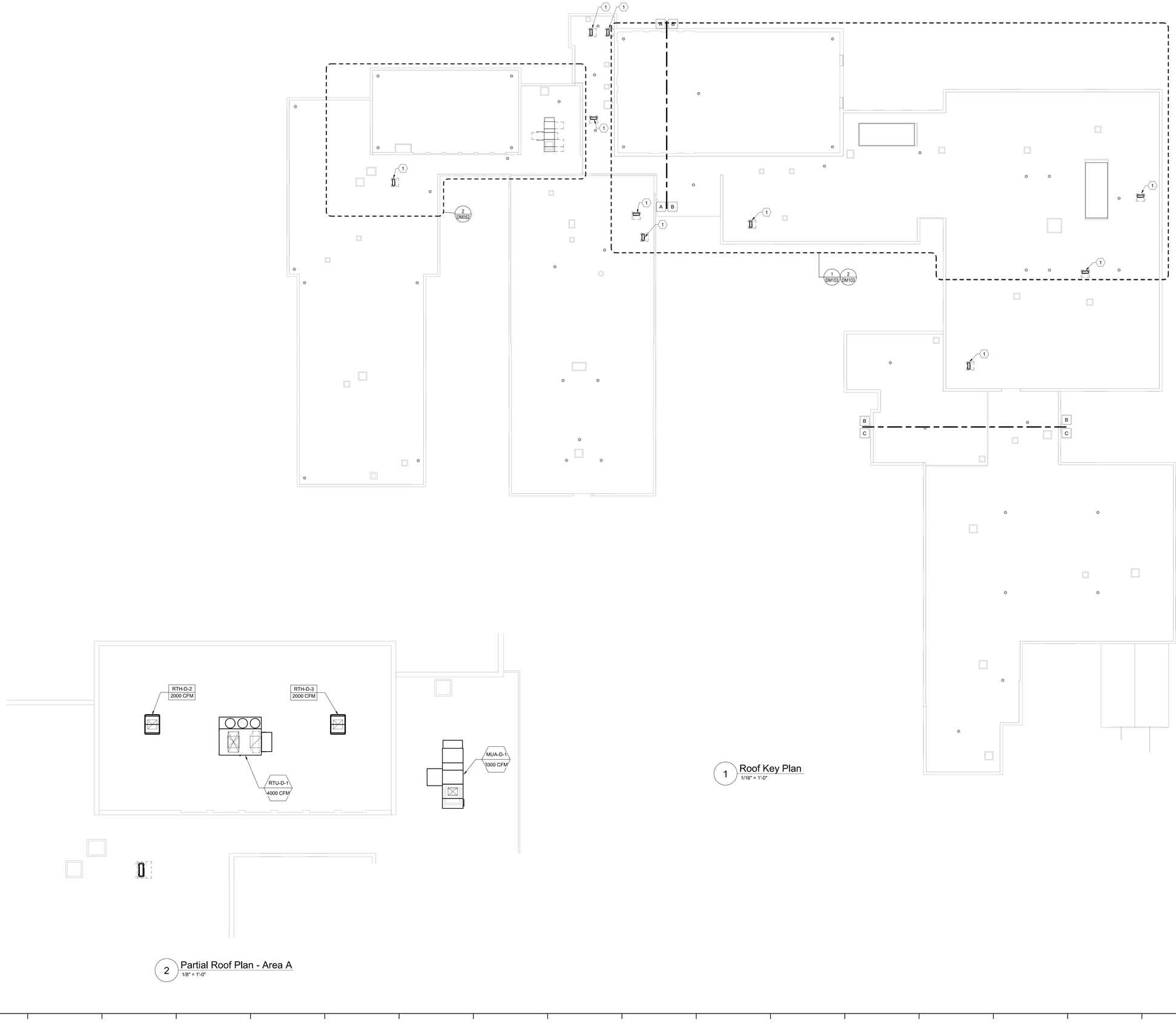
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

First Floor Key Plan

Drawn By:	Date:	Drawing Number:
JPF/pgm	11/4/2022	DM051
Project No.: 17597-22001		



1 Roof Key Plan
1/16" = 1'-0"

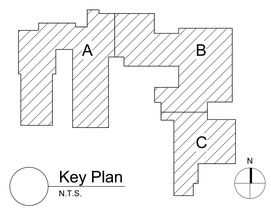
2 Partial Roof Plan - Area A
1/8" = 1'-0"

General Notes

A. REFER TO DM051 FOR GENERAL NOTES.

KEYED NOTES

1. TEMPORARILY REMOVE CONDENSING UNIT AND STORE FOR REUSE. EVACUATE ALL REFRIGERANT PRIOR TO REMOVAL. DISCONNECT AND REMOVE REFRIGERANT TUBING AS REQUIRED UNTIL COMPLETION OF ROOFING WORK. PROVIDE NON-PENETRATING ROOF STRUT SUPPORT SYSTEM FOR RCU INSTALLATION (REFER TO RCU MOUNTING DETAIL). REINSTALL CONDENSING UNIT ON SUPPORT SYSTEM AND EXTEND REFRIGERANT TUBING AND POWER WIRING TO UNIT. MATCH REFRIGERANT TUBING SIZES AND FULLY CHARGE UNIT WITH NEW REFRIGERANT. INSULATE REFRIGERANT TUBING. COORDINATE WITH ROOFING WORK.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

complex world | CLEAR SOLUTIONS

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

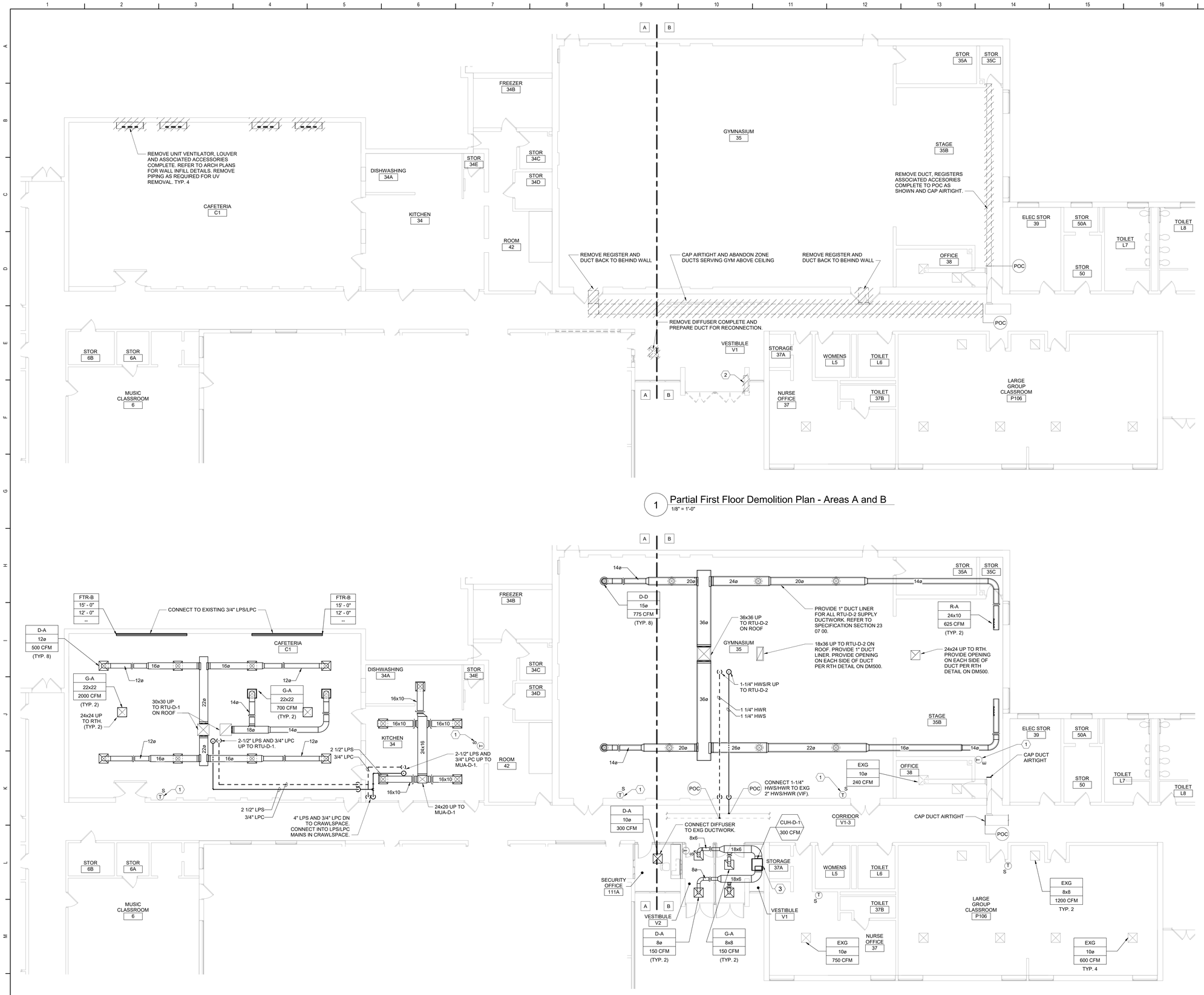
TETRA TECH
ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Roof Key Plan and Partial Area A Plan

Drawn By:	Date:	Drawing Number:
JPF/pgm	11/4/2022	DM052
Project No.: 17597-22001		



1 Partial First Floor Demolition Plan - Areas A and B
1/8" = 1'-0"

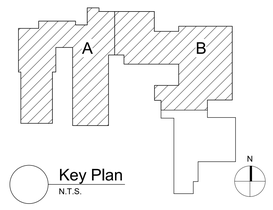
2 Partial First Floor Plan - Areas A and B
1/8" = 1'-0"

General Notes

A. REFER TO DM051 FOR GENERAL NOTES.

Keyed Notes

1. PROVIDE WALL MOUNTED TEMPERATURE SENSOR FOR ZONE CONTROL.
2. REMOVE CABINET UNIT HEATER AND ALL ASSOCIATED ACCESSORIES COMPLETE. PREPARE PIPING FOR RECONNECTION.
3. EXTEND 3/4" HWS/HWR AS REQUIRED TO MAKE CONNECTION TO CUH-D-1. MOUNT CUH TO ALLOW EASY FILTER ACCESS.



S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

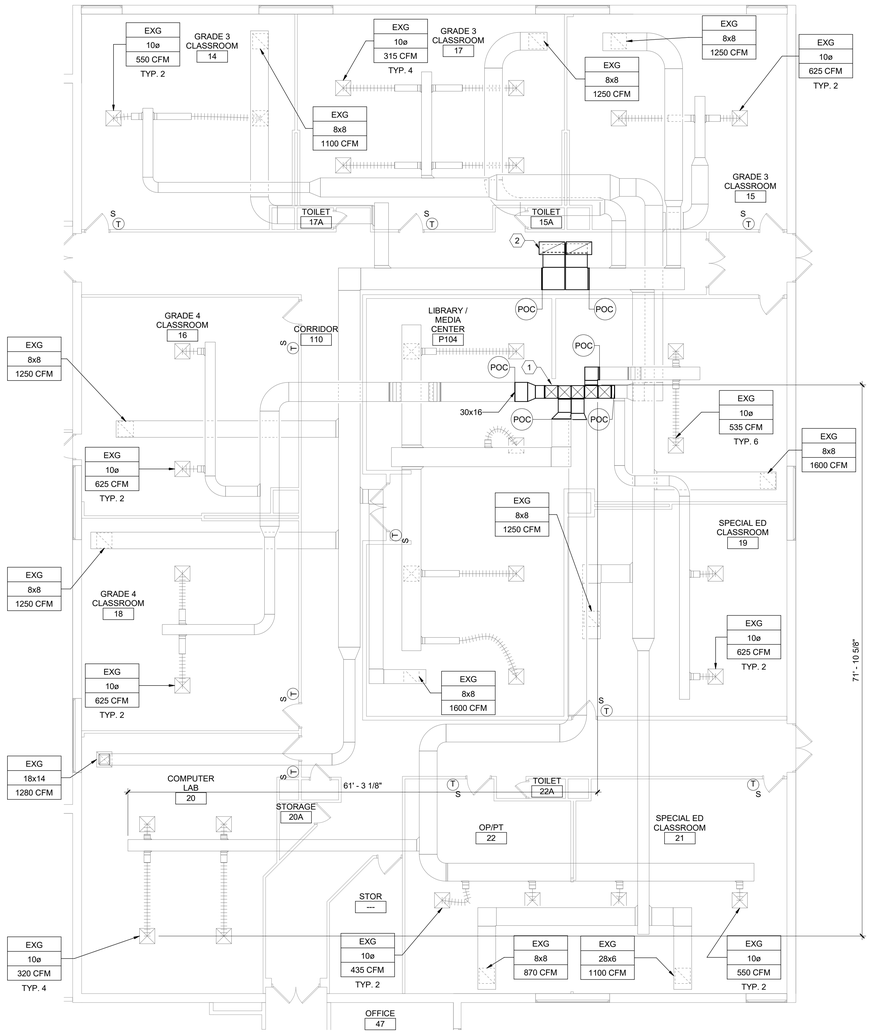
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

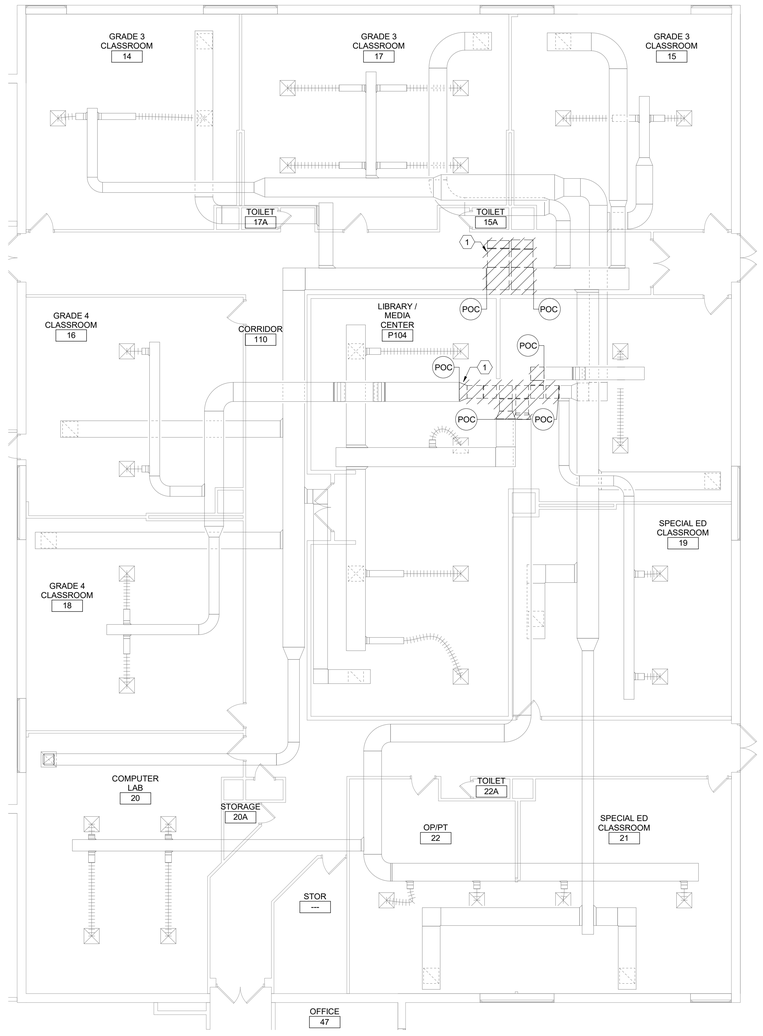
Reconstruction to:
Plattekill Elementary School

Partial First Floor Plans Areas A and B

Drawn By:	Date:	Drawing Number:
JPF1/pgm	11/4/2022	DM101
Project No.: 17597-22001		



2 Partial First Floor Plan - Area B
1/8" = 1'-0"



1 Partial First Floor Demolition Plan - Area B
1/8" = 1'-0"

General Notes

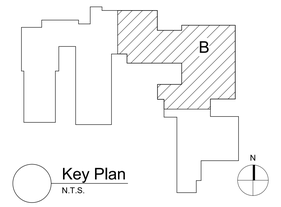
A. REFER TO DM051 FOR GENERAL NOTES.

KEYED DEMOLITION NOTES

1. REMOVE DUCTWORK AND ASSOCIATED ACCESSORIES TO POC AS SHOWN. PREPARE FOR RECONNECTION.

KEYED NOTES

1. 20x20 UP TO RTU-D-4. TYP. 5. TRANSITION AS REQUIRED TO MAKE CONNECTION TO UNIT.
2. 40x20 UP TO RTU-D-4. TYP. 2. TRANSITION AS REQUIRED TO MAKE CONNECTION TO UNIT.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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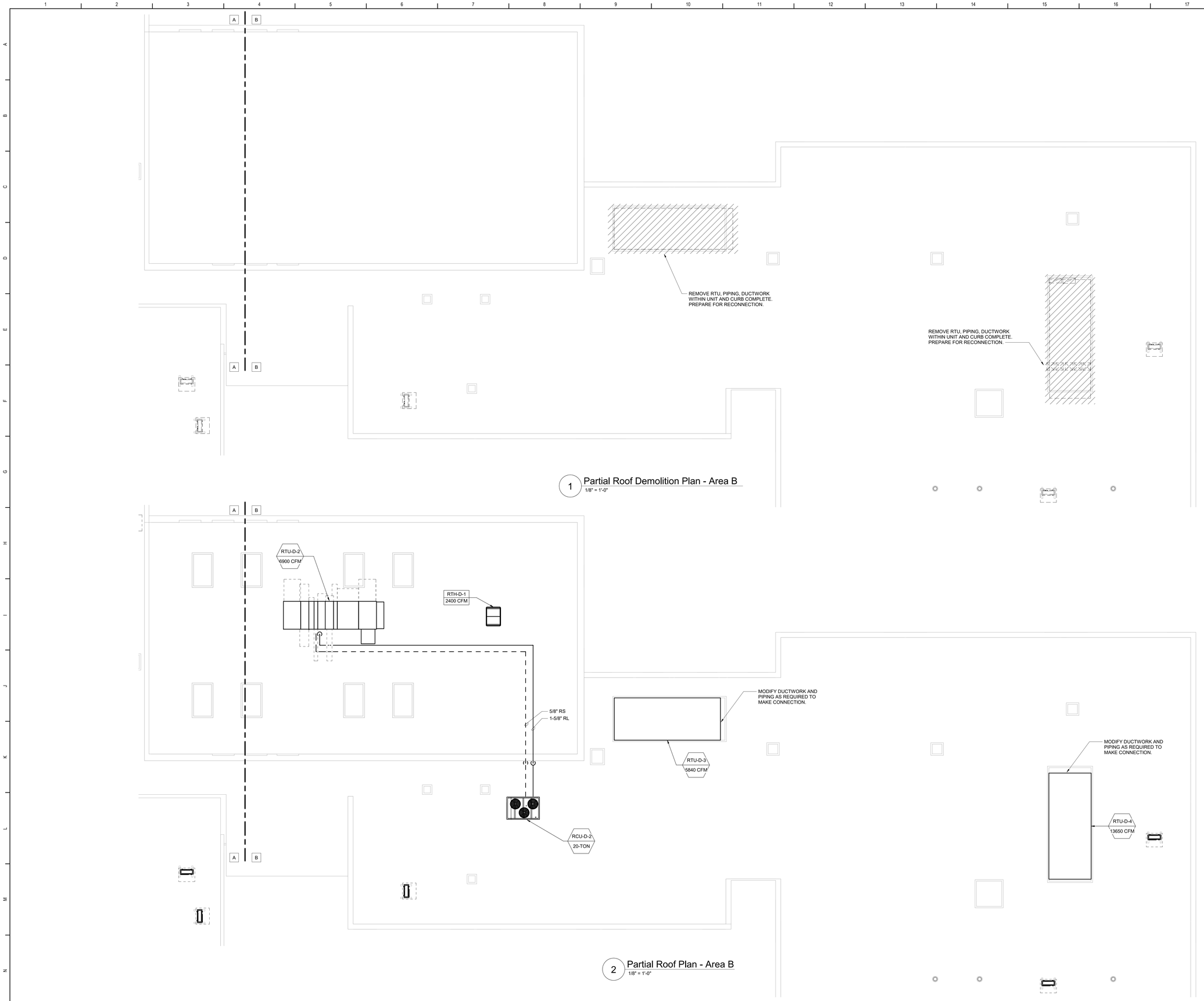
TETRA TECH
ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Partial First Floor Plans - Area B

Drawn By:	Date:	Drawing Number:
JPF1/pgm	11/4/2022	DM102
Project No.: 17597-22001		

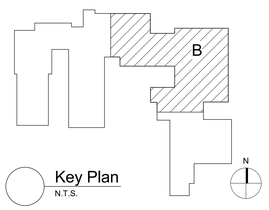


1 Partial Roof Demolition Plan - Area B
1/8" = 1'-0"

2 Partial Roof Plan - Area B
1/8" = 1'-0"

General Notes

A. REFER TO DM051 FOR GENERAL NOTES.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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TETRA TECH ARCHITECTS & ENGINEERS

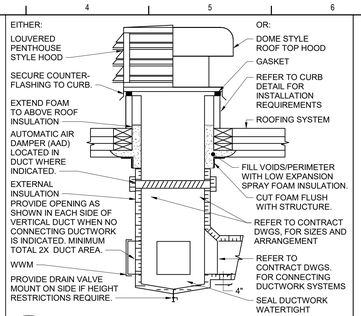
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Partial Roof Plans - Area B

Drawn By:	Date:	Drawing Number:
JPF1/pgm	11/4/2022	DM103

Project No.:
17597-22001

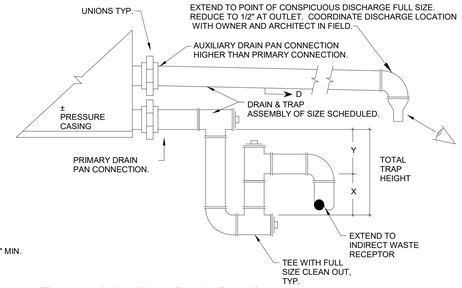


17 Roof Top Hood Detail
NTS

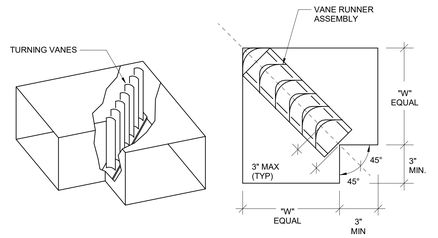
COIL CAPACITY	TRAP SIZE NPS
0-3 TON	3/4"
3-10 TON	1"
10-100 TON	1 1/4"
OVER 100	1 1/2"

NOTE:
1. "X" MUST BE 1-1/2" PLUS CASING STATIC PRESSURE; MINIMUM 2"
2. "Y" MUST BE 1-1/2" MINUS CASING STATIC PRESSURE; MINIMUM 2"

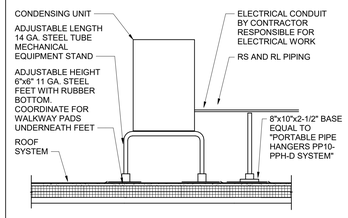
EXAMPLE: CASING At (-1") Wg.
X = 1-1/2" + (-1) = 1/2"; USE 2" MIN.
Y = 1-1/2" - (-1) = 2-1/2""



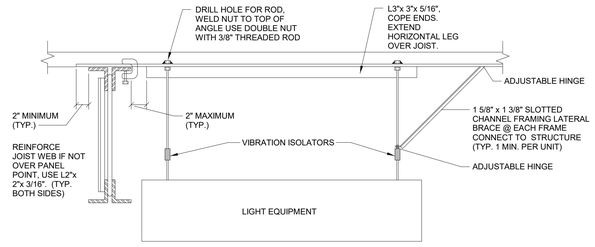
9 Drain Pan / AC Condensate Trap and Auxiliary Drain Detail
NTS



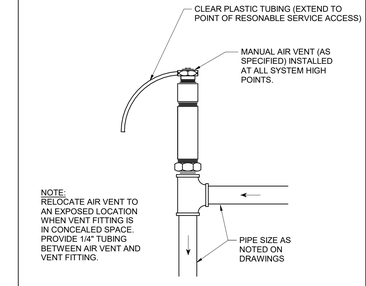
1 Duct Turning Vanes
NTS



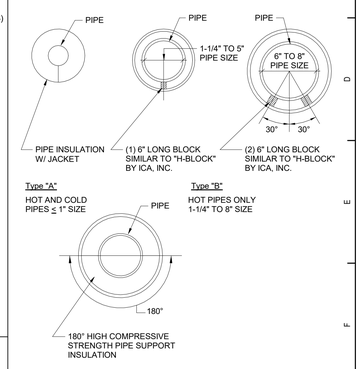
18 RCU Mounting Detail
NTS



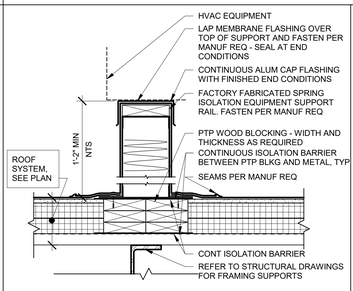
10 Light Equipment Hanging Detail
12" = 1'-0"



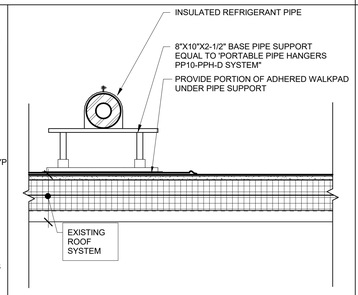
5 Manual Air Vent
NTS



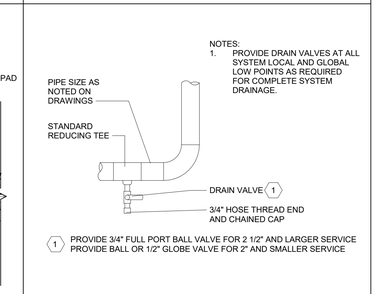
2 Insulation Shield and Blocking Detail
NTS



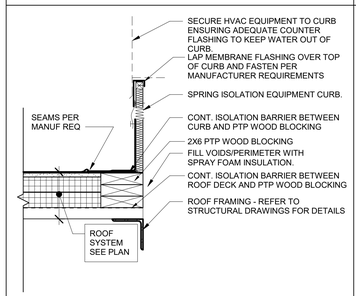
14 Equipment Support Rail Detail
NTS



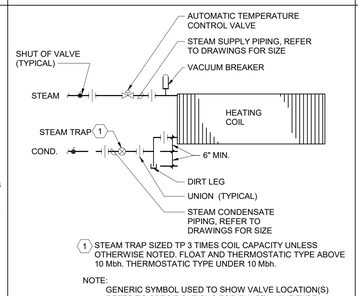
11 Pipe Support Detail
NTS



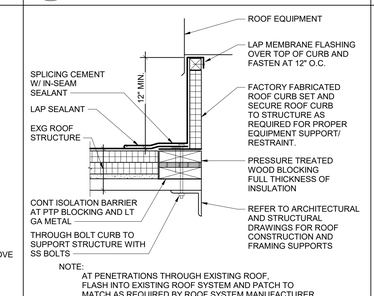
6 Low Point Drain Detail
NTS



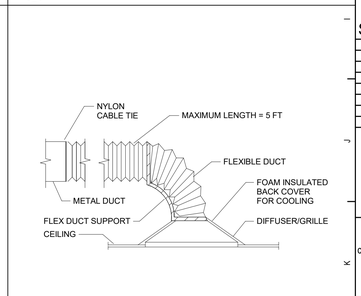
15 Equipment Curb Detail
NTS



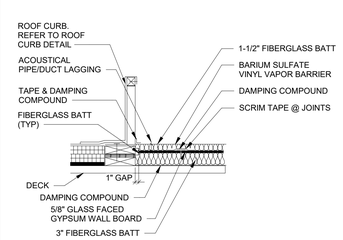
12 MUA/RTU Steam Piping Schematic
NTS



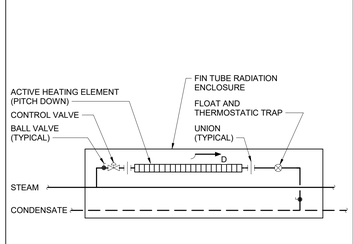
7 Roof Curb Detail
NTS



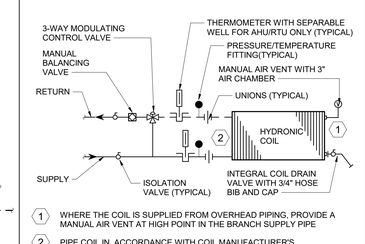
3 Ceiling Diffuser/Grille With Flex Duct
NTS



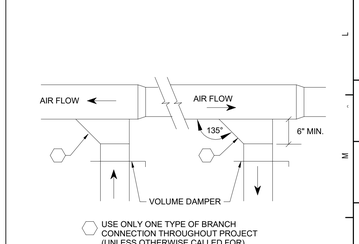
16 Acoustically Lined Roof Curb Detail
NTS



13 Steam Fin Tube Radiation Piping Schematic (Valve Control)
NTS



8 Hydronic Coil Piping Schematic
NTS



4 Duct Detail
NTS

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Details

Drawn By:	Date:	Drawing Number:
JPF1/pgm	11/4/2022	DM500
Project No.: 17597-22001		

ROOFTOP UNIT (RTU) SCHEDULE

EQUIPMENT FURNISHED BY OWNER, INSTALLED BY MECHANICAL CONTRACTOR

DWG LABEL	LOCATION	SERVES	DESIGN MAKE: TRANE	SUPPLY FAN									EXHAUST FAN (QTY=2)								ELECTRICAL CONNECTION				COOLING DATA								HEATING DATA						OPER. WEIGHT	NOTES
				SUPPLY AIR (CFM)	EVENT MODE OA (CFM)	CLASSROOM OA (CFM)	FAN ARR	ESP (in-wg)	TSP (in-wg)	RPM	VFD FREQ.	HP	EXHAUST AIR (CFM)	MIN. EXHAUST (CFM)	FAN ARR	ESP (in-wg)	TSP (in-wg)	RPM	VFD FREQ.	HP	V/PH	FLA	MCA	MOCP	ROWS	EDB (°F)	EWB (°F)	LDB (°F)	LWB (°F)	CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	APD (in-wg)	ROWS	EAT (°F)	LAT (°F)	CAPACITY (MBH)	APD (in-wg)	EWT (°F)	LWT (°F)	GPM	WPD (FT HD)		
RTU-D-2	ROOF - AREA B	GYM 35, STAGE 35B	CSAA017	6900	4670	1700	20" DD PLENUM	0.75	3.81	2180	74	7.5	4670	1700	15" DD PLENUM	0.50	2.76	2272	77	2	208/3	45 A	52 A	70 A	4	77.1	65.5	56.1	53.8	246	160	0.62	2	54.9	85.0	226	0.18	160.0	103.5	8	0.4	6230 lb	1-14

NOTES:
1. GASKETED ACCESS DOORS AND MODULAR SECTIONS WITH DOUBLE WALLED 2" R-13 GALVANIZED STEEL PANELS WITH THERMAL BREAK.
2. COILS SHALL HAVE SAME SIDE CONNECTION UNLESS OTHERWISE INDICATED. PROVIDE FULL SECTION HEIGHT 24" DEEP PIPE CABINET.
3. PROVIDE UV-C LIGHT DOWNSTREAM OF COOLING COIL (TO MAINTAIN CLEAN COIL) WITH SEPARATE 120V/1PH POWER (FLA=1.5A).
4. PROVIDE 2" MERV8 PRE-FILTER PRIOR TO ENERGY WHEEL (BOTH DIRECTIONS) AND MERV13 FILTERS BEFORE COILS.
5. PROVIDE 120V/1PH (FLA=8A) GFI SERVICE OUTLET FOR SEPARATE POWER.
6. PROVIDE HIGH EFFICIENCY ENERGY WHEEL WITH RETURN AIR RECIRCULATION AND BYPASS DAMPERS.
   A. VENTILATION: 4700 CFM, PD: 0.6 in-wg
      a. SUMMER= EDB:84.2°F, EWB:75.0°F, LDB: 77.3°F, LWB: 68.1°F, 70.8% TOTAL EFFECTIVENESS
      b. WINTER= EDB:7.0°F, EWB:3.0°F, LDB: 49.2°F, LWB: 35.7°F, 73.3% TOTAL EFFECTIVENESS
   B. EXHAUST: 4700 CFM, ENTERING SUMMER: 75.0°F/65.0°F, ENTERING WINTER: 65.0°F/45.0°F, PD: 0.6 in-wg
7. PROVIDE INTERLACED CIRCUIT COOLING COIL.
8. PROVIDE SPRING ISOLATED 14" ROOF CURB. PROVIDE ACOUSTICALLY LINED ROOF CURB PER DETAIL.
9. PROVIDE EXTERIOR TOGGLE SWITCH AND DOOR LIMIT SWITCH FOR UV-C LIGHT.
10. PROVIDE H-O-A SWITCH AND STARTER FOR ENERGY WHEEL.
11. PROVIDE 22" ELECTRICAL/CONTROLS SECTION FOR FAN VFDs.
12. PROVIDE SINGLE POINT POWER CONNECTION FOR FAN VFDs AND ENERGY WHEEL.
13. PROVIDE FACTORY-INSTALLED SUPPLY AND EXHAUST FAN VFDs.
14. PROVIDE NEMA 3R UNIT DISCONNECT SWITCH.

REMOTE CONDENSING UNIT (RCU) SCHEDULE

EQUIPMENT FURNISHED BY OWNER, INSTALLED BY MECHANICAL CONTRACTOR

DWG LABEL	LOCATION	SERVES	DESIGN MAKE: TRANE	NOMINAL CAPACITY	COOLING CAPACITY (MBH)	R410A TEMPERATURES		AMBIENT TEMPERATURE	EER	NO. OF COMP/ CAPACITY	NO. OF CIRCUITS	ELECTRICAL DATA - 208V/3PH				OPER. WEIGHT	NOTES
						LIQUID	SUCTION					MCA	MOP	RLA - COMP	NO. COMP.		
RCU-D-2	ROOF - AREA B	RTU-D-2	RAUJ	20 Tons	246	120.5 °F	40.0 °F	95.0	11.7	(2) 10-TON	1	102 A	125 A	41 A	2	1872	1-4

NOTES:
1. FIELD CHARGE REFRIGERANT FOR SUPPLY LINE, CONDENSER AND COILS.
2. PROVIDE EQUIPMENT STARTER AND NEMA 3R DISCONNECT.
3. VERIFY LINE SIZES WITH MANUFACTURER.
4. PROVIDE 14" SPRING ISOLATION SUPPORT RAILS.

MAKE-UP AIR (MUA) UNIT SCHEDULE

EQUIPMENT FURNISHED BY OWNER, INSTALLED BY MECHANICAL CONTRACTOR

DWG LABEL	LOCATION	SERVES	DESIGN MAKE: TRANE MODEL:	SUPPLY FAN				ELECTRICAL DATA				HEATING DATA					NOTES
				SUPPLY/OUTSIDE AIRFLOW	ESP (in wg)	RPM	HP	VOLT/PH	FLA	MCA	MOP	EAT	LAT	CAPACITY (MBH)	STEAM PRESS.	OPERATING WEIGHT (LB)	
MUA-D-1	ROOF - AREA A	KITCHEN 34	CSAA008	3300	0.5	2056	3	208/3	15 A	19 A	30 A	8.7	75.0	237	3 psi	2180	1-3

NOTES:
1. PROVIDE 120V GFCI SERVICE OUTLET.
2. PROVIDE 24" ROOF CURB.
3. PROVIDE UNIT DISCONNECT, FACTORY INSTALLED VFD AND TEFC MOTOR.

CABINET UNIT HEATER (CUH) SCHEDULE

EQUIPMENT FURNISHED BY OWNER, INSTALLED BY MECHANICAL CONTRACTOR

DWG LABEL	LOCATION	MODEL NO.	SA CFM	HEATING DATA				HW COIL		SUPPLY FAN		ELECTRICAL					NOTES
				NO. ROW	EAT (°F)	LAT (°F)	CAP. (MBH)	GPM	WPD (FT HD)	ESP (IN. WG.)	RPM	MOTOR SIZE (HP)	V/PH	FLA	MCA	MOP	
CUH-D-1	VESTIBULE V2	FFCB030	300	2	60.0	113.9	17.5	1.0	3	0.50	776	0.02	120V/1ø	2.2	2.8	15	1-6

NOTES:
1. DESIGN BASIS: TRANE
2. VERTICAL CABINET
3. PROVIDE 1" MERV 6 FILTER
4. PROVIDE NEMA 1 DISCONNECT SWITCH.
5. PROVIDE STAMPED LOUVER INLETS AND OUTLETS.
6. VERIFY PIPE AND ELECTRICAL LEFT/RIGHT HAND CONNECTIONS PRIOR TO ORDERING.

PACKAGED ROOFTOP UNIT (RTU) SCHEDULE

EQUIPMENT FURNISHED BY OWNER, INSTALLED BY MECHANICAL CONTRACTOR

DWG LABEL	LOCATION	SERVES	DESIGN MAKE: VALENT	SUPPLY FAN				HEATING DATA				COOLING DATA									ELECTRICAL DATA				OPER. WEIGHT (LB)	NOTES
				SUPPLY (CFM)	MIN. OA (CFM)	ESP (IN-WG)	BHP	HP	EAT (°F)	LAT (°F)	PRESSURE	CAP. (MBH)	EDB (°F)	EWB (°F)	LDB (°F)	LWB (°F)	TC (MBH)	SC (MBH)	HOT GAS REHEAT (°F)	COMPRESSOR	EER	VOLT	PH	MCA	MOP		
RTU-D-1	ROOF - AREA A	CAFETERIA C1	VX-212-151-2-A0	4000	2600	0.5	1.5	3.0	28.4	86.0	3.0 psi	249.3	83.5	70.1	55.1	54.8	199.0	125.0	77.7 °F	INVERTER SCROLL	11.2	208 V	3	65 A	80 A	3335	1-7

NOTES:
1. GASKETED ACCESS DOORS AND MODULAR SECTIONS WITH DOUBLE WALLED 2" R-13 GALVANIZED STEEL PANELS WITH THERMAL BREAK.
2. COILS SHALL HAVE SAME SIDE CONNECTION UNLESS OTHERWISE INDICATED. PROVIDE FULL SECTION HEIGHT 24" DEEP PIPE CABINET.
3. PROVIDE SINGLE POINT CONNECTION AND NEMA-3R H-O-A NON-FUSED DISCONNECT SWITCH.
4. PROVIDE 2" MERV8 PRE-FILTER AND MERV13 FINAL FILTERS BEFORE COILS.
5. PROVIDE SPRING ISOLATED 14" ROOF CURB. PROVIDE ACOUSTICALLY LINED ROOF CURB PER DETAIL.
6. PROVIDE 120V/1PH (FLA=8A) GFI SERVICE OUTLET FOR SEPARATE POWER.
7. PROVIDE 22" ELECTRICAL/CONTROLS SECTION FOR SUPPLY FAN VFD.

MULTIZONE ROOFTOP UNIT (RTU) SCHEDULE

EQUIPMENT FURNISHED BY OWNER, INSTALLED BY MECHANICAL CONTRACTOR

DWG LABEL	UNIT LOCATION	SERVES	DESIGN MAKE:	SUPPLY FAN								RETURN FAN						ELECTRICAL DATA			WEIGHT (LBS)	OA ENERGY RECOVERY DATA					RA ENERGY RECOVERY DATA				ENERGY RECOVERY EFFICIENCY WINTER	HEATING DATA					HOT WATER COIL				NOTES
				FAN ARR.	SA (CFM)	MIN. OA (CFM)	DISCH. ARR.	ESP (IN WG)	RPM	BHP	HP	FAN ARR.	RA (CFM)	ESP (IN WC)	RPM	BHP	HP	V/PH	MCA	MOP		OA (CFM)	WINTER EDB (°F)	WINTER EWB (°F)	WINTER LDB (°F)	WINTER LWB (°F)	RA (CFM)	WINTER EDB (°F)	WINTER EWB (°F)	WINTER LDB (°F)	WINTER LWB (°F)		NO. ROWS	EAT (°F)	LAT (°F)	MBH	APD (IN WG)	EWT (°F)	LWT (°F)	GPM	WPD (FT HD)	
RTU-D-3	ROOF - AREA B	AREA B - 37, 38, 42, 111A, V1-3, P106	SEASONS 4	24" AF SWSI PLENUM	5840	1690	MULTI-ZONE	0.75	1814	5.6	7.5	20" AF SWSI PLENUM	5840	0.75	1761	3.3	5	208/3	53	70	7050	1690	7.0	3.0	37.5	30.5	1690	68.0	51.5	37.5	31.7	48.6	2	48.7	81.4	206.4	0.34	160.0	95.2	6.5	2.2	1-7,9-12
RTU-D-4	ROOF - AREA B	AREA B - P104, 14-22	SEASONS 4	27" AF SWSI PLENUM	13650	5300	MULTI-ZONE	0.75	1804	14.7	20.0	27" AF SWSI PLENUM	13650	0.75	1433	8.1	10	208/3	108	150	9650	5300	7.0	3.0	27.4	22.6	5300	68.0	51.5	47.6	38.9	32.6	3	43.1	83.0	588.4	0.56	160.0	74.2	14	4.0	1-8,10-12

NOTES:
1. GASKETED ACCESS DOORS AND MODULAR SECTIONS WITH DOUBLE WALLED 2" R-13 GALVANIZED STEEL PANELS WITH THERMAL BREAK.
2. PROVIDE ELECTRICAL/CONTROLS SECTION FOR UNIT DISCONNECT SWITCH, WHEEL H-O-A SWITCH, CONTROLS AND SUPPLY AND RETURN FAN VFD.
3. PROVIDE 2" MERV9 PRE-FILTER PRIOR TO ENERGY WHEEL (BOTH DIRECTIONS) AND MERV14 FILTERS BEFORE SUPPLY FAN. ALL FILTER FACE VELOCITIES <300 FPM.
4. COILS SHALL HAVE SAME SIDE CONNECTION UNLESS OTHERWISE INDICATED.
5. PROVIDE SINGLE POINT CONNECTION AND NEMA-4 DISCONNECT SWITCH.
6. FIELD VERIFY AND MATCH EXISTING ROOF CURB OUTER DIMENSIONS (~10'-2" W x 25'-6" L).
7. PROVIDE 120V/1PH (FLA=8A) GFI SERVICE OUTLET ON LINE SIDE OF DISCONNECT.
8. PROVIDE THREE-DECK MULTIZONE SECTION FOR FIVE ZONES.
9. PROVIDE THREE-DECK MULTIZONE SECTION FOR FOUR ZONES.
10. PROVIDE SPACE FOR FUTURE COOLING COIL.
11. REUSE EXISTING CURB. INSTALL PER DETAIL.
12. PROVIDE FACTORY-INSTALLED ACTUATORS FOR MULTIZONE DAMPERS.

ROOFTOP HOOD (RTH) SCHEDULE

DWG LABEL	SERVES	MODEL NO.	TYPE	CFM	VENT SIZE (IN x IN)	HOOD SIZE (IN x IN)	HOOD HEIGHT (IN)	CURB HEIGHT (IN)	FREE AREA (S.F.)	VELOCITY (FPM)	SP (IN WG)	HOOD FINISH	NOTES
RTH-D-1	GYM 35	24x24GR	RELIEF	2400	24x24	51x39	17.25	14	4.00	600	0.07	KYNAR	1, 2, 3
RTH-D-2	CAFETERIA C1	24x24GR	RELIEF	2000	24x24	51x39	17.25	14	4.00	500	0.04	KYNAR	1, 2, 3
RTH-D-3	CAFETERIA C1	24x24GR	RELIEF	2000	24x24	51x39	17.25	14	4.00	500	0.04	KYNAR	1, 2, 3

NOTES:
1. DESIGN BASIS: LOREN COOK
2. PROVIDE 14" CURB FOR RELIEF.
3. PROVIDE MOTORIZED AUTOMATIC AIR DAMPER (AAD) AND ACTUATOR BELOW ROOF STRUCTURE.

PLATTEKILL BUILDING/EQUIPMENT VENTILATION CALCULATIONS

EQUIPMENT NUMBER	ZONE ID				MINIMUM VENTILATION RATES							
	ROOM NUMBER	ROOM NAME	OCCUPANCY CLASSIFICATION	Az - AREA (SF)	Pz - ZONE OCCU. #/1000 FT	ZONE OCCU.	Rp (CFM/ Person)	RpP	Ra (CFM/SF)	RaA	Vbz (CFM)	EZ	Voz (CFM)
RTU-D-1	7	CAFETERIA	Cafeteria/fast-food dining	2221	100	223	7.5	1673	0.18	400	2072	0.8	2590

NOTES:
Rp = PEOPLE OUTDOOR AIR RATE, Ra = AREA OUTDOOR AIR RATE, Vbz = BREATHING ZONE OUTDOOR AIRFLOW ,
Ez = AIR DISTRIBUTION CONFIGURATION, Voz = ZONE OUTDOOR AIRFLOW

20% Voz = 20% OF THE ZONE OUTDOOR AIRFLOW
DCV Voz = GREATER OF RaA/EZ OR 20% Voz

PLATTEKILL BUILDING/EQUIPMENT VENTILATION CALCULATIONS

EQUIPMENT NUMBER	ZONE ID				MINIMUM VENTILATION RATES								DESIGN	
	ROOM NUMBER	ROOM NAME	OCCUPANCY CLASSIFICATION	Az - AREA (SF)	Pz - ZONE OCCU. #/1000 FT	ZONE OCCU.	Rp (CFM/ Person)	RpP	Ra (CFM/SF)	RaA	Vbz (CFM)	EZ	Voz (CFM)	Vpz (CFM)	Zp
RTU-D-4	14	GRADE 3 CLRM	Classrooms (age 9 plus)	767	35	27	10	270	0.12	92	362	0.8	460	1100	0.42
	17	GRADE 3 CLRM	Classrooms (age 9 plus)	911	35	32	10	320	0.12	109	429	0.8	540	1250	0.43
	15	GRADE 3 CLRM	Classrooms (age 9 plus)	792	35	28	10	280	0.12	95	375	0.8	470	1100	0.43
	P104	LIBRARY/MEDIA	Media center	2138	25	54	10	540	0.12	257	797	0.8	1000	3200	0.31
	19	SP. ED CLRM	Classrooms (age 9 plus)	778	35	28	10	280	0.12	93	373	0.8	470	1250	0.38
	16	GRADE 4 CLRM	Classrooms (age 9 plus)	790	35	28	10	280	0.12	95	375	0.8	470	1250	0.38
	18	GRADE 4 CLRM	Classrooms (age 9 plus)	780	35	28	10	280	0.12	94	374	0.8	470	1250	0.38
	20	COMPUTER LAB	Classrooms (age 9 plus)	852	35	30	10	300	0.12	102	402	0.8	510	1280	0.40
	21	SP. ED CLRM	Classrooms (age 9 plus)	773	35	28	10	280	0.12	93	373	0.8	470	1100	0.43
	22	OP/PT	Office space	579	5	3	5	15	0.06	35	50	0.8	70	870	0.08
RTU-D-3	111A	SECURITY OFFICE	Office space	100	5	1	5	5	0.06	6	11	0.8	20	150	0.13
	V1-3	CORRIDOR	Corridors	4495	0	0	0	0	0.06	270	270	0.8	340	1300	0.26
	42	ROOM	Kitchen (cooking)	346	20	7	8	53	0.12	42	94	0.8	120	1000	0.12
	P106	ARGE GROUP CLRM	Classrooms (age 9 plus)	1525	35	54	10	540	0.12	183	723	0.8	910	2400	0.38
	37	NURSE OFFICE	Office space	468	5	3	5	15	0.06	28	43	0.8	60	750	0.08
	38	P.E. OFFICE	Office space	162	5	1	5	5	0.06	10	15	0.8	20	240	0.08
RTU-D-2	35B	STAGE	Stages, studios	854	70	60	10	600	0.06	51	651	0.8	820	1230	0.67
	35	GYMNASIUM	Multiuse assembly	3783	100	377	7.5	2828	0.06	226	3053	0.8	3820	5670	0.67

NOTES:
Rp = PEOPLE OUTDOOR AIR RATE, Ra = AREA OUTDOOR AIR RATE, Vbz = BREATHING ZONE OUTDOOR AIRFLOW , Ez = AIR DISTRIBUTION CONFIGURATION, Voz = ZONE OUTDOOR AIRFLOW
Vpz = ZONE PRIMARY AIRFLOW, Zpz = PRIMARY OUTDOOR AIR FRACTION, Vps = SYSTEM PRIMARY AIRFLOW, Vot = OUTDOOR AIR INTAKE FLOW,
Vou = UNCORRECTED OUTDOOR AIR INTAKE, D = OCCUPANT DIVERSITY, Ev = SYSTEM VENTILATION EFFICIENCY

SYSTEM VALUES RTU-D-4			
Vps	13650	(UNCORRECTED OA) Vou	3909
(CORRECTED OA) Vot	**4575**	D	1.00
OA%	**34**	Ev	0.85
ADDITIONAL OA%	17		

SYSTEM VALUES RTU-D-3			
Vps	5840	(UNCORRECTED OA) Vou	1156
(CORRECTED OA) Vot	**1410**	D	1.00
OA%	**24**	Ev	0.82
ADDITIONAL OA%	22		

SYSTEM VALUES RTU-D-2			
Vps	6900	(UNCORRECTED OA) Vou	3705
(CORRECTED OA) Vot	**4290**	D	1.00
OA%	**62**	Ev	0.86
ADDITIONAL OA%	16		

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:
2	12/12/2022	SED Add No. 1

WALLKILL CENTRAL SCHOOL DISTRICT

complex world | CLEAR SOLUTIONS

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH ARCHITECTS & ENGINEERS

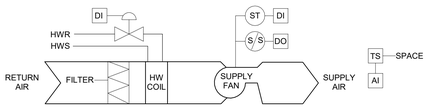
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Schedules

Drawn By:	Date:	Drawing Number:
JPF1/pgm	11/4/2022	DM600

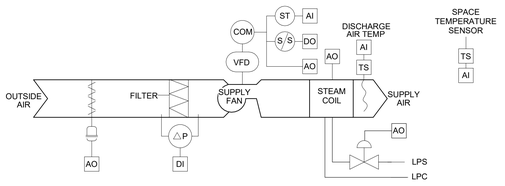
Project No.: 17597-22001



CABINET UNIT HEATER - HOT WATER - VALVE CONTROL - SEQUENCE OF OPERATIONS:

1. OCCUPIED MODE:
   a. ON DROP IN SPACE TEMPERATURE BELOW OCCUPIED HEATING SETPOINT, CYCLE THE FAN ON AND OPEN CONTROL VALVE FULL TO MAINTAIN SPACE OCCUPIED SETPOINT, FAN SHALL HAVE DELAYED SHUT OFF AFTER VALVE CLOSES. USE 5 DEG. F (ADJUSTABLE) DEADBAND TO MINIMIZE SHORT CYCLING.
2. UNOCCUPIED MODE:
   a. ON DROP IN SPACE TEMPERATURE BELOW UNOCCUPIED HEATING SETPOINT, CYCLE THE FAN ON AND OPEN CONTROL VALVE FULL TO MAINTAIN SPACE UNOCCUPIED SETPOINT, FAN SHALL HAVE A DELAYED SHUT OFF AFTER VALVE CLOSES. USE 5 DEG. F (ADJUSTABLE) DEADBAND TO MINIMIZE SHORT CYCLING.
3. SAFETIES:
   a. PROVIDE CURRENT SENSOR TO SENSE THE STATUS OF THE FANS. WHEN FAN MOTOR AMP DRAW IS OUT OF NORMAL RANGE, GENERATE AN ALARM AT THE OWS.

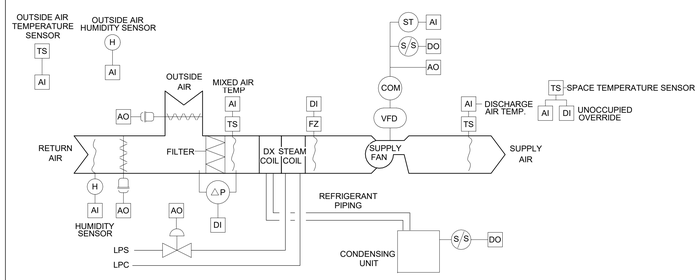
4 Cabinet Unit Heater - Hot Water - Valve Control
NTS



MAKE UP AIR UNIT - STEAM - SEQUENCE OF OPERATIONS:

1. OCCUPIED MODE:
   a. INTERLOCK MUA OPERATION WITH KITCHEN EXHAUST FAN.
   b. THE SUPPLY FAN SHALL RUN AT THE FREQUENCY DETERMINED BY THE BALANCING CONTRACTOR.
   c. OUTSIDE AIR DAMPER SHALL OPEN.
   d. WHEN THE SPACE TEMPERATURE DROPS 3 DEG. F (ADJ.) BELOW THE HEATING SET POINT (70 DEG. F. (ADJ.)), THE CONTROL VALVE SHALL MODULATE TO MAINTAIN SPACE HEATING SETPOINT SUBJECT TO DISCHARGE HIGH LIMIT OF 110 DEG F (ADJ.).
2. UNOCCUPIED MODE:
   a. THE SUPPLY FAN SHALL BE OFF.
   b. THE OUTSIDE AIR DAMPER SHALL BE FULLY CLOSED.
3. SAFETIES:
   a. DIFFERENTIAL PRESSURE ACROSS THE AIR FILTERS SHALL GENERATE AN ALARM WHENEVER THE DIFFERENTIAL PRESSURE EXCEEDS IT'S ADJUSTABLE SETPOINT.
   b. IF THE DISCHARGE AIR TEMPERATURE DROPS BELOW 35 DEG. F (ADJUSTABLE), THE SUPPLY FAN SHALL TURN OFF AND SHALL BE LOCKED OUT, THE CONTROL VALVE SHALL MODULATE FULLY OPEN, AND AN ALARM SHALL BE ACTIVATED.
   c. IF THE DISCHARGE AIR TEMPERATURE RISES ABOVE 120 DEG. F (ADJUSTABLE), THE CONTROL VALVE SHALL MODULATE CLOSED AND AN ALARM SHALL BE ACTIVATED.
   d. UPON FAILURE OF THE FAN, AS SENSED BY A CURRENT SENSING STATUS SWITCH, GENERATE AN ALARM AT THE OWS.

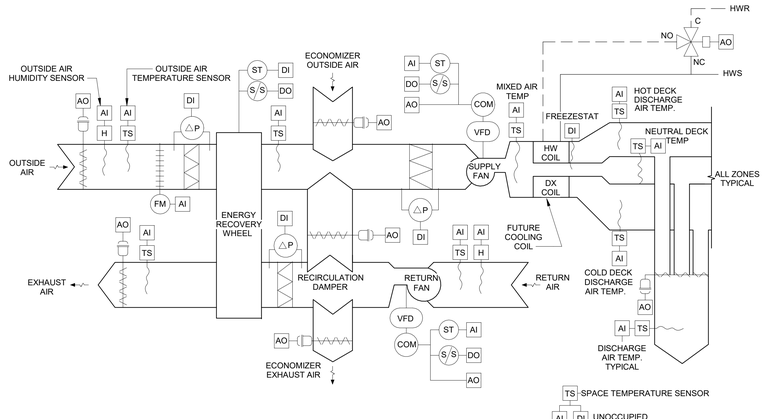
5 Make-Up Air Unit - Steam - MUA-D-1
NTS



AIR HANDLING UNIT - STEAM (VALVE CONTROL) AND DX COOLING - SEQUENCE OF OPERATIONS:

1. OCCUPIED MODE:
   a. SUPPLY FAN AND ASSOCIATED EXHAUST FANS SHALL RUN CONTINUOUSLY. THE SUPPLY FAN SHALL RUN AT THE FREQUENCY DETERMINED BY THE BALANCING CONTRACTOR.
   b. THE OUTSIDE AIR DAMPER SHALL OPEN TO THE POSITION REQUIRED TO MAINTAIN THE MINIMUM OUTSIDE AIR QUANTITY INDICATED. OUTSIDE AIR DAMPER SHALL NEVER BE POSITIONED BELOW THIS MINIMUM POSITION EXCEPT IN CASE OF ALARM.
   c. WHEN THE SPACE TEMPERATURE IS AT OR BELOW THE HEATING SETPOINT, THE HEATING CONTROL VALVE SHALL MODULATE TO MAINTAIN SPACE HEATING SETPOINT SUBJECT TO DISCHARGE HIGH LIMIT OF 110 DEG. F (ADJUSTABLE) AND DISCHARGE LOW LIMIT OF 70 DEG. F (ADJUSTABLE).
   d. WHEN THE SPACE TEMPERATURE RISES 3 DEG. F (ADJUSTABLE) ABOVE THE SPACE HEATING SETPOINT, AND THE OUTSIDE AIR ENTHALPY IS LOWER THAN THE SPACE ENTHALPY, THE OUTSIDE AIR DAMPER SHALL MODULATE OPEN AND THE ASSOCIATED RELIEF DAMPER SHALL OPEN TO MAINTAIN THE OCCUPIED SETPOINT. THIS SHALL BE DONE SUBJECT TO LOW LIMIT OF 55 DEG. F (ADJUSTABLE), AND WITH THE HEATING VALVE FULLY CLOSED.
   e. WHEN THE SPACE TEMPERATURE IS 3 DEG. F (ADJUSTABLE) ABOVE THE COOLING SETPOINT, AND THE OUTSIDE AIR CANNOT COOL THE SPACE, THE RESPECTIVE CONDENSING UNIT SHALL BE CYCLED TO MAINTAIN SPACE TEMPERATURE WITH THE HEATING VALVE FULLY CLOSED. USE 5 DEG. F (ADJUSTABLE) DEADBAND BETWEEN HEATING AND COOLING SETPOINTS.
2. UNOCCUPIED MODE:
   a. THE SUPPLY AND ASSOCIATED EXHAUST FAN SHALL BE OFF.
   b. THE OUTSIDE AIR DAMPER AND THE ASSOCIATED RELIEF DAMPER SHALL BE FULLY CLOSED.
   c. WHERE SPACE HAS FINNED TUBE RADIATION, RADIATION SHALL PROVIDE FIRST STAGE UNOCCUPIED HEATING.
   d. ON DROP IN SPACE TEMPERATURE BELOW THE UNOCCUPIED HEATING SETPOINT, CYCLE THE FAN ON AND COIL CONTROL VALVE FULL OPEN AS REQUIRED TO MAINTAIN REDUCED SPACE TEMPERATURE. USE 5 DEG. F (ADJUSTABLE) DEADBAND TO MINIMIZE SHORT CYCLING.
   e. WHEN THE SPACE TEMPERATURE RISES ABOVE THE UNOCCUPIED ECONOMIZER COOLING SETPOINT, ALLOW ECONOMIZER COOLING WITH THE HEATING VALVE FULLY CLOSED AND THE MECHANICAL COOLING DISABLED.
   f. A TIMED LOCAL OVERRIDE CONTROL SHALL ALLOW AN OCCUPANT TO OVERRIDE THE SCHEDULE AND PLACE THE UNIT INTO OCCUPIED MODE FOR 1 HOUR (ADJUSTABLE). AT EXPIRATION OF THIS TIME, CONTROL OF THE UNIT SHALL AUTOMATICALLY RETURN TO THE SCHEDULE.
3. WARM-UP MODE:
   a. THE UNIT SHALL START PER AN OPTIMUM START PROGRAM.
   b. THE OUTSIDE AIR DAMPER AND THE ASSOCIATED RELIEF DAMPER SHALL BE FULLY CLOSED, THE RETURN AIR DAMPER SHALL BE FULLY OPEN, AND THE ASSOCIATED EXHAUST FAN SHALL BE OFF.
   c. THE SUPPLY FAN SHALL RUN AND THE HEATING CONTROL VALVE SHALL MODULATE TO MAINTAIN OCCUPIED SETPOINT.
4. SAFETIES:
   a. DIFFERENTIAL PRESSURE ACROSS THE AIR FILTERS SHALL GENERATE AN ALARM WHENEVER THE DIFFERENTIAL PRESSURE EXCEEDS IT'S ADJUSTABLE SETPOINT.
   b. A SEPARATE LOW LIMIT FREEZE STAT WITH AUTOMATIC RESET SHALL BE INSTALLED WITH SENSING ELEMENT SERPENTINED ACROSS THE FACE OF THE COIL; WHENEVER FREEZE-UP CONDITIONS ARISE (36 DEG. F ADJUSTABLE) THE SUPPLY FAN SHALL STOP, THE OUTSIDE AIR DAMPER SHALL CLOSE 100%, THE HEATING CONTROL VALVE SHALL OPEN 100% AND AN ALARM SHALL BE ACTIVATED.

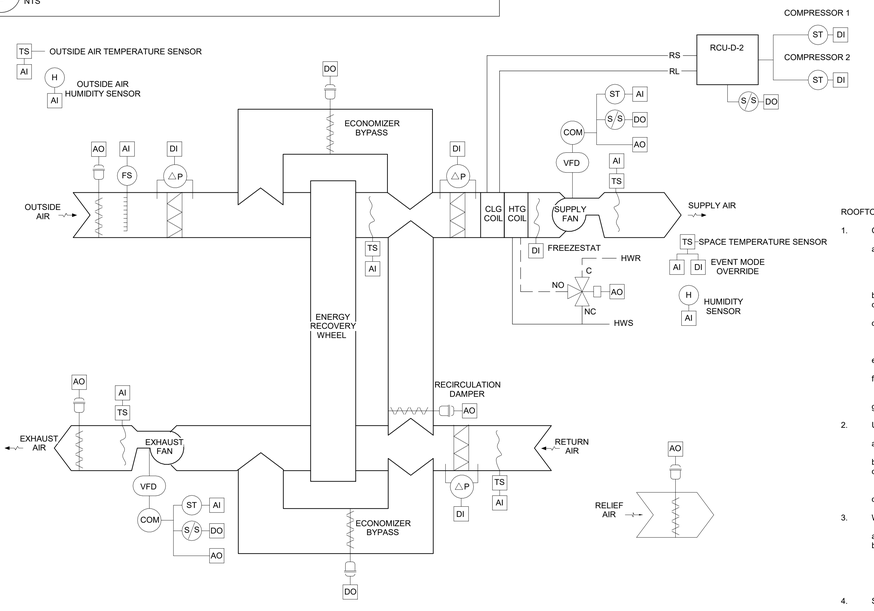
3 RTU - Steam - Valve Control and DX Cooling - RTU-D-1
NTS



MULTI-ZONE UNIT - HOT WATER (3-WAY VALVE CONTROL) W/ENERGY RECOVERY - SEQUENCE OF OPERATIONS:

1. GENERAL:
   a. PROVIDE WALL MOUNTED TEMPERATURE SENSORS MOUNTED IN CONTROLLED SPACES IN APPROPRIATE LOCATIONS AS REQUIRED TO MAINTAIN PROPER CONTROL. SHOW INDIVIDUAL AND AVERAGED DATA ON GRAPHIC.
2. OCCUPIED PERIOD:
   a. SUPPLY FAN AND RETURN FAN SHALL RUN CONTINUOUSLY. THE SUPPLY FAN SHALL RUN AT THE FREQUENCY DETERMINED BY THE BALANCING CONTRACTOR.
   b. THE OUTSIDE AIR DAMPER SHALL OPEN TO THE POSITION REQUIRED TO MAINTAIN THE MINIMUM OUTSIDE AIR QUANTITY INDICATED. OUTSIDE AIR DAMPER SHALL NEVER BE POSITIONED BELOW THIS MINIMUM POSITION EXCEPT IN CASE OF ALARM, RUN THE ENERGY RECOVERY WHEEL.
   c. MAINTAIN SPACE TEMPERATURE HEATING (68°F ADJ.) AND MAXIMUM AVERAGE RETURN AIR RELATIVE HUMIDITY SETPOINT OF 60% (ADJ.). ALL SETPOINTS SHALL BE ADJUSTABLE AT THE OWS, WITH BIAS ADJUSTMENTS FOR INDIVIDUAL PREFERENCES IN THE RESPECTIVE ZONE THERMOSTATS.
   d. HEATING: MODULATE THE HEATING CONTROL VALVE AS REQUIRED TO MAINTAIN OUTDOOR AIR RESET OF HOT DECK TEMPERATURE. VARY HOT DECK TEMPERATURE INVERSELY WITH OUTDOOR AIR TEMPERATURE FROM 70 DEG. F (ADJ.) TO 90 DEG. F (ADJ.), AS THE OUTDOOR AIR TEMPERATURE VARIES FROM 55 DEG. F (ADJ.) TO 10 DEG. F (ADJ.). ABOVE AND BELOW THESE OUTDOOR TEMPERATURES THE HOT DECK TEMPERATURE SHALL REMAIN CONSTANT AS POSSIBLE WITHIN EQUIPMENT RESTRAINTS. MODULATE INDIVIDUAL ZONE BLADES TO MIX HOT AND COLD (NEUTRAL) DECK AIR AS REQUIRED TO MAINTAIN SMOOTH TEMPERATURE CONTROL OF DISCHARGE AIR TEMPERATURE AND ZONE SETPOINTS. ADJUST RESET SCHEDULE DURING THE FIRST YEAR OF OPERATION TO MINIMIZE BOTH ENERGY USE AND "NO-HEAT" COMPLAINTS.
   e. ECONOMIZER MODE:
      A. PROVIDE ENTHALPY BASED ECONOMIZER COOLING PRIOR TO USING MECHANICAL COOLING. REFER TO GENERAL SPECIFICATION ENTHALPY ECONOMIZER CONTROLS FOR MORE DETAILS.
      B. FIRST STAGE ECONOMIZER COOLING: TURN OFF THE ENERGY RECOVERY WHEEL.
      C. SECOND STAGE OF ECONOMIZER COOLING: MODULATE THE ECONOMIZER (OUTSIDE AND EXHAUST AIR) DAMPERS OPEN AS REQUIRED, WHILE MAINTAINING AT MINIMUM 55°F RTU NEUTRAL DECK TEMPERATURE.
      D. MODULATE INDIVIDUAL ZONE BLADES BETWEEN HOT AND NEUTRAL DECKS, AND BETWEEN COLD AND NEUTRAL DECKS, AS REQUIRED TO MAINTAIN SMOOTH TEMPERATURE CONTROL OF DISCHARGE AIR TEMPERATURE AND ZONE SETPOINTS.
3. UNOCCUPIED PERIOD:
   a. THERE SHALL BE NO MINIMUM OUTSIDE AIR REQUIREMENT DURING THE UNOCCUPIED PERIOD; CONTROL THE OUTSIDE AIR AND EXHAUST AIR DAMPERS TO BE SHUT DURING HEATING OPERATION, AND THE RECIRCULATION DAMPERS TO BE 100% OPEN. MODULATE THE OUTSIDE AIR AND EXHAUST AIR DAMPERS OPEN, AND THE RECIRCULATION DAMPER CLOSED, AS REQUIRED TO MAINTAIN THE UNOCCUPIED PERIOD ECONOMIZER COOLING SET POINT.
   b. RUN THE SUPPLY AND EXHAUST FANS INTERMITTENTLY AT REDUCED CFM AS REQUIRED TO MAINTAIN A REDUCED SPACE TEMPERATURE HEATING SET-POINT (INITIALLY 65°F). THE FANS TO BE OFF WHEN THE SPACE IS WITHIN THE SET-POINT DEAD-BAND (ADJ.), AND CONTINUOUSLY MODULATE THE SPEED OF THE SUPPLY AND EXHAUST FAN VARIABLE SPEED DRIVES AS A FUNCTION OF THE DEVIATION FROM THE SETPOINTS AS REQUIRED, PROPORTIONAL TO THE LARGEST PERCENTAGE OPEN POSITION OF THE HEATING VALVE OR THE OUTSIDE AIR DAMPER. ALL SET-POINTS SHALL BE ADJUSTABLE AT THE OWS.
   c. ON CALL FOR HEAT, MODULATE THE HEATING CONTROL VALVE AS REQUIRED TO MAINTAIN OUTDOOR AIR RESET OF HOT DECK TEMPERATURE, HOTTER THAN DURING THE OCCUPIED PERIOD TO MINIMIZE RUNTIME. VARY HOT DECK TEMPERATURE INVERSELY WITH OUTDOOR AIR TEMPERATURE FROM 80 DEG. F (ADJ.) TO 100 DEG. F (ADJ.), AS THE OUTDOOR AIR TEMPERATURE VARIES FROM 55 DEG. F (ADJ.) TO 10 DEG. F (ADJ.). ABOVE AND BELOW THESE OUTDOOR TEMPERATURES THE HOT DECK TEMPERATURE SHALL REMAIN CONSTANT AS POSSIBLE WITHIN EQUIPMENT RESTRAINTS. ADJUST RESET SCHEDULE AND DEADBAND AS REQUIRED DURING THE FIRST YEAR OF OPERATION TO MINIMIZE ENERGY USE, SHORT CYCLING, AND MAINTAIN SPACE TEMPERATURE HEATING SETPOINTS.
   d. MODULATE THE ZONE BLADES AS REQUIRED TO ACHIEVE SETPOINT RAPIDLY WITHOUT OVERHEATING INDIVIDUAL SPACES.
   e. WHEN THERE IS ASSOCIATED FIN TUBE RADIATION SERVING THE SAME SPACE, PROVIDE SEPARATE LOWER SET-POINT FOR AIR HANDLER SO FANS OPERATE ONLY WHEN FIN TUBE IS NOT MAINTAINING SET-POINT.
   f. WHEN THE OUTSIDE AIR TEMPERATURE 36°F OR LOWER AND THE FANS ARE OFF, OPEN THE CONTROL VALVE TO COIL TO PREVENT FREEZE-UP. PROPORTIONALLY OPEN THE CONTROL VALVE TO COIL AS THE OUTDOOR AIR TEMPERATURE VARIES, FROM 20% (ADJ.) AT 36 DEG. F (ADJ.) TO 50% (ADJ.) AT 0 DEG. F (ADJ.).
4. WARM-UP PERIOD:
   a. WARMUP MODE SHALL BE USED BETWEEN UNOCCUPIED AND OCCUPIED MODES.
   b. THE CHANGE FROM UNOCCUPIED TO WARMUP MODES SHALL BE PART OF THE STAGGERED START SCHEDULE.
   c. ON INITIATION OF WARMUP MODE, RUN THE SUPPLY AND EXHAUST FANS CONTINUOUSLY AND MODULATE THE ZONE BLADES AND HEATING CONTROL VALVE,AS REQUIRED TO ACHIEVE AND MAINTAIN THE OCCUPIED PERIOD TEMPERATURE SET POINT.
   d. MAINTAIN THE OUTSIDE, EXHAUST AND RECIRCULATION AIR DAMPERS IN THE UNOCCUPIED POSITION UNTIL MORNING WARM-UP OR COOL DOWN HAS BEEN ACCOMPLISHED, THEN SLOWLY MODULATE DAMPERS TO THEIR PROPER OCCUPIED MODE POSITION. AVOID SUDDEN TEMPERATURE SWINGS AND ACTIVATION OF THE LOW TEMPERATURE LIMIT. TIMING OF WARMUP MODE SHALL INSURE AT LEAST ONE FULL AIR CHANGE "PURGE" BEFORE THE BEGINNING OF THE OCCUPIED PERIOD SCHEDULED.
5. SAFETIES:
   a. PROVIDE FILTER DIFFERENTIAL PRESSURE SWITCHES ACROSS EACH FILTER BANK; ALARM THE OWS WHEN THE FILTERS (AND WHICH FILTER BANK) EXCEED THEIR DIFFERENTIAL PRESSURE LIMIT.
   b. SENSE THE STATUS OF THE FAN VIA FEEDBACK FROM VSD. WHEN THE SPEED COMMAND AND FEEDBACK STATUS DO NOT AGREE, GENERATE AN ALARM AT THE OWS.
   c. PROVIDE COIL FREEZE PROTECTION VIA ANALOG TEMPERATURE SENSOR AT EXPECTED FREEZE LOCATION, AND "LOWEST FOOT" STYLE MANUAL RESET FREEZESTAT. WHENEVER FREEZE-UP CONDITIONS ARISE (36 DEG. F ADJUSTABLE) STOP THE SUPPLY FAN, FULLY CLOSE THE OUTSIDE AIR DAMPER, POSITION THE HEATING THREE-WAY CONTROL VALVE FULLY OPEN TO COIL AND ACTIVATE ALARM.
   d. FIRE ALARM SHUTDOWN.
   e. HOT DECK HIGH TEMP ALARM
   f. HOT DECK LOW TEMP ALARM

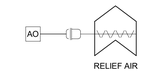
1 Multi-Zone Rooftop Unit - RTU-D-3
NTS



ROOFTOP UNIT - HOT WATER (3-WAY VALVE CONTROL) AND DX COOLING W/ENERGY RECOVERY - SEQUENCE OF OPERATIONS:

1. OCCUPIED MODE:
   a. SUPPLY FAN AND EXHAUST FAN SHALL RUN CONTINUOUSLY. MODULATE THE FAN VARIABLE FREQUENCY DRIVE AS REQUIRED TO MAINTAIN REQUIRED MINIMUM VENTILATION, HEATING SETPOINT OF 70°F (ADJ.) AND COOLING SETPOINT OF 75°F (ADJ.). MODULATE THE SPEED OF THE SUPPLY FAN VARIABLE FREQUENCY DRIVE AS A FUNCTION OF THE DEVIATION FROM THE SETPOINTS AS REQUIRED, PROPORTIONAL TO THE LARGEST PERCENTAGE OPEN POSITION OF THE HEATING COIL VALVE OR OUTSIDE AIR DAMPER. MODULATE THE SPEED OF THE EXHAUST FAN VARIABLE FREQUENCY DRIVE PROPORTIONALLY WITH THE OUTSIDE AIR REQUIREMENT. ALL TEMPERATURE SETPOINTS ARE TO BE ADJUSTABLE AT THE OWS. RUN SUPPLY FAN AT THE (FULL AIRFLOW) FREQUENCY DETERMINED BY THE BALANCING CONTRACTOR FOR MECHANICAL COOLING.
   b. OPERATE THE ENERGY RECOVERY WHEEL. WHEEL ENERGY ECONOMIZER BYPASS DAMPERS SHALL BE CLOSED.
   c. DETERMINE THE FLOW RATE OF OUTSIDE AIR BY DIRECT MEASUREMENT OF AIRFLOW RATE VIA AIR FLOW MEASURING DEVICES LOCATED AT THE INTAKE TO THE RTU. REFER TO SECTION 23 09 00 FOR DETAILS OF DESIGN MAKE FLOW SENSORS. CALIBRATE THESE SENSORS WITH THE BALANCING CONTRACTOR AND MANUFACTURER AS PART OF SYSTEM COMMISSIONING WORK.
   d. PROVIDE TWO DISTINCT OCCUPANCY MODES: CLASS AND EVENT MODES. MODULATE THE RETURN AND OUTSIDE AIR DAMPERS TO THE POSITION REQUIRED TO MAINTAIN THE MINIMUM OUTSIDE AIR QUANTITY AS SCHEDULED FOR EACH MODE. NEVER POSITION DAMPERS BELOW THESE MINIMUM FLOWRATES DURING OCCUPANCY EXCEPT IN CASE OF ALARM. PROVIDE FOR EVENT MODE / CLASS MODE SCHEDULING AND TOGGLING AT THE OWS. PROVIDE PUSH BUTTON IN SPACE TO OVERRIDE (ANY) MODE TO EVENT MODE FOR A PERIOD OF ONE HOUR. NEVER POSITION THE OUTSIDE AIR DAMPER BELOW THIS MINIMUM POSITION DURING THE OCCUPANCY CYCLE EXCEPT IN CASE OF ALARM.
   e. WHEN THE SPACE TEMPERATURE IS AT OR BELOW THE HEATING SETPOINT, MODULATE THE HEATING HOT WATER THREE WAY CONTROL VALVE AS REQUIRED TO MEET THE HEATING TEMPERATURE SETPOINT.
   f. PROVIDE ENTHALPY BASED ECONOMIZER COOLING. PROVIDE MODULATING ACTUATORS FOR RELIEF DAMPERS; MODULATE OPEN FROM CLOSED AT MINIMUM OUTSIDE AIR TO FULLY OPEN AT 100% OUTSIDE AIR ECONOMIZER; OPEN THE ENERGY WHEEL ECONOMIZER BYPASS DAMPERS. WHEN ECONOMIZER COOLING CANNOT MAINTAIN THE SPACE COOLING REQUIREMENTS, ENABLE MECHANICAL COOLING.
   g. OPERATE MECHANICAL COOLING SYSTEM AT LOWEST CAPACITY REQUIRED TO MEET THE COOLING TEMPERATURE SETPOINT.
2. UNOCCUPIED MODE:
   a. THE ENERGY RECOVERY WHEEL AND EXHAUST FAN SHALL BE OFF. OUTSIDE AIR, EXHAUST AIR AND ENERGY WHEEL ECONOMIZER BYPASS DAMPERS SHALL BE CLOSED. RECIRCULATION DAMPER SHALL BE OPEN.
   b. IN HEATING MODE, MODULATE THE SUPPLY FAN SPEED AND HOT WATER COIL VALVE AS REQUIRED TO MAINTAIN SPACE TEMPERATURE SETPOINT 65°F (ADJ.).
   c. IN COOLING MODE, DISALLOW THE MECHANICAL COOLING SYSTEM BUT PROVIDE ECONOMIZER COOLING. ON CALL FOR COOLING, OPEN THE OUTSIDE AIR, EXHAUST AIR, ENERGY WHEEL ECONOMIZER BYPASS AND (RTH) RELIEF AIR DAMPERS, CLOSE THE RECIRCULATION DAMPER AND ENABLE THE SUPPLY AND EXHAUST FANS. RUN FANS AT THE SPEED REQUIRED TO MAINTAIN THE COOLING TEMPERATURE SETPOINT. WHEN UNOCCUPIED COOLING SETPOINT IS REACHED, DISABLE THE FANS AND CLOSE THE DAMPERS.
   d. WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 34 DEG. F (ADJ.), POSITION THE HEATING THREE-WAY CONTROL VALVE 100% (ADJ.) OPEN TO COIL.
3. WARM-UP MODE:
   a. THE UNIT SHALL START PER AN OPTIMUM START PROGRAM.
   b. RUN THE SUPPLY FAN CONTINUOUSLY AT FULL SPEED (60 HZ.), AND MODULATE THE HEATING VALVE, ECONOMIZER COOLING OR MECHANICAL COOLING AS REQUIRED TO MAINTAIN TEMPERATURE SETPOINTS AT THE OCCUPIED LEVEL. MAINTAIN THE OUTSIDE AIR, (RTH) RELIEF AIR, SUPPLY AIR, ENERGY WHEEL ECONOMIZER BYPASS AND RECIRCULATION AIR DAMPERS IN THE UNOCCUPIED POSITION. EXHAUST FAN AND ENERGY WHEEL OFF UNTIL MORNING WARM-UP (COOL DOWN) HAS BEEN ACCOMPLISHED. WHEN MORNING WARM-UP HAS BEEN ACCOMPLISHED, SLOWLY MODULATE DAMPERS TO THEIR PROPER OCCUPIED MODE POSITION. AVOID SUDDEN TEMPERATURE SWINGS AND ACTIVATION OF THE LOW TEMPERATURE LIMIT. TIMING OF WARMUP MODE SHALL INSURE AT LEAST ONE FULL AIR CHANGE "PURGE" BEFORE THE BEGINNING OF THE OCCUPIED PERIOD SCHEDULED.
4. SAFETIES:
   a. PROVIDE FILTER DIFFERENTIAL PRESSURE SWITCHES ACROSS EACH FILTER BANK; ALARM THE OWS WHEN THE FILTERS (AND WHICH FILTER BANK) EXCEED THEIR DIFFERENTIAL PRESSURE LIMIT.
   b. SENSE THE STATUS OF THE FAN VIA FEEDBACK FROM VSD. WHEN THE SPEED COMMAND AND FEEDBACK STATUS DO NOT AGREE, GENERATE AN ALARM AT THE OWS.
   c. SENSE THE STATUS OF THE RCU VIA STATUS SENSORS ACROSS COMPRESSORS. WHEN THE RCU COMMAND AND COMPRESSOR STATUS DO NOT AGREE, GENERATE AN ALARM AT THE OWS.
   d. PROVIDE COIL FREEZE PROTECTION VIA ANALOG TEMPERATURE SENSOR AT EXPECTED FREEZE LOCATION, AND "LOWEST FOOT" STYLE MANUAL RESET FREEZESTAT. WHENEVER FREEZE-UP CONDITIONS ARISE (36 DEG. F ADJUSTABLE) STOP THE SUPPLY AND EXHAUST FANS, FULLY CLOSE THE OUTSIDE AIR AND EXHAUST AIR DAMPERS, FULLY OPEN THE RECIRCULATION DAMPER, POSITION THE HEATING THREE-WAY CONTROL VALVE FULLY OPEN TO COIL AND ACTIVATE ALARM.
   e. FIRE ALARM SHUTDOWN.

6 Rooftop Unit - Hot Water/DX Cooling - 3-Way Valve Control W/ERW - RTU-D-2
12" = 1'-0"



ROOF TOP HOOD - RELIEF - SEQUENCE OF OPERATIONS:

1. INTERLOCK THE OPERATION OF THE ROOFTOP HOODS WITH THEIR ASSOCIATED HEATING AND/OR COOLING EQUIPMENT.
2. OCCUPIED MODE:
   a. WHERE SPACE HAS AN EXHAUST FAN, AUTOMATIC AIR DAMPER SHALL REMAIN CLOSED UNITL THE OUTSIDE AIR DAMPER ON ASSOCAITED HEATING AND/OR COOLING EQUIPMENT OPENS PAST ITS MINIMUM POSITION. ONCE OPEN, INTERLOCK THE DAMPER WITH THE OUTSIDE AIR DAMPER.
   b. WHERE THERE IS NO EXHAUST FAN, MODULATE THE AUTOMATIC AIR DAMPER OPEN AS THE ASSOCIATED HEATING AND/OR COOLING EQUIPMENT OUTSIDE AIR DAMPER MODULATES OPEN.
3. UNOCCUPIED MODE:
   a. AUTOMATIC AIR DAMPER SHALL BE CLOSED.
4. WARM-UP MODE:
   a. AUTOMATIC AIR DAMPER SHALL BE CLOSED.

2 Roof Top Hood - Relief
NTS

TEMPERATURE CONTROLS SYMBOLS LIST

AI	ANALOG IN
AO	ANALOG OUT
COM	COMMUNICATIONS PORT
CS	AIRBORNE CONTAMINANT SENSOR
DI	DIGITAL IN
	DAMPER MOTOR
DO	DIGITAL OUT
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM
F	FLOW (WATER/AIR)
FM	FLOW METER
FS	AIR FLOW SENSOR
FZ	FREEZE STAT
H	HUMIDITY SENSOR
HL	HIGH LIMIT
KWH	KILOWATT HOUR METER
LL	LOW LIMIT
M/S	MANUAL SWITCH STOP / START
P	PRESSURE SENSOR
ΔP	DIFFERENTIAL PRESSURE
PS	POSITION SENSOR
S/S	STOP / START
SD	SMOKE DETECTOR
ST	STATUS
START	STARTER
T	ADJUSTABLE THERMOSTAT
TS	TEMPERATURE SENSOR
VFD	VARIABLE FREQUENCY DRIVE
WS	WATER SENSOR
%	PERCENT
ES	END SWITCH
BS	BOILER SWITCH

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH ARCHITECTS & ENGINEERS

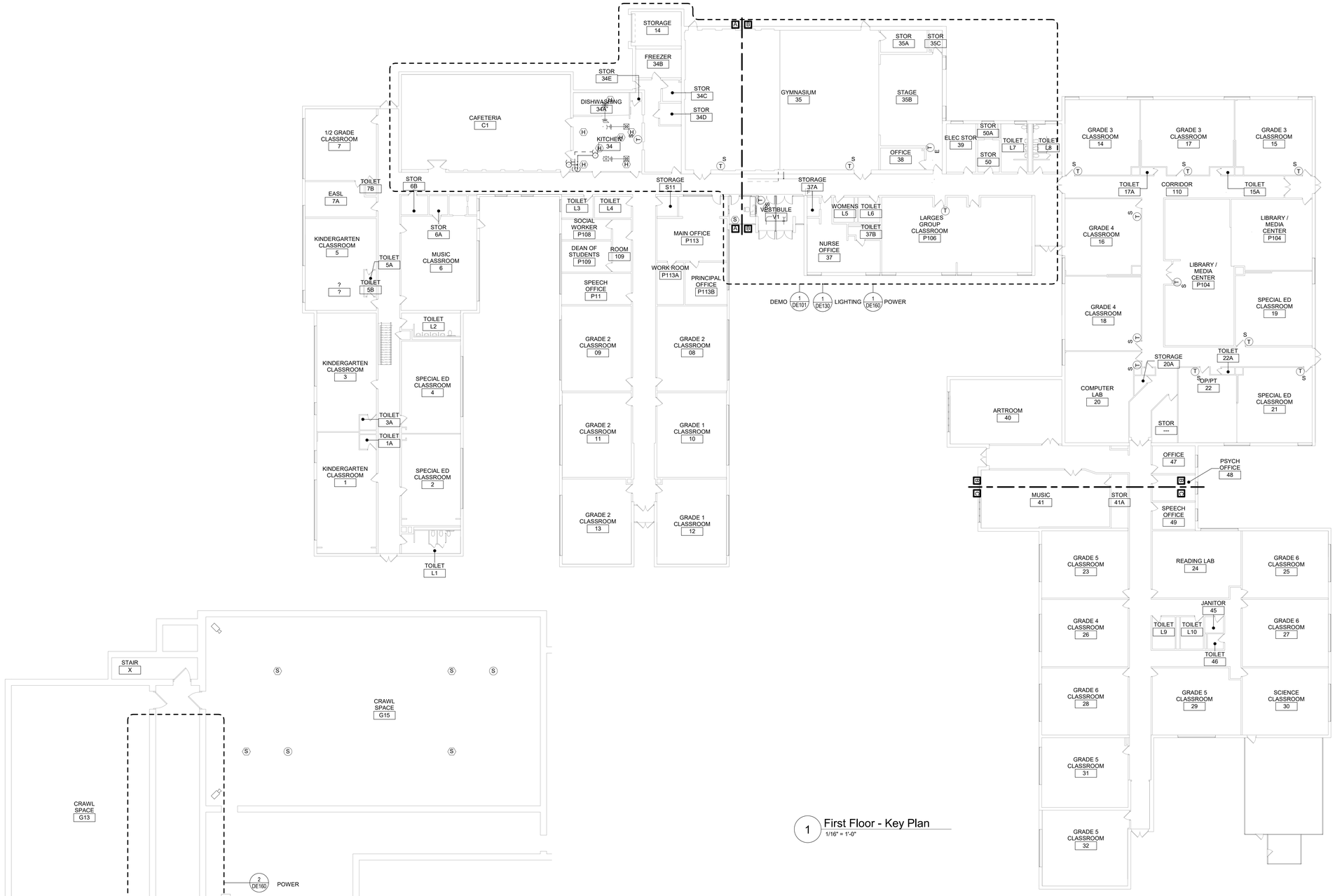
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

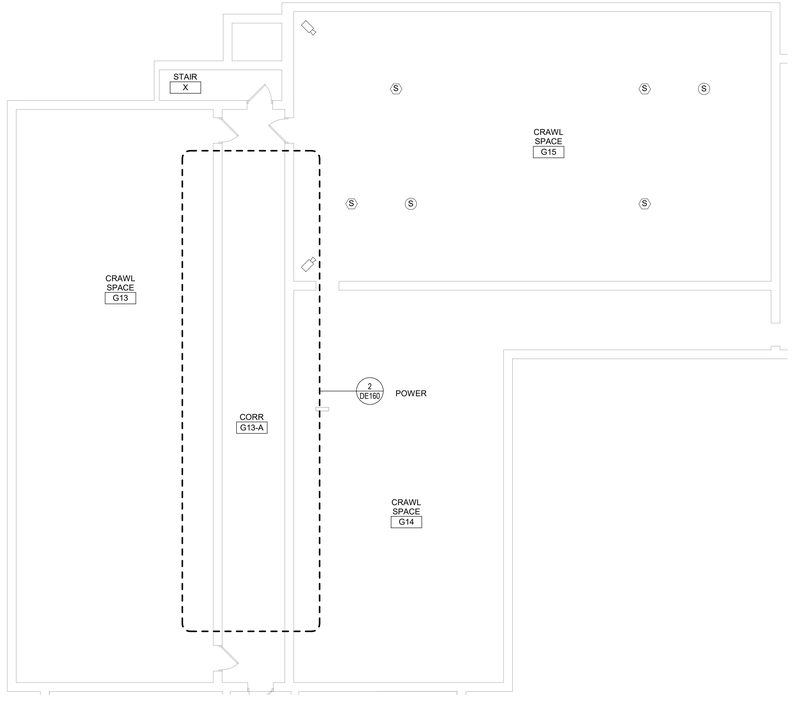
Control Sequences

Drawn By:	Date:	Drawing Number:
JPF1/pgm	11/4/2022	DM700

Project No.: 17597-22001



1 First Floor - Key Plan
1/16" = 1'-0"



2 Partial Basement Key Plan
1/8" = 1'-0"

General Notes

A. COORDINATE ALL ELECTRICAL WORK AND POWER OUTAGES WITH OWNER AND OTHER TRADES PRIOR TO THE START OF CONSTRUCTION. NO POWER OUTAGES SHALL OCCUR WITHOUT OWNER'S PRIOR KNOWLEDGE AND CONSENT.

B. REFER TO DRAWING SA FOR STANDARD SYMBOLS AND ABBREVIATIONS.

C. AT ALL CORRIDORS WHERE NEW CEILINGS ARE BEING INSTALLED, REINSTALL DEVICES ON NEW CEILINGS AS SHOWN ON NEW WORK DRAWINGS AND EXTEND/MODIFY EXISTING CIRCUITRY AS REQUIRED.

D. CIRCUIT WIRING FOR ALL LIGHTING CIRCUITS SHALL BE IN 1/2" EMT CONDUIT (MIN) OR TYPE MC CABLE CONCEALED ABOVE CEILINGS AND IN WALLS (REFER TO SPECIFICATION SECTION 26 05 33 FOR LOCATIONS WHERE MC CABLE IS ACCEPTABLE). ALL CIRCUIT CONDUCTORS SHALL BE #12AWG COPPER (MIN) 90°C THHN THERMOPLASTIC INSULATION.

E. PROPERLY IDENTIFY ALL CIRCUITS AT PANELS AND J-BOXES AND IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

F. PROVIDE ALL ADAPTERS, COUPLINGS AND ASSOCIATED FITTINGS REQUIRED FOR COMPLETE OPERATIONAL SYSTEM.

G. INSTALL CHAIN-HUNG LIGHT FIXTURES AFTER ALL MECHANICAL AND PLUMBING EQUIPMENT, PIPING AND DUCTWORK HAVE BEEN INSTALLED.

H. WHEN INSTALLING NEW DEVICES IN EXISTING LOCATIONS, REUSE EXISTING CONDUIT/RACEWAY AND BACK BOXES IF IN GOOD CONDITION. EXTEND/INSTALL NEW CONDUIT/RACEWAY AS REQUIRED FOR PROPER MOUNTING OF DEVICE. CONCEAL ABOVE CEILINGS OR WITHIN WALLS WHERE POSSIBLE. REFER TO SPECIFICATION SECTION 26 05 33.

J. UNLESS NOTED ELSEWHERE ON THE CONTRACT DOCUMENTS, THE FOLLOWING LIST REPRESENTS THE TYPICAL MOUNTING HEIGHTS FOR THE DEVICES SHOWN:

1. SWITCHES AND PANIC STATIONS..... 48" (TO TOP)
2. RECEPTACLES..... 16"
3. COMPUTER RECEPTACLES..... 16"
4. WALL (W) TELEPHONE AND/OR CALL SWITCHES... 48" (TO TOP)
5. TELEPHONE OUTLETS (UNLABELED)..... 16"
6. VOLUME CONTROLS..... 48" (TO TOP)
7. TELEVISION OUTLETS..... 16"
8. FIRE ALARM PULL STATIONS..... 48" (TO TOP)
9. FIRE ALARM AUDIO/VISUAL UNITS..... 88"
   * (OR 6" BELOW CEILING, WHICHEVER IS LOWER)
10. POWER PANELS..... 72" (TO TOP)
11. DISCONNECT SWITCHES..... 60" (TO TOP)
12. MOTOR STARTERS..... 60" (TO TOP)

THE HEIGHTS INDICATED SHALL BE NOMINAL TO THE BOTTOM OF THE BOX UNLESS NOTED OTHERWISE. MAINTAIN HEIGHT CONSISTENCY BETWEEN NEW AND EXISTING DEVICES.

K. COORDINATE ALL ELECTRICAL WORK WITH OTHER TRADES.

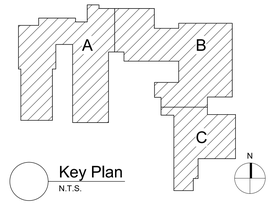
L. PROVIDE ALL POWER DISTRIBUTION WORK INCLUDING PANELS, FEEDERS AND BRANCH CIRCUIT WIRING. UPDATE PANEL DIRECTORIES ACCORDINGLY.

M. TESTS OF ALL ELECTRICAL WORK SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER OR ARCHITECT, AS EQUIPMENT IS INSTALLED AND AS SYSTEMS ARE COMPLETED. IN ADDITION AN ELECTRIC APPROVED CERTIFICATE SHALL BE ISSUED BY AN ELECTRICAL INSPECTION AGENCY.

N. CONNECT ALL EXIT AND EMERGENCY LIGHTS TO THE UNSWITCHED HOT LEG OF THE LIGHTING CIRCUIT SERVING THE AREA.

O. AT ALL CO (#) LOCATIONS RUN AN INDIVIDUAL PLENUM RATED CATEGORY 6 UTP CABLE FROM BOX TO NEAREST IDF. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION.
(#) INDICATES QUANTITY OF RUNS TO BOX.

P. ACCESS CONTROL AND SECURITY SYSTEM PROVIDED BY OWNERS SECURITY VENDOR. PROVIDE 120V CONNECTION TO ELH POWER SUPPLY AND ACM LOCATION. COORDINATE FINAL LOCATIONS WITH OWNER, REFER TO 2/DE501



S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

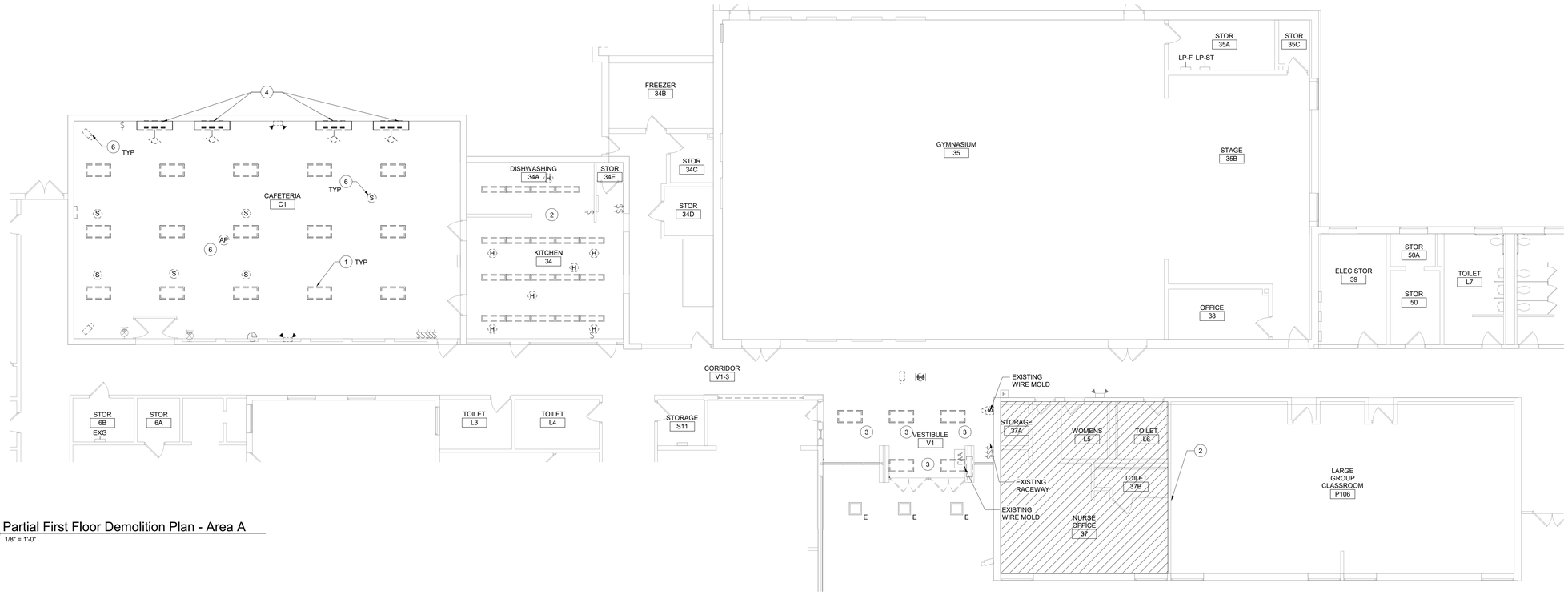
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

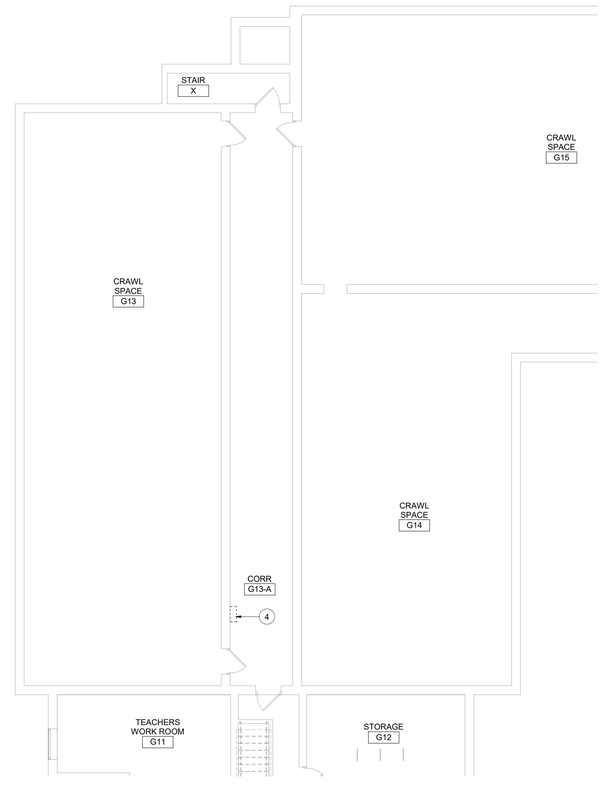
Reconstruction to:
Plattekill Elementary School

First Floor Key Plan

Drawn By:	Date:	Drawing Number:
GLK/CR/ded	11/4/2022	DE050
Project No.: 17597-22001		



1 Partial First Floor Demolition Plan - Area A
1/8" = 1'-0"



2 Partial Basement Demolition Plan - Area A
1/8" = 1'-0"

Demolition General Notes

A. ALL ELECTRICAL DEVICES INTERFERING WITH DEMOLITION WORK SHALL BE DISCONNECTED AND REMOVED, UNLESS OTHERWISE NOTED. EXISTING CIRCUIT WIRING SHALL BE REMOVED BACK TO SOURCE AND PANEL DIRECTORIES MODIFIED ACCORDINGLY.

B. ANY DEVICE INTERFERING WITH DEMOLITION WORK NOT SHOWN ON THESE DRAWINGS SHALL NOT BE REMOVED WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER'S REPRESENTATIVE OR THE ENGINEER.

C. ALL ELECTRICAL DEMOLITION WORK SHALL BE PROPERLY COORDINATED WITH ALL OTHER TRADES.

D. REFER TO SPECIFICATIONS SECTION 16010 FOR DEMOLITION REQUIREMENTS.

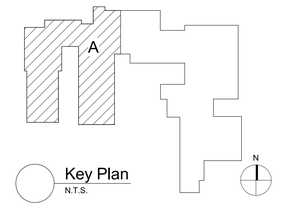
E. EC IS SOLELY RESPONSIBLE FOR THE SAFE HANDLING AND DISPOSAL OF ALL REMOVED LIGHT FIXTURES AND BALLASTS THAT MAY CONTAIN PCBs (POLYCHLORINATED BIPHENYLS), IN ACCORDANCE WITH ALL APPLICABLE EPA, OSHA, FEDERAL, STATE, AND LOCAL CODES AND LAWS.

F. EC IS SOLELY RESPONSIBLE FOR THE SAFE HANDLING AND DISPOSAL OF ALL REMOVED FLUORESCENT LIGHT TUBES THAT MAY CONTAIN MERCURY, IN ACCORDANCE WITH ALL APPLICABLE EPA, OSHA, FEDERAL, STATE, AND LOCAL CODES AND LAWS.

G. AT ALL CORRIDORS WHERE NEW CEILINGS ARE BEING INSTALLED, DISCONNECT AND REMOVE DEVICES AS INDICATED, TAG EXISTING WIRING FOR REUSE.

Keyed Notes

1. REMOVE LUMINAIRES, LIGHTING CONTROL AND CIRCUITS BACK TO SOURCE.
2. REMOVE THE CEILING DEVICES, PRESERVE CIRCUITRY AND STORE FOR REINSTALLATION TO SUPPORT STRUCTURAL REINFORCEMENT. COORDINATE ALL WORK WITH GENERAL CONTRACTOR.
3. REMOVE LUMINAIRES, LIGHTING CONTROL COIL AND TAG CIRCUITRY FOR RE-USE.
4. DE-ENERGIZE EQUIPMENT, DISCONNECT ELECTRICAL CONDUCTORS, REMOVE CONDUCTORS BACK TO THE SOURCE OVERCURRENT PROTECTIVE DEVICE. IDENTIFY THE CIRCUIT, PANEL/SWITCHBOARD AND UPDATE PANEL DIRECTORY TO INDICATE AVAILABLE SPARE.
5. DE-ENERGIZE BOOSTER PUMP CONTROL PANEL. DISCONNECT ELECTRICAL CONDUCTORS AND SAVE FOR RE-USE.
6. REMOVE SMOKE DETECTORS, SPEAKERS, ACCESS POINT, AND CAMERAS. PRESERVE CIRCUITRY AND STORE FOR REINSTALLATION.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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TETRA TECH
ARCHITECTS & ENGINEERS

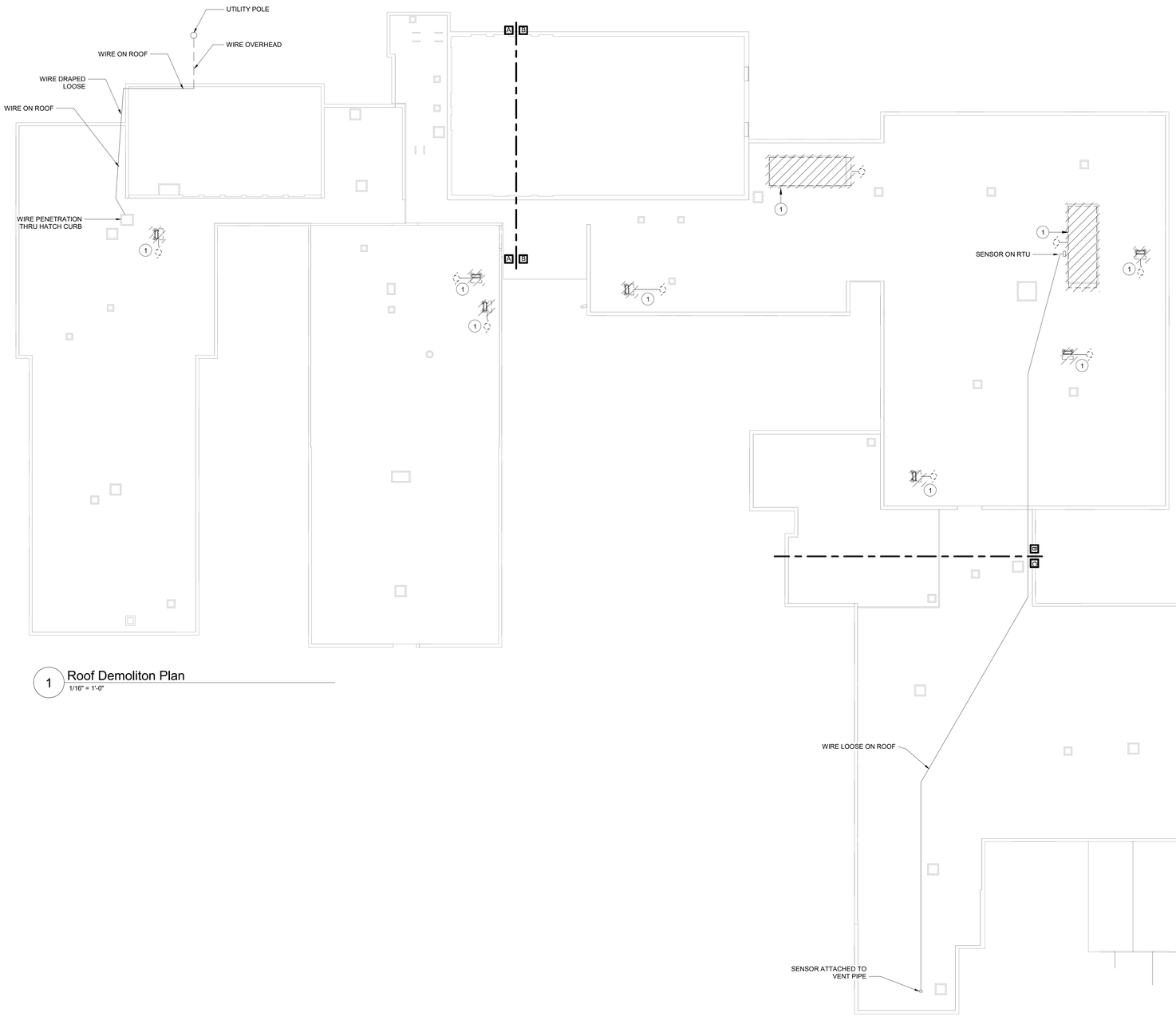
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Partial First Floor Demolition Plans - Areas A and B

Drawn By:	Date:	Drawing Number:
GLK/CR/ded	11/4/2022	DE101

Project No.: 17597-22001



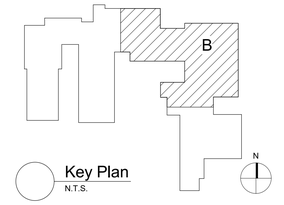
1 Roof Demoliton Plan
1/16" = 1'-0"

Keyed Notes

1. DE-ENERGIZE EQUIPMENT. DISCONNECT ELECTRICAL CONDUCTORS, MAKE NEAT AND SAFE, SAFEGUARD FOR REUSE.

GENERAL NOTES

A. REFER TO DRAWING DE101 FOR GENERAL DEMOLITION NOTES.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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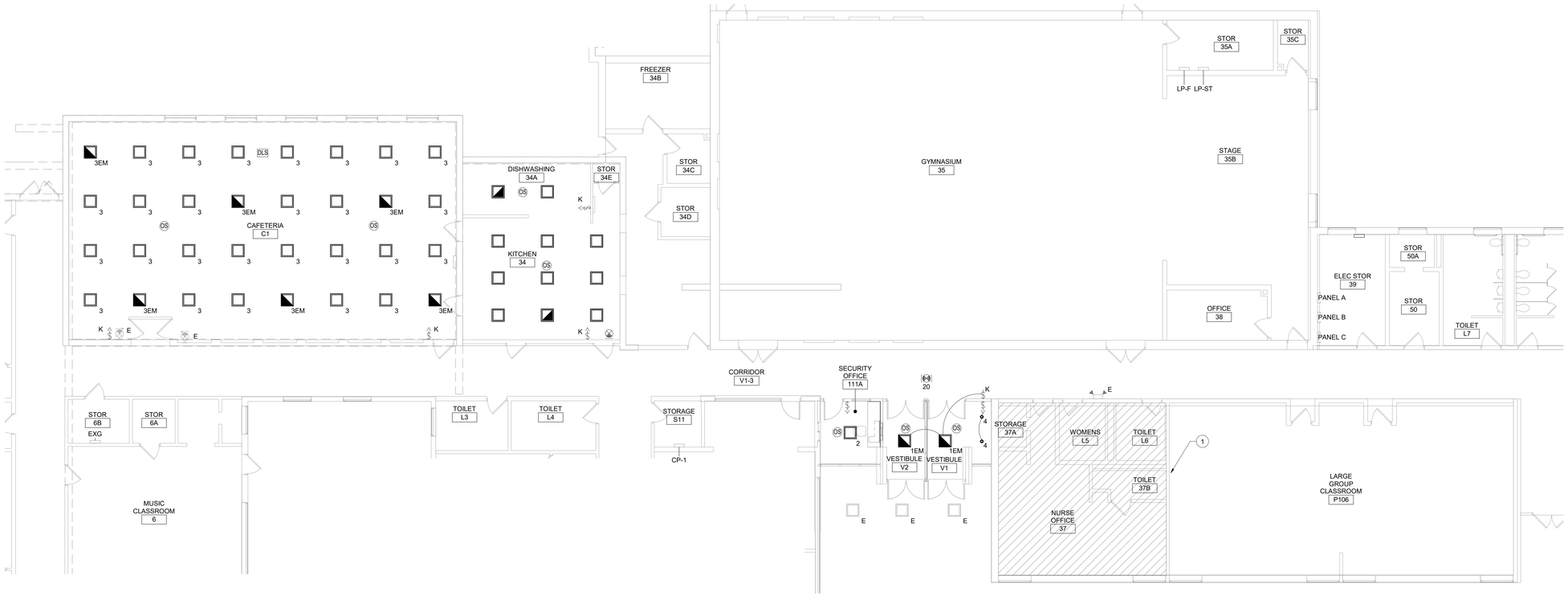
ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Roof Demolition Plan

Drawn By:	Date:	Drawing Number:
GLK/ded	11/4/2022	DE102
Project No.: 17597-22001		



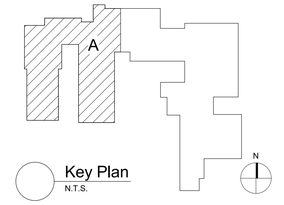
1 Partial First Floor - Lighting Plans - Areas A and B
1/8" = 1'-0"

Keyed Notes

1. REINSTALL CEILING DEVICES PREVIOUSLY STORED FOR STRUCTURAL REINFORCEMENT WORK. CONMNECT TO PRESERVED CIRCUITRY AND CONTROLS.

GENERAL NOTES

A. REFER TO DRAWING CE051 FOR GENERAL NOTES.
B. LIGHTING CONTROL SEQUENCES:
LOBBY/VESTIBULES:
PERSON ENTERS THE AREA, LUMINAIRES TURN ON TO 100% OUTPUT AUTOMATICALLY BY OCCUPANCY SENSOR. PERSON EXITS THE AREA, LUMINAIRES DIM TO 50% OUTPUT (MAINTAINING EGRESS LEVEL ILLUMINATION) . MANUAL CONTROL BY LINE VOLTAGE KEYED SWITCH.
KITCHEN:
PERSON ENTERS THE ROOM AND TURNS LUMINAIRES ON TO 100% OUTPUT. WHEN PERSON EXITS THE ROOM THE OCCUPANCY SENSOR WILL TURN OFF THE LUMINIARES AFTER 15 MINUTES. IF PERSON ENTERS AGAIN LUMINIARES WILL TURN ON TO 100%. MANUAL CONTROL BY LOW VOLTAGE KEYED SWITCH.
CAFETERIA:
PERSON ENTERS THE ROOM AND TURNS LUMINAIRES ON TO 100% OUTPUT. WHEN PERSON EXITS THE ROOM THE OCCUPANCY SENSOR WILL TURN OFF THE LUMINIARES AFTER 15 MINUTES. MANUAL CONTROL BY LOW VOLTAGE KEYED SWITCH. DAYLIGHT RESPONSIVE CONTROL WILL DIM ROW OF LUMINAIRES CLOSET TO WINDOW TO PRESET SET POINT OF ROOM TO MAINTAIN UNIFORMITY OF ILLUMINATION.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

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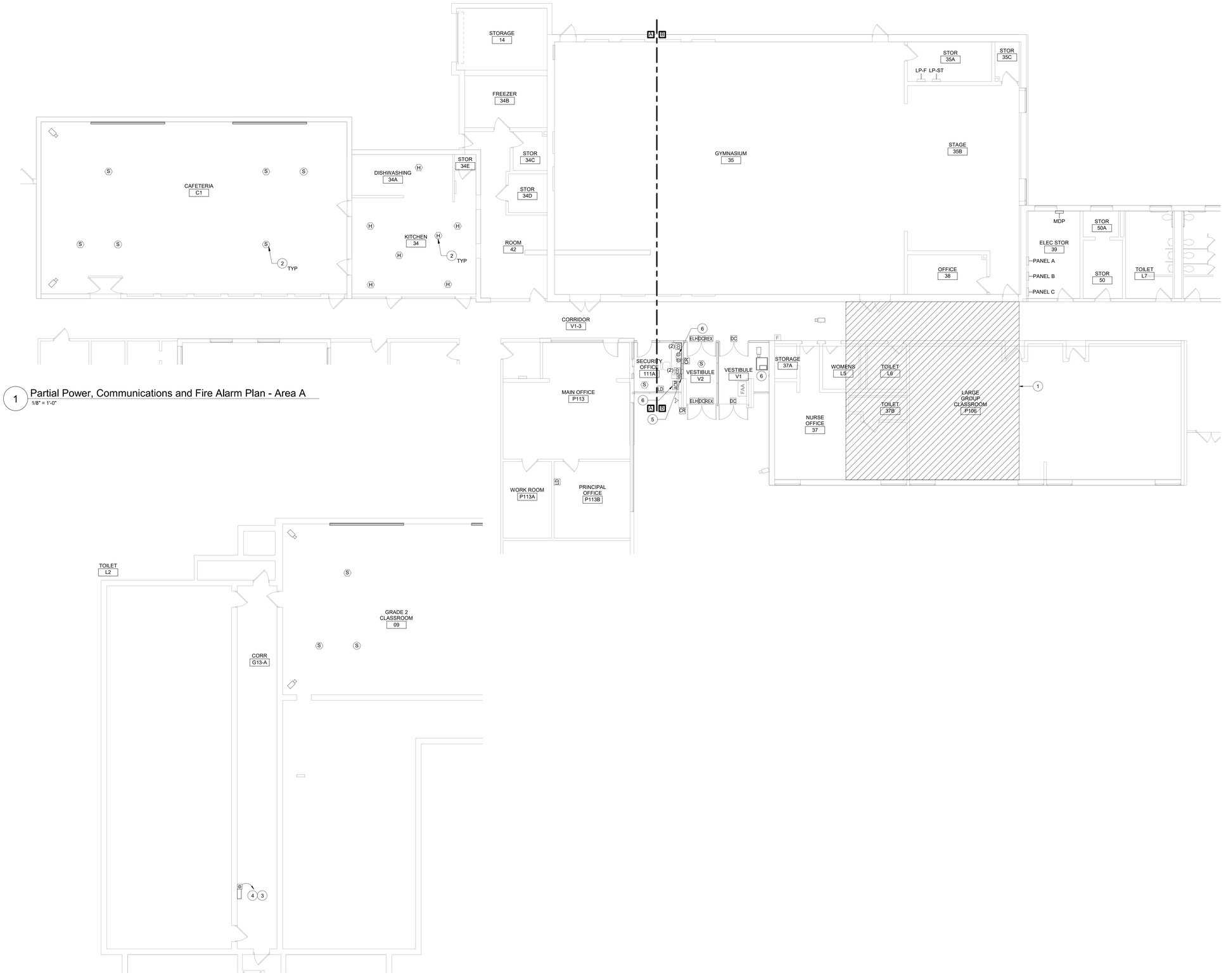
TETRA TECH
ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Partial First Floor Lighting Plan - Areas A and B

Drawn By:	Date:	Drawing Number:
CR/ded	11/4/2022	DE130
Project No.: 17597-22001		



1 Partial Power, Communications and Fire Alarm Plan - Area A
1/8" = 1'-0"

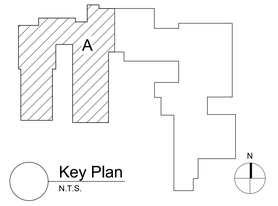
2 Partial Basement Power Plan - Area A
1/8" = 1'-0"

Keyed Notes

1. REINSTALL CEILING DEVICES PREVIOUSLY STORED FOR STRUCTURAL REINFORCEMENT WORK. CONNECT TO PRESERVED CIRCUITRY AND CONTROLS.
2. INSTALL CEILING DEVICES PREVIOUSLY STORED FOR DEMOLITION. MODIFY/EXTEND EXISTING CIRCUITRY AND CONTROLS AS NECESSARY.
3. PROVIDE (2) #12 AWG, (1) #12 AWG G IN 1/2"C TO PANEL B. PROVIDE (1) 20A, 208V, 3 POLE BREAKER WITH AIC RATING TO MATCH EXISTING PANEL.
4. PROVIDE CONNECTION TO BOOSTER PUMP CONTROL PANEL. EXTEND/MODIFY EXISTING CIRCUITRY AS REQUIRED
5. ROLL UP FIRE SHUTTER. PROVIDE POWER, FIRE ALARM INITIATION AND CONTROL CIRCUITS AS SHOWN IN DETAIL 4/DE500
6. PROVIDE (1) #12 AWG, (1) #12 AWG G IN 1/2"C TO PANEL B. PROVIDE (1) 20A, 120V, 1 POLE BREAKER WITH AIC RATING TO MATCH EXISTING PANEL.

GENERAL NOTES

A. REFER TO DRAWING DE050 FOR GENERAL NOTES.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:
1	01/23/2023	SED Add No. 2

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH
ARCHITECTS & ENGINEERS

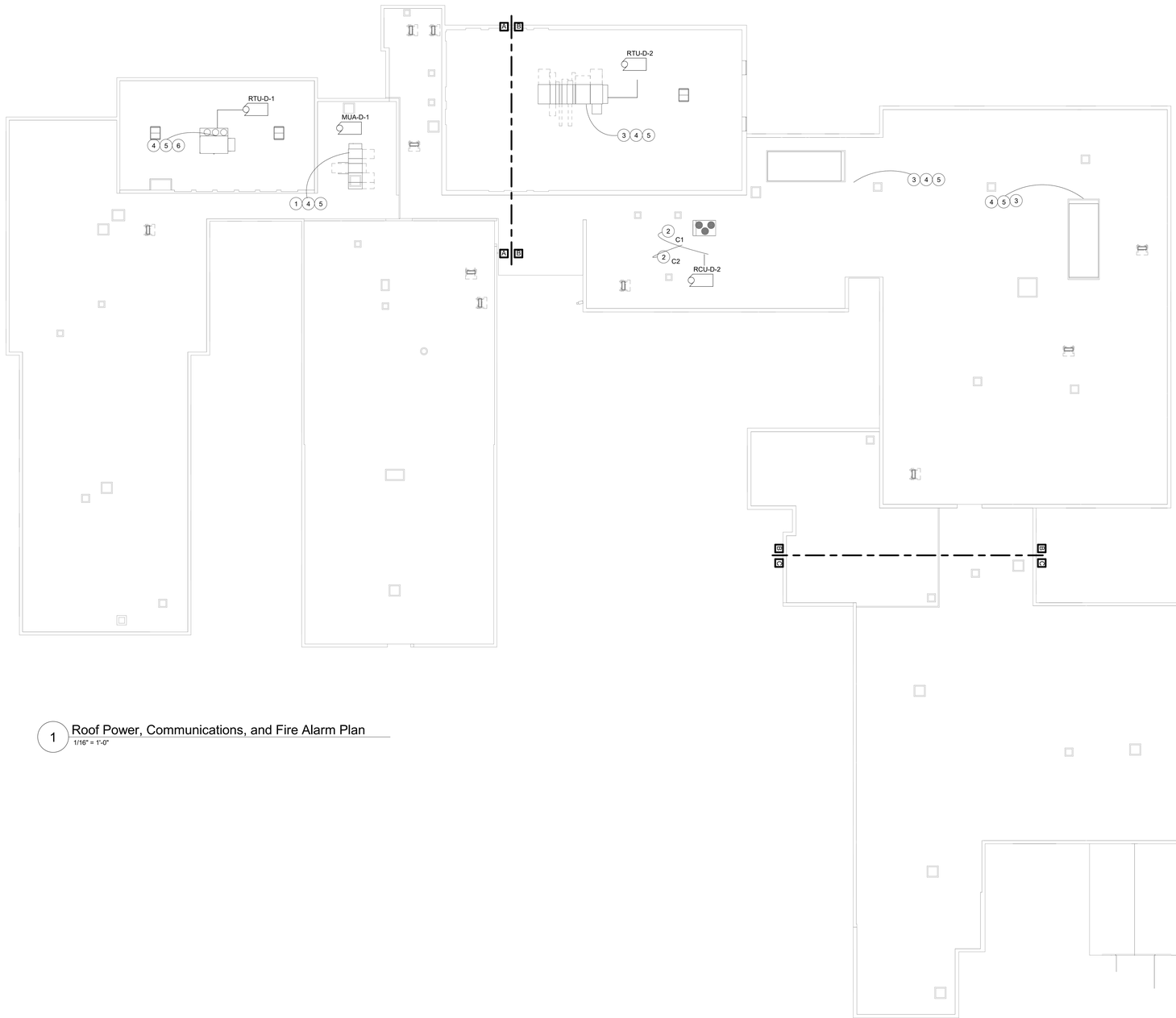
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Partial Basement and First Floor Power, Communications and Fire Alarm Plan

Drawn By:	Date:	Drawing Number:
GLK/ded	11/4/2022	DE160

Project No.: 17597-22001



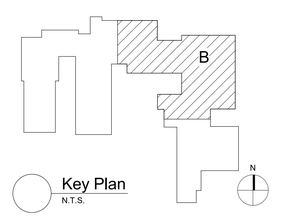
1 Roof Power, Communications, and Fire Alarm Plan
1/16" = 1'-0"

Keyed Notes

1. PROVIDE (3) #10 AWG, (1) #10 AWG IN 1/2"C TO PANEL B. PROVIDE (1) 30A, 208V, 3 POLE BREAKER WITH AIC RATING TO MATCH EXISTING PANEL.
2. PROVIDE (3) #1 AWG, (1) #6 AWG G IN 1-1/4"C TO MDP. PROVIDE (1) 150A, 208V, 3 POLE BREAKER WITH AIC RATING TO MATCH EXISTING PANEL.
3. PROVIDE (3) #2 AWG, (1) #8 AWG G IN 1-1/4"C TO MDP. PROVIDE (1) 90A, 208V, 3 POLE BREAKER WITH AIC RATING TO MATCH EXISTING PANEL.
4. PROVIDE DUCT DETECTOR DOWNSTREAM OF SUPPLY SIDE AIR FILTER AND UPSTREAM OF ANY DUCT BRANCH CONNECTIONS. CONNECT DUCT DETECTORS TO EXISTING FIRE ALARM SYSTEM, EXTEND/MODIFY CIRCUITRY AS NECESSARY.
5. PROVIDE FAN SHUTDOWN RELAY/CONNECTION FOR SUPPLY FAN. CONNECT TO EXISTING FIRE ALARM SYSTEM, EXTEND/MODIFY CIRCUITRY AS NECESSARY.
6. PROVIDE FAN SHUTDOWN RELAY/CONNECTION FOR RETURN FAN. CONNECT TO EXISTING FIRE ALARM SYSTEM, EXTEND/MODIFY CIRCUITRY AS NECESSARY.

GENERAL NOTES

A. REFER TO DRAWING DE050 FOR GENEREAL NOTES.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

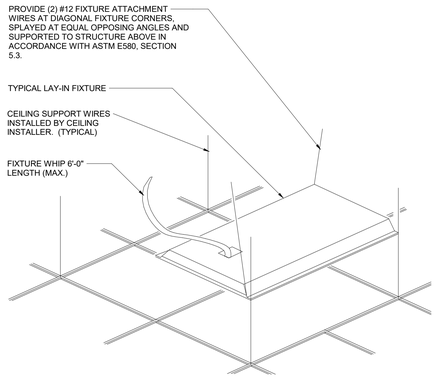
TETRA TECH
ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

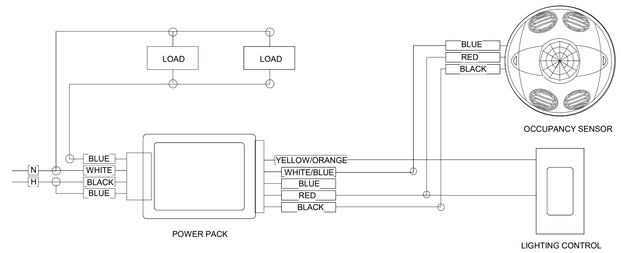
Reconstruction to:
Plattekill Elementary School

Roof Power, Communications and Fire Alarm Plan

Drawn By:	Date:	Drawing Number:
GLK/ded	11/4/2022	DE161
Project No.: 17597-22001		



3 Typical Troffer Detail
NTS



NOTES:

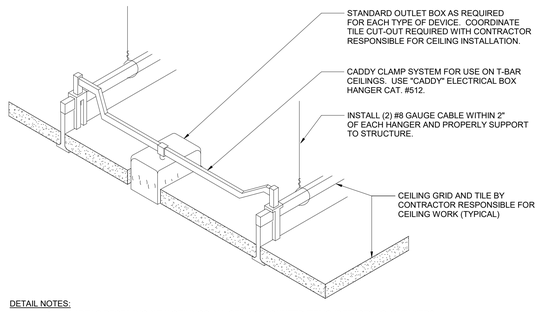
A. PAINT ALL SURFACE RACEWAY AND BOXES TO MATCH EXISTING SURFACES. (WHERE APPLICABLE).
B. PROVIDE RELAYS WHERE TWO OR MORE CIRCUITS FEED LIGHTING IN SAME ROOM.
C. ADJUST SENSITIVITY OF EACH OCCUPANCY SENSOR TO DETECT HUMAN MOVEMENT BUT NOT HVAC EQUIPMENT. ADJUST TIME DELAY FOR OPTIMUM PERFORMANCE. APPLY MASKING SEGMENTS TO DETECTION HEAD WHERE REQUIRED.
D. POWER PACK AND THE LOAD SWITCHED BY THE POWER PACK MUST BE FED FROM THE SAME PHASE.
E. REFER TO LIGHTING PLANS FOR LIGHTING SEQUENCES

1 Occupancy Sensor Wiring Diagram
NTS

NOTES:

1. INSTALL THE FOLLOWING EQUIPMENT, FURNISHED BY OTHERS:
   - CONTROL STATION(S)
   - ANNUNCIATOR(S)
2. PROVIDE A BRANCH CIRCUIT (INDICATED ON PLAN) TO SYSTEM OPERATOR VIA THE CONTROL STATION.
3. PROVIDE A 24 VDC CONNECTION FROM THE F.A.C.P. TO THE RELEASE DEVICE(S).
4. PROPERLY PROGRAM F.A.C.P. TO SIGNAL RELEASE DEVICE TO OPERATE WHEN A FIRE DETECTION APPLIANCE IN THE ADJOINING SPACES SERVED BY ROLLING FIRE DOOR(S) ARE INITIATED.
5. REFER TO PANEL SCHEDULES FOR FURTHER INFORMATION.

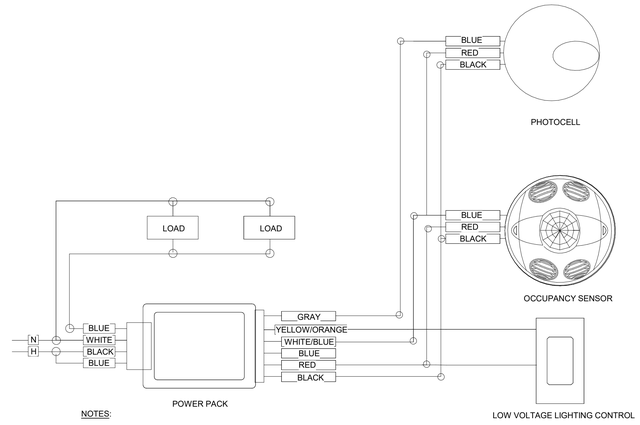
5 Fire Shutter Detail
12" = 1'-0"



DETAIL NOTES:

A. IN AREAS RECEIVING NEW CEILINGS ALL CEILING MOUNTED ITEMS (DETECTORS, SPEAKERS, ETC) ARE TO BE CENTERED WITHIN THE PATTERN OF THE CEILING PANEL. A 2'X4' PANEL SCORED TO A 2'X2' PATTERN SHALL HAVE ITEMS CENTERED IN THE 2'x2' PORTION.
B. PROVIDE ADDITIONAL SUPPORT FOR EXIT SIGNS, WHERE REQUIRED.

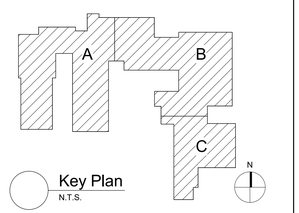
4 Ceiling Mounted Device Detail
NTS



NOTES:

A. PAINT ALL SURFACE RACEWAY AND BOXES TO MATCH EXISTING SURFACES. (WHERE APPLICABLE).
B. PROVIDE RELAYS WHERE TWO OR MORE CIRCUITS FEED LIGHTING IN SAME ROOM.
C. ADJUST SENSITIVITY OF EACH OCCUPANCY SENSOR TO DETECT HUMAN MOVEMENT BUT NOT HVAC EQUIPMENT. ADJUST TIME DELAY FOR OPTIMUM PERFORMANCE. APPLY MASKING SEGMENTS TO DETECTION HEAD WHERE REQUIRED.
D. POWER PACK AND THE LOAD SWITCHED BY THE POWER PACK MUST BE FED FROM THE SAME PHASE.
E. REFER TO LIGHTING PLANS FOR LIGHTING SEQUENCES

2 Daylight Responsive Controls Wiring Diagram
NTS



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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BID SET

TETRA TECH ARCHITECTS & ENGINEERS

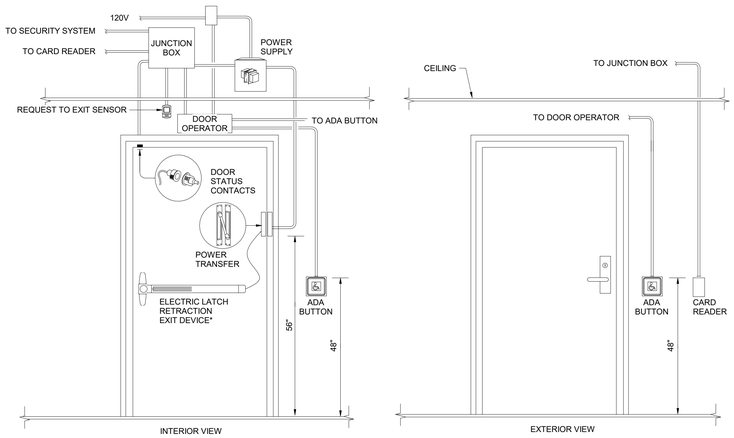
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Details

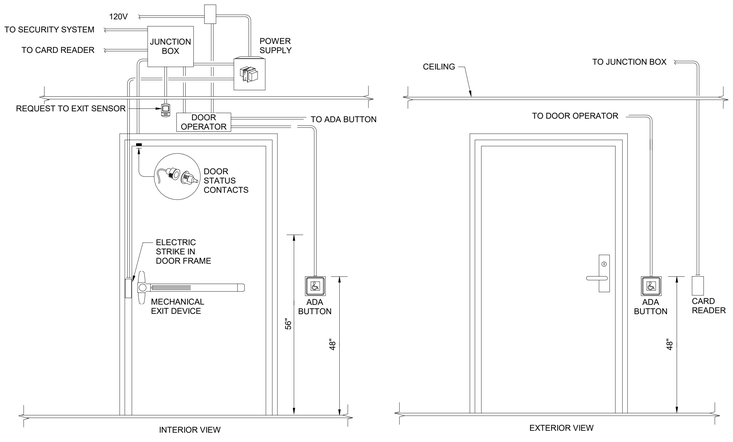
Drawn By:	Date:	Drawing Number:
CR	11/4/2022	DE500

Project No.: 17597-22001



*NOTE:
PANIC HARDWARE SHALL ALWAYS REMAIN FULLY OPERATIONAL MANUALLY, NO MATTER WHAT THE STATUS OF ELECTRIC LATCH.
SEE SPECIFICATION SECTION ##### FOR FURTHER INFORMATION.

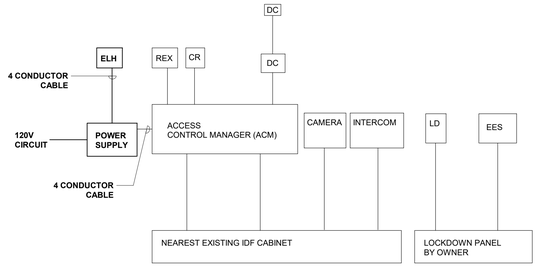
Single Door Configuration with ELR Hardware and ADA Operator
No Scale (VIEW MAY BE MIRRORED)



NOTE:
PANIC HARDWARE SHALL ALWAYS REMAIN FULLY OPERATIONAL MANUALLY, NO MATTER WHAT THE STATUS OF ELECTRIC LATCH.
SEE SPECIFICATION SECTION ##### FOR FURTHER INFORMATION.

Single Door Configuration with Strike Hardware and ADA Operator
No Scale (VIEW MAY BE MIRRORED)

1 Door Configurations
12" = 1'-0"



A. QUANTITY OF DEVICES VARY, REFER TO FLOOR PLAN DRAWINGS.

B. REFER TO FLOOR PLAN DRAWINGS FOR 120V CIRCUIT PANEL LOCATION

C. ALL DOOR CONTACTS IN AN OPENING ARE WIRED AS ONE GROUP.

D. ALL ACCESS CONTROL EQUIPMENT, CONDUITS, BACK BOXES, AND CABLES SHOWN IN GREY ARE PROVIDED BY OTHERS. ELECTRICAL CONTRACTOR TO PROVIDE POWER TO POWER SUPPLY AND FROM POWER SUPPLY TO ELH AND ACM WORK SHOWN IN BOLD

2 Access Control Diagram
12" = 1'-0"

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Details

Drawn By:	Date:	Drawing Number:
CR	11/4/2022	DE501

Project No.:
17597-22001

LUMINAIRE SCHEDULE

TYPE	SYMBOL	DESCRIPTION	LAMPS			MANUFACTURERS (OR EQUAL)	
			WATTAGE	LUMENS	TYPE	NAME	MODEL OR SERIES
1 EM		2' x 2' FLAT PANEL (RECESSED IN GRID) - WITH INTEGRAL BATTERY	16	2000	LED	SIGNIFY (DAY-BRITE)	2FPZ20L835-2-DS-UNV-DIM
2		2' x 2' FLAT PANEL (RECESSED IN GRID)	29	3800	LED	SIGNIFY (DAY-BRITE)	2FPZ38L835-2-DS-UNV-DIM
3		2' x 2' FLAT PANEL (RECESSED IN GRID)	36	4500	LED	SIGNIFY (DAY-BRITE)	2FPZ45L835-2-DS-UNV-DIM
3EM		2' x 2' FLAT PANEL (RECESSED IN GRID) - WITH INTEGRAL BATTERY	36	4500	LED	SIGNIFY (DAY-BRITE)	2FPZ45L835-2-DS-UNV-DIM
4		4" ROUND DOWNLIGHT	8.8	868	LED	SIGNIFY (LEDALITE)	L4R10935VB / L4RDW
5		2' x 2' FOOD PROCESSING LUMINAIRE (RECESSED IN GRID)	45	4500	LED	KENALL LIGHTING	45LD-35K8-DIM1-DV-5F-4H
5EM		SAME AS TYPE 4 - WITH INTEGRAL BATTERY	45	4500	LED	KENALL LIGHTING	45LD-35K8-DIM1-DV-5F-4H
6		2' x 2' FOOD PROCESSING LUMINAIRE (RECESSED IN GRID)	45	4500	LED	KENALL LIGHTING	45LD-35K8-DIM1-DV-5F-4H
6EM		SAME AS TYPE 4 - WITH INTEGRAL BATTERY	45	4500	LED	KENALL LIGHTING	45LD-35K8-DIM1-DV-5F-4H
20		EXIT SIGN (SINGLE/DOUBLE FACE) CEILING MOUNT SEE PLANS FOR DIRECTIONAL INDICATORS	2.5		LED	SIGNIFY (CHORIDE)	ER46L-2-W-R

* MANUFACTURER AND MODEL NUMBER ARE PROVIDED TO SHOW BASIS OF DESIGN ONLY.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Plattekill Elementary School

Schedules

Drawn By:	Date:	Drawing Number:
CR	11/4/2022	DE600

Project No.: 17597-22001

Domestic Water Booster Pump Schedule

DWG LABEL	LOCATION	DESIGN MAKE AND MODEL	CAPACITY	TOTAL DYNAMIC HEAD	MAX CONT OPERATING TEMP	INLET / OUTLET SIZE	RPM	HORSE POWER	FULL LOAD AMPS	VOLTAGE	PHASE	HERTZ	NOTES
			GPM	FEET	°F	NPS							
BP-1	CORR G13-A	GRUNDFOS HYDRO MULTI-B	100	200	104	2	3500	5	15	208	3	60	1, 2

NOTES:

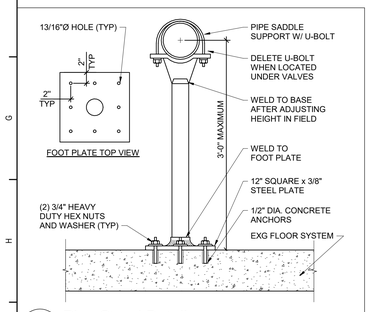
1. PACKAGED DUPLEX BOOSTER PUMP SYSTEM WITH CONTROL PANEL MOUNTED ON A SKID.
2. EACH PUMP SIZED FOR 50% OF TOTAL SYSTEM CAPACITY.

Hydropneumatic Tank Schedule

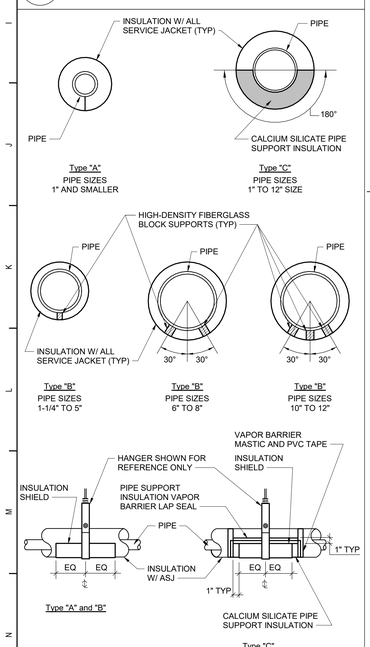
DRAWING LABEL	LOCATION	MAKE AND MODEL NUMBER	TOTAL STORAGE CAPACITY (GALLONS)	MAXIMUM ACCEPTANCE VOLUME - GALLONS	WATER SERVICE PRESSURE (PSI)	MAXIMUM ALLOWABLE PRESSURE (PSI)	DIAMETER (INCHES)	HEIGHT (INCHES)	CONNECTION (NPT)	NOTES
HT-1	CORR G13-A	AMTROL WELL-X-TROL WX-403C	34	11	60	150	16	49	1	1, 2

NOTES:

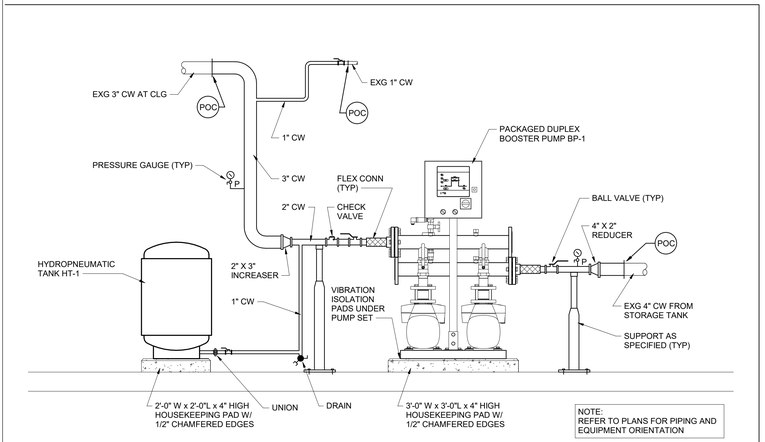
1. HEAVY DUTY BUTYL DIAPHRAGM (FDA APPROVED).
2. ASME CONSTRUCTION.



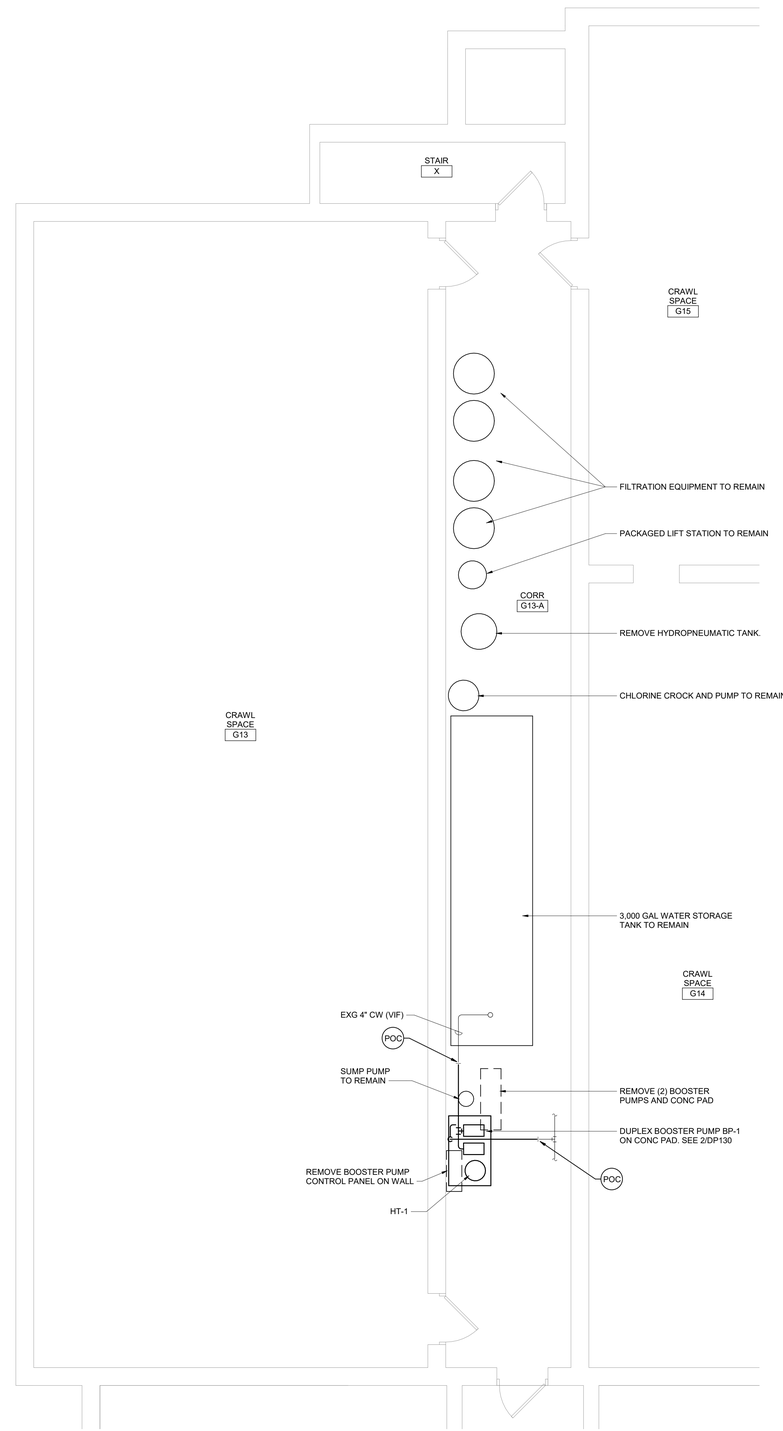
3 Pipe Stand Detail
NTS



4 Insulated Piping Support Assemblies
NTS



2 Duplex Booster Pump Schematic
NTS



1 Enlarged Basement Plan
1/4" = 1'-0"

General Notes

A. VERIFY ALL PIPING LOCATIONS, SIZES, AND ARRANGEMENTS IN FIELD PRIOR TO BID. NOTIFY ARCHITECT IN WRITING OF ANY DISCREPANCIES.

B. VERIFY IN FIELD INVERT AND DIRECTION OF FLOW IN EXISTING SOIL PIPE WHERE NEW SOIL PIPE IS TO BE CONNECTED TO EXISTING SOIL PIPE.

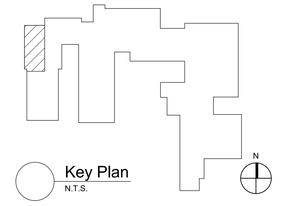
C. LEGALLY DISPOSE OF ALL DEMOLITION DEBRIS.

D. INCLUDE TRENCHING, CUTTING AND PATCHING OF FLOORS, WALLS AND CEILINGS, INCLUDING CEILING TILE REMOVAL AND REPLACEMENT, WHEN REQUIRED FOR PLUMBING WORK. PATCH ABANDONED OPENINGS AND DISTURBED FINISHES TO MATCH EXISTING. TAKE PRECAUTIONS TO PROTECT STRUCTURAL INTEGRITY OF FLOOR OR WALLS WHEN TRENCHING OR CUTTING.

E. MATERIALS FOR PLUMBING INSTALLATION SHALL BE NEW, UNLESS SPECIFICALLY NOTED OTHERWISE.

F. PROVIDE THROUGH PENETRATION FIRESTOPPING FOR FIRE RATED WALLS AND FLOORS. PENETRATIONS THROUGH EXISTING WALLS AND FLOORS ARE CONSIDERED TWO-HOUR PARTITIONS UNLESS SPECIFICALLY NOTED OTHERWISE. REFER TO "A" SERIES OR CODE COMPLIANCE DRAWINGS FOR LOCATION OF FIRE RATED WALLS AND FLOORS.

G. REMOVE ABANDONED ACCESSIBLE PIPING TO MAIN BRANCHES, STACKS OR RISERS AS REQUIRED TO ELIMINATE EXPOSED PIPING AND DEAD END PIPING RUNS LONGER THAN 1'-0". COORDINATE CONCEALMENT OF PIPING WITH FINAL CONSTRUCTION OF WALLS, FLOORS AND CEILINGS.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-005-015

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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BID SET

TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

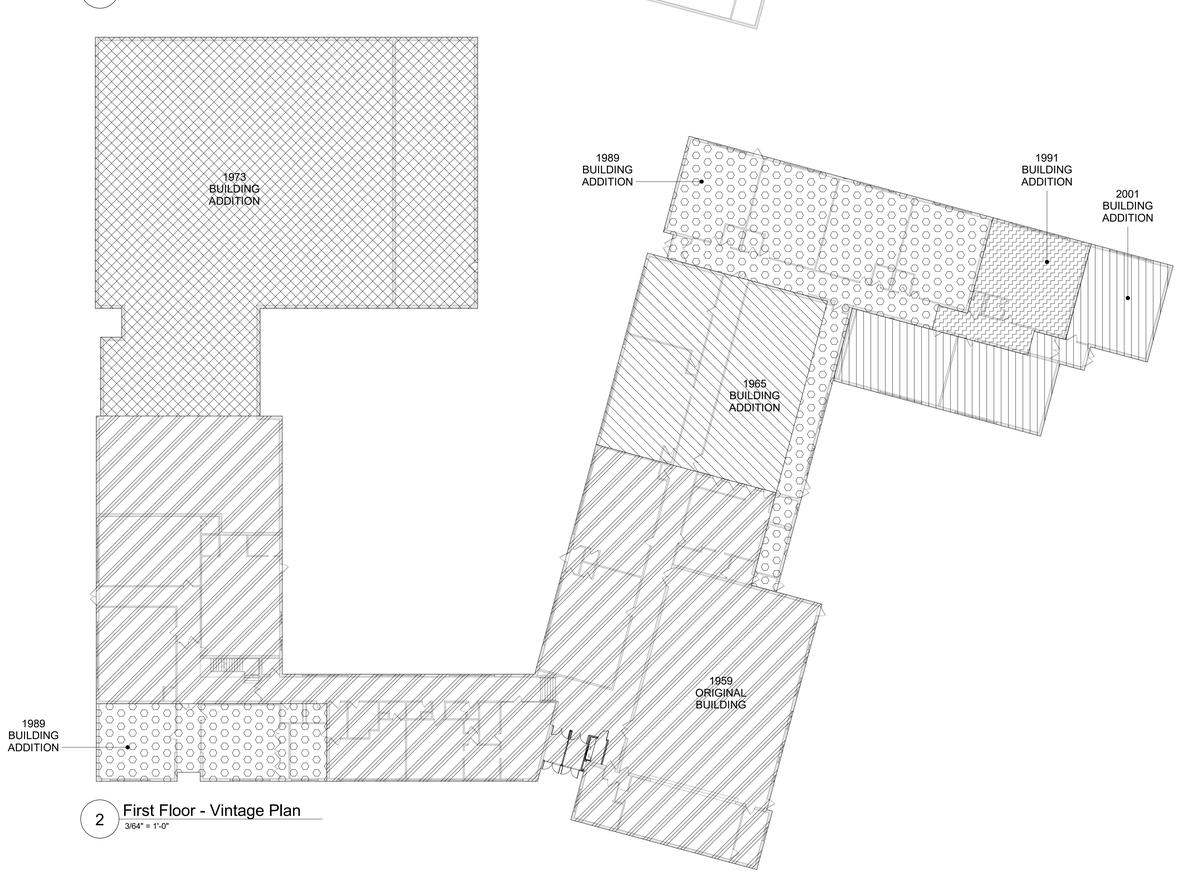
Reconstruction to:
Plattekill Elementary School

Enlarged Basement Plan, Schedule and Details

Drawn By:	Date:	Drawing Number:
BCL	11/4/2022	DP130

Project No.: 17597-22001

1 Second Floor - Vintage Plan
3/64" = 1'-0"



2 First Floor - Vintage Plan
3/64" = 1'-0"

Code Compliance Review

PROJECT LOCATION:
48 MILL STREET, WALLKILL, NY 12589
BOUNDED BY BONA HEINSMAN LANE TO THE EAST, MILL STREET TO THE NORTH, AND NY INTERSTATE 87 TO THE WEST.

PROJECT DESCRIPTION:
THIS PROJECT INCLUDES THE RENOVATION OF THE MAIN ENTRANCE TO CREATE A SECURITY VESTIBULE INCLUDING A SECURITY OFFICE. THE PROJECT ALSO INCLUDES THE RECOATING AND SELECT REPLACEMENT OF THE EXISTING FOAM ROOF SYSTEM, ROOF STRUCTURE REINFORCEMENT AND ASSOCIATED CEILING WORK, AND REPLACEMENT OF DOOR HARDWARE WITH NEW LOCKDOWN HARDWARE.

WORK GENERALLY CONSISTS OF THE FOLLOWING:
ALTERATIONS - LEVEL 1
- LOCKDOWN DOOR HARDWARE UPGRADES
- ROOF RECOATING AND SELECT REPLACEMENT

ALTERATIONS - LEVEL 2
- RECONFIGURATION OF MAIN ENTRANCE FOR SECURITY
- ROOF STRUCTURAL REINFORCEMENT

APPLICABLE CODES AND STANDARDS:

BASED ON THE NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE INCLUDING APPLICABLE 2018 ICC CODES, 2020 BUILDING CODE of NYS INCLUDING THE 2020 BCNYS, 2020 EBCNYS AND 2020 ECCNYS, ICC A117.1-09 STANDARD FOR ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES AND COMMISSIONER OF EDUCATIONS 155 REGULATIONS (SED MPS-98).

BUILDING DATA:

BUILDING: LEPTONDALE ELEMENTARY SCHOOL
48 MILL STREET
WALLKILL, NY 12589

DESCRIPTION: TWO STORY MASONRY AND REINFORCED CONCRETE BUILDING.

YEAR BUILT: 1959 DREYER & CLARK ARCHITECTS

BUILDING AREA:

1ST FLOOR	35,957 SQFT	
2ND FLOOR	22,851 SQFT	
TOTAL GROSS AREA=	58,808 SQFT	

CODE DATA SUMMARY:

USE GROUP: E : EDUCATION

CONSTRUCTION TYPE -

EXISTING: IIB

NEW: IIB

SPRINKLERED: NO

WORK AREA:

LOCATION	AREA	% OF TOTAL
1ST FLOOR	237 SQFT	0.40%
2ND FLOOR	0 SQFT	0%

CORRIDOR DOORS: ALL CORRIDOR DOORS SCHEDULED TO BE REPLACED SHALL HAVE MINIMUM FIRE DOOR ASSEMBLY RATING OF 20 MINUTES IN ACCORDANCE WITH SECTION 716.5

PATH OF CODE COMPLIANCE:

2018 IEBC CODES AND 2020 EXISTING BUILDING CODE of NYS
301.1.2 WORK AREA COMPLIANCE METHOD

CHAPTER 6 - CLASSIFICATION OF WORK
602 ALTERATION - LEVEL 1 (CHAPTER 7)
603 ALTERATION - LEVEL 2 (CHAPTER 8)

NEW CONSTRUCTION WILL COMPLY WITH REQUIREMENTS OF 2018 ICC CODES, 2020 BUILDING CODE of NYS INCLUDING THE 2020 BCNYS, 2020 EBCNYS AND 2020 ECCNYS, ICC A117.1-09 STANDARD FOR ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES AND COMMISSIONER OF EDUCATIONS 155 REGULATIONS (SED MPS-98).

EXIT TRAVEL DISTANCE (PER TABLE 1017.2):
FOR EXIT TRAVEL DISTANCE - SEE BG351.

CORRIDOR ENCLOSURES (PER TABLE 1020.1):
FOR CORRIDOR FIRE RESISTANCE - SEE ENLARGED PLANS, PARTITION TYPES AND DOOR SCHEDULE.
ALL CROSS CORRIDOR PARTITIONS ARE SMOKE PARTITIONS AND EXTEND FROM FINISH FLOOR TO DECK ABOVE.

UL DESIGN NUMBERS:

1 HR. STUD PARTITIONS UL# U465

NOTES:
1. RATING PROVIDED BY 4" SOLID CONCRETE MASONRY UNITS - DETERMINATION OF EQUIVALENT THICKNESS OF CMU REQUIRED IS BASED ON SECTION 721 PRESCRIPTIVE FIRE RESISTANCE, TABLE 721.1 (2) RATED FIRE RESISTANCE PERIODS FOR VARIOUS WALLS AND PARTITIONS, ITEM NUMBER 3-1.2

2. ALL CMU CONSTRUCTION SHALL MEET FIRE RESISTANCE REQUIREMENTS INDICATED IN CHART OF SAME NAME ABOVE, BLOCK TYPE AS REQUIRED TO COMPLY WITH UL DESIGN NUMBERS AND AS REQUIRED TO COMPLY WITH RATED WALLS INDICATED ON CODE COMPLIANCE DRAWINGS. PROVIDE MINIMUM 4" SOLID CMU AT SUCH LOCATIONS REGARDLESS IF NOTED AS SUCH ON PLAN DETAILS.

INTERIOR FINISH REQUIREMENTS:

ALL FINISHES IN CORRIDORS AND ASSEMBLY SPACES SHALL HAVE A FIRE HAZARD CLASSIFICATION PER MANUAL OF PLANNING STANDARDS SECTION S202-2, a. THROUGH e.

RESCUE LABEL / SIGNAGE NOTES:

1. REFER TO PLANS FOR RESCUE WINDOW LOCATIONS.
2. REFER TO SPECIFICATION SECTION 10 14 00 AND SIGNAGE DRAWINGS FOR TYPES AND LOCATIONS.

General Code Notes

A. COORDINATE WITH FLOOR PLANS, WALL SECTIONS AND PARTITION TYPES FOR RATED WALL TYPES AND LOCATIONS. IMMEDIATELY NOTIFY ARCHITECT OF ANY WALL RATING DISCREPANCIES BETWEEN DRAWINGS.

B. ALL WALLS, INCLUDING AT CORRIDORS, SHALL EXTEND COMPLETELY TO THE UNDERSIDE OF DECKING, SUPPORTING STRUCTURE OR ROOF ABOVE, TYPICAL UNLESS NOTED OTHERWISE.

C. AT AREAS OF PROJECT WORK, COMPLETELY SEAL ALL PENETRATIONS REQUIRED TO COMPLY WITH FIRE RESISTANCE RATINGS IDENTIFIED ON THE DRAWINGS, REGARDLESS IF WALL IS NEW OR EXISTING, TYPICAL UNLESS NOTED OTHERWISE.

Legend

ALL WALLS, INCLUDING CORRIDOR WALLS, EXTEND TO THE ROOF DECK OR FLOOR DECK ABOVE UNLESS NOTED OTHERWISE.

1-HOUR FIRE PARTITION

RW RESCUE WINDOW

1959 ORIGINAL BUILDING

1965 BUILDING ADDITION

1973 BUILDING ADDITION

1989 BUILDING ADDITION

1991 BUILDING ADDITION

2001 BUILDING ADDITION

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

complex world | CLEAR SOLUTIONS

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH
ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

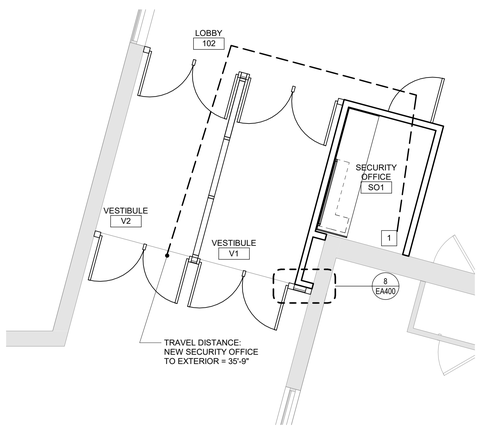
Reconstruction to:
Leptondale Elementary School

Code Compliance Review

Drawn By:	Date:	Drawing Number:
Author	11/4/2022	EG350

Project No.: 17597-22001

1 1st Floor Key Plan - Work Areas and Rescue Window Locations
1/16" = 1'-0"



2 Enlarged Plan - Entrance Work Area
1/4" = 1'-0"

General Code Notes

A. COORDINATE WITH FLOOR PLANS, WALL SECTIONS AND PARTITION TYPES FOR RATED WALL TYPES AND LOCATIONS. IMMEDIATELY NOTIFY ARCHITECT OF ANY WALL RATING DISCREPANCIES BETWEEN DRAWINGS.

B. ALL WALLS, INCLUDING AT CORRIDORS, SHALL EXTEND COMPLETELY TO THE UNDERSIDE OF DECKING, SUPPORTING STRUCTURE OR ROOF ABOVE, TYPICAL UNLESS NOTED OTHERWISE.

C. AT AREAS OF PROJECT WORK, COMPLETELY SEAL ALL PENETRATIONS REQUIRED TO COMPLY WITH FIRE RESISTANCE RATINGS IDENTIFIED ON THE DRAWINGS. REGARDLESS IF WALL IS NEW OR EXISTING, TYPICAL UNLESS NOTED OTHERWISE.

Legend

ALL WALLS, INCLUDING CORRIDOR WALLS, EXTEND TO THE ROOF DECK OR FLOOR DECK ABOVE UNLESS NOTED OTHERWISE.

1-HOUR FIRE PARTITION

RW RESCUE WINDOW

1959 ORIGINAL BUILDING

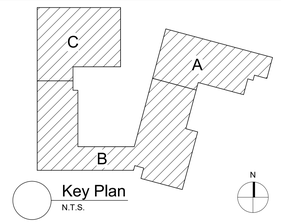
1965 BUILDING ADDITION

1973 BUILDING ADDITION

1989 BUILDING ADDITION

1991 BUILDING ADDITION

2001 BUILDING ADDITION



S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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TETRA TECH ARCHITECTS & ENGINEERS

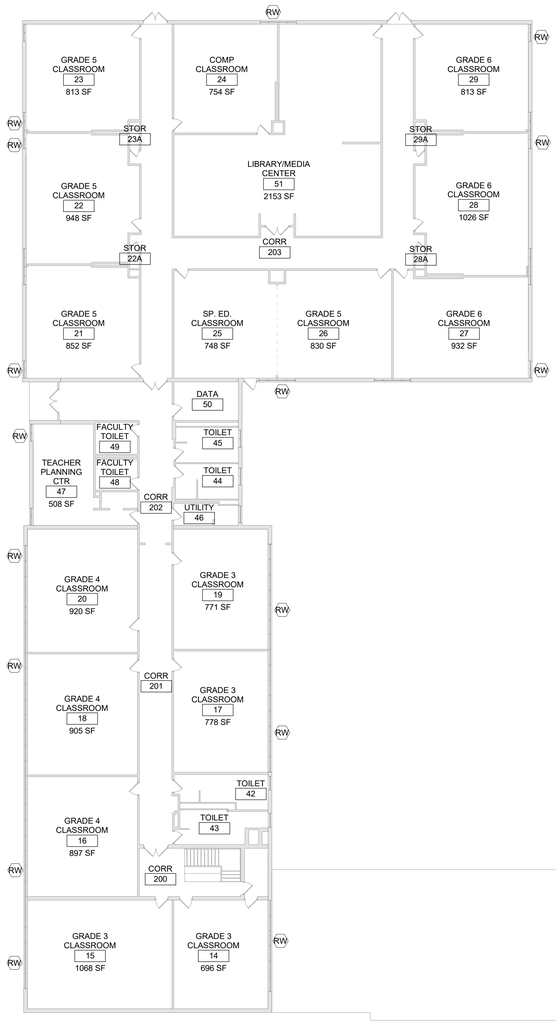
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

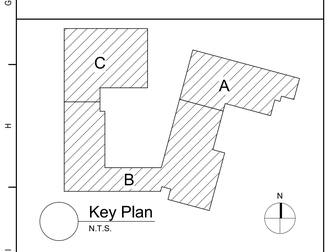
First Floor - Scope of Work and Rescue Window Locations

Drawn By:	Date:	Drawing Number:
Author	11/4/2022	EG351

Project No.: 17597-22001



1 2nd Floor Key Plan - Rescue Window Locations
1/16" = 1'-0"



S.E.D. Control No. 62-18-01-06-0-001-019

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WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

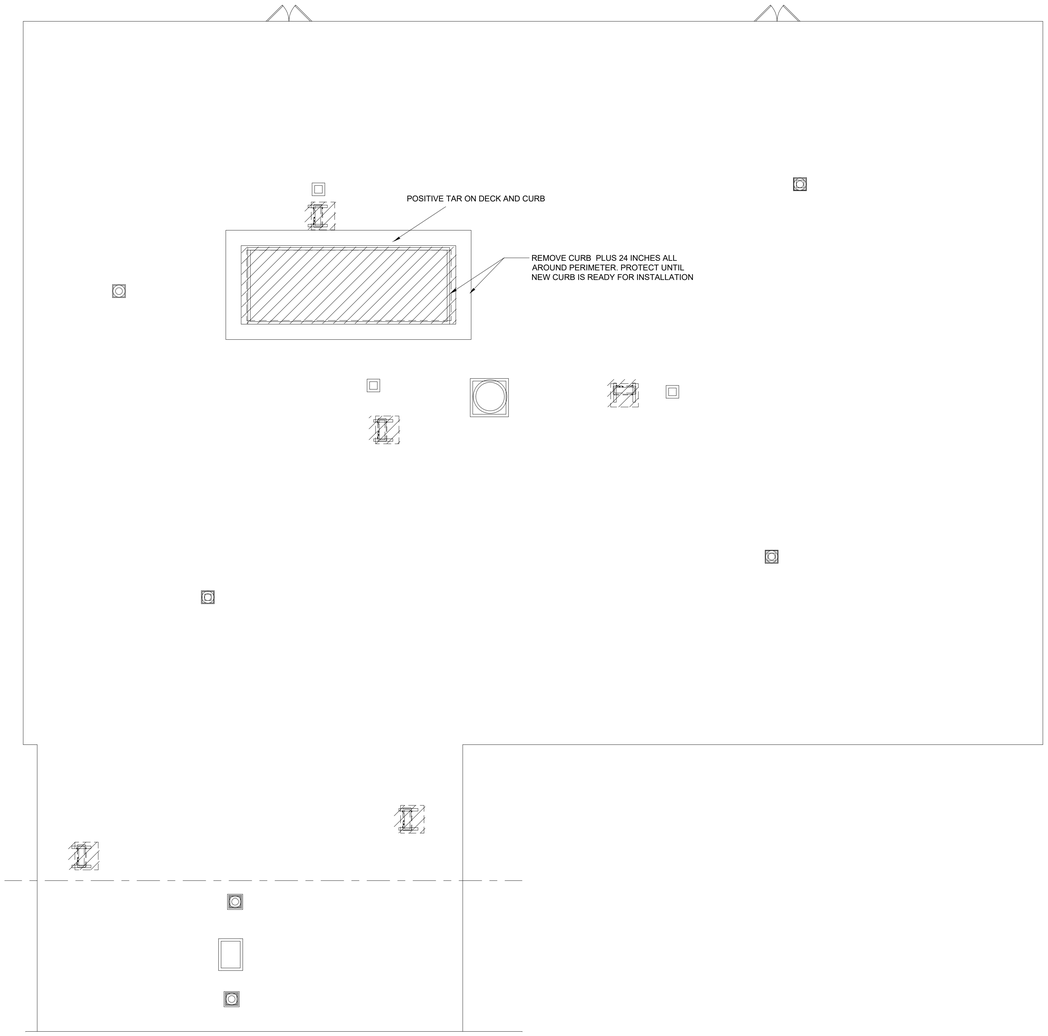
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Second Floor - Rescue Window Locations

Drawn By:	Date:	Drawing Number:
Author	11/4/2022	EG352
Project No.: 17597-22001		



1 Partial Roof Abatement Plan - Area C
NTS

ASBESTOS ABATEMENT NOTES

LEPTONDALE ELEMENTARY RECONSTRUCTION:

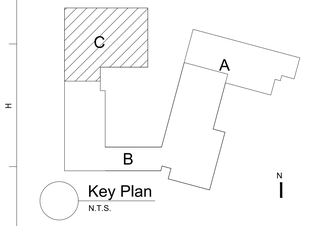
LICENSED ASBESTOS ABATEMENT CONTRACTOR IS RESPONSIBLE FOR TOTAL AND COMPLETE REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING (ACM) TAR AT MECHANICAL EQUIPMENT CURBS AND ON DECK.

ROOFING, AS DETAILED ON ATTACHED ACM LOCATION DRAWINGS. LICENSED ASBESTOS ABATEMENT CONTRACTOR RESPONSIBLE FOR TOTAL AND COMPLETE REMOVAL AND DISPOSAL OF APPROXIMATELY 360 SF OF NON-FRIABLE ASBESTOS CONTAINING ROOF MATERIALS, FLASHING TAR, PITCH POCKET TAR, EQUIPMENT/FLASHING TAR TO THE ROOF DECK, ALL CURBS ARE TO BE REMOVED AS ACM. LEAVING A CLEAN ROOF DECK WITH NO VISIBLE ACM MATERIALS. NOTE: THE BOTTOM MOST LAYER OF TAR ON THE METAL DECK IS POSITIVE FOR ACM.

REFER TO SPECIFICATION SECTION 02 08 00 - SECTION 3.17 FOR A DESCRIPTION OF THE WORK.

ASBESTOS ABATEMENT LEGEND

POSITIVE ACM TAR ON DECK AND CURB TO BE REMOVED



S.E.D. Control No. 62-18-01-06-0-001-019

R

WALLKILL CENTRAL SCHOOL DISTRICT

BID SET

Quality Environmental Solutions & Technologies, Inc.
1298 NYS Route 9
Wappingers Falls, NY 12590
Tel: (845) 298-6031

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Partial Roof Abatement Plan - Area C

Drawn By:	Date:	Drawing Number:
AM/LG	11/4/2022	EHAZ105

Project No.:
17597-22001

1 First Floor - Key Plan
1/16" = 1'-0"

General Notes - Applies to All Drawings

A. DO NOT SCALE DRAWINGS TO OBTAIN DIMENSIONS.

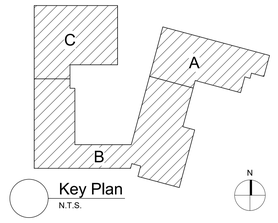
B. TAKE FIELD MEASUREMENTS TO FIT THE WORK PROPERLY. VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD.

C. REFER INCONSISTENCIES TO ARCHITECT PRIOR TO COMMENCING THE WORK IN AFFECTED AREA.

D. ITEMS ARE SHOWN DIAGRAMMATICALLY ON DRAWINGS. VERIFY SPACE REQUIREMENTS AND DIMENSIONS TO FIT THE WORK PROPERLY.

E. NOTES SHOWN ON ONE DRAWING APPLY TO ALL SIMILAR DRAWINGS.

F. DO NOT DISTURB CONSTRUCTION SUSPECTED OF CONTAINING HAZARDOUS MATERIAL. IF ENCOUNTERED, IMMEDIATELY NOTIFY ARCHITECT, CONSTRUCTION MANAGER AND OWNER.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

First Floor Key Plan

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	EA051

Project No.: 17597-22001

1 Second Floor - Key Plan
1/16" = 1'-0"

General Notes - Applies to All Drawings

A. DO NOT SCALE DRAWINGS TO OBTAIN DIMENSIONS.

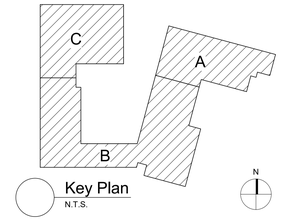
B. TAKE FIELD MEASUREMENTS TO FIT THE WORK PROPERLY. VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD.

C. REFER INCONSISTENCIES TO ARCHITECT PRIOR TO COMMENCING THE WORK IN AFFECTED AREA.

D. ITEMS ARE SHOWN DIAGRAMMATICALLY ON DRAWINGS. VERIFY SPACE REQUIREMENTS AND DIMENSIONS TO FIT THE WORK PROPERLY.

E. NOTES SHOWN ON ONE DRAWING APPLY TO ALL SIMILAR DRAWINGS.

F. DO NOT DISTURB CONSTRUCTION SUSPECTED OF CONTAINING HAZARDOUS MATERIAL. IF ENCOUNTERED, IMMEDIATELY NOTIFY ARCHITECT, CONSTRUCTION MANAGER AND OWNER.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH
ARCHITECTS & ENGINEERS

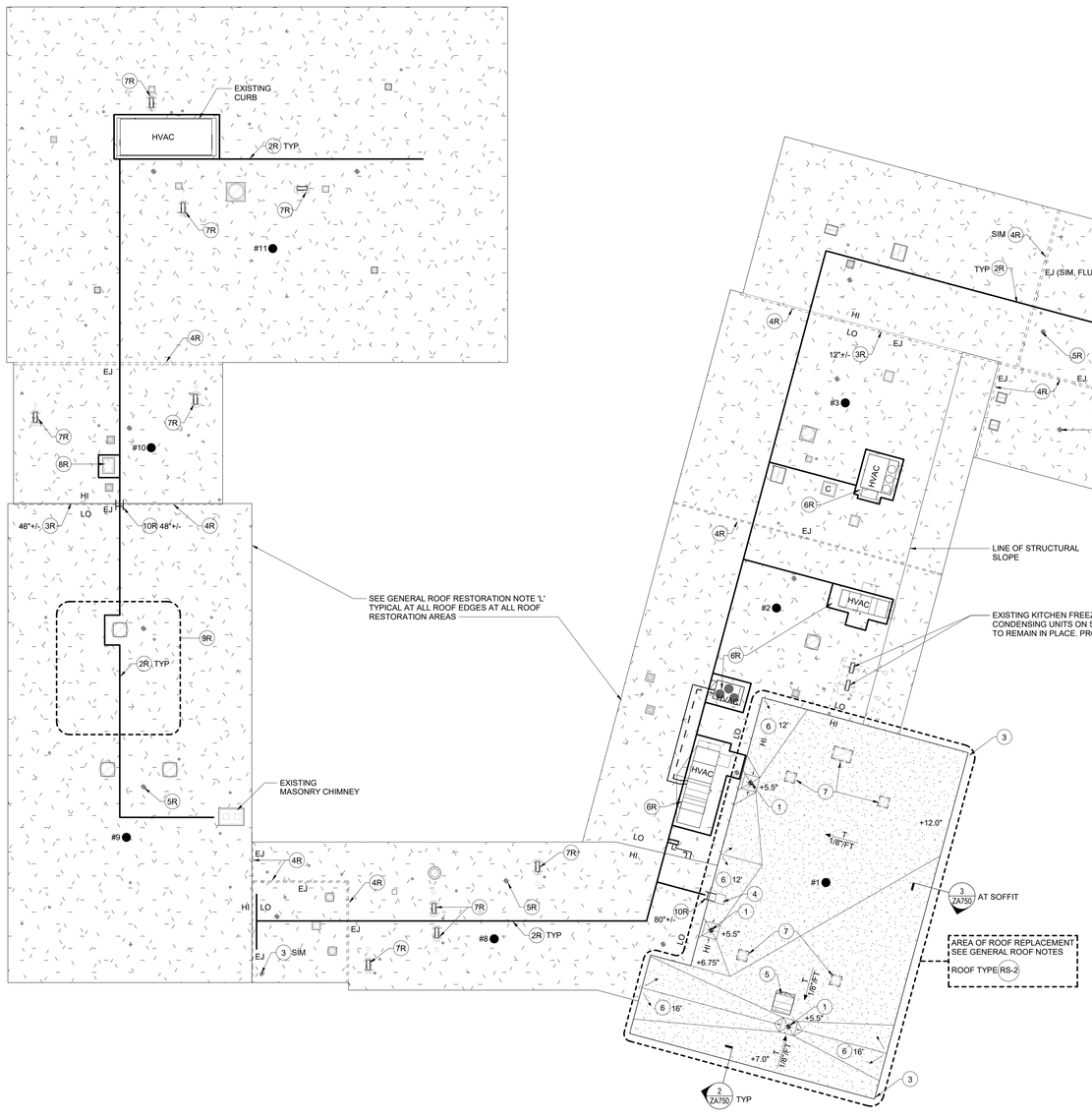
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Second Floor Key Plan

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	EA052

Project No.: 17597-22001



1 Roof Plan
1/16" = 1'-0"

PROVIDE ROOF RESTORATION AT ALL ROOF AREAS UNLESS NOTED OTHERWISE. SEE GENERAL ROOF RESTORATON NOTES AND KEYED ROOF RESTORATION NOTE 1R

Existing Conditions Notes

A. THE FOLLOWING CONDITIONS WERE OBSERVED DURING TEST CUT ANALYSIS. THE CONTRACTOR IS REQUIRED TO VERIFY ALL EXISTING CONDITIONS AND PROVIDE A COMPLETE REMOVAL OF ALL MATERIALS ABOVE THE ROOF DECK AT LOCATIONS INDICATED:

B. TYPICAL AT ROOF CUTS #1, 2, 3, 8, & 9:
- SILICONE COATING WITH GRANULES
- SPRAY POLYURETHANE FOAM INSULATION
- BUILT-UP ROOFING
- FIBERGLASS INSULATION
- ASPHALTIC TAR
- TECTUM DECK

TOTAL THICKNESS ABOVE DECK= 8"

C. TYPICAL AT ROOF CUTS #10 & 11:
- SILICONE COATING WITH GRANULES
- SPRAY POLYURETHANE FOAM INSULATION
- BUILT-UP ROOFING
- FIBERBOARD
- FIBERGLASS INSULATION
- METAL DECK

TOTAL THICKNESS ABOVE DECK = 8"

D. TYPICAL AT ROOF CUT #4:
- SILICONE COATING WITH GRANULES
- SPRAY POLYURETHANE FOAM INSULATION
- EPDM MEMBRANE
- POLYISOCYANURATE INSULATION
- POLY SHEETING
- PERLITE INSULATION
- METAL DECK

TOTAL THICKNESS ABOVE DECK = 10"

E. TYPICAL AT ROOF CUTS #5, 6 & 7:
- SILICONE COATING WITH GRANULES
- SPRAY POLYURETHANE FOAM INSULATION
- POLYISOCYANURATE INSULATION
- GYPSUM DECK

TOTAL THICKNESS ABOVE DECK = 6"

Keyed Roof Restoration Notes

1R PROVIDE COATED FOAMED ROOFING RESTORATION, TYPICAL AT ALL ROOF AREAS INDICATED ON PLAN. SEE SPECIFICATION SECTION 07 57 50 - COATED FOAMED ROOFING RESTORATION INCLUDING ROOF MOISTURE SCANS ATTACHED TO SPECIFICATION AND ROOF TYPE RS-3 DETAIL.

2R PROVIDE CONTINUOUS 30" WIDE ROOF WALKWAY COATING SYSTEM, COORDINATE LOCATIONS WITH EXISTING P ENETRATIONS, VERIFY IN FIELD, SEE SECTION 07 57 50 – COATED FOAMED ROOFING RESTORATION.

3R PROVIDE COATED FOAMED ROOF RESTORATION AT VERTICAL SURFACE, APPROXIMATE HEIGHT AS INDICATED ON PLAN, SEE SECTION 07 57 50 – COATED FOAMED ROOFING RESTORATION.

4R EXISTING EXPANSION JOINT LOCATION, PROVIDE CONTINUOUS 24" MIN. WIDTH MESH REINFORCEMENT, TYPICAL AT ALL EXPANSION JOINTS, CRACKS, WALL BASE FLASHING, AND TERMINATION LOCATIONS, NOT ALL LOCATIONS ARE SHOWN ON PLAN,VERIFY IN FIELD. SEE SECTION 07 57 50 – COATED FOAMED ROOFING RESTORATION. SEE DETAIL 20/ZA750.

5R EXISTING ROOF DRAIN WITH PLASTIC OR MISSING STRAINER. REMOVE AND DISCARD PLASTIC STRAINER AND PROVIDE GALVANIZED CAST IRON ROOF DRAIN DOME.

6R NEW PENETRATION AT EXISTING ROOFING SYSTEM. REMOVE EXISTING ROOFING MATERIALS TO ROOF DECK AND PATCH TO MATCH EXISTING MATERIALS AND THICKNESSES.AFTER INSTALLATION OF PENETRATION PRIOR TO RECOATING, PROVIDE DECK OPENINGS, FRAMES, AND INTEGRAL TAPERED DIVERSION CRICKET AT UPSLOPE SIDE OF CURB, TYPICAL. COORDINATE WITH OTHER PRIME CONTRACTORS. SEE STRUCTURAL DRAWINGS AND DETAILS 21 AND 23/ZA750.

7R EXISTING MECHANICAL EQUIPMENT LOOSE OVER ROOF TO BE REMOVED AND REINSTALLED ON SUPPORT RAILS BY OTHERS. SEAL ALL PENETRATIONS THROUGH ROOF. COORDINATE WITH OTHER PRIME CONTRACTORS.

8R REMOVE EXISTING ROOF HATCH, PROVIDE ROOF HATCH AND FALL PROTECTION RAIL SYSTEM. APPROX. 30" X 36". VERIFY EXISTING DIMENSIONS IN FIELD. PATCH TO MATCH EXISTING MATERIALS AND THICKNESSES AFTER INSTALLATION OF ROOF HATCH. SEE DETAIL 22/ZA750.

9R EXISTING PONDED AREA NOT SHOWN FOR REMOVAL ON ROOF SCAN. SCARIFY EXISTING COATING AND PROVIDE ADDITIONAL SPRAY POLYURETHANE FOAM AS REQUIRED TO CREATE POSITIVE SLOPE TO ROOF DRAIN - VERIFY EXACT CONDITIONS IN FIELD.

10R PROVIDE ALUMINUM WALL LADDER, APPROX. HEIGHT AS INDICATED ON PLAN. VERIFY EXACT LOCATION IN FIELD. SEE DETAIL 14/ZA750.

Keyed Roof Notes

1 REPLACE ROOF DRAIN AT EXISTING LOCATION (VERIFY SIZE IN FIELD). SEE DETAIL 8/ZA750.

2 VENT PIPE PENETRATION (VERIFY SIZE IN FIELD). SEE DETAIL 6/ZA750.

3 EXISTING WALL OR FASCIA SURFACE MOUNTED ELECTRICAL BOX AND CONDUITS TO BE REMOVED AND REINSTALLED BY OTHERS. COORDINATE WITH OTHER PRIME CONTRACTORS

4 ADHERED WALKWAY PAD (TYP). ALIGN WALKWAY PAD WITH LADDERS, DOORS, PERIMETERS OF HATCHES AND MECHANICAL EQUIPMENT (TYP). SEE DETAIL 5/ZA750.

5 EXISTING CURB-MOUNTED EQUIPMENT TO BE REMOVED AND REINSTALLED (OR NEW EQUIPMENT) ON PRE-FABRICATED CURB AT EXISTING LOCATION (VIF) BY OTHERS. COORDINATE WITH OTHER PRIME CONTRACTORS. SEE DETAIL 7/ZA750.

6 TAPERED INSULATION CRICKET (TYP). SLOPE 1/2"/FT, TYP ALL SIDES. VERIFY LENGTH IN FIELD. WIDTH AS INDICATED ON PLAN AND TYPICAL AT ALL CURB PENETRATIONS.

7 EXISTING CURB AND CURB-MOUNTED EQUIPMENT TO BE REMOVED BY OTHERS. COORDINATE WITH OTHER PRIME CONTRACTORS. PROVIDE ROOF DECK OPENING INFILL. VERIFY DIMENSIONS IN FIELD. SEE STRUCTURAL DRAWINGS

General Roof Notes (Typ at all areas of roof replacement)

A. AT AREAS INDICATED FOR ROOF REPLACEMENT, WORK INCLUDES, BUT IS NOT LIMITED TO: REMOVAL OF EXISTING ROOFING MATERIALS, INCLUDING GRANULES, COATINGS, MEMBRANES, INSULATION, BLOCKING, CANTS, FLASHINGS, COUNTER FLASHINGS, FASCIAS, UNDER AND OVERLAYMENT BOARDS, VAPOR BARRIERS, FASTENERS, ADHESIVES, SEALANTS AND RELATED ITEMS DOWN TO ROOF DECK (UNO). THOROUGHLY CLEAN ROOF DECK AND ADJACENT SURFACES OF ALL DEBRIS INCLUDING REMOVAL OF DEBRIS FROM DECK FLUTES, PREPARE (AND PRIME PLANK DECK AREAS) AS REQUIRED TO ACCEPT ROOFING MATERIALS INDICATED. SEE ROOF PLANS FOR SPECIFIC NOTES AND DETAILS.

B. DRAWINGS ARE REPRESENTATIVE, AND MAY NOT EXACTLY INDICATE ALL FIELD CONDITIONS. CONTRACTOR IS REQUIRED TO VERIFY ALL EXISTING CONDITIONS IN FIELD.

C. VERIFY IN FIELD LOCATIONS OF ALL EXISTING ROOF DRAINS AND PENETRATIONS PRIOR TO FIRST SUBMITTAL OF SHOP DRAWINGS.

D. INSPECT ROOF DECK PRIOR TO ROOFING INSTALLATION. VERIFY THAT EXISTING MATERIALS ARE SOLID AND SECURE. NOTIFY ARCHITECT IMMEDIATELY IF DETERIORATED OR LOOSE MATERIALS ARE DISCOVERED.

E. PROVIDE COMPLETE ROOFING INSTALLATION. PROTECT ALL ADJACENT SURFACES AS REQUIRED. RECONSTRUCT OR REPLACE ALL EXISTING ITEMS NOT SCHEDULED FOR WORK THAT ARE DAMAGED DURING ROOFING WORK.

F. MAINTAIN WATERTIGHT CONDITIONS AT ALL TIMES.

G. PROVIDE ROOFING SYSTEMS AND ALL RELATED COMPONENTS INDICATED BY THE CONTRACT DOCUMENTS AND AS REQUIRED TO ACHIEVE ROOF SYSTEM MANUFACTURER'S WARRANTY.

H. ONCE EXPOSED TO VIEW, FIELD VERIFY CONDITION OF EXISTING BLOCKING WITH ARCHITECT AND OWNER'S REPRESENTATIVE. IF DEEMED TO BE IN SERVICEABLE CONDITION, BLOCKING MAY BE PERMITTED TO REMAIN CONTINGIENT UPON RECIEPT OF AGREED CREDIT.

I. REMOVE AND LEGALLY DISPOSE OF ALL MATERIALS INDICATED FOR DEMOLITION.

J. REMOVE EXISTING EQUIPMENT, SUPPORTS, CURBS, PIPING, WIRING, CONDUITS AND MISCELLANEOUS ITEMS ON OR ADJACENT TO THE ROOF THAT IS IMPACTED BY SCHEDULED WORK (TYP, UNO). REFER TO SPECIFIC NOTES ON ROOF PLANS AND REFERENCED DETAILS FOR WORK REQUIRED.

K. EXTEND ALL EXISTING VENT PIPING AS REQUIRED TO MAINTAIN MINIMUM 18" HEIGHT ABOVE SURFACE OF FINISHED ROOF (VIF).

L. WOOD BLOCKING SHALL BE PRESERVATIVE PRESSURE-TREATED (PTP). FASTENERS FOR USE WITH PTP WOOD SHALL BE STAINLESS STEEL.

M. AT ROOF DRAIN LOCATIONS, REFER TO SPECIFIC NOTES ON ROOF PLANS AND REFERENCED DETAILS FOR WORK REQUIRED. BEFORE BEGINNING CONSTRUCTION, VERIFY ALL ROOF DRAINS AND PIPING IS CLEAR AND IN WORKING ORDER. REPORT ANY OBSTRUCTIONS TO ARCHITECT AND OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.

N. AT MECHANICAL EQUIPMENT LOCATIONS, REFER TO SPECIFIC NOTES ON ROOF PLANS AND REFERENCED DETAILS FOR WORK REQUIRED. BEFORE BEGINNING CONSTRUCTION, VERIFY ALL MECHANICAL EQUIPMENT IS OPERATIONAL AND IN WORKING ORDER. REPORT ANY DEFFICIENCIES TO ARCHITECT AND OWNER'S REPRESENTATIVE PROPR TO BEGINNING WORK.

O. AT VERTICAL ROOF TRANSITION AND BASE FLASHING LOCATIONS, REFER TO SPECIFIC NOTES ON ROOF PLANS AND REFERENCED DETAILS FOR WORK REQUIRED.

P. DO NOT DISTURB OR OVERBURDEN EXISTING ROOF AREAS THAT ARE NOT SCHEDULED FOR WORK OR RECENTLY COMPLETED ROOF AREAS. THIS INCLUDES HIGH FOOT TRAFFIC, POINTS OF ACCESS AND WORK PREPARATION AND MATERIAL STAGING AREAS.

Q. ALL WORK SHALL COMPLY WITH EXISTING ADJACENT ROOF SYSTEM MANUFACTURER'S WARRANTY REQUIREMENTS WHERE APPLICABLE.

R. MAINTAIN CONSTANT ROOF EDGE DATUM AND FASCIA HEIGHTS, BY ADJUSTING LAYERS AND THICKNESS OF CONTINUOUS WOOD BLOCKING (VIF).

S. ALL MATERIALS SHALL COMPLY WITH CHAPTER 15 OF THE 2020 BCNYS.

T. SEE STRUCTURAL DRAWINGS FOR STRUCTURAL LOAD NOTES.

U. ADDITIONAL CONSTRUCTION ACTIVITIES MAY BE TAKING PLACE DURING THIS PROJECT'S DURATION REQUIRING COORDINATION WITH THE DISTRICT AND OTHER PRIME CONTRACTORS.

General Roof Restoration Notes

A. AT AREAS INDICATED FOR ROOF RESTORATION, WORK INCLUDES, BUT IS NOT LIMITED TO: PROVIDING COATED FOAM ROOFING RESTORATION AT ALL ROOF AREAS AND ADJACENT BASE FLASHINGS AND VERTICAL TRANSITIONS AS INDICATED ON ROOF TYPE RS-3 DETAIL AND SPECIFICATION SECTION 07 57 50 - COATED FOAMED ROOFING RESTORATION INCLUDING ROOF MOISTURE SCANS ATTACHED TO SPECIFICATION. ROOFING RESTORATION INCLUDES REMOVAL AND REPLACEMENT OF EXISTING WET, LOOSE, BLISTERED, DELAMINATED, CRACKED, CONTAMINATED OR ROOFING MATERIALS NOT SUITABLE FOR RE-COATING. REPLACEMENT FOAM IS TO BE INSTALLED AT REQUIRED THICKNESS/ELEVATION TO ELIMINATE PONDING AND PROVIDE POSITIVE DRAINAGE. PROVIDE REINFORCING AT ALL EXPANSION JOINTS, CRACKS AND TERMINATION LOCATIONS AND ROOF WALKWAY SYSTEM AT LOCATIONS SHOWN ON DRAWINGS. SEE ROOF PLANS FOR SPECIFIC NOTES AND DETAILS.

B. DRAWINGS ARE REPRESENTATIVE, AND MAY NOT EXACTLY INDICATE ALL FIELD CONDITIONS. CONTRACTOR IS REQUIRED TO VERIFY ALL EXISTING CONDITIONS IN FIELD. A SITE VISIT/ROOF INSPECTION BY THE CONTRACTOR/INSTALLER PRIOR TO SUBMITTING BIDS IS STRONGLY RECOMMENDED.

C. VERIFY IN FIELD LOCATIONS OF ALL EXISTING ROOF DRAINS AND PENETRATIONS PRIOR TO FIRST SUBMITTAL OF SHOP DRAWINGS.

D. AT AREAS OF EXPOSURE, INSPECT ROOF DECK PRIOR TO ROOFING INSTALLATION. VERIFY THAT EXISTING MATERIALS ARE SOLID AND SECURE. NOTIFY ARCHITECT IMMEDIATELY IF DETERIORATED OR LOOSE MATERIALS ARE DISCOVERED.

E. PROVIDE COMPLETE ROOFING INSTALLATION. PROTECT ALL ADJACENT SURFACES AS REQUIRED. RECONSTRUCT OR REPLACE ALL EXISTING ITEMS NOT SCHEDULED FOR WORK THAT ARE DAMAGED DURING ROOFING WORK.

F. MAINTAIN WATERTIGHT CONDITIONS AT ALL TIMES.

G. PROVIDE ROOFING SYSTEMS AND ALL RELATED COMPONENTS INDICATED BY THE CONTRACT DOCUMENTS AND AS REQUIRED TO ACHIEVE ROOF SYSTEM MANUFACTURER'S WARRANTY.

H. AT EXISTING ROOF DRAIN LOCATIONS; REMOVE, CLEAN AND REINSTALL EXISTING DOME STRAINERS. CLEAN EXISTING DRAIN BOWL AND PIPING AS REQUIRED AND PERFORM HOSE TEST TO ENSURE FUNCTIONAL OPERATION BEFORE BEGINNING CONSTRUCTION. VERIFY DRAINS AND PIPING IS CLEAR AND IN WORKING ORDER. REPORT ANY OBSTRUCTIONS TO ARCHITECT AND OWNER PRIOR TO BEGINNING WORK. AT DRAIN LOCATIONS WITH MISSING OR PLASTIC STRAINERS, PROVIDE ADJUSTMABLE DRAIN GUARD.

I. ALL MATERIALS SHALL COMPLY WITH CHAPTER 15 OF THE 2020 BCNYS.

J. SEE STRUCTURAL DRAWINGS FOR STRUCTURAL LOAD NOTES.

K. ADDITIONAL CONSTRUCTION ACTIVITIES MAY BE TAKING PLACE DURING THIS PROJECT'S DURATION REQUIRING COORDINATION WITH THE DISTRICT AND OTHER PRIME CONTRACTORS.

L. AT ALL ROOF EDGES, CUT 1" 'V' GROOVE AT SPF TERMINATION AGAINST METAL FASCIA AND FILL CONTINUOUS WITH SILICONE SEALANT, TYPICAL. SEE DETAIL 18/ZA750.

M. EXISTING ALARM/DETECTION/SENSORS/DATA WIRES LOOSE OVER ROOF ARE TO BE REMOVED, RELOCATED, AND/OR REPOSITIONED. COORDINATE WITH OTHER PRIME CONTRACTORS

General Notes - Applies to All Drawings

A. DO NOT SCALE DRAWINGS TO OBTAIN DIMENSIONS.

B. TAKE FIELD MEASUREMENTS TO FIT THE WORK PROPERLY. VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD.

C. REFER INCONSISTENCIES TO ARCHITECT PRIOR TO COMMENCING THE WORK IN AFFECTED AREA.

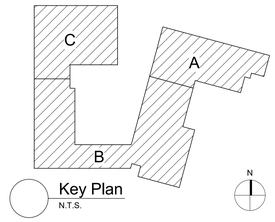
D. ITEMS ARE SHOWN DIAGRAMMATICALLY ON DRAWINGS. VERIFY SPACE REQUIREMENTS AND DIMENSIONS TO FIT THE WORK PROPERLY.

E. NOTES SHOWN ON ONE DRAWING APPLY TO ALL SIMILAR DRAWINGS.

F. DO NOT DISTURB CONSTRUCTION SUSPECTED OF CONTAINING HAZARDOUS MATERIAL. IF ENCOUNTERED, IMMEDIATELY NOTIFY ARCHITECT, CONSTRUCTION MANAGER AND OWNER.

Symbol/Hatch Legend

- INDICATES AREAS OF SPF ROOF SYSTEM TO BE RESTORED
- INDICATES AREAS OF TAPERED INSULATION, ROOF TYPE RS-2 UNLESS NOTED OTHERWISE
- ROOF DRAIN - EXISTING TO REMAIN, SEE KEYED ROOF RESTORATION NOTE 9R FOR LOCATIONS WITH PLASTIC OR MISSING STRAINER REQUIRING ADJUSTABLE DRAIN GUARD
- ROOF DRAIN WITH 4' TAPERED INSULATION SUMP - REPLACE AT EXISTING LOCATION
- EQUIPMENT ON CURB (FAN/HOOD/ETC.)
- C — CURB WITH SOLID COVER, PROVIDE ROOF COATING
- PIPE PENETRATION
- EJ — EXPANSION JOINT
- EQUIPMENT ON SUPPORT RAILS WITH FLEXIBLE PENETRATION
- HVAC — EQUIPMENT ON CURB (RTU)
- ROOF WALKWAY COATING SYSTEM
- ADHERED WALKWAY PAD
- ROOF HATCH
- LINE OF TAPERED INSULATION
- +X.X" — TOTAL THICKNESS OF INSULATION INCLUDING COVERBOARD
- RS-X — ROOF SYSTEM TYPE RS-X
- #X ● — TEST CUT LOCATION, SEE EXISTING CONDITIONS NOTES



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Roof Plan

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	EA053

Project No.: 17597-22001

1 First Floor Demolition Plan - Area A
1/8" = 1'-0"

Demolition Key Notes

1N ARTWORK/PLAQUES TO REMAIN - DO NOT DAMAGE. REMOVAL BY OWNER.

1H SAW CUT OPENING IN WALL TO EXTENT REQUIRED TO PERFORM SCHEDULED WORK. PROVIDE LINTEL PER LINTEL SCHEDULE. PATCH EXPOSED SURFACES TO MATCH ADJACENT FINISHES / SURFACES.

6A REMOVE EXISTING WOOD PANELING AND FURRING STRIPS/SYSTEM TO ACCOMMODATE SCOPE OF WORK. PATCH SUBSTRATE TO MATCH ADJACENT SURFACES WHERE DAMAGED BY REMOVALS IN ORDER TO ACCEPT NEW SCHEDULED WORK.

8A REMOVE STOREFRONT SYSTEM COMPLETELY. PREPARE OPENING TO EXTENT REQUIRED TO PERFORM SCHEDULED WORK. PATCH EXPOSED SURFACES TO MATCH ADJACENT FINISHES / SURFACES. PROTECT AND DELIVER TO OWNER'S STORAGE LOCATION FOR THEIR RE-USE.

8F REMOVE DOOR LOCKSET AND ASSOCIATED HARDWARE IN PREPARATION FOR NEW LEVERSET. REFER TO DOOR HARDWARE SCHEDULE FOR NEW HARDWARE AND TO COORDINATE REQUIRED REMOVALS TO FACILITATE NEW HARDWARE INSTALLATION.

9D.x REMOVE FLOOR FINISH, MASTIC AND WALL BASE TO EXTENT REQUIRED TO PERFORM SCHEDULED WORK. AT ALL AREAS OF FLOOR REMOVAL, LEVEL SLAB WITH ADJACENT SLABS AT LOCATIONS SCHEDULED TO RECEIVE FLOOR FINISH. INCLUDE CONCRETE FLOOR PATCHING AND LEVELING MATERIALS TO MAKE SURFACE LEVEL. PREPARE FOR FINISH. PATCH AREAS OF WALLS TO REMAIN THAT WERE DAMAGED BY REMOVAL OF WALL BASE.

SUFFIX KEY (FLOOR FINISH IDENTIFICATIONS):
I. VAT/VCT.

9G REMOVE CEILING SYSTEM AND/OR SOFFIT SYSTEM IN ITS ENTIRETY.

9H REMOVE SPLINE CEILING SYSTEM SYSTEM IN ITS ENTIRETY (ADJACENT SOFFITS TO REMAIN WHERE EXISTING). REFER TO REFLECTED CEILING PLANS FOR ADDITIONAL INFORMATION. REFER TO OTHER DISCIPLINE'S DRAWINGS FOR ASSOCIATED WORK WITH CEILING MOUNTED ITEMS.

9J REMOVE AND REINSTALL EXISTING CEILING SYSTEM AS REQUIRED TO ACCOMODATE STRUCTURAL REINFORCING OF ROOF. COORDINATE ALL LOCATIONS OF REQUIRED CEILING REMOVAL WITH STRUCTURAL DRAWINGS. EXISTING CEILING MOUNTED ITEMS TO BE PROTECTED FOR REINSTALLTION INTO CEILING. COORDINATE WITH OTHER DISCIPLINE'S DRAWINGS.

12C REMOVE EXISTING TV DISPLAY. TURN OVER TO OWNER FOR THEIR STORAGE / REUSE.

General Demolition Notes

A. - - - - - - REMOVE ITEMS INDICATED BY DASHED LINE.

B. KEYED DEMOLITION TAGS REFER TO SPECIFIC LOCATIONS AS FOLLOWS:

1. DEMOLITION TAGS LOCATED WITHIN THE MIDDLE OF A SPACE REFER TO DEMOLITION OF ALL ITEMS OF THAT SAME TYPE WITHIN THAT ENTIRE SPACE.

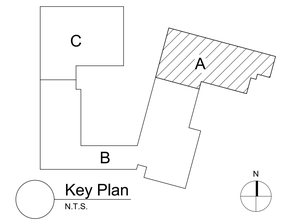
2. DEMOLITION TAGS PLACED IMMEDIATELY ON OR ADJACENT TO A DASHED LINE INDICATING ITEM REMOVAL OR THAT HAVE A LEADER POINTING TO SPECIFIC ITEM(S) REFER TO DEMOLITION OF THAT SPECIFIC ITEM ONLY OF THAT TYPE WITHIN THAT SPACE.

3. DEMOLITION TAGS IN SERIES REFER TO DEMOLITION OF ALL THOSE ITEMS EITHER WITHIN THAT ENTIRE SPACE OR TO THE SPACE IDENTIFIED BY THAT LEADER.

C. WHEN AN ITEM IS INDICATED TO BE DEMOLISHED REMOVE ALL ASSOCIATED COMPONENTS AS PART OF THAT WORK.

D. ALL ARTWORK NOT PERMANENTLY AFFIXED TO EXISTING CONSTRUCTION SHALL BE REMOVED AND STORED BY OWNER PRIOR TO BEGINNING DEMOLITION WORK. CONTACT OWNER'S AGENT(S) IF ANY ARTWORK IS ENCOUNTERED PRIOR TO START OF DEMOLITION WORK.

E. EXISTING WINDOW-MOUNTED A/C UNITS SHALL BE REMOVED AND STORED BY OWNER PRIOR TO START OF DEMOLITION WORK.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

complex world | CLEAR SOLUTIONS

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

First Floor Demolition Plan - Area A

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	EA101
Project No.: 17597-22001		

Demolition Key Notes

- (1N) ARTWORK/PLAQUES TO REMAIN - DO NOT DAMAGE. REMOVAL BY OWNER.
- (1H) SAW CUT OPENING IN WALL TO EXTENT REQUIRED TO PERFORM SCHEDULED WORK. PROVIDE LINTEL PER LINTEL SCHEDULE. PATCH EXPOSED SURFACES TO MATCH ADJACENT FINISHES / SURFACES.
- (6A) REMOVE EXISTING WOOD PANELING AND FURRING STRIPS/SYSTEM TO ACCOMMODATE SCOPE OF WORK. PATCH SUBSTRATE TO MATCH ADJACENT SURFACES WHERE DAMAGED BY REMOVALS IN ORDER TO ACCEPT NEW SCHEDULED WORK.
- (8A) REMOVE STOREFRONT SYSTEM COMPLETELY. PREPARE OPENING TO EXTENT REQUIRED TO PERFORM SCHEDULED WORK. PATCH EXPOSED SURFACES TO MATCH ADJACENT FINISHES / SURFACES. PROTECT AND DELIVER TO OWNER'S STORAGE LOCATION FOR THEIR RE-USE.
- (8F) REMOVE DOOR LOCKSET AND ASSOCIATED HARDWARE IN PREPARATION FOR NEW LEVERSET. REFER TO DOOR HARDWARE SCHEDULE FOR NEW HARDWARE AND TO COORDINATE REQUIRED REMOVALS TO FACILITATE NEW HARDWARE INSTALLATION.
- (9D.x) REMOVE FLOOR FINISH, MASTIC AND WALL BASE TO EXTENT REQUIRED TO PERFORM SCHEDULED WORK. AT ALL AREAS OF FLOOR REMOVAL, LEVEL SLAB WITH ADJACENT SLABS AT LOCATIONS SCHEDULED TO RECEIVE FLOOR FINISH. INCLUDE CONCRETE FLOOR PATCHING AND LEVELING MATERIALS TO MAKE SURFACE LEVEL. PREPARE FOR FINISH. PATCH AREAS OF WALLS TO REMAIN THAT WERE DAMAGED BY REMOVAL OF WALL BASE.

  SUFFIX KEY (FLOOR FINISH IDENTIFICATIONS):
  I. VAT/VCT.

- (9G) REMOVE CEILING SYSTEM AND/OR SOFFIT SYSTEM IN ITS ENTIRETY.
- (9H) REMOVE SPLINE CEILING SYSTEM SYSTEM IN ITS ENTIRETY (ADJACENT SOFFITS TO REMAIN WHERE EXISTING). REFER TO REFLECTED CEILING PLANS FOR ADDITIONAL INFORMATION. REFER TO OTHER DISCIPLINE'S DRAWINGS FOR ASSOCIATED WORK WITH CEILING MOUNTED ITEMS.
- (9J) REMOVE AND REINSTALL EXISTING CEILING SYSTEM AS REQUIRED TO ACCOMODATE STRUCTURAL REINFORCING OF ROOF. COORDINATE ALL LOCATIONS OF REQUIRED CEILING REMOVAL WITH STRUCTURAL DRAWINGS. EXISTING CEILING MOUNTED ITEMS TO BE PROTECTED FOR REINSTALLTION INTO CEILING. COORDINATE WITH OTHER DISCIPLINE'S DRAWINGS.
- (12C) REMOVE EXISTING TV DISPLAY. TURN OVER TO OWNER FOR THEIR STORAGE / REUSE.

General Demolition Notes

A. - - - - - - REMOVE ITEMS INDICATED BY DASHED LINE.

B. KEYED DEMOLITION TAGS REFER TO SPECIFIC LOCATIONS AS FOLLOWS:

1. DEMOLITION TAGS LOCATED WITHIN THE MIDDLE OF A SPACE REFER TO DEMOLITION OF ALL ITEMS OF THAT SAME TYPE WITHIN THAT ENTIRE SPACE.

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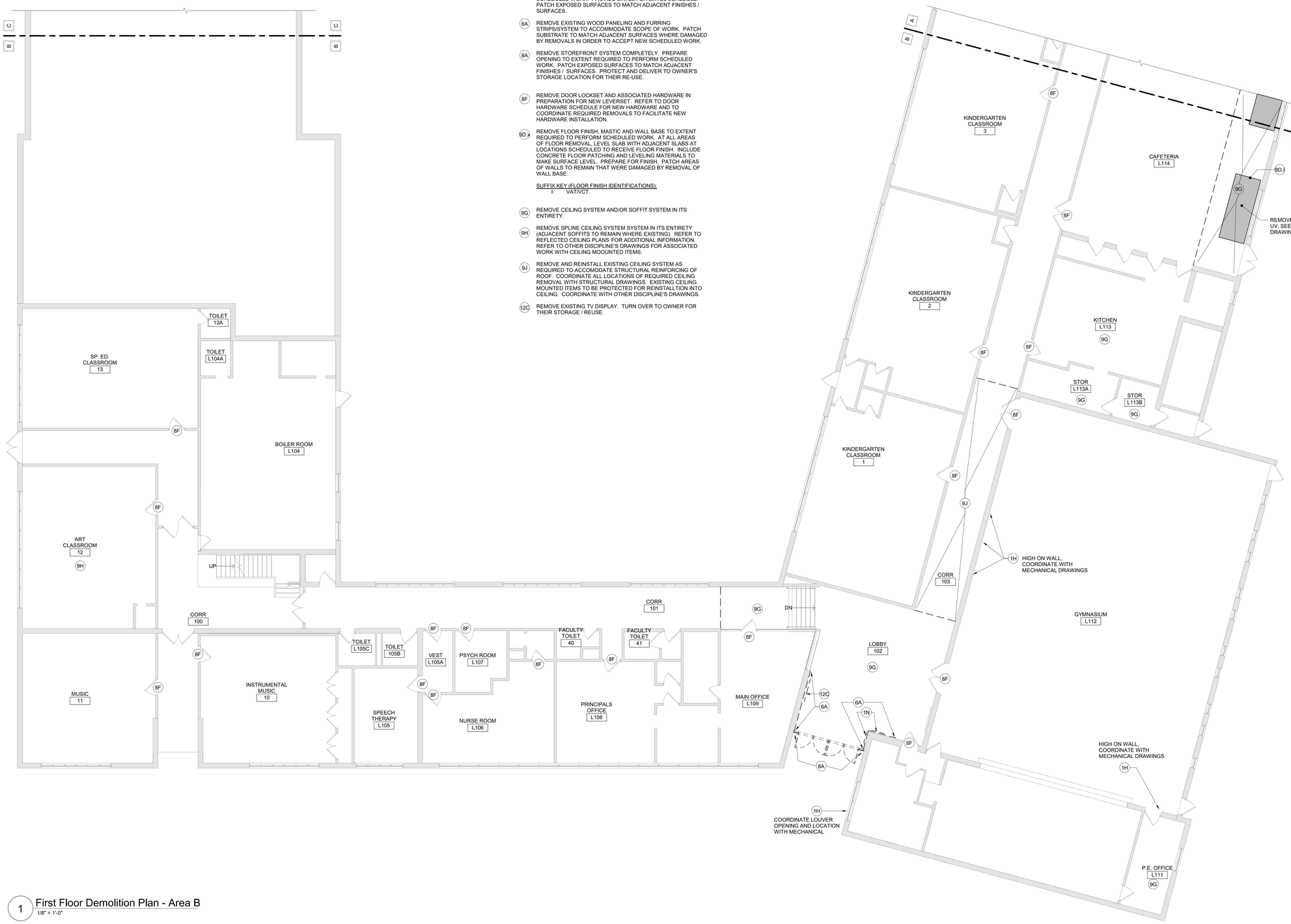
3. DEMOLITION TAGS IN SERIES REFER TO DEMOLITION OF ALL THOSE ITEMS EITHER WITHIN THAT ENTIRE SPACE OR TO THE SPACE IDENTIFIED BY THAT LEADER.

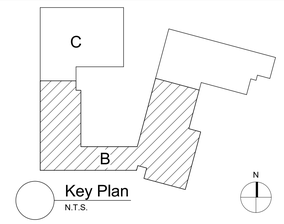
C. WHEN AN ITEM IS INDICATED TO BE DEMOLISHED REMOVE ALL ASSOCIATED COMPONENTS AS PART OF THAT WORK.

D. ALL ARTWORK NOT PERMANENTLY AFFIXED TO EXISTING CONSTRUCTION SHALL BE REMOVED AND STORED BY OWNER PRIOR TO BEGINNING DEMOLITION WORK. CONTACT OWNER'S AGENT(S) IF ANY ARTWORK IS ENCOUNTERED PRIOR TO START OF DEMOLITION WORK.

E. EXISTING WINDOW-MOUNTED A/C UNITS SHALL BE REMOVED AND STORED BY OWNER PRIOR TO START OF DEMOLITION WORK.



1 First Floor Demolition Plan - Area B
1/8" = 1'-0"



S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

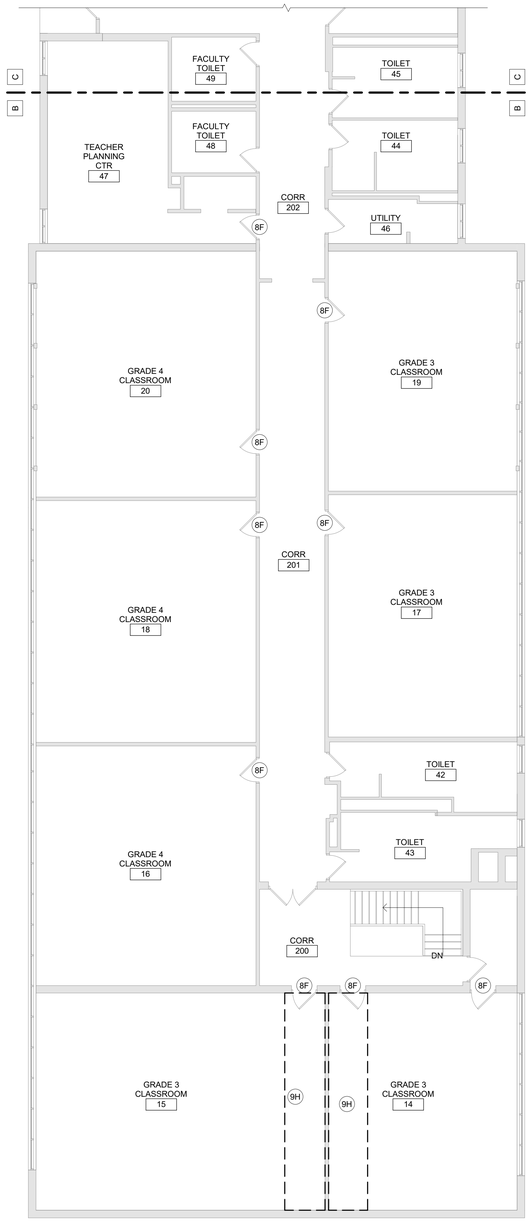
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

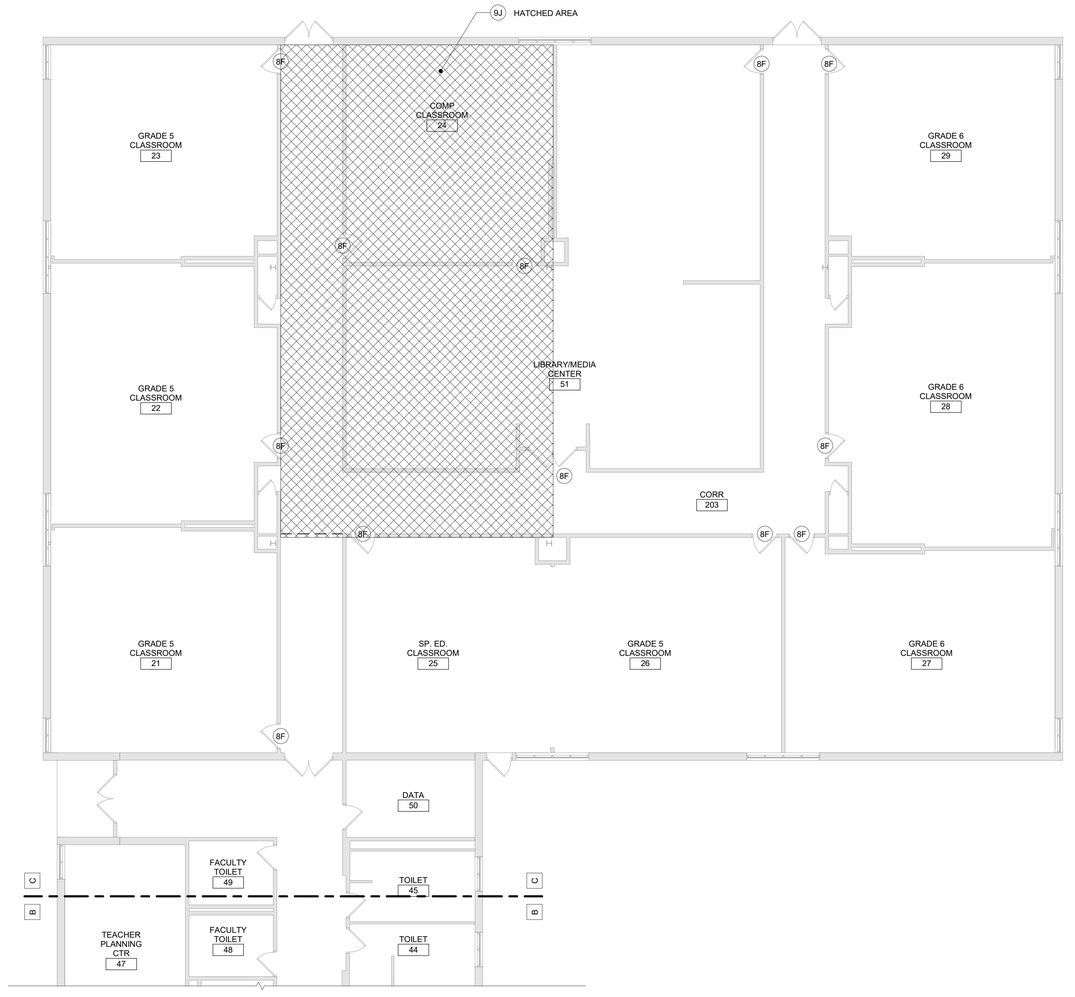
Reconstruction to:
Leptondale Elementary School

First Floor Demolition Plan - Area B

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	EA102
Project No.: 17597-22001		



2 Second Floor Demolition Plan - Partial Area B
1/8" = 1'-0"



1 Second Floor Demolition Plan - Area C
1/8" = 1'-0"

Demolition Key Notes

1N ARTWORK/PLAQUES TO REMAIN - DO NOT DAMAGE. REMOVAL BY OWNER.

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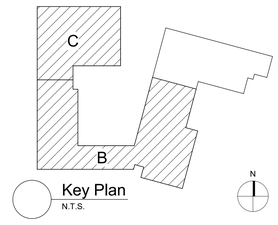

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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BID SET

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

TETRA TECH ARCHITECTS & ENGINEERS

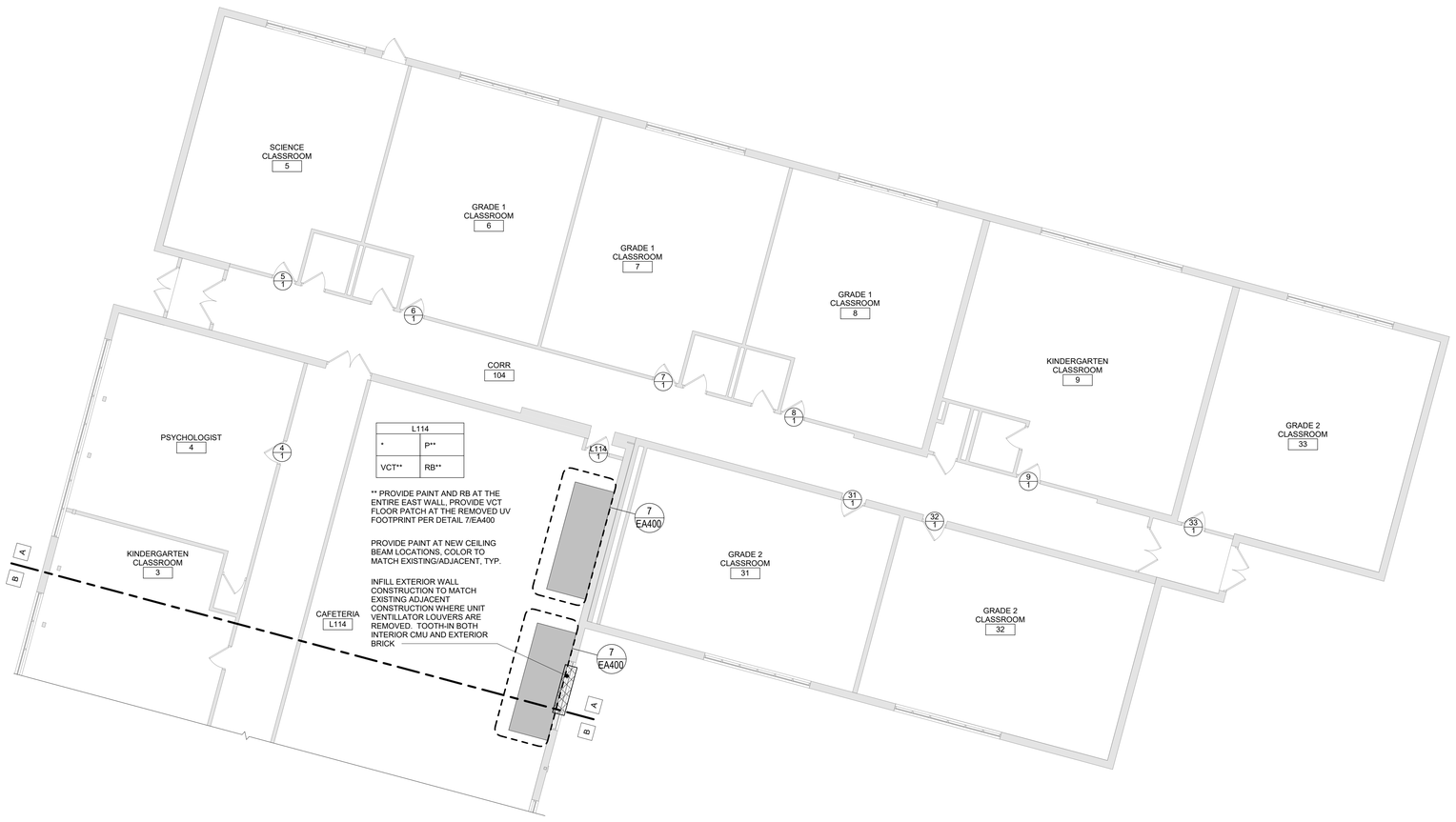
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Second Floor Demolition Plan - Partial Area B and Area C

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	EA104

Project No.: 17597-22001



1 First Floor Plan - Area A
1/8" = 1'-0"

General Plan Notes

A. WHERE EXISTING CONSTRUCTION IS DAMAGED OR DISTURBED, PATCH AS REQUIRED TO RESTORE SURFACES TO THEIR ORIGINAL CONDITION.

B. PARTITION TYPE TAGS APPLY TO ENTIRE LENGTH OF WALL INDICATED BY THAT TAG, REGARDLESS OF OPENINGS WITHIN THAT WALL, TYPICAL UNLESS NOTED OTHERWISE.

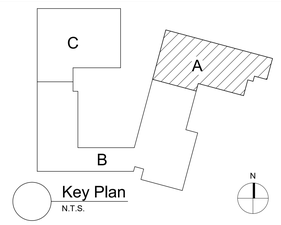
Room Finish Key

C2	CARPET - TYPE 2 ENTRY WALK OFF
HPC	HIGH PERFORMANCE COATING
N	NO WORK REQUIRED
P	PAINT SURFACE(S) INCLUDING SOFFITS
PT	PORCELAIN TILE
RB	RUBBER BASE
VCT	VINYL COMPOSITION TILE
*	SEE REFLECTED CEILING PLAN
**	PROVIDE NEW TB AT WALLS WITH PT
***	THICKSET APPLICATION FOR PT
****	PATCH AND PAINT AT UV AS REQUIRED
	INDICATED CHANGE IN FLOOR FINISH

NOTE: ALL FINISHES LISTED MAY NOT BE REQUIRED FOR THIS PROJECT. REFER TO EA900 FOR GENERAL FINISH NOTES AND GENERAL CASEWORK NOTES.

FINISHES SHOWN IN ROOM FINISH BOX ARE FOR ALL WALLS AND ENTIRE FLOOR AND CEILING REFER TO EACH ROOM FOR MORE INFORMATION.

RM#	
CLG*	WALL
FLR	BASE



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

complex world | CLEAR SOLUTIONS

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH ARCHITECTS & ENGINEERS

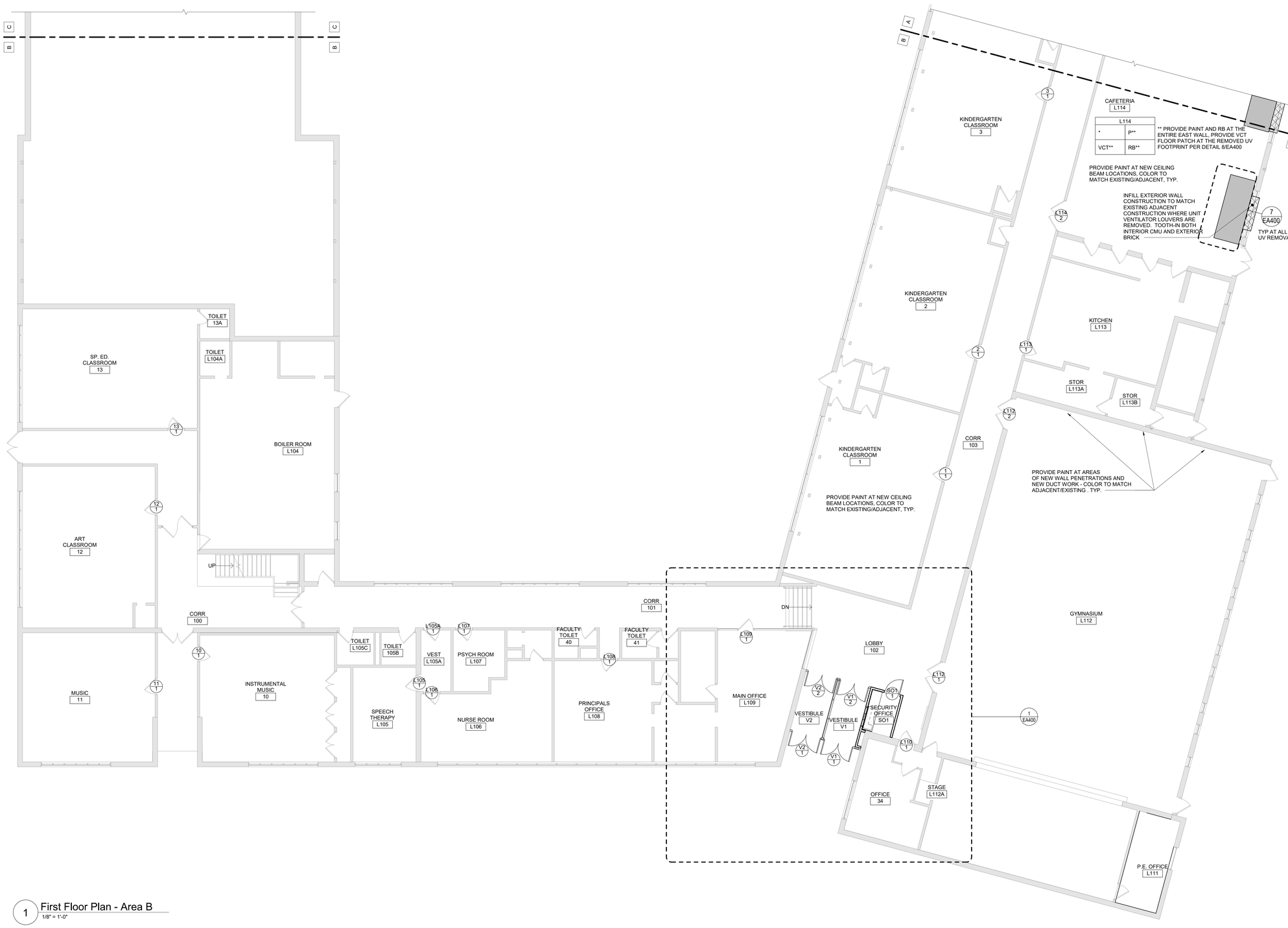
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

First Floor Plan - Area A

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	EA131

Project No.: 17597-22001



1 First Floor Plan - Area B
1/8" = 1'-0"

Room Finish Key

C2	CARPET - TYPE 2 ENTRY WALK OFF
HPC	HIGH PERFORMANCE COATING
N	NO WORK REQUIRED
P	PAINT SURFACE(S) INCLUDING SOFFITS
PT	PORCELAIN TILE
RB	RUBBER BASE
VCT	VINYL COMPOSITION TILE
*	SEE REFLECTED CEILING PLAN
**	PROVIDE NEW TB AT WALLS WITH PT
***	THICKSET APPLICATION FOR PT
****	PATCH AND PAINT AT UV AS REQUIRED
	INDICATED CHANGE IN FLOOR FINISH

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FINISHES SHOWN IN ROOM FINISH BOX ARE FOR ALL WALLS AND ENTIRE FLOOR AND CEILING REFER TO EACH ROOM FOR MORE INFORMATION.

RM#	
CLG*	WALL
FLR	BASE

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

complex world | CLEAR SOLUTIONS

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH ARCHITECTS & ENGINEERS

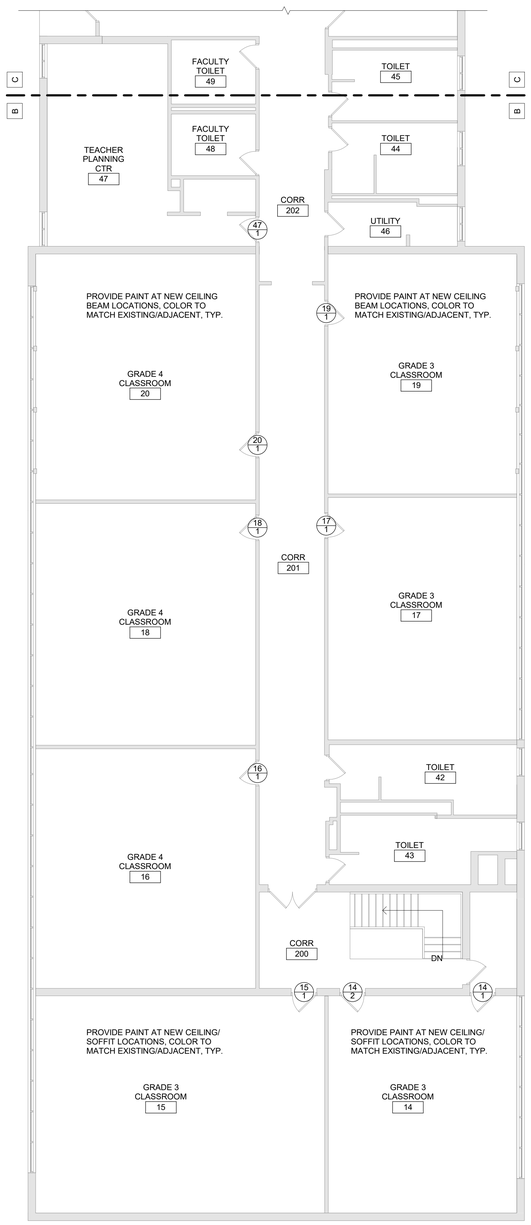
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

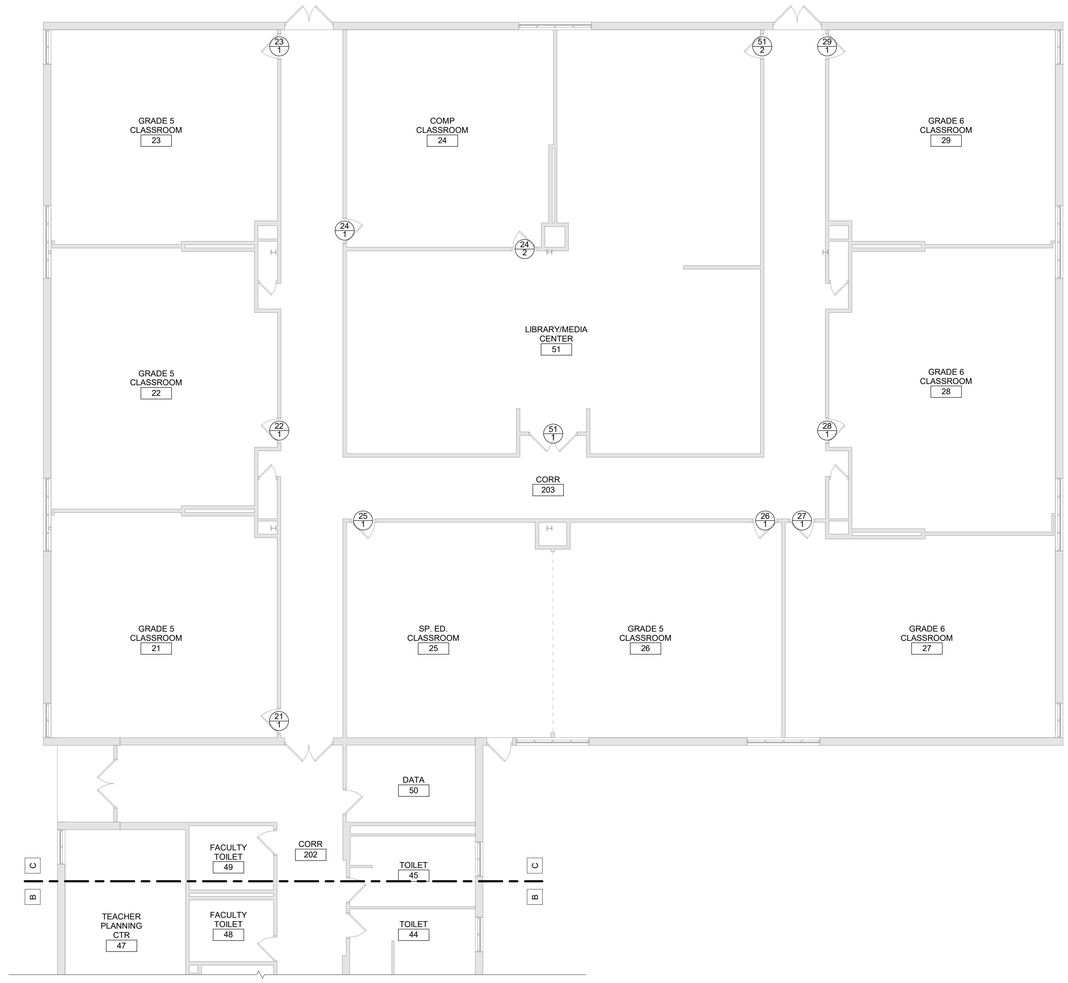
First Floor Plan - Area B

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	EA132

Project No.: 17597-22001



1 Second Floor Plan - Partial Area B
1/8" = 1'-0"

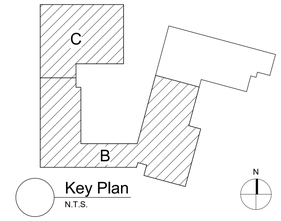


2 Second Floor Plan - Area C
1/8" = 1'-0"

General Plan Notes

A. WHERE EXISTING CONSTRUCTION IS DAMAGED OR DISTURBED, PATCH AS REQUIRED TO RESTORE SURFACES TO THEIR ORIGINAL CONDITION.

B. PARTITION TYPE TAGS APPLY TO ENTIRE LENGTH OF WALL INDICATED BY THAT TAG, REGARDLESS OF OPENINGS WITHIN THAT WALL, TYPICAL UNLESS NOTED OTHERWISE.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH ARCHITECTS & ENGINEERS

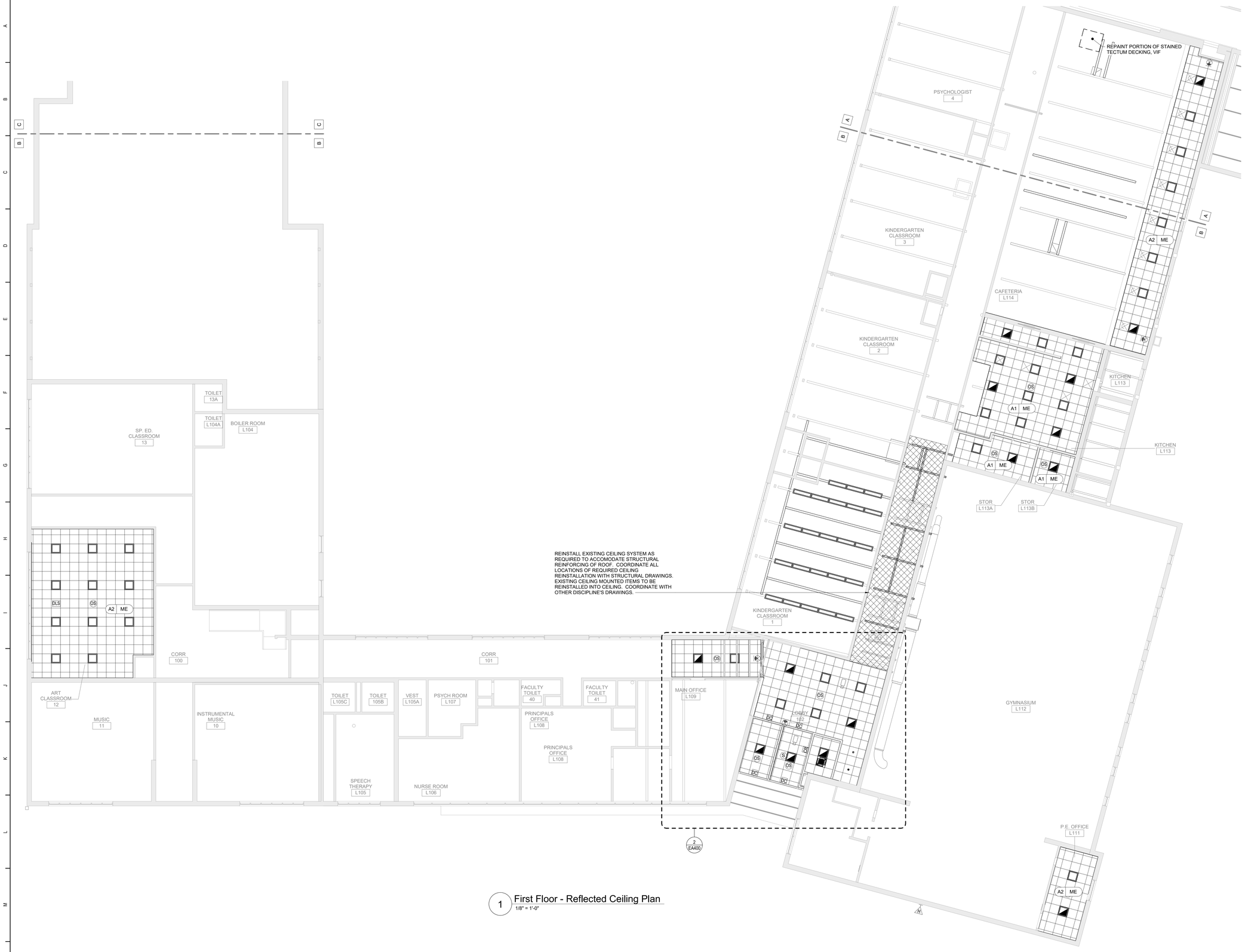
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Second Floor Plan - Partial Area B and Area C

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	EA134

Project No.: 17597-22001



1 First Floor - Reflected Ceiling Plan
1/8" = 1'-0"

General Ceiling Notes

A. LIGHTING AND OTHER CEILING-MOUNTED FIXTURES ARE SHOWN FOR DRAWING CLARITY. COORDINATE ALL CEILING WORK PRIOR TO INSTALLATION OF CEILING GRID.

B. CENTER CEILING-MOUNTED ITEMS (LIGHTS, GRILLES, DETECTORS, SPRINKLER HEAD, ETC) WITHIN THE CEILING PANELS AND GRIDS UNLESS THE PANELS ARE SCORED. CENTER TEMS WITHIN THE PATTERN OF SCORED PANELS.

C. PATCH CEILING SYSTEMS TO REMAIN THAT HAVE BEEN DISTURBED BY SCHEDULED WORK TO MATCH ADJACENT ONSTRUCTION PRIOR TO PAINTING.

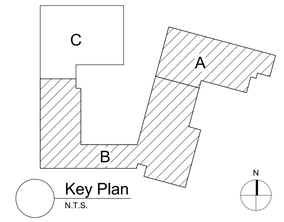
D. (X | 9'-0") DESIGNATES BOTTOM OF CEILING ABOVE FINISHED FLOOR AT THAT POINT UNO. DESIGNATION "ME" INDICATES MATCH EXISTING CEILING HEIGHT.

Ceiling Types

(A1 | X'-X") ACOUSTIC PANEL CEILING

(A2 | X'-X") ACOUSTIC PANEL CEILING

(B | X'-X") PAINTED 5/8" GYPSUM CEILING ON SUPPORT MATERIALS (GRID SUSPENSION SYSTEM, TYP UNO)



S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

complex world | CLEAR SOLUTIONS

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH ARCHITECTS & ENGINEERS

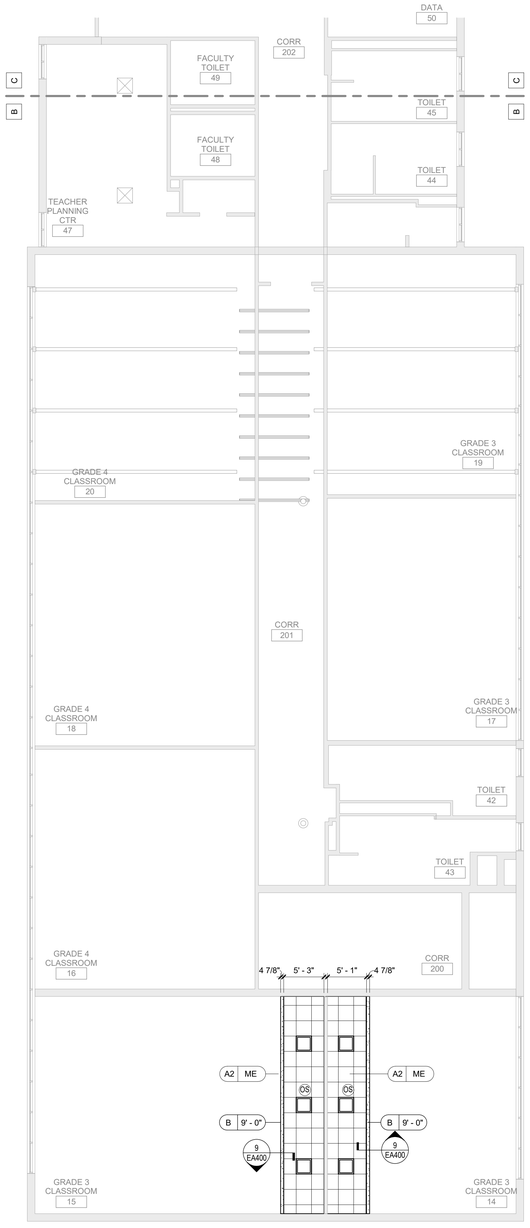
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

First Floor Reflected Ceiling Plan

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	EA161

Project No.: 17597-22001



1 Second Floor - Reflected Ceiling Plan
1/8" = 1'-0"

REINSTALL EXISTING CEILING SYSTEM AS REQUIRED TO ACCOMODATE STRUCTURAL REINFORCING OF ROOF. COORDINATE ALL LOCATIONS OF REQUIRED CEILING REINSTALLATION WITH STRUCTURAL DRAWINGS. EXISTING CEILING MOUNTED ITEMS TO BE REINSTALLED INTO CEILING. COORDINATE WITH OTHER DISCIPLINE'S DRAWINGS.

2 Second Floor - Reflected Ceiling Plan
1/8" = 1'-0"

General Ceiling Notes

A. LIGHTING AND OTHER CEILING-MOUNTED FIXTURES ARE SHOWN FOR DRAWING CLARITY. COORDINATE ALL CEILING WORK PRIOR TO INSTALLATION OF CEILING GRID.

B. CENTER CEILING-MOUNTED ITEMS (LIGHTS, GRILLES, DETECTORS, SPRINKLER HEAD, ETC) WITHIN THE CEILING PANELS AND GRIDS UNLESS THE PANELS ARE SCORED. CENTER TEMS WITHIN THE PATTERN OF SCORED PANELS.

C. PATCH CEILING SYSTEMS TO REMAIN THAT HAVE BEEN DISTURBED BY SCHEDULED WORK TO MATCH ADJACENT ONSTRUCTION PRIOR TO PAINTING.

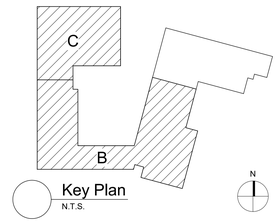
D. (X | 9'-0") DESIGNATES BOTTOM OF CEILING ABOVE FINISHED FLOOR AT THAT POINT UNO. DESIGNATION "ME" INDICATES MATCH EXISTING CEILING HEIGHT.

Ceiling Types

(A1 | X'-X") ACOUSTIC PANEL CEILING

(A2 | X'-X") ACOUSTIC PANEL CEILING

(B | X'-X") PAINTED 5/8" GYPSUM CEILING ON SUPPORT MATERIALS (GRID SUSPENSION SYSTEM, TYP UNO)



S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

complex world | CLEAR SOLUTIONS

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

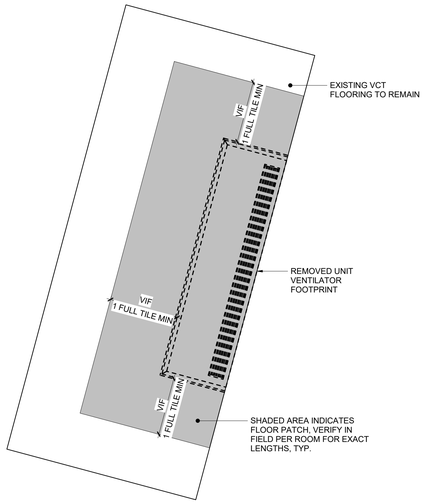
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

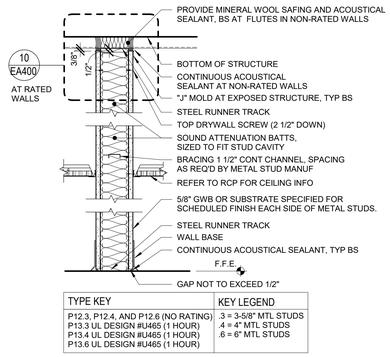
Reconstruction to:
Leptondale Elementary School

Second Floor Reflected Ceiling Plan

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	EA162
Project No.: 17597-22001		

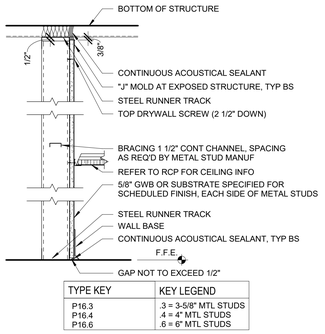


7 Floor Patch at UV Removal Detail
3" = 1'-0"



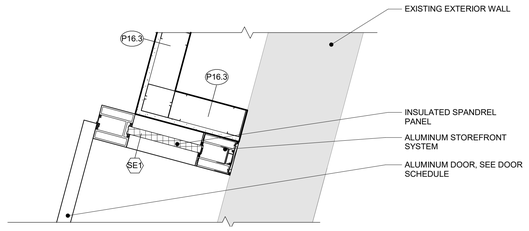
TYPE KEY	KEY LEGEND
P12.3, P12.4, AND P12.6 (NO RATING) P13.3 UL DESIGN #U465 (1 HOUR) P13.4 UL DESIGN #U465 (1 HOUR) P13.6 UL DESIGN #U465 (1 HOUR)	.3 = 3-5/8" MTL STUDS .4 = 4" MTL STUDS .6 = 6" MTL STUDS

3 Partition Types P12 and P13
1 1/2" = 1'-0"

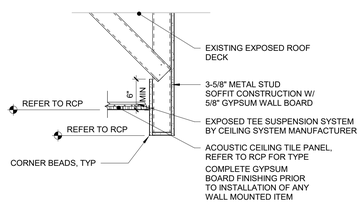


TYPE KEY	KEY LEGEND
P16.3 P16.4 P16.6	.3 = 3-5/8" MTL STUDS .4 = 4" MTL STUDS .6 = 6" MTL STUDS

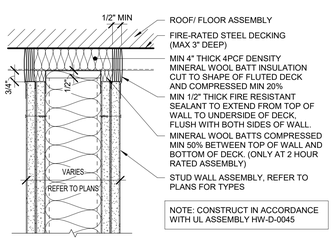
4 Metal Stud Partition Type P16
1 1/2" = 1'-0"



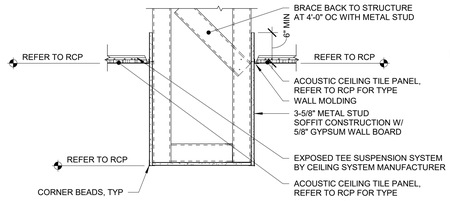
8 Plan Detail
1 1/2" = 1'-0"



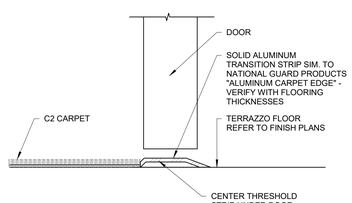
9 Ceiling Edge Detail at Classroom
1" = 1'-0"



10 Typical Top of Wall Assembly (Rated)
3" = 1'-0"

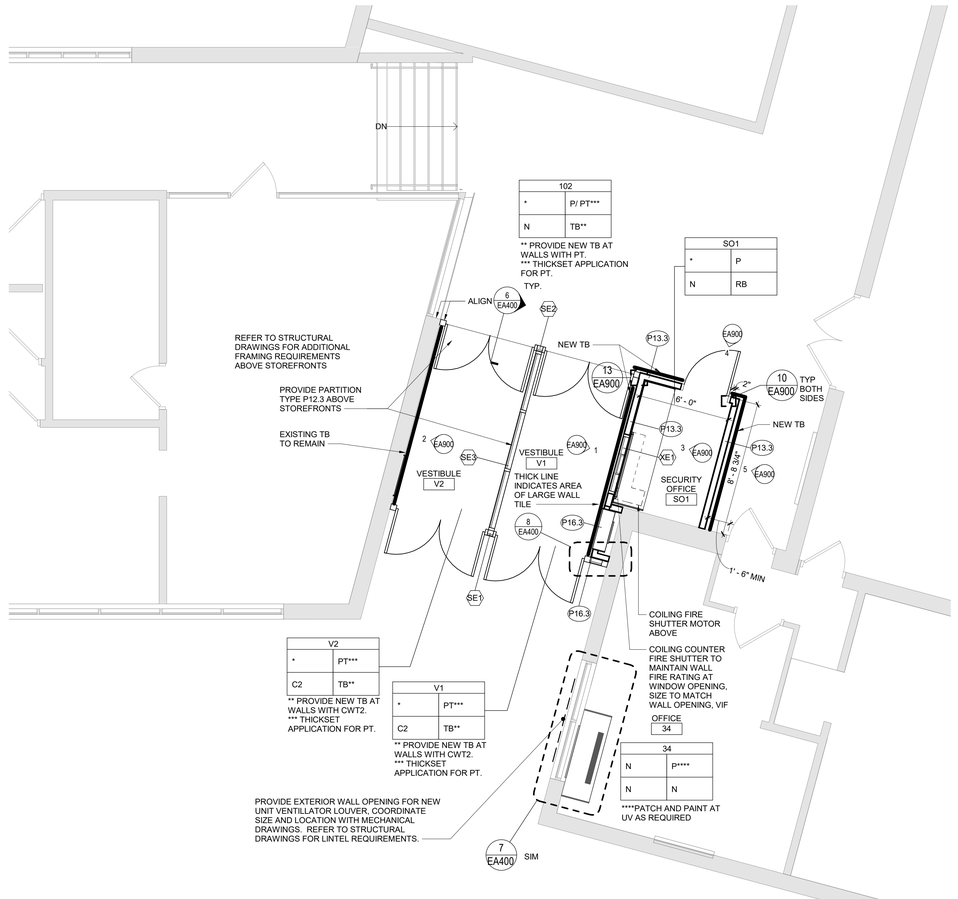


5 Ceiling Edge Detail
1" = 1'-0"



NOTE:
REFER TO SPECIFICATIONS FOR TRANSITION TYPES
REFER TO FINISH PLANS FOR ALL LOCATIONS, TYPICAL.
THRESHOLD TO MEET ALL ADA CRITERIA
RATED DOOR UNDERCUT DISTANCE TO MEET REQUIRED NFPA CRITERIA

6 Aluminum Threshold Detail
6" = 1'-0"



1 First Floor - Area B - Enlarged Entrance Plan
1/4" = 1'-0"

2 First Floor - Enarged Ceiling Plan
1/4" = 1'-0"

Room Finish Key

C2	CARPET - TYPE 2 ENTRY WALK OFF
HPC	HIGH PERFORMANCE COATING
N	NO WORK REQUIRED
P	PAINT SURFACE(S) INCLUDING SOFFITS
PT	PORCELAIN TILE
RB	RUBBER BASE
VCT	VINYL COMPOSITION TILE
*	SEE REFLECTED CEILING PLAN
**	PROVIDE NEW TB AT WALLS WITH PT
***	THICKSET APPLICATION FOR PT
****	PATCH AND PAINT AT UV AS REQUIRED
	INDICATED CHANGE IN FLOOR FINISH

NOTE: ALL FINISHES LISTED MAY NOT BE REQUIRED FOR THIS PROJECT. REFER TO EA900 FOR GENERAL FINISH NOTES AND GENERAL CASEWORK NOTES.

FINISHES SHOWN IN ROOM FINISH BOX ARE FOR ALL WALLS AND ENTIRE FLOOR AND CEILING
REFER TO EACH ROOM FOR MORE INFORMATION.

RM#	
CLG*	WALL
FLR	BASE

Ceiling Types

A1	X'-X"	ACOUSTIC PANEL CEILING
A2	X'-X"	ACOUSTIC PANEL CEILING
B	X'-X"	PAINTED 5/8" GYPSUM CEILING ON SUPPORT MATERIALS (GRID SUSPENSION SYSTEM, TYP UNO)

General Ceiling Notes

A. LIGHTING AND OTHER CEILING-MOUNTED FIXTURES ARE SHOWN FOR DRAWING CLARITY. COORDINATE ALL CEILING WORK PRIOR TO INSTALLATION OF CEILING GRID.

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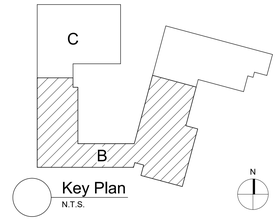

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Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Enlarged Plans / Interior Elevations

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	EA400

Project No.: 17597-22001

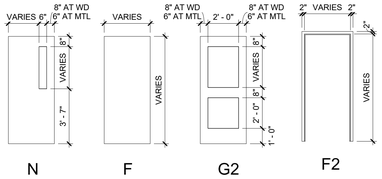
Door Schedule

ROOM NUMBER	DOOR NUMBER	DOOR TYPE	DOOR MATERIAL	DOOR WIDTH	DOOR HEIGHT	DOOR RATING	DOOR GLAZING	FRAME TYPE	FRAME MATERIAL	FRAME WIDTH	FRAME HEIGHT	FRAME RATING	FRAME GLAZING	HEAD	JAMB	SILL	HDW SET	REMARKS
1st FLR AP-K 58																		
1	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
2	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
3	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
4	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
5	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L1	
6	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
7	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L1	
8	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L1	
9	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L1	
31	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
32	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
33	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
L110	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L3	
L112	1	EXG-PR	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	6' - 4"	7' - 4"	-	-				L4	
L112	2	EXG-PR	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	6' - 4"	7' - 4"	-	-				L4	
L113	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
L114	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L3	
L114	2	EXG-PR	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	6' - 4"	7' - 4"	-	-				L4	
SO1	1	N	WD	3' - 0"	7' - 0"	20 MIN	FP	F2	HM	3' - 4"	7' - 2"	20 MIN	-	H14	J14		L10	NOTE 3
V1	1	G2-PR	AL	3' - 0"	7' - 0"	-	FCE/SCL	SE1	AL	14' - 7 1/2"	11' - 3"	-	FCE/SCL	12/EA600	5/EA600		L6	NOTE 1, NOTE 3
V1	2	G2-PR	AL	3' - 0"	7' - 0"	-	SCL	SE2	AL	13' - 5 1/2"	11' - 3"	-	SCL	8/EA600	6/EA600		L7	NOTE 3
V2	1	G2-PR	AL	3' - 0"	7' - 0"	-	FCE/SCL	SE1	AL	14' - 7 1/2"	11' - 3"	-	FCE/SCL	12/EA600	5/EA600		L8	NOTE 1, NOTE 3
V2	2	G2-PR	AL	3' - 0"	7' - 0"	-	SCL	SE2	AL	13' - 5 1/2"	11' - 3"	-	SCL	8/EA600	6/EA600		L9	NOTE 3
1st FLR CLASSRM 58																		
10	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
11	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
12	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
13	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
L105	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L4	
L105A	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
L106	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
L107	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
L108	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
L109	1	G2	WD	3' - 0"	7' - 10"	-	-	-	-	3' - 4"	7' - 2"	-	-				L2	NOTE 2
2nd FLR CLASSROOM 58																		
14	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
14	2	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
15	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
16	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
17	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
18	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
19	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
20	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
21	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L1	
22	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L1	
23	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L1	
24	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
24	2	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
25	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
26	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
27	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L1	
28	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L1	
29	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L1	
47	1	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2
51	1	EXG-PR	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	6' - 4"	7' - 2"	-	-				L5	
51	2	EXG	EXG	3' - 0"	7' - 0"	-	-	EXG	EXG	3' - 4"	7' - 2"	-	-				L2	NOTE 2

NOTE 1: EXTERIOR DOORS TO RECIEVE MANUFACTURER'S STANDARD ALUMINUM THERMALLY BROKEN DOOR THRESHOLD, SIZED TO FIT OPENING

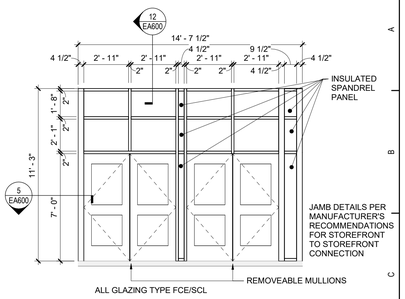
NOTE 2: MODIFICATION LOCK SUPPLIED AND INSTALLED BY STATE CONTRACT - OTHER REQUIRED HARDWARE ITEMS PROVIDED AND INSTALLED PER BID DOCUMENTS.

NOTE 3: REFER TO SECURITY DOCUMENTS FOR ADDITIONAL INFORMATION ON SECURITY HARDWARE

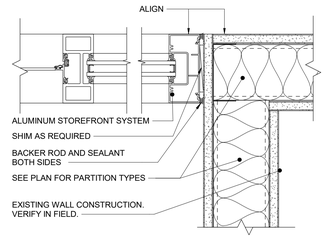


DOOR TYPES

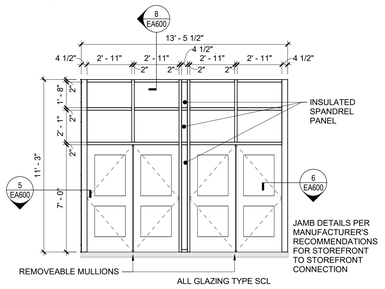
FRAME TYPES



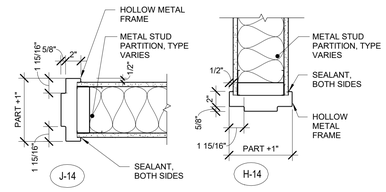
1 STOREFRONT SE1
1/4" = 1'-0"



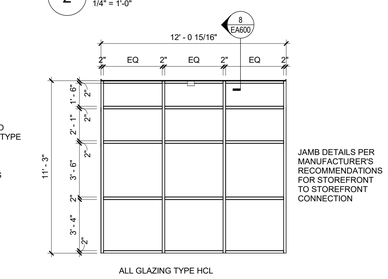
6 Storefront Jamb Detail
3" = 1'-0"



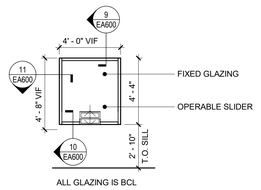
2 STOREFRONT SE2
1/4" = 1'-0"



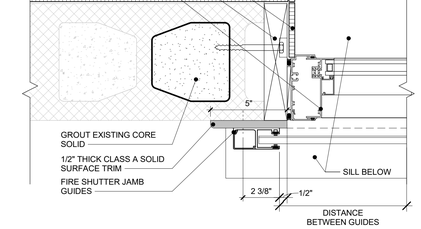
7 Hollow Metal Frame Details
1 1/2" = 1'-0"



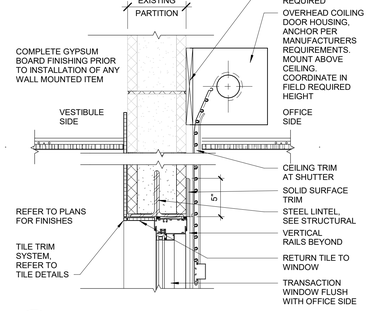
3 STOREFRONT SE3
1/4" = 1'-0"



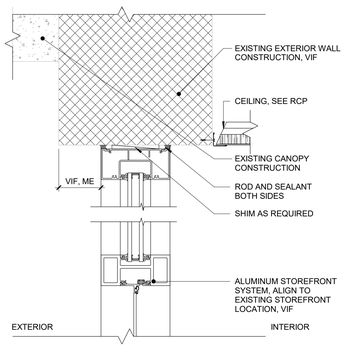
4 WINDOW TYPE XE1
1/4" = 1'-0"



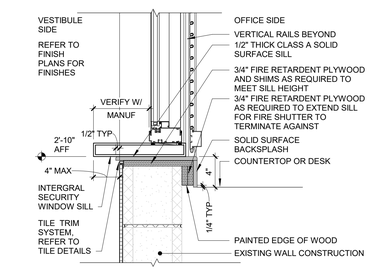
11 Fire Shutter Jamb Detail
3" = 1'-0"



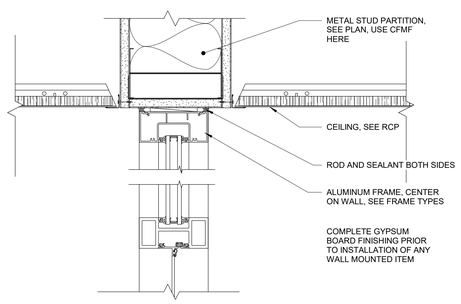
9 Fire Shutter Head Detail
1 1/2" = 1'-0"



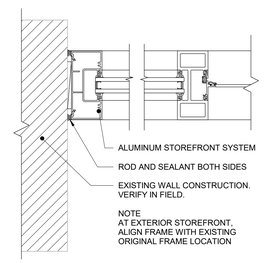
12 Storefront Head Exterior
3" = 1'-0"



10 Fire Shutter Sill Detail
1 1/2" = 1'-0"



8 Storefront Head Interior
3" = 1'-0"



5 Storefront Jamb
3" = 1'-0"

General Door Notes

A. HARDWARE ON DOORS FROM SPACES OF PUPIL OCCUPANCY SHALL BE A TYPE WHICH WILL ALWAYS PERMIT THE DOOR TO BE OPENED FROM THE INSIDE WITHOUT DIRECT MANIPULATION OF ANY TYPE LOCKING DEVICE.

B. METAL VISION PANEL TRIM SHALL BE PAINTED SAME COLOR AS DOOR FRAMES.

C. ALL DOORS WITH ELECTRO-MAGNETIC HOLD OPEN DEVICES SHALL SWING TOWARDS ADJACENT WALLS. COORDINATE ALL INSTANCES WITH CONTRACTOR RESPONSIBLE FOR ELECTRICAL WORK, AND SEE ELECTICAL DWGS.

D. ALL DOOR HARDWARE FROM OCCUPIED SPACES SHALL BE OF A TYPE THAT WILL ALWAYS PERMIT THE DOOR TO BE OPENED FROM WITHIN THE SPACE WITHOUT USE OF A KEY.

E. ALL HM FRAMES IN CMU WALLS SHALL BE GROUTED SOLID.

F. APPLY CONTINOUS JOINT SEALANT TO ALL JOINTS BETWEEN FRAMES AND WALLS, TYP ALL.

G. PAINT ALL HM DOORS AND FRAMES IN ACCORDANCE W/ SECTION 099000.

H. PROVIDE LINTELS AT ALL DOOR AND WINDOW OPENINGS IN ACCORDANCE WITH LINTEL SCHEDULE ON STRUCTURAL DWGS.

I. PROVIDE WINDOW TREATMENTS AT SIDELIGHTS, EXCLUDING TRANSOM DIRECTLY ABOVE DOORS. REFER TO WINDOW TREATMENT PLANS FOR LOCATIONS.

J. NOTE THAT DUE TO REQUIREMENTS IN THE BCNYS, SOME FIRE RESISTANCE RATINGS MAY DIFFER BETWEEN DOORS (AND ITS GLASS, IF ANY) AND THAT DOOR'S FRAME ESPECIALLY IF THAT FRAME HAS GLASS (SIDELITES; TRANSOMS; ETC).

General Window Notes

A. INSULATING GLASS UNITS SHALL BE TYPE FCE/SCL, TYP UNO.

B. RESCUE WINDOWS ARE INDICATED BY THE DESIGNATION "RW".

C. PROVIDE ALL ALUMINUM FLASHINGS, RECEIVERS, TRIM AND SILLS REQUIRED FOR A COMPLETE AND FINISHED INSTALLATION REGARDLESS OF IF SHOWN ON DRAWINGS.

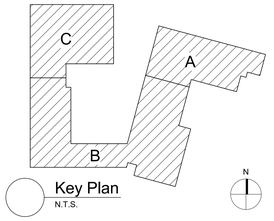
D. REFER TO WINDOW TREATMENTS AS SHOWN ON DRAWINGS.

E. GLAZING SYSTEMS FRAME TYPE KEY:

C	ALUMINUM CURTAIN WALL
F	HOLLOW METAL
S	ALUMINUM STOREFRONT
X	ALUMINUM SECURITY WINDOWS

F. PROVIDE INTERNAL STEEL REINFORCEMENT TO WINDOW, STOREFRONT AND CURTAIN WALL SYSTEMS AS REQUIRED TO COMPLY WITH WIND LOADING OR OTHER DESIGN CRITERIA, OR AS RECOMMENDED BY MANUFACTURER,

G. ALUMINUM WINDOW, STOREFRONT AND CURTAIN WALL FRAME EXTRUSIONS ARE INTENDED AS GENERIC GRAPHIC REPRESENTATIONS ONLY.



S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

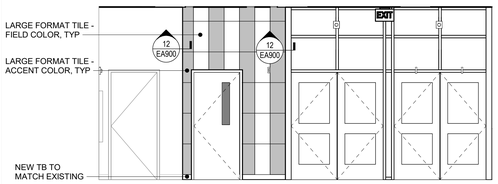
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

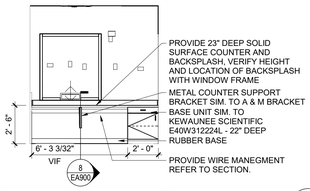
Reconstruction to:
Leptondale Elementary School

Door Schedule, Door and Window Types, and Details

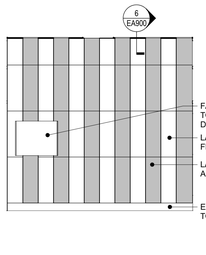
Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	EA600
Project No.: 17597-22001		



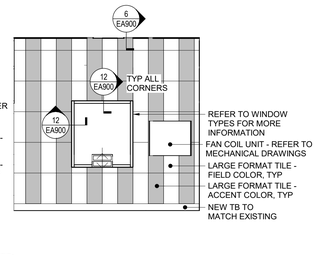
4 Security Office - North Elevation
1/4" = 1'-0"



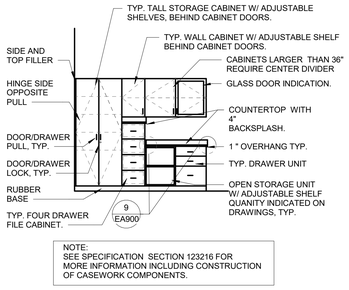
3 Security Office - West Elevation
1/4" = 1'-0"



2 Vestibule - West Elevation
1/4" = 1'-0"

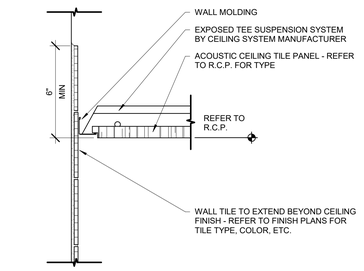


1 Vestibule Security Office Wall
1/4" = 1'-0"

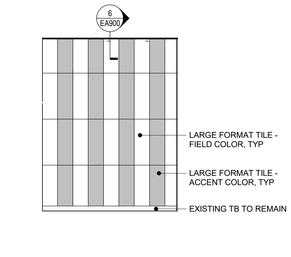


NOTE:
SEE SPECIFICATION SECTION 123216 FOR MORE INFORMATION INCLUDING CONSTRUCTION OF CASEWORK COMPONENTS.

7 Typical Casework Designations
1/4" = 1'-0"



6 Wall Tile at Acoustic Ceiling
3" = 1'-0"



5 Security Office Tile Wall
1/4" = 1'-0"

General Wood Casework Notes

FOR ALL CONTRACTOR RESPONSIBILITIES REFER TO SPECIFICATION SECTION 01 10 00/01 12 00.

A. THE CASEWORK SHOWN ON THE DRAWINGS IS BASED ON KEWAUNEE SCIENTIFIC WOOD CASEWORK. REFER TO THE PROJECT MANUAL, SECTION 12 32 13 FOR DETAILED SPECIFICATIONS.

B. ALL STANDARD CASEWORK DIMENSIONS TO BE MODIFIED TO CORRESPOND WITH THE DIMENSIONS NOTED ON THE DRAWINGS. FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF CABINETS

C. MODEL NUMBERS LISTED ON DRAWINGS APPLY TO ELEVATIONS SHOWN. PROVIDE OPPOSITE HAND MODELS WHERE SHOWN.

D. PROVIDE FULL DEPTH SHELVES AT BASE, WALL AND TALL CABINETS, UNLESS NOTED OTHERWISE.

E. BASE AND TALL CABINETS ARE 22 INCHES DEEP. U.N.O. WALL CABINETS ARE 14 INCHES DEEP, UNO BASE CABINET DEPTH DOES NOT INCLUDE 1" COUNTERTOP OVERHANG, TYP.

F. PROVIDE FINISHED ENDS, BACK EXTENSIONS, SCRIBES AND FINISHED FILLER PANELS ON ALL CABINETS. FILLER PANELS ARE NOT TO EXCEED 3" WIDE, UNLESS NOTED OTHERWISE. PROVIDE TOP AND BOTTOM FILLER PANELS AT ALL BASE & WALL UNITS. SUBMIT SHOP DRAWINGS SHOWING DETAILS OF THESE CONDITIONS.

G. ALL COUNTERTOPS TO BE SOLID SURFACE WITH A RADIUS EDGE UNLESS NOTED OTHERWISE. BACKSPLASHES TO BE 4" HIGH, TYP. DO NOT PROVIDE BACKSPLASHES AT UV WALL UNLESS NOTED OTHERWISE. PROVIDE CAULK AT ALL JOINTS PROVIDE MARINE EDGE AT LOUVER LOCATIONS, TYP.

H. RADIUS COUNTERTOPS AT SOLID SURFACE COUNTERTOPS ENDS MEETING TALL SHELVING UNITS WITH A DEPTH LESS THAN COUNTERTOP DEPTH. RADIUS TO BE 1-1/2" UNLESS NOTED OTHERWISE. REFER TO DETAIL 9/EA900.

J. PROVIDE COUNTERTOP CUT-OUTS FOR SINK, FAUCETS, AIR AND/OR GAS COCKS, COORDINATE WITH ALL REQUIRED CONTRACTORS.

K. PROVIDE CUTS AT ALL CONDITIONS THAT INTERFERE WITH COUNTERTOPS/CABINETS: SCRIBE TO FIT.

L. PROVIDE AT ALL UV SHELVING LOCATIONS-REMOVABLE BACKS IN CABINETS AT PLUMBING AND FIN TUBE VALVE LOCATIONS. VERIFY POSITIONS OF VALVES PRIOR TO SHOP FABRICATION OF ALL CABINETS.

M. PROVIDE SHOP DRAWINGS SHOWING LOCATIONS AND DETIALS FOR ALL GRILLES, LOUVERS, REMOVABLE PANELS, VALVE LOCATIONS ECT. ASSOCIATED WITH CASEWORK COORDINATE WITH ALL REQUIRED CONTRACTORS.

N. PROVIDE CABINETS WITH FINISHED SIDES, INCLUDING BUT NOT LIMITED TO, LOCATIONS OF ADJACENT CABINETS OR EQUIPMENT WITH A DEPTH LESS THAN CABINET OR EQUIPMENT.

P. PROVIDE ALL STANDARD FEATURES OF CASEWORK UNITS AS INDICATED BY MODEL NUMBER OR AS SHOWN ON PLANS, DETAILS AND ELEVATIONS. INCLUDED BUT NOT LIMITED TO: OUTLETS, SWITCHES, LIGHTS ETC.

Q. PROVIDE BLOCKING AT NEW AND EXISTING GYPSUM BOARD WALLS PER MANUFACTURER RECOMMENDATIONS FOR SUPPORT OF WALL ITALL MOUNTED UNITS. REFER TO SPECIFICATION SECTION 06 10 00 FOR WOOD BLOCKING RESPONSIBILITIES.

R. PROVIDE LOCKS AT ALL CASEWORK DOORS/DRAWERS AND FILE UNITS TYP.

S. PROVIDE AS NOTED ON DRAWINGS AND DETAILS; 2" GROMMETS AT OPEN BASE COUNTERS 30"/36" OC, WIRE MANAGEMENT, KEY BOARD TRAYS AND CABLE TRAYS.

T. PROVIDE ALL CUTOUTS AS SHOWN ON CASEWORK PLANS AND ELEVATIONS OR AS REQUIRED. CUTOUTS ARE TO INCLUDE BUT NOT LIMITED TO: ALL ELEC BOXES, OUTLETS, AND ASSOCIATED WIRING AND FINAL HOOK-UP.

U. PROVIDE REMOVABLE BACK PANELS AT ALL SINK BASE CABINETS, INCLUDING ADA FUMEHOODS, EYEWASHAND SAFETY STATIONS.

V. REFER TO BOTH 1/8" AND 1/4" PLANS FOR LAYOUTS.

Q. REFER TO SPECIFICATION SECTION 01 23 00 FOR ADDITIONAL INFORMATION REGARDING CASEWORK ALTERNATES.

Signage Notes

A. ALL ROOM NAMES AND NUMBERS ARE SUBJECT TO CHANGE, SUPPLIER TO VERIFY WITH SCHOOL DISTRICT DURING CONSTRUCTION PHASE, PRIOR TO SUBMITTAL PHASE, FOR FINAL ROOM NAMES AND NUMBERS.

B. ALL PERMANENT ROOMS TO RECEIVE ROOM IDENTIFICATION SYSTEM CONTAINING BOTH TEXT AND ROOM NUMBERS.

C. PROVIDE BARRIER-FREE AND TACTILE SIGNAGE AT ALL LOCATIONS REQUIRED BY CODE AND AS SHOWN ON THE ARCHITECTURAL DRAWINGS.

D. COORDINATE MOUNTING HEIGHTS AS PER CABO/ANSI A117.1 AND AS PER MANUFACTURER'S RECOMMENDATIONS.

E. ALL COLORS TO BE ISSUED DURING CONSTRUCTION.

F. PROVIDE SIGNS AS PER SIGNAGE SCHEDULE AS REQUIRE BY CODE AND SIGNAGE DRAWING.

G. REFER TO SPECIFICATIONS SECTION 10 14 00 FOR MORE INFORMATION.

General Finish Notes

ALL FINISH PRODUCTS ARE TO BE INSTALLED IN ACCORDANCE WITH CONTRACT SPECIFICATION AND MANUFACTURES INSTRUCTIONS. REFER TO SPECIFICATIONS AND FINISH DETAILS FOR ADDITIONAL INFORMATION ON INSTALLATION OF SPECIFIED MATERIALS,

A. ALL PAINTS FOR INTERIOR AND EXTERIOR ARE TO BE APPLIED IN ACCORDANCE WITH SPECIFICATION SECTION 09 91 00 AND 09 96 00.

B. ALL EXPOSED STRUCTURES, INCLUDING BUT NOT LIMITED TO PIPING AND FIREPROOFING, CONDUIT, AND ALL ASSOCIATED EQUIPMENT ARE TO BE PAINTED.

C. APPLY PAINT TO BOTH NEW AND EXISTING ITEMS IN ALL AREAS INDICATED WITH A FINISH BOX AND/OR NOTES - THESE ITEMS ARE INCLUDING BUT ARE NOT LIMITED TO:
- FEC 'S, LADDERS, BEAMS, DOOR/FRAMES - BOTH SIDES GLAZING FRAMES IN DOOR/WALLS- BOTH SIDES, ALL EXPOSED STAIR PARTS INCLUDING RAILINGS, HAND AND GUARD RAILS, STRINGERS AND UNDERSIDES OF STAIRS, ALL ITEMS ARE TO BE ACCENT COLORS.

D. PATTERNS FOR FLOORS AND WALLS ARE AS SHOWN ON DRAWINGS INCLUDING ALL ACCENT LOCATIONS. SUBMIT SHOP DRAWINGS SHOWING DETAILED LAYOUTS OF EACH AREA, INCLUDING EDGES AND TRANSITIONS. ALL LAYOUTS ARE TO BE CENTERED IN EACH ROOM UNO - TYP ALL DRAWINGS. ABOVE REQUIRMENTS ARE TO INCLUDE BUT NOT LIMITED TO:
- CERAMIC TILE. BOTH WALL AND FLOOR.
- PORCELAIN PAVERS
- QUARRY TILE
- TERRAZZO AND BASE
- CARPET
- VCT
- SHEET VINYL
- LINOLEUM
- RUBBER

E. FIELD AND ACCENT PAINT AS SHOWN ON DRAWINGS CONTRACTOR IS TO ASSUME ALL FIELD AND ACCENT COLORS ARE DIFFERENT ROOM TO ROOM. AS WELL AS WITHIN EACH ROOM, REQUIREMENTS ARE TO INCLUDE BUT ARE NOT LIMITED TO:
- WALL, FIELD COLOR
- WALL, ACCENT COLOR
- CEILING CLOUDS, ACCENT COLOR
- SOFFITS, ACCENT COLOR
- DOOR AND WINDOW FRAMES, ACCENT COLOR
- EXPOSED COLUMNS, ACCENT COLOR
- GUARDRAILS, ACCENT COLOR
- HANDRAILS, ACCENT COLOR
- EXPOSED DECKS, ACCENT COLOR
- EXPOSED JOISTS, ACCENT COLOR
- EXPOSED DUCTWORK, ACCENT COLOR

F. PAINT MECHANICAL ROOM FLOOR CURBS CAUTION YELLOW.

G. PROVIDE PAINT AT ALL NEW SOFFITS, REFER TO REFLECTIVE CEILING PLANS FOR ADDITIONAL LOCATIONS.

H. ALL EXPOSED BRICK, GROUND FACE BLOCK IS TO REMAIN UNPAINTED, UNO.

J. CONFIRM WITH OWNER AND ARCHITECT PRIOR TO PAINTING OVER MURALS ON EXISTING SURFACES.

K. CERAMIC WALL TILE IS TO RUN FLOOR TO CEILING UNO.

L. PROVIDE PAINT AND RUBBER BASE AT ALL NEW CHASES, REFER TO NEW WORK PLANS FOR ADDITIONAL LOCATIONS.

M. REFER TO STRUCTURAL DRAWINGS FOR LOCATIONS OF SLAB DEPRESSIONS. REFER TO FINISH MATERIAL SPECIFICATION SECTIONS FOR SLAB DEPRESSION DEPTH REQUIREMENTS.

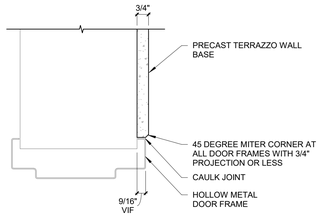
N. REFER TO STRUCTURAL DRAWINGS FOR LOCATIONS OF SLAB DEPRESSIONS. REFER TO FINISH MATERIAL SPECIFICATION SECTIONS FOR SLAB DEPRESSION DEPTH REQUIREMENTS.

P. CARPET IS TO RUN WALL TO WALL, UNDER ALL FURNITURE, MOVEABLE EQUIPMENT AND LIBRARY SHELVING UNITS, INCLUDING ALL UNITS AT THE PERIMETER WALLS.

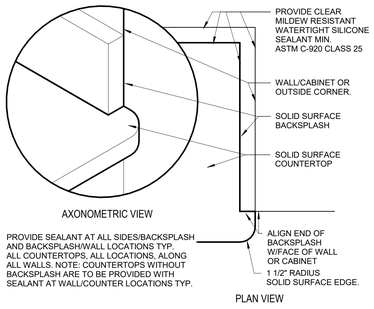
Q. FOR ALL RENOVATED AREAS REQUIRING FINISH WORK REMOVE, PROTECT AND REINSTALL MOVABLE EQUIPMENT INCLUDING BUT NOT LIMITED TO: BOARD UNITS, LOCKERS GYM EQUIPMENT, SHADES/BLINDS, BOOKCASES ETC. REINSTALL IN ORIGINAL LOCATION, OR AS NOTED ON DRAWINGS, COORDINATE WITH OWNER. REFER TO SPEC SECTION 01 23 00 ALTERATION PROJECT PROCEDURES FOR MORE INFORMATION.

R. FIELD VERIFY ALL CONTROL JOINTS LOCATIONS IN CONCRETE SLAB. LOCATE CONTROL JOINTS IN EXG/NEW FLOOR FINISH MATERIAL DIRECTLY ABOVE SLAB JOINTS OR AS RECOMMENDED BY FLOORING MATERIAL MANUFACTURER.
- AT NEW SLABS REFER TO STRUCTURAL DRAWINGS FOR SLAB CONTROL JOINT LOCATIONS.
- AT EXISTING SLABS, FIELD VERIFY LOCATIONS OF EXISTING SLAB CONTROL JOINTS.
- REFER TO FINISH DRAWINGS AND SPECIFICATIONS FOR NEW FLOOR MATERIALS.
COORDINATE FLOOR PATTERNS WITH CONTROL JOINT PRIOR TO SUBMISSION OF REQUIRED FLOOR PATTERN DRAWINGS.

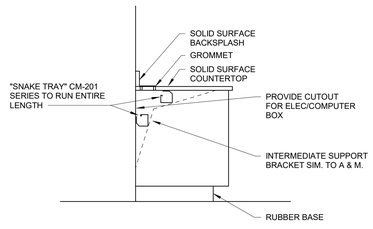
S. PROVIDE ALL FINISHES AS INDICATED BY ROOM FINISH BOX AND/OR AS NOTED ON DRAWINGS.



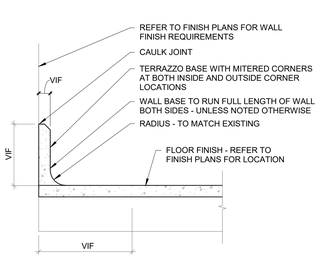
10 Terrazzo Base at HM Frame
3" = 1'-0"



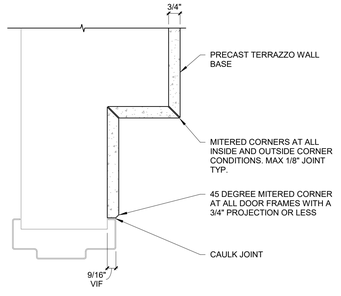
9 Solid Surface Countertop Edge Detail
3" = 1'-0"



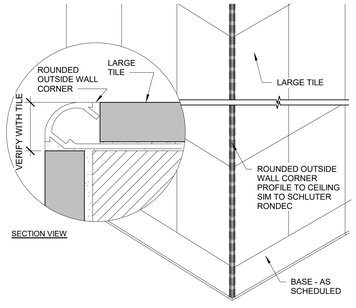
8 Counter Detail
3/4" = 1'-0"



14 Terrazzo Base
3" = 1'-0"



13 Terrazzo Base w/ Mitered Corner
3" = 1'-0"



12 Outside Corner/ Rounded Profile
3" = 1'-0"

NON-GLARE SURFACE:

*TYPICAL FOR ENTIRE SIGN

TACTILE CHARACTERS:

*5/8" MINIMUM CAP LETTER HEIGHT
*1" MINIMUM NUMBER HEIGHT
*RAISED 1/32" MINIMUM
*FULL CAPS
*SAN SERIF TYPE STYLE
*CHARACTERS MUST CONSTRAST WITH BACKGROUND

ROOM
XXXXXX

51

9"

6"

GRADE 2 BRAILLE

TYPE 5 - Typical Permanent Room Plaque

11 Typical Permanent Room Plaque
12" = 1'-0"

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH
ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Interior Elevation, Details and Signage

Drawn By:	Date:	Drawing Number:
TTAE	11/4/2022	EA900

Project No.: 17597-22001

COMPONENTS & CLADDING WIND PRESSURE (PSF)

MEAN ROOF HEIGHT, "h" (FT)	EFFECTIVE WIND AREA (SQ FT)	ROOF										WALLS			
		ZONE 1'		ZONE 1		ZONE 1/1'	ZONE 2		ZONE 3			ZONE 4		ZONE 5	
		MIDDLE	INTERIOR	INTERIOR		OVERHANG	EDGE	OVERHANG	CORNER	OVERHANG		INTERIOR		CORNER	
22.00	≤ 10	-31.1	16.0	-54.2	16.0	-49.0	-71.5	-66.3	-97.5	-92.3		-33.7	31.1	-41.5	31.1
	20	-31.1	16.0	-50.6	16.0	-48.1	-66.9	-60.2	-88.3	-81.5		-32.4	29.8	-38.8	29.8
	50	-31.1	16.0	-45.9	16.0	-47.0	-60.8	-52.1	-76.1	-67.4		-30.5	27.9	-35.1	27.9
	100	-31.1	16.0	-42.3	16.0	-46.1	-56.2	-46.0	-66.9	-56.6		-29.2	26.6	-32.4	26.6
	≥ 500	-21.1	16.0	-34.0	16.0	-31.7	-45.6	-31.7	-45.6	-31.7		-25.9	23.4	-25.9	23.4

NOTES:

1. MEAN ROOF HEIGHT IS MEASURED ABOVE DATUM FFE, ELEVATION = 100'-0".

2. REFER TO ASCE 7-16 FOR DEFINITION OF TERMS. FOR THE DIMENSIONS OF EACH ZONE, REFERENCE FIGURE 30.4-1 IN ASCE 7-16 AND USE "h" FROM ABOVE TABLE TO DETERMINE 0.6h AND 0.2h.

3. THESE TABLES ARE TO BE USED FOR WIND LOAD CONTRIBUTION TO TOTAL LOAD ACTING ON ANY COMPONENT OR CLADDING MEMBER WHICH IS PART OF A ROOF OR EXTERIOR WALL ASSEMBLY. EXAMPLES OF COMPONENTS AND CLADDING INCLUDE, BUT ARE NOT LIMITED TO ROOF JOISTS, WALL STUDS, ROOF DECK FASTENERS, VENEER TIES, WINDOWS, AND THEIR ATTACHMENTS.

4. FOR EFFECTIVE WIND AREA VALUES LISTED IN THE TABLE ABOVE, PRESSURE VALUES MAY INTERPOLATED; OTHERWISE USE THE VALUE ASSOCIATED WITH THE LOWER EFFECTIVE WIND AREA.

5. POSITIVE PRESSURES (+) ACT TOWARDS THE BUILDING, NEGATIVE PRESSURES (-) ACT AWAY FROM THE BUILDING, POSITIVE AND NEGATIVE PRESSURES DO NOT ACT SIMULTANEOUSLY. PRESSURES ARE APPLIED TO THE SURFACE OF THE COMPONENT OR CLADDING.

6. DESIGN VALUES SHOWN IN THIS TABLE ARE ULTIMATE VALUES FOR USE WITH LRFD DESIGN. VALUES MAY BE MULTIPLIED BY 0.6 FOR USE WITH SERVICE LEVEL OR ASD DESIGN. REFER TO THE BUILDING CODE FOR APPLICABLE LOAD COMBINATIONS.

Structural Loads:

A. ROOF LIVE LOADS PER BCNYS 1607.13
MINIMUM ROOF LIVE LOAD — 20 PSF

B. RAIN LOADS PER BCNYS 1611
RAIN INTENSITY, I — 2.75 IN/HR

RAIN SURCHARGE LOAD HAS BEEN APPLIED TO AREAS WHERE PONDING OCCURS IN ACCORDANCE WITH BCNYS 1611.1.

C. SNOW LOADS PER BCNYS 1608
GROUND SNOW, P_g (FIGURE 1608.2) — 40 PSF
FLAT ROOF SNOW LOAD, P_f (ASCE 7) — 30.8 PSF
SNOW EXPOSURE FACTOR, C_e — 1.0
THERMAL FACTOR, C_t — 1.0
SLOPE FACTOR, C — 1.0
SNOW LOAD IMPORTANCE FACTOR, I_S — 1.1
DRIFT SURCHARGE, P_d
- DRIFT A — 56.8 PSF
- DRIFT B — 25.0 PSF
- DRIFT C — 75.0 PSF
- DRIFT D — 30.6 PSF

DRIFT WIDTH, w
- DRIFT A — 11.84 FT
- DRIFT B — 5.21 FT
- DRIFT C — 15.63FT
- DRIFT D — 6.38 FT

ADDITIONAL SNOW LOADS HAVE BEEN APPLIED TO AREAS WHERE DRIFTING OCCURS IN ACCORDANCE WITH BCNYS 1608.

D. WIND LOAD DESIGN CRITERIA PER BCNYS 1609
BASIC DESIGN WIND SPEED (3 SECOND GUST), V — 120 MPH
ALLOWABLE STRESS DESIGN WIND SPEED, V_{asd} — 93 MPH
RISK CATEGORY — I I I
EXPOSURE CATEGORY — C
INTERNAL PRESSURE COEFFICIENT, GCP, — +/- 0.18

E. SEISMIC DESIGN CRITERIA PER BCNYS 1613
RISK CATEGORY — I I I
SEISMIC IMPORTANCE FACTOR, I_e — 1.0
MAPPED SPECTRAL RESPONSE ACCELERATION
- AT SHORT PERIODS, S_S — 20.1 %g
- AT 1 SECOND PERIODS, S_1 — 5.4 %g

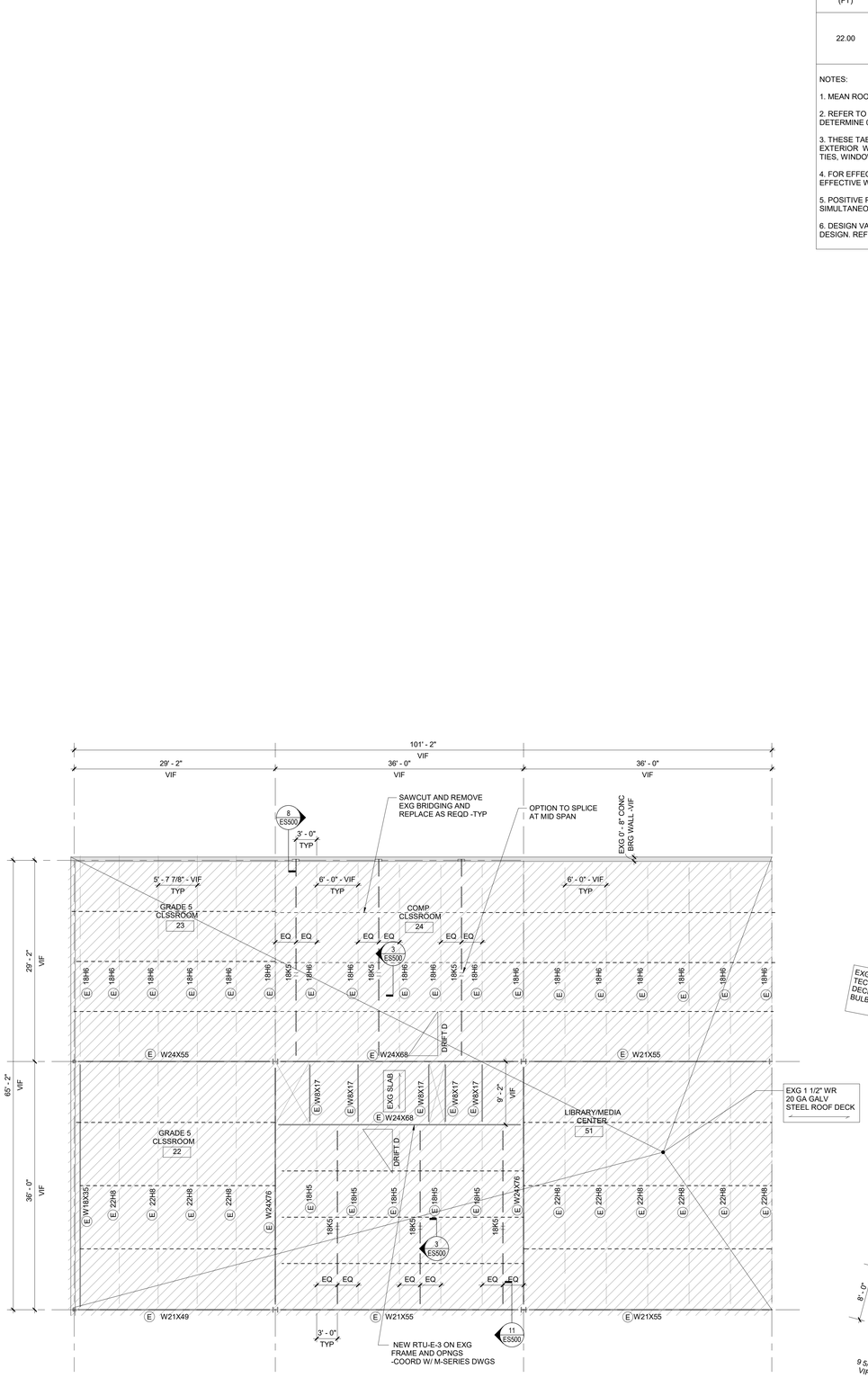
SITE CLASS — D (*ASSUMED)
DESIGN SPECTRAL RESPONSE ACCELERATION
- AT SHORT PERIODS, S_{DS} — 21.4 %g
- AT 1 SECOND PERIODS, S_{D1} — 8.7 %g

SEISMIC DESIGN CATEGORY — B

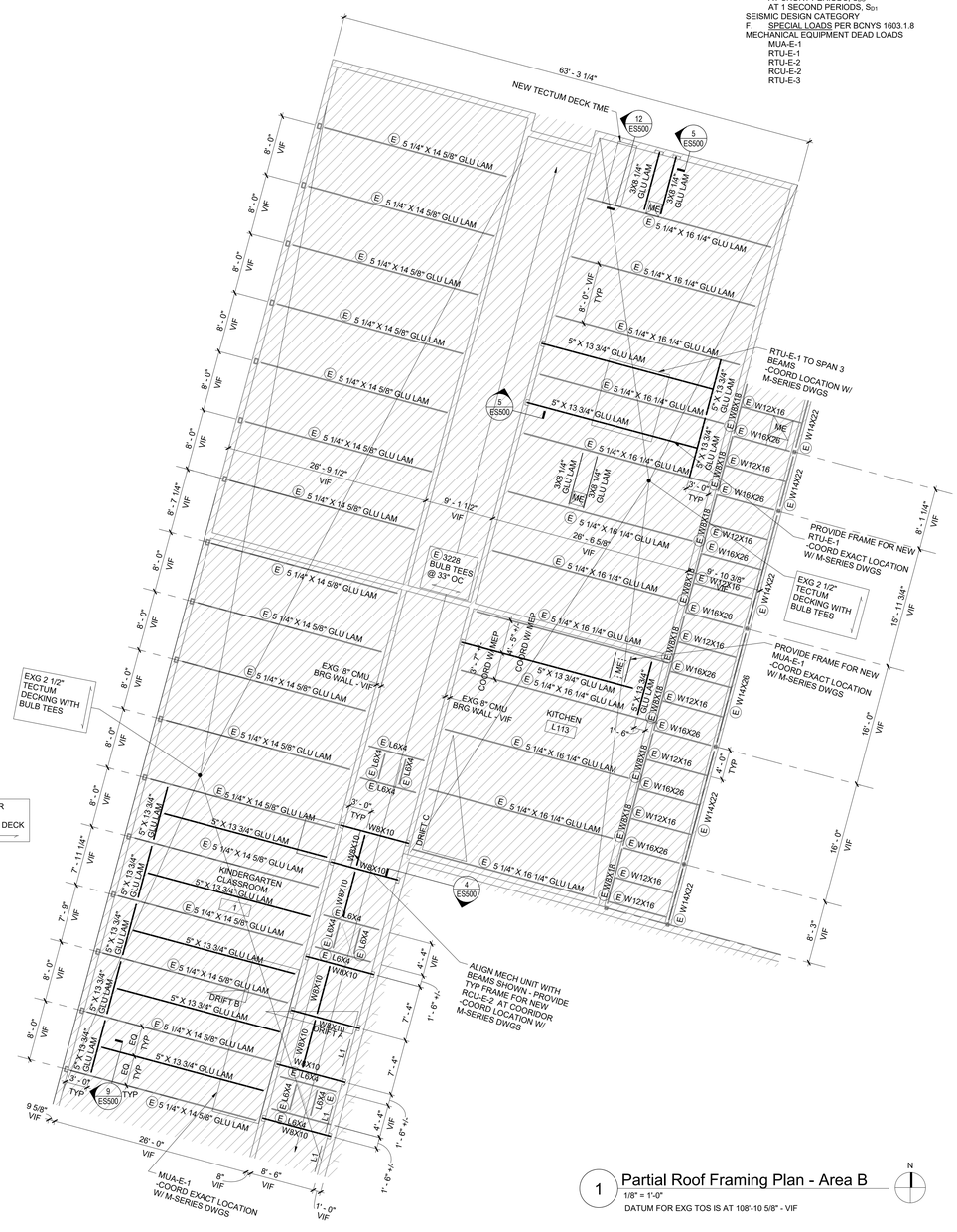
F. SPECIAL LOADS PER BCNYS 1603.1.8
MECHANICAL EQUIPMENT DEAD LOADS
- MUA-E-1 — 2180 LB
- RTU-E-1 — 3335 LB
- RTU-E-2 — 6732 LB
- RCU-E-2 — 1921 LB
- RTU-E-3 — 9100 LB

General Notes:

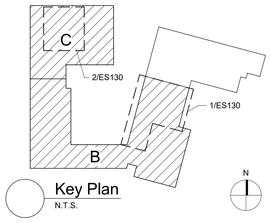
A. DIMENSIONS AND ELEVATIONS SHOWN ON PLAN AS PLUS/MINUS (+/-) AND VIF ARE TO BE CONSIDERED APPROXIMATE. EXACT VALUES FOR ALL (+/-) AND VIF DIMENSIONS ARE TO BE DETERMINED BY THE CONTRACTOR IN THE FIELD THROUGH A PRELIMINARY BUILDING LAYOUT CONTRACTOR TO VERIFY EXISTING DIMENSIONS, ELEVATIONS AND CONDITIONS AND NOTIFY A/E OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK. COORDINATE INFORMATION WITH OTHER TRADES.



2 Partial Roof Framing Plan - Area C
1/8" = 1'-0"
DATUM FOR EXG TOS IS AT 121'-11 3/8" - VIF



1 Partial Roof Framing Plan - Area B
1/8" = 1'-0"
DATUM FOR EXG TOS IS AT 108'-10 5/8" - VIF



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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BID SET

TETRA TECH ARCHITECTS & ENGINEERS

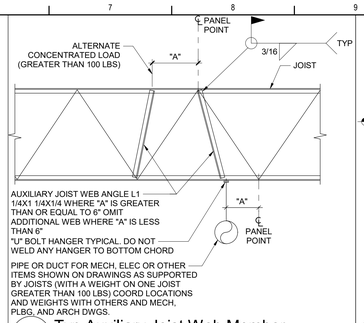
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

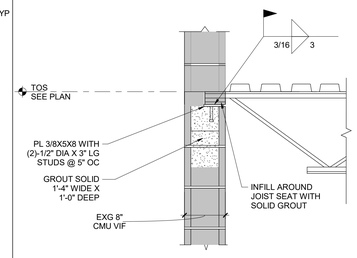
Partial Roof Framing Plan - Areas B and C, Notes and Schedules

Drawn By:	Date:	Drawing Number:
NDC/vmm	11/4/2022	ES130

Project No.: 17597-22001



13 Typ Auxiliary Joist Web Member & Hanger
3/4" = 1'-0"



8 Typ Joist Brg Detail at Exg
1" = 1'-0"

1. FOR 4" THICK WALLS

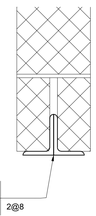
MASONRY OPENING	LINTEL ANGLE
UP TO 6'-4"	MT 6X5.9

2. FOR 6" THICK WALLS

MASONRY OPENING (℄)	LINTEL ANGLE
5'-0"	2- L2 1/2X2 1/2X5/16
6'-0"	2- L3X2 1/2X5/16 LLV
7'-0"	2- L3 1/2X2 1/2X5/16 LLV
8'-0"	2- L3 1/2X2 1/2X5/16 LLV

3. FOR 8", 12", AND 16" THICK WALLS: FOR EACH 4" THICKNESS OF WALL

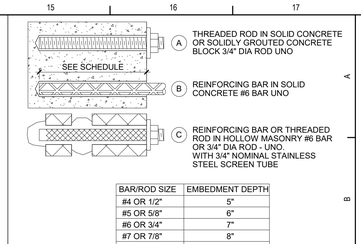
MASONRY OPENING (℄)	LINTEL ANGLE
5'-0"	L3 1/2X3 1/2X5/16
6'-0"	L4X3 1/2X 5/16 LLV
7'-0"	L5X3 1/2X5/16 LLV
8'-0"	L5X3 1/2X5/16 LLV
9'-0"	L6X3 1/2X5/16 LLV
10'-0"	L6X3 1/2X5/16 LLV



LINTEL NOTES

1. ALL OPENINGS 1'-0" AND OVER REQUIRE LINTELS.
2. STEEL TO BE A36.
3. THIS SCHEDULE IS TYPICAL FOR ALL MASONRY OPENINGS IN NON-LOAD BEARING WALLS UNLESS OTHERWISE NOTED.
4. ALL LINTELS TO HAVE MINIMUM 8" BEARING BOTH ENDS.
5. BACK TO BACK ANGLES ARE TO BE STITCH WELDED TOGETHER BEFORE PLACEMENT.
6. ALL LINTELS ARE TO HAVE BOTH ENDS BEAR ON SOLID MASONRY OR SOLIDLY GROUTED HOLLOW MASONRY.
7. WHERE MINIMUM 8" BEARING LENGTH CANNOT BE PROVIDED DUE TO COLUMN INTERFERENCE, PROVIDE CONNECTION OF LINTEL TO COLUMN.
8. THIS LINTEL SCHEDULE IS APPLICABLE FOR USE IN EXISTING BUILDING. SHORE EXISTING STRUCTURE AND WALL AS REQD FOR INSTALLATION OF NEW MAS AND LINTEL. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF OPENINGS.

6 Lintel Schedule
1/2" = 1'-0"

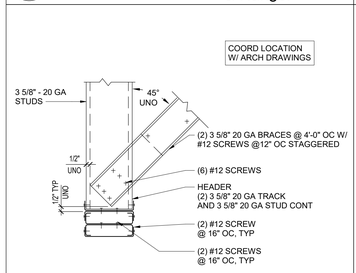


BAR/ROD SIZE	EMBEDMENT DEPTH
#4 OR 1/2"	5"
#5 OR 5/8"	6"
#6 OR 3/4"	7"
#7 OR 7/8"	8"
#8 OR 1"	9"

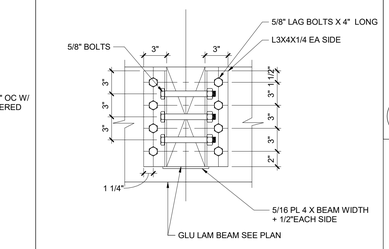
GENERAL NOTES

1. FOR ACCEPTABLE ADHESIVE PRODUCTS REFER TO SPECIFICATIONS.
2. COMPLY WITH MANUFACTURERS REQUIREMENTS FOR INSTALLATION.

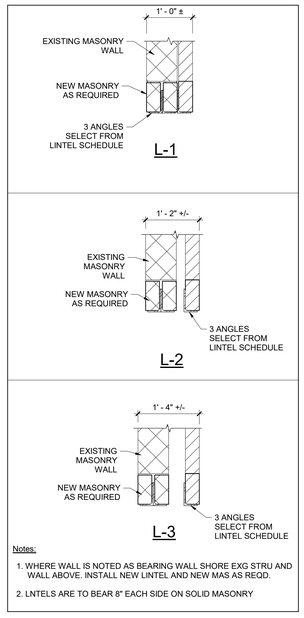
1 Typ Chemical Anchors
3" = 1'-0"



14 Typ CFMF Header Detail
1 1/2" = 1'-0"

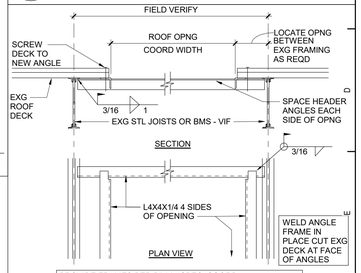


9 Typ Glu Lam Connection
1 1/2" = 1'-0"



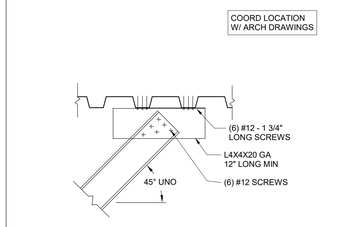
Notes:

1. WHERE WALL IS NOTED AS BEARING WALL SHORE EXG STRU AND WALL ABOVE. INSTALL NEW LINTEL AND NEW MAS AS REQD.
2. LINTELS ARE TO BEAR 8" EACH SIDE ON SOLID MASONRY

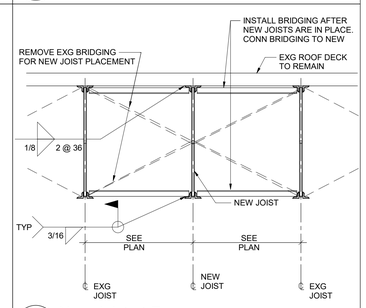


PROVIDE FRAMES PER DIV 05 SPEC. COORD QUANTITIES, LOCATION, AND SIZE OF OPENINGS WITH OTHERS AND MECH, PLBG, AND ARCH DWGS.

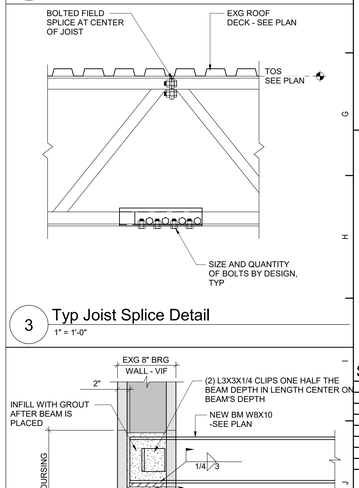
2 Typ Roof Frame For New Opng at Exg
3/4" = 1'-0"



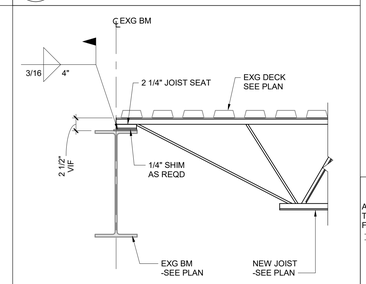
15 Typ CFMF Brace Detail
1 1/2" = 1'-0"



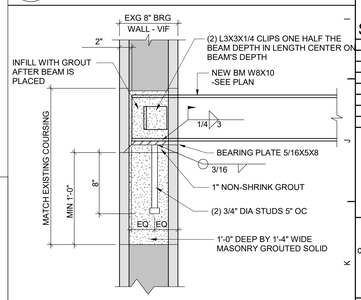
10 New Joist at Exg
1" = 1'-0"



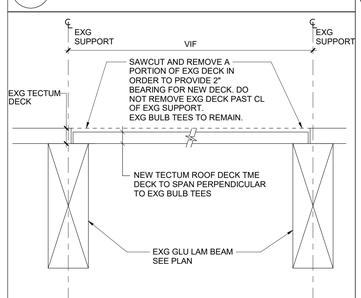
3 Typ Joist Splice Detail
1" = 1'-0"



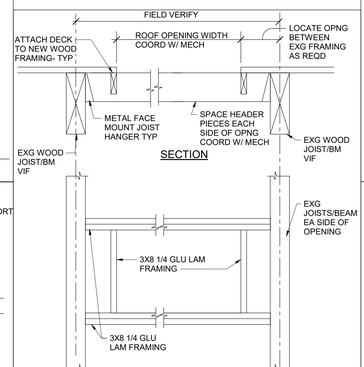
11 Joist Bearing at Exg Beam
1" = 1'-0"



4 Typ Beam Bearing Detail at Existing
1 1/2" = 1'-0"



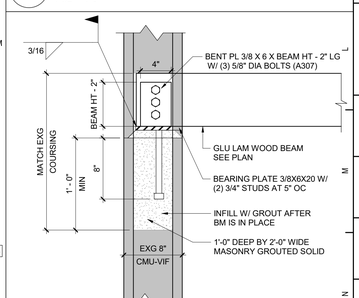
12 Typ Deck Infill at Deck Replacement
1 1/2" = 1'-0"



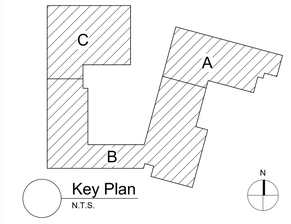
AFTER NEW FRAME IS IN PLACE CUT EXG ROOF DECK AT FACE OF NEW FRAMING

CONTRACTOR TO PROVIDE FRAMES. LOCATION AND SIZE OF OPENING TO BE COORDINATED WITH ARCH, MECH, AND PLBG DRAWINGS

7 Typ Roof Frame for New Opng at Exg
3/4" = 1'-0"



5 Glu Lam Bearing at Exg
1 1/2" = 1'-0"



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

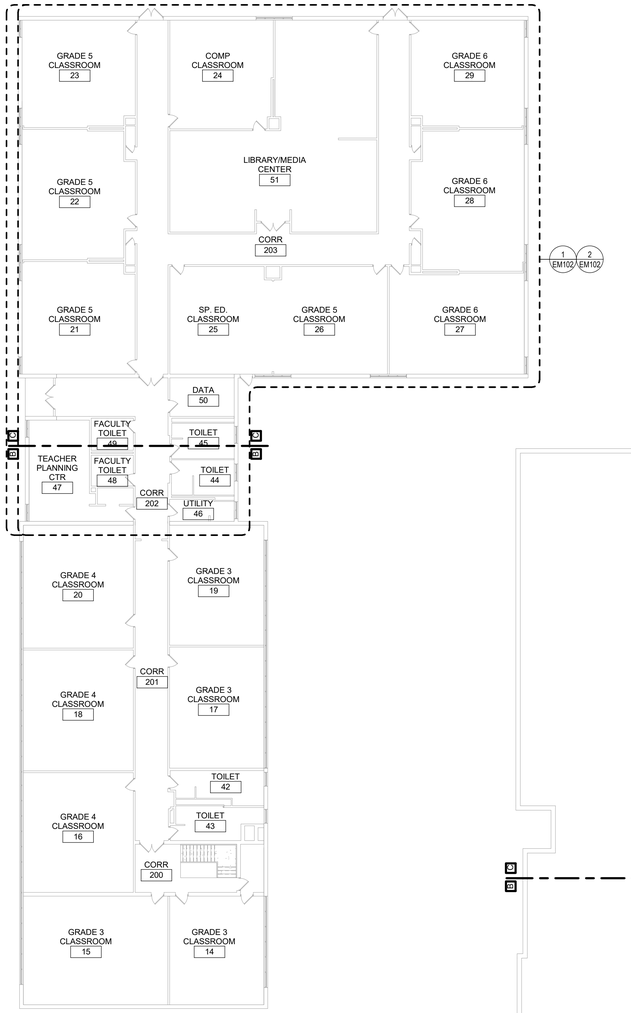
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

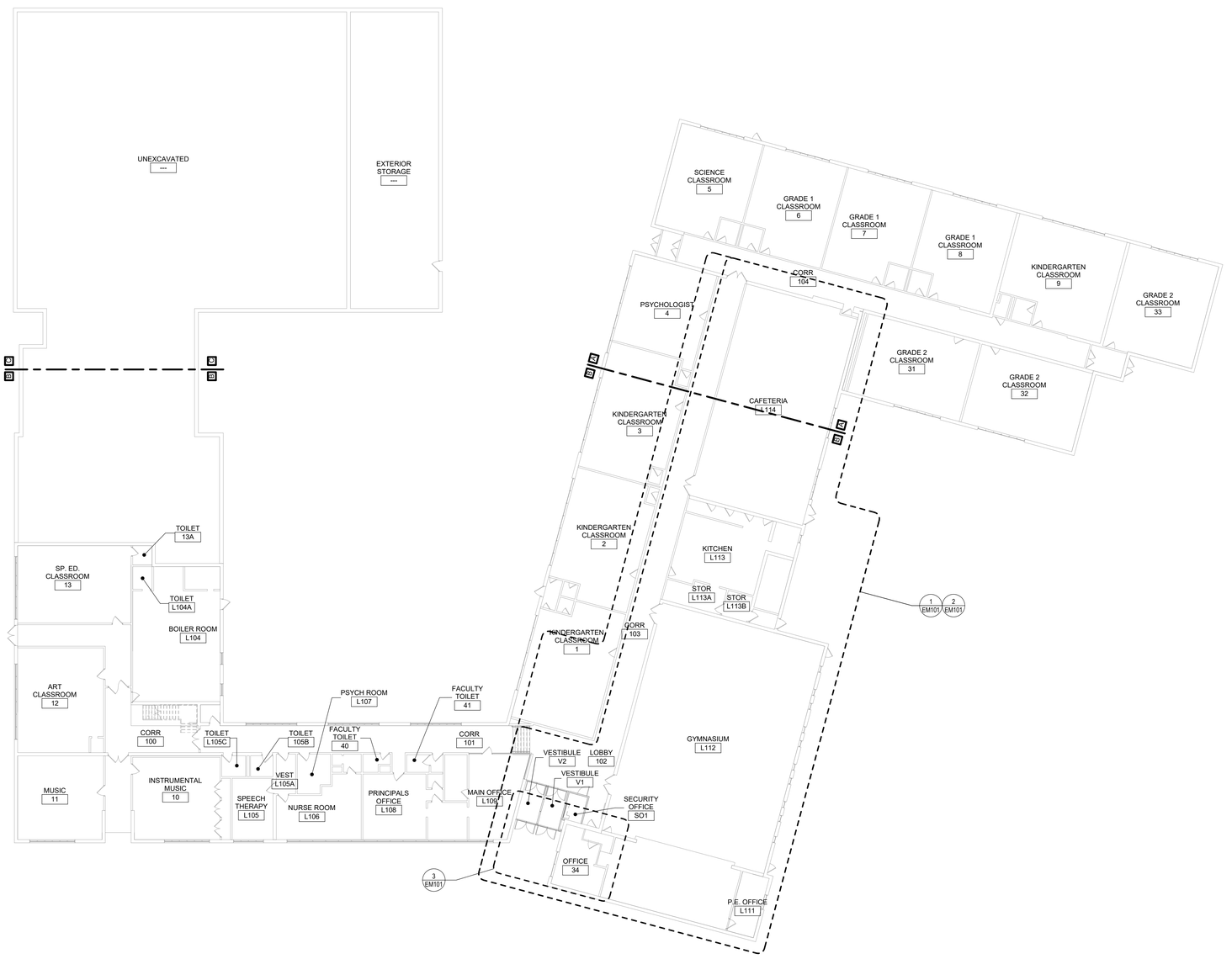
Reconstruction to:
Leptondale Elementary School

Typical Details

Drawn By:	Date:	Drawing Number:
NDC/vmm	11/4/2022	ES500
Project No.: 17597-22001		



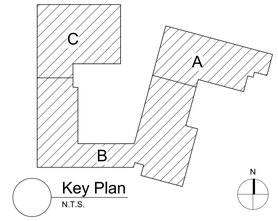
2 Second Floor Key Plan
1/16" = 1'-0"



1 First Floor Key Plan
1/16" = 1'-0"

General Notes

A. THE FOLLOWING GENERAL NOTES APPLY TO ALL "EM" SERIES DRAWINGS.
B. REFER TO ALL CONTRACT DOCUMENTS; DRAWINGS AND SPECIFICATIONS, FOR DETAILED STANDARDS AND REQUIREMENTS.
C. REPORT UNSAFE OR UNSATISFACTORY CONDITIONS IN WRITING TO ARCHITECT AND RESOLVE ISSUES BEFORE PROCEEDING.
D. WORK INCLUDES ALL LABOR AND MATERIALS REQUIRED TO PROVIDE COMPLETE WORKING SYSTEMS.
E. COORDINATE PHASING REQUIREMENTS AT JOB MEETINGS AND ON WORK SCHEDULES.
F. DO NOT SCALE DRAWINGS. PIPING AND DUCTWORK ARE SHOWN DIAGRAMMATICALLY. IT IS NOT POSSIBLE TO SHOW EVERY TRANSITION, FITTING, ASPECT RATIO CHANGE, ETC.; PROVIDE AS REQUIRED TO FIT WITHIN STRUCTURAL CONSTRAINTS. EXAMINE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED AND VERIFY ALL ACCESS, LOCATIONS, DIMENSIONS, ARRANGEMENTS, ELECTRICAL CHARACTERISTICS AND INTERFERENCE IN THE FIELD PRIOR TO BID.
G. VERIFY EXTENT OF CEILING WORK SHOWN ELSEWHERE IN THE CONTRACT DOCUMENTS. PROVIDE FOR ADDITIONAL CEILING SYSTEM REMOVAL, PROTECTION, AND REINSTALLATION AS REQUIRED FOR CONTRACT WORK.
H. DEMOLITION DRAWINGS SHOW THE GENERAL SCOPE OF ITEMS AND SYSTEMS TO BE REMOVED. IT IS NOT THE INTENT TO SHOW ALL ITEMS TO BE REMOVED. FIELD VERIFY AND REMOVE ALL ASSOCIATED ITEMS BACK TO POINT OF CONTINUED SERVICE, UNLESS OTHERWISE NOTED. VERIFY WHAT ALL EQUIPMENT SERVES PRIOR TO REMOVAL.
I. GIVE ALL REMOVED EQUIPMENT TO THE OWNER. DELIVER ON SITE WHERE DESIGNATED BY THE OWNER. PROMPTLY REMOVE FROM THE SITE AND LEGALLY DISPOSE OF ANY SUCH ITEMS DECLINED BY OWNER.
J. IF UNANTICIPATED MECHANICAL, ELECTRICAL, OR STRUCTURAL CONFLICTS ARE ENCOUNTERED, INVESTIGATE AND REPORT BOTH NATURE AND EXTENT OF THE CONFLICT. RE-ROUTE WORK AS REQUIRED.
K. CUT, DRILL, OR OTHERWISE CREATE OPENINGS AS NEATLY AS POSSIBLE, AS REQUIRED FOR THE INDICATED CONTRACT WORK. PROVIDE SUPPORT AS REQUIRED FOR AND USE METHODS LEAST LIKELY TO DAMAGE ELEMENTS TO REMAIN. PRIOR TO WORK, VERIFY LOCATIONS OF ALL STRUCTURAL MEMBERS INCLUDING CROSS BRACING, ELECTRICAL WIRING, PLUMBING, ETC. PROMPTLY NOTIFY ARCHITECT OF ANY CONFLICTS. DO NOT CUT ANY STRUCTURAL MEMBERS OR OTHER SERVICES UNTIL SPECIFICALLY DIRECTED TO DO SO. PENDING RECEIPT OF DIRECTIVE, REARRANGE SCHEDULE AS NECESSARY TO CONTINUE OVERALL JOB PROGRESS WITHOUT DELAY.
L. PATCH ALL DISTURBANCES RESULTING FROM DEMOLITION OR NEW WORK TO MATCH SURROUNDING SURFACES. PATCH FOLLOWING DEMOLITION, AND AGAIN FOLLOWING WORK. WHERE HOLES REMAIN FROM REMOVALS, INFILL AND PATCH TO MATCH UNLESS HOLE IS TO BE REUSED.
M. PROTECT ALL CONTRACT EQUIPMENT, ELEMENTS TO REMAIN, OWNER'S BELONGINGS, AND EQUIPMENT TO BE REUSED OR RETAINED BY OWNER DURING ALL CONTRACT WORK, AT NO ADDITIONAL COST TO OWNER. REPAIR OR REPLACE ITEMS WHICH ARE DAMAGED.
N. THOROUGHLY CLEAN FOLLOWING DEMOLITION AND BEFORE BEGINNING CONTRACT INSTALLATIONS. THOROUGHLY CLEAN AGAIN DURING AND FOLLOWING CONTRACT WORK AS REQUIRED. LEAVE ALL WORK AREAS CLEANER THAN FOUND. LEGALLY DISPOSE OF ALL CONSTRUCTION DEBRIS.
O. PROVIDE TEMPORARY PIPING, DUCT, HEAT, WEATHERPROOFING, ETC. TO SERVICES TO REMAIN UNTIL PERMANENT INSTALLATIONS CAN BE MADE.
P. ALL EXCESS MATERIALS AND SCRAPS ARE CONTRACTOR'S PROPERTY. PROMPTLY REMOVE FROM SITE UNLESS SPECIFICALLY DIRECTED OTHERWISE.
Q. EXISTING HVAC COMPONENTS IN THIS BUILDING MAY CONTAIN, BE IN PROXIMITY TO, OR, WORK ON THEM MAY CAUSE DISTURBANCE OF, ASBESTOS CONTAINING OR OTHER HAZARDOUS MATERIALS. REFER TO ABATEMENT SERIES DRAWINGS AND SPECIFICATIONS COMPLETE FOR ADDITIONAL INFORMATION. PROVIDE FOR RE-INSULATION AS SPECIFIED FOR ALL EXISTING TO REMAIN HVAC COMPONENTS WHERE INSULATION IS REMOVED AS A PART OF ABATEMENT WORK.
R. SEAL ALL FLOOR, WALL AND CEILING PENETRATIONS PER FIRE-RESISTANCE RATINGS, NOTED ON EG-SERIES DRAWINGS, BUT NOT LESS THAN 1-HOUR, AND IN ACCORDANCE WITH SECTION 07 84 13 - PENETRATION FIRESTOPPING. THIS INCLUDES ALL NEW PENETRATIONS AND EXISTING UNFIRESTOPPED PENETRATIONS CREATED BY REMOVALS, AS REQUIRED TO PERFORM THE WORK.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

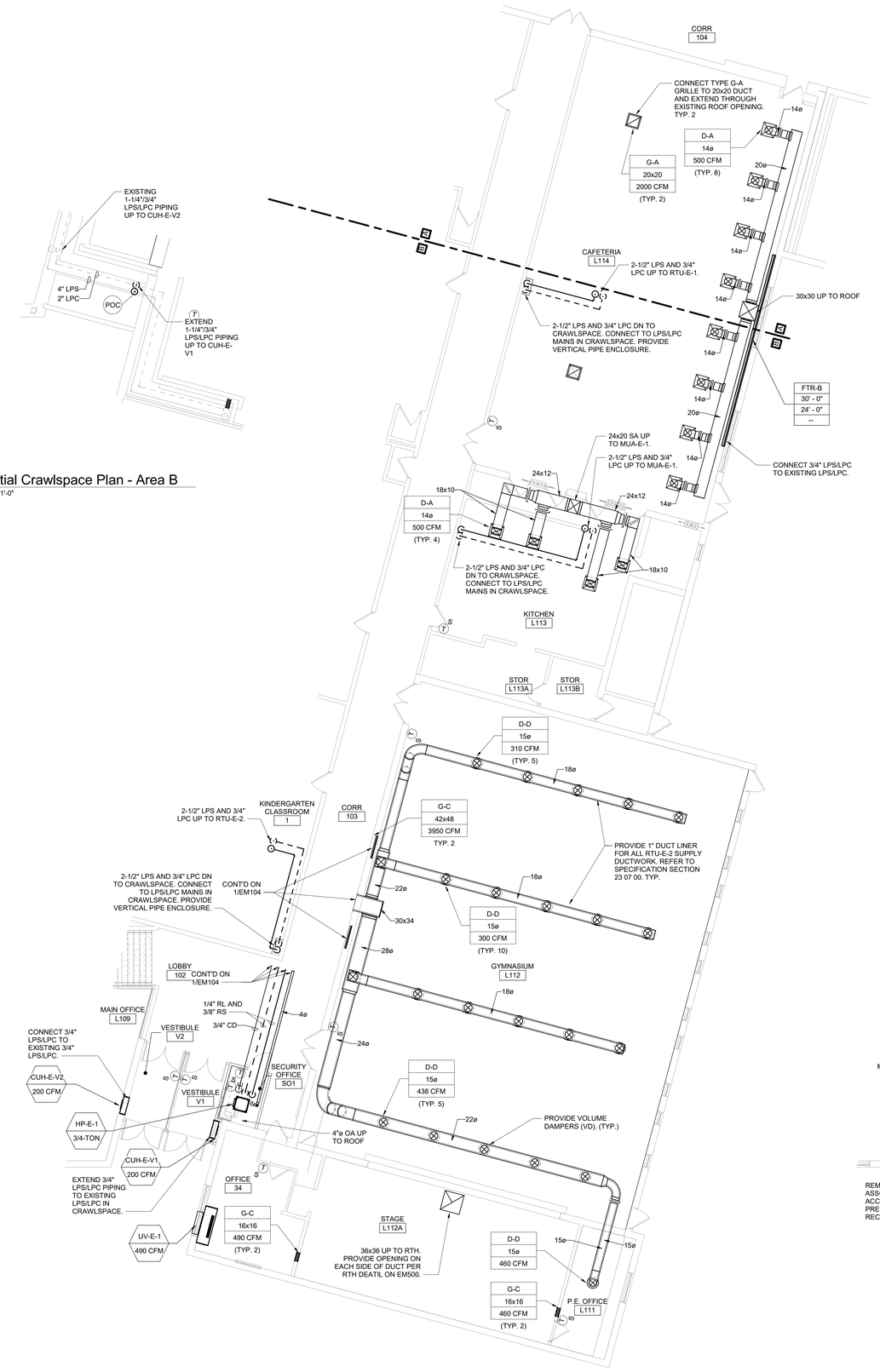
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

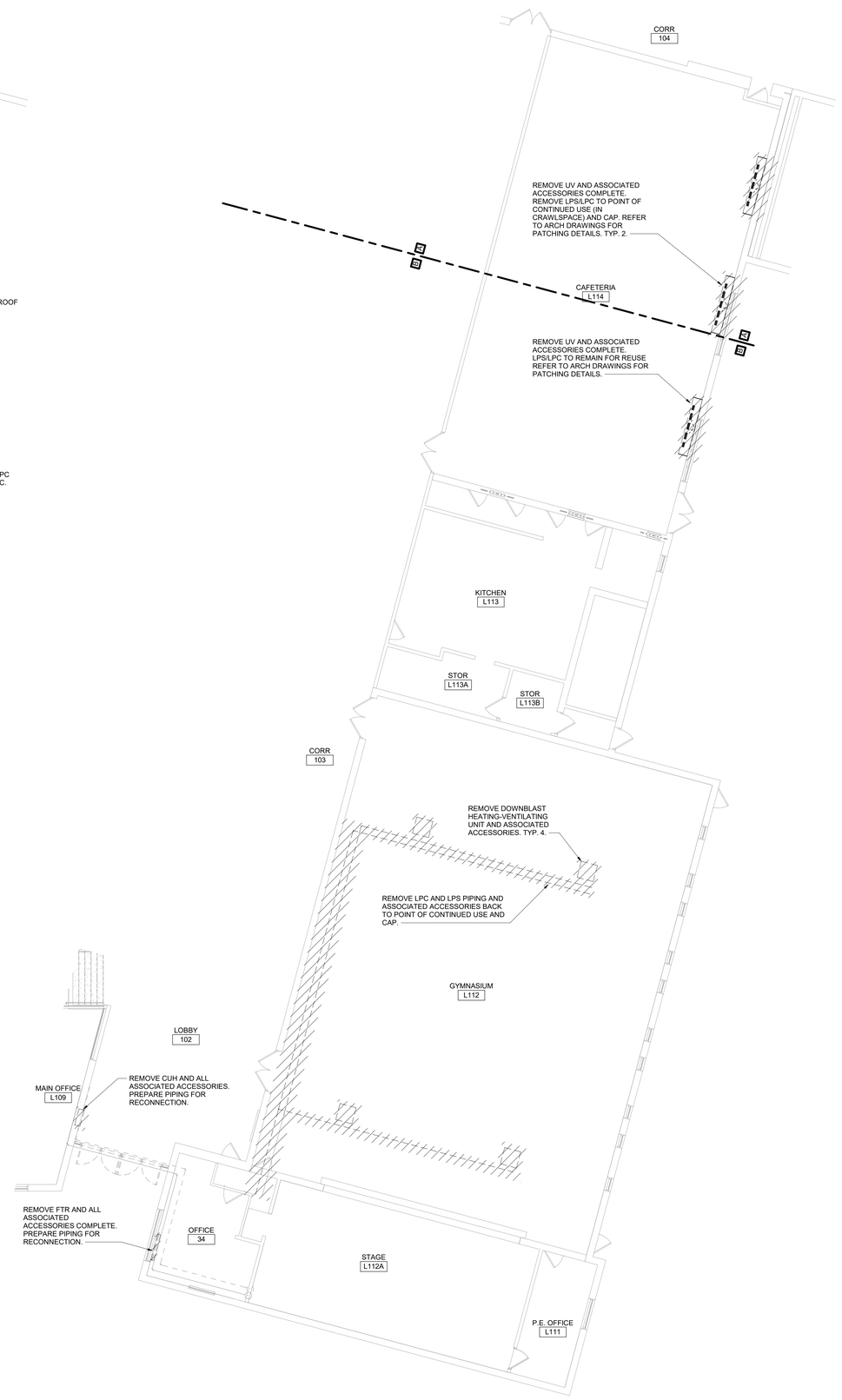
First and Second Floor Key Plans

Drawn By:	Date:	Drawing Number:
JPF1/pgm	11/4/2022	EM051
Project No.: 17597-22001		



3 Partial Crawlspace Plan - Area B
1/8" = 1'-0"

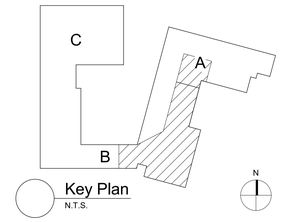
2 Partial First Floor Plan - Areas A and B
1/8" = 1'-0"



1 Partial First Floor Demolition Plan - Areas A and B
1/8" = 1'-0"

General Notes

A. REFER TO EM051 FOR GENERAL NOTES.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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BID SET

TETRA TECH ARCHITECTS & ENGINEERS

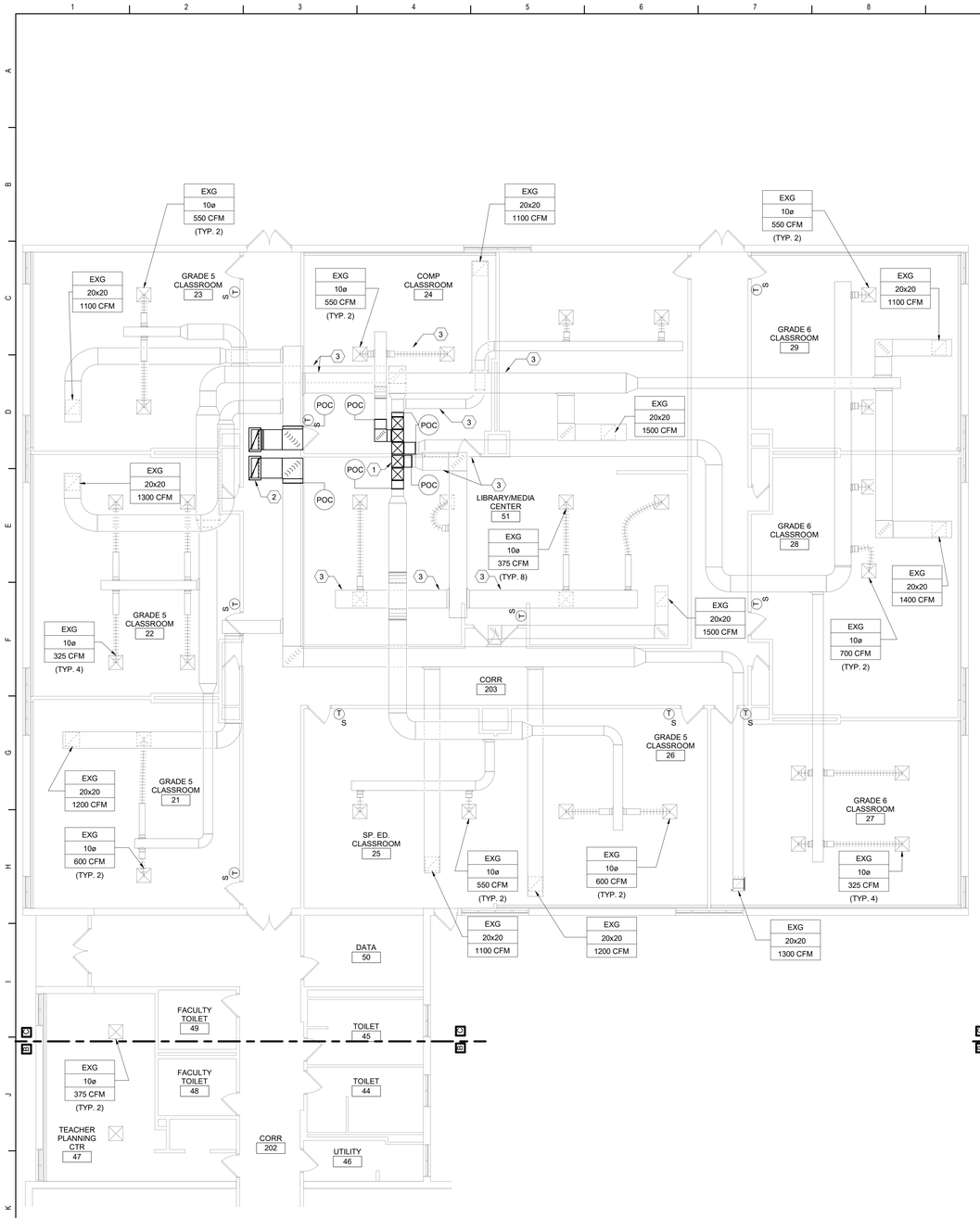
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

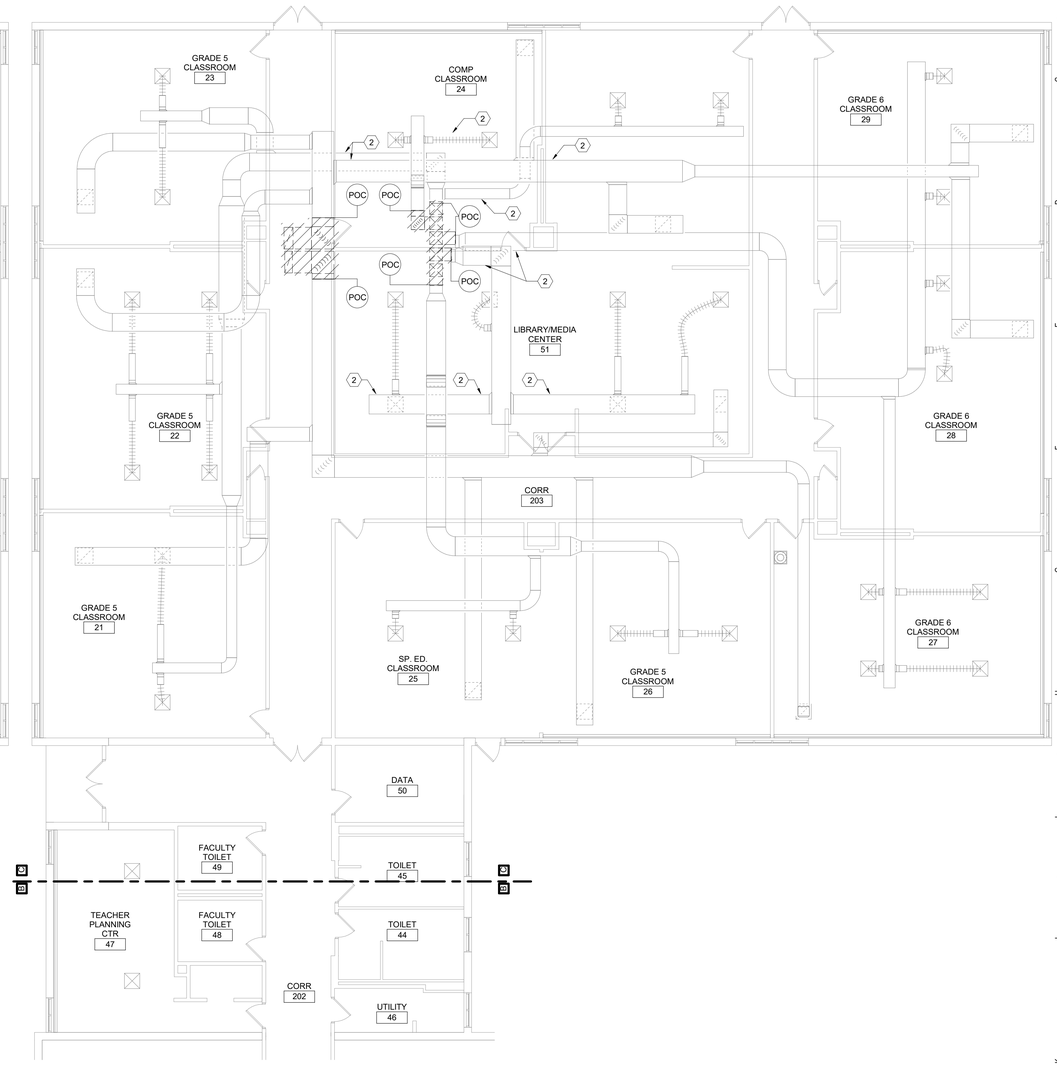
Partial First Floor Plans - Areas A and B

Drawn By:	Date:	Drawing Number:
JPF1/pgm	11/4/2022	EM101

Project No.: 17597-22001



2 Partial Second Floor Plan - Area C
1/8" = 1'-0"



1 Partial Second Floor Demolition Plan - Area C
1/8" = 1'-0"

General Notes

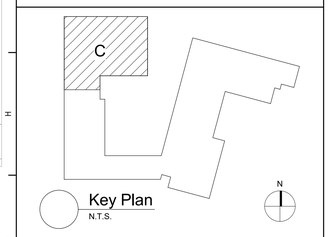
A. REFER TO EM051 FOR GENERAL NOTES.

KEYED DEMOLITION NOTES

1. REMOVE DUCTWORK AND ASSOCIATED ACCESSORIES TO POC AS SHOWN. PREPARE FOR RECONNECTION.
2. DISCONNECT AND REMOVE DUCTWORK AS REQUIRED FOR STRUCTURAL REINFORCEMENT WORK. STORE AND PROTECT FOR REINSTALLATION.

KEYED NOTES

1. 20x20 UP TO RTU-E-3, TYP. 5. TRANSITION AS REQUIRED TO MAKE CONNECTION TO UNIT.
2. 40x20 UP TO RTU-E-3, TYP. 2. TRANSITION AS REQUIRED TO MAKE CONNECTION TO UNIT.
3. REINSTALL DUCTWORK. COORDINATE REINSTALLATION WITH COMPLETION OF STRUCTURAL WORK.



S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

complex world | CLEAR SOLUTIONS

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

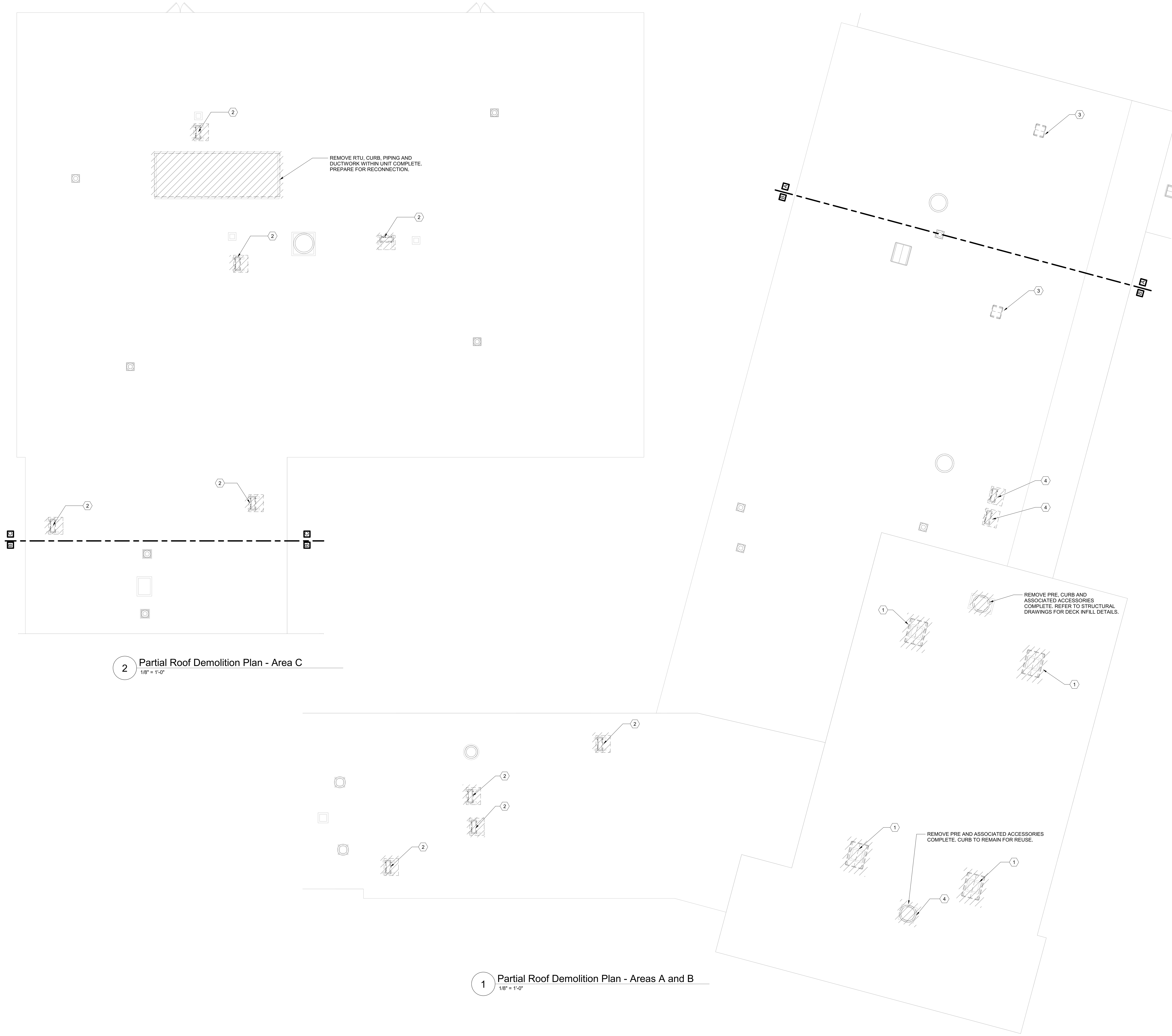
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Partial Second Floor Plans - Area C

Drawn By:	Date:	Drawing Number:
JPF1/pgm	11/4/2022	EM102
Project No.: 17597-22001		



2 Partial Roof Demolition Plan - Area C
1/8" = 1'-0"

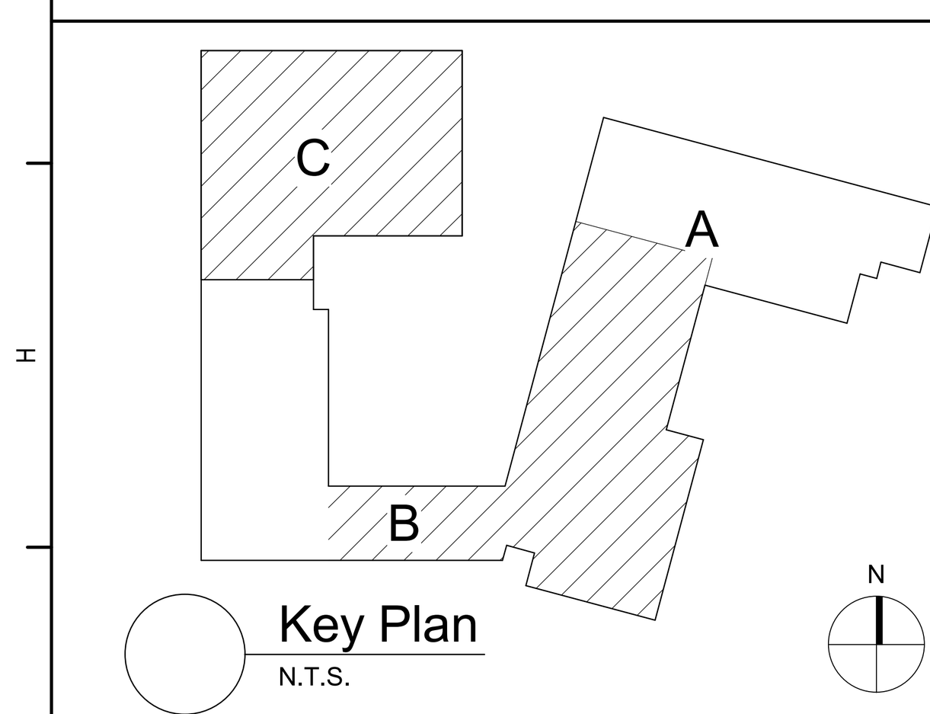
1 Partial Roof Demolition Plan - Areas A and B
1/8" = 1'-0"

General Notes

A. REFER TO EM051 FOR GENERAL NOTES.

KEYED NOTES

1. REMOVE ROOFTOP HOOD, CURB AND ASSOCIATED ACCESSORIES COMPLETE. REFER TO STRUCTURAL DWGS FOR DECK INFILL DETAILS.
2. TEMPORARILY REMOVE CONDENSING UNIT AND STORE FOR REUSE. EVACUATE ALL REFRIGERANT PRIOR TO REMOVAL. DISCONNECT AND REMOVE REFRIGERANT TUBING AS REQUIRED UNTIL COMPLETION OF ROOFING WORK.
3. REMOVE ROOFTOP HOOD AND ASSOCIATED ACCESSORIES COMPLETE. ROOF CURB TO REMAIN.
4. REMOVE PRE AND ASSOCIATED ACCESSORIES COMPLETE. CURB TO REMAIN. PREPARE OPENING FOR RECONNECTION.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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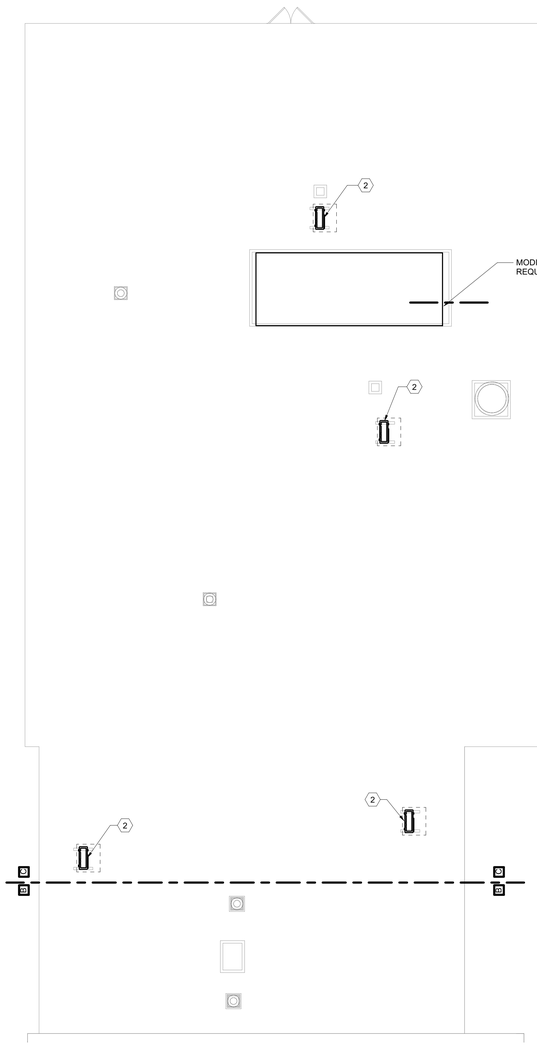
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

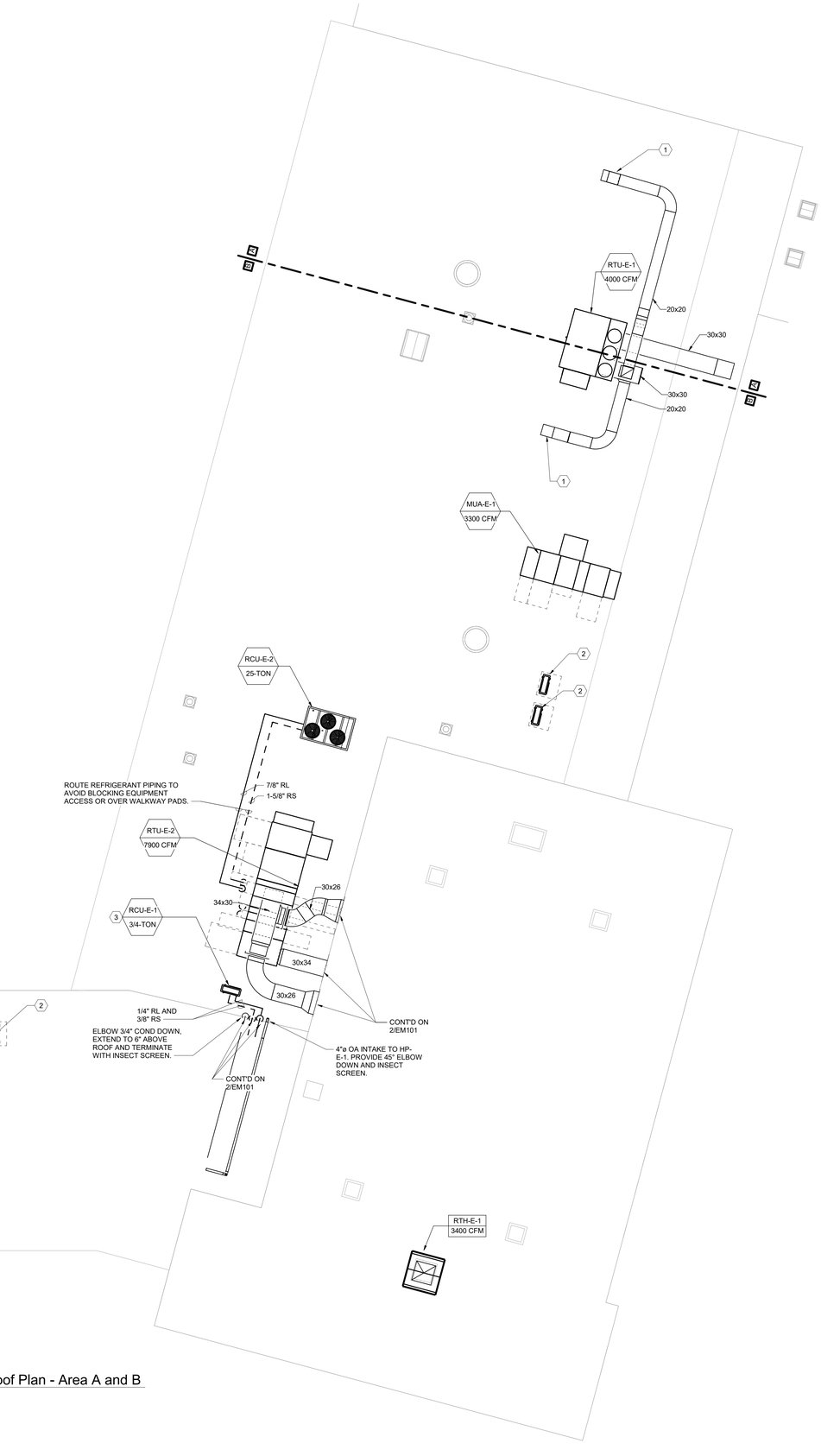
Reconstruction to:
Leptondale Elementary School

Partial Roof Demolition Plans - Areas A, B and C

Drawn By:	Date:	Drawing Number:
JPF1/pgm	11/4/2022	
Project No.: 17597-22001		EM103



2 Partial Roof Plan - Area C
1/8" = 1'-0"



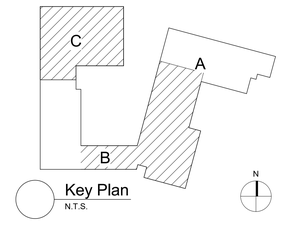
1 Partial Roof Plan - Area A and B
1/8" = 1'-0"

General Notes

A. REFER TO EM051 FOR GENERAL NOTES.

KEYED NOTES

1. CONNECT 20X20 DUCTWORK THROUGH EXISTING ROOF PENETRATION. REFER TO TO DUCT THROUGH ROOF DETAIL ON EM500.
2. PROVIDE NON ROOFING PRENTRATING STRUT SUPPORT SYSTEM FOR RCU INSTALLATION. REINSTALL CONDENSING UNIT ON SUPPORT SYSTEM (REFER TO RCU MOUNTING DETAIL) AND EXTEND REFRIGERANT TUBING AND POWER WIRING TO UNIT. MATCH REFRIGERANT TUBING SIZES AND FULLY CHARGE UNIT WITH NEW REFRIGERANT. INSULATE REFRIGERANT TUBING. COORDINATE WITH ROOFING WORK.
3. PROVIDE 18" HIGH NON ROOFING PENETRATING STRUT SUPPORT SYSTEM FOR RCU INSTALLATION. EXTEND REFRIGERANT TUBING AND CONDENSATE LINE THROUGH WALL AND SEAL OPENING WATERTIGHT.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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TETRA TECH
ARCHITECTS & ENGINEERS

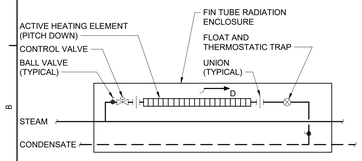
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

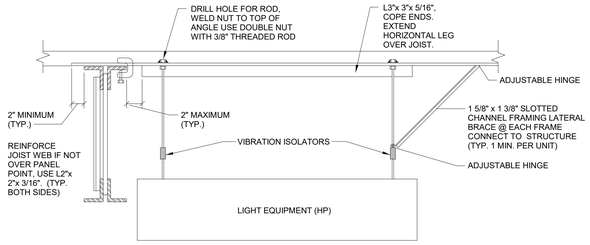
Partial Roof Plans - Areas A, B and C

Drawn By:	Date:	Drawing Number:
JPF1/pgm	11/4/2022	EM104

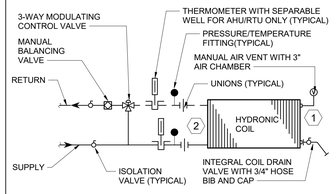
Project No.:
17597-22001



20 Steam Fin Tube Radiation Piping Schematic (Valve Control)
NTS



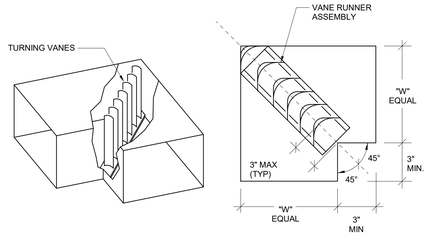
14 Light Equipment Hanging Detail (HP)
NTS



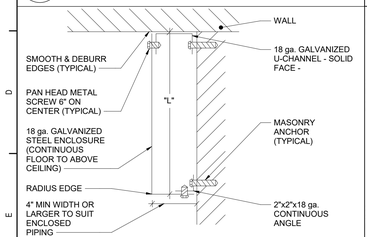
1. WHERE THE COIL IS SUPPLIED FROM OVERHEAD PIPING, PROVIDE A MANUAL AIR VENT AT HIGH POINT IN THE BRANCH SUPPLY PIPE
2. PIPE COIL IN ACCORDANCE WITH COIL MANUFACTURER'S RECOMMENDATIONS.

NOTE: GENERIC SYMBOL USED TO SHOW VALVE LOCATION(S). REFER TO SPECIFICATIONS FOR EXACT VALVE TYPE.

9 RTU-E-3 Coil Piping Schematic
NTS

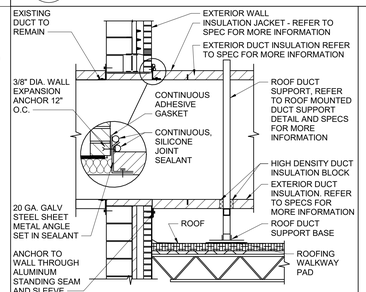


1 Duct Turning Vanes
NTS

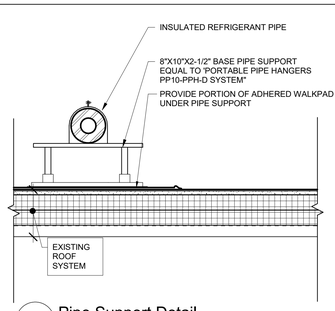


NOTES:
1. LENGTH "L" SHALL MATCH UNIT VENT SHELVING WIDTH WHERE APPLICABLE. MINIMUM "L" DIM. SHALL BE 8" OR TO SUIT INSULATED HEATING PIPING.
2. PRIME ALL METAL SURFACES AND FINISH. PAINT TWO COAT COLOR PER ARCHITECT.

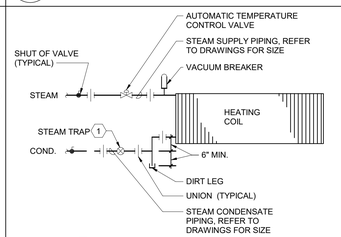
21 Vertical Piping Enclosure Detail
NTS



18 Exterior Wall Duct Penetration Detail
NTS



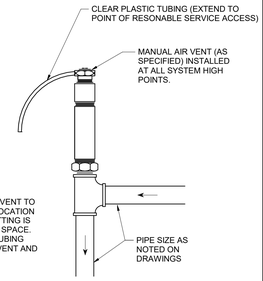
15 Pipe Support Detail
NTS



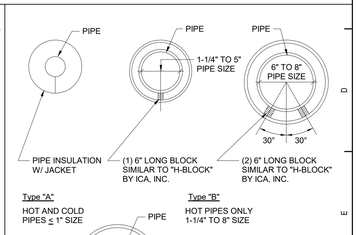
1. STEAM TRAP SIZED TP 3 TIMES COIL CAPACITY UNLESS OTHERWISE NOTED. FLOAT AND THERMOSTATIC TYPE ABOVE 10 Mbh. THERMOSTATIC TYPE UNDER 10 Mbh.

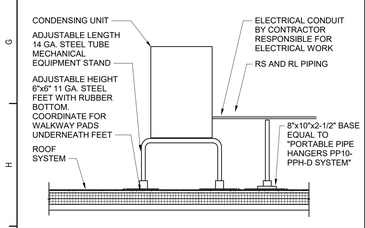
NOTE: GENERIC SYMBOL USED TO SHOW VALVE LOCATION(S) REFER TO SPECIFICATIONS FOR EXACT VALVE TYPE.

10 Steam Piping Schematic (CUH/MUA/RTU/UV)
NTS



5 Manual Air Vent
NTS



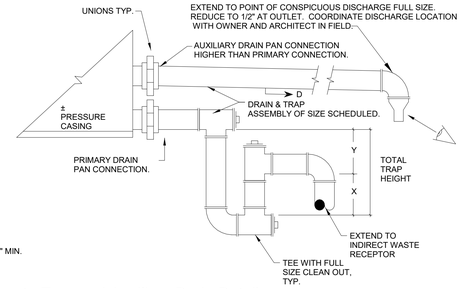


22 RCU Mounting Detail
NTS

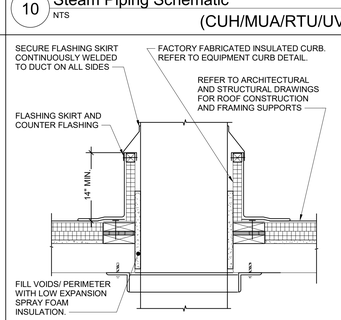
COIL CAPACITY	TRAP SIZE NPS
0-3 TON	3/4"
3-10 TON	1"
10-100 TON	1 1/4"
OVER 100	1 1/2"

NOTE:
1. "X" MUST BE 1-1/2" PLUS CASING STATIC PRESSURE; MINIMUM 2"
2. "Y" MUST BE 1-1/2" MINUS CASING STATIC PRESSURE; MINIMUM 2"

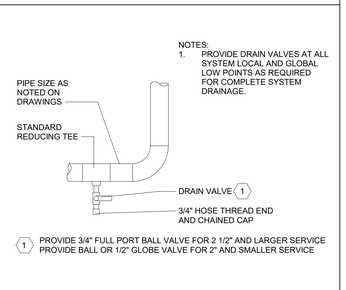
EXAMPLE: CASING At (-1") Wg.
X = 1-1/2" + (-1) = 1/2"; USE 2" MIN.
Y = 1-1/2" - (-1) = 2-1/2""



16 Drain Pan / AC Condensate Trap and Auxiliary Drain Detail
NTS



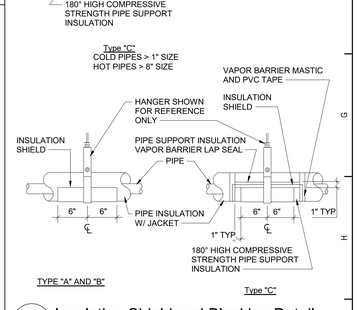
11 Duct Through Roof Detail
NTS



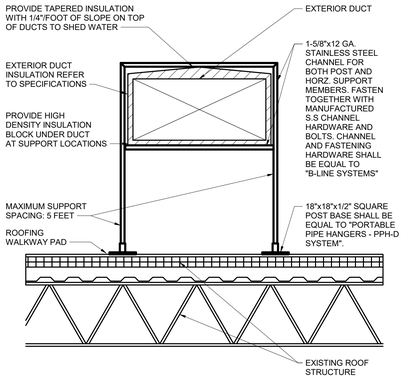
NOTES:
1. PROVIDE DRAIN VALVES AT ALL SYSTEM LOCAL AND GLOBAL LOW POINTS AS REQUIRED FOR COMPLETE SYSTEM DRAINAGE.

1. PROVIDE 3/4" FULL PORT BALL VALVE FOR 2 1/2" AND LARGER SERVICE PROVIDE BALL OR 1/2" GLOBE VALVE FOR 2" AND SMALLER SERVICE

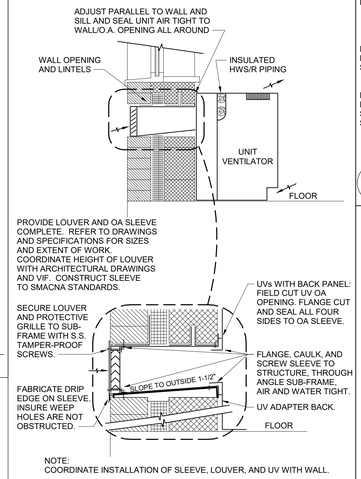
6 Low Point Drain Detail
NTS



2 Insulation Shield and Blocking Detail
NTS

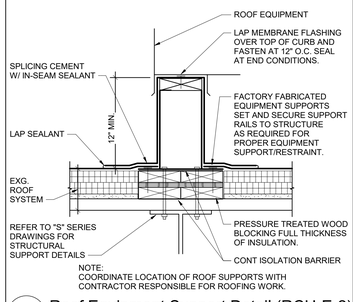


19 Typ Roof Mounted Duct Support Detail
12" = 1'-0"

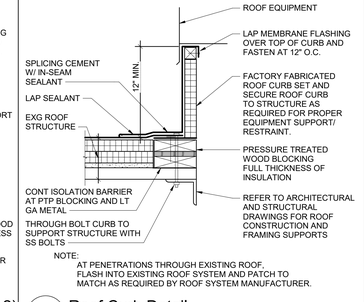


NOTE: COORDINATE INSTALLATION OF SLEEVE, LOUVER, AND UV WITH WALL.

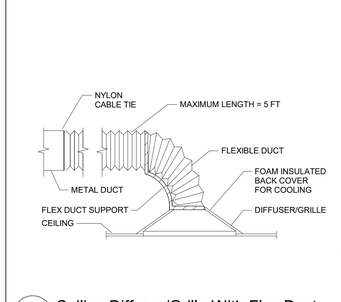
17 Setting Detail-OA Intake and Flr Mounted UV High Back Intake
NTS



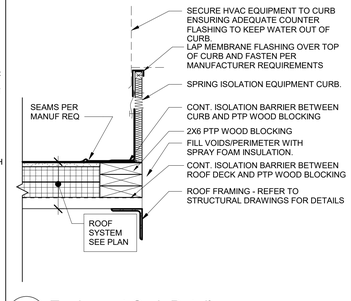
12 Roof Equipment Support Detail (RCU-E-2)
NTS



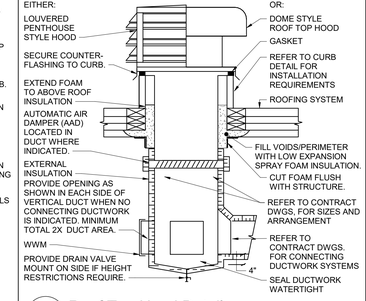
7 Roof Curb Detail
NTS



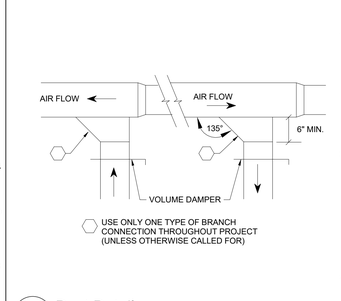
3 Ceiling Diffuser/Grille With Flex Duct
NTS



13 Equipment Curb Detail
NTS



8 Roof Top Hood Detail
NTS



USE ONLY ONE TYPE OF BRANCH CONNECTION THROUGHOUT PROJECT (UNLESS OTHERWISE CALLED FOR)

4 Duct Detail
NTS

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

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Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Details

Drawn By:	Date:	Drawing Number:
JPF1/pgm	11/4/2022	EM500

Project No.: 17597-22001

ROOFTOP UNIT (RTU) SCHEDULE

EQUIPMENT FURNISHED BY OWNER, INSTALLED BY MECHANICAL CONTRACTOR

DWG LABEL	LOCATION	SERVES	DESIGN MAKE: TRANE	SUPPLY FAN								EXHAUST FAN							ELECTRICAL CONNECTION				COOLING DATA								HEATING DATA									
				SUPPLY AIR	OCCUPIED OA	MIN OA	FAN ARR	ESP	TSP	RPM	VFD FREQ.	HP	EXHAUST AIR	MIN. EXHAUST	FAN ARR	ESP	TSP	RPM	VFD FREQ.	HP	V/PH	FLA	MCA	MOCP	ROWS	EDB	EWB	LDB	LWB	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	APD	ROWS	EAT	LAT	CAPACITY (MBH)	APD	INLET PRESSURE (psig)	CONDENSATE (lb/hr)	PD	OPER. WEIGHT	NOTES
RTU-E-2	ROOF - AREA B	GYM	CSAA017	7900 CFM	4870 CFM	1000 CFM	22.25" DD PLENUM	0.75 in-wg	4.99 in-wg	2222	70	10	4870 CFM	1000 CFM	16.5" DD PLENUM	0.50 in-wg	2.56 in-wg	2070	97	5	200/3	74 A	89 A	125 A	4	75.2	65.2	54.3	52.6	296	181	0.56 in-wg	1	64	89.1	215	0.11 in-wg	3	259.4	4.55 in-wg	6894 lb	1-14

NOTES:
1. GASKETED ACCESS DOORS AND MODULAR SECTIONS WITH DOUBLE WALLED 2" R-13 GALVANIZED STEEL PANELS WITH THERMAL BREAK.
2. COILS SHALL HAVE SAME SIDE CONNECTION UNLESS OTHERWISE INDICATED. PROVIDE FULL SECTION HEIGHT 24" DEEP PIPE CABINET.
3. PROVIDE UV-C LIGHT DOWNSTREAM OF COOLING COIL (TO MAINTAIN CLEAN COIL) WITH SEPARATE 120V/1PH POWER (FLA=1.5A).
4. PROVIDE 2" MERV8 PRE-FILTER PRIOR TO ENERGY WHEEL (BOTH DIRECTIONS) AND MERV13 FILTERS BEFORE COILS.
5. PROVIDE 120V/1PH (FLA=8A) GFI SERVICE OUTLET FOR SEPARATE POWER.
6. PROVIDE HIGH EFFICIENCY ENERGY WHEEL WITH RETURN AIR RECIRCULATION AND BYPASS DAMPERS.
   A. VENTILATION: 4870 CFM, PD: 0.6 in-wg
      a. SUMMER= EDB:84.2°F, EWB:75.0°F, LDB: 77.3°F, LWB: 68.1°F, 70.8% TOTAL EFFECTIVENESS
      b. WINTER= EDB:7.0°F, EWB:3.0°F, LDB: 49.2°F, LWB: 35.7°F, 73.3% TOTAL EFFECTIVENESS
   B. EXHAUST: 4700 CFM, ENTERING SUMMER: 75.0°F/65.0°F, ENTERING WINTER: 65.0°F/45.0°F, PD: 0.6 in-wg
7. PROVIDE INTERLACED CIRCUIT COOLING COIL.
8. PROVIDE SPRING ISOLATED 14" ROOF CURB. PROVIDE ACOUSTICALLY LINED ROOF CURB PER DETAIL.
9. PROVIDE EXTERIOR TOGGLE SWITCH AND DOOR LIMIT SWITCH FOR UV-C LIGHT.
10. PROVIDE H-O-A SWITCH AND STARTER FOR ENERGY WHEEL.
11. PROVIDE 22" ELECTRICAL/CONTROLS SECTION FOR FAN VFDs.
12. PROVIDE SINGLE POINT POWER CONNECTION FOR FAN VFDs AND ENERGY WHEEL.
13. PROVIDE FACTORY-INSTALLED SUPPLY AND EXHAUST FAN VFDs.
14. PROVIDE NEMA 3R UNIT DISCONNECT SWITCH.

UNIT VENTILATOR (UV) SCHEDULE

EQUIPMENT FURNISHED BY OWNER, INSTALLED BY MECHANICAL CONTRACTOR

DWG LABEL	LOCATION	MODEL NO.	SA (CFM)	MIN. OA	HEATING DATA				RPM	ELECTRICAL					NOTES
					NO. ROW	EAT (°F)	LAT (°F)	CAP. (MBH)		MOTOR QTY	MOTOR SIZE (HP)	V/PH	FLA	MCA	MOCP	
UV-E-1	OFFICE 34	VUVE075	490	130	1	44.0	145.9	54.1	730	1	0.25	120V/1ø	3.6	4.5	15	1-7

NOTES:
1. DESIGN BASIS: TRANE
2. FLOOR MOUNTED UNIT
3. PROVIDE 1" MERV13 FILTER.
3. STEAM COIL CONDITIONS: STEAM TEMP=222°F, PRESSURE=3 PSIG
4. VERIFY PIPE AND ELECTRICAL LEFT/RIGHT HAND CONNECTIONS PRIOR TO ORDERING.
5. PROVIDE 22-1/4" ADAPTER BACK, HIGH LOUVER AND WALL SLEEVE.
6. PROVIDE FACE & BYPASS DAMPER.
7. NEMA 1 DISCONNECT SWITCH.

REMOTE CONDENSING UNIT (RCU) SCHEDULE (FOR RTU)

EQUIPMENT FURNISHED BY OWNER, INSTALLED BY MECHANICAL CONTRACTOR

DWG LABEL	LOCATION	SERVES	DESIGN MAKE: TRANE	NOMINAL CAPACITY	COOLING CAPACITY (MBH)	R410A TEMPERATURES		AMBIENT TEMPERATURE	EER	NO. OF COMP/CAPACITY	NO. OF CIRCUITS	ELECTRICAL DATA - 208V/3PH				OPER. WEIGHT	NOTES
						LIQUID	SUCTION					MCA	MOP	RLA - COMP. 1	NO. COMP.		
RCU-E-2	ROOF - AREA B	RTU-E-2	RAUJ	25 Tons	296	119.3 °F	39.5 °F	95	12.1	(1) 10-TON, (1) 13.5-TON	2	120 A	150 A	52 A	2	1930	1-4

NOTES:
1. FIELD CHARGE REFRIGERANT FOR SUPPLY LINE, CONDENSER AND COILS.
2. PROVIDE EQUIPMENT STARTER AND NEMA 3R DISCONNECT.
3. VERIFY LINE SIZES WITH MANUFACTURER.
4. PROVIDE 14" SPRING ISOLATION SUPPORT RAILS.

MULTIZONE ROOFTOP UNIT (RTU) SCHEDULE

EQUIPMENT FURNISHED BY OWNER, INSTALLED BY MECHANICAL CONTRACTOR

DWG LABEL	UNIT LOCATION	SERVES	DESIGN MAKE:	SUPPLY FAN								RETURN FAN						ELECTRICAL DATA			WEIGHT (LBS)	OA ENERGY RECOVERY DATA					RA ENERGY RECOVERY DATA					ENERGY RECOVERY EFFICIENCY WINTER	HEATING DATA					HOT WATER COIL					NOTES
				FAN ARR.	SA (CFM)	MIN. OA (CFM)	DISCH. ARR.	ESP (IN WG)	RPM	BHP	HP	FAN ARR.	RA (CFM)	ESP (IN WC)	RPM	BHP	HP	V/PH	MCA	MOP		OA (CFM)	WINTER EDB (°F)	WINTER EWB (°F)	WINTER LDB (°F)	WINTER LWB (°F)	RA (CFM)	WINTER EDB (°F)	WINTER EWB (°F)	WINTER LDB (°F)	WINTER LWB (°F)		NO. ROWS	EAT (°F)	LAT (°F)	MBH	APD (IN WG)	EWT (°F)	LWT (°F)	GPM	WPD (FT HD)	
RTU-E-3	ROOF - AREA B	AREA C - 21-29, 47, 51, 203	SEASONS 4	27" AF SWSI PLENUM	15450	6380	MULTI-ZONE	0.75	1778	16.9	20.0	27" AF SWSI PLENUM	15450	0.75	1758	1.4	15	208/3	116	150	10100	6380	7	3	40.9	33.2	6380	68	51.5	34.1	29	54.3	4	41.7	80.1	640.2	0.57	160	60.2	13.1	3.2	ALL

NOTES:
1. GASKETED ACCESS DOORS AND MODULAR SECTIONS WITH DOUBLE WALLED 2" R-13 GALVANIZED STEEL PANELS WITH THERMAL BREAK.
2. PROVIDE ELECTRICAL/CONTROLS SECTION FOR UNIT DISCONNECT SWITCH, WHEEL H-O-A SWITCH, CONTROLS AND SUPPLY AND RETURN FAN VFD.
3. PROVIDE 2" MERV9 PRE-FILTER PRIOR TO ENERGY WHEEL (BOTH DIRECTIONS) AND MERV14 FILTERS BEFORE SUPPLY FAN. ALL FILTER FACE VELOCITIES <300 FPM.
4. COILS SHALL HAVE SAME SIDE CONNECTION UNLESS OTHERWISE INDICATED.
5. PROVIDE SINGLE POINT CONNECTION AND NEMA-4 DISCONNECT SWITCH.
6. FIELD VERIFY AND MATCH EXISTING ROOF CURB OUTER DIMENSIONS (~10'-2" W x 25'-6" L).
7. PROVIDE 120V/1PH (FLA=8A) GFI SERVICE OUTLET ON LINE SIDE OF DISCONNECT.
8. PROVIDE THREE-DECK MULTIZONE SECTION FOR SEVEN ZONES.
9. PROVIDE FACTORY-INSTALLED ACTUATORS FOR MULTIZONE DAMPERS.
10. PROVIDE SPACE FOR FUTURE COOLING COIL.
11. REUSE EXISTING CURB. INSTALL PER DETAIL.

PACKAGED ROOFTOP UNIT (RTU) SCHEDULE

EQUIPMENT FURNISHED BY OWNER, INSTALLED BY MECHANICAL CONTRACTOR

DWG LABEL	LOCATION	SERVES	DESIGN MAKE: VALENT	SUPPLY FAN					HEATING DATA					COOLING DATA										ELECTRICAL DATA				OPER. WEIGHT (LB)	NOTES
				SUPPLY (CFM)	MIN. OA (CFM)	ESP (IN-WG)	BHP	HP	EAT (°F)	LAT (°F)	STEAM PRESS.	CAP. (MBH)	EDB (°F)	EWB (°F)	LDB (°F)	LWB (°F)	SC (MBH)	HOT GAS REHEAT (°F)	COMPRESSOR	EER	VOLT	PH	MCA	MOP		
RTU-E-1	ROOF - AREA C	CAFETERIA L114	VX-212-151-2-A0	4000	2600	0.5	1.5	3.0	28.4	86.0	3.0 psi	249.3	83.5	70.1	55.1	54.8	199.0	125.0	77.7 °F	INVERTER SCROLL	11.2	208 V	3	65 A	80 A	3335	1-7

NOTES:
1. GASKETED ACCESS DOORS AND MODULAR SECTIONS WITH DOUBLE WALLED 2" R-13 GALVANIZED STEEL PANELS WITH THERMAL BREAK.
2. COILS SHALL HAVE SAME SIDE CONNECTION UNLESS OTHERWISE INDICATED. PROVIDE FULL SECTION HEIGHT 24" DEEP PIPE CABINET.
3. PROVIDE SINGLE POINT CONNECTION AND NEMA-3R H-O-A NON-FUSED DISCONNECT SWITCH.
4. PROVIDE 2" MERV8 PRE-FILTER AND MERV13 FINAL FILTERS BEFORE COILS.
5. PROVIDE ~40" PLENUM CURB WITH SPRING ISOLATION. PROVIDE ACOUSTICALLY LINED ROOF CURB PER DETAIL.
6. PROVIDE 120V/1PH (FLA=8A) GFI SERVICE OUTLET FOR SEPARATE POWER.
7. PROVIDE 22" ELECTRICAL/CONTROLS SECTION FOR SUPPLY FAN VFD.

ROOFTOP HOOD (RTH) SCHEDULE

DWG LABEL	SERVES	MODEL NO.	TYPE	CFM (MAX)	VENT SIZE (IN x IN)	HOOD SIZE (IN x IN)	HOOD HEIGHT (IN)	CURB HEIGHT (IN)	FREE AREA (S.F.)	VELOCITY (FPM)	SP (IN WG)	HOOD FINISH	NOTES
RTH-E-1	GYM L112	36x36GR	RELIEF	3400	36x36	68x63	21.75	14	9.00	380	0.03	KYNAR	1, 2, 3, 4

NOTES:
1. DESIGN BASIS: LOREN COOK
2. PROVIDE 14" CURB..
3. PROVIDE MOTORIZED AUTOMATIC AIR DAMPER (AAD) AND ACTUATOR BELOW ROOF STRUCTURE.
4. VERIFY EXISTING ROOF CURB AND VENT SIZE. MATCH EXISTING.

MAKE-UP AIR (MUA) UNIT SCHEDULE

EQUIPMENT FURNISHED BY OWNER, INSTALLED BY MECHANICAL CONTRACTOR

DWG LABEL	LOCATION	SERVES	DESIGN MAKE: TRANE MODEL:	SUPPLY FAN				ELECTRICAL DATA				HEATING DATA						NOTES
				SUPPLY/OUTSIDE AIRFLOW	ESP	RPM	HP	VOLT/PH	FLA	MCA	MOP	EAT	LAT	CAPACITY (MBH)	STEAM PRESS.	OPERATING WEIGHT (LB)	
MUA-E-1	ROOF - AREA B	KITCHEN L113	CSAA008	3300 CFM	0.50 in-wg	2056	3	208/3	15 A	19 A	30 A	8.7	75	237	3 psi	2180	1-3

NOTES:
1. PROVIDE 120V GFCI SERVICE OUTLET.
2. PROVIDE 24" ROOF CURB.
3. PROVIDE UNIT DISCONNECT, FACTORY INSTALLED VFD AND TEFC MOTOR.

CABINET UNIT HEATER (CUH) SCHEDULE

EQUIPMENT FURNISHED BY OWNER, INSTALLED BY MECHANICAL CONTRACTOR

DWG LABEL	LOCATION	MODEL NO.	SA CFM	HEATING DATA			STEAM PRESS. (psi)	SUPPLY FAN	ELECTRICAL				NOTES
				NO. ROW	EAT (°F)	LAT (°F)	CAP. (MBH)		ESP (IN. WG.)	RPM	MOTOR SIZE (HP)	V/PH	FLA	MCA	MOP	
CUH-E-V1	VESTIBULE V1	FFMB020	200	2	60.0	113.9	11.7	3	0.05	760	0.04	120V/1ø	2.2	2.8	15	1-5
CUH-E-V2	VESTIBULE V2	FFMB020	200	2	60.0	113.9	11.7	3	0.05	760	0.04	120V/1ø	2.2	2.8	15	1-5

NOTES:
1. DESIGN BASIS: TRANE
2. INVERTED VERTICAL CABINET
3. PROVIDE 1" MERV 6 FILTER
3. PROVIDE NEMA 1 DISCONNECT SWITCH.
4. PROVIDE FRONT STAMPED LOUVER INLETS AND OUTLETS.
5. VERIFY PIPE AND ELECTRICAL LEFT/RIGHT HAND CONNECTIONS PRIOR TO ORDERING.

HEAT PUMP (HP) SCHEDULE

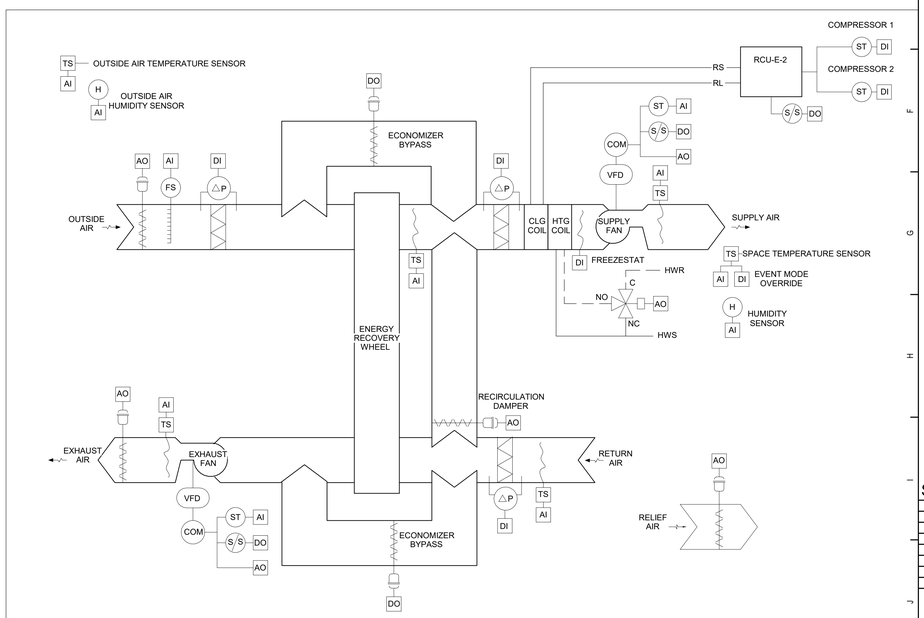
DWG LABEL	LOCATION	DESIGN MAKE: TRANE MITSUBISHI MODEL:	UNIT TYPE	NOMINAL CAP.		SUPPLY FAN SETTING	SUPPLY AIR (CFM)	OUTSIDE AIR (CFM)	SOUND PRESS. (dBA)	REFRIG PIPE DIM LIQUID/ SUCTION (inch)	ELECTRICAL DATA			NOTES
				CLG (BTU/h)	HTG (BTU/h)						VOLT/PH	MCA	MOP	
HP-E-1	SEC. OFFICE SO1	NTXCKS09A112AA	4-WAY CEILING CASSETTE	9,000	6,900	HIGH	300	20	26-28-30	1/4 / 1/2	208V/1PH	0.25	15	1, 2, 3, 4, 5, 6,7

NOTES:
1. NOMINAL COOLING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 80/67°F (DB/WB), OUTDOOR OF 95°F (DB).
2. NOMINAL HEATING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 70°F (DB), OUTDOOR OF 43°F (WB).
3. SEE OUTDOOR UNIT SCHEDULE FOR OUTDOOR AMBIENT CONDITIONS, CONNECTED CAPACITY, AND OTHER FACTORS ASSOCIATED WITH CORRECTED CAPACITIES.
4. SEE SCHEMATIC PIPING/CONTROL DIAGRAM FOR INDICATION OF REQUIRED INDOOR UNIT REMOTE CONTROLLERS, SYSTEM CONTROLLERS, AND INTEGRATION DEVICES.
5. FULL DEMAND CORRECTED CAPACITY INCLUDES DE-RATE ASSOCIATED WITH INDOOR VS. OUTDOOR CONNECTED CAPACITY INDICATED ON OUTDOOR UNIT SCHEDULE FOR ASSOCIATED SYSTEM.
6. PROVIDE INTEGRAL CONDENSATE PUMP WITH 33" LIFT CAPABILITY.
7. PROVIDE TOGGLE DISCONNECT.

REMOTE CONDENSING UNIT (RCU) SCHEDULE (FOR HP)

DWG LABEL	LOCATION	DESIGN MAKE: TRANE/ MITSUBISHI MODEL:	NOMINAL CAPACITY				ELECTRICAL DATA			NOTES
			COOLING		HEATING					
			(BTU/h)	EER / SEER	(BTU/h)	COP @ 47°F	VOLT/PH	MCA	MOCP	
RCU-E-1	ROOF	NTXSKS09A112AA	9,000	13.4 / 22.4	11,000	3.9	208V / 1PH	9	15	1-4

NOTES:
1. NOMINAL COOLING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 80/67°F (DB/WB), OUTDOOR OF 95°F (DB).
2. NOMINAL HEATING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 70°F (DB), OUTDOOR OF 43°F (WB).
3. PROVIDE 18" STRUT SUPPORT SYSTEM (DESIGN BASIS: GREEN LINK ECO-ENGINEERING "KNUCKLEHEAD").
4. PROVIDE NEMA 3R DISCONNECT.



ROOFTOP UNIT - HOT WATER (3-WAY VALVE CONTROL) AND DX COOLING W/ENERGY RECOVERY - SEQUENCE OF OPERATIONS:

1. OCCUPIED MODE:
   a. SUPPLY FAN AND EXHAUST FAN SHALL RUN CONTINUOUSLY. MODULATE THE FAN VARIABLE FREQUENCY DRIVE AS REQUIRED TO MAINTAIN REQUIRED MINIMUM VENTILATION, HEATING SETPOINT OF 70°F (ADJ.), AND COOLING SETPOINT OF 75°F (ADJ.). MODULATE THE SPEED OF THE SUPPLY FAN VARIABLE FREQUENCY DRIVE AS A FUNCTION OF THE DEVIATION FROM THE SETPOINTS AS REQUIRED, PROPORTIONAL TO THE LARGEST PERCENTAGE OPEN POSITION OF THE HEATING COIL VALVE OR OUTSIDE AIR DAMPER. MODULATE THE SPEED OF THE EXHAUST FAN VARIABLE FREQUENCY DRIVE PROPORTIONALLY WITH THE OUTSIDE AIR REQUIREMENT. ALL TEMPERATURE SETPOINTS ARE TO BE ADJUSTABLE AT THE OWS. RUN SUPPLY FAN AT THE (FULL AIRFLOW) FREQUENCY DETERMINED BY THE BALANCING CONTRACTOR FOR MECHANICAL COOLING.
   b. OPERATE THE ENERGY RECOVERY WHEEL. WHEEL ENERGY ECONOMIZER BYPASS DAMPERS SHALL BE CLOSED.
   c. DETERMINE THE FLOW RATE OF OUTSIDE AIR BY DIRECT MEASUREMENT OF AIRFLOW RATE VIA AIR FLOW MEASURING DEVICES LOCATED AT THE INTAKE TO THE RTU. REFER TO SECTION 23 09 00 FOR DETAILS OF DESIGN MAKE FLOW SENSORS. CALIBRATE THESE SENSORS WITH THE BALANCING CONTRACTOR AND MANUFACTURER AS PART OF SYSTEM COMMISSIONING WORK.
   d. PROVIDE TWO DISTINCT OCCUPANCY MODES: CLASS AND EVENT MODES. MODULATE THE RETURN AND OUTSIDE AIR DAMPERS TO THE POSITION REQUIRED TO MAINTAIN THE MINIMUM OUTSIDE AIR QUANTITY AS SCHEDULED FOR EACH MODE. NEVER POSITION DAMPERS BELOW THESE MINIMUM FLOWRATES DURING OCCUPANCY EXCEPT IN CASE OF ALARM. PROVIDE FOR EVENT MODE / CLASS MODE SCHEDULING AND TOGGLING AT THE OWS. PROVIDE PUSH BUTTON IN SPACE TO OVERRIDE (ANY) MODE TO EVENT MODE FOR A PERIOD OF ONE HOUR. NEVER POSITION THE OUTSIDE AIR DAMPER BELOW THIS MINIMUM POSITION DURING THE OCCUPANCY CYCLE EXCEPT IN CASE OF ALARM.
   e. WHEN THE SPACE TEMPERATURE IS AT OR BELOW THE HEATING SETPOINT, MODULATE THE HEATING HOT WATER THREE WAY CONTROL VALVE AS REQUIRED TO MEET THE HEATING TEMPERATURE SETPOINT.
   f. PROVIDE ENTHALPY BASED ECONOMIZER COOLING. PROVIDE MODULATING ACTUATORS FOR RELIEF DAMPERS; MODULATE OPEN FROM CLOSED AT MINIMUM OUTSIDE AIR TO FULLY OPEN AT 100% OUTSIDE AIR ECONOMIZER; OPEN THE ENERGY WHEEL ECONOMIZER BYPASS DAMPERS. WHEN ECONOMIZER COOLING CANNOT MAINTAIN THE SPACE COOLING REQUIREMENTS, ENABLE MECHANICAL COOLING.
   g. OPERATE MECHANICAL COOLING SYSTEM AT LOWEST CAPACITY REQUIRED TO MEET THE COOLING TEMPERATURE SETPOINT.
2. UNOCCUPIED MODE:
   a. THE ENERGY RECOVERY WHEEL AND EXHAUST FAN SHALL BE OFF. OUTSIDE AIR, EXHAUST AIR AND ENERGY WHEEL ECONOMIZER BYPASS DAMPERS SHALL BE CLOSED. RECIRCULATION DAMPER SHALL BE OPEN.
   b. IN HEATING MODE, MODULATE THE SUPPLY FAN SPEED AND HOT WATER COIL VALVE AS REQUIRED TO MAINTAIN SPACE TEMPERATURE SETPOINT 65°F (ADJ.).
   c. IN COOLING MODE, DISALLOW THE MECHANICAL COOLING SYSTEM BUT PROVIDE ECONOMIZER COOLING. ON CALL FOR COOLING, OPEN THE OUTSIDE AIR, EXHAUST AIR, ENERGY WHEEL ECONOMIZER BYPASS AND (RTH) RELIEF AIR DAMPERS, CLOSE THE RECIRCULATION DAMPER AND ENABLE THE SUPPLY AND EXHAUST FANS. RUN FANS AT THE SPEED REQUIRED TO MAINTAIN THE COOLING TEMPERATURE SETPOINT. WHEN UNOCCUPIED COOLING SETPOINT IS REACHED, DISABLE THE FANS AND CLOSE THE DAMPERS.
   d. WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 34 DEG. F (ADJ.), POSITION THE HEATING THREE-WAY CONTROL VALVE 100% (ADJ.) OPEN TO COIL.
3. WARM-UP MODE:
   a. THE UNIT SHALL START PER AN OPTIMUM START PROGRAM.
   b. RUN THE SUPPLY FAN CONTINUOUSLY AT FULL SPEED (60 HZ.), AND MODULATE THE HEATING VALVE, ECONOMIZER COOLING OR MECHANICAL COOLING AS REQUIRED TO MAINTAIN TEMPERATURE SETPOINTS AT THE OCCUPIED LEVEL. MAINTAIN THE OUTSIDE AIR, (RTH) RELIEF AIR, SUPPLY AIR, ENERGY WHEEL ECONOMIZER BYPASS AND RECIRCULATION AIR DAMPERS IN THE UNOCCUPIED POSITION AND EXHAUST FAN AND ENERGY WHEEL OFF UNTIL MORNING WARM-UP (COOL DOWN) HAS BEEN ACCOMPLISHED. WHEN MORNING WARM-UP HAS BEEN ACCOMPLISHED, SLOWLY MODULATE DAMPERS TO THEIR PROPER OCCUPIED MODE POSITION. AVOID SUDDEN TEMPERATURE SWINGS AND ACTIVATION OF THE LOW TEMPERATURE LIMIT. TIMING OF WARMUP MODE SHALL INSURE AT LEAST ONE FULL AIR CHANGE "PURGE" BEFORE THE BEGINNING OF THE OCCUPIED PERIOD SCHEDULED.
4. SAFETIES:
   a. PROVIDE FILTER DIFFERENTIAL PRESSURE SWITCHES ACROSS EACH FILTER BANK; ALARM THE OWS WHEN THE FILTERS (AND WHICH FILTER BANK) EXCEED THEIR DIFFERENTIAL PRESSURE LIMIT.
   b. SENSE THE STATUS OF THE FAN VIA FEEDBACK FROM VSD. WHEN THE SPEED COMMAND AND FEEDBACK STATUS DO NOT AGREE, GENERATE AN ALARM AT THE OWS.
   c. SENSE THE STATUS OF THE RCU VIA STATUS SENSORS ACROSS COMPRESSORS. WHEN THE RCU COMMAND AND COMPRESSOR STATUS DO NOT AGREE, GENERATE AN ALARM AT THE OWS.
   d. PROVIDE COIL FREEZE PROTECTION VIA ANALOG TEMPERATURE SENSOR AT EXPECTED FREEZE LOCATION, AND "LOWEST FOOT" STYLE MANUAL RESET FREEZESTAT. WHENEVER FREEZE-UP CONDITIONS ARISE (36 DEG. F ADJUSTABLE) STOP THE SUPPLY AND EXHAUST FANS, FULLY CLOSE THE OUTSIDE AIR AND EXHAUST AIR DAMPERS, FULLY OPEN THE RECIRCULATION DAMPER, POSITION THE HEATING THREE-WAY CONTROL VALVE FULLY OPEN TO COIL AND ACTIVATE ALARM.
   e. FIRE ALARM SHUTDOWN.

1 Rooftop Unit - Hot Water/DX Cooling - 3-Way Valve Control W/ERW - RTU-E-2
NTS

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:
2	12/12/2022	SED ADD NO.

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

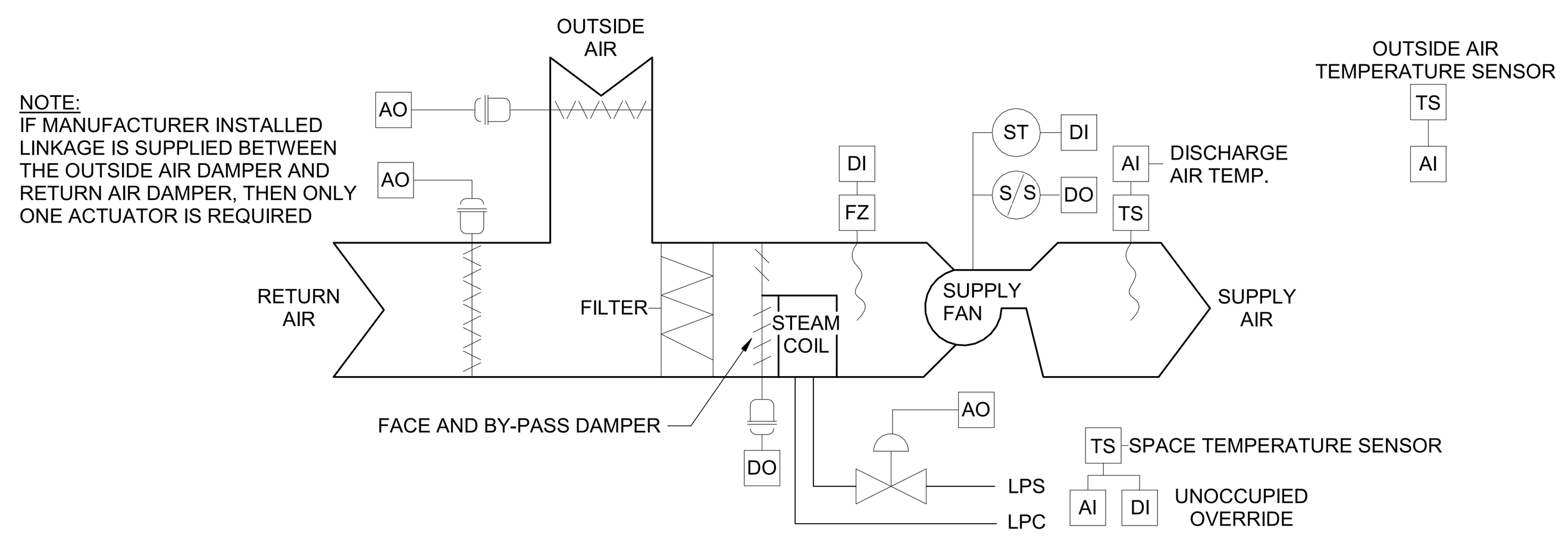
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Schedules and Controls

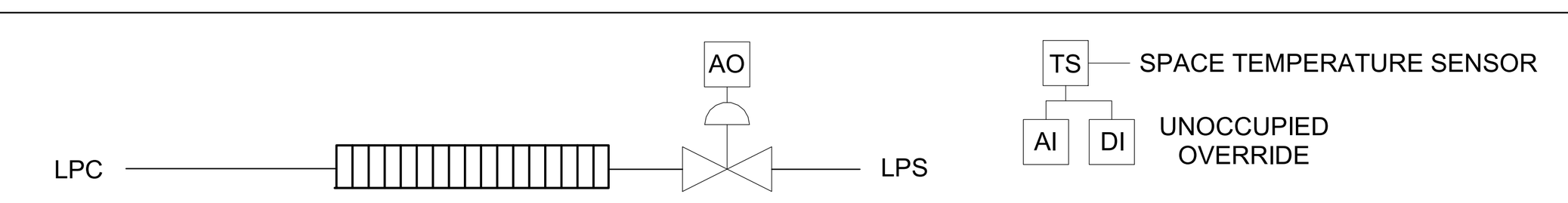
Drawn By: JPF1/pgm
Date: 11/4/2022
Project No.: 17597-22001
Drawing Number: EM600



UNIT VENTILATOR - STEAM - VALVE CONTROL WITH FACE AND BY-PASS - SEQUENCE OF OPERATIONS:

1. OCCUPIED MODE:
   a. SUPPLY FAN SHALL RUN CONTINUOUSLY.
   b. THE OUTSIDE AIR DAMPER SHALL OPEN TO THE POSITION REQUIRED TO MAINTAIN THE MINIMUM OUTSIDE AIR QUANTITY INDICATED. OUTSIDE AIR DAMPER SHALL NEVER BE POSITIONED BELOW THIS MINIMUM POSITION EXCEPT IN CASE OF ALARM.
   c. FACE AND BY-PASS DAMPER SHALL BE POSITIONED TO FULL FACE, DAMPER SHALL NEVER BE POSITIONED TO BY-PASS THE COIL EXCEPT IN CASE OF ALARM AS DESCRIBED BELOW.
   d. WHEN THE SPACE TEMPERATURE IS AT OR BELOW THE HEATING SETPOINT, THE 2-WAY CONTROL VALVE SHALL MODULATE TO MAINTAIN SPACE HEATING SETPOINT SUBJECT TO DISCHARGE HIGH LIMIT OF 110 DEG. F (ADJUSTABLE) AND DISCHARGE LOW LIMIT OF 70 DEG. F (ADJUSTABLE).
   e. WHEN THE SPACE TEMPERATURE RISES 3 DEG. F (ADJUSTABLE) ABOVE THE SPACE HEATING SETPOINT, AND THE OUTSIDE AIR TEMPERATURE IS LOWER THAN THE SPACE TEMPERATURE, THE OUTSIDE AIR DAMPER SHALL MODULATE OPENTO MAINTAIN THE OCCUPIED SETPOINT. THIS SHALL BE DONE SUBJECT TO DISCHARGE LOW LIMIT OF 55 DEG. F (ADJUSTABLE), AND WITH THE HEATING VALVE FULLY CLOSED.
2. UNOCCUPIED MODE:
   a. SUPPLY FAN SHALL BE OFF.
   b. THE OUTSIDE AIR DAMPER SHALL BE FULLY CLOSED.
   c. FACE AND BY-PASS DAMPER SHALL BE POSITIONED TO FULL FACE, DAMPER SHALL NEVER BE POSITIONED TO BY-PASS THE COIL EXCEPT IN CASE OF ALARM AS DESCRIBED BELOW.
   d. WHERE SPACE HAS FINNED TUBE RADIATION, RADIATION SHALL PROVIDE FIRST STAGE UNOCCUPIED HEATING.
   e. ON DROP IN SPACE TEMPERATURE BELOW THE UNOCCUPIED SETPOINT, CYCLE THE FAN ON AND COIL CONTROL VALVE FULL OPEN AS REQUIRED TO MAINTAIN REDUCED SPACE TEMPERATURE. USE 5 DEG. F (ADJUSTABLE) DEADBAND TO MINIMIZE SHORT CYCLING.
   f. A TIMED LOCAL OVERRIDE CONTROL SHALL ALLOW AN OCCUPANT TO OVERRIDE THE SCHEDULE AND PLACE THE UNIT INTO OCCUPIED MODE FOR 1 HOUR (ADJUSTABLE). AT EXPIRATION OF THIS TIME, CONTROL OF THE UNIT SHALL AUTOMATICALLY RETURN TO THE SCHEDULE.
3. WARM-UP MODE:
   a. THE UNIT SHALL START PER AN OPTIMUM START PROGRAM.
   b. THE OUTSIDE AIR DAMPER SHALL BE FULLY CLOSED, FACE AND BY-PASS DAMPER SHALL BE POSITIONED TO FULL FACE EXCEPT IN CASE OF ALARM AS DESCRIBED BELOW.
   c. THE SUPPLY FAN SHALL RUN AND THE CONTROL VALVE SHALL MODULATE TO MAINTAIN OCCUPIED SETPOINT.
4. SAFETIES
   a. A SEPARATE LOW LIMIT FREEZE STAT WITH AUTOMATIC RESET SHALL BE INSTALLED WITH SENSING ELEMENT SERPENTINED ACROSS THE FACE OF THE COIL; WHENEVER COIL FREEZE-UP CONDITIONS ARISE (36 DEG. F ADJUSTABLE THE SUPPLY FAN SHALL STOP, THE OUTSIDE AIR DAMPER SHALL CLOSE 100%, CONTROL VALVE SHALL OPEN 100%, AND THE FACE AND BY-PASS DAMPER SHALL BE POSITIONED TO FULL BY-PASS OF THE COIL. AN ALARM SHALL ALSO BE ACTIVATED.
   b. UPON FAILURE OF THE FAN, AS SENSED BY A CURRENT SENSING STATUS SWITCH, GENERATE AN ALARM AT THE OWS.

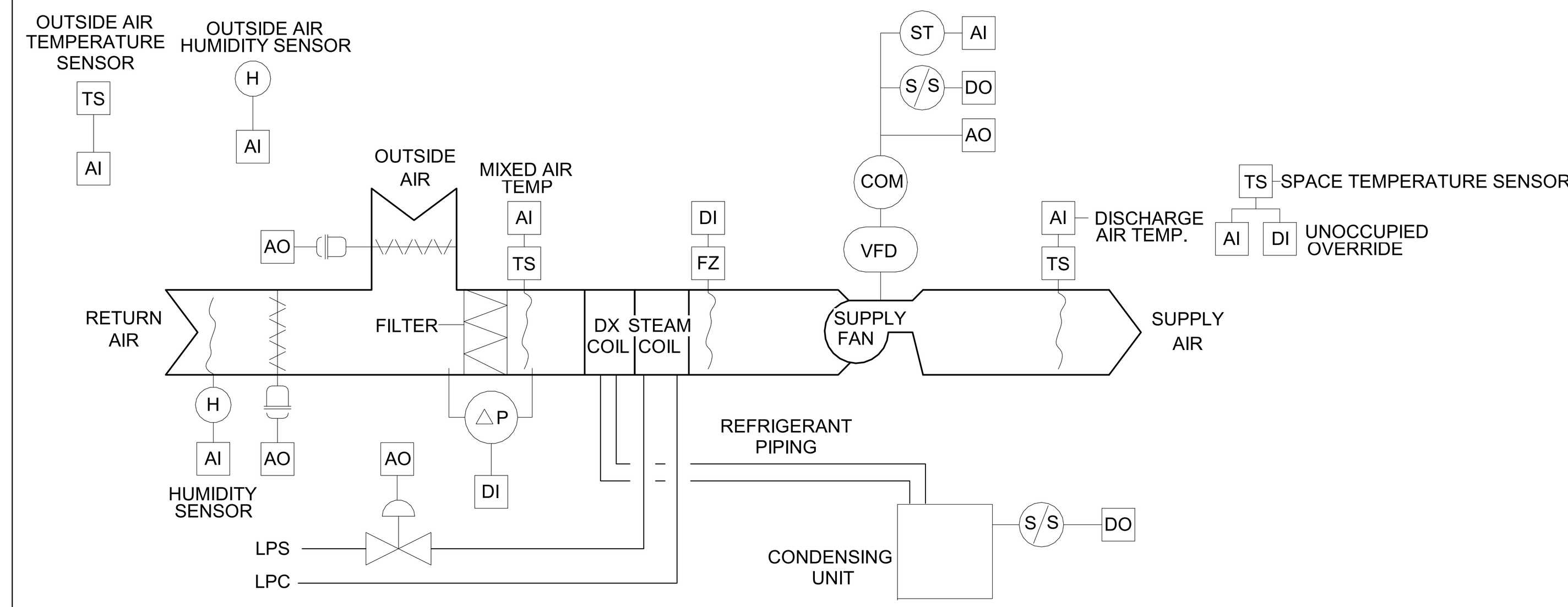
7 UV - Steam Control
NTS



FIN TUBE RADIATION - STEAM - WITH 2-WAY CONTROL VALVE - SEQUENCE OF OPERATIONS:

1. OCCUPIED MODE:
   a. WHEN THE SPACE TEMPERATURE IS AT OR BELOW THE OCCUPIED HEATING SETPOINT, THE CONTROL VALVE SHALL MODULATE TO MAINTAIN OCCUPIED SPACE SETPOINT.
2. UNOCCUPIED MODE:
   a. WHEN THE SPACE TEMPERATURE IS AT OR BELOW THE UNOCCUPIED HEATING SETPOINT, THE CONTROL VALVE SHALL MODULATE TO MAINTAIN UNOCCUPIED SPACE SETPOINT.
3. WARM-UP MODE:
   a. WHEN THE SPACE TEMPERATURE IS AT OR BELOW THE OCCUPIED HEATING SETPOINT, THE CONTROL VALVE SHALL MODULATE TO MAINTAIN OCCUPIED SPACE SETPOINT.
4. SAFETIES:
   a. IF THE SPACE TEMPERATURE IS LESS THAN THE HEATING SETPOINT BY 10 DEG. F (ADJUSTABLE), THE CONTROL VALVE SHALL OPEN 100%. AN ALARM SHALL BE ACTIVATED.

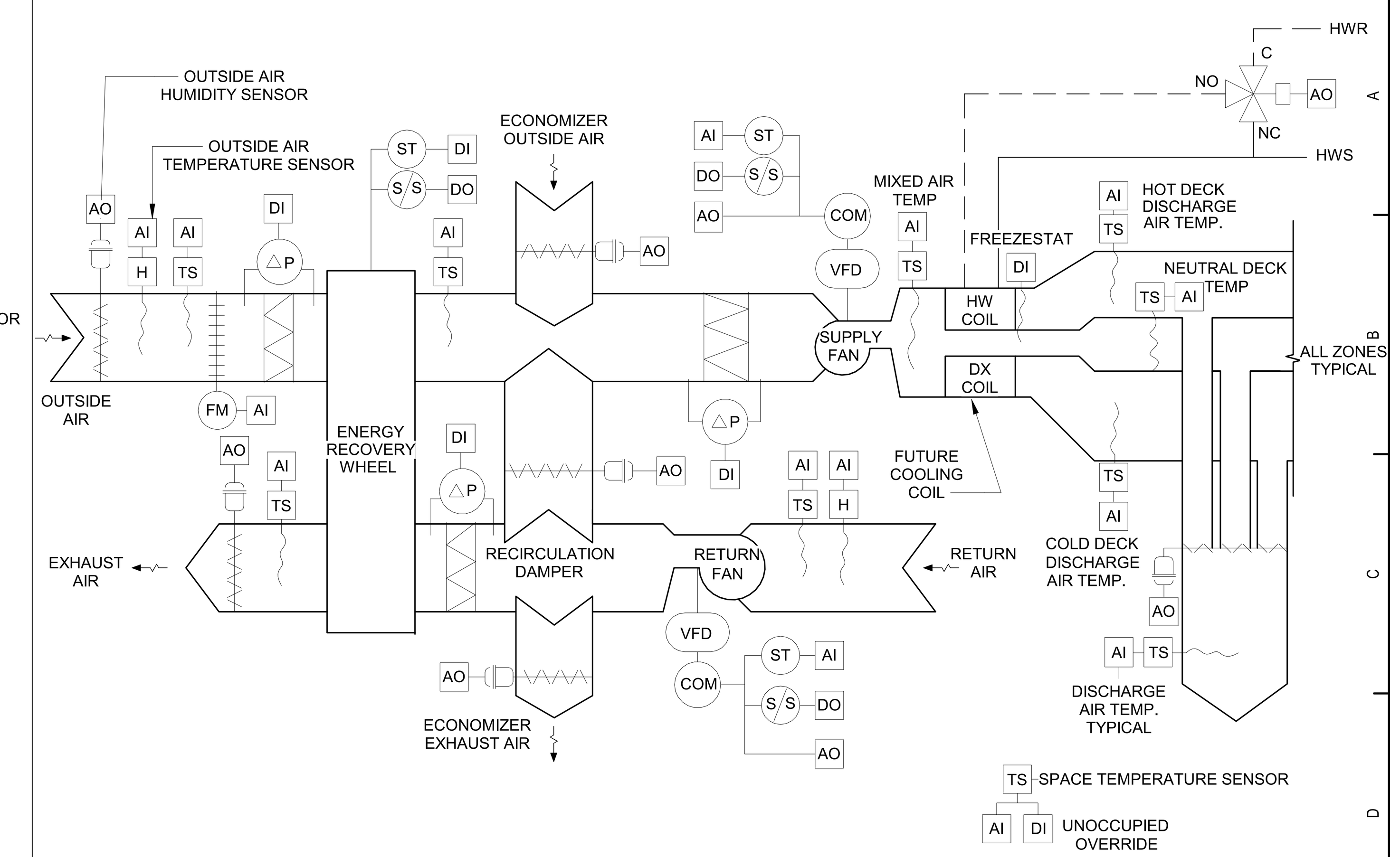
8 Fin Tube Radiation - Steam - 2-Way Control Valve
NTS



AIR HANDLING UNIT - STEAM (VALVE CONTROL) AND DX COOLING - SEQUENCE OF OPERATIONS:

1. OCCUPIED MODE:
   a. SUPPLY FAN AND ASSOCIATED EXHAUST FANS SHALL RUN CONTINUOUSLY. THE SUPPLY FAN SHALL RUN AT THE FREQUENCY DETERMINED BY THE BALANCING CONTRACTOR.
   b. THE OUTSIDE AIR DAMPER SHALL OPEN TO THE POSITION REQUIRED TO MAINTAIN THE MINIMUM OUTSIDE AIR QUANTITY INDICATED. OUTSIDE AIR DAMPER SHALL NEVER BE POSITIONED BELOW THIS MINIMUM POSITION EXCEPT IN CASE OF ALARM.
   c. WHEN THE SPACE TEMPERATURE IS AT OR BELOW THE HEATING SETPOINT, THE HEATING CONTROL VALVE SHALL MODULATE TO MAINTAIN SPACE HEATING SETPOINT SUBJECT TO DISCHARGE HIGH LIMIT OF 110 DEG. F (ADJUSTABLE) AND DISCHARGE LOW LIMIT OF 70 DEG. F (ADJUSTABLE).
   d. WHEN THE SPACE TEMPERATURE RISES 3 DEG. F (ADJUSTABLE) ABOVE THE SPACE HEATING SETPOINT, AND THE OUTSIDE AIR ENTHALPY IS LOWER THAN THE SPACE ENTHALPY, THE OUTSIDE AIR DAMPER SHALL MODULATE OPEN AND THE ASSOCIATED RELIEF DAMPER SHALL OPEN TO MAINTAIN THE OCCUPIED SETPOINT. THIS SHALL BE DONE SUBJECT TO LOW LIMIT OF 55 DEG. F (ADJUSTABLE), AND WITH THE HEATING VALVE FULLY CLOSED.
   e. WHEN THE SPACE TEMPERATURE IS 3 DEG. F (ADJUSTABLE) ABOVE THE COOLING SETPOINT, AND THE OUTSIDE AIR CANNOT COOL THE SPACE, THE RESPECTIVE CONDENSING UNIT SHALL BE CYCLED TO MAINTAIN SPACE TEMPERATURE WITH THE HEATING VALVE FULLY CLOSED. USE 5 DEG. F (ADJUSTABLE) DEADBAND BETWEEN HEATING AND COOLING SETPOINTS.
2. UNOCCUPIED MODE:
   a. THE SUPPLY AND ASSOCIATED EXHAUST FAN SHALL BE OFF.
   b. THE OUTSIDE AIR DAMPER AND THE ASSOCIATED RELIEF DAMPER SHALL BE FULLY CLOSED.
   c. WHERE SPACE HAS FINNED TUBE RADIATION, RADIATION SHALL PROVIDE FIRST STAGE UNOCCUPIED HEATING.
   d. ON DROP IN SPACE TEMPERATURE BELOW THE UNOCCUPIED HEATING SETPOINT, CYCLE THE FAN ON AND COIL CONTROL VALVE FULL OPEN AS REQUIRED TO MAINTAIN REDUCED SPACE TEMPERATURE. USE 5 DEG. F (ADJUSTABLE) DEADBAND TO MINIMIZE SHORT CYCLING.
   e. WHEN THE SPACE TEMPERATURE RISES ABOVE THE UNOCCUPIED ECONOMIZER COOLING SETPOINT, ALLOW ECONOMIZER COOLING WITH THE HEATING VALVE FULLY CLOSED AND THE MECHANICAL COOLING DISABLED.
   f. A TIMED LOCAL OVERRIDE CONTROL SHALL ALLOW AN OCCUPANT TO OVERRIDE THE SCHEDULE AND PLACE THE UNIT INTO OCCUPIED MODE FOR 1 HOUR (ADJUSTABLE). AT EXPIRATION OF THIS TIME, CONTROL OF THE UNIT SHALL AUTOMATICALLY RETURN TO THE SCHEDULE.
3. WARM-UP MODE:
   a. THE UNIT SHALL START PER AN OPTIMUM START PROGRAM.
   b. THE OUTSIDE AIR DAMPER AND THE ASSOCIATED RELIEF DAMPER SHALL BE FULLY CLOSED, THE RETURN AIR DAMPER SHALL BE FULLY OPEN, AND THE ASSOCIATED EXHAUST FAN SHALL BE OFF.
   c. THE SUPPLY FAN SHALL RUN AND THE HEATING CONTROL VALVE SHALL MODULATE TO MAINTAIN OCCUPIED SETPOINT.
4. SAFETIES:
   a. DIFFERENTIAL PRESSURE ACROSS THE AIR FILTERS SHALL GENERATE AN ALARM WHENEVER THE DIFFERENTIAL PRESSURE EXCEEDS IT'S ADJUSTABLE SETPOINT.
   b. A SEPARATE LOW LIMIT FREEZE STAT WITH AUTOMATIC RESET SHALL BE INSTALLED WITH SENSING ELEMENT SERPENTINED ACROSS THE FACE OF THE COIL; WHENEVER FREEZE-UP CONDITIONS ARISE (36 DEG. F ADJUSTABLE) THE SUPPLY FAN SHALL STOP, THE OUTSIDE AIR DAMPER SHALL CLOSE 100%, THE HEATING CONTROL VALVE SHALL OPEN 100% AND AN ALARM SHALL BE ACTIVATED.

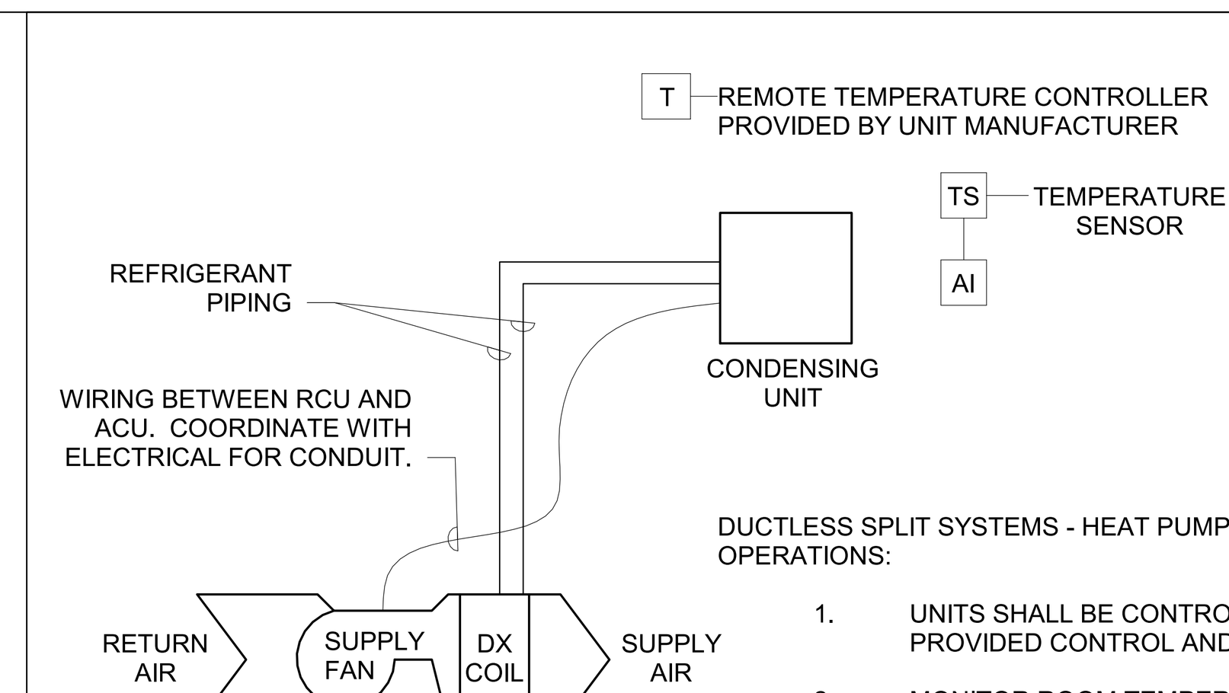
4 RTU - Steam - Valve Control and DX Cooling - RTU-E-1
NTS



MULTI-ZONE UNIT - HOT WATER (3-WAY VALVE CONTROL) W/ENERGY RECOVERY - SEQUENCE OF OPERATIONS:

1. GENERAL:
   a. PROVIDE WALL MOUNTED TEMPERATURE SENSORS MOUNTED IN CONTROLLED SPACES IN APPROPRIATE LOCATIONS AS REQUIRED TO MAINTAIN PROPER CONTROL. SHOW INDIVIDUAL AND AVERAGED DATA ON GRAPHIC.
2. OCCUPIED PERIOD:
   a. SUPPLY FAN AND RETURN FAN SHALL RUN CONTINUOUSLY. THE SUPPLY FAN SHALL RUN AT THE FREQUENCY DETERMINED BY THE BALANCING CONTRACTOR.
   b. THE OUTSIDE AIR DAMPER SHALL OPEN TO THE POSITION REQUIRED TO MAINTAIN THE MINIMUM OUTSIDE AIR QUANTITY INDICATED. OUTSIDE AIR DAMPER SHALL NEVER BE POSITIONED BELOW THIS MINIMUM POSITION EXCEPT IN CASE OF ALARM. RUN THE ENERGY RECOVERY WHEEL.
   c. MAINTAIN SPACE TEMPERATURE HEATING (68°F ADJ.) AND MAXIMUM AVERAGE RETURN AIR RELATIVE HUMIDITY SETPOINT OF 60% (ADJ.). ALL SETPOINTS SHALL BE ADJUSTABLE AT THE OWS, WITH BIAS ADJUSTMENTS FOR INDIVIDUAL PREFERENCES IN THE RESPECTIVE ZONE THERMOSTATS.
   d. HEATING: MODULATE THE HEATING CONTROL VALVE AS REQUIRED TO MAINTAIN OUTDOOR AIR RESET OF HOT DECK TEMPERATURE. VARY HOT DECK TEMPERATURE INVERSELY WITH OUTDOOR AIR TEMPERATURE FROM 70 DEG. F (ADJ.) TO 90 DEG. F (ADJ.), AS THE OUTDOOR AIR TEMPERATURE VARIES FROM 55 DEG. F (ADJ.) TO 10 DEG. F (ADJ.). ABOVE AND BELOW THESE OUTDOOR TEMPERATURES THE HOT DECK TEMPERATURE SHALL REMAIN CONSTANT AS POSSIBLE WITHIN EQUIPMENT RESTRAINTS. MODULATE INDIVIDUAL ZONE BLADES TO MIX HOT AND COLD (NEUTRAL) DECK AIR AS REQUIRED TO MAINTAIN SMOOTH TEMPERATURE CONTROL OF DISCHARGE AIR TEMPERATURE AND ZONE SETPOINTS. ADJUST RESET SCHEDULE DURING THE FIRST YEAR OF OPERATION TO MINIMIZE BOTH ENERGY USE AND "NO-HEAT" COMPLAINTS.
   e. ECONOMIZER MODE:
      A. PROVIDE ENTHALPY BASED ECONOMIZER COOLING PRIOR TO USING MECHANICAL COOLING. REFER TO GENERAL SPECIFICATION ENTHALPY ECONOMIZER CONTROLS FOR MORE DETAILS.
      B. FIRST STAGE ECONOMIZER COOLING: TURN OFF THE ENERGY RECOVERY WHEEL.
      C. SECOND STAGE OF ECONOMIZER COOLING: MODULATE THE ECONOMIZER (OUTSIDE AND EXHAUST AIR) DAMPERS OPEN AS REQUIRED, WHILE MAINTAINING AT MINIMUM 55°F RTU NEUTRAL DECK TEMPERATURE.
      D. MODULATE INDIVIDUAL ZONE BLADES BETWEEN HOT AND NEUTRAL DECKS, AND BETWEEN COLD AND NEUTRAL DECKS, AS REQUIRED TO MAINTAIN SMOOTH TEMPERATURE CONTROL OF DISCHARGE AIR TEMPERATURE AND ZONE SETPOINTS.
3. UNOCCUPIED PERIOD:
   a. THERE SHALL BE NO MINIMUM OUTSIDE AIR REQUIREMENT DURING THE UNOCCUPIED PERIOD; CONTROL THE OUTSIDE AIR AND EXHAUST AIR DAMPERS TO BE SHUT DURING HEATING OPERATION, AND THE RECIRCULATION DAMPERS TO BE 100% OPEN. MODULATE THE OUTSIDE AIR AND EXHAUST AIR DAMPERS OPEN, AND THE RECIRCULATION DAMPER CLOSED, AS REQUIRED TO MAINTAIN THE UNOCCUPIED PERIOD ECONOMIZER COOLING SET POINT.
   b. RUN THE SUPPLY AND EXHAUST FANS INTERMITTENTLY AT REDUCED CFM AS REQUIRED TO MAINTAIN A REDUCED SPACE TEMPERATURE HEATING SET-POINT (INITIALLY 65°F). THE FANS TO BE OFF WHEN THE SPACE IS WITHIN THE SET-POINT DEAD-BAND (ADJ.), AND CONTINUOUSLY MODULATE THE SPEED OF THE SUPPLY AND EXHAUST FAN VARIABLE SPEED DRIVES AS A FUNCTION OF THE DEVIATION FROM THE SETPOINTS AS REQUIRED, PROPORTIONAL TO THE LARGEST PERCENTAGE OPEN POSITION OF THE HEATING VALVE OR THE OUTSIDE AIR DAMPER. ALL SET-POINTS SHALL BE ADJUSTABLE AT THE OWS.
   c. ON CALL FOR HEAT, MODULATE THE HEATING CONTROL VALVE AS REQUIRED TO MAINTAIN OUTDOOR AIR RESET OF HOT DECK TEMPERATURE, HOTTER THAN DURING THE OCCUPIED PERIOD TO MINIMIZE RUNTIME. VARY HOT DECK TEMPERATURE INVERSELY WITH OUTDOOR AIR TEMPERATURE FROM 80 DEG. F (ADJ.) TO 100 DEG. F (ADJ.), AS THE OUTDOOR AIR TEMPERATURE VARIES FROM 55 DEG. F (ADJ.) TO 10 DEG. F (ADJ.). ABOVE AND BELOW THESE OUTDOOR TEMPERATURES THE HOT DECK TEMPERATURE SHALL REMAIN CONSTANT AS POSSIBLE WITHIN EQUIPMENT RESTRAINTS. ADJUST RESET SCHEDULE AND DEADBAND AS REQUIRED DURING THE FIRST YEAR OF OPERATION TO MINIMIZE ENERGY USE, SHORT CYCLING, AND MAINTAIN SPACE TEMPERATURE HEATING SETPOINTS.
   d. MODULATE THE ZONE BLADES AS REQUIRED TO ACHIEVE SETPOINT RAPIDLY WITHOUT OVERHEATING INDIVIDUAL SPACES.
   e. WHEN THERE IS ASSOCIATED FIN TUBE RADIATION SERVING THE SAME SPACE, PROVIDE SEPARATE LOWER SET-POINT FOR AIR HANDLER SO FANS OPERATE ONLY WHEN FIN TUBE IS NOT MAINTAINING SET-POINT.
   f. WHEN THE OUTSIDE AIR TEMPERATURE 36°F OR LOWER AND THE FANS ARE OFF, OPEN THE CONTROL VALVE TO COIL TO PREVENT FREEZE-UP. PROPORTIONALLY OPEN THE CONTROL VALVE TO COIL AS THE OUTDOOR AIR TEMPERATURE VARIES, FROM 20% (ADJ.) AT 36 DEG. F (ADJ.) TO 50% (ADJ.) AT 0 DEG. F (ADJ.).
4. WARM-UP PERIOD:
   a. WARMUP MODE SHALL BE USED BETWEEN UNOCCUPIED AND OCCUPIED MODES.
   b. THE CHANGE FROM UNOCCUPIED TO WARMUP MODES SHALL BE PART OF THE STAGGERED START SCHEDULE.
   c. ON INITIATION OF WARMUP MODE, RUN THE SUPPLY AND EXHAUST FANS CONTINUOUSLY AND MODULATE THE ZONE BLADES AND HEATING CONTROL VALVE,AS REQUIRED TO ACHIEVE AND MAINTAIN THE OCCUPIED PERIOD TEMPERATURE SET POINT.
   d. MAINTAIN THE OUTSIDE, EXHAUST AND RECIRCULATION AIR DAMPERS IN THE UNOCCUPIED POSITION UNTIL MORNING WARM-UP OR COOL DOWN HAS BEEN ACCOMPLISHED, THEN SLOWLY MODULATE DAMPERS TO THEIR PROPER OCCUPIED MODE POSITION. AVOID SUDDEN TEMPERATURE SWINGS AND ACTIVATION OF THE LOW TEMPERATURE LIMIT. TIMING OF WARMUP MODE SHALL INSURE AT LEAST ONE FULL AIR CHANGE "PURGE" BEFORE THE BEGINNING OF THE OCCUPIED PERIOD SCHEDULED.
5. SAFETIES:
   a. PROVIDE FILTER DIFFERENTIAL PRESSURE SWITCHES ACROSS EACH FILTER BANK; ALARM THE OWS WHEN THE FILTERS (AND WHICH FILTER BANK) EXCEED THEIR DIFFERENTIAL PRESSURE LIMIT.
   b. SENSE THE STATUS OF THE FAN VIA FEEDBACK FROM VSD. WHEN THE SPEED COMMAND AND FEEDBACK STATUS DO NOT AGREE, GENERATE AN ALARM AT THE OWS.
   c. PROVIDE COIL FREEZE PROTECTION VIA ANALOG TEMPERATURE SENSOR AT EXPECTED FREEZE LOCATION, AND "LOWEST FOOT" STYLE MANUAL RESET FREEZESTAT. WHENEVER FREEZE-UP CONDITIONS ARISE (36 DEG. F ADJUSTABLE) STOP THE SUPPLY FAN, FULLY CLOSE THE OUTSIDE AIR DAMPER, POSITION THE HEATING THREE-WAY CONTROL VALVE FULLY OPEN TO COIL AND ACTIVATE ALARM.
   d. FIRE ALARM SHUTDOWN.
   e. HOT DECK HIGH TEMP ALARM
   f. HOT DECK LOW TEMP ALARM

1 Multi-Zone Rooftop Unit - RTU-E-3
NTS



DUCTLESS SPLIT SYSTEMS - HEAT PUMP - SEQUENCE OF OPERATIONS:

1. UNITS SHALL BE CONTROLLED WITH THE UNIT PROVIDED CONTROL AND THERMOSTAT.
2. MONITOR ROOM TEMPERATURE BY A SPACE TEMPERATURE SENSOR.
3. GENERATE AN ALARM WHEN THE TEMPERATURE GOES ABOVE OR BELOW ROOM TEMPERATURE RANGE (ADJUSTABLE).

5 Ductless Split System - HP-E-1
NTS

TEMPERATURE CONTROLS SYMBOLS LIST

Symbol	Description
AI	ANALOG IN
AO	ANALOG OUT
COM	COMMUNICATIONS PORT
CS	AIRBORNE CONTAMINANT SENSOR
DI	DIGITAL IN
	DAMPER MOTOR
DO	DIGITAL OUT
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM
F	FLOW (WATER/AIR)
FM	FLOW METER
FS	AIR FLOW SENSOR
FZ	FREEZE STAT
H	HUMIDITY SENSOR
HL	HIGH LIMIT
KWH	KILOWATT HOUR METER
LL	LOW LIMIT
M/S	MANUAL SWITCH STOP / START
P	PRESSURE SENSOR
ΔP	DIFFERENTIAL PRESSURE
PS	POSITION SENSOR
S/S	STOP / START
SD	SMOKE DETECTOR
ST	STATUS
START	STARTER
T	ADJUSTABLE THERMOSTAT
TS	TEMPERATURE SENSOR
VFD	VARIABLE FREQUENCY DRIVE
WS	WATER SENSOR
%	PERCENT
ES	END SWITCH
BS	BOILER SWITCH

LEPTONDALE BUILDING/EQUIPMENT VENTILATION CALCULATIONS

EQUIPMENT NUMBER	ZONE ID				MINIMUM VENTILATION RATES									DESIGN	
	ROOM NUMBER	ROOM NAME	OCCUPANCY CLASSIFICATION	Az - AREA (SF)	Pz - ZONE OCCU. #/1000 FT	ZONE OCCU.	Rp (CFM/ Person)	RpP	Ra (CFM/SF)	RaA	Vbz (CFM)	EZ	Voz (CFM)	Vpz (CFM)	Zp
RTU-E-3	21	GRADE 3 CLRM	Classrooms (age 9 plus)	852	35	30	10	300	0.12	102	402	0.8	510	1200	0.43
	22	GRADE 5 CLRM	Classrooms (age 9 plus)	948	35	34	10	340	0.12	114	454	0.8	570	1300	0.44
	23	GRADE 5 CLRM	Classrooms (age 9 plus)	813	35	29	10	290	0.12	98	388	0.8	490	1100	0.45
	51	LIBRARY/MEDIA	Media center	2153	25	54	10	540	0.12	258	798	0.8	1000	3000	0.33
	24	COMPUTER LAB	Classrooms (age 9 plus)	754	35	27	10	270	0.12	90	360	0.8	460	1100	0.42
	25	SP. ED CLRM	Classrooms (age 9 plus)	748	35	27	10	270	0.12	90	360	0.8	450	1100	0.41
	26	GRADE 5 CLRM	Classrooms (age 9 plus)	830	35	30	10	300	0.12	100	400	0.8	500	1200	0.42
	27	GRADE 6 CLRM	Classrooms (age 9 plus)	932	35	33	10	330	0.12	112	442	0.8	560	1300	0.43
	28	GRADE 6 CLRM	Classrooms (age 9 plus)	1026	35	36	10	360	0.12	123	483	0.8	610	1400	0.44
	29	GRADE 5 CLRM	Classrooms (age 9 plus)	813	35	29	10	290	0.12	98	388	0.8	490	1100	0.45
	203	CORRIDOR	Corridors	1762	0	0	0	0	0.06	106	106	0.8	140	900	0.16
	47	TEACHER PLANNING	Breakrooms	508	50	26	5	130	0.12	61	191	0.8	240	750	0.32
RTU-E-2	L112A	STAGE	Stages, studios	861	70	61	10	610	0.06	52	662	0.8	830	1340	0.62
	L112	GYMNASIUM	Multiuse assembly	3782	100	379	7.5	2843	0.06	227	3069	0.8	3840	6100	0.63
	L111	P.E. OFFICE	Office space	162	5	1	5	5	0.06	10	15	0.8	20	460	0.04

NOTES:
Rp = PEOPLE OUTDOOR AIR RATE, Ra = AREA OUTDOOR AIR RATE, Vbz = BREATHING ZONE OUTDOOR AIRFLOW , Ez = AIR DISTRIBUTION CONFIGURATION, Voz = ZONE OUTDOOR AIRFLOW
Vpz = ZONE PRIMARY AIRFLOW, Zpz = PRIMARY OUTDOOR AIR FRACTION, Vps = SYSTEM PRIMARY AIRFLOW, Vot = OUTDOOR AIR INTAKE FLOW,
Vou = UNCORRECTED OUTDOOR AIR INTAKE, D = OCCUPANT DIVERSITY, Ev = SYSTEM VENTILATION EFFICIENCY

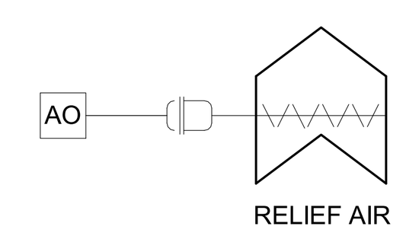
SYSTEM VALUES RTU-E-4			
Vps	15450	(UNCORRECTED OA) Vou	4771
(CORRECTED OA) Vot	7025	D	1.00
OA%	45	Ev	0.68
ADDITIONAL OA%	47		

SYSTEM VALUES RTU-E-2			
Vps	7900	(UNCORRECTED OA) Vou	3746
(CORRECTED OA) Vot	4435	D	1.00
OA%	56	Ev	0.84
ADDITIONAL OA%	18		

PLATTEKILL BUILDING/EQUIPMENT VENTILATION CALCULATIONS

EQUIPMENT NUMBER	ZONE ID				MINIMUM VENTILATION RATES								
	ROOM NUMBER	ROOM NAME	OCCUPANCY CLASSIFICATION	Az - AREA (SF)	Pz - ZONE OCCU. #/1000 FT	ZONE OCCU.	Rp (CFM/ Person)	RpP	Ra (CFM/SF)	RaA	Vbz (CFM)	EZ	Voz (CFM)
RTU-D-1	7	CAFETERIA	Cafeteria/fast-food dining	2221	100	223	7.5	1673	0.18	400	2072	0.8	2590

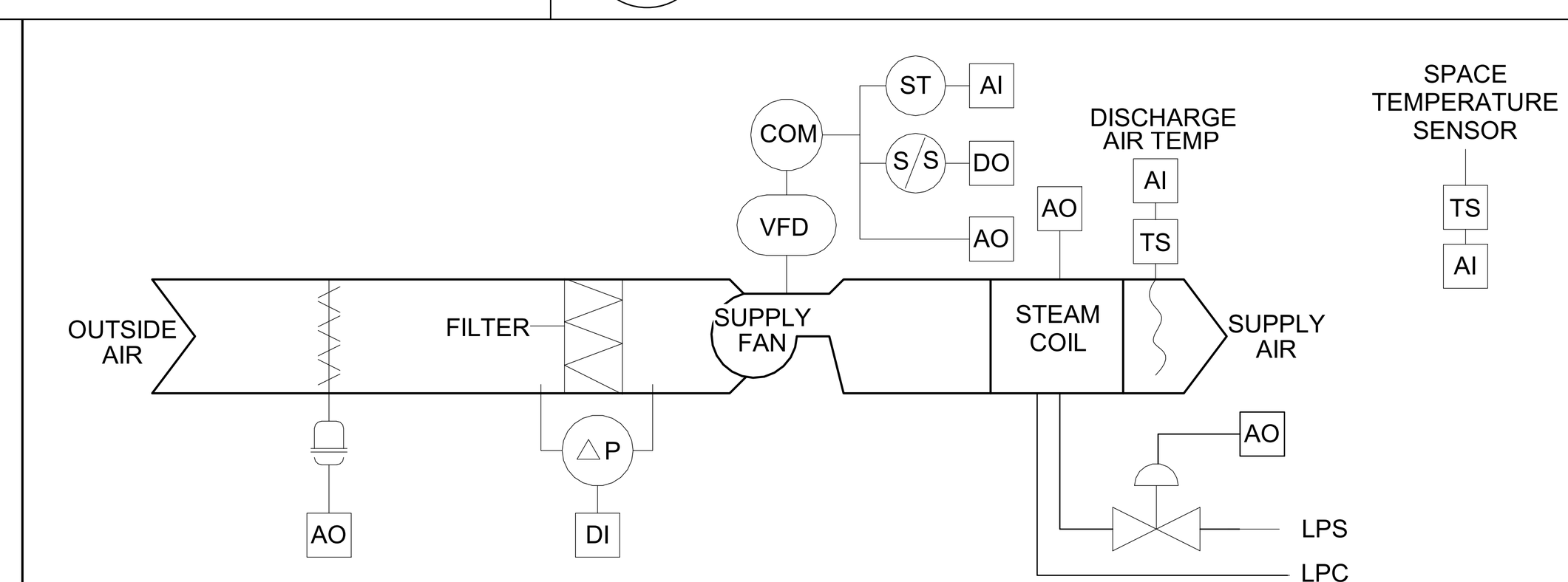
NOTES:
Rp = PEOPLE OUTDOOR AIR RATE, Ra = AREA OUTDOOR AIR RATE, Vbz = BREATHING ZONE OUTDOOR AIRFLOW ,
Ez = AIR DISTRIBUTION CONFIGURATION, Voz = ZONE OUTDOOR AIRFLOW
20% Voz = 20% OF THE ZONE OUTDOOR AIRFLOW
DCV Voz = GREATER OF RaA/EZ OR 20% Voz



ROOF TOP HOOD - RELIEF - SEQUENCE OF OPERATIONS:

1. INTERLOCK THE OPERATION OF THE ROOFTOP HOODS WITH THEIR ASSOCIATED HEATING AND/OR COOLING EQUIPMENT.
2. OCCUPIED MODE:
   a. WHERE SPACE HAS AN EXHAUST FAN, AUTOMATIC AIR DAMPER SHALL REMAIN CLOSED UNITL THE OUTSIDE AIR DAMPER ON ASSOCAITED HEATING AND/OR COOLING EQUIPMENT OPENS PAST ITS MINIMUM POSITION. ONCE OPEN, INTERLOCK THE DAMPER WITH THE OUTSIDE AIR DAMPER.
   b. WHERE THERE IS NO EXHAUST FAN, MODULATE THE AUTOMATIC AIR DAMPER OPEN AS THE ASSOCIATED HEATING AND/OR COOLING EQUIPMENT OUTSIDE AIR DAMPER MODULATES OPEN.
3. UNOCCUPIED MODE:
   a. AUTOMATIC AIR DAMPER SHALL BE CLOSED.
4. WARM-UP MODE:
   a. AUTOMATIC AIR DAMPER SHALL BE CLOSED.

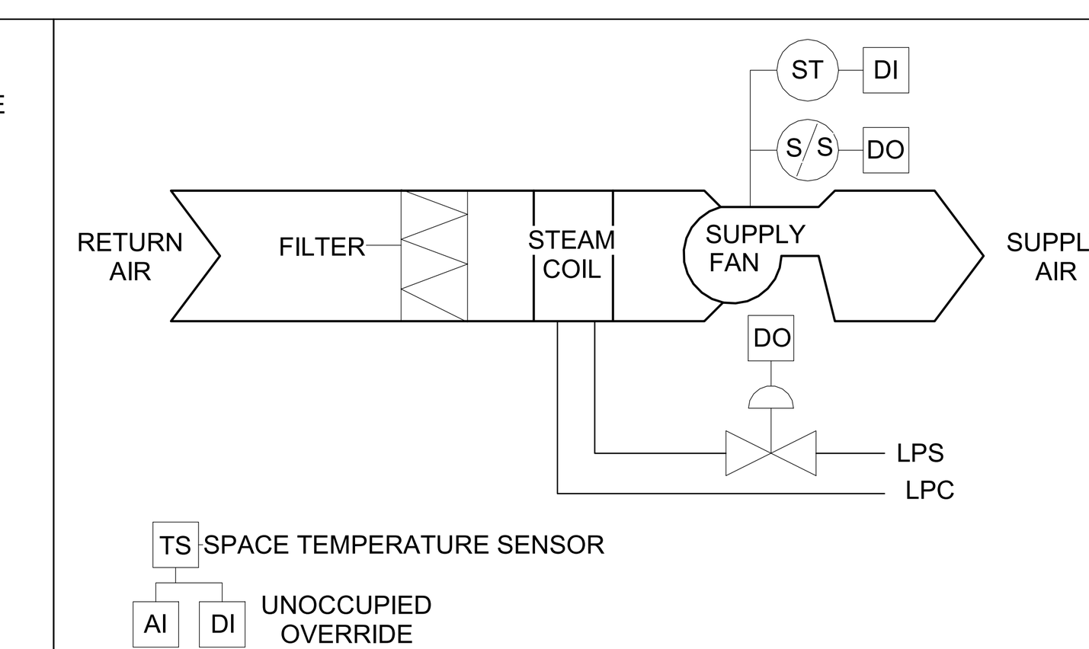
6 Roof Top Hood - Relief
NTS



MAKE UP AIR UNIT - STEAM - SEQUENCE OF OPERATIONS:

1. OCCUPIED MODE:
   a. INTERLOCK MUA OPERATION WITH KITCHEN EXHAUST FAN.
   b. THE SUPPLY FAN SHALL RUN AT THE FREQUENCY DETERMINED BY THE BALANCING CONTRACTOR.
   c. OUTSIDE AIR DAMPER SHALL OPEN.
   d. WHEN THE SPACE TEMPERATURE DROPS 3 DEG. F (ADJ.) BELOW THE HEATING SET POINT (70 DEG. F. (ADJ.)), THE CONTROL VALVE SHALL MODULATE TO MAINTAIN SPACE HEATING SETPOINT SUBJECT TO DISCHARGE HIGH LIMIT OF 110 DEG F (ADJ.).
2. UNOCCUPIED MODE:
   a. THE SUPPLY FAN SHALL BE OFF.
   b. THE OUTSIDE AIR DAMPER SHALL BE FULLY CLOSED.
3. SAFETIES:
   a. DIFFERENTIAL PRESSURE ACROSS THE AIR FILTERS SHALL GENERATE AN ALARM WHENEVER THE DIFFERENTIAL PRESSURE EXCEEDS IT'S ADJUSTABLE SETPOINT.
   b. IF THE DISCHARGE AIR TEMPERATURE DROPS BELOW 35 DEG. F (ADJUSTABLE), THE SUPPLY FAN SHALL TURN OFF AND SHALL BE LOCKED OUT, THE CONTROL VALVE SHALL MODULATE FULLY OPEN, AND AN ALARM SHALL BE ACTIVATED.
   c. IF THE DISCHARGE AIR TEMPERATURE RISES ABOVE 120 DEG. F (ADJUSTABLE), THE CONTROL VALVE SHALL MODULATE CLOSED AND AN ALARM SHALL BE ACTIVATED.
   d. UPON FAILURE OF THE FAN, AS SENSED BY A CURRENT SENSING STATUS SWITCH, GENERATE AN ALARM AT THE OWS.

3 Make-Up Air Unit - Steam - MUA-E-1
NTS



CABINET UNIT HEATER - STEAM - VALVE CONTROL - SEQUENCE OF OPERATIONS:

1. OCCUPIED MODE:
   a. WHEN THE SPACE TEMPERATURE IS AT OR BELOW THE HEATING SETPOINT, CYCLE THE SUPPLY FAN ON AND THE CONTROL VALVE FULL OPEN TO MAINTAIN SPACE SETPOINT.
2. UNOCCUPIED MODE:
   a. ON DROP IN SPACE TEMPERATURE BELOW THE UNOCCUPIED SETPOINT, CYCLE THE SUPPLY FAN ON AND THE CONTROL VALVE FULL OPEN TO MAINTAIN SPACE UNOCCUPIED SETPOINT.
3. WARM-UP MODE:
   a. THE UNIT SHALL START PER AN OPTIMAL START PROGRAM.
4. SAFETIES:
   a. UPON FAILURE OF THE FAN, AS SENSED BY A CURRENT SENSING STATUS SWITCH, GENERATE AN ALARM AT THE OWS.

2 CUH - Steam - Valve Control
NTS

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

complex world | CLEAR SOLUTIONS

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

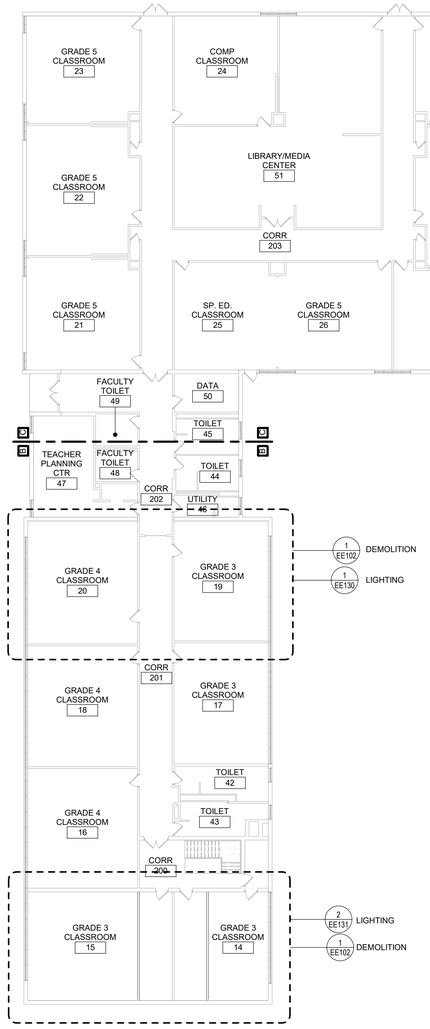
TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Controls

Drawn By:	Date:	Drawing Number:
JPF1/pgm	11/4/2022	EM700
Project No.: 17597-22001		



2 Second Floor - Key Plan
1/16" = 1'-0"

1 First Floor - Key Plan
1/16" = 1'-0"

General Notes

A. COORDINATE ALL ELECTRICAL WORK AND POWER OUTAGES WITH OWNER AND OTHER TRADES PRIOR TO THE START OF CONSTRUCTION. NO POWER OUTAGES SHALL OCCUR WITHOUT OWNER'S PRIOR KNOWLEDGE AND CONSENT.

B. REFER TO DRAWING SA FOR STANDARD SYMBOLS AND ABBREVIATIONS.

C. AT ALL CORRIDORS WHERE NEW CEILINGS ARE BEING INSTALLED, REINSTALL DEVICES ON NEW CEILINGS AS SHOWN ON NEW WORK DRAWINGS AND EXTEND/MODIFY EXISTING CIRCUITRY AS REQUIRED.

D. CIRCUIT WIRING FOR ALL LIGHTING CIRCUITS SHALL BE IN 1/2" EMT CONDUIT (MIN) OR TYPE MC CABLE CONCEALED ABOVE CEILINGS AND IN WALLS (REFER TO SPECIFICATION SECTION 26 05 33 FOR LOCATIONS WHERE MC CABLE IS ACCEPTABLE). ALL CIRCUIT CONDUCTORS SHALL BE #12AWG COPPER (MIN) 90°C THHN THERMOPLASTIC INSULATION.

E. PROPERLY IDENTIFY ALL CIRCUITS AT PANELS AND J-BOXES AND IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

F. PROVIDE ALL ADAPTERS, COUPLINGS AND ASSOCIATED FITTINGS REQUIRED FOR COMPLETE OPERATIONAL SYSTEM.

G. INSTALL CHAIN-HUNG LIGHT FIXTURES AFTER ALL MECHANICAL AND PLUMBING EQUIPMENT, PIPING AND DUCTWORK HAVE BEEN INSTALLED.

H. WHEN INSTALLING NEW DEVICES IN EXISTING LOCATIONS, REUSE EXISTING CONDUIT/RACEWAY AND BACK BOXES IF IN GOOD CONDITION. EXTEND/INSTALL NEW CONDUIT/RACEWAY AS REQUIRED FOR PROPER MOUNTING OF DEVICE. CONCEAL ABOVE CEILINGS OR WITHIN WALLS WHERE POSSIBLE. REFER TO SPECIFICATION SECTION 26 05 33.

J. UNLESS NOTED ELSEWHERE ON THE CONTRACT DOCUMENTS, THE FOLLOWING LIST REPRESENTS THE TYPICAL MOUNTING HEIGHTS FOR THE DEVICES SHOWN:

1. SWITCHES AND PANIC STATIONS..... 48" (TO TOP)
2. RECEPTACLES..... 16"
3. COMPUTER RECEPTACLES..... 16"
4. WALL (W) TELEPHONE AND/OR CALL SWITCHES... 48" (TO TOP)
5. TELEPHONE OUTLETS (UNLABELED)..... 16"
6. VOLUME CONTROLS..... 48" (TO TOP)
7. TELEVISION OUTLETS..... 16"
8. FIRE ALARM PULL STATIONS..... 48" (TO TOP)
9. FIRE ALARM AUDIO/VISUAL UNITS..... 88" * (OR 6" BELOW CEILING, WHICHEVER IS LOWER)
10. POWER PANELS..... 72" (TO TOP)
11. DISCONNECT SWITCHES..... 60" (TO TOP)
12. MOTOR STARTERS..... 60" (TO TOP)

THE HEIGHTS INDICATED SHALL BE NOMINAL TO THE BOTTOM OF THE BOX UNLESS NOTED OTHERWISE. MAINTAIN HEIGHT CONSISTENCY BETWEEN NEW AND EXISTING DEVICES.

K. COORDINATE ALL ELECTRICAL WORK WITH OTHER TRADES.

L. PROVIDE ALL POWER DISTRIBUTION WORK INCLUDING PANELS, FEEDERS AND BRANCH CIRCUIT WIRING. UPDATE PANEL DIRECTORIES ACCORDINGLY.

M. TESTS OF ALL ELECTRICAL WORK SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER OR ARCHITECT, AS EQUIPMENT IS INSTALLED AND AS SYSTEMS ARE COMPLETED. IN ADDITION AN ELECTRIC APPROVED CERTIFICATE SHALL BE ISSUED BY AN ELECTRICAL INSPECTION AGENCY.

N. CONNECT ALL EXIT AND EMERGENCY LIGHTS TO THE UNSWITCHED HOT LEG OF THE LIGHTING CIRCUIT SERVING THE AREA.

O. ACCESS CONTROL AND SECURITY SYSTEM PROVIDED BY OWNERS SECURITY VENDOR. PROVIDE 120V CONNECTION TO ELH POWER SUPPLY AND ACM LOCATION. COORDINATE FINAL LOCATIONS WITH OWNER, REFER TO S/EE600

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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BID SET

TETRA TECH ARCHITECTS & ENGINEERS

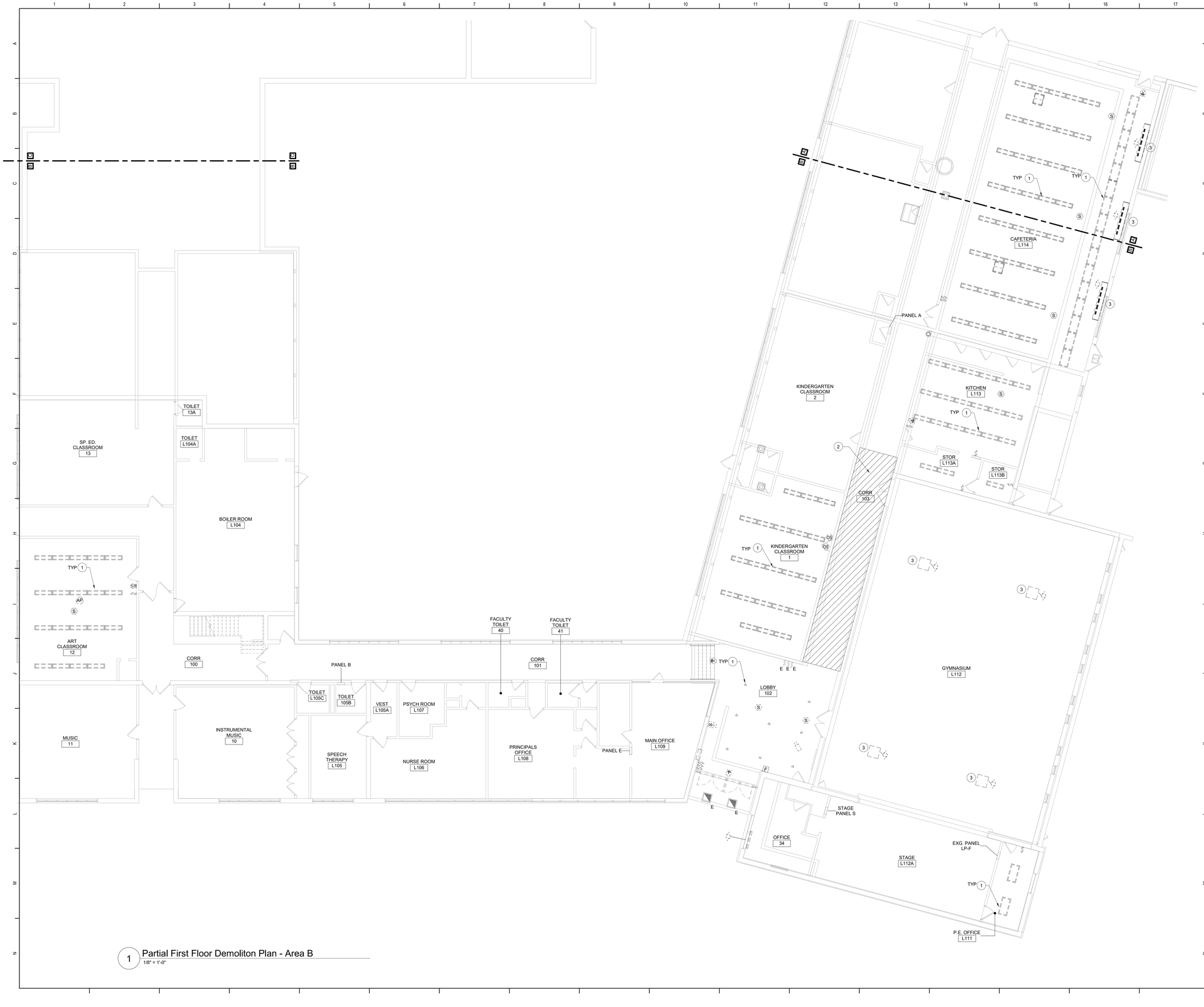
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Key Plans

Drawn By:	Date:	Drawing Number:
GLK/CR/ded	11/4/2022	EE051

Project No.: 17597-22001



1 Partial First Floor Demoliton Plan - Area B
1/8" = 1'-0"

Demolition General Notes

A. ALL ELECTRICAL DEVICES INTERFERING WITH DEMOLITION WORK SHALL BE DISCONNECTED AND REMOVED, UNLESS OTHERWISE NOTED. EXISTING CIRCUIT WIRING SHALL BE REMOVED BACK TO SOURCE AND PANEL DIRECTORIES MODIFIED ACCORDINGLY.

B. ANY DEVICE INTERFERING WITH DEMOLITION WORK NOT SHOWN ON THESE DRAWINGS SHALL NOT BE REMOVED WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER'S REPRESENTATIVE OR THE ENGINEER.

C. ALL ELECTRICAL DEMOLITION WORK SHALL BE PROPERLY COORDINATED WITH ALL OTHER TRADES.

D. REFER TO SPECIFICATIONS SECTION 16010 FOR DEMOLITION REQUIREMENTS.

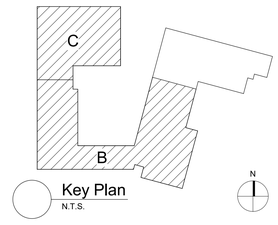
E. EC IS SOLELY RESPONSIBLE FOR THE SAFE HANDLING AND DISPOSAL OF ALL REMOVED LIGHT FIXTURES AND BALLASTS THAT MAY CONTAIN PCBs (POLYCHLORINATED BIPHENYLS), IN ACCORDANCE WITH ALL APPLICABLE EPA, OSHA, FEDERAL, STATE, AND LOCAL CODES AND LAWS.

F. EC IS SOLELY RESPONSIBLE FOR THE SAFE HANDLING AND DISPOSAL OF ALL REMOVED FLUORESCENT LIGHT TUBES THAT MAY CONTAIN MERCURY, IN ACCORDANCE WITH ALL APPLICABLE EPA, OSHA, FEDERAL, STATE, AND LOCAL CODES AND LAWS.

G. AT ALL CORRIDORS WHERE NEW CEILINGS ARE BEING INSTALLED, DISCONNECT AND REMOVE DEVICES AS INDICATED, TAG EXISTING WIRING FOR REUSE.

Keyed Notes

1. REMOVE LUMINAIRES AND LIGHTING CONTROL, COIL AND TAG CIRCUIT(S) FOR REUSE.
2. REMOVE CEILING DEVICES AS NECESSARY , PRESERVE CIRCUITRY AND STORE FOR REINSTALLATION TO SUPPORT STRUCTURAL REINFORCEMENT. COORDINATE ALL WORK WITH GENERAL CONTRACTOR.
3. DE-ENERGIZE EQUIPMENT. DISCONNECT ELECTRICAL CONDUCTORS. REMOVE CONDUCTORS BACK TO THE SOURCE OVERCURRENT PROTECTIVE DEVICE. IDENTIFY THE CIRCUIT AT THE PANEL/SWITCHBOARD AND UPDATE PANEL DIRECTORY TO INDICATE AVAILABLE SPARE.



S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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BID SET

TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

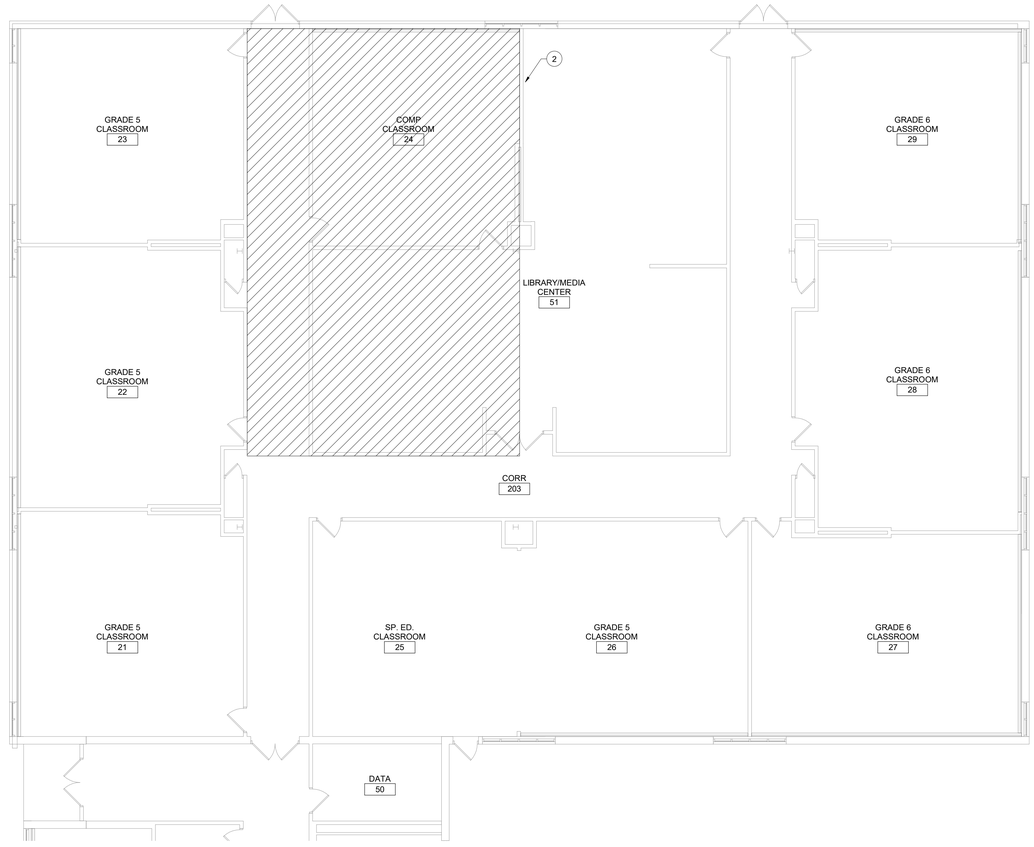
Reconstruction to:
Leptondale Elementary School

Partial First Floor and Demolition Plans
Areas B & C

Drawn By:	Date:	Drawing Number:
CR/ded	11/4/2022	EE101

Project No.: 17597-22001

2 Partial Second Floor - Demolition Plan - Area B
1/8" = 1'-0"



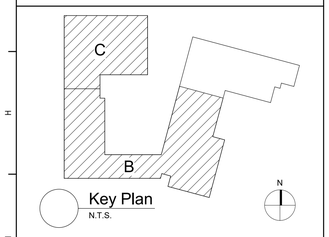
1 Partial Second Floor - Demolition Plan - Area C
1/8" = 1'-0"

Keyed Notes

1. REMOVE LUMINAIRES AND LIGHTING CONTROL, COIL AND TAG CIRCUIT(S) FOR REUSE.
2. REMOVE CEILING DEVICES AS NECESSARY, PRESERVE CIRCUITRY AND STORE FOR REINSTALLATION TO SUPPORT STRUCTURAL REINFORCEMENT. COORDINATE ALL WORK WITH GENERAL CONTRACTOR.

GENERAL NOTES

A. REFER TO DRAWING EE101 FOR GENEREAL DEMOLITION NOTES.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Partial Second Floor Demolition Plans - Areas B and C

Drawn By:	Date:	Drawing Number:
GLK/CR/ded	11/4/2022	EE102

Project No.: 17597-22001

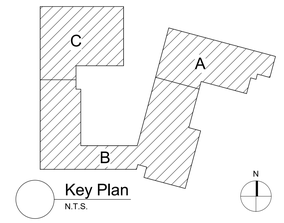
1 Roof Demolition Plan
1/16" = 1'-0"

Keyed Notes

1. DE-ENERGIZE EQUIPMENT. DISCONNECT ELECTRICAL CONDUCTORS, MAKE NEAT AND SAFE, SAFEGUARD FOR REUSE.
2. EXISTING WALL SURFACE MOUNTED ELECTRICAL BOX AND CONDUITS TO BE REMOVED AND REINSTALLED

GENERAL NOTES

A. REFER TO DRAWING EE101 FOR GENEREAL DEMOLITION NOTES.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT
Established 1959

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ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Roof Demolition Plan

Drawn By:	Date:	Drawing Number:
GLK/ded	11/4/2022	EE103
Project No.: 17597-22001		

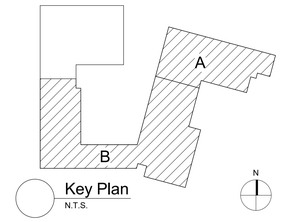
1 Partial First Floor Lighting Plan Area B
1/8" = 1'-0"

Keyed Notes

1. REINSTALL PREVIOUSLY STORED CEILING DEVICES REMOVED FOR STRUCTURAL REINFORCEMENT. RECONNECT TO PRESERVED CIRCUITRY AND CONTROLS.
2. CONNECT LUMINAIRES TO PREVIOUSLY PRESERVED CIRCUITRY. EXTEND/MODIFY AS NECESSARY.
3. CONNECT LUMINAIRES TO PREVIOUSLY PRESERVED CIRCUITRY , EXTEND/MODIFY AS NECESSARY.

General Notes:

A. REFER TO DRAWING CE051 FOR GENERAL NOTES.
B. LIGHTING CONTROL SEQUENCES:
CLASSROOMS:
(2) ZONE, TEACHING WALL AND GENERAL CLASSROOM EACH OPERATED WITH A (4) BUTTON LOW VOLTAGE LIGHTING CONTROL. BUTTON CAPABLE OF ON/OFF, 50% AND 100% MAYBE BE MANUALLY ADJUSTED BY EACH LOW VOLTAGE LIGHTING CONTROL PER ZONE. IF LUMINAIRES ARE LEFT ON AND CLASSROOM IS UNOCCUPIED LUMINAIRES WILL TURN OFF WITHIN 15 MINUTES. ONCE ROOM BECOMES OCCUPIED AGAIN LUMINAIRES WILL TURN ON TO LAST LEVEL OR LAST LEVEL SELECTED.
LOBBY/VESTIBULES:
PERSON ENTERS THE AREA, LUMINAIRES TURN ON TO 100% OUTPUT AUTOMATICALLY BY OCCUPANCY SENSOR. PERSON EXITS THE AREA, LUMINAIRES DIM TO 50% OUTPUT (MAINTAINING EGRESS LEVEL ILLUMINATION) . MANUAL CONTROL BY LINE VOLTAGE KEYED SWITCH.
OFFICES:
PERSON ENTERS THE ROOM AND LUMINAIRES TURN ON TO 50% OUTPUT BY OCCUPANCY SENSOR. WHEN PERSON EXITS THE ROOM THE OCCUPANCY SENSOR WILL TURN OFF THE LUMINAIRESAFTER 15 MINUTES. LOW VOLTAGE LIGHTING CONTROL. BUTTON CAPABLE OF ON/OFF, 50% AND 100% MAYBE BE MANUALLY ADJUSTED BY BUTTON.
KITCHEN:
PERSON ENTERS THE ROOM AND TURNS LUMINAIRES ON TO 100% OUTPUT. WHEN PERSON EXITS THE ROOM THE OCCUPANCY SENSOR WILL TURN OFF THE LUMINAIRES AFTER 15 MINUTES. IF PERSON ENTERS AGAIN LUMNIARES WILL TURN ON TO 100%. MANUAL CONTROL BY LOW VOLTAGE KEYED SWITCH.



S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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TETRA TECH ARCHITECTS & ENGINEERS

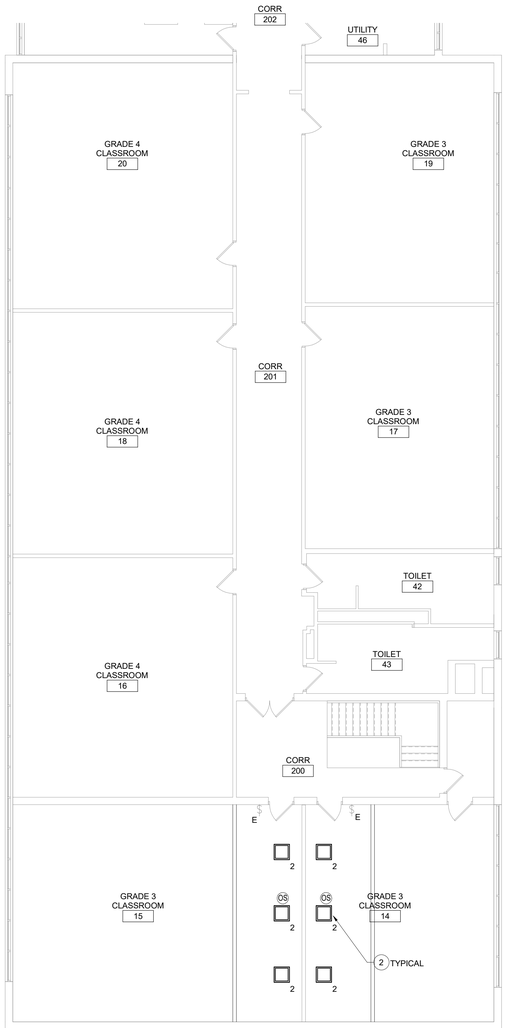
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Partial First Floor Lighting Plan Areas A and B

Drawn By:	Date:	Drawing Number:
CR	11/4/2022	EE130

Project No.: 17597-22001



2 Partial Second Floor Lighting Plan - Area B
1/8" = 1'-0"

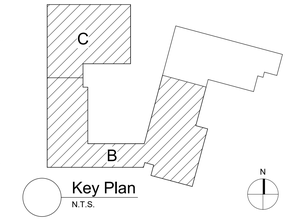
1 Partial Second Floor Lighting Plan - Area C
1/8" = 1'-0"

Keyed Notes

1. REINSTALL CEILING DEVICES PREVIOUSLY STORED FOR STRUCTURAL REINFORCEMENT WORK. CONMNECT TO PRESERVED CIRCUITRY AND CONTROLS.
2. CONNECT LUMINAIRES TO PREVIUOSLY PERSERVED CIRCUITRY, EXTEND MODIFY AS NECCESSARY.

General Notes:

A. REFER TO DRAWING CE051 FOR GENERAL NOTES.
B. LIGHTING CONTROL SEQUENCES:
CLASSROOMS:
(2) ZONE, TEACHING WALL AND GENERAL CLASSROOM EACH OPERATED WITH A (4) BUTTON LOW VOLTAGE LIGHTING CONTROL BUTTON CAPABLE OF ON/OFF, 50% AND 100% MAYBE BE MANUALLY ADJUSTED BY EACH LOW VOLTAGE LIGHTING CONTROL PER ZONE. IF LUMINAIRES ARE LEFT ON AND CLASSROOM IS UNOCCUPIED LUMINAIRES WILL TURN OFF WITHIN 15 MINUTES. ONCE ROOM BECOMES OCCUPIED AGAIN LUMINAIRES WILL TURN ON TO LAST LEVEL OR LAST LEVEL SELECTED.



Key Plan
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S.E.D. Control No. 62-18-01-06-0-001-019

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Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Partial Second Floor Lighting Plan - Areas B and C

Drawn By:	Date:	Drawing Number:
CR	11/4/2022	EE131

Project No.:
17597-22001

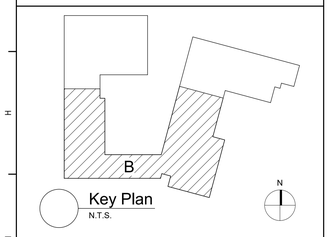
1 Partial First Floor Power, Communications and Fire Alarm Plan - Area B
1/8" = 1'-0"

Keyed Notes

1. PROVIDE (1) #12 AWG, (1) #12 AWG G IN 1/2"C TO STAGE PANEL "S". PROVIDE (1) 20A, 120V, 1 POLE BREAKER WITH AIC RATING TO MATCH EXISTING PANEL.
2. REINSTALL CEILING DEVICES PREVIOUSLY STORED FOR STRUCTURAL REINFORCEMENT WORK. CONMNECT TO PRESERVED CIRCUITRY AND CONTROLS.
3. ROLL UP FIRE SHUTTER. PROVIDE (1) #12 AWG, (1) #12 AWG G IN 1/2"C TO STAGE PANEL "S". PROVIDE (1) 20A, 120V, 1 POLE BREAKER WITH AIC RATING TO MATCH EXISTING PANEL. PROVIDE FIRE ALARM INITIATION AND CONTROL CIRCUITS AS SHOWN IN DETAIL 6/AE500
4. CONNECT PULL STATION TO EXISTING FIRE ALARM INITIATION CIRCUIT. PROVIDE FACP REPROGRAMMING AS NECESSARY.

GENERAL NOTES

A. REFER TO DRAWING EE051 FOR GENEREAL NOTES.



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:
1	01/23/2023	SED Add No. 2

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Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Partial First Floor Power, Communications and Fire Flarm Plans Areas A and B

Drawn By:	Date:	Drawing Number:
GLK/ded	11/4/2022	EE160

Project No.: 17597-22001

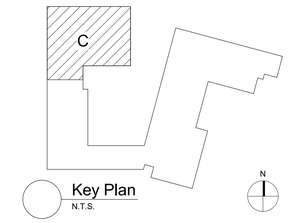
1 Partial Second Floor - Power & Communications Plan - Areas B and C
1/8" = 1'-0"

Keyed Notes

1. REINSTALL CEILING DEVICES PREVIOUSLY STORED FOR STRUCTURAL REINFORCEMENT WORK. CONMNECT TO PRESERVED CIRCUITRY AND CONTROLS.

GENERAL NOTES

A. REFER TO DRAWING EE051 FOR GENEREAL NOTES.



Key Plan
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S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

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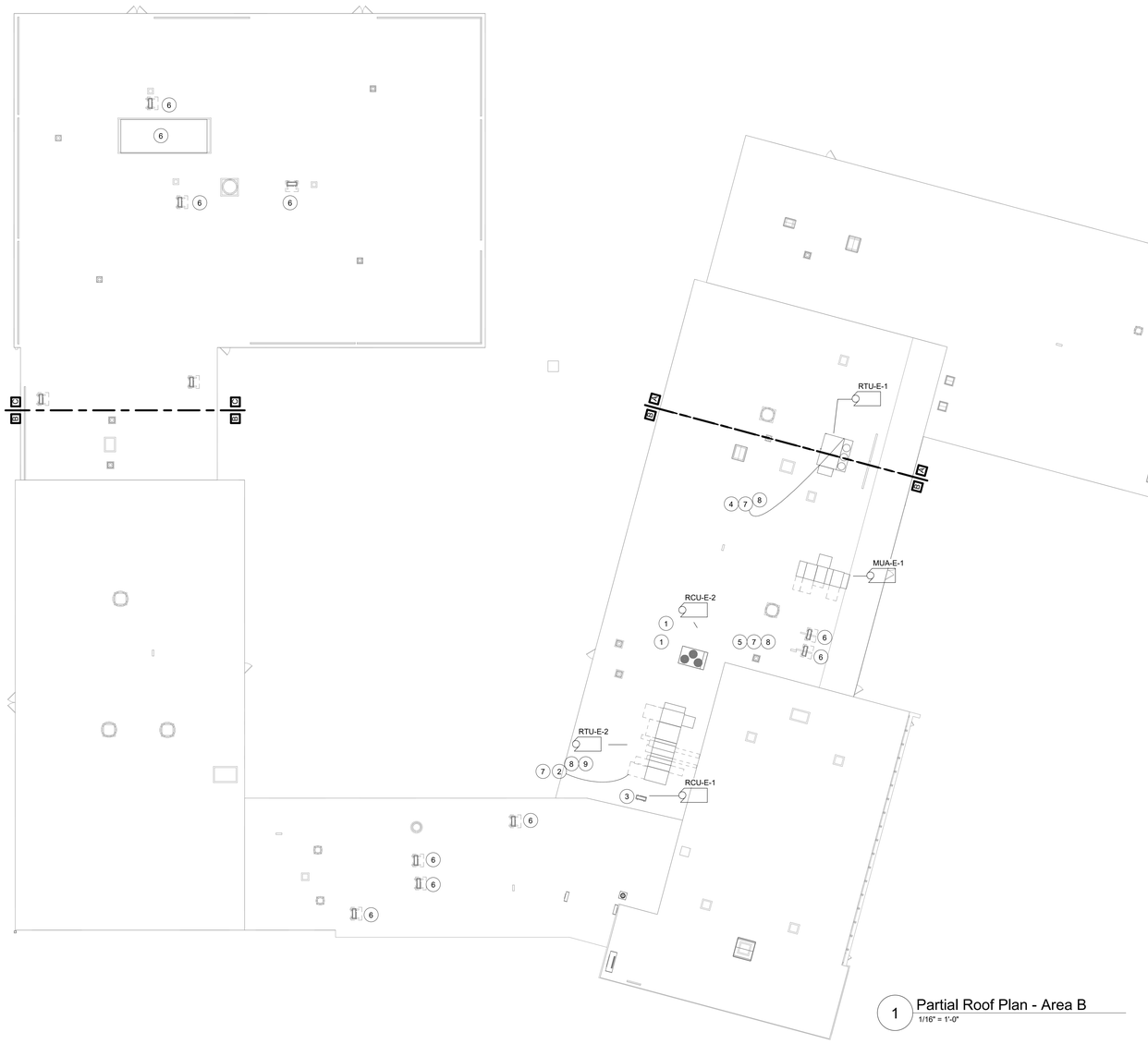
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Partial Second Floor Power, Communications and Fire Alarm Plan - Area B and C

Drawn By:	Date:	Drawing Number:
GLK/ded	11/4/2022	EE161

Project No.:
17597-22001



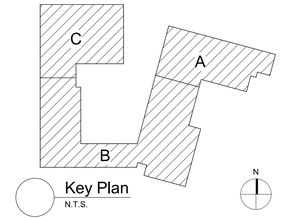
1 Partial Roof Plan - Area B
1/16" = 1'-0"

KEYED NOTES:

1. PROVIDE (3) #1 AWG, (1) #6 AWG G IN 1-1/4"C TO MDP. PROVIDE (1) 150A, 208V, 3 POLE BREAKER WITH AIC RATING TO MATCH EXISTING PANEL.
2. PROVIDE (3) #1 AWG, (1) #6AWG G IN 1-1/4" TO MDP. PROVIDE (1) 125A, 200V, 3 POLE BREAKER WITH AIC RATING TO MATCH EXISTING PANEL.
3. PROVIDE (2) #12 AWG, (1) #12 AWG G IN 1/2"C TO STAGE PANEL "S". PROVIDE (1) 20A, 208V, 2 POLE BREAKER WITH AIC RATING TO MATCH EXISTING PANEL.
4. PROVIDE (3) #4 AWG, (1) #8 AWG G IN 1"C TO MDP. PROVIDE (1) 80A, 208V, 3 POLE BREAKER WITH AIC RATING TO MATCH EXISTING PANEL.
5. PROVIDE (2) #12 AWG, (1) #12 AWG G IN 1/2"C TO STAGE PANEL "S". PROVIDE (1) 30A, 208V, 3 POLE BREAKER WITH AIC RATING TO MATCH EXISTING PANEL.
6. RECONNECT REPLACEMENT EQUIPMENT TO CIRCUIT PREVIOUSLY REMOVED FOR DEMOLITION.
7. PROVIDE DUCT DETECTOR DOWNSTREAM OF SUPPLY SIDE AIR FILTER AND UPSTREAM OF ANY DUCT BRANCH CONNECTIONS. CONNECT DUCT DETECTORS TO EXISTING FIRE ALARM SYSTEM, EXTEND/MODIFY CIRCUITRY AS NECESSARY.
8. PROVIDE FAN SHUTDOWN RELAY/CONNECTION FOR SUPPLY FAN. CONNECT TO EXISTING FIRE ALARM SYSTEM, EXTEND/MODIFY CIRCUITRY AS NECESSARY.
9. PROVIDE FAN SHUTDOWN RELAY/CONNECTION FOR RETURN FAN. CONNECT TO EXISTING FIRE ALARM SYSTEM, EXTEND/MODIFY CIRCUITRY AS NECESSARY.

GENERAL NOTES

A. REFER TO DRAWING EE051 FOR GENEREAL NOTES.



Key Plan
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S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

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TETRA TECH
ARCHITECTS & ENGINEERS

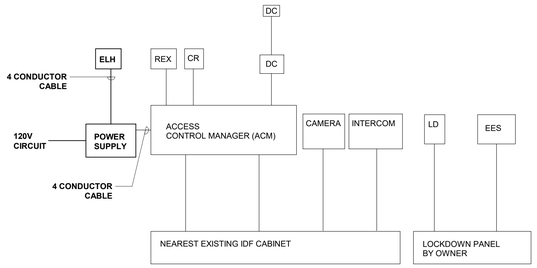
Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Roof Power Plan

Drawn By:	Date:	Drawing Number:
CR/ded	11/4/2022	EE163

Project No.:
17597-22001

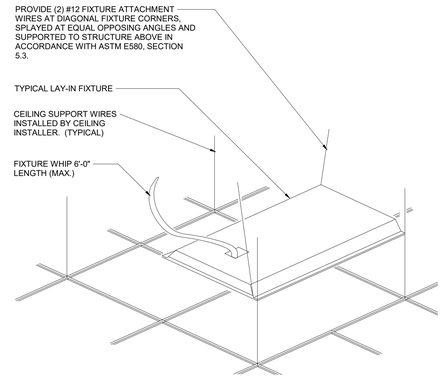


A. QUANTITY OF DEVICES VARY, REFER TO FLOOR PLAN DRAWINGS.

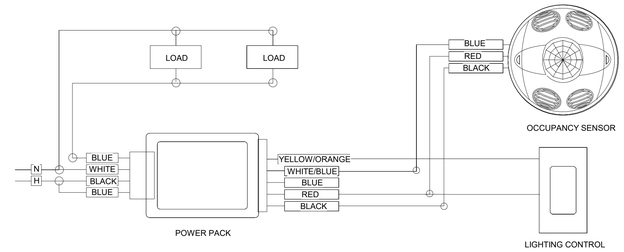
B. REFER TO FLOOR PLAN DRAWINGS FOR 120V CIRCUIT PANEL LOCATION

C. ALL DOOR CONTACTS IN AN OPENING ARE WIRED AS ONE GROUP.

D. ALL ACCESS CONTROL EQUIPMENT, CONDUITS, BACK BOXES, AND CABLES SHOWN IN GREY ARE PROVIDED BY OTHERS. ELECTRICAL CONTRACTOR TO PROVIDE POWER TO POWER SUPPLY AND FROM POWER SUPPLY TO ELH AND ACM WORK SHOWN IN BOLD



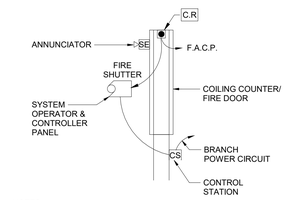
3 Typical Troffer Detail
NTS



NOTES:

A. PAINT ALL SURFACE RACEWAY AND BOXES TO MATCH EXISTING SURFACES. (WHERE APPLICABLE).
B. PROVIDE RELAYS WHERE TWO OR MORE CIRCUITS FEED LIGHTING IN SAME ROOM.
C. ADJUST SENSITIVITY OF EACH OCCUPANCY SENSOR TO DETECT HUMAN MOVEMENT BUT NOT HVAC EQUIPMENT. ADJUST TIME DELAY FOR OPTIMUM PERFORMANCE. APPLY MASKING SEGMENTS TO DETECTION HEAD WHERE REQUIRED.
D. POWER PACK AND THE LOAD SWITCHED BY THE POWER PACK MUST BE FED FROM THE SAME PHASE.
E. REFER TO LIGHTING PLANS FOR LIGHTING SEQUENCES

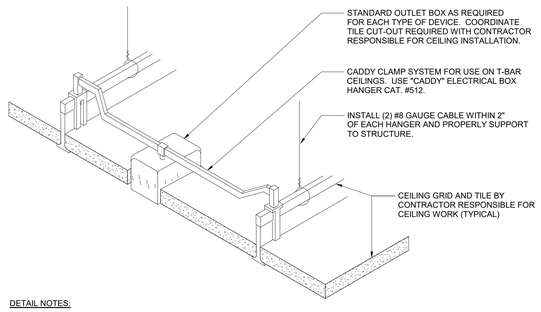
1 Occupancy Sensor Wiring Diagram
NTS



NOTES:

1. INSTALL THE FOLLOWING EQUIPMENT, FURNISHED BY OTHERS:
   - CONTROL STATION(S)
   - ANNUNCIATOR(S)
2. PROVIDE A BRANCH CIRCUIT (INDICATED ON PLAN) TO SYSTEM OPERATOR VIA THE CONTROL STATION.
3. PROVIDE A 24 VDC CONNECTION FROM THE F.A.C.P. TO THE RELEASE DEVICE(S).
4. PROPERLY PROGRAM F.A.C.P. TO SIGNAL RELEASE DEVICE TO OPERATE WHEN A FIRE DETECTION APPLIANCE IN THE ADJOINING SPACES SERVED BY ROLLING FIRE DOOR(S) ARE INITIATED.
5. REFER TO PANEL SCHEDULES FOR FURTHER INFORMATION.

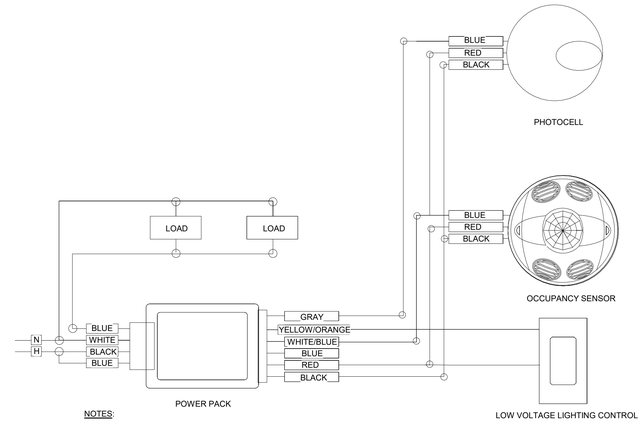
6 Fire Shutter Detail
12" = 1'-0"



DETAIL NOTES:

A. IN AREAS RECEIVING NEW CEILINGS ALL CEILING MOUNTED ITEMS (DETECTORS, SPEAKERS, ETC) ARE TO BE CENTERED WITHIN THE PATTERN OF THE CEILING PANEL. A 2'X4' PANEL SCORED TO A 2'X2' PATTERN SHALL HAVE ITEMS CENTERED IN THE 2'x2' PORTION.
B. PROVIDE ADDITIONAL SUPPORT FOR EXIT SIGNS, WHERE REQUIRED.

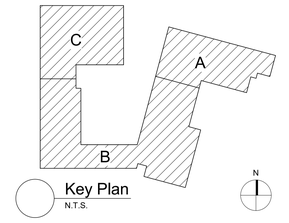
4 Ceiling Mounted Device Detail
NTS



NOTES:

A. PAINT ALL SURFACE RACEWAY AND BOXES TO MATCH EXISTING SURFACES. (WHERE APPLICABLE).
B. PROVIDE RELAYS WHERE TWO OR MORE CIRCUITS FEED LIGHTING IN SAME ROOM.
C. ADJUST SENSITIVITY OF EACH OCCUPANCY SENSOR TO DETECT HUMAN MOVEMENT BUT NOT HVAC EQUIPMENT. ADJUST TIME DELAY FOR OPTIMUM PERFORMANCE. APPLY MASKING SEGMENTS TO DETECTION HEAD WHERE REQUIRED.
D. POWER PACK AND THE LOAD SWITCHED BY THE POWER PACK MUST BE FED FROM THE SAME PHASE.
E. REFER TO LIGHTING PLANS FOR LIGHTING SEQUENCES

2 Daylight Responsive Controls Wiring Diagram
NTS



Key Plan
N.T.S.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

Details and Diagrams

Drawn By:	Date:	Drawing Number:
CR	11/4/2022	EE500

Project No.: 17597-22001

LUMINAIRE SCHEDULE

TYPE	SYMBOL	DESCRIPTION	LAMPS			MANUFACTURERS (OR EQUAL)	
			WATTAGE	LUMENS	TYPE	NAME	MODEL OR SERIES
1 EM		2' x 2' FLAT PANEL (RECESSED IN GRID) - WITH INTEGRAL BATTERY	16	2000	LED	SIGNIFY (DAY-BRITE)	2FPZ20L835-2-DS-UNV-DIM
2		2' x 2' FLAT PANEL (RECESSED IN GRID)	29	3800	LED	SIGNIFY (DAY-BRITE)	2FPZ38L835-2-DS-UNV-DIM
2EM		2' x 2' FLAT PANEL (RECESSED IN GRID) - WITH INTEGRAL BATTERY	29	3800	LED	SIGNIFY (DAY-BRITE)	2FPZ38L835-2-DS-UNV-DIM
3		2' x 2' FLAT PANEL (RECESSED IN GRID)	36	4500	LED	SIGNIFY (DAY-BRITE)	2FPZ45L835-2-DS-UNV-DIM
3EM		2' x 2' FLAT PANEL (RECESSED IN GRID) - WITH INTEGRAL BATTERY	36	4500	LED	SIGNIFY (DAY-BRITE)	2FPZ45L835-2-DS-UNV-DIM
4		4" ROUND DOWNLIGHT	8.8	868	LED	SIGNIFY (LEDALITE)	L4R10935VB / L4RDW
5		2' x 2' FOOD PROCESSING LUMINAIRE (RECESSED IN GRID)	45	4500	LED	KENALL LIGHTING	45LD-35K8-DIM1-DV-5F-4H
5EM		2' x 2' FOOD PROCESSING LUMINIARE (RECESSED IN GRID) - WITH INTEGRAL BATTERY	45	4500	LED	KENALL LIGHTING	45LD-35K8-DIM1-DV-5F-4H
6		1' x 4' FLAT PANEL (SURFACE MOUNT)	30	3800	LED	SIGNIFY (DAY-BRITE)	1FPZ38L835-4-UNV-DIM
20		EXIT SIGN (DOUBLE FACE) CEILING MOUNT SEE PLANS FOR DIRECTIONAL INDICATORS	2.5		LED	SIGNIFY (CHORIDE)	ER46L-2-W-R

* MANUFACTURER AND MODEL NUMBER ARE PROVIDED TO SHOW BASIS OF DESIGN ONLY.

S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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BID SET

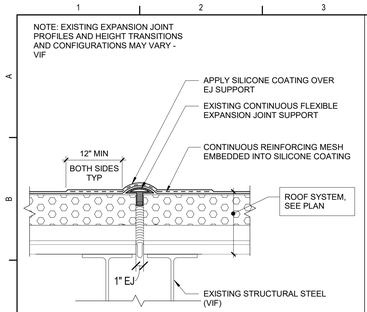
TETRA TECH
ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Leptondale Elementary School

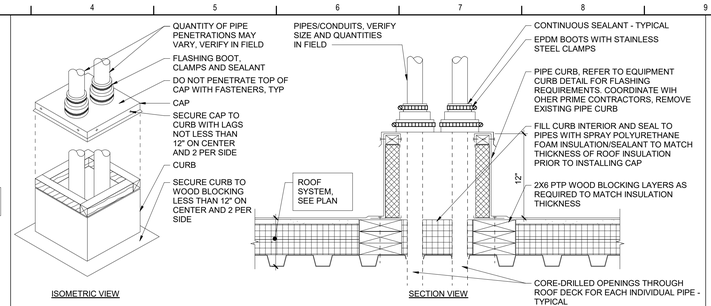
Schedules

Drawn By:	Date:	Drawing Number:
CR	11/4/2022	EE600
Project No.: 17597-22001		



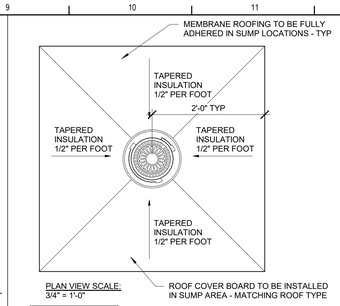
20 SPF Expansion Joint Detail

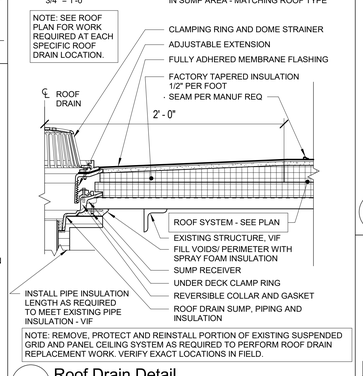
1 1/2" = 1'-0"



12 Pipe Curb Details

12" = 1'-0"

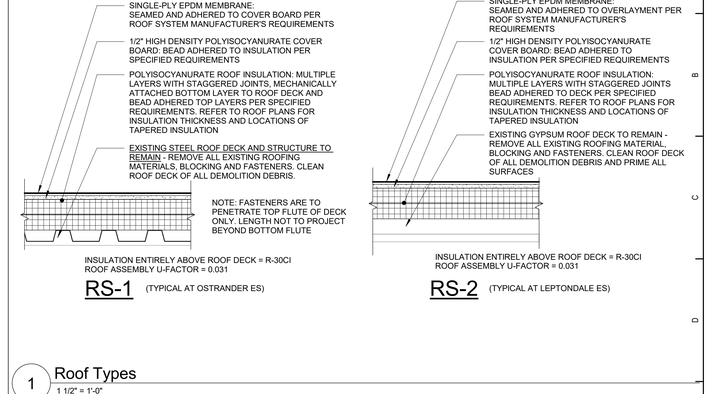




NOTE: REMOVE, PROTECT AND REINSTALL PORTION OF EXISTING SUSPENDED GRID AND PANEL CEILING SYSTEM AS REQUIRED TO PERFORM ROOF DRAIN REPLACEMENT WORK. VERIFY EXACT LOCATIONS IN FIELD.

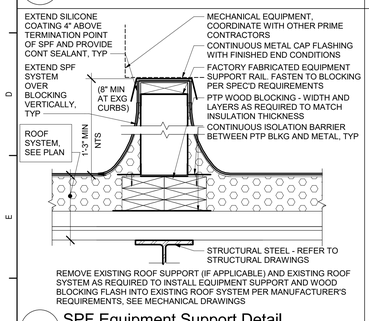
8 Roof Drain Detail

1 1/2" = 1'-0"



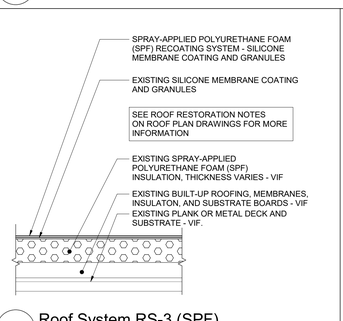
1 Roof Types

1 1/2" = 1'-0"



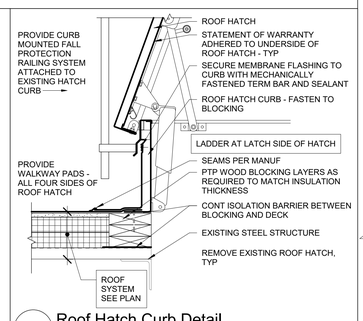
21 SPF Equipment Support Detail

1 1/2" = 1'-0"



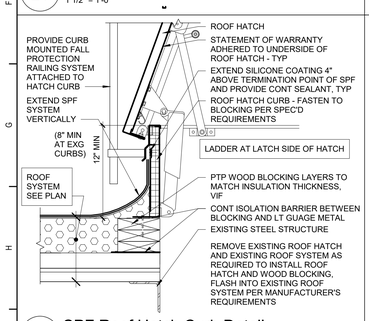
16 Roof System RS-3 (SPF)

1 1/2" = 1'-0"



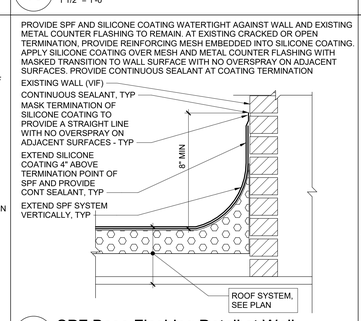
13 Roof Hatch Curb Detail

1 1/2" = 1'-0"



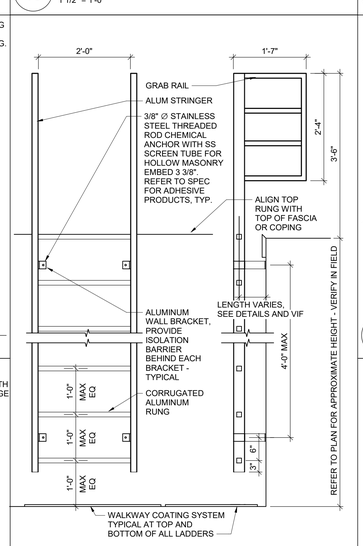
22 SPF Roof Hatch Curb Detail

1 1/2" = 1'-0"



17 SPF Base Flashing Detail at Wall

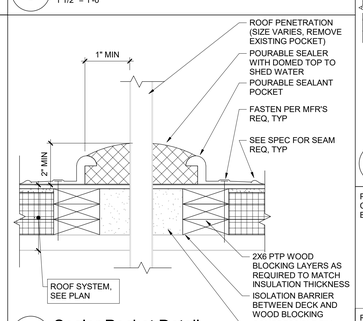
1 1/2" = 1'-0"



NOTES:
- VERIFY LADDER HEIGHT IN FIELD PRIOR TO FABRICATION.
- REFER TO SPECIFICATION SECTION 05 50 00 FOR LADDER INFORMATION AND REQUIREMENTS INCLUDING DELEGATED DESIGN.
- ALL OPEN TUBE ENDS TO BE CAPPED/SEALED CLOSED.
- ALL JOINTS TO BE FULLY WELDED.
- VERIFY BRACKET LENGTH IN FIELD REQUIRED TO CLEAR EXISTING OVERHANGS, PROJECTIONS AND EXISTING WALL SYSTEM COMPONENTS.
- COORDINATE EXACT LADDER LOCATIONS IN FIELD TO AVOID EXISTING CONFLICTS ON WALL AND ROOF PENETRATIONS.

14 Typ Alum Ladder Detail

3/4" = 1'-0"



9 Sealer Pocket Detail

1 1/2" = 1'-0"

REFER TO GENERAL RE-ROOFING NOTES FOR SHUTDOWN, DISCONNECT, EXTENSIONS, RECONNECT AND STARTUP REQUIREMENTS, REMOVE EXISTING SUPPORT RAILS, TYP

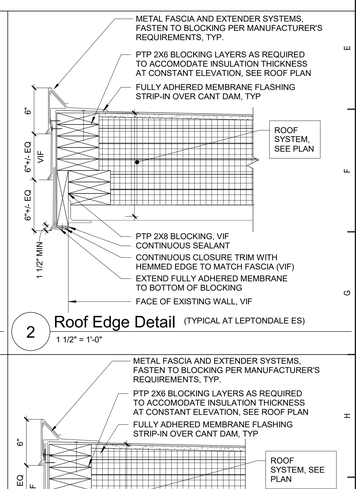
10 Equipment Support Rail Detail

1 1/2" = 1'-0"

NOTE: PROVIDE WALKWAY PADS ON ROOF AT ALL LADDERS, ACCESS DOORS, RTU PERIMETERS AND LOCATIONS SHOWN ON PLANS AND DETAILS.

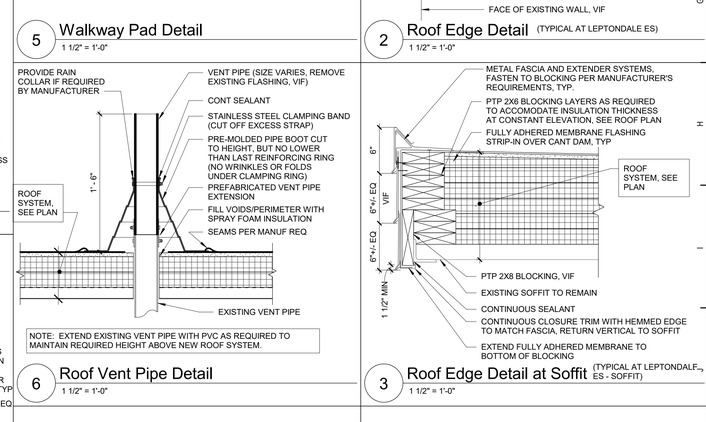
5 Walkway Pad Detail

1 1/2" = 1'-0"



2 Roof Edge Detail (TYPICAL AT LEPTONDALE ES)

1 1/2" = 1'-0"



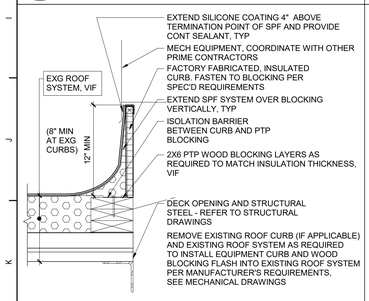
NOTE: EXTEND EXISTING VENT PIPE WITH PVC AS REQUIRED TO MAINTAIN REQUIRED HEIGHT ABOVE NEW ROOF SYSTEM.

6 Roof Vent Pipe Detail

1 1/2" = 1'-0"

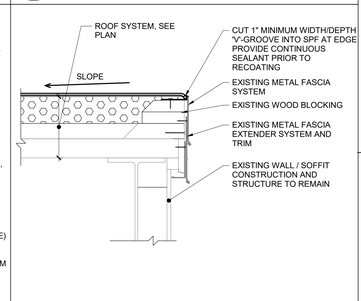
3 Roof Edge Detail at Soffit (TYPICAL AT LEPTONDALE ES - SOFFIT)

1 1/2" = 1'-0"



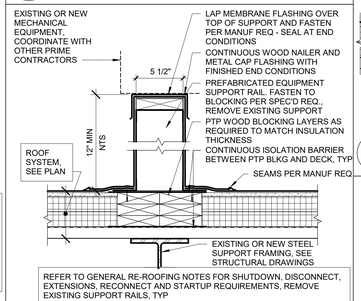
23 SPF Equipment Curb Detail

1 1/2" = 1'-0"



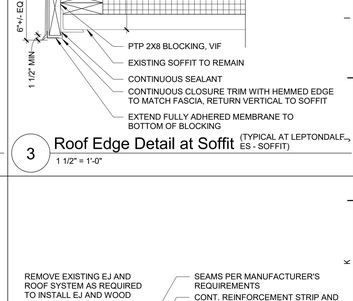
18 SPF Roof Edge Detail

1 1/2" = 1'-0"



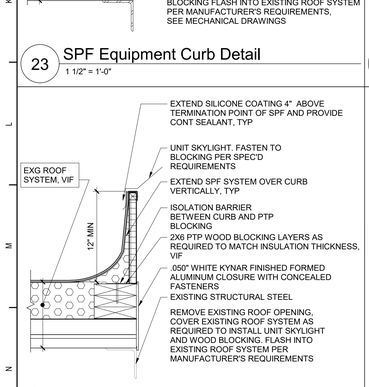
7 Equipment Curb Detail

1 1/2" = 1'-0"



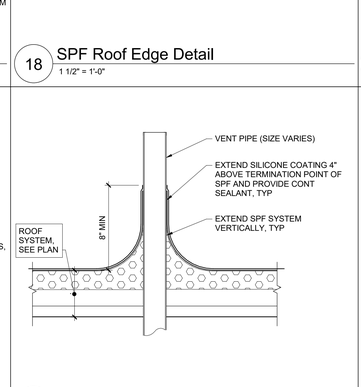
4 Expansion Joint Transition Detail

1 1/2" = 1'-0"



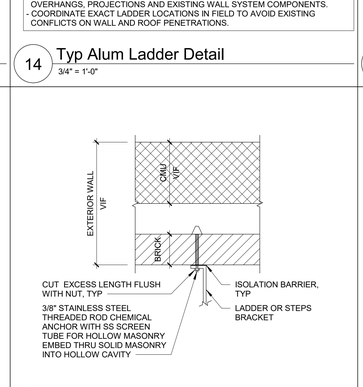
24 SPF Unit Skylight Curb Detail

1 1/2" = 1'-0"



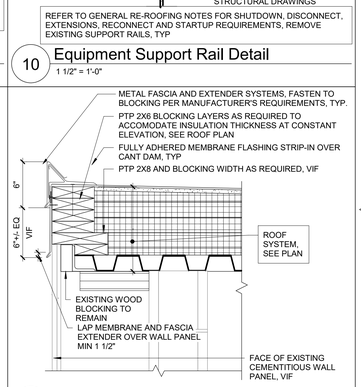
19 SPF Pipe Penetration Detail

1 1/2" = 1'-0"



15 Ladder Anchor Detail at Masonry

1 1/2" = 1'-0"



11 Roof Edge Detail (TYP AT OSTRANDER ES)

1 1/2" = 1'-0"

S.E.D. Control No. 62-18-01-06-0-003-014
S.E.D. Control No. 62-18-01-06-0-005-015
S.E.D. Control No. 62-18-01-06-0-001-019

Rev. No.:	Date:	Description:

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Ostrander Elementary School
Plattekill Elementary School
Leptondale Elementary School

Roof Details

Drawn By:	Date:	Drawing Number:
RAV/CEC	11/4/2022	ZA750

Project No.: 17597-22001