

DESIGN LOADS AND CRITERIA

- 1. DESIGN PROVISIONS: 2020 NYS BUILDING CODE
- BUILDING RISK CATEGORY, III TERRAIN EXPOSURE CATEGORY, B
- BASIC SEISMIC/MAIN WIND FORCE RESISTING SYSTEM FOR SKYLIGHT ONLY: NORTH-SOUTH, LIGHT FRAME (CFMF) WALLS SHEATHED WITH STUCTURAL PANELS RATED FOR EAST-WEST, LIGHT FRAME (CFMF) WALLS SHEATHED WITH STRUCTURAL PANELS RATED FOR
- 2. ROOF DEAD LOAD, 20 PSF (TYPICAL)

PORTION OF ABOVE ROOF DEAD LOAD FOR MECHANICAL EQUIPMENT AND PIPING SUSPENDED FROM STRUCTURAL FRAMING, 5 PSF

CONCENTRATED LOADS SHALL BE LIMITED TO THOSE WHICH INDUCE MOMENTS AND SHEARS IN MEMBERS NOT GREATER THAN THOSE INDUCED BY THE NOTED UNIFORMLY DISTRIBUTED LOADS.

- 3. ROOF LIVE LOAD, 20 PSF (TYPICAL)
- GROUND SNOW LOAD (Pg), 30 PSF FLAT ROOF SNOW LOAD (Pf), 35 PSF EXPOSURE FACTOR (C_E), 1.0
- THERMAL FACTOR (C_t), 1.0 IMPORTANCE FACTOR (I_s), 1.1 RAIN LOAD (PONDING), NOT APPLICABLE RAIN-ON-SNOW SURCHARGE, NOT APPLICABLE
- DRIFTED, UNBALANCE AND SLIDING SNOW LOADS AS INDICATED IN AMERICAN SOCIETY OF CIVIL ENGINEERS STANDARD ASCE 7-16.

WIND LOAD:

BASIC WIND SPEED, 125 MPH EXPOSURE CATEGORY, B TOPOGRAPHIC FACTOR, 1.0 HEIGHT OF MAIN ROOF, 15 FEET

SEISMIC LOADS:

RISK CATEGORY, III SITE CLASS, D SHORT-PERIOD ACCELERATION (S_{ds}), 0.289 g ONE-SECOND ACCELERATION (S_{d1}), 0.096 g SEISMIC DESIGN CATEGORY, B SEISMIC IMPORTANCE FACTOR (I_s), 1.25

STRUCTURAL MATERIALS

STRUCTURAL STEEL AND MISCELLANEOUS STEEL ROLLED STEEL W SHAPES: ASTM A 992 ROLLED STEEL C, MC SHAPES: ASTM A 36 ROLLED STEEL PLATES, BARS, AND ANGLES: ASTM A 36 HOLLOW STRUCTURAL SECTIONS (HSS): ASTM A 500 GRADE B OR C STEEL PIPE: ASTM A 53, TYPE E OR S, GRADE B HIGH-STRENGTH BOLTS: ASTM A 325 OR ASTM A 490 SHEAR CONNECTORS: ASTM A 108, GRADES 1010 THROUGH 1020 HEADED-STUD TYPE UNHEADED ANCHOR RODS: ASTM F 1554 THREADED ANCHORS: ASTM A 36

WELD ELECTRODES: AWS E70XX FOR CONNECTIONS, PROVIDE HIGHER GRADE OR AS REQUIRED FOR CAPACITY.

POWDER ACTUATED FASTENERS (PAF): HILTI 0.177 DIA DS/EDS ADHESIVE ANCHORS (SOLID CONC OR MASONRY): HILTI HIT HY 200

FOOTINGS, FOUNDATION WALLS, PIERS, GRADE BEAMS, MISC:

28 DAY COMPRESSIVE STRENGTH, f'c= 3,000 PSI SLUMP, 3 TO 5 INCHES AIR ENTRAINMENT. 5 % ± 1 %

INTERIOR SLABS ON GRADE AND SLABS ON DECK: 28 DAY COMPRESSIVE STRENGTH, f'c = 3,500 PSI

SLUMP, 3 TO 5 INCHES AIR ENTRAINMENT, 3 % (MAX). DO NOT ADD AIR ENTRAINING ADMIXTURE. AIR ENTRAINMENT OCCURS AS A RESULT OF MIXING.

SEE SPECIFICATIONS AND NOTES FOR ADDITIONAL INFORMATION.

CONCRETE BLOCK: ASTM C 90, 2,800 PSI NET COMPRESSIVE STRENGTH, MORTAR - ASTM C 270, TYPE S UNIT MASONRY: ASTM C 90 CMU, 2,800 PSI NET COMPRESSIVE STRENCTH, MORTAR - ASTM C 270, TYPE S, GROUT: ASTM C 476, 2,500 PSI COMPRESSIVE STRENGTH, 8 TO 10 INCH SLUMP

REINFORCING, CONCRETE OR MASONRY: ASTM A 615. GRADE 60

DIMENSION LUMBER:

STUDS, NO. 1/NO. 2 OR BETTER, SPRUCE-PINE-FIR (SPF) STRUCTURAL FRAMING, NO. 1/NO. 2 OR BETTER, SPRUCE-PINE-FIR (SPF)

ENGINEERED LUMBER:

LAMINATED VENEER LUMBER (LVL), MICROLAM AS MANUFACTURER BY ILEVEL. PREMANUFACTURED I-JOISTS, TJI AS MANUFACTURED BY ILEVEL.

GENERAL NOTES:

- 1. DIMENSIONS TO, OF, AND IN EXISTING STRUCTURE SHALL BE VERIFIED IN FIELD BY CONTRACTOR.
- 2. DO NOT SCALE DRAWINGS. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES IN DIMENSIONS BETWEEN THE EXISTING CONDITIONS, ARCHITECTURAL DRAWINGS, AND STRUCTURAL
- 3. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
- 4. SECTIONS, AND DETAILS SHOWN ARE TYPICAL.. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS, UNLESS OTHERWISE INDICATED.
- 5. THE NOTES ON THIS DRAWING ARE TYPICAL UNLESS OTHERWISE INDICATED.
- 6. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES BEFORE COMMENCING WORK. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR DAMAGES WHICH MIGHT BE OCCASIONED BY FAILURE TO EXACTLY LOCATE AND PRESERVE EXISTING UTILITIES.
- 7. CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF PROPOSED DEVIATIONS OR SUBSTITUTIONS FROM DIMENSIONS, MATERIALS, OR COMPONENTS SHOWN ON THE DRAWINGS AND MAKE ONLY THOSE DEVIATIONS OR SUBSTITUTIONS ACCEPTED BY THE ENGINEER.
- 8. DO NOT SUSPEND MECHANICAL, ELECTRICAL, OR PLUMBING ITEMS FROM ROOF DECK. REFER TO THE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND SPECIFICATIONS FOR HANGERS AND SUPPLEMENTAL FRAMING REQUIRED TO ATTACH THESE ITEMS TO THE MAIN ROOF FRAMING. 9. BRACE BUILDING UNTIL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE
- ELEMENTS ARE AS FOLLOWS: FLOOR DECK, ROOF DECK, SHEAR WALLS, MOMENT FRAMES, BRACING MEMBERS, AND CONNECTIONS.
- 10. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION SAFETY.
- 11. REFER TO ARCHITECTURAL DRAWINGS FOR DEMOLITION AND REMOVALS REQUIRED FOR EXISTING
- 12. COORDINATE THE NUMBER AND LOCATION OF ROOF DRAINS AND OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
- 13. COORDINATE STAIRWAYS, DIMENSIONS, AND STAIR OPENINGS WITH ARCHITECTURAL DRAWINGS AND STAIR FABRICATOR SHOP DRAWINGS.

CAST-IN-PLACE CONCRETE NOTES:

- 1. REINFORCE CONCRETE ELEMENTS INCLUDING FOOTINGS, WALLS, GRADE BEAMS, PIERS, AND SLABS REINFORCEMENT SHOWN PERTAINS TO TYPICAL CONDITIONS.
- 2. COORDINATE CONCRETE MIX DESIGNS WITH CONCRETE MIX SCHEDULE AND DESIGN DATA NOTES
- 3. LAP SPLICE CONCRETE REINFORCEMENT AS SHOWN IN BAR LAP SPLICE SCHEDULE, UNLESS NOTED OTHERWISE. PROVIDE CLASS B LAP UNLESS NOTED OTHERWISE.
- 4. PROVIDE CORNER BARS IN CONTINUOUS FOOTINGS, THE SAME SIZE AND NUMBER AS CONTINUOUS REINFORCEMENT. LAP SPLICE WITH MAIN REINFORCEMENT AS SHOWN IN BAR LAP SPLICE SCHEDULE BUT NOT LESS THAN 2'-0".
- 5. EXTEND WALL FOOTING REINFORCEMENT INTO COLUMN FOOTINGS WITH A MINIMUM EMBEDMENT EQUAL TO THE MINIMUM BAR DEVELOPMENT LENGTH.
- 6. CAST STEPPED FOOTINGS MONOLITHICALLY.
- 7. DOWEL CONCRETE WALLS AND PIERS INTO FOOTINGS WITH DOWELS THE SAME SIZE AND SPACING AS VERTICAL REINFORCEMENT. EXTEND DOWELS TO WITHIN 3 INCHES OF BOTTOM OF FOOTING. TERMINATED WITH ACI STANDARD 90 DEGREE HOOK. LAP SPLICE WITH VERTICAL REINFORCEMENT UNLESS NOTED OTHERWISE.
- 8. CAST CONCRETE PIERS IN CONCRETE WALLS MONOLITHICALLY WITH WALLS.

- VERIFY SIZE AND LOCATION OF MECHANICAL OPENINGS THROUGH CONCRETE MEMBERS PRIOR TO PLACING CONCRETE. PROVIDE SLEEVE OR CHASE FOR PIPING, CONDUIT, OR DUCT PENETRATIONS. CORE DRILLING IS NOT PERMITTED.
- 10. DO NOT LOCATE PENETRATIONS FOR THROUGH FOOTINGS. STEP FOOTINGS DOWN AS REQUIRED TO LOCATE PENETRATION IN WALL.
- 11. DO NOT LOCATE PENETRATIONS THROUGH PIERS, COLUMNS, BEAMS OR GRADE BEAMS UNLESS
- SHOWN IN DRAWINGS OR ACCEPTED BY ENGINEER.

3/4 INCH COVER OTHERWISE, UNLESS NOTED OTHERWISE.

- 12. INSTALL EMBEDDED PIPES OR CONDUIT IN STRUCTURAL CONCRETE AS FOLLOWS: a. ALUMINUM CONDUITS AND PIPES ARE NOT PERMITTED. b. CONDUIT AND PIPE OUTSIDE DIAMETER SHALL NOT EXCEED 1/3 THE THICKNESS OF SLAB, BEAM OR
- WALL IN WHICH THEY ARE EMBEDDED. c. SPACE CONDUIT AND PIPE A MINIMUM OF 3 DIAMETERS (WIDTHS) ON CENTER OR 4 INCHES WHICHEVER IS GREATER. d. PROVIDE A MINIMUM OF 1 1/2 INCH COVER FOR CONCRETE EXPOSED TO EARTH OR WEATHER OR
- e. REFER TO ACI 318, SECTION 6.3 FOR ADDITIONAL REQUIREMENTS. 13. CHAMFER EXPOSED CONCRETE CORNERS AND EDGES 3/4 INCH UNLESS NOTED OTHERWISE.
- 14. CONCRETE COVER FOR REINFORCEMENT SHALL BE AS INDICATED IN CONCRETE COVER SCHEDULE.

STRUCTURAL STEEL NOTES:

- DO NOT BEGIN STEEL ERECTION UNTIL SUPPORTING CONCRETE OBTAINS 75 PERCENT OF THE MATERIAL STRENGTHS NOTED IN DESIGN DATA NOTES.
- 2. LOCATE ROOFTOP MECHANICAL UNITS AS SHOWN: COORDINATE WITH MECHANICAL DRAWINGS NOTIFY ENGINEER IF ACTUAL UNIT WEIGHTS EXCEED THE WEIGHTS SHOWN ON DRAWINGS.
- 3. WHERE BEAM SPACING IS NOT NOTED, SPACE BEAMS EQUALLY BETWEEN COLUMNS OR BETWEEN COLUMNS AND WALLS.
- MINIMUM CAPACITY OF BEAM CONNECTIONS; FOR CONNECTIONS NOT DETAILED, PROVIDE CONNECTION CAPACITY FOR REACTIONS SHOWN ON DRAWINGS OR, IF NOT SHOWN, BASED ON EITHER ALLOWABLE STRESS DESIGN OR LOAD AND RESISTANCE FACTOR DESIGN AS FOLLOWS:
- A. AT LEAST 50 PERCENT OF THE ALLOWABLE UNIFORM LOAD FROM ALLOWABLE UNIFORM LOAD TABLES IN AISC ASD MANUAL, PART 2, FOR THE GIVEN STEEL MEMBER. B. AT LEAST 50 PERCENT OF THE MAXIMUM TOTAL FACTORED UNIFORM LOAD FROM MAXIMUM
- . FOR BEAMS AND GIRDERS WITH SHEAR CONNECTORS, PROVIDE CONNECTION CAPACITY OF AT LEAST 70 PERCENT OF THE UNIFORM LOAD VALUES (ASD OR LRFD, AS APPROPRIATE), UNLESS INDICATED OTHERWISE ON DRAWINGS.

TOTAL FACTORED UNIFORM LOAD TABLES IN AISC LRFD MANUAL, PART 5, FOR THE GIVEN STEEL

- D. CONCENTRATED LOADS NEAR SUPPORTS MUST BE ADDED.
- PROVIDE HOT DIP GALVANIZED FASTENERS FOR GALVANIZED FRAMING CONNECTIONS AND STAINLESS STEEL FASTENERS FOR STAINLESS STEEL FRAMING CONNECTIONS.
- 6. FABRICATE AND ERECT STEEL IN ACCORDANCE WITH THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.
- 7. SLOPE ROOF STEEL UNIFORMLY BETWEEN ELEVATIONS SPECIFIED ON PLANS.
- 8. REMOVE ALL PAINT AND OTHER DEBRIS FROM STEEL PRIOR TO FIELD WELDING TO STRUCTURE. FIELD WELDS AND ADJACENT AREAS SHALL BE FIELD PRIMED AFTER INSPECTED.
- 9. ALL SAFETY REGULATION AND PRECAUTIONS WITH REGARDS TO FIELD WELDING SHALL BE COMPLIED WITH TO PROTECT EXISTING CONSTRUCTION TO REMAIN, FINISHES, AND ON SITE WORKERS (SCREENS
- 10. WHERE FILLET WELD SIZES ARE NOT SPECIFICALLY NOTED, THE FABRICATOR SHALL DETAIL A MINIMUM SIZE FILLET WELD IN ACCORDANCE WITH AWS STANDARDS. THE ACTUAL SIZES SHALL BE
- SHOWN ON THE SHOP DRAWINGS. 11. BACKER BARS AT COMPLETE JOINT PENETRATION WELDS MUST BE REMOVED IF "R" IS GREATER THAN
- 12. CONNECTION DESIGN BY FABRICATOR WILL BE SUBJECT TO REVIEW BY ENGINEER. USE DOUBLE ANGLE SHEAR CONNECTIONS WITH 3/4" DIAMETER ASTM A325 BOLTS WITH AT LEAST THE FOLLOWING NUMBER OF BOLT ROWS:
 - NUMBER OF BOLT ROWS **BEAM SIZE** W8 W10 W12, W14, W16

W18, W21, W24

STRUCTURAL DRAWINGS.

- 13. DO NOT PLACE HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT UNLESS INDICATED IN
- 14. BOLTED CONNECTIONS SHALL UTILIZE TYPE 3 ASTM A 325 BOLTS, UNO. ALL CONNECTIONS SHALL BE INSTALLED SNUG TIGHT.
- 15. REMOVE BURRS, DIRT, AND OTHER FOREIGN MATERIALS FROM FRAYING SURFACES AND SURFACES ADJACENT TO BOLT HEADS AND NUTS. BURRS LESS THAN OR EQUAL TO 1/16" IN HEIGHT ARE PERMITTED TO REMAIN ON FAYING SURFACES.
- 16. FABRICATE BOLTED CONNECTIONS WITH STANDARD SIZED HOLES, UNLESS NOTED OTHERWISE.
- 17. COMPLY WITH AISC SPECIFICATIONS FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTED CONNECTIONS.

SLAB ON DECK NOTES:

- 1. FLOOR DECKS SHALL BE 2" X 20 GAGE COMPOSITE GALVANIZED (G90) STEEL DECK. FLOOR DECK SHALL BE FASTENED TO STRUCTURAL STEEL WITH 5/8" DIAMETER PUDDLE WELDS. FASTENER PATTERN SHALL BE XX/X WITH (X) #10 TEK SCREW SIDELAP FASTENERS PER SPAN. DECK SHALL BE WELDED TO ALL PERIMETER SUPPORT STEEL WITH 5/8 INCH DIAMETER PUDDLE WELDS AT A MAXIMUM SPACING OF 12 INCHES ON CENTER.
- CONCRETE FLOOR DECKS SHALL BE NORMAL WEIGHT CONCRETE, UNLESS NOTED OTHERWISE. PROVIDE #4 AT 16 INCHES ON CENTER, EACH WAY UNLESS NOTED OTHERWISE.
- 3. CONTRACTOR SHALL COORDINATE AND LOCATE ALL FLOOR OPENINGS WITH THE MECHANICAL AND ARCHITECTURAL DRAWINGS. PROVIDE SUPPORT FRAMING AROUND OPENINGS GRATER THAN 6 INCHES BY 6 INCHES AS SHOWN IN DETAIL XX/XX.
- 4. DECK HAS BEEN DESIGNED TO BE UNSHORED DURING CONCRETE PLACEMENT. DO NOT OVERLOAD DECK DURING CONSTRUCTION.
- 5. INSTALL DECK IN ACCORDANCE WITH THE SDI MANUAL OF CONSTRUCTION W/STEEL DECK.
- 6. SHEAR STUDS SHALL BE MINIMUM OF 3/4 INCH DIAMETER UNIFORMLY SPACED ALONG BEAM LENGTH. DO NOT INSTALL STUDS AT DECK HI-HAT LOCATIONS. SEE SPECIFICATIONS FOR ADDITIONAL
- 7. PROVIDE ALL NECESSARY ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION.
- 8. STEEL FLOOR STRUCTURE WILL DEFLECT UNDER WEIGHT OF WET CONCRETE. PLACE A VARYING THICKNESS CONCRETE SLAB TO MAINTAIN REQUIRED FINISHED FLOOR ELEVATION. COMPLETELY "ROUGH-FILL" EACH BAY WITH CONCRETE BEFORE SCREEDING.
- 9. DO NOT USE EXTERIOR BEAM SCREEDS TO LEVEL SLAB. EXTERIOR BEAM WILL DEFLECT UNDER WEIGHT OF THE CONCRETE.
- SUBMIT SLAB POUR SEQUENCE AND PROPOSED CONSTRUCTION JOINT LAYOUT FOR REVIEW PRIOR TO SLAB PLACEMENT. METAL DECK NOTES:
- 1. COORDINATE NUMBER AND LOCATION OF ROOF DRAINS AND DECK OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
- ROOF DECK SHALL BE 1 1/2" X 20ga GALVANIZED (GGO) STEEL DECK. ROOF DECK SHALL BE FASTENED TOSTRUCTURAL STEEL WITH 5/8"Ø PUDDLE WELDS. FASTENER PATTERN SHALL BE 36/4 W/#10 TEK SCREWS SIDELAP FASTENERS PER SPAN. SIDELAP FASTENERS SHALL HAVE A MAXIMUM SPACING OF 36". DECK SHALL BE WELDED TO ALL PERIMETER SUPPORT STEEL WITH 5/8"Ø PUDDLE WELDS AT A MAXIMUM SPACING OF 12" C-C.
- 3. METAL ROOF DECKS MUST BE "WARPED" TO FOLLOW SLOPE OF ROOF PITCH INDICATED. ROOF DECK MAY REQUIRE ATTACHMENT WITH TEK SCREWS IN SOME LOCATIONS TO DRAW DECK TIGHT TO SUPPORTING STEEL MEMBERS PRIOR TO WELDING AS INDICATED ABOVE.
- 4. LAP ENDS OF DECK SHEETS A MINIMUM OF 2 INCHES. MINIMUM DECK BEARING SHALL BE 1 1/2".
- PROVIDE ALL NECESSARY ACCESSORIES INCLUDING; RIDGE PLATES, VALLEY PLATES, CELL CLOSURES, FINISH STRIPS, BUTT STRIPS, AND SUMP PANS FOR A COMPLETE INSTALLATION.
- 6. INSTALL DECK IN ACCORDANCE WITH THE SDI MANUAL OF CONSTRUCTION WITH STEEL DECK. 7. CONSTRUCTION LOADS SHALL NOT EXCEED LOAD RATING OF DECK.

COLD-FORMED METAL FRAMING NOTES:

- MINIMUM MEMBER MATERIAL THICKNESS IS 18 GAUGE UNLESS NOTED OTHERWISE
- 2. CUT FRAMING COMPONENTS SQUARELY OR ON AN ANGLE AS REQUIRED TO FIT TIGHTLY WITH FULL BEARING AGAINST ABUTTING MEMBERS. TEMPORARILY BRACE MEMBERS AS REQUIRED PRIOR TO FINAL FASTENING.
- 3. FIELD CUTTING OF MEMBERS SHALL BE PERFORMED BY SHEARING OR SAWING. TORCH CUTTING IS NOT ACCEPTABLE.
- 4. SPLICES ARE NOT PERMITTED IN STUDS, JOISTS, OR OTHER LOAD-CARRYING MEMBERS UNLESS CALCULATIONS AND DETAILS HAVE BEEN SUBMITTED TO ENGINEER FOR REVIEW AND ACCEPTED.
- 5. WHEN COLD-FORMED STUDS ARE TO BE USED FOR TRUSS, RAFTER, OR HEADER APPLICATIONS, STUDS SHALL BE UN-PUNCHED THROUGH THE WEB. IT IS THE RESPONSIBILITY OF THE CONTRACTOR

- TO SPECIFY UN-PUNCHED STUDS WHEN ORDERING MATERIALS.
- 6. FIELD-INSTALLED HOLES ARE NOT PERMITTED IN MEMBERS UNLESS INDICATED IN DRAWINGS.
- 7. DO NOT SCREW OR WELD STUDS TO VERTICAL DEFLECTION TRACKS. DO NOT CONNECT SHEATHING TO VERTICAL DEFLECTION TRACKS. PROVIDE GAP IN SHEATHING TO ACCOMMODATE VERTICAL
- 8. ABUTTING TRACK MEMBERS SHALL BE SPLICED TOGETHER USING A TYPICAL STUD/JOIST SCREWED TO THE TRACK ON BOTH SIDES OF JOINT. BUTT-WELDING IS ALSO ACCEPTABLE.
- 9. FOR LOAD BEARING CONSTRUCTION, THE CONTRACTOR SHALL ENSURE THAT ADEQUATE BRACING IS IN PLACE UNTIL SHEATHING IS ATTACHED TO BOTH STUD FLANGES. DO NOT OVERLOAD STUDS DURING CONSTRUCTION.
- 10. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ERECTION BRACING.
- 12. THE FOLLOWING SHALL BE USED FOR POWDER-ACTUATED FASTENERS IN STEEL UNLESS NOTED OTHERWISE:

11. MINIMUM SCREW SPACING AND EDGE DISTANCE IS 3/4 INCH UNLESS NOTED OTHERWISE.

- 13. THE FOLLOWING SHALL BE USED FOR POWDER-ACTUATED FASTENERS IN CONCRETE UNLESS NOTED OTHERWISE: MINIMUM EDGE DISTANCE = 3 INCHES
- MINIMUM FASTENER SPACING = 4 INCHES 14. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWS D1.3 "STRUCTURAL WELDING CODE -
- 15. MINIMUM WELD THROAT THICKNESS EQUALS THE BASE METAL THICKNESS OF THE THINNEST CONNECTED MATERIAL UNLESS NOTED OTHERWISE.
- 16. TOUCH-UP WELDS WITH GALVANIZED REPAIR PAINT.

MINIMUM EDGE DISTANCE = 1/2 INCH

MINIMUM FASTENER SPACING = 1 INCH

SHEET LIST					
SHEET NUMBER	SHEET NAME				
S0.01	DESIGN DATA AND GENERAL NOTES				
S0.02	SPECIAL INSPECTION NOTES AND SCHEDULE				
S1.00	FOUNDATION AND FRAMING PLANS				
S3.0	SECTIONS AND DETAILS				
S5.0	CFMF SECTIONS AND DETAILS				

CONCRETE COVER SCHEDULE	
LOCATION	COVE
CONCRETE CAST AGAINST AND PERMANENTLY IN CONTACT WITH GROUND	3"
CONCRETE EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	
#6 BARS AND LARGER	2"
#5 BARS AND SMALLER	1 1/2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	
SLABS, WALLS, JOIST	3/4"
BEAMS, GIRDERS, COLUMNS, AND PIERS	1 1/2"

	CLASS B TENSION LAP SPLICE SCHEDULE									
		fc' =3,000 P	SI			1	fc' = 4,000 P	SI		
DAD CIZE	TOP	BAR	OTHE	R BAR	DAD CIZE	TOP	BAR	OTHE	R BAR	
BAR SIZE	CASE 1	CASE 2	CASE 1	CASE 2	BAR SIZE	CASE 1	CASE 2	CASE 1	CASE 2	
#3	28	42	21	32	#3	24	36	18	28	
#4	37	56	28	43	#4	32	48	25	37	
#5	46	69	36	53	#5	40	60	31	46	
#6	56	83	43	64	#6	48	72	37	55	
#7	81	131	62	93	#7	70	105	54	81	
#8	93	139	71	107	#8	80	120	62	92	
#9	104	157	80	120	#9	90	136	70	104	

- TABULATED VALUES ARE IN INCHES.
- 2. TOP BARS ARE HORIZONTAL BARS PLACED WITH MORE THAN 12 INCHES OF FRESH CONCRETE PLACED BELOW THE DEVELOPMENT LENGTH OR SPLICE.
- 3. CASE 1 APPLIES TO CLEAR SPACING GREATER THAN OR EQUAL TO 2 BAR DIAMETERS AND COVER GREATER THAN OR EQUAL TO 1 DIAMETER.
- 4. CASE 2 APPLIES TO CLEAR SPACING LESS THAN 2 BAR DIAMETERS AND COVER LESS THAN 1
- 5. FOR VALUES OF COVER AND SPACING BETWEEN TABULATED VALUES USE THE LONGER LAP LENGTH. DO NOT INTERPOLATE.

6. CALCULATE CENTER TO CENTER SPACING OF BARS AT LAP SPLICE LOCATIONS.

7. FOR EPOXY COATED BARS INCREASE THE TABULATED VALUES AS FOLLOWS; TOP BARS MULTIPLY TABULATED VALUE BY 1.3, FOR OTHER BARS MULTIPLY TABULATED VALUE BY 1.5. 8. FOR LIGHTWEIGHT CONCRETE MULTIPLY TABULATED VALUE BY 1.3

CONCDETE MIX								
	CONCRETE MIX							
APPLICATION	EXPOSURE	F'c	MAXIMUM W/C RATIO	AIR CONTENT	NOMINAL MAX. AGGREGATE SIZE (NOTE 4)			
FOOTINGS	F0	3,000 PSI	SEE NOTE 2	4.5% ± 1.5%	1 INCH			
EXT SLAB ON GRADE	F1	4,500 PSI	0.45	4.5% ± 1.5%	1 INCH			
SLAB ON GRADE	F0	3,000 PSI	SEE NOTE 2	SEE NOTE 3	1 INCH			
FOUNDATION WALLS	F0	3,000 PSI	SEE NOTE 2	4.5% ± 1.5%	3/4 INCH			
SITE WALLS	F1	4,000 PSI	0.45	4.5% ± 1.5%	3/4 INCH			
SLAB ON DECK	F0	3,500 PSI	SEE NOTE 2	SEE NOTE 3	3/4 INCH			
PIERS	F0	3,000 PSI	SEE NOTE 2	4.5% ± 1.5%	3/4 INCH			

1. EXPOSURE CATEGORIES AND CLASSES FOR SULFATES, PERMEABILITY AND CORROSION

- PROTECTION OF REINFORCEMENT IS CLASS ZERO UNLESS NOTED OTHERWISE. 2. WHERE NO MAXIMUM WATER TO CEMENT RATIO IS NOTED, PROPORTION WATER TO CEMENT RATIO FOR SPECIFIED CONCRETE MIX DESIGN STRENGTH.
- 3. DO NOT AIR ENTRAIN INTERIOR SLABS ON GRADE OR SLABS ON METAL DECK. AIR ENTRAINMENT IS NOT PERMITTED FOR CONCRETE TO RECEIVE HARD TROWEL FINISH AND ENTRAPPED AIR SHALL NOT EXCEED 2%. SLABS SHALL BE FINISHED TO AVOID SURFACE IMPERFECTIONS, INCLUDING BLISTERING AND DELAMINATION.

4. COARSE AGGREGATE SHALL BE ASTM C33 MEETING GRADATION REQUIREMENTS TYPE 57 FOR

1-INCH MAXIMUM AGGREGATE SIZE AND TYPE 67 FOR 3/4-INCH MAXIMUM AGGREGATE SIZE.

		AB	BREVIATIONS		
ADDL	ADDITIONAL	ENGR	EDGE OF DECK	OPP	OPPOSITE
ADJ	ADJACENT	FD	FLOOR DRAIN	OF	OUSIDE FACE
APPROX	APPROXIMATE	FT	FOOT		
ARCH	ARCHITECTURAL	FDN	FOUNDATION	PL	PLATE
AESS	ARCHITECTURAL EXPOSED	FTG	FOOTING	PAF	POWDER ACTUATED
	STRUCTUAL STEEL			PAF	FASTENER
		GALV	GALVANIZED	PE	PROFESSIONAL ENGINEER

5. MAXIMUM CONCRETE UNIT WEIGHT NOT TO EXCEED 150 POUNDS PER CUBIC FEET.

		GALV	GALVANIZED	PE	PROFESSIONAL ENGINEER
B/ , BO	BOTTOM OF	GA	GAUGE	PERP	PERPENDICULAR
BLDG	BUILDING			PLF	POUNDS PER LINEAL FOOT
BLKG	BLOCKING	HSS	HOLLOW STEEL SECTION	PSF	POUNDS PER SQUARE FOOT
BP	BASEPLATE	HORIZ	HORIZONTAL	PSI	POUNDS PER SQUARE INC
BRG	BEARING	HI	HIGH	PCF	POUNDS PER CUBIC FOOT
BTWN	BETWEEN	HP	HIGH POINT	PC	PRECAST
		111/40	HEATING, VENTILATION,	PSL	PARALLEL STRAND LUMBER
CANT	CANTILEVER	HVAC	AIR CONDITIONING	PT	PRESSURE TREATED
CIP	CAST IN PLACE	IF	INSIDE FACE		
CJ	CONTROL JOINT	INFO	INFORMATION	R	RADIUS
CL	CENTER LINE	INT	INTERIOR	RD	ROOF DRAIN
CLR	CLEAR CONCRETE	INV	INVERT	RDP	REGISTERED DESIGN PROFESSIONAL
CMU	MASONRY UNIT(S)	K	KIPS	REQD	REQUIRED
COL	COLUMN	KSF	KIPS PER SQUARE FOOT	REINF	REINFORCING
CONC	CONCRETE			REV	REVISION
CONT	CONTINUOUS	L	ANGLE	RO	ROUGH OPENING
	COLD-FORMED	LBS	POUNDS		
CFMF	METAL FRAMING	LG	LONG	SIM	SIMILAR
COORD	COORDINATE	LLH	LONG LEG HORIZONTAL	SPA	SPACE
		LLV	LONG LEG VERTICAL	STD	STANDARD
DET	DETAIL	LO	LOW	SF	SQUARE FEET
DIA	DIAMETER	LOC	LOCATION	SS	STAINLESS STEEL
DIM	DIMENSION	LW	LIGHT WEIGHT	STL	STEEL
DN	DOWN	1.7/1	LAMINATED VENEER	SQ	SQUARE
DO	DITTO	LVL	LUMBER		
DWLS	DOWELS			THK	THICK
DWG	DRAWINGS	MFR	MANUFACTURER	T/ , TO	TOP OF
		MAX	MAXIMUM	TYP	TYPICAL
EA	EACH	MIN	MIN	T&B	TOP AND BOTTOM
EF	EACH FACE	MECH	MECHANICAL		
ES	EACH SIDE	MISC	MISCELLANEOUS	UNO	THICK
EL	ELEVATION	МО	MASONRY OPENING		
ELEV	ELEVATOR			VERT	VERTICAL
EOS	EDGE OF SLAB	NA	NOT APPLICABLE	VIF	VERIFY IN FIELD
EOD	EDGE OF DECK	NIC	NOT IN CONTRACT		

NOM NOMINAL

NS NEAR SIDE

OC ON CENTER

OPNG OPENING

NW NORMAL WEIGHT

NTS NOT TO SCALE

OD OUTSIDE DIAMETER

EQUAL

FACH WAY

EXTERIOR

FXPANSION

FINISH SYSTEM

EXTERIOR INSULATION

EQUIP EQUIPMENT

EXIST EXIST

FW

EXT

EIFS

WIDTH, WIDE

WP WORK POINT

WWF | WELDED WIRE FABRIC

WCJ WALL CONTROL JOINT

W/ WITH

WD WOOD

			N	OTICE	Ξ			
PREP ENGII CONI	ARED E NEERS, DITIONS	/INGS ARE BY BBS A PC. AND, AS CONS	RCHITE(THERE STRUCTE	CTS, LA FORE, ED AT	ANDSC MAY THE	APE NOT TIME.	ARCHITI REPRE ALL	ECT SEN
CONE		SHOWN I AS THEY						

REV. DATE

ITEM

DRAWING BY: CHECK BY:

S DRAWING, PREPARED FOR THE SPECIFIC PROJECT INDICATED

AN INSTRUMENT OF SERVICE AND THE PROPERTY OF B

NFRINGEMENT OR ANY USE OF THIS DRAWING FOR ANY 01

INSENT OF THE ARCHITECT OR ENGINEER.

IS DOCUMENT IS ALSO PROHIBITED WITHOUT THE WRIT

LANDSCAPE ARCHITECT:

ENGINEERS 44 EAST MAIN STREET 37 WOLF ROAD, STE. 20 NEW YORK 11772 NEW YORK 12205 F. 631.475.0361

www.BBSARCHITECTURE.com



SED No.	66-01-02-06-0-004-020
DISTRICT	BEDFORD CENTRAL SCHOOL DISTRICT
PROJECT	PHASE 1 - BOND IMPROVEMENTS
DWG TITLE	DESIGN DATA AND GENERAL NOTES
SCALE:	AS NOTED
DATE:	10/19/22
BID PICK-UP:	

FILE No:

22-225E

STATEMENT OF SPECIAL INSPECTIONS: **SPECIAL INSPECTION NOTES**:

- 1. THE SCHEDULE OF SPECIAL INSPECTIONS, ASSOCIATED NOTES AND SPECIFICATION SECTION 01420 INDICATE THE REQUIRED STRUCTURAL TESTS AND INSPECTIONS FOR THE PROJECT AND SHALL BE CONSIDERED THE STATEMENT OF SPECIAL INSPECTIONS. THE FOLLOWING TYPES OF CONSTRUCTION REQUIRE INSPECTION:
- A. CAST-IN-PLACE CONCRETE
- B. COLD FORMED FRAMING C. STRUCTURAL STEEL
- 2. THE OWNER WILL ENGAGE THE SERVICES OF A QUALIFIED SPECIAL INSPECTOR FOR THIS PROJECT, WHO WILL PROVIDE AND/OR COORDINATE INSPECTION AND TESTING REQUIREMENTS IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 17 OF THE "2015 INTERNATIONAL BUILDING CODE".
- 3. THE QUALIFICATIONS OF ALL PERSONNEL PERFORMING SPECIAL INSPECTIONS AND TESTING SHALL MEET THE MINIMUM QUALIFICATIONS FOR SPECIAL INSPECTIONS IDENTIFIED IN THE "2015 INTERNATIONAL BUILDING CODE". ALL PERSONNEL PERFORMING SPECIAL INSPECTIONS AND TESTING ARE SUBJECT TO THE APPROVAL OF THE CODE ENFORCEMENT OFFICIAL. SUBMIT CREDENTIALS OF SPECIAL INSPECTORS AND TESTING TECHNICIANS SHALL FOR REVIEW WHEN
- 4. THE CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING AT LEAST 7 DAYS PRIOR TO THE START OF CONSTRUCTION TO REVIEW THE REQUIRED SPECIAL INSPECTION AND TESTING REQUIREMENTS, NOTIFICATIONS, AND REPORTING PROCEDURES FOR THE PROJECT. ATTENDEES SHALL INCLUDE THE REGISTERED DESIGN PROFESSIONAL FOR STRUCTURAL ENGINEERING AND FOR ARCHITECTURE, OWNER OR OWNER'S REPRESENTATIVE, SPECIAL INSPECTOR, TESTING AGENCY, AND AFFECTED SUB-CONTRACTORS. THE CONTRACTOR SHALL DISTRIBUTE CONSTRUCTION SCHEDULES TO EACH ATTENDEE.
- 5. SPECIAL INSPECTIONS AND TESTING SHALL BE PERFORMED ON A CONTINUOUS OR PERIODIC BASIS DURING THE PERFORMANCE OF THE WORK, AS INDICATED IN THE SCHEDULE. CONTINUOUS AND PERIODIC INSPECTIONS SHALL BE DEFINED AS

-CONTINUOUS SPECIAL INSPECTION IS THE FULL TIME OBSERVATION OF WORK WHILE THE WORK IS BEING PERFORMED.

THE WORK IS BEING PERFORMEND OR AFTER IT HAS BEEN COMPLETED.

-PERIODIC SPECIAL INSPECTION IS THE PART-TIME OBSERVATION OF WORK WHILE

- 6. THE CONTRACTOR SHALL NOTIFY THE SPECIAL INSPECTOR OR TESTING AGENCY AT LEAST 48 HOURS IN ADVANCE OF A REQUIRED INSPECTION OR TEST.
- 7. THE SPECIAL INSPECTOR OR TESTING AGENCY SHALL SUBMIT INTERIM REPORTS TO THE REGISTERED DESIGN PROFESSIONAL, CODE ENFORCEMENT OFFICIAL, AND SPECIAL INSPECTOR (IF PREPARED BY A TESTING AGENCY) WITHIN 7 DAYS OF INSPECTION. REPORTS SHALL BE SIGNED BY THE PERSON PERFORMING THE INSPECTION OR TEST AND THE PERSON SUPERVISING.
- 8. AT THE COMPLETION OF SPECIAL INSPECTIONS, A FINAL REPORT OF SPECIAL INSPECTIONS SHALL BE PREPARED BY THE SPECIAL INSPECTOR AND EACH TESTING AGENCY PERFORMING INSPECTIONS. THE FINAL REPORT SHALL INDICATE THE INSPECTIONS PERFORMED, NON-CONFORMANCES HAVE BEEN REPORTED AND RESOLVED OR IDENTIFY ANY UNRESOLVED NON-CONFORMANCE ITEMS. THE FINAL REPORT SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL(S), CODE ENFORCEMENT OFFICIAL, AND SPECIAL INSPECTOR (IF PREPARED BY A TESTING AGENCY).
- TEST, INCIDENTAL LABOR, AND SAFE ACCESS TO THE WORK AREAS INCLUDING SCAFFOLDING, AND ACCESS TO CONTRACT DOCUMENTS SO THAT INSPECTIONS AND TESTING MAY BE PERFORMED WITHOUT HINDRANCE. 10. THE SPECIAL INSPECTOR SHALL NOTIFY THE CONTRACTOR IMMEDIATELY OF

9. THE CONTRACTOR SHALL COOPERATE WITH SPECIAL INSPECTOR AND TESTING AGENCIES INCLUDING ADVANCE NOTIFICATION OF REQUIRED INSPECTION OR

- DISCREPANCIES FOR CORRECTIVE ACTION. REPORTS SHALL NOTE WHEN AND HOW DEFICIENCIES WERE CORRECTED. ITEMS IMMEDIATELY CORRECTED AND SUBSEQUENTLY INSPECTED OR TESTED NEED NOT BE IDENTIFIED AS A NON-CONFORMANCE ITEM. 11. IF NON-CONFORMING WORK IS NOT CORRECTED WHILE SPECIAL INSPECTOR OR
- NOTIFY REGISTERED DESIGN PROFESSIONAL AND CODE ENFORCEMENT OFFICIAL WITHIN 24 HOURS AND ISSUE A REPORT NOTING THE NON-CONFORMANCE. 12. SPECIAL INSPECTOR AND EACH TESTING AGENT SHALL USE A LOG TO RECORD AND TRACK NON-CONFORMING WORK DURING CONSTRUCTION. AN UPDATED LOG

SHALL BE ATTACHED TO EACH REPORT. NON-CONFORMANCE LOG SHALL

TESTING AGENT IS ON SITE, SPECIAL INSPECTOR OR TESTING AGENT SHALL

INCLUDE THE FOLLOWING INFORMATION: -DESCRIPTION OF NON-CONFORMANCE -DATE OF NON-CONFORMANCE -DESCRIPTION OF RDP RESPONSE, IF RECEIVED

-STATUS OF NON-CONFORMANCE: 'OPEN' OR 'CLOSED'.

- 13. IF NON-CONFORMING WORK IS NOT CORRECTED AT TIME OF SUBSTANTIAL COMPLETION OF STRUCTURE OR OTHER APPROPRIATE TIME, SPECIAL INSPECTOR SHALL NOTIFY CODE ENFORCEMENT OFFICIAL AND REGISTERED DESIGN PROFESSIONAL.
- 14. THE SPECIAL INSPECTION PROGRAM SHALL IN NO WAY RELIEVE THE CONTRACTOR OF THE OBLIGATION TO PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS OR FROM IMPLEMENTING AN EFFECTIVE QUALITY CONTROL PROGRAM.
- 15. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION SITE SAFETY.
- 16. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

SCHEDULE OF SPECIAL INSPECTIONS:

CAST-IN-PLACE CONCRETE:

AST-IN-PLACE CONCRETE.			
INSPECTION TASK	REFERENCED STANDARD	INSPECTION FREQUENCY	TESTING/INSPECTION QUANTITY AND EXTENT
1. INSPECT REINFORCING STEEL AND PLACEMENT A. FOOTINGS, FOUNDATION WALLS, AND PIERS B. SLABS ON GRADE C. SLABS ON DECK D. SHEAR WALLS		PERIODIC PERIODIC PERIODIC PERIODIC	ALL LOCATIONS
2. INSPECT EMBEDDED BOLTS AND ANCHOR RODS PRIOR TO PLACEMENT OF CONCRETE: A. AT COLUMN BASE PLATES, BEAM POCKETS, AND ELSEWHERE WHERE RODS ARE SUBJECT TO SHEAR OR TENSION B. AT COLUMNS IN BRACED FRAMES		PERIODIC PERIODIC	ALL LOCATIONS
3. VERIFY USE OF REQUIRED DESIGN MIX		CONT	EACH PLACEMENT
 4. SAMPLE AND TEST FRESH CONCRETE: A. TAKE SIX STANDARD CYLINDERS B. RECORD TIME CONCRETE IS BATCHED, TIME CONCRETE IS SAMPLED, AND TIME THE TRUCK IS EMPTY C. PERFORM SLUMP TEST D. MEASURE AIR CONTENT E. RECORD CONCRETE AND AMBIENT AIR TEMPERATURE F. RECORD UNIT WEIGHT OF CONCRETE G. PERFORM COMPREHENSIVE STRENGTH TESTS 	ASTM C 172 ASTM C 31 ASTM C 94 ASTM C 231 ASTM C 138 ASTM C 567 ASTM C 39	CONT	EACH 50 CU. YD. OF CONCRETE OR EACH 5000 SF OF SLAB AREA FOR EACH CLASS CONCRETE EACH TRUCK ONE TEST EACH TRUCK; TWO TESTS IF CONCRETE IS PUMPED - ONE AT TRUCK AN ONE AT HOSE END EACH TRUCK EACH TRUCK TEST 2 CYLINDERS AT 7 DAYS AND AT 28 DAYS - RETAIN REMAINING CYLINDERS & TEST AS DIRECTED
5. INSPECT CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	ACI 318 5.9, 5.10	CONT	EACH PLACEMENT
6. INSPECT FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	ACI 318 5.11, 5.13	PERIODIC	EACH PLACEMENT
7. INSPECT AND TEST CONCRETE SLABS ON GRADE AND METAL DECK A. FLOOR FLATNESS AND LEVELNESS B. MOISTURE VAPOR EMISSION AND ALKALINITY	ASTM E 1155 ASTM F 1869 ASTM F 710	PERIODIC CONT	ENTIRE SLAB AREA 4 TESTS FOR EACH 2000 SF OF FLOOR ARI AND MINIMUM OF 4 TESTS IN EACH AREA THE BUILDING WHERE ADHERED FLOOR FINISHES ARE BEING APPLIED
8. INSPECT WELDING OF REINFORCING STEEL: A. REFER TO STRUCTURAL STEEL TABLE	AWS D1.4	PERIODIC	

_	INSPECTION TASK	REFERENCED STANDARD	INSPECTION FREQUENCY	TESTING/INSPECTION QUANTITY AND EXTENT
1.	VERIFY FABRICATOR(S) MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES	AISC 360-10 CHAPTER N	PERIODIC	
2.	MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS, AND WASHERS: A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE	APPLICABLE ASTM MATERIAL SPECIFICATIONS; AISC 360-10, A3.3	PERIODIC PERIODIC	ALL BOLTS
3.	INSPECTION OF HIGH-STRENGTH BOLTING: A. BEARING-TYPE CONNECTIONS	AISC 360-10, N5.6	PERIODIC	ALL BOLTS
4.	MATERIAL VERIFICATION OF STRUCTURAL STEEL AND METAL DECK: A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS B. MANUFACTURER'S CERTIFIED MILL	ASTM A 6 OR ASTM A 568 ASTM A 653	PERIODIC PERIODIC	ALL STRUCTURAL STEEL AND METAL DECK
5.	PERFORM PULL-OUT TESTS ON DRILLED-IN, ADHESIVE, EXPANSION, AND SLEEVE ANCHORS		PERIODIC	TEST 10% OF EACH ANCHOR TYPE (MINIMUM OF 2) BY APPLYING A LOAD EQUAL TO 125% OF ALLOWABLE PULL-OUT STRENGTH TEST 100% OF ANCHORS BY PULLING WITH A CLAW HAMMER USING THE WEIGHT OF ONE MAN
6.	MATERIAL VERIFICATION OF WELD FILLER MATERIALS: A. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED	AISC 360-10, A3.5	CONT	ALL FILLER MATERIAL
7.	INSPECTION OF WELDING OF STRUCTURAL STEEL: A. FILLET WELDS 1. SINGLE PASS (5/16 OR LESS) 2. MULTIPASS (GREATER THAN 5/16) B. METAL DECK WELDS C. SHEAR CONNECTOR WELDS. VERIFY FOR SHEAR CONNECTOR WELDS. BEND TEST BY CONTRACTOR	AISC 360-10, N5,4 & N5,5, AWS D1.1 ASTM E 709 AWS D1.1 AWS D1.3 HAMMER TEST AISC 360-10, N6	PERIODIC CONT PERIODIC PERIODIC	100% VISUAL INSPECTION AND 10% MAGNETIC PARTICLE TESTING 100% VISUAL INSPECTION
	INSPECTION OF WELDING OF REINFORCING STEEL: A. VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706 B. REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS AND SHEAR REINFORCEMENT C. OTHER REINFORCING STEEL	AWS D1.4 ACI 318 3.5.2	PERIODIC CONT CONT	ALL REINFORCING STEEL WELD LOCATIONS
9.	INSPECTION OF ERECTED STEEL FRAME: A. JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS B. BRACED FRAMES AND MOMENT FRAMES C. APPLICATION OF JOINT DETAILS AT EACH CONNECTION	AISC 360-10, N5.7	PERIODIC	ENTIRE FRAME
10	INSPECTION OF ERECTED METAL DECK: A. SIZE AND SPACING OF MECHANICAL FASTENERS INCLUDING SCREWS AND POWDER-ACTUATED FASTENERS	AISC 360-10, N6	PERIODIC	ENTIRE DECK

STRUCTURAL STEEL AND METAL DECK:

REV. DATE

THESE DRAWINGS ARE BASED ON CONSTRUCTION DRAWINGS NOT PREPARED BY BBS ARCHITECTS, LANDSCAPE ARCHITECTS AND ENGINEERS, PC. AND, THEREFORE, MAY NOT REPRESENT THE CONDITIONS AS CONSTRUCTED AT THE TIME. ALL EXISTIN CONDITIONS SHOWN ARE REPRESENTED AS SUGGESTIVE INFORMATION AS THEY MAY NOT HAVE BEEN BUILT AND DETAILED



DRAWING BY: CHECK BY: AED THIS DRAWING, PREPARED FOR THE SPECIFIC PROJECT INDICATED IS AN INSTRUMENT OF SERVICE AND THE PROPERTY OF BBS

LANDSCAPE ARCHITECTS ENGINEERS 244 EAST MAIN STREET | 1 87 WOLF ROAD, STE. 205

PATCHOGUE

NEW YORK 11772 NEW YORK 12205 T. 631.475.0349 F. 631.475.0361 F. 518.621.7655 www.BBSARCHITECTURE.com

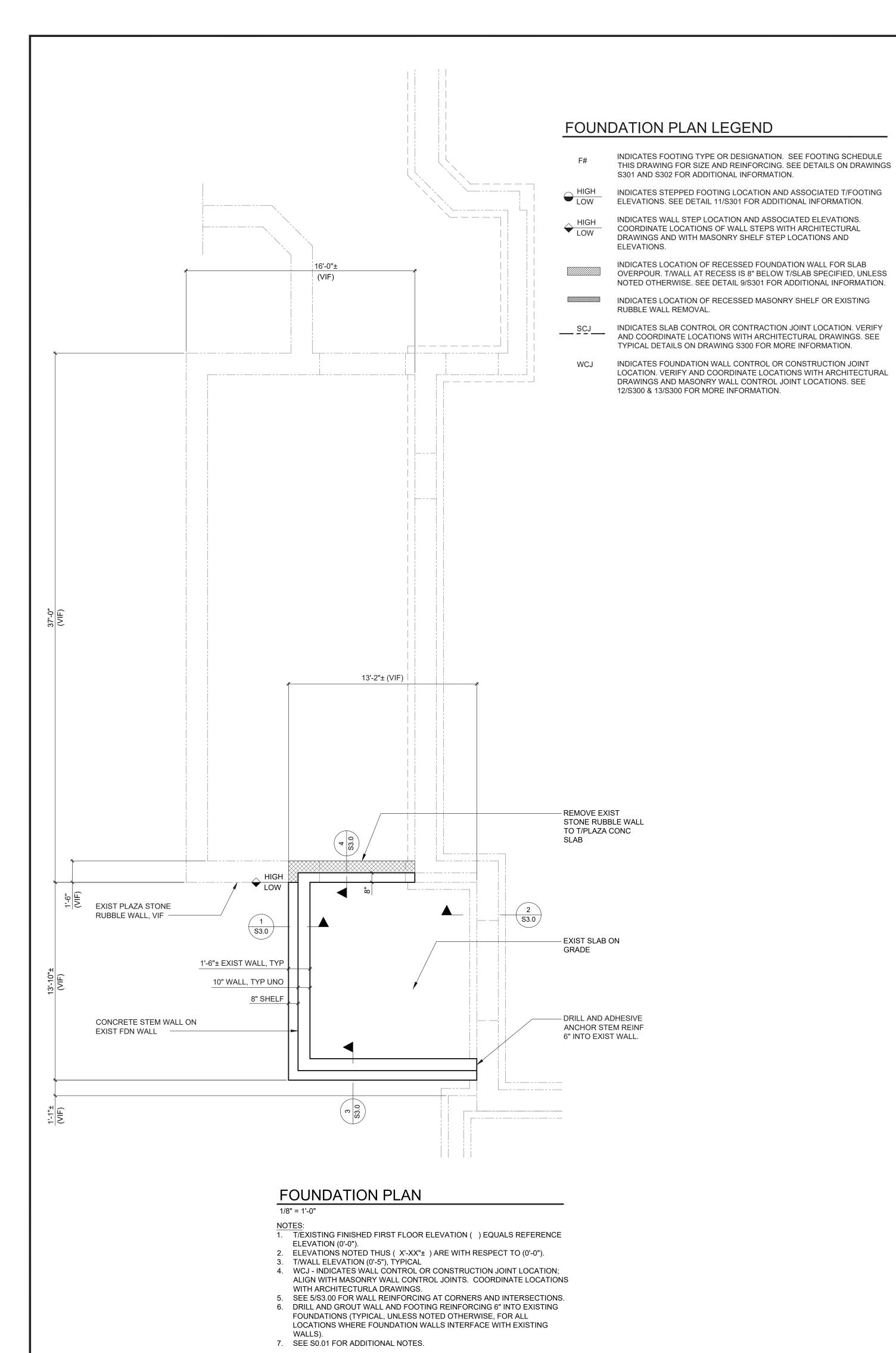
ARCHITECTS, LANDSCAPE ARCHITECTS AND ENGINEERS, POINFRINGEMENT OR ANY USE OF THIS DRAWING FOR ANY OTHER PROJECT IS PROHIBITED. ANY ALTERATION OR REPRODUCTION OF THIS DOCUMENT IS ALSO PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT OR ENGINEER.

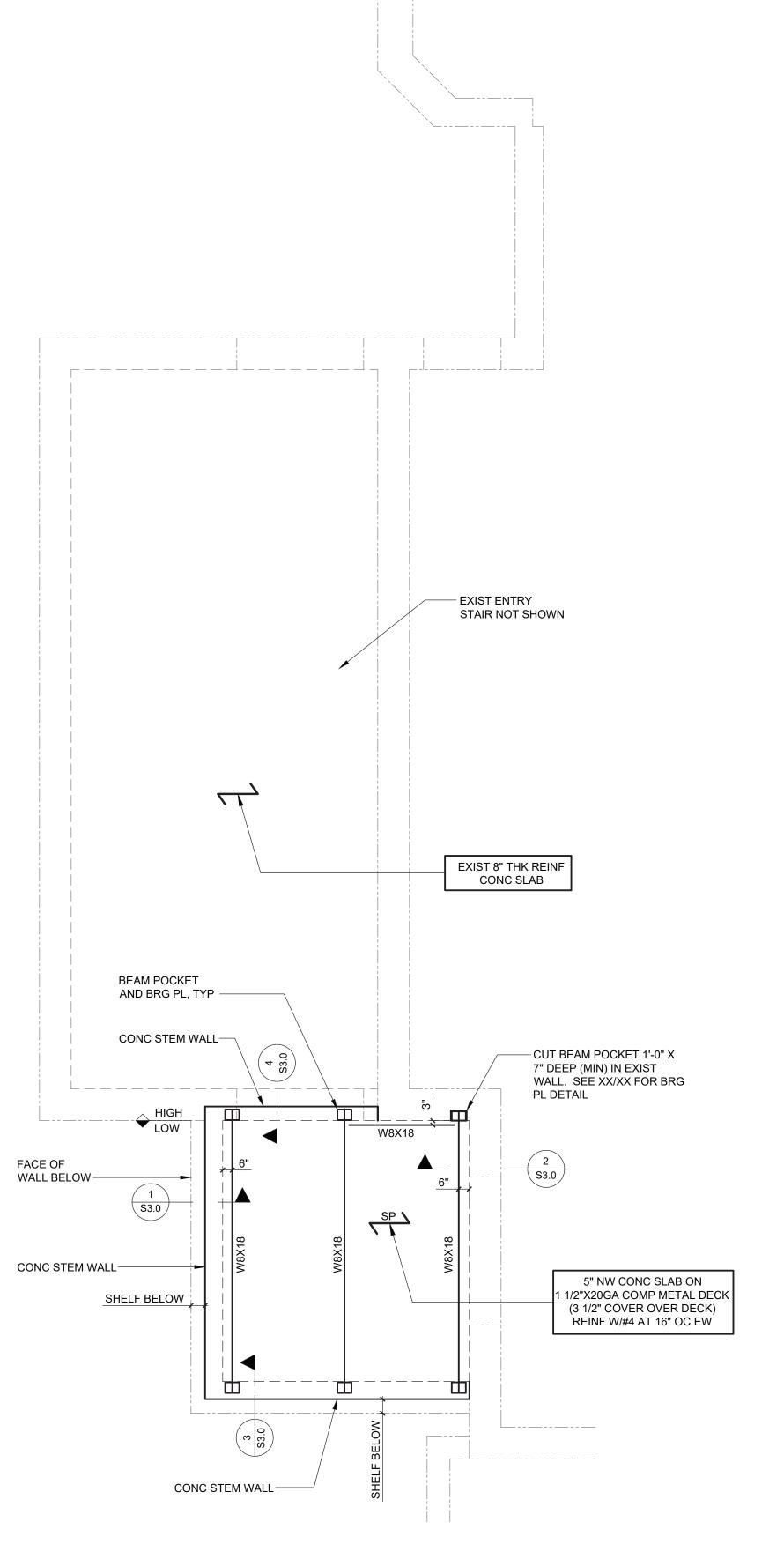


66-01-02-06-0-004-020

DISTRICT	BEDFORD CENTR
	SCHOOL DISTRI
PROJECT	PHASE 1 - BO
	IMPROVEMEN
<u>DWG TITLE</u>	SPECIAL INSPECTION NOT
	AND SCHEDUL
SCALE:	AS NOT
DATE:	10/19
BID PICK-UP:	
FILE No:	22-22

S0.02

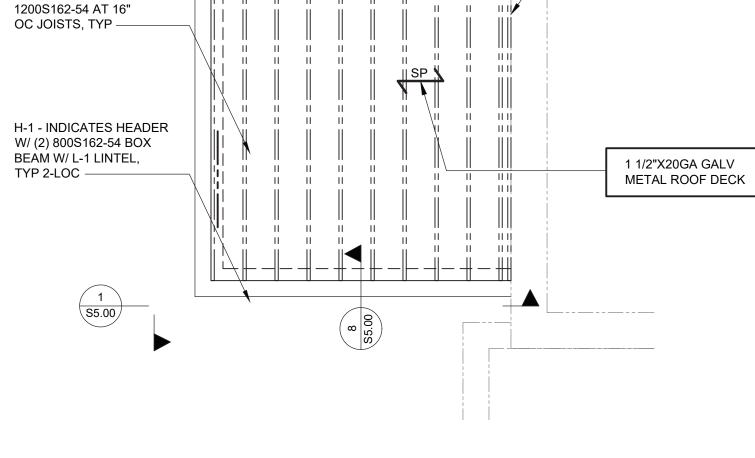




FLOOR FRAMING PLAN

1/8" = 1'-0"

- T/STEEL (B/DECK) ELEVATION (-0'-5") ABOVE REFERENCE ELEVATION (0'-0") UNLESS NOTED OTHERWISE. ELEVATIONS NOTED () ARE TO T/STEEL (B/DECK) WITH RESPECT TO ELEVATION (+).
- EQUALLY SPACE FLOOR BEAMS BETWEEN COLUMNS UNLESS NOTED
- BRGP# INDICATES BEARING PLATE. SEE S5.00 FOR DETAILS. SEE S3.00 FOR LINTEL SCHEDULE AND NOTES. NOT ALL LINTELS IN
- WALLS ARE SHOWN. 6. SEE S0.01 FOR ADDITIONAL NOTES.



- 362S162-54 AT 16" OC,

ON SLAB BELOW

BRG WALL SUPPORTED

– ADDL JOIST AT WALL

ROOF FRAMING PLAN

600S162-54 AT 16" OC,

TYP CFMF BRG WALL

3-SIDES, TYP UNO —

F/ VENEER-

1. T/STEEL (B/DECK) ELEVATION (+) ABOVE REFERENCE ELEVATION

(0'-0") UNLESS NOTED OTHERWISE.
2. EOD INDICATES EDGE OF DECK. 3. SEE S0.01 FOR ADDITIONAL NOTES.

DRAWING BY: CHECK BY: AED THIS DRAWING, PREPARED FOR THE SPECIFIC PROJECT INDICATED IS AN INSTRUMENT OF SERVICE AND THE PROPERTY OF BBS ARCHITECTS, LANDSCAPE ARCHITECTS AND ENGINEERS, PC. INFRINGEMENT OR ANY USE OF THIS DRAWING FOR ANY OTHER PROJECT IS PROHIBITED. ANY ALTERATION OR REPRODUCTION OF THIS DOCUMENT IS ALSO PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT OR ENGINEER. LANDSCAPE ARCHITECTS ENGINEERS

244 EAST MAIN STREET PATCHOGUE

NEW YORK 11772

F. 631.475.0361

S1.00

T. 631.475.0349

187 WOLF ROAD, STE. 205

NEW YORK 12205

F. 518.621.7655

66-01-02-06-0-004-020

BEDFORD CENTRAL SCHOOL DISTRICT

> PHASE 1 - BOND **IMPROVEMENTS**

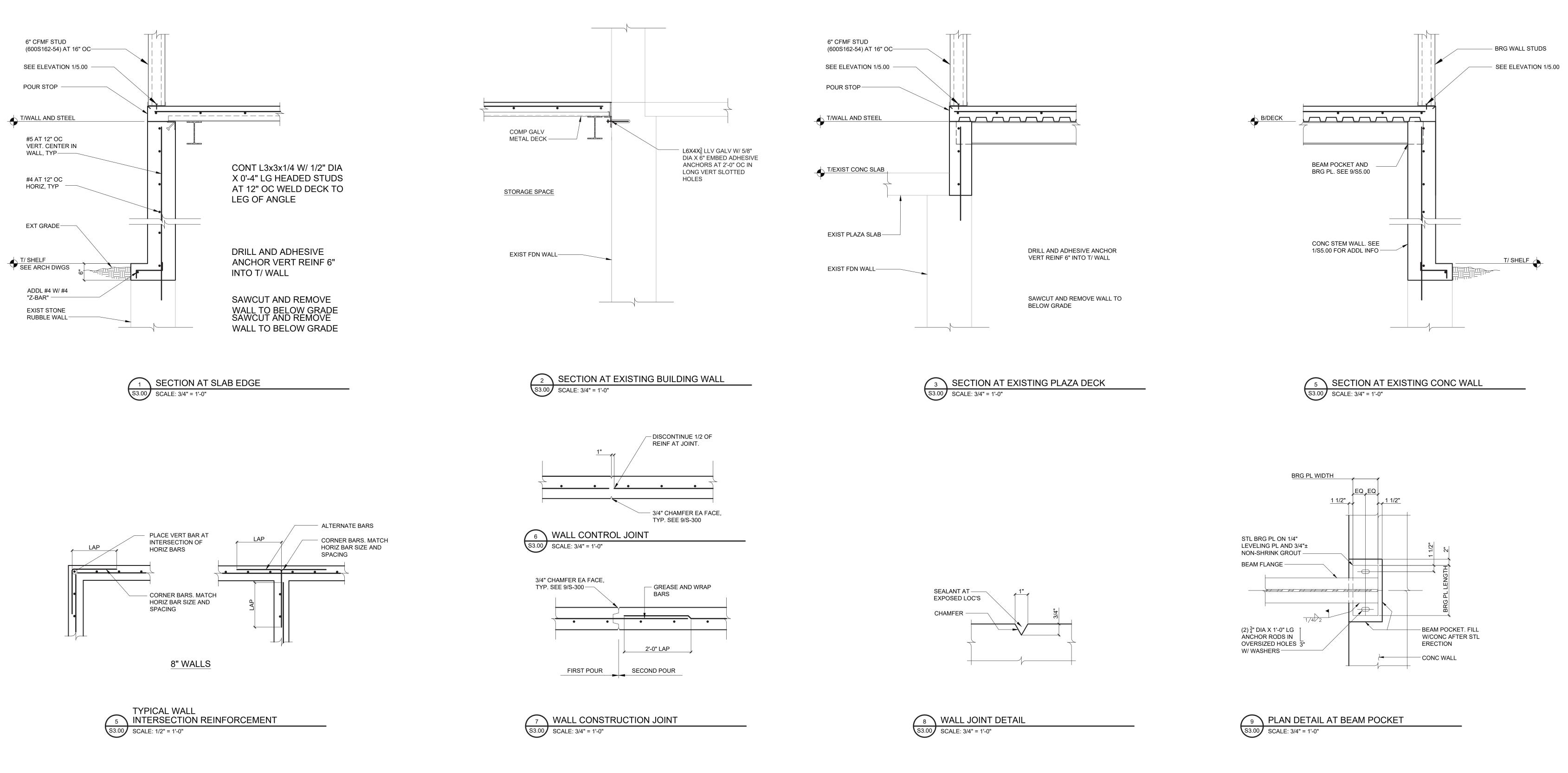
FOUNDATION AND FRAMING PLANS

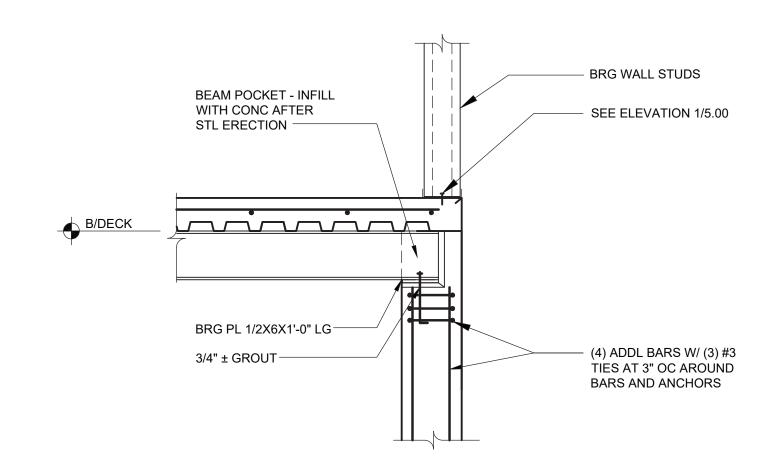
AS NOTED

www.BBSARCHITECTURE.com

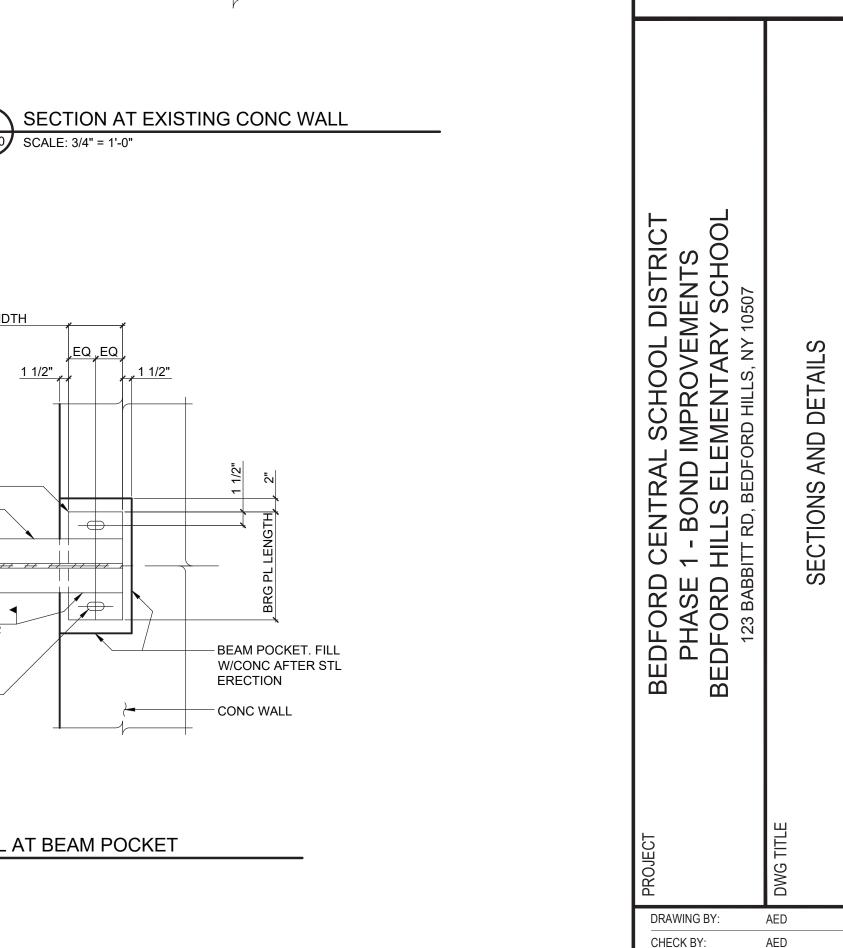
THESE DRAWINGS ARE BASED ON CONSTRUCTION DRAWINGS NOT PREPARED BY BBS ARCHITECTS, LANDSCAPE ARCHITECTS AND ENGINEERS, PC. AND, THEREFORE, MAY NOT REPRESENT THE CONDITIONS AS CONSTRUCTED AT THE TIME. ALL EXISTING CONDITIONS SHOWN ARE REPRESENTED AS SUGGESTIVE INFORMATION AS THEY MAY NOT HAVE BEEN BUILT AND DETAILED

REV. DATE









REV. DATE

ITEM

THESE DRAWINGS ARE BASED ON CONSTRUCTION DRAWINGS NOT PREPARED BY BBS ARCHITECTS, LANDSCAPE ARCHITECTS AND ENGINEERS, PC. AND, THEREFORE, MAY NOT REPRESENT THE CONDITIONS AS CONSTRUCTED AT THE TIME. ALL EXISTING CONDITIONS SHOWN ARE REPRESENTED AS SUGGESTIVE INFORMATION AS THEY MAY NOT HAVE BEEN BUILT AND DETAILED PER THE ORIGINAL DOCUMENTS OR PER THE OWNER'S INFORMATION.

Dalto Engineering
7 Maureen Court, Clifton Park, NY
www.daltopllc.com p.518.466.3317

66-01-02-06-0-004-020 BEDFORD CENTRAL SCHOOL DISTRICT PHASE 1 - BOND **IMPROVEMENTS** SECTIONS AND DETAILS AS NOTED 10/19/22 BID PICK-UP:

S3.00

THIS DRAWING, PREPARED FOR THE SPECIFIC PROJECT INDICATED IS AN INSTRUMENT OF SERVICE AND THE PROPERTY OF BBS ARCHITECTS, LANDSCAPE ARCHITECTS AND ENGINEERS, PC. INFRINGEMENT OR ANY USE OF THIS DRAWING FOR ANY OTHER PROJECT IS PROHIBITED. ANY ALTERATION OR REPRODUCTION OF THIS DOCUMENT IS ALSO PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT OR ENGINEER.

LANDSCAPE ARCHITECTS

www.BBSARCHITECTURE.com

187 WOLF ROAD, STE. 20

NEW YORK 12205

F. 518.621.7655

T. 518.621.7650

ARCHITECTS

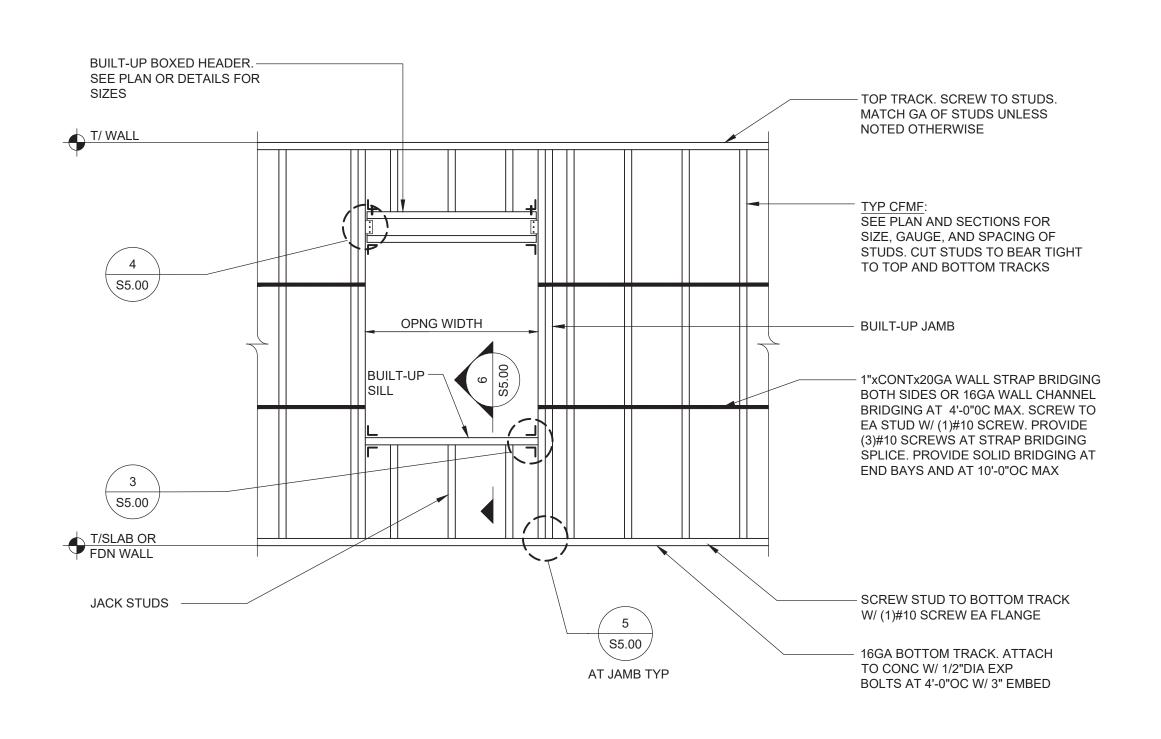
ENGINEERS

244 EAST MAIN STREET

PATCHOGUE NEW YORK 11772

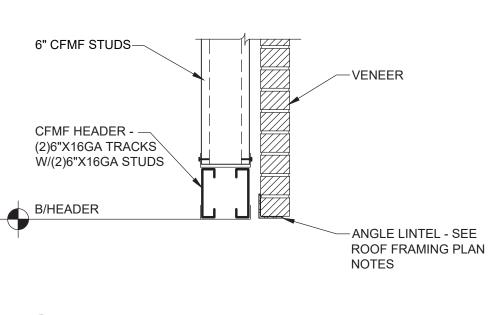
T. 631.475.0349

F. 631.475.0361



COLD-FORMED METAL FRAMING
BEARING WALL FRAMING ELEVATION S5.00 SCALE: 3/4" = 1'-0"

1. SEE ARCHITECTURAL DRAWINGS FOR OPENINGS SIZES AND LOCATIONS.
2. SEE SCHEDULE FOR HEADER AND JAMB SIZES.



2 SECTION AT CFMF HEADER S5.00 SCALE: 1" = 1'-0"

JAMB CONNECTION DETAIL

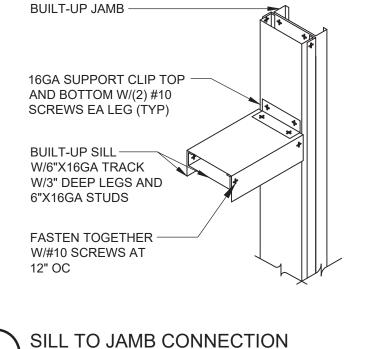
FASTEN CLIP TO CONC — FDN WALL W/(2) 0.145X1 1/4" POWDER-ACTUATED

FASTENERS

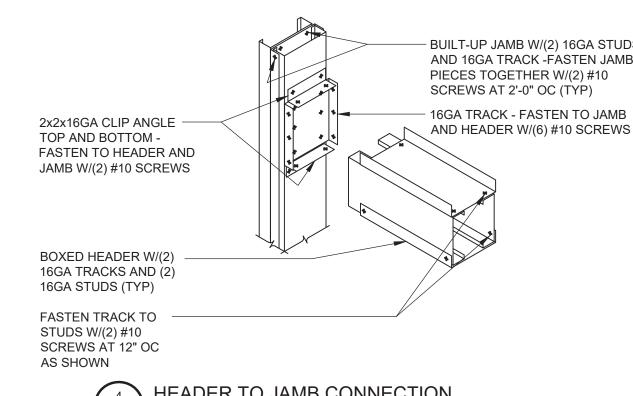
BOTTOM TRACK -

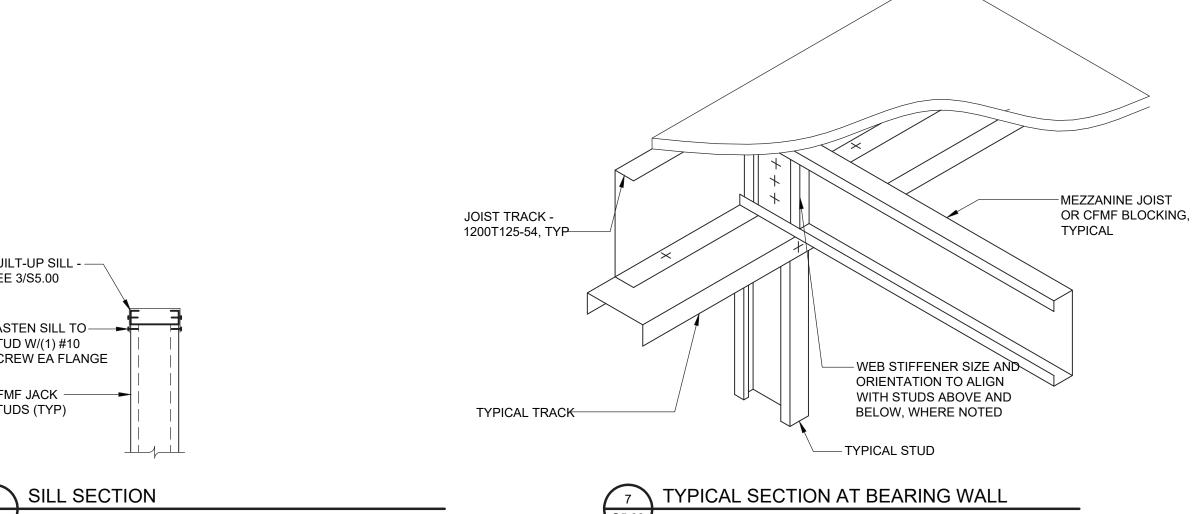
CONC FDN WALL -

S5.00 SCALE: 1" = 1'-0"



SILL TO JAMB CONNECTION
S5.0 SCALE: 1" = 1'-0"



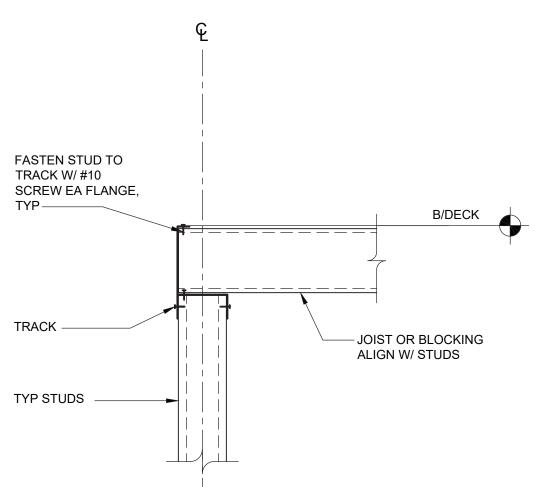


B/DECK — JOIST OR BLOCKING ALIGN W/ STUDS

— BUILT-UP JAMB STUD

W/(2) #10 SCREWS TO JAMB STUD

8 SECTION AT JOIST BEARING S5.00 SCALE: 1" = 1'-0"



DRAWING BY: CHECK BY: AED

THIS DRAWING, PREPARED FOR THE SPECIFIC PROJECT INDICATED IS AN INSTRUMENT OF SERVICE AND THE PROPERTY OF BBS ARCHITECTS, LANDSCAPE ARCHITECTS AND ENGINEERS, PC. INFRINGEMENT OR ANY USE OF THIS DRAWING FOR ANY OTHER PROJECT IS PROHIBITED. ANY ALTERATION OR REPRODUCTION OF THIS DOCUMENT IS ALSO PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT OR ENGINEER.

CFMF SECTIONS AND DETA

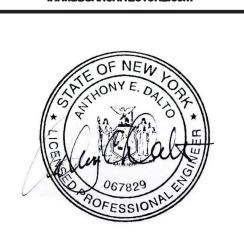
REV. DATE

THESE DRAWINGS ARE BASED ON CONSTRUCTION DRAWINGS NOT PREPARED BY BBS ARCHITECTS, LANDSCAPE ARCHITECTS AND ENGINEERS, P.C. AND, THEREFORE, MAY NOT REPRESENT THE CONDITIONS AS CONSTRUCTED AT THE TIME. ALL EXISTING CONDITIONS SHOWN ARE REPRESENTED AS SUGGESTIVE INFORMATION AS THEY MAY NOT HAVE BEEN BUILT AND DETAILED PER THE ORIGINAL DOCUMENTS OR PER THE OWNER'S INFORMATION.

Dalto Engineering
7 Maureen Court, Clifton Park, NY
www.daltopllc.com p.518.466.3317

LANDSCAPE ARCHITECTS ENGINEERS

244 EAST MAIN STREET 187 WOLF ROAD, STE. 205 PATCHOGUE NEW YORK 11772 NEW YORK 12205 T. 631.475.0349 T. 518.621.7650 F. 631.475.0361 F. 518.621.7655 www.BBSARCHITECTURE.com



SED NO.	66-01-02-06-0-004-020
<u>DISTRICT</u>	BEDFORD CENTRAL SCHOOL DISTRICT
<u>PROJECT</u>	PHASE 1 - BOND IMPROVEMENTS
DWG TITLE	CFMF SECTION AND DETAILS
SCALE:	AS NOTED
DATE:	10/19/22
BID PICK-UP:	

\$5.00 of BHES

— BUILT-UP JAMB W/(2) 16GA STUDS AND 16GA TRACK -FASTEN JAMB PIECES TOGETHER W/(2) #10 AND HEADER W/(6) #10 SCREWS 4 HEADER TO JAMB CONNECTION S5.00 SCALE: 1" = 1'-0" -METAL ROOF DECK. SEE PLAN

BUILT-UP SILL - — SEE 3/S5.00 FASTEN SILL TO-STUD W/(1) #10 SCREW EA FLANGE CFMF JACK ──── STUDS (TYP) 6 SILL SECTION S5.00 SCALE: 1" = 1'-0"

GENERAL NOTES

- REMOVAL & RELOCATION OF CERTAIN EXISTING WORK SHALL BE NECESSARY FOR THE PERFORMANCE OF THE NEW WORK SHOWN HEREIN. ALL EXISTING CONDITIONS ARE NOT COMPLETELY DETAILED ON THI DRAWINGS. THE CONTRACTOR SHALL SURVEY THE SITE & MAKE ALL NECESSARY CHANGES BASED ON EXISTING CONDITIONS AS REQUIRED FOR PROPER DEMOLITION OF EXISTING WORK & SHALL INCLUDE ALL MATERIALS & LABOR FOR SAME IN HIS BID PRICE. NO ALLOWANCE WILL BE MADE FOR FAILURE TO DO SO.
- PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL VISIT THE PREMISES OF THE PROPOSED WORK & SHALL CAREFULLY EXAMINE THE ENGINEERING DRAWINGS, EXISTING CONDITIONS & LIMITATIONS THEREOF. VERIFY ACTUAL LOCATIONS WHERE THE NEW PIPING WILL BE ROUTED. COORDINATE WITH NEW & EXISTING WORK & PROVIDE CLEARANCE W/ BUILDING STRUCTURE, OTHER SERVICES, ETC., THE CONTRACTOR SHALL INCLUDE ALL COSTS WHATSOEVER WHICH ARE INCURRED AS A RESULT OF LIMITATIONS OF THE EXISTING & NEW CONDITIONS. LATER CLAIMS FOR EXTRA LABOR, EQUIPMENT MATERIALS, ETC. REQUIRED DUE TO DIFFICULTIES WHICH COULD HAVE BEEN FORESEEN WILL NOT BE CONSIDERED AS EXTRA WORK.
- INSTALL WORK SO AS TO BE READILY ACCESSIBLE FOR OPERATING, MAINTENANCE & REPAIR. MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ACCOMPLISH THIS, BUT CHANGES OF MAGNITUDE WHICH INVOLVE EXTRA COST SHALL NOT BE MADE WITHOUT APPROVAL.
- INVESTIGATE EACH SPACE THROUGH WHICH EQUIPMENT MUST BE MOVED. WHEN NECESSARY, EQUIPMENT SHALL BE SHIPPED FROM MANUFACTURER IN CRATED SECTIONS OF SIZE SUITABLE FOR MOVING THROUGH AREAS AVAILABLE. ASCERTAIN FROM BUILDING OWNER AT WHAT TIMES OF DAY EQUIPMENT MAY BE MOVED THROUGH THE BUILDING.
- COORDINATE THE EXACT SIZE & LOCATION OF NEW OPENINGS WITH EXISTING STRUCTURE. PATCH / INSULATE AS REQUIRED. CONTRACTOR SHALL FIRESTOP ALL PENETRATIONS FROM NEW PIPING, CONDUIT, DUCTWORK, ETC. THROUGH EXISTING OR NEW FIRE/ SMOKE BARRIERS. REFER TO SPECIFICATION SECTION 15511 FOR FURTHER DETAILS.
- IT IS THE INTENT OF THIS CONTRACT FOR REMAINING SYSTEMS TO BE LEFT IN GOOD WORKING ORDER, READY FOR OPERATION. COORDINATE ANY REQUIRED SYSTEM SHUTDOWNS WITH OWNER 48 HOURS IN ADVANCE. EXISTING SYSTEM SHUTDOWNS WILL NOT BE PERMITTED IF THEY INTERFERE WITH THE DAILY OPERATIONS OF THE BUILDING. CONTRACTOR WILL BE REQUIRED TO TAKE PROPER PRECAUTIONS AGAINST DAMAGING OR DISRUPTING BUILDING SYSTEMS, WIRING, PIPING OR CONTROL TUBING. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED AT THE CONTRACTOR'S COST AS A PART OF THIS
- THE CONTRACTOR SHALL REPAIR / RESTORE TO ORIGINAL CONDITION ANY EXISTING EQUIPMENT OF MATERIALS DAMAGED IN THE PROCESS OF INSTALLATION, OR DEMOLITION TO THE SATISFACTION OF THI OWNER'S REPRESENTATIVE. CONTRACTOR SHALL MAKE REPAIRS USING THE SAME OR EQUIVALENT MATERIALS. WORK WILL BE PERFORMED AT THE CONTRACTOR'S COST.
- CONTRACTOR SHALL INCUR ANY COSTS OR BURDENS ASSOCIATED WITH LOST OR STOLEN EQUIPMENT / MATERIALS.
- MATERIAL ACCUMULATED AS A RESULT OF HIS OPERATIONS ON A DAILY BASIS. ALL AREAS / EQUIPMENT AFFECTED UNDER THIS CONTRACT SHALL BE KEPT CLEAN OF DUST / DEBRIS. ALL AREAS SHALL RECEIVE A FINAL CLEANING PRIOR TO FINAL ACCEPTANCE BY THE OWNER.

DURING THE LIFE OF THE CONTRACT PERIOD, CONTRACTOR SHALL REMOVE ALL RUBBISH / EXCESS

- PROVIDE FOR LEGAL REMOVAL / DISPOSAL OF ALL RUBBISH / DEBRIS FROM THE BUILDING & SITE. PROTECT ALL WORK NOT SLATED FOR DEMOLITION.
- THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES PRIOR TO SCHEDULING THE WORK. WORK SHALL BE PERFORMED IN PROPER SEQUENCE, AS AGREED TO BY ALL TRADES. ANY COSTS INCURRED BY THE OWNER DUE TO IMPROPER SEQUENCING OF WORK WILL BE PAID FOR BY THIS
- CONTRACTOR SHALL OBTAIN ALL PERMITS, PAY ALL FEES, CONNECTION CHARGES, ETC. ASSOCIATED WITH THE WORK UNDER THEIR CONTRACT.
- PAINT / TOUCH UP ALL SURFACES MARRED AS A RESULT OF THE PERFORMANCE OF THE CONTRACT
- THE MECHANICAL CONTRACTOR SHALL REFER TO / REVIEW ALL OTHER TRADE DRAWINGS IN THE BID PACKAGE & SHALL BE RESPONSIBLE FOR / PERFORM ALL WORK INDICATED AS (M.C.) MECHANICAL WORK AS A PART OF THE BASE BID UNLESS SPECIFICALLY NOTED OTHERWISE.
- SUBSTITUTED EQUIPMENT OF GREATER OR LARGER POWER. DIMENSIONS, CAPACITIES & RATINGS MAY BE FURNISHED PROVIDED THAT SAID EQUIPMENT IS APPROVED IN WRITING PRIOR TO ORDER. ANY CONNECTING MECHANICAL SERVICES, ELECTRICAL SERVICES, BASES, STRUCTURAL APPURTENANCES, ETC. REQUIRED TO BE INCREASED DUE TO THE USE OF SAID EQUIPMENT WILL BE PAID FOR IN FULL BY THE MECHANICAL CONTRACTOR, INCLUDING ANY ADDITIONAL REQUIRED ENGINEERING FEES.
- . EACH PIECE OF EQUIPMENT SHALL BE PROVIDED WITH A PERMANENT TYPE LAMINATED, BLACK FINISH WHITE CORE, PHENOLIC NAMEPLATE. NAMEPLATES SHOULD INDICATE THE NAME & NUMBER OF THE UNIT UNIT VOLTAGE, & ANY INTERLOCK REFERENCE. STARTERS / DISCONNECT SWITCHES SHOULD ALSO BE EQUIPPED WITH AN IDENTICAL NAMEPLATE WITH THE SAME INFORMATION.
- "ATTIC STOCK" UPON COMPLETION OF THE PROJECT, MECHANICAL CONTRACTOR SHALL COMPLETELY REMOVE / DISPOSE OF FILTERS USED DURING CONSTRUCTION & START-UP PROCEDURES. INSTALL NEW FILTERS IN ALL EQUIPMENT, MERV-8 OR BETTER UPON TURN OVER OF THE PROJECT TO THE OWNER. IN ADDITION, PROVIDE (2) COMPLETE SETS OF FILTERS FOR EACH PEICE OF EQUIPMENT & TURN OVER TO
- . MECHANICAL CONTRACTOR SHALL PROVIDE (1) SPARE MOTOR FOR EACH SIZE MOTOR USED ON THE PROJECT. IN INSTANCES WHERE MORE THAN TEN OF THE SAME MOTOR ARE USED, MECHANICAL CONTRACTOR SHALL PROVIDE (1) SPARE MOTOR FOR EVERY TEN MOTORS OF A GIVEN SIZE USED ON THE
- MAINTENANCE MANUAL: UPON COMPLETION OF THE PROJECT, THE MECHANICAL CONTRACTOR SHALL PROVIDE A BINDER CONTAINING THE OPERATIONS & MAINTENANCE MANUALS FOR EACH NEW PEICE OF EQUIPMENT INSTALLED UNDER THIS PROJECT. THE FIRST SECTION OF THE MAINTENANCE MANUAL SHALL CONTAIN A LIST OF EACH PEICE OF EQUIPMENT, COMPLETE WITH INFORMATION SHOWING APPROPRIATE REPLACEMENT FILTER SIZES / TYPES, APPROPRIATE REPLACEMENT BELT SPECIFICATIONS, REPLACEMENT MOTOR SPECIFICATIONS, REPLACEMENT BEARING SPECIFICATIONS, VOLTAGES OF UNIT, ETC. THIS SHALL SERVE AS A WRITTEN DATABASE DESCRIBING ALL MAINTENANCE INFORMATION FOR EACH NEW PEICE OF EQUIPMENT USED.

BOILER ROOM and PIPING NOTES

- THE DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL PIPING & EQUIPMENT, & INDICATE THI REQUIRED SIZE / POINTS OF TERMINATION OF THE PIPING & SUGGEST PROPER ROUTING OF SAME. IT IS NOT THE INTENTION OF THE DRAWINGS TO SHOW ALL NECESSARY OFFSETS, RISES, DROPS, OBSTRUCTIONS OR STRUCTURAL CONDITIONS. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO INSTALL HIS WORK IN SUCH A MANNER THAT IT WILL CONFORM TO THE STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM & KEEP OPENINGS / PASSAGEWAYS CLEAR WITHOUT FURTHER CONSTRUCTION OR COST.
- ALL FLOOR MOUNTED BOILER ROOM EQUIPMENT SHALL BE INSTALLED ON A LEVEL, REINFORCED CONCRETE HOUSEKEEPING PAD, 4" THICK MIN. UNLESS OTHERWISE NOTED. ALL HOUSEKEEPING PADS SHALL BE INSTALLED BY THE MECHANICAL CONTRACTOR. PADS SHALL BE REINFORCED W/ WELDED WIRE MESH & SHALL BE POURED USING 3,000 PSI CONCRETE.
- MECHANICAL CONTRACTOR SHALL PROVIDE & INSTALL ALL REQUIRED STRUCTURAL SUPPORTS FOR ALL PIPING SYSTEMS & EQUIPMENT AS REQUIRED. PIPING SYSTEMS SHALL BE EQUIPPED WITH EXPANSION COMPENSATORS AT THE INTERVALS REQUIRED. PROVIDE PIPING GUIDES / ANCHORS AS REQUIRED.
- MECHANICAL CONTRACTOR SHALL PROPERLY INSULATE ALL NEW PIPING SYSTEMS & EQUIPMENT. REFER TO SPECIFICATION SECTION 15250 FOR FURTHER DETAILS REGARDING INSULATION REQUIREMENTS UPON COMPLETION OF INSULATION WORK, MECHANICAL CONTRACTOR SHALL PROPERLY LABEL EACH PIPING RUN SHOWING THE TYPE OF FLUID CARRIED & DIRECTION OF FLOW. PIPE IDENTIFICATION MARKERS SHALL BE INSTALLED EVERY 20 FEET IN THE PIPING RUNS.
- LEGEND LISTING VALVE #, TYPE OF VALVE, SERVICE TYPE, & LOCATION OF VALVE. KEY VALVE #S TO AS-BUILT DRAWINGS UPON COMPLETION OF PROJECT.

ALL VALVES WITHIN PIPING SYSTEMS SHALL BE TAGGED USING A 1-1/2" DIA. BRASS TAG. PROVIDE A

- MECHANICAL CONTRACTOR SHALL SUBMIT (3) SETS OF OPERATING MANUALS FOR EACH PIECE / TYPE OF MECHANICAL EQUIPMENT.
- MECHANICAL CONTRACTOR SHALL PROVIDE & INSTALL ALL WIRING & DEVICES AS REQUIRED TO CONTROL THE BOILER ROOM EQUIPMENT AS DESCRIBED IN THE SEQUENCE OF OPERATIONS LISTED IN THE PROJECT MANUAL. REFER TO SPECIFICATION SECTION 15903 FOR FURTHER DETAILS.

FIRESTOPPING NOTES

- ALL PENETRATIONS RELATED TO MECHANICAL WORK THROUGH FIRE RATED WALLS, FLOORS OR OTHER STRUCTURES SHALL BE FIRE STOPPED AS REQUIRED TO MAINTAIN THE RATING OF THE WALL BY MECHANICAL CONTRACTOR. IT IS ASSUMED THAT ALL WALLS IN THE CONSTRUCTION CARRY A MINIMUM FIRE RATING OF 1 HR. IT SHOULD BE ASSUMED THAT ALL MACHINE ROOM WALLS / BOILER ROOM WALLS / ELECTRIC ROOM WALLS CARRY A RATING OF 2 HR. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR A COMPLETE REVIEW OF THE ARCHITECTURAL DRAWINGS IN ORDER TO DETERMINE FIRE RATINGS OF ALL WALLS / PARTITIONS RELATED TO WORK UNDER THIS CONTRACT.
- MECHANICAL CONTRACTOR SHALL REVIEW THE COMPLETE ARCHITECTURAL SET OF DRAWINGS IN ORDER TO DETERMINE WHERE DUCT PENETRATIONS THROUGH RATED BARRIERS. DUCTS PENETRATING SAID RATED BARRIERS SHALL BE EQUIPPED WITH A UL LISTED FUSIBLE LINK TYPE FIRE DAMPER, RATED FOR SERVICE FOR WHICH IT IS BEING USED. FIRE DAMPERS SHALL BE PROVIDED & INSTALLED BY THE MECHANICAL CONTRACTOR, COMPLETE W/ DUCT ACCESS DOORS DIRECTLY ADJACENT TO THE DAMPER, POSITIONED FOR EASY REPLACEMENT OF THE LINK.
- MECHANICAL CONTRACTOR SHALL REVIEW THE COMPLETE ARCHITECTURAL SET OF DRAWINGS IN ORDER TO DETERMINE WHERE DUCT PENETRATIONS THROUGH RATED BARRIERS OCCUR BETWEEN SEPARATE SMOKE ZONES. DUCTS PENETRATING SAID FIRE / SMOKE BARRIERS SHALL BE EQUIPPED WITH A UL LISTED COMBINATION FIRE / SMOKE DAMPER, RATED FOR SERVICE FOR WHICH IT IS BEING USED. FIRE / SMOKE DAMPERS SHALL BE PROVIDED & INSTALLED BY THE MECHANICAL CONTRACTOR, COMPLETE WA DUCT ACCESS DOORS DIRECTLY ADJACENT TO THE DAMPER. DAMPER ACTUATOR & RELATED WIRING SHALL BE PROVIDED & INSTALLED BY THE ELECTRICAL CONTRACTOR. COORDINATE DAMPER INSTALLATIONS W/ E.C. TO VERIFY PROPER CLEARANCES TO ASSURE PROPER DAMPER OPERATION.
- MECHANICAL CONTRACTOR SHALL PROVIDE A FULL SET OF AS-BUILT DRAWINGS, SHOWING EACH DAMPER LOCATION, TYPE OF DAMPER, ACCESS DOOR LOCATIONS, ETC. CONTRACTOR SHALL REFER TO SPECIFICATION SECTION 15511 FOR FURTHER DETAILS REGARDING FIRESTOPPING MATERIALS & METHODS.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PRODUCTS TO BE USED. FIRESTOP MATERIALS OTHER THAN THE PRODUCTS SPECIFIED SHALL INCLUDE FULL TECHNICAL DATA WITH SHOP DRAWINGS TO DEMONSTRATE EQUALITY WITH THE SPECIFIED FIRESTOPPING MATERIALS.

GENERAL INSTRUMENTATION NOTES

- AT A MINIMUM, PROVIDE THERMOMETERS / WELLS AT THE FOLLOWING LOCATIONS:
- AT INLETS & OUTLET OF EACH THREE WAY VALVE (UNIT VENTILATORS / CABINET UNIT HEATER INSTALLATIONS EXCEPTED).
- AT INLET & OUTLET OF EACH HYDRONIC BOILER, CHILLER OR COOLING TOWER. AT INLET & OUTLET OF EACH HYDRONIC COIL IN AIR HANDLING UNITS & BUILT-UP CENTRAL SYSTEMS.
- AT A MINIMUM, PROVIDE LIQUID FILLED PRESSURE GAUGES / WELLS AT THE FOLLOWING LOCATIONS:
- AT SUCTION & DISCHARGE OF EACH PUMP.

FOR EACH MAKEUP WATER LINE.

- BEFORE & AFTER ALL PRESSURE REDUCING VALVES.
- AT ACCESSIBLE HIGH POINT OF ALL HYDRONIC PIPING SYSTEMS. AT ALL EXPANSION / COMPRESSION TANKS.

EQUIPMENT VENTING NOTES

- MECHANICAL CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER VENTING OF ALL NEWLY INSTALLED HYDRONIC PIPING SYSTEMS. AUTOMATIC AIR VENTS SHALL BE INSTALLED AT EVERY HIGH POINT IN THE PIPING SYSTEM WHERE AIR CAN COLLECT. PROVIDE COCK IN RISER PRIOR TO AUTOMATIC AIR VENT. NEW AIR VENTS SHALL BE "TACO" #HY-VENT OR EQUIVALENT.
- 2. MECHANICAL CONTRACTOR SHALL PROVIDE & INSTALL NEW AUTOMATIC AIR VENT FOR EACH AIR HANDLING UNIT COIL OR DUCT MOUNTED COIL. INSTALL SHUT-OFF COCK PRIOR TO VENT TIE-IN.
- MECHANICAL CONTRACTOR SHALL PROVIDE NEW MANUAL AIR VENTS FOR ALL UNIT VENTILATOR COILS, CONVECTORS, FAN COIL UNITS, FIN TUBE RADIATORS, ETC. MANUAL VENTS SHALL BE "TACO" #417 COIN VENT OR EQUIVALENT. PROVIDE SHUT-OFF COCK PRIOR TO VENT. AIM COIN VENT DISCHARGE IN AN APPROPRIATE MANNER AS TO FACILITATE THE CAPTURE OF BLEED WATER WHILE PERFORMING SYSTEM BLEEDING OPERATIONS.

ELECTRICAL WORK UNDER MECHANICAL CONTRACT

- MECHANICAL CONTRACTOR SHALL PROVIDE ALL STARTERS & DISCONNECT SWITCHES REQUIRED FOR ALL NEW MECHANICAL EQUIPMENT. STARTER / DISCONNECT SWITCH INSTALLATION TO BE PERFORMED UNDER THE ELECTRICAL CONTRACT. COORDINATE WORK W/ ELECTRICAL CONTRACTOR PRIOR TO START
- POWER WIRING REQUIRED FOR CONTROLS SHALL BE PERFORMED UNDER THE MECHANICAL CONTRACT UNLESS SPECIFICALLY NOTED OTHERWISE ON THE ELECTRICAL DRAWINGS. MECHANICAL CONTRACTOR SHALL OBTAIN THE SERVICES OF A LICENSED ELECTRICIAN (PER NEC REQUIREMENTS) TO PERFORM ALL ELECTRICAL WORK.

DUCTWORK NOTES

- PROVIDE ALL NEW DUCTWORK AS SHOWN AND SPECIFIED UNDER SPECIFICATION SECTION 015891, AND IN CONFORMANCE WITH 'SMACNA' SPECIFICATIONS.
- IF A DUCT ELBOW IS SHOWN TO BE RADIUSED, THEN RADIUSED ELBOWS SHALL BE INSTALLED. SQUARE ELBOWS MAY NOT BE SUBSTITUTED WHERE RADIUSED ELBOWS ARE SHOWN. WHERE SQUARE ELBOWS ARE SHOWN, TURNING VANES SHALL BE INSTALLED UPON APPROVAL BY THE ENGINEER.
- PROVIDE DUCT LINING IN ALL DUCTWORK THAT IS CONVEYING BELOW AMBIENT TEMPERATURE AIR & IS NOT INSULATED. PROVIDE LINING IN SUPPLY & RETURN AIR DUCTWORK FROM AIR HANDLING EQUIPMENT TO 20 FEET AWAY FROM THE UNIT(S). IN ADDITION, INCLUDE LINING IN ANY OTHER DUCT SPECIFICALLY SHOWN OR SPECIFIED TO BE EQUIPPED WITH LINING. REFER TO SPECIFICATION SECTION 15891 & 15290 FOR FURTHER INFORMATION.
- WHERE FLEXIBLE DUCTWORK IS USED, LENGTHS MAY NOT EXCEED 4 FEET TOTAL IN ANY ONE RUN OF FLEXIBLE DUCTWORK. FLEXIBLE DUCTWORK SHALL BE RATED IN ACCORDANCE WITH UL 181, CLASS 1. REFER TO SPECIFICATION SECTION 15891 FOR FURTHER INFORMATION.
- MECHANICAL CONTRACTOR SHALL PROVIDE A BUTTERFLY TYPE VOLUME DAMPER WITH LOCKING QUADRANT HANDLE PRIOR TO EACH AIR OUTLET SHOWN. INSTALL DAMPER AT LEAST 5 FEET AWAY FROM AIR OUTLET WHEREVER POSSIBLE.
- MECHANICAL CONTRACTOR SHALL PROVIDE FLEXIBLE DUCT CONNECTIONS WHERE DUCT SYSTEMS CONNECT TO EQUIPMENT. REFER TO SPECIFICATION SECTION 15891 FOR FURTHER INFORMATION.

TESTING and BALANCING NOTES

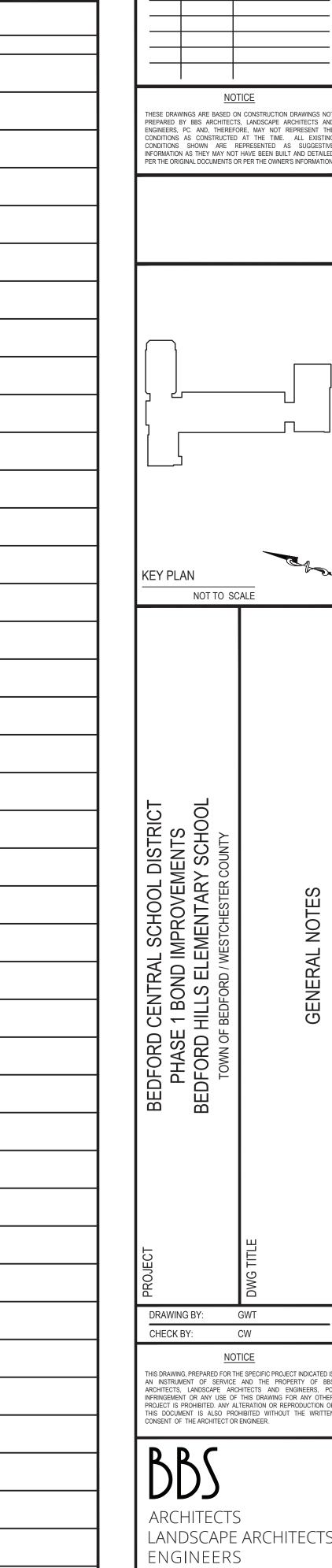
- MECHANICAL CONTRACTOR WILL BE REQUIRED TO PERFORM ALL EQUIPMENT & SYSTEM TESTING / BALANCING REQUIRED UNDER THIS CONTRACT. PROVIDE A FULL REPORT DETAILING ALL DESIGN & ACTUAL CONDITIONS FOR ALL AIR & HYDRONIC SYSTEMS SHOWN ON THE DRAWINGS. REFER TO SPECIFICATION SECTIONS 15990 & 15997 FOR FURTHER DETAILS.
- UPON NOTICE OF COMPLETION OF WORK BY THE CONTRACTOR, OWNER WILL OBTAIN THE SERVICES OF AN INDEPENDENT TESTING & BALANCING CONTRACTOR TO VERIFY THE RESULTS OF THE TESTING & BALANCING REPORT SUBMISSION. INDEPENDENT TESTING AGENCY SHALL SELECT A RANDOM NUMBER OF MEASUREMENTS TO BE CHECKED. MEASUREMENTS WILL BE CHECKED IN THE SAME MANNER AS ORIGINALLY MEASURED. NUMBER OF VERIFICATION MEASUREMENTS SHALL BE APPROXIMATELY 25% OF THE TOTAL MEASUREMENTS FOR THE PROJECT.
- IF MORE THAN 10% OF THE VERIFICATION TESTING SHOWS DEVIATIONS OF 10% OR MORE / SOUND LEVEL OF 2dB DIFFERENT THAN THAT ORIGINALLY MEASURED, THE ORIGINAL REPORT WILL BE REJECTED. A SYSTEMS WILL THEN BE REQUIRED TO BE COMPLETELY RE-TESTED, WITH A SECOND REPORT SUBMITTED IN THE EVENT THAT THE ORIGINAL REPORT IS REJECTED, ALL SYSTEMS SHALL BE READJUSTED & TESTED NEW CERTIFIED REPORTS SUBMITTED, AND NEW VERIFICATION TESTS MADE, AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS INVOLVED WITH THE VERIFICATION TESTS.

ABBREVIATIONS	
A.F.F	ABOVE FINISHED FLOOR
B.D,	BACKDRAFT DAMPER
cws	COLD WATER SUPPLY
CFM	CUBIC FEET OF AIR PER MINUTE
D	DEEP / DEPTH
DIA,/~	DIAMETER
F&T	FLOAT & THERMOSTATIC
FPM	FEET PER MINUTE
FSD	FIRE DAMPER - DUCT MOUNTED
FLEX	FLEXIBLE
FO	FLAT OVAL DUCTWORK
GAL	GALLONS
GPH	
	HIGH
H.C	HANDICAPPED
	TING SYSTEM HOT WATER SUPPLY
	ING SYSTEM HOT WATER RETURN
HP.	HORSEPOWER
I.D.	INSIDE DIAMETER
KW	KILOWATT,
<u>L</u>	LONG
LAT	LEAVING AID TEMPERATURE
	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MIN	MIŅIMUM
МВН	BTU x 1,000
MFR	MANUFACTURER
м.ң	MANHOLE
MISC	MISCELLANEOUS
MTD	MOUNTED
G	
N.I.C	NOT IN CONTRACT
No./#	NUMBER
NOM	NOMIŅAL
N.T,S	NOT TO SCALE
O.A	OUTSIDE AIR
O.C	ON CENTER
O.D	
O.S. &.Y	OUTSIDE SCREW & YOKE
0.C	ON CENTER
PE	PNEUMATIC / ELECTRIC
PREFAB	PREFABRIÇATED
	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
	REVOLUTIONS PER MINUTE
	SUPPLY AIR
	STATIC PRESSURE
	STANDARD
	TEMPERATURE
	. THERMAL EXPANSION VALVE
	VOLUME DAMPER
	VELOCITY
	VARIABLE FREQUENCY DRIVE
	WIDE
	WET BULB TEMPERATURE
	WATER TEMPERATURE DROP
WTR	
WPD	WATER PRESSURE DROP.

SYMBOL	DESCRIPTION
24x12 / 20"~	RECTANGULAR GALVANIZED DUCTWORK - DIMENSIONS 'W' x 'H'
E	NEW SUPPLY DUCTWORK TO RISE UP
	NEW SUPPLY DUCTWORK TO DROP DOWN
\$	NEW RETURN DUCTWORK TO RISE UP
	NEW RETURN DUCTWORK TO DROP DOWN
E 3	TRANSITION IN DUCTWORK
	FIRE DAMPER INSTALLED IN DUCTWORK
	VOLUME DAMPER IN DUCT (w/ LOCKING QUADRANT HANDLE)
5 0	ROUND DUCTWORK TO RISE UP
5	ROUND DUCTWORK TO DROP DOWN
42x18 FO	FLAT OVAL DUCT WORK
	RECTANGULAR TO ROUND DUCT TRANSITION
Z-4 12-12-12-12-12-12-12-12-12-12-12-12-12-1	ELBOW IN DUCTWORK w/ TURNING VANES
24	ELBOW IN DUCTWORK (RADIUS + 1.5 x D)
	45 DEG. TAKEOFF FITTING
	90 DEG. TAKEOFF w/ BELLMOUTH FITTING
	FLEXIBLE DUCTWORK TO DIFFUSER (4 FT. MAX. RUN)
	4-WAY PATTERN CEILING DIFFUSER
	3-WAY PATTERN CEILING DIFFUSER
	2-WAY PATTERN CEILING DIFFUSER (90 DEG. / OPPOSING PATTER
	CEILING RETURN AIR REGISTER
	LINEAR SLOT DIFFUSER
	ROOF MOUNTED EXHAUST FAN

PIPING SYMBOL SYMBOL	DESCRIPTION
 	PIPING TO RISE UP
	PIPING TO DROP DOWN
P.A.	PIPING ANCHOR
	PIPING GUIDE
	COLD WATER SUPPLY PIPING
HWS	HEATING SYSTEM SUPPLY PIPING
— ————————————————————————————————————	HEATING SYSTEM RETURN PIPING
	CHILLED WATER SUPPLY PIPING
	CHILLED WATER RETURN PIPING
	CONDENSER WATER SUPPLY PIPING
	CONDENSER WATER RETURN PIPING
CD	CONDENSATE DRAINAGE PIPING
F.O.S	FUEL OIL SUPPLY PIPING
F.O.R	FUEL OIL RETURN PIPING
G	LOW PRESSURE NATURAL GAS PIPING
———EG ———	ELEVATED PRESSURE NATURAL GAS PIPING
<u> </u>	GAS COCK
	DIRT LEG IN PIPING
LP	LIQUEFIED PETROLEUM GAS PIPING
V	VENT PIPING
	LINEAR EXPANSION COMPENSATOR
	EXPANSION LOOP IN PIPING
	UNION IN PIPING
	PIPING STRAINER (w/ BLOWDOWN VALVE)
	REDUCER / INCREASER FITTINGS IN PIPING
<u> </u>	ECCENTRIC REDUCER IN PIPING
	THERMOMETER
<u></u>	PRESSURE GAUGE
	FULL PORT BALL VALVE
	GATE VALVE
	SWING CHECK VALVE
	BALANCING VALVE
	3-WAY VALVE (w/ OPERATOR)
	CIRCUIT CETTER
3	TRIPLE DUTY VALVE
	WAFER VALVE
]	PLUG / CAP IN PIPING
4	PNEUMATIC CONTROL VALVE OPERATOR
	ELECTRIC CONTROL VALVE OPERATOR
	AUTOMATIC AIR VENT
	EXISTING PIPING

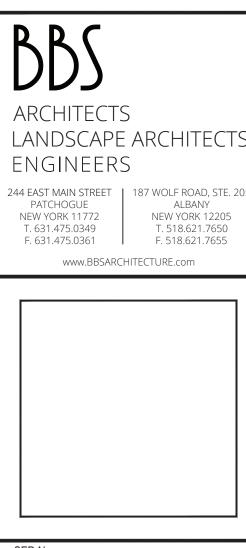
PIPING SYMBOL	<u>LEGEND</u>
SYMBOL	DESCRIPTION
 	PIPING TO RISE UP
191	PIPING TO DROP DOWN
P.A.	PIPING ANCHOR
	PIPING GUIDE
	COLD WATER SUPPLY PIPING
HWS —	HEATING SYSTEM SUPPLY PIPING
— — HWR — —	HEATING SYSTEM RETURN PIPING
	CHILLED WATER SUPPLY PIPING
	CHILLED WATER RETURN PIPING
	CONDENSER WATER SUPPLY PIPING
	CONDENSER WATER RETURN PIPING
CD	CONDENSATE DRAINAGE PIPING
F.O.S. —	FUEL OIL SUPPLY PIPING
F.O.R. —	FUEL OIL RETURN PIPING
G	LOW PRESSURE NATURAL GAS PIPING
EG	ELEVATED PRESSURE NATURAL GAS PIPING
<u>\\</u>	GAS COCK
+	DIRT LEG IN PIPING
LP	LIQUEFIED PETROLEUM GAS PIPING
	VENT PIPING
	LINEAR EXPANSION COMPENSATOR
	EXPANSION LOOP IN PIPING
	UNION IN PIPING
1	PIPING STRAINER (w/ BLOWDOWN VALVE)
_Ŋ <u></u>	REDUCER / INCREASER FITTINGS IN PIPING
	ECCENTRIC REDUCER IN PIPING
	THERMOMETER
©	PRESSURE GAUGE
	FULL PORT BALL VALVE
	GATE VALVE
<u> </u>	SWING CHECK VALVE
<u> </u>	BALANCING VALVE
	3-WAY VALVE (w/ OPERATOR)
	CIRCUIT CETTER
3	TRIPLE DUTY VALVE
	WAFER VALVE
	PLUG / CAP IN PIPING
$\widetilde{+}$	PNEUMATIC CONTROL VALVE OPERATOR
	ELECTRIC CONTROL VALVE OPERATOR
· 中	AUTOMATIC AIR VENT
	EXISTING PIPING



REV. DATE

NOTICE NOTICE

NOT TO SCALE



GWT

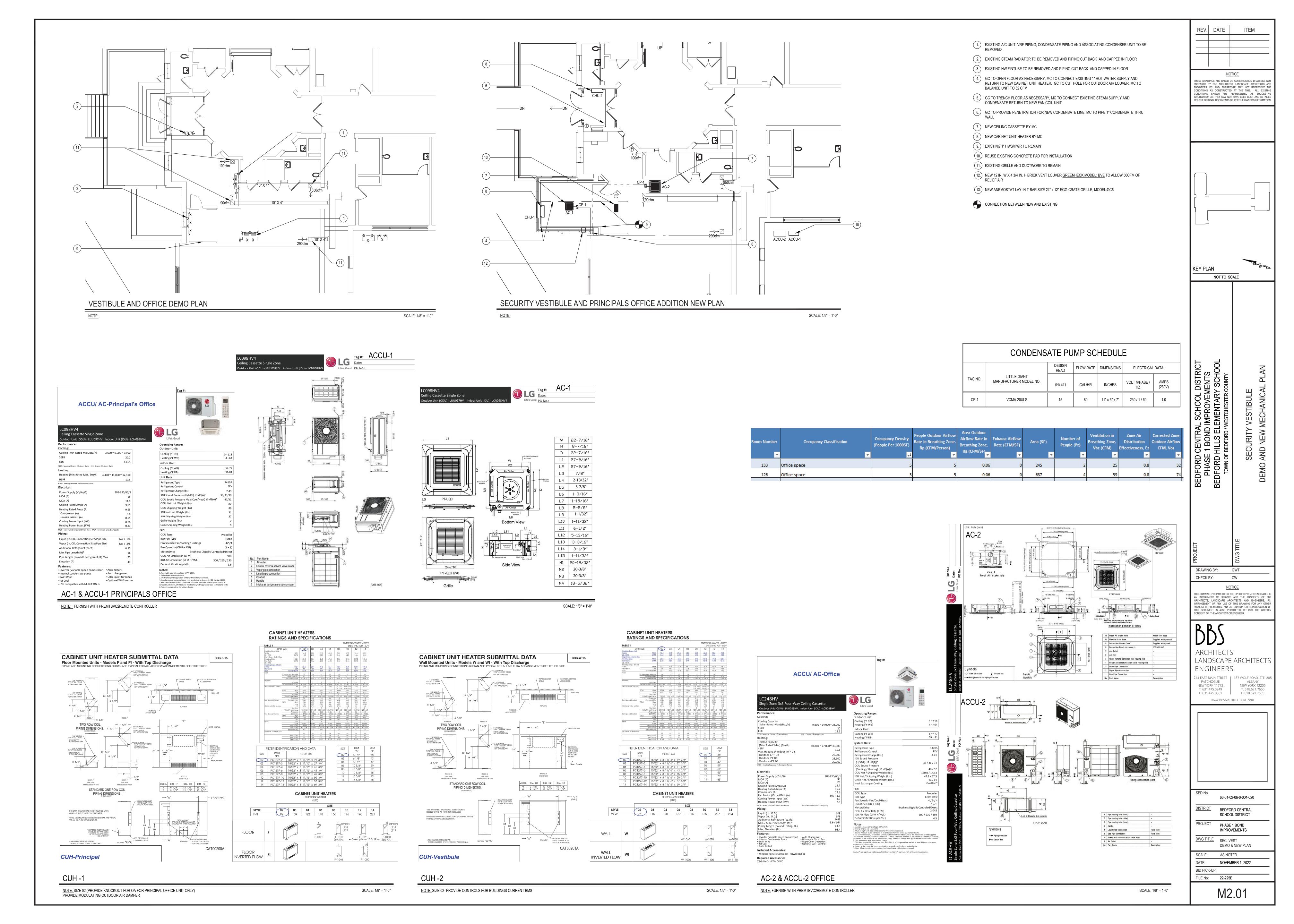
CW

66-01-02-06-0-004-020 DISTRICT BEDFORD CENTRAL SCHOOL DISTRICT PROJECT PHASE 1 BOND **IMPROVEMENTS** DWG TITLE GENERAL NOTES SCALE: AS NOTED

BID PICK-UP: FILE No: 22-225E M0.01

NOVEMBER 1, 2022

DATE:



ELECTRICAL CONSTRUCTION NOTES (NOT ALL APPLY):

- 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NEC, APPLICABLE LOCAL CODES, STATE CODES, SCHOOL WORKING RULES AND SCHEDULE DIRECTIVES. AND THE ENGINEER'S SPECIFICATIONS.
- THE VOLTAGE CHARACTERISTIC OF EXISTING BUILDING IS 208Y/120V, 3-PASE, 4-WIRE. THE VOLTAGE CHARACTERISTIC OF THE PROPOSED ADDITION SHALL BE 480/277V, 3-PHASE 4-WIRE WITH 208/120V DERIVED FROM STEP DOWN TRANSFORMERS., ALL
- EQUIPMENT SHALL BE COMPATIBLE WITH THESE CHARACTERISTICS. THE DRAWINGS SHOW SCHEMATICALLY, THE APPROXIMATE LOCATION OF ALL EQUIPMENT, CONDUITS, DEVICES, ETC. THE EXACT LOCATION OF WHICH SHALL BE SUBJECT TO APPROVAL BY THE ARCHITECT/OWNER WHO RESERVES THE RIGHT TO MAKE PRIOR TO
- INSTALLATION, ANY REASONABLE CHANGES IN LOCATION INDICATED WITHOUT EXTRA COST TO THE OWNER. CONTRACTOR SHALL VERIFY ALL INDICATED OR APPROXIMATED DIMENSIONS DRAWN OR DENOTED.
- 4. DIVISION 16 CONTRACTOR SHALL EXAMINE THE SITE TO VERIFY WORK TO BE PERFORMED AS SHOWN ON DRAWINGS AND SPECIFICATIONS BEFORE SUBMITTING HIS BID. ANY DISCREPANCY BETWEEN DRAWINGS/SPECIFICATIONS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO ARCHITECT/ENGINEERS ATTENTION BEFORE BID SUBMITTAL.
- DIVISION 16 CONTRACTOR SHALL PROVIDE ALL LABOR SERVICE MATERIALS, EQUIPMENT, AND RELATED ITEMS TO COMPLETE THE WORK OF THIS DIVISION, AS REQUIRED BY THE NATIONAL ELECTRIC CODE, AND ALL STATE AND LOCAL AUTHORITIES HAVING
- 6. DIVISION 16 CONTRACTOR SHALL PROVIDE ALL ELECTRICAL HARDWARE SHOWN ON THESE DRAWINGS AND RELATED DETAIL
- MATERIALS NOT SPECIFICALLY SHOWN OR SPECIFIED. DIVISION 16 CONTRACTOR SHALL PAY ANY FEES APPLICABLE TO ELECTRICAL WORK, SUCH AS, BUT NOT LIMITED TO, THE POWER
- COMPANY, TELEPHONE COMPANY, CATV, CERTIFIED ELECTRICAL INSPECTORS, ALARM AND FIRE PROTECTION COMPANIES. THE DIVISION 16 CONTRACTOR SHALL REFER TO ALL OTHER DRAWINGS IN BID PACKAGE AND PERFORM THE WORK (INCLUDE IN HIS BID) INDICATED AS ELECTRICAL CONTRACTOR (E.C.) WORK.
- 9. ALL WORK SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND DIRECTIVES OF THE SCHOOL DISTRICT BUILDINGS AND GROUNDS DEPARTMENT.
- 10. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR WHO SHALL OBTAIN AN INSPECTION CERTIFICATE AND PAY ASSOCIATED FEE. SUBMIT A PHOTOCOPY OF THIS CERTIFICATE TO THE ENGINEER WITH FINAL PAYMENT APPLICATION.
- 11. DIVISION 16 CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND THEIR INSTALLATION TO BE FREE OF DEFECTS FOR A PERIOD AS DEFINED IN SECTION 1700 OF THE PROJECT MANUAL.
- 12. A COMPLETE SYSTEM OF WIRING, WITH ALL FEEDERS, MAINS, AND BRANCHES AS SHOWN ON THE DRAWINGS, SHALL BE FURNISHED AND INSTALLED FROM THE MAIN DISTRIBUTION BOARD TO THE PANELS OUTLETS. MOTORS, AND APPURTENANCES. PROVIDE IDENTIFICATION FOR ALL PANEL AND MOTOR FEEDER CABLES IN PULL BOXES AND AT TERMINATIONS. ANY CONDUCTOR
- VOLTAGES HIGHER THAN 240 VOLTS SHALL BE MARKED ON DEVICES AND JUNCTION BOXES. 14. FURNISH AND INSTALL ALL WIRING OF ANY VOLTAGE OR PURPOSE AS SHOWN ON THE DRAWINGS.
- 15. ALL BRANCH CIRCUITS SHALL HAVE INDIVIDUAL NEUTRALS. SHARING COMMON NEUTRALS AMONG BUNDLED CIRCUITS IS SPECIFICALLY DISALLOWED UNLESS OTHERWISE NOTED. 16. PULL/JUNCTION BOXES SHALL BE PROVIDED WHERE INDICATED OR AS OTHERWISE REQUIRED TO FACILITATE THE PROPER
- INSTALLATION OF WIRES AND CABLES. CONDUITS MAY BE INCREASED IN SIZE FOR CONSTRUCTION CONVENIENCE. 17. FURNISH AND INSTALL ALL DISCONNECT DEVICES AND SAFETY SWITCHES AS SHOWN ON THE DRAWINGS AND/OR AS REQUIRED TO
- 18. FURNISH AND INSTALL ALL INDICATED LIGHTING FIXTURES AND MOUNTING HARDWARE AS REQUIRED FOR A COMPLETE
- 19. DIVISION 16 CONTRACTOR SHALL PROVIDE TO SCHOOL 5 PERCENT SPARE LAMPS (MINIMUM QUANTITY 1) OF EACH TYPE SPECIFIED
- WITH NEW FIXTURES. 20. PROVIDE ALL WIRING, PANEL BOARDS, SWITCHES, FUSES, EQUIPMENT, AND ALL INCIDENTAL MATERIALS REQUIRED TO SUPPLY

TEMPORARY AND PERMANENT ELECTRICAL NEEDS FOR THE WORK INVOLVED, ALL IN ACCORDANCE WITH OSHA, LOCAL, STATE AND

- 21. ALL WIRING TO BE 1#12+1#12(N)+1#12(G)-3/4"C., OR STEEL JACKETED MC CABLE (WHERE CODE PERMITTED), UNLESS OTHERWISE SPECIFIED ON DRAWINGS. RUN BRANCH CIRCUITS IN DROPPED CEILINGS, VOIDS, & CHASES. CONDUITS MAY BE SURFACE MOUNTED IN MECHANICAL SPACES UNLESS OTHERWISE NOTED. CONDUITS IN PUBLIC AREAS SHALL BE CONCEALED IN HUNG CEILINGS, EMBEDDED IN SLAB OR MASONRY WALLS, EXCEPT WHERE SURFACE MOUNTED RACEWAY IS SPECIFIED. ALUMINUM JACKETED MC
- 22. ALL CONNECTIONS AND/OR SPLICES SHALL BE MADE ONLY IN ACCESSIBLE JUNCTION BOXES. ALL COUPLINGS AND CONNECTORS FOR USE WITH EMT SHALL BE COMPRESSION TYPE. SET SCREW TYPE OR INDENT TYPE FITTINGS
- 24. ALL CONNECTIONS TO CONDUIT RUN UNDERGROUND SHALL BE MADE WATERTIGHT. ALL METALLIC CONDUIT INSTALLED IN EARTH FILL, AS WELL AS UNDERGROUND, SHALL BE PAINTED WITH (2) COATS OF ASPHALTUM PAINT OR EQUAL.
- WIRING INSTALLED IN CEILINGS SHALL BE HUNG INDEPENDENT OF CEILING SYSTEM AND SECURELY TIED TO BUILDING STEEL 26. ALL LOW VOLTAGE (FIRE ALARM, PA INTERCOM, PHONE, DATA, ETC.) WIRING INSTALLED IN OPEN AREAS SHALL BE IN METALLIC RACEWAY IN MECHANICAL AREAS, GYMNASIUMS, ART ROOMS, STOREROOMS, ETC., AND IN SURFACE MOUNTED RACEWAY IN PUBLIC AREAS. LOW VOLTAGE WIRE INSTALLED IN DROPPED CEILINGS SHALL BE BUNDLED TOGETHER AND SUPPORTED BY BUILDING STEEL LOW VOLTAGE WIRE SHALL NOT BE SUPPORTED WITH BRANCH CIRCUITS OR FEEDER CIRCUITS AND SHALL NOT BE SUPPORTED BY
- CONDUIT, PIPES, ETC.. LOW VOLTAGE WIRING NOT INSTALLED IN CONDUITS, SHALL BE PLENUM RATED. CONDUITS SHALL BE SECURED IN PLACE AND PROTECTED WHERE NECESSARY TO PREVENT DAMAGE DURING CONSTRUCTION. 28. FURNISH AND INSTALL ALL HARDWARE TO PROPERLY SUPPORT ALL CONDUITS NOT INSTALLED IN CONCRETE SLABS OR
- 29. ALL CONDUITS OR MC CABLE SHALL BE EQUIPPED WITH AN INSULATING/CHAFE GUARD GROMMET AT WIRE EXIT/ENTRANCE. MC CABLE SHALL USE MC STYLE BUSHINGS. BX OR OTHER BUSHINGS ARE SPECIFICALLY DISALLOWED. 30. WHERE AN EXISTING CONDUIT OR CABLE IS REQUIRED TO BE REMOVED BUT SERVES AND EXISTING PIECE OF EQUIPMENT WHICH IS
- TO REMAIN OPERABLE, THE DIVISION 16 CONTRACTOR SHALL REROUTE SAID CONDUIT OR CABLE OR PROVIDE A NEW SOURCE OF POWER (APPROVED BY ENGINEERING) TO THIS EQUIPMENT AS A PART OF THIS CONTRACT. ALL PANELS, SWITCHES, DISCONNECT STARTERS, OR OTHER ELECTRIC SYSTEM CONTROLS SHALL BE STENCILED WITH THEIR APPROPRIATE DESIGNATION/FUNCTION. ALL CIRCUIT BREAKERS SHALL BE IDENTIFIED BY A PANEL SCHEDULE OR STENCIL ADJACENT
- TO THE CIRCUIT BREAKER. ALL CIRCUIT BREAKERS POSITIONS IN ALL PANELS ARE SHOWN FOR ESTIMATE PURPOSES ONLY. EC IS RESPONSIBLE FOR LOAD
- BALANCING. 33. ALL DEVICES SHALL BE FASTENED IN PLACE SECURELY. GRID MOUNTING LIGHTING FIXTURES SHALL BE SECURED TO GRID WITH
- CLIPS LISTED FOR THE PURPOSE OR SUSPENDED FROM STRUCTURE PER NEC. 34. WORK WHICH MUST BE DONE IN OCCUPIED AREAS SHALL BE DONE AT SUCH TIMES AS INDICATED IN THE PHASING OF
- CONSTRUCTION AND AS APPROVED BY THE SCHOOL.

CABLE IS NOT ACCEPTABLE.

- 35. WHERE THE DIVISION 16 CONTRACTOR IS INSTRUCTED TO PROVIDE, INSTALL AND WIRE CIRCUIT BREAKER(S) TO AN EXISTING PANEL AND THAT PANEL DOES NOT HAVE THE ROOM TO INSTALL REQUIRED CIRCUIT BREAKERS, THE DIVISION 16 CONTRACTOR SHALL REMOVE (3) ADJACENT 1P CIRCUIT BREAKERS AND PROVIDE A 3P, 60A BREAKER IN THEIR PLACE FOR SUB FEED TO A SURFACE MOUNTED 100A.3~.4W.24 POLE SUB PANEL AND ESTABLISH OVERFLOW CIRCUITS IN NEW SUB PANEL, EACH WITH REQUIRED CIRCUIT BREAKERS. PROVIDE (3) 1P, AMPERAGE AS BEFORE CIRCUIT BREAKERS FOR DISCONNECTED CIRCUITS IN MAIN PANEL AND RECONNECT THEM IN SUB PANEL. SUB PANEL FEED TO BE 3#6+1#6(N)+1#10(G)-1"C.
- 36. SELECTED RECEPTACLES AS SHOWN ON DRAWINGS MAY BE GFI PROTECTED BY CONNECTING TO GFCI RECEPTACLE FIRST IN CIRCUIT. ALL RECEPTACLES THAT ARE PROTECTED FROM AN UPSTREAM GFCI UNIT SHALL BE VISABLY LABELED AS SUCH. GFCI

RECEPTACLE SHALL BE SPEC GRADE AND RATED 20A, WITH OPERATING NOTIFICATION INDICATING LIGHT.

- 37. ALL DEVICES ADDRESSED BY ADA REGULATIONS SHALL BE INSTALLED AT ADA COMPLIANT HEIGHT AND LOCATIONS. 38. ALL NEW LIGHTING OR EXISTING LIGHTING HAVING SWITCHING REARRANGEMENT SHALL BE EQUIPPED WITH CODE COMPLIANT ENERGY CONSERVATION CONTROLS. SUCH CONTROL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO
- 39. REMOVAL OF ELECTRICAL ITEMS INCLUDES THEIR DISPOSAL. THE EXCEPTION WILL BE TO TURN OVER TO THE OWNER ITEMS, IF ANY, THEY SPECIFY TO BE RETAINED IN THEIR INVENTORY. PCB OR ASBESTOS BEARING MATERIAL SHALL BE DISPOSED OF IN
- ACCORDANCE WITH LAWS AND REGULATIONS. 40. EC SHALL PROVIDE & WIRE WEATHERPROOF GFCI RECEPTACLES ON ALL APPLICABLE ROOFTOP UNITS AS PART OF HIS BID. SEE MECHANICAL EQUIPMENT SCHEDULES FOR UNITS WITH SERVICE RECEPTACLES FACTORY INSTALLED.
- 41. UNLESS OTHERWISE NOTED, STARTERS AND DISCONNECTS FOR MECHANICAL EQUIPMENT SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR.. COORDINATE WITH THE MECHANICAL CONTRACTOR FOR ALL POWERED MECHANICAL EQUIPMENT. THE DIVISION 16 CONTRACTOR IS RESPONSIBLE TO INSTALL ALL MOTOR STARTERS AND ASSOCIATED POWER WIRING FROM SOURCE TO UNIT VIA STARTERS AND DISCONNECTS. THE LOCATIONS OF MOTOR STARTERS SHALL BE DETERMINED BY THE MECHANICAL CONTRACTOR IN THE FIELD AND SUBMITTED TO THE ENGINEER FOR APPROVAL UNLESS IT IS SPECIFIED ON THE DRAWINGS. THE DIVISION 16 CONTRACTOR SHALL REFER TO THE MECHANICAL DRAWINGS, EQUIPMENT SCHEDULES & NOTES AND INCLUDE IN HIS BID PRICE ALL ELECTRICAL WORK ASSOCIATED WITH THEIR INSTALLATION, AND THE REMOVAL OF ANY STARTERS/DISCONNECTS NO

DEMOLITION NOTES (NOT ALL APPLY):

- 1. THE ITEMS SPECIFICALLY SHOWN ON DEMOLITION DRAWING/S ARE TO BE ADDRESSED BY THE ELECTRICAL CONTRACTOR. THE TEMS ARE TO BE TREATED AS NOTED AND RANGE FROM DIRECT REMOVAL AND DISPOSAL, OR REMOVAL, STORAGE, AND
- REINSTALLATION/RELOCATION, OR TEMPORARY REMOVE/STORAGE, AND REINSTALLATION IN SAME LOCATION. MANY OTHER ELECTRIC ITEMS EXIST THAT ARE NOT SHOWN INCLUDE, BUT ARE NOT LIMITED TO, SWITCHES, RECEPTACLE, FLOOR OUTLETS, LOW VOLTAGE JACKS, LOW VOLTAGE DEVICES AND WIRING, TELEPHONE PUNCH DOWN BLOCKS, AND OUT OF SERVICE ITEMS. ALL SUCH ITEMS SHALL BE PERMANENTLY DE-ENERGIZED, DISCONNECTED, AND OTHERWISE MADE SAFE FOR DEMOLITION BY NON-ELECTRIC DEMOLITION WORKERS. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ASSURING THAT ALL ELECTRIC DEVICES, OF ANY VOLTAGE OR FUNCTION, THAT ARE TO BE DEMOLISHED ARE SAFE AND ADVISE THE DEMOLITION CONTRACTOR WHEN THIS IS SO.
- AFTER THE ELECTRICAL CONTRACTOR HAS DISCONNECTED ELECTRIC SUPPLIES TO ITEMS TO BE DEMOLISHED, HE SHALL ADVISE THE GENERAL CONTRACTOR OF ANY ELECTRIC ITEMS TO BE RETAINED FOR FUTURE USE AND THEREFOR NOT TO BE DEMOLISHED. THE GENERAL CONTRACTOR SHALL THEN PERFORM ALL WORK ZONE DEMOLITION. THIS MATTER APPLIES TO ALL ELECTRIC ITEMS, OF ANY VOLTAGE OR PURPOSE.
- THE SPECIAL/SPECIFIC ITEMS SHOWN ON THE DRAWING FOR ELECTRICAL CONTRACTOR TO ACT ON WERE FOUND BY SURVEY. NUMEROUS LOCATIONS WERE BLOCKED BY FURNITURE, ETC. AND ADDITIONAL EQUAL TYPE ITEMS MAY BE PRESENT. THE ELECTRICAL CONTRACTOR SHALL ALLOW FOR THIS IN HIS BID PRICE AND ATTEND TO THOSE EQUAL OR SIMILAR DEVICES AS MAY
- REMOVAL ITEMS THAT ARE LISTED AS TO BE TURNED OVER TO OWNER'S INVENTORY SHALL BE DISCUSSED WITH THE DISTRICT BUILDINGS AND GROUNDS MANAGER. THOSE ITEMS THAT THE OWNER DECLINES SHALL THEN BE DISPOSED OF BY THE CONTRACTOR IN THE MANOR OF OTHER PERMANENT REMOVALS. ANY PCB BEARING FLUORESCENT FIXTURES SHALL BE
- 6. RETAIN EXISTING RECEPTACLES IN WALLS THAT WILL NOT BE IN CONFLICT WITH NEW CONSTRUCTION. RETAIN LIGHT SWITCH LOCATIONS THAT WILL NOT BE IN CONFLICT WITH NEW CONSTRUCTION. INSTALL BLANKING PLATE COVERS OVER THE UNUSED PORTION OF GANG BOXES HAVING MORE GANG POSITIONS THAN NEEDED FOR NEW SWITCHES 7. LIGHT FIXTURES ARE TO BE REMOVED AS GENERAL, NON ELECTRIC, CONTRACTOR DEMOLITION. DIVISION 16 CONTRACTOR RESPONSIBLE TO SAFE OFF LIGHTUING CIRCUITS FOR REMOVAL BY OTHERS. NO SPECIFIC QUANTITIES OR LOCATIONS ARE
- OTHERWISE TO BE DISPOSED OF. ELECTRICAL CONTRACTOR SHALL EXAMINE FIXTURES FOR PRESENCE OF PCB'S AND SPECIAL THE ELECTRICAL CONTRACTOR SHALL COVER ALL BACK BOXES IN THE WALL THAT BECOME EXPOSED DUE TO DEVICE REMOVALS. THIS INSTRUCTION ALSO APPLIES TO EXPOSED ELECTRICAL BACK BOXES AS MAY EXIST AT THE SITE PRIOR TO THIS PROJECT. THE COVER SHALL BE BRUSHED ALUMINUM WITH CHAMFERED EDGES AND COVER THE HOLE COMPLETELY WITH AT LEAST 3/4"

EXTRA MARGIN ON ALL SIDES. MOUNT THE COVER WITH SCREWS TO MATCH THE ORIGINAL PATTERN

SHOWN. RETURN WHATEVER QUANTITY, IF ANY, OF THESE TO OWNER'S INVENTORY IF HE SO SPECIFIES OR THEY ARE

- IT IS EXPECTED THAT STRUCTURAL DEMOLITION BY THE GENERAL CONTRACTOR WILL CAUSE VARIOUS ELECTRIC SUPPLIES, OF VARIOUS VOLTAGES AND PURPOSES, TO BE CUT AND RENDER SOME DEVICES TEMPORARILY INACTIVE. IT IS THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO RECONSTRUCT AND RECONNECT SUCH ELECTRIC SOURCES WHEN THE NEW STRUCTURE IS BUILT. NOTE THAT MOST REINSTALLED ITEMS WILL BE IN DIFFERENT LOCATIONS FROM THE REMOVAL LOCATION. THE ELECTRICAL CONTRACTOR SHALL MAKE ALL REQUIRED CIRCUIT EXTENSIONS OR MODIFICATIONS TO PROVIDE SERVICE TO A REINSTALLED ITEM AS RELOCATED. PROVIDE ALL REQUIRED CIRCUIT EXTENSIONS AS REQUIRED TO RESTORE SERVICE TO DEVICES. NOTE THAT THIS REQUIREMENT ALSO APPLIES TO THE ROOMS AND ELECTRICAL ITEMS WITHIN THAT ARE NOMINALLY NOT IN CONTRACT. SUCH RESTORATION OF SERVICE, IF NEEDED, IS SPECIFICALLY IN THE ELECTRICAL CONTRACTOR'S
- 10. IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL ELECTRICAL DEVICES, FROM DAMAGES DURING CONSTRUCTION, WHICH ARE EITHER INDICATED TO REMAIN, AND/OR TO BE REMOVED AND REINSTALLED THROUGHOUT ALL CONSTRUCTION AREAS. DEVICES SHALL INCLUDE BUT WILL NOT BE LIMITED TO: SMOKE DETECTORS, EMERGENCY LIGHTS, EXIT SIGNS, OCCUPANCY SENSORS, SPEAKERS, LIGHT FIXTURES, SWITCHES, RECEPTACLE, ETC. IN THE EVENT OF DAMAGES INCURRED DUE TO CONSTRUCTION ACTIVITIES, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY
- DAMAGED DEVICES AT NO ADDITIONAL COST TO OWNER. ALL SYSTEM ASSOCIATED WITH THE DEVICES SCHEDULED TO BE REMOVED, STORED AND PROTECTED SHALL BE TESTED BY THE MANUFACTURER'S CERTIFIED TESTING VENDOR PRIOR TO ANY DEMOLITION ACTIVITY. ANY DEVICE WHICH FAILS THE TEST SHALL BE REPLACED WITH A FORM, FIT AND FUNCTION COMPONENT PER UNIT PRICES, AND SUCH DEVICES ARE NOT INCLUDED IN THIS RESPONSIBILITY STATEMENT, BUT ALSO SUCH INSTALLATION SHALL BE IN THE ELECTRICAL CONTRACTOR'S BASE BID. THE ELECTRICAL CONTRACTOR SHALL RE-TEST ALL SUCH SYSTEM COMPONENTS BY A MANUFACTURER CERTIFIED TESTING VENDOR OF SUCH SYSTEM OF ALL PREVIOUSLY TESTED SYSTEM COMPONENTS AFTER ALL WORK BY ALL TRADES HAS BEEN COMPLETED, AND ALL SYSTEM COMPONENTS HAVE BEEN INSTALLED. ANY COMPONENT WHICH FAILS SHALL BE REPLACED, AND PROGRAMMED IF NECESSARY BY THE ELECTRICAL CONTRACTOR. ALL SUCH REPLACEMENT AND PROGRAMMING COSTS SHALL BE ELECTRICAL CONTRACTOR'S RESPONSIBILITY. ALL COSTS ASSOCIATED WITH THE TESTING OF AFFECTED SYSTEM SUCH AS BUT NOT LIMITED TO FIRE ALARM, PUBLIC ADDRESS, INTERCOM, TELEPHONE, AND SECURITY SYSTEMS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. ALL EQUIPMENT, DEVICES, WIRING AND THEIR ASSOCIATED MATERIAL SPECIFIED TO REMAIN, WHICH IS NOT STORED AND PROTECTED, SHALL BE PROTECTED DURING THE DEMOLITION ACTIVITIES, AND ALL TRADES SHALL BE INFORMED OF SUCH COMPONENTS. ANY OF SUCH COMPONENTS WHICH BECOME DAMAGED DURING DEMOLITION SHALL BE REPLACED FORM, FIT AND FUNCTION BY THE ELECTRICAL CONTRACTOR AT HIS EXPENSE.

BREVIATIONS	
E, EX	EXISTING
ETR	EXISTING TO REMAIN
PSEGLI	PSE&G LONG ISLAND (UTILITY CO.)
SM, S.M.	SURFACE MOUNTED
U.O.N.	UNLESS OTHERWISE NOTED
EC, E.C.	ELECTRICAL CONTRACTOR
GC, G.C.	GENERAL CONTRACTOR
MC, M.C.	MECHANICAL CONTRACTOR
PC, P.C.	PLUMBING CONTRACTOR
TYP.	TYPICAL
REQ'D	REQUIRED
O.C.	ON CENTER
CKT	CIRCUIT
AFF	AWAY FROM FLOOR
СВ	CIRCUIT BREAKER
REC.	RECEPTACLE

ABOVE COUNTERTOP

TEMPORARY POWER CONSTRUCTION NOTES: (NOT ALL APPLY)

REQUIRED. ALL RECEPTACLES OUTLETS SHALL BE 2 GANG DOUBLE DUPLEX.

- 1. THE DIVISION 16 CONTRACTOR SHALL PROVIDE TEMPORARY POWER AND LIGHT IN THE NEW AREAS 'D', AND 'E' AND THE RECONSTRUCTED AREAS OF THE EXISTING BUILDING.
- 2. ALL TEMPORARY POWER PANELS AND FUSED SWITCHES OUTSIDE SHALL BE NEMA 3R CONSTRUCTION AND LOCKABLE. ALL OUTSIDE RECEPTACLES SHALL BE WATERPROOF AND HAVE A COVER THAT ENCLOSES THE PLUGGED IN CORDS WHILE IN SERVICE AS INTERMATIC WP120C. NON-WATERPROOF GEAR IN A HOUSING IS NOT ACCEPTABLE. 3. ALL RECEPTACLES SHALL BE GFCI PROTECTED AND MOUNTED 3'-0" ABOVE FINISHED FLOOR. PROVIDE WORK BLOCKING AS
- TEMPORARY LIGHTING SHALL BE CONSTRUCTED OF SINGLE AND DOUBLE 100 WATT CLEAR INCANDESCENT LAMPS, OR EQUIVALENT, AND WATERPROOF RUBBER SOCKETS, SPLICED WITH WATERPROOF CONNECTORS ON FESTOONED ROMEX-TYPE WIRE. ADEQUACY OF ALL TEMPORARY LIGHTING CONFIGURATIONS SHALL BE AS DETERMINED BY THE CONSTRUCTION MANAGER. PRE ASSEMBLED TEMPORARY LIGHTING IS DISALLOWED. TAPS AND SPLICES SHALL BE MADE WITH SCOTCH LOCK CONNECTORS, RUBBER TAPE, AND THEM PVC COATED. THE CONNECTORS SHALL BE FILLED WITH PENETROX. A PLASTIC SHAPE ON CAGE/GUARD SHALL PROTECT EACH SOCKET AND LAMP, NOMINAL SPACING BETWEEN LAMP CLUSTER IS 16 FEET, MOUNT LIGHTS EIGHT FEET ABOVE FINISHED FLOOR IN TYPICAL LOCATIONS AND 10 FEET ABOVE FINISHED FLOOR IN CORRIDOR. PROVIDE NIGHT LIGHTING CIRCUIT, WHICH SHALL OPERATE CONTINUOUSLY. ALL LAMPS SHALL BE 130 VOLT, ROUGH SERVICE RATED. TEMPORARY LIGHTS SHALL BE TO OSHA STANDARDS. ALTERNATE FIXTURES SHALL BE 400W CONSTRUCTION SITE STYLE
- PROVIDE HOOK UPS TO JOB TRAILER FOR ALL TRADES. USE SITE POWER AS SOURCE. OWNER PAYS FOR POWER CONSUMPTION. WIRING SHALL BE 1#12+1#12(N)+1#12(G) ROMEX STYLE. CIRCUITS SHALL BE OPERATED A MAXIMUM OF 15 AMPS OR 1800 WATTS (18 100 WATT LAMPS), SWITCHING SHALL BE DONE VIA THE SWITCH RATED 20A, 10 CIRCUIT BREAKERS. SEGREGATE THE NIGHT
- LIGHTS AND RECEPTACLES IN THE LOWER PART OF THE POWER PANELS AND LABEL THESE "DO NOT TURN OFF". CIRCUIT HOME RUNS CONDUCTORS SHALL INCREASE ONE WIRE SIZE EVERY 100 FEET I.E. #10 CONDUCTORS. WIRING WITHIN THE ROOM AREA SHALL BE MADE WITH #12 CONDUCTORS.
- THE DIVISION 16 CONTRACTOR SHALL PREPARE EACH PANEL SCHEDULE. A LENGTH OF GREENFIELD FLEX CONDUIT AT PINCH POINTS SHALL PROTECT ALL WIRE, SUCH AS WHERE WIRING PASSED THROUGH A DOORWAY. WIRING SHALL BE SUPPORTED FROM ANCHORS INSTALLED BY THE DIVISION 16 CONTRACTOR FOR THE
- PURPOSE OF ATTACHMENT TO PROJECT. ALL ELECTRICAL HARDWARE SHALL BE NEW FOR THIS PROJECT. ALL WIRING SHALL BE INSTALLED SO AS NOT TO CAUSE TRIPPING HAZARD OR SIMILAR OBSTRUCTION. 11. POWER PANELS SHALL BE EQUIPPED WITH 42 1P, 20A CIRCUIT BREAKERS AND ALL CIRCUIT BREAKERS NOT IN SERVICE SHALL BE
- LABELED SPARE. AT THE OWNERS OPTION PANEL AND CIRCUIT BREAKERS SHALL BE TURNED OVER TO OWNERS INVENTORY AT CONCLUSION OF THE PROJECT. ALL ELECTRICAL HARDWARE SHALL BE NEW FOR THIS PROJECT. 12. THE DIVISION 16 CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE OF TEMPORARY LIGHTING AND POWER SYSTEMS DURING, AND AFTER INSTALLATION, UP TO THE TIME OF BENEFICIAL OCCUPANCY, AND TIME OF REMOVAL. REPAIRS SHALL BE MADE WITHIN 24 HOURS OF THE REPORTED OUTAGE, OR AS DIRECTED BY THE CONSTRUCTION MANAGER. DIVISION 16 CONTRACTOR SHALL COMMENCE WORK ON THIS PROJECT WITH A GROSS OF SPARE CONSTRUCTION BULBS AT HIS IMMEDIATE
- 13. REMOVAL OF THE TEMPORARY POWER AND LIGHTING SHALL BE THE RESPONSIBILITY OF THE DIVISION 16 CONTRACTOR WHEN THE PROJECT IS COMPLETE, ALL EQUIPMENT, WIRING SUPPORTS, CONNECTORS, ETC. SHALL BE REMOVED FROM OWNER'S PROPERTY AFTER PROJECT IS COMPLETE. INCLUDE STATEMENT OF REMOVAL WITHIN CLOSE OUT DOCUMENTS, REQUIRED FOR
- FINAL PAYMENT. 14. PROVIDE THE TEMPORARY ELECTRICAL SERVICE TO THE CONSTRUCTION TRAILERS SHALL BE AS PER USERS REQUIREMENTS OF THE TRADES. TEMPORARY SERVICES ARE REQUIRED PER SPECIAL CONDITIONS OF THE PROJECT.
- 15. ALL TEMPORARY POWER WORK SHALL BE COORDINATED WITH THE CONSTRUCTION MANAGER SPECIAL EMPHASIS SHALL BE EXERCISED FOR TERRAZZO MACHINES AND ITS ELECTRICAL REQUIREMENT.

FIRE STOP NOTES:

- 1. ALL CONDUIT AND CABLE PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS OR OTHER STRUCTURES SHALL BE FIRE STOPPED. 2. THE FIRE STOP MATERIALS SHALL BE HILTLTYPE FS-657 FIRE BLOCK, FS-ONE SEALANT, CP-672 JOINT SPRAY, CP-601S FLASTOMERIC SEALANT, 6P-606 FLEXIBLE SEALANT, CP-643 OR CP-642 COLLAR, CP-618 PUTTY STICK, OR FS-635 TROWEL ABLE COMPOUND, AS
- 3. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PRODUCTS SPECIFIED OR EQUAL.
- 4. FIRE STOP MATERIALS OTHER THAN HILTI SHALL INCLUDE FULL TECHNICAL DATA WITH SHOP DRAWINGS TO DEMONSTRATE EQUALITY WITH THE SPECIFIED FIRE STOPS AND STATEMENT FROM MANUFACTURER THAT THEY MEET OR EXCEED THE PRODUCTS SPECIFIED
- 5. ALL SYSTEMS SHALL HAVE THEIR OWN SLEEVE THROUGH FIRE RATED WALLS. IE FIRE ALARM, PUBLIC ADDRESS, TELEPHONE, DATA,

	ELECTRICAL SYMBOL LEGEND
<u>(S)</u>	SMOKE DETECTOR - CEILING MOUNTED
S	SPEAKER - CEILING MOUNTED
R	FIRE ALARM RELAY
CR	CARD READER
$\overline{}$	DATA BOX - PROVIDE RJ45 CONNECTION AND CAT6 CABLE
FACP	FIRE ALARM CONTROL PANEL
φ	DUPLEX RECEPTACLE
•	DOUBLE DUPLEX RECEPTACLE
Ó	MECHANICAL EQUIPMENT CONNECTION
	DISCONNECT - NEMA 3R RATED FOR OUTDOOR - NEMA 1 FOR INDOORS
F	FIRE ALARM PULL BOX
Н	FIRE ALARM COMBINATION AUDIO/VISUAL NOTIFICATION
\$	LIGHTING SWITCH
	LINEAR LIGHTING FIXTURE
	2' X 2' RECESSED FIXTURE

SIMILAR SYMBOLS USED ON DEMO PLANS. ALL ITEMS SHOWN ON DEMO PLAN TO BE REMOVED ENTIRELY UNLESS OTHERWISE NOTED.

LINE DESIGNATIONS

EXISTING TO REMAIN DEVICES DEVICES TO BE REMOVED. PULL BACK ALL ASSOCIATED CONDUIT AND WIRING AND REMOVE UNLESS OTHERWISE NOTED ON THE NEW DEVICES

REV. DATE ITEM

THESE DRAWINGS ARE BASED ON CONSTRUCTION WINGS NOT PREPARED BY BBS ARCHITECTS, LANDSCAP ARCHITECTS AND ENGINEERS, PC. AND, THEREFORE, MAY NOT REPRESENT THE CONDITIONS AS CONSTRUCTED AT THE IME. ALL EXISTING CONDITIONS SHOWN ARE REPRESENTED AS SUGGESTIVE INFORMATION AS THEY MAY NOT HAVE BEEN THE OWNER'S INFORMATION.

0 DRWG. BY: EEA EEA CHK. BY:

THIS DRAWING, PREPARED FOR THE SPECIFIC PROJECT. INDICATED IS AN INSTRUMENT OF SERVICE AND THE PROPERTY OF BBS ARCHITECTS, LANDSCAPE ARCHITECTS AND ENGINEERS, PC. INFRINGEMENT OR ANY USE OF THIS DRAWING FOR ANY OTHER PROJECT IS PROHIBITED. ANY ALTERATION OR REPRODUCTION OF THIS DOCUMENT IS ALSO PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT OR ENGINEER.

ARCHITECTS LANDSCAPE ARCHITECTS

ENGINEERS BRANCH PROJECT CONTACT: 244 EAST MAIN STREET 187 WOLF ROAD, STE. 205 PATCHOGUE NEW YORK 11772 ALBANY NEW YORK 12205 T. 631.475.0349

F. 631.475.0361 T. 518.621.7650 www.BBSARCHITECTURE.COM

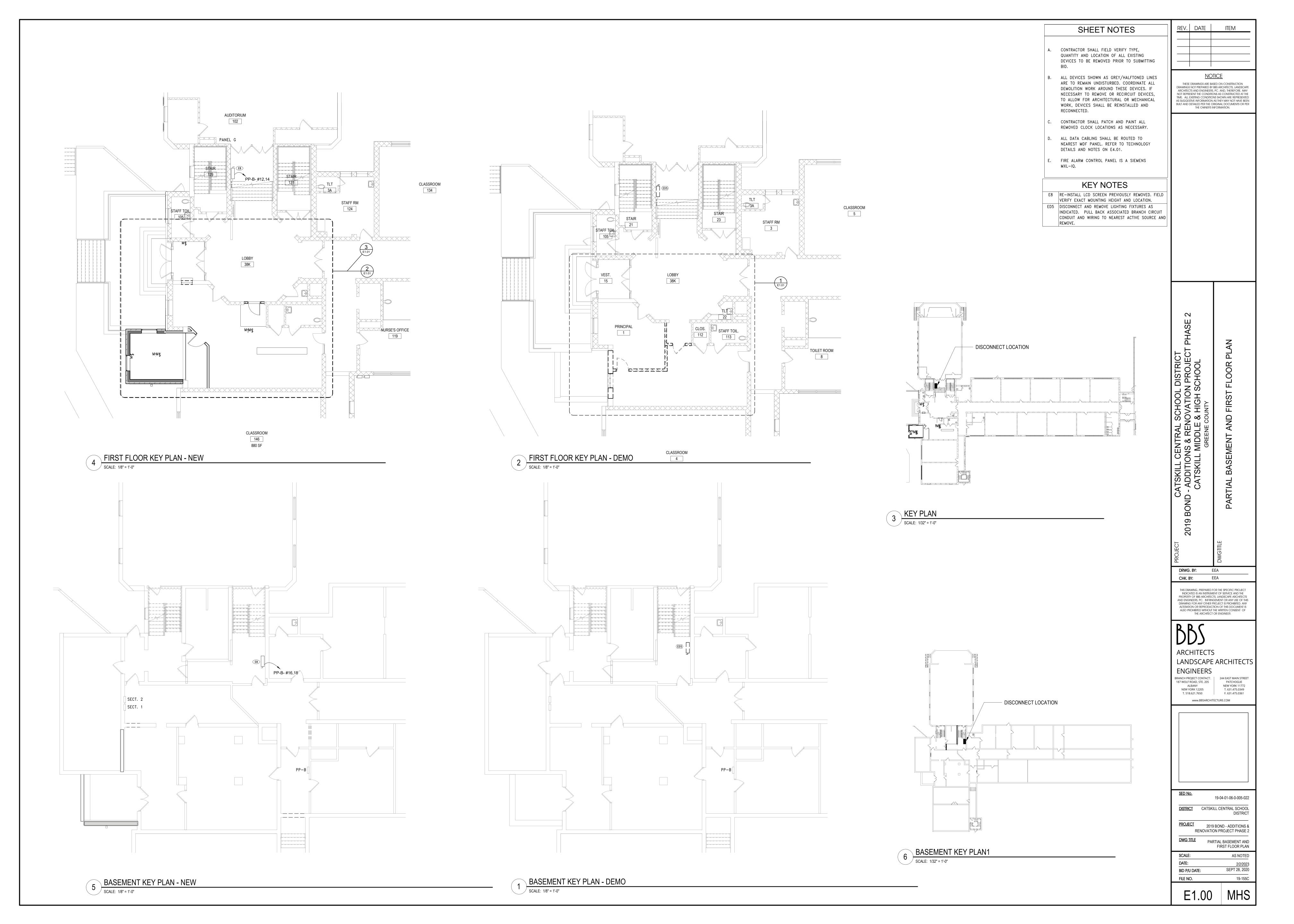
19-04-01-06-0-005-022

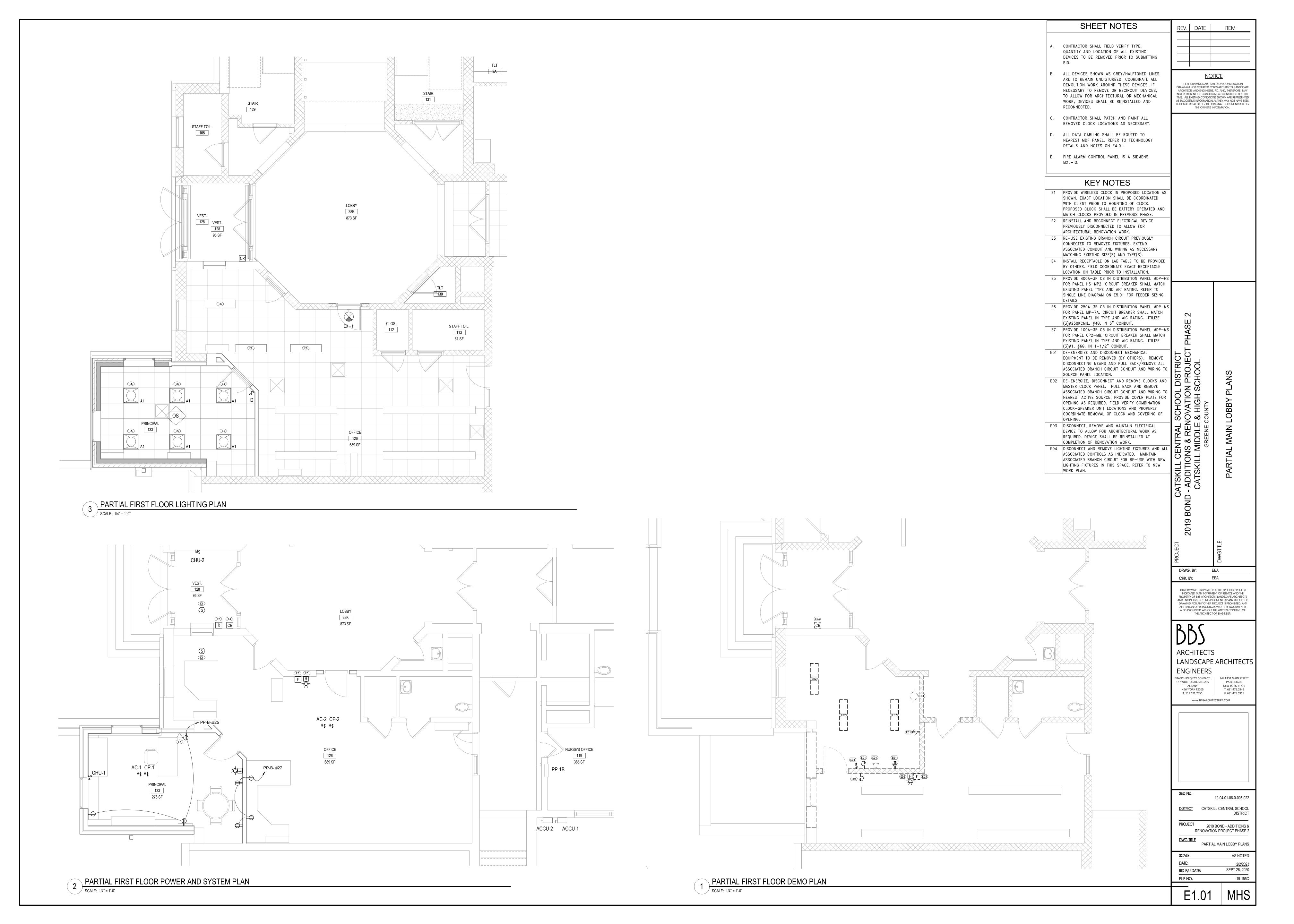
<u>DISTRICT</u> CATSKILL CENTRAL SCHOOL

AND ABBREVIATIONS

2019 BOND - ADDITIONS 8 RENOVATION PROJECT PHASE 2 DWG TITLE GENERAL NOTES, SYMBOLS

SCALE: SEPT 28, 2020 BID P/U DATE:





	Location: ST Supply From: Mounting: SU			Volts: Phases: Wires:	_	ye							
СКТ	Circuit Description	Trip	Poles		Ą	ı	В		С	Poles	Trip	Circuit Description	СКТ
1	EXSTING CKT	20 A	1	0 VA	0 VA					1	20 A	EXSTING CKT	2
3	EXSTING CKT	15 A	1			0 VA	0 VA			1	20 A	EXSTING CKT	4
5	EXSTING CKT	20 A	1					0 VA	0 VA	1	20 A	EXSTING CKT	6
7	EXSTING CKT	20 A	1	0 VA	0 VA					1	20 A	EXSTING CKT	8
9	EXSTING CKT	20 A	1			0 VA	0 VA			1	20 A	EXSTING CKT	10
11	EXSTING CKT	15 A	1					0 VA	0 VA	1	20 A	EXSTING CKT	12
13	EXSTING CKT	15 A	1	0 VA	0 VA					1	20 A	EXSTING CKT	14
15	EXSTING CKT	15 A	1			0 VA	0 VA			1	20 A	EXSTING CKT	16
17	EXSTING CKT	20 A	1					0 VA	0 VA	2	20 A	ACCU-1 & CP-1	18
19					0 VA								20
21													22
23													24
		Tota	l Load:	0 '	VΑ	0	VA	0	VA				•
		Total	Amps:	0	A	0 A		0 A					

PROVIDE CIRCUIT TO MATCH PANEL TYPE AND AIC RATING

	Location: CORF Supply From: Mounting: SURF		Volts: 120/208 Wye Phases: 3 Wires: 4						A.I.C. Rating: Mains Type: MCB Mains Rating: 125 A					
СКТ	Circuit Description	Trip	Poles	Į.	A	E	3	-1	С	Poles	Trip	Circuit Description	СК	
1	STORAGE RM LIGHTS (E)	20 A	1	0 VA	0 VA					1	20 A	NURSE OFFICES DECP. (E0	2	
3	FACULTY RM LIGHTS (E)	20 A	1			0 VA	0 VA			1	20 A	EXIT LIGHTS (E)	4	
5	ELEV CAB LIGHTS (E)	20 A	1					0 VA	0 VA	1	20 A	HALLWAY LIGHTS AND STAIR LIGHTS	6	
7	CTU-1 (E)	20 A	1	0 VA	0 VA					1	20 A	CUH-1 (E)	8	
9	ANDOVER AHU (E)	20 A	1			0 VA	0 VA			1	20 A	STORAGE RM LIGHTS NEAR STAIRWA	. 10	
11	BACK MECH RM LIGHTS (E)	20 A	1					0 VA	0 VA	2	20 A	LIFT	12	
13	GX-2 (E)	20 A	1	0 VA	0 VA								14	
15	LIGHTS MECH RM AND ELEC PIT (E)	20 A	1			0 VA	0 VA			2	20 A	LIFT	16	
17	FACULTY RM RECEPT (E)	20 A	1					0 VA	0 VA				18	
19	FACULTY RM RECEPT (E)	20 A	1	0 VA	0 VA					3	20 A	GX-1 (E)	20	
21	FACULTY RM RECEPT (E)	20 A	1			0 VA	0 VA						22	
23	FACULTY RM RECEPT (E)	20 A	1					0 VA	0 VA				24	
25	OFFICE RECEPT	20 A	1	540 VA	0 VA					3	20 A	STARTER BOILER RM (E)	26	
27	OFFICE RECEPT	20 A	1			720 VA	0 VA						28	
29	RED BASEMENT THERAPY (E)	20 A	1					0 VA	0 VA				30	
31	CTU-2 (E)	20 A	3	0 VA	0 VA					3	20 A	COPY MECH	32	
33						0 VA	0 VA						34	
35								0 VA	0 VA				36	
37	AHU-1 (E)	20 A	3	0 VA	0 VA					1	20 A	BLUE BASEMENT STRINGS RM	38	
39						0 VA	0 VA			1	20 A	EXISTING CIRCUIT	40	
41								0 VA	0 VA	1	20 A	EXISTING CIRCUIT	42	
		Tota	l Load:	540	VA	720	VA	0	VA					
		Tota	l Amps: ˈ	5	A	7	A	0	Α	_				

	Location: Supply From: Mounting: SU	Volts: 120/208 Wye Phases: 3 Wires: 4						A.I.C. Rating: Mains Type: MCB Mains Rating: 125 A					
CKT	•	Trip	Poles		A	ı	В		С	Poles	Trip	Circuit Description	СКТ
1	EXSTING CKT	20 A	1	0 VA	0 VA					2	60 A	EXSTING CKT	2
3	EXSTING CKT	20 A	1			0 VA	0 VA						4
5	EXSTING CKT	20 A	1					0 VA	0 VA	1	20 A	EXSTING CKT	6
7	EXSTING CKT	20 A	3	0 VA	0 VA					3	40 A	EXSTING CKT	8
9						0 VA	0 VA						10
11								0 VA	0 VA				12
	EXSTING CKT	20 A	1	0 VA	0 VA					1	20 A	EXSTING CKT	14
15	EXSTING CKT	20 A	1			0 VA	0 VA			1	20 A	EXSTING CKT	16
	EXSTING CKT	20 A	1					0 VA	0 VA	1	20 A	EXSTING CKT	18
19	EXSTING CKT	20 A	1	0 VA	0 VA					1	20 A	EXSTING CKT	20
21	EXSTING CKT	20 A	2			0 VA	0 VA			1	20 A	EXSTING CKT	22
23								0 VA	0 VA	2	20 A	EXSTING CKT	24
25	EXSTING CKT	20 A	2	0 VA	0 VA								26
27						0 VA	0 VA			2	20 A	EXSTING CKT	28
29	EXSTING CKT	60 A	2					0 VA	0 VA				30
31				0 VA	0 VA					1	20 A	EXSTING CKT	32
33	EXSTING CKT	90 A	2			0 VA	0 VA			1	20 A	EXSTING CKT	34
35								0 VA	0 VA	1	20 A	EXSTING CKT	36
37	EXSTING CKT	30 A	3	0 VA	0 VA					1	20 A	EXSTING CKT	38
39						0 VA	0 VA			1	40 A	EXSTING CKT	40
41								0 VA	0 VA	1	20 A	CHU-1 AND 2	42
		Tota	al Load:	0	VA	0 '	VA	0	VA				
		Tota	I Amps:	0	Α	0	A	() A	_			

	Location: Supply From: Mounting: SU			Volts: Phases: Wires:	-	ye		A.I.C. Rating: Mains Type: MCB Mains Rating: 125 A					
СКТ	Circuit Description EXSTING CKT	Trip	Poles	,	4	E	3		С	Poles	Trip	Circuit Description	СК
1		100 A	3	0 VA	0 VA					1		EXSTING CKT	2
3						0 VA	0 VA			1	20 A	EXSTING CKT	4
5								0 VA	0 VA	2	50 A	EXSTING CKT	6
7	EXSTING CKT	40 A	2	0 VA	0 VA								8
9						0 VA	0 VA			2	40 A	EXSTING CKT	10
11	EXSTING CKT	20 A	1					0 VA	0 VA				1:
13	EXSTING CKT	20 A	1	0 VA	0 VA					1	20 A	EXSTING CKT	14
15	EXSTING CKT	20 A	1			0 VA	0 VA			1	20 A	EXSTING CKT	10
17	EXSTING CKT	20 A	1					0 VA	0 VA	1	20 A	EXSTING CKT	18
19	EXSTING CKT	20 A	1	0 VA	0 VA					1	20 A	EXSTING CKT	20
21	EXSTING CKT	20 A	1			0 VA	0 VA			1	20 A	EXSTING CKT	2:
23	EXSTING CKT	20 A	1					0 VA	0 VA	1	20 A	EXSTING CKT	24
25	EXSTING CKT	20 A	1	0 VA	0 VA					1	20 A	EXSTING CKT	20
27	EXSTING CKT	20 A	1			0 VA	0 VA			1	20 A	EXSTING CKT	28
29	EXSTING CKT	20 A	1					0 VA	0 VA	1	20 A	EXSTING CKT	30
31	EXSTING CKT	20 A	1	0 VA	0 VA					1	20 A	EXSTING CKT	32
33	EXSTING CKT	20 A	1			0 VA	0 VA			1	20 A	EXSTING CKT	34
35	EXSTING CKT	20 A	1					0 VA	0 VA	1	20 A	EXSTING CKT	36
37	EXSTING CKT	20 A	1	0 VA	0 VA							SPACE	38
39	EXSTING CKT	90 A	2			0 VA	0 VA			2	20 A	ACCU-2 & CP-2	40
41								0 VA	0 VA				42
		Tota	I Load:	0 '	VA	0 \	/A	0	VA				
		Total	Amps:	0	A	0	A	0	Α	_			

	Electrical Fixture Schedule												
Mark	DESCRIPTIONN	VOLTAGE	PHASE	AMPS	Panel	Circuit Number	CIRCUIT BREAKER	CONDUIT AND WIRING	PROVIDE DISCONNECT	FSD	DUCT SMOKE DETECTOR	NOTES	
AC-1	INDOOR AC UNIT	208	1					(2)#12, #12G. IN 3/4" CONDUIT	Yes			FED FROM OUTDOOR UNIT	
AC-2	INDOOR AC UNIT	208	1					(2)#12, #12G. IN 3/4" CONDUIT	Yes			FED FROM OUTDOOR UNIT	
ACCU-1	OUTDOOR AC UNIT	208	1	11.9 MCA	PANEL G	18,20	20A-2P	(2)#12, #12G. IN 3/4" CONDUIT	Yes				
ACCU-2	OUTDOOR AC UNIT	208	1	20 MCA	SECT. 2	40,42	30A-2P	(2)#12, #12G. IN 3/4" CONDUIT	Yes				
CHU-1	CABINET UNIT HEATER	120	1	.8 FLA	SECT. 1	42	15A-1P	(2)#12, #12G. IN 3/4" CONDUIT	Yes				
CHU-2	CABINET UNIT HEATER	120	1	.8 FLA	SECT. 1	42	15A-1P	(2)#12, #12G. IN 3/4" CONDUIT	Yes				
CP-1	CONDENSATE PUMP	208	1	1 FLA	PANEL G	18,20	15A-2P	(2)#12, #12G. IN 3/4" CONDUIT	Yes				
CP-2	CONDENSATE PUMP	208	1	1 FLA	SECT. 2	40,42	15A-2P	(2)#12, #12G. IN 3/4" CONDUIT	Yes				

	265000 - LIGHTING FIXTURE SCHEDULE												
TAG	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	WATTAGE / CCT / LAMP / CRI	VOLTAGE	REMARKS							
A1	2'X2' RECESSED LED WITH BEVEL OPTION. DLC LISTED WITH 6500 LUMEN PACKAGE.	COOPER METALUX	22PD-65-PB1-L835	58W/3500K/LED/80+	UNV								
EX-1	INDOOR EXIT SIGN WITH NICKEL-CADMIUM BATTERY	ACUITY BRANDS EDG AND EDGR SER	EDG/EDGR-W-1-G-EL-WM	LED	UNV								

REV.	DATE	ITEM
THESE DRAWINGS ARE BASED ON CONSTRUCTION DRAWINGS NOT PREPARED BY BBS ARCHITECTS, LANDSCAPE ARCHITECTS AND ENGINEERS, P.C. AND, THEREFORE, MAY NOT REPRESENT THE CONDITIONS AS CONSTRUCTED AT THE TIME. ALL EXISTING CONDITIONS SHOWN ARE REPRESENTED AS SUGGESTIVE INFORMATION AS THEY MAY NOT HAVE BEEN BUILT AND DETAILED PER THE ORIGINAL DOCUMENTS OR PER THE OWNER'S INFORMATION.		
DECT PHASE 2	HOOL	S
HOOL E	IIGH SC	S

CATSKILL CENTRAL SCHC
2019 BOND - ADDITIONS & RENOVAT
CATSKILL MIDDLE & HIG
GREENE COUNTY DRWG. BY: Author CHK. BY: Checker

THIS DRAWING, PREPARED FOR THE SPECIFIC PROJECT INDICATED IS AN INSTRUMENT OF SERVICE AND THE PROPERTY OF BBS ARCHITECTS, LANDSCAPE ARCHITECTS AND ENGINEERS, PC. INFRINGEMENT OR ANY USE OF THIS DRAWING FOR ANY OTHER PROJECT IS PROHIBITED. ANY ALTERATION OR REPRODUCTION OF THIS DOCUMENT IS ALSO PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT OR ENGINEER.

ARCHITECTS LANDSCAPE ARCHITECTS ENGINEERS BRANCH PROJECT CONTACT: 244 EAST MAIN STREET
187 WOLF ROAD, STE. 205 PATCHOGUE
ALBANY NEW YORK 11772
NEW YORK 12205 T. 631.475.0349
T. 518.621.7650 F. 631.475.0361

www.BBSARCHITECTURE.COM

19-04-01-06-0-005-022 DISTRICT CATSKILL CENTRAL SCHOOL DISTRICT

PROJECT 2019 BOND - ADDITIONS & RENOVATION PROJECT PHASE 2 DWG TITLE SCHEDULES

SCALE:

DATE:

BID P/U DATE: AS NOTED 2/2/2023 SEPT 28, 2020 FILE NO.