VALLEY CENTRAL SCHOOL DISTRICT ADMINISTRATION BUILDING 2023 CAPITAL PROJECT - PHASE 1

ISSUED FOR BID: 10/18/24

CSARCH - ARCHITECTS

BLAKE ENGINEERING, PLLC - M.E.P. ENGINEERS

PASSERO ASSOCIATES - SITE/CIVIL AND STRUCTURAL ENGINEERS

AECC ENVIRONMENTAL CONSULTING - HAZARDOUS MATERIALS DESIGNERS

STATE EDUCATION DEPARTMENT PROJECT CONTROL NUMBER:

2023 CAPITAL PROJECT - PHASE 1

44-13-01-06-1-005-006

THE DESIGN OF THIS PROJECT CONFORMS TO APPLICABLE PROVISIONS OF THE NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE, THE NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE, AND THE MANUAL OF PLANNING STANDARDS OF THE NEW YORK STATE EDUCATION DEPARTMENT.

CSArch PROJECT NO. 187-2302.01



Valley Central School District
 Administration Offices,
 944 NY-17K, Montgomery, NY 12549

VICINITY MAP NTS



DRAWING LIST

GENERAL DRAWINGS

ADMIN G000 COVER & SHEET INDEX

ADMIN G001 SYMBOLS, ABBREVIATIONS, AND MISC.

ARCHITECTURAL DRAWINGS

ADMIN A101 OVERALL FLOOR PLAN

PLUMBING GENERAL DRAWINGS
ADMIN P001 PLUMBING NOTES, LEGEND & DETAILS

PLUMBING DRAWINGS

ADMIN P111 PLUMBING PLANS

MECHANICAL GENERAL DRAWINGS

ADMIN M001 MECHANICAL NOTES, LEGENDS, SCHEDULES & DETAILS

ADMIN M111 MECHANICAL PLANS

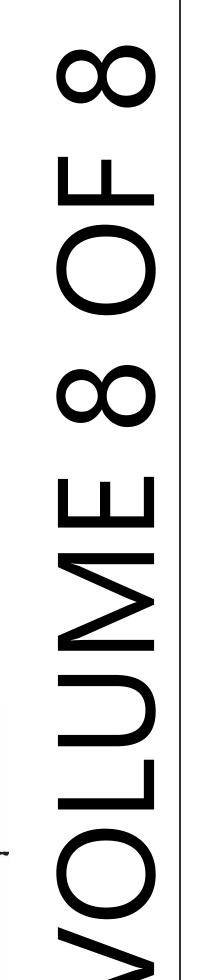
TOTAL TOTAL

ELECTRICAL GENERAL DRAWINGS

ADMIN E001 ELECTRICAL NOTES, LEGENDS, & SCHEDULES

ELECTRICAL DRAWINGS

ADMIN E111 ELECTRICAL PLANS





ABBREVIATIONS ARCHITECTURAL LEGEND ABBREVIATION DESCRIPTION **MATERIAL INDICATIONS** ADA AMERICANS WITH DISABILITIES ACT EARTH ADD ADDENDUM ADMIN ADMINISTRATIVE GRANULAR FILL AFF ABOVE FINISHED FLOOR ALTERNATE BRICK APPROX APPROXIMATE ARCHITECT / ARCHITECTURAL AUDIO VISUAL CONCRETE MASONRY UNIT BUILDING CONCRETE BOTTOM OF BOT OR B/ BASEMENT GROUT CONTROL / CONSTRUCTION JOINT CENTERLINE ROUGH WOOD BLOCKING CEILING CLG CLR CLEAR CONCRETE MASONRY UNIT CMU COL COLUMN FINISH WOOD CONCRETE CONC CONF CONFERENCE CONTINUOUS PLYMOOD CONTR CONTRACTOR COORD COORDINATE SHEATHING CORR CORRIDOR RIGID INSULATION DEMO DEMOLITION DET DETAIL DIA DIAMETER BATT INSULATION DWG DRAMING SPRAY FOAM INSULATION EDUCATION EPS INSULATION EXTERIOR INSULATION FINISH SYSTEM EIFS ELECT ELECTRIC / ELECTRICAL ELEY ELEVATION ETHYLENE PROPYLENE DIENE MONOMER EPDM **DIMENSIONING CONVENTIONS** EQUIP EQUIPMENT EXST EXISTING EXPANSION JOINT FACE OF STUD OR CMU EXT EXTERIOR FIN COLUMN CENTER LINE FIN FL FINISH FLOOR FIXT FIXTURE FLR FLOOR FIRE-RETARDENT-TREATED MATERIAL FRT FTG FOOTING **SYMBOLS** GROUND ROOM NAME CLASSROOM 🔨 GAUGE GALLON(S) 100 ROOM NUMBER GAL 000 S.F. GALVANIZE(D) AREA OF ROOM GENERAL CONTRACTOR GYPSUM WALL BOARD (A100) DOOR NUMBER, REFER TO A900 DRAWINGS GMBS GYPSUM WALL BOARD SOFFIT MINDOM TAG, REFER TO A900 DRAWINGS HM HOLLOW METAL HORIZ HORIZONTAL HR BORROWED LIGHT NUMBER, REFER TO A900 DRAWINGS HTG STOREFRONT / CURTAINWALL HEATING/VENTILATING/AIR CONDITIONING NUMBER, REFER TO A 900 DRAWINGS COLUMN GRID DESIGNATION INCH INTERIOR PARTITION TAG, REFER TO A 100 DRAWINGS JANITOR HOUR RATING OF PARTITION JANITOR'S CLOSET ADDITIONAL NOTES FOR PARTITION JOIST REVISION NUMBER TMIOL LABORATORY KEY NOTE, NEW WORK POUND LINEAR KEY NOTE, DEMOLITION WORK LEVEL LVL ELEVATION TAG MANUAL MAS MASONRY MAXIMUM MAX MDF MEDIUM DENSITY FIBERBOARD HANDICAPPED ACCESSIBLE MECH MECHANICAL ELEMENT OR FIXTURE MEZZ MEZZANINE MANUFACTURER MIDDLE MINIMUM INTERIOR FINISH TAG, MISC MISCELLANEOUS REFER TO AF 100 MO MASONRY OPENING DRAWINGS METAL NOT APPLICABLE **DETAIL INDICATOR LEGEND** NOT IN CONTRACT NOM NOMINAL NTS NOT TO SCALE ON CENTER OD OUTSIDE DIAMETER **SECTION INDICATOR** -SECTION NUMBER OVERHEAD OPTIONAL OVERALL OUNCE DRAMING SHEET NUMBER SECTION IS DRAWN ON PERIMETER -DIRECTION OF VIEW PLASTIC LAMINATE PLAM PLBG PLUMBING PLAS PLASTER PLYMD PLYMOOD **DETAIL INDICATOR (SECTION)** -SECTION NUMBER PNL PANEL PNT PAINT POLYISO POLYISOCYANURATE PRESSURE PRESERVATIVE TREATED DRAWING SHEET NUMBER PR SECTION IS DRAWN ON PREP PREPARATORY DIRECTION OF VIEW PTN PARTITION PVC POLYVINYL CHLORIDE **ENLARGED DETAIL INDICATOR** RADIUS REQD RM REQUIRED DETAIL NUMBER ROOM RND ROUND DRAWING AREA ROUGH OPENING REQUIRING SCH SCHEDULED DETAIL SECT SECTION SQUARE FEET - DRAMING SHEET NUMBER SIMILAR DETAIL IS DRAWN ON SPEC SPECIFICATION SQUARE STAINLESS STEEL SOUND TRANSMISSION CLASS STC **DETAIL TITLE** STD STANDARD DETAIL TYPE / NAME DETAIL NUMBER STL STEEL STOR STORAGE STRUCT STRUCTURAL / STRUCTURE SUSP SUSPENDED SUSPENDED ACOUSTICAL CEILING TOP AND BOTTOM DRAMING SHEET NUMBER TONGUE AND GROOVE T\$G TECH TECHNOLOGY TEMPORARY TEMPERED TMPD **EXTERIOR ELEVATION INDICATOR** TOM TOP OF MASONRY T05 TOP OF STEEL - ELEVATION NUMBER TYP TYPICAL DIRECTION OF VIEW-UNDERWRITERS LABORATORY UNLESS NOTED OTHERWISE UNO DRAWING SHEET VERT NUMBER DETAIL IS VERTICAL VESTIBULE DRAWN ON VERIFY IN FIELD **INTERIOR ELEVATION INDICATOR** MITH W/0 MITHOUT BLANK ARROW INDICATES
ELEVATIONS NOT DETAILED MDMOOD MOOD PRESERVED-TREATED MATERIAL - ELEVATION NUMBER MEIGHT DRAWING SHEET NUMBER YD YARD DETAIL IS DRAWN ON DIRECTION OF VIEWS

GENERAL NOTES

1. DIMENSIONS ARE GIVEN THUS (UNLESS I

1. DIMENSIONS ARE GIVEN THUS (UNLESS NOTED OTHERWISE)

A. TO FACE OF MASONRY WALL

B. TO FACE OF METAL STUD

C. TO COLUMN CENTERLINES

2. DO NOT SCALE DRAWINGS. IF A DIMENSION IS NOT SHOWN, BRING IT TO THE ATTENTION OF THE ARCHITECT FOR VERIFICATION BEFORE PROCEEDING WITH THE ASSOCIATED WORK

D. TO FINISH FACE OF SOFFIT OR CEILING
E. FACE OF EXISTING CONSTRUCTION

3. WALLS ON COLUMN LINES ARE CENTERED, UNO

4. ALL DIMENSIONS RELATED TO EXISTING CONDITIONS SHALL BE VERIFIED IN FIELD. CONTRACTOR TO NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK IN THAT AREA.

5. LAYOUT OF TOILET FIXTURES AND ACCESSIBILITY CLEARANCES ARE SHOWN AS CLEAR DIMENSION. CONTRACTORS ARE REQUIRED TO COODINATE LAYOUTS OF PARTITIONS, UTILITY CONNECTIONS, AND THICKNESS OF FINISHES TO ALLOW THESE CLEAR DIMENSIONS.

6. ALL ELEVATIONS (X'-X") ARE REFERENCE FROM FIRST FLOOR ELEVATION

7. ALL WOOD BLOCKING WITHIN 2'-0" OF GRADE SHALL BE PRESSURE TREATED

B. ALL FLOOR PENETRATIONS SHALL BE SMOKE-SEALED AND /OR FIRE STOPPED. COORDINATE WITH 'H' DWGS FOR SMOKE / FIRE DAMPER REQUIREMENTS.

9. FOR INTERIOR PARTITION TYPES, REFER TO DRAWING ATO1

10. FOR DOOR SCHEDULE, REFER TO DRAWING A901
11. FOR FINISH SCHEDULE, REFER TO DRAWING AF901

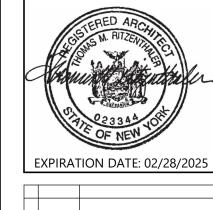
12. ALL EXPOSED SURFACES OF NEW PARTITIONS AND

SOFFITS ARE TO BE FINISHED.

13. PROVIDE PATCH TO MATCH EXISTING FINISHES AT ALL WALL REMOVAL AREAS, COORDINATE WITH DEMOLITION DRAWINGS AND SPECIFICATIONS.

14. FOR ALL MATERIAL TESTING, REFER TO SPECIFICATION DIVISION 000220

15. ALL CONSTRUCTION SHOWN IS NEW UNLESS NOTED OTHERWISE



DATE DESCRIPTION

Drawn By: CSA
Checked By: CSA
Proj. #: 44-13-01-06-1-005-006

Proj. #: 44-13CSArch Proj. #:
Issued for Bid:
Sheet Title

SYMBOLS, ABBREVIATIONS AND MISC

Sheet No.
ADMIN
G001

CONSTRUCTION DOCUMENTS

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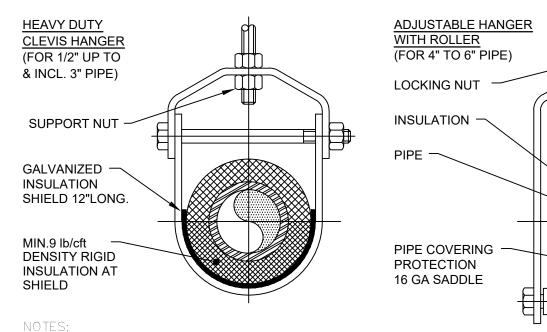
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EXPIRATION DATE: 02/28/2025

OVERALL FLOOR PLAN

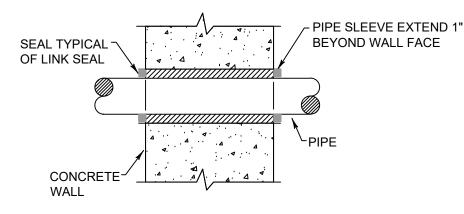
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1. PIPE 8" AND LARGER SHALL HAVE ROLLER SUPPORTED WITH DUAL RODS. 2. FOR CHW SERVICE OVER 3" REPLACE SADDLE WITH 12" LONG 14 GA SHIELD WITH RIGID INSULATION BETWEEN PIPE AND SHIELD.

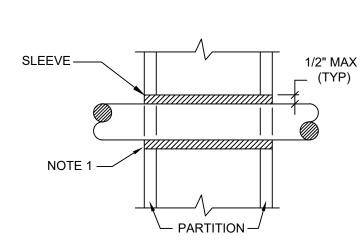
-					
	PIPE Ø (IN.)	MAX. S	MIN. ROD SIZE		
		STEEL PIPE	COPPER PIPE	CPVC	(IN.)
	1/2 THRU 1	7	5	5	3/8
	1-1/2 THRU 2	9	8	6	3/8
	2-1/2	11	9	7.5	1/2
	3	12	10	7.5	1/2
	4	14	12	8.5	5/8
	6	17	14	9	3/4
	8	19	16	10	7/8
	10	22	18	10.5	7/8

Pipe Hanger Support



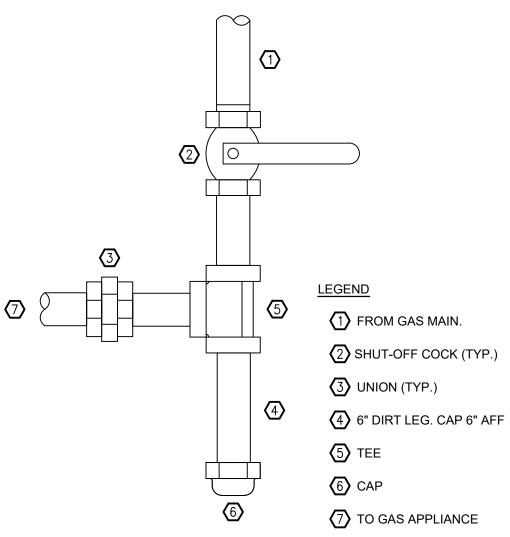
Exterior Wall Pipe Penetrations

P001 N.T.S.



1. AT FIRE RATED PARTITIONS, ADD ADDITIONAL LAYER OF FIRE SAFING INSULATION AROUND PENETRATION SO AS TO FILL CAVITY. 2. DUCT AND PIPE PENETRATIONS THRU CORRIDOR WALLS ABOVE THE CEILING ARE TO BE FIRE STOPPED AROUND THE PENETRATION.

Pipe Penetrations Detail \P001 / N.T.S.



Gas Piping Appliance Connection Detail

Plumbing Legend: Plumbing Notes: 1. ALL MATERIALS AND EQUIPMENT ARE TO BE NEW, UNUSED, AND FREE FROM DEFECTS DOMESTIC COLD WATER SUPPLY 110 °F DOMESTIC HOT WATER SUPPLY 140 °F DOMESTIC HOT WATER SUPPLY HOT WATER RETURN THE CONTRACT. SANITARY SEWER, ABOVE GRADE SANITARY SEWER, BELOW GRADE GREASE WASTE, BELOW GRADE CONNECTION WITH THIS TRADE SHALL BE COMPLETED BY THIS CONTRACTOR. PLUMBING VENT STORM WATER, ABOVE GRADE REQUIRED IN CONNECTION WITH WORK UNDER THIS CONTRACT. STORM WATER, BELOW GRADE NATURAL GAS PIPING DIRECTION OF PIPE SLOPE (DOWN) CONCENTRIC REDUCER OR INCREASER ECCENTRIC REDUCER TOP CONNECTION, 45° OR 90° AND GUIDELINES. BOTTOM CONNECTION, 45° OR 90° SIDE CONNECTION CAPPED OUTLET

POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK STRAINER HOSE BIB SOLENOID VALVE GATE VALVE CHECK VALVE **BUTTERFLY VALVE** FULL PORT BALL VALVE PRESSURE GAUGE PRESSURE REDUCING VALVE (PRV) DRAIN VALVE FLEXIBLE PIPING CONNECTION C.O. CLEANOUT W.C.O. WALL CLEANOUT FLOOR CLEANOUT F.C.O. C.O.T.G. CLEANOUT TO GRADE D.C.O.T.G. DOUBLE CLEANOUT TO GRADE

PLUMBING FIXTURE MARK

(P-X)

RISE OR DROP IN PIPE

PIPE DOWN

OF ANY KIND. THE BASIS OF QUALITY SHALL BE THE LATEST REVISION OF ASTM, ANSI, OR OTHER ACCEPTABLE STANDARDS. 2. THESE DRAWINGS ARE DIAGRAMMATIC, AND INDICATE GENERAL ARRANGEMENT OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE REVIEWED THE SITE FOR HIS WORK PRIOR TO HAVING SUBMITTED HIS PROPOSAL. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR CONDITIONS FOUND DURING THE COURSE OF

3. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF ALL OTHER TRADES.

4. ALL CUTTING, PATCHING, FIRE-STOPPING, AND SURFACE RESTORATION IN

5. THIS CONTRACTOR SHALL PAY ALL FEES, GIVE ALL NOTICES, FILE ALL NECESSARY DRAWINGS, AND OBTAIN ALL PERMITS, INSPECTIONS AND CERTIFICATES OF APPROVAL

6. ALL WORK IN ASSOCIATION WITH THIS CONTRACT SHALL BE COMPLETED IN STRICT COMPLIANCE WITH THE 2020 BUILDING CODE OF NEW YORK STATE, 2020 PLUMBING CODE OF NEW YORK STATE, 2020 FUEL GAS CODE OF NEW YORK STATE & 2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.

WHERE THE PROJECT INVOLVES A GAS SERVICE, THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION, APPLICATIONS AND FEES OF ALL WORK ASSOCIATED WITH THE LOCAL GAS UTILITY COMPANY. ALL WORK INVOLVING THE GAS UTILITY COMPANY SHALL BE COMPLETED IN ACCORDANCE WITH THEIR REGULATIONS

8. ALL DOMESTIC COLD AND HOT WATER PIPING AND FITTINGS ARE TO BE INSULATED WITH 1" THICK RIGID ONE-PIECE MOLDED SECTIONAL FIBERGLASS PIPE COVERING WITH UNIVERSAL JACKET. ALL JOINTS ARE TO BE COMPLETELY SEALED A MINIMUM OF

9. ALL PIPING SHALL BE PROPERLY SUPPORTED AND ROUTED PARALLEL OR PERPENDICULAR TO BUILDING WALLS. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL SUPPORT HANGERS AND MISCELLANEOUS METALS REQUIRED FOR PROPER INSTALLATION OF WORK.

10. ALL EXPOSED PIPING, FITTINGS, TRAPS, ESCUTCHEONS, VALVES, ETC. SHALL BE CHROME PLATED.

11. SLOPE SANITARY DRAINAGE PIPING 2" DIAMETER AND SMALLER NOT LESS THAN 1/4" PER FOOT. SLOPE SANITARY DRAINAGE PIPING OVER 2" DIAMETER NOT LESS THAN 1/8" PER FOOT.

12. INSTALL A CLEANOUT AT THE BASE OF EACH SOIL STACK, AT EACH CHANGE IN DIRECTION, AT INTERVALS NOT OVER 50 FEET AND ELSEWHERE AS SHOWN ON DRAWINGS OR REQUIRED BY CODE.

13. PROVIDE EXPOSED PIPING WITH CHROME PLATED CAST BRASS ESCUTCHEON WITH SET SCREW WHERE PENETRATING FLOORS, CEILINGS, WALLS OR PARTITIONS.

14. TEST PIPING AND PROVE TIGHT FOR AT LEAST TWO HOURS IN ACCORDANCE WITH REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION AND/OR AS SPECIFIED. TEST SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER AND LOCAL INSPECTOR. TEST SHALL BE REPEATED IF NECESSARY UNTIL FINAL APPROVAL OF SYSTEM IS OBTAINED.

14.1. WATER & GAS PIPING TO BE AIR-PRESSURE TESTED TO 1-1/2 TIMES MAXIMUM WORKING PRESSURE.

14.2. DRAINAGE, WASTE & VENT PIPING TO BE TESTED BY FILLING THE SYSTEM WITH WATER TO 10-FEET ABOVE HIGHEST POINT.

15. SUPPORT HORIZONTAL PIPING UTILIZING A SPACING PER PIPING MANUFACTURER'S REQUIREMENTS.

16. INSTALL VALVES ON THE ENTIRE DISTRIBUTION SYSTEM, SO LOCATED AS TO GIVE COMPLETE CONTROL TO ALL FIXTURES AND EQUIPMENT.

17. INSTALL DRAIN VALVES AT BASE OF ALL RISERS AND AT LOW POINTS OF PIPING

18. THE CONTRACTOR IS RESPONSIBLE TO TEST ALL EQUIPMENT, PIPING, FIXTURES, AND SYSTEMS INSTALLED UNDER THIS CONTRACT TO ENSURE PROPER OPERATION PRIOR TO FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.

19. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE WHETHER SPECIAL LICENSING IS REQUIRED IN ORDER TO PERFORM THE REQUIRED WORK IN THE MUNICIPALITY WHERE THE PROJECT IS LOCATED. IF THE CONTRACTOR CANNOT OBTAIN THE REQUIRED LICENSING TO COMPLETE THE WORK WITHIN THE PROJECT SCHEDULE, THEN THE

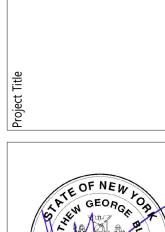
20. CONTRACTOR IS RESPONSIBLE TO CREATE AND SUBMIT RED-LINE "AS-BUILT" PLANS TO THE ENGINEER AT THE END OF THE PROJECT. AS-BUILT PLANS SHALL ACCURATELY REPRESENT THE SYSTEMS AS THEY WERE INSTALLED.

CONTRACTOR SHALL NOT BE PERMITTED TO BID ON THIS PROJECT.

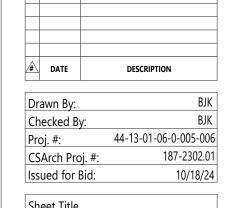
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PLUMBING NOTES, LEGEND

& DETAILS





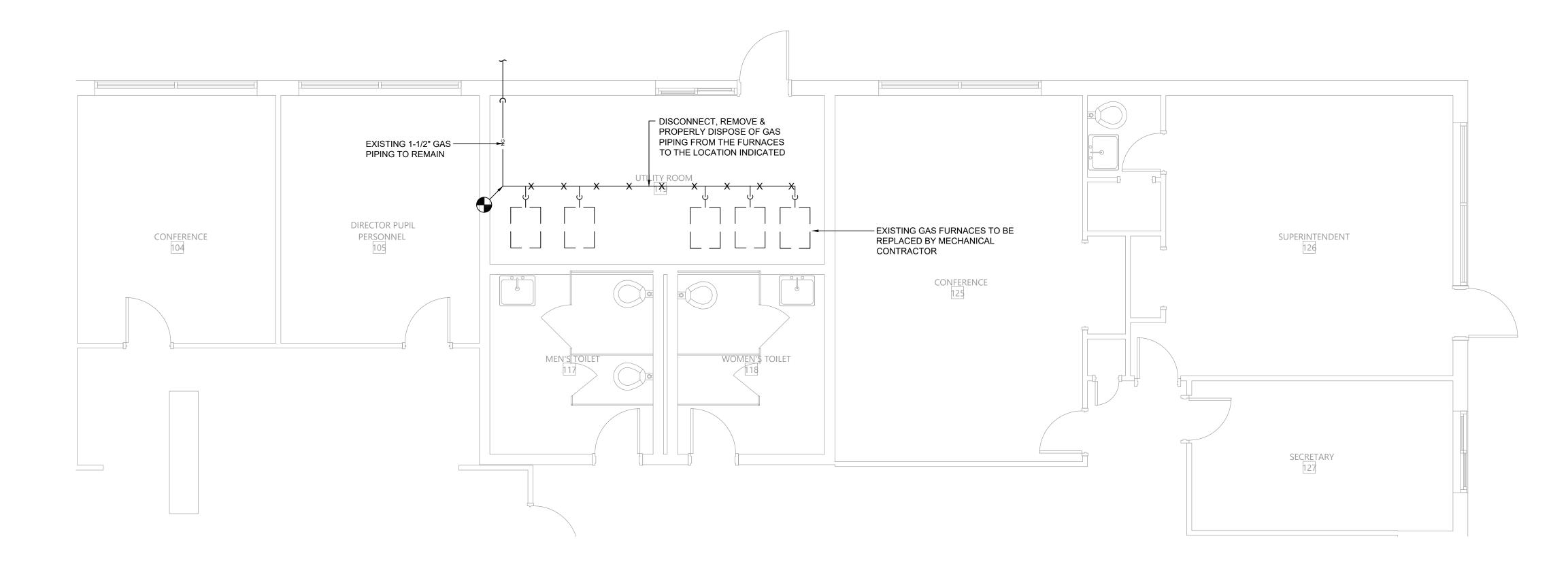


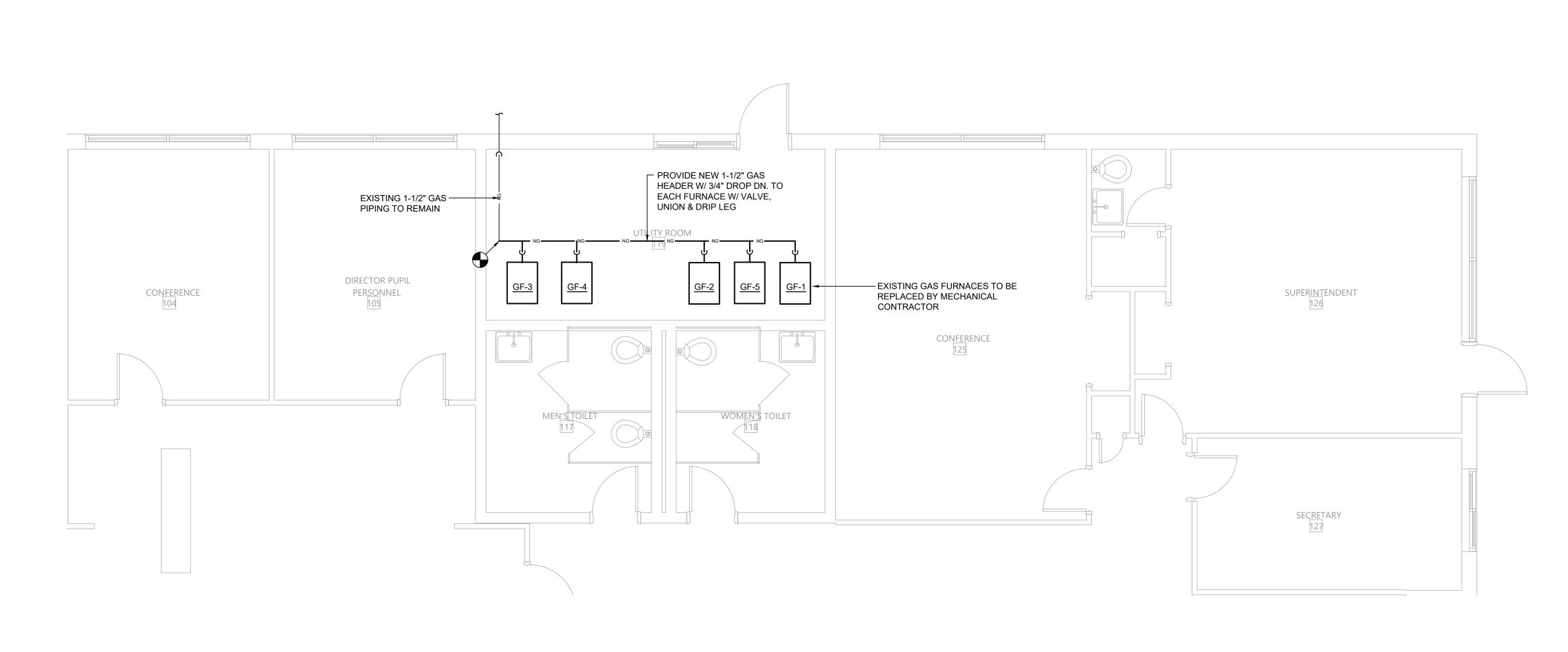
PLUMBING PLANS

Sheet No.

ADMIN
P111

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Plumbing Demolition Plan

P111 Scale: 1/4" = 1'-0"

2

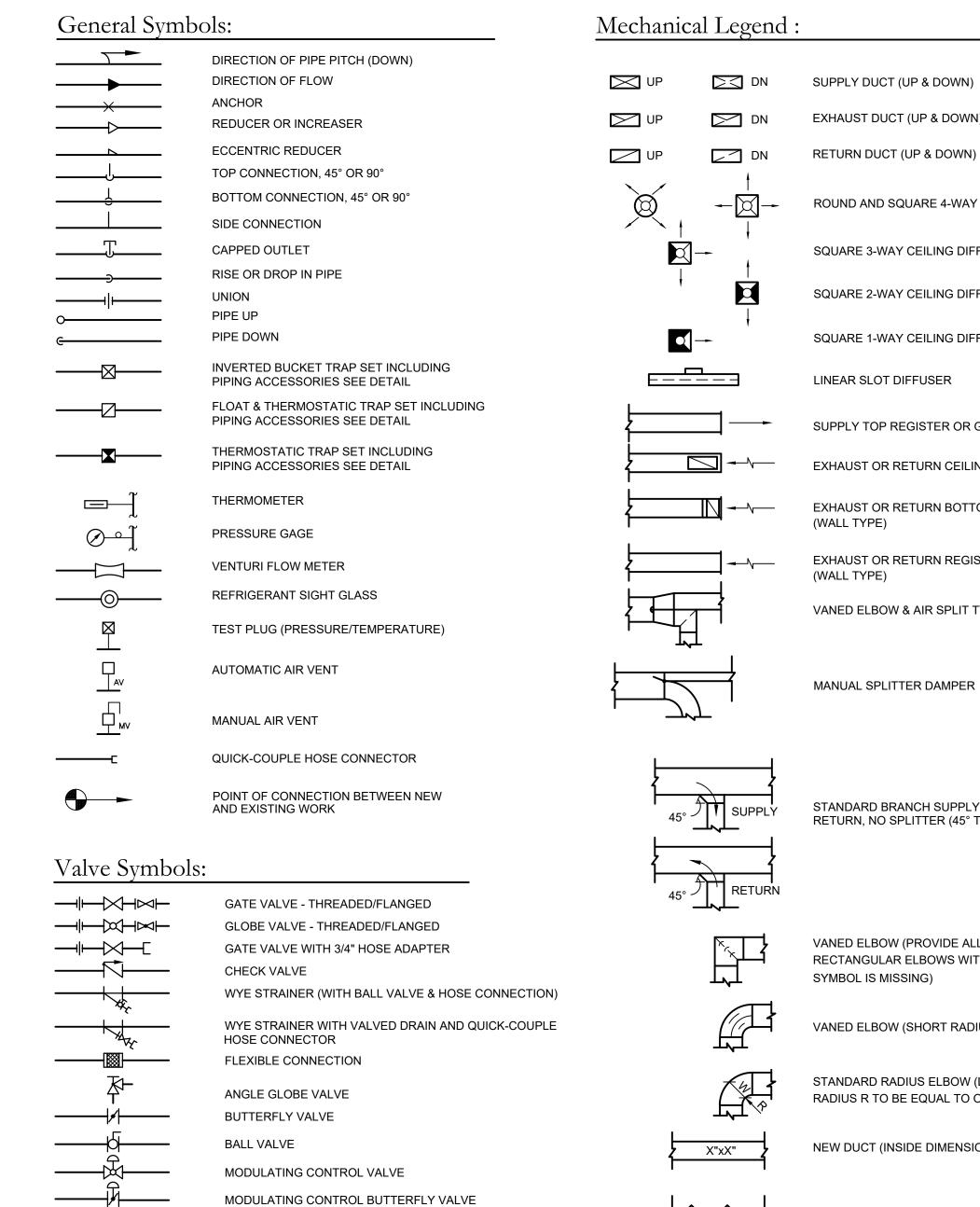
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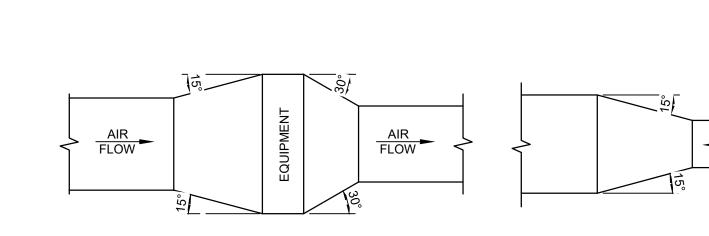
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Sheet Title **MECHANICAL** NOTES, LEGENDS,

SCHEDULES & DETAILS

ADMIN





STANDING SEAM

REINFORCING (ALL DUCTS 18" THRU 54" SHALL BE CROSSBROKEN)

IF TRANSVERSE JOINTS ARE LOCATED 4'-0" OR LESS ON CENTER NO REINFORCING

IF TRANSVERSE JOINTS ARE LOCATED 4'-0" OR LESS ON CENTER NO REINFORCING

IF TRANSVERSE JOINTS ARE LOCATED 4'-0" OR LESS ON CENTER NO REINFORCING

IF TRANSVERSE JOINTS ARE LOCATED 4'-0" OR LESS ON CENTER NO REINFORCING

IF ON 8'-0" CENTERS REINFORCE WITH 1"X1"X1/8" ANGLES AT 4 FT. O.C.

IF ON 8'-0" CENTERS REINFORCE WITH 1"X1"X1/8" ANGLES AT 4 FT. O.C.

IF ON 8'-0" CENTERS REINFORCE WITH 1"X1"X1/8" ANGLES AT 4 FT. O.C.

IF ON 8'-0" CENTERS REINFORCE WITH 1"X1"X1/8" ANGLES AT 4 FT. O.C.

REINFORCE ALL SIDES OVER 60" WITH 1 1/2"X1 1/2"X1/8" ANGLES ON 2'-0"

4'-0" CENTERS. IF JOINTS ARE ON 8'-0" CENTERS REINFORCE WITH 1 1/2"X

REINFORCE ALL SIDES OVER 84" WITH 1 1/2"X1 1/2"X3/16" ANGLES ON 2'-0"

CENTERS. SIDES 61" THRU 84" REINFORCE WITH 1 1/2"X1 1/2"X1/8" ANGLES ON

2'-0" CENTERS. SIDES 60" OR LESS NEED NO REINFORCING IF JOINTS ARE ON

4'-0" CENTERS. IF JOINTS ARE ON 8'-0" CENTERS REINFORCE WITH 1 1/2"X

REINFORCE ALL SIDES OVER 96" WITH 2"X2"X1/4" ANGLES ON 2'-0" CENTERS

REINFORCE ALL SIDES 85" THRU 96" WITH 1 1/2"X1 1/2"X3/16" ANGLES ON 2'-0"

2'-0" CENTERS. REINFORCE ALL SIDES UNDER 60" WITH 1 1/2"X1 1/2"X1/8" AN-

GLES IF JOINTS ARE 8'-0" ON CENTER. NO REINFORCING IF JOINTS ARE 4'-0"

CENTERS. REINFORCE ALL SIDES 61" THRU 84" WITH 1 1/2"X1 1/2"X1/8" ANGLES ON

CENTERS. SIDES UNDER 60" NEED NO REINFORCING IF JOINTS ARE ON

FASTENED ON 8" CENTERS

FASTENED ON 8" CENTERS

FASTENED ON 8" CENTERS

FASTENED ON 8" CENTERS

1 1/2"X1/8" ANGLES ON 4'-0" CENTERS.

1 1/2"X1/8" ANGLES ON 4'-0" CENTERS.

ON CENTER.

HEMMED "S" SLIP

PLAIN "S" SLIP

AIR-COOLED CONDENSING UNIT SCHEDULE

OUTDOOR AIR MINIMUM MINIMUM

15.00

16.00

15.20

16.00

12.00

12.00

12.00

TEMP. (°F) | SEER

NONE REQUIRED

NONE REQUIRED

Ductwork Transition Detail

ELECTRICAL DATA

UNIT POWER CONNECTION

FLA VOLT. PHASE Hz. MCA MOCP

COMP.

RLA | LRA |

50.4 | 122.1 | 2.80 | 208

THICKNESS & REINFORCING SCHEDULE - * LOW PRESSURE DUCTWORK

TRANSVERSE JOINT

PLAIN "S" SLIP

OR BAR SLIP

OR POCKET LOCK

OR POCKET LOCK

HEMMED "S" SLIP OR

OR BAR SLIP

1" POCKET LOCK

POCKET LOCK

BAR SLIP OR REIN-

FORCED BAR SLIP OR

1/4" BAR SLIP, OR RE-

OR 1 1/2" POCKET LOCK

1/4" BAR SLIP. OR RE-

OR 1 1/2" POCKET LOCK

REINFORCED BAR SLIP,

OR ANGLE SLIP, ALTER-

NATE BAR SLIP, OR AN-

1 1/2" COMPANOIN AN-

LOCK, OR 1 1/2" ANGLE

SLIP OR REINFORCED

2" COMPANION ANGLE

OR 2"X2"X1/4" ANGLE

ANGLE REINFORCED

REINFORCED BAR SLIP

BAR SLIP

ANGLES TO BE

THE SAME SIZE

REINFORCING

AS REQUIRED

ANGLES

SLIP, OR 2"X2"X1/4"

POCKET LOCK OR

BAR SLIP

GLES, OR ANGLE RE-

INFORCED POCKET

GLE REINFORCED

POCKET LOCK

INFORCED BAR SLIP,

INFORCED BAR SLIP,

BAR SLIP OR

GREATEST DIMENSION

* NOTE: LOW PRESSURE DUCTWORK SHALL BE DUCTWORK IN WHICH THE PRESSURE DOES NOT EXCEED 2" WATER GAUGE

TRANSVERSE JOINT

POCKET LOCK

OR BAR SLIP

DRIVE SLIP OF

POCKET LOCK

OR BAR SLIP

HEMMED "S" SLIP OR

OR 1" POCKET LOCK

DRIVE SLIP 18" OR

POCKET LOCK

LESS BAR SLIP REIN-

FORCED BAR SLIP OR

1/4" BAR SLIP, OR RE-

OR 1 1/2" POCKET LOCK

1/4" BAR SLIP, OR RE-

NFORCED BAR SLIP,

OR 1 1/2" POCKET LOCK

REINFORCED BAR SLIP.

OR ANGLE SLIP, ALTER-

NATE BAR SLIP, OR AN-

1/2" COMPANOIN AN-

GLES, OR ANGLE RE-

LOCK, OR 1 1/2" ANGLE

SLIP OR REINFORCED

" COMPANOIN ANGLE,

OR 2"X2"X1/4" ANGLE

SLIP, OR 2"X2"X1/4"

POCKET LOCK OR

ANGLE REINFORCED

REINFORCED BAR SLIP

POCKET LOCK

NOMINAL

COMPRESSOR CAPACITY REFRIGERANT

(MBH)

27.6

40

48

R-410A

R-410A

R-410A

R-410A

SCROLL

SCROLL

SCROLL

SCROLL

GASKET - FIRE

COMPANION ANGLES

INFORCED POCKET

BAR SLIP

GLE REINFORCED

POCKET LOCK

INFORCED BAR SLIP,

BAR SLIP OR DRIVE SLIP

SMALLEST DIMENSION

STEEL DUCTS U.S.

STANDARD GAUGE

ALUMINUM DUCTS

B & S GAUGE

24(0.020°)

22(0.025°)

22(0.025°)

20(0.032°)

20(0.032°)

18(0.040°)

18(0.040°)

16(0.051°)

LONGITUDINAL

STANDING SEAM)

16(0.051°)

LONGITUDINAL

STANDING SEAM)

SEAM MAY BE

ACME LOCK

ANGLES TO BE

AS REQUIRED

REINFORCING

ANGLES

ÈEQUAL OF

GREATER

1. THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.

Ductwork Radius Elbow Detail

MODEL

4TTR5030N1

4TTR5036N1

4TTR5042N1

4TTR6048N1

2. ALL STANDARD RADIUS ELBOWS CAN BE SUBSTITUTED WITH SHORT RADIUS ELBOWS. ALL

SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED

INDOOR UNIT

SERVED

GF-1

GF-2

GF-3

GF-4

THAN W

AND FASTENED AS RECOMMENDED BY SMACNA.

MANUFACTURER

(OR ACCEPT.

EQUAL)

TRANE

TRANE

TRANE

EQUIPMENT

TAG

CU-2

CU-3

CU-4

CU-5

THE SAME SIZE

SEAM MAY BE

LONGITUDINAL

PITTSBURGH OR

PITTSBURGH OR

PITTSBURGH OR

PITTSBURGH OR

PITTSBURGH

PITTSBURGH

PITTSBURGH

PITTSBURGH

PITTSBURGH

LOCK

DRIVE SLIP

ANGLE REINFORCED POCKET LOCK

GREATER

LOCK

LOCK

LOCK

ACME LOCK

ACME LOCK

ACME LOCK

ACME LOCK

GREATEST DUCT

DIMENSION

12" OR LESS

13" THRU 18"

19" THRU 30"

31" THRU 42"

43" THRU 54"

55" THRU 60"

61" THRU 84"

85" THRU 96"

OVER 96"

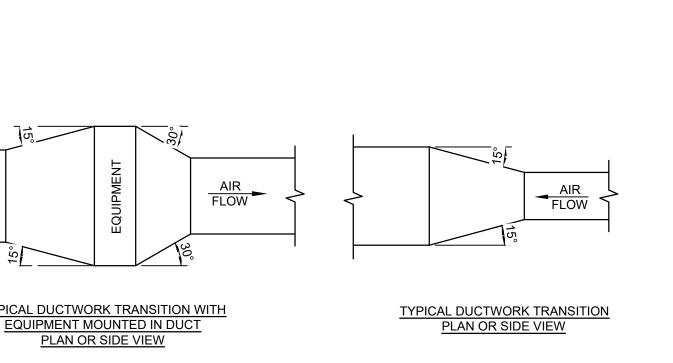
PITTSBURGH LOCK

ALTERNATE BAR SLIP

LONG RADIUS ELBOW

REINFORCED BAR SLIP

NOTE: UNLESS OTHERWISE INDICATED ON PLANS, MAXIMUM ANGLES SHOWN SHALL APPLY.



ANGLES TO BE

THE SAME SIZE

AS REQUIRED

REINFORCING

ANGLE SLIP

- ANGLES TO BE

THE SAME SIZE

AS REQUIRED

REINFORCING

ANGLES

ANGLES

ANGLE REINFORCED

STANDING SEAM

TWO POSITION CONTROL VALVE THREE-WAY MODULATING CONTROL VALVE THREE-WAY TWO POSITION CONTROL VALVE PRESSURE REGULATING VALVE

PRESSURE SAFETY VALVE AUTOMATIC BALANCING CONTROL VALVE WATER BALANCE DEVICE CIRCUIT SETTER VALVE GATE VALVE WITH GLOBE-VALVED BYPASS PLUG VALVE CONTROL VALVE (CV) - FLOAT-OPERATED PRESSURE REDUCING VALVE (PRV)

STANDARD BRANCH SUPPLY OR RETURN, NO SPLITTER (45° TAP) VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EVEN IF SYMBOL IS MISSING) VANED ELBOW (SHORT RADIUS) NEW DUCT (INSIDE DIMENSIONS: WIDTH x DEPTH) FLEXIBLE DUCTWORK (INSULATED) MANUAL VOLUME DAMPER FIRE DAMPER COMBINATION FIRE SMOKE DAMPER DUCT SMOKE DETECTOR

 GAS FURNACES, DX COILS & CONDENSING UNITS FURNISHED BY OWNER, INSTALLED BY CONTRACTOR; CONTRACTOR IS RESPONSIBLE TO RECEIVE THE EQUIPMENT DELIVERY AT THE PROJECT SITE, MOVE EQUIPMENT FROM TRUCK(S) TO A DESIGNATED STORAGE LOCATION ON THE SITE & RIG THE UNIT INTO THE FINAL INSTALLATION LOCATION; CONTRACTOR IS TO PROVIDE ALL ASSOCIATED COMPONENTS, I.E., DUCTWORK, PIPING CONTROLS, ACCESSORIES, ETC. UNLESS OTHERWISE NOTED IN THE PROJECT DOCUMENTS; REFER TO FRONT END DOCUMENTS FOR ADDITIONAL INFORMATION

										GAS	FURN.	ACE	SCH	EDUI	LE											
DUUDMENT	AREA OF SURDIVE STATIC COOLING CAPACITY						HEATING CAPACITY				ELECTRICAL DATA					TOTAL										
EQUIPMENT TAG	MANUFACTURER (EXISTING)	MODEL	BUILDING SERVED	SUPPLY AIRFLOW (CFM)	STATIC PRESS. (IN. W.C.)	DX COIL MANUFACTURER	DX COIL MODEL	MIN. TOTAL CAPACITY (MBH)	MIN. SENS. CAPACITY (MBH)	MINIMUM SEER	MINIMUM EER	E.A Db (°F)		PAIRED OUTDOOR UNIT	GAS INPUT HIGH/LOW (MBH)	OUTPUT HIGH/LOW (MBH)	E.A.T. Db (°F)	L.A.T. Db (°F)	AFUE (%)	BLOWER FAN			R CONNECT		WEIGH	NOTES
GF-1	TRANE	S9V2B080D4PSC	SUPERINT.	780	0.50	TRANE	4TXCB003DS3	26.12	20.79	15.00	12.00	75.0	62.0	CU-1	80.0/52.0	77.7/50.4	62.5	117.8	96	MOTOR HP	120		60 10.		127	PROVIDE NEW THERMOSTAT & CONTROL WIRING A REQUIRED; VERIFY EXACT LOCATION IN FIELD
GF-2	TRANE	S9V2C080U5PSC	REAR OFFICES	1030	0.50	TRANE	4TXCC009DS3	34.3	27.9	16.00	12.00	75.0	62.0	CU-2	80.0/52.0	77.7/50.4	62.5	117.8	96	1	120	1	60 13.	.9 15	139	PROVIDE NEW THERMOSTAT & CONTROL WIRING REQUIRED; VERIFY EXACT LOCATION IN FIELD
GF-3	TRANE	S9V2C100D4VSB	CENTER CORE	1055	0.50	TRANE	4PXCCD42BS3	38.5	31.4	15.20	12.00	75.0	62.0	CU-3	100.0/65.0	95.8/64.0	62.5	117.8	97	1	120	1	60 10.	.8 15	144	PROVIDE NEW THERMOSTAT & CONTROL WIRING REQUIRED; VERIFY EXACT LOCATION IN FIELD
GF-4	TRANE	S9V2D120U5VSB	FRONT OFFICES	1425	0.50	TRANE	4PXCDU60BS3	45.8	38.7	16.00	12.00	75.0	62.0	CU-4	120.0/78.0	113.1/76.7	62.5	117.8	97	1	120	1	60 13.	.9 15	156	PROVIDE NEW THERMOSTAT & CONTROL WIRING REQUIRED; VERIFY EXACT LOCATION IN FIELD
GF-5	TRANE	S9V2C100D5PSC	BOARD ROOM	1600	0.50	TRANE	4PXCCD60BS3	45.3	37.8	16.00	12.00	75.0	62.0	CU-5	100.0/65.0	97.0/63.1	62.5	117.8	96	1	120	1	60 13.	.9 15	145	PROVIDE NEW THERMOSTAT & CONTROL WIRING REQUIRED; VERIFY EXACT LOCATION IN FIELD

(LB)

INSTALL PER MANUFACTURER'S REQUIREMENTS; PROVIDE

ACCESSORIES AS REQUIRED FOR COMPLETE INSTALLATION

1. ALL VANED ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY 2. WHEN W1 IS NOT EQUAL TO W2, VANE SHALL BE SINGLE VANE TYPE REGARDLESS

OF W DIMENSION. 3. ALL SINGLE VANES SHALL HAVE A 2" RADIUS, 1-1/2" MAXIMUM SPACE BETWEEN VANES AND A 3/4" TRAILING EDGE. 4. WHEN W EQUALS W2 AND W1 IS GREATER THAN 20" VANES SHALL BE DOUBLE

Ductwork Squared Elbow Detail \M001/ N.T.S.

2. THESE DRAWINGS ARE DIAGRAMMATIC, AND INDICATE GENERAL ARRANGEMENT OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE REVIEWED THE SITE FOR HIS WORK PRIOR TO HAVING SUBMITTED HIS PROPOSAL. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR CONDITIONS FOUND DURING THE COURSE OF

Mechanical Notes:

OR OTHER ACCEPTABLE STANDARDS.

AND ARE REFLECTED ON HIS SUBMITTALS.

NEW YORK STATE.

REQUIREMENTS.

ACCEPTANCE.

PROPER INSTALLATION OF WORK.

THROUGH MANUAL AIR VENTS.

FINAL APPROVAL OF SYSTEM IS OBTAINED.

AND AT HIGH POINTS OF THE PIPING SYSTEM.

ENGINEER'S ATTENTION PRIOR TO PROCEEDING.

AUTHORITIES HAVING JURISDICTION.

COMPLETE CONTROL TO ALL FIXTURES AND EQUIPMENT.

1. ALL MATERIALS AND EQUIPMENT ARE TO BE NEW, UNUSED, AND FREE FROM DEFECTS

3. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF ALL OTHER TRADES.

4. ALL WORK INCLUDING LABOR AND MATERIALS SHALL BE FULLY GUARANTEED FOR

5. ALL CUTTING, PATCHING, FIRE-STOPPING, AND SURFACE RESTORATION IN

6. A MINIMUM OF FOUR (4) COPIES OF SHOP DRAWINGS SHALL BE SUBMITTED TO THE

7. THIS CONTRACTOR SHALL PAY ALL FEES, GIVE ALL NOTICES, FILE ALL NECESSARY

8. ALL WORK IN ASSOCIATION WITH THIS CONTRACT SHALL BE COMPLETED IN STRICT

9. ALL PIPING SHALL BE PROPERLY SUPPORTED AND ROUTED PARALLEL OR

10. ALL PIPING SHALL BE PITCHED SUCH THAT AIR IN THE SYSTEM CAN BE VENTED

11. TEST PIPING AND PROVE TIGHT FOR AT LEAST TWO HOURS TO TWICE THE SYSTEM

12. SUPPORT HORIZONTAL PIPING UTILIZING A SPACING PER PIPING MANUFACTURER'S

13. INSTALL VALVES ON THE ENTIRE DISTRIBUTION SYSTEM, SO LOCATED AS TO GIVE

14. INSTALL DRAIN VALVES AT BASE OF ALL RISERS AND AT LOW POINTS OF PIPING

15. INSTALL ALL HYDRONIC PIPING AS HIGH AS POSSIBLE PROVIDING RISERS, DROPS AND

16. THE ENTIRE HYDRONIC SYSTEM IS TO BE BALANCED TO WITHIN 10% OF THE

17. ALL DUCTWORK IS TO BE CONSTRUCTED OF GALVANIZED SHEET STEEL (EXCEPT

18. PROVIDE MANUAL DAMPERS AT EACH SPLIT OR TAP CONNECTION TO TRUNK DUCTS

INACCESSIBLE CEILINGS SHALL BE INSTALLED WITH REMOTE GEAR OPERATORS.

19. FURNISH & INSTALL FUSIBLE LINK FIRE DAMPERS AT ALL LOCATIONS WHERE DUCT PENETRATES FIRE-RATED FLOOR OR CEILING ASSEMBLY WHETHER OR NOT

20. INSTALL TURNING VANES ON ALL RECTANGULAR TURNS. TURNING VANES SHALL BE

DOUBLE THICKNESS TYPE CONSTRUCTED IN ACCORDANCE WITH SMACNA MANUAL.

21. ROUND SHEET STEEL ELBOWS ARE TO BE INSTALLED AT THE DUCT CONNECTION TO

22. INSTALL ALL DUCTWORK AS HIGH AS POSSIBLE PROVIDING RISERS, DROPS AND OFFSETS TO CLEAR STRUCTURAL MEMBERS, LIGHT FIXTURES, OTHER PIPING, AND

23. THE ENTIRE AIR DISTRIBUTION SYSTEM IS TO BE BALANCED TO WITHIN 10% OF THE

24. THE CONTRACTOR IS RESPONSIBLE TO TEST ALL EQUIPMENT, PIPING, FIXTURES, AND

25. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE WHETHER SPECIAL LICENSING IS REQUIRED IN ORDER TO PERFORM THE REQUIRED WORK IN THE MUNICIPALITY

THEN THE CONTRACTOR SHALL NOT BE PERMITTED TO BID ON THIS PROJECT.

ACCURATELY REPRESENT THE SYSTEMS AS THEY WERE INSTALLED.

MOUNT 5'-0" A.F.F. IN LOCATIONS SHOWN ON PLANS

26. CONTRACTOR IS RESPONSIBLE TO CREATE AND SUBMIT RED-LINE "AS-BUILT" PLANS TO THE ENGINEER AT THE END OF THE PROJECT. AS-BUILT PLANS SHALL

THERMOSTAT PROVIDED BY OWNER, INSTALLED BY CONTRACTOR;

SYSTEMS INSTALLED UNDER THIS CONTRACT TO ENSURE PROPER OPERATION PRIOR

WHERE THE PROJECT IS LOCATED. IF THE CONTRACTOR CANNOT OBTAIN THE

REQUIRED LICENSING TO COMPLETE THE WORK WITHIN THE PROJECT SCHEDULE,

ALL SUPPLY AIR DIFFUSERS. SHEET STEEL PLENUM BOXES ARE TO BE INSTALLED AT

THE DUCT CONNECTION TO ALL RETURN AND EXHAUST AIR GRILLES. THE CONTRACTOR IS TO PAINT THE INSIDE OF THE SHEET STEEL PLENUM BOXES FLAT

OTHER OBSTRUCTIONS. WHERE CONFLICTS ARISE, IT SHALL BE BROUGHT TO THE

BE A MINIMUM OF 20 GA. DOUBLE PANEL INSULATED TYPE.

ENGINEER'S ATTENTION PRIOR TO PROCEEDING.

TO FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.

SPECIFIED AIRFLOW REQUIREMENTS.

Mechanical Equipment:

SPECIFICALLY SHOWN. INSTALL DUCTWORK CASING ACCESS DOORS AND FRAMES AHEAD OF EACH FIRE DAMPER FOR INSPECTION AND MAINTENANCE. DOORS SHALL

SPECIFIED WATER FLOWRATE REQUIREMENTS. A CERTIFIED BALANCING REPORT

AND VERIFICATION IS TO BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL

WHERE OTHERWISE SPECIFIED) WITH GAUGES, BRACING AND CONSTRUCTION IN

ACCORDANCE WITH THE LATEST SMACNA DUCT MANUAL STANDARDS AND ALL OTHER

FOR BALANCING PURPOSES WHETHER OR NOT SPECIFICALLY SHOWN ON DRAWINGS.

EACH DAMPER SHALL BE OF THE OPPOSED BLADE DAMPER TYPE INSTALLED WITH AN OPERATOR AND LOCKING DEVICE. ALL DAMPERS LOCATED ABOVE HARD OR

SYSTEM. INSTALL MANUAL AIR VENT VALVE FACILITIES AT THE TOP OF ALL RISERS

OFFSETS TO CLEAR STRUCTURAL MEMBERS, LIGHT FIXTURES, OTHER PIPING, AND OTHER OBSTRUCTIONS. WHERE CONFLICTS ARISE, IT SHALL BE BROUGHT TO THE

WORKING PRESSURE. TEST SHALL BE PERFORMED IN THE PRESENCE OF THE

ENGINEER AND LOCAL INSPECTOR. TEST SHALL BE REPEATED IF NECESSARY UNTIL

PERPENDICULAR TO BUILDING WALLS. THE CONTRACTOR SHALL FURNISH AND

INSTALL ALL SUPPORT HANGERS AND MISCELLANEOUS METALS REQUIRED FOR

APPROVAL REQUIRED IN CONNECTION WITH WORK UNDER THIS CONTRACT.

DRAWINGS, AND OBTAIN ALL PERMITS, INSPECTIONS AND CERTIFICATES OF

COMPLIANCE WITH THE 2020 BUILDING CODE OF NEW YORK STATE, 2020 MECHANICAL CODE OF NEW YORK STATE & 2020 ENERGY CONSERVATION CONSTRUCTION CODE OF

ENGINEER FOR APPROVAL PRIOR TO ORDERING AND INSTALLATION OF THE

EQUIPMENT AND/OR MATERIALS. BY SUBMITTING SHOP DRAWINGS, THE CONTRACTOR REPRESENTS THAT ACTUAL FIELD CONDITIONS ARE VERIFIED BY HIM

CONNECTION WITH THIS TRADE SHALL BE COMPLETED BY THIS CONTRACTOR.

ONE (1) YEAR FROM THE DATE OF PAYMENT AND FINAL ACCEPTANCE BY THE OWNER

OF ANY KIND. THE BASIS OF QUALITY SHALL BE THE LATEST REVISION OF ASTM, ANSI,

EXHAUST DUCT (UP & DOWN) RETURN DUCT (UP & DOWN)

ROUND AND SQUARE 4-WAY CEILING DIFFUSERS

SQUARE 3-WAY CEILING DIFFUSERS

SQUARE 2-WAY CEILING DIFFUSERS

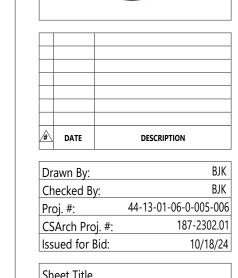
SQUARE 1-WAY CEILING DIFFUSERS LINEAR SLOT DIFFUSER SUPPLY TOP REGISTER OR GRILLE (WALL TYPE)

EXHAUST OR RETURN CEILING REGISTER OR GRILLE EXHAUST OR RETURN BOTTOM REGISTER OR GRILLE

EXHAUST OR RETURN REGISTER OR TOP GRILLE VANED ELBOW & AIR SPLIT TYPE DUCT TAKE-OFF

STANDARD RADIUS ELBOW (LONG RADIUS); INSIDE RADIUS R TO BE EQUAL TO OR GREATER THAN W

X TERMINAL UNIT TAG X AIRFLOW (CUBIC FEET PER MINUTE)



MECHANICAL **PLANS**

ADMIN

	LIGHTING FIXTURE SCHEDULE									
TAG	SYMBOL	MANUFACTURER & MODEL	TYPE	VOLTAGE	# OF LAMPS	LAMP WATTS	FIXTURE WATTS	MOUNTING	SIZE	NOTES
-	₩	HE WILLIAMS LED EMERGENCY LIGHT EMER/LED-WHT-SDT-D	LED	120	2	1.0	2.0	UNIVERSAL	-	UL 924 LISTED FIXTURE; 90-MINUTE BATTERY BACKUP

120/208V 3Ø 4W+G

120/208V 3Ø 4W+G				ВІ	JS RATII	NG: -A				MLC
CONNECTED LOAD	CONDUCTORS	CKT. BREAKER AMPACITY	POSITION	L1 KVA	L2 KVA	L3 KVA	POSITION	CKT. BREAKER AMPACITY	CONDUCTORS	CONNECTED LOAD
SPACE	-		1	-/-			2		-	SPACE
SPACE	-		3		-/-		4		-	SPACE
SPACE	-		5			·/·	6		-	SPACE
SPACE	-		7	·/.			8		-	SPACE
SPACE	-		9		·/.		10	20	EXISTING	EXISTING LOAD
EXIT LIGHTS	EXISTING	20	11			·/.	12	20	EXISTING	LIGHTING ROOM 118
LIGHTING ROOM 125	EXISTING	20	13	·/.			14	20	EXISTING	LIGHTING ROOM 120
LIGHTING ROOM 129	EXISTING	20	15		·/.		16	20	EXISTING	LIGHTING ROOM 106
LIGHTING ROOM 106	EXISTING	20	17			·/.	18	20	EXISTING	LIGHTING ROOM 104
LIGHTING ROOM 102	EXISTING	20	19	·/.			20	20	EXISTING	RECP. TELEPHONE
RECPT.	EXISTING	20	21		·/.		22	20	EXISTING	LIGHTING ROOM 10:
LIGHTING ROOM 103	EXISTING	20	23			·/.	24	20	EXISTING	LIGHTING ROOM 103
LIGHTING ROOM 101	EXISTING	20	25	·/.			26	20	EXISTING	LIGHTING ROOM 12
LIGHTING ROOM 125	EXISTING	20	27		·/.		28	20	EXISTING	LIGHTING ROOM 125
EXISTING LOAD	EXISTING	20	29			·/.	30	20	EXISTING	FIRE ALARM PANEI
EXISTING LOAD (X)	EXISTING	20	31	·/.			32	20	EXISTING	WATER COOLER
EXISTING LOAD	EXISTING	20	33		·/.		34	20	EXISTING	EXHAUST FANS
A/C RECP. SUPT OFFICE	EXISTING	20	35			·/.	36	20	EXISTING	SITE LIGHTING
PANEL C	EXISTING	200	37 39 41	<u>-</u> /-	-/-	-/	38 40 42	200	EXISTING	PANEL I
GENERAL ELECTRIC NHB PAI	NFL	-		-	-		_	kVA T	OTAL	

Existing Panelboard PP-A

Scale: None

 PROVIDE NEW CIRCUIT BREAKERS FOR ALL NEW OR MODIFIED CIRCUITS; BREAKERS SHALL MATCH EXISTING TYPE AND

 PANEL SCHEDULE SHOWN BASED ON EXISTING DIRECTORY, CONTRACTOR SHALL VERIFY IN FIELD & ADJUST CIRCUIT LAYOUT AS NEEDED BASED ON AVAILABLE POSITIONS

CONNECTED LOAD	CONDUCTORS	CKT. BREAKER AMPACITY	POSITION	L1 KVA	L2 KVA	L3 KVA	POSITION	CKT. BREAKEF AMPACITY	CONDUCTORS	CONNECTED LOAD	
CIRCULATING PUMP	EXISTING	15	1	-/-			2	20	EXISTING	RECPT W.P.G.F.I.	
SPACE	-		3		·/.		4		-	SPACE	
SPACE	-		5			·/.	6		-	SPACE	
SPACE	-		7	-/-			8		-	SPACE	
SPACE	-		9		-/.		10		-	SPACE	
SPACE	-		11			·/.	12		-	SPACE	
SPACE	-		13	-/-			14		-	SPACE	
SPACE	-		15		-/-		16	00	EVIOTINO	STODAGE SHED FOR BEG	
SPACE	-		17			·/.	18	60	EXISTING	STORAGE SHED FOR REC	
GAS FURNACE GF-1	(2) #12 CU & (1) #12 GND.	15	19	-/-			20	15	(2) #12 CU & (1) #12 GND.	GAS FURNACE GF-2	
GAS FURNACE GF-4	(2) #12 CU & (1) #12 GND.	15	21		·/.		22	15	(2) #12 CU & (1) #12 GND.	GAS FURNACE GF-3	
GAS FURNACE GF-5	(2) #12 CU & (1) #12 GND.	15	23			-/-	24	20	EXISTING	HEATER BATH SUPT	
UPS OUTLET	EXISTING	20	25	-/-			26	20	EXISTING	HEATER HALLWAY	
PERSONAL SEE OUTLET	EXISTING	20	27		·/.		28	20	EXISTING	HEATER VESTIBULE	
HALLWAY OUTLET/PERSONA	AL EXISTING	20	29			·/.	30	50	EXISTING	HOT WATER HEATER	
CONDENSING UNIT CU-1	(2) #10 CU & (1) #10 GND.	25	31	-/-			32	50	EXISTING	NOT WATER HEATER	
CONDENSING UNIT CU-T	(2)#10 CO & (1)#10 GND.	23	33		·/.		34	35	(2) #8 CU & (1) #10 GND.	CONDENSING UNIT CU-3	
CONDENSING UNIT CU-5	(2) #6 CU & (1) #10 GND.	45	35			· /	36		(2) #0 00 a (1) #10 GND.	CONDENSING ONLY CO-3	
COMPENSING ONLY CO-3	(2)#0 CO & (1)#10 OND.	45	37	-/-			38	45	(2) #6 CU & (1) #10 GND.	CONDENSING UNIT CU-4	
CONDENSING UNIT CU-2	(2) #10 CU & (1) #10 GND.	30	39		·/.		40	45	(2) #0 00 & (1) #10 0110.	CONDENSING GIVIT GO-4	
CONDENSING ONLY GO 2	(2)#10 CO & (1)#10 GND.	30	41			·/	42		-	SPACE	
GENERAL ELECTRIC NHB PA	ANEL			-	-	-	-	kVA T	OTAL		
PROVIDE NEW CIRCUIT BREAKERS FOR ALL NEW C									FOR ALL NEW OR MODIFIED		

BUS RATING: 225A

PROVIDE NEW CIRCUIT BREAKERS FOR ALL NEW OR MODIFIED CIRCUITS; BREAKERS SHALL MATCH EXISTING TYPE AND

 PANEL SCHEDULE SHOWN BASED ON EXISTING DIRECTORY. CONTRACTOR SHALL VERIFY IN FIELD & ADJUST CIRCUIT LAYOUT AS NEEDED BASED ON AVAILABLE POSITIONS

Existing Panelboard PP-C E002 / Scale: None

ELECTRICAL LEGEND:

MOTOR

EARTH GROUND

JUNCTION BOX

EMERGENCY POWER OFF BUTTON

PULL BOX CORD REEL

FUSE WITH RATING

MOLDED CASE CIRCUIT BREAKER

DISCONNECT SWITCH, FUSED

DISCONNECT SWITCH, UNFUSED

STARTER, COMBINATION WITH DISCONNECT SWITCH

STARTER OR MOTOR CONTROLLER METER

MLO

20A 120V DUPLEX CEILING MOUNTED RECEPTACLE

20A 120V DUPLEX WALL MOUNTED RECEPTACLE; 18" A.F.F. UNLESS OTHERWISE NOTED

20A 120V DUPLEX WALL MOUNTED RECEPTACLE WITH GROUND FAULT CIRCUIT INTERRUPTER

20A 120V QUADRAPLEX RECEPTACLE

WALL MOUNTED SPECIAL PURPOSE RECEPTACLE

⇒ 20A 120V WALL MOUNTED USB CHARGER RECEPTACLE TYPICAL OF HUBBELL USB20X OR ACCEPTABLE EQUAL

FLOOR BOX WITH STAINLESS COVER TYPICAL OF LEW EECTRIC #OB-1-SP OR ACCEPTABLE EQUAL; PUSH BUTTON OPEN; FULLY IP66 RATED WATER PROOF (WHEN IN CLOSED POSITION); W/ 20A 125V

E60120 GFCI RECEPTACLE (UNLESS OTHERWISE NOTED) WALL PHONE OUTLET MTD. 48" A.F.F.; 3/4" EMT CDT. IN WALL TO ABOVE CEILING W/ PULL CORD

WALL BOX FOR TELEVISION CONNECTION; 1-1/4" EMT CDT. IN WALL TO ABOVE CEILING W/ PULL CORD

TELEPHONE/DATA COMMUNICATION BOX W/ (2) 3/4" EMT CDT. IN WALL TO ABOVE CEILING W/ PULL CORD; NO FACE PLATE

BRANCH CIRCUIT HOMERUN; LINES INDICATE NUMBER OF CIRCUITS, NEUTRAL, AND SWITCH LEG CONDUCTORS; ONE SEPARATE GROUNDING CONDUCTOR SHALL BE PROVIDED FOR EACH

HOMERUN; NOT SHOWN BLANK = SINGLE POLE 2 = DOUBLE POLE 3 = THREE-WAY 4 = FOUR-WAY D = DIMMERK = KEY OPERATED P = WITH PILOT LIGHT PB= PUSH BUTTON T = TIMER OPERATED WP= WEATHER PROOF X = EXPLOSION PROOF OC= OCCUPANCY SENSOR

DUAL TECHNOLOGY OCCUPANCY SENSOR

DAYLIGHT SENSOR

HORN/STROBE DEVICE, ONE ASSEMBLY; MTD. 80" A.F.F. UNLESS OTHERWISE NOTED: 15 CANDELA UNLESS OTHERWISE NOTED

STROBE DEVICE; MTD. 80" A.F.F. UNLESS OTHERWISE NOTED; 15 CANDELA UNLESS OTHERWISE NOTED

MANUAL PULL STATION; MTD. 48" A.F.F.

WATER FLOW SWITCH

VALVE TAMPER SWITCH

DETECTOR; LETTER INDICATES AS FOLLOWS: BLANK = SMOKE DETECTOR P = PHOTOELECTRIC SMOKE M = MULTIPLE STATION SMOKE ALARM D = PHOTOELECTRIC DUCT SMOKE DETECTOR FSD = DUCT SMOKE DETECTOR FOR FIRE SMOKE DAMPER

RATE OF RISE HEAT DETECTOR, 135°F

CARBON MONOXIDE DETECTOR; MTD. 60" A.F.F.

ADDRESSABLE FIRE ALARM CONTROL PANEL

FIRE ALARM ANNUNCIATOR PANEL

REMOTE TEST SWITCH & LED FOR DUCT SMOKE DETECTORS

FIRE ALARM RELAY

ELECTRICAL NOTES:

1. ALL MATERIALS AND EQUIPMENT ARE TO BE NEW, UNUSED, AND FREE FROM DEFECTS OF ANY KIND. THE BASIS OF QUALITY SHALL BE THE LATEST REVISION OF ASTM, ANSI, OR OTHER ACCEPTABLE STANDARDS.

2. THESE DRAWINGS ARE DIAGRAMMATIC, AND INDICATE GENERAL ARRANGEMENT OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE REVIEWED THE SITE FOR HIS WORK PRIOR TO HAVING SUBMITTED HIS PROPOSAL. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR CONDITIONS FOUND DURING THE COURSE OF THE CONTRACT.

3. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF ALL OTHER

4. ALL WORK INCLUDING LABOR AND MATERIALS SHALL BE FULLY GUARANTEED FOR ONE (1) YEAR FROM THE DATE OF PAYMENT AND FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.

5. ALL CUTTING. PATCHING. FIRE-STOPPING. AND SURFACE RESTORATION IN CONNECTION WITH THIS TRADE SHALL BE COMPLETED BY THIS CONTRACTOR.

6. A MINIMUM OF FOUR (4) COPIES OF SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO ORDERING AND INSTALLATION OF THE EQUIPMENT AND/OR MATERIALS. BY SUBMITTING SHOP DRAWINGS, THE CONTRACTOR REPRESENTS THAT ACTUAL FIELD CONDITIONS ARE VERIFIED BY HIM AND ARE REFLECTED ON HIS SUBMITTALS.

7. THIS CONTRACTOR SHALL PAY ALL FEES, GIVE ALL NOTICES, FILE ALL NECESSARY DRAWINGS, AND OBTAIN ALL PERMITS, INSPECTIONS AND CERTIFICATES OF APPROVAL REQUIRED IN CONNECTION WITH WORK UNDER THIS CONTRACT.

EQUIPMENT AND MATERIALS FOR WHICH UNDERWRITERS LABORATORIES INC. (UL) PROVIDES PRODUCT LISTING SERVICE SHALL BE LISTED AND BEAR THE

LISTING MARK. 9. ALL WORK IN ASSOCIATION WITH THIS CONTRACT SHALL BE COMPLETED IN STRICT COMPLIANCE WITH THE 2017 NATIONAL ELECTRIC CODE, 2020 BUILDING CODE OF NEW YORK STATE, 2020 FIRE CODE OF NEW YORK STATE & 2020

ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE. 10. ALL NEW LIGHTING FIXTURES SHALL BE INSTALLED FULLY LAMPED AND OPERABLE. THE CONTRACTOR SHALL TURN OVER TO THE OWNER SPARE LAMPS OF EVERY TYPE ON THE PROJECT IN AN AMOUNT NOT LESS THAN 20% OF THE TOTAL NUMBER OF EACH TYPE (MINIMUM 1 PER TYPE).

11. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION, APPLICATIONS AND FEES OF ALL WORK ASSOCIATED WITH THE LOCAL UTILITY COMPANY AND/OR THE TELEPHONE COMPANY. ALL WORK INVOLVING THE UTILITY COMPANY SHALL BE COMPLETED IN ACCORDANCE WITH THEIR REGULATIONS AND GUIDELINES.

12. ALL CONDUCTORS SHALL BE COPPER, SHALL NOT BE LESS THAN #12 AWG, AND SHALL NOT EXCEED 70 FEET FROM PANEL BOARD TO FURTHEST CONNECTION UNLESS OTHERWISE NOTED ON PLANS.

13. LIGHTING LOADS SHALL NOT BE COMBINED ON THE SAME CIRCUIT AS ANY OTHER ELECTRICAL LOADS.

14. CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH & INSTALL ALL SMALL DETAILS AND INCIDENTAL WORK NOT SHOWN OR SPECIFIED, BUT WHICH CAN BE REASONABLY INFERRED AS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM OF HIGH QUALITY MEETING ALL APPLICABLE CODES AND REGULATIONS.

15. FOR EACH NEW OR MODIFIED ELECTRICAL PANEL, THE CONTRACTOR SHALL PROVIDE A TYPE WRITTEN DIRECTORY CARD TO REFLECT ALL CIRCUITING. ADDITIONALLY, THE CONTRACTOR SHALL LABEL (WITH A PERMANENT MARKER OR LABEL) EACH RECEPTACLE ON THE INSIDE OF EACH FACE PLATE WITH PANEL AND CIRCUIT NUMBER DESIGNATION.

16. MINIMUM REQUIREMENT FOR EQUIPMENT GROUNDING SHALL BE GOVERNED BY THE NEC. ALL GROUNDS, BONDING, ETC. SHALL MEET THESE REQUIREMENTS. THE CONTRACTOR SHALL FURNISH AND INSTALL ANY AND ALL ITEMS NECESSARY TO MEET THESE REQUIREMENTS AT NO EXTRA COST, EVEN IF SUCH ITEMS ARE NOT DETAILED ON THE DRAWINGS.

17. ALL CONDUIT AND CABLE SHALL BE PROPERLY SUPPORTED AND ROUTED PARALLEL OR PERPENDICULAR TO BUILDING WALLS. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL SUPPORT HANGERS AND MISCELLANEOUS METALS REQUIRED FOR PROPER INSTALLATION OF WORK.

18. THE CONTRACTOR IS RESPONSIBLE TO TEST ALL EQUIPMENT, WIRING, DEVICES, AND SYSTEMS INSTALLED UNDER THIS CONTRACT TO ENSURE PROPER OPERATION PRIOR TO FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.

19. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE WHETHER SPECIAL LICENSING IS REQUIRED IN ORDER TO PERFORM THE REQUIRED WORK IN THE MUNICIPALITY WHERE THE PROJECT IS LOCATED. IF THE CONTRACTOR CANNOT OBTAIN THE REQUIRED LICENSING TO COMPLETE THE WORK WITHIN THE PROJECT SCHEDULE, THEN THE CONTRACTOR SHALL NOT BE PERMITTED TO BID ON THIS PROJECT.

	WIRE COLOR CODING TABLE							
PHASE	WIRES	VOLTAGE	L1	L2	L3	NEUTRAL	GROUND	
1	2 (1)	120	BLACK	_	-	WHITE	-	
1	2 (1)	208	BLACK	RED	-	-	-	
1	3	120	BLACK	-	-	WHITE	GREEN (2)	
1	3	208	BLACK	RED	-	-	GREEN (2)	
3	4	208	BLACK	RED	BLUE	-	GREEN (2)	
3	5	208	BLACK	RED	BLUE	WHITE	GREEN (2)	
1	3	277	BROWN	-		GRAY	GREEN (2)	
1	3	480	BROWN	ORANGE	-	-	GREEN (2)	
3	4	480	BROWN	ORANGE	YELLOW	-	GREEN (2)	
3	5	480	BROWN	ORANGE	YELLOW	GRAY	GREEN (2)	
NOTES:								

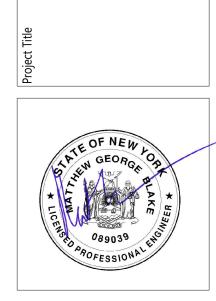
FOR DOUBLE INSULATED EQUIPMENT ONLY.

CONDUCTORS.

GREEN/YELLOW MAY BE USED: - GREEN/YELLOW SHALL BE GREEN WITH ONE OR MORE YELLOW STRIPES. - GREEN = 50 TO 70%, YELLOW = 50 TO 30%. - GREEN/YELLOW IS THE ONLY COLOR INTERNATIONALLY ACCEPTED FOR USE AS AN EQUIPMENT GROUNDING CONDUCTOR.

- GREEN OR GREEN/YELLOW MUST ONLY BE USED FOR GROUNDING

DEVICE MOUNTING	G HEIGHTS					
POWER RECEPTACLES (INTERIOR)	18" A.F.F.					
POWER RECEPTACLES (EXTERIOR)	36" A.F.G.					
POWER RECEPTACLES (@ COUNTER)	44" A.F.F.					
LIGHT SWITCHES	44" A.F.F. TO TOP OF DEVICE					
DISCONNECT SWITCHES	SEE NEC 404.8(A)					
TELEPHONE/DATA RECEPTACLES	18" A.F.F.					
TELEPHONE/DATA RECEPTACLES (@ COUNTER)	44" A.F.F.					
WALL TELEPHONE RECEPTACLES	48" A.F.F. TO TOP OF DEVICE					
FIRE ALARM PULL STATIONS	42" A.F.F. MIN./44" A.F.F. MAX.					
FIRE ALARM AUDIO/VISUAL DEVICES	80" A.F.F. MIN./96" A.F.F. MAX.					
EXIT LIGHTS (WALL MOUNTED)	12" ABOVE DOOR					
EMERGENCY LIGHTS (WALL MOUNTED)	90" A.F.F.					
TV & A/V OUTLETS	18" A.F.F.					
NOTE: ALL DIMENSIONS ARE TO CENTER OF DEVIC	CE UNLESS OTHERWISE NOTED					



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DATE Drawn By: 44-13-01-06-0-005-006 Proj. #:

CSArch Proj. #: Issued for Bid:

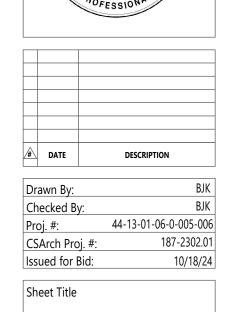
ELECTRICAL NOTES, LEGENDS & **SCHEDULES**

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VALLEY CENTRAL SCHOOL DISTRICT ADMINISTRATION BUILDING 2023 CAPITAL PROJECTS - PHASE 1





ELECTRICAL PLANS

ADMIN E111