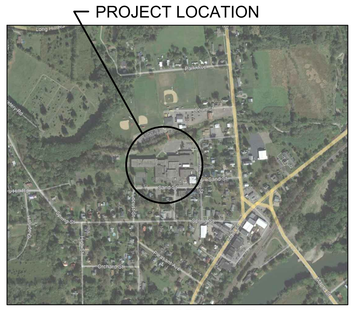
Afton Central School District

29 Academy St, Afton, NY 13730



LOCATION MAP

2024 Capital Project Phase 2

Central School SED # 08-01-01-04-0-001-020

Bus Garage SED # 08-01-01-04-5-015-003

LIST OF DRAWINGS

HA PN: 2025-005 PHASE 2

GENERAL

G-000	COVER SHEET AND DRAWING INDEX
G-001	GENERAL NOTES, ABBREVIATIONS & SYMBOLS LEGEND

CIVIL

L0.00	SITE SURVEY
L0.01	SITE NOTES AND LEGEND
L0.02	SITE PREPARATION PLAN
L1.01	GRADING, DRAINAGE, AND UTILITY PLAN
L1.02	SITE LAYOUT PLAN
L9.00	DETAILS

ARCHITECTURAL

A-100	GROUND FLOOR, FIRST FLOOR COMPOSITE FLOOR PLAN
A-101	SECOND FLOOR, THIRD FLOOR COMPOSITE FLOOR PLAN
A-102	GROUND, FIRST,SECOND,THIRD FLOOR PLANS WINDOW REPLACEMENT PART B
A-103	GROUND FLOOR CEILING PLAN PART A
A-400	1908 BUILDING WINDOW SECTIONS AND ELEVATIONS
A-401	1908 BUILDING EXISTING WINDOW CONDITION PHOTOS
A-500	1908 BUILDING BRICK RE-POINTING ELEVATIONS

BUS GARAGE FUELING CANOPY

S-000	BUS GARAGE / FUELING STATION SITE PLAN
S-100	CANOPY AT BUS GARAGE FUELING STATION
BC-100	BUS FUELING STATION CANOPY DESIGN
BC-200	BUS FUELING STATION CANOPY DETAILS

MECHANICAL

MD-100	MECHANICAL GROUND FLOOR DEMOLITION PLAN
MD-101	MECHANICAL FIRST FLOOR DEMOLITION PLAN PART A
MD-102	MECHANICAL FIRST FLOOR DEMOLITION PLAN PART B/C
MD-103	MECHANICAL SECOND FLOOR DEMOLITION PLAN
M-001	MECHANICAL LEGEND
M-100	GROUND FLOOR PIPING RENOVATION PLAN
M-101	GROUND FLOOR DUCTWORK RENOVATION PLAN
M-200	DETAILS
M-300	MECHANICAL SCHEDULES
M-400	MECHANICAL DRAWING SPECIFICATIONS
M-401	MECHANICAL DRAWING SPECIFICATIONS

ELECTRICAL

E-500	ELECTRICAL SITE PLAN, BUS GARAGE
E-000	ELECTRICAL LEGEND
E-001	ELECTRICAL COMPOSITE GROUND FLOOR PLAN
E-100	ELECTRICAL PLAN GROUND FLOOR CORRIDOR C005/C008
E-101	ELECTRICAL GROUND FLOOR CORRIDOR C004

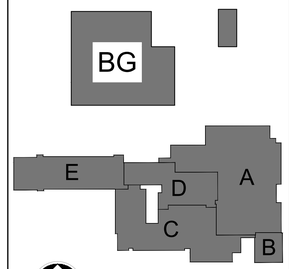
BID DOCUMENTS
11/03/2026

HIGHLAND ASSOCIATES
architecture | engineering | interior design

102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com

New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED # 08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.

UNAUTHORIZED DOCUMENT USE:

THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project Phase 2

SEALS:

DRAWING TITLE:

COVER SHEET AND DRAWING INDEX

DRAWN BY:	CHECKED BY:
A.L.	C.Z.
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

G-000

CAD FILE: 5005-G-000-PH2.DWG PLOT DATE: 11/16/2026

GENERAL NOTES

ALL NOTES BELOW ARE THE RESPONSIBILITY OF ALL CONTRACTS

1. ANY ITEM SHOWN ON THE DRAWINGS AND NOT INCLUDED IN THE SPECIFICATIONS, SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. SUBMIT SPECIFICATIONS TO THE ARCHITECT FOR APPROVAL.

2. CONTRACTOR IS TO PROVIDE ALL ITEMS GRAPHICALLY REPRESENTED IN THE DRAWINGS WHETHER IT IS DETAILED, DESIGNATED OR NOT INCLUDING BUT NOT LIMITED TO DOORS, GATES, STEPS, STAIRS, WALKS, CIVIL, ARCHITECTURAL, HVAC, ELECTRICAL, PLUMBING AND FIRE PROTECTION ELEMENTS ETC. REQUEST SPECIFICATION INFORMATION FROM THE ARCHITECT/ENGINEER.

3. THE CONTRACTOR SHALL INVESTIGATE JOB SITE TO COMPARE CONTRACT DOCUMENTS AND EXISTING CONDITIONS. INCLUDE COST FOR ALL WORK DESCRIBED IN CONTRACT DOCUMENTS AND REQUIRED OR IMPLIED BY EXISTING CONDITIONS. NOTIFY ARCHITECT OF ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND NEW WORK, OMISSIONS OR CONFLICTS IN THE DRAWINGS AND ANY RESTRICTIONS RELATED TO THE EXECUTION OF THE WORK.

4. CONTRACTOR SHALL FULLY ACQUAINT HIMSELF WITH THE CONDITIONS OF THE CONTRACT, LOCAL CONDITIONS RELATING TO LOCATION, ACCESSIBILITY AND GENERAL CHARACTER OF THE CONSTRUCTION SITE AND LOCAL LABOR CONDITIONS SO THAT HE UNDERSTANDS THE NATURE, EXTENT, DIFFICULTIES, AND RESTRICTIONS RELATED TO THE EXECUTION OF WORK. NOTIFY ARCHITECT OF ALL DISCREPANCIES PRIOR TO COMMENCING WORK.

5. IF THERE IS A CONFLICT IN THE DOCUMENTS, THE BETTER QUALITY AND OR GREATER QUANTITY WILL BE PROVIDED BY THE CONTRACTOR. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REQUEST INTERPRETATION FROM THE ARCHITECT/ENGINEER PRIOR TO PROVIDING ANY ITEM IN QUESTION. IF THE CONFLICT IS NOT REPORTED TO THE ARCHITECT/ENGINEER, AND THE CONTRACTOR PROVIDES THE ITEM IN QUESTION, THE CONTRACTOR SHALL BE REQUIRED TO REPLACE THE ITEM AT NO ADDITIONAL COST TO THE OWNER.

6. THE CONTRACTOR SHALL ISSUE COMPLETE SETS OF THE CONTRACT DOCUMENTS TO EACH OF THE SUBCONTRACTORS FOR COORDINATION OF THEIR WORK AND DESCRIPTION OF SCOPE OF THE WORK. COORDINATE ALL DEMOLITION AND CONSTRUCTION WITH OTHER TRADES.

7. THE CONTRACTOR SHALL APPLY FOR, OBTAIN AND PAY FOR ALL PERMITS, FEES, INSPECTIONS AND APPROVALS BY LOCAL AUTHORITIES HAVING JURISDICTION OVER THE PROJECT. PROVIDE COPIES OF ALL TRANSACTIONS TO OWNER. NOTIFY ARCHITECT OF ANY VARIANCE WITH CODES IN FORCE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ORDERS OF ANY PUBLIC AUTHORITY BEARING ON THE PERFORMANCE OF THE WORK.

8. THE CONTRACTOR SHALL PROVIDE, AND PAY FOR ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, CONSTRUCTION EQUIPMENT, WAREHOUSING, TRANSPORTATION AND DELIVERY COSTS, HOISTING, REMOVAL OF TRASH AND DEBRIS, AND OTHER FACILITIES AND SERVICES NECESSARY FOR THE EXECUTION AND COMPLETION OF THE WORK.

9. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR, AND HAVE CONTROL OVER, ALL CONSTRUCTION MEANS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK REQUIRED BY THE CONTRACT DOCUMENTS.

10. THE ARCHITECT/ENGINEER IS NOT RESPONSIBLE FOR ERRORS, OMISSIONS OR DELAYS BY THE CONTRACTOR.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACTS AND OMISSIONS OF THE CONTRACTOR'S EMPLOYEES, SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES, AND ANY OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTRACT WITH A CONTRACTOR.

12. OTHER CONTRACTORS AND THEIR SUBCONTRACTORS MAY BE WORKING ON THE PREMISES SIMULTANEOUS WITH THE DURATION OF THIS CONTRACT. NO ACTION SHALL BE TAKEN ON THE PART OF THIS CONTRACTOR OR ANY SUBCONTRACTOR TO IMPEDE THE ACCESS OR OPERATION OF ANY OTHER CONTRACTOR ON THE PREMISES, UNION OR NON-UNION.

13. WORK SHALL BE DONE DURING NORMAL WORKING HOURS. CONTRACTOR SHALL SCHEDULE AND PERFORM ALL WORK SO AS NOT TO UNREASONABLY DISTURB ANY TENANT IN THE BUILDING AND SHALL BE RESPONSIBLE FOR ANY OVERTIME COSTS INCURRED THEREBY.

14. THE CONTRACTOR SHALL COMPLY AND COORDINATE ALL WORK WITH BUILDING OWNER REGARDING HEAT, WATER, ELECTRICITY, DELIVERIES, ACCESS, ELEVATOR AVAILABILITY, NOISE CONTROL, TRASH AND DEBRIS REMOVAL, HOISTING, AND ANY OTHER UTILITIES OR OWNER'S RULES AND REGULATIONS CONCERNING THE PROJECT SITE.

15. THE CONTRACTOR SHALL PROCURE MATERIALS SO AS NOT TO DELAY SUBSTANTIAL COMPLETION. NOTIFY ARCHITECT WITHIN 5 DAYS OF EXECUTION OF CONTRACT OF ANY MATERIAL DELIVERY WHICH COULD DELAY COMPLETION OF CONTRACT.

16. THE CONTRACTOR SHALL COORDINATE SCHEDULING, PROVISIONS FOR INSTALLATION, LOCATIONS AND THE ACTUAL INSTALLATION OF ITEMS FURNISHED BY OWNER OR BY OTHERS.

17. COORDINATE WORK WITH ALL TRADES ON THE PROJECT NOT UNDER CONTRACT TO THE CONTRACTOR. ANY CHANGES OR DELAYS ARISING FROM CONFLICTS BETWEEN SUCH TRADES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

18. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD. CONTRACT DRAWINGS ARE NOT INTENDED TO REPRESENT EXACT DIMENSIONS. VERIFICATION OF DIMENSIONS IS THE RESPONSIBILITY OF THE CONTRACTOR FOR ALL PHASES OF THE PROJECT INCLUDING BIDDING, FABRICATION, COORDINATION AND CONSTRUCTION. DIMENSIONS OF EXISTING ELEMENTS ARE FOR GENERAL INFORMATION ONLY AND MUST BE VERIFIED IN THE FIELD.

22. CHANGES IN DRAWINGS OR ACTUAL WORK SHALL BE ISSUED BY THE ARCHITECT.

23. DO NOT SCALE DRAWINGS. DIMENSIONS GOVERN. LARGE SCALE DETAILS GOVERN OVER SMALL SCALE DETAILS.

24. PERFORM ALL WORK AND INSTALL MATERIALS IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS AND IN A MANNER CONSISTENT WITH INDUSTRY STANDARD OF WORKMANSHIP.

25. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL NECESSARY COVERINGS, PROTECTIVE ENCLOSURES, TEMPORARY DOORS AND PARTITIONS AND DUST BARRIERS TO PROTECT ALL OCCUPANTS, WORKERS AND EXISTING WORK AND FINISHES TO REMAIN. LOCATION OF SUCH PROTECTION SHALL BE VERIFIED WITH OWNER PRIOR TO COMMENCING WORK AND IN COORDINATION WITH PROGRESSION OF WORK SCHEDULE. PERFORM WORK IN A MANNER THAT WILL AVOID HAZARDS TO PERSONS IN ADJACENT AREAS AND THAT WON'T INTERFERE WITH WORK OR PASSAGE TO ANY OF THESE AREAS. REPAIR AND REPLACE ANY DAMAGED MATERIAL CAUSED BY IMPROPER PROTECTIONS AT NO ADDITIONAL CHARGE TO OWNER. A WEATHER TIGHT SYSTEM ENCLOSURE AND TEMPORARY HEAT WHEN REQUIRED TO COMPLETE THE WORK IS REQUIRED FOR THE COMPLETE BUILDING THROUGHOUT THE ENTIRE PROJECT.

26. CONTRACTOR TO REMOVE ANY STRAY PAINT, DIRT, OR STAINS INCURRED DURING THE CONSTRUCTION PROCESS. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TEMPORARY EQUIPMENT COVERINGS USED DURING CONSTRUCTION AND HE SHALL ALSO BE RESPONSIBLE FOR REMOVING HIS TRASH OFF OF THE JOB SITE DAILY.

27. WORK DAMAGED DURING CONSTRUCTION OR NOT CONFORMING TO SPECIFIED STANDARDS, TOLERANCES OR MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE WORK INCLUDES ALL BUILDING AND SITE ELEMENTS.

28. THE CONTRACTOR SHALL MAINTAIN ALL EXITS, EXIT LIGHTING, FIRE PROTECTION DEVICES AND LIFE SAFETY SYSTEMS IN WORKING ORDER AS REQUIRED BY CODE.

29. EXIT DOORS, EGRESS DOORS, AND OTHER DOORS REQUIRED FOR MEANS OF EGRESS DURING CONSTRUCTION SHALL BE OPERABLE FROM THE INSIDE WITHOUT USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.

30. THE CONTRACTOR SHALL PERFORM ALL CUTTING AND WELDING IN COMPLIANCE WITH THE PUBLISHED STANDARDS OF NFPA. THE CONTRACTOR SHALL PROVIDE FIRE WATCHES FOR ALL CUTTING, GRINDING, AND WELDING OPERATIONS. THE TRAINING OF THESE FIRE WATCHES AND THE USE OF THE CONTRACTOR'S SUPPLIED FIRE EXTINGUISHERS IS THE RESPONSIBILITY OF THE CONTRACTOR.

31. ANY AREA OUTSIDE THE LIMITS OF CONSTRUCTION DISTURBED BY OPERATIONS OF THE CONTRACTOR SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS AT THE CONTRACTOR'S EXPENSE.

32. THE USE OF RECYCLED FILL MATERIALS IS PROHIBITED UNDER ANY STRUCTURE. ALL FILL UNDER STRUCTURES IS TO BE ITEM 4 IN NEW YORK AND PENNDOT 2A SELECT STRUCTURAL FILL IN PENNSYLVANIA. NO SUBSTITUTIONS WILL BE ACCEPTED.

33. CONTRACTOR SHALL PROVIDE MEANS OF CONVEYING ALL MATERIALS TO AND FROM ROOF.

34. CONTRACTOR SHALL BE MADE AWARE THAT ANY EXISTING EQUIPMENT "TO REMAIN" MUST BE PROTECTED DURING THE DEMOLITION AND CONSTRUCTION PROCESS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO EQUIPMENT AND PROVIDE TEMPORARY COVERING FOR ALL EXISTING EQUIPMENT TO REMAIN.

35. REPAIR AND/OR REPLACE EXISTING ITEMS NOT SCHEDULED OR NOTED TO BE DEMOLISHED, AND NOT SPECIFIED TO BE REMOVED, BUT WHICH BECOME DAMAGED DURING THE PROGRESS OF THE WORK. MAKE ANY AND ALL SUCH REPAIRS, REPLACEMENTS AND MODIFICATIONS TO RESTORE THE DAMAGED ITEMS TO THEIR ORIGINAL CONDITION AT THE TIME OF DAMAGE, TO THE SATISFACTION OF AND AT NO ADDITIONAL COST TO THE OWNER.

36. 24 HOURS PRIOR TO OCCUPANCY OF ANY PHASE, THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL SURFACES OF DUST, DEBRIS, LOOSE CONSTRUCTION MATERIAL AND EQUIPMENT. VACUUM OR MOP ALL FLOORS AND CLEAN WINDOWS.

37. THE CONTRACTOR SHALL PROVIDE A WARRANTY TO THE OWNER THAT ALL MATERIALS, AND EQUIPMENT FURNISHED AND INSTALLED UNDER THIS CONTRACT SHALL BE NEW, UNLESS OTHERWISE SPECIFIED, AND THAT ALL WORK SHALL BE OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND SHALL CONFORM TO THE CONTRACT DOCUMENTS.

38. FOR A PERIOD OF ONE YEAR BEGINNING AT THE DATE OF SUBSTANTIAL COMPLETION, CONTRACTOR SHALL PROMPTLY CORRECT WORK FOUND NOT TO BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. CONTRACTOR SHALL BEAR ALL COST OF CORRECTIONS.

39. THE CONTRACTOR. SHALL SUBMIT FOR ARCHITECT'S REVIEW ALL BUILDING STANDARD SAMPLES AND PRODUCT LITERATURE. CONTRACTOR TO ALSO SUBMIT SAMPLES AND PRODUCT LITERATURE AND OTHER PERTINENT DATA FOR ARCHITECT'S CONSIDERATION OF ANY PROPOSED SUBSTITUTIONS.

40. THE CONTRACTOR. SHALL SUBMIT FOR ARCHITECT'S REVIEW PRIOR TO FABRICATION OR PURCHASE, SHOP DRAWINGS OR SAMPLES FOR ALL MILLWORK, CUSTOM METALWORK, CUSTOM CASEWORK, AND ALL OTHER ITEMS AS REQUESTED BY THE ARCHITECT FOR ALL ABOVE BUILDING STANDARD ITEMS.

41. PERFORM ALL INTERIOR AND EXTERIOR WORK INSTALLING MATERIALS IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS AND IN A MANNER CONSISTENT WITH INDUSTRY STANDARD OF WORKMANSHIP. FOLLOW ALL SAFETY PROCEDURES TO PROTECT WORKERS, GENERAL PUBLIC, AND BUILDING OCCUPANTS.

42. NOTIFY AND SCHEDULE WITH BUILDING OWNER AND EVERYONE INVOLVED WITH PROJECT (IN ADVANCE), WHEN CERTAIN WORK OR CONSTRUCTION IS BEING PERFORMED THAT REQUIRES THE BUILDING TO BE EVACUATED. SCHEDULE ALL WORK SO AS NOT TO INTERFERE WITH BUILDING OCCUPANTS. PERFORM WORK ON OFF HOURS OR WORK SHIFTS WHEN BUILDING IS VACANT, AND ALLOW ENOUGH TIME FOR ANY ODORS TO DISSIPATE. PROVIDE PROPER EXHAUST VENTILATION AS PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS. CONTRACTOR TO SUBMIT DUST AND H.V.A.C. (VENTILATION) CONTROL PLAN AND PROCEDURES TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO STARTING CONSTRUCTION.

43. CONTRACTOR SHALL FULLY ACQUAINT HIMSELF WITH THE CONDITIONS OF THE CONTRACT, LOCAL CONDITIONS RELATING TO LOCATION, ACCESSIBILITY AND GENERAL CHARACTER OF THE CONSTRUCTION SITE AND LOCAL LABOR CONDITIONS SO THAT HE UNDERSTANDS THE NATURE, EXTENT, DIFFICULTIES, AND RESTRICTIONS RELATED TO THE EXECUTION OF WORK. NOTIFY ARCHITECT OF ALL DISCREPANCIES PRIOR TO COMMENCING WORK.

44. REVIEW ALL PRODUCT M.S.D.S (MATERIAL SAFETY DATA SHEET) INFORMATION ON ALL MATERIALS AND FOLLOW ALL SAFETY AND APPLICATION PROCEDURES.

45. THE FOLLOWING LIST IS A SAMPLE OF ITEMS THAT REQUIRE SPECIAL PRECAUTIONS: PAINTS, STAINS, SOLVENTS, VAPORS, EPOXY, CORROSIVES, CONTAMINANTS, VAPOR EMISSION COMPLIANCE TREATMENTS, ADHESIVES, GLUES, CLEANING SOLUTIONS, PROPANE, FUELS, WELDING, CHEMICALS, ETC...

46. ANY FABRICATION AND/OR INSTALLATION WHICH HAS NOT BEEN PROPERLY COORDINATED WITH APPROVED EQUIPMENT MANUFACTURE AND MUST BE REPAIRED, RELOCATED, ALTERED, REPLACED, RE-INSTALLED OR MODIFIED IN ANY MANNER WILL BE DONE TO THE SATISFACTION OF THE OWNER WITH NO ADDITIONAL COST TO THE OWNER OR DESIGN PROFESSIONAL

CONCRETE WORK

47. ALL CONCRETE WALKS TO REMAIN THAT ARE DAMAGED DURING CONSTRUCTION ARE TO BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

48. FOR EXTERIOR CONCRETE SLABS AND WALKS, PROVIDE CONTRACTION JOINTS AT A MINIMUM EVERY 6 TO 8 FEET AND EXPANSION JOINTS AT A MINIMUM EVERY 20 FEET.

49. REINFORCING IS REQUIRED IN ALL CONCRETE PADS AND WALKS INCLUDING SITE EQUIPMENT PADS.

50. ALL CONCRETE SLABS, NEW OR EXISTING, ARE REQUIRED TO SLOPE TO FLOOR DRAINS UNLESS SPECIFICALLY DESIGNATED OTHERWISE.

MASONRY WORK

51. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL WEEP JOINTS AROUND WINDOWS AND EXTRUDED ALUM. STORE FRONTS FREE OF CAULK.

52. ALL MASONRY WEEP HOLES MUST BE LOCATED ABOVE GRADE, ABOVE CONCRETE WALKS, ABOVE PAVEMENT MULCH, ETC. DO NOT COVER WEEP HOLES UNDER ANY CIRCUMSTANCES. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ALL CIVIL WORK (TYPICAL).

53. MASONRY CONTRACTOR TO INSTALL BRICK WALLS AS PER DRAWINGS AND SPECIFICATIONS. ALL INSTALLATION METHODS, DETAILS, RECOMMENDATIONS, LATEST TECHNICAL DEVELOPMENTS, ETC. SHALL BE AS PER THE BRICK INSTITUTE OF AMERICA, 11490 COMMERCE PARK DRIVE RESTON VIRGINIA 22091. 703-620-0010.

54. PROPER BRICK BACK UP SYSTEM, ANCHORS, ETC. MUST BE IN PLACE PRIOR TO INSTALLING ANY BRICK. CONTRACTOR MUST NOT INSTALL ANY BRICK IF BACK UP SYSTEM IS NOT PROPERLY CONSTRUCTED. NOTIFY CONSTRUCTION MANAGER AND ARCHITECT IMMEDIATELY.

55. ALL CONCRETE MASONRY WALLS (C.M.U) TO BE INSTALLED IN ACCORDANCE WITH THE NATIONAL CONCRETE MASONRY ASSOCIATION. 2302 HORSE PEN ROAD, HERNDON, VIRGINIA 22071-3406

56. REFER TO WALL SECTIONS FOR WEEP VENTS, WEEP HOLES, FLASHINGS, ANCHORS, ETC.

STEEL AND METAL WORK

57. ANY STEEL THAT IS GRAPHICALLY REPRESENTED ON THE ARCHITECTURAL DRAWINGS MUST BE PROVIDED. REQUEST SIZE INFORMATION FROM THE ARCHITECT/ENGINEER. ANY STEEL NOT SHOWN ON THE STRUCTURAL DRAWINGS IS TO BE FURNISHED BY THE GENERAL TRADES CONTRACTOR.

58. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVISION AND INSTALLATION OF ALL SUPPLEMENTAL MISCELLANEOUS IRON AND/OR STRUCTURAL STEEL (16 GA.) STUDDING REQUIRED TO ADEQUATELY SUPPORT ALL GYPSUM WALLBOARD DROPS SOFFITS, CORNICES, ETC. FROM THE STRUCTURAL STEEL ABOVE.

59. GENERAL CONTRACTOR SHALL CLOSELY COORDINATE THE INSTALLATION OF THE REQUIRED SUPPLEMENTAL MISC. IRON AND/OR STRUCTURAL STEEL STUDDING SO AS CONDUIT, SPRINKLER SYSTEM AND/OR ACOUSTICAL SUSPENDED CEILING SYSTEM ETC... CAN BE INSTALLED PROPERLY.

60. CONTRACTOR TO SUBMIT DETAILED SHOP DRAWING OF SUPPLEMENTAL MISC. IRON AND/OR STRUCT. STL. STUDDING TO ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION OF SAME.

61. STRUCTURAL STEEL FABRICATOR AND INSTALLER SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL FRAMED OPENINGS IN ROOF WITH APPROVED EQUIPMENT MANUFACTURES. OPENINGS SUCH AS, BUT NOT LIMITED TO MECHANICAL UNITS, EXHAUST FANS, CURB MOUNTED EQUIPMENT, ROOF DRAINS, SKYLIGHTS, STAIR OPENINGS, ROOF HATCHES, SMOKE HATCHES, DUCT THROUGH ROOF PENETRATIONS, EXPANSION JOINTS, ETC. EXACT SIZES AND EXACT LOCATIONS OF ALL OPENINGS ARE TO BE VERIFIED WITH THE APPROVED SHOP DRAWINGS ISSUED FOR THE INSTALLATION. THE EXACT SIZES SHALL BE COORDINATED PRIOR TO ANY FABRICATION AND INSTALLATION BY ANY/ALL TRADES. SIZES AND LOCATIONS OF OPENINGS INDICATED ON THE CONTRACT DRAWINGS ARE DIAGRAMMATIC AND FOR GENERAL INFORMATION ONLY. ANY FABRICATION AND/OR INSTALLATION WHICH HAS NOT BEEN PROPERLY COORDINATED WITH APPROVED EQUIPMENT MANUFACTURE MUST BE REPAIRED, RELOCATED, ALTERED, REPLACED, REINSTALLED OR MODIFIED TO THE SATISFACTION OF THE OWNER WITH NO ADDITIONAL COST TO THE OWNER OR THE DESIGN PROFESSIONAL.

62. ALL EXTERIOR STRUCTURAL STEEL MEMBERS TO RECEIVE HIGH PERFORMANCE COATING UNLESS OTHERWISE NOTED. ALL INTERIOR STRUCTURAL STEEL IS TO BE FIREPROOFED AND IS TO HAVE NO PRIMER COAT, UNLESS OTHERWISE NOTED.

63. WHERE TWO DISSIMILAR METALS MEET, PAINT FACE OF ONE WITH BITUMINOUS PAINT.

64. ANY ADDITIONAL STEEL THAT IS REQUIRED DUE TO SUBSTITUTION OF EQUIPMENT OR SYSTEMS IS TO BE PROVIDED BY THE CONTRACTOR MAKING THE SUBSTITUTION AT NO ADDITIONAL COST TO THE OWNER.

THERMAL, MOISTURE AND SOUND ISOLATION PROTECTION, FIRE PROOFING

65. CONTRACTOR IS TO PROVIDE TEMPORARY WATERTIGHT WEATHERPROOF CLOSURES AT ALL ROOF OPENINGS UNTIL AFTER INSTALLATION OF MECHANICAL UNITS, DRAINS, VENTS, ETC. ROOF IS THEN TO BE RESEALED WEATHER-TIGHT.

66. ALL PENETRATIONS THROUGH RATED WALLS ARE TO BE SEALED TO MAINTAIN INTEGRITY OF WALL CONSTRUCTION AND RATING.

67. ALL INSULATION EXPOSED TO CEILING PLENUM IS TO BE FIRE AND DUST PROOF.

68. INSULATION WILL NOT BE LEFT EXPOSED IN ANY FINISHED SPACE. AT A MINIMUM, THE INSULATION WILL BE COVERED WITH GYPSUM BOARD, TAPED, SPACKLED, SANDED AND PAINTED.

69. CONTRACTOR IS TO REPLACE ANY SPRAY-ON FIREPROOFING DAMAGED DURING CONSTRUCTION SO AS TO MAINTAIN INTEGRITY OF INSTALLATION

70. WHEREVER A FOAM BACKER ROD AND SEALANT ARE USED, THE SEALANT AND BACKER ROD MUST BE COMPATIBLE WITH EACH OTHER. USE A SIZE BACKER ROD THAT COMPRESSES 25% WHEN INSERTED INTO THE JOINT. (TYPICAL ALL JOINTS)

71. ALL EXTERIOR WINDOWS, DOORS, LOUVERS, VENTS, EXHAUST FANS, PIPE PENETRATIONS, AND ALL OTHER PENETRATIONS THRU EXTERIOR WALLS SHALL BE SEALED ALL AROUND WITH SEALANT. (BOTH ON EXTERIOR AND INTERIOR SIDES)

72. ALL ROOF WORK SHALL BE DONE IN ACCORDANCE WITH EXIST. ROOF MANUFACTURES RECOMMENDATIONS SO AS NOT TO VOID ANY EXISTING ROOF WARRANTIES. CONSULT WITH EXISTING ROOF MANUFACTURER PRIOR TO DOING ANY WORK. PROVIDE ALL NECESSARY ROOF PROTECTION TO MAINTAIN ROOF PERFORMANCE AND WARRANTY.

73. ALL OPENINGS / PENETRATIONS IN WALLS, FLOORS AND CEILINGS SHALL BE SEALED WITH NELSON FIRE-STOP PRODUCTS (1-800-331-7325) OR APPROVED EQUAL. PRODUCT USE SHALL BE AS RECOMMENDED BY NELSON AND MUST MAINTAIN RATING OF ALL WALLS, FLOORS AND CEILINGS. ALL PENETRATIONS REQUIRE SEALANT, SUCH AS BUT NOT LIMITED TO THE FOLLOWING:
STRUCTURAL STEEL, PIPING, CONDUITS, DUCTWORK, WIRING ETC. CONTRACTOR MUST PROVIDE DETAILED SHOP DWGS. OF ALL PENETRATIONS FOR ARCHITECTS REVIEW, NO EXCEPTIONS.

74. FOR INSTALLATION OF INSULATION & VAPOR / AIR BARRIERS, INCLUDING ALL TYPES OF INSULATION: BATTS, SPRAY INSULATION, ACOUSTICAL, ETC. (REFER TO DRAWINGS AND SPECIFICATIONS FOR TYPES) CONTRACTOR MUST INSTALL INSULATIONS & VAPOR / AIR BARRIERS AS PER MANUFACTURER'S INSTRUCTIONS, SPECIFICATIONS, METHODS, RECOMMENDATIONS, STANDARDS, PROCEDURES, ETC. FOR <u>EACH</u> TYPE OF INSULATION & VAPOR / AIR BARRIER. SEALING OF ALL GAPS TO PROVIDE A CONTINUOUS ENVELOPE, ATTACHMENT, JOINT SEALING, CONDENSATION CONTROL, THERMAL PERFORMANCE, ACOUSTICAL PERFORMANCE, FIRE PERFORMANCE RATINGS, AESTHETICS, ASTM STANDARDS COMPLIANCE, INTERNATIONAL BUILDING CODE, LOCAL CODES, UNDERWRITERS LABORATORIES, FACTORY MUTUAL, EPA, ETC. MUST ALL BE FOLLOWED.

75. REFER TO MECHANICAL (HVAC), PLUMBING AND ELECTRICAL DRAWINGS FOR DETAILS OF UTILITY WALL PENETRATIONS.

ACOUSTICAL PERFORMANCE

76. ALL NEW STC RATED PARTITIONS SHALL HAVE SOUND ATTENUATION INSULATION BLANKETS FROM CONCRETE SLAB TO UNDERSIDE OF DECK ABOVE. THICKNESS OF INSULATION IS TO MATCH THICKNESS OF STUD FRAME TO FILL VOIDS COMPLETELY. SEE PARTITION LEGEND FOR ADDITIONAL INFORMATION.

77. ALL PERIMETER EDGES OF STC RATED PARTITIONS SHALL BE CAULKED WITH AN ACOUSTICAL SEALER, CONTINUOUS.

78. AT ALL PENETRATIONS (DUCTS, PIPES, CONDUITS, ETC.) THRU ANY STC RATED PARTITIONS, PROVIDE 1" SPACE AROUND PERIMETER. VOID SHALL BE PACKED WITH SOUND ATTENUATION BLANKETS AND CAULKED WITH ACOUSTICAL SEALANT. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

79. WRAP BACKSIDE OF BOXES WITH MOLDABLE ACOUSTIC DEADENING SOUND MAT AND PACK AROUND ALL ELECTRICAL OUTLETS AND SWITCH BOXES WITH SOUND ATTENUATION INSULATION (THICKNESS TO MATCH VOID) AND CAULK WITH ACOUSTICAL SEALANT. ELECTRICAL CONTRACTOR SHALL NOT INSTALL ANY OUTLETS BACK TO BACK. INSTALL ONLY ONE BOX PER STUD CAVITY.

80. ALL WALL PANELS TO BE RECESSED IN A SOUND ATTENUATION LINED BOX. CONDUITS INTO BOX TO BE ACOUSTICALLY PACKED AND CAULKED WITH ACOUSTICAL SEALANT.

81. INSULATE AROUND ALL CONDUITS, PIPES, ETC. - RUN IN STUD PARTITIONS WITH 3\" SOUND ATTENUATION INSULATION.

OPENINGS, PENETRATIONS, WOODS, PLASTICS, STEEL FRAMING, STEEL STUDS AND BRACING

82. ALL EXTERIOR WINDOWS, DOORS, LOUVERS, VENTS, EXHAUST FANS, DUCTWORK, CONDUIT AND PIPE PENETRATIONS, AND ALL OTHER PENETRATIONS THROUGH EXTERIOR WALLS SHALL BE SEALED COMPLETELY AROUND WITH SEALANT. (BOTH ON EXTERIOR AND INTERIOR SIDES)

83. ALL WOOD TO BE FIRE RETARDANT TYPICAL UNLESS OTHERWISE NOTED.

84. ALL WOOD ON EXTERIOR WALLS AND ROOF TO BE MOISTURE RESISTANT UNLESS OTHERWISE NOTED.

85. CONTRACTOR IS TO PROVIDE ALL MISC. FRAMING, BLOCKING, ETC. TO HANG SCREENS, BULLETIN BOARDS, RAILS, TOILET ACCESSORIES, WOODWORK, ETC.

86. ALL INTERIOR PARTITIONS WHICH RECEIVE CERAMIC TILE SHALL BE 20 GAGE MIN. AT 12" O.C. WITH HORIZONTAL COLD ROLLED STIFFENER CHANNELS AT 4'-0" O.C. (MAX.) AND EXTEND FROM FINISHED FLOOR TO STRUCTURE ABOVE. 20 GAGE DIAGONAL STUD KICKERS MUST ALSO BE INSTALLED AT EVERY OTHER VERTICAL STUD ABOVE CEILING.

87. PROVIDE STEEL AND OR STEEL FRAMING FOR ALL ROOF MOUNTED EQUIPMENT INCLUDING BUT NOT LIMITED TO HVAC, ELECTRICAL AND PLUMBING EQUIPMENT.

88. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLATION OF ALL SUPPLEMENTAL MISCELLANEOUS IRON AND/OR STRUCTURAL STEEL (16 GA.) STUDDING REQUIRED TO ADEQUATELY SUPPORT ALL GYPSUM WALLBOARD DROPS SOFFITS, CORNICES, ETC. FROM THE STRUCTURAL STEEL ABOVE.

89. CONTRACTOR IS TO COORDINATE WITH ALL TRADES FOR CEILING PENETRATIONS AND PROVIDE BRACING FOR EXTRA SUPPORT AS NECESSARY FOR PROPER INSTALLATION.

90. ALL PENETRATIONS THROUGH DRYWALL AND MASONRY SURFACES INCLUDING BUT NOT LIMITED TO PIPE, CONDUIT, DUCTWORK, GRILLES, REGISTERS, DEVICE BOXES, HANGER RODS, ETC. SHALL HAVE THEIR COMMON JOINTS WITH DRYWALL AND/OR MASONRY CAULKED TO PROVIDE AN AIR-TIGHT SEAL.

91. PROVIDE OPENINGS AS REQUIRED FOR MECH. AND ELECT. EQUIPMENT. DRYWALL CONTRACTOR TO PROVIDE STUD BRACING AS REQUIRED TO STABILIZE WALLS ABOVE CEILINGS AT HIGH AND LOW PARTITIONS.

92. PIPE SLEEVES ARE TO BE CONDUIT (LENGTH TO MATCH THE THICKNESS OF THE WALL), WITH INSULATED BUSHINGS AND ARE TO BE SEALED AFTER CONDUIT INSTALLATION TO MAINTAIN RATING. SLEEVES ARE TO BE PLACED IN FIRST BLOCK COURSE.

93. CONTRACTOR SHALL FRAME AND FINISH ALL MECHANICAL AND ELECTRICAL WALL AND ROOF PENETRATIONS.

94. CONTRACTOR IS TO PROVIDE STUD BRACING FOR METAL STUD PARTITIONS TALLER THAN 10'-0" AFF. SPACING OF BRACING TO BE AS DETAILED OR AS REQUIRED.

95. 2 X 6 CONTINUOUS WOOD BLOCKING AND/OR MISCELLANEOUS FRAMING SHALL BE PROVIDED AT DRYWALL PARTITIONS FOR ALL WALL MOUNTED ELEMENTS INCLUDING BUT NOT LIMITED TO CABINET WORK AT TOP AND BOTTOM OF WALL MOUNTED UNITS AND UNDER COUNTER TOP LEVEL OF BASE CABINET, SHELVING, WALL MOUNTED FF&E ITEMS AND EQUIPMENT, PROJECTION SCREENS, MONITORS, BULLETIN BOARDS, WHITE BOARDS, SMART BOARDS, RAILS, TOILET ACCESSORIES, MILLWORK AND WOODWORK, ETC.

96. CONTRACTOR SHALL CLOSELY COORDINATE THE INSTALLATION OF THE REQUIRED SUPPLEMENTAL MISCELLANEOUS IRON AND/OR STRUCTURAL STEEL STUDDING WITH CONDUIT, SPRINKLER SYSTEM AND/OR ACOUSTICAL SUSPENDED CEILING SYSTEM.

97. EXACT SIZES AND EXACT LOCATIONS OF ALL OPENINGS ARE TO BE VERIFIED WITH THE APPROVED SHOP DRAWINGS ISSUED FOR THE INSTALLATION. THE EXACT SIZES SHALL BE COORDINATED PRIOR TO ANY FABRICATION AND INSTALLATION BY ANY/ALL TRADES. (SIZES AND LOCATIONS INDICATED ON CONTRACT DRAWINGS ARE DIAGRAMMATIC AND FOR INFORMATION ONLY.)

DOORS, WINDOWS AND HARDWARE

98. VERIFY ALL KEYING REQUIREMENTS OF ALL LOCKS WITH OWNER.

99. PROVIDE ELECTRICAL WORK FOR ALL HARDWARE REQUIRING ELECTRICAL, SHOWN ON THE DRAWINGS OR NOT SHOWN ON THE DRAWINGS. COORDINATION OF ALL ELECTRONIC HARDWARE IS REQUIRED. PROVIDE ALL HARDWARE REQUIRED IF NOTED ON ELECTRICAL, ARCHITECTURAL, SPECIAL SYSTEMS OR IT DRAWINGS.

100. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL WEEP JOINTS AROUND WINDOWS AND EXTRUDED ALUMINUM STORE FRONTS FREE OF CAULK.

101. ALL EXTERIOR DOOR FRAMES SHALL RECEIVE FOAM INSULATION INSERTS TYP. AT HEAD AND JAMB. ALL EXTERIOR ENTRANCE DOORS AND FRAMES TO RECEIVE PERIMETER WEATHER STRIPPING OR AS PER SPECIFICATIONS.

102. CONTRACTOR SHALL FRAME AND FINISH WHERE NECESSARY ALL MECHANICAL AND ELECTRICAL WALL PENETRATIONS.

103. TEMPERED GLASS IS TO BE INSTALLED IN ALL DOORS AND WINDOWS AS REQUIRED BY THE APPLICABLE BUILDING CODE.

104. ALL EXTERIOR DOORS AND FRAMES ARE INSULATED.

FINISHES

105. ALL NEW & EXISTING CONCRETE FLOOR SLABS ON GRADE THAT ARE SCHEDULED TO RECEIVE FLOOR FINISHES ARE TO RECEIVE VAPOR EMISSIONS COMPLIANCE TREATMENT. FLOOR FINISH CONTRACTORS ARE RESPONSIBLE FOR TESTING MOISTURE CONTENT IN FLOOR SLABS BEFORE APPLYING VAPOR EMISSIONS COMPLIANCE TREATMENT AND BEFORE APPLYING FLOOR FINISHES, TWO (2) TESTS MINIMUM ARE REQUIRED PER AREA.

106. FLOOR FINISH CONTRACTORS ARE RESPONSIBLE FOR TESTING MOISTURE CONTENT IN FLOOR SLABS BEFORE APPLYING KOSTER VAP 1 2000 SYSTEM & BEFORE APPLYING FLOOR FINISHES. (TWO (2) TESTS REQUIRED)

107. THE CONTRACTOR SHALL EXAMINE ALL SURFACES TO DETERMINE THAT THEY ARE SOUND, DRY, CLEAN AND READY TO RECEIVE FINISHES PRIOR TO INSTALLATION. START OF INSTALLATION OF FINISHES SHALL IMPLY ACCEPTANCE BY THE CONTRACTOR PROVIDING FINISHES OF SUBSTRATE AND SHALL NOT BE GROUNDS FOR CLAIMS AGAINST IMPROPER PERFORMANCE OF INSTALLED MATERIALS. ADVISE THE ARCHITECT/ENGINEER OF ANY EXISTING CONSTRUCTION NOT LEVEL, SMOOTH OR PLUMB WITHIN INDUSTRY STANDARDS OR AS REQUIRED BY THE FINISH MANUFACTURER PRIOR TO START OF CONSTRUCTION AND PRIOR TO INSTALLATION OF FINISHES.

108. PATCH ALL EXISTING PLASTER OR GYPSUM BOARD FINISHED WALLS THAT ARE TO REMAIN. WALL SURFACES ARE TO BE PREPPED TO RECEIVE NEW FINISHES, FREE FROM HOLES, CRACKS AND BLEMISHES.

109. IN ALL INSTANCES WHERE EXISTING WALLS ARE BEING REMOVED AND/OR REWORKED, AT A MINIMUM THE CONTRACTOR IS TO REPAINT OR REFINISH ENTIRE WALL TO NEAREST CORNER OR BREAK-LINE WHERE WALL CHANGES DIRECTION.

110. CONTRACTOR TO PROVIDE CONTROL JOINTS IN DRYWALL ON STRIKE SIDE OF DOORS.

111. CONTROL JOINTS IN GYPSUM BOARD PARTITIONS AND GYPSUM BOARD CEILINGS SHALL BE SPACED AS FOLLOWS:

<u>PARTITIONS</u> - 30 FT. MAXIMUM IN EITHER DIRECTION.
<u>INTERIOR CEILINGS (WITH PERIMETER RELIEF)</u> - 50 FT MAXIMUM IN EITHER DIRECTION.
<u>INTERIOR CEILINGS (WITHOUT PERIMETER RELIEF)</u> - 30 FT MAXIMUM IN EITHER DIRECTION.
<u>EXTERIOR CEILINGS</u> - 30 FT. MAXIMUM IN EITHER DIRECTION.

112. ALL DRYWALL USED <u>ONLY</u> UNDER CERAMIC TILE IS TO BE MOISTURE RESISTANT. USE CEMENT BOARD AT ALL SHOWER AREAS.

113. ALL COLUMN COVERS ARE TO EXTEND FROM CONCRETE FLOOR TO 6" ABOVE CEILING UNLESS OTHERWISE NOTED.

114. EPOXY PAINT SYSTEMS TO BE USED IN WET AREAS UNLESS OTHERWISE NOTED. COORDINATE WITH FINISH SCHEDULE.

115. ALL INTERIOR PARTITIONS WHICH RECEIVE CERAMIC TILE SHALL BE 16 GA. MIN. AT 12" O.C. W/HORIZONTAL COLD ROLLED STIFFENER CHANNELS AT 4'-0" O.C. (MAX.) AND EXTEND FROM FINISHED FLOOR TO STRUCTURE ABOVE. 20 GA. DIAGONAL STUD KICKERS MUST ALSO BE INSTALLED AT EVERY OTHER VERTICAL STUD ABOVE CEILING. BRACE HORIZ. AT EACH FLOOR OR BEAM @ 24" O.C.

116. REFER TO SPECIFICATIONS FOR LIST OF REQUIRED ATTIC STOCK. AT A MINIMUM ATTIC STOCK IS REQUIRED FOR ALL PAINTS, CEILING TILES, WALL BASE, FLOORING INCLUDING TREADS, RISERS, FLOOR TILE - VINYL AND CERAMIC OR PORCELAIN, CARPET TILE, CARPETING, SHEET FLOORING, WOOD FLOORING, ACOUSTIC PANELS. REFERENCE THE SPECIFICATIONS FOR ADDITIONAL MATERIALS AND REQUIREMENTS.

SPECIALTIES, EQUIPMENT AND FURNISHINGS

117. FIRE EXTINGUISHER CABINETS TO BE MOUNTED PER ADA REQUIREMENTS OR AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION. FIRE EXTINGUISHERS WITH GROSS WEIGHT OVER 40LBS. MUST BE MOUNTED PER ADA REQUIREMENTS OR AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION. CLEARANCE BETWEEN THE BOTTOM OF THE FLOOR AND THE EXTINGUISHER MUST BE PER ADA REQUIREMENTS.

118. FOR PREFABRICATED PARTITION ATTACHMENT TO FLOOR AND EXISTING PARTITIONS, SEE MANUFACTURER'S SPECIFICATIONS AND DETAILS.

119. CONTRACTOR SHALL COMPLY WITH MANUFACTURER'S INSTRUCTIONS WHEN RELOCATING AND/OR INSTALLING ANY EQUIPMENT AND FURNISHINGS

120. GENERAL CONTRACTOR SHALL VERIFY EQUIPMENT LOCATIONS WITH OWNER PRIOR TO INSTALLATION.

121. CONTRACTOR SHALL VERIFY EXISTING EQUIPMENT CONDITIONS. EQUIPMENT CURRENTLY ANCHORED TO FLOOR SHALL RECEIVE SIMILAR TREATMENT WHEN RELOCATED.

122. CONTRACTOR SHALL BE MADE AWARE THAT ALL EXISTING EQUIPMENT "TO REMAIN" WILL BE PRESENT DURING THE CONSTRUCTION PROCESS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO EQUIPMENT AND PROVIDE TEMPORARY COVERING FOR ALL EXISTING EQUIPMENT TO REMAIN.

123. FIRE EXTINGUISHER CABINETS TO BE MOUNTED 4'-6" A.F.F. TO TOP MAXIMUM AS PER ADA .

124. REQUIREMENTS. (FIRE EXTINGUISHERS WITH GROSS WEIGHT OVER 40LBS. MUST BE MOUNTED 3'-6" MAX.). CLEARANCE BETWEEN THE BOTTOM OF THE FLOOR AND THE EXTINGUISHER MAY NOT BE LESS THAN 4".)

125. ALL OPEN-FACE SHELVING UNITS SHALL HAVE CONCEALED ANCHOR BRACKETS.

FASTENERS, PULL TEST REQUIREMENTS

126. PULL OUT TESTS SHALL BE PERFORMED BY THE FASTENER MFGR. CONFORM TO FACTORY MUTUAL'S LOST PREVENTION DATA SHEET 1-49. THE RESULTS OF THESE TESTS, AND ASSESSMENT BY THE FASTENER MFGR. REGARDING THE SUITABILITY OF THE FASTENER FOR THE INTENDED PROJECT IS REQUIRED. FASTENER INSTALLATION INSTRUCTIONS SHALL BE PROVIDED TO THE APPLICATOR PRIOR TO THE JOB START.

127. FASTENERS AND PLATES SHALL MEET FACTORY MUTUAL STANDARD 4470 FOR CORROSION RESISTANCE AND WIND UPLIFT RESISTANCE.

128. FASTENER MFGR. SHALL WARRANTY THE PERFORMANCE OF THE FASTENER AND PLATES FOR THE DURATION OF THE ROOFING WARRANTY.

129. FASTENER AND PLATES SHALL BE APPROVED IN WRITING BY THE FASTENER MANUFACTURER FOR THE INTENDED USAGE.

130. THE CONTRACTOR IS TO VERIFY THE PULL OUT PERFORMANCE OF THE WOOD NAILERS TO CONFIRM THAT THEY MEET FACTORY MUTUAL'S LOSS PREVENTION DATA 1-49. ANY NAILERS THAT DO NOT MEET THIS REQUIREMENT SHALL BE REPLACED.

131. IN AREAS WHERE EXISTING WOOD BLOCKING IS TO REMAIN IN EXISTING PARAPET WALLS FASTENER MANUFACTURER TO PROVIDE THE PULL OUT TEST PERFORMANCE CERTIFICATE PRIOR TO THE START OF ANY INSTALLATION.

PLUMBING WORK

132. REFER TO PLUMBING DRAWINGS FOR DETAILS OF UTILITY WALL PENETRATIONS.

133. ALL FIXTURES LABELED "H" INDICATE HANDICAP FIXTURES.

134. PROVIDE ADA COMPLIANT PIPE INSULATION AT ALL EXPOSED PIPING UNDER HANDICAPPED SINKS.

135. ALL EXPOSED PLUMBING COMPONENTS ARE TO BE HAVE EITHER AN ARCHITECTURAL FACTORY FINISH OR TO BE PAINTED. COORDINATE WITH THE FINISH SCHEDULE.

136. ALL EXPOSED PIPES ARE TO BE MOUNTED FLUSH TO ALL WALLS, UNDERSIDE OF FLOOR DECKS AND BEAMS UNLESS OTHERWISE NOTED.

HVAC WORK

137. ALL NEW SUPPLY AIR AND RETURN GRILLES SHALL BE LOCATED IN THE CENTER LINE OF ACOUSTICAL TILES UNLESS OTHERWISE INDICATED ON PLANS.

138. FINISHES FOR ALL HVAC WALL DEVICES ARE TO BE COORDINATED WITH THE ARCHITECT. THE DIMENSIONAL LOCATION OF ALL HVAC WALL DEVICES SHALL BE PROVIDED TO THE ARCHITECT/ENGINEER DURING THE SHOP DRAWING PROCESS. THE LOCATION OF THE DEVICES SHALL BE COORDINATED WITH ALL CONTRACTOR'S EQUIPMENT AND DEVICES.

139. ALL EXPOSED HVAC COMPONENTS ARE TO BE HAVE EITHER AN ARCHITECTURAL FACTORY FINISH OR TO BE PAINTED. COORDINATE WITH THE FINISH SCHEDULE.

140. ALL EXPOSED PIPES ARE TO BE MOUNTED FLUSH TO ALL WALLS, UNDERSIDE OF FLOOR DECKS AND BEAMS UNLESS OTHERWISE NOTED.

141. REFER TO MECHANICAL DRAWINGS FOR DETAILS OF UTILITY WALL PENETRATIONS.

ELECTRICAL, IT AND SPECIAL SYSTEMS WORK

142. GENERAL TRADES CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR THE MOUNTING HEIGHT OF ALL SWITCHES AND OUTLETS AT MILLWORK, CASEWORK, COUNTERS, SHELVING, SINKS, ETC. HEIGHT OF THE SWITCHES SHALL BE PER ADA GUIDELINES OR PER CODE HAVING JURISDICTION IF REQUIRED.

143. FINISHES FOR ALL ELECTRICAL, IT AND SPECIAL SYSTEMS DEVICES ARE TO BE COORDINATED WITH THE ARCHITECT. THE DIMENSIONAL LOCATION OF ALL ELECTRICAL IT AND SPECIAL SYSTEMS DEVICES SHALL BE PROVIDED TO THE ARCHITECT/ENGINEER DURING THE SHOP DRAWING PROCESS. THE LOCATION OF THE DEVICES SHALL BE COORDINATED WITH ALL CONTRACTOR'S EQUIPMENT AND DEVICES.

144. CONTRACTOR IS TO PROVIDE ALL PLYWOOD OR UNISTRUT AS REQUIRED FOR MOUNTING OF IT AND ELECTRICAL EQUIPMENT.

145. ALL EXPOSED FIRE ELECTRICAL COMPONENTS ARE TO BE HAVE EITHER AN ARCHITECTURAL FACTORY FINISH OR TO BE PAINTED. COORDINATE WITH THE FINISH SCHEDULE.

146. CONTRACTOR IS TO REVIEW ALL DRAWINGS TO CONFIRM TERMINATION AND SAFING OFF REQUIRED OF ALL SERVICES PRIOR TO DEMOLITION.

147. ALL EXPOSED PIPES AND CONDUITS ARE TO BE MOUNTED FLUSH TO ALL WALLS, UNDERSIDE OF FLOOR DECKS AND BEAMS UNLESS OTHERWISE NOTED.

148. REFER TO ELECTRICAL DRAWINGS FOR DETAILS OF UTILITY WALL PENETRATIONS.

DEMOLITION NOTES

ALL NOTES BELOW ARE THE RESPONSIBILITY OF ALL CONTRACTS

1. THE CONTRACTOR SHALL INVESTIGATE JOB SITE TO COMPARE CONTRACT DOCUMENTS AND EXISTING CONDITIONS. INCLUDE COST FOR ALL WORK DESCRIBED IN CONTRACT DOCUMENTS AND REQUIRED OR IMPLIED BY EXISTING CONDITIONS. NOTIFY ARCHITECT/ENGINEER OF ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND NEW WORK, OMISSIONS OR CONFLICTS IN THE DRAWINGS AND ANY RESTRICTIONS RELATED TO THE EXECUTION OF THE WORK.

2. DEMOLITION WORK IS TO BE COORDINATED WITH THE CONSTRUCTION DOCUMENTS: STRUCTURAL, ARCHITECTURAL, PLUMBING, MECHANICAL, ELECTRICAL, AND FIRE PROTECTION FOR CLARIFICATION AND COORDINATION OF ELEMENTS TO REMAIN. THE MECHANICAL, ELECTRICAL, PLUMBING AND ALL OTHER BUILDING SYSTEMS SHALL BE REMOVED IN THEIR ENTIRETY IN ACCORDANCE WITH THE SPECIFICATIONS, UNLESS SPECIFICALLY INDICATED TO REMAIN WITHIN THESE DOCUMENTS. REFER TO MECHANICAL, PLUMBING, FIRE PROTECTION, STRUCTURAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL ITEMS BEING DEMOLISHED INCLUDING BUT NOT LIMITED TO ELECTRICAL PANELS, FIXTURES, OUTLETS AND EQUIPMENT, FLOOR TRENCHING TO RECEIVE NEW WORK, PIPING, STEAM PIPING, FIRE HOSE CONNECTIONS, RADIATORS, DUCTWORK, MECHANICAL UNITS, STRUCTURAL BEAMS, COLUMNS, FLOOR SLABS, ETC.

3. ALL DEMOLITION AND REMOVAL WORK SHALL BE COMPLETED AS INDICATED AND NOTED ON THE DRAWINGS AND AS SPECIFIED AND/OR REQUIRED TO COMPLETE AND ACCEPT NEW WORK AND CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION BETWEEN DEMOLITION AND NEW CONSTRUCTION.

4. CONTRACTOR IS TO REVIEW ALL DRAWINGS TO CONFIRM TERMINATION AND SAFING OFF REQUIRED OF ALL SERVICES PRIOR TO DEMOLITION.

5. PRIOR TO THE START OF DEMOLITION, MAKE A THOROUGH EXAMINATION OF THOSE PORTIONS OF THE STRUCTURE IN WHICH THE WORK IS TO BE PERFORMED. CHECK ALL THE WORK ADJOINING OR AT UNDERLYING LOCATIONS. REPORT TO THE OWNER AND THE ARCHITECT ANY AND ALL CONDITIONS WHICH MAY INTERFERE WITH OR OTHERWISE AFFECT OR PREVENT THE PROPER EXECUTION AND COMPLETION OF THE WORK. DO NOT START THE WORK UNTIL SUCH CONDITIONS HAVE BEEN EXAMINED AND A COURSE OF ACTIONS MUTUALLY AGREED UPON.

6. PRIOR TO THE START OF DEMOLITION, PROVIDE THE NECESSARY PROTECTIVE DEVICES WHERE REQUIRED, AND IN STRICT ACCORDANCE WITH OSHA RULES AND REGULATIONS LIFE SAFETY REGULATIONS FOR CONSTRUCTION, REPAIR AND IMPROVEMENTS OF OPERATIONS AND ANY OTHER RULES OR REGULATIONS THAT THE OWNER MAY HAVE.

7. CONTRACTOR TO PROVIDE TEMPORARY FALL PROTECTION AS REQUIRED AT ALL WALL, FLOOR, AND ROOF PENETRATIONS.

8. PRIOR TO THE DEMOLITION OF THOSE ITEMS WHICH HAVE UTILITY CONNECTIONS (INCLUDING BUT NOT LIMITED TO WATER, GAS, ELECTRICITY, STEAM, ETC.) THE CONTRACTOR SHALL ARRANGE WITH THE OWNER TO LOCATE SHUTOFF VALVES, PANEL BOXES AND OTHER CONTROL ELEMENTS, SO THAT WATER DAMAGE AND OTHER POTENTIALLY INCONVENIENT OR DANGEROUS SITUATIONS ARE AVOIDED. EACH CONTRACTOR SHALL TURN OFF THEIR RESPECTIVE UTILITY AS REQUIRED BY THE WORK.

9. CONTRACTOR SHALL REVIEW AT THE SITE ALL ITEMS TO BE DEMOLISHED WITH OWNER TO IDENTIFY ANY ITEMS TO BE SALVAGED PRIOR TO THE START OF DEMOLITION.

10. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND PROVIDE REQUIRED FIRE RESISTIVE RATING IN ALL BUILDING ELEMENTS. HOLES AND OPENINGS REMAINING IN BUILDING ELEMENTS FROM DEMOLITION WILL BE PATCHED AND REPAIRED TO MAINTAIN THE REQUIRED FIRE RESISTIVE RATING.

11. TAKE NECESSARY PRECAUTIONS TO PREVENT DUST AND DIRT FROM RISING AND BECOMING AIRBORNE AT THE SITE AND WITHIN THE BUILDING AND PREVENT DUST AND DIRT FROM SOILING ADJACENT AREAS NOT UNDER THIS CONTRACT. EXCESSIVE USE OF WATER WILL NOT BE PERMITTED.

12. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL NECESSARY COVERINGS, PROTECTIVE ENCLOSURES, TEMPORARY DOORS AND PARTITIONS AND DUST BARRIERS TO PROTECT ALL OCCUPANTS AND EXISTING WORK AND FINISHES TO REMAIN. LOCATION OF SUCH PROTECTION SHALL BE VERIFIED WITH OWNER PRIOR TO COMMENCING WORK AND IN COORDINATION WITH PROGRESSION OF WORK SCHEDULE. PERFORM WORK IN A MANNER THAT WILL AVOID HAZARDS TO PERSONS IN ADJACENT AREAS AND THAT WON'T INTERFERE WITH WORK OR PASSAGE TO ANY OF THESE AREAS. REPAIR AND REPLACE ANY DAMAGES CAUSED BY IMPROPER PROTECTIONS AT NO ADDITIONAL CHARGE TO OWNER.

13. CONTRACTOR IS TO PROVIDE WEATHERTIGHT PROTECTION AT ALL EXPOSED AREAS, WALLS, ROOF, PIPE PENETRATIONS, ETC. DURING CONSTRUCTION. CONTRACTOR TO SECURE DEMOLISHED EXTERIOR OPENINGS. MAKE WEATHER TIGHT, PROVIDE TEMPORARY CONSTRUCTION DOOR WITH LOCK AS ALLOWED BY CODE IF REQUIRED. DEMOLITION EXPOSING THE INTERIOR OF THE BUILDING TO THE OUTSIDE ELEMENTS OR TO THE PUBLIC SHALL BE PROPERLY SEALED AND PROTECTED TO ELIMINATE DAMAGE FROM VANDALISM OR WEATHER DURING CONSTRUCTION.

14. KEEP ALL ADJOINING PUBLIC AREAS CLEAN AND FREE OF DEBRIS OR CONSTRUCTION MATERIALS DURING WORKING HOURS, AND PROVIDE SAFE CONDITIONS FOR THE GENERAL PUBLIC AND WORKMEN.

15. REMOVE ALL INTERIOR PARTS AND PIECES INCLUDING BUT NOT LIMITED TO CLIPS, CABLES, HOOKS, HANGERS AND MISCELLANEOUS HARDWARE NOT REQUIRED FOR THE NEW CONSTRUCTION OR RENOVATION CONSTRUCTION THAT WOULD BE EXPOSED AFTER COMPLETION OF CONSTRUCTION.

16. DEMOLISHED MATERIALS, UNLESS OTHERWISE NOTED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE SITE, ON A REGULAR BASIS, IN A LEGAL MANNER.

17. CONTRACTOR IS RESPONSIBLE FOR ALL DUMPSTERS, DUMPING FEES, AND PERMITS FOR ALL ITEMS NOTED FOR DEMOLITION.

18. REPAIR AND/OR REPLACE EXISTING ITEMS NOT SCHEDULED OR NOTED TO BE DEMOLISHED, AND NOT SPECIFIED TO BE REMOVED, BUT WHICH BECOME DAMAGED DURING THE PROGRESS OF THE WORK. MAKE ANY AND ALL SUCH REPAIRS, REPLACEMENTS AND MODIFICATIONS TO RESTORE THE DAMAGED ITEMS TO THEIR ORIGINAL CONDITION AT THE TIME OF DAMAGE, TO THE SATISFACTION OF AND AT NO ADDITIONAL COST TO THE OWNER.

19. PATCH, FILL AND REPAIR ALL SURFACES DISTURBED, CUT, DAMAGED, IN NEED OF REPAIR OR MADE IMPERFECT BY ALTERATIONS, DEMOLITION OR REMOVAL WORK AND AS REQUIRED TO PREPARE SURFACES FOR NEW MATERIALS AND ARRANGEMENTS INCLUDING BUT NOT LIMITED TO ALL FLOOR SLABS, SLABS ON GRADE, INTERIOR AND EXTERIOR WALLS, ROOF AND ROOF DECK, STRUCTURE, ETC.

20. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY SUPPORT AND SHORING OF FLOOR STRUCTURE, ROOF STRUCTURE, EXTERIOR WALL CONSTRUCTION, FOUNDATIONS, EXISTING CEILINGS PARTITIONS, ETC. DURING DEMOLITION AND RENOVATION. CONTRACTOR IS RESPONSIBLE FOR ALL ENGINEERING APPLICABLE TO SHORING DESIGN.

21. EXISTING FINISHES THAT ARE DISTURBED BY DEMOLITION SHALL BE PATCHED TO MATCH EXISTING TO THE SATISFACTION OF THE OWNER.

22. ALL DEMOLISHED AREAS AND EXISTING SURFACES AND AREAS WHERE EQUIPMENT AND ITEMS HAVE BEEN DEMOLISHED OR REMOVED ARE TO BE PATCHED, REPAIRED, IN-FILLED, CLEANED AND PREPPED FOR NEW SURFACES, AND TO RECEIVE FINISHES. TYPICAL FOR ALL FLOORS, WALLS, CEILINGS, EXPOSED FLOORS, ROOFS, EXTERIOR WALLS, STRUCTURE ETC.

23. IF COMPLETE EXTERIOR WINDOWS AND WINDOW SYSTEMS ARE SCHEDULED TO BE DEMOLISHED, EXTERIOR WINDOWS AND WINDOW SYSTEMS ARE TO BE REMOVED INCLUDING FRAMES, BLOCKING AND ASSOCIATED HARDWARE UNLESS OTHERWISE NOTED. ALL SURFACES INCLUDING ROUGH OPENING ARE TO BE CLEANED, REPAIRED, PREPPED AND RECEIVE NEW WINDOW INSTALLATIONS AND FINISHES. PROVIDE ALL NECESSARY BLOCKING, ANCHORS, ANCHOR SUPPORTS, SEALANTS, BACKER RODS, TRIM AND FINISHES AND ALL OTHER DETAIL REQUIREMENTS AS NECESSARY FOR A COMPLETE WEATHER TIGHT INSTALLATION. PROVIDE TEMPORARY WEATHER PROTECTION AT ALL WINDOWS PRIOR TO AND DURING WINDOW DEMOLITION AND NEW WIDOW INSTALLATION.

30. WHERE FLOOR OR SLABS ARE BEING DEMOLISHED IN PART, FOR ALL EXPOSED EDGES THAT ARE TO REMAIN, THE CONTRACTOR SHALL GRIND, PATCH, REPAIR AND FINISH THE EXPOSED END OR EDGE OF THE CONCRETE SURFACE.

31. ALL EXISTING FLOORING AND FLOORING SYSTEMS THAT ARE TO BE REMOVED IN THEIR ENTIRETY UNLESS OTHERWISE NOTED TO REMAIN INCLUDING ANY CARPET, CERAMIC, VCT, TILE, ETC., FLOOR BASES, CURBS, TRANSITIONS, UNDERLAYMENTS, ADHESIVES, SETTING BEDS AND HOUSE KEEPING PADS NOT USED FOR NEW OR RENOVATED CONSTRUCTION DOWN TO EXISTING FLOOR SLABS. CONTRACTOR TO ADD CONCRETE FLASH PATCH TO LEVEL EXISTING SLAB AS REQUIRED TO ACCEPT NEW FLOOR FINISHES, UNDERLAYMENTS, & SETTING BEDS TYPICAL. ALL FLOORS ARE TO BE CLEAN AND FREE FROM DEBRIS AND IMPERFECTIONS TO MEET FLOOR FINISH MANUFACTURER'S REQUIREMENTS FOR NEW FLOORING AND FLOORING FINISH INSTALLATION. CONTRACTOR IS TO PATCH ALL EXISTING CONCRETE FLOOR SLABS TO MATCH EXISTING THAT ARE DISTURBED BY DEMOLITION. CONTRACTOR IS TO VERIFY ALL LOCATIONS. REFERENCE THE FINISH SCHEDULE FOR FINISHES TO REMAIN AND ANY SPECIAL INSTRUCTIONS. IF THERE IS A CONFLICT IN THE DOCUMENTS, REQUEST DIRECTION FROM THE ARCHITECT PRIOR TO STARTING DEMOLITION.

32. REFERENCE THE FINISH SCHEDULE FOR FINISHES TO REMAIN AND ANY SPECIAL INSTRUCTIONS. IF THERE IS A CONFLICT IN THE DOCUMENTS, REQUEST DIRECTION FROM THE ARCHITECT PRIOR TO STARTING DEMOLITION.

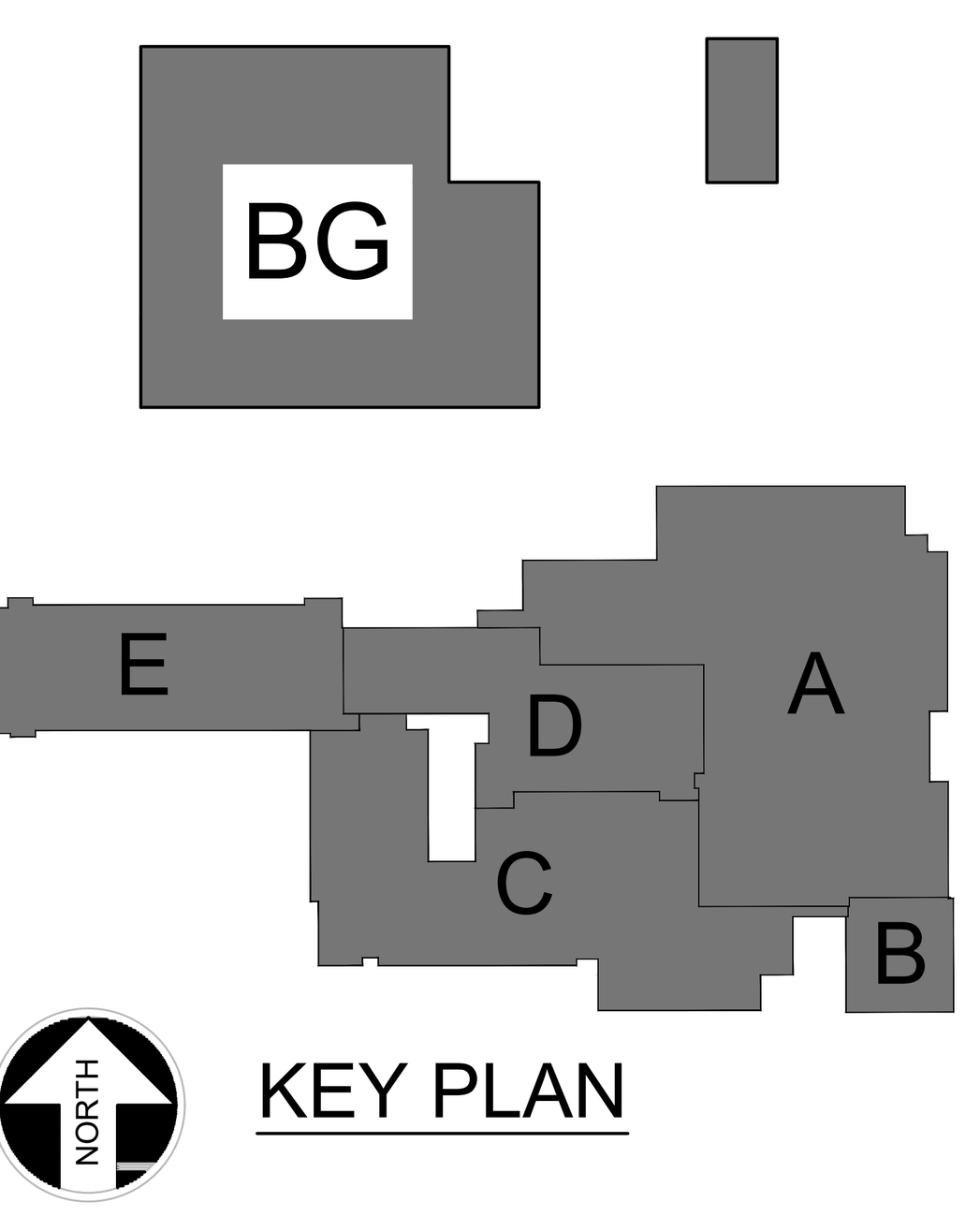
33. DATA PRESENTED ON THESE DRAWINGS ARE AS ACCURATE AS FIELD SURVEYS CAN DETERMINE, BUT ABSOLUTE ACCURACY IS NOT GUARANTEED. FIELD VERIFICATION OF THE DOCUMENTS IS THE RESPONSIBILITY OF THE CONTRACTOR AS FINAL MEASUREMENTS, LOCATIONS, AND HEIGHTS WILL BE GOVERNED BY ACTUAL FIELD CONDITIONS. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS IN AREAS TO BE RENOVATED PRIOR TO BID IN ORDER TO PROVIDE AN ACCURATE BID AND BE AWARE OF ALL CONSTRUCTION METHODS NEEDED TO PROVIDE THE FINISHED PRODUCT AS SHOWN IN THE DOCUMENTS.

HIGHLAND
ASSOCIATES
architecture | engineering | interior design

102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com

New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

GENERAL NOTES, ABBREVIATIONS & SYMBOLS LEGEND

DRAWN BY:	CHECKED BY:
A.L.	C.Z.
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

G-001

CAD FILE: 5005-G-001-PH2.DWG PLOT DATE: 10/13/2026

R.O. - Board of Education of the
Afton Central School District
D.B. 294, Pg. 468; D.B. 294, Pg. 67
D.B. 294, Pg. 73; D.B. 263, Pg. 433
D.B. 501, Pg. 279; D.B. 512, Pg. 469
D.B. 408, Pg. 38; D.B. 408, Pg. 40
D.B. 534, Pg. 749; D.B. 641, Pg. 182
D.B. 734, Pg. 783
TM 289.06-01-8, 21, 23, 24 & 75

R.O. - Charles Torres
Deed No. 2013-001357
TM 289.06-01-18

BM - South Bolt on Hydrant
Elevation = 984.14'

Court Street

Note: ROW shown per Tax Map - No recorded deeds found.

R.O. - Village of Afton
D.B. 461, Pg. 285
TM 289.06-01-20
1 Story
Conc. Block Building

1 Story
Metal Building

R.O. - John P. & Susan A. Dougherty
Deed Instrument - 2003-001619
TM 289.06-01-25

R.O. - John P. & Susan A. Dougherty
Deed Instrument - 2008-002518
TM 289.06-01-24

Bumps Creek

Academy Street

AREA OF WORK

BM - Bolt on Hydrant at Point of Arrow
Elevation = 989.57'

Afton Central Schools
2 and 3 Story Brick Building

289.06-01-75
1749

AFTON CDS - SITE SURVEY

0 15 30 60 90
SCALE IN FEET

HIGHLAND
ASSOCIATES
architecture | engineering | interior design

102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:

BID DOCUMENTS
SCHOOL SED # 08-01-01-04-0-001-020
BG SED # 08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.

UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central
School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

REGISTERED LANDSCAPE ARCHITECT
PETER JAMES CECERE
002437
STATE OF NEW YORK

REGISTRATION CURRENT THROUGH 7/31/2028

DRAWING TITLE:

SITE SURVEY

DRAWN BY:	CHECKED BY:
AB/AH	PC
DATE:	PROJECT NO:
011/03/2026	2025-005

DRAWING NO:

L0.00

CAD FILE: X:\8_SDS\BDR-PH2-V.DWG PLOT DATE: 8/15/2026

SURVEY NOTES - AFTON CSD

EXISTING SURFACE AND AS BUILT INFORMATION.CONTRACTOR TO VERIFY INFORMATION AND REPORT ANY AND ALL DISCREPANCIES.

MAP NOTES:

1) UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM DATA OBTAINED BY FIELD SURVEY, PREVIOUS MAPS AND RECORDS, AND FROM PAROLE TESTIMONY MADE BY SCHOOL DISTRICT AND UTILITY COMPANY PERSONNEL. UTILITIES WERE ALSO LOCATED USING OUR UNDERGROUND DESIGNATING EQUIPMENT. THERE MAY BE OTHER UNDERGROUND UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN TO THE UNDERSIGNED. SIZE AND LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES MUST BE VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO ANY CONSTRUCTION.

UTILITY INFORMATION:

SERVICE	OPERATING AUTHORITY
ELECTRIC	NATIONAL GRID/CENTRAL
WATER	VILLAGE OF AFTON
TELEPHONE	VERIZON
SANITARY	VILLAGE OF AFTON

SURVEY VERIFICATION/COORDINATION - AFTON CSD

CONTRACTOR IS RESPONSIBLE FOR VERIFICATION / COORDINATION OF ALL INFORMATION (BENCH-MARKS, ELEVATIONS, UTILITIES, ELEMENTS, TREES, ETC.) SHOWN ON THIS SURVEY AND CALIBRATING THIS INFORMATION WITH ACTUAL "IN THE FIELD" DATA. THIS SURVEY IS PROVIDED FOR THE BENEFIT OF THE CONTRACTOR AND GENERAL DESIGN INTENT IS SHOWN. NO ADDITIONAL COSTS WILL BE ALLOWED SHOULD INFORMATION SHOWN ON THE SURVEY AND FIELD DATA VARY.

SITE PREPARATION and CONSTRUCTION NOTES - AFTON CSD

1. EXISTING LAWN AREA REMAINS. PROTECT.
2. STRIP EXISTING TOPSOIL AND STOCK PILE FOR REUSE ONSITE IN AN AREA AS SHOWN ON PLANS OR AS DIRECTED BY THE OWNER. TEMPORARILY SEED ENTIRE PILE IMMEDIATELY AND SURROUND WITH SILT FENCE.
3. EXISTING VEGETATION REMAINS. PROTECT AT ALL TIMES AS SHOWN ON THE PLANS AND AS SPECIFIED. DO NOT PARK VEHICLES/EQUIPMENT OR STORE MATERIALS WITHIN DRIP LINES OF TREES.
4. SITE COORDINATOR SHALL REMOVE UP TO TEN (10) TREES AS DIRECTED BY OWNER ADJACENT TO PLAYGROUND AS DIRECTED BY THE OWNER, INCLUDING ALL STUMPS AND ROOTS AND DISPOSE OFF SITE. BACKFILL VOID WITH IMPORTED GRANULAR BACKFILL COMPACTED TO MINIMUM 95% OF IN PLACE DRY DENSITY. REMAINING TREES TO BE PROTECTED. EXISTING PERIMETER FENCE TO REMAIN. PROTECT. REPLACE ANY PERIMETER FENCE DAMAGED DURING TREE REMOVAL.
5. EXISTING PAVEMENT REMAINS. PROTECT. REPLACE ANY PAVEMENT DAMAGED DURING CONSTRUCTION
6. REMOVE EXISTING PAVEMENT SURFACE AND HAUL OFF SITE. REMOVE GRANULAR BASE COURSE AND HAUL OFF SITE OR USE AS GENERAL EARTH FILL WHEN MEETING SPECIFIED SIEVE REQUIREMENTS.
7. EXISTING SITE UTILITY REMAINS. PROTECT.
8. REMOVE EXISTING SITE UTILITY DISPOSE OFF SITE AND BACK FILL VOID WITH IMPORTED GRANULAR BACKFILL, COMPACTED TO MINIMUM 95% OF IN PLACE DRY DENSITY.
9. EXISTING SITE FEATURE REMAINS. PROTECT.
10. REMOVE EXISTING SITE FEATURE AND DISPOSE OFF SITE, INCLUDING ANY ASSOCIATED FOOTINGS OR UNDERGRAINS. BACKFILL VOID WITH IMPORTED GRANULAR BACKFILL COMPACTED TO 95% OF IN PLACE DRY DENSITY.
11. REMOVE EXISTING SITE FEATURE AND RETURN TO OWNER.
12. SAW CUT NEAT, STRAIGHT EDGE. PRIOR TO PAVING. AT SIDEWALKS REMOVE AT NEAREST SCORE JOINT.
13. CONTRACTOR SHALL FIELD VERIFY LOCATION, ELEVATION, INVERT, SIZE, AND TYPE OF EXISTING PIPE/UTILITY PRIOR TO ORDERING MATERIALS AND CONSTRUCTION. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCY IMMEDIATELY.
14. ADJUST UTILITY TO FINISHED GRADE. FURNISH ALL LABOR AND MATERIAL TO ACCOMPLISH PER SPECIFICATIONS.
15. MEET EXISTING LINE AND GRADE.
16. SLIP DOUEL NEW CONCRETE WALK INTO EXISTING CONCRETE WALK OR BUILDING FOUNDATION WALL WITH No. 4 SLIP DOUEL, 18" LONG, 12" O.C., 2" CLEAR MINIMUM FROM SURFACE. INSERT DOUELS EQUAL LENGTH INTO EXISTING AND NEW CONCRETE. PROVIDE EXPANSION JOINT AND SEALANT.
17. ALIGN NEW EDGE WITH EXISTING.
18. CAP END SILT TIGHT.
19. PROVIDE HOT TAR ASPHALT CRACK SEALER BETWEEN EXISTING AND NEW ASPHALT JOINT.
20. PROVIDE FERNCO COUPLER OR SIMILAR SILT TIGHT JOINT BETWEEN EXISTING PIPE AND NEW STORM PIPE. ALLOW INSPECTION BY ARCHITECT PRIOR TO BACKFILLING. NOTIFY ARCHITECT WHEN READY TO BACKFILL. WHEN CONNECTING DISSIMILAR PIPES, PROVIDE MARMAC DISSIMILAR PIPE COUPLER.
21. APPLY BLACKOUT SEALER TO BLACK OUT EXISTING STUDENT LOT PAVEMENT LINES AS DIRECTED BY OWNER TO ACCOMMODATE NEW COURT PAINTED LINES.
22. POWER WASH, SWEEP, AND CLEAN EXISTING ASPHALT OF ALL LOOSE MATERIAL, VEGETATION, OILS/GAS STAINS AND SPILLS. PROVIDE ASPHALT CRACK SEALER ON ALL PAVEMENT CRACKS, SEAL ALL PAVEMENT AS SPECIFIED. VERIFY BASKETBALL STRIPING LAYOUT WITH OWNER PRIOR TO PAINTING.
23. SITE CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS SHOWN ON SURVEY AS NOTED IN SURVEY NOTES. NOTIFY ARCHITECT OF ANY DISCREPANCIES.
24. SITE CONTRACTOR SHALL COORDINATE LOCATION OF 4" SMT'S TO AVOID PLAYSCAPE FOOTINGS.
25. PROVIDE BASKETBALL HOOP AT EXISTING PAVED PARKING LOT AREA. REPAIR ANY DAMAGED ASPHALT FROM HOOP INSTALLATION WITH MEDIUM DUTY ASPHALT TO PROVIDE A SMOOTH AND UNIFORM PLAY SURFACE. PROVIDE 5'x5' MEDIUM DUTY ASPHALT MOW STRIP AT NEW HOOP POSTS.
26. COORDINATE EXACT LOCATION OF PLAYSCAPE FOOTING TO AVOID EXISTING 18" CMP TO REMAIN.

LEGEND - AFTON CSD

EXISTING	PROPOSED	DESCRIPTION
	CLL	CONTRACT LIMIT LINE
		STREET LINE / PROPERTY EDGE
----100----	100	CONTOUR
		GRANITE CURB
		PAVEMENT EDGE
		SAWCUT LINE
		CURB REMOVAL
OHW		OVERHEAD WIRES
W		WATER LINE
G		GAS LINE
T		BURIED TELEPHONE LINE
FO		BURIED FIBER OPTIC LINE
D		BURIED DATA LINE
E		BURIED ELECTRIC LINE
Ss		SANITARY SEWER - SIZE / TYPE
St		STORM SEWER - SIZE / TYPE
	6" SMT	STORMWATER MANAGEMENT TRENCH
		UTILITY POLE
NYSEG 8A-1		UTILITY POLE WITH LIGHT
		GUY WIRE
LP		LIGHT POLE
CIPF		CAPPED IRON ROD FOUND
IRF		IRON ROD FOUND
IPF		IRON PIPE FOUND
YCIRS		YELLOW CAPPED IRON ROD SET
TBOX		TELEPHONE PULL BOX
TRANS		ELECTRIC TRANSFORMER
EMTR		ELECTRIC METER
EHH		ELECTRIC HANDHOLE
SMON		CONCRETE MONUMENT FOUND
PIV		POST INDICATOR VALVE
TPED		TELEPHONE PEDESTAL
ERiser		ELECTRIC RISER
BOL	MB	METAL BOLLARD
		TRAFFIC SIGN
HYD		FIRE HYDRANT
		YARD HYDRANT
WV		WATER VALVE
WMH		WATER MANHOLE
CBRO	CB / DI	CATCH BASIN / STORM INLET
		AREA DRAIN
DMH		STORM MANHOLE / DRYWELL
SMH		SANITARY MANHOLE
CO		CLEANOUT
GV		GAS VALVE
CHAIN LINK FENCE		VINYL CLAD CHAIN LINK FENCE
x257.25	456.32	SPOT GRADE
	F.V.	FIELD VERIFY
	TYP	TYPICAL
	T/B	TOP/BOTTOM OF CURB
		EDGE OF WOODS
		TREES / SHRUBS
		DRAINAGE FLOW DIRECTION
		DETAIL FLAG
	1	CONSTRUCTION NOTE
		REMOVE EXISTING PAVEMENT
	MDA	MEDIUM DUTY ASPHALT
	HDA	HEAVY DUTY ASPHALT
	HDC 4	HEAVY DUTY CONCRETE WITH SCORING
		LAWN - 5" TOPSOIL AND SOD

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:

BID DOCUMENTS
SCHOOL SED # 08-01-01-04-0-001-020
BG SED # 08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

REGISTERED LANDSCAPE ARCHITECT · JAMES TIMES OSTERHOUT · 002437 · STATE OF NEW YORK

REGISTRATION CURRENT THROUGH 7/31/2028

DRAWING TITLE:

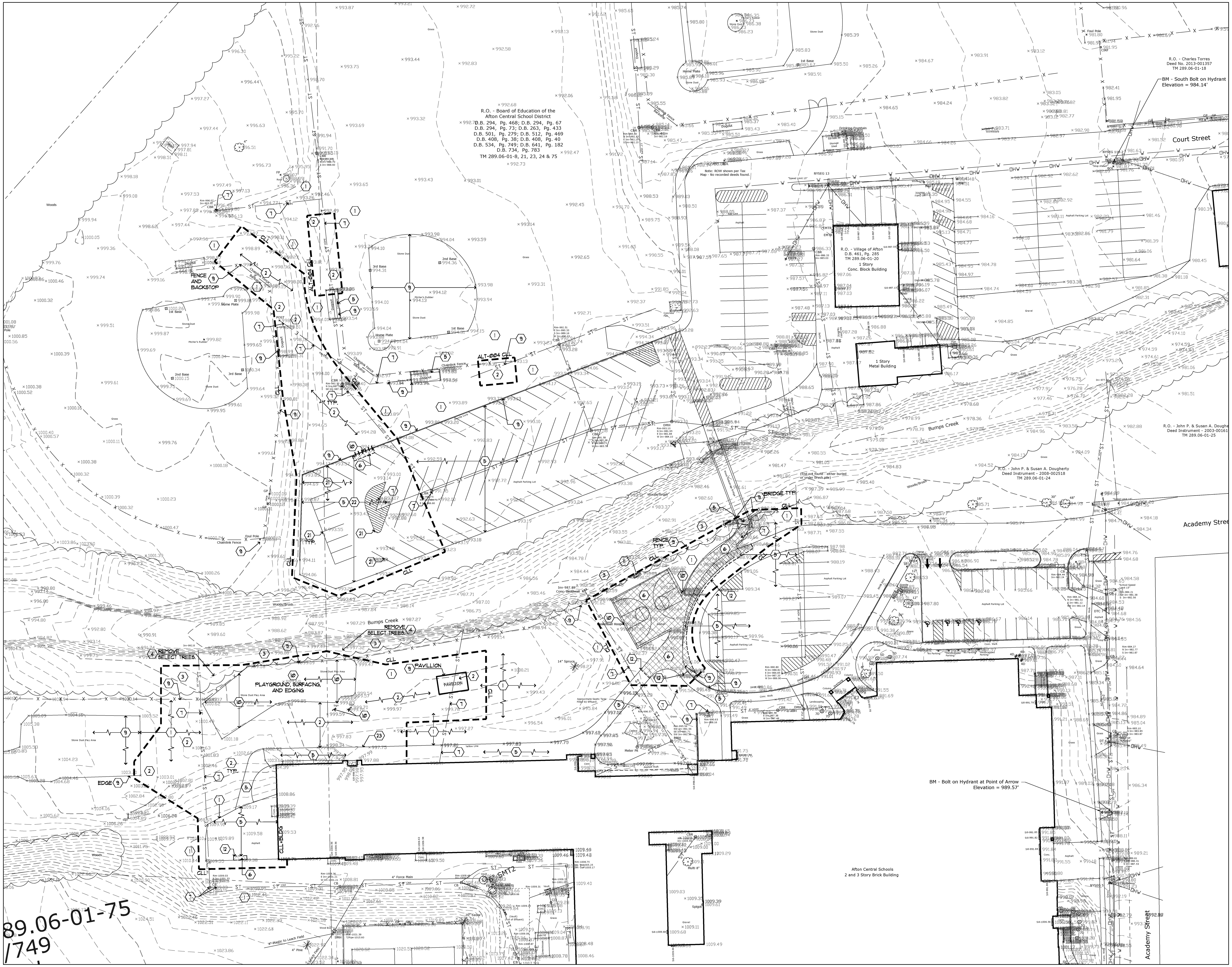
SITE NOTES AND LEGEND

DRAWN BY:	CHECKED BY:
AB/AH	PC
DATE:	PROJECT NO:
011/03/2026	2025-005

DRAWING NO:

L0.01

CAD FILE: A-TS_5005-BDR-PHS-V.DWG PLOT DATE: 0/1/3/2026



AFTON CDS - SITE PREPARATION PLAN

0 15 30 60 90
SCALE IN FEET

HIGHLAND ASSOCIATES
architecture | engineering | interior design

102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com

New York • Pennsylvania

REVISION NO:

BID DOCUMENTS
SCHOOL SED # 08-01-01-04-0-001-020
BG SED # 08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

REGISTERED LANDSCAPE ARCHITECT · PATRICK JAMES COSTELLO · 002437 · STATE OF NEW YORK
REGISTRATION CURRENT THROUGH 7/31/2028

DRAWING TITLE:

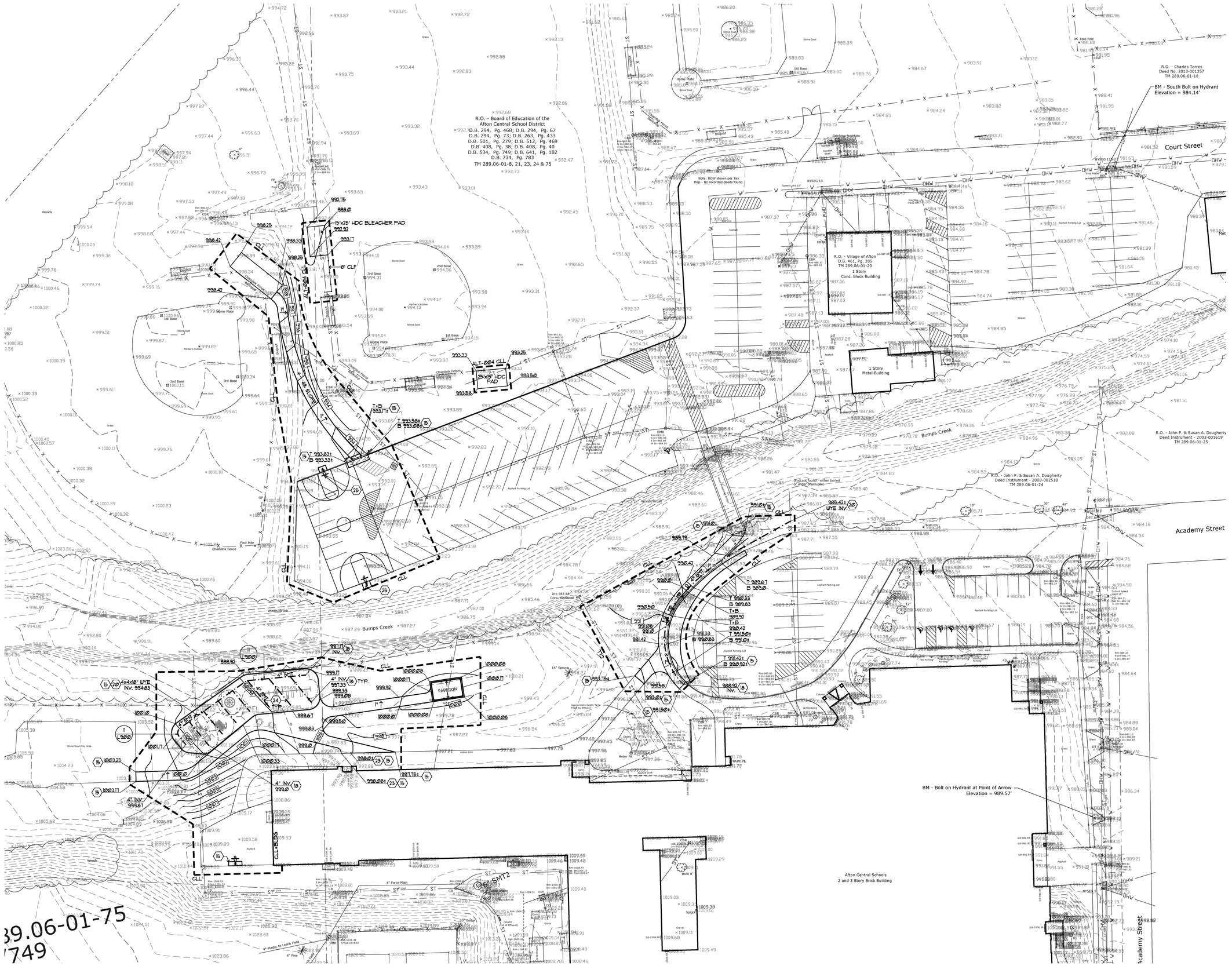
SITE PREPARATION PLAN

DRAWN BY:	CHECKED BY:
AB/AH	PC
DATE:	PROJECT NO:
011/03/2026	2025-005

DRAWING NO:

L0.02

CAD FILE: X-TB_5005-BDR-PH2-V.DWG PLOT DATE: 6/15/2026



HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:

BID DOCUMENTS
SCHOOL SED # 08-01-01-04-0-001-020
BG SED # 08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.

UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

REGISTERED LANDSCAPE ARCHITECT — PATRICK JAMES VOSTER — 002437 — STATE OF NEW YORK
REGISTRATION CURRENT THROUGH 7/31/2028

DRAWING TITLE:

GRADING, DRAINAGE, AND UTILITY PLAN

DRAWN BY:	CHECKED BY:
AB/AH	PC
DATE:	PROJECT NO:
011/03/2026	2025-005

DRAWING NO:

L1.01

CAD FILE: A-TB_5005-BDR-PHSV.DWG PLOT DATE: 9/15/2026

R.O. - Board of Education of the
Afton Central School District
D.B. 294, Pg. 468; D.B. 294, Pg. 67
D.B. 294, Pg. 73; D.B. 263, Pg. 433
D.B. 501, Pg. 279; D.B. 512, Pg. 469
D.B. 408, Pg. 38; D.B. 408, Pg. 40
D.B. 534, Pg. 749; D.B. 641, Pg. 182
D.B. 734, Pg. 783
TM 289.06-01-8, 21, 23, 24 & 75

R.O. - Charles Torres
Deed No. 2013-001357
TM 289.06-01-18

R.O. - Village of Afton
D.B. 461, Pg. 285
TM 289.06-01-20
1 Story
Conc. Block Building

1 Story
Metal Building

R.O. - John P. & Susan A. Dougherty
Deed Instrument - 2003-00161
TM 289.06-01-25

R.O. - John P. & Susan A. Dougherty
Deed Instrument - 2008-002518
TM 289.06-01-24

Afton Central Schools
2 and 3 Story Brick Building

Court Street

Academy Street

Bumps Creek

Woods/Brush

Note: ROW shown per Tax Map - No recorded deeds found.

ALT-004 CLL

ALT-002 CLL

289.06-01-75
/749
hool

AFTON CSD - SITE LAYOUT PLAN

0 15 30 60 90
SCALE IN FEET

HIGHLAND
ASSOCIATES
architecture | engineering | interior design

102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:

BID DOCUMENTS
SCHOOL SED # 08-01-01-04-0-001-020
BG SED # 08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.

UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central
School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

REGISTERED LANDSCAPE ARCHITECT
PETER JAMES CONSTANTINE
002437
STATE OF NEW YORK

REGISTRATION CURRENT THROUGH 7/31/2028

DRAWING TITLE:

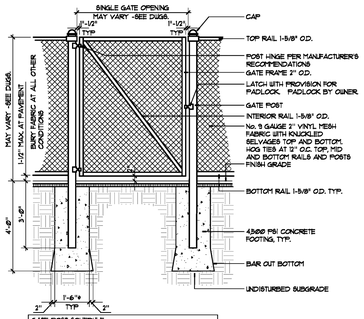
SITE LAYOUT PLAN

DRAWN BY:	CHECKED BY:
AB/AH	PC
DATE:	PROJECT NO:
011/03/2026	2025-005

DRAWING NO:

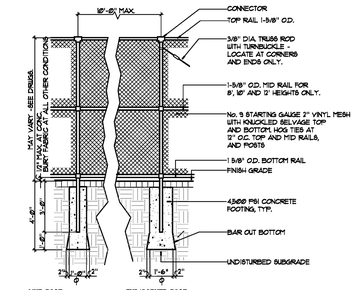
L1.02

CAD FILE: X-TB_5005-BDR-PHO-V.DWG PLOT DATE: 0/15/2026



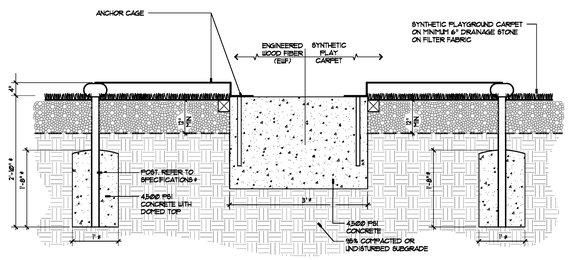
GATE POST SCHEDULE		
SINGLE GATE WIDTH	FABRIC HEIGHT	POST O.D.
4'-0"	4'-0"	3"
4'-0"	5'-0"	4"

VINYL CHAIN LINK FENCE GATE – SINGLE WIDTH
1 1/2"=1'-0" SECTION • NOT TO SCALE 27S-060A
© APPEL OSBORNE LANDSCAPE ARCHITECTURE



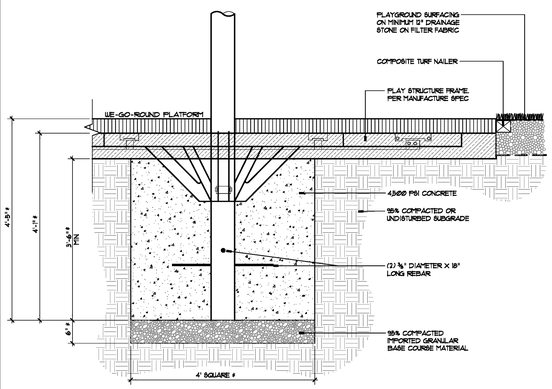
POST SCHEDULE		
FABRIC HEIGHT	LINE POST O.D.	END / CORNER POST O.D.
4' to 6'	2"	2 1/2"
8' to 12'	3"	4"

VINYL CHAIN LINK FENCE = CLF
1 1/2"=1'-0" SECTION • NOT TO SCALE 27S-060A
© APPEL OSBORNE LANDSCAPE ARCHITECTURE



#SIZES MAY VARY DUE TO POST SIZE. REFER TO MANUFACTURER'S RECOMMENDATIONS.

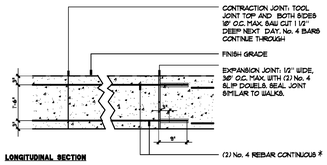
WE-SAW FOUNDATIONS
1/2"=1'-0" SECTION • NOT TO SCALE 323B-186C
© APPEL OSBORNE LANDSCAPE ARCHITECTURE



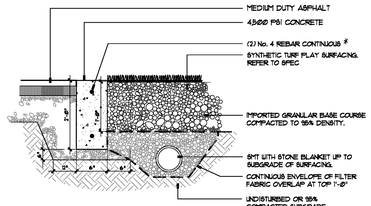
NOTE: SLOPE FIP ¼" FOR 6'0" FROM LIE-GO-ROUND TRIM TO FINISH GRADE

#SIZES MAY VARY DUE TO POST SIZE. REFER TO MANUFACTURER'S RECOMMENDATIONS.

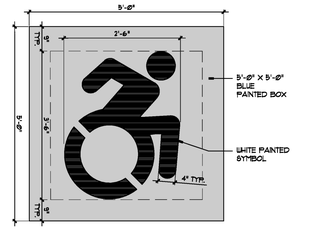
WE-GO-ROUND FOUNDATIONS
1/2"=1'-0" SECTION • NOT TO SCALE LIE-GO-ROUND FOUNDATIONS
© APPEL OSBORNE LANDSCAPE ARCHITECTURE

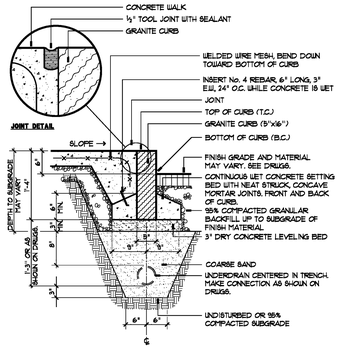


LONGITUDINAL SECTION



PLAYGROUND EDGE CONDITION– SYNTHETIC PLAY CARPET SURFACING

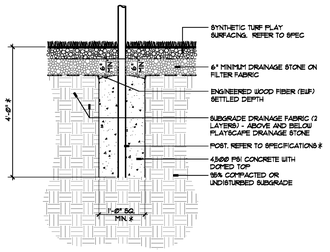


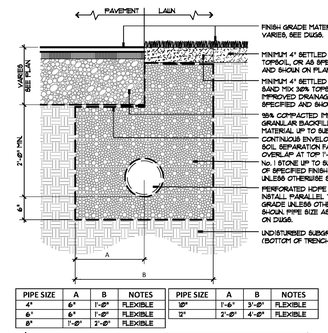


INTEGRAL GRANITE CURB – 6" x 16" WITH UD
1 1/2"=1'-0" SECTION • NOT TO SCALE 327A-060C
© APPEL OSBORNE LANDSCAPE ARCHITECTURE

NOTE: 6L.P.-FORMED (MACHINE FORMED) CURBS ARE ACCEPTABLE WHEN INSTALLED IN ACCORDANCE WITH NYSDOT 609-3.04-B USING TYPE "J" CONCRETE AND MIXING IN FIBER MESH AS SPECIFIED.

PLAYGROUND CONC. EDGE and SURFACING
SECTION • NOT TO SCALE PlayGround Edge Conditions
© APPEL OSBORNE LANDSCAPE ARCHITECTURE

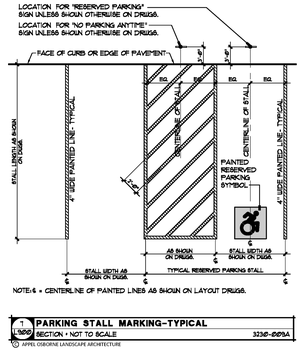




PIPE SIZE	A	B	NOTES
4"	6"	1'-6"	FLEXIBLE
6"	6"	1'-6"	FLEXIBLE
8"	1'-0"	2'-0"	FLEXIBLE

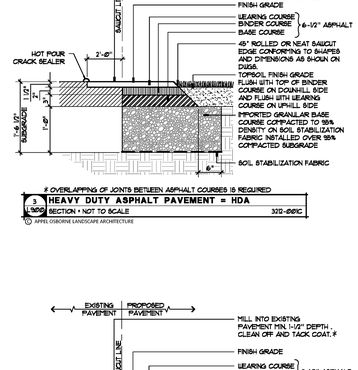
PIPE SIZE	A	B	NOTES
18"	1'-6"	3'-0"	FLEXIBLE
12"	2'-0"	4'-6"	FLEXIBLE

STORMWATER MGMT TRENCH = SMT
1/2"=1'-0" SECTION • NOT TO SCALE 334B-182
© APPEL OSBORNE LANDSCAPE ARCHITECTURE



NOTE: 4 = CENTERLINE OF PAINTED LINES AS SHOWN ON LAYOUT DRWGS.

PARKING STALL MARKING–TYPICAL
1/2"=1'-0" SECTION • NOT TO SCALE 323B-060A
© APPEL OSBORNE LANDSCAPE ARCHITECTURE

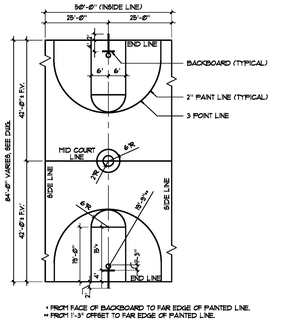


OVERLAPPING OF JOINTS BETWEEN ASPHALT COURSES IS REQUIRED

HEAVY DUTY ASPHALT PAVEMENT = HDA
1 1/2"=1'-0" SECTION • NOT TO SCALE 322-060C
© APPEL OSBORNE LANDSCAPE ARCHITECTURE

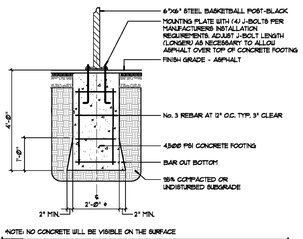


PLAYSCAPE and SWING FOOTING
1/2"=1'-0" SECTION • NOT TO SCALE 323B-186
© APPEL OSBORNE LANDSCAPE ARCHITECTURE



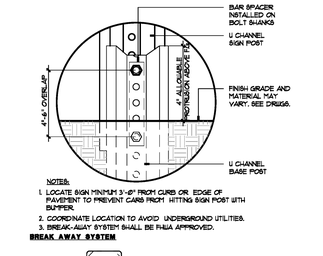
* FROM FACE OF BACKBOARD TO FAIR EDGE OF PAINTED LINE.
** FROM 1'-3" OFFSET TO FAR EDGE OF PAINTED LINE.

BASKETBALL COURT
1/8"=1'-0" PLAN • NOT TO SCALE 323B-92A
© APPEL OSBORNE LANDSCAPE ARCHITECTURE



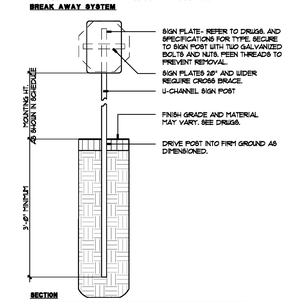
#NOTE: NO CONCRETE WILL BE VISIBLE ON THE SURFACE

BASKETBALL BACKBOARD FOOTING
1/2"=1'-0" SECTION • NOT TO SCALE 323B-92B
© APPEL OSBORNE LANDSCAPE ARCHITECTURE



NOTES:
1. LOCATE SIGN MINIMUM 3'-0" FROM CURB OR EDGE OF PAVEMENT TO PREVENT CARS FROM HITTING SIGN POST WITH BUMPER.
2. COORDINATE LOCATION TO AVOID UNDERGROUND UTILITIES.
3. BREAK-AWAY SYSTEM SHALL BE FHWA APPROVED.

BREAK AWAY SYSTEM

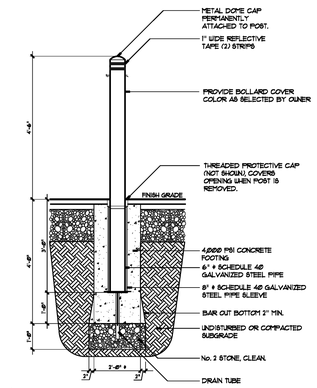


SECTION

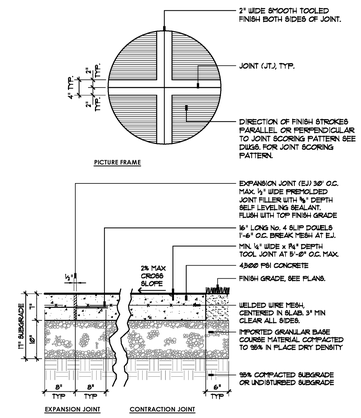
SIGN SCHEDULE	MOUNTING HEIGHT*
R7-8 RESERVED HANDICAPPED PARKING	5'-0"
R7-1 NO PARKING ANYTIME	5'-0"
R5-1 DO NOT ENTER	7'-0"

*ALL DIMENSIONS ARE TO BOTTOM OF SIGN PLATE.

TRAFFIC SIGN
1/2"=1'-0" SECTION • NOT TO SCALE 323B-093A
© APPEL OSBORNE LANDSCAPE ARCHITECTURE



METAL BOLLARD – REMOVABLE
1/2"=1'-0" SECTION • NOT TO SCALE 323B-806B
© APPEL OSBORNE LANDSCAPE ARCHITECTURE



DROP DOWN

CURB RAMP WITH DETECTABLE WARNING SYSTEM
1/2"=1'-0" AXONOMETRIC • NOT TO SCALE 323-060
© APPEL OSBORNE LANDSCAPE ARCHITECTURE

OVERLAPPING OF JOINTS BETWEEN ASPHALT COURSES IS REQUIRED.

MEDIUM DUTY ASPHALT PAVEMENT = MDA
1 1/2"=1'-0" SECTION • NOT TO SCALE 322-060B
© APPEL OSBORNE LANDSCAPE ARCHITECTURE

HEAVY DUTY CONCRETE WALK/PAD = HDC
1 1/2"=1'-0" SECTION • NOT TO SCALE 323-203
© APPEL OSBORNE LANDSCAPE ARCHITECTURE

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:

BID DOCUMENTS
SCHOOL SED # 08-01-01-04-0-001-020
BG SED # 08-01-01-04-5-015-003

COPYRIGHT:
©HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ® SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ® IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

REGISTERED LANDSCAPE ARCHITECT JAMES ASTLEY 002437 STATE OF NEW YORK

REGISTRATION CURRENT THROUGH 7/31/2028

DRAWING TITLE:

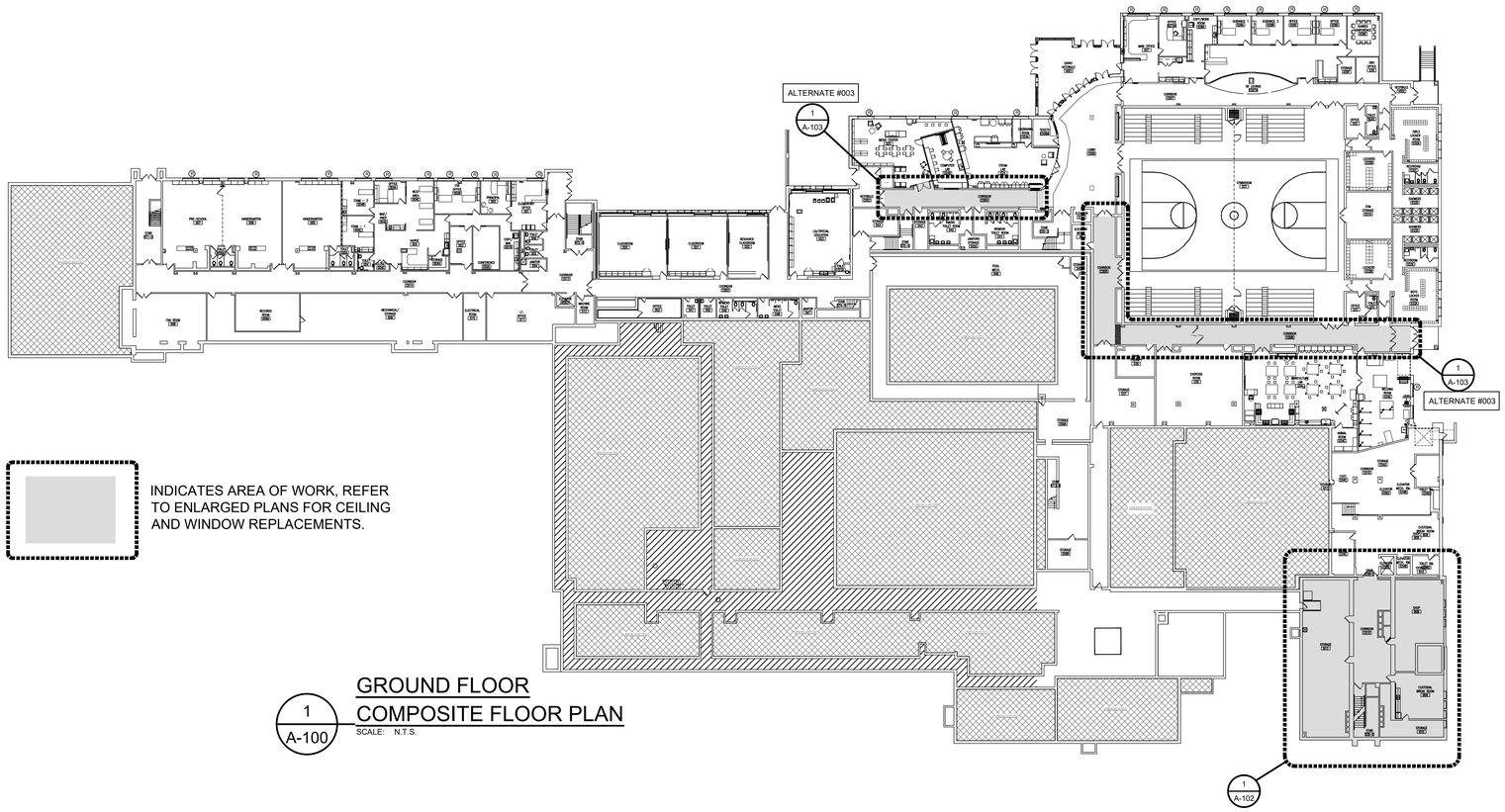
DETAILS

DRAWN BY:	CHECKED BY:
AB/AH	PC
DATE:	PROJECT NO:
011/03/2026	2025-005

DRAWING NO:

L9.00

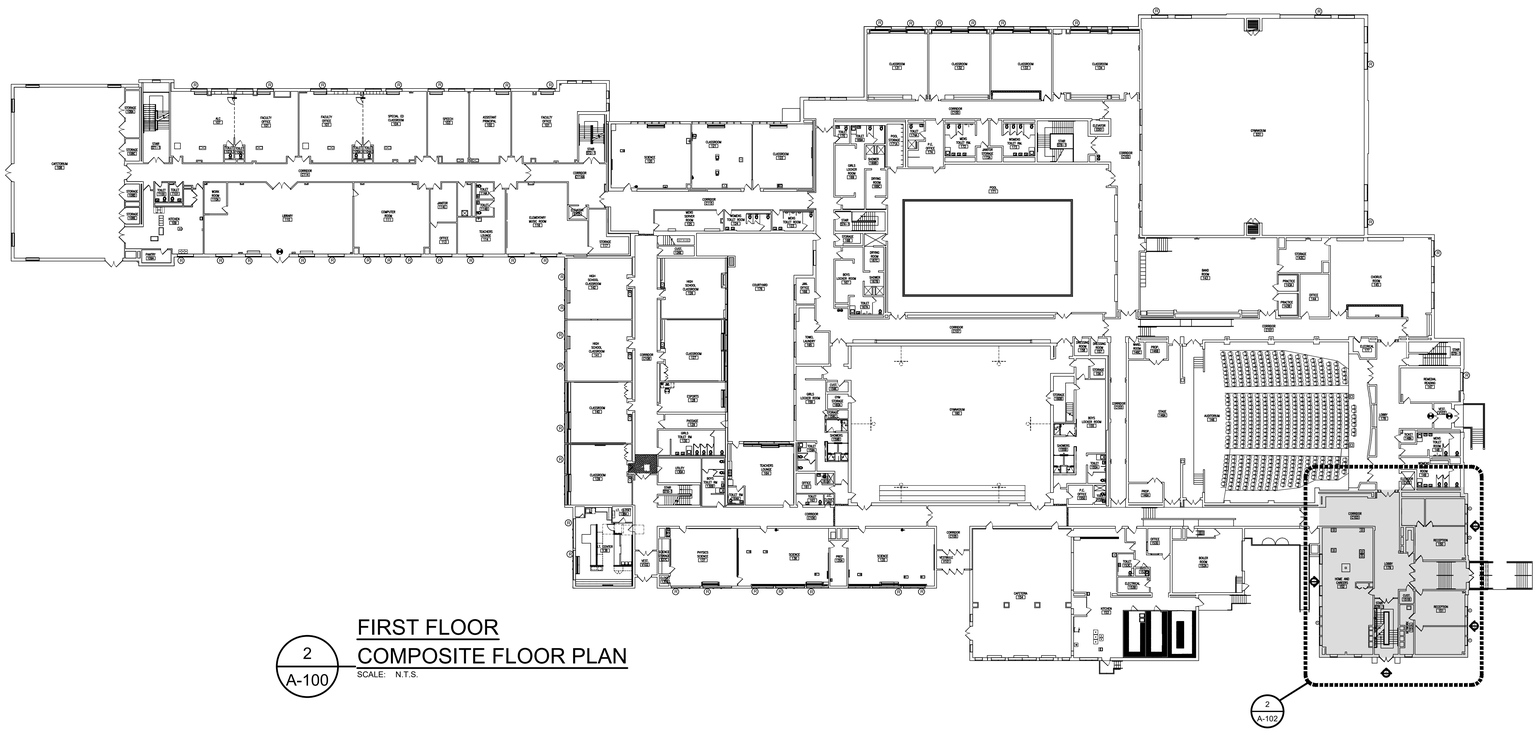
CAD FILE: X-TB_5005-BDR-PHV-V.DWG PLOT DATE: 0/0/2026



INDICATES AREA OF WORK, REFER TO ENLARGED PLANS FOR CEILING AND WINDOW REPLACEMENTS.

1 / A-100 — GROUND FLOOR COMPOSITE FLOOR PLAN

SCALE: N.T.S.

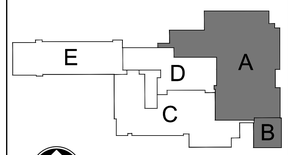


2 / A-100 — FIRST FLOOR COMPOSITE FLOOR PLAN

SCALE: N.T.S.

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ®" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ®" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

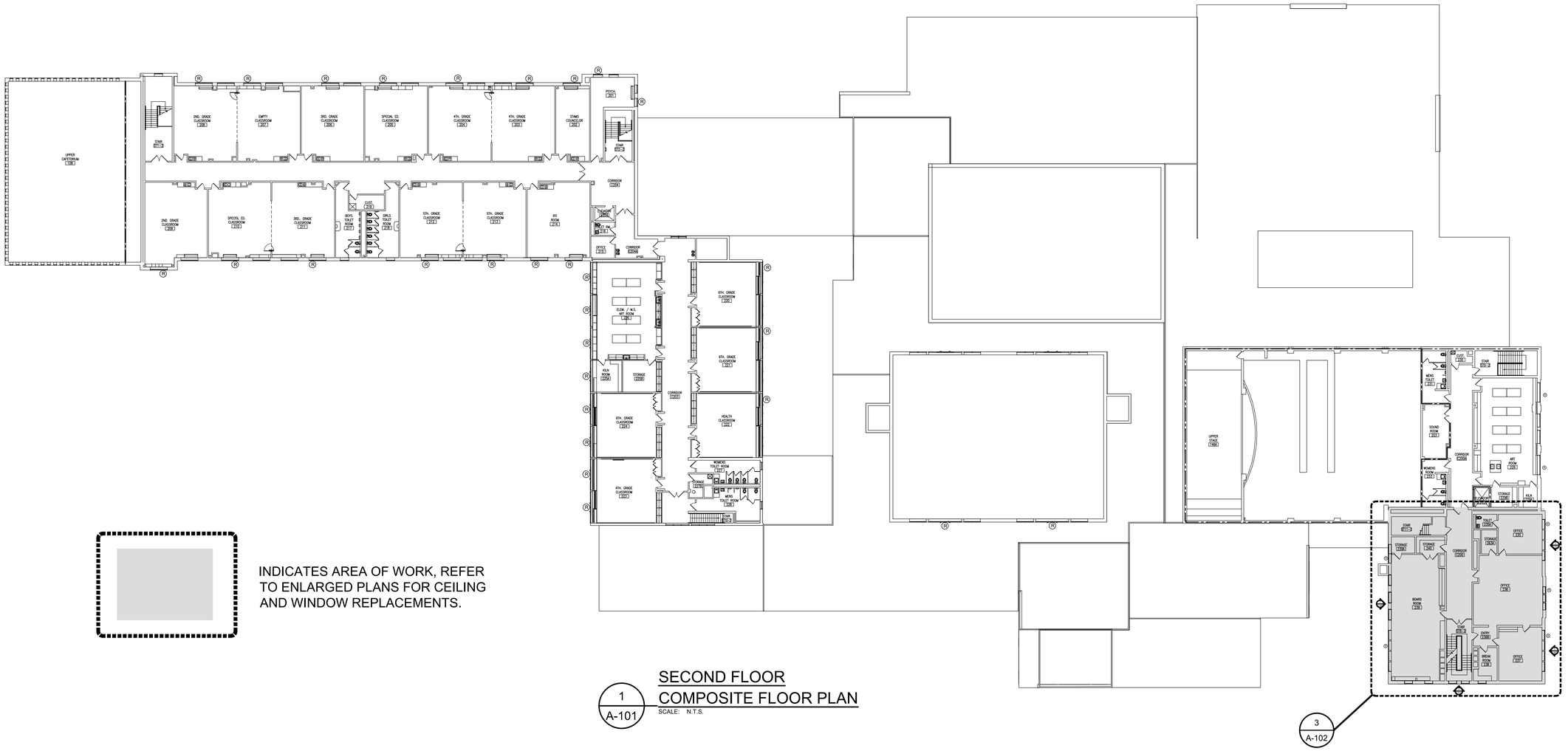
GROUND FLOOR
FIRST FLOOR
COMPOSITE FLOOR PLANS

DRAWN BY:	CHECKED BY:
R.J.C.	DM
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

A-100

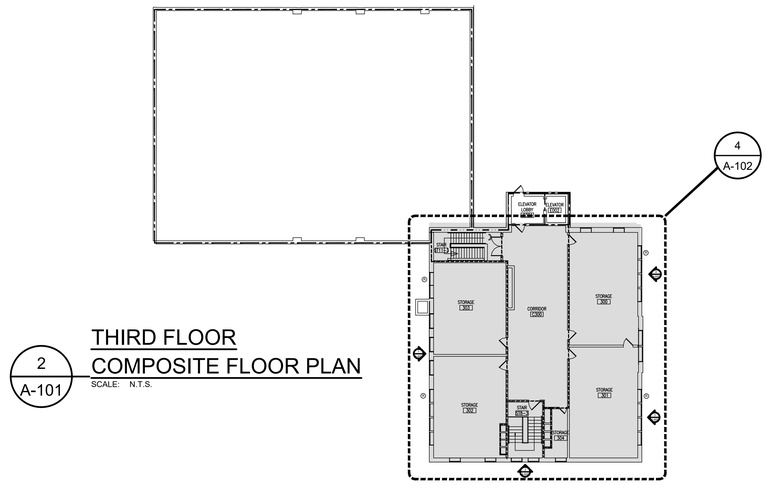
CAD FILE: 5005-A-100-PH2.DWG PLOT DATE: 10/13/2026



INDICATES AREA OF WORK, REFER TO ENLARGED PLANS FOR CEILING AND WINDOW REPLACEMENTS.

1 / A-101 — SECOND FLOOR COMPOSITE FLOOR PLAN
SCALE: N.T.S.

3 / A-102

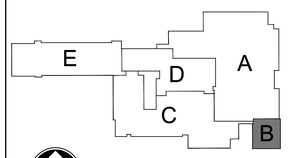


4 / A-102

2 / A-101 — THIRD FLOOR COMPOSITE FLOOR PLAN
SCALE: N.T.S.

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

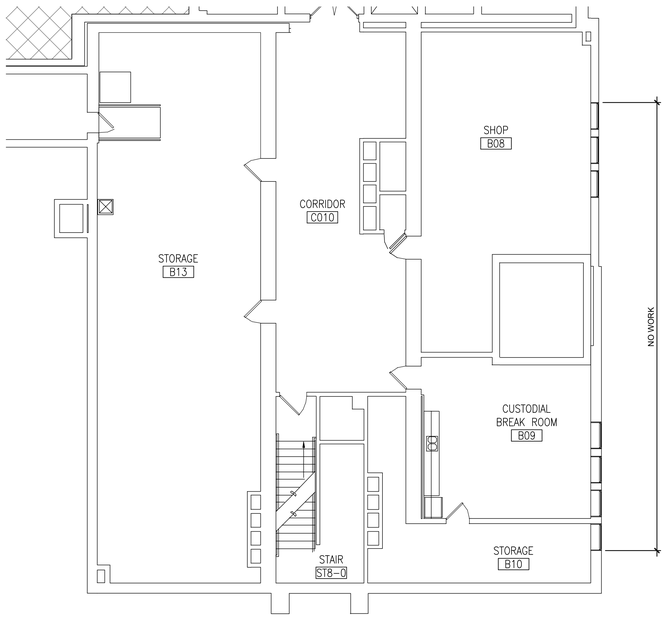
SECOND FLOOR
THIRD FLOOR
COMPOSITE FLOOR PLANS

DRAWN BY:	CHECKED BY:
R.J.C.	DM
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

A-101

CAD FILE: 5005A-101-PH2.DWG PLOT DATE: 10/13/2026



1 A-102 GROUND FLOOR COMPOSITE PLAN (PART B)
SCALE: 1/8" - 1'-0"

DRAWING LEGEND

- R — INDICATES RESCUE WINDOW
- X — WINDOW TYPE
- INDICATES PHOTOS FOR REFERENCE
- -------- INDICATES PORTIONS OF CEILING TO BE REMOVED AND REPLACE AFTER WINDOW INSTALLATION

DEMOLITION KEY NOTES

1. CONTRACTOR IS TO REMOVE EXISTING WINDOWS, FRAMES, SILL, CAULKING, AND FRAMING. PREPARE EXISTING OPENING FOR NEW WINDOW INSTALLATION.
2. CONTRACTOR IS TO REMOVE AND STORE EXISTING CEILING AND GRID (SHOWN DASHED) AS REQUIRED FOR WINDOW INSTALLATION.

CONSTRUCTION KEY NOTES

1. CONTRACTOR IS TO INSTALL NEW WINDOW SYSTEM, INCLUDING ALL REQUIRED FLASHING, CAULKING, INTERIOR MOLDINGS, AND NEW CORIAN SILLS.
2. CONTRACTOR IS TO REINSTALL CEILING GRID AND TILES AFTER COMPLETION OF WINDOW INSTALLATION.



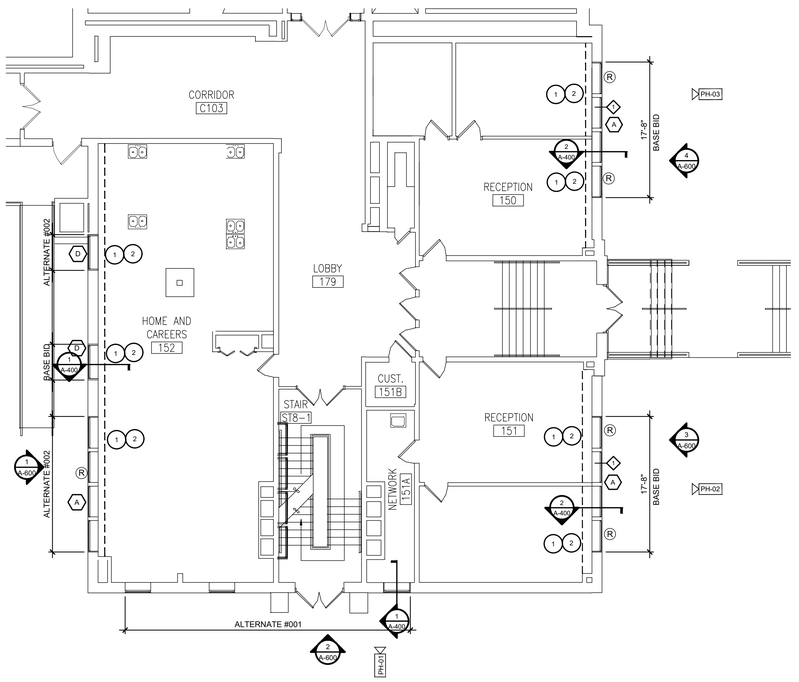
PH-01



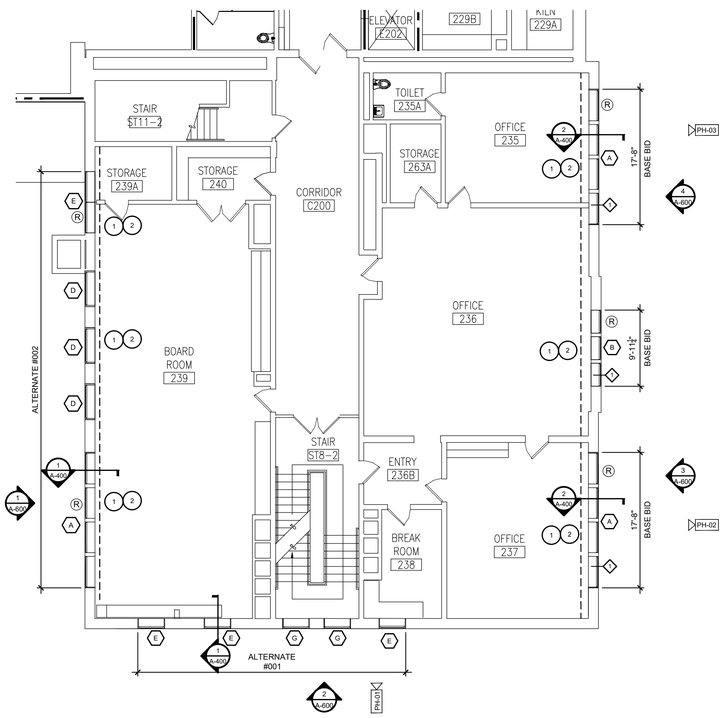
PH-02



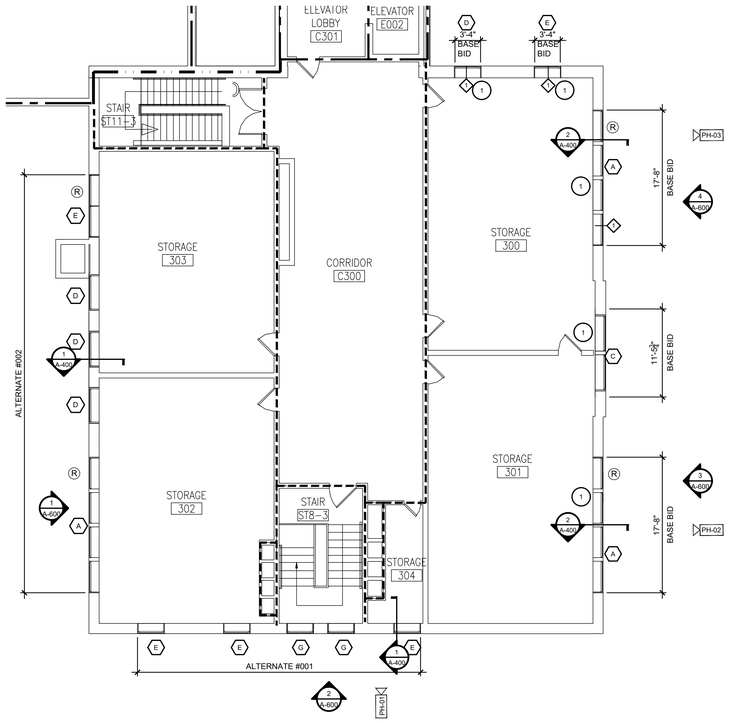
PH-03



2 A-102 FIRST FLOOR COMPOSITE PLAN (PART B)
SCALE: 1/8" - 1'-0"



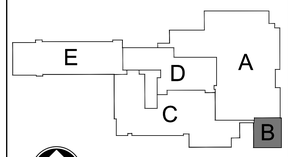
3 A-102 SECOND FLOOR COMPOSITE PLAN (PART B)
SCALE: 1/8" - 1'-0"



4 A-102 THIRD FLOOR COMPOSITE PLAN (PART B)
SCALE: 1/8" - 1'-0"

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

GROUND, FIRST, SECOND, THIRD, FLOOR PLAN WINDOW REPLACEMENT PART - B

DRAWN BY:	CHECKED BY:
R.J.C.	DM
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

A-102

CAD FILE: 5005A-102-PH2.DWG PLOT DATE: 10/13/2026

DRAWING LEGEND

EXISTING WALL CONSTRUCTION TO REMAIN

EXISTING DOOR TO REMAIN

ROOM NAME / NO. — INDICATES ROOM NAME AND NUMBER

CONSTRUCTION KEY NOTES

INDICATES NEW 2X2 CEILING GRID AND CEILING TILES AT EXISTING HEIGHT.

INDICATES NEW 2X2 CEILING LIGHTS REFER TO ELECTRICAL FOR INFORMATION

OC — INDICATES NEW OCCUPANCY SENSORS SEE ELECTRICAL DRAWINGS FOR INFORMATION

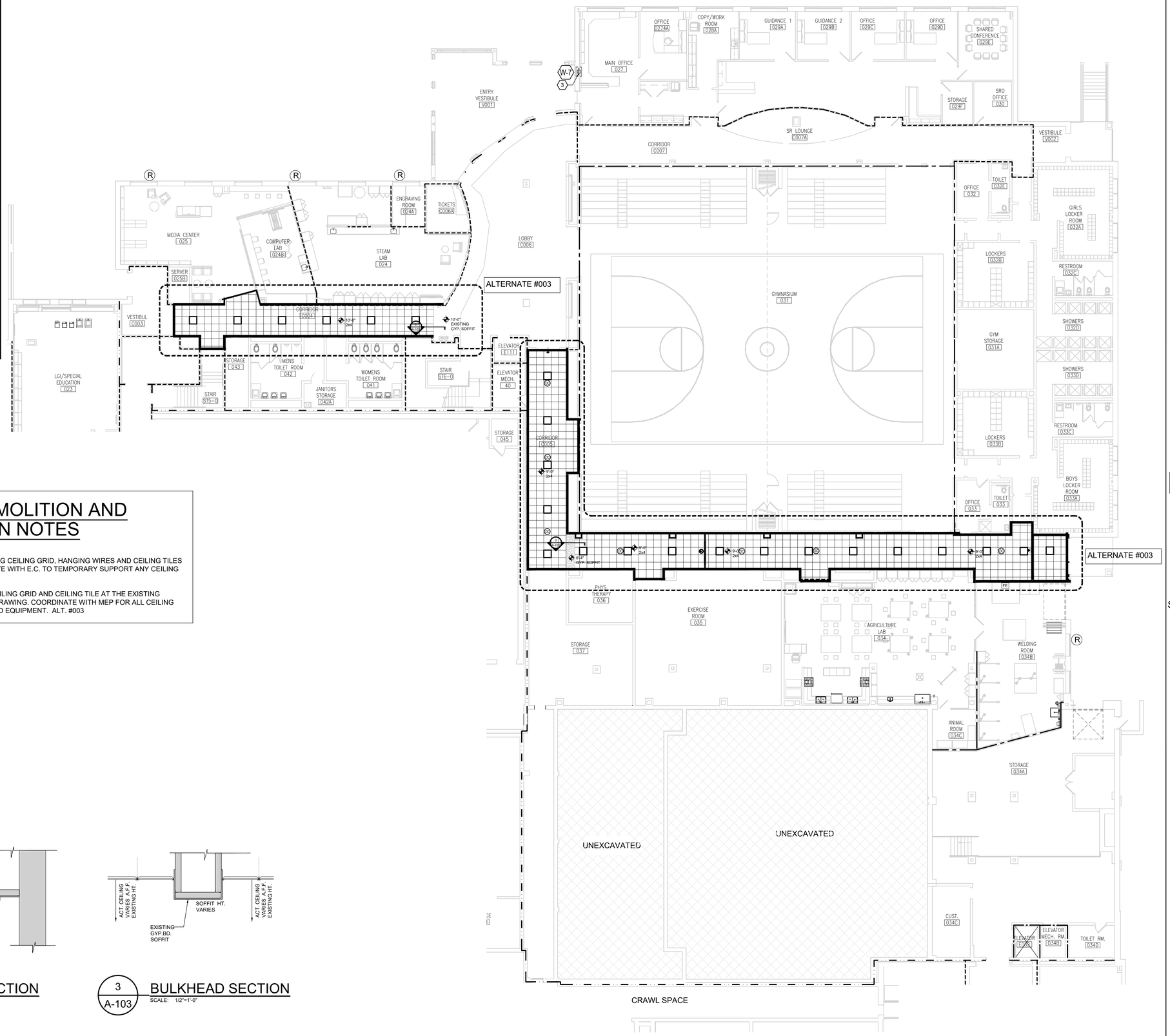
NOTE:

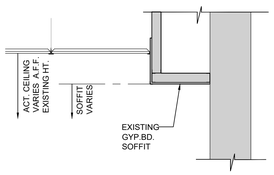
CONTRACTOR TO PATCH & REPAIR ANY WALLS DISTURBED DURING DEMOLITION OF EXISTING CEILINGS TO MATCH EXISTING CONDITIONS

CEILING DEMOLITION AND RENOVATION NOTES

1. G.C. SHALL REMOVE EXISTING CEILING GRID, HANGING WIRES AND CEILING TILES IN THEIR ENTIRETY, COORDINATE WITH E.C. TO TEMPORARY SUPPORT ANY CEILING MOUNTED DEVICES. ALT. #003

2. G.C. SHALL INSTALL NEW CEILING GRID AND CEILING TILE AT THE EXISTING HEIGHTS, INDICATED ON THIS DRAWING. COORDINATE WITH MEP FOR ALL CEILING MOUNTED CEILING DEVICES AND EQUIPMENT. ALT. #003





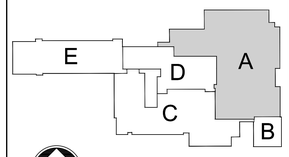
2 / A-103 SOFFIT SECTION
SCALE: 1/2"=1'-0"

3 / A-103 BULKHEAD SECTION
SCALE: 1/2"=1'-0"

1 / A-103 GROUND FLOOR CEILING PLAN PART - A
SCALE: 3/32" - 1'-0"

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ® SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ®" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

GROUND FLOOR
CEILING PLAN
PART - A

DRAWN BY:	CHECKED BY:
R.J.C. / A.L.	D.G.
DATE:	PROJECT NO:
11/03/2026	2025-005

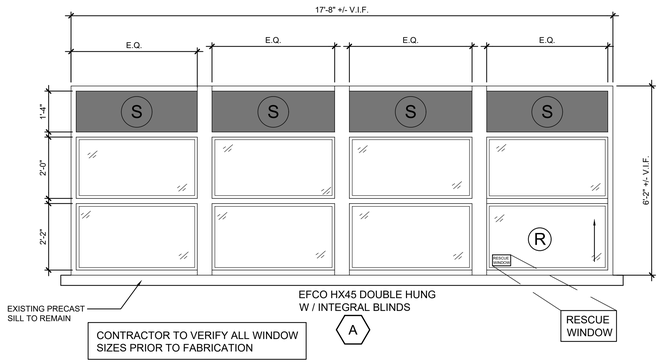
DRAWING NO:

A-103

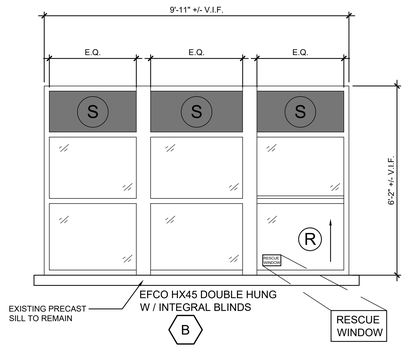
CAD FILE: 5005A-103-PH2.DWG PLOT DATE: 10/13/2026

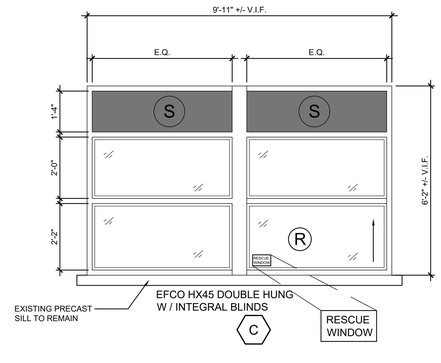
WINDOW ELEVATIONS

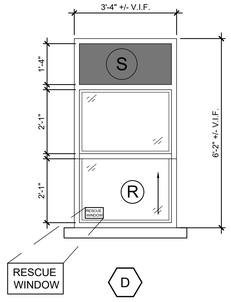
SCALE: 1/2" =1'-0"

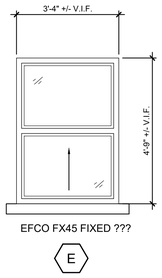


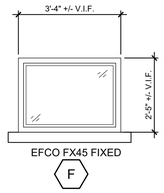
CONTRACTOR TO VERIFY ALL WINDOW SIZES PRIOR TO FABRICATION



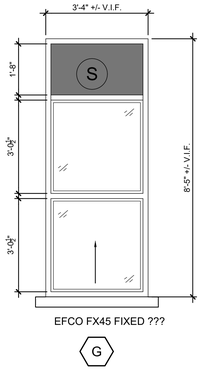




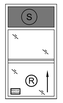




CONTRACTOR TO VERIFY ALL WINDOW SIZES PRIOR TO SHOP DRAWINGS AND FABRICATION



WINDOW LEGEND:

S	1" INSULATED METAL PANELS - INSTALLED IN WINDOW GLAZING POCKET BY WINDOW MANUF. • NUDO PANELS-ENDUREX 535 - 1" OVERALL - CUSTOM COLOR FACE SHEETS EXTERIOR/INTERIOR, ISOCYANATE CORE, CEMENT BOARD BACKERS.
R	RESCUE WINDOW TYPICAL
	RESCUE WINDOW TO PROVIDE MIN. CLEAR OPENING OF AT LEAST 6 SQ. FT. AND MIN. DIM. OF 24". COMPLY WITH NYSED REQUIREMENT. 6.5 SQ. FT. CLEAR AREA PROVIDED.
	STICKER TO HAVE BRIGHT YELLOW BACKGROUND W/ BLACK LETTERS TEXT TO BE READABLE FROM BOTH SIDES OF WINDOW. ANY WINDOW COVERINGS ALSO TO HAVE LABELS AND WINDOW OPERATING INSTRUCTIONS IF NOT READILY APPARENT.

NOTE:
REFER TO DRAWING A-102 FOR RESCUE WINDOW LOCATIONS

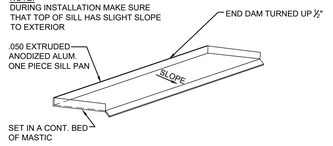
NOTES:

1. CONTRACTOR/WINDOW MFG. TO FIELD VERIFY ALL DIMENSIONS PRIOR TO SHOP DRAWINGS AND FABRICATION.
2. ALL EXTERIOR WINDOW GLASS TO BE EFCO 1" OVERALL - ¼" CLEAR TEMPERED SNX62/27 #2, ARGON/TECHNOFORM SPACER, SCHOOL GUARD SG4.
3. WINDOWS TO BE EFCO HX45 DOUBLE HUNG WITH RESCUE WINDOW AND EFCO FX45 FIXED. WITH INTEGRAL BLINDS BOTH OPERABLE AND FIXED WINDOWS REQUIRE A OVERALL U-FACTOR OF .36 OR BELOW.
4. PROVIDE ALUM. SILL FLASHING BY WINDOW MFGR. TO MATCH EXISTING. FIELD VERIFY ALL EXISTING CONDITIONS.
5. ALL EXISTING INTERIOR WINDOW SILLS TO MATCH EXISTING. WINDOW MFGR TO PROVIDE ALUM. EXTENDER TRIM @ HEAD, JAMB, AND SILL TO MATCH WINDOW SYSTEM.
6. PROVIDE CONTINUOUS SEALANT, BACKER ROD AND TRIM AS REQUIRED, AT HEAD, JAMBS AND SILL - EXTERIOR AND INTERIOR.
7. WINDOW SHADES THAT OCCUR AT RESCUE WINDOW LOCATIONS MUST BE PROVIDED WITH THE SAME RESCUE WINDOW DECAL AND SHALL APPEAR ON INTERIOR SIDE OF SHADES WHEN IN THE CLOSED/DRAWN POSITION.



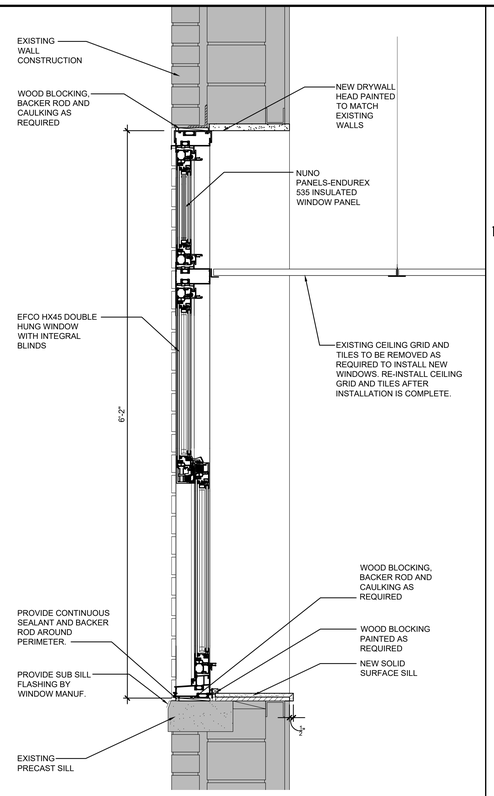
ALL NEW WINDOWS TO HAVE INTEGRAL BLINDS SIMILAR TO EXISTING WINDOWS.

NOTE:
DURING INSTALLATION MAKE SURE THAT TOP OF SILL HAS SLIGHT SLOPE TO EXTERIOR



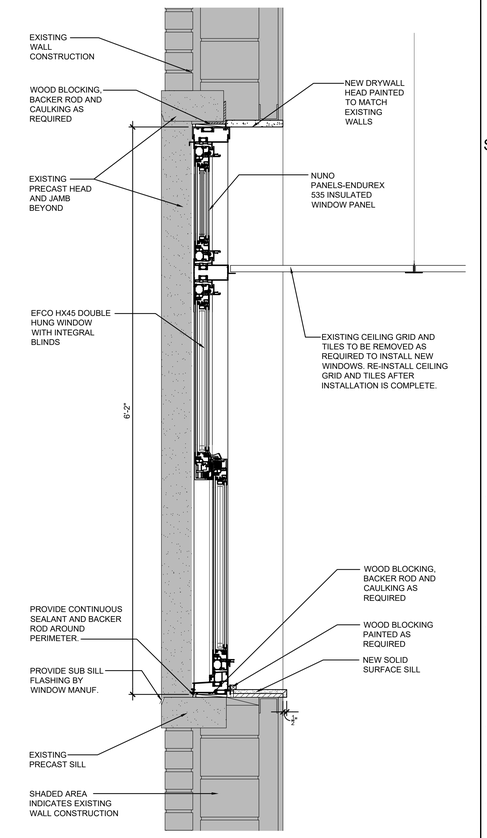
TYPICAL SILL PAN ISO- METRIC DETAIL @ WINDOWS

SCALE : N.T.S.



1 / A-400 WINDOW SECTION

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

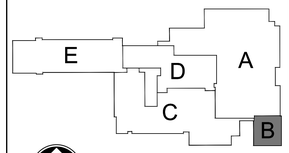


2 / A-400 WINDOW SECTION

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

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



NORTH

KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED # 08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ®" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.

UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ®" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

1908 BUILDING WINDOW SECTIONS AND ELEVATIONS

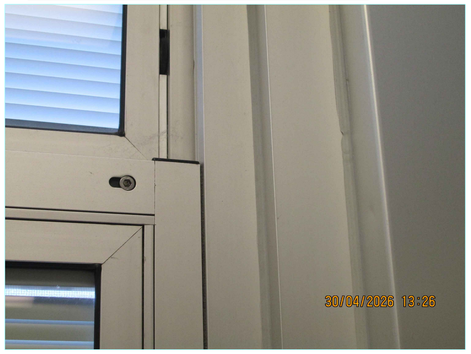
DRAWN BY:	CHECKED BY:
R.J.C.	DM
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

A-400

CAD FILE: 5005-A-400-PH2.DWG PLOT DATE: 11/10/2026

EXISTING WINDOW CONDITIONS





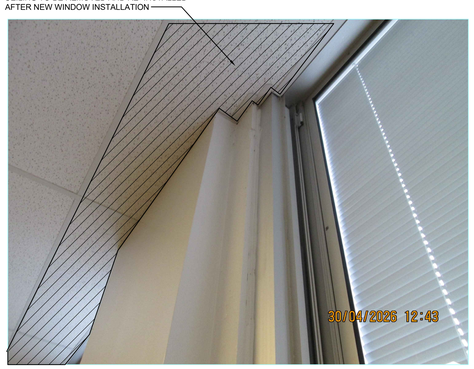
INSTALL NEW CORIAN WINDOW SILL



CEILING TO BE REMOVED AND RE- INSTALLED AFTER NEW WINDOW INSTALLATION



CEILING TO BE REMOVED AND RE- INSTALLED AFTER NEW WINDOW INSTALLATION





INSTALL NEW CORIAN WINDOW SILL





INSTALL NEW CORIAN WINDOW SILL

CEILING TO BE REMOVED AND RE- INSTALLED AFTER NEW WINDOW INSTALLATION



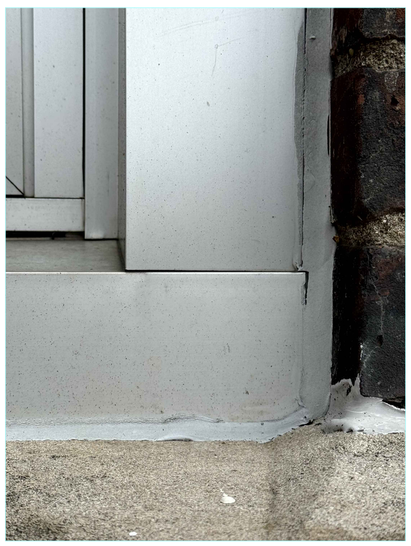






INSTALL NEW CORIAN WINDOW SILL





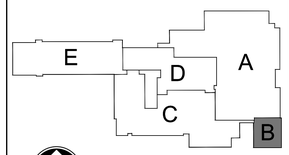




HIGHLAND ASSOCIATES
architecture | engineering | interior design

102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



NORTH

KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

1908 BUILDING
EXISTING WINDOW
CONDITION PHOTES

DRAWN BY:	CHECKED BY:
R.J.C.	DM
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

A-401

CAD FILE: 5005-A-401-PHO.DWG PLOT DATE: 10/13/2026



WEST ELEVATION



WEST ELEVATION



WEST ELEVATION



WEST ELEVATION

1 CONTRACTOR TO REMOVE EXISTING CAULKING JOINT AND CLEAN AREA. INSTALL NEW CAULK JOINT AROUND PERIMETER OF BUILDING AT PRECAST AND BRICK JOINT TYP.

HATCHED AREAS INDICATE APPROXIMATE AREAS OF BRICK RE-POINTING. CONTRACTOR TO REMOVE ALL LOOSE MORTAR AND TROWEL IN NEW MORTAR TO MATCH EXISTING.



NORTH ELEVATION



NORTH ELEVATION



EAST ELEVATION



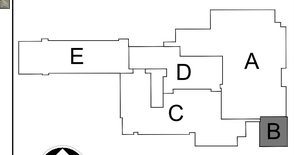
EAST ELEVATION

HIGHLAND
ASSOCIATES
architecture | engineering | interior design

102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com

New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ®" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.

UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ®" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

1908 BUILDING
BRICK RE-POINTING
ELEVATIONS

DRAWN BY:	CHECKED BY:
RJC	DM
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

A-500

CAD FILE: 5005-A-500-PH2.DWG PLOT DATE: 10/13/2026



BUS CANOPY SITE

SCALE:N.T.S.

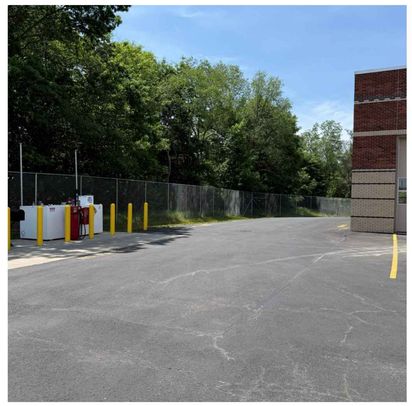




EXISTING FUELING STATION

BUS FUELING STATION WITH
PROPOSED LOCATION OF NEW
CANOPY (FOR REFERENCE ONLY)





HIGHLAND
ASSOCIATES
architecture | engineering | interior design

102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com

New York • Pennsylvania

REVISION NO:

FUELING STATION



BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
©HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ® SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.

UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF ©HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ® IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central
School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

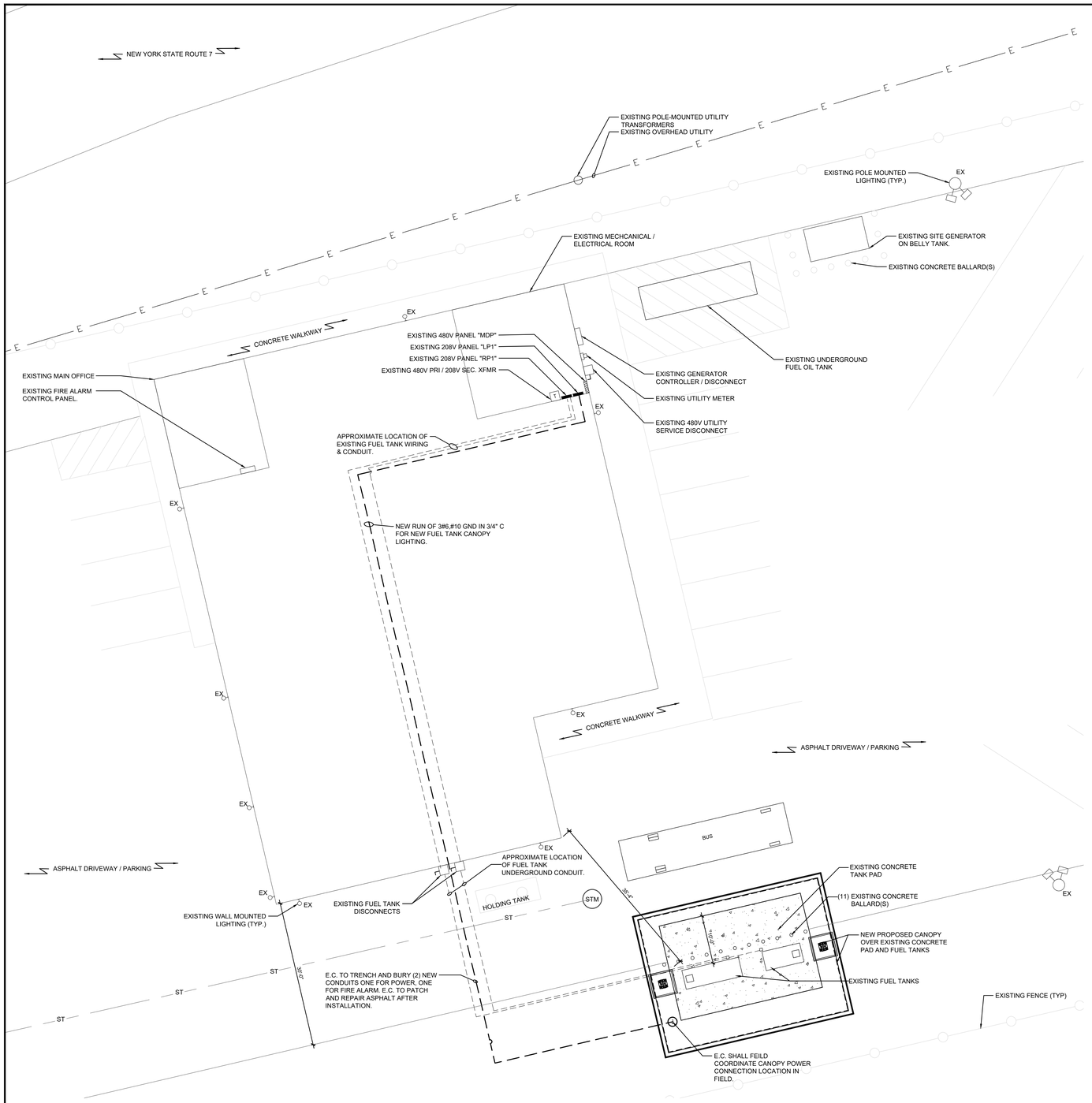
BUS GARAGE/
FUELING STATION
SITE PLAN

DRAWN BY:	CHECKED BY:
RJC	DM
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

S-000

CAD FILE: 5005-S-000-PH2.DWG PLOT DATE: 10/13/2026



AFTON TRANSPORTATION BUILDING SITE RENOVATION - FUEL TANK CANOPY

SCALE: 1"=10'-0"

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:

BG

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED # 08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ®" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ®" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:
CANOPY
AT BUS FUELING
STATION

DRAWN BY:	CHECKED BY:
RJC	DM
DATE:	PROJECT NO:
11/03/2026	2025-005

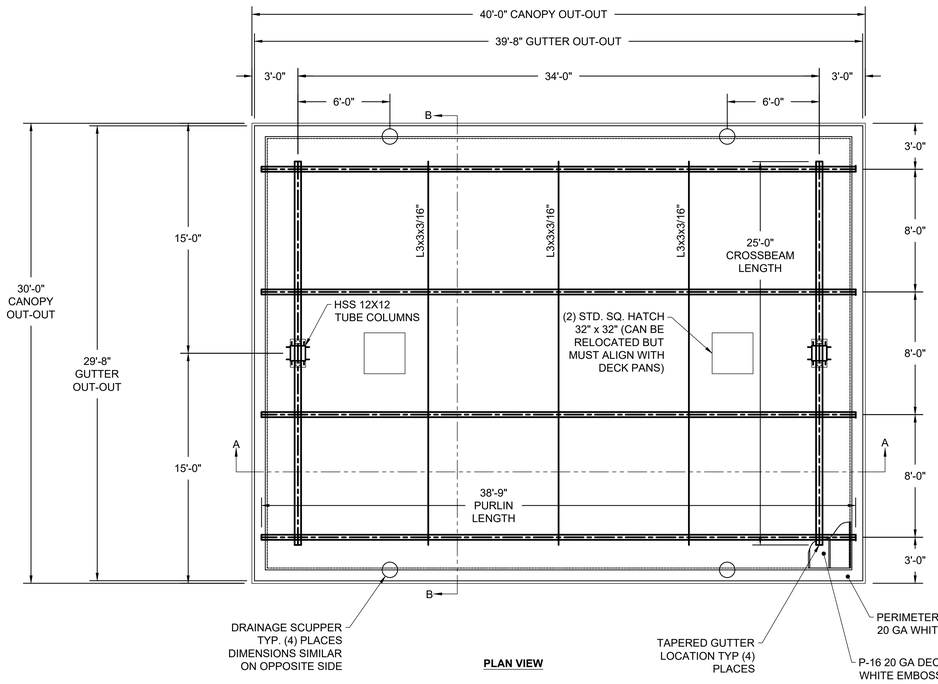
DRAWING NO:

S-100

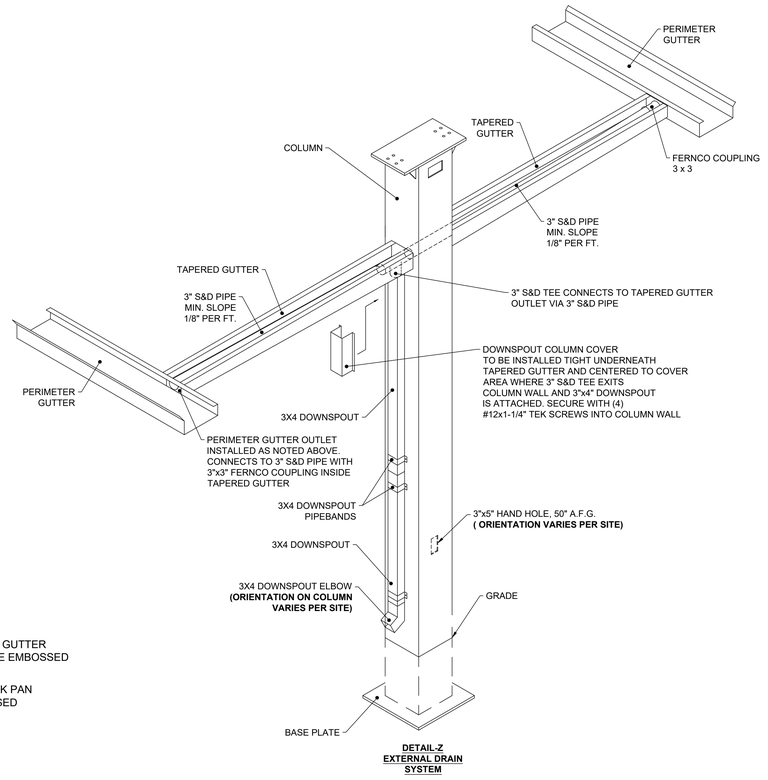
CAD FILE: 5005-S-100.DWG PLOT DATE: 11/16/2026

CANOPY DESIGNED AND
MANUFACTURED BY AUSTIN MOHAWK

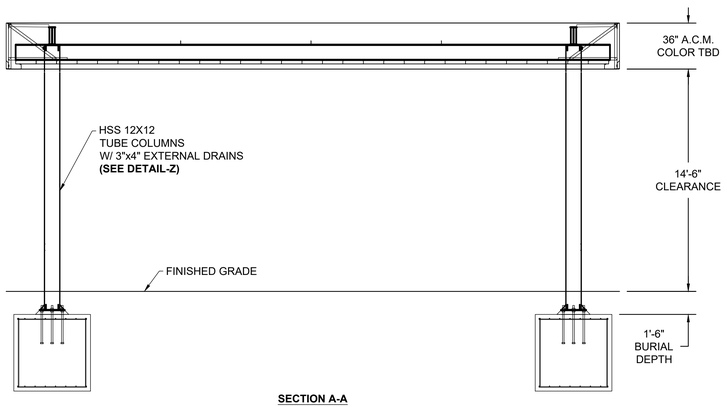
AUSTIN MOHAWK & CO., LLC.
2175 BEECHGROVE PLACE
UTICA, NY 13501
PHONE: 315.793.3000
TOLL FREE: 1.800.765.3110
FAX: 315.793.9370
WEBSITE: www.austinmohawk.com
E-MAIL: info@austinmohawk.com



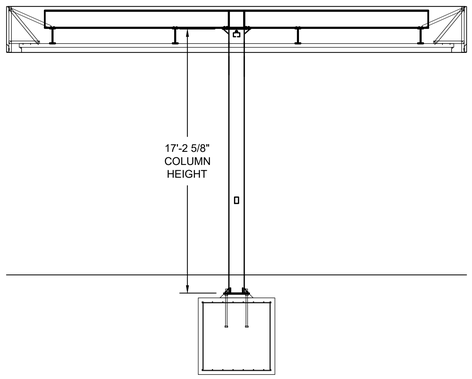
PLAN VIEW



DETAIL-Z EXTERNAL DRAIN SYSTEM



SECTION A-A



SECTION B-B

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:

BG

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED # 08-01-01-04-5-015-003

COPYRIGHT:
©HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ® SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ®" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

BUS FUELING STATION CANOPY DESIGN

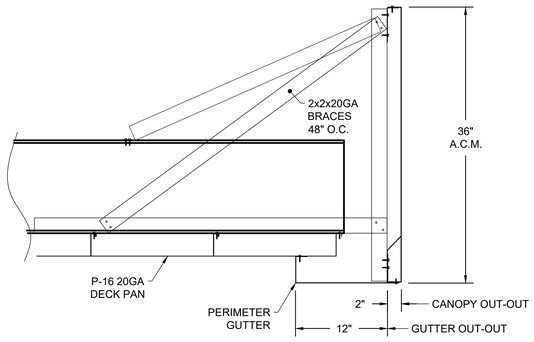
DRAWN BY:	CHECKED BY:
RJC	DM
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

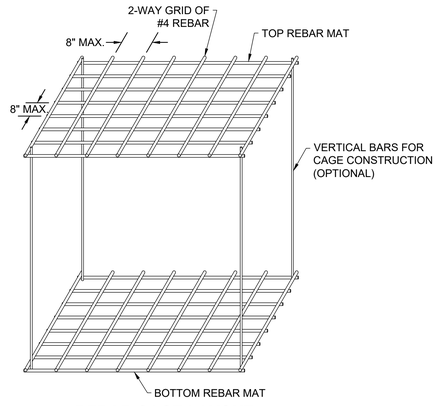
BC-100

CAD FILE: 5005-BC-100.DWG PLOT DATE: 10/20/2026

CANOPY DESIGNED AND
MANUFACTURED BY AUSTIN MOHAWK



DETAIL A:
30'-0" SIDE FASCIA BRACE DETAIL



REBAR CAGE LAYOUT

KEY:

C — DETAIL LETTER
3 — SHEET

FOOTING SPECIFICATIONS:

1) OWNER / GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FOOTING AND ANCHOR BOLT INSTALLATION

2) ALL FOOTINGS SHALL BE CAST ON LEVEL, UNDISTURBED SOIL OR ROCK OR PROPERLY COMPACTED SUBGRADE. BOTTOM OF FOOTING TO BE ABOVE WATER TABLE. FOOTING BASED ON MINIMUM 2,000 PSF SOIL BEARING CAPACITY AND 150 PSF PER FOOT OF DEPTH LATERAL BEARING CAPACITY. OWNER/GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL SOIL PARAMETERS.

3) FOOTING CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI. FOOTING DESIGN SHALL BE IN ACCORDANCE WITH ACI 318.

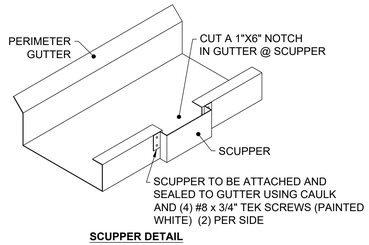
4) THE TOPS OF ALL FOOTINGS MUST BE AT THE SAME ELEVATION. OWNER / GENERAL CONTRACTOR SHALL PROVIDE BURIAL DEPTH FROM HIGH GRADE UNDER CANOPY. WHERE THE TOP OF THE FOOTINGS ARE AT DIFFERENT ELEVATIONS, THE OWNER / GENERAL CONTRACTOR SHALL PROVIDE THE CANOPY MANUFACTURER WITH ALL FOOTING AND GRADE ELEVATIONS PRIOR TO CANOPY FABRICATION. VARIATIONS IN DESIGN ELEVATIONS MAY RESULT IN INADEQUATE CLEARANCE AND UNDER SIZED FOOTINGS.

5) OWNER / GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING NON-SHRINK GROUT UNDER ALL COLUMN BASES AFTER CANOPY IS LEVELED AND SECURED.

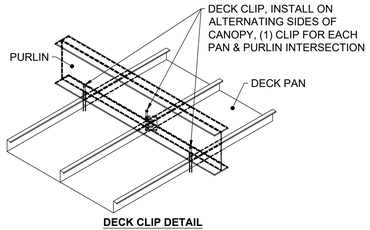
6) FOOTING REINFORCING STEEL SHALL BE ASTM A615 GRADE 60 DEFORMED BILLETSTEEL BARS.

7) FOOTINGS ARE ASSUMED TO BE CONSTRAINED BY CONCRETE FUEL ISLAND AND /OR CONCRETE DRIVE SLAB AT GRADE. WHERE THIS CONDITION DOES NOT EXIST, THE OWNER SHALL NOTIFY CANOPY FABRICATOR.

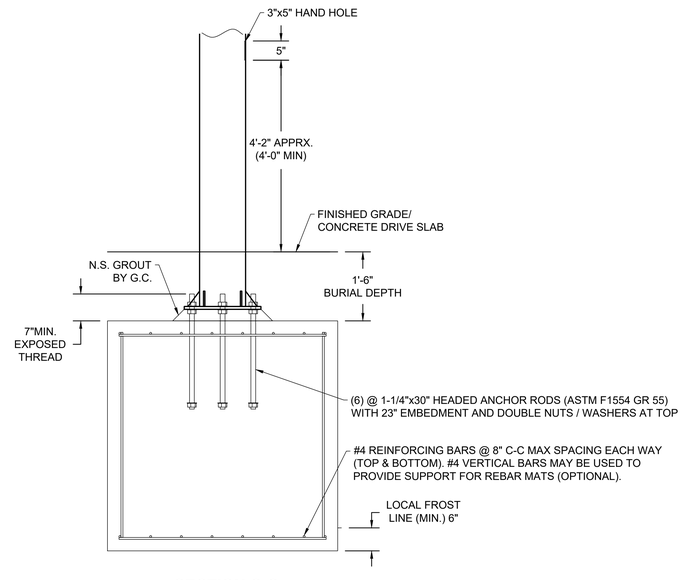
8) ANCHOR BOLTS SHALL BE PLACED IN ACCORDANCE WITH THIS DRAWING. TEMPLATES SHALL BE USED TO ENSURE PROPER PLACEMENT OF ANCHOR BOLTS. ANCHOR BOLTS ARE TO BE INSTALLED SUCH THAT A MINIMUM OF 7" OF THREAD IS EXPOSED ABOVE TOP OF FOOTING. BOTTOM OF THREADS SHALL NOT END MORE THAN 3/4" ABOVE TOP OF FOOTER.



SCUPPER DETAIL



DECK CLIP DETAIL



SECTION C-C

AUSTIN MOHAWK & CO., LLC.
2175 BEECHGROVE PLACE
UTICA, NY 13501
PHONE: 315.793.3000
TOLL FREE: 1.800.765.3110
FAX: 315.793.9370
WEBSITE: www.austinmohawk.com
E-MAIL: info@austinmohawk.com

HIGHLAND
ASSOCIATES
architecture | engineering | interior design

102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com

New York • Pennsylvania

REVISION NO:

BG

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.

UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central
School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

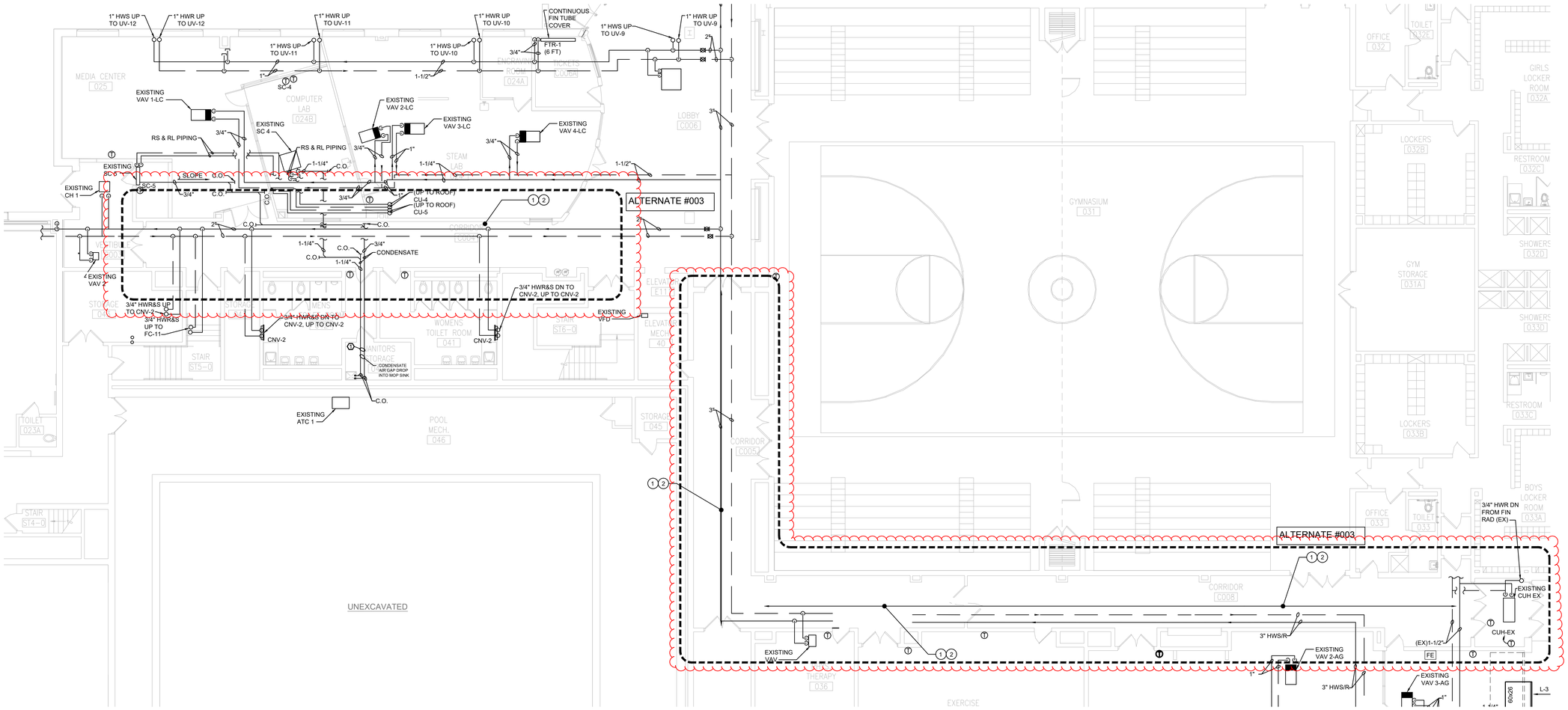
BUS FUELING
STATION CANOPY
DETAILS

DRAWN BY:	CHECKED BY:
RJC	DM
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

BC-200

CAD FILE: 5005-BC-002.DWG PLOT DATE: 10/13/2026



GROUND FLOOR DEMOLITION PLAN - PART D & A

SCALE: 1/8"=1'-0"

KEYED NOTES:

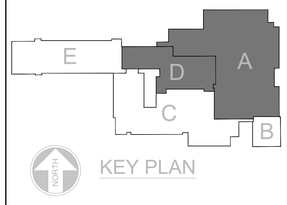
1. THERE IS NO HVAC SYSTEMS SERVING THIS CORRIDOR PROPER.
2. THERE ARE NO DOORS WITH DOOR LOUVERS IN THIS CORRIDOR.

HIGHLAND ASSOCIATES
architecture | engineering | interior design

102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com

New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.

UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:
GROUND FLOOR DEMOLITION PLAN

DRAWN BY:	CHECKED BY:
F.R.G.	A.J.L.
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

MD-100

CAD FILE: 5005-MD-100-PH2.DWG PLOT DATE: 10/12/2026



FIRST FLOOR DEMOLITION PLAN-PART E & C

SCALE: 1/8"=1'-0"

KEYED NOTES:

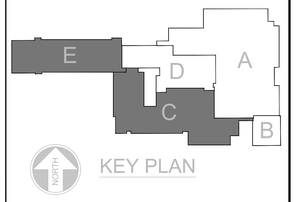
1. THERE IS NO HVAC SYSTEMS SERVING THIS CORRIDOR PROPER.
2. THERE ARE NO DOORS WITH DOOR LOUVERS IN THIS CORRIDOR.

HIGHLAND ASSOCIATES
architecture | engineering | interior design

102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com

New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.

UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

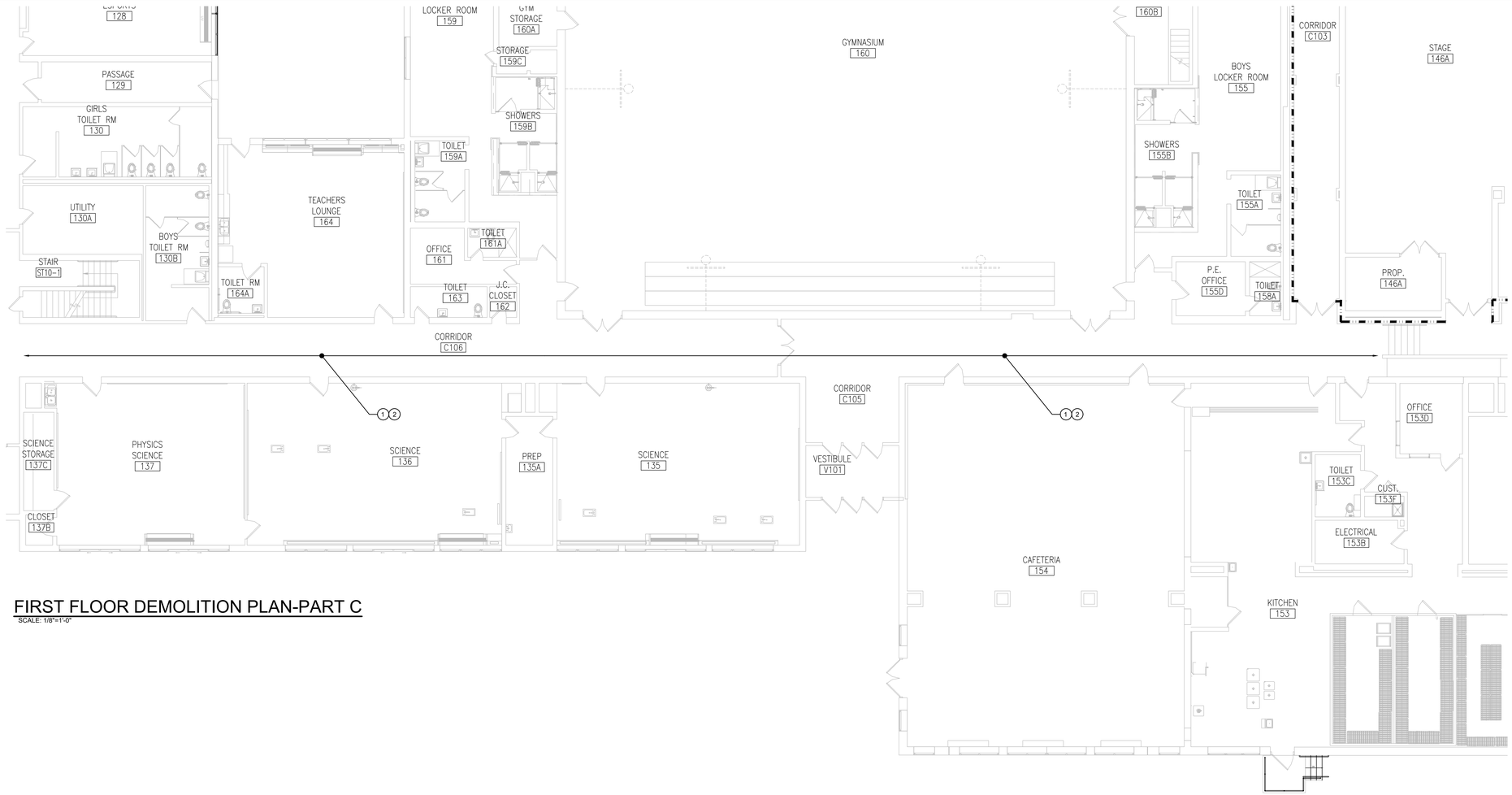
DRAWING TITLE:
FIRST FLOOR DEMOLITION PLAN PART A

DRAWN BY:	CHECKED BY:
F.R.G.	A.J.L.
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

MD-101

CAD FILE: 5005-MD-101-PH2.DWG PLOT DATE: 10/12/2026

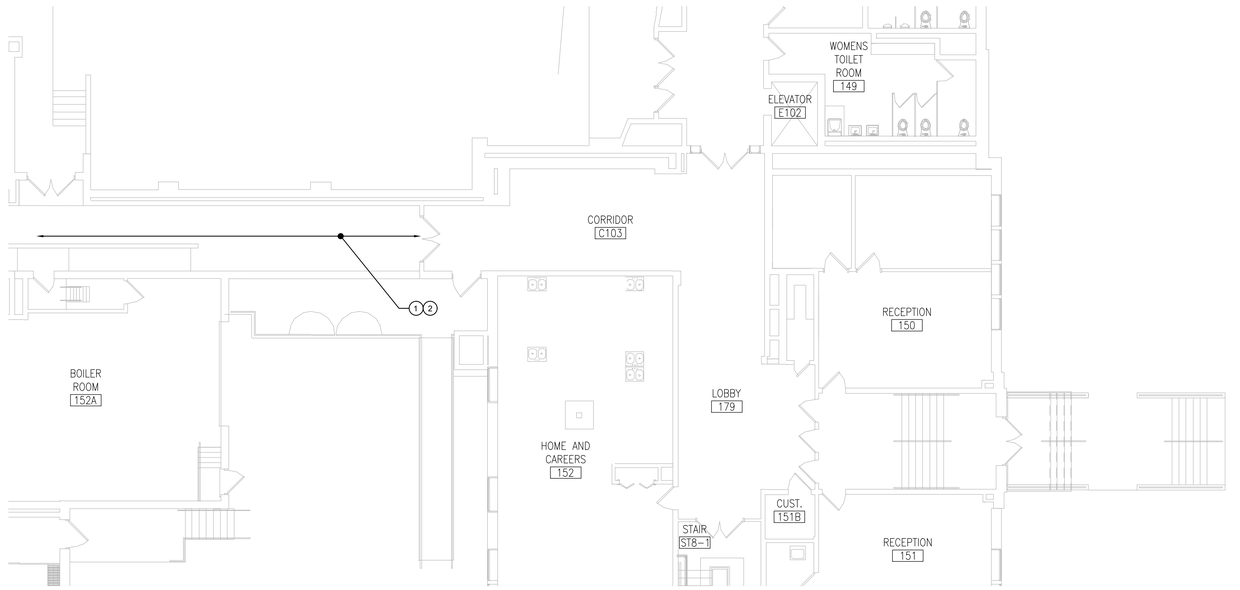


FIRST FLOOR DEMOLITION PLAN-PART C

SCALE: 1/8"=1'-0"

KEYED NOTES:

1. THERE IS NO HVAC SYSTEMS SERVING THIS CORRIDOR PROPER.
2. THERE ARE NO DOORS WITH DOOR LOUVERS IN THIS CORRIDOR.



FIRST FLOOR DEMOLITION PLAN-PART C

SCALE: 1/8"=1'-0"

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ®" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ®" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

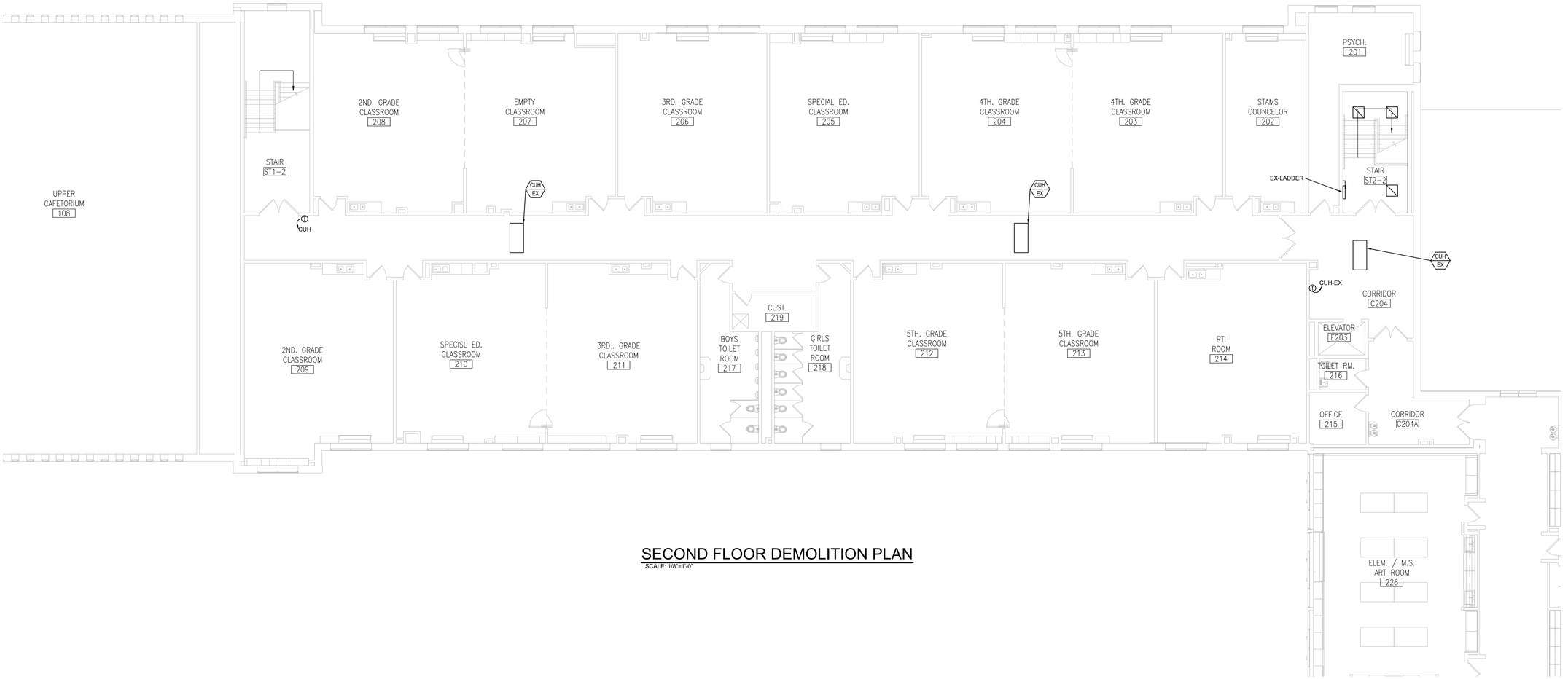
FIRST FLOOR DEMOLITION PLAN PART B/C

DRAWN BY:	CHECKED BY:
F.R.G.	A.J.L.
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

MD-102

CAD FILE: 5005-MD-102-PH2.DWG PLOT DATE: 10/12/2026

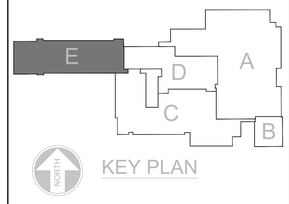


SECOND FLOOR DEMOLITION PLAN

SCALE: 1/8"=1'-0"

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:
SECOND FLOOR DEMOLITION PLAN

DRAWN BY:	CHECKED BY:
F.R.G.	A.J.L.
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

MD-103

CAD FILE: 5005-MD-103-FH2.DWG PLOT DATE: 10/12/2026

GENERAL NOTES:

1. THESE GENERAL NOTES SHALL APPLY TO ALL M SERIES DRAWINGS, IN COORDINATION WITH DIVISION 23 SECTIONS, AND FRONT END (DIVISION 0 AND 1) REQUIREMENTS. ALL WORK ASSOCIATED WITH THE M SERIES DRAWINGS SHALL BE COORDINATED WITH ALL OTHER TRADES TO AVOID CONFLICTS.

2. ALL WORK SHALL BE PERFORMED IN COOPERATION WITH THE OWNER (AND/OR OWNER'S REPRESENTATIVE) AND THE ARCHITECT/ENGINEER THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE CONSTRUCTION SCHEDULE ESTABLISHED BY THE OWNER AND ARCHITECT, AND SHALL IMMEDIATELY REPORT ANY DELAYS IN MATERIALS RECEIPT INCLUDING CIRCUMSTANCES CAUSING DELAYS.

3. CONTRACT DRAWINGS FOR THE MECHANICAL WORK ARE DIAGRAMMATIC, INTENDED TO CONVEY THE SCOPE OF WORK AND TO INDICATE THE GENERAL ARRANGEMENT AND APPROXIMATE LOCATION OF EQUIPMENT, DUCTWORK, PIPING, AND ACCESSORIES. THE INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL CONDITIONS, DIMENSIONS, AND LOCATIONS PRIOR TO BIDDING PROJECT. CHECK PROJECT DRAWINGS PRIOR TO INSTALLATION FOR INTERFERENCES WITH OTHER TRADES. SHOULD THE CONTRACTOR FIND SUCH INTERFERENCES, THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING HIS WORK WITH OTHERS. THE OWNER RESERVES THE RIGHT TO MAKE REASONABLE CHANGES PRIOR TO ROUGH-IN WITHOUT ADDED EXPENSE. DIMENSIONS INDICATED ARE SUBJECT TO VERIFICATION OF EXACT SITE CONDITIONS AT THE TIME OF INSTALLATION.
   - THE CONTRACTOR SHALL INSTALL ALL DUCTWORK, PIPING, EQUIPMENT, ETC. IN A WORKMAN LIKE MANNER WITH QUALIFIED CONTRACTORS.

4. ALL MECHANICAL WORK SHALL BE INSTALLED PER LOCAL MECHANICAL CODE, HEALTH CODE, FIRE CODE, ENERGY CONSERVATION CODE, AND BUILDING CODE. ALL WORK SHALL COMPLY TO ACCORDANCE OF LOCAL, STATE AND FEDERAL REGULATIONS AND OTHER AUTHORITIES HAVING JURISDICTION.

5. CONTRACTOR RESPONSIBLE FOR PAYING FOR ALL FEES ASSOCIATED WITH OBTAINING PERMITS, INSPECTIONS, ETC.

6. THE MECHANICAL CONTRACTOR SHALL BE LICENSED IN THE LOCAL JURISDICTION PRIOR TO BIDDING ON PROJECT. CONTRACTOR TO CONTACT CITY/TOWNSHIP TO VERIFY LICENSE TO ENSURE THEY ARE CURRENT.

7. ALL MECHANICAL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER RECOMMENDATIONS. ANY CONFLICTS WITH INSTALLATION AND MANUFACTURER RECOMMENDATIONS SHALL BE REPORTED TO ENGINEER.

8. CUTTING AND PATCHING - ALL NOTES BELOW HOLD THE COMMON CONDITION "UNLESS OTHERWISE NOTED".
   - FOR RENOVATIONS: THE CONTRACTOR REQUIRING CUTTING SHALL BE RESPONSIBLE FOR HIS/HER OWN WORK WHETHER DESCRIBED IN THE CONTRACT DOCUMENTS OR NOT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING CUTTING AND PATCHING REQUIREMENTS WITH OTHER TRADES.
   - FOR NEW CONSTRUCTION: ALL CUTTING AND PATCHING THROUGH ALL WALL, CEILING, ETC. SHALL BE PROVIDED BY MECHANICAL CONTRACTOR IN COORDINATION WITH THE GENERAL WORK. ALL PAINTING AND FINISHING SHALL BE DONE BY GENERAL CONTRACTOR. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH GENERAL CONTRACTOR.
   - OPENINGS MADE POST-FINISH: IF AN OPENING IS REQUIRED IN A FINISHED SURFACE, AFTER COMPLETION, DUE TO LACK OF COORDINATION OR PROPER SCHEDULE MAINTENANCE, THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CUTTING AND PATCHING REQUIRED TO FINISH SPECIFIC MECHANICAL WORK AND RESTORE THE FINISHED SURFACE TO PREVIOUS CONDITION.
   - UNDERGROUND PIPING (NEW CONSTRUCTION): TRENCHING SHALL BE BY GENERAL CONTRACTOR. PIPE INSTALLATION WITH APPROPRIATE BEDDING MATERIAL SHALL BE BY THE MECHANICAL CONTRACTOR. BACKFILL ABOVE PIPE AND BEDDING SHALL BE BY THE GENERAL CONTRACTOR BASED ON REQUIREMENTS OF THE STRUCTURAL PLANS AND SPECFICATIONS.
   - UNDERGROUND PIPING FINISHED FLOORS OTHER THAN CONCRETE: UNLESS OTHERWISE NOTED, TRENCHING, EXCAVATION, BACKFILLING, COMPACTION AND RESTORATION OF THE FLOORING SUBSTRATE SHALL BE PERFORMED BY THIS CONTRACTOR. FINAL FINISHED FLOOR SHALL BE BY OTHERS.
   - UNDERGROUND PIPING FOR FINISHED CONCRETE FLOORS: UNLESS OTHERWISE NOTES, TRENCHING, EXCAVATION, BACKFILLING, COMPACTION, AND RESTORATION OF FINISHED FLOORING SYSTEM SHALL BE PERFORMED BY THIS CONTRACTOR.
   - EQUIPMENT OPENINGS: OPENINGS REQUIRED FOR REMOVAL OF EXISTING EQUIPMENT OR INSTALLATION OF NEW EQUIPMENT SUPPLIED UNDER THIS CONTRACT SHALL BE CUT AND PATCHED BY THIS CONTRACTOR.

9. FURNISH AND INSTALL ALL NEW EQUIPMENT AND MATERIALS AS DESCRIBED HEREIN. ANY MATERIAL, OPERATION, METHOD, OR DEVICE MENTIONED, LISTED OR NOTED WITHIN THIS SPECIFICATION SHALL BE FURNISHED BY THIS CONTRACTOR UNLESS SPECIFICALLY MENTIONED AS BEING FURNISHED OR INSTALLED BY OTHERS.

10. ALL PIPING AND DUCT PENETRATING ALL FIRE-RATED WALLS, CEILINGS, FLOORS, ROOFS, ETC. SHALL BE FIRE STOPPED IN ACCORDANCE WITH DIVISION 7.

11. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE COMPLETE AND OPERABLE SYSTEMS, INCLUDING OPERATIONAL PROPERTIES TO THE EXTENT NECESSARY TO LINK MULTIPLE COMPONENTS OF THE SYSTEMS TOGETHER AND TO INTERFACE WITH SYSTEMS PROVIDED BY OTHERS. THE MECHANICAL CONTRACTOR SHALL GUARANTEE ALL SYSTEMS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE. THE CONTRACTOR SHALL PROVIDE OWNER WITH ALL NECESSARY OPERATION AND MAINTENANCE MANUALS, SHOP DRAWINGS, WIRING DIAGRAMS, AS-BUILT DRAWINGS, AND WARRANTY PAPERWORK UPON COMPLETION OF THE PROJECT.

12. THE CONTRACTOR SHALL COORDINATE WITH G.C. FOR LOCATIONS OF ACCESS PANELS PROVIDED BY G.C. IN NON-ACCESSIBLE CEILING AND WALLS FOR ALL VALVES, SHOCK ABSORBERS, VOLUME DAMPERS AND ALL OTHER ITEMS THAT REQUIRE ACCESS TO PROPERLY MAINTAIN OR SERVICE.

13. ALL PIPING PENETRATIONS THROUGH EXPOSED WALLS SHALL BE PROVIDED WITH CHROME ESCUTCHEONS AND SEAL TO WALL OR CEILING.

14. ALL NATURAL GAS PIPING SHALL BE INSTALL PER NEW YORK FUEL GAS CODE AND AUTHORITY HAVING JURISDICTION. CONTRACTOR SHALL PROVIDE SHUT OFF GAS VALVE FOR ALL EQUIPMENT UTILIZING GAS. CONTRACTOR SHALL PROVIDE 6" DIRT LEG (MINIMUM) FOR ALL EQUIPMENT UTILIZING GAS.

15. EQUIPMENT CONNECTIONS:
   - ALL EQUIPMENT SHALL BE PROVIDED WITH UNIONS AND SHUT-0FF VALVES WHETHER DETAILED OR NOT.
   - ALL MECHANICAL HYDRONIC OR REFRIGERANT EQUIPMENT SHALL BE PROVIDED WITH SHUT OFF VALVES.
   - THIS CONTRACTOR SHALL MAKE FINAL HYDRONIC AND REFRIGERANT CONNECTIONS TO PIPING/EQUIPMENT FURNISHED BY OTHERS, UNLESS OTHERWISE NOTED.

17. ALL PENETRATIONS THROUGH ROOFING MEMBRANE AND ROOF DECKING SHALL BE PERFORMED BY AN INSTALLER CERTIFIED BY THE ROOFING SYSTEM MANUFACTURER TO MAINTAIN ROOF SYSTEM WARRANTY.

18. FOR PROJECTS WITH APPROVED USE OF PVC AND CPVC PIPING, SUCH PIPING SHALL BE PROHIBITED IN THE FOLLOWING LOCATIONS.
   - AREAS OF ASSEMBLY.
   - RETURN AIR PLENUMS.
   - EXIT DISCHARGE CORRIDORS.
   - STAIRS.

19. RODENTPROOFING - IN OR ON STRUCTURES WHERE OPENINGS HAVE BEEN MADE IN FLOORS CEILINGS, OR WALLS FOR THE PASSAGE OF DUCT OR PIPE, SUCH OPENINGS SHALL BE CLOSED AND PROTECTED WITH APPROVED METAL COLLARS THAT ARE SECURELY FASTENED TO THE ADJOINING STRUCTURE.

20. STRUCTURAL SAFETY - IN THE PROCESS OF INSTALLING OR REPAIRING ANY PART OF A MECHANICAL SYSTEM, THE FINISHED FLOOR, WALLS, CEILINGS, TILE OR ANY OTHER PART OF THE BUILDING OR PREMISES THAT MUST BE CHANGED OR REPLACED SHALL REMAIN IN A STRUCTURALLY SAFE CONDITION IN ACCORDANCE WITH THE REQUIREMENTS OF THE BUILDING CODE OF NEW YORK STATE.

21. PROTECTION OF DUCTS, PIPES AND MECHANICAL SYSTEM COMPONENTS - PIPING, DUCT AND OTHER SYSTEM COMPONENTS SHALL BE INSTALLED IN SUCH A MANNER SO AS TO PREVENT CORROSION, BREAKAGE, FREEZING, AND PHYSICAL DAMAGE BY OTHER BUILDING COMPONENTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE BUILDING CODE OF NEW YORK STATE.

22. EXISTING SITE UTILITIES - UNDERGROUND UTILITY LOCATIONS ARE NOT GUARANTEED, NOR IS THERE ANY GUARANTEE THAT ALL EXISTING UTILITIES, WHETHER FUNCTIONAL OR ABANDONED, WITHIN THE PROJECT AREA ARE SHOWN. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EXISTING UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR ALL DAMAGES RESULTING FROM THE CONTRACTOR'S WORK. CONTRACTOR SHALL CONTACT DIG SAFELY NEW YORK (DSNY) - 800-962-7962 FOR STAKEOUT REQUESTS.

23. COORDINATE ALL EQUIPMENT & DEVICE LOCATIONS WITH ARCHITECTURAL DRAWINGS.

24. COORDINATE ALL PENETRATIONS THROUGH EXTERIOR WALLS WITH ARCHITECTURAL DRAWINGS.

25. THE CONTRACTOR SHALL CHECK AND VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE BEFORE PROCEEDING WITH THE WORK. HE SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER FOR CORRECTION PRIOR TO BEGINNING ANY WORK. DISCOVERY OF ANY DISCREPANCIES AFTER WORK HAS COMMENCED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

26. ALL EQUIPMENT-HVAC CONTRACTOR MUST REVIEW THE EQUIPMENT SCHEDULES, SPECIFICATIONS, AND DRAWINGS IN ALL CONTRACT DOCUMENTS AND SUBSEQUENT SHOP DRAWINGS. ALL LABOR AND MATERIALS FOR A COMPLETE AND OPERABLE SYSTEM AS PART OF THE CONTRACT. FAILURE TO REVIEW DOES NOT RELIEVE THE CONTRACTOR OF FULFILLING CONTRACTUAL OBLIGATIONS.

27. REFER TO ARCHITECTURAL DRAWINGS AND SHOP DRAWINGS FOR FINAL CONNECTIONS AND EXACT LOCATIONS FOR ALL WORK REQUIRED FOR EQUIPMENT NOT FURNISHED UNDER THIS CONTRACT.

28. COORDINATE INSTALLATION OF NEW WORK WITH ARCHITECTURAL, STRUCTURAL, PLUMBING, POWER AND LIGHTING PLANS. CONTRACTOR SHALL TAKE ALL INTERFERENCE INTO CONSIDERATION. PROVIDE ALL NECESSARY OFFSETS OR TRANSITIONS WITH EQUIVALENT AREAS TO MATCH DUCT SIZES AS INDICATED ON DRAWINGS.

29. DO NOT INSTALL ANY MECHANICAL WORK ABOVE ELECTRICAL PANELS.

30. DO NOT INSTALL ANY MECHANICAL WORK ABOVE OR THROUGH ELEVATOR EQUIPMENT ROOM UNLESS SPECIFICALLY SERVING EQUIPMENT ROOM.

31. FOR ALL BRANCH DUCT CONNECTIONS TO MAIN TRUNK, PROVIDE 45° TRANSITION FITTING OR CONICAL TAP FOR ROUND DUCT. BUTT FITTINGS ARE NOT PERMITTED. PROVIDE MANUAL VOLUME DAMPER WITH LOCKING QUADRANT AN ALL BRANCH RUNOUTS TO GRILLES AND DIFFUSERS.

32. PROVIDE TURNING VANES IN ALL MITERED ELBOWS OR PROVIDE ELBOWS WITH CENTERLINE RADIUS EQUAL TO 1.5 TIMES DUCT WIDTH.

33. INSTALL ALL FIRE DAMPERS AND CEILING RADIATION DAMPERS IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION. PROVIDE UL FIRE DAMPERS WITH BLADES OUT OF AIR STREAM AND ACCESS DOORS. FIRE DAMPERS IN TRANSFER DUCTS ONLY MAY HAVE BLADES IN AIR STREAM.

34. SLEEVE AND SEAL ALL PIPE OR DUCT PENETRATIONS OF WALL AND FLOORS. PACK VOID BETWEEN PIPE OR DUCT AND SLEEVE WITH INSULATION IN NON-RATED WALLS AND FLOORS. PACK VOID BETWEEN PIPE OR DUCT AND SLEEVE WITH INSULATION IN FIRE-RATED WALLS AND FLOORS, APPLY INTUMESCENT FIRE SAFING COMPOUND AT PENETRATION, MAINTAINING INTEGRITY AND RATING OF FIRE SEPARATION. SLEEVES THROUGH FLOORS SHALL EXTEND 2" ABOVE FLOOR AND BE GROUTED INTO PLACE AND WATERPROOFED. PIPING THROUGH EXTERIOR WALLS SHALL BE SLEEVED AND SEALED WEATHER TIGHT.

35. SHUTDOWN OF SERVICES SHALL BE COORDINATED AND SCHEDULED WITH THE OWNER.

36. THE HVAC CONTRACTOR SHALL DISCONNECT AND CAP ALL SUPPLY, RETURN, AND EXHAUST AIR OUTLETS THAT ARE STILL ACTIVE IN THE PROJECT AREA DURING CONSTRUCTION.

37. THE HVAC CONTRACTOR SHALL REFER TO THE PHASING PLAN TO DETERMINE THE EXTENT OF WORK AND TEMPORARY SYSTEM CONNECTIONS NECESSARY FOR EACH PHASE.

38. ALL DUCT AND UNIT MOUNTED SMOKE DETECTORS FOR MECHANICAL EQUIPMENT AND DAMPERS SHALL BE FURNISHED BY ELECTRICAL CONTRACTOR, INSTALLED BY MECHANICAL CONTRACTOR, WIRED TO FIRE ALARM SYSTEM BY ELECTRICAL CONTRACTOR, WITH UNIT SHUTDOWN CONTROL WIRING BY THE MECHANICAL CONTRACTOR.

39. HVAC CONTRACTOR SHALL PROVIDE ALL TRANSFORMERS AS REQUIRED FOR DUCT-MOUNTED DAMPER ACTUATORS OR THE DDC CONTROLS SYSTEM.

40. ALL WORK SHALL BE SCHEDULED AND COORDINATED WITH THE OWNER SO THAT DISRUPTION OF AREAS INVOLVED IS KEPT TO A MINIMUM. ANY ACCIDENTAL INTERRUPTIONS TO SERVICES SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR WITH OUT ANY ADDITIONAL COST TO THE OWNER.

41. PRIOR TO SUBMITTING BIDS AND DURING CONSTRUCTION, THE CONTRACTOR SHALL EXAMINE THE DRAWINGS OF ALL TRADES AND COORDINATE THE INSTALLATION WITH ALL TRADES AND EXISTING CONDITIONS. COORDINATION OF WORK IF NECESSARY SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

42. THE DRAWINGS ARE DIAGRAMMATIC AND DO NOT INDICATE ALL OFFSETS, BENDS, ACCESS PANELS AND SIMILAR PARTS WHICH MAY BE REQUIRED. THE CONTRACTOR SHALL INVESTIGATE THE STRUCTURAL AND FINISH CONDITIONS AFFECTING HIS WORK AND PROVIDE ALL FITTINGS, ACCESS PANELS, AND SIMILAR ACCESSORIES THAT MAYBE REQUIRED TO PROVIDE A COMPLETE AND OPERATING INSTALLATION AT NO ADDITIONAL COST TO THE OWNER.

43. PROVIDE ALL DAMPERS, SHEAVES, AND BELTS AS REQUIRED FOR BALANCING.

44. THE HVAC CONTRACTOR SHALL CENTER AND/OR ALIGN REGISTERS, DIFFUSERS, AND EQUIPMENT WITH ADJACENT ARCHITECTURAL FEATURES.

45. INSTALL FIRE DAMPERS AS REQUIRED PER NFPA 101 AND NFPA 90A.

46. ALL HVAC INSTALLATIONS SHALL COMPLY WITH NFPA 101.

47. CONTRACT DOCUMENT DRAWINGS FOR MECHANICAL WORK (HVAC, PLUMBING, AND FIRE PROTECTION) ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT ONLY.

48. PROVIDE INTERNAL VIBRATION ISOLATION FOR ALL MECHANICAL EQUIPMENT, PIPING AND DUCTWORK AS SPECIFIED TO PREVENT TRANSMISSION OF VIBRATION TO BUILDING STRUCTURE.

49. MAINTAIN A MINIMUM OF 6'-8" CLEARANCE TO UNDERSIDE OF PIPES, DUCTS, CONDUITS, SUSPENDED EQUIPMENT, ETC., THROUGHOUT ACCESS ROUTES IN MECHANICAL ROOMS.

50. LOCATE ALL TEMPERATURE, PRESSURE, AND FLOW MEASURING DEVICES IN ACCESSIBLE LOCATIONS WITH STRAIGHT SECTION OF PIPE OR DUCT UP AND DOWNSTREAM AS RECOMMENDED BY THE MANUFACTURER FOR GOOD ACCURACY.

51. TESTING, ADJUSTING, AND BALANCING AGENCY SHALL BE A MEMBER OF THE ASSOCIATED AIR BALANCE COUNCIL (AABC) OR THE NATIONAL ENVIRONMENT BALANCING BUREAU (NEBB). TESTING, ADJUSTING, AND BALANCING SHALL BE PERFORMED IN ACCORDANCE WITH THE AABC STANDARDS.

52. WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF EQUIPMENT ARE REQUIRED, THE PRODUCT OF ONE MANUFACTURER SHALL BE USED.

53. ALL CONTROL WIRE AND CONDUIT SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE AND DIVISION 16 OF THE SPECIFICATION.

54. WHEN MECHANICAL WORK (HVAC, PLUMBING, SHEET METAL, FIRE PROTECTION, ETC.) IS SUBCONTRACTED, IT SHALL BE THE MECHANICAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE SUBCONTRACTORS AND THE ASSOCIATED CONTRACTS. WHEN DISCREPANCIES ARISE PERTAINING TO WHICH CONTRACTOR PROVIDES A PARTICULAR ITEM OF THE MECHANICAL CONTRACT OR WHICH CONTRACT PROVIDES FINAL CONNECTIONS FOR A PARTICULAR ITEM OF THE MECHANICAL CONTRACT, IT SHALL BE BROUGHT TO THE ATTENTION OF THE MECHANICAL CONTRACTOR, WHOSE DECISION SHALL BE FINAL.

55. ALL MISCELLANEOUS STEEL REQUIRED TO ENSURE PROPER INSTALLATION AND AS SHOWN IN DETAILS FOR PIPING, DUCTWORK, AND EQUIPMENT (UNLESS OTHERWISE NOTED) SHALL BE FURNISHED AND INSTALLED BY THE RESPECTIVE CONTRACTOR.

56. PROVIDE ACCESS PANELS FOR INSTALLATION IN WALLS AND CEILINGS, WHERE REQUIRED, TO SERVICE DAMPERS, VALVES, SMOKE DETECTORS, AND OTHER CONCEALED MECHANICAL EQUIPMENT. ACCESS PANELS SHALL BE TURNED OVER TO GENERAL CONTRACTOR FOR INSTALLATION. DUCT ACCESS PANELS INSTALLED BY HVAC CONTRACTOR.

57. ALL DUCTWORK, PIPING AND EQUIPMENT SUPPORTED FROM STRUCTURAL STEEL SHALL BE COORDINATED WITH GENERAL CONTRACTOR. ALL ATTACHMENTS TO STEEL BAR JOISTS, TRUSSES, OR JOIST GIRDERS SHALL BE AT PANEL POINTS. PROVIDE BEAM CLAMPS MEETING MSS STANDARDS. WELDING TO STRUCTURAL MEMBERS SHALL NOT BE PERMITTED. THE USE OF C-CLAMPS SHALL NOT BE PERMITTED.

58. MECHANICAL EQUIPMENT, DUCTWORK, AND PIPING SHALL NOT BE SUPPORTED FROM METAL DECK.

59. ALL ROOF MOUNTED EQUIPMENT CURBS FOR EQUIPMENT PROVIDED BY THE MECHANICAL CONTRACTOR SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY THE GENERAL CONTRACTOR.

60. LOCATIONS AND SIZES OF ALL FLOOR, WALL, AND ROOF OPENINGS SHALL BE COORDINATED WITH ALL OTHER TRADES INVOLVED.

61. REFER TO TYPICAL DETAILS FOR DUCTWORK, PIPING, AND EQUIPMENT INSTALLATION.

62. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE HVAC SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.

63. CERTAIN ITEMS SUCH AS RISES AND DROPS IN DUCTWORK, ACCESS DOORS, VOLUME DAMPERS, ETC., ARE INDICATED ON THE CONTRACT DRAWINGS FOR CLARITY FOR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS.

64. UNLESS OTHERWISE SHOWN, LOCATE ALL ROOM THERMOSTATS 44" (CENTERLINE) ABOVE FINISHED FLOOR. NOTIFY THE ENGINEER OF ANY ROOMS WHERE THE ABOVE LOCATION CANNOT BE MAINTAINED OR WHERE THERE IS A QUESTION ON LOCATION. COORDINATE INSTALLATION WITH OTHER SENSORS AND SWITCHES TO MAINTAIN AESTHETIC APPEARANCE. WHERE THERMOSTATS ARE LOCATED NEAR LIGHT SWITCHES, THEY SHALL MATCH THE HEIGHT OF THE SWITCH. ATC CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AND DETERMINE SUITABLE LOCATION IN WHICH THE SENSOR IS NOT NEGATIVELY EFFECTED BY HEAT OR COOLING SOURCES.

65. ALL DUCTWORK DIMENSIONS, AS SHOWN ON THE DRAWINGS, ARE INTERNAL CLEAR DIMENSIONS AND DUCT SIZE SHALL BE INCREASED TO COMPENSATE FOR DUCT LINING THICKNESS.

66. COORDINATE DIFFUSER, REGISTER, AND GRILLE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS, LIGHTING, AND OTHER CEILING ITEMS AND MAKE MINOR DUCT MODIFICATIONS TO SUIT.

67. UNLESS OTHERWISE NOTED, ALL DUCTWORK IS OVERHEAD, TIGHT TO THE UNDERSIDE OF THE STRUCTURE, WITH SPACE FOR INSULATION IF REQUIRED.

68. PROVIDE ACCESS DOORS IN DUCTWORK TO PROVIDE ACCESS FOR ALL SMOKE DETECTORS, FIRE DAMPERS, SMOKE DAMPERS, VOLUME DAMPERS, HUMIDIFIERS, COILS, AND OTHER ITEMS LOCATED IN THE DUCTWORK WHICH REQUIRE SERVICE AND/OR INSPECTION.

69. PROVIDE ACCESS DOORS IN DUCTWORK FOR OPERATION, ADJUSTMENT, AND MAINTENANCE OF ALL FANS, VALVES, AND MECHANICAL EQUIPMENT.

70. SEE SPECIFICATIONS FOR DUCTWORK GAUGES, BRACING, HANGERS, AND OTHER REQUIREMENTS.

71. EXTERIOR LOUVERS ARE INDICATED IN THE MECHANICAL SCHEDULES. LOUVER SIZES, LOCATIONS, AND DETAILS SHALL BE COORDINATED WITH GENERAL CONTRACTOR. LOUVER SIZES, LOCATIONS, MOUNTING, AND DETAILS SHALL BE COORDINATED WITH OTHER TRADES INVOLVED.

72. STRUCTURAL STEEL FABRICATOR AND INSTALLER SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL FRAMED OPENINGS IN ROOF WITH APPROVED EQUIPMENT MANUFACTURERS. (OPENINGS SUCH AS, BUT NOT LIMITED TO MECHANICAL UNITS, EXHAUST FANS, CURB MOUNTED EQUIPMENT, ROOF DRAINS, SKYLIGHTS, STAIR OPENINGS, ROOF HATCHES, DUCT THROUGH ROOF PENETRATIONS, EXPANSION JOINTS, ETC.) EXACT SIZES AND EXACT LOCATIONS OF OPENINGS ARE TO BE VERIFIED WITH THE APPROVED SHOP DRAWINGS ISSUED FOR THE INSTALLATION. THE EXACT SIZES SHALL BE COORDINATED PRIOR TO ANY FABRICATION AND INSTALLATION BY ANY/ALL TRADES. SIZES AND LOCATIONS INDICATED ON CONTRACT DRAWINGS ARE DIAGRAMMATIC AND FOR INFORMATION ONLY.

73. ANY FABRICATION AND/OR INSTALLATION WHICH HAS NOT BEEN PROPERLY COORDINATED WITH APPROVED EQUIPMENT MANUFACTURER AND MUST BE REPAIRED, RELOCATED, ALTERED, REPLACED, RE-INSTALLED OR MODIFIED IN ANY MANNER, WILL BE DONE TO THE SATISFACTION OF THE OWNER, AT NO ADDITIONAL COST TO THE OWNER OR DESIGN PROFESSIONAL.

74. THESE DRAWINGS REFLECT INFORMATION ON EXISTING BUILDING SERVICES GATHERED BY LIMITED FIELD INVESTIGATION AND PREVIOUS CONSTRUCTION DRAWINGS (NOT AS-BUILT DRAWINGS). THE EXACT LOCATION, ARRANGEMENT, AND SIZES OF EXISTING DEVICES AND EQUIPMENT MAY BE DIFFERENT FROM THAT SHOWN ON THESE DRAWINGS. ALL BIDDERS ARE REQUIRED TO INVESTIGATE EXISTING BUILDING CONDITIONS (AND UNFORESEEN CONDITIONS) PRIOR TO SUBMITTING THEIR BIDS AND PROVIDE ALL REQUIRED FIELD AND SITE MEASUREMENTS PRIOR TO ORDERING ANY NEW COMPONENTS, DEVICES, CONTROLS, DUCTWORK/PIPING, OR EQUIPMENT.

75. THIS CONTRACTOR IS RESPONSIBLE FOR THE CUTTING AND PATCHING OF ALL OPENINGS RELATED TO HIS WORK. PATCHES SHALL MATCH SURROUNDING WALL SURFACES AND SHALL BE SEALED AND FIRESTOPPED AS REQUIRED.

76. CEILINGS THAT NEED TO BE TEMPORARILY REMOVED TO ALLOW FOR THE INSTALLATION OF DUCTWORK, PIPING OR EQUIPMENT, AND ARE NOT SCHEDULED TO BE REMOVED ON THE ARCHITECTURAL DRAWINGS, SHALL BE REMOVED AND REPLACE BY THIS CONTRACTOR. COORDINATE THE REMOVAL AND THE REPLACEMENT WITH THE ELECTRICAL CONTRACTOR AND THE FIRE PROTECTION CONTRACTOR.

77. MECHANICAL CONTRACTOR SHALL REPLACE (IN-KIND) ALL CEILING TILES AND CEILING GRID SEGMENTS THAT GET DAMAGED DURING DEMOLITION OR CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.

78. M.C. SHALL PROVIDE COORDINATION SHOP DRAWINGS OF HVAC DUCTWORK AND PIPING COORDINATED WITH LIGHTING, PLUMBING, AND FIRE PROTECTION. FIELD VERIFY ALL DIMENSIONS AND UNFORESEEN CONDITIONS WITH AT LEAST 1 SITE SURVEY.

LEGEND

x / x	EQUIPMENT TAG (SEE SCHEDULES)	SLR	GEOTHERMAL GROUND SOURCE RETURN
(T)	THERMOSTAT	HWS	HOT WATER SUPPLY
(H)	HUMIDITY SENSOR	HWR	HOT WATER RETURN
(S)	SWITCH	CD	CONDENSATE DRAIN
(C)	CO2 SENSOR	S.A.	SUPPLY AIR
SD	SMOKE DETECTOR	R.A.	RETURN AIR
F	FIRE DAMPER	O.A.	OUTSIDE AIR
FS	COMBINATION FIRE / SMOKE DAMPER	E.A.	EXHAUST AIR
R ⟶	RISE	DL	DOOR LOUVER (SEE ARCH DWGS)
D ⟶	DROP	CO	CLEANOUT
D-X / CFM	SUPPLY DIFFUSER	—— G ——	NATURAL GAS PIPING
R-X / CFM	RETURN GRILLE		BALL VALVE
E-X / CFM	EXHAUST GRILLE		BALANCING / SHUTOFF VALVE
F.C.	FLEXIBLE CONNECTION	⋈	GATE VALVE
MIN.	MINIMUM		CHECK VALVE
MAX.	MAXIMUM		STRAINER
E.S.P.	EXTERNAL STATIC PRESSURE		2 WAY CONTROL VALVE
TYP.	TYPICAL		3 WAY CONTROL VALVE
WMS	WIRE MESH SCREEN		GAS REGULATOR
(E)	EXISTING		POINT OF NEW CONNECTION
SLS	GEOTHERMAL GROUND SOURCE SUPPLY		POINT OF DISCONNECT

GAS PIPING NOTES:

1. ALL REGULATORS SHALL BE FACTORY EQUIPPED WITH INTERNAL RELIEF FOR OVERPRESSURE PROTECTION AND SHALL COME WITH STAINLESS STEEL BUG SCREEN. INSTALL WITH VENT POINTED DOWN TO PREVENT WATER AND DUST FROM ENTERING AND CLOGGING THE PORT.
2. PROVIDE ALL REDUCERS, COUPLINGS AND ADAPTORS REQUIRED FOR CHANGING PIPE SIZES TO VALVES, PRV'S AND EQUIPMENT INLETS/OUTLETS.
3. WHERE THE PIPING IS TO RUN HORIZONTAL AND LEVEL 12" ABOVE THE ROOF, PROVIDE MIRO MODEL 5-SB-H FOR HEIGHTS UP TO 18" AND/OR MODEL 6-H SINGLE CLEVIS SUPPORT, WHICH CAN ACCOMMODATE UP TO 30". INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION DOCUMENTATION.
4. WHERE PIPING IS TO RUN PARALLEL TO THE ROOF PITCH, PROVIDE PIPING JOINTS TO ACCOUNT FOR CHANGES IN ROOF PITCH AT THE HIGH AND LOW POINTS. PROVIDE EITHER TWO-ELBOW "SWING TYPE" JOINT OF MITERED WELDED JOINT.
5. COORDINATE THE FINAL GAS CONNECTION POINT ON EACH PIECE OF EQUIPMENT WITH THE MECHANICAL CONTRACTOR BASED ON THE HIS APPROVED EQUIPMENT SHOP DRAWINGS. PROVIDE PIPING TO THE COORDINATED FINAL CONNECTION. ADJUST THE LOCATION OF THE BRANCH TAKE-OFF FROM THE MAIN AS NECESSARY TO ACCOMMODATE THE FINAL EQUIPMENT SELECTION.
6. IF EQUIPMENT BEING CONNECTED TO IS MOUNTED ON A SPRING ISOLATED CURB, ANY OTHER SPRING TYPE MOUNTING, OR ANY MOUNTING WHERE DEFLECTION CAN OCCUR, PROVIDE A FLEXIBLE CONNECTION AT THE UNIT.
7. FLEXIBLE CONNECTION SHALL BE UL LISTED AND FM GLOBAL APPROVED FOR NATURAL GAS SERVICE. INSTALL IN ACCORDANCE WITH MANUFACTURERS INSTALLATION INSTRUCTIONS.
8. ALL GAS PIPING OVER 4" SHALL BE WELDED BY A CERTIFIED WELDER SHOWING DOCUMENTATION BY A.P.I. 1104 OR A.S.M.E. B.31.1., NEED PROOF OF WELDING QUALIFICATIONS AND CERTIFICATION CURRENT TO DATE.

INTERIOR AND EXTERIOR GAS PIPING:

PIPE SHALL BE BLACK STEEL, ELECTRIC RESISTANCE WELDED, SCHEDULE 40, ASTM A-53.

FITTINGS: MALLEABLE IRON 150 PSIG CLASS, ASTM A-197 OR ANSI B16.9/ASTM A-234 WELDED.

JOINTS: ENTIRE PIPING SYSTEM SHALL CONSIST OF WELDED JOINTS AND FITTINGS. EXCEPTION IS SCREWED JOINTS MAY BE USED AT EQUIPMENT CONNECTIONS AND WHERE CONDITIONS PREVENT USE OF WELDED JOINTS. DO NOT USE GAS FITTER'S CEMENT EXCEPT ON OUTLET CAPS. NO THREADED JOINTS SHALL BE CONCEALED.

PROVIDE ALL FITTINGS REQUIRED TO ACCOMMODATE ANGLE CHANGES WHEN RUNNING GAS PIPING PARALLEL TO A PITCHED ROOF AT THE HIGH POINTS AND LOW POINTS. FITTINGS SHALL INCLUDE, BUT NOT LIMITED TO SWING JOINTS CONSISTING OF TWO ELBOWS OR MITERED WELDED JOINTS.

WHERE HVAC EQUIPMENT, PLUMBING EQUIPMENT OR ANY OTHER GAS APPLIANCE IS INSTALLED IN SPRING ISOLATORS, OR SPRING ISOLATED CURBS, OR ANY OTHER TYPE OF MOUNTING THAT PERMITS ANY MOVEMENT, PROVIDE FLEXIBLE CONNECTIONS TO THE EQUIPMENT. PROVIDE ANY AND ALL ADDITIONAL PIPING SUPPORTS REQUIRED. FLEXIBLE CONNECTIONS SHALL BE UL LISTED CGA APPROVED FOR OUTDOOR GAS APPLICATIONS. BASIS OF DESIGN SHALL BE GASTITE CSST CGA APPROVED FOR OUTDOOR GAS APPLICATIONS, METRAFLEX MODEL SERIES GASCT (THREADED) AND GASCW (WELDED) "FLEXIBLE CONNECTOR FOR GAS SERVICE" STRAIGHT STAINLESS STEEL HOSE AND BRAID, CSA APPROVED NATURAL GAS/PROPANE USE OR APPROVED EQUAL. INSTALL IN ACCORDANCE WITH THE MANUFACTURE'S INSTALLATION INSTRUCTION.

ALL GAS PIPING (EXPOSED AND CONCEALED) SHALL BE PAINTED. REFER TO DIVISION 09 SECTION "PAINTING" FOR PAINT MATERIALS, SURFACE PREPARATION AND APPLICATION OF PAINT. PAINT ALL GAS PIPING WITH "YELLOW" SEMIGLOSS, ACRYLIC-ENAMEL PAINT. COAT PIPING WITH TWO (2) COATS FINISH OVER TWO (2) COATS RUST INHIBITIVE METAL PRIMER.

DEMOLITION NOTES:

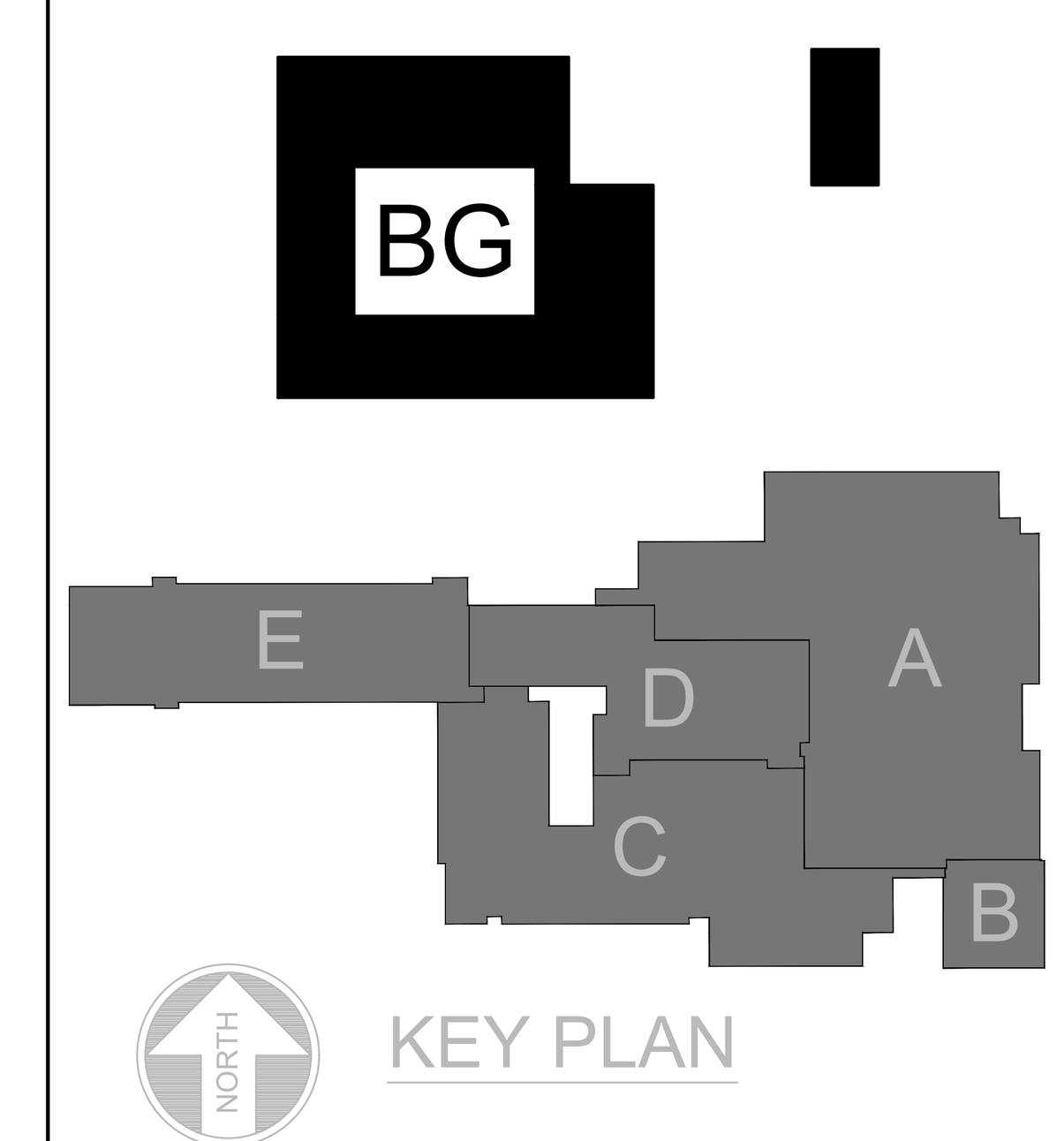
1. ALL DUCTWORK OPENINGS CREATED BY DEMOLITION SHALL BE SEALED OR CAPPED AIR TIGHT.
2. (hatched) DESIGNATES DUCTWORK, DIFFUSERS, GRILLES, PIPES, OR EQUIPMENT TO BE DEMOLISHED.
3. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO EACH PIECE OF EQUIPMENT SLATED FOR REUSE.
4. BEFORE STARTING DEMOLITION OPERATIONS, PROVIDE THE NECESSARY PROTECTIVE DEVICES WHERE REQUIRED, AND IN STRICT ACCORDANCE WITH OSHA RULES AND REGULATIONS.
5. TAKE NECESSARY PRECAUTIONS TO PREVENT DUST AND DIRT FROM RISING.
6. KEEP ALL ADJOINING PUBLIC AREAS CLEAN AND FREE OF DEBRIS OR CONSTRUCTION MATERIALS DURING WORKING HOURS, AND MAKE AN EFFORT TO PROVIDE SAFE CONDITIONS FOR THE SCHOOL PERSONNEL AND WORKMEN.
7. DEMOLISHED MATERIALS (PIPING, EXHAUST FANS, DUCTWORK, INSULATION, WIRING, ETC.), NOT BEING REUSED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF SITE ON A REGULAR BASIS, IN A LEGAL MANNER. COORDINATE WITH SCHOOL FACILITY MAINTENANCE SUPERVISOR.
8. REPAIR AND/OR REPLACE EXISTING ITEMS NOT NOTED TO BE DEMOLISHED, AND NOT SPECIFIED TO BE REMOVED, BUT WHICH BECOME DAMAGED DURING THE PROGRESS OF THE WORK. MAKE ANY AND ALL SUCH REPAIRS, REPLACEMENTS AND MODIFICATIONS TO RESTORE THE DAMAGED ITEMS TO THEIR ORIGINAL CONDITION AT THE TIME OF DAMAGE, TO THE SATISFACTION OF AND AT NO ADDITIONAL COST TO THE OWNER.
9. PATCH, FILL AND REPAIR ALL SURFACES DISTURBED, CUT, DAMAGED OR MADE IMPERFECT BY ALTERATIONS OR REMOVAL WORK AND AS REQUIRED TO PREPARE SURFACES FOR NEW MATERIALS AND ARRANGEMENTS.
10. PRIOR TO THE DEMOLITION OF THOSE ITEMS WHICH HAVE UTILITY CONNECTIONS (WATER, ELECTRICITY, ETC) THE CONTRACTOR SHALL ARRANGE WITH THE SCHOOL FACILITY MAINTENANCE SUPERVISOR TO LOCATE SHUT-OFF VALVES, PANEL BOXES AND OTHER CONTROL ELEMENTS SO THAT WATER DAMAGE AND OTHER POTENTIALLY INCONVENIENT OR DANGEROUS SITUATIONS ARE AVOIDED.
11. EXISTING FINISHES THAT ARE DISTURBED BY DEMOLITION SHALL BE PATCHED TO MATCH EXISTING.
12. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY DUST PARTITIONS AND DEBRIS PROTECTION BETWEEN AREAS OF CONSTRUCTION AND AREAS IN WHICH NO WORK IS TAKING PLACE. LOCATION OF SUCH PROTECTION SHALL BE VERIFIED PRIOR TO COMMENCING WORK AND IN COORDINATION WITH THE PROGRESSION OF THE WORK SCHEDULE.
13. DO NOT REMOVE ANY MAJOR EQUIPMENT OR PIPING SERVICE WITHOUT FIRST CONSULTING WITH THE SCHOOL MAINTENANCE SUPERVISOR. ALL SERVICES, I.E. HOT WATER MUST BE KEPT RUNNING AT ALL TIMES. COORDINATE SHUTDOWN AND CROSSOVER TIMES OF ALL UTILITIES WITH SCHOOL FACILITY MAINTENANCE SUPERVISOR.
14. ANY DAMAGES CAUSED TO EXISTING EQUIPMENT BEING RELOCATED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

COORDINATION NOTE:

COORDINATION - IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL, MECHANICAL, AND PLUMBING UNDER DIRECTION OF THE CONSTRUCTION MANAGER TO COORDINATE THEIR WORK. THE HVAC CONTRACTOR SHALL TAKE THE LEAD IN THE COORDINATION EFFORT AND PRODUCE THE COORDINATION DRAWINGS. COORDINATION DRAWINGS SHALL BE SUBMITTED FOR APPROVAL BY THE ARCHITECT PRIOR TO STARTING ANY WORK. THE PURPOSE OF THESE DRAWINGS IS TO COORDINATE THE LOCATIONS OF ALL PIPING, DUCTWORK, AND ELECTRICAL EQUIPMENT. SPECIAL ATTENTION IS CALLED TO ARTICLE 110-26 (F) OF THE NATIONAL ELECTRICAL CODE. THE SPACE EQUAL TO THE WIDTH AND DEPTH OF THE EQUIPMENT AND EXTENDING FROM THE FLOOR TO A HEIGHT OF 6FT. ABOVE THE EQUIPMENT OR TO STRUCTURAL CEILING, WHICHEVER IS LOWER, SHALL BE DEDICATED TO THE ELECTRICAL INSTALLATION. NO PIPING, DUCTS, LEAK PROTECTION APPARATUS, OR OTHER EQUIPMENT FOREIGN TO THE ELECTRICAL INSTALLATION SHALL BE LOCATED IN THIS ZONE. THIS COORDINATION IS REQUIRED FOR ALL PHASES OF THIS PROJECT.

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

AFTON
CRIMSON KNIGHTS
Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

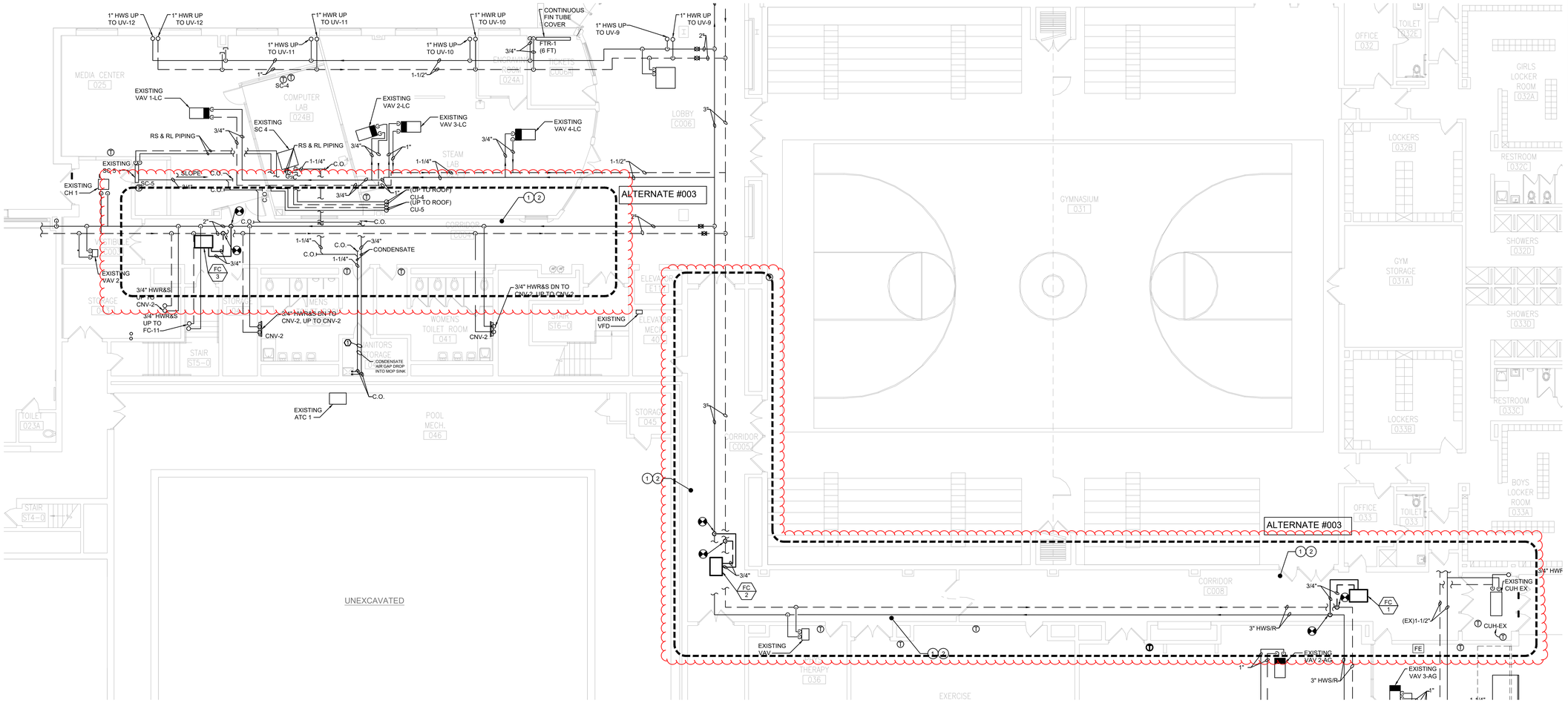
LEGEND

DRAWN BY:	CHECKED BY:
F.G.	A.J.L.
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

M-001

CAD FILE: 5005-M-001-PH2.DWG PLOT DATE: 10/12/2026



GROUND FLOOR PIPING RENOVATION PLAN - PART D & A

SCALE: 1/8"=1'-0"

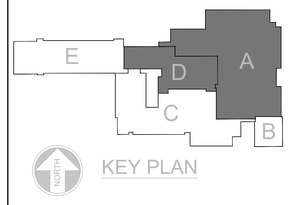
KEYED NOTES:

1. THERE IS NO HVAC SYSTEMS SERVING THIS CORRIDOR PROPER.
2. THERE ARE NO DOORS WITH DOOR LOUVERS IN THIS CORRIDOR.

HIGHLAND ASSOCIATES
architecture | engineering | interior design

102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
©HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ℗ SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.

UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF ©HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ℗ IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

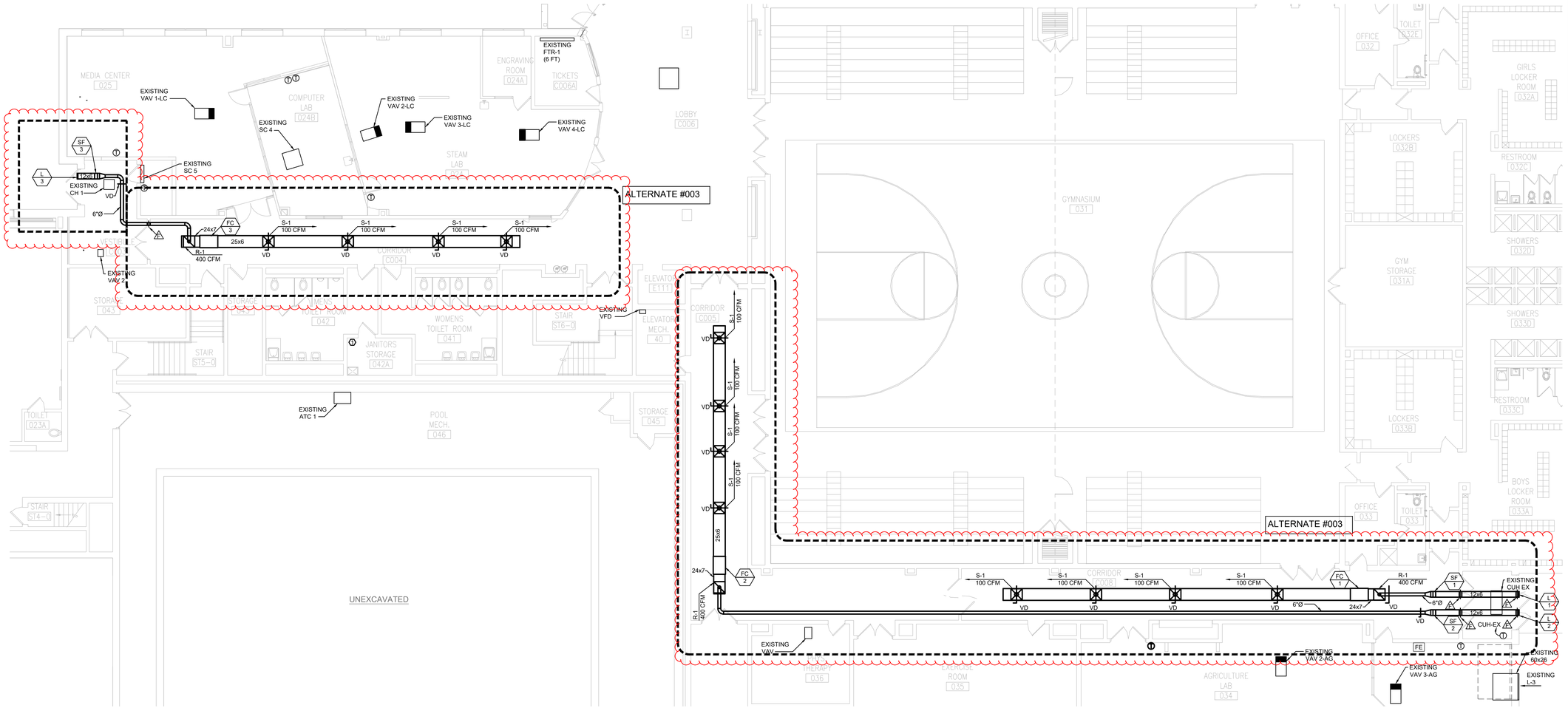
DRAWING TITLE:
GROUND FLOOR PIPING RENOVATION PLAN

DRAWN BY:	CHECKED BY:
F.R.G.	A.J.L.
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

M-100

CAD FILE: 5005-M-100-PH2.DWG PLOT DATE: 10/12/2026



GROUND FLOOR DUCTWORK RENOVATION PLAN - PART D & A

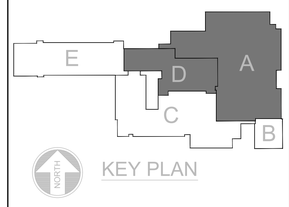
SCALE: 1/8"=1'-0"

KEYED NOTES:

1. THERE IS NO HVAC SYSTEMS SERVING THIS CORRIDOR PROPER.
2. THERE ARE NO DOORS WITH DOOR LOUVERS IN THIS CORRIDOR.

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.

UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

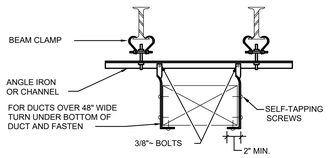
DRAWING TITLE:
GROUND FLOOR DUCTWORK RENOVATION PLAN

DRAWN BY:	CHECKED BY:
F.R.G.	A.J.L.
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

M-101

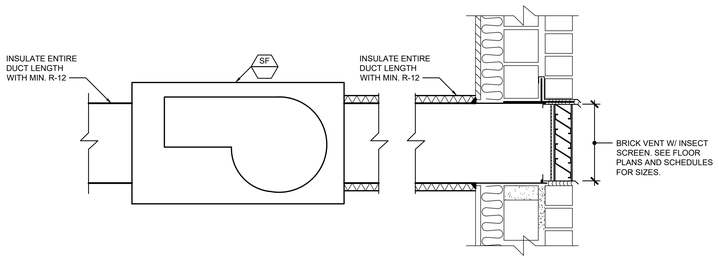
CAD FILE: 5005-M-101-PH2.DWG PLOT DATE: 10/12/2026



DUCT SIZE	HANGER SIZE	MAX. SPACING
UP THRU 2 SQ. FT.	1" X 1/16"	8' - 0"
2 THRU 4 SQ. FT	1" X 1/8"	8' - 0"
4 THRU 10 SQ. FT.	1" X 1/8"	6' - 0"
OVER 10 SQ. FT.	1" X 1/8"	4' - 0"

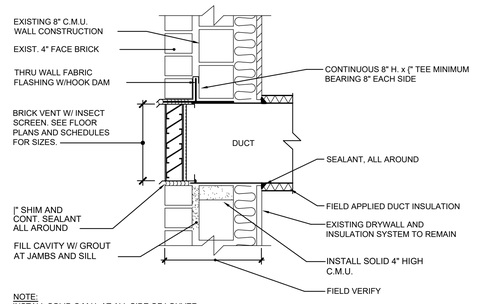
DUCT HANGING DETAIL AND SCHEDULE OF SUPPORTS

NOT TO SCALE



TYPICAL GOOSENECK DETAIL

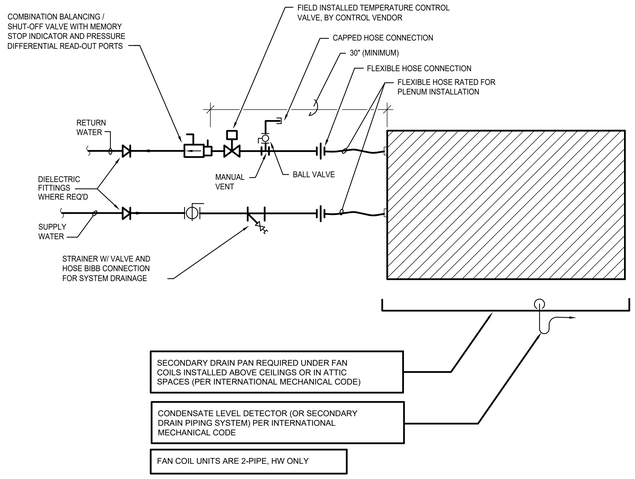
NOT TO SCALE



NOTE:
INSTALL SOLID C.M.U. AT ALL SIDE OF LOUVER, WEAVE SOLID C.M.U. INTO EXISTING C.M.U. ALL WORK BY THIS CONTRACTOR

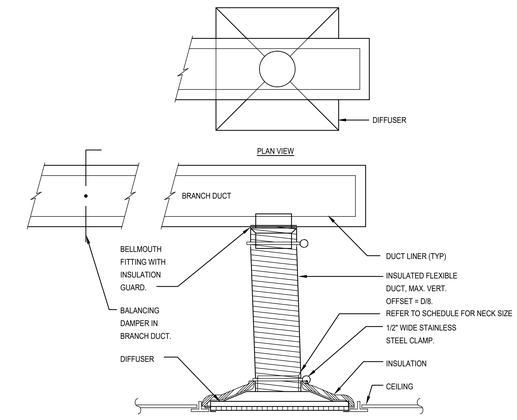
BRICK VENT DETAIL

NOT TO SCALE



FAN COIL UNIT PIPING DETAIL (TYPICAL)

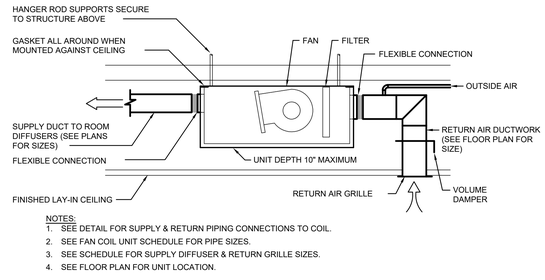
NOT TO SCALE



NOTE: FLEX RUNS LIMITED TO 5 LN FOOT MAX.

SUPPLY AIR DIFFUSER DETAIL (BOTTOM TAP)

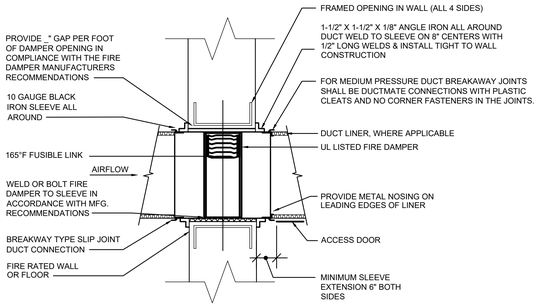
NO SCALE



NOTES:
1. SEE DETAIL FOR SUPPLY & RETURN PIPING CONNECTIONS TO COIL.
2. SEE FAN COIL UNIT SCHEDULE FOR PIPE SIZES.
3. SEE SCHEDULE FOR SUPPLY DIFFUSER & RETURN GRILLE SIZES.
4. SEE FLOOR PLAN FOR UNIT LOCATION.

HORIZONTAL CONCEALED FAN COIL DETAIL

NOT TO SCALE

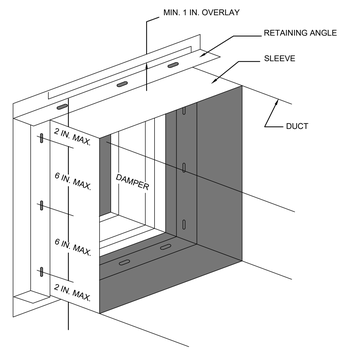


NOTES:
1. HORIZONTAL MOUNTED DAMPERS SHALL HAVE STAINLESS STEEL NEGATOR SPRING

2. PROVIDE FIRE DAMPER WITH ONE - SIDED RETAINING ANGLES WHERE TWO - SIDED RETAINING ANGLES SHALL BE UNACCESSABLE.

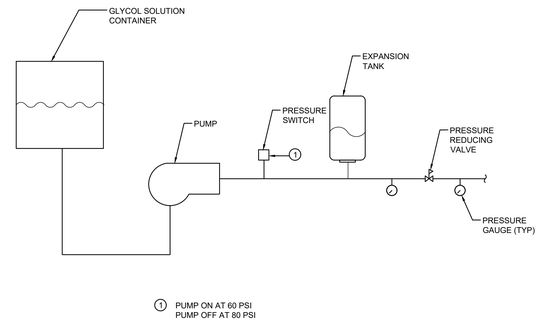
TYPE A FIRE DAMPER DETAIL

NOT TO SCALE



FIRE DAMPER RETAINING ANGLE DETAIL

NOT TO SCALE



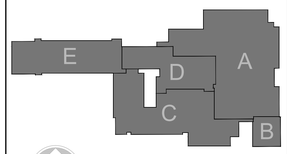
① PUMP ON AT 60 PSI
PUMP OFF AT 80 PSI

GLYCOL FILL DETAIL

NOT TO SCALE

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ®" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ®" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

DETAILS

DRAWN BY:	CHECKED BY:
F.R.G.	A.J.L.
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

M-200

CAD FILE: 5005-M-200-PH2.DWG PLOT DATE: 10/12/2026

FC — FAN COIL UNIT SCHEDULE

TAG	CFM	COOLING CAPACITY 40% GLYCOL								HEATING CAPACITY		MOTOR WATTS	ELECTRICAL DATA		MANUFACTURER MODEL NO.	REMARKS
		SENS MBH	TOTAL MBH	EAT DB	EAT WB	EWT	LWT	GPM	WPD FT. H20	TYPE	MBH		VOLTAGE	MCA		
FC-1	400	1/5	37.92	0.00	88.70	180	140	2.05	4.76	HOT WATER	37.92	130	115V - 1PH	2.44	TRANE FFCB040	1-7
FC-2	400	1/5	37.92	0.00	88.70	180	140	2.05	4.76	HOT WATER	37.92	130	115V - 1PH	2.44	TRANE FFCB040	1-7
FC-3	400	1/5	37.92	0.00	88.70	180	140	2.05	4.76	HOT WATER	37.92	130	115V - 1PH	2.44	TRANE FFCB040	1-7

NOTES:
1. 2-ROW HOT WATER COIL
2. THE HYDRONIC COIL SHALL INCLUDE AN AUTO AIR VENT THAT IS RATED TO 125 PSIG.
3. PROVIDE DELUXE PIPING PACKAGE WITH MANUAL CIRCUIT SETTER.
4. PROVIDE DIGITAL ZONE SENSOR
5. PROVIDE UC400-B/SYMBIO 400-B
6. PROVIDE DISCONNECT SWITCH
7. PROVIDE LOW LIMIT SENSOR

SUPPLY, RETURN, & EXHAUST AIR DIFFUSER SCHEDULE

TAG	NECK SIZE	DUCT RUNOUT SIZE	CFM RANGE	PANEL SIZE	THROW (FEET)	MAX. N.C.	MAX. S.P.	MANUFACTURER & MODEL	REMARKS
S-1	8"Ø	25"X6"	0-100	24"x24"	2-3-5	<15	0.01	ANEMOSTAT / EPL-D	1,2
R-1	24"X24"	24"X7"	0-750	24"x24"	-	<20	-0.01	ANEMOSTAT / GC5	1

NOTE:
1. CONTRACTOR AND VENDOR TO VERIFY CEILING TYPES BEFORE ORDERING ALL EQUIPMENT
2. 2 WAY THROW PATTERN (NOMINAL) DIFFUSER

SF — IN-LINE FAN SCHEDULE

TAG	TYPE	CFM	ESP IN. H_2O	MOTOR HP	RPM	SONES	VOLTAGE	MFR / MODEL	ROOF OPEN'G	SERVICE	REMARKS
SF-1	INLINE	74	0.5	1/5	3071	5	115V - 1PH	FANTECH / FRD 12-6	-	FC-1 OA	1,2,3
SF-2	INLINE	89	0.5	1/5	3071	5	115V - 1PH	FANTECH / FRD 12-6	-	FC-2 OA	1,2,3
SF-3	INLINE	49	0.5	1/5	3071	5	115V - 1PH	FANTECH / FRD 12-6	-	FC-3 OA	1,2,3

NOTES:
1. PROVIDE SPEED CONTROLLER FOR DIRECT DRIVE FANS.
2. PROVIDE FANTECH WC 15 SPEED CONTROL
3. PROVIDE GREENHECK VCD-34 MOTORIZED DAMPER. INTERLOCK OPERATION WITH FAN POWER ON.

L — LOUVER SCHEDULE

TAG	SERVICE	CFM	ESP IN. WG	SIZE	THROAT		MFGR / MODEL	REMARKS
					FREE AREA	VELOCITY		
L-1	FC-1 OA	74	0.0225	12"x7.75"	0.204 SF	500 FPM MAX	GREENHECK / BVF	1-5
L-2	FC-2 OA	89	0.0225	12"x7.75"	0.204 SF	500 FPM MAX	GREENHECK / BVF	1-5
L-3	FC-3 OA	49	0.0225	12"x4.75"	0.120 SF	500 FPM MAX	GREENHECK / BVF	1-5

NOTE
1. INSECT SCREEN
2. STANDARD FINISH
3. COLOR SHALL BE STONE GRAY GF-103
4. SUPPLY AIR FOR OUTSIDE AIR
5. SINGLE BLADE DAMPER

CODE MINIMUM VENTILATION COMPLIANCE SCHEDULE

EQUIPMENT / TAG	AREA SERVED	CODE MINUMUM OA CFM	ACTUAL OA CFM	REMARKS
FC-1	CORRIDOR C008	74	74	
FC-2	CORRIDOR C005	89	89	
FC-3	CORRIDOR C004	49	49	

AFTON CENTRAL SCHOOL DISTRICT VENTILATION RATE TABLE

Zone Identification			Standard Case: 2024 Mechanical Code of New York State Verification Rate Procedure										Design Case - Cooling		Design Case - Heating		Design Exhaust
Room or Zone	Occupancy Category	Area (sf)	People Outdoor Air Rate Rp (cfm/per)	Area Outdoor Air Rate Ra (cfm/sf)	Occupant Density (#/1000 sf)	Occupancy (# people) Pz	People OA CFM Vpeo	Area OA CFM - Varea	Breathing Zone Outdoor Air Flow Vbz (cfm)	Zone Air Distribution Effectiveness Ez	Zone Outdoor Air Flow Voz (cfm)	Code Required Exhaust Airflow Rate (cfm/sf) or (cfm/fixture)	Total Exhaust Required (cfm)	Zone Primary Air Flow Vpz (cfm)	Primary Outdoor Air Fraction Zp = Voz/Vpz	Zone Primary Air Flow Vpz (cfm)	Primary Outdoor Air Fraction Zp = Voz/Vpz	Total Exhaust Provided
FC-1 Corridor C008																		
Corridor C008	General - Corridors	983	0	0.06	0	0	0.0	59.0	59	0.8	74	0	0	400	0.18	400	0.18	0
FC-2 Corridor C005																		
Corridor C005	General - Corridors	1,192	0	0.06	0	0	0.0	71.5	72	0.8	89	0	0	400	0.22	400	0.22	0
										FC-2 MIN OA	**89**							
FC-3 Corridor C004																		
Corridor C004	General - Corridors	657	0	0.06	0	0	0.0	39.4	39	0.8	49	0	0	400	0.12	400	0.12	0
										FC-3 MIN OA	**49**							

ALTERNATE #003

MECHANICAL / ELECTRICAL EQUIPMENT CONNECTIONS SCHEDULE

EQUIPMENT / TAG	DISCONNECT		STARTER		NOTES
	FURNISHED BY	INSTALLED BY	FURNISHED BY	INSTALLED BY	
FC-1	M.C.	M.C.	M.C.	M.C.	① ②
FC-2	M.C.	M.C.	M.C.	M.C.	① ②
FC-3	M.C.	M.C.	M.C.	M.C.	① ②
SF-1	M.C.	M.C.	M.C.	M.C.	① ②
SF-2	M.C.	M.C.	M.C.	M.C.	① ②
SF-3	M.C.	M.C.	M.C.	M.C.	① ②

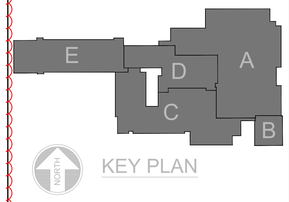
M/E EQUIPMENT CONNECTIONS SCHEDULE NOTES:

① THE MECHANICAL/ELECTRICAL EQUIPMENT CONNECTIONS SCHEDULE AND ACCOMPANYING NOTES ARE INTENDED TO CLEARLY DEFINE WHICH CONTRACTOR FURNISHES AND INSTALLS STARTERS AND DISCONNECTS AND SHALL BECOME PART OF THE SPECIFICATIONS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER WIRING AND FINAL POWER CONNECTIONS. ALL CONTROL WIRING SHALL BE FURNISHED, INSTALLED AND FINAL CONNECTION BY THE TRADE SUPPLYING THE EQUIPMENT.

② E.C. - ELECTRICAL CONTRACTOR
M.C. - MECHANICAL CONTRACTOR (HVAC)
P.C. - PLUMBING CONTRACTOR
MFR - MANUFACTURER
N/A - NOT APPLICABLE

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project Phase 2

SEALS:

DRAWING TITLE:

SCHEDULES

DRAWN BY:	CHECKED BY:
F.R.G.	A.J.L.
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

M-300

CAD FILE: 5005-M-300-PH2.DWG PLOT DATE: 10/12/2026

MECHANICAL SPECIFICATIONS

SCOPE OF WORK:

1. THESE SPECIFICATIONS AND ACCOMPANYING DRAWINGS ARE INTENDED TO COVER THE FURNISHING BY THIS CONTRACTOR ALL LABOR, MATERIAL AND EQUIPMENT OF EVERY KIND NECESSARY FOR THE COMPLETE INSTALLATION OF THE VARIOUS SYSTEMS, AND OTHER SUCH MATERIAL AND EQUIPMENT AS HEREINAFTER SPECIFIED, AND SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
   - A. INSTALLATION OF NEW FC-1, FC-2 AND FC-3 UNITS.
   - B. INSTALLATION OF NEW SUPPLY FAN SF-1, SF-2, AND SF-3.
   - C. INSTALLATION OF SUPPLY, RETURN AND EXHAUST AIR DUCTWORK, SUPPLY AIR DIFFUSERS, RETURN AIR GRILLES INCLUDING ALL BALANCING DEVICES, INSULATION, HANGERS, SUPPORTS AND ACCESSORIES.
   - D. BALANCING OF ALL AIR AND WATER SYSTEMS WITHIN THE SCOPE OF WORK.
   - E. INSTALLATION OF ALL CONTROLS AND INTERFACE.

GENERAL NOTES:

1. PERFORM ALL WORK IN ACCORDANCE WITH THE LATEST NEC, OSHA, STATE OF NEW YORK, NFPA, IBC, IMC AND LOCAL CODES HAVING JURISDICTION.
2. PROVIDE LIABILITY INSURANCE AND BONDING AS REQ'D BY THE OWNER.
3. ALL WORK SHALL BE GUARANTEED AGAINST DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE.
4. PROVIDE ALL FEES AND PERMITS AS REQUIRED FOR CONSTRUCTION.
5. PERFORM ALL WORK WHEN AND AS DIRECTED.
6. BEFORE SUBMITTING A PROPOSAL, BIDDERS SHALL VISIT AND EXAMINE CAREFULLY THE AREAS AFFECTED BY THIS WORK TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND WITH THE DIFFICULTIES THAT WILL AFFECT THE EXECUTION OF THIS WORK. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE. LATER CLAIMS WILL NOT BE RECOGNIZED FOR EXTRA LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN HAD SUCH EXAMINATION BEEN MADE.
7. THE DRAWINGS INDICATE THE LOCATIONS OF EQUIPMENT PIPING AND DUCTWORK AND SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE. IF BEFORE THE INSTALLATION IT IS FOUND NECESSARY TO CHANGE THE LOCATION TO ACCOMMODATE CONDITIONS AT THE BUILDING, SUCH CHANGES SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
8. COORDINATE DUCTWORK, PIPING AND EQUIPMENT LOCATIONS WITH EXISTING CONDITIONS.
9. ALL INSTALLATIONS SHALL BE COMPATIBLE WITH OWNER'S STANDARDS.
10. CONTRACTOR SHALL COORDINATE THE SITE ACCESS REQUIREMENTS THEY ARE TO FOLLOW WITH THE CLIENT. CONTRACTORS SHALL ALSO VERIFY WITH THE CLIENT LOCATIONS TO BE USED FOR STAGING AREAS, STORAGE OF EQUIPMENT, ETC.
11. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE CLIENT FOR A SEQUENCE OF EVENTS FOR INSTALLATION OF DUCTWORK & EQUIPMENT IN THE EXISTING BUILDING. EQUIPMENT AND SYSTEM SHUTDOWNS SHALL NOT COMMENCE UNTIL APPROVAL BY THE CLIENT.
12. CONNECTIONS INTO EXISTING SYSTEMS, i.e. EXHAUST DUCT SYSTEMS, HOT WATER, SYSTEMS SHALL BE COORDINATED WITH THE CLIENT & IF NECESSARY BE COMPLETED ON WEEKENDS OR AT NIGHT.
13. DEMOLITION DEBRIS MUST BE REMOVED IN PLASTIC BAGS, IN A COVERED CART OR DIRECTLY OUTDOORS BY CHUTE. IF DEBRIS IS TRANSPORTED THROUGH THE BUILDING, THE HAULING ROUTE WILL BE PRESCRIBED BY THE OWNER.
14. CONTRACTOR SHALL INSTRUCT ALL PERSONNEL ON SITE AND ALL SUBCONTRACTORS REGARDING THE NECESSITY FOR ALL PRECAUTIONS AGAINST DUST MIGRATION.
15. PROVIDE IDENTIFICATION MARKERS FOR ALL PIPING SYSTEMS AND MECHANICAL EQUIPMENT. PIPING MARKERS SHALL IDENTIFY FLUID CONTENTS AND FLOW. EQUIPMENT IDENTIFICATION SHALL INCLUDE EQUIPMENT TAG AND NUMBER, I.E., FAN COIL FC-1. COORDINATE WITH THE CLIENT FOR THE DESIRED TAGGING OF EQUIPMENT.
16. ALL WORK SHALL BE GUARANTEED AGAINST DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF THE INSTALLATION AND ANY PORTIONS OF THE WORK WHICH DEVELOP DEFECTS DURING THAT TIME SHALL BE REPLACED OR REPAIRED IN A MANNER SATISFACTORY TO THE ENGINEER.
17. PRIOR TO STARTING ANY WORK, PURCHASE OF EQUIPMENT, ETC. COORDINATE THE WORK WITH CONSTRUCTION MANAGER & OTHER TRADES. CONFER WITH OTHER CONTRACTORS WHOSE WORK MIGHT AFFECT THIS INSTALLATION AND ARRANGE ALL PARTS OF THIS WORK AND EQUIPMENT OF OTHERS, WITH THE BUILDING CONSTRUCTION AND WITH ARCH FINISH SO THAT IT WILL HARMONIZE IN SERVICE AND APPEARANCE.
18. COORDINATE EQUIPMENT LOCATIONS WITH EXISTING CONDITIONS. MECHANICAL CONTRACTOR SHALL PROVIDE & INSTALL CONTROL WIRING & ASSOCIATED RELAYS, SWITCHES, ETC.
19. ALL EQUIPMENT, ACCESSORIES AND CONTROLS SHALL BE COMPATIBLE WITH OWNERS STANDARDS.
20. CONTRACTOR SHALL COORDINATE THE SITE ACCESS REQUIREMENTS THEY ARE TO FOLLOW WITH THE OWNER. CONTRACTORS SHALL ALSO VERIFY WITH THE OWNER LOCATIONS TO BE USED FOR STAGING AREAS, STORAGE OF EQUIPMENT, ETC.
21. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE OWNER FOR A SEQUENCE OF EVENTS FOR INSTALLATION OF DUCTWORK, PIPING & EQUIPMENT IN THE EXISTING BUILDING. EQUIPMENT AND SYSTEM SHUTDOWNS SHALL NOT COMMENCE UNTIL APPROVAL BY THE OWNER.
22. DO ALL NECESSARY CUTTING AND ROUGH PATCHING INCLUDING FINISH PAINTING AND FINISH PATCHING. THIS CONTRACTOR SHALL PROVIDE CONTROLS AND CONTROL WIRING/TUBING POWER WIRING AS NECESSARY TO COMPLETE THE SEQUENCES OF OPERATION & ALL NECESSARY INTERCONNECTING CONTROL WIRING FOR MECHANICAL EQUIPMENT.
23. SUBMIT SHOP DRAWINGS ON ALL MECHANICAL EQUIPMENT, PIPING AND DUCTWORK.

DEFINITIONS

1. FOLLOWING DEFINITION OF TERMS AND EXPRESSIONS ARE USED IN THIS SECTION.
   - A. "PROVIDE" SHALL MEAN "FURNISH AND INSTALL" UNLESS OTHERWISE INDICATED.
   - B. "HEREIN" SHALL MEAN THE CONTENTS OF A PARTICULAR SECTION WHERE THIS TERM APPEARS.
   - C. "INDICATED" SHALL MEAN "INDICATED ON CONTRACT DRAWINGS."
   - D. FINISHED SPACES: SPACES OTHER THAN MECHANICAL AND ELECTRICAL EQUIPMENT ROOMS, FURRED SPACES, PIPE AND DUCT SHAFTS, UNHEATED SPACES IMMEDIATELY BELOW ROOF, SPACES ABOVE CEILINGS, UNEXCAVATED SPACES, CRAWL SPACES AND TUNNELS.
   - E. EXPOSED, INTERIOR INSTALLATIONS: EXPOSED TO VIEW INDOORS. EXAMPLES INCLUDE FINISHED OCCUPIED SPACES AND MECHANICAL EQUIPMENT ROOMS.
   - F. EXPOSED, EXTERIOR INSTALLATIONS: EXPOSED TO VIEW OUTDOORS, OR SUBJECT TO OUTDOOR AMBIENT TEMPERATURES AND WEATHER CONDITIONS. EXAMPLES INCLUDE ROOFTOP LOCATIONS.
   - G. CONCEALED, INTERIOR INSTALLATIONS: CONCEALED FROM VIEW AND PROTECTED FROM PHYSICAL CONTACT BY BUILDING OCCUPANTS. EXAMPLES INCLUDE ABOVE CEILINGS AND IN DUCT SHAFTS.
   - H. CONCEALED, EXTERIOR INSTALLATIONS: CONCEALED FROM VIEW AND PROTECTED FROM WEATHER CONDITIONS AND PHYSICAL CONTACT BY BUILDING OCCUPANTS, BUT SUBJECT TO OUTDOOR AMBIENT TEMPERATURES. EXAMPLES INCLUDE INSTALLATIONS WITHIN UNHEATED SHELTERS.

SCHEDULE OF WORK

THE CONTRACTOR SHALL SCHEDULE ALL OF HIS WORK TO CONFORM TO THE JOB PROGRESS SCHEDULE.

PREMIUM TIME WORK

WORK AS DIRECTED BY THE OWNER AT PREBID MEETING SHALL BE PERFORMED AT NIGHT OR WEEKENDS OTHER THAN HOLIDAY WEEKENDS, AS DIRECTED AND COORDINATED WITH THE CONSTRUCTION MANAGER AND THE OWNERS AND FACILITY ENGINEERING OPERATIONS.

INTERFERENCE WITH THE OWNER'S NORMAL OPERATION

A. ALL WORK TO BE PERFORMED IN SUCH A MANNER AS NOT TO INTERFERE WITH THE NORMAL WORK OPERATIONS IN ADJACENT SPACES OR BUILDINGS.

B. IN NO WAY SHALL THE CONTRACTOR:
1. BLOCK OR RESTRICT THE MEANS OF EGRESS FOR ADJACENT SPACES.
2. DECREASE ANY FIRE RATING OF WALLS, PARTITIONS, CEILINGS, DOORS OR COMBINATION THEREOF OF ADJACENT SPACES OR OF MEANS OF EGRESS.
3. INTERRUPT SAFETY SYSTEMS OR IN ANY WAY ADVERSELY AFFECT THE SAFETY OF PEOPLE OR MATERIALS IN ADJACENT SPACES.

C. THE CONTRACTOR SHALL PROVIDE DUST PROOF TEMPORARY PARTITIONS AND ANY CONTAINMENT MEASURE REQUIRED TO PREVENT DIRT, DUST OR FUMES FROM REACHING ADJACENT WORK SPACES OR EQUIPMENT.

D. ALL PERSONNEL TRAFFIC AND MATERIAL DELIVERY SHALL BE ROUTED SO AS TO ABSOLUTELY MINIMIZE TRAVEL THROUGH ADJACENT WORK AREA.

E. COORDINATE WITH THE CLIENT PRIOR TO THE SHUTDOWN OF EXISTING AIR CONDITIONING SYSTEMS FOR MODIFICATIONS IF REQUIRED SERVICING THE NEW RENOVATED AREAS.

VISIT TO SITE

A. BEFORE SUBMITTING PROPOSAL, BIDDERS SHALL VISIT AND EXAMINE CAREFULLY THE AREAS AFFECTED BY THIS WORK TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND WITH THE DIFFICULTIES THAT WILL ATTEND THE EXECUTION OF THIS WORK. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE, LATER CLAIMS WILL NOT BE RECOGNIZED FOR EXTRA LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN HAS SUCH EXAMINATION BEEN MADE.

PERMITS

A. OBTAIN ALL PERMITS REQUIRED FOR THE INSTALLATION OF THE WORK AND PAY ALL FEES IN CONNECTION THEREWITH.

B. PROVIDE INSURANCE AND BONDING AS REQUIRED BY THE BUILDING OWNER.

CODES AND STANDARDS

A. THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CITY, STATE OF NEW YORK AND LOCAL CODES.

B. INTERNATIONAL MECHANICAL CODE 2024.

CLEAN UP

A. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE GENERAL CLEAN UP OF ALL AREAS AFFECTED BY THE RUBBISH AND ACCUMULATIVE MATERIAL SHALL BE REMOVED FROM THE PREMISES AND THE WORK IN CONTRACT. ALL PREMISES LEFT "BROOM CLEAN" UPON COMPLETION.

DRAWINGS

A. EXCEPT WHERE DIMENSIONS ARE SHOWN, THE DRAWINGS ARE DIAGRAMMATIC. EXACT LOCATIONS OF FIXTURES, APPARATUS, DUCTWORK AND PIPING SHALL BE DETERMINED BY DIMENSIONS ON THE SITE.

JOB CONDITIONS

A. THE DRAWINGS INDICATE THE LOCATIONS OF APPARATUS, FIXTURES, AND PIPING SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE. IF BEFORE THE INSTALLATION IT IS FOUND NECESSARY TO CHANGE THE LOCATION TO ACCOMMODATE CONDITIONS NO ADDITIONAL COST TO THE OWNER, AND AS APPROVED AT THE BUILDING, SUCH CHANGES SHALL BE MADE AT BY THE ENGINEER.

B. DUCTWORK OR PIPING SHALL NOT BE RUN WITHIN 42" OF SWITCHBOARDS, PANEL BOARDS OR MOTOR CONTROL CENTERS.

SHOP DRAWINGS

A. ALL SUBMITTALS SHALL BEAR A STAMP OR NOTATION INDICATING THAT THE CONTRACTOR HAS REVIEWED AND APPROVED THE SUBMITTALS.

B. ALL SUBMITTALS SHALL BEAR SUFFICIENT NOTATIONS TO CLEARLY INDICATE THE SPECIFIC MAKE, MODEL NUMBER, ACCESSORIES, OPTIONS AND REFERENCE SPECIFICATION PARAGRAPH. VIBRATION ISOLATORS SHALL INCLUDE OPERATING WEIGHT AND LOAD DISTRIBUTION AT EACH MOUNTING POINT.

C. ALL SUBMITTALS INDICATE COMPLETE COMPLIANCE WITH ALL PERFORMANCE AND SPECIFICATION REQUIREMENTS AS HEREIN SPECIFIED AND SHOWN ON THE DRAWINGS OR SHALL SPECIFICALLY LIST THE EXCEPTIONS. THE CONTRACTOR AGREES THAT FAILURE OF MANUFACTURER'S SUBMITTAL TO CONFORM TO THE ABOVE WILL RESULT IN A MANUFACTURER'S DISQUALIFICATION ON THIS PROJECT.

RECORD DRAWING

A. RECORD CAD DRAWINGS: IMMEDIATELY BEFORE INSPECTION FOR CERTIFICATE OF SUBSTANTIAL COMPLETION, REVIEW MARKED-UP RECORD PRINTS WITH ENGINEER AND GENERAL CONTRACTOR OR CONSTRUCTION MANAGER. WHEN AUTHORIZED, PREPARE A FULL SET OF CORRECTED CAD DRAWINGS OF THE CONTRACT DRAWINGS, AS FOLLOWS:
1. FORMAT: SAME CAD PROGRAM, VERSION, AND OPERATING SYSTEM AS THE ORIGINAL CONTRACT DRAWINGS.
2. FORMAT: DWG. VERSION AUTO CAD 2016, OPERATING IN MICROSOFT WINDOWS OPERATING SYSTEM.
3. INCORPORATE CHANGES AND ADDITIONAL INFORMATION PREVIOUSLY MARKED ON RECORD PRINTS. DELETE, REDRAW, AND ADD DETAILS AND NOTATIONS WHERE APPLICABLE.
4. REFER INSTANCES OF UNCERTAINTY TO ENGINEER FOR RESOLUTION.

B. NEWLY PREPARED RECORD DRAWINGS: PREPARE NEW DRAWINGS INSTEAD OF PREPARING RECORD DRAWINGS WHERE ARCHITECT DETERMINES THAT NEITHER THE ORIGINAL CONTRACT DRAWINGS NOR SHOP DRAWINGS ARE SUITABLE TO SHOW ACTUAL INSTALLATION.
1. NEW DRAWINGS MAY BE REQUIRED WHEN A CHANGE ORDER IS ISSUED AS A RESULT OF ACCEPTING AN ALTERNATE, SUBSTITUTION, OR MODIFICATION.
2. CONSULT CONTRACTOR FOR PROPER SCALE AND SCOPE OF DETAILING AND NOTATIONS REQUIRED TO RECORD ACTUAL PHYSICAL INSTALLATION AND ITS RELATION TO OTHER CONSTRUCTION. INTEGRATE NEWLY PREPARED RECORD DRAWINGS INTO RECORD DRAWING SETS TO COMPLY WITH PROCEDURES FOR FORMATTING, ORGANIZING, COPYING, BINDING, AND SUBMITTING.

HVAC COMMISSIONING:

FURNISH LABOR AND MATERIALS TO ACCOMPLISH HVAC COMMISSIONING. IF THE CONTRACTOR CANNOT MEET THESE REQUIREMENTS, THEN THE CONTRACTOR SHALL EMPLOY THE SERVICES OF AN INDEPENDENT COMMISSIONING EXPERT.

PURPOSE - VERIFY OPERATION AND FUNCTIONAL PERFORMANCE OF HVAC SYSTEMS FOR COMPLIANCE OF INTENT, DOCUMENT HVAC TEST INSPECTIONS, VERIFY THE APPLICATION OF O&M MANUALS, AS-BUILTS, SPARE PARTS AND SPECIAL TOOLS LISTINGS, COORDINATE AND DIRECT TRAINING TO PERSONNEL FOR O&M FOR HVAC SYSTEMS.

COMMISSIONING TEAM - REPRESENTATIVE OF EACH OF THE FOLLOWING CONTRACT-ORS: MECHANICAL CONTRACTOR, CONTROLS, SHEETMETAL, ELECTRICAL, EQUIPMENT VENDOR, TAB AND OWNER'S REPRESENTATIVE.

COMMISSIONING PLAN: PER ASHRAE GUIDELINE 1. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING PHASES:
- PHASE 1 - SYSTEM READINESS AND STARTUP
- PHASE 2 - INITIAL OPERATION
- PHASE 3 - FUNCTIONAL PERFORMANCE VERIFICATION
- PHASE 4 - DEMONSTRATION AND INSTRUCTION

THE COMMISSIONING SHALL ENCOMPASS THE FOLLOWING SYSTEMS - NEW FAN COIL UNITS AND OUTSIDE AIR SUPPLY FANS, CONTROLS AND MOTORIZED DAMPERS.

ACCEPTANCE TESTING:

1. AN ACCEPTANCE TEST FOR THE HVAC SYSTEM SHALL BE PERFORMED BY THE CONTRACTOR IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE UPON COMPLETION OF THE SUCCESSFUL TEST, THE CONTRACTOR SHALL SO CERTIFY IN WRITING TO THE OWNER AND CONSTRUCTION MANAGER.
2. THE ACCEPTANCE TEST SHALL BE PERFORMED TO DETERMINE THAT THE PROTECTIVE MEASURES REQUIRED AS OUTLINED IN NFPA-90A AND THE SEQUENCE OF OPERATION, ALL CONTROLS AND EQUIPMENT SHALL BE MODULATED THROUGHOUT THEIR ENTIRE RANGES AND ADJUSTMENTS SHALL BE MADE FOR OPTIMUM PERFORMANCE.

TESTING, ADJUSTING, BALANCING

AIR TESTING AND BALANCING

1. THE WORK INCLUDED UNDER THIS SECTION OF SPECIFICATIONS ALSO CONSISTS OF THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT AND SERVICE NECESSARY TO PERFORM AIR BALANCING FOR THE HVAC WORK ON AIR & WATER DISTRIBUTION SYSTEMS AS SHOWN ON THE DRAWINGS AND AS CALLED FOR IN THESE SPECIFICATIONS AND THE SEQUENCE OF CONTROLS.
2. THE BALANCING WORK SHALL INCLUDE, BUT NOT LIMITED TO THE FOLLOWING:
   - A. THE SETTING AND ADJUSTING OF ALL EXISTING AND NEW BALANCE DEVICE TO ACHIEVE PROPER WATER FLOW IN ALL PARTS OF THE WATER AND AIR SYSTEM
   - B. THE INSPECTION OF THE FUNCTION AND OPERATION OF ALL ATC CONTROLS TO INSURE PROPER OPERATION AND CONTROL CYCLES.
   - C. SUBMITTING A REPORT ON EACH PHASE OF THE WORK. TESTING AND BALANCING OF ALL DUCT MAINS, RUNOUTS, DIFFUSERS, RETURN AIR FANS, OUTSIDE AIR, RETURN AIR, RELIEF AIR.
3. THE CONTRACTOR SHALL PROCURE THE SERVICES OF AN INDEPENDENT AIR AND WATER BALANCING TEST AGENCY WHO SHALL NOT HAVE ANY AFFILIATION WITH CONSTRUCTION CONTRACTORS, EQUIPMENT SALES OR DESIGN ENGINEERING FIRMS. THE AGENCY SHALL BE A CERTIFIED MEMBER OF THE ASSOCIATED NEBB, AABC OR TABB.
4. PROVIDE TEST AND BALANCE REPORTS. SUBMIT FOUR COPIES. FORMS SHALL BE IN AABC, NEBB OR TABB STANDARD FORMS.
5. BEFORE FINAL ACCEPTANCE OF THE HVAC SYSTEM, THE CONTRACTOR SHALL TEST THE HVAC SYSTEMS UNDER NORMAL CONDITIONS FOR TWO 8-HOUR DAYS OR LONGER WHEN SO DIRECTED TO DETERMINE THAT THEY FULLFIL REQUIREMENTS OF PLANS, SPECIFICATIONS AND THAT THEY OPERATE SATISFACTORY.
6. CONTRACTOR SHALL OPERATE WITH THE TEMPERATURE CONTROL MANUFACTURER TO INTEGRATE THE CONTROL SYSTEM WITH THE HVAC SYSTEM.
7. COOLING SYSTEMS OPERATING TEST SHALL BE MADE DURING THE INITIAL COOLING SEASON.
8. ADJUST ALL AIR DUCTS TO DESIGN CFM. AIR QUANTITIES SHALL BE ADJUSTED BY VOLUME OR SPLITTER DAMPERS. DAMPERS AND OTHER BALANCING DEVICES SHALL HAVE THEIR ADJUSTED POSITIONS MARKED IN AN INCONSPICUOUS PERMANENT MANNER.
9. AIR BALANCING: ADJUST ALL DUCTS TO THE PROPER DESIGN CFM. AIR QUANTITIES SHALL BE ADJUSTED BY VOLUME OR SPLITTER DAMPERS. TEST AND ADJUST EACH FAN TO WITHIN PLUS OR MINUS 10% OF DESIGN CFM REQUIREMENTS BUT TOTAL SHALL NOT BE LESS THAN INDICATED.
10. BALANCE REPORTS: PROVIDE A COMPLETE TEST AND BALANCE REPORT IDENTIFYING EACH, FAN AND COIL. TEST AND BALANCE REPORTS SHALL CONTAIN CFM'S, ENTERING AND LEAVING AIR TEMPERATURES, PRESSURE DROPS AND STATIC PRESSURES.
11. QUALIFICATIONS: BALANCING CONTRACTOR SHALL BE EITHER "NEBB" OR "AABC" CERTIFIED. ALL REPORTS SHALL BE IN NEBB OR AABC FORMAT.
13. CHECK ALL AIR VENTS AT HIGH POINTS ON WATER SYSTEMS AND DETERMINE ALL ARE INSTALLED AND OPERATING FREELY
14. SET ALL TEMPERATURE CONTROLS SO COILS ARE CALLING FOR FULL COOLING.
15. COMPLETE AIR BALANCE MUST HAVE BEEN ACCOMPLISHED BEFORE ACTUAL WATER BALANCE BEGINS.
16. CLEAN AND FLUSH NEW PIPE.

WATER TESTING AND BALANCING

A. PREPARATION: PREPARE WATER SYSTEMS IN THE FOLLOWING MANNER:
1. WATER BALANCING: OPEN ALL VALVES TO FULL OPEN POSITION.
2. ASSURE THAT ALL STRAINERS HAVE BEEN CLEANED.
3. EXAMINE WATER IN SYSTEM. IF DIRTY OR UNTREATED, DRAIN SYSTEM, AND REFILL WITH CLEAN TREATED WATER.
4. CHECK PUMP ROTATION AND CORRECT IF NECESSARY.
5. CHECK EXPANSION TANKS TO DETERMINE THAT THEY ARE NOT AIR-BOUND OR WATER-BOUND AND THAT SYSTEM IS COMPLETELY FULL OF WATER.
6. CHECK ALL AIR VENTS AT HIGH POINTS ON WATER SYSTEMS AND DETERMINE ALL ARE INSTALLED AND OPERATING FREELY.
7. SET ALL TEMPERATURE CONTROLS SO COILS ARE CALLING FOR FULL COOLING. THIS SHOULD CLOSE ALL AUTOMATIC BYPASS VALVES AT COIL AND CONVERTERS. SAME PROCEDURE WHEN BALANCING HOT WATER COILS, SET ON FULL CALL FOR HEATING.
8. CHECK OPERATION OF AUTOMATIC BYPASS VALVE.
9. COMPLETE AIR BALANCE MUST HAVE BEEN ACCOMPLISHED BEFORE ACTUAL WATER BALANCE BEGINS.
10. AUTOMATICALLY OPERATED VALVES SHALL OPERATE AS SPECIFIED OR INDICATED. TESTING AGENCY SHALL CHECK ALL CONTROLS THAT REGULATE HYDRONIC FLOW AND PRESSURE FOR PROPER CALIBRATION AND LIST CONTROLS REQUIRING ADJUSTMENT.

B. ADJUSTMENT: PROCEED AS FOLLOWS
1. SET PUMPS TO PROPER GALLONS PER MINUTE DELIVERY.
2. ADJUST WATER FLOW.
3. CHECK LEAVING WATER TEMPERATURES AND RETURN WATER TEMPERATURES. RESET TO CORRECT DESIGN TEMPERATURE
4. CHECK WATER TEMPERATURE AT INLET SIDE OF COILS. RECORD RISE OR DROP OF TEMPERATURES FROM SOURCES
5. PROCEED TO BALANCE EACH COIL.

C. READJUSTMENT: PROCEED AS FOLLOWS
1. AFTER ADJUSTMENT TO COILS ARE MADE, RECHECK SETTINGS AT PUMP AND READJUST IF REQUIRED.
2. INSTALL PRESSURE GAGES ON COIL, READ PRESSURE DROP THROUGH COIL AT SET FLOW RATE ON CALL FOR FULL COOLING AND FULL HEATING. SET PRESSURE DROP ACROSS BYPASS VALVE TO MATCH COIL FULL FLOW PRESSURE DROP. THIS PREVENTS UNBALANCED FLOW CONDITIONS WHEN COILS ARE ON FULL BYPASS.
3. CHECK RECORD AND INCLUDE IN THE TEST REPORT THE FOLLOWING ITEMS.
   - 1) AFTER ADJUSTMENTS TO COILS ARE MADE, RECHECK SETTINGS AT PUMP AND READJUST IF REQUIRED.
   - 2) INSTALL PRESSURE GAGES ON COIL, READ PRESSURE DROP THROUGH COIL AT SET FLOW RATE ON CALL FOR FULL COOLING AND FULL HEATING. SET PRESSURE DROP ACROSS BYPASS VALVE TO MATCH COIL FULL FLOW PRESSURE DROP. THIS PREVENTS UNBALANCED FLOW CONDITIONS WHEN COILS ARE ON FULL BYPASS.
   - 3) CHECK RECORD AND INCLUDE IN THE TEST REPORT THE FOLLOWING ITEMS.
     - a. INLET WATER AND AIR TEMPERATURES (DRY BULB AND WET BULB) AT EACH COIL.
     - b. LEAVING WATER AND AIR TEMPERATURES (DRY BULB AND WET BULB) AT EACH COIL.
     - c. GPM AND PRESSURE DROP AT EACH COIL, HEAT EXCHANGER, BOILER, CHILLER AND OTHER SIMILAR DEVICES.
     - d. PRESSURE DROP ACROSS EACH COIL BYPASS WHERE OBTAINABLE.
     - e. OPERATING SUCTION AND DISCHARGE PRESSURES AND FINAL T.D.H. FOR EACH PUMP.
   - 4) LIST ALL MECHANICAL SPECIFICATIONS OF PUMPS; PUMP HEAD, GPM AND HORSEPOWER.
   - 5) LIST RATED AND ACTUAL RUNNING AMPERAGE OF PUMP MOTOR.
   - 6) CHECK WATER METERING DEVICE READINGS.

ELECTRICAL

1. POWER WIRING SHALL BE DEFINED AS ALL WIRING FROM THE POWER SOURCE PANELBOARDS TO THE DISCONNECT SWITCH AND/OR STARTER INCLUDING FINAL CONNECTIONS TO THE EQUIPMENT. THIS WORK SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
2. CONTROL WIRING SHALL BE DEFINED AS LINE VOLTAGE OR LOW VOLTAGE, INTERNAL OR EXTERNAL TO PROVIDE FOR THE OPERATION OF EQUIPMENT.
3. THIS CONTRACTOR SHALL FURNISH ALL MOTORS, MOUNTS, VFD'S, MOTOR STARTERS AND DISCONNECTS.
4. THIS CONTRACTOR SHALL PROVIDE ALL CONTROLS & CONTROL DEVICES, MOUNTINGS & OTHER ELECTRICAL DEVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THE CONTROL SYSTEM WITH CONTROL INTERLOCKS BETWEEN MECHANICAL EQUIPMENT.

DUCTWORK:

1. GENERAL: HVAC SUPPLY, AND EXHAUST SYSTEM DUCTWORK SHALL BE G90 GALVANIZED STEEL CONSTRUCTED AND INSTALLED IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION, INC. (SMACNA). "HVAC DUCT CONSTRUCTION STANDARDS" LATEST EDITION.
2. INSULATED FLEXIBLE DUCTS: FLEXIBLE DUCT WRAPPED WITH FLEXIBLE GLASS FIBER INSULATION, ENCLOSED BY SEAMLESS ALUMINUM PIGMENTED PLASTIC VAPOR BARRIER JACKET, MAXIMUM 0.23 K VALUE AT 75 DEGREES F. 10 YEAR PARTS AND LABOR WARRANTY AGAINST BLOW-OUT. THERMAFLEX G-KM. PROVIDE INSULATED THERMAFLEX FLEXFLOW ELBOWS AT DIFFUSER LOCATIONS.
3. FASTENERS - RIVETS, BOLTS OR SHEET METAL SCREWS.
4. SEALANT - WATER RESISTANT, FIRE RESISTIVE, COMPATIBLE WITH MATING MATERIALS, HEAVY MASTIC, WATER-BASED, 0/0 SMOKE DEVELOPED/FLAME SPREAD PER ASTM E84. DUCTMATE PRO SEAL.
5. HANGER RODS - STEEL, THREADED BOTH ENDS, ONE END OR CONTINUOUSLY THREADED.
6. CONSTRUCT T'S, BENDS AND ELBOWS WITH RADIUS OF NOT LESS THAN 1-1/2 TIMES WIDTH OF DUCT ON INSIDE RADIUS. WHERE NOT POSSIBLE, USE TURNING VANES.
7. INCREASE DUCT SIZES GRADUALLY, NOT EXCEEDING 15 DEG DIVERGENCE WHEREVER POSSIBLE. DIVERGENCE UPSTREAM OF EQUIPMENT SHALL NOT EXCEED 30 DEG, CONVERGENCE DOWNSTREAM SHALL NOT EXCEED 45 DEG.
8. PROVIDE EASEMENTS WHERE LOW PRESSURE DUCTWORK CONFLICTS WITH PIPING AND STRUCTURE. WHERE EASEMENTS EXCEED 10% DUCT AREA, SPLIT INTO TWO DUCTS MAINTAINING ORIGINAL DUCT AREA.
9. CONNECT FLEXIBLE DUCTS TO METAL DUCTS WITH DRAWBANDS.
10. ALL LOW PRESSURE DUCT LONGITUDINAL JOINTS SHALL BE OF THE PITTSBURGH LOCK TYPE.
11. USE BUCKLEY ATMD FITTINGS ON TAPS TO AIR INLETS AND OUTLETS. FITTINGS TO HAVE NEOPRENE GASKET, INTEGRAL VOLUME DAMPER AND EXTENDED NECK/ QUADRANT DAMPER. SECURE WITH MULTIPLE SHEET METAL SCREWS.
12. FOR MEDIUM PRESSURE DUCTWORK, USE DUCTMATE JOINTS ON SUPPLY AND EXHAUST.
13. ROUND AND OVAL DUCTWORK MAY BE SUBSTITUTED FOR RECTANGULAR. AIR VELOCITY MAY NOT BE INCREASED. ACCEPTABLE MANUFACTURER IS UNITED MCGILL. CLEARANCE MUST BE VERIFIED AND CONSIDERED WHERE CONFLICTS OCCUR.
14. USE BUCKLEY M-BM FITTINGS ON TAPS TO CV AND VAV BOXES. FITTINGS TO HAVE NEOPRENE GASKET AND MINI-BELLMOUTH CONFIGURATION. SECURE WITH MULTIPLE SHEET METAL SCREWS.
15. THE CONTRACTOR SHALL INCLUDE ALLOWANCES FOR STRUCTURAL, PIPING AND CONDUIT INTERFERENCE'S NOT EVIDENT IN THE BID PHASE OR INDICATED ON THE DRAWINGS. INTERFERENCE'S ARE TO BE WORKED OUT DURING THE SHOP DRAWING PHASE.
16. PROVIDE OFFSETS AT INTERFERENCE LOCATIONS AND/OR WHERE CHANGES IN CEILING HEIGHTS REQUIRE SUCH OFFSETS. OFFSETS SHALL BE SMOOTH AS POSSIBLE AND WITHOUT THE NEED FOR HARD ELBOWS. OFFSETS SHALL MINIMIZE THE ELBOW/OFFSET ANGLE REQUIRED WHICH SHALL RESULT IN MINIMAL STATIC PRESSURE GRADIENTS INTO THE SYSTEM.
17. PROVIDE OPENINGS IN DUCT SYSTEMS TO ACCOMMODATE THERMOMETERS, SENSORS, CONTROLLERS AND PITOT TUBES.
18. LOCATE DUCTS WITH SUFFICIENT SPACE AROUND EQUIPMENT TO ALLOW NORMAL OPERATING AND MAINTENANCE ACTIVITIES.
19. DURING CONSTRUCTION, PROVIDE TEMPORARY CLOSURES OF METAL OR TAPED POLYETHYLENE ON OPEN DUCTWORK TO PREVENT CONSTRUCTION DUST FROM ENTERING DUCTWORK SYSTEMS.

LOW PRESSURE DUCTWORK

1. FABRICATE AND SUPPORT IN ACCORDANCE WITH SMACNA LOW PRESSURE DUCT CONSTRUCTION STANDARDS AND ASHRAE HANDBOOKS, EXCEPT AS INDICATED. PROVIDE DUCT MATERIAL, GAGES, REINFORCING, AND SEALING FOR OPERATING PRESSURES INDICATED.
2. SIZE ROUND AND OVAL DUCTS INSTALLED IN PLACE OF RECTANGULAR DUCTS IN ACCORDANCE WITH ASHRAE TABLE OF EQUIVALENT RECTANGULAR, OVAL AND ROUND DUCTS. NO VARIATION OF DUCT CONFIGURATION OF SIZES PERMITTED EXCEPT BY WRITTEN PERMISSION.
3. CONSTRUCT T'S, BENDS, AND ELBOWS WITH RADIUS OF NOT LESS THAN 1-1/2 TIMES WIDTH OF DUCT ON CENTERLINE. WHERE NOT POSSIBLE AND WHERE RECTANGULAR ELBOWS ARE USED, PROVIDE AIRFOIL TURNING VANES, BY AERO DYNE MODEL HEP.
4. INCREASE DUCT SIZES GRADUALLY, NOT EXCEEDING 15 DEGREES DIVERGENCE WHEREVER POSSIBLE. DIVERGENCE UPSTREAM OF EQUIPMENT SHALL NOT EXCEED 30 DEGREES CONVERGENCE DOWNSTREAM SHALL NOT EXCEED 45 DEGREES.
5. PROVIDE EASEMENTS WHERE LOW PRESSURE DUCTWORK CONFLICTS WITH PIPING AND STRUCTURE. WHERE EASEMENTS EXCEED 10 PERCENT DUCT AREA, SPLIT INTO TWO DUCT MAINTAINING ORIGINAL DUCT AREA.
6. CONNECT FLEXIBLE DUCTS TO METAL DUCTS WITH DRAW BANDS.
7. USE DOUBLE NUTS AND LOCK WASHERS ON THREADED ROD SUPPORTS.
8. ALL LONGITUDINAL JOINTS SHALL BE OF THE PITTSBURGH LOCK TYPE. USE BUCKLEY ATMD FITTINGS WITH EXTENDED NECK QUADRANT LOCK. SECURE WITH SHEET METAL SCREWS.
9. ROUND AND OVAL DUCTWORK MAY BE USED IN LIEU OF RECTANGULAR. AIR VELOCITY MAY NOT BE INCREASED. ACCEPTABLE MANUFACTURER IS UNITED SHEET METAL. CLEARANCES MUST BE VERIFIED AND CONSIDERED WHERE CONFLICTS OCCUR.

DUCTWORK MATERIAL SCHEDULE

AIR SYSTEM	MATERIAL
SUPPLY, RETURN, EXHAUST	G90 STEEL

DUCTWORK CLASSIFICATION:

FC UNIT TO AIR OUTLET - LOW PRESSURE, 2 INCH CLASS A SEAL

INSTALLATION

1. THE CONTRACTOR SHALL INCLUDE ALLOWANCES FOR STRUCTURAL, PIPING, AND CONDUIT INTERFERENCE'S NOT EVIDENT DURING THE BID PHASE OR INDICATED ON THE DRAWINGS. INTERFERENCE'S ARE TO BE WORKED OUT DURING THE SHOP DRAWING PHASE.
2. PROVIDE OFFSETS AT INTERFERENCE LOCATIONS AND/OR WHERE CHANGES IN CEILING HEIGHTS REQUIRE SUCH OFFSETS, OFFSETS SHALL BE SMOOTH AS POSSIBLE AND WITHOUT THE NEED FOR HARD ELBOWS, OFFSETS SHALL MINIMIZE THE ELBOW/OFFSET ANGLE REQUIRED WHICH SHALL RESULT IN MINIMAL STATIC PRESSURE GRADIENTS INTO THE SYSTEM.
3. PROVIDE OPENINGS IN DUCTWORK WHERE REQUIRED TO ACCOMMODATE THERMOMETERS AND CONTROLLERS. PROVIDE PITOT TUBE OPENINGS WHERE REQUIRED FOR TESTING OF SYSTEMS, COMPLETE WITH METAL CAN WITH SPRING DEVICE OR SCREW TO ENSURE AGAINST AIR LEAKAGE. WHERE OPENINGS ARE PROVIDED IN INSULATED DUCTWORK, INSTALL INSULATION MATERIAL INSIDE A METAL RING.
4. LOCATE DUCTS WITH SUFFICIENT SPACE AROUND EQUIPMENT TO ALLOW NORMAL OPERATING AND MAINTENANCE ACTIVITIES.
5. DURING CONSTRUCTION PROVIDE TEMPORARY CLOSURES OF METAL OR TAPED POLYETHYLENE ON OPEN DUCTWORK TO PREVENT CONSTRUCTION DUST FROM ENTERING DUCTWORK SYSTEM.
6. INSTALL BUCKLEY FITTINGS PER MANUFACTURER'S INSTRUCTIONS. SECURE WITH SHEET METAL SCREWS.

AIR TURNING DEVICES

1. MULTI-BLADE DEVICE WITH BLADES ALIGNED IN SHORT DIMENSION, GALVANIZED STEEL, LOCKED BLADES AND MOUNTING STRAPS. USE ALUMINUM FOR MOISTURE LADEN AIR DUCTWORK SYSTEMS. AERO DYNE MODEL HEP.

FLEXIBLE DUCT CONNECTIONS

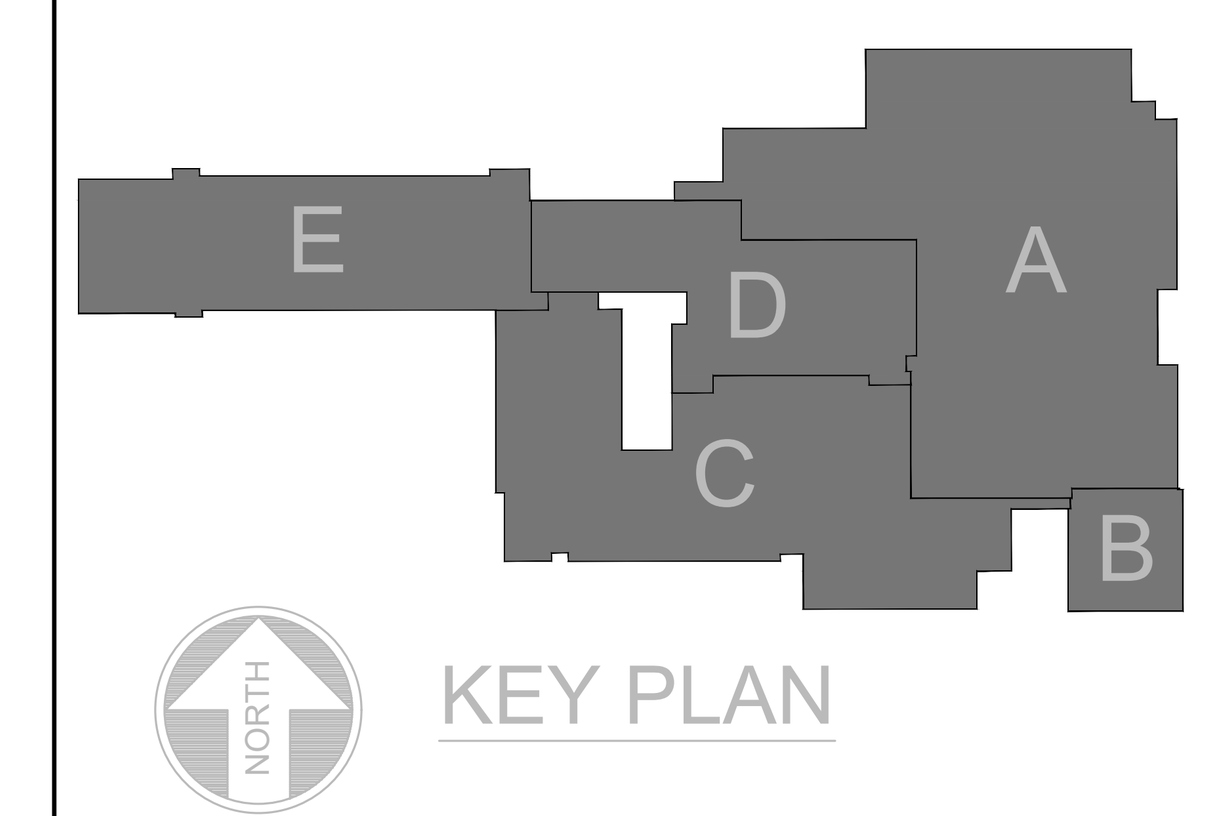
1. FABRICATE IN ACCORDANCE WITH SMACNA CONSTRUCTION STANDARDS.
2. UL LISTED FIRE-RETARDANT NEOPRENE COATED WOVEN GLASS FIBER FABRIC TO NFPA 90A MINIMUM DENSITY 36 OZ PER SQ YD APPROX. 3" WIDE, CRIMPED INTO METAL NOSING.

DUCTWORK INSULATION

1. GENERAL: INSULATE NEW SUPPLY, RETURN AIR DUCTWORK WITH 1\" FIBERGLASS INSULATION W/FRK VAPOR BARRIER WRAP, 1.50 LB. DENSITY MINIMUM AND "K" VALUE OF 0.25 @75° F. INSULATION SHALL BE INSTALLED BY A QUALIFIED INSULATION CONTRACTOR.
2. MANUFACTURER'S: MANVILLE, OWENS CORNING, CERTAINTEED.
3. DUCTWORK INSULATION PERFORMANCE SHALL COMPLY WITH THE PENNSYLVANIA STATE MECHANICAL CODE.

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:
MECHANICAL DRAWING SPECIFICATIONS

DRAWN BY:	CHECKED BY:
F.R.G.	A.J.L.
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:
M-400

CAD FILE: 5005-M-400-PH2.DWG PLOT DATE: 10/12/2026

MECHANICAL SPECIFICATIONS

VOLUME CONTROL DAMPERS

1. CONTROL DAMPERS: PROVIDE DAMPERS WITH PARALLEL BLADES FOR 2-POSITION CONTROL, OR OPPOSED BLADES FOR MODULATING CONTROL. CONSTRUCT BLADES OF 16 GAUGE STEEL, PROVIDE HEAVY-DUTY MOLDED SELF-LUBRICATING NYLON BEARINGS, 1/2 INCH HEX STEEL AXLES SPACED ON 9" CENTERS. CONSTRUCT FRAME OF .5 INCH X 1 INCH X 16 GAUGE STEEL CHANNEL. FINISH TO BE GALVANIZED. FOR DAMPERS LOCATED IN DUCTWORK WITH AIR VELOCITIES GREATER THAN 1500 FPM, DAMPERS SHALL HAVE AIRFOIL BLADES. PROVIDE FRAMES TO ACCEPT DUCTMATE JOINTS WHERE APPLICABLE TRANSVERSE JOINTS ARE PROVIDED.

CEILING SUPPLY DIFFUSERS

1. CEILING DIFFUSERS (LAY-IN) SHALL BE STEEL WITH DIRECTIONAL TYPE DIFFUSION PATTERN AS INDICATED, LAY-IN PANEL TYPE, PLAQUE FACE 23-3/4" X 23-3/4" PANEL. PROVIDE SQUARE TO ROUND ADAPTER WHERE REQUIRED AND COMBINATION VOLUME CONTROLLER AND EQUALIZER. FINISH SHALL BE OFF-WHITE. PROVIDE THROW REDUCING VANES.

EXHAUST & RETURN REGISTERS

1. RETURN GRILLES (R-1) SHALL BE STREAMLINED BLADES, DEPTH OF WHICH EXCEEDS 3/4 INCH SPACING, WITH SPRING OR OTHER DEVICE TO SET BLADES, 45 DEGREE BLADES, HORIZONTAL FACE. ROTACORE DIFFUSERS SHALL HAVE FINE BLADES AND TIGHT BLADE SPACING.
2. FABRICATE 1-1/4" MARGIN FRAME WITH COUNTERSUNK SCREW MOUNTING OR LAY-IN TYPE MOUNTING.
3. FABRICATE UNITS FROM (STEEL)(ALUMINUM) EXTRUSIONS, WITH FACTORY BAKED ENAMEL OR POWDER COATED WHITE FINISH OR PRIME FINISH FOR FIELD PAINTING, REFER TO ARCHITECTURAL DRAWINGS.
4. ANEMOSTAT GC-50 AS BASIS OF DESIGN.

PART 3 EXECUTION

3.01 INSTALLATION

A. ALL PIPING INSTALLATIONS AND CONSTRUCTION SHALL COMPLY WITH ALL REQUIREMENTS OF THIS SPECIFICATION AND MEET OR EXCEED MRI MANUFACTURER'S STANDARDS AND RECOMMENDATIONS FOR CONSTRUCTION AND INSTALLATION.

B. SEAL ALL PIPE SEAMS, JOINTS, CONNECTIONS, AND PENETRATIONS.

C. KEEP PIPING TIGHT TO UNDERSIDE OF STRUCTURE. MAINTAIN AT LEAST 3 INCHES CLEAR BETWEEN PIPE AND CEILING CONSTRUCTION.

D. SECURE ALL INSULATION AND VAPOR BARRIERS ON PIPES WITH A SEPARATE DRAW BAND.

E. COORDINATE ALL ATTACHMENTS THROUGH ROOFING PENETRATION WITH ROOFING CONTRACTOR.

TESTING, ADJUSTING, BALANCING

1. AIR BALANCING: ADJUST ALL DUCTS TO THE PROPER DESIGN CFM. AIR QUANTITIES SHALL BE ADJUSTED BY VOLUME OR SPLITTER DAMPERS. TEST AND ADJUST EACH DIFFUSER, GRILLE AND FAN TO WITHIN PLUS OR MINUS 10% OF DESIGN CFM REQUIREMENTS BUT TOTAL SHALL NOT BE LESS THAN INDICATED. DIFFUSERS AND GRILLES SHALL BE ADJUSTED TO MINIMIZE DRAFTS IN ALL AREAS. BALANCE FROM HIGH VELOCITY BOX TO DIFFUSERS OF BOXES THAT WERE DISTURBED DURING CONSTRUCTION.
2. BALANCE REPORTS: PROVIDE A COMPLETE TEST AND BALANCE REPORT IDENTIFYING EACH DIFFUSER, GRILLE, FAN AND COIL. TEST AND BALANCE REPORTS SHALL CONTAIN CFM'S, GPM'S, ENTERING AND LEAVING AIR AND WATER TEMPERATURES, PRESSURE DROPS AND STATIC PRESSURES.
3. QUALIFICATIONS: BALANCING CONTRACTOR SHALL BE EITHER "NEBB" OR "AABC" CERTIFIED. ALL REPORTS SHALL BE IN NEBB OR AABC FORMAT.

CONTROLS SYSTEM

PROVIDE AN EXTENSION OF THE EXISTING CONTROL SYSTEM BY C&S OPERATIONS, INC. CONTROLS. PROVIDE NEW THERMOSTATS.

CONTROL WIRING:

THIS CONTRACTOR SHALL BE RESPONSIBLE FOR RUNNING ALL CONTROL WIRING INCLUDING INTERCONNECTING WIRING BETWEEN THE CONTROLLER, PANEL AND CONTROL DEVICE.

CONTROLS AND INSTRUMENTS

THE CONTROL SYSTEM SHALL BE ELECTRIC/ELECTRONIC, ALL WIRING SHALL BE RUN IN CONDUIT AND SHALL BE IN ACCORDANCE WITH THE STATE AND NATIONAL ELECTRIC CODE. ALL CONTROLS INCLUDING RELAYS, THERMOSTAT WIRING CONDUIT ALARMS ETC. SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR.

CONTROL CABINETS SHALL BE USED FOR MOUNTING OF ALL TIMERS, RELAY, ETC. CABINETS SHALL MEET UL 50 SPECIFICATIONS FOR LINE VOLTAGE APPLICATIONS. ALL WIRING SHALL ENTER AND EXIT THROUGH TERMINAL STRIPS. ALL COMPONENTS SHALL BE LABELED.

ALL CONTROL WIRING SHALL BE IN ACCORDANCE WITH N.E.C. AND N.F.P.A.

ALTHOUGH SUCH WORK IS NOT SPECIFICALLY INDICATED, PROVIDE ALL SUPPLEMENTARY OR MISCELLANEOUS ITEMS, APPURTENANCES AND DEVICES INCIDENTAL TO OR NECESSARY FOR A SOUND SECURE AND COMPLETE INSTALLATION. PROVIDE CONTROL WIRING BETWEEN FIELD INSTALLED CONTROLS, INDICATING DEVICES AND UNIT CONTROL PANELS.

SYSTEM SCOPE: THE HVAC CONTRACTOR SHALL FURNISH AND INSTALL A COMPLETE AUTOMATIC TEMPERATURE CONTROL (ATC) SYSTEM AS DESCRIBED HEREIN AND/OR THE DRAWING. FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND SERVICES FOR FULLY FUNCTIONAL CONTROL SYSTEM AS INDICATED, IN ACCORDANCE WITH PROVISIONS OF THE CONTRACT.

CONTROL WIRING: LOW VOLTAGE WIRING (100 VOLTS OR LESS) REQUIRED FOR TEMPERATURE CONTROL SYSTEMS.

CONDUCTORS FOR CONTROL SIGNALS: NO. 18 OR 19 AWG COPPER CONDUCTORS AS REQUIRED.

CONNECTOR MAY BE ASSEMBLED IN CABLE WITH PVC INSULATION MINIMUM OF 0.016 INCHES THICK.

CABLE OUTER SHEATHING STANDARD WITH MANUFACTURER.

LINE VOLTAGE WIRE FOR TEMPERATURE CONTROL SUITABLE FOR 600 VOLTS, 168°F TEMPERATURE WITH TYPE THW PLASTIC COVERING, MINIMUM OF NO. 18 AWG.

PLENUM CABLE SHALL BE USED IN ALL AIR PLENUMS.

COMMISSIONING: CONTROL SYSTEM TO BE SET UP AND CHECKED OUT BY FACTORY TRAINED, COMPETENT TECHNICIANS SKILLED IN THE SETTING AND ADJUSTMENT OF CONTROL EQUIPMENT USED IN THIS PROJECT, THIS TECHNICAN TO BE EXPERIENCED IN THE TYPE OF SYSTEMS ASSOCIATED WITH THE CONTROL SYSTEM.

AT TIME OF FINAL OBSERVATION, DEMONSTRATE THE SEQUENCE OF OPERATION FOR EACH SYSTEM TO ARCHITECT. PERFORM SYSTEM DEMONSTRATION AS DIRECTED BY OWNER AND ARCHITECT.

TRAINING: PROVIDE A MINIMUM OF (16) HOURS OF INSTRUCTION TO OWNER'S PERSONNEL IN THE OPERATION AND MAINTENANCE OF THE CONTROL SYSTEMS. PROVIDE TRAINING AFTER THE SYSTEM HAS BEEN INSTALLED AND CHECKED OUT.

WARRANTY: AT COMPLETION OF FINAL TEST OF INSTALLATION AND ACCEPTANCE BY OWNER, PROVIDE ANY SERVICE INCIDENTAL TO PROPER PERFORMANCE FOR A PERIOD OF ONE (1) YEAR.

EQUIPMENT SHALL BE WARRANTED FOR ONE YEAR (INCLUDING DEFECTS IN WORKMANSHIP AND MATERIAL UNDER NORMAL USE AND SERVICE). DURING WARRANTY PERIOD SUPPLIER SHALL ALSO REPLACE OR REPAIR, FREE OF CHARGE, ANY EQUIPMENT PROVED TO BE DEFECTIVE IN WORKMANSHIP OR MATERIAL.

ALTHOUGH SUCH WORK IS NOT SPECIFICALLY INDICATED, PROVIDE ALL SUPPLEMENTARY OR MISCELLANEOUS ITEMS, APPURTENANCES AND DEVICES INCIDENTAL TO OR NECESSARY FOR A SOUND SECURE AND COMPLETE INSTALLATION. PROVIDE CONTROL WIRING BETWEEN FIELD INSTALLED CONTROLS, INDICATING DEVICES AND UNIT CONTROL PANELS.

FAN COIL UNITS:

SUBMITTALS

1. PRODUCT DATA: INCLUDE MANUFACTURER'S TECHNICAL DATA FOR EACH MODEL INDICATED, INCLUDING RATED CAPACITIES OF SELECTED MODEL CLEARLY INDICATED; DIMENSIONS; REQUIRED CLEARANCES; LOCATION AND SIZE OF FIELD CONNECTIONS; SHIPPING, INSTALLED, AND OPERATING WEIGHTS; ELECTRICAL NAMEPLATE DATA; CONTROL AND POWER WIRING DIAGRAMS; FURNISHED SPECIALTIES; ACCESSORIES; AND INSTALLATION AND STARTUP INSTRUCTIONS.
2. SHOP DRAWING: DETAIL EQUIPMENT ASSEMBLIES AND INDICATE DIMENSIONS, WEIGHTS, LOADINGS, REQUIRED CLEARANCES, METHOD OF FIELD ASSEMBLY, COMPONENTS, AND LOCATION AND SIZE OF EACH FIELD CONNECTION. DETAIL MOUNTING, SECURING, AND FLASHING OF ROOF CURB TO ROOF STRUCTURE. INDICATE COORDINATING REQUIREMENTS WITH ROOF MEMBRANE SYSTEM.
   1. WIRING DIAGRAMS: DETAIL WIRING FOR POWER, SIGNAL, AND CONTROL SYSTEMS AND DIFFERENTIATE BETWEEN MANUFACTURER-INSTALLED AND FIELD-INSTALLED WIRING.
3. COMMISSIONING REPORTS: INDICATE RESULTS OF STARTUP AND TESTING COMMISSIONING REQUIREMENTS. SUBMIT COPIES OF CHECKLISTS.
4. FOR SUBSTITUTIONS, SUBMIT LAYOUT AND WITH FACTORY SERVICE CLEARANCES INDICATED.
5. NOISE CRITERIA: SUBMIT CERTIFIED NOISE CRITERIA AND DISTANCE MEASURED AT. INCLUDE SOUND ATTENUATORS WITH SUBMITTAL AND CALCULATION TO ENSURE DESIGN INTENT OF ROOM SOUND LEVELS ARE MET SATISFACTORIALY.

COORDINATION

1. COORDINATE LAYOUT AND INSTALLATION OF FAN-COIL UNITS AND SUSPENSION SYSTEM COMPONENTS WITH OTHER CONSTRUCTION THAT PENETRATES OR IS SUPPORTED BY CEILINGS, INCLUDING LIGHT FIXTURES, HVAC EQUIPMENT, FIRE-SUPPRESSION-SYSTEM COMPONENTS, AND PARTITION ASSEMBLIES. RETAIN PARAGRAPH BELOW FOR UNITS WITH OUTDOOR AIR.

WARRANTY

1. PROVIDE ONE (1) YEAR PARTS AND LABOR FROM DATE OF FINAL ACCEPTANCE.

EXTRA MATERIALS

1. FURNISH EXTRA MATERIALS DESCRIBED BELOW THAT MATCH PRODUCTS INSTALLED AND THAT ARE PACKAGED WITH PROTECTIVE COVERING FOR STORAGE AND IDENTIFIED WITH LABELS DESCRIBING CONTENTS.
   1. FURNISH ONE (1) SPARE FILTERS FOR EACH FILTER INSTALLED TO BE INSTALLED UPON FINAL ACCEPTANCE OF PROJECT.
   2. FURNISH ONE (1) SPARE FILTERS FOR EACH FILTER INSTALLED TO BE INSTALLED UPON FINAL ACCEPTANCE OF PROJECT.

MANUFACTURERS

1. ACCEPTABLE MANUFACTURERS - FAN COIL UNITS
   1. TRANE - (BASIS OF DESIGN)
   2. NAILOR
   3. DAIKIN

FAN-COIL UNITS

1. CONCEALED UNIT BASIC CONSTRUCTION
   1. THE BASIC UNIT INCLUDES THE COIL, CHASSIS, FAN(S) AND FAN CASING(S), FAN BOARD AND MOTOR(S). STEEL PARTS EXPOSED TO MOISTURE SHALL BE GALVANIZED. THE FAN BOARD ASSEMBLY SHALL INCLUDE A QUICK-DISCONNECT MOTOR PLUG. THE CHASSIS STRUCTURAL FRAME CONSTRUCTED SHALL BE OF 18 GAUGE GALVANIZED STEEL. THE UNIT SHALL BE ACOUSTICALLY INSULATED WITH CLOSED CELL INSULATION.
2. FAN
   1. THE GALVANIZED STEEL FAN WHEELS SHALL BE CENTRIFUGAL FORWARD-CURVED AND DOUBLE-WIDTH. FAN WHEELS AND HOUSINGS SHALL BE CORROSION RESISTANT. FAN HOUSINGS SHALL BE CONSTRUCTED OF FORMED SHEET METAL.
3. COIL
   1. ALL HOT WATER COILS ARE BURST TESTED AT 450 PSIG (AIR) AND LEAK TESTED AT 100 PSIG (AIR UNDER WATER). MAXIMUM MAIN COIL WORKING PRESSURE IS 300 PSIG. MAXIMUM ENTERING WATER TEMPERATURE SHALL BE 200 DEGREES F. TUBES AND U-BENDS ARE 3/8" O.D. COPPER. FINS ARE ALUMINUM AND ARE MECHANICALLY BONDED TO THE COPPER TUBES. COIL CONNECTIONS SHALL BE EXPANDED TO ACCEPT STANDARD 5/8" (16 MM) O.D. COPPER TUBING.
4. COIL AIR VENTS - AUTO
   1. THE HYDRONIC COIL SHALL INCLUDE AN AUTO AIR VENT THAT IS RATED TO 125 PSIG.
5. ELECTRONICALLY COMMUTATED MOTORS (ECM)
   1. ALL MOTORS ARE BRUSHLESS DC (BLDC) ELECTRONICALLY COMMUTATED MOTORS (ECM) FACTORY PROGRAMMED AND RUN TESTED IN ASSEMBLED UNITS. THE MOTOR CONTROLLER IS MOUNTED IN A CONTROL BOX WITH A BUILT IN INTEGRATED USER INTERFACE AND LED TACHOMETER. IF ADJUSTMENTS ARE NEEDED, MOTOR PARAMETERS CAN BE ADJUSTED THROUGH MOMENTARY CONTACT SWITCHES ACCESSIBLE WITHOUT FACTORY SERVICE PERSONNEL ON THE MOTOR CONTROL BOARD. MOTORS WILL SOFT RAMP BETWEEN SPEEDS TO LESSEN THE ACOUSTICS DUE TO SUDDEN SPEED CHANGES. MOTORS CAN BE OPERATED AT THREE SPEEDS OR AT VARIABLE SPEED WITH FACTORY SUPPLIED OR FIELD SUPPLIED CONTROLLERS. THE MOTOR WILL CHOOSE THE HIGHEST SPEED IF THERE ARE SIMULTANEOUS OR CONFLICTING SPEED REQUESTS. ALL MOTORS HAVE INTEGRAL OVERLOAD PROTECTION WITH A MAXIMUM AMBIENT OPERATING TEMPERATURE OF 104.0 F AND USE PERMANENTLY SEALED BALL BEARINGS. MOTORS CAN OPERATE AT PLUS OR MINUS 10 PERCENT OF RATED VOLTAGE ON ALL SPEED SETTINGS.
6. DELUXE PIPING PACKAGE WITH MANUAL CIRCUIT SETTER
   1. DELUXE PIPING PACKAGES WITH CIRCUIT SETTER INCLUDE A UNION, STRAINER, P/T PORT, AND SHUT-OFF BALL VALVE ON THE SUPPLY LINE. THE RETURN LINE HAS A UNION, CONTROL VALVE, AND MANUAL CIRCUIT SETTER. THREE-WAY PACKAGES HAVE A BALANCING FITTING ON THE BYPASS LINE. BALL VALVES ALLOW THE UNIT TO BE CUT OFF FOR SERVICE PURPOSES. THESE VALVES HAVE A HANDLE THAT ROTATES 90 DEGREES TO A FULLY OPEN POSITION. A MANUAL CIRCUIT SETTER ACTS AS BOTH A FLOW SETTING DEVICE AND A STOP VALVE. THE MANUAL CIRCUIT SETTER INCLUDES ¼ IN. SCHRADER PORTS IN THE VALVE BODY. THESE PORTS ARE USED TO MEASURE THE PRESSURE DROP ACROSS THE VALVE. THE PRESSURE DROP CAN BE COMPARED TO FACTORY SUPPLIED CURVES THAT RELATE THE PRESSURE DROP TO A SPECIFIC FLOW RATE. THIS VALVE ALSO HAS A MEMORY STOP THAT HELPS FIND THE CORRECT SETTING QUICKLY. ALL PIPING PACKAGES ARE BURST TESTED AT 300 PSIG (AIR) AND LEAK TESTED AT 100 PSIG (AIR UNDER WATER). THE INTERCONNECTING PIPING MAXIMUM WORKING PRESSURE IS 300 PSIG. THE MAXIMUM ENTERING FLUID TEMPERATURE IS 200.0 F FOR WATER APPLICATIONS AND 180.0 F FOR GLYCOL APPLICATIONS.
7. DIGITAL ZONE SENSOR
   1. A WALL MOUNTED ZONE SENSOR WITH DIGITAL DISPLAY SHALL BE PROVIDED WITH THE FANCOIL UNIT. THE SENSOR SHALL ALSO INCLUDE A FSS (OFF/AUTO/HIGH/MED/LOW), SETPOINT BUTTONS, ON/CANCEL BUTTONS AND COMMUNICATION JACK.
8. UC400-B/SYMBIO 400-B
   1 THE UC400-B/SYMBIO 400-B CONTROLLER IS A FACTORY INSTALLED MICROPROCESSOR BASED CONTROLLER. THE ADAPTER BOARD AND DISCONNECT SWITCH (OPTIONAL). THE WIRES FROM THE TRANSFORMER ARE TERMINATED IN THE FACTORY ON THE CONTROL BOARD. ALL FACTORY MOUNTED END DEVICES ARE INSTALLED AND WIRES ARE TERMINATED ON THE CONTROL BOARD. ALL FIELD CONNECTIONS OTHER THAN POWER ARE MADE WITH SCREW TYPE CONNECTIONS ON THE CONTROL BOARD WITH THE EXCEPTION OF FIELD SUPPLIED VALVES WHICH ARE CONNECTED TO A FACTORY SUPPLIED HARNESS. THIS OPTION CAN BE USED IN A STAND-ALONE APPLICATION OR AS PART OF A TRANE INTEGRATED COMFORT SYSTEM (ICS). THE UC400-B/SYMBIO 400-B CONTROLLER SHIPS WITH A UNIT OF MEASURE OVER BACNET LINK IN SI UNITS. WHEN A BUILDING AUTOMATION SYSTEM (BAS) IS UNABLE TO CONVERT TO OTHER DESIRED UNITS, A FREE SOFTWARE TOOL IS AVAILABLE FOR CHANGING TO ANOTHER UNIT OF MEASURE. A NUMBER OF CONTROL OPTIONS MAY BE CONFIGURED TO MEET THE CUSTOMER'S NEEDS AT THE FACTORY, THROUGH AN INTEGRATED COMFORT SYSTEM (ICS) OR BY USING INTEGRATED COMFORT SYSTEM (ICS) SERVICE TOOL SOFTWARE. REFER TO THE CURRENT INSTALLATION OPERATION PROGRAMMING GUIDE (IOM) FOR ALL AVAILABLE CONFIGURATIONS AND CONTROL OPTIONS.
9. DISCONNECT SWITCH
   1. A UNIT MOUNTED NON-FUSED DISCONNECT SWITCH IS AVAILABLE AS A STANDARD OPTION ON ALL UNITS. 1" MERV 8 FILTER THE FILTER IS CONCEALED FROM SIGHT AND EASILY REMOVABLE. A 1" MERV 8 FILTER IS PROVIDED IN THE UNIT. THE MERV 8 FILTERS HAVE A RATING BASED ON ASHRAE STANDARD 52.2. THE AVERAGE DUST SPOT EFFICIENCY IS NO LESS THAN 35 TO 40 PERCENT WHEN TESTED IN ACCORDANCE WITH ASHRAE 52.1 ATMOSPHERIC DUST SPOT METHOD.
10. LOW LIMIT SENSOR
    1. THIS SAFETY OPTION DE-ENERGIZES THE SYSTEM SWITCH WHEN THE LOW LIMIT SENSOR, LOCATED IN THE ENTERING AIRSTREAM, SENSES A TEMPERATURE OF 36 DEGREES F (2.2 DEGREES C) OR BELOW. THE LOW LIMIT SENSOR IS FACTORY-INSTALLED AND WIRED.

EXAMINATION

1. EXAMINE AREAS TO RECEIVE FAN-COIL AND BLOWER COIL UNITS FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE.
2. EXAMINE ROUGHING-IN FOR PIPING AND ELECTRICAL CONNECTIONS TO VERIFY ACTUAL LOCATIONS BEFORE FAN-COIL-UNIT INSTALLATION.
3. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

INSTALLATION, OPERATION, AND MAINTENANCE

1. INSTALLATION, OPERATION AND MAINTENANCE MANUAL SHALL BE SUPPLIED WITH THE UNIT.
2. INSTALLING CONTRACTOR SHALL INSTALL UNIT, INCLUDING FIELD INSTALLED COMPONENTS, IN ACCORDANCE WITH INSTALLATION, OPERATION, AND MAINTENANCE MANUAL INSTRUCTIONS.
3. START UP AND MAINTENANCE REQUIREMENTS SHALL BE COMPLIED WITH TO ENSURE SAFE AND CORRECT OPERATION OF THE UNIT.
4. INSTALL NEW FILTERS IN EACH FAN-COIL AND BLOWER COIL UNIT WITHIN TWO WEEKS AFTER FINAL ACCEPTANCE OF PROJECT.

CONNECTIONS

1. PIPING INSTALLATION REQUIREMENTS ARE SPECIFIED IN OTHER DIVISION 23 SECTIONS. DRAWINGS INDICATE GENERAL ARRANGEMENT OF PIPING, FITTINGS, AND SPECIALTIES. SPECIFIC CONNECTION REQUIREMENTS ARE AS FOLLOWS:
   1. INSTALL PIPING ADJACENT TO MACHINE TO ALLOW SERVICE AND MAINTENANCE.
   2. CONNECT PIPING TO FAN-COIL-UNIT AND BLOWER COIL UNIT WITH HYDRONIC PIPING PACKAGE. REFER TO DIV. 23 HYDRONIC ACCESSORIES AND FOLLOW DETAILS ON DRAWINGS.
   3. CONNECT CONDENSATE DRAIN TO INSULATED INDIRECT WASTE.
      a. INSTALL CONDENSATE TRAP OF ADEQUATE DEPTH TO SEAL AGAINST THE PRESSURE OF FAN. INSTALL CLEANOUTS IN PIPING AT CHANGES OF DIRECTION.
      b. CONNECT TO CONDENSATE PUMP WHERE INDICATED.
1. CONNECT SUPPLY AND RETURN DUCTS TO FAN-COIL UNITS WITH FLEXIBLE DUCT CONNECTORS SPECIFIED IN DIVISION 23 SECTION "DUCT ACCESSORIES." COMPLY WITH SAFETY REQUIREMENTS IN UL 1995 FOR DUCT CONNECTIONS.
2. INSTALL SECONDARY PAN BELOW ENTIRE UNIT AND WITH MOISTURE SENSOR WITHIN PAN TIED INTO UNIT CONTROLLER TO SHUT DOWN UNIT AND ALARM DDC UPON SENSING OF MOISTURE.
3. GROUND EQUIPMENT ACCORDING TO DIVISION 26 SECTION "GROUNDING AND BONDING."
4. CONNECT WIRING ACCORDING TO DIVISION 26 SECTION "CONDUCTORS AND CABLES."

FIELD QUALITY CONTROL

1. MANUFACTURER'S FIELD SERVICE: ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO INSPECT, TEST, AND ADJUST FIELD-ASSEMBLED COMPONENTS AND EQUIPMENT INSTALLATION, INCLUDING CONNECTIONS AND TO ASSIST IN FIELD TESTING. REPORT RESULTS IN WRITING.
2. PERFORM THE FOLLOWING FIELD TESTS AND INSPECTIONS AND PREPARE TEST REPORTS:
   1. OPERATIONAL TEST: AFTER ELECTRICAL CIRCUITRY HAS BEEN ENERGIZED, START UNITS TO CONFIRM PROPER MOTOR ROTATION AND UNIT OPERATION.
   2. OPERATE ELECTRIC HEATING ELEMENTS THROUGH EACH STAGE TO VERIFY PROPER OPERATION AND ELECTRICAL CONNECTIONS.
   3. TEST AND ADJUST CONTROLS AND SAFETY DEVICES. REPLACE DAMAGED AND MALFUNCTIONING CONTROLS AND EQUIPMENT.
3. REMOVE AND REPLACE MALFUNCTIONING UNITS AND RETEST AS SPECIFIED ABOVE.

ADJUSTING

1. ADJUST INITIAL TEMPERATURE SET POINTS.
2. OCCUPANCY ADJUSTMENTS: WHEN REQUESTED WITHIN 12 MONTHS OF DATE OF FINAL ACCEPTANCE, PROVIDE ON-SITE ASSISTANCE IN ADJUSTING SYSTEM TO SUIT ACTUAL OCCUPIED CONDITIONS. PROVIDE UP TO ONE (1) VISIT TO PROJECT DURING OTHER THAN NORMAL OCCUPANCY HOURS FOR THIS PURPOSE.

CUTTING AND PATCHING:

A. THE CONTRACTOR SHALL PROVIDE ALL FLOOR AND WALL CUTS AS REQUIRED FOR DUCTWORK AND PIPING PENETRATIONS OF EXISTING CONSTRUCTION.

B. NO CUTTING OF BEARING WALLS, BEAMS, ETC. SHALL BE DONE WITHOUT THE APPROVAL OF THE ARCHITECT. ALL PATCHING AND FINISHING, ETC. SHALL MATCH THE SURROUNDINGS. ALL CUTTING AND PATCHING SHALL BE DONE BY WORKMEN SKILLED IN THE TRADES AND IN THE EMPLOY OF THE CONTRACTOR FOR THE PROJECT. ALL CUTTING SHALL BE DONE WITH SAW TYPE EDGES TO GIVE A NEAT WORKMANLIKE APPEARANCE. ALL PIPE HOLES SHALL BE CORE DRILLED UNLESS SPECIFIED OTHERWISE.

C. SHOULD IT BE NECESSARY TO DO ANY CUTTING AND PATCHING DUE TO THE FAILURE OF THIS CONTRACTOR TO GIVE PROPER INFORMATION TO THE CONTRACTOR, IT SHALL BE DONE AT THE EXPENSE OF THE MECHANICAL CONTRACTOR.

FIRE STOP PENETRATION PROTECTION SEALING SYSTEM:

A. WHERE PIPES PASS THROUGH FIRE PARTITIONS, FIRE WALLS, FLOORS OR CEILINGS INSTALL A FIRE STOP THAT PROVIDES AN EFFECTIVE BARRIER AGAINST THE SPREAD OF FIRE, SMOKE, GASES AND WATER. FIRE-STOP MATERIAL SHALL BE PACKED TIGHT AND COMPLETELY FILL CLEARANCES BETWEEN PIPE, SLEEVES AND STRUCTURE. ALL CRACK VOIDS OR HOLES (UP TO 4" DIAMETER) SHALL BE SEALED.

B. FIRE-STOPPING MATERIALS SHALL MAINTAIN ITS INTEGRITY WHILE PREVENTING THE PASSAGE OF FLAME, SMOKE, GASES OR WATER. (REFER TO SPECIFICATION SECTION 078413 FOR PENETRATION FIRE-STOPPING PROCEDURE.

OPERATION AND MAINTENANCE MANUALS:

A. SUBMIT THREE (3) COPIES TO THE ENGINEER. THE CONTRACTOR SHALL ARRANGE FORMAL INSTRUCTION SESSIONS BY COMPETENT REPRESENTATIVES OF THE MANUFACTURER FOR THE OWNER'S OPERATING PERSONNEL TO COVER THE FOLLOWING:
SERVICE TELEPHONE NUMBER, FAX NUMBER, EMAIL ADDRESSES, BUSINESS AND SERVICE ADDRESS AND MOBILE TELEPHONE NUMBERS OF THE INSTALLING CONTRACTOR, MANUFACTURER AND SUPPLIER AND PARTS COUNTERS OF, FANS, AND OTHER COMPONENTS COMPRISING THE SYSTEMS.

B. MANUFACTURER'S OPERATING AND MAINTENANCE MANUALS, INCLUDING DETAILED PARTS LISTS WITH NUMBERS, POWER AND CONTROL WIRING DIAGRAMS, ACCESSORIES, GUARANTEE PERIOD AND NAME, ADDRESS AND PHONE NUMBER OF THE NEAREST SALES AND SERVICE ORGANIZATION FOR EACH ITEM. BOTH ON PRINT AND CD'S (MIN 3 COPIES) FORM (PDF/MS WORD).

C. CROSS OUT OPTIONS NOT USED, HIGHLIGHT OPTIONS SELECTED.

D. STEP-BY-STEP PROCEDURE FOR STARTING, STOPPING, SET POINT ADJUSTMENT, MONITORING AND ALARM ENUNCIATION FOR EACH SYSTEM.

E. COPIES OF INSPECTION CERTIFICATES PROVIDED BY THE CITY, COUNTY, STATE AND INSURANCE COMPANIES.

F. ROUTINE MAINTENANCE AND SCHEDULES FOR EQUIPMENT.

G. OBTAIN WRITTEN STATEMENTS FROM THE OWNER'S REPRESENTATIVE ACKNOWLEDGING SATISFACTORY COMPLETION OF EACH ITEM OF THE MANUALS.

INSTRUCTION TO OPERATIONAL PERSONNEL:

A. FURNISH THE SERVICES OF COMPETENT INSTRUCTORS TO GIVE FULL INSTRUCTION TO THE DESIGNATED FACILITIES PERSONNEL IN THE ADJUSTMENT, OPERATION AND MAINTENANCE INCLUDING PERTINENT SAFETY REQUIREMENTS, OF THE SPECIFIED EQUIPMENT OR SYSTEM ON THE CONTRACT DOCUMENTS. INSTRUCTORS SHALL BE THOROUGHLY FAMILIAR WITH ALL PARTS OF THE INSTALLATION AND SHALL BE TRAINED IN OPERATING THEORY AS WELL AS PRACTICAL O&M WORK.

B. INSTRUCTION SHALL BE GIVEN DURING THE FIRST REGULAR WORK WEEK AFTER THE EQUIPMENT HAS BEEN ACCEPTED AND TURNED OVER TO THE OWNER FOR REGULAR OPERATION.

C. INSTRUCTION SHALL COVER ROUTINE MAINTENANCE, CONTROL AND POWER WIRING DIAGRAM ANALYSIS, PREVENTATIVE MAINTENANCE AND SCHEDULING, STARTING AND STOPPING, ALARM RESETS, TREND-LOGGING, SET POINT ADJUSTMENT, EMERGENCY AND NORMAL SHUTDOWN/STARTUP, RELATIVE PRESSURE CONTROL SYSTEMS, ALARM DATE STAMPING AND ALL ELSE REQUIRED BY THE OWNER FOR COMPLETE USAGE/ MAINTENANCE/ADJUSTMENT OF EQUIPMENT IN THEIR INTENDED SYSTEMS.

D. OBTAIN WRITTEN STATEMENTS FROM THE OWNER'S REPRESENTATIVE ACKNOWLEDGING SATISFACTORY COMPLETION OF EACH ITEM OF THE MANUALS.

E. THE INSTRUCTION PERIOD SHALL BE A MINIMUM OF 16 HOURS OF CLASSROOM AND FIELD SESSIONS. THIS INSTRUCTION PERIOD SHALL BE IN ADDITION TO THE CONTROLS AND SHALL COVER ALL OF THE BUILDING NON-CONTROL SYSTEMS.

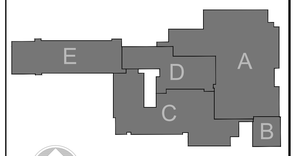
C. POINTS LIST:
1. POINTS LIST (INCLUDING BUT NOT LIMITED TO)

SYSTEM	POINT DESCRIPTION	AI	AO	DI	DO
FAN COIL UNIT	SUPPLY AIR TEMPERATURE	X			
	SPACE TEMPERATURE	X			
	UNIT ALARM			X	
SUPPLY FAN	SUPPLY FAN STATUS ON/OFF			X	
	SUPPLY FAN COMMAND				X
	SUPPLY FAN ALARM		X		

HIGHLAND ASSOCIATES
architecture | engineering | interior design

102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED #08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

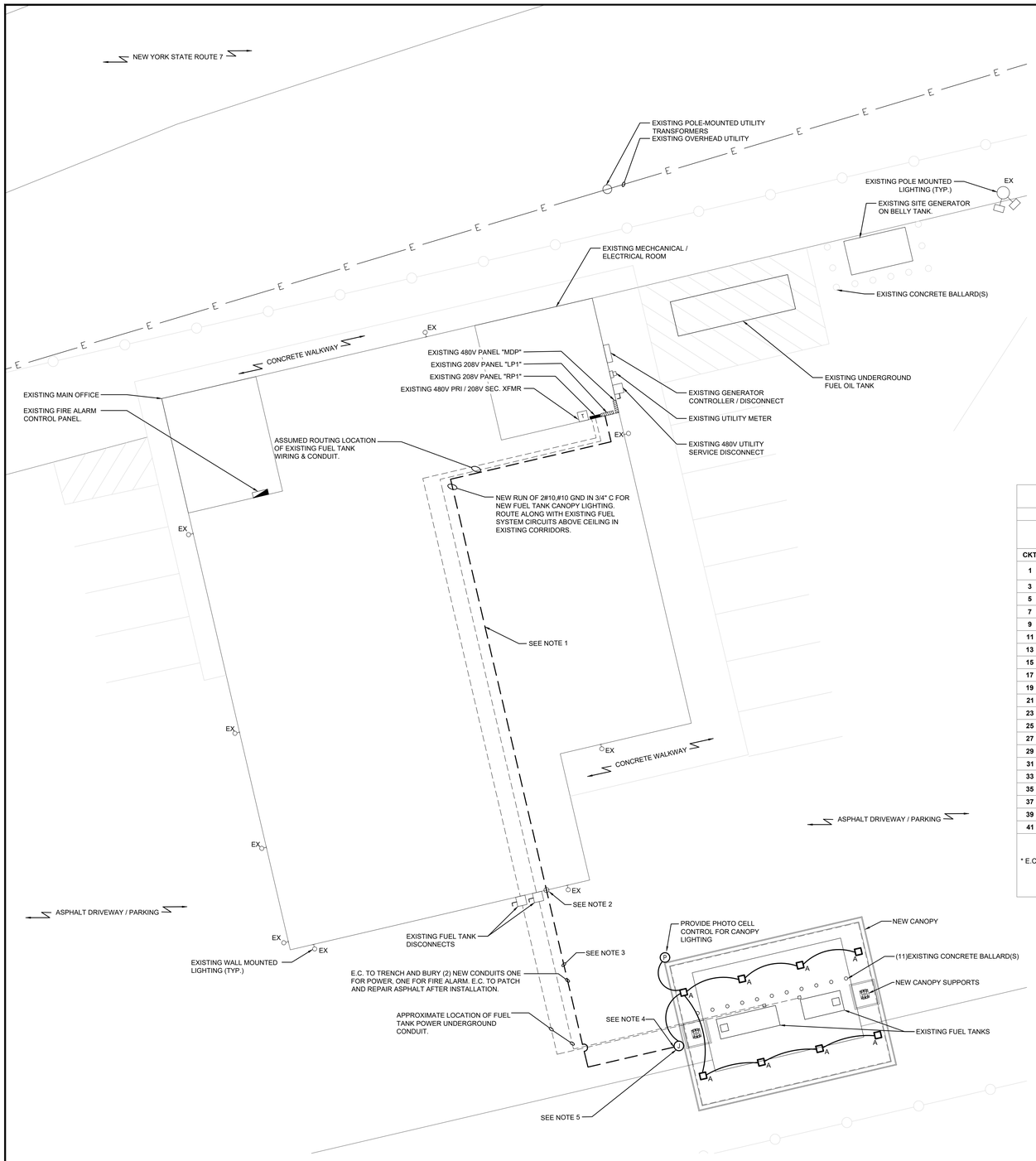
DRAWING TITLE:
MECHANICAL DRAWING SPECIFICATIONS

DRAWN BY:	CHECKED BY:
F.R.G.	A.J.L.
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

M-401

CAD FILE: 5005-M-401-PH2.DWG PLOT DATE: 10/12/2026



AFTON TRANSPORTATION BUILDING SITE RENOVATION - FUEL TANK CANOPY

SCALE: 1"=10'-0"

NOTES:

1.WIRING SHALL BE RUN IN EMT CONDUIT ABOVE CORRIDOR CEILING.
2.PENETRATE EXTERIOR ALL AND CONVERT TO RGS CONDUIT VIA 90° LB CONDUIT BODY. DROP ON EXTERIOR WALL TO BELOW GRADE.
3.EXTEND NEW CANOPY POWER/SYSTEMS FEEDS IN NEW TRENCH ACROSS EXISTING PAVED AREA. CONDUITS UNDER PAVED TRAFFIC AREA TO BE INSTALLED IN REINFORCED CONCRETE ENVELOPE.
4.EXTEND NEW CANOPY LIGHTING CIRCUIT TO EXISTING PANEL LP1 LOCATED IN THE MAIN ELECTRICAL ROOM.
5.THE E.C SHALL FIELD VERIFY ALL CANOPY CONNECTION LOCATIONS AND WIRING ROUTING WITHIN CANOPY WITH THE MANUFACTURER AND CANOPY INSTALLER.
6.THE E.C SHALL FURNISH AND INSTALL NEW UNDER CANOPY LIGHTING AS SPECIFIED.

EXISTING PANEL BOARD SCHEDULE

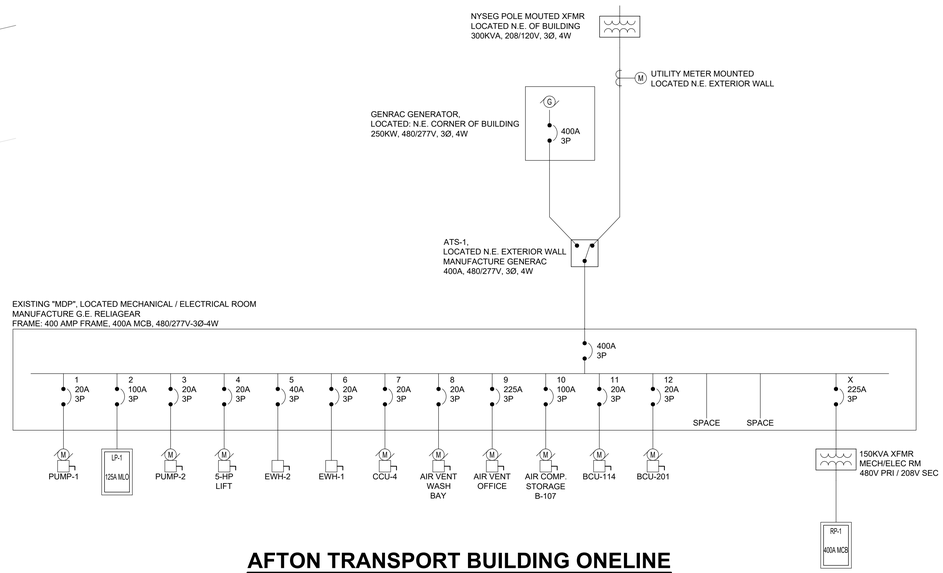
PANEL			SOURCE (A):	100		VOLTAGE:	480	277	3Ø	4W	LOCATION:	MECHANICAL/ELECTRICAL RM				SINGLE	x
LP-1			FRAME (A):	125 MLO		MIN. O.C:	EXISTING				FED BY:	MDP				DOUBLE	
			TYPE:	LIGHTING		A.I.C:	EXISTING				MOUNTING:	SURFACE				COM. COVER	

CKT	POLE	T	W	G	C	LOAD	KVA ØA		KVA ØB		KVA ØC		LOAD	C	G	W	T	P	CKT
1	1	20	-	-	-	RM.B-114,113,111,110	1.3	0.3	***	***	***	***	LIGHT. CORRIDOR B-118,B-120	-	-	-	20	1	2
3	1	20	-	-	-	RM.B-106, B-107, B-103	***	***	0.8	0.6	***	***	RM. B-104, B-105A, B-10...	-	-	-	20	1	4
5	1	20	-	-	-	LIGHT. BUS MAINTEN. B-102	***	***	***	***	1.9	1.6	LIGHT. WASH BAY B-101	-	-	-	20	1	6
7	1	20	-	-	-	LIGHT. MEZZ AREA.	0.6	0.2	***	***	***	***	LIGHTING - CANOPY	3/4"	#10	2#10	20	1	8*
9	1	20	-	-	-	LIGHTING - EXTERIOR	***	***	1.8	1.0	***	***	GENERATOR	-	-	-	20	1	10
11	1	20	-	-	-	EXISTING LOAD	***	***	***	***	0.7	0.7	EXISTING LOAD	-	-	-	20	1	12
13	1	-	-	-	-	SPARE	0.0	0.0	***	***	***	***	SPARE	-	-	-	-	1	14
15	1	-	-	-	-	SPARE	***	***	0.0	0.0	***	***	SPARE	-	-	-	-	1	16
17	1	-	-	-	-	SPARE	***	***	***	***	0.0	0.0	SPARE	-	-	-	-	1	18
19	1	-	-	-	-	SPARE	0.0	0.0	***	***	***	***	SPARE	-	-	-	-	1	20
21	1	-	-	-	-	SPARE	***	***	0.0	0.0	***	***	SPARE	-	-	-	-	1	22
23	1	-	-	-	-	SPARE	***	***	***	***	0.0	0.0	SPARE	-	-	-	-	1	24
25	1	-	-	-	-	SPARE	0.0	0.0	***	***	***	***	SPARE	-	-	-	-	1	26
27	1	-	-	-	-	SPARE	***	***	0.0	0.0	***	***	SPARE	-	-	-	-	1	28
29	1	-	-	-	-	SPARE	***	***	***	***	0.0	0.0	SPARE	-	-	-	-	1	30
31	1	-	-	-	-	SPARE	0.0	0.0	***	***	***	***	SPARE	-	-	-	-	1	32
33	1	-	-	-	-	SPARE	***	***	0.0	0.0	***	***	SPARE	-	-	-	-	1	34
35	1	-	-	-	-	SPARE	***	***	***	***	0.0	0.0	SPARE	-	-	-	-	1	36
37	1	-	-	-	-	SPARE	0.0	0.0	***	***	***	***	SPARE	-	-	-	-	1	38
39	1	-	-	-	-	SPARE	***	***	0.0	0.0	***	***	SPARE	-	-	-	-	1	40
41	1	-	-	-	-	SPARE	***	***	***	***	0.0	0.0	SPARE	-	-	-	-	1	42
							2.5		4.2		4.9								

* E.C. TO USE EXISTING 20A-1P SPARE BREAKER FOR NEW LOAD. WIRE UPSIZED FOR VOLTAGE DROP.	Total KVA ØA	Total KVA ØB	Total KVA ØC
	TOTAL KVA THIS PANEL:		11.6
	TOTAL KVA DEMAND:		8.1
	TOTAL AMPERAGE DEMAND:		9.7

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG NO.	LAMPS	VOLTS	DESCRIPTION
A	BEACON GALASY II	XSGY-30-4K7	4757 LUMENS 30 WATTS	120/277V	CANOPY MOUNTED LIGHTING FIXTURE. 4000K, 70CRI.



AFTON TRANSPORT BUILDING ONELINE

SCALE: NTS

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:

BG

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED # 08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

ELECTRICAL SITE PLAN, BUS GARADGE

DRAWN BY:	CHECKED BY:
MLT / TBH	LKN
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

E-500

CAD FILE: 5005.2-BG-ES-100.DWG PLOT DATE: 11/10/2026

LIGHTING

INDICATES FIXTURE TYPE
2X2' LINEAR LED LIGHTING FIXTURE

WALL MOUNTED BATTERY UNIT WITH DUAL HEADS. BATTERY UNIT TO BE CONNECTED TO CIRCUIT AHEAD OF SWITCHING. +80" FROM BOTTOM OF DEVICE.

WALL MOUNTED EXIT SIGN. BATTERY UNIT TO BE CONNECTED TO CIRCUT AHEAD OF SWITCHING. MOUNTED 2" ABOVE DOOR FRAME.

OS CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR WITH MANUAL OVERRIDE SWITCH. ______________

OC WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR WITH MANUAL OVERRIDE SWITCH. MOUNTED AT 42" A.F.F.

S^X WALL MOUNTED SWITCH. MOUNTED AT 42" A.F.F. U.O.N. 'K' INDICATES KEY SWITCH

ONE-LINE LEGEND

XXXX XXXX XXXX XXXX SINGLE SECTION POWER PANEL

ENERGY EFFICIENT DRY-TYPE TRANSFORMER. ELECTRICAL CHARACTERISTICS AND PHYSICAL SIZE, AS INDICATED ON DRAWINGS

CIRCUIT BREAKER

M MOTOR, SIZE AS INDICATED

AUTOMATIC TRANSFER SWITCH

FUSE AND SWITCH

SPECIAL SYSTEMS

F FIRE ALARM SYSTEM MANUAL PULL STATIION. MOUNTED AT 42" A.F.F. TO CENTERLINE.

AV WALL MOUNTED MULTI-TAP (15/30/75/110 CD) ADA COMPLIANT FIRE ALARM SPEAKER/VISUAL UNIT WITH VOICE NOTIFICATION CAPABILITIES (MOUNT 80" A.F.F. TO BOTTOM)

V WALL MOUNTED MULTI-TAP (15/30/75/110 CD) ADA COMPLIANT FIRE ALARM VISUAL ONLY UNIT. (MOUNT 80" A.F.F. TO BOTTOM)

S CEILING MOUNTED SMOKE DETECTOR

AV CEILING MOUNTED AUDIO/VISUAL FIRE ALARM UNIT

H CEILING MOUNTED HEAT DETECTOR

WAP CEILING MOUNTED WIRELESS ACCESS POINT

PA CEILING MOUNTED PA SPEAKER

C CCTV CAMERA

POWER

208/120V BRANCH CIRCUIT PANELBOARD-SURFACE MOUNTED.

FUSED DISCONNECT SWITCH. SIZE AS NOTED.

DISCONNECT SWITCH. SIZE AS NOTED.

S_M MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOADS (UNLESS OTHERWISE NOTED.) SIZED TO PROTECT EQUIPMENT SERVED.

XXX XX MECHANICAL EQUIPMENT TAG

XX MOTOR CONNECTION NUMBER INDICATES HORSEPOWER

COORDINATION NOTE:

COORDINATION - IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL, MECHANICAL, PLUMBING AND FIRE PROTECTION CONTRACTORS TO COORDINATE THEIR WORK. THE HVAC CONTRACTOR SHALL TAKE THE LEAD IN THE COORDINATION EFFORT AND PRODUCE THE COORDINATION DRAWINGS. COORDINATION DRAWINGS SHALL BE SUBMITTED FOR APPROVAL BY THE ARCHITECT PRIOR TO STARTING ANY WORK. THE PURPOSE OF THESE DRAWINGS IS TO COORDINATE THE LOCATIONS OF ALL PIPING, DUCTWORK, AND ELECTRICAL EQUIPMENT. SPECIAL ATTENTION IS CALLED TO ARTICLE 110-26 (F) OF THE NATIONAL ELECTRIC CODE. THE SPACE EQUAL TO THE WIDTH AND DEPTH OF THE EQUIPMENT AND EXTENDING FROM THE FLOOR TO A HEIGHT OF 6FT. ABOVE THE EQUIPMENT OR TO STRUCTURAL CEILING, WHICHEVER IS LOWER, SHALL BE DEDICATED TO THE ELECTRICAL INSTALLATION. NO PIPING, DUCTS, LEAK PROTECTION APPARATUS, OR OTHER EQUIPMENT FOREIGN TO THE ELECTRICAL INSTALLATION SHALL BE LOCATED IN THIS ZONE. THIS COORDINATION IS REQUIRED FOR ALL PHASES OF THIS PROJECT.

COORDINATION NOTE:

COORDINATION - IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO REVIEW ALL ARCHITECTURAL PLANS FOR FULL UNDERSTANDING OF THE SCOPE OF WORK. ELECTRICAL WORK NOTED ON ARCHITECTURAL DRAWINGS IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

EXISTING PANELBOARD SCHEDULE

PANEL	MAINS (A):	225	VOLTAGE:	208	120	3Ø	4W	LOCATION:	JANITOR STORAGE 042A	SINGLE	x
LVP-B1	O.C. DEVICE:	MCB & SURGE	MIN. O.C:	EXISTING				FED BY:	MDP-100	DOUBLE	
	TYPE:	APPLIANCE	A.I.C:	EXISTING				MOUNTING:	SURFACE	COM. COVER	

CKT	POLE	T	W	G	C	LOAD	KVA ØA		KVA ØB		KVA ØC		LOAD	C	G	W	T	P	CKT
SECTION 1																			
1	1	20	-	-	-	EMS POWER	1.0	1.0	***	***	***	***	RECS IG RM 022/023	-	-	-	20	1	2
3	1	20	-	-	-	SPARE	***	***	0.0	1.0	***	***	RECS IG RM 020/021/023	-	-	-	20	1	4
5	1	20	-	-	-	RECS/DOORS LOBBY C006, CH	***	***	***	***	1.0	1.0	RECS IG RM 023 (T.V.)	-	-	-	20	1	6
7	1	20	-	-	-	FC-9 RM 052/C006/CH	1.0	0.5	***	***	***	***	VAV BOXES - RM 025/024/024A	-	-	-	20	1	8
9	1	20	-	-	-	SERVER MAINT. RECS (MEDIA)	***	***	1.0	0.0	***	***	SPARE	-	-	-	20	1	10
11	1	20	-	-	-	REC ELEVATOR PIT	***	***	***	***	1.0	1.0	IRP PANEL RM 044	-	-	-	20	1	12
13	3	100	-	-	-	SUBFEED FOR SECOND SECTION	8.2	0.0	***	***	***	***	SPARE	-	-	-	20	1	14
15							***	***	6.6	0.0	***	***	SPARE	-	-	-	20	1	16
17							***	***	***	***	4.6	1.0	RM 041/042 GFI	-	-	-	20	1	18
19	1	20	-	-	-	SPARE	1.0	1.0	***	***	***	***	REC IG RM 026	-	-	-	20	1	20
*21	1	20	-	-	-	LTGS C004/041/042/004	***	***	1.0	1.0	***	***	SUBLIMATION PRINTER	-	-	-	20	3	22
23	1	20	-	-	-	HEAT PRESS W. RM024	***	***	***	***	1.0	1.0							24
25	1	20	-	-	-	HEAT PRESS CENTER. RM 024	1.0	1.0	***	***	***	***							26
27	1	20	-	-	-	HEAT PRESS E. RM 024	***	***	1.0	1.0	***	***	RECS - RM 024A)	-	-	-	20	1	28
29	1	20	-	-	-	WEST 3D PRINTERS	***	***	***	***	1.0	0.0	SPARE	-	-	-	20	1	30
31	1	20	-	-	-	EAST 3D PRINTERS	1.0	1.0	***	***	***	***	RECS RM 052/062	-	-	-	20	1	32
33	1	30	-	-	-	LIBRARY UPS	***	***	1.0	1.0	***	***	RECS ST-6, LOBBY C006	-	-	-	20	1	34
35	1	30	-	-	-	LIBRARY UPS	***	***	***	***	1.0	2.7	HAND DRYER 042	-	-	-	30	2	36
37	1	20	-	-	-	ELEVATOR LTGS	1.0	2.7	***	***	***	***							38
39	2	20	-	-	-	LIBRARIAN PRINTER	***	***	1.0	3.7	***	***	HAND DRYER 041	-	-	-	30	1	40
41							***	***	***	***	1.0	3.7	HAND DRYER 041	-	-	-	30	1	42
SECTION 2																			
43	1	20	-	-	-	RECS - CORDREELS MEDIA	1.1	0.7	***	***	***	***	W. CORDREELS STEAM	-	-	-	20	1	44
45	1	20	-	-	-	RECS - GENERAL MEDIA	***	***	1.1	0.7	***	***	E. CORDREELS STEAM	-	-	-	20	1	46
47	1	20	-	-	-	RECS - LIBRARIAN DESK	***	***	***	***	0.7	0.5	RECS - STEAM MONITORS	-	-	-	20	1	48
49	1	20	-	-	-	RECS - N. COMPUTERS (024B)	0.7	1.2	***	***	***	***	STEAM 12 REC WIREMOLD (W.)	-	-	-	20	1	50**
51	1	20	-	-	-	RECS - S. COMPUTERS (024B)	***	***	0.7	1.2	***	***	STEAM 12 REC PLUGMOLD (E.)	-	-	-	20	1	52**
53	1	20	-	-	-	RECS - GENERAL 024B	***	***	***	***	0.5	0.5	STEAM 6 REC WIREMOLD	-	-	-	20	1	54
55	1	20	-	-	-	LTGS - MEDIA CENTER	0.9	1.4	***	***	***	***	LTGS - STEAM (RMS 024/A/B)	-	-	-	20	1	56
57	1	20	-	-	-	LTGS - LEARNING COMMONS	***	***	1.0	0.5	***	***	MEDIA LOCKDOWN SHADES	-	-	-	20	1	58
59	1	20	-	-	-	REC - STEAM TEACH. STATION	***	***	***	***	0.3	0.7	RECS - LIBRARY E./S.	-	-	-	20	1	60
61	1	20	-	-	-	REC - V.R. CABINET	0.3	0.7	***	***	***	***	RECS - (024B) CABINET	-	-	-	20	1	62
63	1	20	-	-	-	SPARE	***	***	0.1	1.2	***	***	MEDIA 12 REC WIREMOLD (W.)	-	-	-	20	1	64
65	1	20	-	-	-	SPARE	***	***	***	***	0.0	1.2	MEDIA 12 REC PLUGMOLD (E.)	-	-	-	20	1	66
67	1	20	-	-	-	SPARE	0.0	1.2	***	***	***	***	SF-3 C004	3/4"	#12	2#12	20	1	68**
69	1	20	-	-	-	SPARE	***	***	0.0	0.0	***	***	FC-3 C004	3/4"	#12	2#12	20	1	70**
71	1	20	-	-	-	SPARE	***	***	***	***	0.0	0.0	SPARE	-	-	-	20	1	72
							21.4		19.3		21.0								
							Total KVA ØA		Total KVA ØB		Total KVA ØC								
							TOTAL KVA THIS PANEL:				61.6								
							TOTAL KVA DEMAND:				43.1								
							TOTAL AMPERAGE DEMAND:				119.7								

*LIGHTING WITHIN CORRIDOR TO BE REPLACED, CIRCUIT SHOWN DARK FOR REFERENCE.
** E.C. SHALL ADD 20A-1P BREAKER FOR NEW LOAD.

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG NO.	LAMPS	VOLTS	DESCRIPTION
A0	METALUX 2X2 ENCOUNTER	22EX-LD2-25-UNV-L840-CD1	LED 2,500 LUMENS 20W	120/277V	2'X2' RECESSED TROFFER. 80 CRI, 4000K COLOR TEMPERATURE.
A1	METALUX 2X2 ENCOUNTER	22EX-LD2-30-UNV-L840-CD1	LED 3,000 LUMENS 24.9W	120/277V	2'X2' RECESSED TROFFER. 80 CRI, 4000K COLOR TEMPERATURE.
(exit sign symbol)	LITHONIA LIGHTING	EDG-W-1-RMR-EL	0.6W LED	120/277V	LED EXIT SIGN WITH RED LETTERING ON MIRROR BACKGROUND. CONTAINS INTERNAL NICKEL-CADMIUM BATTERY FOR EMERGENCY LIGHTING.
(battery unit symbol)	LITHONIA LIGHTING	ELM4L-HO-UVOLT-SDRT	(2) 3.3W LED 640 LUMENS	120/277V	LED EMERGENCY LIGHTING BATTERY UNIT WITH HIGH-IMPACT WHITE THERMOPLASTIC HOUSING, LITHIUM IRON PHOSPHATE BATTERY WITH REMOTE LAMP CAPACITY OF 22W FOR 90 MINUTES AND SELF DIAGNOSTICS. FIXTURE TO BE UL 924 CERTIFIED.

COMMON ABBREVIATIONS

AMP./ A.	AMPERE
AMP.	ALTERNATING CURRENT
ACT.	ACOUTICAL TILE
A/C.	AIR CONDITIONING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
A.I.C	AMPERES INTERRUPTING CAPACITY
A.T.C.	AUTOMATIC TEMPERATURE CONTROL
A.T.S.	AUTOMATIC TRANSFER SWITCH
AUX.	AUXILIARY
B.F.C	BELOW FINSIHED CEILING
BLDG.	BUILDING
BKR.	BREAKER
BSMT.	BASEMENT
.C.	CENTIGRADE DEGREES
CLG.	CEILING
CKT.	CIRCUIT
CB.	CIRCUIT BREAKER
COL.	COLUMN
CCTV	CLOSED CIRCUIT TELEVISION
C.	CONDUIT
CONDR.	CONDUCTOR
CONTR.	CONTRACTOR
CU	COPPER
DEMARC.	DEMARCATION
DISC	DISCONNECT SWITCH
DMSC	DUAL MODE SYSTEM CONTROLLER
DN	DOWN
EA	EACH
E.F.	EXHAUST FAN
ELEC.	CL. ELECTRICAL CLOSET
ELEC	ELECTRICAL
E.C.	ELECTRICAL CONTRACTOR
ELEV.	/ EL. ELEVATION / ELEVATOR
E.M.A.	ELECTRICAL METALLIC TUBING
EPO	EMERGENCY POWER OFF
EQUIP.	EQUIPMENT
FDS	FUSED DISCONNECT
FT.	FEET
FL.	FLOOR
FLA.	FULL LOAD AMPERES
GALV.	GALVANIZED
G.C.	GENERAL CONTRACTOR
GEN.	GENERATOR
G.F.I.	GROUND FAULT INTERRUPTER
GRS	GALVANIZED RIGID STEEL
HP	HORSEPOWER
HZ	HERTZ
IMC	INTERMEDIATE CONDUIT
INSUL.	CO. INSULATED COPPER
JB	JUNCTION BOX
KW	KILOWATT
KVA	KILOVOLT-AMPERE
LG.	LENGTH
LF	LINEAR FEET
M.C.	MECHANICAL CONTRACTOR
MDS	MAIN DISTRIBUITION SWITCHBOARD
MDP	MAIN DITRIBUTION PANEL
MANUF.	MANUFACTURER
MAX.	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MECH.	MECHANICAL
KCMIL	THOUSAND CIRCULAR MILLS
MTD	MOUNTED
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MO	MOTOR OPERATED
N.	NETURAL
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NUM/ #	NUMBER
%	PERCENT
~/ PH / Ø	PHASE
PB	PULLBOX
PH	PHASE
PNL	PANEL
P.C.	PLUMBING CONTRACTOR
NO.	PRIMARY
REQ'D	REQUIRED
RGS	RIGID GALVANIZED STEEL CONDUIT
SECT	SECTION
SEC	SECONDARY
SERV	SERVICE
S.F.A.	SQUARE FEET
SW.G.	SWITCH
SWBD	SWITCHBOARD
SN	SOLID NEUTRAL
SURF	SURFACE
TELECOMM	TELECOMMUNICATIONS
TH	THICK
TYP	TYPICAL
UG	UNDERGROUND
UON	UNLESS UNDERWISE NOTED
V	VOLTAGE / VOLTS
WP	WEATHERPROOF
W/	WITH
W/O	WITHOUT
XFMR	TRANSFORMER

GENERAL ELECTRICAL NOTES:

1. ALL ELECTRICAL WORK PREFORMED SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC)
2. ALL WIRING, UNLESS OTHERWISE NOTED (U.O.N.) ON DRAWINGS, SHALL BE TYPE "THHN" MINIMUM #12 AWG. ALL WIRING SHALL BE COPPER CONDUCTORS; ALUMINUM AND ALUMINUM ALLOY CONDUCTORS WILL NOT BE ACCEPTED.
3. ALL BRANCH CIRCUIT WIRING SHALL UTILIZE AT A MINIMUM ¾" EMT CONDUIT
4. ELECTRICAL CONTRACTOR (E.C) SHALL IDENTIFY ALL JUNCTION AND PULLBOXES ABOVE CEILING WITH THE PANELBOARD AND BRANCH CIRCUIT NUMBER MARKED ON THE COVERPLATE. PROVIDE ENGRAVED BAKELTE NAMEPLATES (1-3/4" X 3-1/2" WITH ¾" LETTERS FOR PANELS, MOTOR SAFETY DISCONNECTS AND CONTROL STATIONS. A NEW TYPEWRITTEN DIRECTORY SHALL BE PROVIDED AND PLACED AT ALL PANELBOARDS WHICH HAVE BEEN AFFECTED BY THE ELECTRICAL CONTRACT SCOPE.
5. ALL THE CIRCUITING SHOWN IS DIAGRAMMATIC. THE CONTRACTOR SHALL PROVIDE JUNCTION AND PULLBOXES AS REQUIRED BY THE NEC. ALL CONDUITS SHALL BE SIZED IN A CCORDANCE WITH THE NEC UNLESS SHOWN LARGER ON DRAWINGS, HOWEVER NO CONDUIT SHALL BE LESS THAN ½" FOR CONTROLS AND ¾" FOR POWER.
6. ALL CONDUIT EXPOSED TO THE WEATHER SHALL BE STANDARD WALL RIGID GALVANIZED STEEL CONDUIT U.O.N.
7. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC ONLY. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR EXACT LOCATIONS OF EQUIPMENT AND DEVICES.
8. IT WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO PROVIDE FOR TEMPORARY POWER AND LIGHTING FOR ALL WORK AREAS FOR ALL TRADES AS WELL AS TO KEEP A SAFE AND NEAT WORKPLACE.
9. A GROUNDING CONDUCTOR MUST BE PROVIDED IN ALL BRANCH CIRCUITS AND FEEDER CONDUITS. ALL GROUND CONDUCTORS SHALL BE AS REQUIRED BY NEC ARTICLE 250.
10. THE CONTRACTOR SHALL REPAIR OR REPLACE ALL ITEMS DAMAGED DURING THE CONSTRUCTION OF HIS WORK. ANY AND ALL REPAIR AND/OR REPLACEMENT SHALL MEET THE REQUIREMENTS OF THE ARCHITECT / ENGINEER.
11. IT IS THE INTEND OF THE ELECTRICAL DRAWINGS TO PROVIDE THE CONTRACTOR WITH SUFFICIENT INFORMATION IN ORDER TO PROVIDE AN INSTALLATION COMPLETE IN EVERY RESPECT. THE DRAWINGS ARE DIAGRAMMATIC IN CHARACTER AND DO NOT SHOW EVERY CONNECTION OR INSTALLATION IN DETAIL OR ITS EXACT LOCATION. CONTRACTOR SHALL CAREFULLY INVESTIGATE, COORDINATE WITH OTHER TRADES, AND VERIFY ALL FIELD CONDITIONS AND ACTUAL LOCATIONS OF ALL ITEMS SHOWN ON DRAWINGS PRIOR TO COMMENCING ANY WORK. SHOULD THE DRAWINGS DISAGREE WITH ACTUAL CONDITIONS CONTRACTOR SHALL BRING UP IT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER TO IDENTIFY DISCREPANCIES AND/OR CONFLICTS.
12. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST-CLASS WORKMANLIKE MANNER ACCORDING TO THE NATIONAL ELECTRICAL CODE (NEC). THE COMPLETE SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTED BY THE ENGINEER/ARCHITECT PRIOR TO PROJECT COMPLETION.
13. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT AND/OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREBY.
14. ALL EXTERIOR BUILDING EQUIPMENT TO BE WEATHERPROOF NEMA 3R MINIMUM UNLESS OTHERWISE NOTED.
15. WHERE THE CONTRACTOR COMBINES MULTIPLE CIRCUITS IN ONE CONDUIT, THEY SHALL INSTALL ALL HOMERUN BRANCH AND FEEDER WIRING IN ACCORDANCE WITH NEC 310 AND NEC CHAPTER 9, REGARDING DERATING OF CONDUCTOR AMPACITIES. ALL INDIVIDUAL CIRCUITS COMBINED WITHIN COMMON CONDUIT SHALL BE PROVIDED WITH SEPARATE NEUTRAL CONDUCTORS. SHARING OF NEUTRAL CONDUCTORS BY MULTIPLE CIRCUITS IS NOT PERMITTED.
16. EMPTY CONDUITS FOR COMMUNICATION CABLE TV, ETC. SHALL BE PROVIDED WITH A CONDUIT PULLING LINE. LINE SHALL BE RATED 130LBS. CONDUITS STUPPED TO ABOVE ACCESSIBLE CEILING SHALL BE PROVIDED WITH A TERMINATION BUSHING.
17. RECEPTACLES SHALL BE MOUNTED VERTICALLY UNLESS OTHERWISE INDICATED. MOUNTING HEIGHT FOR RECEPTACLES SHALL BE 18" A.F.F. TO CENTER UNLESS OTHERWISE INDICATED.
18. DO NOT SCALE THE ELECTRICAL DRAWINGS, REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR THE EXACT LOCATION OF EQUIPMENT AND DEVICES.
19. DISCONNECT SWITCHES SHALL BE H.P. RATED, HEAVY DUTY, QUICK-MAKE, QUICK-BREAK ENCLOSURES AS REQUIRED BY NEC ARTICLE 430. MAXIMUM MOUNTING HEIGHT SHALL BE 5'6" TO TO CENTER OF HANDLE.
20. ALL MATERIALS SHALL BE NEW AND BEAR UNDERWRITERS' LABORATORY (UL) LABELS WHERE APPLICABLE.
21. ALL BREAKERS SHALL BE NEW, PROVIDE FULL-SIZE BREAKERS.
22. ALL TWO OR THREE PULL BREAKERS SHALL BE COMMON TRIP. TIE HANDLES OR TANDEMS WILL ARE NOT PERMITTED.
23. ALL FUSES, UNLESS NOTED ON DRAWING, SHALL BE CURRENT LIMITING FUSES (C.L.) RATED FOR 200,000 A.I.C.
24. CONNECTION TO MOTOR TERMINAL BOXES, SOLENOIDS, AND ANY OTHER DEVICES HAVING ADJUSTABLE MOUNTING FACILITIES OR WHICH ARE SUBJECT TO VIBRATION SHALL BE MADE IN LIQUID TIGHT FLEXIBLE METAL CONDUIT WHEREVER A FLEXIBLE CONDUIT IS EMPLOYED.
25. THE DIRECTION OF ROTATION OF ALL MOTORS SHALL BE VERIFIED. BEFORE TESTING FOR ROTATION ALL COUPLINGS SHALL BE DISCONNECTED TO PREVENT DAMAGE TO DRIVEN EQUIPMENT.
26. ALL RECEPTACLES LOCATED PER NEC SECTION 210.8 SHALL BE GFCI TYPE.
27. ABOVE CEILING JUNCTION BOXES/PULLBOXES SHALL BE INSTALLED WITH THE BOX OPENING FACING DOWN.
28. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL THE FOLLOWING: ALL JUNCTION, METAL OR NON-METALLIC CONDUIT, WIRING AS REQUIRED; OUTLETS WITH COVERS, SWITCHES; OUTLETS WITH COVERS, SWITCHES, CONNECTORS, CONTROLS AND OTHER ACCESSORIES AS REQUIRED TO MAKE FINAL CONNECTIONS TO ALL ELECTRICAL EQUIPMENT SHOWN FOR A COMPLETE AND FUNCTIONAL OPERATION MEETING ALL APPLICABLE CODES AND ORDINANCES.
29. NO PART OF ANY JUNCTION BOX/PULLBOX SHALL BE INSTALLED OVER A LIGHT FIXTURE.
30. THE CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES, INSPECTIONS AND TESTING, FOR COMPLETE ELECTRICAL SCOPE OF WORK.
31. THE CONTRACTOR SHALL CLEAN UP THE CONSTRUCTION SITE AT THE END OF EACH WORKING DAY AND REMOVE ALL TRASH AND DEBRIS CREATED BY HIS TRADE FROM THE PREMISES. THE CONTRACTOR SHALL NOT ALLOW ADJACENT AREAS TO BECOME DUSTY, DIRTY, OR CLUTTERED AS A RESULT OF THE CONSTRICTION OPERATION.
32. THE LISTING OF PRODUCT MANUFACTURERS, MATERIALS AND METHODS ARE THE BASIS OF DESIGN AND ARE INTENDED TO ESTABLISH A STANDARD OF QUALITY. THE ENGINEER SHALL BE SOLE JUDGE OF QUALITY AND EQUIVALENCE OF EQUIPMENT, MATERIALS AND METHODS. WHERE SUBSTITUTED OR ALTERNATIVE EQUIPMENT IS PROPOSED ON THE PROJECT BEFORE BIDDING, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THAT THE EQUIPMENT IS PROPOSED ON THE PROJECT BEFORE BIDDING, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE EQUIPMENT WILL FIT THE SPACE AVAILABLE, INCLUDING ALL REQUIRED CODE AND MAINTENANCE CLEARANCES AND TO COORDINATE ALL EQUIPMENT REQUIREMENTS WITH OTHER CONTRACTORS.

EXISTING PANELBOARD SCHEDULE

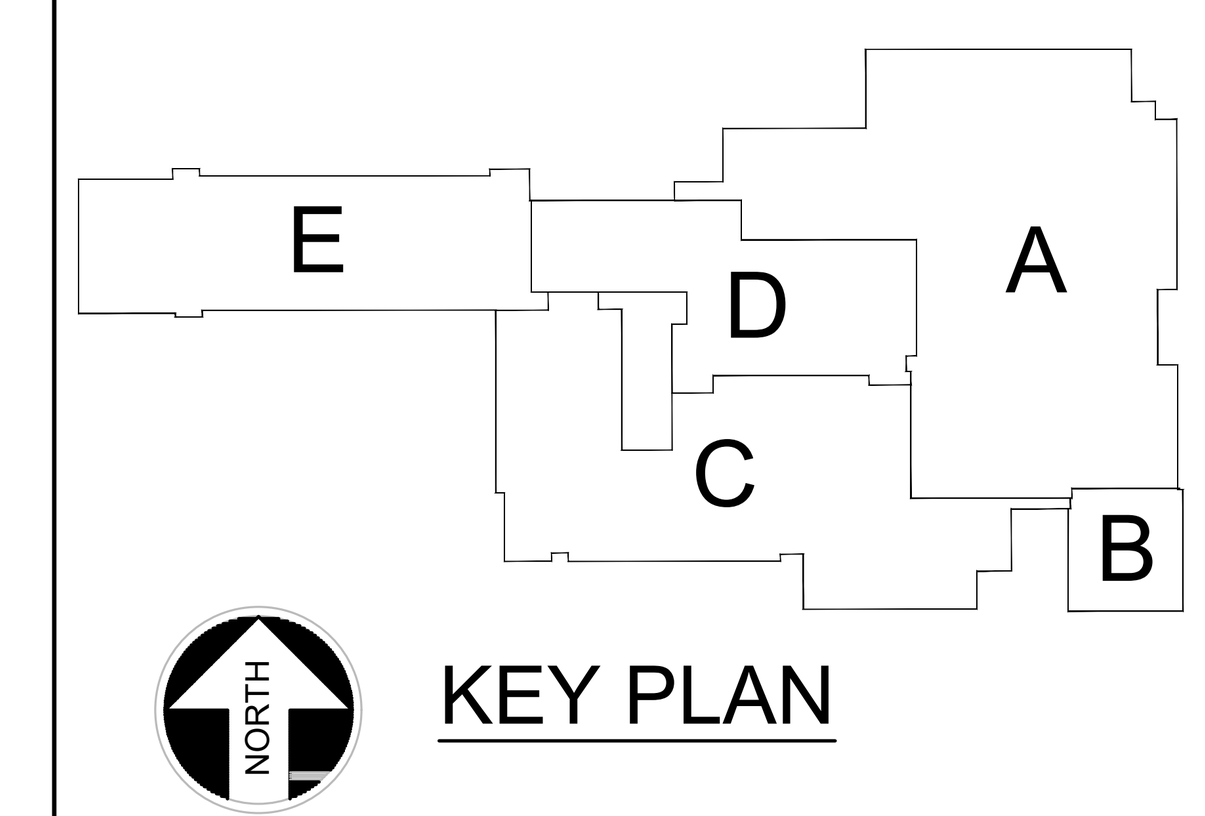
PANEL	MAINS (A):	225	VOLTAGE:	208	120	3Ø	4W	LOCATION:	STORAGE 037	SINGLE	x
LVP-B2	O.C. DEVICE:	MCB & SURGE	MIN. O.C:	EXISTING				FED BY:	MDP-100	DOUBLE	
	TYPE:	APPLIANCE	A.I.C:	EXISTING				MOUNTING:	SURFACE	COM. COVER	

CKT	POLE	T	W	G	C	LOAD	KVA ØA		KVA ØB		KVA ØC		LOAD	C	G	W	T	P	CKT
1	1	20	-	-	-	U.V. RM 027, 028, 029, 030	1.0	1.0	***	***	***	***	RECS IG RM 035/036	-	-	-	20	1	2
3	1	20	-	-	-	RECS RM 027/028	***	***	1.0	1.0	***	***	RECS IG 1908 BASEMENT	-	-	-	20	1	4
5	1	20	-	-	-	RECS RM 029/030	***	***	***	***	1.0	1.0	RECS IG FACILITIES OFFICE	-	-	-	20	1	6
7	1	20	-	-	-	UNIT HEATER 034 & CUH-1	1.0	1.0	***	***	***	***	RECS RM C005/C008/035	-	-	-	20	1	8
9	1	20	-	-	-	RECS IG-027/028	***	***	1.0	1.0	***	***	RECS RM 036/037	-	-	-	20	1	10
11	1	20	-	-	-	RECS IG-026/030	***	***	***	***	1.0	1.0	RECS RM 034A	-	-	-	20	1	12
13	3	80	-	-	-	SEWER PUMP	5.8	1.0	***	***	***	***	LTGS C007/VEST/VOO4/WALL	-	-	-	20	1	14
15							***	***	5.8	1.0	***	***	LTGS RM 029/030	-	-	-	20	1	16
17							***	***	***	***	5.8	1.0	MAIN OFFICE T.V.	-	-	-	20	1	18
19	1	40	-	-	-	AFTERMIX MAC PANEL	1.0	1.0	***	***	***	***	LTGS LOBBY - HIGH HATS	-	-	-	20	1	20
21	1	40	-	-	-	SPARE	***	***	0.0	1.0	***	***	LTGS LOBBY&VESIBULE	-	-	-	20	1	22
23	1	40	-	-	-	SPARE	***	***	***	***	0.0	1.0	LTGS-C009/C005/037/036	-	-	-	20	1	24*
25	3	20	-	-	-	EF - 1 RM 029	1.4	0.3	***	***	***	***	FC-2. C005	3/4"	#12	2#12	20	1	26**
27							***	***	1.4	1.0	***	***	LTGS STOR. 034A	-	-	-	20	1	28
29							***	***	***	***	1.4	1.0	LTGS STOR. RM 035	-	-	-	20	1	30
31	3	60	-	-	-	SPARE	0.0	0.3	***	***	***	***	FC-1 C008	3/4"	#12	2#12	20	1	32**
33							***	***	0.0	0.5	***	***	SF-1 C008	3/4"	#12	2#12	20	1	34**
35							***	***	***	***	0.0	1.0	RECS RM C007/028/030	-	-	-	20	1	36
37	1	20	-	-	-	JOHNSON CONTROL POWER	1.0	1.4	***	***	***	***	FCU MAIN LOBBY	-	-	-	20	3	38
**39	1	20	2#12	#12	3/4"	SF-2 C008	***	***	0.5	1.4	***	***							40
41	-	-	-	-	-	-	***	***	***	***	0.0	1.4							42
							17.2		16.6		16.6								
							Total KVA ØA		Total KVA ØB		Total KVA ØC								
							TOTAL KVA THIS PANEL:				50.5								
							TOTAL KVA DEMAND:				35.3								
							TOTAL AMPERAGE DEMAND:				98.1								

*LIGHTING WITHIN CORRIDOR TO BE REPLACED, CIRCUIT SHOWN DARK FOR REFERENCE.
** E.C. SHALL REUSE EXISTING BREAKER FOR NEW LOAD.

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED # 08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

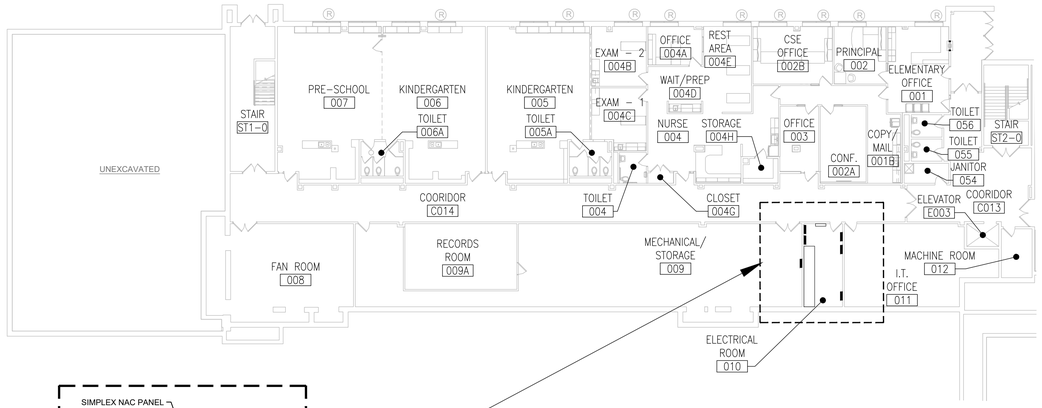
DRAWING TITLE:
ELECTRICAL LEGEND

DRAWN BY:	CHECKED BY:
MLT / TBH	LKN
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:
E-000

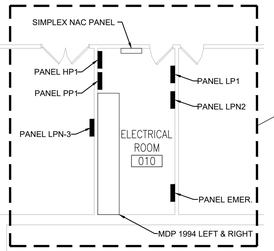
CAD FILE: 5005.2-E-000.DWG PLOT DATE: 11/10/2026

ALL WORK ASSOCIATED WITH C008/C005 & C004 IS PART OF ALTERNATE #003.



AFTON SCHOOL GROUND FLOOR COMPOSITE PLAN PART E

SCALE 1/16" = 1'-0"



ELECTRICAL ROOM 010

SCALE 1/8" = 1'-0"

ALTERNATE #003: CORRIDOR RENOVATION E-101.

ALTERNATE #003: CORRIDOR RENOVATION E-100.

STORAGE ROOM 037

SCALE 1/8" = 1'-0"

CRAWLSPACE PUMP ROOM

SCALE 1/8" = 1'-0"

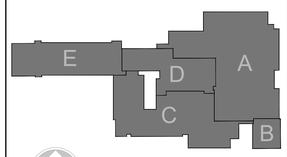
AFTON SCHOOL GROUND FLOOR COMPOSITE PLAN PARTS A,B,C,D

SCALE 1/16" = 1'-0"

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:

BG



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED # 08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

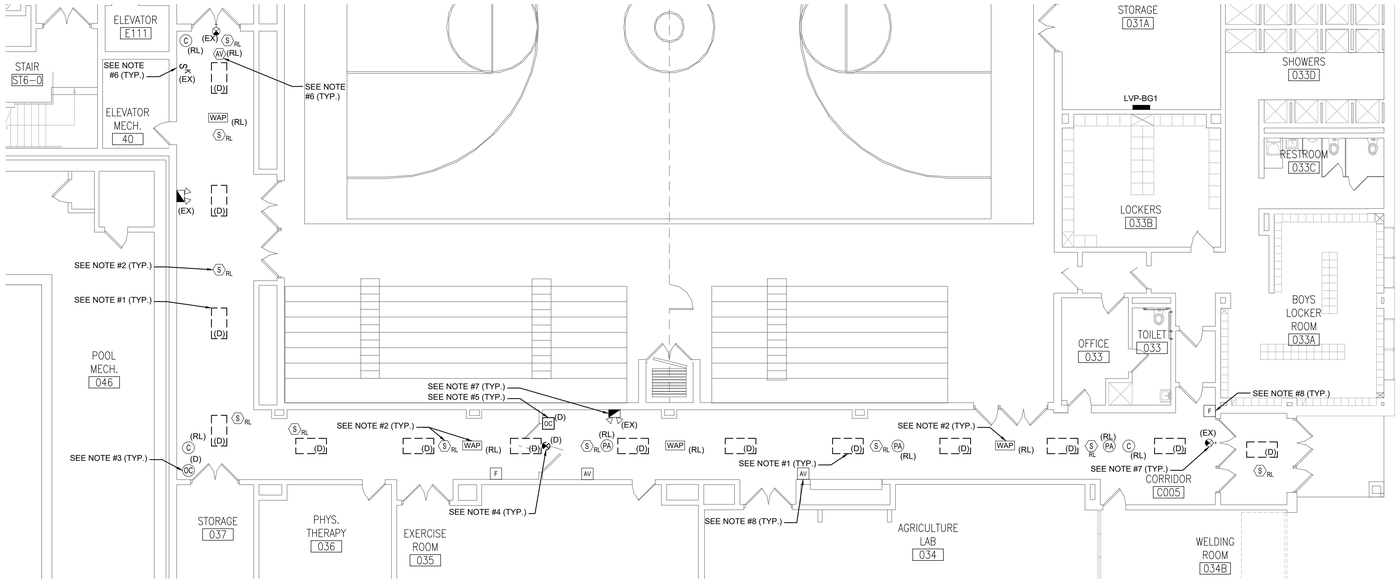
ELECTRICAL COMPOSITE PLAN GROUND FLOOR

DRAWN BY:	CHECKED BY:
MLT / TBH	LKN
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

E-001

CAD FILE: 5005.2-E-001.DWG PLOT DATE: 11/10/2026



CORRIDOR C005/C008 DEMOLITION PLAN

SCALE 1/8" = 1'-0"

1. E.C. SHALL REMOVE EXISTING LIGHTING FIXTURE AND KEEP EXISTING WIRING AND CONDUIT FOR NEW LIGHTING IN RENOVATION.

2. E.C. SHALL TEMPORARILY REMOVE OR SUSPEND/SUPPORT EXISTING WIFI DEVICE, SMOKE/HEAT DETECTOR, AUDIO/VISUAL FIRE ALARM DEVICE, OR CAMERA. AND REINSTALL INTO NEW CEILING TILE IN RENOVATION.

3. E.C. SHALL REMOVE EXISTING CEILING LIGHTING OCCUPANCY SENSOR, KEEPING ALL WIRING AND CONDUIT FOR NEW WORK.

4. E.C. SHALL REMOVE EXISTING EMERGENCY EXIT SIGN, LEAVING ALL WIRING AND CONDUIT FOR NEW SIGN IN RENOVATION.

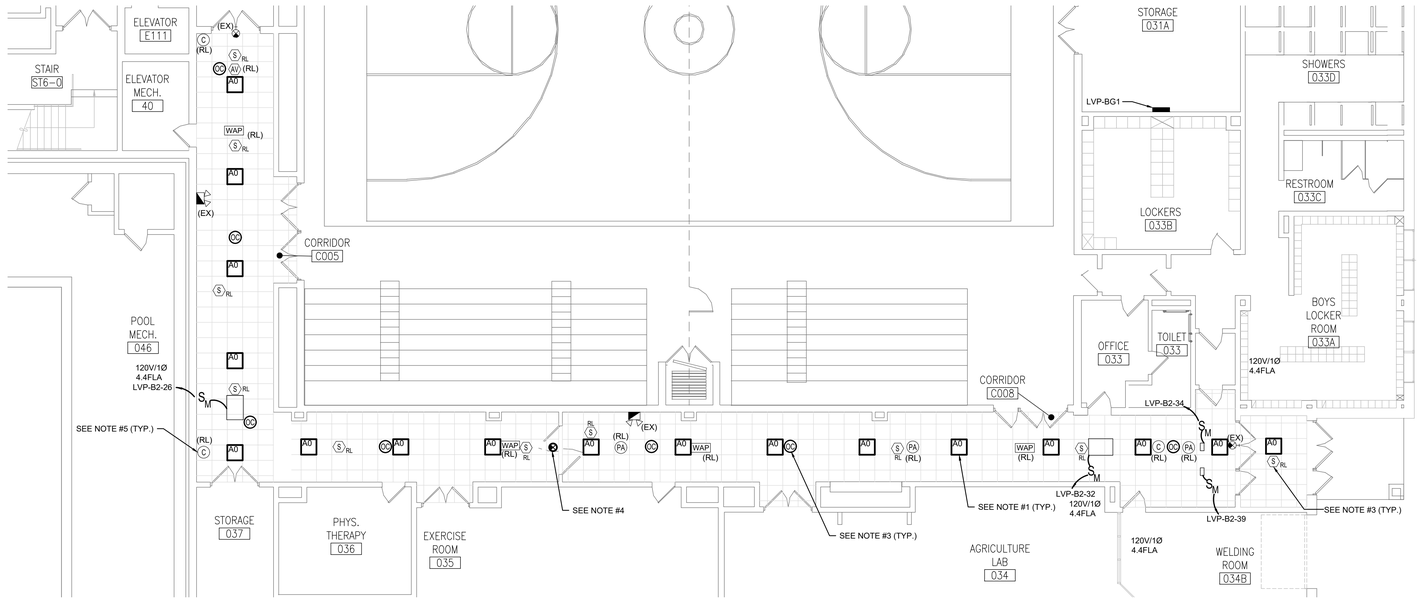
5. EXISTING WALL MOUNTED OCCUPANCY SENSOR SHALL BE REMOVED IN DEMOLITION AND TO BE REPLACED BY CEILING MOUNTED OCCUPANCY SENSOR IN NEW WORK.

6. EXISTING WALL MOUNTED LIGHT SWITCH, SHOWN FOR REFERENCE.

7. EXISTING WALL MOUNTED EMERGENCY EXIT SIGN / EMERGENCY TWIN HEAD FIXTURE TO REMAIN, DEVICES SHOWN FOR REFERENCE.

8. EXISTING FIRE ALARM DEVICE SHOWN FOR REFERENCE.

ALL WORK ASSOCIATED WITH C008/C005 IS PART OF ALTERNATE #003.



CORRIDOR C005/C008 RENOVATION PLAN

SCALE 1/8" = 1'-0"

1. E.C.SHALL RECONNECT NEW LIGHTING FIXTURE TO EXISTING CIRCUIT WHICH SERVES SPACE. E.C. SHALL EXTEND WIRING AND CONDUIT AS NEEDED FOR COMPLETE INSTALLATION.

2. E.C. SHALL REINSTALL ANY WIFI DEVICE, SMOKE/HEAT DETECTOR, AUDIO/VISUAL FIRE ALARM DEVICE, OR PA SYSTEM DEVICE THAT WAS REMOVED OR SUSPENDED/SUPPORTED IN DEMOLITION. DEVICE SHALL BE REINSTALLED IN CENTER OF TILE.

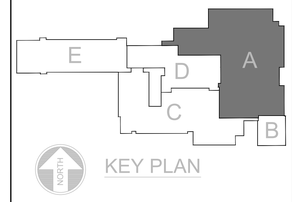
3. E.C. SHALL RECONNECT NEW CEILING OCCUPANCY SENSOR TO EXISTING CIRCUIT WHICH SERVES SPACE. E.C. SHALL EXTEND WIRING AND CONDUIT AS NEEDED FOR COMPLETE INSTALLATION. OCCUPANCY SENSOR SHALL TURN OFF AFTER SET TIME OF NO OCCUPANCY AND TURN LIGHTS ON WHEN PERSON(S) ENTERS CORRIDOR.

4. E.C. SHALL RECONNECT NEW CEILING MOUNTED EMERGENCY EXIT SIGN TO EXISTING CIRCUIT. E.C. SHALL EXTEND WIRING AND CONDUIT AS NEEDED FOR COMPLETE INSTALLATION.

5. E.C. SHALL EXTEND CONDUIT AND WIRE AS REQUIRED FOR INSTALLATION, DEVICE TO BE REINSTALLED IN CENTER OF TILE. E.C. SHALL COORDINATE CAMERA AIM WITH DISTRICT. DEVICE SHALL BE REINSTALLED IN CENTER OF TILE.

HIGHLAND
ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED # 08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VIOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:

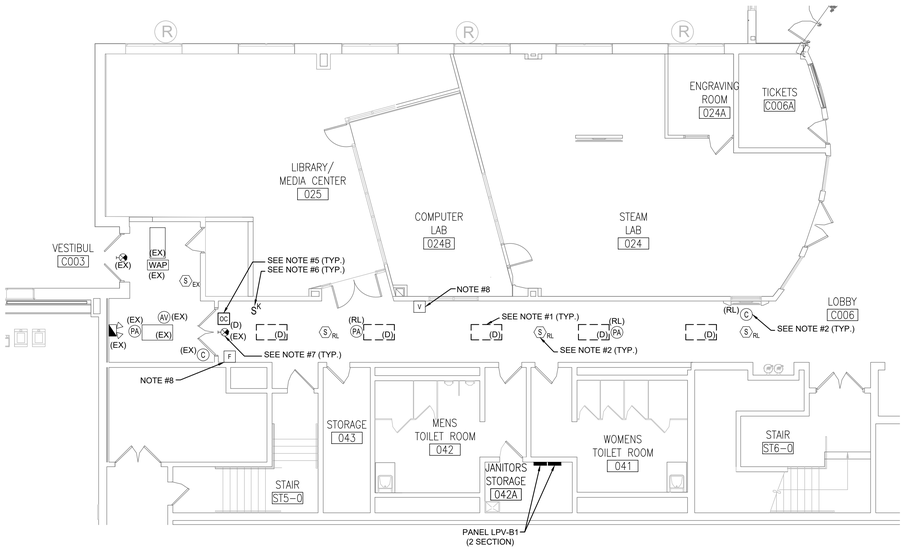
ELECTRICAL PLAN
GROUND FLOOR
CORRIDOR C005/C008

DRAWN BY:	CHECKED BY:
MLT / TBH	LKN
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

E-100

CAD FILE: 5005.2-E-100.DWG PLOT DATE: 11/10/2026



CORRIDOR C004 DEMOLITION PLAN

SCALE 1/8" = 1'-0"

1. E.C. SHALL REMOVE EXISTING LIGHTING FIXTURE AND KEEP EXISTING WIRING AND CONDUIT FOR NEW LIGHTING IN RENOVATION.

2. E.C. SHALL TEMPORARILY REMOVE OR SUSPEND/SUPPORT EXISTING WIFI DEVICE, SMOKE/HEAT DETECTOR, AUDIO/VISUAL FIRE ALARM DEVICE, OR CAMERA. AND REINSTALL INTO NEW CEILING TILE IN RENOVATION.

3. E.C. SHALL REMOVE EXISTING CEILING LIGHTING OCCUPANCY SENSOR, KEEPING ALL WIRING AND CONDUIT FOR NEW WORK.

4. E.C. SHALL REMOVE EXISTING EMERGENCY EXIT SIGN, LEAVING ALL WIRING AND CONDUIT FOR NEW SIGN IN RENOVATION.

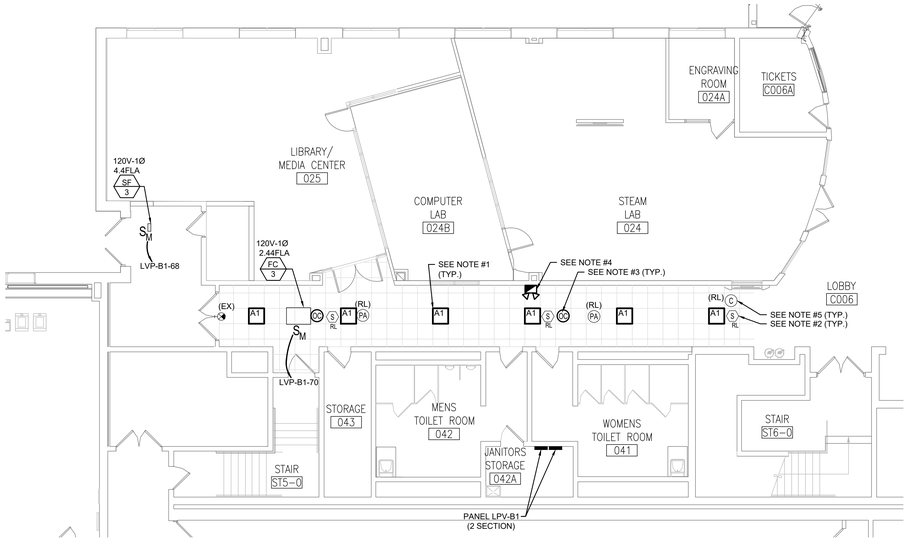
5. E.C. SHALL REMOVE EXISTING WALL MOUNTED OCCUPANCY SENSOR, SURFACE RACEWAY & DEVICE BOX. SENSOR TO BE REPLACED WITH CEILING MOUNTED SENSOR.

6. EXISTING WALL MOUNTED LIGHT SWITCH, SHOWN FOR REFERENCE.

7. EXISTING WALL MOUNTED EMERGENCY EXIT SIGN / EMERGENCY TWIN HEAD FIXTURE TO REMAIN, DEVICES SHOWN FOR REFERENCE.

8. EXISTING WALL MOUNTED FIRE ALARM DEVICE SHOWN FOR REFERENCE.

ALL WORK ASSOCIATED WITH C004 IS PART OF ALTERNATE #003.



CORRIDOR C004 RENOVATION PLAN

SCALE 1/8" = 1'-0"

1. E.C.SHALL RECONNECT NEW LIGHTING FIXTURE TO EXISTING CIRCUIT WHICH SERVES SPACE. E.C. SHALL EXTEND WIRING AND CONDUIT AS NEEDED FOR COMPLETE INSTALLATION.

2. E.C. SHALL REINSTALL ANY WIFI DEVICE, SMOKE/HEAT DETECTOR, OR AUDIO/VISUAL FIRE ALARM DEVICE, THAT WAS REMOVED OR SUSPENDED/SUPPORTED IN DEMOLITION. DEVIC SHALL BE REINSTALLED IN CENTER OF TILE.

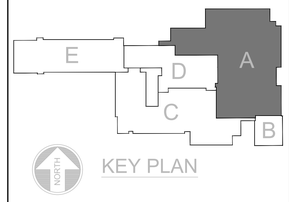
3. E.C. SHALL RECONNECT NEW CEILING OCCUPANCY SENSOR TO EXISTING CIRCUIT WHICH SERVES SPACE. E.C. SHALL EXTEND WIRING AND CONDUIT AS NEEDED FOR COMPLETE INSTALLATION. OCCUPANCY SENSOR SHALL TURN OFF AFTER SET TIME OF NO OCCUPANCY AND TURN LIGHTS ON WHEN PERSON(S) ENTERS CORRIDOR. DEVICE SHALL BE CENTERED ON TILE.

4. E.C. SHALL INSTALL NEW TWINHEAD FIXTURE AHEAD OF SWITCHING WITHIN CORRIDOR.

5. E.C. SHALL EXTEND CONDUIT AND WIRE AS REQUIRED FOR INSTALLATION, DEVICE TO BE REINSTALLED IN CENTER OF TILE. E.C. SHALL COORDINATE CAMERA AIM WITH DISTRICT.

HIGHLAND ASSOCIATES
architecture | engineering | interior design
102 Highland Avenue
Clarks Summit, PA 18411
570-586-4334
www.highlandassociates.com
New York • Pennsylvania

REVISION NO:



KEY PLAN

BID DOCUMENTS

SCHOOL SED # 08-01-01-04-0-001-020
BG SED # 08-01-01-04-5-015-003

COPYRIGHT:
"HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT.
UNAUTHORIZED DOCUMENT USE:
THIS DRAWING MAY BE UTILIZED ONLY FOR THE PURPOSE OF CONSTRUCTING OR INSTALLING THE WORK SHOWN THEREON AT THE SITE OF THE WORK SPECIFIED. ANY OTHER USE OF THIS DRAWING, INCLUDING WITHOUT LIMITATION ANY REPRODUCTION OR ALTERATION OF THIS DRAWING, WITHOUT THE PRIOR WRITTEN APPROVAL OF "HIGHLAND ASSOCIATES, LTD. ARCHITECTURE ENGINEERING INTERIOR DESIGN 2025 ©" IS A VOLATION OF THE LAW AND IS PROHIBITED.

PROJECT TITLE:

Afton Central School District
29 Academy St, Afton, NY 13730

2024 Capital Project
Phase 2

SEALS:

DRAWING TITLE:
ELECTRICAL PLAN
GROUND FLOOR
CORRIDOR C004

DRAWN BY:	CHECKED BY:
MLT / TBH	LKN
DATE:	PROJECT NO:
11/03/2026	2025-005

DRAWING NO:

E-101

CAD FILE: 5005.2-E-101.DWG PLOT DATE: 11/10/2026