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SHEET INDEX

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EROSION AND SEDIMENTATION CONTROL NOTES

1. EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPS)SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OR SOIL DISTURBANCE ACTIVITIES. BMPS SHALL COMPLY WITH THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION RULES AND REGULATIONS AND MAINE EROSION AND SEDIMENT CONTROL PRACTICES FIELD GUIDE FOR CONTRACTORS: HTTPS://WWW.MAINE.GOV/DEP/LAND/EROSION/ESCBMPS/ESC_BMP_FIELD.PDF
2. EROSION CONTROL MEASURES WITHIN 50 FEET OF PROTECTED NATURAL RESOURCES SHALL HAVE A DOUBLE PERIMETER EROSION CONTROL AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.
3. OPEN AREAS THAT ARE STRIPPED OR GRADED SHALL BE LIMITED TO ONE ACRE OR NO LARGER THAN CAN BE MULCHED IN ONE DAY.
4. SEDIMENT BARRIERS SHALL BE PLACED DOWNGRADIENT OF ALL STOCKPILES. STORMWATER RUNOFF SHOULD BE PREVENTED FROM RUNNING INTO STOCKPILES.
5. MINIMUM EROSION CONTROL MEASURES WILL NEED TO BE IMPLEMENTED AND THE CONTRACTOR WILL BE RESPONSIBLE TO MAINTAIN ALL COMPONENTS OF THE EROSION CONTROL PLAN UNTIL THE SITE IS FULLY STABILIZED. HOWEVER, BASED ON SITE AND WEATHER CONDITIONS DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES MAY NEED TO BE IMPLEMENTED. ALL AREAS OF INSTABILITY AND EROSION MUST BE REPAIRED IMMEDIATELY DURING CONSTRUCTION AND NEED TO BE MAINTAINED UNTIL THE SITE IS FULLY STABILIZED OR VEGETATION IS ESTABLISHED. A CONSTRUCTION LOG MUST BE MAINTAINED FOR THE EROSION AND SEDIMENTATION CONTROL INSPECTIONS AND MAINTENANCE
6. MINIMIZE DISTURBED AREA AND PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE. CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE SOIL EROSION.
7. WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 FEET OF ANY PROTECTED NATURAL RESOURCE. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED, AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.
8. PRIOR TO CONSTRUCTION, PROPERLY INSTALL SEDIMENT BARRIERS AT THE DOWN GRADIENT EDGE OF ANY AREA TO BE DISTURBED AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE DISTURBED AREA. SEDIMENT BARRIERS SHOULD BE INSTALLED DOWNGRADIENT OF SOIL OR SEDIMENT STOCKPILES AND STORMWATER PREVENTED FROM RUNNING ONTO THE STOCKPILE. MAINTAIN THE SEDIMENT BARRIERS BY REMOVING ACCUMULATED SEDIMENT, OR REMOVING AND REPLACING THE BARRIER, UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED. WHERE A DISCHARGE TO A STORM DRAIN INLET OCCURS, IF THE STORM DRAIN CARRIES WATER DIRECTLY TO A SURFACE WATER AND YOU HAVE AUTHORITY TO ACCESS THE STORM DRAIN INLET, YOU MUST INSTALL AND MAINTAIN PROTECTION MEASURES THAT REMOVE SEDIMENT FROM THE DISCHARGE.
9. PRIOR TO CONSTRUCTION, PROPERLY INSTALL A STABILIZED CONSTRUCTION ENTRANCE (SCE) AT ALL POINTS OF EGRESS FROM THE SITE. THE SCE IS A STABILIZED PAD OF AGGREGATE, UNDERLAIN BY A GEOTEXTILE FILTER FABRIC, USED TO PREVENT TRAFFIC FROM TRACKING MATERIAL AWAY FROM THE SITE ONTO PUBLIC ROWS. MAINTAIN THE SCE UNTIL ALL DISTURBED AREAS ARE STABILIZED.
10. INSTALL SILT FENCES OR SEDIMENT BARRIERS ALONG CONTOUR DIVIDING FLAT AND STEEP SLOPES, AREAS WITH DIFFERENT DISTURBANCE SCHEDULES, AROUND TEMPORARY STOCKPILES OR IN OTHER UNSPECIFIED POSSIBLE CIRCUMSTANCES SHOULD BE CONSIDERED BY THE CONTRACTOR. THE INTENT OF SUCH INTERIOR SILT FENCES IS TO LIMIT SEDIMENT TRANSPORT WITHIN THE SITE TOWARD THE PROTECTED RESOURCES.
11. SILT FENCE AND SEDIMENT BARRIERS WILL BE INSPECTED, REPLACED AND/OR REPAIRED IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL (0.5 INCH OR GREATER) OR SNOW MELT OR LOSS OF SERVICEABILITY DUE TO SEDIMENT ACCUMULATION. AT A MINIMUM, ALL EROSION CONTROL DEVICES WILL BE OBSERVED WEEKLY.
12. EROSION CONTROL MIX BERMS SHALL CONSIST OF A MIX OF SHREDDED WOOD FRAGMENTS AND GRIT THAT MUST BE WELL GRADED WITH AN ORGANIC CONTENT THAT IS BETWEEN 50 AND 100% OF WEIGHT. MINERAL PORTION OF THE MIX SHOULD BE NATURALLY INCLUDED IN THE PRODUCT WITH NO ROCKS GRATER THAN 4-INCHES OR LARGE AMOUNTS OF FINES (SILTS AND CLAYS). MIX SHOULD BE FREE OF REFUSE OR MATERIAL TOXIC TO PLANT GROWTH.
13. EROSION CONTROL MIX SHALL BE USED ON SLOPES 3:1 OR SHALLOWER. SLOPES BETWEEN 3:1 AND 2:1 SHALL HAVE EROSION CONTROL BLANKET. SLOPES BETWEEN 2:1 AND 1.5:1 SHALL HAVE RIP RAP. SLOPES GREATER THAN 1.5:1 ARE PROHIBITED.
14. HAYBALES MAY BE INSTALLED IN ADDITION TO SILT FENCE OR USED AROUND INLETS TO PROVIDE ADDITIONAL SEDIMENT CAPTURE AND CONTROL.
15. EROSION CONTROL BLANKETS INTENDED FOR TEMPORARY SLOPE OR CHANNEL STABILIZATION SIMILAR TO NORTH AMERICAN GREEN ERONET BIODEGRADABLE EROSION CONTROL BLANKET OR SIMILAR.
16. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO CONSTRUCTION SITE.
17. A SUITABLE BINDER SUCH AS TERRTACK WILL BE USED ON THE HAY MULCH FOR WIND CONTROL.
18. IF FINAL SEEDING OF DISTURBED AREAS IS NOT COMPLETED BY SEPTEMBER 15TH OF THE YEAR OF CONSTRUCTION, THEN ON THAT DATE THESE AREAS WILL BE GRADED AND SEEDED WITH WINTER RYE AT THE RATE OF 112 POUNDS PER ACRE OR 3 POUNDS PER 1000 SQUARE FEET. THE RYE SEEDING WILL BE PRECEDED BY AN APPLICATION OF 3 TONS OF LIME AND 800 LBS. OF 10-20-20 FERTILIZER OR ITS EQUIVALENT. MULCH WILL BE APPLIED AT A RATE OF 90 POUNDS PER 1000 SQUARE FEET.
19. IF THE RYE SEEDING CANNOT BE COMPLETED BY OCTOBER 1ST OR IF THE RYE DOES NOT MAKE ADEQUATE GROWTH BY DECEMBER 1ST, THEN ON THOSE DATES, HAY MULCH WILL BE APPLIED AT 150 POUNDS PER 1000 SQUARE FEET.
20. WITHIN 7 DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES IN AN AREA THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS, STABILIZE ANY EXPOSED SOIL WITH MULCH, OR OTHER NON-ERODIBLE COVER. STABILIZE AREAS WITHIN 75 FEET OF A WETLAND OR WATER BODY WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OF THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.
21. REMOVE ANY TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENTS AND STABILIZE.
22. PERMANENT STABILIZATION: IF THE AREA WILL NOT BE WORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO FINAL GRADE, THEN PERMANENTLY STABILIZE THE AREA WITHIN 7 DAYS BY PLANTING VEGETATION, SEEDING, SOD, OR THROUGH THE USE OF PERMANENT MULCH, OR RIP-RAP, OR ROAD SUB-BASE. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS; AMEND AREAS OF DISTURBED SUBSOILS WITH TOPSOIL, COMPOST, OR FERTILIZERS; PROTECT SEEDED AREAS WITH MULCH OR, IF NECESSARY, EROSION CONTROL BLANKETS; AND SCHEDULE SODDING, PLANTING, AND SEEDING SO TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS. NEWLY SEEDED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL-ESTABLISHED WITH 90% COVER BY HEALTHY VEGETATION. IF NECESSARY, AREAS MUST BE REWORKED AND RE-STABILIZED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT. ONE OR MORE OF THE FOLLOWING MAY APPLY TO A PARTICULAR SITE.
   - A. SEEDED AREAS: FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS A 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.
   - B. SODDED AREAS: FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.
   - C. PERMANENT MULCH: FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.
   - D. RIPRAP: FOR AREAS STABILIZED WITH RIP-RAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIP-RAP HAVE AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR APPROVED GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIP-RAP. STONE MUST BE SIZED APPROPRIATELY. IT IS RECOMMENDED THAT ANGULAR STONE BE USED.
   - E. PAVED AREAS: FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED, PROVIDED IT IS FREE OF FINE MATERIALS THAT MAY RUNOFF WITH A RAIN EVENT
   - F. DITCHES, CHANNELS, AND SWALES: FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH A 90% COVER OF HEALTHY VEGETATION, WITH A WELL-GRADED RIP-RAP LINING, TURF REINFORCEMENT MAT, OR WITH ANOTHER NON-EROSIVE LINING SUCH AS CONCRETE OR ASPHALT PAVEMENT. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE CHANNEL LINING, UNDERCUTTING OF THE CHANNEL BANKS, OR DOWN-CUTTING OF THE CHANNEL.
26. ALL DISTURBED AREAS WILL BE SEEDED WITH 2.5 LBS. RED FESCUE AND 0.5 LBS. RYE GRASS PER 1,000 SQUARE FEET AND MULCHED AT A RATE OF 90 LBS. PER 1,000 SQUARE FEET OR EQUIVALENT APPLICATION OF SEED AND MULCH.
27. IF PERMANENT BMP LOCATIONS ARE TO BE USED AS SEDIMENT TRAPS THEN THE AREAS OF THE AREAS OF THE BMPS SHALL BE RESTORED AS NEEDED TO PREPARE FOR LONG TERM USE, SUCH AS BY REMOVAL OF SEDIMENT, REGRADING ELEVATIONS, INSTALLING UNDERDRAINS (WHERE APPROPRIATE) AND STABILIZING THE AREA.
28. WINTER CONSTRUCTION IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 15. IF DISTURBED AREAS ARE NOT STABILIZED WITH PERMANENT MEASURES BY NOVEMBER 1 OR NEW SOIL DISTURBANCE OCCURS AFTER NOVEMBER 1, BUT BEFORE APRIL 15, THEN THESE AREAS MUST BE PROTECTED AND RUNOFF FROM THEM MUST BE CONTROLLED BY ADDITIONAL MEASURES AND RESTRICTIONS.
   - A. SITE STABILIZATION: FOR WINTER STABILIZATION, HAY MULCH IS APPLIED AT TWICE THE STANDARD TEMPORARY STABILIZATION RATE. AT THE END OF EACH CONSTRUCTION DAY, AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE STABILIZED. MULCH MAY NOT BE SPREAD ON TOP OF SNOW.
   - B. SEDIMENT BARRIERS: ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS.
   - C. DITCH: ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE DEPARTMENT.
   - D. SLOPES: MULCH NETTING MUST BE USED TO ANCHOR MULCH ON ALL SLOPES GREATER THAN 8% UNLESS EROSION CONTROL BLANKETS OR EROSION CONTROL MIX IS BEING USED ON THESE SLOPES.
29. STORMWATER CHANNELS: DITCHES, SWALES, AND OTHER OPEN STORMWATER CHANNELS MUST BE DESIGNED, CONSTRUCTED, AND STABILIZED USING MEASURES THAT ACHIEVE LONG-TERM EROSION CONTROL. DITCHES, SWALES AND OTHER OPEN STORMWATER CHANNELS MUST BE SIZED TO HANDLE, AT A MINIMUM, THE EXPECTED VOLUME RUN-OFF. EACH CHANNEL SHOULD BE CONSTRUCTED IN SECTIONS SO THAT THE SECTION'S GRADING, SHAPING, AND INSTALLATION OF THE PERMANENT LINING CAN BE COMPLETED THE SAME DAY. IF A CHANNEL'S FINAL GRADING OR LINING INSTALLATION MUST BE DELAYED, THEN DIVERSION BERMS MUST BE USED TO DIVERT STORMWATER AWAY FROM THE CHANNEL, PROPERLY-SPACED CHECK DAMS MUST BE INSTALLED IN THE CHANNEL TO SLOW THE WATER VELOCITY, AND A TEMPORARY LINING INSTALLED ALONG THE CHANNEL TO PREVENT SCOURING.
   - A. THE CHANNEL SHOULD RECEIVE ADEQUATE ROUTINE MAINTENANCE TO MAINTAIN CAPACITY AND PREVENT OR CORRECT ANY EROSION OF THE CHANNEL'S BOTTOM OR SIDE SLOPES.
   - B. WHEN THE WATERSHED DRAINING TO A DITCH OR SWALE IS LESS THAN 1 ACRE OF TOTAL DRAINAGE AND LESS THAN ¼ ACRE OF IMPERVIOUS AREA, DIVERSION OF RUNOFF TO ADJACENT WOODED OR OTHERWISE VEGETATED BUFFER AREAS IS ENCOURAGED WHERE THE OPPORTUNITY EXISTS.
30. CULVERTS: CULVERTS MUST BE SIZED TO AVOID UNINTENDED FLOODING OF UPSTREAM AREAS OR FREQUENT OVERTOPPING OF ROADWAYS. CULVERT INLETS MUST BE PROTECTED WITH APPROPRIATE MATERIALS FOR THE EXPECTED ENTRANCE VELOCITY, AND PROTECTION MUST EXTEND AT LEAST AS HIGH AS THE EXPECTED MAXIMUM ELEVATION OF STORAGE BEHIND THE CULVERT. CULVERT OUTLET DESIGN MUST INCORPORATE MEASURES, SUCH AS APRONS, TO PREVENT SCOUR OF THE STREAM CHANNEL. OUTLET PROTECTION MEASURES MUST BE DESIGNED TO STAY WITHIN THE CHANNEL LIMITS. THE DESIGN MUST TAKE ACCOUNT OF TAILWATER DEPTH.
31. ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.

INSPECTION AND MAINTENANCE

THE FOLLOWING STANDARDS MUST BE MET DURING CONSTRUCTION:

1. INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A STORM EVENT (0.5" OR MORE IN A CONSECUTIVE 24-HOUR PERIOD), AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS.
2. IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF ADDITIONAL BMPS OR SIGNIFICANT REPAIR OF BMPS ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (0.5" OR MORE IN A CONSECUTIVE 24-HOUR PERIOD). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.
3. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPS THAT NEED MAINTENANCE, BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPS, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN.

HOUSEKEEPING

1. SPILL PREVENTION: CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.
2. GROUNDWATER PROTECTION: DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.
3. FUGITIVE SEDIMENT AND DUST: ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.

4. DEBRIS AND OTHER MATERIALS. MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
5. EXCAVATION DE-WATERING: EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.
6. AUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:
   - (A) DISCHARGES FROM FIREFIGHTING ACTIVITY;
   - (B) FIRE HYDRANT FLUSHINGS;
   - (C) VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
   - (D) DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX (C)(3);
   - (E) ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
   - (F) PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED;
   - (G) UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
   - (H) UNCONTAMINATED GROUNDWATER OR SPRING WATER;
   - (I) FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
   - (J) UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5));
   - (K) POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
   - (L) LANDSCAPE IRRIGATION.
7. UNAUTHORIZED NON-STORMWATER DISCHARGES. THE DEPARTMENT'S APPROVAL UNDER THIS CHAPTER DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:
   - (A) WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
   - (B) FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
   - (C) SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
   - (D) TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

GENERAL CONSTRUCTION NOTES

1. CONTRACTOR TO PROVIDE OWNER AND ENGINEER WITH A WORK PLAN OUTLINING THE WORK SCHEDULE, TRAFFIC CONTROL PLAN, AND WORK AREA BARRICADING PLAN TO BE APPROVED BY THE OWNER AND ENGINEER PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION WITH THE TOWN, UTILITY COMPANIES, DIG SAFE, AND EMERGENCY SERVICES WHERE APPLICABLE. CONTRACTOR SHALL NOTIFY ALL UTILITIES PRIOR TO COMMENCING WORK TO ALLOW SUFFICIENT TIME TO LOCATE AND MARK THE LOCATION OF ALL BURIED UTILITIES. CONTRACTOR SHALL ALSO CONTACT "DIG SAFE", TELEPHONE NO 811 OR 888-DIG-SAFE. REPAIR OF ANY DAMAGED UTILITY WILL BE INCIDENTAL TO THIS PROJECT.
3. THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER IN WRITING OF ANY CONDITION OR OCCURRENCE THAT REPRESENTS A CHANGE IN PROJECT SCOPE. VERBAL NOTIFICATION IS REQUIRED PRIOR TO PROCEEDING WITH THE WORK OF THE PROJECT AND WRITTEN NOTIFICATION MUST BE PROVIDED. REQUESTS FOR FEE ADJUSTMENTS WILL NOT BE CONSIDERED UNLESS PROPER NOTICE IS GIVEN.
4. THE CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS AS REQUIRED TO PERFORM THE WORK AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE AND LOCAL CODES.
5. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS. PERMIT APPLICATIONS SHALL BE SUBMITTED WITH ADEQUATE TIME SO AS NOT TO DELAY CONSTRUCTION.
6. THE CONTRACTOR SHALL SUPERVISE AND INSPECT THE WORK OF THIS PROJECT IN AN EFFICIENT AND COMPETENT MANNER. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES USED TO COMPLETE THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THE WORK IS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. A REPRESENTATIVE OF THE GENERAL CONTRACTOR SHALL BE PRESENT DURING ALL PHASES OF THE WORK.
7. SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. PERFORM ALL WORK IN ACCORDANCE WITH SAFETY STANDARDS OF APPLICABLE LAWS, BUILDING AND CONSTRUCTION CODES, THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" PUBLISHED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND THE REQUIREMENTS OF TITLE 9 OF THE CODE OF FEDERAL REGULATIONS, PART 1926, "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION".
8. THE LOCATIONS OF ALL PROPERTY LINES AND RIGHT OF WAYS ARE APPROXIMATE (SHOWN FOR REFERENCE ONLY), UNLESS NOTED OTHERWISE. PROPERTY LINES AND RIGHT OF WAYS SHOWN ARE NOT INTENDED TO REPRESENT LEGAL BOUNDARIES.
9. THE LOCATION, TYPE AND SIZE OF EXISTING PIPES, DUCTS, CONDUITS AND OTHER UNDERGROUND STRUCTURES SHOWN ON THE DRAWINGS ARE NOT WARRANTED TO BE EXACT NOR IS IT WARRANTED THAT ALL UNDERGROUND STRUCTURES ARE SHOWN. CONTRACTOR SHALL FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. DEPTH OF SERVICES ARE UNKNOWN AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. EXCAVATING TEST PITS AS NECESSARY TO VERIFY UTILITY LOCATIONS AND DEPTHS SHALL BE INCIDENTAL TO THIS PROJECT.
10. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING TOPOGRAPHY AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING PIPE SIZES, INVERTS, AND LOCATIONS, AND SHALL INCLUDE IN SUBMITTAL PRIOR TO ORDERING.
12. LAYOUT OF THE PROJECT IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE APPROVED BY THE ENGINEER. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL GRADE AND LAYOUT CONTROL. LAYOUT SHOULD BE PERFORMED WITH SURVEY EQUIPMENT AND OVERSEEN BY A LICENSED SURVEYOR. A CAD FILE WILL BE AVAILABLE TO THE CONTRACTOR.
13. CONTRACTOR SHALL BE REQUIRED TO PROVIDE DUST CONTROL FOR PROJECT WHICH CAN INCLUDE, BUT IS NOT LIMITED TO, WATER AND CALCIUM CHLORIDE. COST IS INCIDENTAL TO THE PROJECT.
14. RESTRICT ACCESS TO SITE THROUGH THE USE OF APPROPRIATE SIGNAGE, GATES, BARRIERS, FENCES, ETC. SITE SHALL BE LEFT WITH APPROPRIATE SAFETY MEASURES IN PLACE DURING NON-WORKING HOURS. NO TRENCH SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS THE RESPONSIBILITY OF CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS.
15. CONTRACTOR SHALL PERFORM ALL CONSTRUCTION ACTIVITIES RELATED TO THE PROJECT WITHIN THE CONFINES OF THE SITE. ANY ACTIVITY, MATERIAL STORAGE ETC., TAKING PLACE ON PRIVATE PROPERTY SHALL BE WITH THE EXPRESS WRITTEN PERMISSION OF THE OWNER AND PROPERTY OWNER AND COORDINATED WITH THE OWNER. WORK OUTSIDE OF THESE LIMITS MAY BE REQUIRED.
16. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT EQUIPMENT FLUIDS FROM REACHING ANY WATER COURSE. ANY INADVERTENT FLUID DISCHARGES SHALL BE IMMEDIATELY CLEANED FROM THE WATERS USING WHATEVER MEANS NECESSARY, AS DETERMINED BY THE ENGINEER.
17. CONTRACTOR SHALL BACKFILL TRENCH FOLLOWING EACH DAY'S CONSTRUCTION. NO OPEN TRENCHES WILL BE ALLOWED OVERNIGHT UNLESS APPROVED BY ENGINEER AND PROPERLY BARRICADED (IE. SNOW FENCING, CHAIN LINK FENCING, JERSEY BARRIER OR APPROVED EQUAL. CAUTION RIBBON AND EQUIPMENT PLACEMENT WILL NOT BE APPROVED AS BARRICADING. CONTRACTOR IS RESPONSIBLE TO MAINTAIN TRENCH AS DIRECTED BY THE ENGINEER.
18. ALL FINISH SURFACES SHALL BE INSTALLED TO PROMOTE POSITIVE DRAINAGE. IN NO WAY SHALL THE NEW FINISH SURFACES CREATE DRAINAGE PROBLEMS THAT DID NOT EXIST PRIOR TO CONSTRUCTION.
19. ALL MATERIALS SCHEDULED FOR REMOVAL SHALL BE DISPOSED OF IN A LEGAL MANNER BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE OWNER HAS THE FIRST RIGHT AND REFUSAL FOR ANY DEMOLITION MATERIALS.DISPOSAL OF SURPLUS SOIL MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR; SURPLUS MATERIAL SHALL NOT BE DISPOSED OF ON THE PROJECT SITE. DISPOSAL SHALL BE MADE ONLY AT WASTE AREAS WHICH ARE LICENSED TO ACCEPT SUCH MATERIALS, UNLESS THE MATERIAL IS ACCEPTABLE FOR USE AS FILL IN OTHER AREAS OF THE PROJECT. THE OWNER HAS THE FIRST RIGHT AND REFUSAL FOR ANY SURPLUS SOIL MATERIALS.
20. PROPERLY PROTECT AND DO NOT DISTURB PROPERTY IRONS AND MONUMENTS. IF DISTURBED, THE PROPERTY MONUMENT WILL BE RESET AT THE CONTRACTOR'S EXPENSE, BY A REGISTERED LAND SURVEYOR APPROVED BY THE ENGINEER.

REMOVAL NOTES:

1. CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING WORK. NOTIFY THE ARCHITECT OF ANY DISCREPANCY FROM THE PLANS.
2. CONTRACTOR TO COORDINATE AND MEET THE REQUIREMENT OF THE MUNICIPAL UTILITY COMPANY WHEN DOING WORK ON THEIR SYSTEM.
3. ALL DEMOLITION DEBRIS SHALL BE REMOVED AND DISPOSED OF OFFSITE IN ACCORDANCE WITH ALL APPLICABLE LAWS.

LAYOUT NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR LAYOUT OF SITE ELEMENTS. CONTRACTOR SHALL EMPLOY A REGISTERED LAND SURVEYOR FOR THE PROPER LAYOUT.
2. CONTRACTOR SHALL LOCATE AND CLEARLY MARK ALL PROPERTY LINES, NATURAL RESOURCES, CLEARING LIMITS AND/OR EXISTING TO REMAIN ELEMENTS, PRIOR TO COMMENCING WORK.
3. ALL RADII ARE 5' UNLESS OTHERWISE NOTED ON THE PLANS.

GRADING NOTES:

1. ALL ELEVATIONS EXISTING AND PROPOSED ARE BASED ON THE TOPOGRAPHIC SURVEY COMPLETED. ALL RADII ARE 5' UNLESS OTHERWISE NOTED ON THE PLANS.
2. ALL TOPSOILS AND ORGANICS SHALL BE REMOVED FROM PAVEMENT AND BUILDING AREAS PRIOR TO CONSTRUCTION. THIS MATERIAL SHALL NOT BE USED AS GENERAL SITE FILL.
3. GRADES ADJACENT TO THE BUILDING SHALL BE 6"-8" BELOW FINISH FLOOR UNLESS OTHERWISE NOTED.
4. GRADES OF SIDEWALK AT BUILDING ENTRANCES SHALL BE FLUSH WITH FINISH FLOOR, SLOPING AWAY FROM THE THRESHOLD, ON A FROST PROTECTED SLAB, UNLESS OTHERWISE NOTED.
5. ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM UNLESS OTHERWISE NOTED.
6. TREES AND TREE CANOPIES SHOWN ON THE PLANS ARE APPROXIMATE AND HAVE NOT BEEN FIELD VERIFIED.

UTILITY NOTES:

1. ALL UNDERGROUND SECONDARY POWER SHALL BE RUN IN SCHEDULE 40 PVC CONDUIT UNLESS OTHERWISE SPECIFIED.
2. ALL UNDERGROUND ELECTRIC FOR SITE LIGHTING SHALL BE RUN IN SCHEDULE 40 PVC CONDUIT.
3. PROVIDE A PULL WIRE IN ALL UNDERGROUND CONDUIT.
4. CONDUIT TRENCHING AND BACKFILLING BY THE SITE CONTRACTOR. CONDUITS AND CONDUCTORS ARE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
5. NO UTILITY TRENCH BACKFILLING SHALL OCCUR UNTIL THE WORK HAS BEEN INSPECTED BY THE AUTHORITY HAVING JURISDICTION.
6. WHERE NEW WATER AND SEWER RUN SIDE BY SIDE, MAINTAIN A TEN FOOT (10') HORIZONTAL SEPARATION IF POSSIBLE. WHERE THEY CROSS MAINTAIN AN 18" SEPARATION WITH THE WATERLINE GOING OVER THE SEWER LINE. PROVIDE 2" RIGID INSULATION BARRIER, IN A 8' DIAMETER FROM THE POINT OF WHERE THEY CROSS . IF WATER MUST PASS UNDER SEWER, ENCASE THE WATERLINE IN CONCRETE 4' EITHER SIDE OF THE CROSSING.
7. WATER, SEWER AND STORM DRAIN LINES SHALL BE INSTALLED BELOW APPLICABLE FROST DEPTH. PENETRATIONS INTO BUILDING CAN OCCUR OVER THE FOUNDATION AND THROUGH THE FROST WALL.

MATERIAL SPECIFICATIONS

1. **SAND BEDDING SHALL MEET MDOT STANDARD SPECIFICATION 703.05.**
2. **AGGREGATE BASE GRAVEL SHALL MEET MDOT STANDARD SPECIFICATION 703.06 TYPE A.**
3. **AGGREGATE SUBBASE GRAVEL SHALL MEET MDOT STANDARD SPECIFICATION 703.06 TYPE D.**
4. **STRUCTURAL FILL TO MEET MDOT STANDARD SPECIFICATION 703.06 TYPE A.**
5. **SEEDING SHALL MEET MDOT STANDARD SPECIFICATION 717.03 METHOD ONE.**
6. **BACKFILL MATERIAL SHALL MEET THE FOLLOWING FOR COMPACTION:**

FILL AND BACKFILL LOCATION	MODIFIED PROCTOR DENSITY %
ROADWAY	95
UNDER OR WITHIN FIVE FEET OF STRUCTURES	95
FILL FOR EROSION REPAIR AREAS	92
TRENCHES THROUGH NON-ROADWAY AREAS	92
IN EMBANKMENT (INCLUDING TEMPORARY)	92
PIPE BEDDING AND TRENCHING	92

ABBREVIATIONS

@	AT
AFG	ABOVE FINISHED GRADE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX;±	APPROXIMATELY
BLDG	BUILDING
CL	CENTERLINE
CB	CATCH BASIN
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CPE	CORRUGATED POLYETHYLENE
DI	DUCTILE IRON
DIA.	DIAMETER
E	EASTING
EL	ELEVATION
EFM	EXISTING FORCE MAIN
EPS	EXTRUDED POLYSTYRENE
FM	FORCEMAIN
GAL	GALLON
GALV	GALVANIZED
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HDPE	HIGH DENSITY POLYETHYLENE
HP	HORSEPOWER
ID	INSIDE DIAMETER
IN.	INCHES
INT.	INTERSECTION
INV.	INVERT
MAX.	MAXIMUM
MDOT	MAINE DEPT. OF TRANSPORTATION
MH	MANHOLE
MIN	MINIMUM
N	NORTHING
NE	NORTHEAST
N.T.S.	NOT TO SCALE
NWT	NON WOVEN GEOTEXTILE
OD	OUTSIDE DIAMETER
O.C.	ON CENTER
OH	OVERHEAD
OZ	OUNCES
PERF	PERFORATED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
PL	PROPERTY LINE
POH	PROPOSED OVERHEAD ELECTRIC
PUGE	PROPOSED UNDERGROUND ELECTRIC
R	RADIUS
S	SLOPE
SCL	STORMWATER COLLECTION LINE
SCS	STORMWATER COLLECTION SYSTEM
SDR	STANDARD DIMENSION RATIO
SE	SOUTHEAST
SHT	SHEET
SQ	SQUARE
SS	STAINLESS STEEL
SY	SQUARE YARD
TBM	TEMPORARY BENCH MARK
TOC	TOP OF CONCRETE
TYP	TYPICAL

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

ISSUE FOR BID

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

PROJECT

CONNER SCHOOL RENOVATIONS
CONNER, MAINE

TITLE

GENERAL NOTES & ABBREVIATIONS

STATE OF MAINE
04.22.2025
PAUL A. MONYOK
No. 11833
LICENSED
PROFESSIONAL ENGINEER

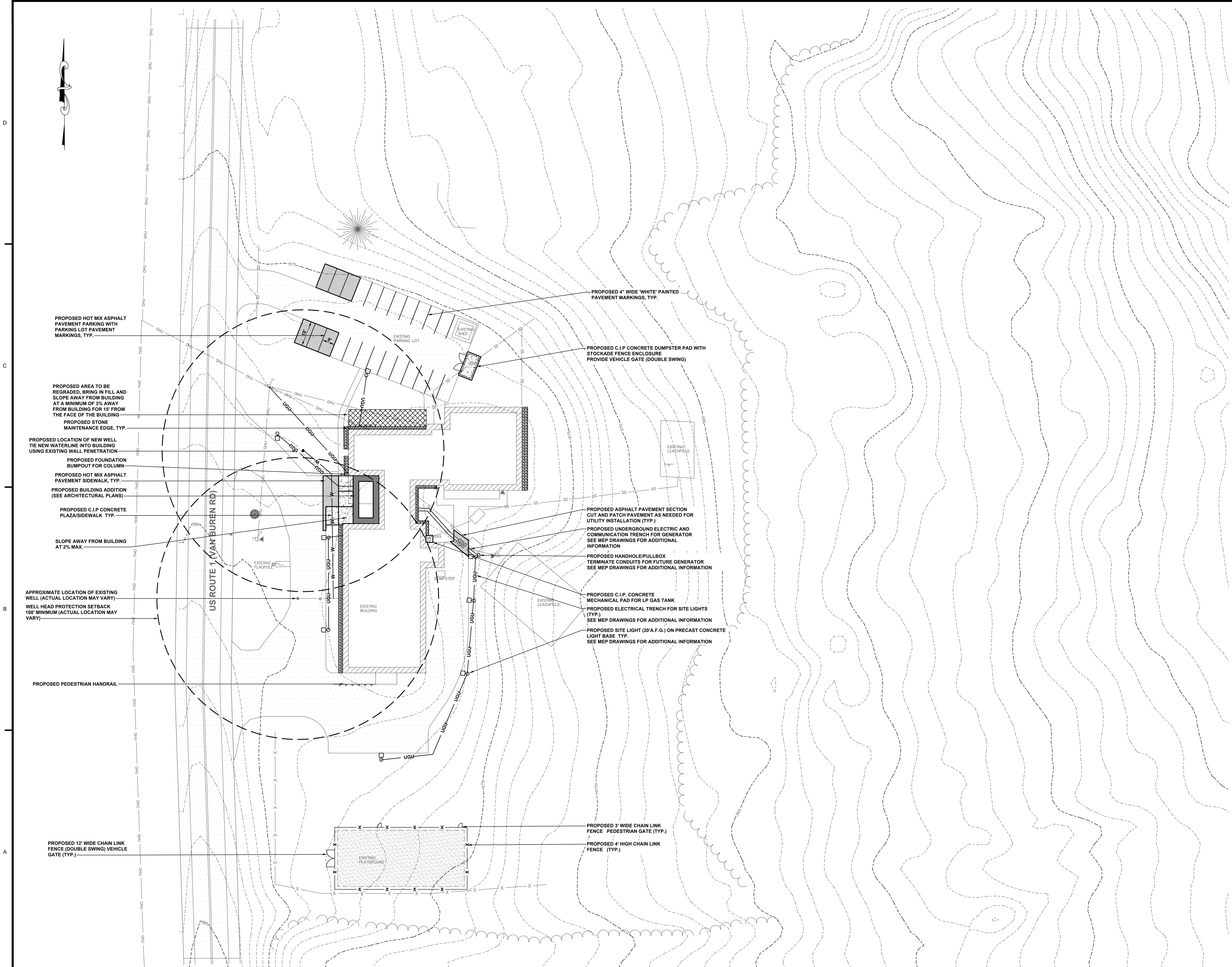
DATE	SCALE
2025.04.22	NTS

DRAWN BY	DESIGNED BY	CHECKED BY
PAM	PAM	--

PROJECT No.: 10377.028

DRAWING No.: **C001** REV.: **1**

FILE LOCATION: P:\ME\10377-BUREAU_OF_GENERAL_SERVICES\028-CONNOR SCHOOL-RENOVATIONS-MGC\02-CAD_FILES\CIVIL\10377.028-C-DT.DWG, 2025.04.18, 3:24 PM



LOCATION MAP:

SCALE: 1"=2000'

USGS QUADRANGLE: QUAD
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LEGEND:

DESCRIPTION	*EXISTING*	*PROPOSED*
PROPERTY LINE		
BENCHMARK		
SURVEY STATION		
MANHOLE		
UTILITY POLE		
WELL		
WATER VALVE	WV	
SIGN		
CATCH BASIN		
HYDRANT		
EDGE OF GRAVEL		
EDGE OF PAVEMENT		
MAJOR FOOT CONTOUR	100	100
MINOR FOOT CONTOUR	98	98
WATERLINE	W	W
STORM DRAIN	SD	SD
SANITARY SEWER	SS	SS
OVERHEAD UTILITIES	OHU	OHU
UNDERGROUND UTILITIES	UGE	UGU
CHAIN LINK FENCE	X	X
SILT FENCE		SF
TREE LINE		
GRAVEL SURFACE		
PAVED SURFACE		

PLAN REFERENCE:

INFORMATION BASED ON A SITE PLAN DEVELOPED BY J. GORDON ARCHITECTURE DATED MARCH 28, 2000. ADDITIONAL SITE FEATURES SUPPLEMENTED FROM AERIAL PHOTOGRAPHS AND SITE OBSERVATIONS.
TOPOGRAPHIC BASED ON LIDAR DATA PROVIDED ONLINE SERVICES PROVIDED BY NOAA, AND SET TO NAD 83, 2011 MAINE STATE PLANE EAST

NOTES:

CONTRACTOR SHALL VERIFY ALL EXISTING INFORMATION IN THE FIELD AND REPORT ANY DISCREPANCIES PRIOR TO STARTING WORK.

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)
1 inch = 30 ft.

REV.	DATE	DESCRIPTION	BY	CHK.
1	2025.04.22	ISSUE FOR BID	PAM	MGC

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207.989.4824

PROJECT

CONNER SCHOOL RENOVATIONS
CONNER, MAINE

TITLE

PROPOSED SITE PLAN

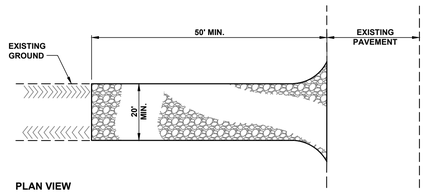
STATE OF MAINE 04.22.2025 PAUL A. MONYOK No. 11833 LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	1" = 30'

DRAWN BY	DESIGNED BY	CHECKED BY
PAM	PAM	---

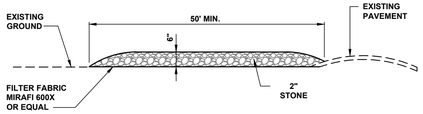
PROJECT No. 10377.028

DRAWING No. **C101** REV. **1**



PLAN VIEW

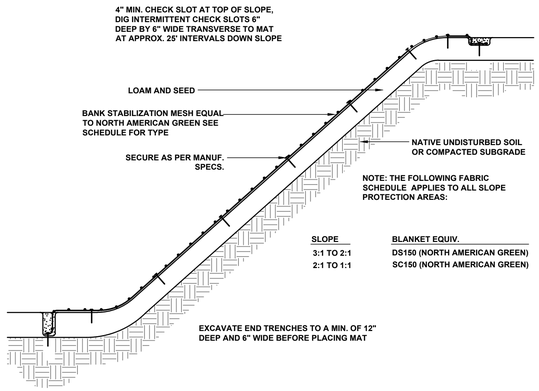
NOTE: CONTRACTOR SHALL ADD STONE TO ENTRANCE AS MUD/SILT MATERIAL ACCUMULATES



SECTION

STABILIZED CONSTRUCTION ENTRANCE DETAIL

N.T.S.



BANK STABILIZATION DETAIL

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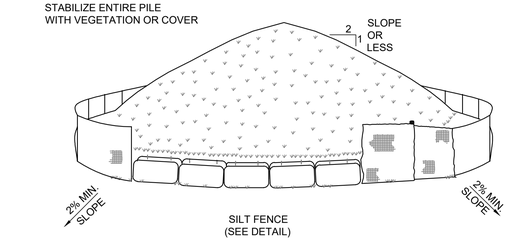
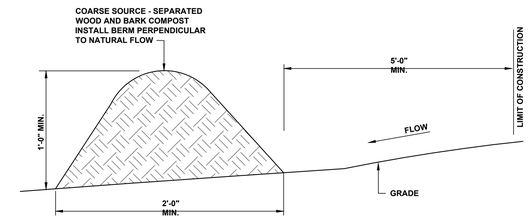


INSTALLATION NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED W/ EITHER SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.
4. SEE SILT FENCE DETAIL ON THIS SHEET
5. TEMPORARILY STABILIZE AS NOTED IN SPECIFICATIONS

TEMPORARY STOCKPILE AREA

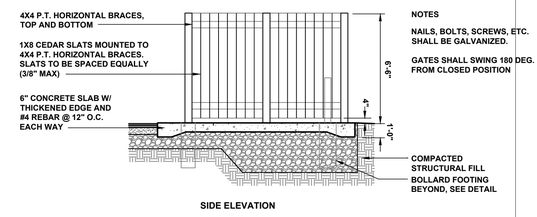
N.T.S.



NOTE:
THE EROSION CONTROL MIX MUST BE WELL-GRADED WITH AN ORGANIC COMPONENT THAT IS BETWEEN 50 AND 100% OF DRY WEIGHT, AND THAT IS COMPOSED OF FIBROUS AND ELONGATED FRAGMENTS. THE MINERAL PORTION OF THE MIX SHOULD BE NATURALLY INCLUDED IN THE PRODUCT WITH NO LARGER ROCKS (>4") OR LARGE AMOUNTS OF FINES (SILTS AND CLAYS). IN STUMP GRINDING, THE MINERAL SOIL ORIGINATES FROM THE ROOT BALL AND SHOULD NOT BE REMOVED BEFORE GRINDING. THE MIX SHOULD BE FREE OF REFUSE, MATERIAL TOXIC TO PLANT GROWTH OR UNSUITABLE MATERIAL (BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS).

EROSION CONTROL MIX BERM DETAIL

N.T.S. (MAY BE USED AS AN ALTERNATE TO SILT FENCE)

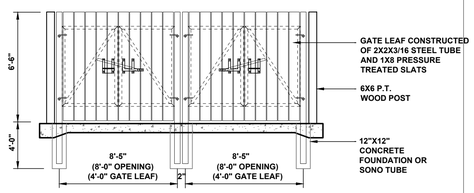


NOTES

NAILS, BOLTS, SCREWS, ETC. SHALL BE GALVANIZED.

GATES SHALL SWING 180 DEG. FROM CLOSED POSITION

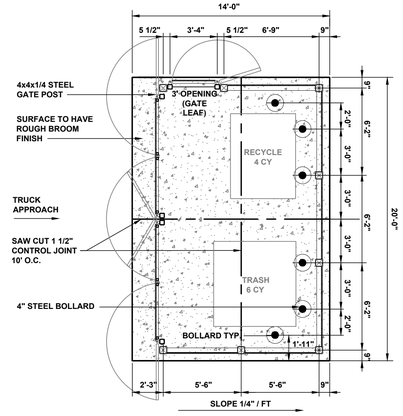
SIDE ELEVATION



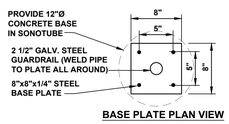
FRONT ELEVATION

DUMPSTER PAD AND ENCLOSURE DETAIL

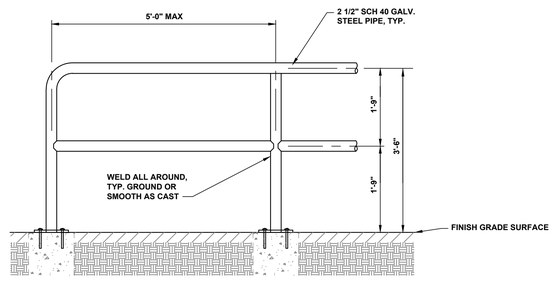
N.T.S.



PLAN VIEW

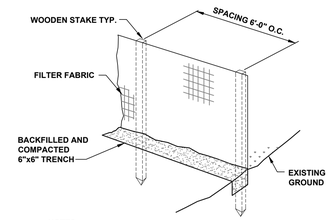


BASE PLATE PLAN VIEW



STEEL PIPE HANDRAIL DETAIL

N.T.S.

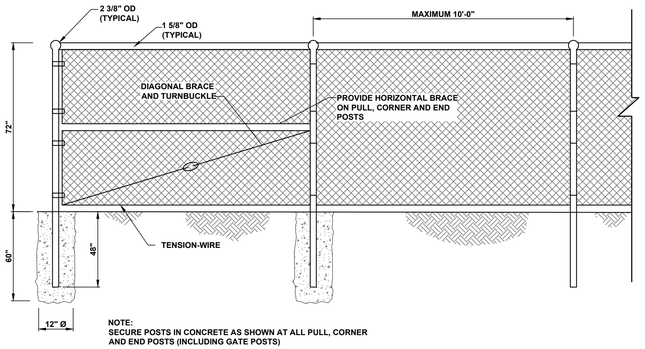


NOTES:

1. KEY FABRIC IN A 6"x6" TRENCH W/BACKFILL AND COMPACT.
2. SILT FENCE SHALL BE A 3' FENCE WITH A MINIMUM GRAB STRENGTH OF 120 LBS.

SILT FENCE DETAIL

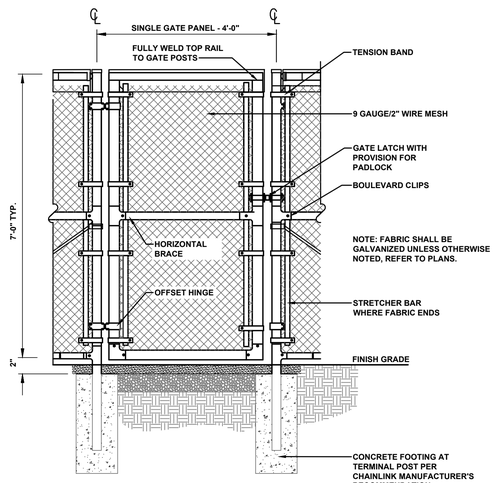
N.T.S.



NOTE:
SECURE POSTS IN CONCRETE AS SHOWN AT ALL PULL, CORNER AND END POSTS (INCLUDING GATE POSTS)

CHAIN LINK FENCE DETAIL

N.T.S.



4' MAN GATE DETAIL

N.T.S.

REV.	DATE	DESCRIPTION	BY	CHK

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PROJECT

CONNER SCHOOL RENOVATIONS
CONNER, MAINE

TITLE

SITE DETAILS

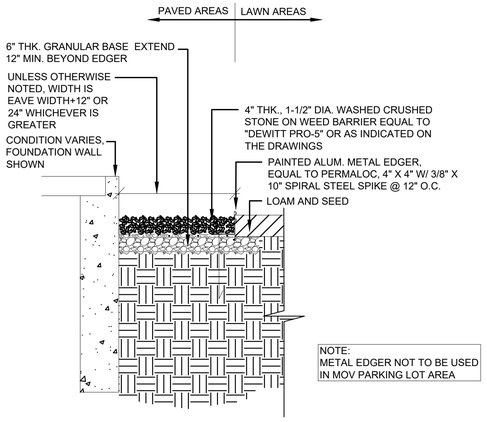
STATE OF MAINE 04.22.2025 PAUL A. MONYOK NO. 11833 LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	NTS

DRAWN BY	DESIGNED BY	CHECKED BY
PAM	PAM	--

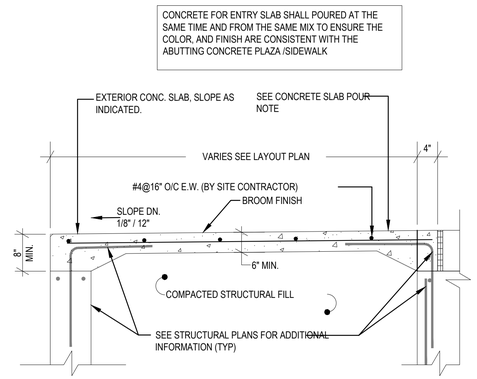
PROJECT No. 10377.028

DRAWING No. **C501** REV. **1**



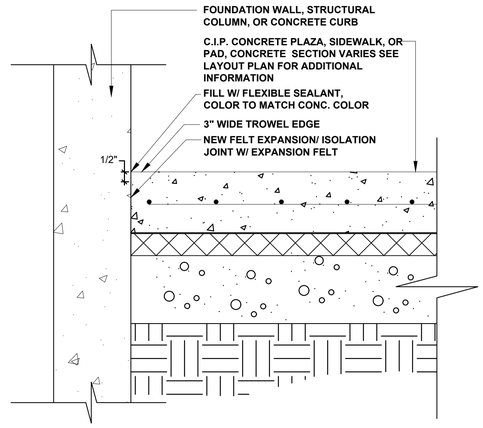
STONE MAINTENANCE EDGE DETAIL

N.T.S.



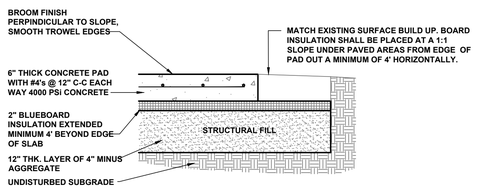
FULL DEPTH FROST PROTECTED ENTRY PAD DETAIL

N.T.S.



CONCRETE ISOLATION JOINT DETAIL

N.T.S.

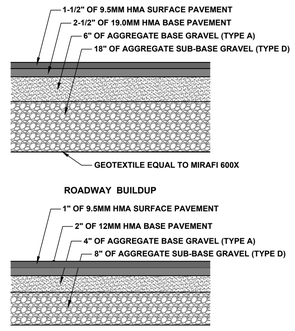


NOTE:

1. MATCH EXISTING SURFACE FINISH, EXCEPT WHERE NOTED. IN LAWN AREAS INSTALL 4" OF LOAM AND SEED AND MULCH.

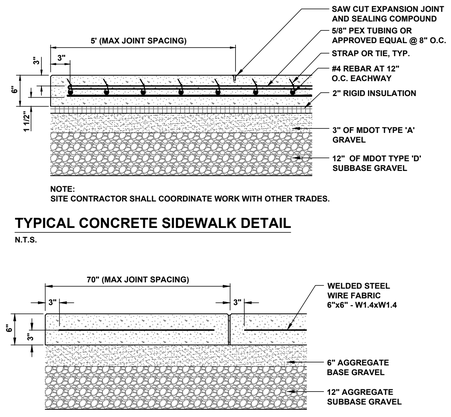
TYPICAL CONCRETE PAD DETAIL

N.T.S.



TYPICAL ROADWAY/SIDEWALK BUILDUP DETAIL

NTS

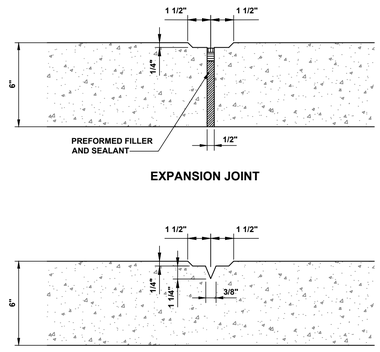


TYPICAL CONCRETE SIDEWALK DETAIL

N.T.S.

TYPICAL CONCRETE SIDEWALK DETAIL

N.T.S.



NOTES:

1. TOOLED JOINT SURFACES SHALL BE SMOOTH AND AT A CONSTANT DEPTH.
2. CONCRETE REINFORCEMENT NOT SHOWN FOR CLARITY.

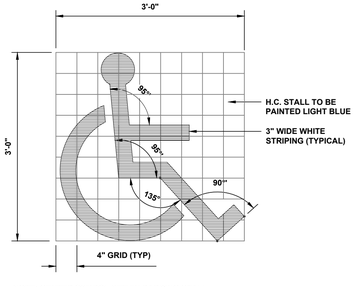
TYPICAL CONCRETE SIDEWALK JOINT DETAILS

N.T.S.

CONCRETE NOTES

1. ALL CONCRETE MATERIALS AND WORKMANSHIPS SHALL CONFIRM TO THE LATEST EDITIONS OF ACI 318 AND ACI 301.
2. CONCRETE EXPOSED TO FREEZING AND THAWING SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE:
   - A. MINIMUM COMPRESSIVE STRENGTH: 5000 PSI @ 28 DAYS
   - B. CEMENT: ASTM C150 TYPE II
   - C. AGGREGATE: ASTM C33 OR C330
   - D. MAXIMUM AGGREGATE SIZE: 1"
   - E. MAXIMUM WATER-CEMENT RATIO: 0.45
   - F. SLUMP: 2 TO 4 INCHES
   - G. AIR ENTRAINMENT: ASTM C260, 4 TO 6 PERCENT
   - H. WATER REDUCING ADMIXTURE: ASTM C494
     1. ADMIXTURES SHALL BE USED IN ACCORDANCE WITH ACI AND THE MANUFACTURERS RECOMMENDATIONS.
     2. USE OF CALCIUM CHLORIDE, CHLORIDE IONS OR OTHER SALTS IS NOT PERMITTED.
3. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED BARS. REINFORCING BARS TO BE WELDED SHALL BE ASTM A706, GRADE 60, DEFORMED BARS.
4. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064.
5. PROVIDE ALL NECESSARY CHAIRS, SHAIR BARS, SPACER, ETC WIRED SECURELY TO HOLD REINFORCMENT IN POSITION. THESE ACCESSORIES SHALL BE PLASTIC BOOTED WHERE CONCRETE IS TO BE EXPOSED TO WEATHER OR MOISTURE.
6. REINFORCING BARS SHALL BE PLACED IN ACCORDANCE WITH THE LATEST EDITION OF THE CRSI "RECOMMENDED PRACTICE FOR PLACING REINFORCING BARS".
7. CONCRETE COVER TO REINFORCING STEEL SHALL CONFORM TO ACI 318.
8. PROVIDE A 3/4" CHAMFER TO ALL EXPOSED CONCRETE EDGES.
9. WET CURE CONCRETE SLABS FOR A MINIMUM OF 3 DAYS.
10. SAW CUT CONTROL JOINTS SHALL BE 1/8" X 1/4 SLAB DEPTH CUT WITH AN EARLY ENTRY DRY-CUT SAW AS SOON AS THE CONCRETE IS SUFFICIENTLY HARD TO RESIST TEARING AND RAVELING (1 TO 4 HOURS AFTER FINISHING).

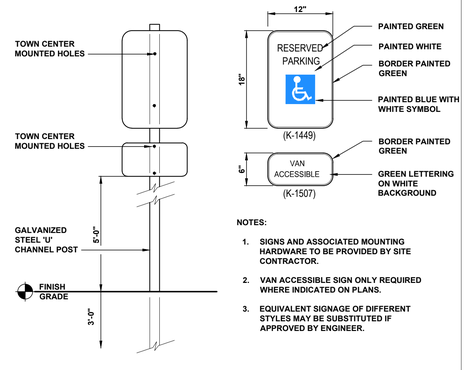
FROST DEPTH: 5 FEET



NOTE: CENTER SYMBOL WITHIN PARKING STALL

TYPICAL HANDICAP PARKING STALL SYMBOL

NTS

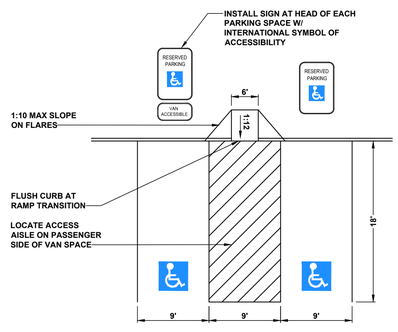


NOTES:

1. SIGNS AND ASSOCIATED MOUNTING HARDWARE TO BE PROVIDED BY SITE CONTRACTOR.
2. VAN ACCESSIBLE SIGN ONLY REQUIRED WHERE INDICATED ON PLANS.
3. EQUIVALENT SIGNAGE OF DIFFERENT STYLES MAY BE SUBSTITUTED IF APPROVED BY ENGINEER.

TYPICAL HANDICAP PARKING SIGN DETAIL

NTS



NOTES:

1. SLOPES ACROSS PARKING SPACES IN EACH DIRECTION SHALL BE 2% MAX.

ACCESSIBLE PARKING SPACE LAYOUT

N.T.S.

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

ISSUE FOR BID

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

PROJECT

CONNER SCHOOL RENOVATIONS
CONNER, MAINE

TITLE

SITE DETAILS

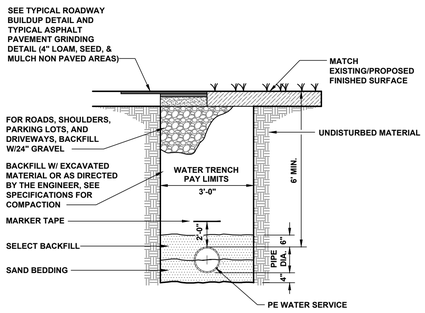
STATE OF MAINE — 04.22.2025 — PAUL A MONYOK — No. 11835 — LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	NTS

DRAWN BY	DESIGNED BY	CHECKED BY
PAM	PAM	--

PROJECT No. 10377.028

DRAWING No. **C502** REV.

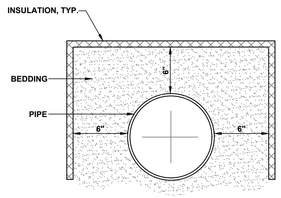


NOTE:

1. MATCH EXISTING SURFACE FINISH, EXCEPT WHERE NOTED. IN LAWN AREAS INSTALL 4" OF LOAM AND SEED AND MULCH.

TYPICAL TRENCH DETAIL - PE WATER SERVICE

N.T.S.

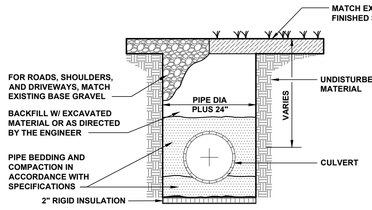


NOTE :

1. 2" RIGID INSULATION BLUE BOARD BY DOW CO. SM. EXTRUDED POLYSTYRENE, (OR APPROVED EQUAL) TO BE USED IF EARTHEN COVER IS LESS THAN 5'-0" OVER PROPOSED STORM DRAIN CULVERT.
2. CONTRACTOR MAY HAVE TO SUPPLY MORE THAN ONE LAYER OF BLUE BOARD INSULATION, IN AREAS THAT HAVE MINIMAL EARTHEN COVER TO MAINTAIN THE INSULATION VALUE OF 5'-0" COVER. 2" BLUE BOARD INSULATION HAS THE INSULATION VALUE OF APPROXIMATELY 1'-6" OF EARTHEN COVER. INSULATE PIPE TO EQUAL 5'-0" OF COVER.
3. MAINTAIN A MINIMUM OF 12" OF EARTHEN COVER OVER INSULATION AS A MECHANICAL PROTECTION. LOAM AND SEED AS NECESSARY TO PREVENT EROSION.
4. IF PIPE IS INSTALLED OVER BEDROCK, PLACE 6" OF CLEAN BEDDING UNDER PIPING.

TYPICAL PIPE TRENCH INSULATION DETAIL

NTS



NOTE:

1. CULVERTS MUST HAVE A MINIMUM OF 1' OF AGGREGATE COVER FOR PROPER SUPPORT. INSULATION PLACED BELOW PIPE TRENCH ASSEMBLY TO COUNTERACT FROST.

TYPICAL CULVERT TRENCH DETAIL

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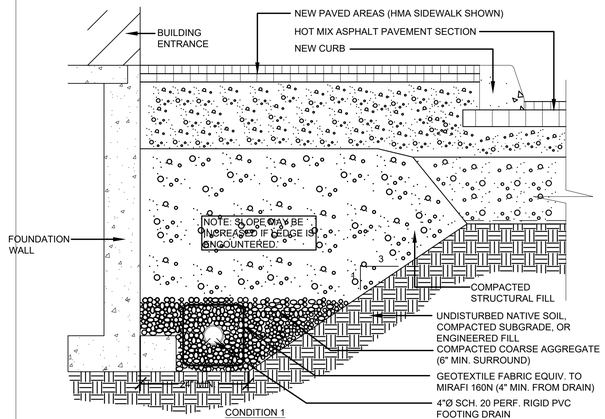

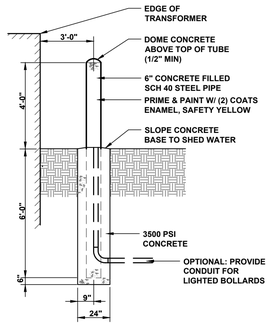

STEEL BOLLARD DETAIL

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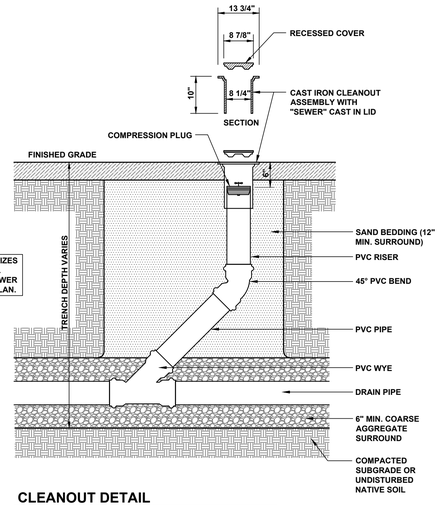

CLEANOUT DETAIL

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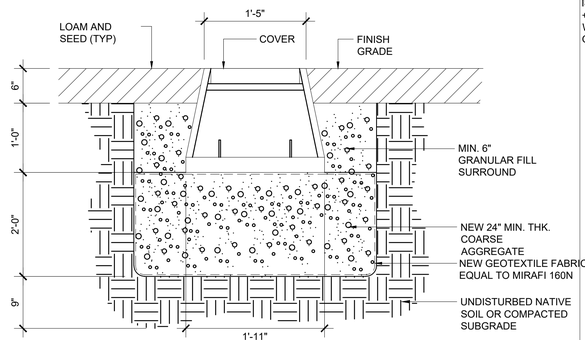
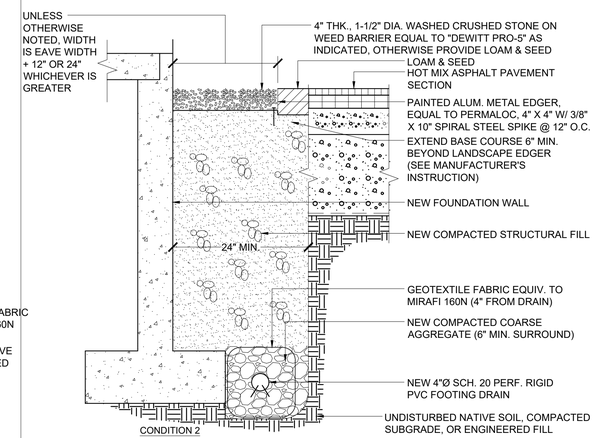


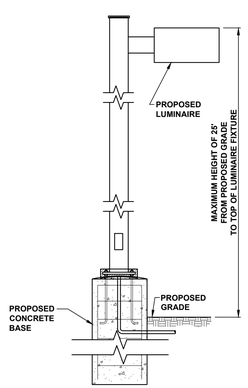
TYPICAL HANDHOLE DETAIL

N.T.S.



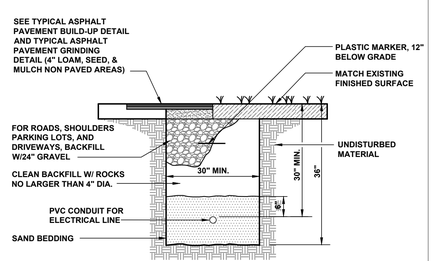
FOUNDATION DRAIN DETAIL

N.T.S.



TYPICAL POLE MOUNTED LIGHT DETAIL

NTS

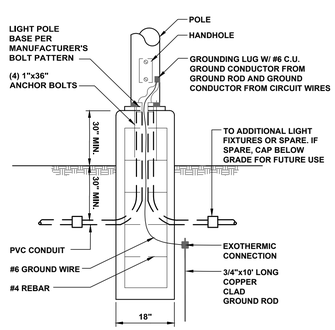


NOTES:

1. SIZE, NUMBER, MATERIAL, AND ARRANGEMENT OF CONDUIT SHALL BE COORDINATED WITH UTILITY COMPANY.
2. ALL ELECTRICAL CONDUIT AND STRUCTURES SHALL BE WATER TIGHT.

TYPICAL UNDERGROUND STREET LIGHTING TRENCH DETAIL

NTS



TYPICAL LIGHT POLE BASE DETAIL

NTS

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

ISSUE FOR BID

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
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Bangor, Maine 04401
207.989.4824

PROJECT

CONNER SCHOOL RENOVATIONS
CONNER, MAINE

TITLE

SITE DETAILS

STATE OF MAINE 04.22.2025 PAUL A MONYOK No. 14835 LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	NTS

DRAWN BY	DESIGNED BY	CHECKED BY
PAM	PAM	–

PROJECT No. 10377.028

DRAWING No. **C503** REV.

SAWN LUMBER NOTES:

1. ALL WOOD FRAMING MEMBERS INCLUDING BUT NOT LIMITED TO WALL STUDS AND JOISTS, ARE INTENDEDTO ACT AS A SYSTEM AS DETAILED IN THE STRUCTURAL DRAWINGS AND ONCE CONSTRUCTION IS COMPLETE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE SAFETY AND STABILITY OF WOOD FRAMING SYSTEMS (I.E. TEMPORARY BRACING IF REQUIRED) DURING CONSTRUCTION AS A RESULT OF CONSTRUCTION METHODS AND SEQUENCES. REFERENCE ARCHITECTURAL DRAWINGS FOR ALL SAWN LUMBER FINISH REQUIREMENTS.

2. ALL SAWN LUMBER SHALL CONFORM TO THE WESTERN WOOD PRODUCTS ASSOCIATION OR THE WEST COAST LUMBER INSPECTION BUREAU GRADING RULES. LUMBER SHALL BE OF THE SPECIES AND GRADE SHOWN BELOW:

MEMBER	GRADE
2x AND 4x FRAMING	DOUGLAS FIR-LARCH NO. 2
5x AND GREATER BEAMS	DOUGLAS FIR-LARCH NO. 1
POSTS/COLUMNS	DOUGLAS FIR-LARCH NO. 1

WOOD STUDS IN BEARING WALLS SHALL BE OF THE SIZE, GRADE, AND SPACING NOTED BELOW UNLESS NOTED OTHERWISE ON THE DRAWINGS. ALL STUD BEARING WALLS REQUIRE SHEATHING ON A MINIMUM OF ONE SIDE OF THE WALL. WHERE PLYWOOD SHEATHING DOES NOT EXIST AS NOTED IN THE DRAWINGS, THE SHEATHING MAY CONSIST OF 3/4" GYPSUM SHEATHING ATTACHED WITH #8 SCREWS AT 6" ON CENTER AT ALL PANEL EDGES AND AT 12" O.C. IN THE FIELD. WHERE ARCHITECTURAL FINISHES ARE APPLIED TO FLOORS ABOVE PRIOR TO THE MINIMUM SHEATHING REQUIREMENTS BEING INSTALLED ON THE STUD BEARING WALLS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ADEQUACY OF THE UNSHEATHED BEARING WALL AND TO PROVIDE BRACING AS REQUIRED.

MEMBER AND SPACING	GRADE	FLOOR LOCATION
REF. PLANS	DOUGLAS FIR-LARCH NO. 2	EXTERIOR AND INTERIOR BEARING WALLS

3. STORAGE OF ALL LUMBER AND TIMBER ON SITE SHALL BE KEPT OFF GROUND, UNDER COVER AND PROTECTED FROM DAMAGE

4. ALL DIMENSIONAL LUMBER SHALL BE CERTIFIED BY THE SUPPLIER IN WRITING TO BE KILN DRIED

5. STRUCTURE SHALL NOT BE ENCLOSED UNLESS LUMBER MOISTURE CONTENT HAS BEEN VERIFIED TO BE AT OR BELOW 15%. ANY SIGNS OF MOLD SHALL BE REMOVED AND TREATED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS OR INDUSTRY STANDARDS.

6. ALL LUMBER IN CONTACT WITH THE GROUND, CONCRETE SHALL BE PRESSURE TREATED. CONTRACTOR MAY SUBMIT FOR APPROVAL, A MOISTURE BARRIER IN-LIEU OF THE PRESSURE TREATED WOOD

7. FASTENERS FOR PRESERVATIVE-TREATED AND FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, OR STAINLESS STEEL AND SHALL FOLLOW CURRENT SIMPSON GUIDELINES BASED ON WEATHER EXPOSURE. WHERE STAINLESS STEEL CONNECTORS OR HOT DIPPED GALVANIZED CONNECTORS ARE SPECIFIED IN THE DRAWINGS, STAINLESS STEEL OR HOT DIPPED GALVANIZED FASTENERS SHALL BE USED TO MATCH THE CONNECTOR TYPE

8. ALL PLATES AND LEDGERS SHALL BE FASTENED WITH A MINIMUM (3) ANCHORS PER PIECE.

9. ALL METAL HARDWARE AND FRAMING ACCESSORIES SHALL BE MANUFACTURED BY SIMPSON STRONG-TIE COMPANY. SUBSTITUTIONS SHALL NOT BE MADE. ALL ITEMS SHALL BE INSTALLED PER THE SIMPSON'S INSTALLATION REQUIREMENTS. ALL NAIL HOLES SHALL BE FILLED WITH THE RECOMMENDED FASTENER UNLESS NOTED OTHERWISE ON THE DRAWINGS

10. WHERE FRAMING HANGERS OR WOOD CONNECTIONS ARE REQUIRED BUT HAVE NOT BEEN SPECIFIED ON THE STRUCTURAL DRAWINGS, PLEASE CONTACT EOR FOR APPROPRIATE WOOD CONNECTOR OR CONNECTION TO UTILIZE

11. ALL WALLS SHALL HAVE DOUBLE TOP PLATES AND SHALL BE SPLICED PER THE TYPICAL TOP PLATE SPLICE DETAIL, UNLESS NOTED OTHERWISE. TOP PLATES AT WALL INTERSECTIONS SHALL BE LAPPED AND NAILED WITH (3) 16d NAILS.

12. WHERE ROOF MEMBERS OR ROOF TRUSSES ARE CONNECTED TO EXTERIOR WALLS OR WALLS w/ PLYWOOD SHEATHING, THE SPECIFIED HURRICANE CLIP SPECIFIED SHALL BE PLACED ON THE SIDE OF THE WALL DOUBLE TOP PLATE WHICH ATTACHES TO THE PLYWOOD.

13. HOLES FOR BOLTS SHALL BE DRILLED WITH A BIT OF THE SAME NOMINAL DIAMETER AS THE BOLT + 1/16". LEAD HOLES FOR LAG SCREWS SHALL BE BORED PER NDS 11.1.3

14. ALL BOLTS, CARRIAGE BOLTS, LAG SCREWS, EXPANSION BOLTS AND EPOXY BOLTS SHALL BE INSTALLED WITH STANDARD CUT WASHERS UNDER THE BOLT HEADS AND NUTS THAT BEAR DIRECTLY ON THE WOOD. ALL NUTS SHALL BE TIGHTENED AT THE TIME OF INSTALLATION AND RE-TIGHTENED IF NECESSARY, DUE TO WOOD SHRINKAGE, PRIOR TO CLOSE-IN OR AT THE COMPLETION OF THE PROJECT. BOLTS AND LAG SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1. WOOD SCREWS SHALL CONFORM TO B18.6.1. ALL BOLTS SHALL CONFORM TO ASTM A307 GRADE A UNLESS NOTED OTHERWISE. THE MINIMUM STRENGTHS FOR LAG SCREWS AND WOOD SCREWS SHALL BE AS FOLLOWS:

WOOD SCREW DIAMETER - INCHES	MIN. BENDING YIELD STRENGTH (PSI)
0.138 (#6)	100,000
0.151 (#7)	90,000
0.164 (#8)	90,000
0.177 (#9)	90,000
0.190 (#10)	80,000
0.216 (#12)	80,000
0.246 (#14)	70,000

LAG SCREW DIAMETER - INCHES	MIN. BENDING YIELD STRENGTH (PSI)
1/4	70,000
5/16	60,000
3/8 AND GREATER	45,000

15. CUTTING AND NOTCHING OF SAWN LUMBER JOISTS, SAWN LUMBER RAFTERS AND STUDS SHALL BE IN CONFORMANCE WITH THE FOLLOWING CRITERIA:
    - A. JOISTS — NOTCHES AT THE ENDS OF JOISTS SHALL NOT EXCEED 1/5 THE JOIST DEPTH. HOLES BORED IN JOISTS SHALL NOT BE WITHIN 2-1/2 INCHES OF THE TOP OR BOTTOM OF THE JOIST, AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED 1/4 THE DEPTH OF THE JOIST. NOTCHES IN THE TOP OR BOTTOM OF THE JOISTS SHALL NOT EXCEED 1/6 THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN
    - B. RAFTERS — NOTCHING AT THE ENDS OF RAFTERS OR CEILING JOISTS SHALL NOT EXCEED 1/5 THE DEPTH. NOTCHES IN THE TOP OR BOTTOM OF THE RAFTER OR CEILING JOIST SHALL NOT EXCEED 1/6 THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE 1/3 OF THE SPAN, EXCEPT THAT A NOTCH NOT EXCEEDING 1/3 OF THE DEPTH IS PERMITTED IN THE TOP OF THE RAFTER OR CEILING JOIST NOT FURTHER FROM THE FACE OF THE SUPPORT THAN THE DEPTH OF THE MEMBER. HOLES BORED IN RAFTERS OR CEILING JOISTS SHALL NOT BE WITHIN 2-1/2 INCHES OF THE TOP AND BOTTOM AND THEIR DIAMETER SHALL NOT EXCEED 1/4 THE DEPTH OF THE MEMBER.
    - C. WALLS — MAXIMUM OF 2 1/4" DIAMETER NEATLY BORED HOLE MAY BE PLACED IN THE CENTER OF ALL BEARING 2x6 STUDS WITH NO ADDITIONAL REINFORCEMENT REQUIRED. REF. SHEET SXXX FOR ADDITIONAL INFORMATION ON STUDS AND POSTS

16. ALL NAILS FOR STRUCTURAL WORK SHALL BE COMMON WIRE NAILS UNLESS NOTED OR DETAILED OTHERWISE MEETING ASTM F1667. HOLES SHALL BE PRE-DRILLED WHERE NECESSARY TO PREVENT SPLITTING. NAILS SHALL HAVE THE MINIMUM PROPERTIES SPECIFIED IN THE TABLE BELOW:

NAIL TYPE	SHANK DIA. - INCHES	MIN. PENETRATION - INCHES	MIN. BENDING YIELD STRENGTH (PSI)
6d	0.113	1.13	100,000
8d	0.131	1.31	100,000
10d	0.148	1.48	90,000
12d	0.148	1.48	90,000
16d	0.162	1.63	90,000
20d	0.192	1.92	80,000

17. NAILING NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE PER THE APPLICABLE VERSION OF THE IBC NAILING SCHEDULE.

NAILING SCHEDULE NOTES:

1. ALL OTHER NAILING REQUIREMENTS NOT SHOWN ON DRAWINGS OR IN SCHEDULE ABOVE SHALL BE IN ACCORDANCE WITH 2021 INTERNATIONAL BUILDING CODE.

2. POWER DRIVEN OR PNEUMATIC NAILS OTHER THAN COMMON NAILS MAY BE USED IF DATA IS SUBMITTED TO THE ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO USE.

3. MINIMUM NAIL LENGTHS SHALL BE SUFFICIENT TO ACHIEVE MINIMUM PENETRATION INTO MAIN MEMBER AS NOTED IN SCHEDULE ON NOTE #16.

STRUCTURAL STEEL NOTES:

1. ALL STRUCTURAL STEEL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION'S "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND THE "AISC CODE OF STANDARD PRACTICE."

2. ALL STRUCTURAL STEEL SHAPES AND PLATES SHALL CONFORM TO THE FOLLOWING:

W AND WT SHAPES	ASTM A992
S SHAPES, CHANNEL, ANGLE & PLATE	ASTM A36
HSS	ASTM A500, GRADE B
PIPES	ASTM A53, GRADE B

3. THE STRUCTURAL STEEL FABRICATOR SHALL BE AN AISC CERTIFIED FABRICATOR. MINIMUM CATEGORY "SBD" CERTIFICATION. (SUBMIT FABRICATOR CERTIFICATION FOR APPROVAL).

4. ALL SHOP INSPECTION SHALL BE COMPLETED BY THE FABRICATOR'S INSPECTOR. SHOP INSPECTION SHALL BE IN ACCORDANCE WITH AISC, AWS, AND AS OUTLINED IN THE CONTRACT DRAWINGS.

5. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC "MANUAL OF STEEL CONSTRUCTION" (14TH EDITION) AND THE AISC"SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS (2005 EDITION).

6. ALL STEEL DETAILS AND CONNECTIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AISC "MANUAL OF STEEL CONSTRUCTION" (14TH EDITION)

7. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING OR GUYS TO PROVIDE LATERAL SUPPORT UNTIL THE PERMANENT LATERAL FORCE RESISTING SYSTEM IS INSTALLED.

8. THE CONTRACTOR SHALL COORDINATE BOTTOM OF BASE PLATE ELEVATION WITH THE TOP OF CONCRETE ELEVATION PLUS ALLOWANCE FOR GROUT BED. IN CASE OF CONFLICT THE CONTRACTOR SHALL MAKE ALLOWANCE IN THE BID FOR THE MORE STRINGENT REQUIREMENT.

9. CUTS OR BURNING OF HOLES IN STRUCTURAL STEEL MEMBERS IN THE FIELD WILL NOT BE PERMITTED.

10. ALL NUTS INDICATED "FINGER TIGHT" SHALL BE HAND TIGHTENED AS REQUIRED TO INSTALL ELEMENTS. DO NOT TIGHTEN NUTS INDICATED AS "FINGER TIGHT" BY MECHANICAL MEANS. TACK WELD "FINGER TIGHT" NUTS IN PLACE OR PROVIDE JAM NUT TO PREVENT BACK OFF.

11. ALL STEEL TO STEEL CONNECTIONS SHALL BE SIMPLE SHEAR CONNECTIONS UNLESS NOTED OTHERWISE.

12. ALL SIMPLE SHEAR CONNECTIONS SHALL BE BEARING TYPE CONNECTIONS UNLESS NOTED AS SLIP CRITICAL.

13. MINIMUM NUMBER OF BOLTS FOR ANY CONNECTION SHALL BE TWO.

14. ALL STEEL TO STEEL CONNECTIONS SHALL EXTEND AT LEAST 2/3 THE DEPTH OF THE SHALLOWEST MEMBER BEING CONNECTED.

15. SHOP CONNECTIONS NOT SPECIFICALLY INDICATED ON THE DRAWINGS MAY BE WELDED OR BOLTED. FIELD CONNECTIONS NOT SPECIFICALLY SHOWN ON THE DRAWINGS SHALL BE BOLTED.

16. ALL WELDING ELECTRODES SHALL BE E70 WITH A MINIMUM YIELD STRENGTH OF 58KSI, MINIMUM TENSILE STRENGTH OF 70 KSI, AND MINIMUM ELONGATION OF 22% IN ACCORDANCE WITH AWS A5.

17. ALL WELD MATERIAL SHALL HAVE A MINIMUM CVN TOUGHNESS OF 20 FT-LBS AT MINUS 10 DEGREES FAHRENHEIT AND 40 FT-LB AT 70° FAHRENHEIT.

18. 100% OF ALL SHOP FULL PENETRATION WELDS SHALL BE ULTRASONICALLY TESTED AND ALL DEFECTS REPAIRED.

19. ALL STRUCTURAL STEEL SHALL BE SHOP PRIMED WITH FABRICATOR'S STANDARD LEAD AND CHROMATE FREE PRIMER UNO OR UNLESS STEEL IS TO BE FIREPROOFED OR IS INDICATED TO RECEIVE HIGH PERFORMANCE PRIMER AND TOP COAT. FABRICATOR SHALL COORDINATE PRIMER REQUIREMENTS WITH SLIP CRITICAL BOLTS

20. FABRICATOR SHALL SUBMIT METHOD FOR INSTALLING SLIP CRITICAL BOLTS FOR APPROVAL. ERECTOR SHALL SET UP PREINSTALLATION TESTING WITH THE OWNER'S SPECIAL INSPECTOR.

21. STEEL FABRICATOR SHALL SUBMIT SHOP DRAWINGS FABRICATION OF ALL STRUCTURAL STEEL ELEMENTS. SHOP DRAWINGS SHALL INDICATE:
    - A. INCLUDE DETAILS OF CUTS, CONNECTIONS, SPLICES, CAMBER, HOLES AND OTHER PERTINENT DATA.
    - B. INCLUDED EMBEDMENT DRAWINGS.
    - C. INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH AND TYPE OF EACH WELD.
    - D. INDICATE TYPE, SIZE, AND LENGTH OF BOLTS, DISTINGUISHING BETWEEN SHOP AND FIELD BOLTS.
    - E. IDENTIFY PRETENSIONED AND SLIP CRITICAL HIGH STRENGTH BOLTS.

22. FIELD TESTING AND INSPECTION OF STRUCTURAL STEEL MATERIALS, AND STRUCTURAL STEEL INSTALLATION SHALL BE COMPLETED BY AN INDEPENDENT TESTING AGENCY (COMMISSIONED BY THE OWNER), AND SHALL BE IN ACCORDANCE WITH THE SCHEDULE OF SPECIAL INSPECTIONS.

FOUNDATION NOTES:

1. DESIGN OF FOUNDATIONS IS BASED ON AN ALLOWABLE SOIL BEARING PRESSURE OF 2000 POUNDS PER SQUARE FOOT.

2. ALL DELETERIOUS MATERIALS FOUND WITHIN THE LIMITS OF THE STRUCTURE, AS DETERMINED BY THE TESTING AGENCY, SHALL BE REMOVED AND REPLACED WITH COMPACTED SELECT FILL.

3. NO FOUNDATIONS SHALL BE PLACED ON FROZEN GROUND OR IN WATER. ALL TRENCHES SHALL BE DEWATERED PRIOR TO PLACING CONCRETE.

4. FROST WALLS SHALL BE CURED FOR A MINIMUM OF 7 DAYS PRIOR TO BACKFILLING. THE BACKFILL MATERIAL SHALL BE BROUGHT UP TO GRADE EQUALLY ON BOTH SIDES OF FROST WALLS.

5. RETAINING WALLS AND FOUNDATION WALLS SHALL BE CURED TO MEET SPECIFIED STRENGTH PRIOR TO BACKFILLING.

6. SELECT FILL AND BACKFILL MATERIAL SHALL BE PLACED IN MAXIMUM 8" LIFTS. EACH LIFT SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY PER ASTM D-1557, MODIFIED PROCTOR TEST.

7. SELECT FILL AND BACKFILL MATERIAL SHALL BE SCREENED OR CRUSHED GRAVEL OF HARD DURABLE PARTICLES FREE FROM VEGETABLE MATTER, LUMPS, BALLS OF CLAY AND OTHER DELETERIOUS SUBSTANCES. SELECT FILL SHALL CONFORM TO THE FOLLOWING GRADATION REQUIREMENTS:

SELECT FILL - GRADATION REQUIREMENTS	
SIEVE SIZE	PERCENT FINER BY WEIGHT
4 INCH	100
3 INCH	90 - 100
1/4 INCH	25 - 90
No. 40	0 - 30
No. 200	0 - 5

8. ON SITE MATERIALS GENERATED DURING EXCAVATION MAY BE USED AS BACKFILL MATERIAL PLACED ADJACENT TO FOUNDATION WALLS PROVIDED IT MEETS THE GRADATION REQUIREMENTS FOR SELECT FILL.

9. FIELD QUALITY CONTROL FOR SUBGRADE PREPARATION AND ALL OTHER ASSOCIATED FOUNDATION WORK SHALL BE COMPLETED BY AN INDEPENDENT TESTING AGENCY (COMMISSIONED BY THE OWNER), AND SHALL BE IN ACCORDANCE WITH THE SCHEDULE OF SPECIAL INSPECTIONS.

10. CONCRETE FOR FOUNDATIONS SHALL COMPLY WITH THE CONCRETE NOTES

11. COORDINATE PLUMBING AND FOUNDATION ELEVATIONS TO MINIMIZE INTERFERENCES. STEP FOOTINGS PER TYPICAL DETAILS WHERE INTERFERENCES OCCUR.

12. THE CONTRACTOR SHALL SUBMIT THE FOLLOWING INFORMATION TO THE STRUCTURAL ENGINEER OF RECORD FOR REVIEW:
    - A. GRADATION OF MATERIAL TO BE USED AS SELECT FILL.
    - B. COMPACTION TEST RESULTS UNDER PAVEMENTS, SLABS ON GRADE AND FOUNDATIONS.

POST INSTALLED ANCHOR NOTES:

1. NOTED EMBEDMENT DEPTHS ARE FROM FACE OF CMU OR FACE OF CONCRETE

2. ALL INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S DATA AND THE ASSOCIATED ICC REPORT.

3. ALL PERSONNEL INSTALLING ANCHORS SHALL HAVE ATTENDED INSTALLER TRAINING PER THE SPECIFICATIONS.

4. FIELD TESTING AND INSPECTION OF POST INSTALLED ANCHOR MATERIALS AND POST INSTALLED ANCHOR INSTALLATION SHALL BE COMPLETED BY AN INDEPENDENT TESTING AGENCY COMMISSIONED BY THE OWNER, AND SHALL BE IN ACCORDANCE WITH THE SCHEDULE OF SPECIAL INSPECTIONS.

CONCRETE AND REINFORCEMENT NOTES:

1. ALL CONCRETE SHALL CONFORM TO LATEST EDITIONS OF ACI 318 AND ACI 301.

2. CONCRETE SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE

A.	MINIMUM COMPRESSIVE STRENGTH:	4000 PSI @28 DAYS
B.	CEMENT	ASTM C150 TYPE II
C.	AGGREGATE	ASTM C33 OR C330
D.	MAXIMUM AGGREGATE SIZE	1 1/2 INCH
E.	MAXIMUM WATER-CEMENT RATIO:	0.45
F.	SLUMP:	2 TO 4 INCHES
G.	AIR ENTRAINMENT:	ASTM C260, 6.5% (± 1%)
H.	WATER REDUCING ADMIXTURE:	ASTM C494

    1. ADMIXTURES SHALL BE USED IN ACCORDANCE WITH ACI AND THE MANUFACTURERS RECOMMENDATIONS.
    2. USE OF CALCIUM CHLORIDE, CHLORIDE IONS OR OTHER SALTS IS NOT PERMITTED.

3. REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60

4. REINFORCING STEEL SHALL BE SUPPORTED ON CHAIRS OR BOLSTERS.

5. ALL LAP SPLICES SHALL BE IN ACCORDANCE WITH THE TABLES BELOW (TYPE 2 MECHANICAL SPLICES MAY BE USED IN LIEU OF LAP SPLICES AT CONTRACTOR'S OPTION)

6. ALL LAP SPLICES SHALL BE ACI CLASS B SPLICES. THE FOLLOWING TABLES ARE BASED ON NORMAL WEIGHT CONCRETE WITH BARS 4 BAR DIAMETERS OR MORE APART AND CONCRETE COVER EQUAL TO 2 BAR DIAMETERS OR MORE. TOP BARS ARE DEFINED AS HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE PLACED BELOW THE REINFORCEMENT.

4000 PSI CONCRETE	GRADE 60 REINFORCING STEEL fy = 60,000 PSI								
BAR SIZE	#3	#4	#5	#6	#7	#8	#9	#10	#11
LAP (IN) - TOP BARS	15	20	24	29	48	60	74	91	109
LAP (IN) - OTHER BARS	12	15	19	22	37	47	57	70	84

7. REINFORCEMENT SHALL BE SECURELY ANCHORED IN POSITION WHILE PLACING CONCRETE. THE CONTRACTOR SHALL PROVIDE ADDITIONAL BARS OR STIRRUPS AS REQUIRED TO ANCHOR BARS IN THE PROPER POSITION

8. THE DESIGN AND CONSTRUCTION OF FORMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. FORMS SHALL BE CONSTRUCTED TO SHAPE, FORMS, AND LINES INDICATED ON DRAWINGS. BRACING SHALL BE DESIGNED TO RESIST FORCES EXERTED BY FRESH CONCRETE.

9. QUALIFIED WORKMEN SHALL CONSTANTLY OBSERVE AND ADJUST FORMS AND SHORES AS REQUIRED DURING CONCRETE PLACEMENT.

10. ALL SHORING SHALL REMAIN IN PLACE UNTIL THE SUPPORTED CONCRETE HAS ATTAINED 75% OF THE REQUIRED 28 DAY COMPRESSIVE STRENGTH.

11. CONTRACTOR SHALL VERIFY DIMENSIONS AND LOCATIONS OF ALL SLOTS, PIPE SLEEVES, ANCHOR BOLTS, ETC. AS REQUIRED FOR ALL OTHER TRADES BEFORE CONCRETE IS POURED. THESE ITEMS SHALL BE INSTALLED AND VERIFIED BY THE CONTRACTOR.

12. CONCRETE COVER TO REINFORCING STEEL SHALL CONFORM TO ACI 318 AS FOLLOWS:

A.	CONCRETE CAST AGAINST EARTH:		3"
B.	CONCRETE EXPOSED TO EARTH OR WEATHER:	#3 THRU #5:	1 ½"
		#6 THRU #11:	2"
C.	CONCRETE NOT EXPOSED TO WEATHER OR PLACED IN CONTACT WITH GROUND:	SLABS/WALLS:	¾"
		BEAMS/COLUMNS:	1 ½"

13. FOOTING AND GRADE BEAM SIZES SHOWN ARE FOR FOOTINGS CONSTRUCTED WITH SIDE FORMS. IF EARTH FORMING IS USED FOUNDATION SIZES SHALL INCREASED IN WIDTH 1" IN EACH DIRECTION.

14. SHOP DRAWINGS FOR PLACEMENT SHALL BE SUBMITTED FOR REVIEW PRIOR TO REBAR FABRICATION.

15. ALL INSIDE CONCRETE WEARING SURFACES SHALL RECEIVE A SMOOTH STEEL TROWEL FINISH.

16. ALL OUTSIDE CONCRETE WEARING SURFACES SHALL RECEIVE A STEEL TROWEL AND A MEDIUM BROOM FINISH PERPENDICULAR TO THE TRAFFIC FLOW.

17. ALL CONCRETE SLABS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING FLATNESS/LEVELNESS REQUIREMENTS:

SLAB CATEGORY	FLATNESS, Ff	LEVELNESS, Fl	DEVIATION
BULLFLOATED	15	13	½" IN 10'
STRAIGHTEDGED	20	15	5/16" IN 10'
FLAT	30	20	3/8" IN 10'
VERY FLAT	50	30	¼" IN 10'
SUPERFLAT	100	50	<¼" IN 10'

FLOOR FLATNESS / LEVELNESS TESTS SHALL BE CONDUCTED ACCORDING TO ASTM E1155

18. PROVIDE A 3/4" CHAMFER TO ALL EXPOSED CONCRETE EDGES

19. WET CURE ALL CONCRETE SLABS FOR A MINIMUM OF 3 DAYS.

20. SAW CUT CONTROL JOINTS SHALL BE 1/8"x1 1/2" DEEP CUT WITH AN EARLY ENTRY DRY-CUT SAW AS SOON AS THE CONCRETE IS SUFFICIENTLY HARD TO RESIST TEARING AND RAVELING (1 TO 4 HOURS AFTER FINISHING).

21. HORIZONTAL JOINTS IN FOOTINGS, GRADE BEAMS, AND TIE BEAMS WILL NOT BE PERMITTED.

22. DO NOT INSTALL PLUMBING SLEEVES IN GRADE BEAMS OR TIE BEAMS WITHOUT ENGINEER APPROVAL.

23. REINFORCING BARS SHALL NOT BE CUT TO ACCOMMODATE THE INSTALLATION OF ANCHORS, EMBEDS, OR OTHER ITEMS.

24. AT CHANGES IN DIRECTION OF CONTINUOUS CONCRETE ELEMENTS PROVIDE CORNER BARS OF SAME SIZE AND SPACING OF HORIZONTAL REINFORCEMENT.

25. PLACE CONCRETE PER ACI 304. USE INTERNAL MECHANICAL VIBRATION FOR ALL CONCRETE. LIMIT MAXIMUM FREE FALL DROP OF CONCRETE TO 6'-0". PRECAUTIONS SHALL BE TAKEN TO AVOID SEGREGATION DURING CONCRETE PLACEMENT.

26. FIELD TESTING AND INSPECTION OF ALL CONCRETE MATERIALS AND CONCRETE INSTALLATION SHALL BE CONDUCTED BY AN INDEPENDENT TESTING AGENCY (COMMISSIONED BY THE OWNER), AND SHALL BE IN ACCORDANCE WITH THE SCHEDULE OF SPECIAL INSPECTIONS.

GENERAL NOTES:

1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING, AND ELECTRICAL CONTRACT DRAWINGS, AND ASSOCIATED SHOP DRAWING SUBMITTALS. CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND COORDINATING DIMENSIONS, CLEARANCES, ETC. WITH WORK OF OTHER TRADES.

2. IN CASE OF CONFLICT BETWEEN VARIOUS STRUCTURAL DRAWINGS, OR STRUCTURAL PLANS AND DETAILS, THE MORE STRINGENT REQUIREMENT SHALL GOVERN

3. IN CASE OF CONFLICT BETWEEN DRAWINGS, NOTES, AND SPECIFICATIONS THE MORE STRINGENT REQUIREMENT SHALL GOVERN.

4. WORK NOT INDICATED ON A PART OF THE DRAWINGS BUT REASONABLY IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES SHALL BE REPEATED.

5. ALL DETAILS AND SECTIONS ARE INTENDED TO BE TYPICAL FOR THE GENERAL CONDITIONS INDICATED. ALL DETAILS SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION THROUGHOUT THE PROJECT EXCEPT WHERE A SEPARATE DETAIL IS INDICATED

6. REVIEW ALL PROJECT DOCUMENTS PRIOR TO FABRICATION AND START OF CONSTRUCTION. REPORT ANY DISCREPANCIES TO CONTRACTING OFFICER OR A/E PRIOR TO PROCEEDING WITH WORK.

7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT EXISTING FACILITIES, STRUCTURES, UTILITY LINES, ETC. FROM DAMAGE DURING CONSTRUCTION.

8. COORDINATE STRUCTURAL DRAWINGS WITH OTHER CONTRACT DRAWINGS FOR ANCHORED, EMBEDDED OR SUPPORTED ITEMS THAT MAY AFFECT THE STRUCTURAL DRAWINGS.

9. USE OF CONTRACT DRAWINGS REPRODUCED IN WHOLE OR IN ANY PART FOR SHOP DRAWING PRODUCTION SHALL NOT RELIEVE THE CONTRACTOR OR SUBCONTRACTOR FROM THE REQUIREMENT TO ACCURATELY LAYOUT, COORDINATE, DETAIL, FABRICATE AND INSTALL A COMPLETE STRUCTURE.

10. ALL SHOP DRAWINGS SHALL BE REVIEWED BY THE SUBCONTRACTOR AND CONTRACTOR FOR CONFORMANCE WITH CONTRACT DOCUMENTS, COMPLETENESS, AND TO RESPOND TO QUESTIONS RELATED TO CONTRACTOR INFORMATION PRIOR TO SUBMITTING FOR APPROVAL. ALL SHEETS SHALL BE STAMPED AND INITIALED BY CONTRACTOR INDICATING SUCH REVIEW IS COMPLETE PRIOR TO SUBMITTING SHOP DRAWINGS FOR APPROVAL.

11. CONTRACTOR SHALL MAKE NO DEVIATIONS FROM THE CONTRACT DRAWINGS WITHOUT WRITTEN APPROVAL OF THE CONTRACTING OFFICER.

12. ALL ELEVATIONS INDICATED IN STRUCTURAL DRAWINGS ARE IN REFERENCE TO A GROUND FLOOR FINISHED SLAB ELEVATION OF 0'-0". SEE CIVIL FOR FINISHED FLOOR MSL ELEVATION

BUILDING - DESIGN CRITERIA:

CODES:
INTERNATIONAL BUILDING CODE (IBC) 2021
ASCE 7-16 MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES

BUILDING AND SITE DATA:
ROOF PITCH: 1 1?2:12
CATEGORY: II
EXPOSURE: B
PARTIALLY ENCLOSED
WARM ROOF
SEISMIC SITE CLASS D (N-VALUE METHOD)

LOADS:

GROUND SNOW LOAD:	100 PSF
ROOF DEAD LOAD:	20 PSF
BASIC WIND SPEED:	102 MPH

DEFLECTION:

LIVE LOAD:	L/240
TOTAL LOAD:	L/180

FOUNDATION DESIGN:
FOUNDATION DESIGN IS BASED ON AN ASSUMED NET ALLOWABLE BEARING CAPACITY OF 2000 PSF.

REV	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

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PROJECT

CONNOR SCHOOL RENOVATIONS

1581 VAN BUREN RD, CONNOR, ME 04736

TITLE

STRUCTURAL NOTES

STATE OF MAINE
WILLIAM C. TIMKEN
No. 18004
PROFESSIONAL ENGINEER
LICENSED

DATE	SCALE
2025.04.22	12" = 1'-0"

DRAWN BY	DESIGNED BY	CHECKED BY
WCT	WCT	CDL

PROJECT No. 10377.028

DRAWING NO. **S001** REV.

MASONRY NOTES:

1. ALL MASONRY WORK SHALL BE IN COMPLIANCE WITH ACI 530, "BUILDING CODE REQUIREMENTS FOR MASONRY CONSTRUCTION" AND ACI 530.1 "SPECIFICATIONS FOR MASONRY CONSTRUCTION."

2. HOLLOW LOAD BEARING CONCRETE BLOCK SHALL CONFORM TO ASTM C90, TYPE 1, NORMAL WEIGHT. BLOCK UNITS SHALL BE TWO CELL, 50% SOLID WITH A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 1900 PSI.

3. SPECIFIED MASONRY DESIGN COMPRESSIVE STRENGTH, f'm = 1500 PSI.

4. MORTAR SHALL CONFORM TO ASTM C270, TYPE S. MINIMUM COMPRESSIVE STRENGTH SHALL BE 1800 PSI AT 28 DAYS.

5. GROUT SHALL CONFORM TO ASTM C476 WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.

6. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED BARS.

7. HORIZONTAL JOINT REINFORCEMENT SHALL BE LADDER TYPE, STANDARD CLASS, MILL GALVANIZED WITH 9 GAGE SIDE RODS AND 9 GAGE CROSS RODS. HORIZONTAL JOINT REINFORCEMENT SHALL BE PROVIDED AT EVERY OTHER HORIZONTAL JOINT UNLESS NOTED OTHERWISE. WHERE JOINT REINFORCEMENT IS SPLICED PROVIDE 12" MINIMUM LAP, INCLUDING CORNERS AND TEES. PREFABRICATED CORNERS AND TEES SHALL BE USED AT ALL WALL INTERSECTIONS.

8. PROVIDE CONTROL JOINTS IN CONCRETE MASONRY WALLS AS INDICATED OR, IF NOT INDICATED, AT A MAXIMUM SPACING OF 25' ON CENTER.

9. HOLLOW CONCRETE UNITS SHALL BE LAID IN RUNNING BOND UNLESS NOTED OTHERWISE. PROVIDE FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACES. EXPOSED JOINTS SHALL BE TOOLED CONCAVE, UNEXPOSED JOINTS SHALL BE STRUCK FLUSH.

10. CORNER BLOCKS AND END BLOCKS SHALL BE USED TO FINISH ALL 90 DEGREE CORNERS SAND WALL OPENINGS.

11. ALL BOND BEAM BLOCKS SHALL BE KNOCK-OUT TYPE BLOCKS. 41/2" MINIMUM GROUT MESH SHALL BE USED UNDER BOND BEAMS TO CONFINE GROUT FROM HOLLOW CORES.

12. GROUTING:
    - A. CELLS THAT ARE TO BE GROUTED SOLID SHALL BE ALIGNED TO MAINTAIN A CLEAR, UNOBSTRUCTED, CONTINUOUS VERTICAL CELL. PROVIDE CLEANOUTS IN THE BOTTOM COURSE OF MASONRY FOR EACH GROUT POUR, AT EACH VERTICAL BAR.
    - B. GROUT SOLID ALL CELLS CONTAINING REINFORCING BARS OR OTHER ATTACHMENTS.
    - C. GROUT SOLID (3) CELLS MINIMUM BELOW LINTELS AND STEEL BEAMS BEARING ON MASONRY.
    - D. LOW LIFT GROUTS SHALL NOT EXCEED 5 FEET. GROUT POUR HEIGHT SHALL NOT EXCEED 10 FEET. PROVIDE CLEANOUTS IN THE BOTTOM COURSE OF MASONRY FOR EACH GROUT POUR, WHEN GROUT POUR EXCEEDS 5 FEET.
    - E. HIGH LIFT GROUTS SHALL NOT EXCEED 12'-8" AND THE FOLLOWING CONDITIONS MUST BE MET:
        - a. THE MASONRY MUST CURE FOR AT LEAST FOUR HOURS.
        - b. THE GROUT SLUMP MUST BE MAINTAINED BETWEEN 10 AND 11 INCHES.
        - c. THE WALL CANNOT CONTAIN INTERMEDIATE BOND BEAMS BETWEEN THE TOP AND BOTTOM OF THE POUR HEIGHT.
    - F. GROUTING SHALL BE STOPPED 11/2" BELOW THE TOP OF A COURSE TO FORM A KEY AT THE JOINT.
    - G. GROUTING OF MASONRY BEAMS OR LINTELS SHALL BE DONE IN ONE CONTINUOUS OPERATION.

13. MASONRY LINTELS:
    - A. PROVIDE A MINIMUM OF 8" BEARING AT EACH END OF EACH LINTEL. KNOCK-OUT SHALL BE PROVIDED. USE LINTEL-TYPE BLOCKS ONLY AT OPENINGS.
    - B. EXTEND BOTTOM BARS 24" BEYOND THE OPENING FOR #4 & #5 BARS AND 30" BEYOND THE OPENING FOR #6.

14. REINFORCING:
    - A. VERTICAL REINFORCING SHALL BE PLACED AT EACH JAMB OF EACH WALL OPENING, AT EACH WALL END, AT EACH SIDE OF WALL CONTROL JOINT, AT EACH WALL INTERSECTION.
    - B. SPLICED REINFORCING SHALL BE LAPPED 48 BAR DIAMETERS OR AS SHOWN ON DRAWINGS, WHICHEVER IS GREATER.
    - C. VERTICAL REINFORCING BARS SHALL HAVE A MINIMUM CLEARANCE OF 3/4" FROM MASONRY AND SHALL BE HELD IN POSITION TOP AND BOTTOM AND AT INTERVALS NOT EXCEEDING FOUR (4) FEET.
    - D. FOUNDATION DOWELS MAY BE SLOPED NO MORE THAN 1h:6v TO ALIGN WITH WALL CAVITIES OR VERTICAL CMU CORES. PROVIDE DOWELS TO MATCH WALL REINFORCEMENT SIZE AND SPACING, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
    - E. LOCATE ALL VERTICAL REINFORCEMENT CENTERED IN THE WALL UNLESS OTHERWISE DETAILED.
    - F. WHERE BOND BEAMS ARE DISCONTINUOUS, EXTEND REINFORCEMENT 48 BAR DIAMETERS BEYOND THE SPECIFIED TERMINATION.
    - G. WHERE BOND BEAMS ARE REQUIRED TO STEP BY 4"-12" VERTICALLY, REMOVE MASONRY AS REQUIRED TO MAINTAIN CONTINUITY OF REINFORCEMENT @ A SLOPE = 6 UNITS HORIZONTAL TO 1 UNIT VERTICAL.

15. FIELD PENETRATIONS THROUGH BLOCK WALLS SHALL NOT BE MADE THROUGH BOND BEAMS, LINTELS OR GROUTED CELLS.

16. DRAWINGS INDICATE DOWELS FOR SECURING REINFORCEMENT IN STRUCTURAL WALLS TO BE CAST IN CONCRETE. POST-INSTALLED DOWELS ARE ACCEPTABLE AS A SUBSTITUTION WHEN APPROVED BY THE STRUCTURAL ENGINEER OF RECORD, SUBJECT TO THE FOLLOWING REQUIREMENTS:
    - A. REQUIRED HOLE SIZE FOR "UNIFORM VERTICAL REINFORCEMENT" SHALL BE AS FOLLOWS:
        - a. #4 5/8"∅x4 1/4"
        - b. #5 3/4"∅x5 1/4"
    - B. REQUIRED HOLE SIZE FOR "JAMB REINFORCEMENT" SHALL BE AS FOLLOWS:
        - a. #4 5/8"∅x6 1/4"
        - b. #5 3/4"∅x8"
    - C. SET BARS IN EPOXY INJECTION ADHESIVE HILTI HIT-RE 500 OR AN APPROVED EQUAL. COMPLY WITH MANUFACTURER'S SPECIFICATIONS FOR PREPARATION & PLACEMENT REQUIREMENTS.

REV	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

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PROJECT

CONNOR SCHOOL RENOVATIONS

1581 VAN BUREN RD, CONNOR, ME 04736

TITLE

STRUCTURAL NOTES

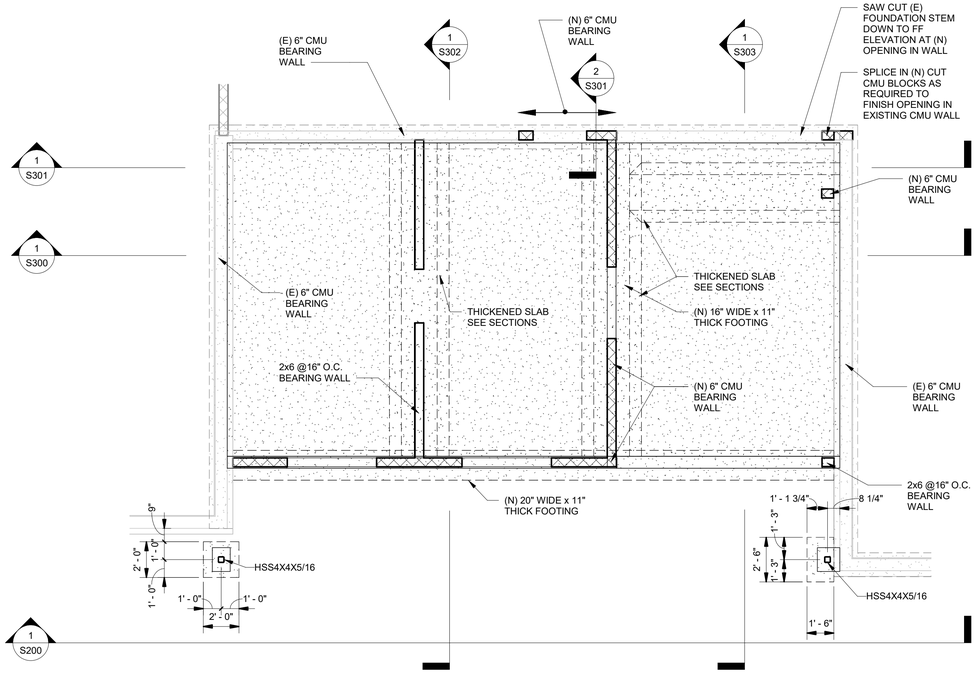
STATE OF MAINE
WILLIAM C. TIMKEN
No. 18004
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	12" = 1'-0"

DRAWN BY	DESIGNED BY	CHECKED BY
WCT	WCT	CDL

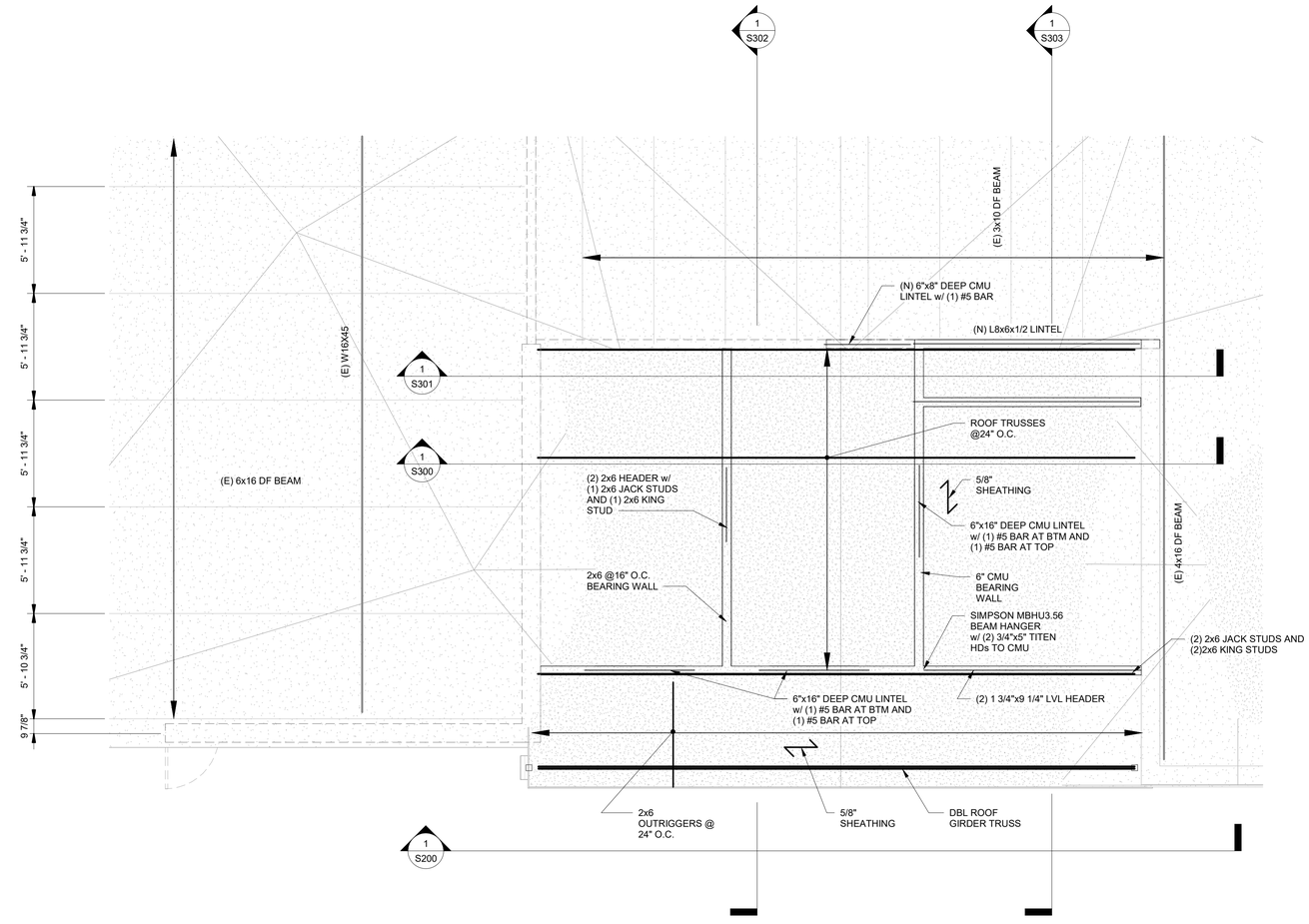
PROJECT No. 10377.028

DRAWING NO. **S002** REV.



1 S101 SLAB PLAN

SCALE: 1/4" = 1'-0"



2 S101 ROOF FRAMING PLAN

SCALE: 1/4" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK.

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PROJECT

CONNOR SCHOOL RENOVATIONS

1581 VAN BUREN RD, CONNOR, ME 04736

TITLE

FOUNDATION AND ROOF FRAMING PLANS

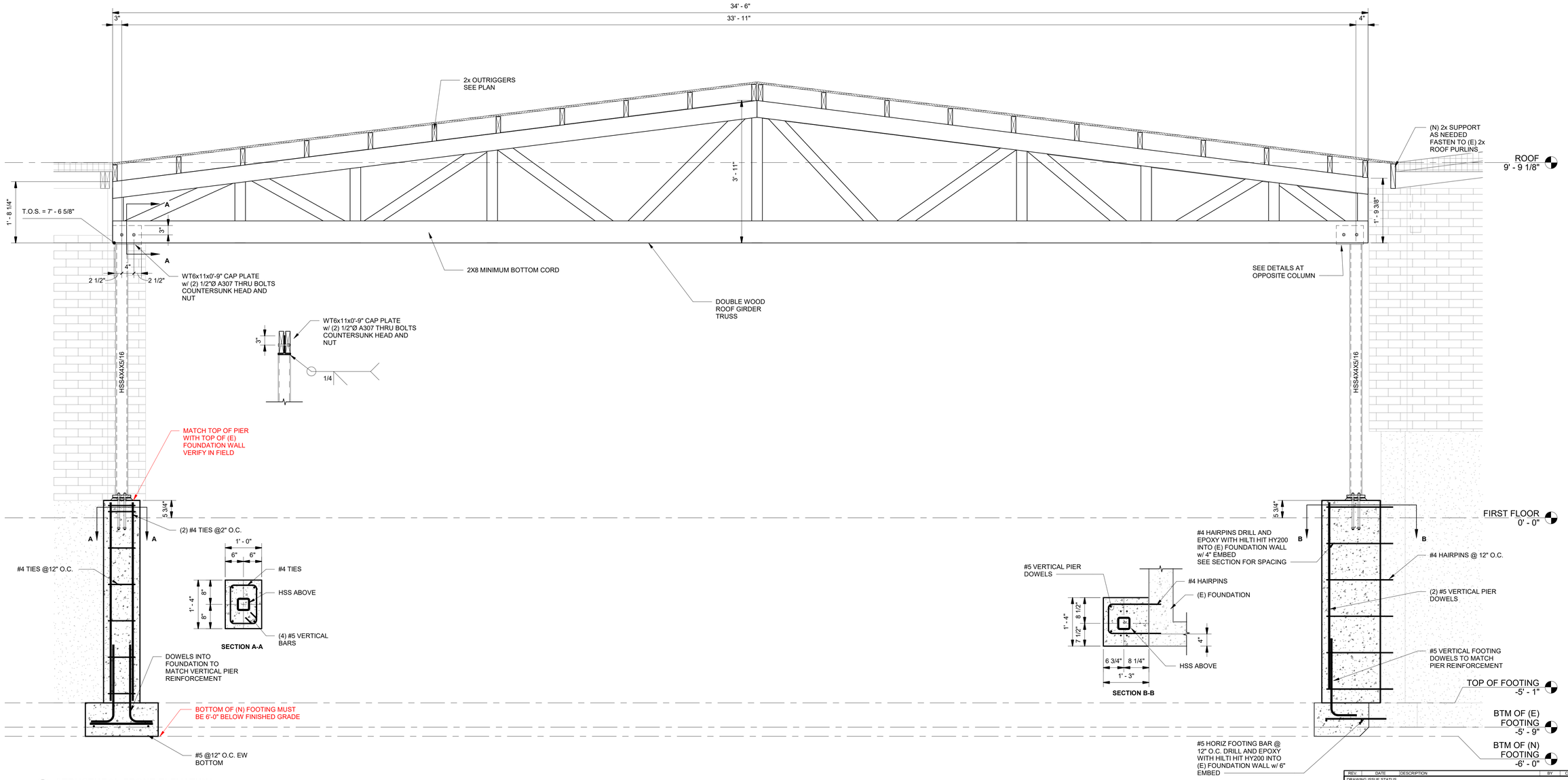
STATE OF MAINE
WILLIAM C. TIMKEN
No. 18004
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	1/4" = 1'-0"

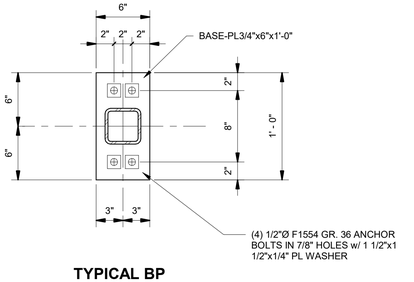
DRAWN BY	DESIGNED BY	CHECKED BY
WCT	WCT	CDL

PROJECT No. 10377.028

DRAWING NO. **S101** REV.

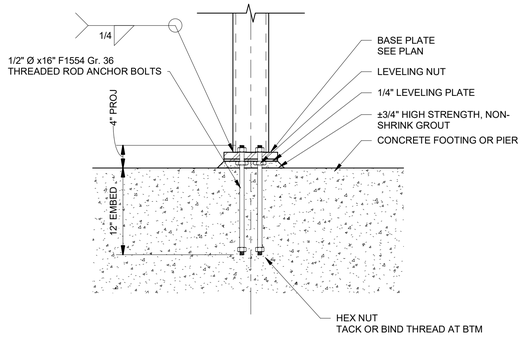


1 S200 **STRUCTURAL FRONT ELEVATION**
SCALE: 3/4" = 1'-0"



TYPICAL BP

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



TYPICAL STEEL COLUMN BASEPLATE CONNECTION
SCALE: 1 1/2" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

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PROJECT

CONNOR SCHOOL RENOVATIONS

1581 VAN BUREN RD, CONNOR, ME 04736

TITLE

STRUCTURAL FRONT ELEVATION

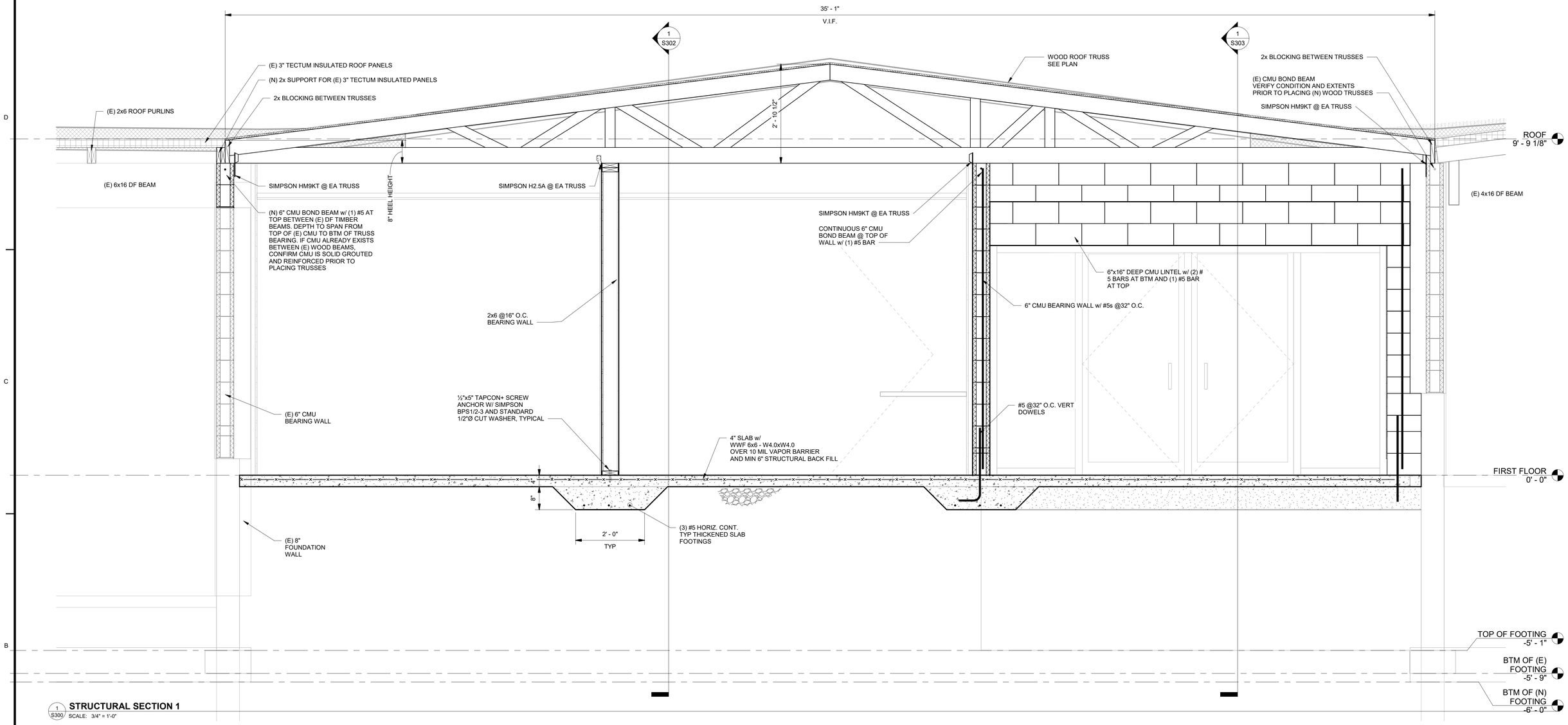
STATE OF MAINE
WILLIAM C. TIMKEN
No. 18004
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	As indicated

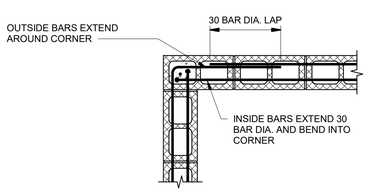
DRAWN BY	DESIGNED BY	CHECKED BY
WCT	WCT	CDL

PROJECT No. 10377.028

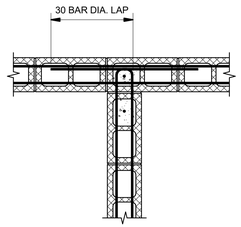
DRAWING NO. **S200** REV.



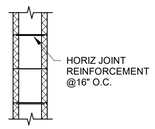
1 S300 **STRUCTURAL SECTION 1**
SCALE: 3/4" = 1'-0"



CORNER BOND BEAM DETAIL
SCALE: 3/4" = 1'-0"



INTERSECTING BOND BEAM DETAIL
SCALE: 3/4" = 1'-0"



HORIZ JOINT REINFORCEMENT
SCALE: 3/4" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

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PROJECT

CONNOR SCHOOL RENOVATIONS

1581 VAN BUREN RD, CONNOR, ME 04736

TITLE

STRUCTURAL SECTION

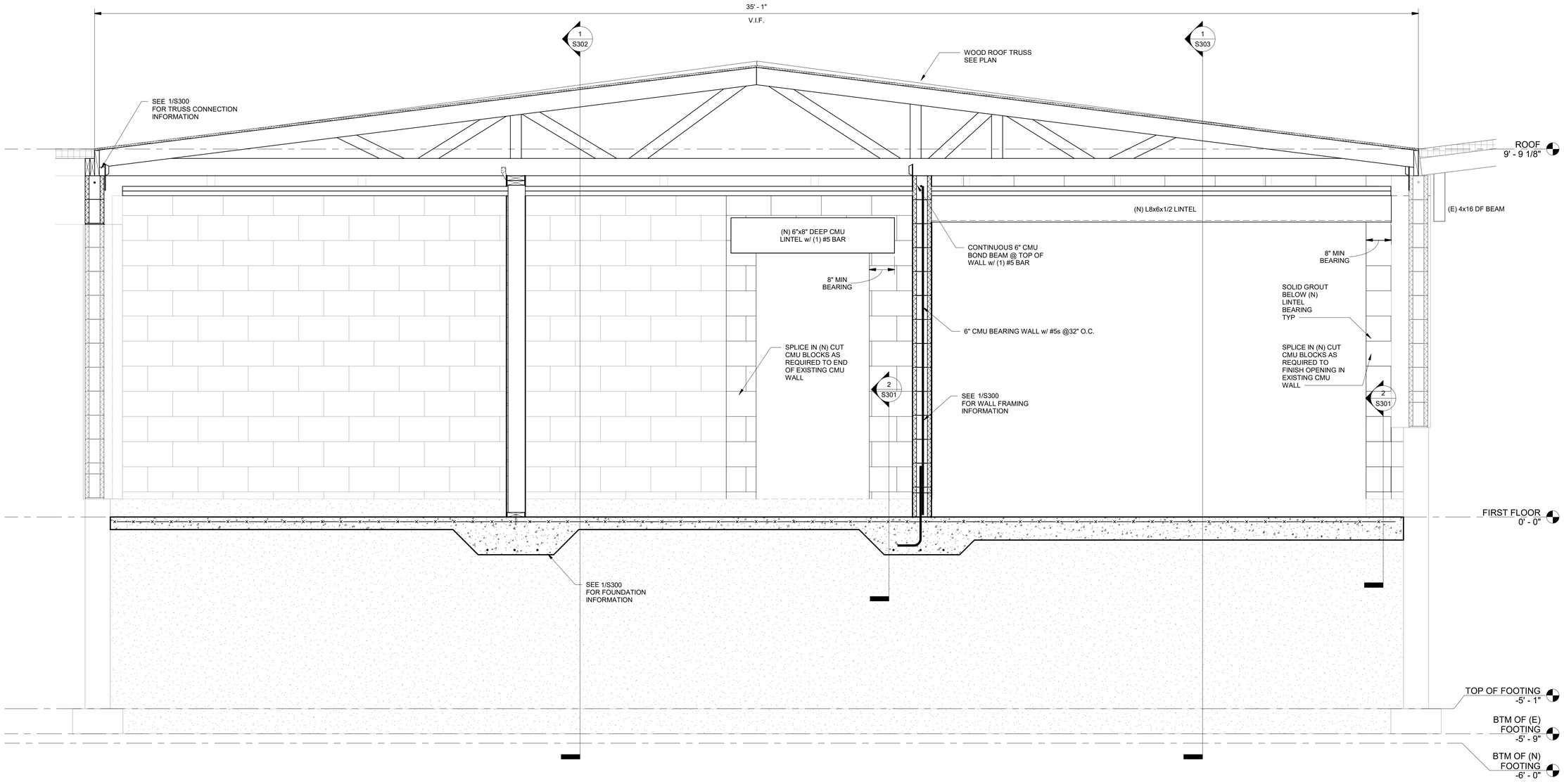
STATE OF MAINE
WILLIAM C. TIMKEN
No. 18004
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	3/4" = 1'-0"

DRAWN BY	DESIGNED BY	CHECKED BY
WCT	WCT	CDL

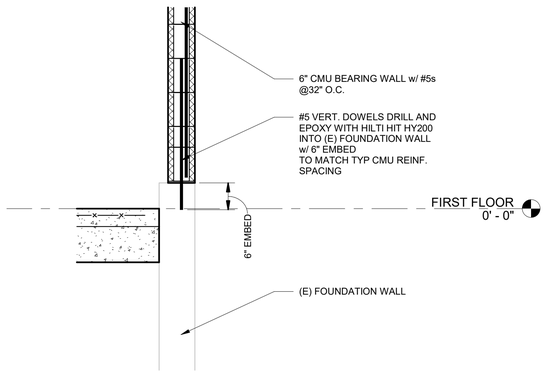
PROJECT No. 10377.028

DRAWING NO. **S300** REV.



1/S301 STRUCTURAL SECTION 2

SCALE: 3/4" = 1'-0"



2/S301 (N) CMU WALL TO (E) FOUNDATION

SCALE: 3/4" = 1'-0"

REV	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
One Merchants Plaza, Suite 701
Bangor, Maine 04401
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WWW.HALEYWARD.COM

PROJECT

CONNOR SCHOOL RENOVATIONS

1581 VAN BUREN RD, CONNOR, ME 04736

TITLE

STRUCTURAL SECTION

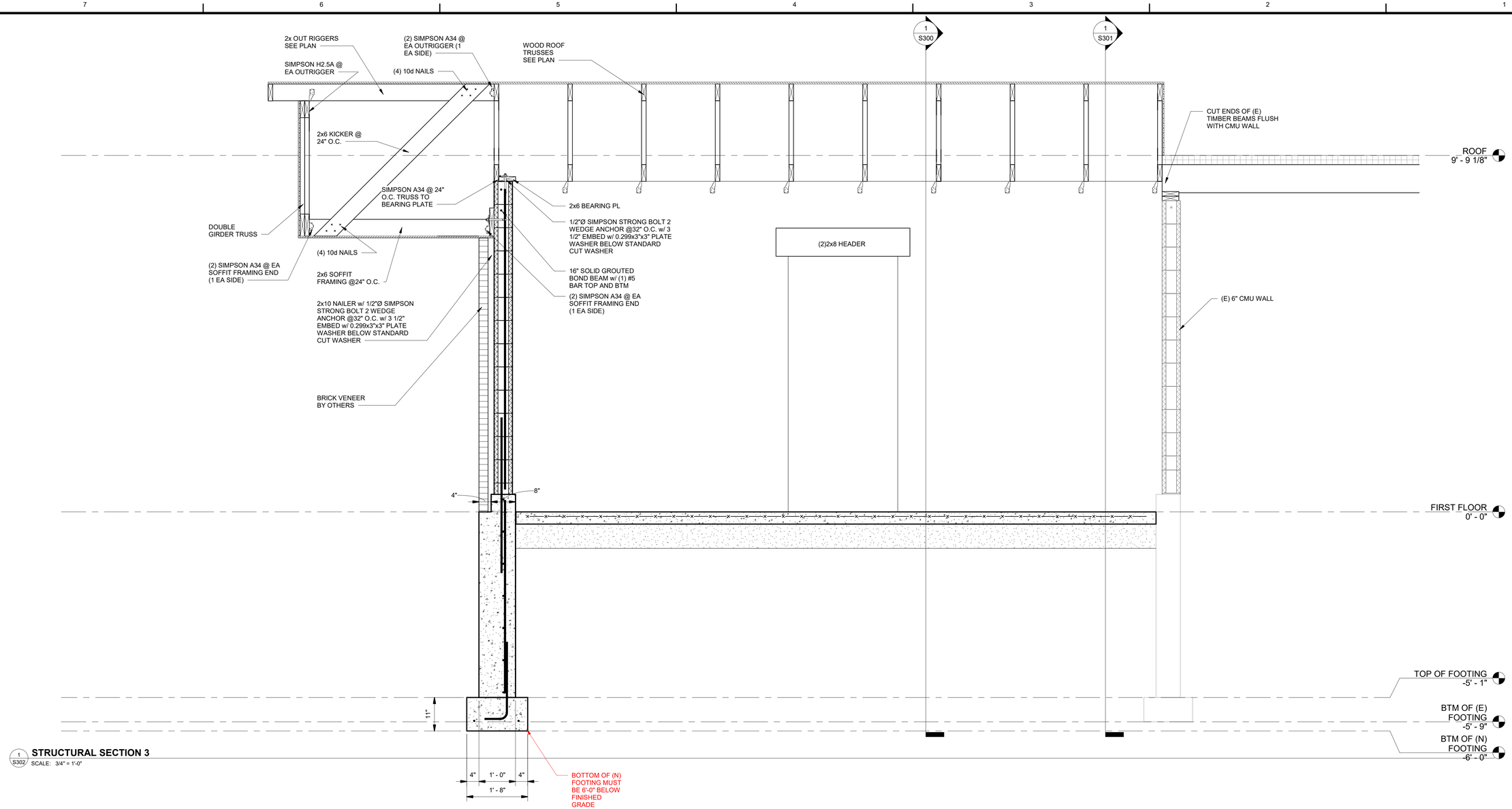
STATE OF MAINE
WILLIAM C. TIMKEN
No. 18004
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	3/4" = 1'-0"

DRAWN BY	DESIGNED BY	CHECKED BY
WCT	WCT	CDL

PROJECT No. 10377.028

DRAWING NO. **S301** REV.



1 S302 **STRUCTURAL SECTION 3**
SCALE: 3/4" = 1'-0"

REV	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

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STRUCTURAL SECTION

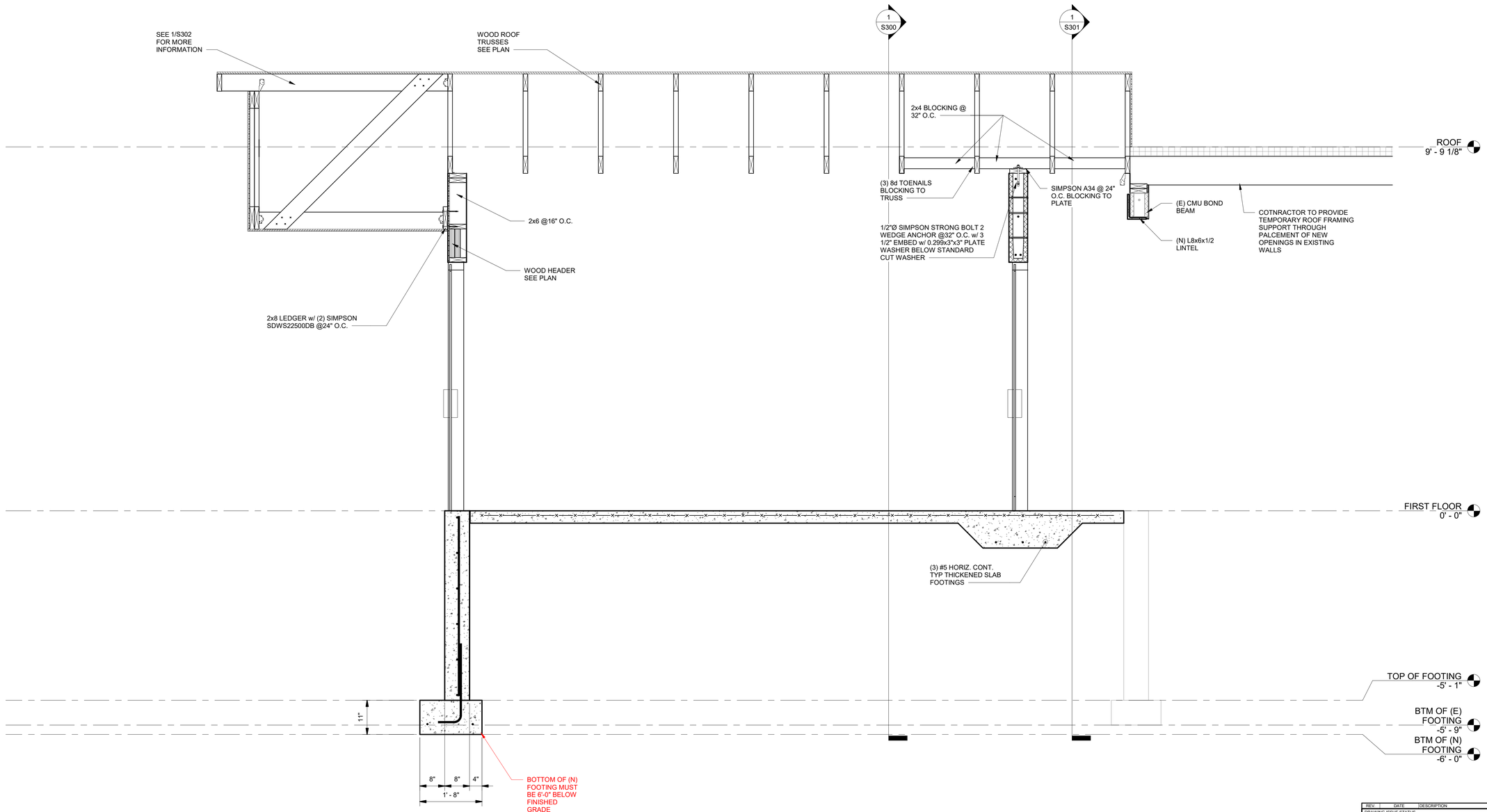
STATE OF MAINE
WILLIAM C. TIMKEN
No. 18004
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	3/4" = 1'-0"

DRAWN BY	DESIGNED BY	CHECKED BY
WCT	WCT	CDL

PROJECT No. 10377.028

DRAWING NO. **S302** REV.



1 S303 **STRUCTURAL SECTION 4**
SCALE: 3/4" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

ISSUED FOR BID

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PROJECT

CONNOR SCHOOL RENOVATIONS

1581 VAN BUREN RD, CONNOR, ME 04736

TITLE

STRUCTURAL SECTION

STATE OF MAINE
WILLIAM C. TIMKEN
No. 18004
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	3/4" = 1'-0"

DRAWN BY	DESIGNED BY	CHECKED BY
WCT	WCT	CDL

PROJECT No. 10377.028

DRAWING NO. **S303** REV.

PROJECT GENERAL NOTES

1. THESE GENERAL NOTES ARE INTENDED TO COMPLIMENT CONTRACT DOCUMENTS. REFER TO CONTRACT DOCUMENTS FOR DETAILED INFORMATION AND ADDITIONAL REQUIREMENTS.
2. WORK INCLUDED IN THIS CONTRACT SHALL CONFORM TO FEDERAL, STATE, AND LOCAL LAWS, STATUTES, ORDINANCES, CODES, RULES AND REGULATIONS, OR LAWFUL ORDERS OF PUBLIC AUTHORITY. PROMPTLY REPORT NONCONFORMITY DISCOVERED TO ARCHITECT/ENGINEER.
3. INTENT OF CONTRACT DOCUMENTS IS TO INCLUDE ITEMS NECESSARY FOR PROPER EXECUTION AND COMPLETION OF WORK BY CONTRACTOR AND PROVIDE A COMPLETE, FULLY OPERATIONAL BUILDING, PROVIDE ALL LABOR, MATERIALS, AND INCIDENTALS NECESSARY TO ACHIEVE THIS INTENT.
4. FAILURE OF DRAWINGS OR SPECIFICATIONS TO INDICATE EACH INCIDENTAL SHALL NOT RELIEVE CONTRACTOR FROM PROVIDING NECESSARY ITEMS AS PART OF THIS CONTRACT. DRAWINGS SHOW DESIGN, LOCATION, DESCRIBE QUALITY LEVEL AND CONSTRUCTION TECHNIQUES IN A GENERAL SENSE ONLY.
5. DETAILS ARE TYPICAL, WHAT IS SHOWN IN ONE CONDITION APPLIES TO OTHER SIMILAR CONDITIONS, UNLESS NOTED OTHERWISE.
6. VERIFY FOLLOWING ITEMS AND REPORT DISCREPANCIES TO ARCHITECT PRIOR TO PROCEEDING WITH WORK, AND PROCEED WITH WORK AFTER SUCH DISCREPANCIES ARE RESOLVED.
   - EXISTING CONDITIONS
   - WALLS, FLOORS, AND SUBSTRATES WHERE PRODUCTS AND SYSTEMS ARE TO BE INSTALLED.
   - SIZE AND CONDITIONS OF WINDOW, DOOR, AND OTHER OPENINGS WHERE PRODUCTS AND SYSTEMS ARE TO BE INSTALLED.
   - THE EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES, MECHANICAL, AND ELECTRICAL SYSTEMS.
   - DISCREPANCIES BETWEEN OR WITHIN CONTRACT DOCUMENTS.
   - UNSUITABLE SOILS: REPORT LOCATION OF UNSUITABLE SOIL MATERIALS BELOW ANTICIPATED LEVELS OF FOOTINGS OR SLABS PRIOR TO SETTING FORMS.
   - DIMENSIONAL DISCREPANCIES.
7. COORDINATE THE WORK OF SUBCONTRACTORS.
8. COORDINATE WORK TO ACHIEVE GIVEN VISUAL AND PERFORMANCE REQUIREMENTS OF MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS WITHIN INDICATED SPACE.
9. DEFINITIONS:
   - NEW: INDICATES ITEMS THAT SHALL BE FURNISHED AND INSTALLED BY THIS CONTRACT. TYPICALLY USED TO ENSURE CLARITY BETWEEN VARIOUS COMPONENTS OF THE DRAWINGS. NOT ALL ITEMS ARE LABELED AS "NEW" WHEN IT IS OBVIOUS BY OTHER INDICATION.
   - EXISTING: EXISTING BUILDING OR SITE COMPONENTS WHICH ARE IN PLACE AT START OF CONSTRUCTION. NOT ALL ITEMS ARE LABELED AS "EXISTING" WHEN IT IS OBVIOUS BY OTHER INDICATION.
   - REPAIR: RESTORE TO SUITABLE OR APPROPRIATE OPERATING AND AESTHETIC CONDITION.
   - RESTORE: BRING BACK TO FORMER CONDITION, BY REPAIRING OR PATCHING AS REQUIRED.
   - PATCH: RESTORE TO CONDITION MATCHING EXISTING ADJACENT CONSTRUCTION, SURFACE TEXTURE, AND FINISH.
   - N.I.C. (NOT IN CONTRACT): WORK WHICH IS NOT INCLUDED IN THIS CONTRACT BUT WHICH MAY REQUIRE CONTRACTOR COORDINATION.
   - REMOVE: DISMANTLE AND/OR EXTRACT FROM PREMISES ENTIRELY. DISPOSE OF OFF SITE UNLESS NOTED OTHERWISE. PROVIDE NEW MATERIAL AS INDICATED.
   - DAMAGES: EXISTING BUILDING OR SITE COMPONENTS, NOT SCHEDULED FOR WORK WHICH ARE DAMAGED. SUCH ELEMENTS AND COMPONENTS SHALL BE REPLACED OR RESTORED TO ORIGINAL CONDITION BY METHODS APPROVED BY ARCHITECT.
   - DEMOLISH: DISMANTLE AND/OR EXTRACT FROM PREMISES ENTIRELY. DISPOSE OF OFF SITE UNLESS NOTED OTHERWISE.
   - SALVAGE: REMOVE AND REINSTALL OR REMOVE AND DELIVER TO OWNER AS INDICATED. SALVAGED COMPONENTS MAY BE FORE LIMITED REUSE. TO MATCH EXISTING CONDITIONS OR TO PATCH AND REPAIR AS INDICATED.

DOOR AND WINDOW NOTES

1. PROVIDE DOOR STOPS TO PROTECT WALLS AT LOCATIONS WHERE A DOOR SWING WILL STRIKE WALL.
2. EXTERIOR DOORS SHALL HAVE WEATHER STRIPPING, THRESHOLDS, AND SHALL BE INSTALLED WEATHERTIGHT.
3. REFER TO SPECIFICATION FOR DOOR & FRAME GAUGES, ANCHORS, AND REINFORCEMENT.

GENERAL ARCHITECTURAL NOTES

1. DRAWINGS USE A SYSTEM OF KEYED NOTES ON PLANS, ELEVATIONS AND DETAILS. INSTRUCTIONS FOR SPECIFIC COMPONENTS OF WORK ARE KEYED TO DRAWINGS. BUILDING SYSTEMS ARE KEYED TO FLOOR PLANS, WALL SECTIONS, ROOF PLAN, AND OTHER DETAILS AS APPROPRIATE.
2. MAINTAIN MINIMUM MANEUVERING CLEARANCES AT DOORS IN COMPLIANCE WITH ADA ACCESSIBILITY GUIDELINES (ADAAG AND ANSI A117.1).
3. MOUNTING HEIGHTS AND CLEARANCES AT TOILET ROOMS AND ELSEWHERE SHALL COMPLY WITH THE LATEST VERSION OF ADA ACCESSIBILITY GUIDELINES (ADAAG AND ANSI A117.1 ACCESSIBILITY STANDARD).
   - BARRIER-FREE CLEARANCES ARE GIVEN. THESE CLEAR DIMENSIONS SHALL BE MAINTAINED IN CASES OF DISCREPANCY.
   - DIMENSIONS GIVEN FOR FIXTURE AND ACCESSORY LOCATIONS ARE CLEAR DIMENSIONS FROM FINISHED SURFACES UNLESS NOTED OTHERWISE.
4. MAINTAIN CLEAR DIMENSIONS IN ACCORDANCE WITH LATEST VERSION OF ADA ACCESSIBILITY GUIDELINES (ADAAG).
5. GRAB BAR COMPONENTS SHALL BE ABLE TO WITHSTAND A LOAD OF 250 LBS AT ANY POINT.
6. INSTALL BLOCKING BEHIND SURFACE-APPLIED FIXTURE, TRIM, GRAB BARS, SHELVES, CHAIR RAILS, PICTURE RAILS, BASE MOLDINGS, TACK OR MARKER BOARDS, WINDOW TREATMENTS, WALL OR BASE CABINETS OR COUNTERS, AND MISCELLANEOUS ACCESSORIES MOUNTED ON STUD WALLS.
7. EXPOSED WOOD NOT INDICATED SHALL BE STAINED NATURAL FINISH (CLEAR).
8. PROVIDE TRANSITION STRIPS OR THRESHOLDS (1/2" MAXIMUM) OF SAME MATERIAL AS FLOORING AND/OR AS NOTED ON DRAWINGS BETWEEN DISSIMILAR FLOORING MATERIALS.
9. PATCH AND LEVEL EXISTING SUBFLOORS TO RECEIVE NEW FLOOR FINISHES AS INDICATED IN ROOM FINISH SCHEDULE.
10. EXPOSED PIPES UNDER LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT.

WALL SYSTEM NOTES

1. ALL PARTITIONS SHALL EXTEND FROM SUB-FLOOR TO SLAB TO UNDERSIDE OF FLOOR OR ROOF DECK ABOVE, UNLESS NOTED OTHERWISE.
2. GYPSUM BOARD APPLIED TO WALLS SHALL BE APPLIED WITH THE BOTTOM EDGE SPACED NOT LESS THAN 1/2" ABOVE THE FLOOR. INSTALL A CONTINUOUS BEAD OF ACOUSTICAL SEALANT UNDER EACH LAYER OF GWB AT THE INTERSECTION WITH FLOOR, ON EACH SIDE OF THE WALL.
3. ALL TOP OF WALL CONDITIONS SHALL BE SEALED TO THE DECK ABOVE, UNLESS NOTED OTHERWISE. MAINTAIN THE REQUIRED FIRE RATINGS, SMOKE RATINGS, AND ACOUSTICAL RATINGS. COORDINATE THE TOP OF WALL CONSTRUCTION WITH THE STRUCTURAL FRAMING.
4. FOR EXISTING WALLS SUPPORTING NEW ITEMS, VERIFY THE WALL TYPE PRIOR TO PERFORMING THE WORK TO DETERMINE APPROPRIATE TYPE OF ANCHOR UNLESS INDICATED OTHERWISE. CONSULT ARCHITECT FOR CLARIFICATION IF NEEDED.
5. ALL EXTERIOR WOOD FRAMING IN CONTACT WITH CONCRETE, WITHIN 18" OF THE GROUND, OR EXPOSED TO THE WEATHER SHALL BE WOOD-PERSERVATIVE TREATED LUMBER (PRESSURE TREATED).

SITE MAP

NOT TO SCALE

ABBREVIATIONS

AB	ANCHOR BOLT
AB	AIR BARRIER
AC	AIR CONDITIONING
ADDL	ADDITIONAL
ADJ	ADJUSTABLE
ADO	AUTOMATIC DOOR OPERATOR
AED	AUTOMATIC ELECTRONIC DEFIBRILLATOR
AFF	ABOVE FINISHED FLOOR
AH	AIR HANDLER
AIB	AIR INFILTRATION BARRIER
ALT	ALTERNATE
ALUM	ALUMINUM
AOR	AREA OF REFUGE
APPROX	APPROXIMATE
ARCH	ARCHITECT(URAL)
ARND	AROUND
AVB	AIR/VAPOR BARRIER
AWP	ACOUSTICAL WALL PANEL
BD	BOARD
BF	BARRIER FREE
BIT	BITUMINOUS
BLDG	BUILDING
BLKG	BLOCKING
BM	BENCHMARK
BOT	BOTTOM
BO	BOTTOM OF
BRK	BRICK
BRG	BEARING
B/S	BRICK SHELF
BSMT	BASEMENT
C, CRS	COURSE
CAB	CABINET
CB	CATCH BASIN
CC	CENTER TO CENTER
CF	CUBIC FOOT
CFMF	COLD FORMED METAL FRAMING
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CMT	CERAMIC MOSAIC TILE
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
COL	COLUMN
CONC	CONCRETE
CONC/C	COLORED CONCRETE
CONT	CONTINUOUS OR CONTINUE
CONTR	CONTRACTOR
CPT	CARPET
CS	COUNTERSINK
CSMT	CASEMENT
CT	CERAMIC TILE
CW	CURTAIN WALL
CWT	CERAMIC WALL TILE
CUH	CABINET UNIT HEATER
CY	CUBIC YARD
DBL	DOUBLE
DC	DISPLAY CASE
DEMO	DEMOLISH, DEMOLITION
DF	DRINKING FOUNTAIN
DIA, DIAM	DIAMETER
DIM	DIMENSION
DIV	DIVISION
DMP	DEMOUNTABLE PARTITION
DN	DOWN
DR	DOOR
DTL	DETAIL
DWG	DRAWING
DWR	DRAWER
E	EAST
EA	EACH
EF	EXHAUST FAN
EMHO	ELECTRO MAGNETIC HOLD OPEN
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
EP	EPOXY PAINT
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMER	EMERGENCY
ENCL	ENCLOSED/ENCLOSURE
EQ	EQUAL
EQUIP	EQUIPMENT
EXH	EXHAUST
EXIST	EXISTING
EXT	EXTERIOR
EW	EYEWASH
EWC	ELECTRIC WATER COOLER
FB	FIRE BLANKET
FBO	FURNISHED BY OWNER
FCS	FLOOR COATING SYSTEM
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER AND CABINET
FFE	FINISHED FLOOR ELEVATION
FG	FIBERGLASS
FHVC	FIRE HOUSE AND VALVE CABINET
FIN	FINISH(ED)
FIN GR	FINISH GRADE
FLR	FLOOR(ING)
FNDN	FOUNDATION
FP	FIREPROOFING
FPD	FLAT PANEL DISPLAY
FO	FACE OF
FRMG	FRAME(ING)
FRP	FIBER REINFORCED PLASTIC
FRTG	FIRE RATED TEMPERED GLASS
FRT	FIRE RETARDANT TREATED
FSR	FLEXIBLE SHEET ROOFING
FT	FOOT(FEET)
FTG	FOOT
FTR	FIN TUBE RADIATION
FUR	FURRED(ING)
FV	FIELD VERIFY
FWC	FABRIC WALL COVERING
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GFB	GROUND FACE CMU
GL	GLASS, GLAZING
GWB	GYPSUM WALLBOARD
GMGB	GLASS MATT GYPSUM BOARD
HARD	HARDENER
HB	HOSE BIB
HC	HOLLOW CORE
HD	HEAD
HDO	HIGH DENSITY OVERLAY
HDWD	HARDWOOD
HDWR	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HANDRAIL
HS	HIGH SCHOOL
HT	HEIGHT
HTG	HEATING
HVAC	HEATING/VENTILATION/AIR CONDITIONING
IBC	INSTALLED BY CONTRACTOR
ID	INSIDE DIAMETER
IN	INCH(ES)
INCL	INCLUDE(D),(ING)
INFO	INFORMATION
INSUL	INSULATED
ITWP	INSULATED TRANSLUCENT WALL PANELS
INT	INTERIOR
INV	INVERT
JT	JOINT
KIT	KITCHEN
LAB	LABORATORY
LAM	LAMINATE(D)
LAV	LAVATORY
LB	POUND(S)
LCC	LEAD COATED COPPER
LF	LINEAR FOOT
LH	LEFT HAND
LOC'N	LOCATION
LW	LIGHTWEIGHT (CMU)
LVP	LUXURY VINYL PLANK
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MC	MEDICINE CABINET
MCWF	MULTI-COLOR WALL FINISH
MDO	MEDIUM DENSITY OVERLAY
MECH	MECHANICAL
MED	MEDIUM
MF	MEMBRANE FLASHING
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLDG	MOULDING
MO	MASONRY OPENING
MR	MOISTURE RESISTANT
MRGB	MOISTURE RESISTANT GYPSUM BOARD
MS	MOP SINK
MSF	METAL STUD FRAMING
MTL	METAL
N	NORTH
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE
O/	OVER
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFS	OVERFLOW SCUPPER
OP	OPAQUE
OH	OVERHEAD
OPH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
OPS	OPERABLE PANEL SYSTEM
OF/CI	OWNER FURNISHED/CONTRACTOR INSTALLED
OF/OI	OWNER FURNISHED/OWNER INSTALLED
PTD	PAINTED
PC	PRECAST CONCRETE
PERF	PERFORATED
PERIM	PERIMETER
PRKG	PARKING
PL	PLATE
PLAM	PLASTIC LAMINATE
PLYWD	PLYWOOD
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
PTD	PAPER TOWEL DISPENSER
PTN	PARTITION
PVC	POLYVINYLCHLORIDE
PVMT	PAVEMENT
QR	QUARTER ROUND
QT	QUARRY TILE
RE:	REFERENCE
REF	REFRIGERATOR
REQ'D	REQUIRED
REV	REVISION(S), REVISED
RL	RAIN LEADER
RF	RUBBER FLOOR
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY
S	SOUTH
SAT	SUSPENDED ACOUSTICAL TILE
SC	SOLID CORE
SCHED	SCHEDULE
SD	STORM DRAIN, SOAP DISPENSER
SECT	SECTION
SF	SQUARE FOOT (FEET)
SF	STOREFRONT
SGL	SAFETY GLASS
SH	SHOWER
SHT	SHEET
SHTHG	SHEATHING
SIM	SIMILAR
SLNT	SEALANT
SNR	SANITARY NAPKIN RECEPTOR
SP	SPECIAL PAINT
SPEC	SPECIFICATION
SPKR	SPEAKER
SQ	SQUARE
SS	STAINLESS STEEL
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRL	STRUCTURAL
STRUCT	STRUCTURE/STRUCTURAL
SUPT	SUPPORT
SUSP	SUSPENDED
SV	SHEET VINYL
T	TOILET
TB	TOWEL BAR
TB	TACK BOARD
T&G	TONGUE AND GROOVE
TG	TEMPERED GLASS
THK	THICK(NESS)
TO	TOP OF
TP	TOILET PARTITION
TPD	TOILET PAPER DISPENSER
TV	TELEVISION
TYP	TYPICAL
UCR	UNDER COUNTER REFRIGERATOR
UNO	UNLESS NOTED OTHERWISE
VB	VAPOR BARRIER/VINYL BASE
VC	VALVE CABINET
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VPW	VENEER PLYWOOD
VWC	VINYL WALL COVERING
W	WEST
W/	WITH
WC	WATER CLOSET
WD	WOOD
WGL	WIRE GLASS
WH	WATER HEATER
W/O	WITHOUT
WS	WATERSTOP
WP	WATERPROOF
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH
YD	YARD
ZCC	ZINC-COATED COPPER

SYMBOLS

- SECTION — 1 / A-101
- DETAIL — 1 / A-101
- EXTERIOR ELEVATION — 1 / A-201
- INTERIOR ELEVATION — 1 / 4 A-201 2 / 3
- DOOR INDICATION — 101
- WINDOW OR GLAZED OPENING INDICATION — A
- ROOM NUMBER — ROOM 101
- WALL TYPE — M1
- CENTERLINE
- LEVEL LINE CONTROL POINT — LEVEL 0' - 0"
- MATCHLINE
- BREAKLINE
- COLUMN CENTERLINE — 1

MATERIALS LEGEND

- CONCRETE
- EARTH
- GRAVEL
- SAND
- BRICK
- CONCRETE MASONRY UNIT
- STEEL
- WOOD
- WOOD FRAMING
- WOOD BLOCKING
- GYPSUM BOARD
- PLYWOOD
- RIGID INSULATION
- BATT INSULATION

REV	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

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PROJECT

CONNOR SCHOOL
1581 VAN BUREN RD.
CONNOR, MAINE 04736

TITLE

ABBREVIATIONS, SYMBOLS & NOTES

LICENSED ARCHITECT — MATTHEW G. CARTER — NO. 2687 — STATE OF MAINE

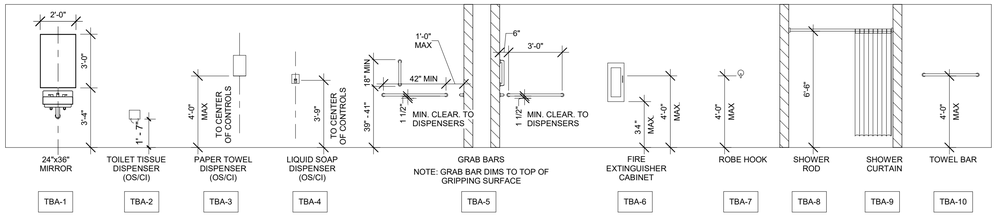
DATE	SCALE
2025.04.22	

DRAWN BY	DESIGNED BY	CHECKED BY
Author	Designer	Checker

PROJECT No. 10377.028

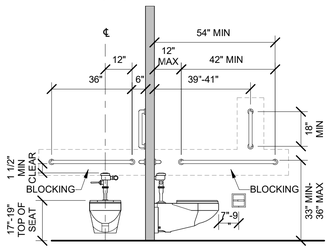
DRAWING NO. **A001** REV.

NOTE:
MOUNTING HEIGHTS SHOWN ARE CLEARANCES REQUIRED FROM FINISHED FLOOR AND WALL MATERIALS.



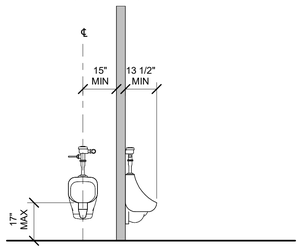
NOTE:
1. REFER TO MANUFACTURER'S INSTRUCTIONS FOR SPECIFIC ADA REQUIRED MOUNTING HEIGHTS AS APPLICABLE.
2. ALL CONTROLS ON ACCESSIBLE ACCESSORIES REQUIRE 5LBS MAXIMUM FORCE TO OPERATE OR ACTIVATE; ARE OPERABLE WITH ONE HAND WITHOUT REQUIRING TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST; AND ARE WITHIN COMPLIANT RACH RANGES. OPERABLE PARTS ON ACCESSIBLE ACCESSORIES TO BE 15" AFF MINIMUM AND NOT TO EXCEED 48" MAXIMUM.
3. 35" MAX AFF TO BOTTOM OF REFLECTIVE SURFACE ON FULL LENGTH MIRRORS.

WATER CLOSET
ADA 213, 305, 308, 309, 604



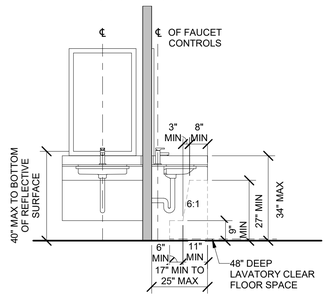
NOTE:
1. PROVIDE BLOCKING AT ALL GRAB BAR LOCATIONS.
2. FLUSH VALVE REQUIRED TO BE ON OPEN (WIDE) SIDE.
3. FLUSH CONTROLS ARE OPERABLE WITH ONE HAND AND DO NOT RQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST.
4. SPACE BETWEEN THE GRAB BAR AND ANY PROJECTING OBJECT BELOW OR AT EACH END IS 1 1/2" MIN.
5. THE SPACE BETWEEN THE GRAB BAR AND ANY PROJECTING OBJECT ABOVE IS 12" MIN, EXCEPT FOR SHOWER CONTROLS AND FITTINGS, AND OTHER GRAB BARS WHICH HAVE 1 1/2" MIN CLEAR.

URINAL
ADA 213, 305, 308, 309, 605



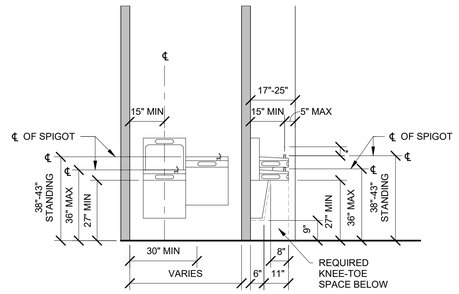
NOTE:
1. FLUSH CONTROLS ARE OPERABLE WITH ONE HAND AND DO NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST.
2. PROVIDE A 30"X48" LEVEL CLEAR SPACCE IN FRONT OF THE URINAL FOR FORWARD APPROACH; IF THE WALL OR SHIELD PROJECTS MORE THAN 24" FROM THE PLUMBING WALL ON BOTH SIDES, PROVIDE A 36"X48" CLEAR FLOOR SPACE.

LAVATORY
ADA 213, 305, 308, 309, 606



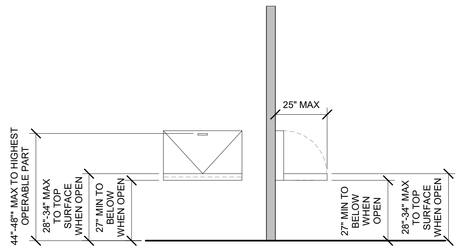
NOTE:
1. 34" AFF MAX TO RIM OF SINK.
2. 40" MAX TO BOTTOM OF REFLECTIVE SURFACE OF MIRROR.
3. FAUCET CONTROLS CAN NOT BE FURTHER BACK THAN THE TOE SPACE BELOW.

DRINKING FOUNTAIN CLEARANCES
ADA 211, 602



NOTE:
1. "4" MIN HEIGHT WATER FLOW FROM CENTERLINE OF SPIGOT TYPICAL.
2. LOW SPOUT OUTLETS ARE 36" MAXIMUM AFF WITH AN ADDITIONAL 4" MINIMUM HEIGHT WATER FLOW.

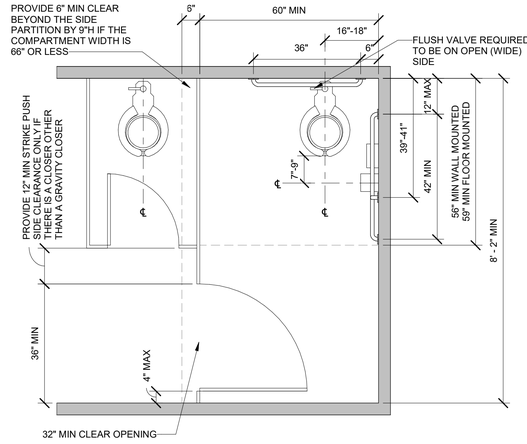
BABY CHANGING STATION
ADA 305, 306, 308



NOTE:
1. "WHERE A HIGH FORWARD REACH IS OVER AN OBSTRUCTION, THE CLEAR FLOOR SPACE SHALL EXTEND BENEATH THE ELEMENT FOR A DISTANCE NOT LESS THAN THE REQUIRED REACH DEPTH OVER THE OBSTRUCTION. THE HIGH FORWARD REACH SHALL BE 48" MAXIMUM WHERE THE REACH DEPTH IS 20" MAXIMUM. WHERE THE REACH DEPTH EXCEEDS 20", THE HIGH FORWARD REACH SHALL BE 44" MAXIMUM AND THE REACH DEPTH SHALL BE 25" MAXIMUM.

3. FIXTURE AND ACCESSORY MOUNTING HEIGHTS

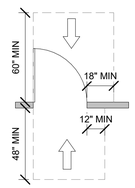
TOILET COMPARTMENT SIDE OPENING - IN-SWINGING
ADA 213.3.1, 604.8



NOTE:
1. TOILETS HAVE A 60" MINIMUM WIDE CLEAR SPACE ALONG THE PLUMBING WALL.
2. TOILETS HAVE 59" DEEP CLEAR SPACE FROM THE BACK WALL IF FLOOR MOUNTED AND 56" IF WALL MOUNTED.
3. NO OTHER FIXTURES OR DOORS CAN OVERLAP THE TOILET CLEAR FLOOR SPACE EXCEPT FOR GRAB BARS, DISPENSERS, SANITARY NAPKIN DISPOSAL UNITS, COAT HOOKS, SHELVES, CLEAR FLOOR SPACE OF OTHER FIXTURES, AND TURNING SPACES.
4. AN IN-SWINGING DOOR CAN SWING INTO THE SPACE IN FRONT OF THE TOILET CLEAR FLOOR SPACE, BUT IT CANNOT ENCROACH INTO THE MINIMUM OF 56" OR 59" DEPTH REQUIRED FOR THE TOILET CLEAR SPACE.
5. TOE CLEARANCE OF 9" HEIGHT AND 6" DEEP MINIMUM BEYOND ONE SIDE PARTITION IS PROVIDED IF THE COMPARTMENT IS 66" OR LESS WIDE EXCLUSIVE OF PARTITION SUPPORT.
6. TOE CLEARANCE OF 9" HEIGHT AND 6" DEEP BEYOND THE FRONT PARTITION IS PROVIDED IF THE COMPARTMENT IS 62" OR LESS DEEP FOR WALL HUNG TOILETS OR 65" OR LESS DEEP FOR FLOOR MUNTED EXCLUSIVE OF PARTITION SUPPORT.
7. ACCESSIBLE STALL DOOR TO HAVE SELF-CLOSING HINGES WITH ACCESSIBLE HARDWARE ON BOTH SIDES. IF COAT HOOK PROVIDED MUST NOT EXCEED 48" MAX AFF.

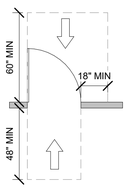
4.TOILET COMPARTMENTS

FRONT APPROACH
PULL SIDE



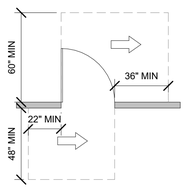
PUSH SIDE WITH BOTH CLOSER & LATCH

FRONT APPROACH
PUSH SIDE



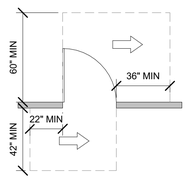
PUSH SIDE

HINGE APPROACH
PULL SIDE



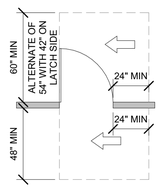
PUSH SIDE WITH BOTH CLOSER & LATCH

HINGE APPROACH
PULL SIDE



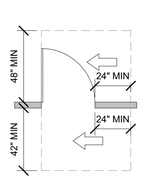
PUSH SIDE

LATCH APPROACH
PULL SIDE



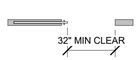
PUSH SIDE WITH CLOSER

LATCH APPROACH
PULL SIDE

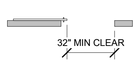


PUSH SIDE

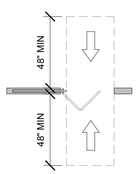
POCKET DOOR



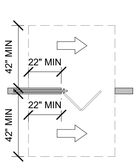
BARN DOOR



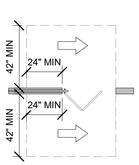
FRONT APPROACH
BI-FOLD & SLIDING/POCKET



HINGE/POCKET SIDE APPROACH
BI-FOLD & SLIDING/POCKET



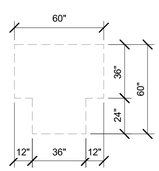
LATCH SIDE APPROACH
BI-FOLD & SLIDING/POCKET



NOTE:
1. REFERENCE ADA 404.2

2. MANEUVERING CLEARANCES AT DOORS

T-SHAPED TURN
ADA 304.3

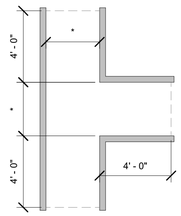


NOTE:
1. ONLY ONE OF THE 3 ARMS OF THE T CAN GO UNDERNEATH AN OBJECT WITH KNEE/TOE CLEARANCE BELOW

CIRCULAR TURN
ADA 304.3

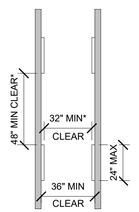
NOTE:
1. TURNING SPACE CAN GO UNDERNEATH AN OBJECT WITH KNEE/TOE CLEARANCE BELOW

T-SHAPED PASSING SPACE
ADA 403.5



NOTE:
1. * = AS REQUIRED FOR ACCESSIBLE ROUTE

ACCESSIBLE ROUTE CLEAR WIDTH
ADA 403.5



NOTE:
1. * = CLEAR BETWEEN PROTRUSIONS

1. ACCESSIBLE ROUTES

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

PROJECT

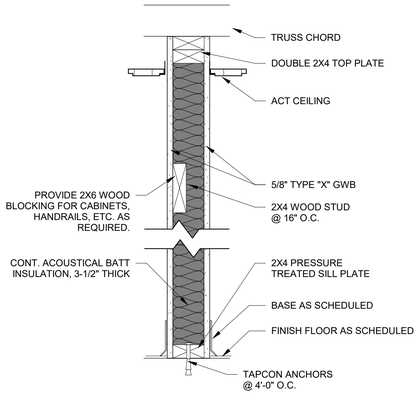
CONNOR SCHOOL
1581 VAN BUREN RD.
CONNOR, MAINE 04736

TITLE

ACCESSIBILITY REQUIREMENTS

LICENSED ARCHITECT
MATTHEW G. CARTER
NO. 2867
STATE OF MAINE

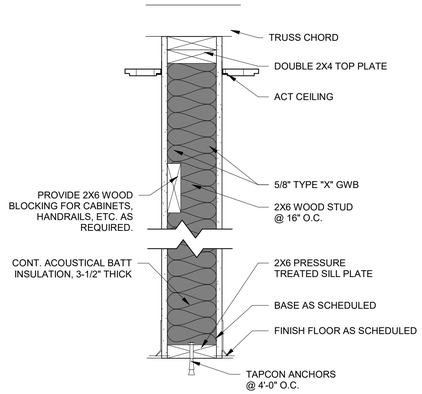
DATE	SCALE
2025.04.22	As indicated
DRAWN BY: KEK	DESIGNED BY: KEK	CHECKED BY: MGC
PROJECT No.	10377.028
DRAWING NO.	REV.
A002	



A **3-3/4" (2X4 WOOD STUDS)**

***CONFIRM AGAINST EXISTING WALL SIZES WHERE ALIGNING WITH EXISTING WALL & AGAINST EXISTING DOORS BEING REUSED**

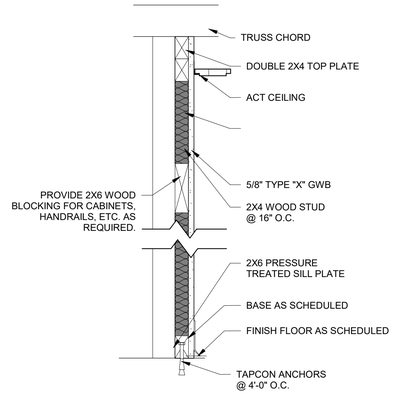
A - PARTITION TYPE B.O. TRUSS



A2 **6-3/4" (2X6 WOOD STUDS)**

***CONFIRM AGAINST EXISTING WALL SIZES WHERE ALIGNING WITH EXISTING WALL & AGAINST EXISTING DOORS BEING REUSED**

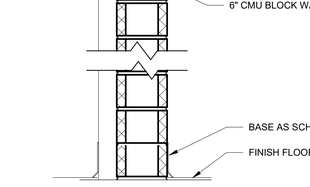
A2 - PARTITION TYPE B.O. TRUSS



A3 **2-1/8" (2X4 WOOD STUDS)**

***CONFIRM AGAINST EXISTING WALL SIZES WHERE ALIGNING WITH EXISTING WALL & AGAINST EXISTING DOORS BEING REUSED**

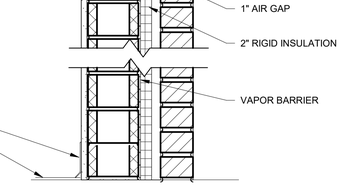
A3 - PARTITION TYPE B.O. TRUSS



B **6" CMU BLOCK WALL**

***CONFIRM AGAINST EXISTING WALL SIZES WHERE ALIGNING WITH EXISTING WALL & AGAINST EXISTING DOORS BEING REUSED**

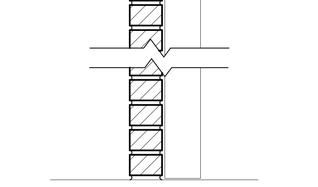
B - PARTITION TYPE 6" CMU BLOCK WALL



B2 **6" CMU BLOCK WALL WITH BRICK EXTERIOR**

***CONFIRM AGAINST EXISTING WALL SIZES WHERE ALIGNING WITH EXISTING WALL & AGAINST EXISTING DOORS BEING REUSED**

B2 - PARTITION TYPE 6" CMU WALL WITH BRICK

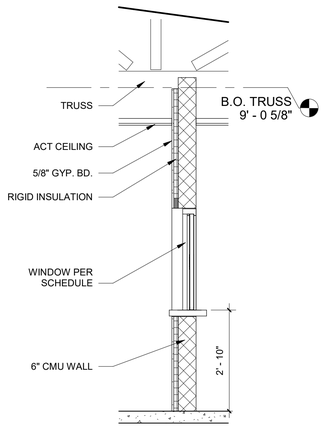


C **SINGLE WYTHE BRICK WALL**

***CONFIRM AGAINST EXISTING WALL SIZES WHERE ALIGNING WITH EXISTING WALL & AGAINST EXISTING DOORS BEING REUSED**

C - PARTITION TYPE SINGLE WYTHE BRICK WALL

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



1 / A003 **ENTRY DESK WALL SECTION**
SCALE: 1/2" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
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PROJECT

CONNOR SCHOOL
1581 VAN BUREN RD.
CONNOR, MAINE 04736

TITLE

PARTITION TYPES / WALL SECTIONS

LICENSED ARCHITECT MATTHEW G. CARTER NO. 2867 STATE OF MAINE

DATE	SCALE
2025.04.22	As indicated

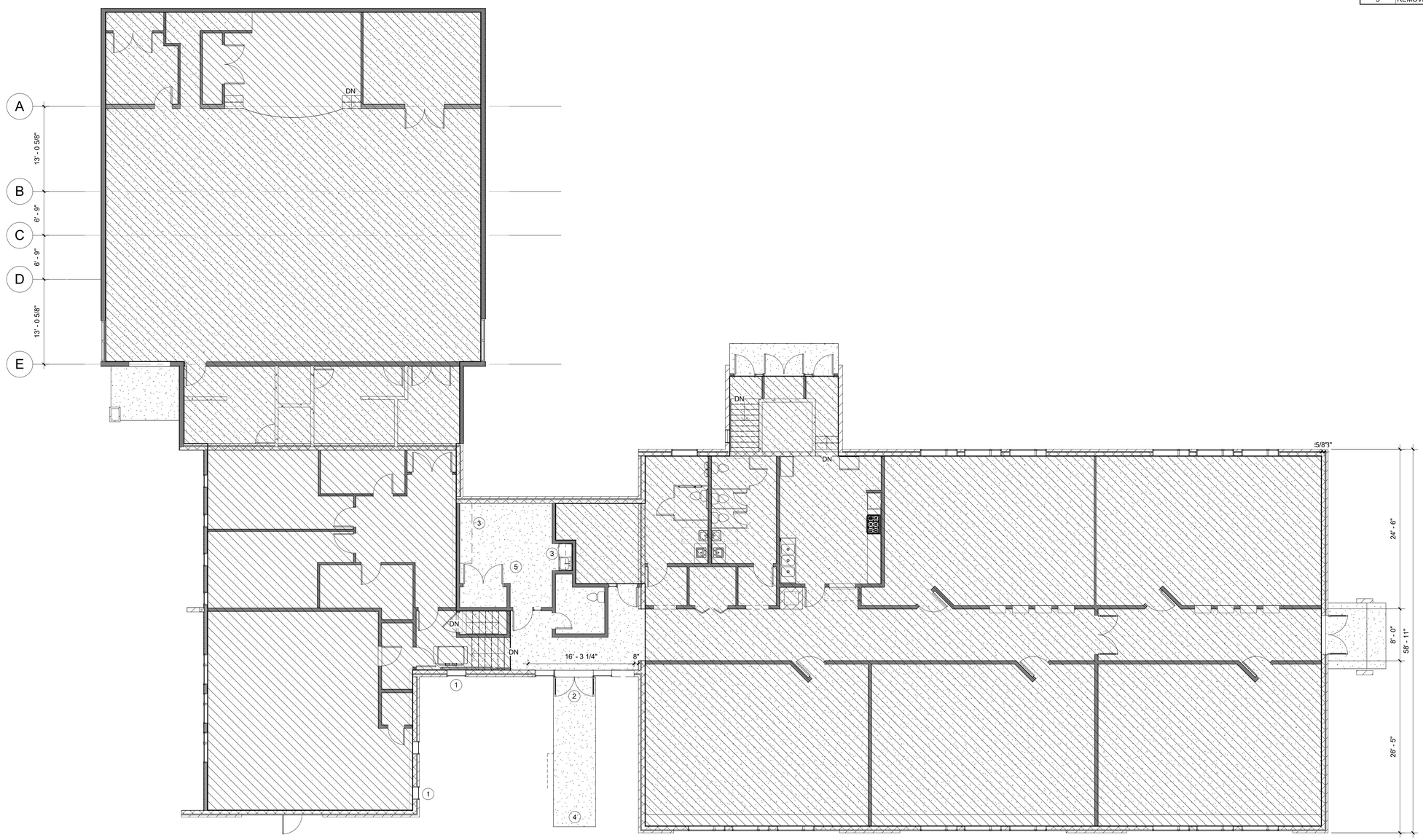
DRAWN BY	DESIGNED BY	CHECKED BY
Author	AM	JM

PROJECT No. 10377.028

DRAWING NO. **A003** REV.

DEMOLITION NOTES

Number	Description
1	REMOVE WINDOW.
2	DOOR AND ASSEMBLY.
3	REMOVE MILLWORK AND SINK. NEW SINK LOCATION PER PLAN
4	REMOVE SIDEWALK
5	REMOVE FLOORING.



1 AD101 **FIRST FLOOR - EXIST / DEMOLITION**
SCALE: 1/8" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
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PROJECT

CONNOR SCHOOL
1581 VAN BUREN RD.
CONNOR, MAINE 04736

TITLE

FIRST FLOOR DEMOLITION PLAN

LICENSED ARCHITECT
MATTHEW Q. CARTER
NO. 2867
STATE OF MAINE

DATE	SCALE
2025.04.22	1/8" = 1'-0"

DRAWN BY	DESIGNED BY	CHECKED BY
JAM	Designer	Checker

PROJECT No. 10377.028

DRAWING NO. **AD101** REV.

1 A101 **FIRST FLOOR**
SCALE: 1/8" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

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PROJECT

CONNOR SCHOOL
1581 VAN BUREN RD.
CONNOR, MAINE 04736

TITLE

FIRST FLOOR PLAN

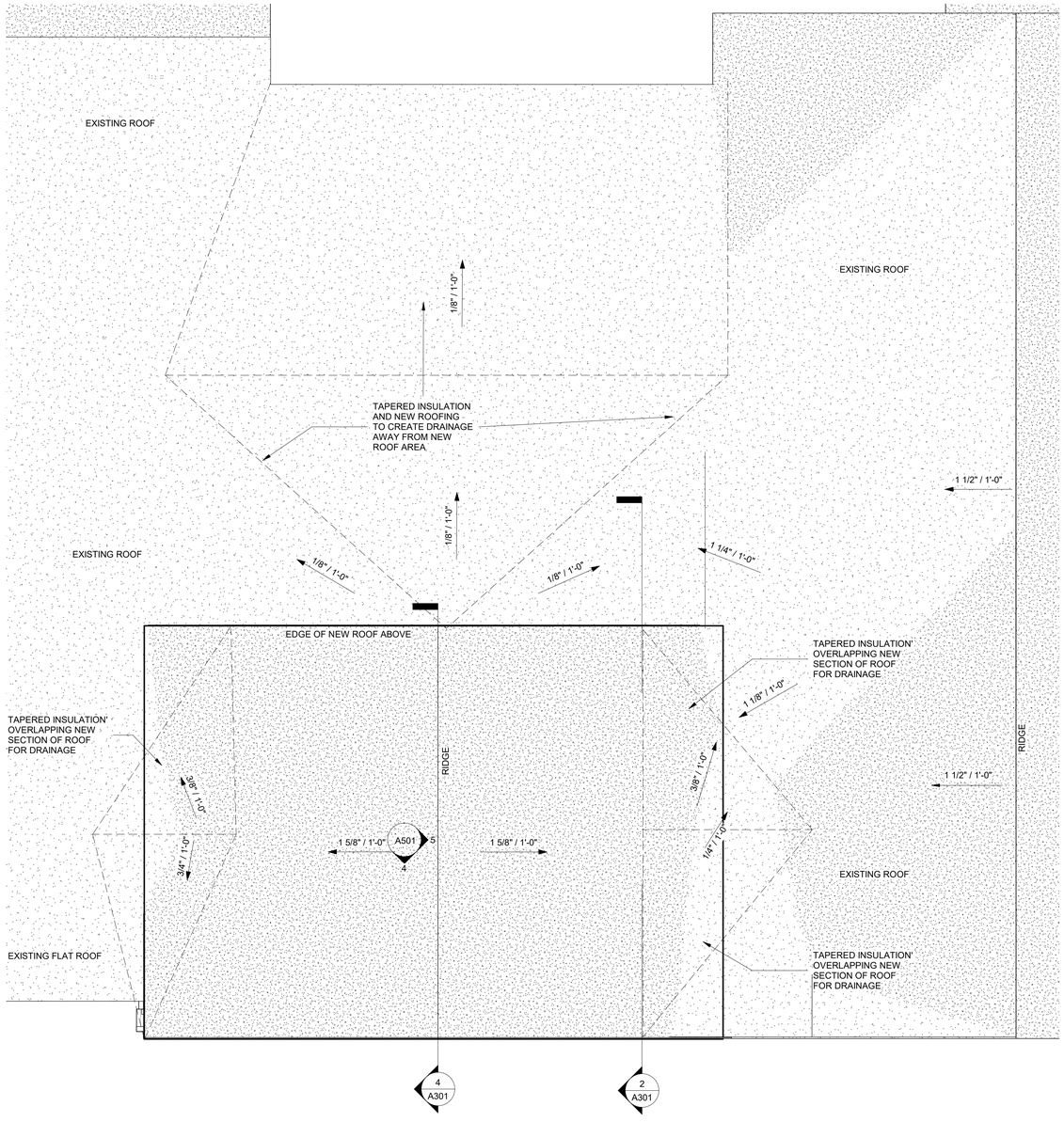
LICENSED ARCHITECT
MATTHEW G. CARTER
NO. 2867
STATE OF MAINE

DATE	SCALE
2025.04.22	1/8" = 1'-0"

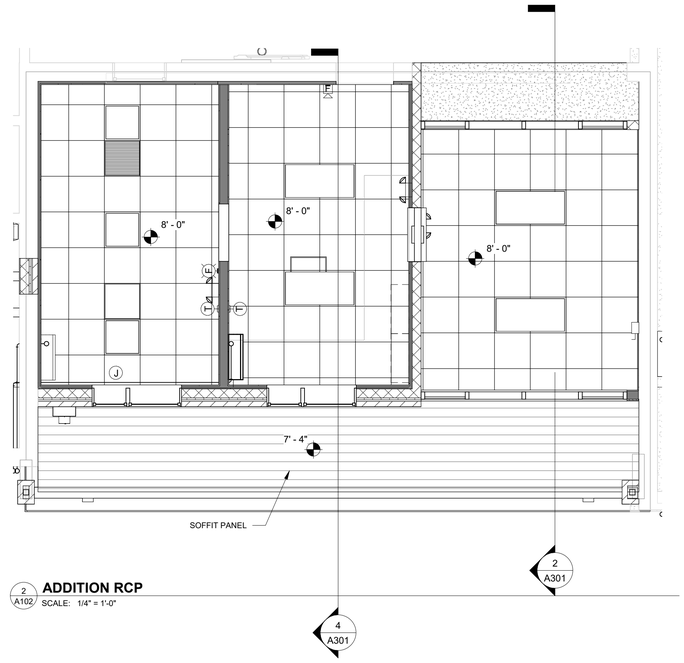
DRAWN BY	DESIGNED BY	CHECKED BY
AM	Designer	JM

PROJECT No. 10377.028

DRAWING NO. **A101** REV.



1 A102 **ROOF PLAN @ ADDITION**
SCALE: 1/4" = 1'-0"



2 A102 **ADDITION RCP**
SCALE: 1/4" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
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PROJECT

CONNOR SCHOOL
1581 VAN BUREN RD.
CONNOR, MAINE 04736

TITLE

ROOF PLAN AND REFLECTED CEILING PLAN

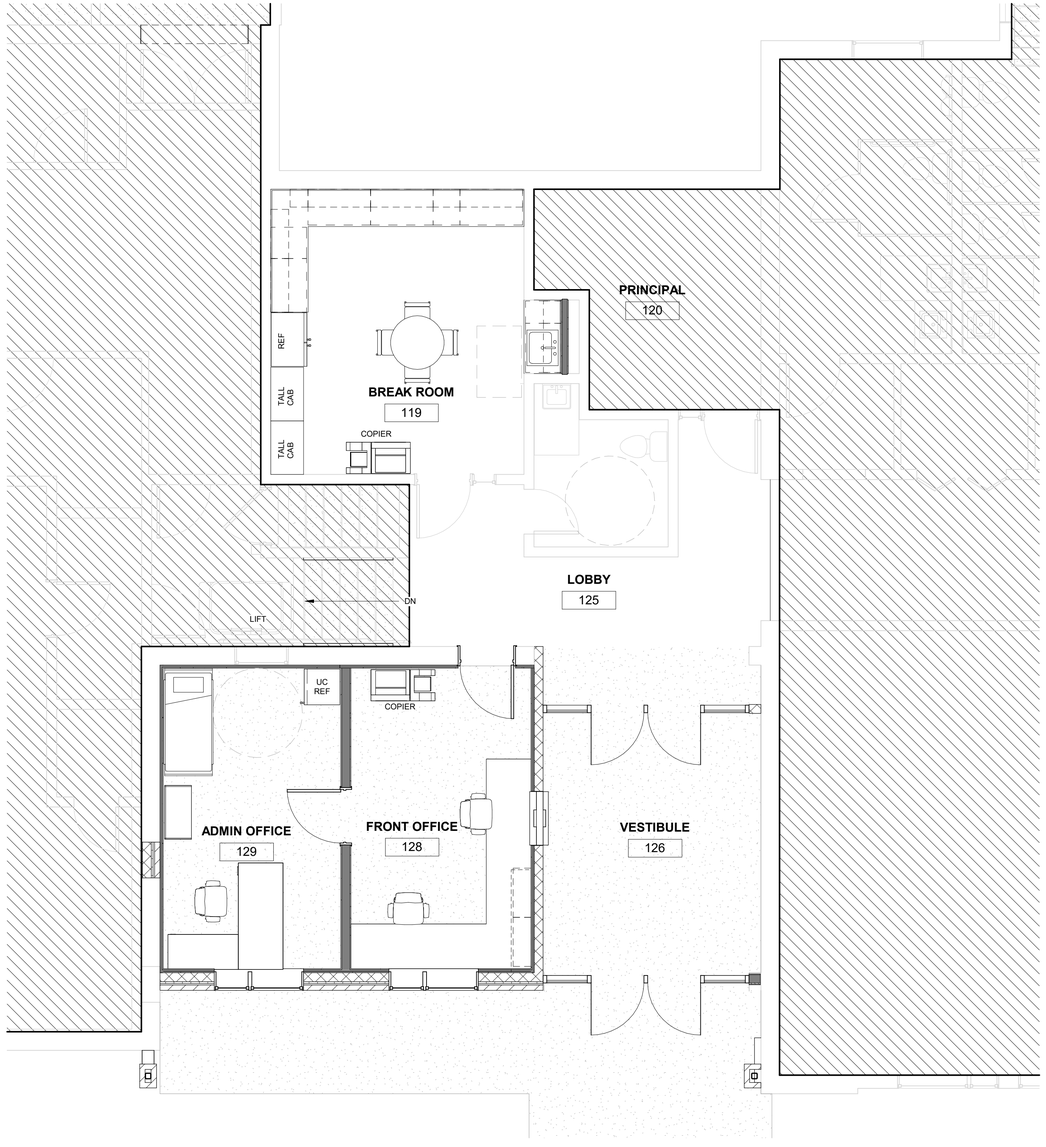
LICENSED ARCHITECT
MATTHEW G. CARTER
NO. 2867
STATE OF MAINE

DATE	SCALE
2025.04.22	1/4" = 1'-0"

DRAWN BY	DESIGNED BY	CHECKED BY
JAM	Designer	Checker

PROJECT No. 10377.028

DRAWING NO. **A102** REV.



1 A103 **FURNITURE PLAN**
SCALE: 1/4" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
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PROJECT

CONNOR SCHOOL
1581 VAN BUREN RD.
CONNOR, MAINE 04736

TITLE

FURNITURE PLAN

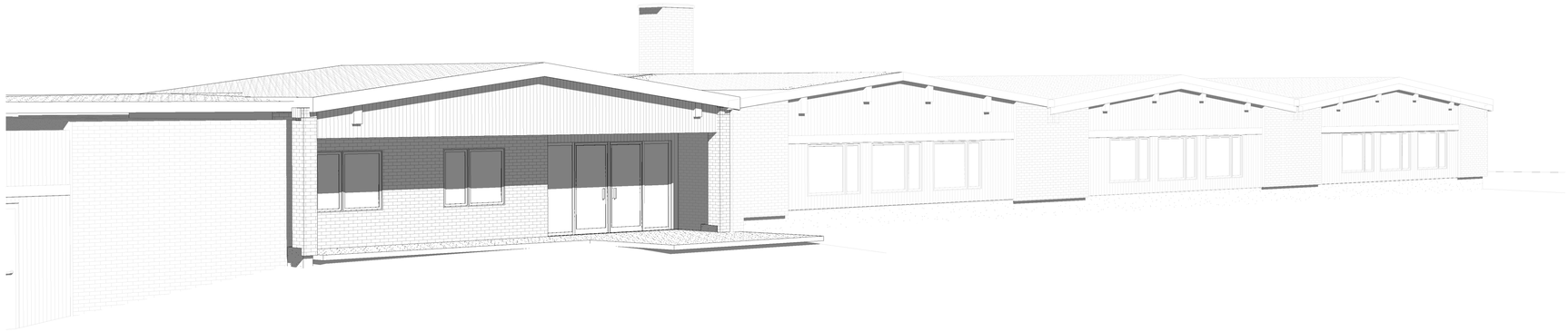
LICENSED ARCHITECT
MATTHEW G. CARTER
NO. 2867
STATE OF MAINE

DATE	SCALE
2025.04.22	1/4" = 1'-0"

DRAWN BY	DESIGNED BY	CHECKED BY
AM	AM	MGC

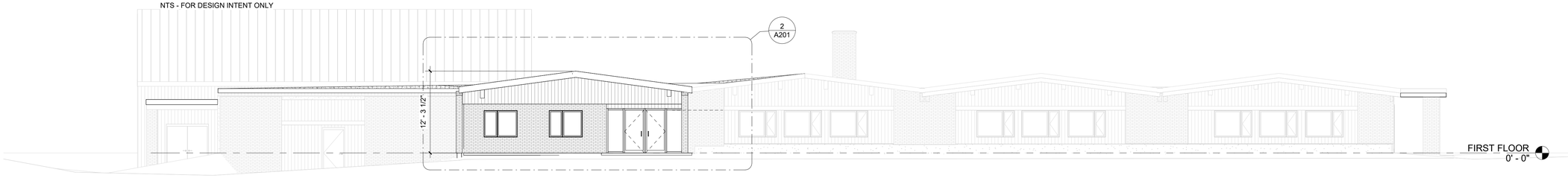
PROJECT No. 10377.028

DRAWING NO. **A103** REV.

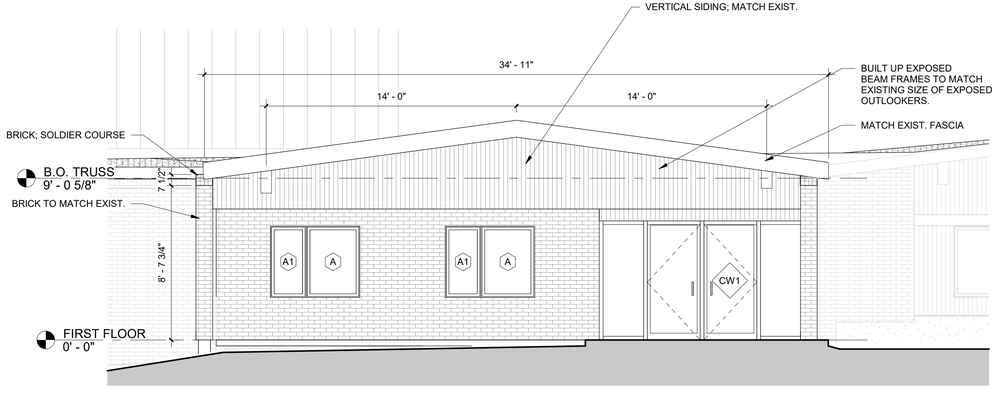


1 A201 **FRONT ENTRY VIEW**
SCALE:

NTS - FOR DESIGN INTENT ONLY



3 A201 **PROPOSED WEST ELEVATION WITH ENTRY ADDITION**
SCALE: 1/8" = 1'-0"



2 A201 **WEST ELEVATION - ENLARGED**
SCALE: 1/4" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
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Bangor, Maine 04401
207.989.4824
WWW.HALEYWARD.COM

PROJECT

CONNOR SCHOOL
1581 VAN BUREN RD.
CONNOR, MAINE 04736

TITLE

EXTERIOR ELEVATION

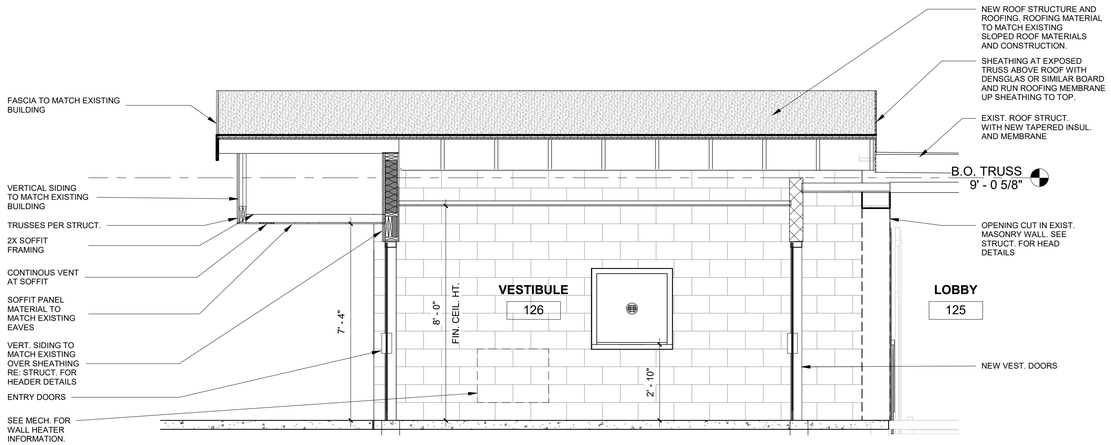
LICENSED ARCHITECT MATTHEW Q. CARTER NO. 2867 STATE OF MAINE

DATE	SCALE
2025.04.22	As indicated

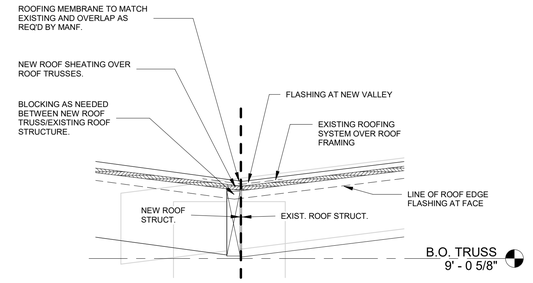
DRAWN BY	DESIGNED BY	CHECKED BY
JAM	Designer	Checker

PROJECT No. 10377.028

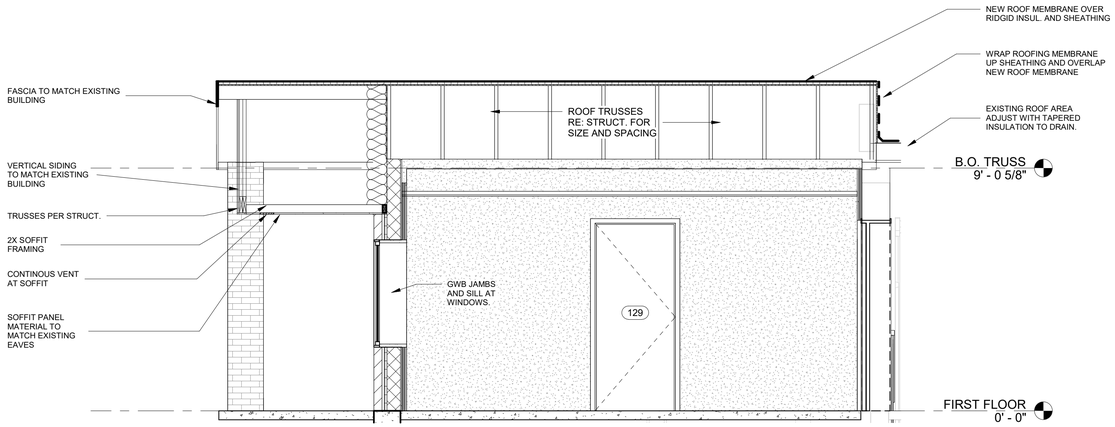
DRAWING NO. **A201** REV.



2 A301 **SECTION AT ENTRY VESTIBULE DOORS**
SCALE: 3/8" = 1'-0"



3 A301 **ROOF CONNECTION DETAIL**
SCALE: 1 1/2" = 1'-0"



4 A301 **SECTION AT FRONT OFFICE MASONRY WALL**
SCALE: 3/8" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
One Merchants Plaza, Suite 701
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207.989.4824
WWW.HALEYWARD.COM

PROJECT

CONNOR SCHOOL
1581 VAN BUREN RD.
CONNOR, MAINE 04736

TITLE

BUILDING SECTIONS

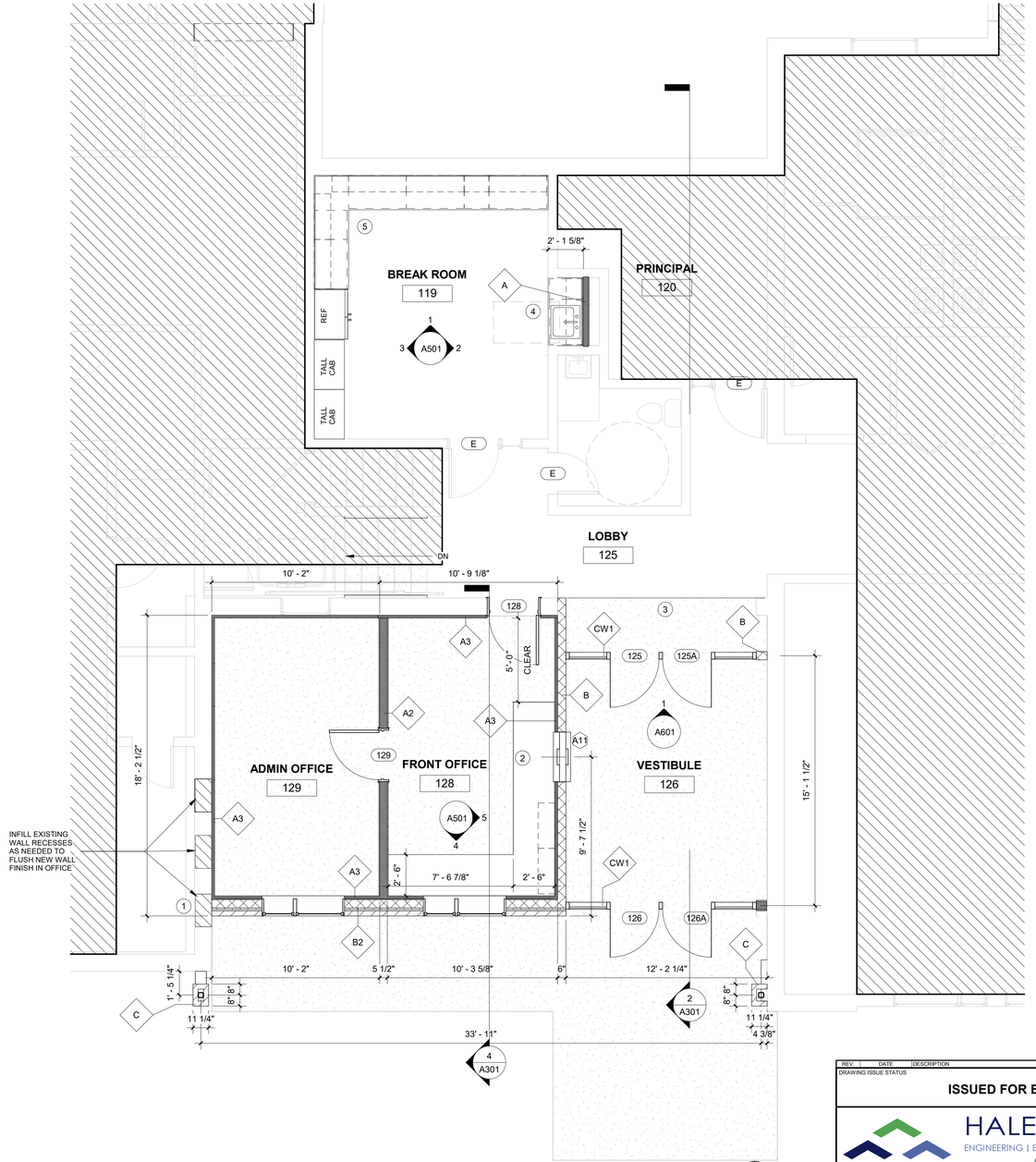
LICENSED ARCHITECT
MATTHEW Q. CARTER
NO. 2887
STATE OF MAINE

DATE	SCALE
2025.04.22	As indicated

DRAWN BY	DESIGNED BY	CHECKED BY
AM	JAM	JM

PROJECT No. 10377.028

DRAWING NO. **A301** REV.



1 A401 **ENLARGED ENTRY AREA**
SCALE: 1/4" = 1'-0"

KEY NOTES

Number	Description
1	INFILL WALL. MATCH ADJACENT FINISHES.
2	BUILT-IN WORK SURFACE. FINISH PER OWNER.
3	NEW CONC. SLAB. FINISH PER OWNER
4	NEW CASEWORK AND PLUMBING FIXTURES.
5	NEW CASEWORK. THERMOFOIL FINISH. COLOR PER OWNER

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
One Merchants Plaza, Suite 701
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207.989.4824
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PROJECT

CONNOR SCHOOL
1581 VAN BUREN RD.
CONNOR, MAINE 04736

TITLE

ENLARGED PLANS

LICENSED ARCHITECT MATTHEW G CARTER NO. 2867 STATE OF MAINE

DATE	SCALE
2025.04.22	1/4" = 1'-0"

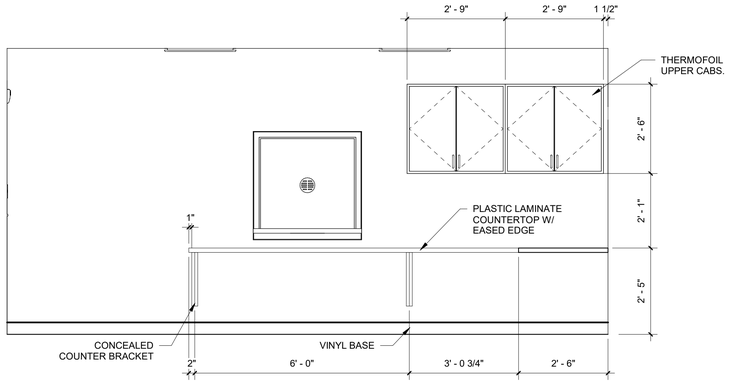
DRAWN BY	DESIGNED BY	CHECKED BY
JAM	Designer	Checker

PROJECT No. 10377.028

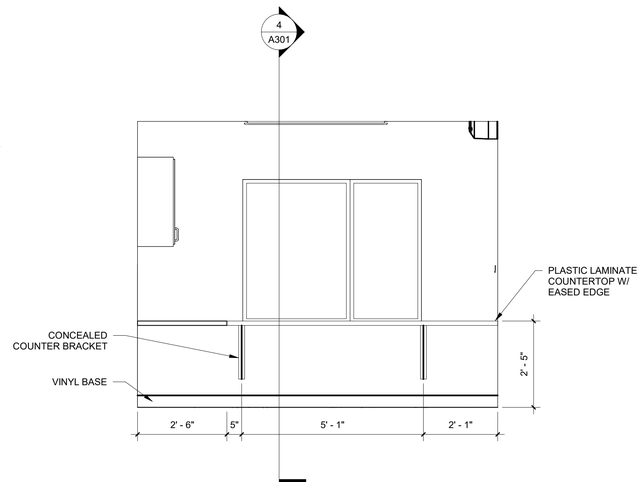
DRAWING NO. **A401** REV.

MILLWORK GENERAL NOTES:

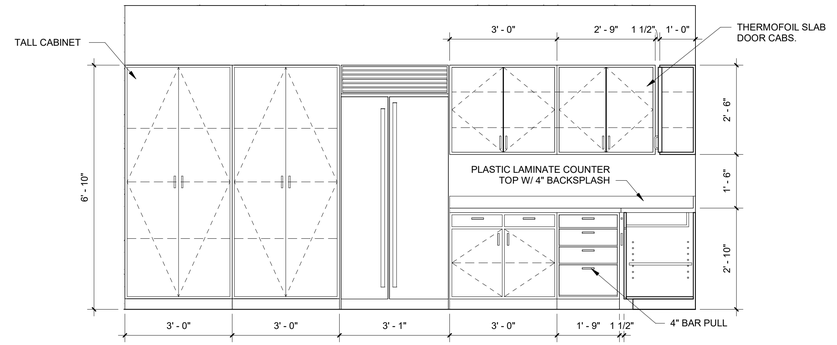
1. THERMOFOIL SLAB DOORS ON 3/4" PLYWOOD FRAMELESS CABINETS. FINISH COLOR/STYLE PER OWNER.
2. INTERIOR FINISH: MELAMINE.
3. PROVIDE ADJUSTABLE, 1/2" MELAMINE SHELVES. BORED PIN & HOLE METHOD.
4. PROVIDE SOFT CLOSE HINGES AND DRAWER GLIDES.
5. PULLS: 4" BAR PULL. STYLE PER OWNER.
6. PROVIDE INTEGRAL TOE KICK AT SINK BASE. FLOOR FINISH TO CONTINUE UNDER SINK BASE.
7. PLASTIC LAMINATE COUNTERTOP: 1 1/2" W/ EASED EDGE AND 4" MATCHING BACKSPLASH UNLESS NOTED OTHERWISE.



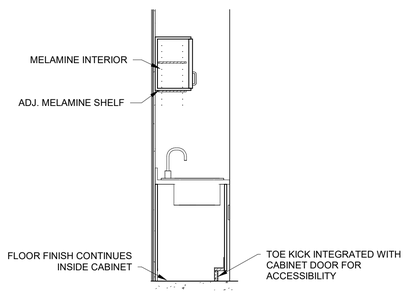
5 A501 **SOUTH WALL @ FRONT OFFICE**
SCALE: 1/2" = 1'-0"



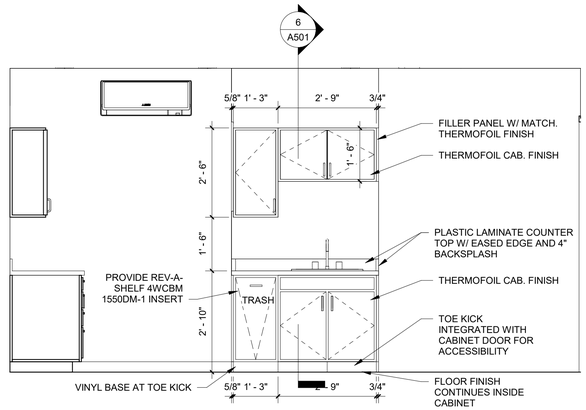
4 A501 **WEST WALL @ FRONT OFFICE**
SCALE: 1/2" = 1'-0"



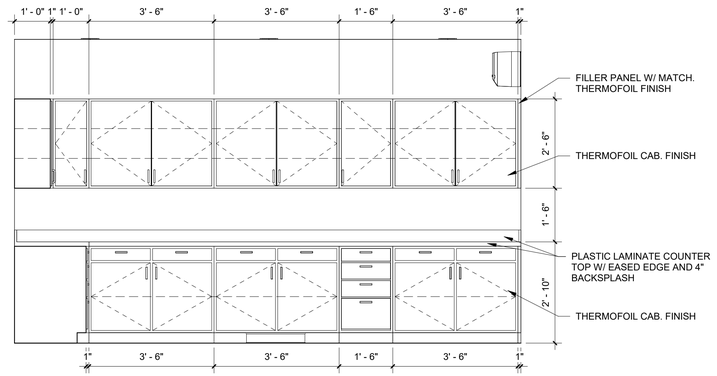
3 A501 **NORTH WALL @ BREAK ROOM**
SCALE: 1/2" = 1'-0"



6 A501 **SECTION @ SINK BASE**
SCALE: 1/2" = 1'-0"



2 A501 **SOUTH WALL @ BREAK ROOM**
SCALE: 1/2" = 1'-0"



1 A501 **EAST WALL @ BREAK ROOM**
SCALE: 1/2" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
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PROJECT

CONNOR SCHOOL
1581 VAN BUREN RD.
CONNOR, MAINE 04736

TITLE

MILLWORK DETAILS

LICENSED ARCHITECT
MATTHEW G. CARTER
NO. 2687
STATE OF MAINE

DATE	SCALE
2025.04.22	As indicated

DRAWN BY	DESIGNED BY	CHECKED BY
AM	AM	MGC

PROJECT No. 10377.028

DRAWING NO. **A501** REV.

GENERAL NOTES:
1. CONTRACTOR TO PROVIDE DOOR AND DOOR HARDWARE SPECIFICATIONS.
2. INTERIOR DOOR HARDWARE FINISHES AND TYPES TO BE SATIN CHROME OR BRUSHED STAINLESS STEEL.
3. REPLACE EXISTING DOORS WITH SOLID CORE FLUSH DOOR TYPE 'A'. DOOR TRIM TO MATCH EXISTING STYLES.
4. EXISTING DOOR HEIGHTS AND WIDTHS ARE SHOWN FOR REFERENCE ONLY.
5. REPLACE ALL EXISTING KNOBS WITH LEVER HARDWARE.
6. REPLACE ALL EXISTING KNOBS, DOOR HINGES, AND FLOOR STOPS WITH SATIN CHROME OR BRUSHED STAINLESS STEEL.
7. CONFIRM ALL LOCKING AND ACCESS CONTROL REQUIREMENTS WITH OWNER & ARCHITECT.
8. MAGLOCK, PUSH BUTTON DOOR RELEASE, CARD READER, CLOSER, AND ANY OTHER ASSOCIATED EGRESS HARDWARE TO REMAIN ON EXISTING DOORS UNLESS OTHERWISE NOTED. CONFIRM ALL HARDWARE IS FUNCTIONAL AND SUITABLE FOR REUSE.
9. REUSE SALVAGED DOORS AND FRAMES REMOVED DURING DEMOLITION WHERE APPLICABLE. OWNER AND ARCHITECT SHALL REVIEW ALL SALVAGED DOORS WITH CONTRACTOR PRIOR TO DEMOLITION AND INSTALLATION.
10. CONFIRM DOORS AGAINST DRAWINGS, NOTIFY ARCHITECT OF ANY DISCREPENCIES.
11. PROVIDE FRAME ROUGH OPENINGS AS RECOMMENDED BY FRAME MANUFACTURER.
12. INSTALLATION OF ALL DOORS AND HARDWARE SHALL MEET 521 CMR REQUIREMENTS. NOTIFY ARCHITECT IF ANY CLEARANCES CANNONT BE MET PRIOR TO CONSTRUCTION.
13. ALL DOORS SHALL COMPLY WITH MINIMUM 521 CMR REQUIRED APPROACH CLEARANCES. NOTIFY ARCHITECT IF MINIMUM CANNOT BE ACHEIVED.

DOOR SCHEDULE

DOOR NUMBER	DOOR							FRAME			FIRE RATING	HARDWARE SETS	COMMENTS
	LOCATION	WIDTH	HEIGHT	THICKNESS	TYPE	MATERIAL	FINISH	TYPE	MATERIAL	FINISH			
125	LOBBY	2' - 11 1/2"	6' - 5 1/2"		B	GLASS	ANODIZED ALUM		STOREFRONT	ANNODIZED ALUM		PANIC	BULLET RESISTENT GLASS. ELECTRIC STRIKE LATCH
125A	LOBBY	2' - 11 1/2"	6' - 5 1/2"		B	GLASS	ANODIZED ALUM		STOREFRONT	ANNODIZED ALUM		PANIC	BULLET RESISTENT
126	VESTIBULE	2' - 11 1/2"	6' - 5 1/2"		B	GLASS	ANODIZED ALUM		STOREFRONT	ANNODIZED ALUM		PANIC	PROVIDE ACCESSIBLE AUTO ENTRANCE PAD AND OPENER
126A	VESTIBULE	2' - 11 1/2"	6' - 5 1/2"		B	GLASS	ANODIZED ALUM		STOREFRONT	ANNODIZED ALUM		PANIC	BULLET RESISTENT- DOORWAY TO HAVE ELECT. STRIKE AND REMOTE RELEASE
128	FRONT OFFICE	3' - 0"	7' - 0"	0' - 1 3/4"	A	WOOD	STAIN / POLY		HM	PAINT		LEVER; OFFICE	
129	ADMIN OFFICE	3' - 0"	7' - 0"	0' - 1 3/4"	A	WOOD	STAIN / POLY		HM	PAINT		LEVER; OFFICE	

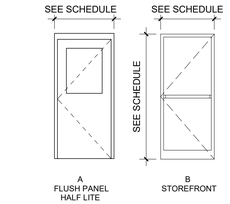
WINDOW SCHEDULE

Type Mark	Count	Description	Height	Width	Head Height	Sill Height	Comments
A	2	FIXED; VINYL; DOUBLE PANE	4' - 0"	3' - 0"	6' - 4 1/2"	2' - 4 1/2"	
A1	2	FIXED; VINYL; DOUBLE PANE	4' - 0"	2' - 0"	6' - 4 1/2"	2' - 4 1/2"	MULL TOGETHER WITH A
A11	1	SECURE TICKET/TELLER WINDOW	3' - 0"	3' - 0"	5' - 7 3/4"	2' - 7 3/4"	BULLET RESISTANT

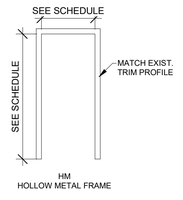
Grand total: 5

FINISH SCHEDULE

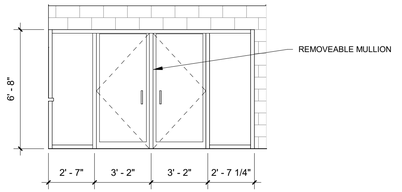
NUMBER	NAME	Area	FLOOR	BASE FINISH	WALL FINISH	CEILING FINISH	COMMENTS
			FIELD				
119	BREAK ROOM	235 SF	VCT	VINYL BASE	PAINT	EXISTING TO REMAIN	ALL FINISHES PER OWNER
126	VESTIBULE	184 SF	SEALED CONCRETE	VINYL BASE	PAINT	ACT	
128	FRONT OFFICE	169 SF	CARPET TILE	VINYL BASE	PAINT	ACT	
129	ADMIN OFFICE	167 SF	CARPET TILE	VINYL BASE	PAINT	ACT	



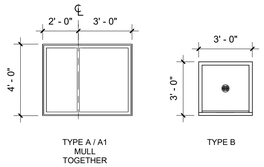
DOOR TYPES
SCALE: 1/4" = 1'-0"



FRAME TYPES
SCALE: 1/4" = 1'-0"



1 A601 **CW1 - ENTRY STOREFRONT**
SCALE: 1/4" = 1'-0"
**BULLET RESISTENT GLASS. THREAT LEVEL TO BE DETERMINED



WINDOW TYPES
SCALE: 1/4" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS
ISSUED FOR BID

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PROJECT
CONNOR SCHOOL
1581 VAN BUREN RD.
CONNOR, MAINE 04736

TITLE
SCHEDULES

LICENSED ARCHITECT MATTHEW G. CARTER NO. 2867 STATE OF MAINE

DATE	SCALE
2025.04.22	1/4" = 1'-0"

DRAWN BY	DESIGNED BY	CHECKED BY
AM	AM	MGC

PROJECT No. 10377.028

DRAWING NO. **A601** REV.

ABBREVIATIONS

AC	ABOVE CEILING
AD	ACCESS DOOR
AD	AREA DRAIN
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
ATC	AUTOMATIC TEMPERATURE CONTROL
AV	AIR VENT
BFP	BACK FLOW PREVENTER
BOP	BOTTOM OF PIPE
CD	CONDENSATE
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CFF	CAPPED FOR FUTURE
CFH	CUBIC FEET PER HOUR
CO	CLEAN OUT
COND	CONDENSATE
CONT	CONTINUATION
COORD	COORDINATION
CSS	CLINIC SERVICE SINK
CTE	CONNECT TO EXISTING
CU	COPPER
CW	COLD WATER
DC	DOUBLE CONTAINED
DCO	DANDY CLEANOUT
DCV	DOUBLE CHECK VAVLE
DDC	DIRECT DIGITAL CONTROL
DF	DRINKING FOUNTAIN
DFU	DRINKING FIXTURE UNIT
DIA	DIAMETER
DIC	DOWN IN CHASE
DIW	DOWN IN WALL
DN	DOWN
DS	DOWNSPOUT
DT	DROP AND TRANSITION
DWH	DOMESTIC WATER HEATER
ERV	ENERGY RECOVERY VENTILATORS
ELEV	ELEVATOR
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
EX	EXAMPLE
F	FURNACE
FBO	FURNISHED BY OWNER
FC	FIELD CONNECT
FCO	FLOOR CLEAN OUT
FLR	FLOOR
FD	FLOOR DRAIN
FFD	FUNNEL FLOOR DRAIN
FG	FIBERGLASS
FRHB	FREEZE RESISTANT HOSE BIB
FS	FLOW SWITCH
FU	FIXTURE UNIT
G	GAS
GAL	GALLON
G.C.	GENERAL CONTRACTOR
GPF	GALLONS PER FLUSH
GPM	GALLONS PER MINUTE
GVTR	GREASE VENT THROUGH ROOF
GW	GREASE WASTE
HB	HOSE BIB
HC	HANDICAPPED ACCESSIBLE
HRU	HEAT RECOVERY UNIT
HTR	HEATER
HW	HOT WATER
HX	HEAT EXCHANGER
IN	INCHES
INV	INVERT
IAW	IN ACCORDANCE WITH IN WG INCHES WATER GAUGE
IWFD	INDIRECT WASTE FUNNEL DRAIN
IW, ID	INDIRECT WASTE
LP	LIQUEFIED PROPANE
L, LAV	LAVATORY
JS	JANITOR'S SINK
MAU	MAKEUP AIR UNIT
MAX.	MAXIMUM
MBH	1000 BTU/HR
MC	MECHANICAL CONTRACTOR
MIN.	MINIMUM
MPV	MULTI-PURPOSE VALVE
MSB	MOP SERVICE SINK
MTD	MOUNTED
MV	MIXING VALVE
NC	NORMALLY CLOSED
NG	NATURAL GAS
NO	NORMALLY OPEN
NIC	NOT IN CONTRACT
NPW	NON-POTABLE WATER
NTS	NOT TO SCALE
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
PC	PLUMBING CONTRACTOR
PDI	PUMBING & DRAINAGE INSTITUTE
PLUMB	PLUMBING
PP	POLYPROPYLENE
PPE	PREPURCHASED EQUIPMENT
PRS	PRESSURE REDUCING STATION
PRV	PRESSURE REDUCING VAVLE
PSI	POUNDS PER SQUARE INCH
RD	ROOF DRAIN
RDOF	ROOF DRAIN OVERFLOW
RHW	RECIRCULATION HOT WATER
RPZ	REDUCE PRESSURE ZONE BFP
RV	RELIEF VALVE
S	SANITARY
SAN	SANITARY
SCV	SELF CONTAINED VALVE
SD	STORM DRAIN
SH	SHOWER
SK	SINK
SQ.FT.	CALCULATED SURFACE AREA OF ROOF. ADJACENT WALLS. ETC.
SS	STAINLES STEEL
ST	STORM
T&P	TEMPERATURE & PRESSURE RELIEF VALVE
TE	TEMPERATURE ELEMENT
TMV	THERMOSTATIC MIXING VALVE
TOP	TOP OF PIPE
TP	TRAP PRIMER
TYP.	TYPICAL
UIC	UP IN CHASE
UIW	UP IN WALL
U.O.N.	UNLESS OTHERWISE NOTED
UR	URINAL
UV	UNIT VENTILATOR
V	VENT
VB	VACUUM BREAKER
VCFF	VALVED AND CAPPED FOR FUTURE
VFD	VARIABLE FEQUENCY DRIVE
VIF	VERIFY IN FIELD
VOL	VOLUME
VTR	VENT THRU ROOF
W	WASTE
WI	WITH
WC	WATER CLOSET
W&V	WASTE AND VENT
WCO	WALL CLEAN OUT
WFU	WATER FIXTURE UNITS
WH	WALL HYDRANT
WHA	WATER HAMMER ARRESTOR
W&T	WASTE AND TRAP
ZVB	ZONE VALVE BOX

PIPING SYMBOLS

- PIPE ELBOW TURNED DOWN
- PIPE ELBOW TURNED UP
- P-TRAP (W&T)
- PIPE TEE DOWN
- PIPE TEE UP
- PIPE BREAK
- DIRECTION OF FLOW
- PIPE PITCHES DOWN
- UNION
- PIPE ANCHOR
- PIPE GUIDE OR SLEEVES
- GENERIC VALVE, SEE SPECIFICATIONS FOR TYPE
- GATE VALVE
- BALL VALVE
- BUTTERFLY VALVE (MANUAL)
- 2-WAY CONTROL VALVE
- 3-WAY CONTROL VALVE
- CALIBRATED BALANCING VALVE (CIRCUIT SETTER)
- AUTOMATIC FLOW CONTROL VALVE
- CHECK VALVE
- BACK FLOW PREVENTER
- GLOBE VALVE
- NEEDLE VALVE
- PLUG VALVE
- S — SOLENOID VALVE
- OS&Y VALVE
- PRESSURE REDUCING OR REGULATING VALVE
- MANUAL AIR VENT
- AUTOMATIC AIR VENT
- VACUUM BREAKER
- CONCENTRIC REDUCER/INCREASER
- ECCENTRIC REDUCER/INCREASER
- FLEXIBLE PIPE CONNECTOR
- EXPANSION JOINT
- PUMP
- TEMPERATURE & PRESSURE TAP (PETE'S PLUG)
- PRESSURE GAUGE AND COCK
- THERMOMETER AND WELL
- PRESSURE RELIEF VALVE
- HOSE END DRAIN VALVE WITH CAP
- HOSE BIBB
- PIPE CAP
- CO — CLEAN OUT
- WATER HAMMER ARRESTOR
- M — WATER METER
- STRAINER
- STRAINER WITH BLOWDOWN

PIPING SYMBOLS

(E)	EXISTING PIPING TO REMAIN
(R)	EXISTING PIPING TO BE REMOVED
CW	DOMESTIC COLD WATER
HW	DOMESTIC HOT WATER
RHW	DOMESTIC RECIRCULATION HOT WATER
CW	DOMESTIC COLD WATER (BELOW SLAB)
HW	DOMESTIC HOT WATER (BELOW SLAB)
TP	TRAP PRIMER
TP	TRAP PRIMER (BELOW SLAB)
CD	CONDENSATE DRAIN
G	GAS PIPING
KS	KITCHEN SANITARY TO GREASE INTERCEPTOR
KS	KITCHEN SANITARY TO GREASE INTERCEPTOR (UNDER SLAB)
S	SANITARY
S	SANITARY (BELOW SLAB)
V	SANITARY VENT
V	SANITARY VENT (BELOW SLAB)
ST	STORM WATER
ST	STORM WATER (BELOW SLAB)
STOF	STORM WATER OVERFLOW
STOF	STORM WATER OVERFLOW (BELOW SLAB)
PD	PUMPED DISCHARGE

MISCELLANEOUS SYMBOLS

- 4 / P101 — DETAIL NUMBER / SHEET NUMBER WHERE DETAIL IS LOCATED
- CONNECT NEW TO EXISTING
- LIMITS OF DEMOLITION
- 1 — REVISION NUMBER

PLUMBING EQUIPMENT ABBREVIATIONS

(REFER TO PLUMBING SCHEDULE SHEET FOR INFORMATION)

PET	EXPANSION TANK
DWH	DOMESTIC WATER HEATER
RP	RECIRCULATION PUMP
MV	THERMOSTATIC MIXING VALVE

PLUMBING FIXTURES ABBREVIATIONS

(REFER TO PLUMBING FIXTURE SCHEDULE SHEET FOR INFORMATION)

BF	BOTTLE FILLER
FD	FLOOR DRAIN
FCO	FLOOR CLEANOUT
FPHB	FREEZEPROOF HOSE BIBB
LV	LAVATORY
MB	MOP BASIN
SH	SHOWER
SK	SINK
TP	TRAP PRIMER
UR	URINAL
WB	WALL BOX
WC	WATER CLOSET

EXISTING EQUIPMENT LEGEND

(E)	EXISTING TO REMAIN
(R)	EXISTING TO BE DISCONNECTED AND REMOVED
(RL)	EXISTING TO BE DISCONNECTED AND RELOCATED
(ER)	EXISTING IN NEW LOCATION
(RP)	EXISTING TO BE REPLACED

PLUMBING NOTES

1. ALL PLUMBING GENERAL NOTES, SYMBOLS, LISTS AND DETAILS ARE TO BE CONSIDERED AS APPLICABLE TO ALL PLUMBING DRAWINGS FOR THIS PROJECT.
2. OBTAIN ALL PERMITS AND APPROVALS TO PERFORM THE WORK.
3. PLUMBING CONTRACTOR SHALL REPORT ASBESTOS TO GENERAL CONTRACTOR.
4. SAFETY CONFINED SPACE WORK: THE CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY LIGHTING, VENTILATION, EMERGENCY EXTRACTION EQUIPMENT, ETC. FOR ALL WORK WITHIN CONFINED SPACE (IF APPLICABLE).
5. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND EXACT LOCATIONS AND ARRANGEMENTS OF EXISTING AND NEW EQUIPMENT, DUCTWORK, PIPING AND OTHER COMPONENTS SHALL BE DETERMINED IN THE FIELD WITH DUE CONSIDERATION OF STRUCTURAL, ELECTRICAL AND ARCHITECTURAL SYSTEM. EXISTING STRUCTURAL SYSTEMS SHALL NOT BE MODIFIED WITHOUT THE EXPRESS PERMISSION OF THE ENGINEER.
6. THE CONTRACTOR SHALL VISIT THE SITE, BECOME FAMILIAR WITH THE EXISTING FIELD CONDITIONS, AND MAKE THEIR OWN ESTIMATE OF THE DIFFICULTIES IN EXECUTING THE WORK PRIOR TO SUBMITTING ITS BID. NO COMPENSATION WILL BE AWARDED TO THE CONTRACTOR BASED ON A CLAIM OF LACK OF KNOWLEDGE OF EXISTING FIELD CONDITIONS.
7. REVIEW PROTOCOL AND PROCEDURES WITH FACILITY OWNERS AND OPERATORS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING BUILDING OWNER'S PROTOCOL AND PROCEDURES BY ITS EMPLOYEES AND SUB-CONTRACTORS.
8. ALL WORK SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, THE ACCEPTED PLUMBING CODE WITH STATE AMENDMENTS, THE AHJ AND THE LOCAL PLUMBING INSPECTOR.
9. IF REQUIRED THE PROJECT SHALL BE PHASED IN ACCORDANCE WITH THE APPROVED PHASING PLAN. THE CONTRACTOR SHALL OBTAIN APPROVAL FOR THE SEQUENCING AND TIMING OF OPERATIONS PRIOR TO COMMENCING WORK. SEE SPECIFICATIONS.
10. CONTRACTOR IS TO MAINTAIN SERVICE TO ROOMS OUTSIDE THE PROJECT SCOPE OF WORK AND PHASING SCHEDULE. IF INTERRUPTION OF SERVICE IS REQUIRED COORDINATE SHUTDOWN WITH PROJECT ENGINEER AND OWNER.
11. THE CONTRACTOR SHALL VERIFY SHUTDOWN AND ISOLATION VALVE LOCATIONS. THE CONTRACTOR SHALL COORDINATE ALL SHUTDOWN WORK WITH THE FACILITY OWNER AND OPERATOR.
12. CARE SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXISTING SYSTEMS AND SURFACES TO REMAIN. RESTORE DAMAGED AREAS THAT ARE BEYOND THE SCOPE OF THIS CONTRACT TO THEIR ORIGINAL CONDITION.
13. WHERE INDICATED ON THE DRAWINGS, REMOVE OR RELOCATE EXISTING COMPONENTS AS REQUIRED TO ACCOMMODATE THE NEW WORK. REMOVALS SHALL INCLUDE ALL ASSOCIATED OFF-SITE DISPOSAL COSTS.
14. PIPING AND EQUIPMENT ARE NOT COMPLETELY DETAILED ON THE DIAGRAMS AND ELEVATIONS PROVIDED ON THE DRAWINGS ARE APPROXIMATE. THE DISTRIBUTION IS INTENDED AS A GENERAL ROUTING ONLY, BUT DOES ILLUSTRATE THE DESIRED LOCATION. THE CONTRACTOR SHALL AVOID INTERFERENCES WITH OTHER EQUIPMENT AND THE WORK OF OTHER DISCIPLINES.
15. NOT ALL VALVES, INSTRUMENTS AND CONTROLS ARE SHOWN IN THE PLAN VIEWS. INSTALL PIPING AND VALVES AS SHOWN ON PIPING DIAGRAMS AND DETAILS. SEE DETAILS, PIPING DIAGRAMS AND MANUFACTURER'S RECOMMENDATIONS FOR ADDITIONAL VALVES & FITTINGS NECESSARY FOR COMPLETE PIPING SYSTEM.
16. DRAWINGS OF REVISED PIPING ARRANGEMENTS SHALL BE SUBMITTED IF ITEMS ARE NOT SHOWN ON THE DRAWINGS. REVISIONS SHALL BE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER PRIOR TO COMMENCEMENT OF THE CHANGES.
17. COORDINATE REMOVALS AND RELOCATION'S INCLUDING SELECTIVE CUTTING AND PENETRATIONS WITH ARCHITECTURAL, MECHANICAL STRUCTURAL AND ELECTRICAL CONTRACTORS.
18. FIELD VERIFY EXISTING EQUIPMENT AND PIPING PRIOR TO REMOVAL OR REUSE. CONFIRM WITH PROJECT ENGINEER THAT ALL EQUIPMENT AND PIPING DESIGNATED TO BE REMOVED IS NO LONGER IN SERVICE PRIOR TO ITS REMOVAL. PROJECT ENGINEER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL DEMO'D EQUIPMENT.
19. EXISTING EQUIPMENT AND PIPING TO REMAIN IN SERVICE SHALL BE INSPECTED. REPORT INOPERABLE EQUIPMENT TO PROJECT ENGINEER.
20. ALL UNUSED (ABANDONED), PIPING AND EQUIPMENT INDICATED TO BE REMOVED SHALL BE REMOVED AND CAPPED.
21. TIE-IN POINT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL DETERMINE EXACT LOCATIONS IN THE FIELD BASED ON EXISTING CONDITIONS.
22. COORDINATE THE LOCATIONS OF ALL WALL MOUNTED EQUIPMENT WITH FINAL EQUIPMENT/FURNITURE LAYOUT.
23. INTENT OF PROJECT IS FOR NEW MATERIALS AND COMPONENTS TO MATCH EXISTING. ALL MATERIALS SHALL BE APPROVED BY THE FACILITY OWNERS AND OPERATORS.
24. EQUIPMENT SCHEDULED IS THE BASIS OF DESIGN, OR APPROVED EQUAL.
25. COORDINATE ELECTRICAL POWER REQUIREMENTS FOR ALL MOTORS.
26. COORDINATE WITH OWNER FURNISHED EQUIPMENT AND SYSTEMS.
27. PLUMBING CONTRACTOR SHALL PROVIDE ALL SUPPLEMENTARY STRUCTURAL SUPPORTS, ANGLE IRON, PLATES, ROD, ETC. AS NECESSARY FOR PROPER INSTALLATION OF PIPING, EQUIPMENT, AND ACCESSORIES.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING SUPPORTS, STRUT RACKS, TRAPEZE STEEL, PIPE SUPPORT COMPONENTS, ETC.AT THE END OF EACH WORKING DAY, THE CONSTRUCTION SITE SHALL BE LEFT IN A CLEAN AND NEAT CONDITION.
29. INSTALL EQUIPMENT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND GOOD PRACTICE NORMAL TO THE TRADE. INSTALLATION SHALL INCLUDE PROVISIONS FOR ACCESS TO NORMAL MAINTENANCE ITEMS. PROVIDE ADEQUATE STRUCTURAL SUPPORTS AND SECURE MOUNTING METHODS WITH PROVISIONS FOR VIBRATION ISOLATION AND EXPANSION WHERE REQUIRED.
30. COORDINATE ALL PENETRATIONS WITH GENERAL CONTRACTOR. SEE ARCHITECTURAL DRAWINGS FOR PENETRATION DETAILS. PLUMBING CONTRACTOR SHALL PROVIDE FLASHING AND COUNTER FLASHING FOR ROOF PENETRATIONS AS REQUIRED.
31. CONTRACTOR TO COORDINATE ALL WORK WITH OTHER BUILDING TRADES, RELOCATION OF EXISTING UTILITIES MAY BE NECESSARY TO ACCOMMODATE INSTALLATION OF NEW EQUIPMENT OR DUCTWORK.
32. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE MADE BY ITS FIRM ON NEW OR EXISTING EQUIPMENT INSTALLED OR RELOCATED BY THEM UNDER THIS CONTRACT. THIS SHALL INCLUDE ALL TOUCH-UP PAINTING.
34. CONTRACTOR SHALL FIELD VERIFY ALL CLEARANCES AND DIMENSIONS.
35. PROVIDE ACCESS PANELS FOR ALL CONCEALED SHUT-OFF VALVES EXCEPT THOSE ABOVE SUSPENDED CEILING.
36. INFILL ALL NEW OR EXISTING ABANDONED FLOOR SLAB PENETRATIONS WITH GROUT, FULL THICKNESS OF SLAB. MAINTAIN FIRE RATING. ALL EXISTING CONCRETE FLOORS AND CHASES ARE 2-HR FIRE RATED.
37. ALL DOMESTIC WATER SUPPLY AND DWV PIPING SHALL BE RUN ABOVE CEILINGS OR WITHIN PARTITIONS UNLESS OTHERWISE NOTED.
38. PLUMBING RISERS SHALL BE RUN CONCEALED WITHIN WALLS OR CHASES. COORDINATE WITH ARCHITECTURAL DRAWINGS.
39. SANITARY LINES SHALL SLOPE 1/4" PER FOOT UNLESS NOTED OTHERWISE.
40. COORDINATE WITH BUILDING OWNER PRIOR TO CUTTING OR GRINDING FLOORS.
41. INSTALLATION SHALL PERMIT ACCESSIBILITY FOR SERVICE AND/OR REPLACEMENT OF EQUIPMENT PROVIDED. PROVIDE ACCESS PANELS TO ALLOW ACCESS TO SYSTEMS COMPONENTS THAT REQUIRE INSPECTION AND MAINTENANCE ACCORDING TO MANUFACTURER'S LITERATURE.
42. NEW PIPING LOCATIONS ON THE PLANS ARE DIAGRAMMATICAL. TO THE EXTENT POSSIBLE THE CONTRACTOR SHALL INSTALL PIPING SYSTEMS TO MINIMIZE RUN LENGTHS TO FIXTURES.
43. CONTRACTOR TO PROVIDE ALL MATERIALS NEEDED FOR CONSTRUCTION UNLESS OTHERWISE NOTED OR DIRECTED.
44. DIELECTRIC UNIONS SHALL BE INSTALLED BETWEEN DISSIMILAR METALS IN SOLDERED AND THREADED PIPING SYSTEMS AND INSULATED FLANGES FOR WELDING SYSTEMS.
45. OPERATIONS AND MAINTENANCE MANUALS: SUBMIT ALL TESTING DATA AND COPIES OF APPROVED PRODUCT DATA, INCLUDING MAINTENANCE INFORMATION IN A TABBED, NEATLY ORGANIZED THREE RING BINDER. INCLUDE VALVE IDENTIFICATION CHARTS PROVIDE 3 COPIES TO THE OWNER.
46. PIPE IDENTIFICATION; LABELING SHALL APPEAR AT INTERVALS OF NOT MORE THAN 20 FEET AND AT LEAST ONCE IN EACH ROOM AND EACH STORY TRAVERSED BY THE PIPING SYSTEM. ALL PIPING SHALL BE CLEARLY IDENTIFIED SPECIFICALLY FOR TYPE OF SERVICE WITH COILED PLASTIC PIPE MARKERS AND FLOW DIRECTION ARROWS. LABELING COLOR AND SIZE SHALL BE PER OSHA SPECIFICATIONS.
47. VALVE IDENTIFICATION; PROVIDE A CIRCULAR BRASS TAG AND CHAIN ON EACH VALVE. TAG TO INCLUDE A DISCRETE NUMBER AND SHALL BE COORDINATED WITH ANY CURRENT FACILITY NUMBERING SCHEME OR STANDARD.
48. IF CONTRACT INCLUDES RENOVATION WORK WHICH TAKES PLACE IN AN OCCUPIED SPACE. INSTALLATIONS SHALL NOT AFFECT ONGOING OPERATIONS. COORDINATE HOURS AVAILABLE TO PERFORM WORK WITH THE OWNER AND GENERAL CONTRACTOR.
49. PRIOR TO CONNECTING TO ANY EXISTING PIPING, CONFIRM TIE-IN LOCATIONS WITH THE FACILITY OWNERS AND OPERATORS.
50. INSTALL ALL NEW AND RELOCATED EXISTING COMPONENTS IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS, APPLICABLE CODES AND STANDARDS.
51. SEAL INTERIOR PIPE PENETRATIONS WITH FIRE SEALANT. SEAL EXTERIOR WALL PIPE PENETRATIONS WATER TIGHT.
52. CUT AND PATCH SURFACES, RESTORING ORIGINAL FINISHES.
53. ASTM E84 COMPLIANCE: INSULATION AND OTHER MATERIALS SHALL COMPLY WITH THE FLAME AND SMOKE SPREAD RATINGS.
54. SUBMITTALS, PRE-CONSTRUCTION: SUBMIT CATALOG CUT SHEETS OF PROPOSED EQUIPMENT FOR ENGINEER REVIEW AND APPROVAL PRIOR TO PURCHASE AND INSTALLATION.
55. SUBMITTALS, DURING CONSTRUCTIONS: SUBMIT COPIES OF PIPE ROUGH-IN PRESSURE TESTS AS COMPLETED.
56. SUBMITTALS, POST CONSTRUCTION: SUBMIT COPIES OF FINAL PRESSURE TEST, FLUSHING AND PLUMBING DISINFECTION REPORTS. SUBMIT COPIES OF COMPLETED MANUFACTURER START UP REPORTS FOR EQUIPMENT.
57. RECORD DRAWINGS; MAINTAIN A CURRENT SET OF MARKED UP CONSTRUCTION DRAWINGS ON SITE AT ALL TIMES. PROVIDE A COMPLETE SET OF THESE RECORD MARK-UPS, OR AS-BUILT. DRAWINGS TO THE ARCHITECT AT THE END OF THE PROJECT.
58. USE OF PIPE DOPE IS NOT ALLOWED.
59. SEE SPECIFICATIONS FOR OTHER REQUIREMENTS.

SHEET LIST - PLUMBING

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

PLUMBING NOTES, SYMBOLS & ABBREVIATIONS

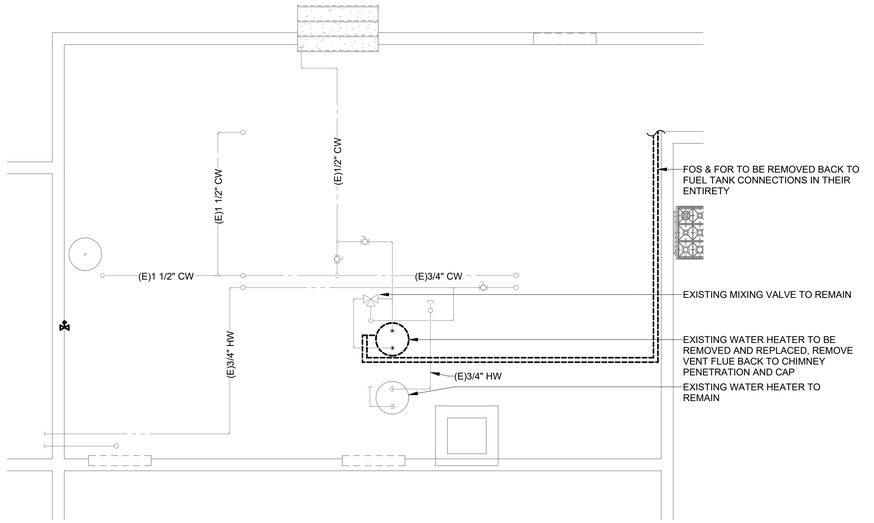
STATE OF MAINE — JARED M MERRY — No. 11679 — LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	12" = 1'-0"

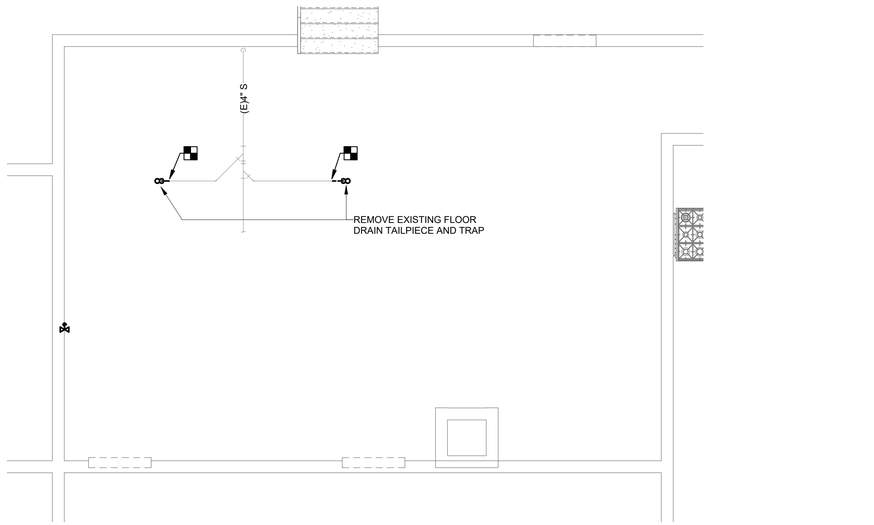
DRAWN BY	DESIGNED BY	CHECKED BY
JNB	JNB	JMM

PROJECT No. 10377.028

DRAWING NO. **P-001** REV.



1 PD101 **BASEMENT DOMESTIC PLUMBING DEMO PLAN**
SCALE: 1/4" = 1'-0"



2 PD101 **BASEMENT DWV PLUMBING DEMO PLAN**
SCALE: 1/4" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

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PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

PLUMBING DOMESTIC FIRST FLOOR PLAN DEMOLITION PLAN

STATE OF MAINE JARED M MERRY No. 11679 LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	1/4" = 1'-0"

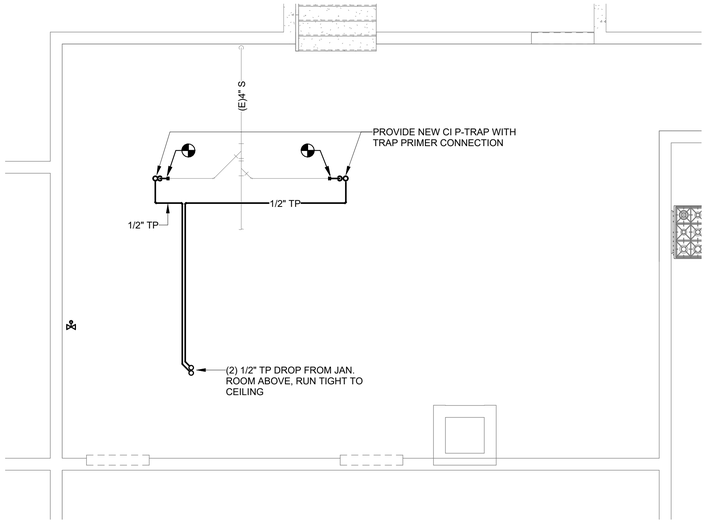
DRAWN BY	DESIGNED BY	CHECKED BY
JNB	JNB	JMM

PROJECT No. 10377.028

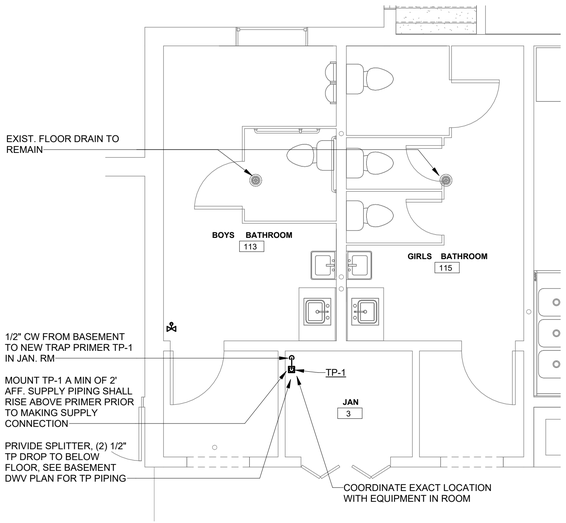
DRAWING NO. **PD101** REV.

SHEET PW101 GENERAL NOTES

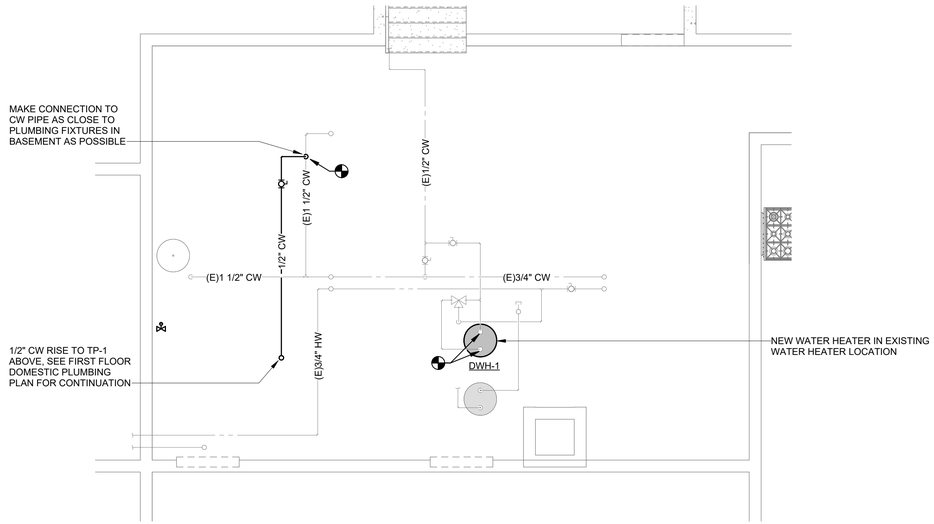
1. SEE PLUMBING FIXTURE SCHEDULE FOR ALL FIXTURE CONNECTION SIZES.
2. PITCH SANITARY PIPING 1/4" PER FT UNLESS NOTED OTHERWISE.
3. TRAP PRIMER PIPING TO BE 1/2".



2 P-101 BASEMENT DWV PLUMBING PLAN
SCALE: 1/4" = 1'-0"



3 P-101 FIRST FLOOR PLUMBING PLAN
SCALE: 1/4" = 1'-0"



1 P-101 BASEMENT DOMESTIC PLUMBING PLAN
SCALE: 1/4" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

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PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

DOMESTIC AND DWV PLUMBING PLANS

STATE OF MAINE JARED M. MERRY No. 11679 LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	As indicated

DRAWN BY	DESIGNED BY	CHECKED BY
JNB	JNB	JMM

PROJECT No. 10377.028

DRAWING NO. **P-101** REV.

TRAP PIMER SCHEDULE

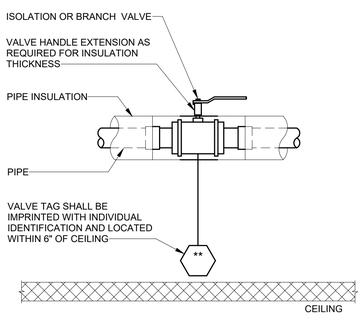
TAG	SERVICE	MANUFACTURER	MODEL	INLET NPT	ELECTRICAL POWER	ELECTRICAL FLA	EMERGENCY POWER	NOTES:
TP-1	BATHROOM FLOOR DRAINS	SIOUX CHIEF	PRIME PERFECT - 695	1/2"			-	ALL

NOTES:
1. PROVIDE WITH SPLITTER TO SPLIT OUTLET TO TWO SEPERATE TRAP PRIMER SUPPLIES.

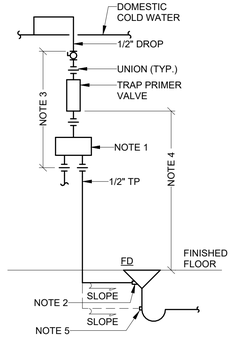
DOMESTIC WATER HEATER SCHEDULE

TAG	MANUFACTURER	MODEL	APPROXIMATE GAL	FUEL TYPE	HEATING CAPACITY	EWT (°F)	LWT (°F)	ELCTRICAL VOLTS	PHASE	FLA	WATTS	MCA	MOCP	NOTES:
DWH-1	AO SMITH	CAHP-66 200	68	ELEC	3412.0 Btu/h	45 °F	140 °F	208 V	1	26	5408 W	30 A	30 A	-

NOTES:

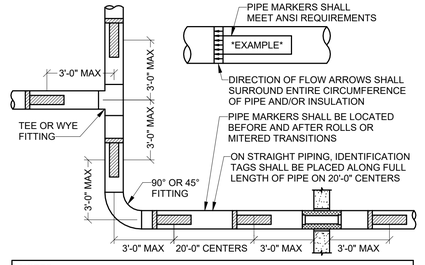


3 P-501 **VALVE TAG DETAIL**
NTS



NOTES:
1. FOR MULTIPLE TRAP PRIMER APPLICATION. GROUP PRIMERS TOGETHER WHEREVER POSSIBLE.
2. PROVIDE 3/4"x1/2" THREAD AND SWEAT FITTING WHERE DRAIN BODY REQUIRES.
3. WHERE PIPING DROP IS NOT EXPOSED, PROVIDE ACCESS PANEL.
4. INSTALL VALVE AT A MINIMUM DISTANCE ABOVE THE FLOOR AS REQUIRED BY TRAP PRIMER MANUFACTURER, BUT NO LOWER THAN 1 FOOT AFF FOR EACH 20 FEET OF TRAP PRIMER PIPING.
5. TRAP PRIMER PIPING TO BE INSTALLED BELOW SLAB SLOPED TO DRAIN. PROVIDE A P-TRAP WITH 1/2" PRIMER TAP WHEN FLOOR DRAIN PRIMER PORT IS BURIED WITHIN THE SLAB.

2 P-501 **TRAP PRIMER DETAIL**
NTS



NOTES:
1. IDENTIFICATION PARAMETERS FOR USE IN BOTH PLUMBING AND MECHANICAL PIPING SYSTEMS.
2. CONTRACTOR SHALL PLACE MINIMUM OF ONE TAG PER ROOM OR HALLWAY.
3. SEE DRAWINGS FOR PIPE TYPES.
4. SEE LEGEND AND ABBREVIATIONS FOR MORE INFORMATION.

1 P-501 **PIPE IDENTIFICATION DETAIL**
NTS

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
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207.989.4824

PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

PLUMBING DETAILS & SCHEDULES

STATE OF MAINE
JARED M. MERRY
No. 11679
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	1/4" = 1'-0"

DRAWN BY	DESIGNED BY	CHECKED BY
JNB	JNB	JMM

PROJECT No. 10377.028

DRAWING NO. **P-501** REV.

ABBREVIATIONS

@	AT
A	AMP
ABS	ACRYLONITRILE BUTADIENE STYRENE PLASTIC
ABV	ABOVE
AD	ACCESS DOOR
ADA	AMERICANS WITH DISABILITIES ACT
AF	AIR FILTER
AFF	ABOVE FINISHED FLOOR
AFM	AIR FLOW MEASURING STATION
AL	ACOUSTICAL LINER
AMB	AMBIENT
AP	ACCESS PANEL
APD	AIR PRESSURE DROP
APPROX	APPROXIMATELY
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASSY	ASSEMBLY
ATC	AUTOMATIC TEMPERATURE CONTROL
ATT	ACOUSTICAL ATTENUATOR
AV	AUTOMATIC VENT
BDD	BACKDRAFT DAMPER
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BOT	BOTTOM
BOD	BOTTOM OF DUCT
BTUH	BTU PER HOUR
C	CENTERLINE
CA	COMPRESSED AIR
CAP	CAPACITY
CC	COOLING COIL
CFM	CUBIC FEET PER MINUTE
CLG	CEILING
CO	CLEAN OUT, CARBON MONOXIDE
COL	COLUMN
CONC	CONCRETE
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
COND	CONDENSATE
CONN	CONNECTION
CONT	CONTINUATION
CP	CONTROL PANEL, CONDENSATE PUMP
CPT	CONDENSATE PUMP TRAP
CV	CONTROL VALVE
Cv	CONTROL VALVE RATING
CVT	CONSTANT VOLUME AIR TERMINAL
CW	DOMESTIC COLD WATER
CWR	COLD WATER RETURN
CWS	COLD WATER SUPPLY
D	DRAIN, DEPTH
dB	DECIBELS
DB	DRY BULB
DDC	DIRECT DIGITAL CONTROL
∅, DIA	DIAMETER
DIFF	DIFFERENTIAL, DIFFUSER
DISCH	DISCHARGE
DN	DOWN
DOM	DOMESTIC
DP	DIFFERENTIAL PRESSURE
DWG	DRAWING
DWGS	DRAWINGS
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
EDR	EQUIVALENT DIRECT RADIATION
EER	ENERGY EFFICIENT RATIO
EFF	EFFICIENCY
ELEC	ELECTRIC, ELECTRICAL
ELEV	ELEVATION
ENT	ENTERING
EPDM	ETHYLENE PROPYLENE DIENE MEMBRANE
EQUIP	EQUIPMENT
ESP	EXTERNAL STATIC PRESSURE
EXP	EXPANSION
F	FAN, DEGREES FAHRENHEIT
FA	FRESH AIR
FAI	FRESH AIR INTAKE
FBG	FURNISHED BY GOVERNMENT
FC	FLEX CONNECTION
FCO	FLOOR CLEANOUT
FD	FIRE DAMPER
FF	FINISH FLOOR
FIX	FIXTURE
FLA	FULL LOAD AMPS
FLR	FLOOR
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FS	FLOAT SWITCH
FSD	FIRE SMOKE DAMPER
FTR	FIN TUBE RADIATION
FZ	FREEZESTAT
G	GAS
GA	GAUGE
GAL	GALLONS
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GP	GENERAL PURPOSE
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GRH	GRAVITY RELIEF HOOD
GV	GATE VALVE
GSM	GALVANIZED SHEET METAL
GYP	GYPSUM WALLBOARD
H	HEIGTH
HOA	HANDS-OFF-AUTOMATIC
HOR	HORIZONTAL
HP	HORSEPOWER, HIGH PRESSURE
HPC	HIGH PRESSURE CONDENSATE
HPS	HIGH PRESSURE STEAM
HR	HOUR
HT	HEIGHT
HUMID	HUMIDIFIER, HUMIDITY
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
HW	DOMESTIC HOT WATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HZ	HERTZ
I/O	INPUT / OUTPUT
ID	INSIDE DIAMETER
IN	INCHES
KW	KILOWATT
L	LENGTH
LAT	LEAVING AIR TEMPERATURE
LD	LIQUEFIED PETROLEUM
LDB	LEAVING DRY BULB
LF	LINEAR FEET
LG	LONG
LOC	LOCATION, LOCATED
LP	LIQUEFIED PROPANE
LPC	LOW PRESSURE CONDENSATE
LPS	LOW PRESSURE STEAM
LRA	LOCKED ROTOR AMPS
LS	LINE SET (REFRIG)
LVG	LEAVING
LWB	LEAVING WET BULB
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MAX PD	MAXIMUM PRESSURE DROP
MBH	1000 BTU PER HOUR
MBU	1000 BTU
MC	MECHANICAL CONTRACTOR
MCA	MAXIMUM CIRCUIT AMPS
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MEZZ	MEZZANINE
MFG	MANUFACTURER
MIN	MINIMUM, MINUTES
MLS	MAIN LINE SET (REFRIG)
mm	MILLIMETERS
MNTD	MOUNTED
MOCP	MAXIMUM OVERCURRENT PROTECTION
MUW	MAKE-UP WATER
N/A	NOT APPLICABLE
NATL	NATURAL
NC	NORMALLY CLOSED, NOISE CRITERIA
NEC	NATIONAL ELECTRIC CODE NFPA 70
NG	NATURAL GAS
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN, NUMBER
N02	NITROGEN DIOXIDE
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OAF	OUTSIDE AIR FILTER, OUTSIDE AIR FAN
OAI	OUTSIDE AIR INTAKE
OAT	OUTSIDE AIR TEMPERATURE
OBVD	OPPOSED BLADE VOLUME DAMPER
OD	OUTSIDE DIAMETER
OED	OPEN ENDED DUCT
OS&Y	OUTSIDE STEM AND YOKE
P	PUMP, PITCH
PC	PUMPED CONDENSATE
PD	PRESSURE DROP
PH	PHASE
PLMB	PLUMBING
PRESS	PRESSURE
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
PT	PRESSURE TREATED
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
R	RADIUS, RETURN
RA	RETURN AIR
RAD	RADIATOR
RAF	RETURN AIR FAN
RAT	RETURN AIR TEMPERATURE
REL	RELIEF
REQD	REQUIRED
RET	RETURN
RH	RELATIVE HUMIDITY
RLA	RATED LOAD AMPS
RL	REFRIGERANT LIQUID
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
RS	REFRIGERANT SUCTION
SA	SUPPLY AIR
SCH	SCHEDULE
SCR	SCREEN
SD	SMOKE DAMPER
SF	SQUARE FOOT
SIM	SIMILAR
SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTOR'S NATIONAL ASSOCIATION
SOV	SHUT OFF VALVE
SP	STATIC PRESSURE
SPH	STATIC PRESSURE HIGH LIMIT
SPL	STATIC PRESSURE LOW LIMIT
SPS	STATIC PRESSURE SENSOR
SQ	SQUARE
SS	STAINLESS STEEL
STL	STEEL
SUP	SUPPLY
T	TEMPERATURE SENSOR, THERMOSTAT
TC	TOTAL COOLING
TEMP	TEMPERATURE
THK	THICK, THICKNESS
TG	TRANSFER GRILLE
TRANS	TRANSITION
TSP	TOTAL STATIC PRESSURE
TSTAT	THERMOSTAT
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VENT, VOLT
VD	VOLUME DAMPER
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VIF	VERIFY IN FIELD
VRF	VARIABLE REFRIGERANT FLOW
VTR	VENT THROUGH ROOF
W	WIDTH, WATT
W/	WITH
WB	WET BULB
WC	WATER COLUMN
WCO	WALL CLEANOUT
WG	WATER GAUGE
WMS	WIRE MESH SCREEN
WPD	WATER PRESSURE DROP

AIR DISTRIBUTION SYMBOLS

- 12x16 — RECTANGULAR DUCT. (FIRST NUMBER IS SIDE SHOWN) DIMENSION IN INCHES.
- 12"Ø — ROUND DUCT
- M — MOTORIZED DAMPER
- FLEXIBLE DUCT
- FLEXIBLE DUCT CONNECTOR (FC)
- D R — DUCT DROPS AND RISES IN DIRECTION OF AIR FLOW
- RETURN DUCT TURNED UP OR DOWN (DASHED)
- SUPPLY DUCT TURNED UP OR DOWN (DASHED)
- EXHAUST DUCT TURNED UP OR DOWN (DASHED)
- ACOUSTICAL LINING (DUCT DIM. FOR NET FREE AREA)
- ROUND DUCT ELBOW DOWN
- ROUND DUCT ELBOW UP
- SQUARE TO ROUND TRANSITION
- POINT OF CHANGE IN DUCT CONSTRUCTION BY STATIC PRESSURE CLASS. THE NUMBER ASSIGNS PRESSURE CLASS (IN. OF WATER) WHICH WILL ACCOMMODATE MAXIMUM OPERATING PRESSURE THE ASSIGNMENT UNTIL THE DUCT TERMINATES OR ANOTHER SYMBOL APPEARS. A "N" SUPERSCRIPT INDICATES NEGATIVE PRESSURE.
- CAP (DUCT AND/OR PIPE)
- INDICATES DUCT, PIPING, EQUIPMENT TO BE REMOVED.
- EA — EXHAUST AIR
- RA — RETURN AIR
- SA — SUPPLY AIR
- OA — OUTSIDE AIR
- VOLUME DAMPER
- FIRE DAMPER
- SMOKE DAMPER
- COMBINATION FIRE/SMOKE DAMPER
- VANED ELBOW (PROVIDE FOR ALL SQUARE OR RECTANGULAR ELBOWS EVEN IF SYMBOL MISSING.)
- VANED ELBOW (SHORT RADIUS) NOTE: ADJUSTABLE ELBOWS ARE NOT ALLOWED.
- DIRECTION OF AIR FLOW (IN)
- DIRECTION OF AIR FLOW (OUT)
- H — HUMIDISTAT OR HUMIDITY SENSOR
- T — THERMOSTAT (T'STAT) OR TEMP. SENSOR
- S — BACS SENSOR (COMBINATION TEMP, CO2 & OCC)
- SD — SMOKE DETECTOR
- CEILING RETURN GRILLE
- CEILING SUPPLY DIFFUSER
- CEILING EXHAUST DIFFUSER
- P — DYNAMIC PRESSURE SENSOR
- PD — DIFFERENTIAL PRESSURE MONITOR
- OC — OCCUPANCY SENSOR

MISCELLANEOUS SYMBOLS

- S2 / 750 — DIFFUSER, REGISTER OR GRILLE TAG; CFM AIR FLOW
- FT1 / 8 — FINNED TUBE TAG; LENGTH OF FINNED ELEMENT
- 4 / M101 — DETAIL NUMBER; SHEET NUMBER WHERE DETAIL IS LOCATED
- CONNECT NEW TO EXISTING
- LIMITS OF DEMOLITION
- 1 — REVISION NUMBER

MECHANICAL EQUIPMENT ABBREVIATIONS

(REFER TO MECHANICAL SCHEDULE SHEET FOR INFORMATION)

AHU	AIR HANDLING UNIT
EF	EXHAUST FAN
ERV	ENERGY RECOVER VENTILATOR
EBH	ELECTRIC BASEBOARD HEATER
HP	HEAT PUMP
DHC	DUCT HEATING COIL
DBF	DRYER BOOSTER FAN
IU	HEAT PUMP INDOOR UNIT
OU	HEAT PUMP OUTDOOR UNIT
UH	UNIT HEATER
ET	EXPANSION TANK
VAV	VARIABLE AIR VOLUME

EXISTING EQUIPMENT LEGEND

(E)	EXISTING TO REMAIN
(R)	EXISTING TO BE DISCONNECTED AND REMOVED
(RL)	EXISTING TO BE DISCONNECTED AND RELOCATED
(ER)	EXISTING IN NEW LOCATION
(RP)	EXISTING TO BE REPLACED

PIPING SYMBOLS

- PIPE ELBOW TURNED DOWN
- PIPE ELBOW TURNED UP
- P-TRAP (W&T)
- PIPE TEE DOWN
- PIPE TEE UP
- PIPE BREAK
- DIRECTION OF FLOW
- PIPE PITCHES DOWN
- UNION
- PIPE ANCHOR
- PIPE GUIDE OR SLEEVES
- GENERIC VALVE, SEE SPECIFICATIONS FOR TYPE
- GATE VALVE
- BALL VALVE
- BUTTERFLY VALVE (MANUAL)
- 2-WAY CONTROL VALVE
- 3-WAY CONTROL VALVE
- CALIBRATED BALANCING VALVE (CIRCUIT SETTER)
- AUTOMATIC FLOW CONTROL VALVE
- CHECK VALVE
- BACK FLOW PREVENTER
- GLOBE VALVE
- NEEDLE VALVE
- PLUG VALVE
- SOLENOID VALVE
- OS&Y VALVE
- PRESSURE REDUCING OR REGULATING VALVE
- MANUAL AIR VENT
- AUTOMATIC AIR VENT
- VACUUM BREAKER
- CONCENTRIC REDUCER/INCREASER
- ECCENTRIC REDUCER/INCREASER
- FLEXIBLE PIPE CONNECTOR
- EXPANSION JOINT
- PUMP
- TEMPERATURE & PRESSURE TAP (PETE'S PLUG)
- PRESSURE GAUGE AND COCK
- THERMOMETER AND WELL
- PRESSURE RELIEF VALVE
- HOSE END DRAIN VALVE WITH CAP
- HOSE BIBB
- PIPE CAP
- M — WATER METER
- STRAINER
- STRAINER WITH BLOWDOWN

PIPING SYSTEMS

(E)	EXISTING PIPING TO REMAIN
(R)	EXISTING PIPING TO REMOVED
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
RL/RS	REFRIGERANT LIQUID / REFRIGERANT SUCTION
RL	REFRIGERANT LIQUID
RS	REFRIGERANT SUCTION
RH	REFRIGERANT HOT GAS
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLYRN
CD	CONDENSATE DRAIN
CA	COMPRESSED AIR
AD	ACID DRAIN
AD	ACID DRAIN (BELOW SLAB)
AV	ACID VENT
CWS	CONDENSER WATER SUPPLY
CWR	CONDENSER WATER RETURN
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FOV	FUEL OIL VENT
GYL	GLYCOL
GYLS	GLYCOL SUPPLY
GYLR	GLYCOL RETURN
HCR	HIGH PRESSURE CONDENSATE RETURN
HLP	HIGH PRESSURE LIQUID PROPANE
HNG	HIGH PRESSURE NATURAL GAS
HPS	HIGH PRESSURE STEAM
LPS	LOW PRESSURE STEAM
LPR	LOW PRESSURE RETURN
MPS	MEDIUM PRESSURE STEAM
MPR	MEDIUM PRESSURE RETURN
NPW	NON POTABLE COLD WATER
PCWS	PROCESS COOLING WATER SUPPLY
PCWR	PROCESS COOLING WATER SUPPLY
PC	PUMP STEAM CONDENSATE
PD	PUMP DISCHARGE
PW	POTABLE WATER
R	RELIEF LINE

GENERAL MECHANICAL NOTES

1. IT IS THE INTENT OF THESE DRAWINGS TO SHOW COMPLETE AND FUNCTIONAL SYSTEMS THAT ARE IN COMPLIANCE WITH ALL INDUSTRY STANDARDS AND APPLICABLE CODES. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ENGINEER'S ATTENTION.
2. ALL MECHANICAL SYSTEMS WORK SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL AUTHORITIES HAVING JURISDICTION AND ALL APPLICABLE CODES. ALL WORK SHALL CONFORM TO EQUIPMENT MANUFACTURER'S INSTRUCTIONS AND INDUSTRY STANDARDS.
3. ALL WORKMANSHIP SHALL BE OF THE HIGHEST STANDARDS. INSTALL ALL WORK IN A NEAT, SYSTEMATIC AND ORDERLY ARRANGEMENT. ALL MATERIAL SHALL BE NEW AND OF THE BEST QUALITY AVAILABLE; FREE FROM DEFECTS. THE CONTRACTOR SHALL GUARANTEE THE MATERIALS AND INSTALLATION FOR ONE YEAR FROM THE PROJECT ACCEPTANCE DATE AGAINST ANY DEFECTS DUE TO FAULTY MATERIALS, EQUIPMENT, WORKMANSHIP, OR INSTALLATION. UPON NOTICE OF THE DEFECT, THE CONTRACTOR SHALL REPLACE OR REPAIR THE DEFECTIVE ITEM AT NO ADDITIONAL COST.
4. THE CONTRACTOR SHALL VISIT THE JOB SITE TO VERIFY ALL EXISTING FIELD CONDITIONS. DIMENSIONS AND OBSTRUCTIONS.
5. ALL PIPING AND DUCTWORK IS SHOWN DIAGRAMMATICALLY. PIPING AND SYSTEMS SHALL FOLLOW ARRANGEMENT AS MUCH AS POSSIBLE, HOWEVER, ACTUAL FIELD CONDITIONS SHALL DICTATE. CAREFULLY COORDINATE THE SPACE REQUIREMENTS AND LOCATIONS OF ALL DUCTWORK WITH ALL OTHER TRADES. GIVE PRIORITY TO GRAVITY DRAINAGE PIPING.
6. DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLAN FOR EXACT LOCATION OF WALLS, DOORS, WINDOWS, CEILING DIFFUSERS, ETC.
7. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE WORK OF ALL OTHER TRADES. SHOULD ANY DISCREPANCIES BE DISCOVERED IN ANY OF THE BID DOCUMENTS, (INCLUDING ALL OTHER DIVISIONS) THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER BEFORE PROCEEDING ANY FURTHER WITH THE WORK, OTHERWISE THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL COST INVOLVED WITH THE CORRECTION OF THE CONSTRUCTION INSTALLATION.
8. ALL EQUIPMENT, DUCTWORK, PIPING, ETC. SHALL BE SUPPORTED FROM THE BUILDING'S STRUCTURAL FRAME AND MEMBERS. ALL DUCT SIZES ARE NET DIMENSIONS AND DO NOT INCLUDE AND INSULATION. SUPPORT OR REINFORCEMENT DIMENSIONS. ALL WORK SHALL BE NEW UNLESS OTHERWISE NOTED AS EXISTING.
9. THE CONTRACTOR SHALL PERFORM TESTS ON ALL MECHANICAL SYSTEMS AS REQUIRED BY FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS. ALL TESTS SHALL BE WITNESSED AND ACCEPTED BY THE AUTHORITY HAVING JURISDICTION. THE CONTRACTOR SHALL PROVIDE ALL SERVICES AND MATERIALS REQUIRED BY THE TEST AND CERTIFY IN WRITING THAT ALL WORK HAS PASSED ALL REQUIRED TESTS.
10. THE MECHANICAL SYSTEMS SHALL BE BALANCED, COMPLETE WITH A WRITTEN REPORT BY AN INDEPENDENT AIR BALANCE FIRM WITH A MINIMUM OF 3 YEARS EXPERIENCE.
11. WHERE PIPES AND DUCTS PENETRATE WALLS OR FLOOR, THE SPACE BETWEEN THE STRUCTURE AND THE DUCT OR PIPE SHALL BE SEALED AIRTIGHT WITH AN APPROVED MATERIAL. PROVIDE FIRE STOPS AND/OR SEALANT AROUND ALL PENETRATIONS THAT HAVE A FIRE RATING GREATER THAN OR EQUAL TO THE FIRE RATING OF THE WALL, FLOOR OR ENCLOSURE.
12. PROVIDE ACCESS PANELS FOR ALL VALVES, DAMPERS, CLEANOUTS, ETC. THAT REQUIRE ACCESS.

SHEET LIST - MECHANICAL

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

MECHANICAL NOTES, SYMBOLS & ABBREVIATIONS

STATE OF MAINE — JARED M MERRY — No. 11679 — LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	12" = 1'-0"

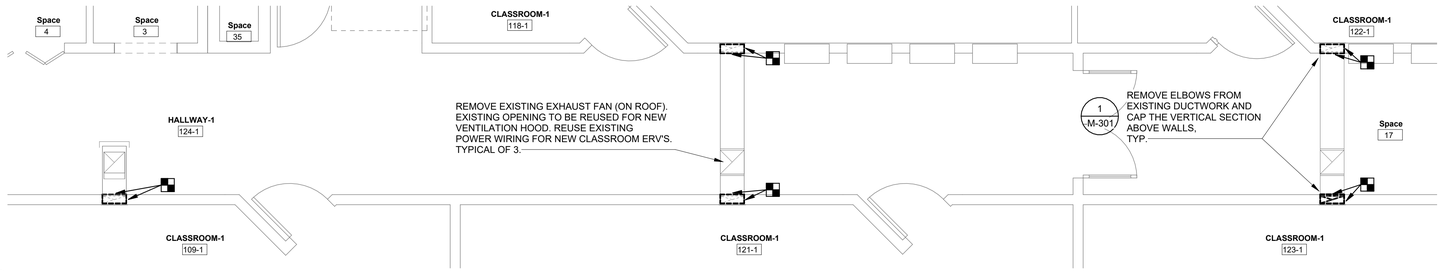
DRAWN BY	DESIGNED BY	CHECKED BY
ITB	JMM	JMM

PROJECT No. 10377.028

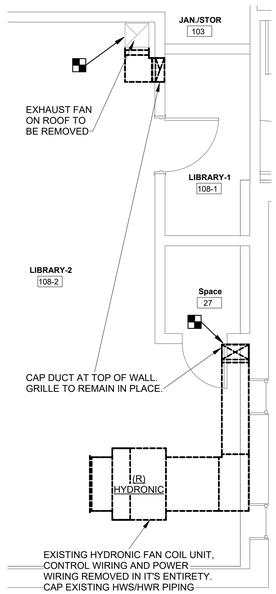
DRAWING NO. **M-001** REV.

SHEET MD101 GENERAL NOTES

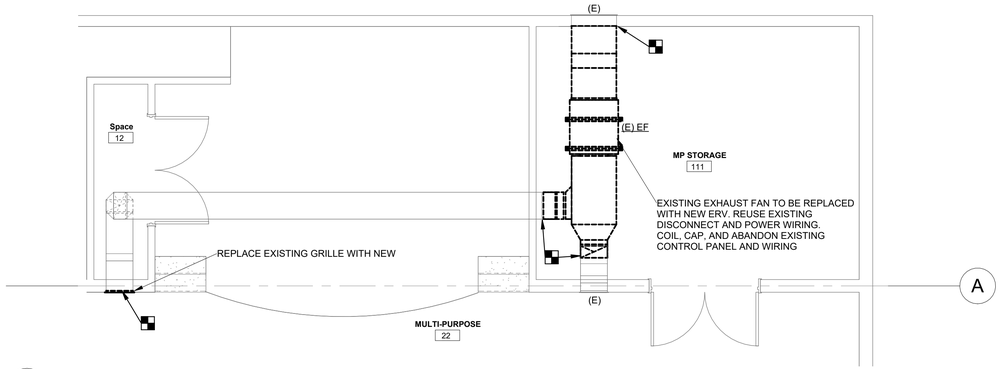
1. DUCTWORK TO REMAIN SHALL BE CEANED AND TESTED FOR LEAKS; REPAIRED IF NECESSARY.



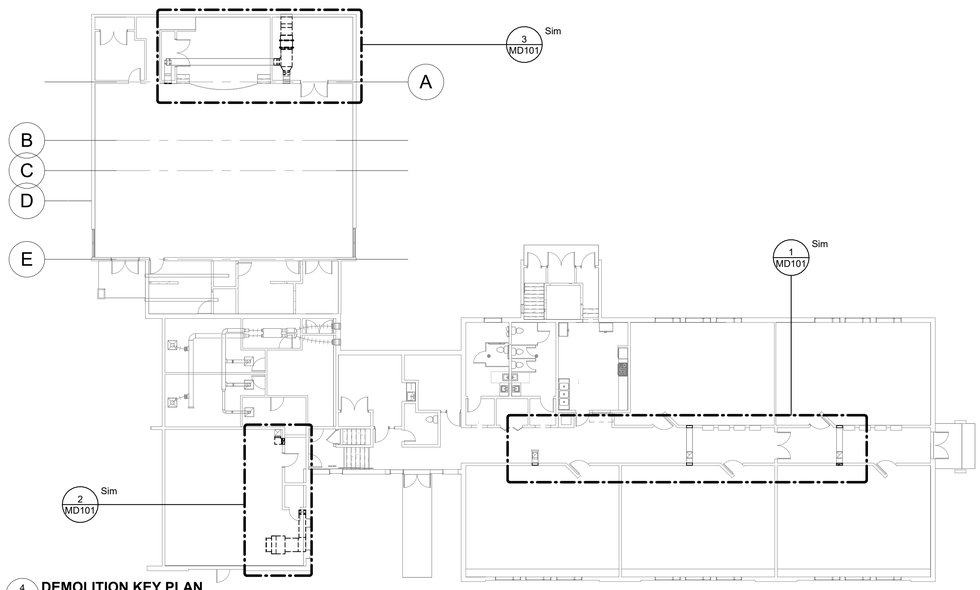
1 MD101 **MECHANICAL DUCTWORK FIRST FLOOR DEMOLITION PLAN - CLASSROOMS**
SCALE: 1/4" = 1'-0"



2 MD101 **MECHANICAL DUCTWORK FIRST FLOOR DEMOLITION PLAN - LIBRARY**
SCALE: 1/4" = 1'-0"



3 MD101 **MECHANICAL DUCTWORK FIRST FLOOR DEMOLITION PLAN - GYM/STAGE/STORAGE**
SCALE: 1/4" = 1'-0"



4 MD101 **DEMOLITION KEY PLAN**
SCALE: 1/16" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

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PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

MECHANICAL HVAC FIRST FLOOR DEMOLITION PLAN

STATE OF MAINE · JARED M. MERRY · No. 11679 · LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	As indicated

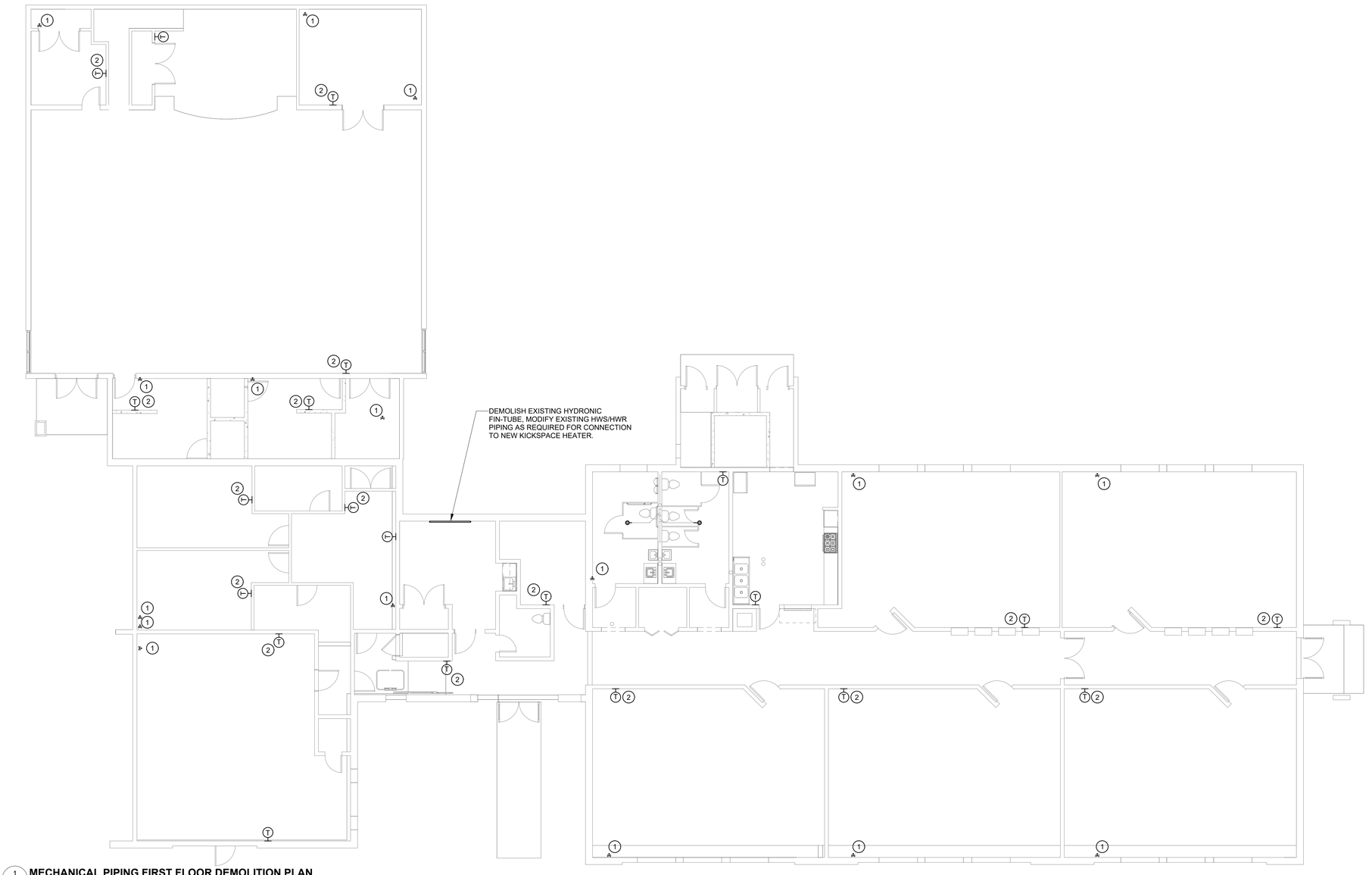
DRAWN BY	DESIGNED BY	CHECKED BY
ITB	JMM	JMM

PROJECT No. 10377.028

DRAWING NO. **MD101** REV.

SHEET MD102 NUMBERED NOTES (#)

1 ZONE VALVE TO BE DEMOLISHED AND REPLACED WITH NEW.
2 THERMOSTAT TO BE DEMOLISHED AND REPLACED WITH THERMOSTAT FROM TRANE/MITSUBISHI.



1 MD102 **MECHANICAL PIPING FIRST FLOOR DEMOLITION PLAN**
SCALE: 1/8" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

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PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

MECHANICAL PIPING FIRST FLOOR DEMOLITION PLAN

STATE OF MAINE — JARED M. MERRY — No. 11679 — LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	1/8" = 1'-0"

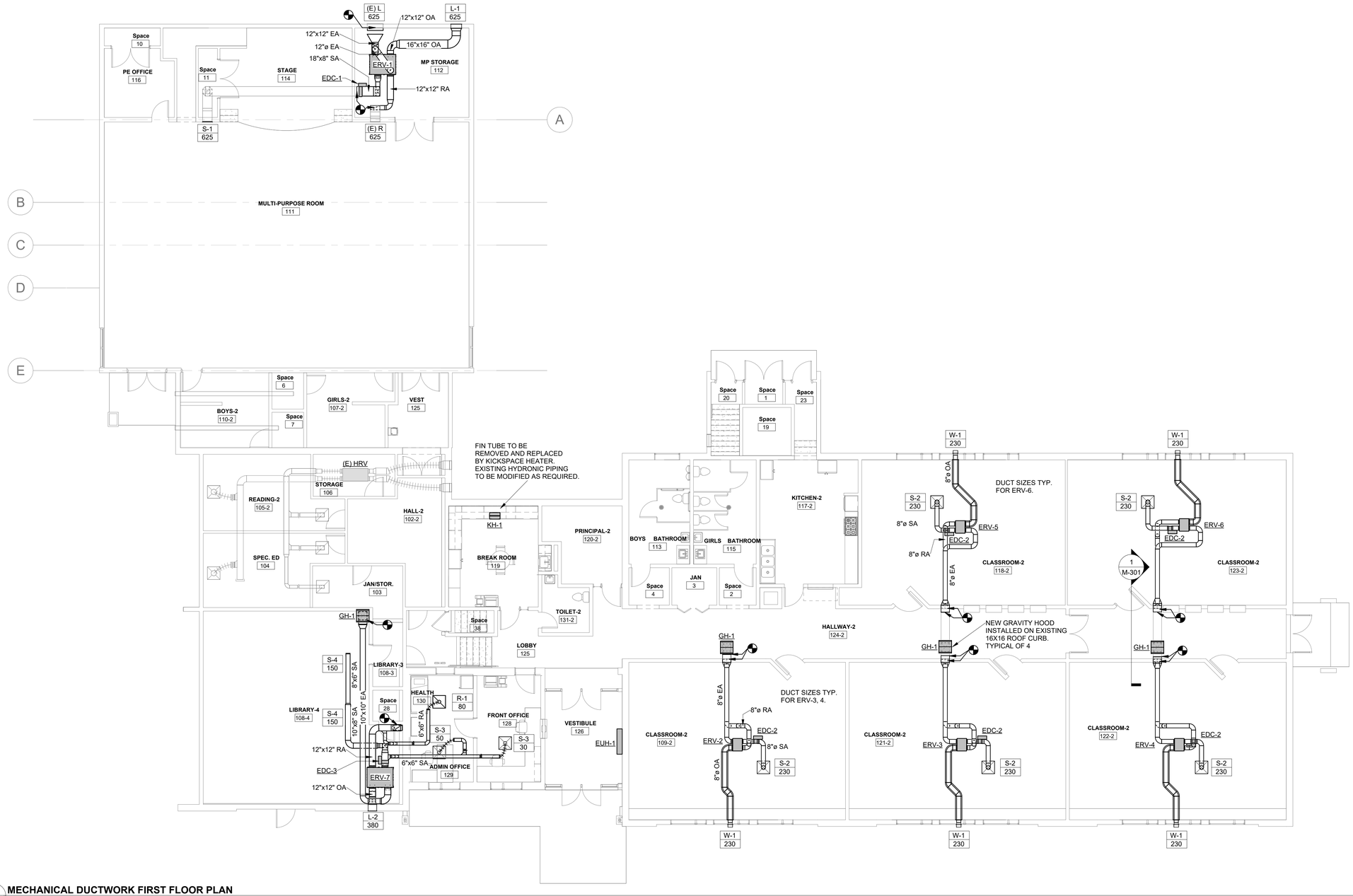
DRAWN BY	DESIGNED BY	CHECKED BY
ITB	JMM	JMM

PROJECT No. 10377.028

DRAWING NO. **MD102** REV.

SHEET MH101 GENERAL NOTES

1. EXISTING DUCTWORK TO BE USED TO THE MAXIMUM EXTENT POSSIBLE.



1 MH101 **MECHANICAL DUCTWORK FIRST FLOOR PLAN**
SCALE: 1/8" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

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PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

MECHANICAL HVAC FIRST FLOOR PLAN

STATE OF MAINE
JARED M. MERRY
No. 11679
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	As indicated

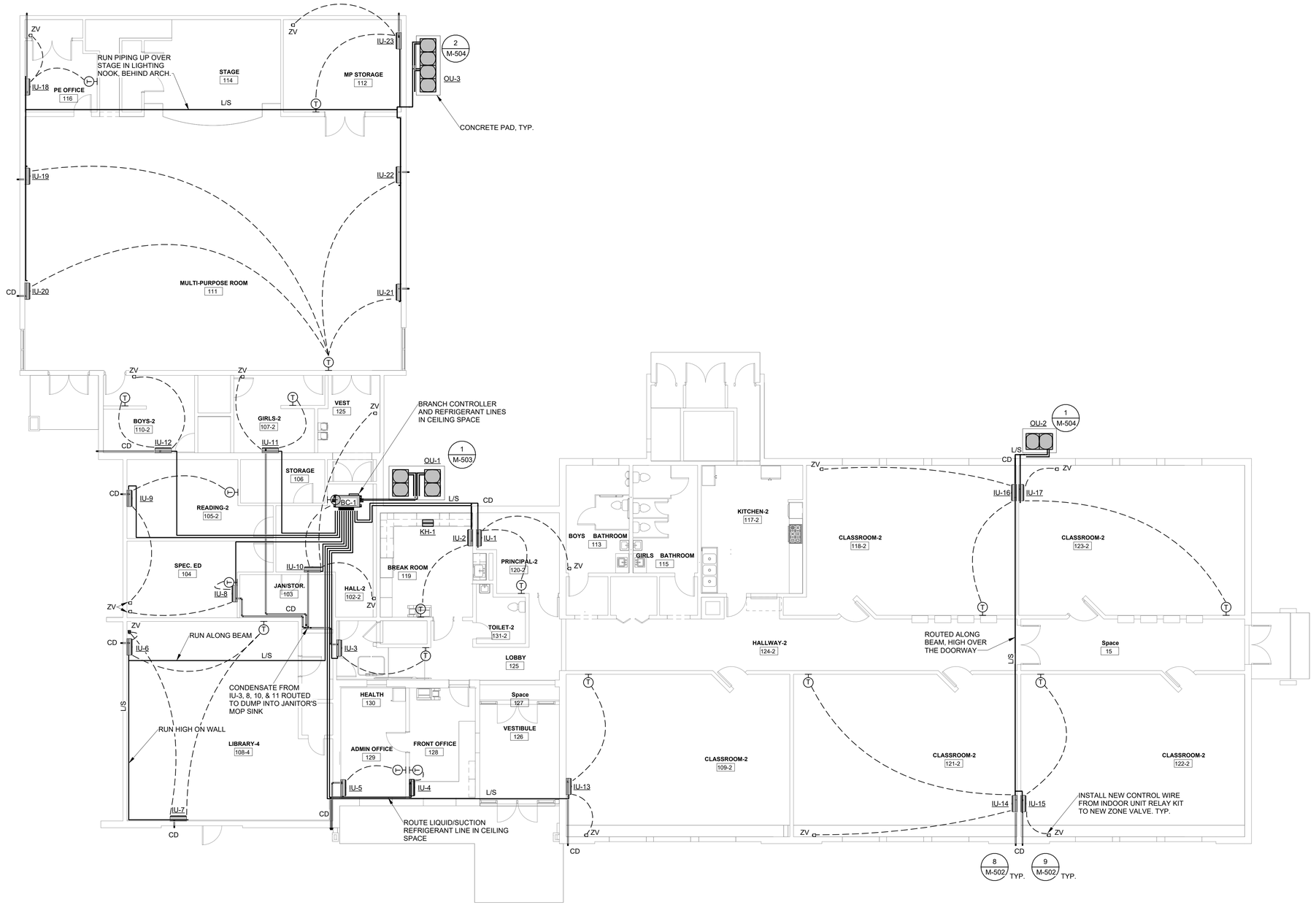
DRAWN BY	DESIGNED BY	CHECKED BY
ITB	JMM	JMM

PROJECT No. 10377.028

DRAWING NO. **MH101** REV.

MECHANICAL PIPING GENERAL NOTES:

1. THE CONTRACTOR SHALL CONNECT HYDRONIC ZONE VALVES TO THE ZONE'S NEW INDOOR UNIT CN 24 RELAY UNIT CONNECTIONS TO OPERATE AS AUXILIARY HEAT.



1 MP101 **MECHANICAL PIPING FIRST FLOOR PLAN**
SCALE: 1/8" = 1'-0"

REV	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

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PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

MECHANICAL PIPING FIRST FLOOR PLAN

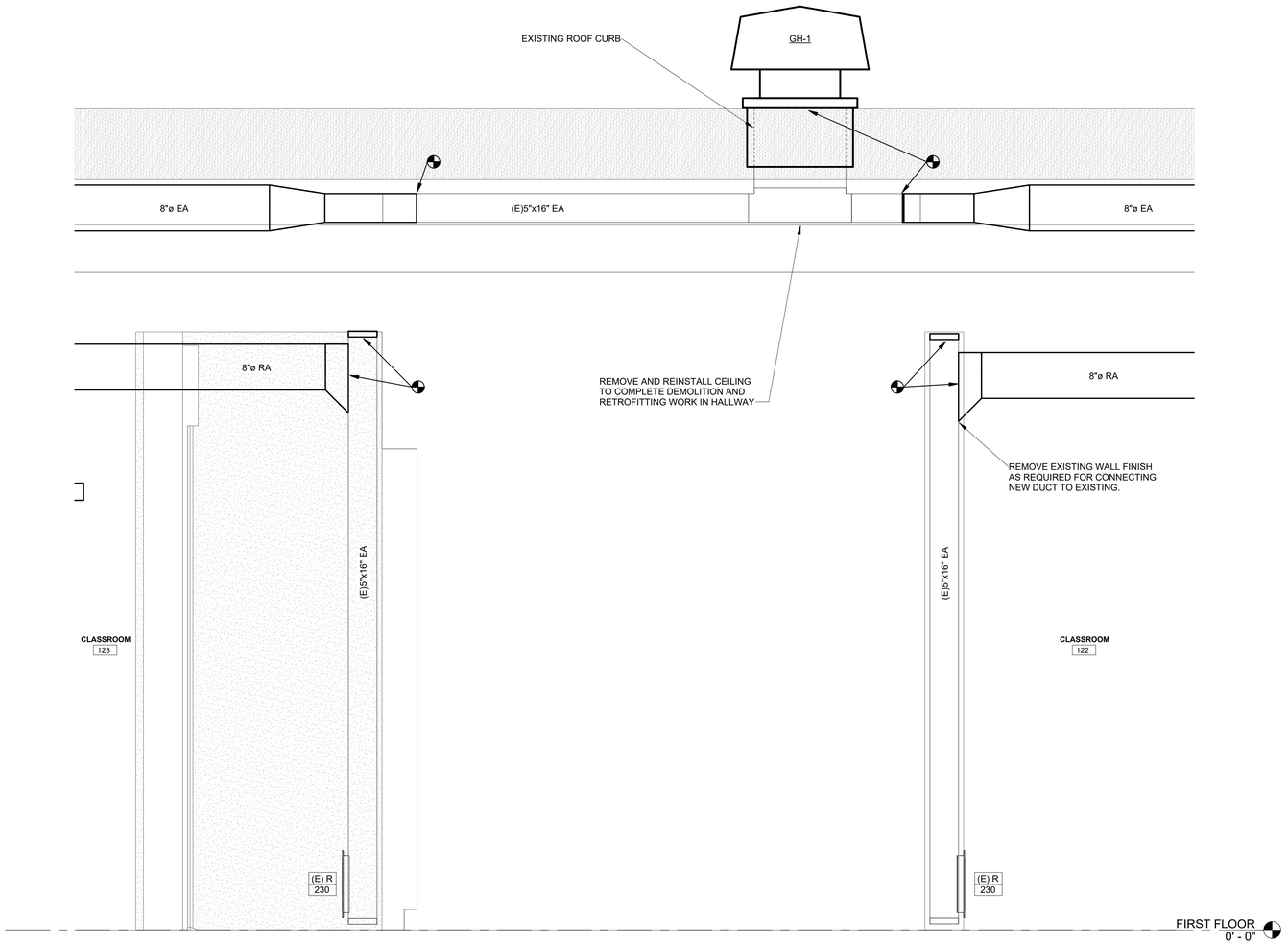
STATE OF MAINE · JARED M. MERRY · No. 11679 · LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	As indicated

DRAWN BY	DESIGNED BY	CHECKED BY
ITB	JMM	JMM

PROJECT No. 10377.028

DRAWING NO. **MP101** REV.



1 / M-301 **CLASSROOM EXISTING DUCTWORK CONNECTION**
SCALE: 1" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

ISSUED FOR BID

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PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

MECHANICAL SECTION

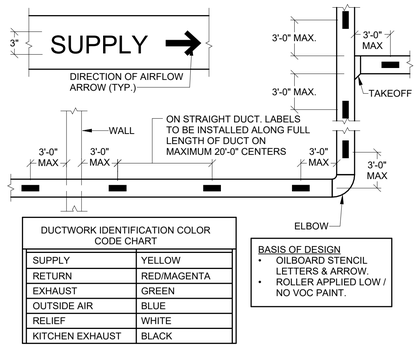
STATE OF MAINE
JARED M. MERRY
No. 11679
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	1" = 1'-0"

DRAWN BY	DESIGNED BY	CHECKED BY
ITB	JMM	JMM

PROJECT No. 10377.028

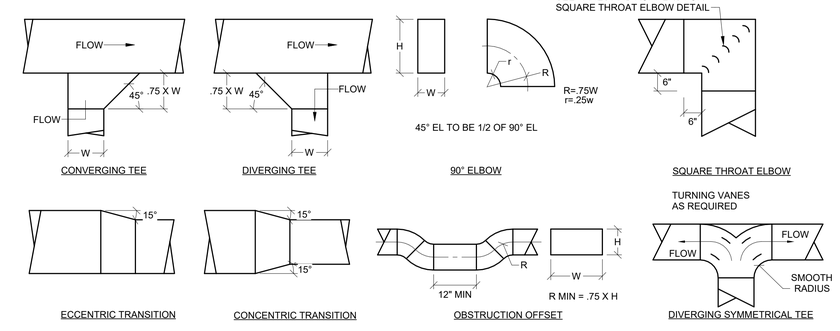
DRAWING NO. **M-301** REV.



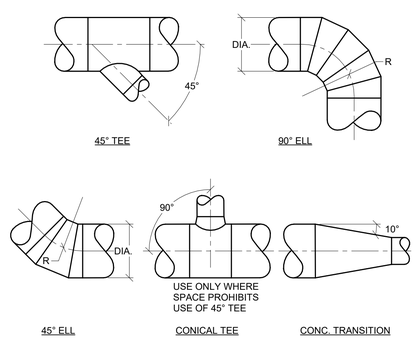
DUCTWORK IDENTIFICATION COLOR CODE CHART	
SUPPLY	YELLOW
RETURN	RED/MAGENTA
EXHAUST	GREEN
OUTSIDE AIR	BLUE
RELIEF	WHITE
KITCHEN EXHAUST	BLACK

BASIS OF DESIGN
- OILBOARD STENCIL LETTERS & ARROW.
- ROLLER APPLIED LOW / NO VOC PAINT.

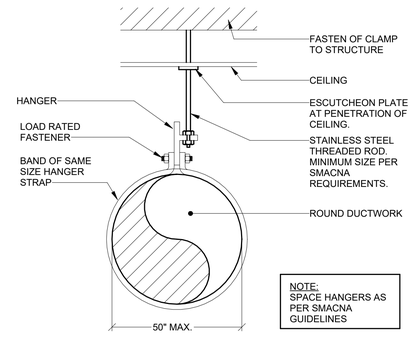
1 M-501 DUCT LABELS
NTS



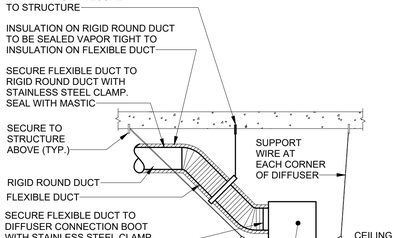
2 M-501 STANDARD RECTANGULAR DUCT DETAILS
NTS



3 M-501 STANDARD ROUND DUCT DETAILS
NTS

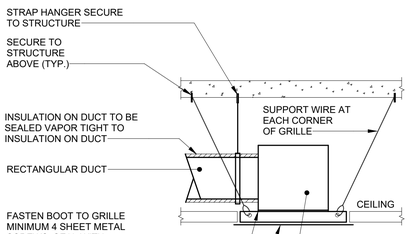


4 M-501 ROUND DUCT HANGER SUPPORT DETAIL
NTS



NOTES:
1. DRYWALL, METAL STUDS OR ANY OTHER RIGID MATERIAL MUST NOT TOUCH DUCT.
2. SUPPORT DUCT FROM HANGERS ON EITHER SIDE OF WALL. DO NOT LET DUCT "LOAD" ONTO WALL.
3. PENETRATION MUST BE SEALED 100% AIR TIGHT.
4. USE FIRE SEALANT AT FIRE WALLS.

5 M-501 DUCT NON-RATED WALL PENETRATION DETAIL
NTS



NOTES:
ALL MATERIALS TO BE INSTALLED IN STRICT ACCORDANCE WITH FIRESTOP SEALANT MANUFACTURER'S UL LISTED SYSTEM DETAILS.

6 M-501 FIRESTOP FOR 100"x100" MAX INSULATED DUCT PENETRATION OF ONE HOUR FIRE PARTITION
NTS

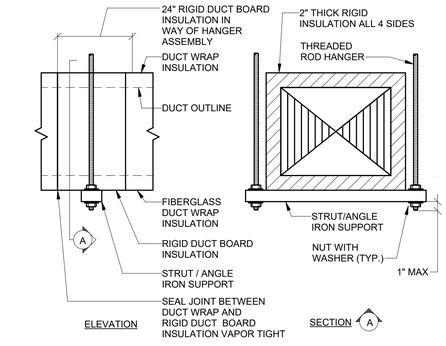
NOTES:
ALL MATERIALS TO BE INSTALLED IN STRICT ACCORDANCE WITH FIRESTOP SEALANT MANUFACTURER'S UL LISTED SYSTEM DETAILS.

7 M-501 PENETRATION OF ONE HOUR FIRE PARTITION
NTS

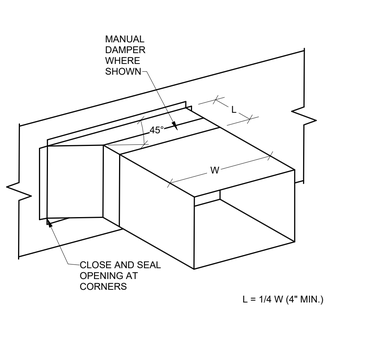
8 M-501 FLEXIBLE DUCT SUPPORT
NTS

SINGLE VANE SCHEDULE			
	R	SP	GA
SMALL	0'-2"	0'-1 1/2"	24
LARGE	0'-4 1/2"	0'-3 1/4"	22

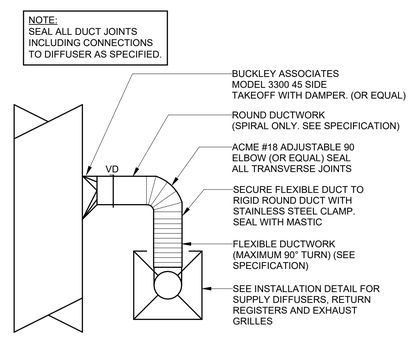
9 M-501 TURNING VANE AND RUNNERS FOR SQUARE ELBOWS
NTS



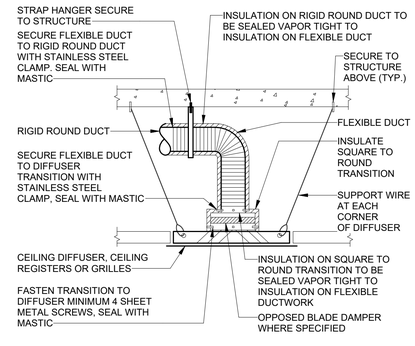
10 M-501 HANGER FOR DUCT WITH INSULATION
NTS



11 M-501 RECTANGULAR BRANCH DUCT TAKE-OFF DETAIL
NTS



12 M-501 ROUND BRANCH DUCT TAKE-OFF DETAIL
NTS



13 M-501 DIFFUSERS REGISTERS AND GRILLES INSTALL DETAIL
NTS

14 M-501 INSTALL DETAIL FOR CEILING DIFFUSER
NTS

15 M-501 RETURN & EXHAUST GRILLES INSTALLATION DETAIL
NTS

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
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207.989.4824

PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

MECHANICAL DETAILS

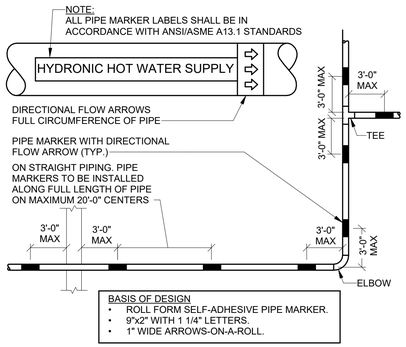
STATE OF MAINE · JARED M. MERRY · No. 11679 · LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	1/4" = 1'-0"

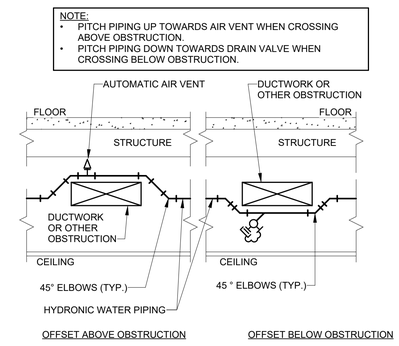
DRAWN BY	DESIGNED BY	CHECKED BY
ITB	JMM	JMM

PROJECT No. 10377.028

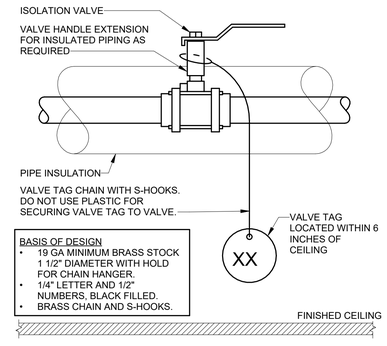
DRAWING NO. **M-501** REV.



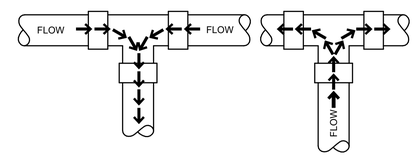
1 M-502 **PIPE MARKERS**
NTS



2 M-502 **VERTICAL PIPING OFFSET**
NTS

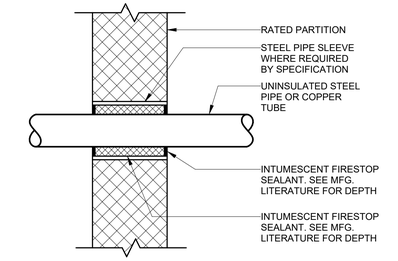


3 M-502 **VALVE TAG**
NTS

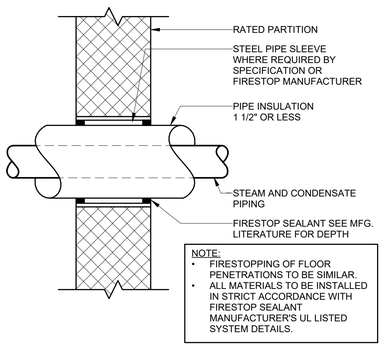


NOTE:
BULL HEAD TEES SHALL NOT BE USED!

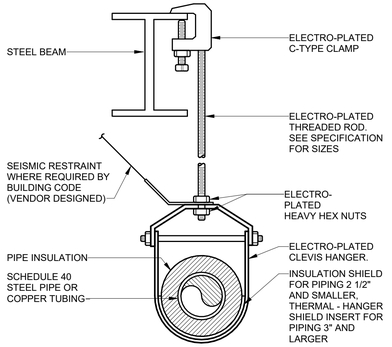
4 M-502 **BULL HEAD TEES**
NTS



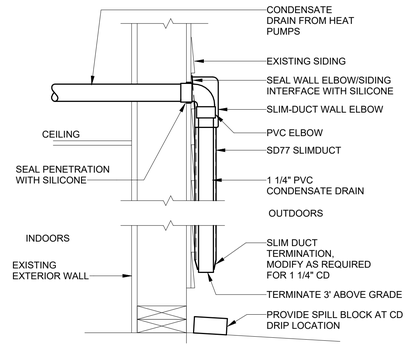
5 M-502 **FIRESTOPPING UNINSUALTED PIPE AT RATED PARTITIONS**
NTS



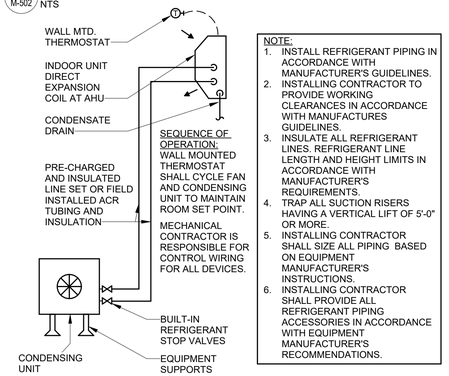
6 M-502 **FIRESTOPPING INSULATED PIPE AT RATED PARTITIONS**
NTS



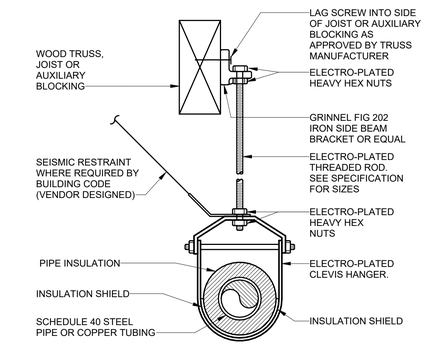
7 M-502 **PIPE SUPPORT TO STEEL STRUCTURE**
SCALE: 1/4" = 1'-0"



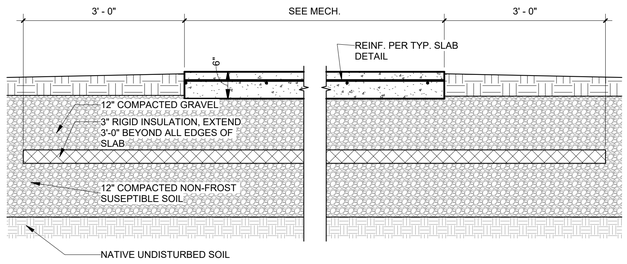
8 M-502 **SLIM DUCT CONDENSATE DRAIN DETAIL**
SCALE: 1/4" = 1'-0"



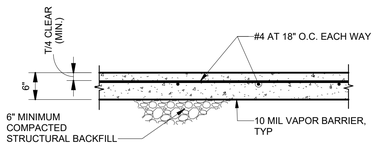
9 M-502 **DUCTLESS MINI-SPLIT AC REF. PIPING**
SCALE: 1/4" = 1'-0"



10 M-502 **PIPE SUPPORT TO WOOD STRUCTURE**
SCALE: 1/4" = 1'-0"



11 M-502 **TYPICAL EQUIPMENT PAD DETAIL**
SCALE: 3/4" = 1'-0"



12 M-502 **TYPICAL SLAB-ON-GRADE DETAIL**
SCALE: 3/4" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

MECHANICAL DETAILS

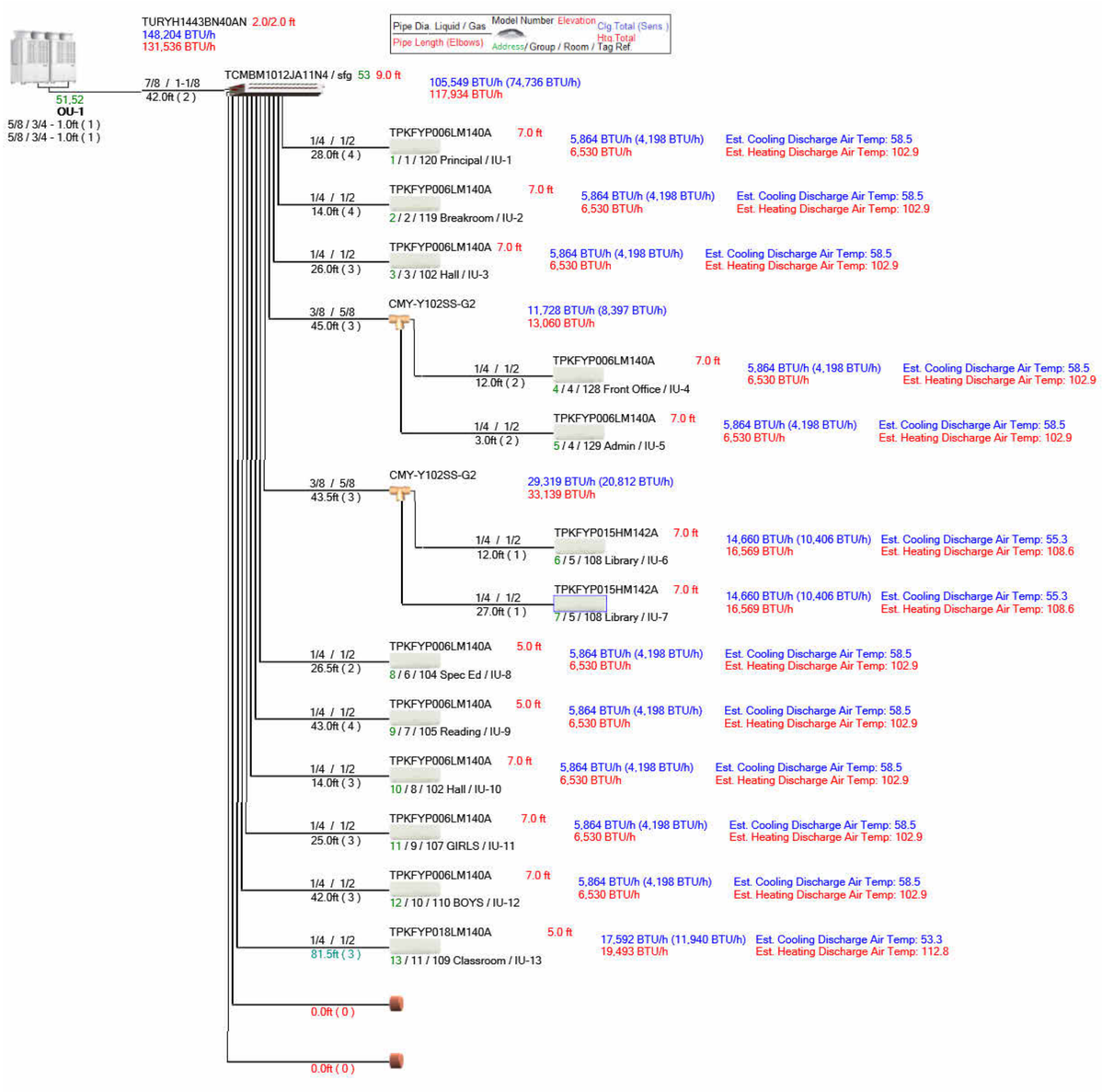
STATE OF MAINE JARED M. MERRY No. 11679 LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	As indicated

DRAWN BY	DESIGNED BY	CHECKED BY
ITB	JMM	JMM

PROJECT No. 10377.028

DRAWING NO. **M-502** REV.



1 / M-503 **MECHANICAL PIPING DIAGRAM - OU-1**
NTS

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
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207.989.4824

PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

MECHANICAL DETAILS

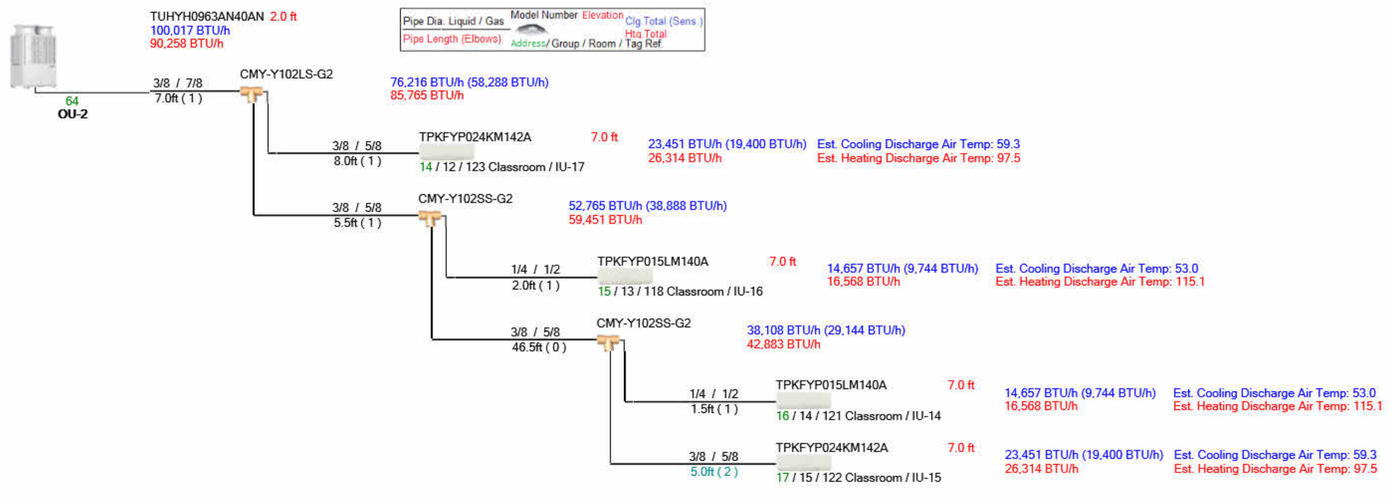
STATE OF MAINE
JARED M. MERRY
No. 11679
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	12" = 1'-0"

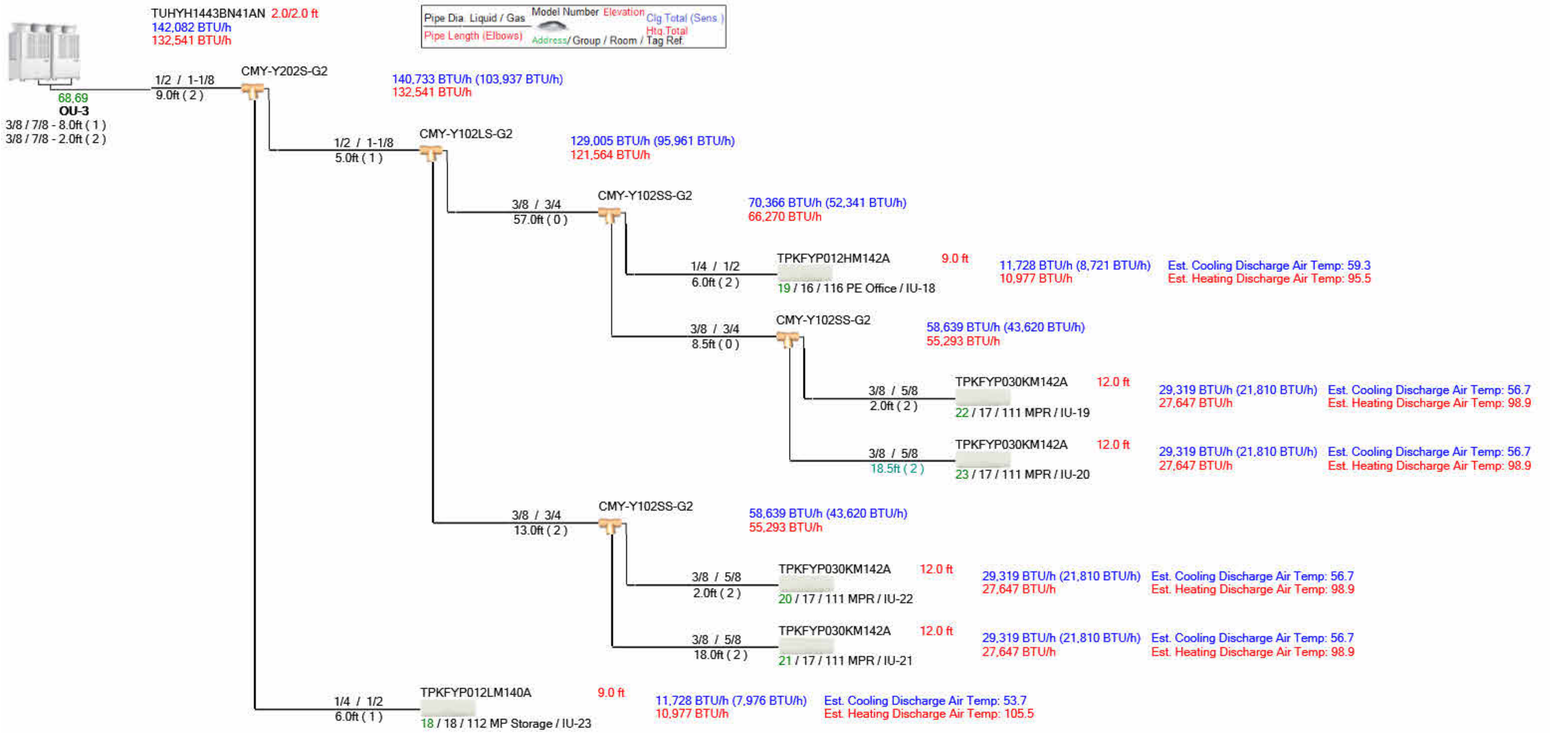
DRAWN BY	DESIGNED BY	CHECKED BY
ITB	JMM	JMM

PROJECT No. 10377.028

DRAWING NO. **M-503** REV.



1 M-504 **MECHANICAL PIPING DIAGRAM - OU-2**
NTS



2 M-504 **MECHANICAL PIPING DIAGRAM - OU-3**
NTS

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
WWW.HALEYWARD.COM
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PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

MECHANICAL DETAILS

STATE OF MAINE
JARED M. MERRY
No. 11679
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	12" = 1'-0"
DRAWN BY: ITB	DESIGNED BY: JMM	CHECKED BY: JMM
PROJECT No.: 10377.028	
DRAWING NO.: **M-504**	REV.

VRF/SPLIT SYSTEM INDOOR UNIT SCHEDULE

TAG	ROOM SERVING	OUTDOOR UNIT	MODEL	TYPE	NOMINAL COOLING CAPACITY(BTU/h)	NOMINAL HEATING CAPACITY (BTU/h)	COOLING DESIGN ENTERING AIR TEMP DB/WB (°F)	HEATING DESIGN ENTERING AIR TEMP DB/WB (°F)	CORRECTED CAPACITY					COOLING COIL LAT (°F)	HEATING COIL LAT (°F)	REFR. PIPE SIZE LIQUID/SUCTION (IN.)	FAN SPEED SETTING	PEAK FAN AIRFLOW (CFM)	SOUND PRESSURE PER FAN SPEED (dBA)	VOLTAGE/PHASE	POWER COOLING 208V (kW)	POWER HEATING 208V (kW)	MCA/MFS	CONDENSATE REMOVAL (GAL/HR)	NOTES
									COOLING DIVERSITY (FULL/PARTIAL) SEE NOTES 5&6	COOLING TOTAL CAPACITY (BTU/h)	COOLING SENSIBLE CAPACITY (BTU/h)	HEATING DIVERSITY (FULL/PARTIAL) SEE NOTES 5&6	HEATING CAPACITY (BTU/h)												
IU-1	120 Principal	OU-1	TPKFYP006LM140A	WALL-MOUNTED	6,000	6,700	80.0/67.0	70	FULL DEMAND	5,863.9	4,198.3	FULL DEMAND	6,530.2	58.5	102.9	1/4 / 1/2	HIGH	191	22-26-29-31	208/230V/1	0.02	0.01	0.24/0.24/15	0.26	1-8
IU-2	119 Breakroom	OU-1	TPKFYP006LM140A	WALL-MOUNTED	6,000	6,700	80.0/67.0	70	FULL DEMAND	5,863.9	4,198.3	FULL DEMAND	6,530.2	58.5	102.9	1/4 / 1/2	HIGH	191	22-26-29-31	208/230V/1	0.02	0.01	0.24/0.24/15	0.26	1-8
IU-3	102 Hall	OU-1	TPKFYP006LM140A	WALL-MOUNTED	6,000	6,700	80.0/67.0	70	FULL DEMAND	5,863.9	4,198.3	FULL DEMAND	6,530.2	58.5	102.9	1/4 / 1/2	HIGH	191	22-26-29-31	208/230V/1	0.02	0.01	0.24/0.24/15	0.26	1-8, 10
IU-4	128 Front Office	OU-1	TPKFYP006LM140A	WALL-MOUNTED	6,000	6,700	80.0/67.0	70	FULL DEMAND	5,863.9	4,198.3	FULL DEMAND	6,530.2	58.5	102.9	1/4 / 1/2	HIGH	191	22-26-29-31	208/230V/1	0.02	0.01	0.24/0.24/15	0.26	1-8
IU-5	129 Admin	OU-1	TPKFYP006LM140A	WALL-MOUNTED	6,000	6,700	80.0/67.0	70	FULL DEMAND	5,863.9	4,198.3	FULL DEMAND	6,530.2	58.5	102.9	1/4 / 1/2	HIGH	191	22-26-29-31	208/230V/1	0.02	0.01	0.24/0.24/15	0.26	1-8
IU-6	108 Library	OU-1	TPKFYP015HM142A	WALL-MOUNTED	15,000	17,000	80.0/67.0	70	FULL DEMAND	14,659.6	10,405.9	FULL DEMAND	16,569.3	55.3	108.6	1/4 / 1/2	HIGH	413	34-39-43	208/230V/1	0.03	0.03	0.38(208V)/0.38(230V)/15	0.56	1-8
IU-7	108 Library	OU-1	TPKFYP015HM142A	WALL-MOUNTED	15,000	17,000	80.0/67.0	70	FULL DEMAND	14,659.6	10,405.9	FULL DEMAND	16,569.3	55.3	108.6	1/4 / 1/2	HIGH	413	34-39-43	208/230V/1	0.03	0.03	0.38(208V)/0.38(230V)/15	0.56	1-8
IU-8	104 Spec Ed	OU-1	TPKFYP006LM140A	WALL-MOUNTED	6,000	6,700	80.0/67.0	70	FULL DEMAND	5,863.9	4,198.3	FULL DEMAND	6,530.2	58.5	102.9	1/4 / 1/2	HIGH	191	22-26-29-31	208/230V/1	0.02	0.01	0.24/0.24/15	0.26	1-8, 10
IU-9	105 Reading	OU-1	TPKFYP006LM140A	WALL-MOUNTED	6,000	6,700	80.0/67.0	70	FULL DEMAND	5,863.9	4,198.3	FULL DEMAND	6,530.2	58.5	102.9	1/4 / 1/2	HIGH	191	22-26-29-31	208/230V/1	0.02	0.01	0.24/0.24/15	0.26	1-8
IU-10	102 Hall	OU-1	TPKFYP006LM140A	WALL-MOUNTED	6,000	6,700	80.0/67.0	70	FULL DEMAND	5,863.9	4,198.3	FULL DEMAND	6,530.2	58.5	102.9	1/4 / 1/2	HIGH	191	22-26-29-31	208/230V/1	0.02	0.01	0.24/0.24/15	0.26	1-8, 10
IU-11	107 Girls	OU-1	TPKFYP006LM140A	WALL-MOUNTED	6,000	6,700	80.0/67.0	70	FULL DEMAND	5,863.9	4,198.3	FULL DEMAND	6,530.2	58.5	102.9	1/4 / 1/2	HIGH	191	22-26-29-31	208/230V/1	0.02	0.01	0.24/0.24/15	0.26	1-8, 10
IU-12	110 Boys	OU-1	TPKFYP006LM140A	WALL-MOUNTED	6,000	6,700	80.0/67.0	70	FULL DEMAND	5,863.9	4,198.3	FULL DEMAND	6,530.2	58.5	102.9	1/4 / 1/2	HIGH	191	22-26-29-31	208/230V/1	0.02	0.01	0.24/0.24/15	0.26	1-8
IU-13	109 Classroom	OU-1	TPKFYP018LM140A	WALL-MOUNTED	18,000	20,000	80.0/67.0	70	FULL DEMAND	17,591.6	11,940.4	FULL DEMAND	19,493.3	53.3	112.8	1/4 / 1/2	HIGH	438	31-36-41-46	208/230V/1	0.05	0.04	0.24/0.24/15	0.78	1-8
IU-14	121 Classroom	OU-2	TPKFYP015LM140A	WALL-MOUNTED	15,000	17,000	80.0/67.0	70	FULL DEMAND	14,656.9	9,744.1	FULL DEMAND	16,568.3	53.0	115.1	1/4 / 1/2	HIGH	353	29-34-37-40	208/230V/1	0.04	0.03	0.24/0.24/15	0.61	1-8
IU-15	122 Classroom	OU-2	TPKFYP024KM142A	WALL-MOUNTED	24,000	27,000	80.0/67.0	70	FULL DEMAND	23,451.1	19,400.1	FULL DEMAND	26,314.4	59.3	97.5	3/8 / 5/8	HIGH	918	39-49	208/230V/1	0.07	0.07	0.63(208V)/0.63(230V)/15	0.53	1-8
IU-16	118 Classroom	OU-2	TPKFYP015LM140A	WALL-MOUNTED	15,000	17,000	80.0/67.0	70	FULL DEMAND	14,656.9	9,744.1	FULL DEMAND	16,568.3	53.0	115.1	1/4 / 1/2	HIGH	353	29-34-37-40	208/230V/1	0.04	0.03	0.24/0.24/15	0.61	1-8
IU-17	123 Classroom	OU-2	TPKFYP024KM142A	WALL-MOUNTED	24,000	27,000	80.0/67.0	70	FULL DEMAND	23,451.1	19,400.1	FULL DEMAND	26,314.4	59.3	97.5	3/8 / 5/8	HIGH	918	39-49	208/230V/1	0.07	0.07	0.63(208V)/0.63(230V)/15	0.53	1-8
IU-18	116 PE Office	OU-3	TPKFYP012HM142A	WALL-MOUNTED	12,000	13,500	80.0/67.0	70	FULL DEMAND	11,727.7	8,721.0	FULL DEMAND	10,977.3	59.3	95.5	1/4 / 1/2	HIGH	413	34-39-43	208/230V/1	0.03	0.03	0.38(208V)/0.38(230V)/15	0.4	1-8
IU-19	111 MPR	OU-3	TPKFYP030KM142A	WALL-MOUNTED	30,000	34,000	80.0/67.0	70	FULL DEMAND	29,319.3	21,810.1	FULL DEMAND	27,646.6	56.7	98.9	3/8 / 5/8	HIGH	918	43-49	208/230V/1	0.07	0.07	0.63(208V)/0.63(230V)/15	0.97	1-9
IU-20	111 MPR	OU-3	TPKFYP030KM142A	WALL-MOUNTED	30,000	34,000	80.0/67.0	70	FULL DEMAND	29,319.3	21,810.1	FULL DEMAND	27,646.6	56.7	98.9	3/8 / 5/8	HIGH	918	43-49	208/230V/1	0.07	0.07	0.63(208V)/0.63(230V)/15	0.97	1-9
IU-21	111 MPR	OU-3	TPKFYP030KM142A	WALL-MOUNTED	30,000	34,000	80.0/67.0	70	FULL DEMAND	29,319.3	21,810.1	FULL DEMAND	27,646.6	56.7	98.9	3/8 / 5/8	HIGH	918	43-49	208/230V/1	0.07	0.07	0.63(208V)/0.63(230V)/15	0.97	1-9
IU-22	111 MPR	OU-3	TPKFYP030KM142A	WALL-MOUNTED	30,000	34,000	80.0/67.0	70	FULL DEMAND	29,319.3	21,810.1	FULL DEMAND	27,646.6	56.7	98.9	3/8 / 5/8	HIGH	918	43-49	208/230V/1	0.07	0.07	0.63(208V)/0.63(230V)/15	0.97	1-9
IU-23	112 MP Storage	OU-3	TPKFYP012LM140A	WALL-MOUNTED	12,000	13,500	80.0/67.0	70	FULL DEMAND	11,727.7	7,976.1	FULL DEMAND	10,977.3	53.7	105.5	1/4 / 1/2	HIGH	297	24-31-37-41	208/230V/1	0.04	0.03	0.24/0.24/15	0.59	1-8

NOTES:

1 NOMINAL COOLING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 80/67°F (DB/WB), OUTDOOR OF 95°F (DB)
2 NOMINAL HEATING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 70°F (DB), OUTDOOR OF 43°F (WB)
3 SEE OUTDOOR UNIT SCHEDULE FOR OUTDOOR AMBIENT CONDITIONS, CONNECTED CAPACITY, AND OTHER FACTORS ASSOCIATED WITH CORRECTED CAPACITIES
4 NOT USED
5 FULL DEMAND CORRECTED CAPACITY INCLUDES DE-RATE ASSOCIATED WITH INDOOR VS. OUTDOOR CONNECTED CAPACITY INDICATED ON OUTDOOR UNIT SCHEDULE FOR ASSOCIATED SYSTEM. PARTIAL CORRECTED CAPACITY ASSUMES SUFFICIENT DIVERSITY EXISTS SUCH THAT THE CONNECTED CAPACITY DE-RATE DOES NOT APPLY.IT IS THE DESIGNER'S RESPONSIBILITY TO ENSURE "DIAMOND SYSTEM BUILDER" IS SET IN THE APPROPRIATE OUTPUT CAPACITY SETTING (FULL DEMAND/PARTIAL DEMAND) PRIOR TO GENERATING THIS SCHEDULE.
6 IT IS RECOMMENDED TO ALWAYS BASE HEATING CORRECTED CAPACITY ON FULL DEMAND.
7 PROVIDE WITH CN 24 RELAY KIT.
8 PROVIDE WITH MANUFACTURER'S TAR-U01MEDU-K WIRELESS CONTROLLER.
9 PROVIDE WITH SAFTEY TECHNOLOGY WIRE GUARD PROTECTIVE CAGE OR EQUIVALENT.
10 PROVIDE WITH CONDENSATE LIFT PUMP.

VRF/SPLIT SYSTEM OUTDOOR UNIT SCHEDULE

TAG	SERVES	MANUFACTURER	MODEL	MODULES	NOM. COOLIGN CAPACITY (BTU/h)	NOM. HEATING CAPACITY (BTU/h)	COOLIGN EFF. IEER/EER	HEATING COP @ 47°F	CONNECTED CAPACITY (% OF NOM)	DESIGN COOLING OUDOOR DB (°F)	DESIGN HEATING OUTDOOR WB (°F)	MAX PIPE LENGTH FROM BC OR FIRST PIPE JOINT (FT)	REF. PIPING SIZES LIQUID/SUCTION	CORRECTED COOLING CAPACITY (BTU/h)	CORRECTED HEATING CAPACITY (BTU/h)	SOUND PRESSURE (dBA)	COMPRESSOR TYPE / QUANTITY	PRELIM. FIELD ADDED CHARGE (SEE NOTE 5)	ELECTRICAL - PER MODULE				NOTES
																			VOLTAGE / PHASE	MCA	RFS	MOCP	
OU-1	OFFICES / LIB	TRANE/MITSUBISHI	TURYH1443BN40AN	HP72, HP72	144,000	160,000	21.6 / 11.15	3.635	75.0 %	82.0	-10.4	86.4	7/8 / 1-1/8	148,203.9	131,536.1	59.5/61	SCROLL/2	27.7	208/230V / 3Ø	55/49, 55/49	60/50, 60/50	90/80, 90/80	1-12
OU-2	CLASSROOMS	TRANE/MITSUBISHI	TUHYH0963AN40AN	HP96	96,000	108,000	22.15 / 12.4	4.175	81.3 %	82.0	-10.4	61.1	3/8 / 7/8	100,017.4	90,258.4	56/58.5	SCROLL/1	9.6	208/230V / 3Ø	63/57	70/60	100/90	1-12
OU-3	GYNASSIUM	TRANE/MITSUBISHI	TUHYH1443BN41AN	HP72, HP72	144,000	160,000	21.25 / 11.2	3.895	100.0 %	82.0	-10.4	93.9	1/2 / 1-1/8	142,082.3	132,541.0	77.5/79.5	SCROLL/2	13.7	208/230V / 3Ø	55/49, 55/49	55/49, 55/49	90/80, 90/80	1-12

NOTES:

1 NOMINAL COOLING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 80/67°F (DB/WB), OUTDOOR OF 95°F (DB).
2 NOMINAL HEATING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 70°F (DB), OUTDOOR OF 43°F (WB).
3 EFFICIENCY VALUES FOR EER, IEER, COP ARE BASED ON AHRI 1230 TEST METHOD FOR MIXTURE OF DUCTED & NON-DUCTED INDOOR UNITS.
4 FOR SYSTEMS WITH MULTIPLE MODULES, REFRIGERANT PIPE DIMENSIONS INDICATE TOTAL SYSTEM COMBINED PIPING DOWNSTREAM OF MODULE TWINNING.
5 ADDED FIELD CHARGE LISTED IS IN ADDITION TO FACTORY CHARGE, THIS MUST BE UPDATED BASED UPON FINAL AS-BUILT PIPING LAYOUT.
6 FACTORY REPRESENTATIVES SHALL REVIEW THE PROJECT PRIOR TO AND THROUGHOUT THE INSTALLATION OF CITY MULTI EQUIPMENT.
7 FACTORY REPRESENTATIVES SHALL STARTUP AND COMMISSION CITY MULTI EQUIPMENT UPON COMPLETION OF EQUIPMENT INSTALLATIONS.
8 FACTORY REPRESENTATIVES SHALL PROVIDE ON-SITE ASSISTANCE FOR THE BMS INTEGRATION OF THE CITY MULTI EQUIPMENT.
9 FACTORY REPRESENTATIVES SHALL PROVIDE END-USER TRAINING ON THE CITY MULTI EQUIPMENT UPON COMPLETION OF THE INSTALLATION OF EQUIPMENT.
10 PROVIDE 24" SUPER STAND KIT.
11 PROVIDE WITH SNOW AND HAILE GUARD.
12 PROVIDE WITH APPROPRIATELY SIZED CONCRETE PAD FOR OU. REIFORCED WITH #4 REBAR, 12" OC, EACH WAY. 6" DEPTH, MINIMUM.

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

MECHANICAL SCHEDULES

STATE OF MAINE JARED M. MERRY No. 11679 LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	12" = 1'-0"

DRAWN BY	DESIGNED BY	CHECKED BY
ITB	JMM	JMM

PROJECT No. 10377.028

DRAWING NO. **M-601** REV.

ERV SCHEDULE

TAG	LOCATION	AREA SERVED	TOTAL AIRFLOW (CFM)	RETURN AIRFLOW (CFM)	FAN SECTIONS								ELECTRICAL DATA						ENERGY RECOVERY WHEEL (Y/N)	OPERATING WEIGHT (LBS)	PRE FILTERS (MERV)	FINAL FILTERS (MERV)	TYPICAL UNIT MFG & MODEL NO.	NOTES:
					SUPPLY FAN				EXHAUST FAN				ELECTRICAL CONNECTION # 1 - MAIN UNIT											
					SUPPLY AIRFLOW (CFM)	FAN QTY	TSP/ESP (IN WC)	HP (EACH)	EXHAUST AIRFLOW (CFM)	FAN QTY	TSP/ESP (IN WC)	HP (EACH)	VOLTS/Ø	FLA	MCA	MOCP	DISCONNECT BY DIV 26 (Y/N)	STANDBY POWER (Y/N)						
ERV-1	112 MP STORAGE	GYMNASIUM	625	625	632	1	.5	0.50	625	1	.4	0.50	208/1	3.1	3.5	15	Y	Y	N	196	8	8	RENEWAIRE HE07-JINH-S15AA--1GNT---L	ALL
ERV-2	109 CLASSROOM	CLASSROOM	230	230	230	1	.5	0.11	230	1	.4	0.11	120/1	2.5	15	15	Y	Y	N	52	8	8	RENEWAIRE EV PREMIUM LH	ALL
ERV-3	121 CLASSROOM	CLASSROOM	230	230	230	1	.5	0.11	230	1	.4	0.11	120/1	2.5	15	15	Y	Y	N	52	8	8	RENEWAIRE EV PREMIUM LH	ALL
ERV-4	122 CLASSROOM	CLASSROOM	230	230	230	1	.5	0.11	230	1	.4	0.11	120/1	2.5	15	15	Y	Y	N	52	8	8	RENEWAIRE EV PREMIUM LH	ALL
ERV-5	118 CLASSROOM	CLASSROOM	230	230	230	1	.5	0.11	230	1	.4	0.11	120/1	2.5	15	15	Y	Y	N	52	8	8	RENEWAIRE EV PREMIUM LH	ALL
ERV-6	123 CLASSROOM	CLASSROOM	230	230	230	1	.5	0.11	230	1	.4	0.11	120/1	2.5	15	15	Y	Y	N	52	8	8	RENEWAIRE EV PREMIUM LH	ALL
ERV-7	108 LIBRARY	LIBRARY/OFFICES	380	380	380	1	.5	0.5	380	1	.4	0.5	208/1	2.32	2.6	15	Y	Y	N	148	8	8	RENEWAIRE HE07-JINH-S15EE---GNT---L	ALL

NOTES:
1. REFER TO NOTES, DETAILS, SEQUENCE OF OPERATIONS, AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. PROVIDE SINGLE POINT POWER CONNECTION FOR ALL COMPONENTS AND ADDITIONAL SINGLE POINT POWER CONNECTION FOR LIGHTING CIRCUIT.
3. PROVIDE DOUBLE-WALL INSULATED (R-13 MIN.) CONSTRUCTION AND HINGED ACCESS DOORS.
4. PROVIDE WITH MANUFACTURER'S STANDARD CONTROLLER AND DUCT MOUNTED CO2 SENSOR.

VRF HEAT RECOVERY BRANCH CIRCUIT CONTROLLER

TAG	SERVES	MANUFACTURER	MODEL NUMBER	TYPE (DOUBLE / MAIN / SUB)	# OF PORTS	CONNECTED CAPACITY	VOTAGE/PHASE	POWER COOLING 208V (kW)	POWER HEATING 208V (kW)	MCA 208	NOTES
BC-1	OFFICE / LIBRARY	TRANE/MITSUBISHI	TCMBM1012JA11N4	MAIN	12	108,000.0	208/230V/1Ø	0.198	0.106	1.19	ALL

NOTES:
1 INCLUDE DIAMONDBACK BALL VALVES BV-SERIES, 700PSIG WORKING PRESSURE, FULL PORT, 410A RATED.
2 FOR SUB BC CONTROLLER CMB-P-NU-GB1 OR -GB, THE TOTAL CONNECTABLE INDOOR UNIT CAPACITY CAN BE 126,000 BTUS OR LESS. IF TWO SUB BC CONTROLLERS ARE USED, THE TOTAL INDOOR UNIT CAPACITY CONNECTED TO BOTH SUB BC CONTROLLERS ALSO CANNOT EXCEED 126,000 BTUS. FOR SUB BC CONTROLLER CMB-P1016NU-HB1 THE TOTAL CONNECTABLE INDOOR UNIT CAPACITY CAN BE 126,000 BTUS OR LESS. HOWEVER, IF TWO SUB CONTROLLERS ARE USED, AND ONE OF THEM IS CMB-1016NU-HB1, THE TOTAL INDOOR UNIT CAPACITY CONNECTED TO BOTH SUB CONTROLLERS MUST NOT EXCEED 168,000 BTUS.
3 PROVIDE WITH ACCESSORY BALL VALVES TO ALL PORTS ON BRANCH CONTROLLER.

ELECTRIC DUCT COIL SCHEDULE

TAG	LOCATION	ROWS	AIR DATA						ELECTRICAL DATA	MFG SIZE HxL (IN.)	TYPICAL UNIT MFG & MODEL NO.	NOTES:
			CFM	MBH	KW	EAT/LAT (°F)	MAX FACE VELOCITY (FPM)	MAX APD (IN WC)	VOLTS/Ø			
EDC-1	GYM	1	625	17.06	5	40/65	700	0.01	208/1	8x18	INDEECO QUA	1
EDC-2	CLASSROOMS	1	270	10.25	3	40/75	773.5	0.01	208/1	8"Ø	RENEWAIRE RH RHD3240-8	1
EDC-3	LIBRARY	1	380	10.25	3	40/65	420	<0.01	208/1	12x12	INDEECO QUA	1

NOTES: 1. PROVIDE WITH INTEGRAL CONTROLLER WITH SCR CONTROLS.

ELECTRIC UNIT HEATER SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	CFM	BTUH	ELECTRICAL						DIMENSIONS H X W X D	NOTES:
						VOLTAGE	PHASE	FLA	KW	MCA	MOCP		
EUH-1	QMARK	CUS93505483FFW	CEILING RECESSEED	250	17060	480	3	6	5	10	15	26 3/8" x 35" x 9 7/8"	1,2,3

NOTES:
1. COLOR/FINISH TO BE DETERMINED BY THE CLIENT.
2. DISCONNECT BY ELECTRICAL CONTRACTOR.
3. PROVIDE WITH WALL RECESS TRIM KIT.
4. UNIT HEATERS TO BE MOUNTED AT A MAXIMUM OF 10' AFF.

HYDRONIC KICKSPACE HEATER SCHEDULE

TAG	LOCATION	HOT WATER UNIT						ELECTRICAL					TYPICAL UNIT MFG & MODEL NO.	NOTES:
		CFM	MBH	GPM	EWT/LWT (°F)	MAX WPD (FT. HD)	PIPING RUNOUT SIZE (IN.)	VOLTAGE	PHASE	FLA	MCA	MOCP		
KH-1	119 BREAKROOM	103	8460	1	180/160	0.22	3/4	120	1	0.5	0.75	15	BEACON MORRIS K-84	ALL

NOTES: 1. INFORMATION GIVEN FOR WHEN HEATER IS OPPERATING IN "HIGH" MODE.
2. GRILL COLOR TO BE DETERMINED BY OWNER
3. PROVIDE WITH MANUFACTURER'S AQUASTAT.

REGISTER, DIFFUSER & GRILL SCHEDULE

TAG	MAX CFM	NECK SIZE	TYPE	DELTA - P	MAX NC	THROW (FT)	MFG AND MODEL NO.	NOTES
S-1	625	18"x12"	SIDEWALL	0.016	-	10-15-23	PRICE 600	2, 4, 5
S-2	230	8"Ø	CEILING (SUSPENDED)	<0.007	<20	4-10-17	METALAIRE 9000	4, 5, 6, 7
S-3	50	6"Ø	CEILING	0.001	<20	1-2-6	METALAIRE 9000	2, 4, 6, 8
S-4	150	24"x4"	SIDEWALL	0.006	-	7-12-24	PRICE 600	2, 4, 5
R-1	80	6"Ø	CEILING	0.029	-	-	METALAIRE 5700	2, 4, 5, 6
GH-1	460	14"x14"	ROOFTOP	<0.024	-	-	GREENHECK FGR	4, 5, 9
W-1	230	8"Ø	EXTERNAL WALL	0.010	-	-	GREENHECK WC-8	4, 5

KEYED NOTES:
1 PROVIDE WITH OPTIONAL SDFA FRAMES, CORDINATE SPIRAL DUCT DIAMETER WITH PLANS.
2 PROVIDE WITH OPTIONAL VCS3 OPPOSED BLADE DAMPERS.
3 PROVIDE WITH OPTIONAL POB.
4 ALUMINUM CONSTRUCTION.
5 COLOR/FINISH TO BE DETERMINED BY OWNER.
6 PROVIDE WITH MELTALAIRE TR DUCT TRANSITIONS
7 14x14 INCH FACE
8 8x8 INCH FACE
9 FIELD VERIFY EXISTING CURB DIMENSIONS BEFORE ORDERING

LOUVER SCHEDULE

TAG	LOCATION	SERVICE	FREE AREA (FT^2)	CFM	SP (IN WG)	SIZE WxH (IN)	TYPICAL UNIT MFG. & MODEL	NOTES
L-1	MP STORAGE	INTAKE	1.11	625	0.047	20x20	GREENHECK ESD-635	1
L-2	LIBRARY	INTAKE	0.57	380	0.066	16x16	GREENHECK ESD-635	1

NOTES
1. PROVIDE ALUMINUM BIRD SCREEN

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
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PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

MECHANICAL SCHEDULES

STATE OF MAINE · JARED M. MERRY · No. 11679 · LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	12" = 1'-0"
DRAWN BY: ITB	DESIGNED BY: JMM	CHECKED BY: JMM
PROJECT No. 10377.028	
DRAWING NO. **M-602**	REV.

GENERAL CONTROLS NOTES:

1. ALL VRF INDOOR UNITS SHALL BE PROVIDED WITH AND CONTROLLED BY A SINGLE DELUXE MA THERMOSTAT. EACH THERMOSTAT M-NET COMMUNICATION WIRE SHALL DAISY CHAIN BETWEEN ALL INDOOR UNITS AND BRANCH CONTROLLER(S) THROUGHOUT THE BUILDING AND CONNECT BACK TO THE CENTRAL CONTROLLER.

GLOBAL PROJECT SETPOINTS:

OCCUPIED SETPOINTS:

HEATING:	68°F	(ADJ.)
COOLING:	75°F	(ADJ.)
CO2:	600 PPM	(ADJ.)

UNOCCUPIED SETPOINTS:

HEATING:	55°F	(ADJ.)
COOLING:	85°F	(ADJ.)

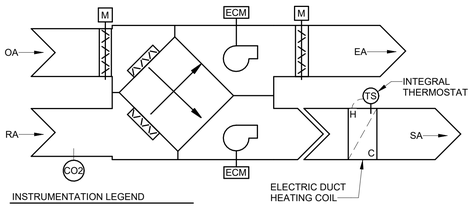
OTHER SEQUENCES OF CONTROL

1. VESTIBULE CABINET UNIT HEATER:

A. THE VESTIBULE CABINET UNIT HEATER (CUH) SHALL RESPOND TO A SINGLE THERMOSTAT LOCATED ON THE VESTIBULE WALL.
B. WHEN THE TEMPERATURE FALLS BELOW THE HEATING SETPOINT (60°F, ADJUSTABLE) THE UNIT HEATER SHALL ENERGIZE AND THE BLOWER SHALL START. WHEN THE THERMOSTAT IS SATISFIED THE HEATER SHALL DE-ENERGIZE AND BLOWER SHALL TURN OFF.

2. BREAK ROOM KICKSPACE HEATER:

A. THE KICKSPACE HEATER (KH) SHALL RESPOND TO AN EXISTING THERMOSTAT LOCATED ON THE BREAKROOM WALL.
B. WHEN THE TEMPERATURE FALLS BELOW THE HEATING SETPOINT (68°F, ADJUSTABLE) THE EXISTING CONTROL VALVE SHALL OPEN AND THE BLOWER SHALL START. WHEN THE THERMOSTAT IS SATISFIED THE BLOWER SHALL BE OFF AND HEATING CONTROL VALVE SHALL BE CLOSED.



INSTRUMENTATION LEGEND

M	MOTOR
ECM	ELEC. COMMUTATED MOTOR
SA	SUPPLY AIR
RA	RETURN AIR
OA	OUTSIDE AIR
EA	EXHAUST AIR
TS	TEMPERATURE SENSOR
CO2	CO2 SENSOR

A. GENERAL:

1. THE ERV AND ELECTRIC DUCT HEATER SHALL BE CONTROLLED VIA THEIR OWN INTEGRAL CONTROLLERS.
2. ALL SETPOINTS SHALL BE ADJUSTABLE.
3. OPERATION SHALL BE BASED ON THE OCCUPANCY SCHEDULE AS SET BY THE FACILITY'S MANAGEMENT AND PROGRAMMED INTO THE INTEGRAL CONTROLLER.
4. ALL SENSORS SHOWN SHALL BE SUPPLIED WITH THE UNIT.

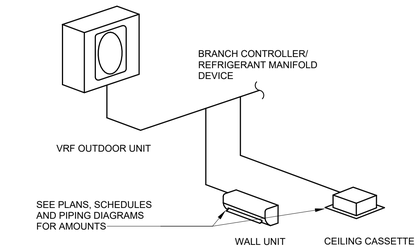
B. ERV CONTROL:

1. UNOCCUPIED: THE ERV FANS SHALL BE OFF AND THE OUTSIDE AIR AND EXHAUST AIR DAMPERS SHALL BE CLOSED.
2. OCCUPIED: THE ERV EXHAUST AIR AND OUTSIDE AIR DAMPERS SHALL BE OPEN. THE ERV SUPPLY FAN SHALL START AND RUN AT THE MINIMUM VENTILATION RATE SETPOINT, INDICATED ON THE SCHEDULE.
3. WHEN CO2 LEVELS RISE ABOVE 600 PPM, ADJ. THE ERV SUPPLY AND EXHAUST FANS SHALL RAMP THEIR SPEED TO MAINTAIN CO2 LEVELS OF 6000 PPM OR LESS, ADJ.

C. ELECTRIC DUCT HEATER CONTROL:

1. THE ELECTRIC DUCT HEATER SHALL ENERGIZE WHEN THE ASSOCIATED ERV SUPPLY FAN IS OPERATIONAL AND MODULATE TO MAINTAIN A SUPPLY AIR TEMPERATURE OF 68°F (ADJ.).

3 M-701 TYPICAL ERV AND DUCT HEATER SEQUENCE OF OPERATIONS
NTS

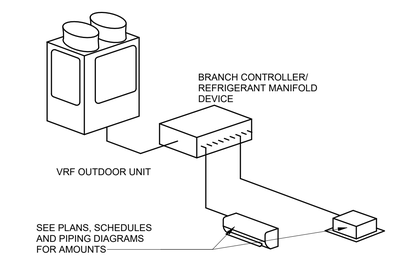


VRF CHANGEOVER HEAT PUMP SYSTEM

1. GENERAL
   A. THE SYSTEM SHALL OPERATE AS A CHANGEOVER VRF HEAT PUMP SYSTEM.
   B. EACH INDOOR UNIT SHALL CONDITION A SINGLE ZONE THROUGH A SINGLE WALL MOUNTED CONTROLLER.
   C. INDOOR AND OUTDOOR UNITS SHALL BE CONTROLLED BY THE MANUFACTURER'S CONTROLLERS:
      a. PROVIDE AND CONNECT ALL INDOOR AND OUTDOOR UNITS TO A SINGLE CENTRAL CONTROLLER.
      b. PROVIDE WALL MOUNTED ZONE CONTROLLERS AS INDICATED ON THE MECHANICAL PLANS.
2. CYCLES/MODES:
   A. THE CYCLE/MODE OF THE ZONE EQUIPMENT AND OUTDOOR EQUIPMENT SHALL BE DETERMINED AND SET BY THE MANUFACTURER'S HEAT PUMP CONTROLS.
   B. ALL SETPOINTS SHALL BE FIELD ADJUSTABLE FROM THE UNIT ZONE CONTROLLERS AND CENTRAL CONTROLLER.

3. AUXILIARY HEAT:
   EXISTING HYDRONIC HEAT SHALL ACT AS AUXILIARY HEAT TO THE EACH VRF ZONE. PROVIDE MANUFACTURER CN 24 RELAY KIT WITH EACH INDOOR UNIT. IF SPACE TEMPERATURE FALLS BELOW PRESET TEMPERATURE DIFFERENCE FROM SETPOINT, THE NEW CN 24 RELAY KIT SHALL OPEN THE EXISTING HYDRONIC ZONE VALVE FOR THAT ZONE. WHEN MANUFACTURER'S CONTROLS ARE SATISFIED, HYDRONIC ZONE VALVE SHALL CLOSE AND THE VRF SYSTEM SHALL CONTINUE TO OPERATE.

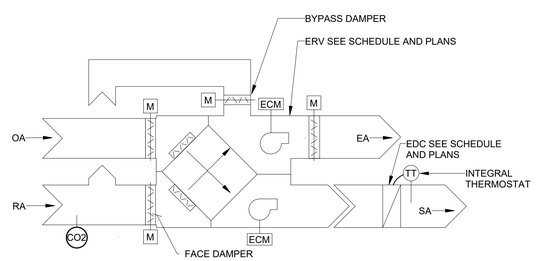
4 M-701 VRF CHANGEOVER HEAT PUMP SYSTEM SEQUENCE OF OPERATIONS
SCALE: 1/4" = 1'-0"



HEAT RECOVERY VRF HEAT PUMP SYSTEM

1. GENERAL
   A. THE SYSTEM SHALL OPERATE AS HEAT RECOVERY VRF HEAT PUMP SYSTEM TO SIMULTANEOUSLY HEAT AND COOL EACH ZONE.
   B. ALL INDOOR UNITS SHALL BE CONTROLLED BY A WALL MOUNTED CONTROLLER. IN SPACES SERVED BY MULTIPLE INDOOR UNITS A SINGLE CONTROLLER SHALL CONTROL THEM AS A SINGLE ZONE. SEE PLANS FOR CONTROLLER/THERMOSTAT LOCATIONS AND EQUIPMENT SERVED.
   C. INDOOR AND OUTDOOR UNITS SHALL BE CONTROLLED BY THE MANUFACTURER'S CONTROLLERS:
      a. PROVIDE AND CONNECT ALL INDOOR AND OUTDOOR UNITS TO A SINGLE CENTRAL CONTROLLER.
      b. PROVIDE WALL MOUNTED ZONE CONTROLLERS AS INDICATED ON THE MECHANICAL PLANS.
   D. EXISTING HYDRONIC HEAT SHALL ACT AS AUXILIARY HEAT TO THE EACH VRF ZONE. PROVIDE MANUFACTURER CN 24 RELAY KIT WITH EACH INDOOR UNIT. IF SPACE TEMPERATURE FALLS BELOW PRESET TEMPERATURE DIFFERENCE FROM SETPOINT, THE NEW CN 24 RELAY KIT SHALL OPEN THE EXISTING HYDRONIC ZONE VALVE FOR THAT ZONE. WHEN MANUFACTURER'S CONTROLS ARE SATISFIED, HYDRONIC ZONE VALVE SHALL CLOSE AND THE VRF SYSTEM SHALL CONTINUE TO OPERATE.
1. CYCLES/MODES:
   A. THE CYCLE/MODE OF THE ZONE EQUIPMENT AND OUTDOOR EQUIPMENT SHALL BE DETERMINED AND SET BY THE MANUFACTURER'S HEAT PUMP CONTROLS.
   B. ALL SETPOINTS SHALL BE FIELD ADJUSTABLE FROM THE UNIT ZONE CONTROLLERS, CENTRAL CONTROLLER AND BAS INTERFACE.

2 M-701 VRF HEAT RECOVERY SYSTEM SEQUENCE OF OPERATIONS
SCALE: 1/4" = 1'-0"



INSTRUMENTATION LEGEND

M	MOTORIZED DAMPER ACTUATOR
ECM	ELEC. COMMUTATED MOTOR
SA	SUPPLY AIR
RA	RETURN AIR
OA	OUTSIDE AIR
EA	EXHAUST AIR
T	THERMOSTAT
DP	DIFFERENTIAL PRESSURE SWITCH
P	STATIC PRESSURE SENSOR

A. GENERAL:

1. THE ERV AND ELECTRIC DUCT HEATER SHALL BE CONTROLLED VIA THE MANUFACTURER'S INTEGRAL CONTROLLERS CONTROLLERS.
2. ALL SETPOINTS SHALL BE ADJUSTABLE.
3. OPERATION SHALL BE BASED ON THE OCCUPANCY SCHEDULE AS SET BY THE FACILITY'S MANAGEMENT.
4. THE BUILDING'S FIRE ALARM SYSTEM SHALL INITIATE SHUTDOWN OF THE ERV SYSTEM.

B. ERV CONTROL:

1. THE POSSIBLE CYCLES/MODES SHALL BE OCCUPIED, UNOCCUPIED, ECONOMIZING & UNOCCUPIED BYPASS.
2. UNOCCUPIED CYCLE: THE ERV EXHAUST AIR AND OUTSIDE AIR DAMPERS SHALL BE CLOSED AND THE ERV SHALL BE OFF.
3. OCCUPIED CYCLE:
   A. THE ERV EXHAUST AND OUTSIDE AIR DAMPERS SHALL BE OPEN.
   B. THE ERV SHALL START AND RUN CONTINUOUSLY AT THE MINIMUM CFM INDICATED ON SCHEDULE.
   C. THE ERV FANS SHALL MODULATE BETWEEN THE MINIMUM VENTILATION RATE AND MAXIMUM UNIT FLOW TO MAINTAIN CO2 LEVELS BELOW 600 PPM (ADJ.).
   D. ECONOMIZING - PROVIDE WITH MANUFACTURER'S SENSORS AND BYPASS CONTROLLER. WHEN THE OUTDOOR AIR ENTHALPY IS LESS THAN THE RETURN AIR ENTHALPHY, AND THE OUTDOOR AIR TEMPERATURE IS GREATER THAN THE LOW LIMIT SETPOINT (50°F ADJ.).
      a. THE RA FACE DAMPER SHALL CLOSE AND THE BYPASS DAMPER SHALL OPEN.
      b. THE ERV SHALL RUN AT FULL CFM UNTIL SIGNAL IS SENT TO STOP ECONOMIZING MODE.

C. ELECTRIC DUCT HEATER CONTROL

1. DURING SPACE HEATING OPERATION AND WHEN THE SUPPLY AIR TEMPERATURE FROM THE ERV FALLS BELOW 68°F, THE DUCT HEATER SHALL ENERGIZE AND MODULATE TO MAINTAIN A SUPPLY AIR TEMPERATURE OF 68°F, ADJ.
2. DURING SPACE COOLING OPERATION THE DUCT HEATING COIL SHALL BE OFF.
3. WHEN THE ERV IS OFF THE DUCT HEATING COIL SHALL BE OFF.

5 M-701 ERV-1 (MULTIPURPOSE ROOM) SEQUENCE OF OPERATIONS
NTS

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

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PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

MECHANICAL SEQUENCES OF OPERATION

STATE OF MAINE — JARED M. MERRY — No. 11679 — LICENSED PROFESSIONAL ENGINEER

DATE	2025.04.22
SCALE	1/4" = 1'-0"
DRAWN BY	JNB
DESIGNED BY	JNB
CHECKED BY	JMM
PROJECT No.	10377.028
DRAWING NO.	M-701
REV.	

ABBREVIATIONS

A	AMPERES
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ARCH	ARCHITECT
ATS	AUTOMATIC TRANSFER SWITCH
ATC	AUTOMATIC TEMPERATURE CONTROL
AWG	AMERICAN WIRE GAUGE
BFG	BELOW FINISH GRADE
BLDG	BUILDING
C	CONDUIT
CAT	CATALOG
CB	CIRCUIT BREAKER
CBM	CERTIFIED BALLAS MANUFACTURERS
CKT	CIRCUIT
CL	CENTERLINE
CLF	CURRENT LIMITING FUSE
COL	COLUMN
CPT	CONTROL POWER TRANSFORMER
CT	CURRENT TRANSFORMER
CU	COPPER
DWG	DRAWING
EF	EXHAUST FAN
EM	EMERGENCY
ELEV.	ELEVATOR
EMT	ELECTRICAL METALLIC TUBING
EPO	EMERGENCY POWER OFF
EWC	ELECTRIC WATER COOLER
F	FUSE
FA	FIRE ALARM
FLA	FULL LOAD AMPERES
FMC	FLEXIBLE METAL CONDUIT
FT	FEET
GFI	GROUND FAULT CIRCUIT INTERRUPTER
GND, G	GROUND OR GROUNDING
GRMC	GALVANIZED RIGID METALLIC CONDUIT
HOA	HAND, OFF, AUTOMATIC SWITCH
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
IMC	INTERMEDIATE METAL CONDUIT
INT	INTERLOCK
IG	ISOLATED GROUND
KCMIL	THOUSAND CIRCULAR MILS
KVA	KILOVOLT AMPERES
KW	KILOWATTS
LTG	LIGHTING
LFMC	LIQUIDTIGHT FLEXIBLE METAL CONDUIT
MC	METAL CLAD CABLE
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURES ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NO	NORMALLY OPEN OR NUMBER
NTS	NOT TO SCALE
P	POLE
PB	PUSHBUTTON
PNL	PANEL
POS	PROVIDED UNDER OTHER SECTIONS
PVC	POLYVINYL CHLORIDE
PWR	POWER
QTY	QUAINTLY
REQ'D	REQUIRED
RMC	RIGID METAL CONDUIT
RMS	ROOT MEAN SQUARED
RNMC	RIGID NON-METALLIC CONDUIT
RTU	ROOF TOP UNIT
SP	SPARE
SW	SWITCH
SYM	SYMMETRICAL
TEL	TELEPHONE
TMCB	THERMAL MAGNETIC CIRCUIT BREAKER
TP	TAMPER PROOF
TYP	TYPICAL
UG	UNDERGROUND OR UNDERGRADE
UL	UNDERWRITERS LABORATORIES
V	VOLT
VT	VOLTAGE TRANSFORMER
W	WIRE
WH	WATER HEATER
WP	WEATHER PROOF
XFMR	TRANSFORMER
UON	UNLESS OTHERWISE NOTED
Δ	DELTA
Y	WYE
Ø	PHASE
G.C.	GENERAL CONTRACTOR
M.C.	MECHANICAL CONTRACTOR
E.C.	ELECTRICAL CONTRACTOR
NL	INDICATES NIGHT LIGHT FIXTURE TO BE CONNECTED TO UNSWITCHED SOURCE, ENERGIZED 24 HOURS A DAY

LIGHTING FIXTURES LEGEND

(REFER TO LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION)

CEILING OUTLET AND LED FIXTURE

- A / a / P-2 — 2'x2' LED FIXTURE TYPE 'A' (REFER TO LIGHTING SCHEDULE) "a" INDICATES CONTROLLED BY SWITCH 'a' "P-2" INDICATES CONNECTED TO PANEL P CIRCUIT NUMBER 2
- 2'x4'
- 1'x4'
- SURFACE MOUNTED DOWNLIGHT
- PENDANT MOUNTED DOWNLIGHT
- STRIP LIGHT (SURFACE, SUSPENDED, CHAIN-HUNG)
- LINEAR (SURFACE, SUSPENDED, CHAIN-HUNG)
- WRAP AROUND (SURFACE, SUSPENDED, CHAIN-HUNG)
- HIGH BAY (SURFACE, SUSPENDED, CHAIN-HUNG)

WALL OUTLET AND LED FIXTURE

- WALLPACK
- WALL SCONCE
- WALL SCONCE
- VANITY
- UNDERCABINET

WALL OUTLET AND LED EMERGENCY FIXTURE

- BATTERY BACKUP UNIT
- SINGLE HEADED REMOTE HEAD
- DOUBLE HEADED REMOTE HEAD
- EXIT SIGN (SHADING INDICATES DIRECTION OF FACE(S) DIRECTIONAL ARROWS AS INDICATED)

CEILING OUTLET AND LED EMERGENCY FIXTURE

- BATTERY UNIT
- EXIT SIGN (SHADING INDICATES DIRECTION OF FACE(S) DIRECTIONAL ARROWS AS INDICATED)
- EMERGENCY (LIFE SAFETY) LIGHTING FIXTURES - 'NL' DENOTES NIGHT LIGHT, "EM" DENOTES BATTERY PACK
- CRITICAL BRANCH FIXTURES

LIGHTING DEVICES LEGEND

- a — LOWER CASE LETTER DESIGNATION SUCH AS 'a' INDICATES CONTROL OF SWITCH LEG 'a'
- V — 'V' INDICATES OCCUPANCY SENSOR VACANCY OPERATION
- S — SINGLE POLE SWITCH
- S^3 — THREE WAY SWITCH
- S^4 — FOUR WAY SWITCH
- S^D — DIMMER SWITCH
- S^T — TIMER SWITCH
- S — DUAL TECHNOLOGY WALL MOUNTED OCCUPANCY SENSOR
- D — DIMMABLE DUAL TECHNOLOGY WALL MOUNTED OCCUPANCY SENSOR
- OC — DUAL TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR

FIRE ALARM SYSTEM LEGEND

- F 75CD (LF) — FIRE ALARM SYSTEM COMBINATION HORN/ADA APPROVED STROBE LIGHT SIGNAL UNIT (75CD UNLESS NOTED OTHERWISE) "LF" INDICATES LOW FREQUENCY DEVICE
- F 75CD (LF) — FIRE ALARM SYSTEM COMBINATION HORN/ADA APPROVED CEILING MOUNTED STROBE LIGHT SIGNAL UNIT (75CD UNLESS NOTED OTHERWISE) "LF" INDICATES LOW FREQUENCY DEVICE
- F 75CD — FIRE ALARM SYSTEM ADA APPROVED STROBE LIGHT SIGNAL UNIT (75cd UNLESS NOTED OTHERWISE)
- F 75CD — FIRE ALARM SYSTEM ADA APPROVED CEILING MOUNTED STROBE LIGHT SIGNAL UNIT (75CD UNLESS NOTED OTHERWISE)
- F — FIRE ALARM SYSTEM HORN
- F — FIRE ALARM SYSTEM DUAL ACTION MANUAL PULL STATION
- SD — DUCT SMOKE DETECTOR
- S "XX" — FIRE ALARM SYSTEM SMOKE DETECTOR "XX" DENOTES THE TYPE OF SMOKE DETECTOR
  - EL — ELEVATOR
  - CO — COMBINATION SMOKE DETECTOR AND CARBONMONOXIDE DETECTION
  - PO — PHOTOELECTRIC SMOKE DETECTOR
  - 120 — STANDALONE 120V SMOKE DETECTOR NOT CONNECTED TO THE BUILDING SYSTEM
- S — FIRE ALARM SYSTEM SMOKE DETECTOR MULTI-CRITERIA TYPE UNLESS OTHERWISE NOTED
- S — FIRE ALARM SYSTEM SMOKE DETECTOR MULTI-CRITERIA TYPE UNLESS OTHERWISE NOTED. WITH SOUNDER BASE.
- H — FIRE ALARM SYSTEM COMBINATION 135°F FIXED TEMPERATURE/ RATE OF RISE HEAT DETECTOR. `F' INDICATES 190°F FIXED TEMPERATURE.
- G — GAS DETECTOR
- B — FIRE ALARM SYSTEM BELL
- FS — SPRINKLER SYSTEM WATER FLOW SWITCH
- TS — SPRINKLER SYSTEM VALVE TAMPER SWITCH
- DH — MAGNETIC DOOR HOLDER/CLOSER
- AIM — FIRE ALARM ADDRESSABLE INPUT MODULE
- AOM — FIRE ALARM ADDRESSABLE OUTPUT MODULE
- RTI — REMOTE TEST INDICATOR
- FACP — FIRE ALARM CONTROL PANEL
- FAA — FIRE ALARM SYSTEM REMOTE ANNUNCIATOR PANEL
- K — FIRE ALARM KEY BOX
- ANSUL — KITCHEN CHEMICAL PULL STATION
- HELP — PLACE OF REFUGE CALL FOR HELP
- † — AUDIO AND VISUAL ALARM DEVICES SHALL BE MOUNTED 80" ABOVE

ELECTRICAL FIXTURES & EQUIPMENT LEGEND

- '#' — INDICATES CIRCUIT NUMBER CONNECTED TO

FIXTURES

20A, 125V RECEPTACLES

20A, 125V RECEPTACLES ALL TAMPERPROOF

- DUPLEX RECEPTACLE
- DUPLEX RECEPTACLE, HALF-SWITCHED
- DUPLEX RECEPTACLE MOUNTED AT COUNTER HEIGHT
- QUADRAPLEX RECEPTACLE, HALF-SWITCHED
- USB — DUPLEX RECEPTACLE WITH TWO USB CHARGING PORTS
- DUPLEX RECEPTACLE CONNECTED TO 120V EMERGENCY CIRCUIT. EMERGENCY SYSTEM RECEPTACLES SHALL HAVE INDICATION OF PANELBOARD AND CIRCUIT NUMBER SUPPLYING THEM.
- QUADRAPLEX RECEPTACLE CONNECTED TO 120V EMERGENCY CIRCUIT. EMERGENCY SYSTEM RECEPTACLES SHALL HAVE INDICATION OF PANELBOARD AND CIRCUIT NUMBER SUPPLYING THEM.
- FLUSH CEILING MOUNTED DUPLEX RECEPTACLE
- FLUSH CEILING MOUNTED QUAD RECEPTACLE
- OVERHEAD CORD REEL WITH GFI QUAD RECEPTACLE HUBBELL CATALOG #ACA12335-DR20 OR APPROVED EQUAL
- FLUSH POKE-THRU FLOOR WITH DUPLEX RECEPTACLE
- FLUSH POKE-THRU FLOOR WITH QUAD RECEPTACLE

OTHER RECEPTACLES (AS NOTED)

- SPECIAL RECEPTACLE, SEE SPECIAL RECEPTACLE SCHEDULE
- METAL RACEWAY WITH FULL SIZE DEVICES AS INDICATED. PROVIDE WITH AMOUNT OF CHANNELS NECESSARY TO INCORPORATE DEVICES SHOWN.

CONTROL DEVICES (AS NOTED)

- SE — EMERGENCY SHUT-OFF SWITCH
- SM — MANUAL MOTOR STARTER (THERMAL OVERLOAD SWITCH)
- SP — TOGGLE SWITCH WITH PILOT LIGHT (20 AMP)
- SK — KEYED TOGGLE SWITCH (20 AMP)
- PB — AUTOMATIC DOOR PUSH BUTTON FURNISHED AND INSTALLED BY OTHERS, WIRED BY THE ELECTRICAL CONTRACTOR. VERIFY EXACT REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGHING-IN
- TC — THERMAL CUTOUT, TEMPERATURE
- EPO — EMERGENCY POWER OFF PUSHBUTTON
- SS — START STOP STATION

EQUIPMENT

- 10 — MOTOR - NUMERAL DENOTES HORSEPOWER
- J , J — JUNCTION BOX - CEILING AND WALL MOUNTED RESPECTIVELY
- PB — PULL BOX - SIZE PER ELECTRIC CODE

DISCONNECTING EQUIPMENT

- 208 30AS/NF 3R — HEAVY DUTY UNFUSED DISCONNECT
- 208 30AS/20AF 3R — HEAVY DUTY FUSED DISCONNECT
  - NEMA RATING (NEMA 1 UNLESS OTHERWISE NOTED)
  - TIME DELAY FUSE TRIP RATING
  - VOLTAGE (SEE CIRCUITING FOR # OF POLES)
- EC — ENCLOSED BREAKER (AS NOTED)

CONTROLS EQUIPMENT

- CP — CONTROL PANEL
- LC — LIGHTING CONTACTOR
- TC — TIME CLOCK
- T — TIMER
- C — CONTACTOR
- VFD — VARIABLE FREQUENCY DRIVE

FIXTURE & EQUIPMENT DESIGNATIONS

- GFI — GROUND FAULT CIRCUIT INTERRUPTER
- WP — WEATHERPROOF

BUILDING GROUNDING GRID LEGEND

- ——G—— GROUNDING CABLE EXPOSED
- – –G– – GROUNDING CABLE BURIED
- LIGHTNING PROTECTION ROD
- GROUND ROD
- EXOTHERMIC BONDING CONNECTION
- BOLTED BORDING CONNECTION
- SBB — IT ROOM SECONDARY BUS BAR

CIRCUITRY, AND FEEDERS LEGEND

- LP2A#1,3,5 — HOMERUN TO PANEL "LP2A", CIRCUIT #1,3,5
- 1 — FEEDER SIZE TAG SYMBOL. REFER TO "LEGEND OF FEEDER SIZES".
- CIRCUITRY TURNING UP
- CIRCUITRY TURNING DOWN

POWER ONE-LINE LEGEND

- POWER TRANSFORMER
- M — KILOWATT HOUR METER
- M — KILOWATT HOUR METER WITH BREAKER
- 15A — ENCLOSED BREAKER WITH FRAME AND TRIP RATING
- 100A ATS — TRANSFER SWITCH WITH RATING AND TYPE (MANUAL OR AUTOMATIC) "ATS" FOR AUTOMATIC "MTS" FOR MANUAL
- 60A — UNFUSED DISCONNECT WITH FRAME RATING
- 200A 50A — FUSED DISCONNECT FRAME & FUSE TRIP RATING
- 50A — INLINE FUSE WITH TRIP RATING
- SYSTEM GROUND OR EQUIPMENT GROUND
- SPECICAL OUTLET
- M 1HP — MOTOR WITH HOURSEPOWER RATING
- G 100A 3P — GENERATOR WITH VOLTAGE, PHASES, RATING BUILT IN MAIN BREAKER WITH RATING, AND #OF POLES

AUDIO / VISUAL LEGEND

- AMP — SOUND SYSTEM SUB-AMPLIFIER
- VC — VOLUME CONTROL SWITCH - WALL MOUNTED
- SP — SPEAKER-CEILING MOUNTED, "V" INDICATES WITH VOLUME CONTROL
- TV — RECESSED AV MONITOR UTILITY BOX WITH DUPLEX RECEPTACLE AND DATA OUTLET. PROVIDE 1 1/4" CONDUIT TO WITH PULL STRING TO ABOVE DROP CEILING. 6' AFF CHIEF MODEL #PAC526F
- C — SEMI-FLUSH WALL MOUNTED, 120 VOLT, 3 WIRE SYNCHRONOUS, 12/24 HOUR ANALOG FACED CLOCK - INTERCONNECT TO THE EAREST RECEPTACLE CIRCUIT

SECURITY DEVICES LEGEND

- CR — CARD READER
- KP — KEY PAD
- DC — DOOR CONTACTS
- M — MOTION SENSOR
- GB — GLASS BREAK SENSOR
- EL — ELECTRIC DOOR LOCK, EITHER STRIKE OR LATCH, CONTRACTOR SHALL VERIFY WITH THE DOOR AND SECURITY VENDOR.
- RX — REQUEST TO EXIT DEVICE
- VIDEO CAMERA
- PB — PUSH/PANIC BUTTON
- SEC — SECURITY PANEL
- DR — DOOR RELEASE BUTTON
- INT — WALL MOUNTED TWO WAY INTERCOM

'V' INDICATES VIDEO CAPABILITY

EXISTING EQUIPMENT LEGEND

- EXISTING EQUIPMENT TO REMAIN (INDICATED BY LIGHT COLOR)
- EXISTING EQUIPMENT TO BE MODIFIED OR REMOVED (INDICATED AS BOLD AND DASHED.)

(E)	EXISTING TO REMAIN
(R)	EXISTING TO BE DISCONNECTED AND REMOVED
(RL)	EXISTING TO BE DISCONNECTED AND RELOCATED
(RP)	EXISTING TO BE REPLACED
(ER)	EXISTING IN NEW LOCATION
(EN)	EXISTING LOCATION WITH NEW DEVICE

COMMUNICATION DEVICES LEGEND

- W — TELEPHONE OUTLET: 4"x4" JUNCTION BOX WITH SINGLE GANG FACEPLATE AND 1" CONDUIT STUBBED 6" ABOVE AN ACCESSIBLE CEILING. 'W' INDICATES MOUNTING AT 48" AFF.
- COAXIAL OUTLET: 4"x4" JUNCTION BOX WITH SINGLE GANG FACEPLATE AND 1" CONDUIT STUBBED 6" ABOVE AN ACCESSIBLE CEILING.
- DATA OUTLET: 4"x4" JUNCTION BOX WITH SINGLE GANG FACEPLATE AND 1" CONDUIT STUBBED 6" ABOVE AN ACCESSIBLE CEILING.
- CEILING MOUNTED OUTLET
- FLOOR MOUNTED OUTLET
- WAP — WIRELESS ACCESS POINT

GENERAL ELECTRICAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NFPA 70, NATIONAL ELECTRICAL CODE (NEC), OSHA REGULATIONS, AS WELL AS APPLICABLE REGULATIONS OF THE PERTINENT FEDERAL, STATE, COUNTY, AND CITY AGENCIES. PROVIDE MATERIALS AND EQUIPMENT THAT COMPLY WITH ANSI, IEEE, IES AND NEMA STANDARDS. WHERE APPLICABLE, PROVIDE ONLY MATERIALS THAT ARE U.L. LISTED AND LABELED.
2. PROVIDE ALL NECESSARY ACCESSORIES REQUIRED TO MEET THE INTENT OF THE CONTRACT DRAWINGS.
3. ALL GENERAL NOTES, SYMBOL LISTS, ABBREVIATIONS AND DETAILS ARE TO BE CONSIDERED APPLICABLE TO ALL ELECTRICAL DRAWINGS FOR THIS PROJECT.
4. WHERE A DISCREPANCY OCCURS BETWEEN THE DRAWINGS AND THE SPECIFICATIONS, THE SPECIFICATIONS SHALL PREVAIL. CONTACT THE ENGINEER FOR CLARIFICATION WHEN SUCH A SITUATION OCCURS.
5. WHERE MATERIAL IS CALLED OUT IN THE LEGEND BY MANUFACTURER TYPE OR CATALOG NUMBER, SUCH DESIGNATIONS ARE TO ESTABLISH STANDARDS OR DESIRED QUALITY. ACCEPTANCE OR REJECTION OF PROPOSED SUBSTITUTIONS SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER.
6. ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL IN NATURE AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL/CIVIL DRAWINGS FOR EXACT LOCATION OF EQUIPMENT AND DEVICES, AND FURNITURE REQUIREMENTS, PRIOR TO ROUGHING IN FOR SAME.
7. GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS; PAY ALL GOVERNMENT AND STATE SALES TAXES AND FEES WHERE APPLICABLE, AND OTHER COSTS, INCLUDING UTILITY CONNECTIONS OR EXTENSIONS IN CONNECTION WITH THE PROJECT SCOPE OF WORK. FILE ALL NECESSARY DRAWINGS, PREPARE ALL DOCUMENTS AND OBTAIN ALL NECESSARY APPROVALS OF ALL GOVERNMENTAL AND STATE DEPARTMENTS HAVING JURISDICTION, OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTIONS FOR PROJECT SCOPE OF WORK AND DELIVER A COPY TO THE ENGINEER BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR THE PROJECT SCOPE OF WORK.
8. COOPERATE FULLY WITH SEPARATE CONTRACTORS SO WORK ON THOSE CONTRACTS MAY BE CARRIED OUT SMOOTHLY, WITHOUT INTERFERING WITH OR DELAYING WORK UNDER THIS CONTRACT. COORDINATE THE WORK OF THIS CONTRACT WITH WORK PERFORMED UNDER SEPARATE CONTRACTS.
9. EACH CONTRACTOR SHALL COORDINATE ITS CONSTRUCTION OPERATIONS WITH THOSE OF OTHER CONTRACTORS AND ENTITIES TO ENSURE EFFICIENT AND ORDERLY INSTALLATION OF EACH PART OF THE WORK. EACH CONTRACTOR SHALL COORDINATE ITS OPERATIONS WITH OPERATIONS, INCLUDED IN DIFFERENT SECTIONS, THAT DEPEND ON EACH OTHER FOR PROPER INSTALLATION, CONNECTION, AND OPERATION. SCHEDULE CONSTRUCTION OPERATIONS IN SEQUENCE REQUIRED TO OBTAIN THE BEST RESULTS WHERE INSTALLATION OF ONE PART OF THE WORK DEPENDS ON INSTALLATION OF OTHER COMPONENTS, BEFORE OR AFTER ITS OWN INSTALLATION. COORDINATE INSTALLATION OF DIFFERENT COMPONENTS WITH OTHER CONTRACTORS TO ENSURE MAXIMUM PERFORMANCE AND ACCESSIBILITY FOR REQUIRED MAINTENANCE, SERVICE, AND REPAIR. MAKE ADEQUATE PROVISIONS TO ACCOMMODATE ITEMS SCHEDULED FOR LATER INSTALLATION.
10. IF COMPLIANCE WITH TWO OR MORE STANDARDS OR DIRECTIVES IS SPECIFIED AND THE STANDARDS ESTABLISH DIFFERENT OR CONFLICTING REQUIREMENTS FOR MINIMUM QUANTITIES OR QUALITY LEVELS, COMPLY WITH THE MOST STRINGENT REQUIREMENT. REFER UNCERTAINTIES AND REQUIREMENTS THAT ARE DIFFERENT, BUT APPARENTLY EQUAL, TO ARCHITECT/ENGINEER FOR A DECISION BEFORE PROCEEDING.
11. THE QUANTITY OR QUALITY LEVEL SHOWN OR SPECIFIED SHALL BE THE MINIMUM PROVIDED OR PERFORMED. THE ACTUAL INSTALLATION MAY COMPLY EXACTLY WITH THE MINIMUM QUANTITY OR QUALITY SPECIFIED, OR IT MAY EXCEED THE MINIMUM WITHIN REASONABLE LIMITS. TO COMPLY WITH THESE REQUIREMENTS, INDICATED NUMERIC VALUES ARE MINIMUM OR MAXIMUM, AS APPROPRIATE, FOR THE CONTEXT OF REQUIREMENTS. REFER UNCERTAINTIES TO ENGINEER FOR A DECISION BEFORE PROCEEDING.
12. DELIVER, STORE, AND HANDLE PRODUCTS USING MEANS AND METHODS THAT WILL PREVENT DAMAGE, DETERIORATION, AND LOSS, INCLUDING THEFT. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND GENERALLY ACCEPTED CONSTRUCTION PRACTICE.
13. WARRANTY EQUIPMENT AND INSTALLATIONS FOR A PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION OF PROJECT
14. EACH CONTRACTOR SHALL ASSIGN REPRESENTATIVES WITH EXPERTISE AND AUTHORITY TO ACT ON ITS BEHALF AND SHALL SCHEDULE THEM TO PARTICIPATE IN AND PERFORM COMMISSIONING PROCESS ACTIVITIES FOR ALL NEW EQUIPMENT AND SYSTEMS.
15. PREPARE PROJECT SPECIFIC INFORMATION TO BE SUBMITTED AS SHOP DRAWINGS FOR PROJECT. SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL EQUIPMENT AND MATERIALS TO BE USED ON PROJECT. SUBMITTALS SHALL BE DRAWN ACCURATELY AND TO SCALE. DO NOT BASE SHOP DRAWINGS ON REPRODUCTIONS OF THE CONTRACT DOCUMENTS OR STANDARD PRINTED DATA. SUBMIT SHOP DRAWINGS IN QUANTITIES AS REQUIRED BY ARCHITECT.
16. THE EXISTENCE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES AND CONSTRUCTION INDICATED AS EXISTING ARE NOT GUARANTEED. BEFORE BEGINNING WORK, INVESTIGATE AND VERIFY THE EXISTENCE AND LOCATION OF UTILITIES, MECHANICAL AND ELECTRICAL SYSTEMS, AND OTHER CONSTRUCTION AFFECTING THE WORK. ADVISE ARCHITECT OF CONFLICTS OR DEFICIENCIES PRIOR TO STARTING WORK.
17. TAKE FIELD MEASUREMENTS AS REQUIRED TO FIT THE WORK PROPERLY. RECHECK MEASUREMENTS BEFORE INSTALLING EACH PRODUCT. WHERE PORTIONS OF THE WORK ARE INDICATED TO FIT TO OTHER CONSTRUCTION, VERIFY DIMENSIONS OF OTHER CONSTRUCTION BY FIELD MEASUREMENTS BEFORE FABRICATION. COORDINATE FABRICATION SCHEDULE WITH CONSTRUCTION PROGRESS TO AVOID DELAYING THE WORK.VERIFY SPACE REQUIREMENTS AND DIMENSIONS OF ITEMS SHOWN DIAGRAMMATICALLY ON DRAWINGS. IMMEDIATELY ON DISCOVERY OF THE NEED FOR CLARIFICATION OF THE CONTRACT DOCUMENTS, SUBMIT A REQUEST FOR INFORMATION TO ENGINEER. INCLUDE A DETAILED DESCRIPTION OF PROBLEM ENCOUNTERED, TOGETHER WITH RECOMMENDATIONS FOR CHANGING THE CONTRACT DOCUMENTS.
18. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND RECOMMENDATIONS FOR INSTALLING PRODUCTS IN APPLICATIONS INDICATED.
19. CONDUCT CONSTRUCTION OPERATIONS SO NO PART OF THE WORK IS SUBJECTED TO DAMAGING OPERATIONS OR LOADING IN EXCESS OF THAT EXPECTED DURING NORMAL CONDITIONS OF OCCUPANCY.
20. KEEP INSTALLED WORK CLEAN. CLEAN INSTALLED SURFACES ACCORDING TO WRITTEN INSTRUCTIONS OF MANUFACTURER OR FABRICATOR OF PRODUCT INSTALLED, USING ONLY CLEANING MATERIALS SPECIFICALLY RECOMMENDED. IF SPECIFIC CLEANING MATERIALS ARE NOT RECOMMENDED, USE CLEANING MATERIALS THAT ARE NOT HAZARDOUS TO HEALTH OR PROPERTY AND THAT WILL NOT DAMAGE EXPOSED SURFACES.
21. DURING HANDLING AND INSTALLATION, CLEAN AND PROTECT CONSTRUCTION IN PROGRESS AND ADJOINING MATERIALS ALREADY IN PLACE. APPLY PROTECTIVE COVERING WHERE REQUIRED TO ENSURE PROTECTION FROM DAMAGE OR DETERIORATION AT SUBSTANTIAL COMPLETION.
22. CLEAN AND PROVIDE MAINTENANCE ON COMPLETED CONSTRUCTION AS FREQUENTLY AS NECESSARY THROUGH THE REMAINDER OF THE CONSTRUCTION PERIOD. ADJUST AND LUBRICATE OPERABLE COMPONENTS TO ENSURE OPERABILITY WITHOUT DAMAGING EFFECTS.
23. START EQUIPMENT AND OPERATING COMPONENTS TO CONFIRM PROPER OPERATION. REMOVE MALFUNCTIONING UNITS, REPLACE WITH NEW UNITS, AND RETEST. ADJUST OPERATING COMPONENTS FOR PROPER OPERATION WITHOUT BINDING. ADJUST EQUIPMENT FOR PROPER OPERATION. TEST EACH PIECE OF EQUIPMENT TO VERIFY PROPER OPERATION. TEST AND ADJUST CONTROLS AND SAFETIES. REPLACE DAMAGED AND MALFUNCTIONING CONTROLS AND EQUIPMENT.
24. PROVIDE FINAL PROTECTION AND MAINTAIN CONDITIONS THAT ENSURE INSTALLED WORK IS WITHOUT DAMAGE OR DETERIORATION AT TIME OF SUBSTANTIAL COMPLETION.
25. THE COST OF CORRECTIVE WORK SHALL BE INCLUDED UNDER THE CONTRACT.
26. SEAL CONDUIT AND CABLE PENETRATIONS WITH APPROVED FIRESTOP MATERIALS. REFER TO DIVISION 7 SECTION "THROUGH-PENETRATION FIRESTOP SYSTEMS" FOR MATERIALS.
27. INSTALL EQUIPMENT TO ALLOW MAXIMUM POSSIBLE HEADROOM UNLESS SPECIFIC MOUNTING HEIGHTS ARE INDICATED. INSTALL EQUIPMENT LEVEL AND PLUMB, PARALLEL AND PERPENDICULAR TO OTHER BUILDING SYSTEMS AND COMPONENTS IN EXPOSED INTERIOR SPACES, UNLESS OTHERWISE INDICATED. INSTALL ELECTRICAL EQUIPMENT TO FACILITATE SERVICE, MAINTENANCE, AND REPAIR OR REPLACEMENT OF COMPONENTS. CONNECT EQUIPMENT FOR EASE OF DISCONNECTING, WITH MINIMUM INTERFERENCE TO OTHER INSTALLATIONS.
28. ELECTRICAL AND SYSTEMS CONTRACTOR SHALL COORDINATE HIS WORK WITH GENERAL, HVAC, FIRE PROTECTION PLUMBING CONTRACTORS AND VENDORS AND SHALL MAKE NECESSARY ADJUSTMENTS OR CHANGES TO FACILITATE INSTALLATION OF EQUIPMENT IN SPACES AVAILABLE.
29. ACCESS PANELS SHALL BE PROVIDED BY ELECTRICAL AND SYSTEMS CONTRACTOR FOR ALL ITEMS REQUIRING INSPECTION OR MAINTENANCE OR AS REQUIRED BY CODE. ACCESS PANELS SHALL BE OF SUFFICIENT SIZE AND LOCATED SO THAT THE CONCEALED ITEMS MAY BE SERVICED AND MAINTAINED OR COMPLETELY REMOVED AND REPLACED. MINIMUM SIZE OF PANEL SHALL BE 12" BY 12". PANELS SHALL BE COMPLETE WITH IDENTIFYING LABELS.
30. ELECTRICAL CONTRACTOR SHALL KEEP AN UP TO DATE SET OF "AS-BUILT" RECORD DRAWINGS ON SITE AT ALL TIMES. AT PROJECT COMPLETION PROVIDE THE OWNER, ARCHITECT AND THE ENGINEER WITH A COMPLETE SET OF CONTRACT DRAWINGS WITH ALL FIELD CHANGES IN CAD FORMAT ALONG WITH A PDF SET AND A FULL SIZE PRINT.
31. ALL ELECTRICAL EQUIPMENT, DEVICES, CONDUCTORS, CABLES AND ETC. SHALL BE U.L. LABELED AND LISTED FOR THE APPLICATION IN WHICH IT IS BEING USED.
32. CONTRACTOR SHALL PREPARE OPERATION AND MAINTENANCE MANUALS FOR BUILDING OWNER. OPERATION AND MAINTENANCE MANUALS SHALL INCLUDE SHOP DRAWING SUBMITTALS AND OPERATION AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT AND SYSTEM INSTALLED FOR PROJECT. OWNER SHALL BE PROVIDED WITH 3 COPIES OF OPERATION AND MAINTENANCE MANUALS.

STANDARDS

1. ALL MATERIALS, EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE FOLLOWING:

A. LATEST ADOPTED MAINE UNIFIED BUILDING CODE "MUBEC"
B. NATIONAL ELECTRICAL CODE, LATEST APPROVED EDITION.
C. ANY AND ALL FEDERAL, STATE AND/OR LOCAL CODES, APPLICABLE ORDINANCES AND REGULATIONS.
D. LATEST APPROVED STANDARDS OF IEEE, ANSI, NEMA AND NFPA.
E. LOCAL UTILITY AND TELEPHONE COMPANY REGULATIONS.
F. BICSI TDMM, LATEST EDITION.
G. ALL EQUIPMENT SHALL BE NEW AND U.L. LISTED WHERE LISTING IS AVAILABLE.

SUBSTITUTIONS

1. WHERE EQUIPMENT AND MATERIALS ARE INDICATED "OR EQUIVALENT" SUBSTITUTION OF ITEMS EQUAL IF QUALITY. PERFORMANCE, RATING AND APPEARANCE WILL BE PERMITTED UPON SPECIFIC REVIEW IN WRITING BY THE ENGINEERS BEFORE INSTALLATION. SPECIFIC CRITERIA FOR SUBSTITUTION OF CERTAIN EQUIPMENT ARE DEFINED ELSEWHERE.
2. IN ALL CASES, THE RIGHT IS RESERVED TO REQUIRE ADEQUATE PROOF OF THE EQUALITY AND ACCEPTABILITY OF THE SUBSTITUTE BEFORE PERMITTING ITS USE. THE CONTRACTOR SHALL ASSUME THE COST AND THE ENTIRE RESPONSIBILITY FOR ANY CHANGES IN ANY PHASE OF BUILDING CONSTRUCTION, AS SHOWN ON THE CONTRACT DRAWINGS OR REQUIRED BY THE SPECIFICATIONS, WHICH MAY BE OCCASIONED BY REVIEW OF MATERIALS AND EQUIPMENT OTHER THAN THAT SPECIFIED.

SHEET LIST - ELECTRICAL

FIRE ALARM NOTES

1. THE FIRE ALARM SYSTEM IS EXISTING, LOCATED IN THE BASEMENT. PROVIDE ALL NEW FIRE ALARM AS SHOWN IN SCOPE AREA. NEW DEVICES TO BE CONNECTED TO THIS SYSTEM. MODIFICATION MAY BE REQUIRED TO ACCOMODATE ADDITIONAL DEVICES. PROVIDE EXTENDER PANEL AS REQUIRED.
2. THE DRAWINGS SHOW THE LAYOUT OF THE SYSTEM AND INDICATE THE APPROXIMATE LOCATIONS OF EQUIPMENT AND PIPING. CONTRACTOR IS CAUTIONED NOT TO SCALE THE DRAWINGS. THE PIPING SHALL BE RUN APPROXIMATELY IN THE AREAS AS INDICATED ON THE DRAWINGS, HOWEVER, TO THE ARRANGEMENT OF THE PIPING SYSTEMS AS MAY BE REFERENCED WITH WORK OF OTHER TRADES. CONTRACTOR SHALL REVIEW AND COORDINATE WITH STRUCTURAL, ELECTRICAL AND MECHANICAL DRAWINGS. PARTITIONS, STRUCTURAL MEMBERS, ETC. ARE DESIGNED TO BE FURRED OR CLOSED IN AND TO INCLUDE ROUGH-IN PIPING. CONTRACTOR SHALL FURNISH ALL OFFSETS, ADDITIONAL FITTINGS, ETC. WHETHER SHOWN ON DRAWINGS OR NOT, AS REQUIRED TO MEET INSTALLATION CONDITIONS.
3. CONTRACTOR IS TO REPORT ANY CONDITION REQUIRING CHANGES FROM PLANS TO ENGINEER PRIOR TO STARTING WORK.
4. CONTRACTOR IS TO EMPLOY EXPERIENCED WORKMEN WHO ARE TO FAMILIARIZE THEMSELVES WITH THE BUILDING AND OBSERVE SAFETY REQUIREMENTS.
5. CONTRACTOR TO ADJUST FIRE ALARM INITATING DEVICE LOCATIONS TO COORDINATE WITH THE LIGHTS, DIFFUSERS AND ALL OTHER CEILING MOUNTED ITEMS AS REQUIRED.
6. DEVICE LAYOUT DRAWINGS INDICATE APPROXIMATE LOCATION OF DEVICES. ACTUAL LOCATION SHALL BE INSTALLED CENTER OF CEILING TILE AND CENTER OF RESPECTIVE ROOM TAKING INTO CONSIDERATION FIELD CONDITIONS (LIGHTS, DUCTWORK, ETC.)
7. SUPPORT WIRE FOR CEILING MAY NOT BE USED TO SUPPORT ANY ELECTRICAL CONDUIT OR WIRE.
8. FOR EMT AND FLEXIBLE ALUMINUM METALLIC CONDUIT, ONLY THROATED INSULATOR CONNECTOR SHALL BE USED.
9. ALL FLEXIBLE CONDUIT USED WITHIN 12" OF A SPRINKLER RISER SHALL BE INSTALLED IN LIQUID TIGHT FLEXIBLE CONDUIT WITH STEEL COMPRESSION FITTINGS.
10. FIRE CONTROL PANELS, POWER SUPPLIES AND MODULE ENCLOSURES SHALL BE MOUNTED DIRECTLY TO STUDS USING THE APPROPRIATE SIZED METAL SCREWS IN A MINIMUM OF TWO PLACES. AT LEAST TWO OTHER FASTENERS FOR A TOTAL OF FOUR SHALL BE USED SUCH AS DRYWALL ANCHORS OR TOGGLE BOLTS. SHOULD ADDITIONAL MOUNTING HOLES BE DRILLED, ALL FOUR CORNERS ARE TO BE ANCHORED AT A MINIMUM.
11. ALL J-BOX COVERS USED IN FIRE ALARM AND FIRE SUPPRESSION SYSTEM AND CONTROLS SHALL BE RED.
12. WHEN CUTTING A DEVICE INTO A WALL AFTER DRYWALL IS INSTALLED, FLEXIBLE METAL CONDUIT WITH AN INSULATED CONNECTOR SHALL BE USED.
13. NO MORE THAN TWO WIRES SHALL BE TERMINATED ON ANY SCREW TYPE TERMINATION LUG.
14. T-TAPPING OF SUPERVISED CIRCUITS WHICH EMPLOY AN END OF LINE RESISTOR IS SPECIFICALLY EXCLUDED.
15. ALL PENETRATIONS THROUGH FIRE RATED WALLS SHALL BE MADE USING CONDUIT SLEEVE AND SHALL BE FIRE CAULKED USING UL APPROVED FIRE BARRIER CAULK LISTED FOR THE APPLICATION.
16. FIRE ALARM VENDOR MUST ADHERE TO ALL LOCAL CODES AND AUTHORITIES HAVING JURISDICTION. THE ENTIRE SYSTEM MUST BE DESIGNED IN ACCORDANCE WITH THESE AUTHORITIES HAVING JURISDICTION.
17. FIRE ALARM VENDOR MUST PRODUCE A SEPARATE FIXED PRICE TO PERFORM THE SCOPE OF WORK CONTAINED ON THESE DRAWINGS IN CONNECTION WITH THE FIRE ALARM SYSTEM. THESE DRAWINGS ARE PROVIDED FOR BID PURPOSES ONLY AND TO ILLUSTRATE THE SCOPE OF WORK INTENT OF THIS PROJECT. PRIOR TO SUBMISSION OF THE FIRE ALARM SYSTEM BID, THE FIRE ALARM VENDOR IS RESPONSIBLE TO REVIEW ALL DRAWINGS. UPON SUBMISSION OF THE FIRE ALARM BID, THE FIRE ALARM VENDOR CERTIFIES THAT ALL DRAWINGS HAVE BEEN REVIEWED, THE SITE HAS BEEN VISITED/INSPECTED, AND THAT ALL LOCAL BUILDING CODE REQUIRED ITEMS ARE FULLY UNDERSTOOD, AND INCLUDED IN THE BID PRICE.
18. FIRE ALARM VENDOR MUST SUBMIT TO THE ENGINEER & OWNER FINAL SIGNED AND SEALED (BY PROJECT LOCATION STATE LICENSED P.E.) DESIGN /BUILD DRAWINGS INCLUDING: FIRE ALARM RISER DIAGRAM, LAYOUT, EQUIPMENT LIST, & SPECIFICATIONS PRIOR TO START OF INSTALLATION. THE COST OF ENGINEERING FEE, PRORAMMING CHARGE, NEW EQUIPMENT, CONNECTION & TESTING, TROUBLE SHOOTING OF SYSTEM, ATTENDANCE AT THE FIRE ALARM INSPECTION, ETC. ARE TO BE PART OF THE TOTAL PRICE.

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

ELECTRICAL ABBREVIATIONS, NOTES & SYMBOLS

STATE OF MAINE JARED M. MERRY No. 11679 LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	12" = 1'-0"

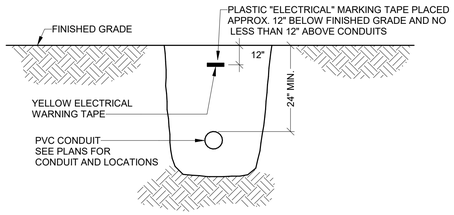
DRAWN BY	DESIGNED BY	CHECKED BY
TJA	TJA	JMM

PROJECT No. 10377.028

DRAWING NO. **E-001** REV.

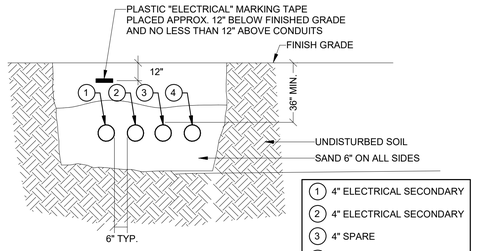
SITE LIGHTING FIXTURE SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL	COLOR//TYPE	Lumens	WATTS	VOLTAGE	REMARKS
Z3	POLE MOUNTED SITE LIGHTING FIXTURE, TYPE III OPTICS, BUILT IN PHOTOEYE, UNIVERAL SQUARE POLE MOUNT MOUNTED ON 15' POLE	BEACON	VP-ST-1-36L-39-4K7-3-UNV-ASQU-##-LS-3P R-TL	40K LED	5400 lm	39.3 W	120-277V	PROVIDE WITH 15' MOUNTING POLE
Z4F	POLE MOUNTED SITE LIGHTING FIXTURE, TYPE IV FORWARD OPTICS, BUILT IN PHOTOEYE, UNIVERAL SQUARE POLE MOUNT MOUNTED ON 15' POLE	BEACON	VP-ST-1-36L-55-4K7-4F-UNV-ASQU-##-LS-3 PR-TL	40K LED	7500 lm	56.8 W	120-277V	PROVIDE WITH 15' MOUNTING POLE
Z4W-1	POLE MOUNTED SITE LIGHTING FIXTURE, TYPE IV WIDE OPTICS, BUILT IN PHOTOEYE, UNIVERAL SQUARE POLE MOUNT MOUNTED ON 15' POLE	BEACON	VP-ST-1-36L-85-4K7-4W-UNV-ASQU-##-LS-3 PR-TL	40K LED	10000 lm	83.6 W	120-277V	PROVIDE WITH 20' MOUNTING POLE
Z4W-2	POLE MOUNTED SITE LIGHTING FIXTURE, TYPE IV WIDE OPTICS, BUILT IN PHOTOEYE, UNIVERAL SQUARE POLE MOUNT MOUNTED ON 15' POLE	BEACON	VP-ST-1-36L-55-4K7-4W-UNV-ASQU-##-LS-3 PR-TL	40K LED	7500 lm	56.8 W	120-277V	PROVIDE WITH 15' MOUNTING POLE
Z4W-3	POLE MOUNTED SITE LIGHTING FIXTURE, TYPE IV WIDE OPTICS, BUILT IN PHOTOEYE, UNIVERAL SQUARE POLE MOUNT MOUNTED ON 15' POLE	BEACON	VP-ST-1-36L-39-4K7-4W-UNV-ASQU-##-LS-3 PR-TL	40K LED	5400 lm	39.3 W	120-277V	PROVIDE WITH 15' MOUNTING POLE

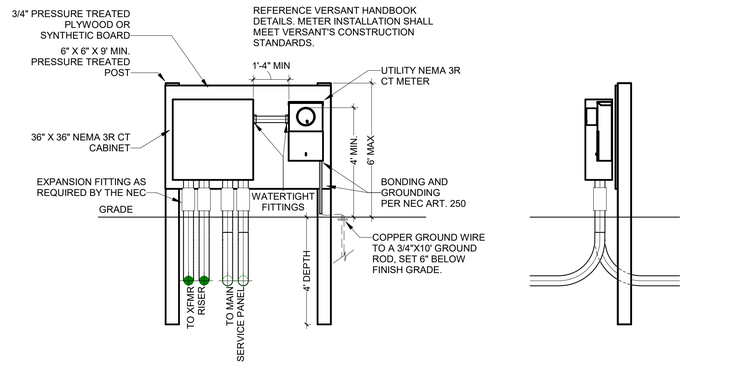


NOTES:
1. CAUTION - DEEPER BURIAL DEPTHS MAY REQUIRE DERATING. SEE NEC.

3 E-101 **TYPICAL SITE LIGHTING TRENCH DETAIL**
NTS



2 E-101 **ELECTRICAL SECONDARY TRENCH DETAIL**
NTS



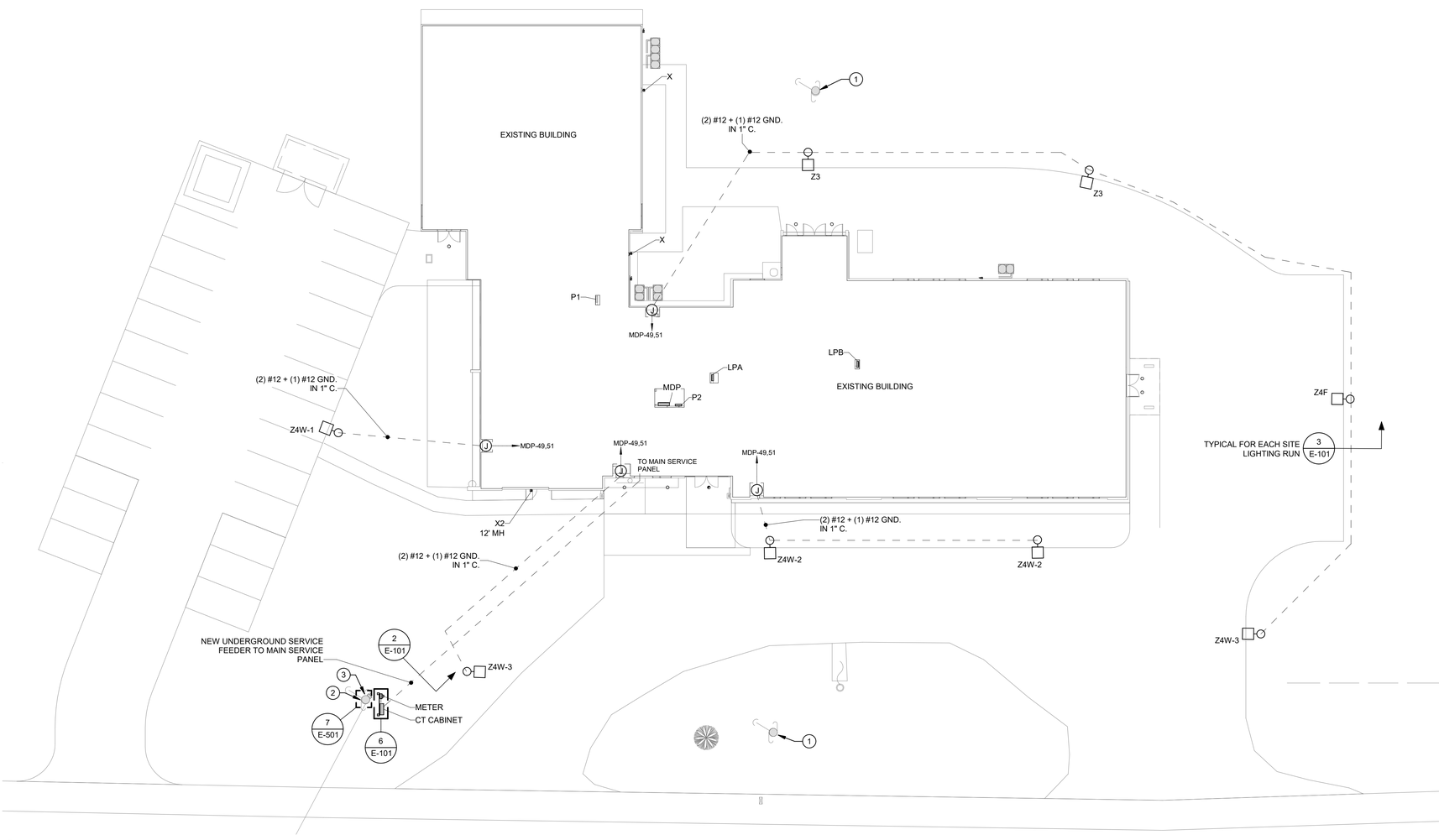
6 E-101 **PEDESTAL MOUNTED CT METER AND CT CABINET DETAIL**
NTS

SHEET E-101 GENERAL NOTES

1. EXTERIOR BUILDING MOUNTED FIXTURES SHOWN FOR INDICATION OF SITE LIGHTING. FOR CIRCUITING SEE LIGHTING PLAN.

SHEET E-101 NUMBERED NOTES

1 REMOVE POLE, LIGHT FIXTURE, AND OVERHEAD BRANCH CIRCUIT CONDUCTORS IN THEIR ENTIRETY.
2 REMOVE LIGHT FIXTURE AND OVERHEAD BRANCH CIRCUIT CONDUCTORS.
3 EXISTING 120/240V/1PH SERVICE ENTRANCE TO BE REPLACED WITH NEW 120/208V/3PH SERVICE. REMOVE EXISTING METER, RISER CONDUIT, CONDUCTORS AND UNDERGROUND CONDUIT IN THEIR ENTIRETY.



1 E-101 **ELECTRICAL SITE PLAN**
SCALE: 1/16" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

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PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

ELECTRICAL SITE PLAN

STATE OF MAINE ★ JARED M. MERRY No. 11679 ★ LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	As indicated

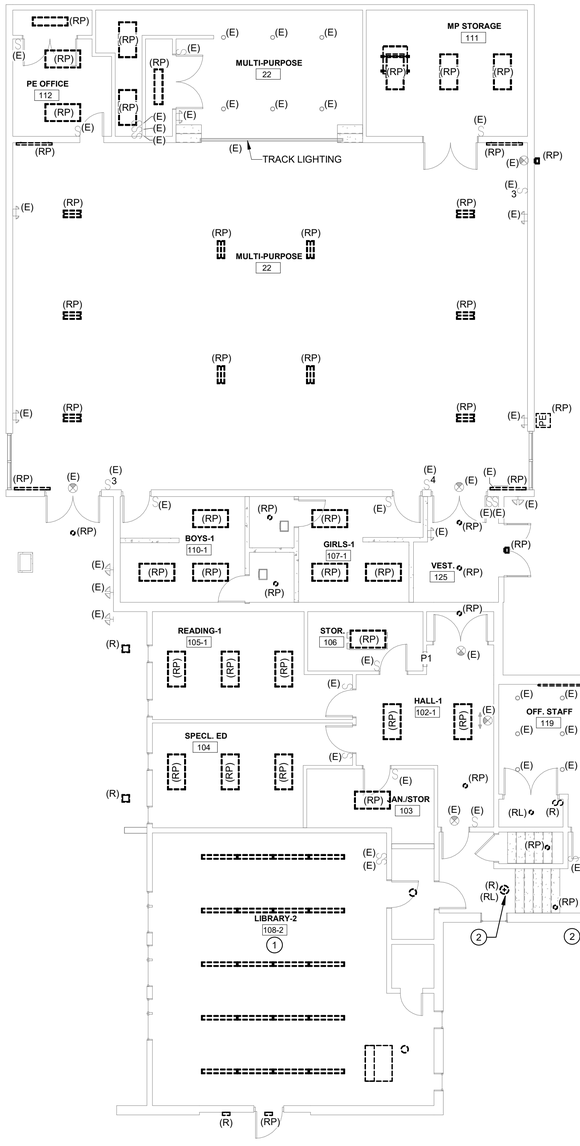
DRAWN BY	DESIGNED BY	CHECKED BY
TJA	TJA	JMM

PROJECT No. 10377.028

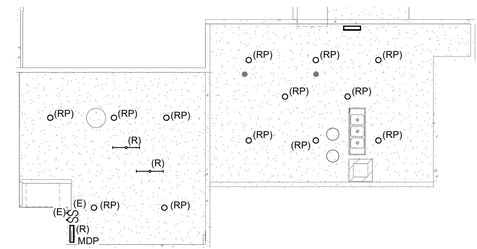
DRAWING NO. **E-101** REV.

SHEET ED101 NUMBERED NOTES (#)

1 REPLACE INDICATED LIGHTING FIXTURES IN THIS ROOM. EXISTING SWITCHING AND CIRCUIT TO BE REUSED.
2 REMOVE LIGHT FIXTURE. LEAVE CIRCUITING IN PLACE FOR NEW/RELOCATED FIXTURE.



1 ED101 **ELECTRICAL LIGHTING FIRST FLOOR DEMOLITION PLAN**
SCALE: 1/8" = 1'-0"



2 ED101 **ELECTRICAL LIGHTING BASEMENT DEMOLITION PLAN**
SCALE: 3/32" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK.

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PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

ELECTRICAL LIGHTING DEMOLITION PLAN

STATE OF MAINE
JARED M. MERRY
No. 11679
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	As indicated

DRAWN BY	DESIGNED BY	CHECKED BY
TJA	TJA	JMM

PROJECT No. 10377.028

DRAWING NO. **ED101** REV.

SHEET ED102 GENERAL NOTES

1. DEMOLISH DISCONNECTS, CONDUCTORS, AND CONDUIT ASSOCIATED WITH MECHANICAL UNITS THAT ARE TO BE REMOVED UNLESS OTHERWISE NOTED.

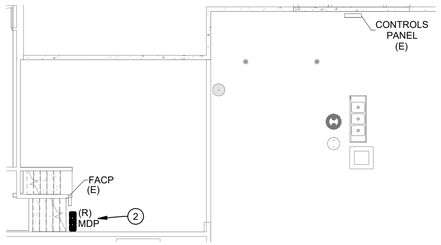
SHEET ED102 NUMBERED NOTES

1 PANEL SHALL BE REPLACED IN KIND. FEEDER CONDUIT AND CONDUCTORS SHALL REMAIN IN PLACE FOR PANEL REPLACEMENT. REMOVE ANY NECESSARY ITEMS FOR REMOVAL OF THE PANEL. REMOVE AND REPLACE TO MATCH EXISTING WALL FINISH AS REQUIRED TO COMPLETE NEW WORK.

2 REMOVE MDP, SERVICE ENTRANCE CONDUCTORS AND CONDUIT IN THEIR ENTIRETY.

3 REMOVE CONDUCTORS AND CONDUIT FROM DISCONNECT TO EXHAUST FAN. LEAVE DISCONNECT, CONDUCTORS, AND CONDUIT TO PANEL LOCATION IN PLACE FO REUSE.

4 REMOVE CONDUCTORS AND CONDUIT FROM DISCONNECT TO EXISTING EXHAUST FAN. LEAVE DISCONNECT, CONDUCTORS, AND CONDUIT TO PANEL LOCATION IN PLACE FOR REUSE.



2 ED102 **ELECTRICAL BASEMENT DEMOLITION PLAN**
SCALE: 3/32" = 1'-0"

1 ED102 **ELECTRICAL FIRST FLOOR DEMOLITION PLAN**
SCALE: 1/8" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK

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PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

ELECTRICAL POWER & SYSTEMS DEMOLITION

STATE OF MAINE
JARED M MERRY
No. 11679
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	As indicated

DRAWN BY	DESIGNED BY	CHECKED BY
TJA	TJA	JMM

PROJECT No. 10377.028

DRAWING NO. **ED102** REV.

LIGHTING DEVICE SCHEDULE

TYPE MARK	VOLTAGE	FUNCTIONS
OC	LINE VOLTAGE	CEILING MOUNTED OCCUPANCY SENSOR
OC - V	LOW VOLTAGE	CEILING MOUNTED OCCUPANCY SENSOR, VACANCY OPERATION CAPABILITY
PE	LINE VOLTAGE	PHOTOEYE
S	LINE VOLTAGE	SINGLE POLE SWITCH
S - DV	LOW VOLTAGE	SINGLE POLE SWITCH, DIMMING, VACANCY OPERATION CAPABILITY

LIGHTING FIXTURE SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL	COLOR/TYPE	LUMENS	WATTS	VOLTAGE	REMARKS
A	2'x4' SWITCHABLE FLAT PANEL	COLUMBIA LIGHTING	CBT24 A LSCS EDD	SWITCHABLE LED	3400/4500/5800	48.0 W	120-277V	
B	2'x2' FLAT PANEL	COLUMBIA LIGHTING	CBT22 A LSCS EDD	SWITCHABLE LED	2800/3300/4500	38.0 W	120-277V	
BS	2'x2' FLAT PANEL, DRYWALL FLANGED RECESSED	COLUMBIA LIGHTING	CBT22 A LSCS EDD	SWITCHABLE LED	2800/3300/4500	38.0 W	120-277V	ORDER WITH SOLID CEILING FLANGE KIT MODEL# FK22
C	8' HUNG LED LINEAR	COLUMBIA LIGHTING	CSL8 A LSCS	SWITCHABLE LED	8000/8800/9600	81.0 W	120-347V	ORDER WITH CABLE HANG KIT MODEL# CM48SCF5-KIT
D6	6" RECESSED LED DOWNLIGHT	PRESCOLITE	LBRST 6RD M LS ML CS9 WH	SWITCHABLE LED	1100/1500/2500	30.7 W	120-277V	
D8	8" SURFACE MOUNTED DOWNLIGHT	PRESCOLITE	LBRST 8RD M LS HL CS9 WH	SWITCHABLE LED	3000/4000/4600	48.7 W	120-277V	
DS4	4" SURFACE MOUNTED LED DOWNLIGHT	PRESCOLITE	LBSES 4RD CS9 WH	SWITCHABLE LED	750	10.4 W	120-277V	ORDER WITH REMOTE DRIVER J-BOX WHERE NECESSARY. OTHERWISE ORDER DIRECT J-BOX MOUNT MODEL.
DS6	6" SURFACE MOUNTED LED DOWNLIGHT	PRESCOLITE	LBSES 6RD CS9 WH	SWITCHABLE LED	1100	13.1 W	120-277V	ORDER WITH REMOTE DRIVER J-BOX WHERE NECESSARY. OTHERWISE ORDER DIRECT J-BOX MOUNT MODEL.
DS8	8" SURFACE MOUNTED DOWNLIGHT	PRESCOLITE	LBSES 8RD CS9 WH	SWITCHABLE LED	1750	19.3 W	120-277V	ORDER WITH REMOTE DRIVER J-BOX WHERE NECESSARY. OTHERWISE ORDER DIRECT J-BOX MOUNT MODEL.
DS8E	8" SURFACE MOUNTED DOWNLIGHT, EMERGENCY BATTERY BACKUP	PRESCOLITE	LBSES 8RD RM CS9 WH	SWITCHABLE LED	1750	19.3 W	120-277V	ORDER WITH EMERGENCY BATTERY BACKUP ACCESORY LBSE 8RD EM WH
E1	UNIVERSAL MOUNTED THERMOPLASTIC LED EXIT LIGHT WITH RED LETTERING	DUAL LITE	EVEURWE	LED	N/A	3.0 W	120-277V	
E2	UNIVERSAL SURFACE MOUNTED THERMOPLASTIC LED EMERGENCY BATTERY UNIT	DUAL LITE	EV2	40K LED	N/A	3.0 W	120-277V	
E3	UNIVERSAL MOUNTED THERMOPLASTIC LED EXIT LIGHT WITH RED LETTERING, DUAL EMERGENCY BATTERY HEADS	DUAL LITE	EVCURW	LED	N/A	3.0 W	120-277V	
G	CHAIN HUNG LOW BAY	ADVANTAGE LIGHTING SOLUTIONS	LHB 90 40 FL WH UD -PLUG	40K LED	12700	90.0 W	120-277V	FIXTURES HAS INCLUDED CABLE HANGER AS STANDARD MOUNTING
H	2' CLOSET STRIP LIGHT	COLUMBIA LIGHTING	MPS 2 35 LW F W ED U	35K LED	2400	14.0 W	120-277V	
J	4' SURFACE MOUNTED WRAP AROUND	COLUMBIA LIGHTING	CNW LSCS	SWITCHABLE LED	3000/3500/4000	35.0 W	120-277V	
K	4' WALL MOUNTED LINEAR	COLUMBIA LIGHTING	CWM 4 35 MW SM DIS FA ED U	35K LED	4200	43.0 W	120-277V	
R	24" STEM MOUNTED DRUM LIGHT	FORUM	DRM-UD 24 H (XX) HO 35 WOL UNV WH D10V	35K LED	9000	25.0 W	120-277V	"XX" INDICATES COORDINATE STEM LENGTHS FOR EACH FIXTURE REQUIRED TO HANG THEM ALL AT THE SAME HEIGHT
V	2' WALL MOUNTED VANITY	LIGHTWAY	24-LED O2C 3 W2 WSA DIM	35K LED	2400	18.0 W	120/277V	
W	4' WALL WASH LINEAR	COLUMBIA LIGHTING	W3B 4 40 LW SFA ED U	40K LED	4300	30.1 W	120-277V	
X	EXTERIOR WEDGE LIGHT, EMERGENCY BATTERY BACKUP	BEACON	VPW2 48L-20 4K7 4W UNV BLT EH	40K LED	4000	20.5 W	120-277V	
X2	EXTERIOR WEDGE LIGHT, EMERGENCY BATTERY BACKUP, BUILT IN PHOTOEYE	BEACON	VPW2 48L-20 4K7 4W UNV BLH PC EH	40K LED	4000	20.5 W	120-277V	
Y	WALL MOUNTED STEM DISPLAY LIGHT	HYDREL	PLACERTWIN A P1 80CRI 35K 120 40DEG FLC S90 L3 BL	35K LED	2800	22.0 W	120V	

SHEET EL101 GENERAL NOTES

1. ALL INTERIOR SWITCHABLE CCT LIGHTING FIXTURES SHALL BE SET TO 35K.

SHEET EL101 NUMBERED NOTES

1 RELOCATE EXISTING CLOSET LIGHT FIXTURE TO FIT LAYOUT IN ROOM. IF NOT ALREADY CONNECTED TO THE SAME CIRCUIT AS THE REMAINDER OF THE BREAK ROOMS LIGHTING, CONNECT TO THE SAME CIRCUIT AND INTEGRATE INTO THE ROOMS SWITCH LEG.

2 NORMAL LIGHTING FIXTURES SHALL REPLACE EXISTING NORMAL LIGHTING IN THIS AREA. RECONNECT TO EXISTING LOCAL LIGHTING CIRCUIT. RECONNECT NORMAL LIGHTING TO EXISTING SWITCH LEG(S). CONNECT ANY NEW EGRESS LIGHTING TO THE LOCAL LIGHTING CIRCUIT UNSWITCHED.

3 RELOCATED FIXTURE. UTILIZE EXISTING CIRCUIT AND SWITCHING FOR LIGHTING FIXTURE. EXTEND CIRCUITING AND SWITCHING WIRING AS NECESSARY FOR NEW LOCATION.

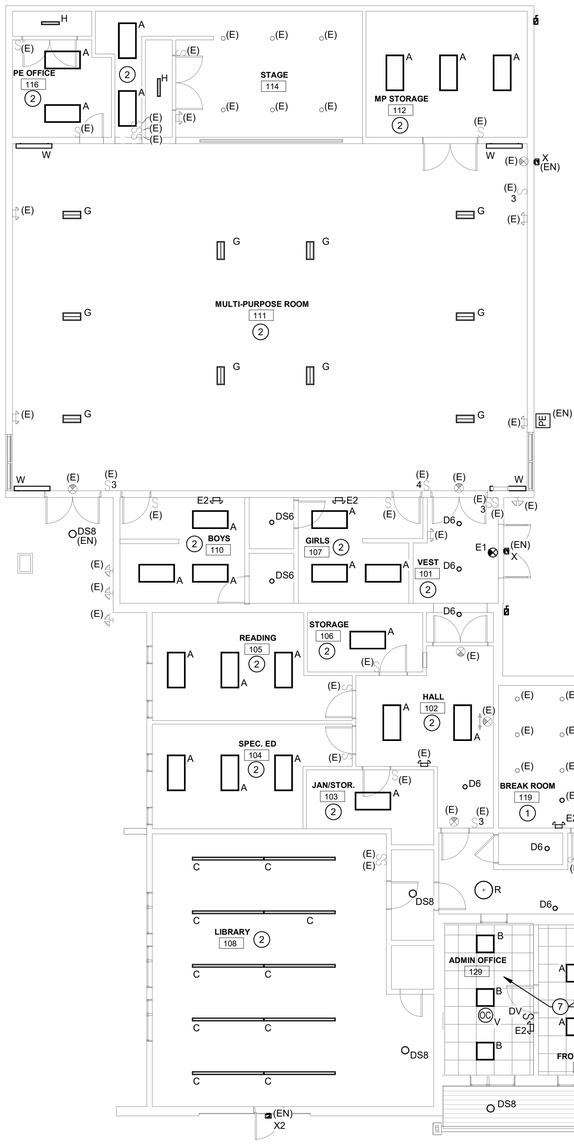
4 STEM MOUNT HALLWAY FIXTURES SO THAT EACH FIXTURE IS AT THE SAME HEIGHT.

5 ADD ROW OF NEW CLASSROOM LIGHTS IN PLACE OF REMOVED WALL WASH FIXTURE. UTILIZE EXISTING LOCAL LIGHTING CIRCUIT. EXTEND SURFACE MOUNTED CONDUIT SYSTEM ALREADY FEEDING OTHER 4 LOCATIONS TO NEW FIXTURE. EXTEND CIRCUITING AND SWITCHING WIRING AS NECESSARY FOR NEW FIXTURE LOCATION.

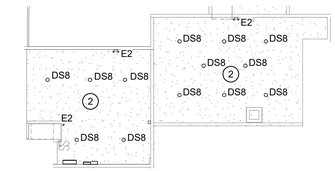
6 CONNECT NEW EBU TO LOCAL LIGHTING CIRCUIT UNSWITCHED. UTILIZE SURFACE MOUNTED CONDUIT FROM FLOOR BELOW TO REACH THE NEW FIXTURE.

7 LIGHTING IN NEW ROOMS SHALL BE CONNECTED TO LOCAL LIGHTING CIRCUIT IN LOBBY BEFORE ANY SWITCHES.

8 INSTALL NEW PHOTOEYE NEARBY CANOPY TO CONTROL NEW CANOPY LIGHTING. PHOTOEYE SHALL BE IN SERIES WITH NEW FIXTURES.



1 EL101 **ELECTRICAL LIGHTING FIRST FLOOR PLAN**
SCALE: 1/8" = 1'-0"



2 EL101 **ELECTRICAL LIGHTING BASEMENT PLAN**
SCALE: 1/16" = 1'-0"

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

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PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

ELECTRICAL LIGHTING FIRST FLOOR PLAN

STATE OF MAINE — JARED M. MERRY — No. 11679 — LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	As indicated

DRAWN BY	DESIGNED BY	CHECKED BY
TJA	TJA	JMM

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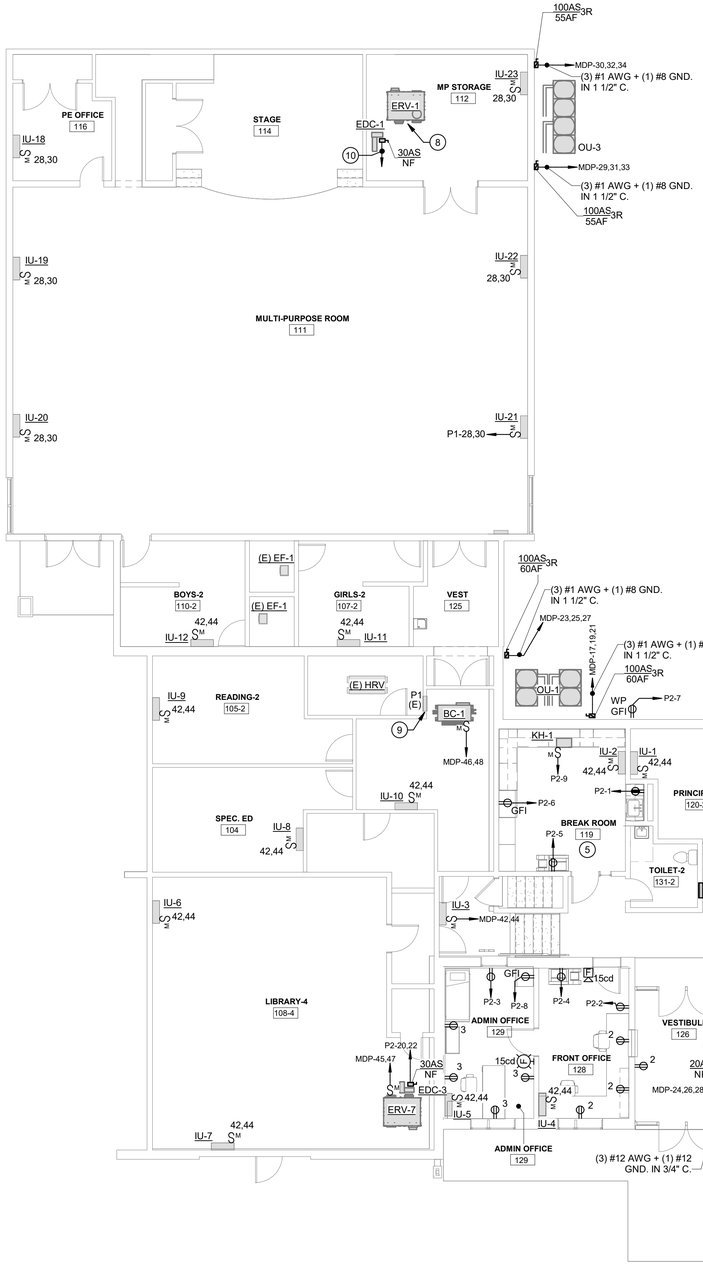
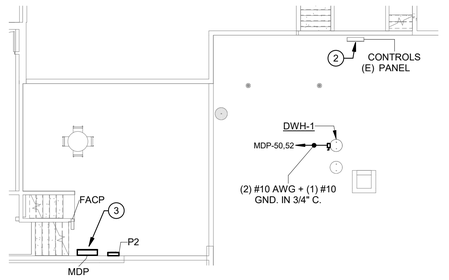


1 EP101 **ELECTRICAL POWER & SYSTEMS FIRST FLOOR PLAN**

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



2 EP101 **ELECTRICAL POWER & SYSTEMS BASEMENT PLAN**

SCALE: 3/32" = 1'-0"

SHEET EP101 NUMBERED NOTES

1. REPLACE PANEL WITH PANEL OF THE SAME RATING AS REMOVED PANEL. PROVIDE NEW PANEL WITH MATCHING AMOUNT OF BREAKER POSITIONS AND MATCHING BREAKER QUANTITY AND RATINGS INCLUDING AIC RATINGS. RECONNECT TO EXISTING PANEL FEEDER. EXTEND FEEDER AND BRANCH CIRCUIT CONDUIT AND CONDUCTORS AS NECESSARY FOR INSTALLATION OF NEW PANEL. MAKE THE NECESSARY MODIFICATIONS TO THE WALL TO ACCOMODATE NEW PANEL.
2. UTILIZE EXISTING FEEDER. RECONNECT TO EXISTING CONNECTION LOCATION.
3. INSTALL NEW MDP IN NEW LOCATION SHOWN. RECONNECT EXISTING LOADS TO THEIR NEW BREAKERS. EXTEND FEEDERS AND BRANCH CIRCUITS CONDUCTORS AND CONDUIT AS NECESSARY FOR INSTALLATION OF NEW MDP.
4. CIRCUIT SERVICE RECEPTACLE TO LOCAL GENERAL RECEPTACLE CIRCUIT FOR NEARBY INTERIOR ROOM.
5. RELOCATE ANY RECEPTACLES THAT WILL BE COVERED BY NEW CABINETRY TO ABOVE COUNTER HEIGHT. EXTENCH BRANCH CIRCUITING AS NECESSARY.
7. UTILIZE EXISTING DISCONNECT AND BRANCH CIRCUITING PREVIOUSLY SERVING CLASSROOM EXHAUST FAN FOR ERV POWER. EXTEND ANY ACCOSIATED WIRING AS NECESSARY FOR NEW LOCATION.
8. UTILIZE EXISTING DISCONNECT AND BRANCH CIRCUITING PREVIOUSLY SERVING EXHAUST FAN. EXTEND ANY ACCOSIATED WIRING AND COMPLETE ANY MODIFCATIONS AS NECESSARY FOR NEW ERV.
9. UTILIZE EXISTING FEEDER. RECONNECT TO EXISTING CONNECTION LOCATION. ADD (1) 20A 2-POLE BREAKER IN SPACE 28,30. NEW BREAKER SHALL MATCH EXISTING TYPE AND RATINGS INCLUDING AIC RATING.
10. (2) #10 AWG + (1) #10 GND. IN 3/4" C.

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PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

ELECTRICAL POWER FIRST FLOOR PLAN

STATE OF MAINE
JARED M MERRY
No. 11679
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	As indicated

DRAWN BY	DESIGNED BY	CHECKED BY
TJA	TJA	JMM

PROJECT No. 10377.028

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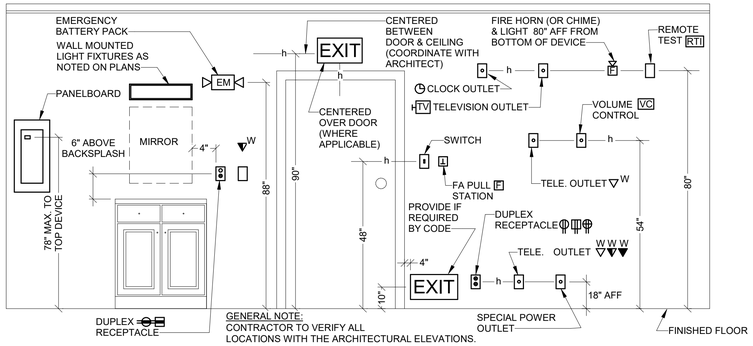
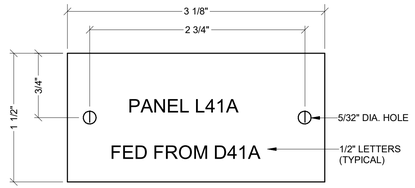
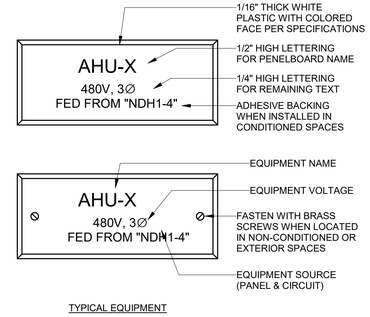


1 E-501 **EQUIPMENT MOUNTING HEIGHTS**
NTS



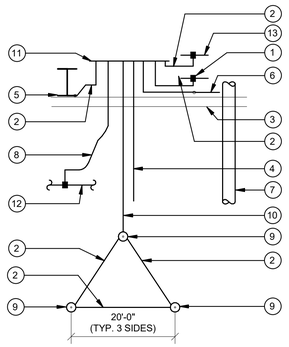
NOTES:
1. REFER TO SPECIFICATIONS FOR ADDITIONAL NAMEPLATE REQUIREMENTS.
2. NAMEPLATE TO BE 1/16" THICK WHITE PLASTIC WITH BLACK CENTER LAMINATION. FACE SHALL BE WHITE, ENGRAVED LETTERS SHALL BE BLACK.
3. SECURE NAMEPLATE TO SURFACES WITH (2) FLAT HEAD BRASS SCREWS. ADHESIVE CEMENT SHALL NOT BE ALLOWED.

2 E-501 **TYPICAL NAMEPLATE DETAIL**
NTS



TYPICAL EQUIPMENT

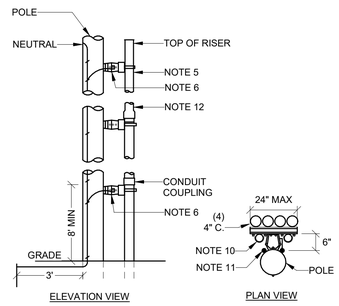
3 E-501 **EQUIPMENT NAMEPLATE DETAIL**
NTS



1. MAIN SWITCHBOARD GROUND BUS.
2. #4/0 BARE CU. GROUND CONDUCTOR IN 1 1/4 "CONDUIT.
3. BUILDING EXTERIOR WALL.
4. #4/0 BARE CU. GROUND CONDUCTOR IN CONCRETE ENCASEMENT TO XFMR PAD GROUNDING GRID.
5. STRUCTURAL STEEL EXOTHERMIC CONNECTION.
6. GROUNDING CLAMP ON METALLIC PIPE.
7. STREET SIDE OF WATER SERVICE PIPE.
8. #4/0 BARE CU. GROUND CONDUCTOR FROM THE BUILDING GROUND GRID.
9. 3/4" X 10'-0" LONG COPPERWELD GROUND ROD DRIVEN WITH TOP 1'-0" BELOW GRADE.
10. #3/0 CU. GROUND CONDUCTOR
11. BUILDING SYSTEM GROUND BUS
12. BUILDING GROUNDING GRID
13. CONCRETE - ENCASED ELECTRODE

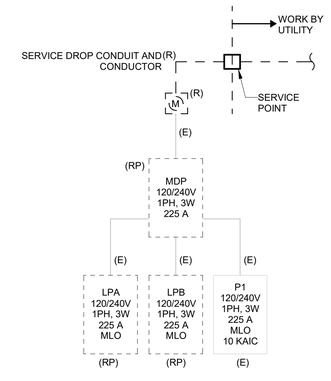
NOT ALL ITEMS MAY BE AVAILABLE. CONNECT TO ALL ITEMS AVAILABLE

4 E-501 **ELECTRICAL SERVICE GROUNDING ELECTRODE**
NTS

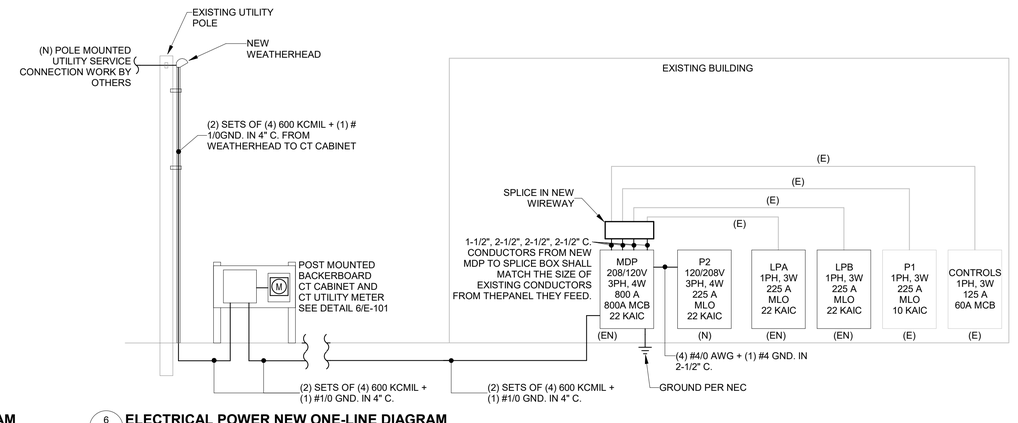


GENERAL NOTES:
1. STANDOFF BRACKETS ARE REQUIRED WHEN MORE THAN ONE CONDUIT PER UTILITY IS TO BE INSTALLED ON A POLE.
2. ALL THREE PHASE PRIMARY RISERS, WHETHER STAND OFF BRACKETS ARE USED OR NOT, SHALL BE RIGID STEEL FOR THE FIRST SECTION.
3. ON SINGLE PHASE PRIMARY, SECONDARY AND SERVICE URD RISERS USING STAND OFF BRACKETS, RIGID STEEL OR SCHEDULE 80 MAY BE USED.
4. WHERE RIGID STEEL OR SCHEDULE 80 PVC IS USED FOR THE RISER, ONE BRACKET SHALL BE USED TO SUPPORT EACH SECTION OF CONDUIT UP TO 10 FEET IN LENGTH. EACH BRACKET IS TO BE PLACED JUST BELOW THE RISER CONDUIT COUPLING.
5. CONDUIT SECTIONS FOR SINGLE PHASE OR TREE PHASE RISERS USING STAND OFF BRACKETS SHALL BE RIGID STEEL OR SCHEDULE 80 PVC CONDUIT ONLY (SEE NOTE 2), WITH THE EXCEPTION THAT SCHEDULE 40 PVC SUNLIGHT RESISTANT CONDUIT MAY BE USED FOR THE TOP SECTION FO THE RISER (NOT LONGER THAN 10'). IF THE TOP SECTION IS LONGER THAN 24" IT MUST BE SUPPORTED WITH A MINIMUM OF ONE STAND OFF BRACKET. IF THE TOP SECTION IS SCHEDULE 40 PVC AND LONGER THAN 72" IT MUST BE SUPPORTED BY NO FEWER THAN TWO STAND OFF BRACKETS.
6. WHERE PVC IS USED FOR THE RISER, EACH STAND OFF BRACKET SUPPORTING THE PVC SHALL BE GROUNDED. WHERE STEEL IS USED FOR THE RISER ONE STAND OFF BRACKET SUPPORTING THE STEEL IS REQUIRED TO BE GROUNDED.
7. SWEEPS, WHEN USED, ARE REQUIRED TO BE STEEL.
8. IF RISER IS ALL STEEL CONDUIT, INSTALL INSULATED GROUNDING BUSHING AT TOP OF RISER.
9. LOWEST BRACKET SHALL BE A MINIMUM OF 8 FEET ABOVE FINISH GRADE.
10. ALTERNATE LOCATION FOR COMMUNICATION CABLE IF RUN IN METAL CONDUIT OR SCHEDULE 80.
11. COMMUNICATION CABLE MAY BE ATTACHED DIRECTLY TO POLE ADJACENT TO BRACKETS.
12. WHEN USING PVC, POSITION BELL END SECURELY OVER RIGID CONDUIT.

7 E-501 **CONDUIT STANDOFF BRACKET DETAIL**
SCALE: 1/4" = 1'-0"



5 E-501 **ELECTRICAL POWER DEMOLITION ONE-LINE DIAGRAM**
NTS



6 E-501 **ELECTRICAL POWER NEW ONE-LINE DIAGRAM**
NTS

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

ELECTRICAL DETAILS

STATE OF MAINE JARED M MERRY No. 11679 LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	As indicated

DRAWN BY	DESIGNED BY	CHECKED BY
TJA	TJA	JMM

PROJECT No. 10377.028

DRAWING NO. **E-501** REV.

Distribution Panel MDP

Location: BASEMENT
Supply From: UTILITY POLE
Mounting: SURFACE
Enclosure: NEMA 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22 kAIC
Mains Type: MCB
Mains Rating: 800 A
MCB Rating: 800 A

Notes:
NEW PANEL REPLACING EXISTING MDP

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	WATER PUMP	30 A	2	0.0 W	0.0 W					2	30 A	SPARE	2
3						0.0 W	0.0 W						4
5	SPARE	60 A	2					0.0 W	0.0 W	2	60 A	STOVE	6
7				0.0 W	0.0 W								8
9	PANEL P1	60 A	2			0.0 W	0.0 W			2	60 A	FURNACE	10
11								0.0 W	0.0 W				12
13	LPB	100 A	2	0.0 W	0.0 W					2	100 A	LPA	14
15						0.0 W	0.0 W						16
17								4953....	5666....				18
19	OU-1 FEED 1	90 A	3	4953....	5666....					3	100 A	OU-2	20
21						4953....	5666....						22
23								4953....	2066....				24
25	OU-1 FEED 2	90 A	3	4953....	2066....					3	20 A	EUH-1	26
27						4953....	2066....						28
29								4953....	4953....				30
31	OU-3 FEED 1	90 A	3	4953....	4953....					3	90 A	OU-3 FEED 2	32
33						4953....	4953....						34
35								0.0 W	0.0 W				36
37	SPARE	30 A	3	0.0 W	0.0 W					3	20 A	SPARE	38
39						0.0 W	0.0 W						40
41	IU 14-17	15 A	2					200.0...	396.0...	2	15 A	IU 1-12	42
43				200.0...	396.0...								44
45	ERV-7	15 A	2			250.0...	80.0 W			2	15 A	BRANCH CONTROLLER BC-1	46
47								250.0...	80.0 W				48
49	SITE LIGHTING	20 A	2	205.6...	2704....					2	30 A	NEW WATER HEATER	50
51						205.6...	2704....						52
53	SPARE	15 A	2					0.0 W	300.0...	1	15 A	ERV-2	54
55				0.0 W	9940....								56
57	SPARE	40 A	2			0.0 W	7180....			3	100 A	PANEL P2	58
59								0.0 W	8860....				60
			Total Load:	40992.3 W		37966.3 W		37632.7 W					
			Total Amps:	342 A		317 A		314 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	78592.0 W	100.00%	78592.0 W		
HEATING	29300.0 W	100.00%	29300.0 W	**Total Conn. Load:**	116591.2 W
RECEPTACLE	2880.0 W	100.00%	2880.0 W	**Total Est. Demand:**	116591.2 W
ELECTRIC WATER HEATING	5408.0 W	100.00%	5408.0 W	**Total Conn.:**	324 A
LIGHTING	411.2 W	100.00%	411.2 W	**Total Est. Demand:**	324 A

Notes:

Branch Panel: P2

Location: BASEMENT
Supply From: MDP
Mounting: SURFACE
Enclosure: NEMA 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22 kAIC
Mains Type: MLO
Mains Rating: 225 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	BREAK ROOM SINK RECEPTACLE	20 A	1	180.0...	900.0 W					1	20 A	FRONT OFFICE RECEPTACLES	2
3	ADMIN OFFICE RECEPTACLES	20 A	1			900.0...	180.0...			1	20 A	FRONT OFFICE COPIER	4
5	BREAK ROOM COPIER	20 A	1					180.0 W	180.0...	1	20 A	BREAK ROOM REFRIGERATOR	6
7	EXTERIOR SERVICE RECEPTACLE	20 A	1	180.0...	180.0 W					1	20 A	ADMIN OFFICE REFRIGERATOR	8
9	KICK HEATER	15 A	1			100.0...	0.0 W			1	20 A	SPARE	10
11	EDC RM 122	20 A	2					1500....	1500....	2	20 A	EDC RM 121	12
13				1500....	1500....								14
15	EDC RM 123	20 A	2			1500....	1500....			2	20 A	EDC RM 188	16
17								1500....	1500....				18
19	EDC RM 109	20 A	2	1500....	1500....					2	20 A	EDC RM 108	20
21						1500....	1500....						22
23	EDC GYMNASIUM	30 A	2					2500....	0.0 W	1	20 A	SPARE	24
25				2500....	0.0 W					1	20 A	SPARE	26
27	SPARE	20 A	1			0.0 W	0.0 W			1	20 A	SPARE	28
29	SPARE	20 A	1					0.0 W	0.0 W	1	20 A	SPARE	30
31	SPARE	20 A	1	0.0 W	0.0 W					1	20 A	SPARE	32
33	SPARE	20 A	1			0.0 W	0.0 W			1	20 A	SPARE	34
35	SPARE	20 A	1					0.0 W	0.0 W	1	20 A	SPARE	36
37	SPARE	20 A	1	0.0 W	0.0 W					1	20 A	SPARE	38
39	SPARE	20 A	1			0.0 W	0.0 W			1	20 A	SPARE	40
41	SPARE	20 A	1					0.0 W	0.0 W	1	20 A	SPARE	42
			Total Load:	9940.0 W		7180.0 W		8860.0 W					
			Total Amps:	85 A		60 A		76 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HEATING	23100.0 W	100.00%	23100.0 W		
RECEPTACLE	2880.0 W	100.00%	2880.0 W	**Total Conn. Load:**	25980.0 W
				Total Est. Demand:	25980.0 W
				Total Conn.:	72 A
				Total Est. Demand:	72 A

Notes:

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

ISSUED FOR BID

HALEY WARD
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PROJECT

CONNOR SCHOOL RENOVATIONS

CONNOR, MAINE

TITLE

ELECTRICAL SCHEDULES

STATE OF MAINE
JARED M. MERRY
No. 11679
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2025.04.22	

DRAWN BY	DESIGNED BY	CHECKED BY
TJA	TJA	JMM

PROJECT No. 10377.028

DRAWING NO. **E-601** REV.