LRHSD TRANSPORTATION BUILDING EXTERIOR RESTORATION - DIS-02

LRHSD PROJECT NO. REF21-42-8302

LENAPE REGIONAL HIGH SCHOOL ADMINSTRATION BUILDING
93 WILLOW GROVE ROAD
SHAMONG, NJ 08088

LENAPE REGIONAL HIGH SCHOOL SCHOOL DISTRICT

PREPARED FOR THE

LENAPE REGIONAL HIGH SCHOOL DISTRICT BOARD OF EDUCATION

SAMUEL B. GREEN PRESIDENT
JOANNE E. HARMON VICE PRESIDENT
MATTHEW D. WEBB SUPERINTENDENT

ARCHITECT
THE DESIGN COLLABORATIVE
ARCHITECTS AND PLANNERS, P.A.
1940 ROUTE 9 NORTH
CAPE MAY COURT HOUSE, NJ 08210

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DRAWING NOTE KEY

DRAWING NOTE KEY: 'E' - EXISTING CONDITIONS

ITEMS REPRESENT EXISTING BUILDING ELEMENTS INTENDED TO REMAIN AS IS, OR TO BE ALTERED AND INCORPORATED INTO THE FINISHED CONSTRUCTION

E-2.1.1	CONCRETE DRIVES AND WALKS: EX'G TO REMAIN, REPAIRS, RESTORATION OF EX'G WALKS AND DRIVES ARE EXCLUDED FROM THE SCOPE OF THIS CONTRACT.
E-2.1.2	OUTBUILDINGS: EX'G TO OUTBUILDINGS, INCLUDING STORAGE SHEDS AND CONTAINERS ARE TO REMAIN AND SHALL BE PROTECTED THROUGHOUT CONSTRUCTION.
E-2.1.3	UTILITY STRUCTURES: EX'G TO UTILITY STRUCTURES, INCLUDING UTILITY POLES, GAS SERVICE AND METER, GENERATOR AND ASSOCIATED BOLLARDS ARE TO REMAIN, AND SHALL BE PROTECTED THROUGHOUT CONSTRUCTION.
E-2.1.4	UNDERGROUND STORM DRAINAGE: EX'G STORM WATER COLLECTION SYSTEMS TO BE EXCAVATED AND RELOCATED TO ACCOMMODATE NEW BUILDING SIDING, PROVIDE NEW NEW BOOTS AND ADAPTERS, REPLACE WHERE REQ'D.
E-2.5.1	GROUNDS RESTORATION: REPAIR, RESTORE GROUNDS FOLLOWING STORM WATER COLLECTION SYSTEM RELOCATION. PROVIDE 4" TOPSOIL AND SEED, SLOPE AWAY FROM BUILDING.
E-3.1.1	CONCRETE FOOTING: EX'G TO REMAIN AS IS.
E-3.1.2	CONCRETE FOUNDATION WALL: EX'G TO REMAIN AS IS, REMOVE EX'G BASE FLASHING AS REQ'D TO COMPLETE THE WALL BASE RESTORATION WORK.
E-4.1	EX'G CMU: 8" X 12" IN. THICK.
E-8.1.1	EX'G ENTRANCE DOORS: EX'G EXTERIOR DOOR TO REMAIN, NO ALTERATION PROPOSED.
E-8.1.2	EX'G ENTRANCE DOORS: EX'G EXTERIOR DOOR TO REMAIN, WINDOWS ARE TO BE PREPARED SPECIAL COATING FINISH TO MATCH NEW DOOR FINISHES. PROVIDE CEMENTITIOUS SIDING RETURN TRIM, ASSOCIATED FLASHING AND SEALED.
E-8.2.1	EX'G WINDOWS: EX'G WINDOWS TO REMAIN, WINDOWS ARE TO BE PREPARED FOR THE INSTALLATION OF CEMENTITIOUS SIDING RETURN TRIM AND ASSOCIATED FLASHING. THE WINDOW PERIMETER SHALL BE SEALED.
E-8.2.2	EX'G WINDOWS: EX'G WINDOWS TO REMAIN, WINDOWS ARE TO BE PREPARED SPECIAL COATING FINISH TO MATCH NEW DOOR FINISHES. PROVIDE CEMENTITIOUS SIDING RETURN TRIM, ASSOCIATED FLASHING AND SEALED.
E-8.3.1	EX'G LOUVERS: EX'G LOUVERS TO REMAIN, LOUVERS ARE TO BE PREPARED FOR THE INSTALLATION OF CEMENTITIOUS SIDING RETURN TRIM AND ASSOCIATED FLASHING. THE LOUVER PERIMETER SHALL BE SEALED.
E-9.0.1	INTERIOR WALL FINISHES, GENERAL: EX'G TO REMAIN, REPAIR, PAINT AFFECTED SURFACES FOLLOWING THE COMPLETION OF NEW WORK. FINISHES TO MATCH EX'G
E-9.0.2	EXTERIOR WALL FINISHES, WINDOW FRAMES AND TRIM: EX'G TO REMAIN, RESTORE DAMAGE, PAINT BAY WINDOW ELEMENTS INCLUDING UNDERSIDE.
E-10.1.1	WALL MOUNTED SIGNAGE: REMOVE, REINSTALL AS REQ'D TO COMPLETE THE WORK OF THIS CONTRACT, PATCH ABANDONED HOLES PRIOR TO COATING.
E-10.2.1	WALL MOUNTED LETTERS: REMOVE, REFINISH AS SPECIFIED AND REINSTALL UPON COMPLETION OF THE RESTORATION OF THE EX'G WALL SURFACE.
E-22.0.1	UNDERGROUND GAS SERVICE: EX'G GAS SERVICE TO REMAIN, PROTECT FROM DAMAGE. VERIFY LOCATION PRIOR TO ANY EXCAVATION.
E-22.1.1	WALL MOUNTED PLUMBING FITTINGS AND FIXTURES: EX'G HOSE BIBBS AND OTHER WALL MOUNTED PLUMBING FITTINGS AND FIXTURES TO REMAIN, EXTENT AS REQUIRED TO ACCOMMODATE PROPOSED WALL FINISHES.
E-22.1.2	PLUMBING ROOF VENT PENETRATIONS: PLUMBING VENT STACKS TO REMAIN, REPAIR DAMAGE, REMOVE EXCESS SEALANTS, PREPARE METAL COMPONENTS AND ADJ. ROOF SURFACE FOR COATING APPLICATION.
E-22.2.1	GAS METERS, ASSOCIATED SYSTEMS AND PIPING: EX'G GAS SERVICE TO REMAIN, PROTECT FROM DAMAGE THROUGHOUT CONSTRUCTION.
E-23.1.1	HVAC SYSTEMS, WALL MOUNTED: EX'G WALL MOUNTED MECHANICAL SYSTEMS AND EQUIPMENT TO BE REMOVED AND PRESERVED FOR REUSE. REINSTALL WHERE DIRECTED ON THE CONTRACT MECHANICAL DRAWINGS.
E-23.1.2	HVAC SYSTEMS, GROUND MOUNTED: EX'G GROUND MOUNTED MECHANICAL SYSTEMS TO REMAIN, PROTECT THROUGHOUT CONSTRUCTION, VERIFY PROPER OPERATION UPON COMPLETION.
E-23.1.3	HVAC PIPING, PIPING COVERS: REMOVE, RELOCATE, REINSTALL AS REQ'D AND AS DIRECTED WITHIN THE CONTRACT MECHANICAL DOCUMENTS. TEST SYSTEMS AND VERIFY PROPER OPERATION UPON COMPLETION OF THE REINSTALLATION.
E-23.2.1	HVAC ROOF EXHAUST / VENT PENETRATIONS: MECHANICAL VENT STACKS TO REMAIN, REPAIR DAMAGE, REMOVE EXCESS SEALANTS, PREPARE METAL COMPONENTS AND ADJ. ROOF SURFACE FOR COATING APPLICATION.
E-23.2.2	HVAC VENTING PENETRATIONS: HVAC THRU-WALL VENTING SYSTEMS AND LOUVERS THAT CANNOT BE READILY REMOVED AND RELOCATED SHALL BE PREPARED AND COATED, PENDING OWNER / ARCHITECT CONFIRMATION.
E-26.0.1	UNDERGROUND ELECTRICAL SERVICE: EX'G ELECTRICAL SERVICE TO REMAIN, PROTECT FROM DAMAGE, VERIFY LOCATION PRIOR TO ANY EXCAVATION.
E-26.1.1	ELECTRICAL CONSTRUCTION: EX'G ABANDONED OR INACTIVE ELECTRICAL EQUIPMENT, DEVICES, SWITCHES, CONDUIT AND WIRING TO BE REMOVED, INCLUDING THAT SERVING ABANDONED MECHANICAL SYSTEMS. TERMINATE SERVICES AT SOURCE.
E-26.1.1	ELECTRICAL CONDUIT / WIRING / JUNCTION BOX: REMOVE, RELOCATE, REINSTALL AS REQ'D TO COMPLETE THE WORK OF THE CONTRACT, PATCH ABANDONED HOLES PRIOR TO COATING. VERIFY PROPER OPERATION UPON COMPLETION.
E-26.1.2	WALL MOUNTED LIGHTING FIXTURES, SUPPORTS: REMOVE, REINSTALL AS REQ'D TO COMPLETE THE WORK OF THIS CONTRACT, PATCH ABANDONED HOLES PRIOR TO COATING. VERIFY PROPER OPERATION UPON COMPLETION.
E-26.1.3	WALL SECURITY AND DATA DEVICES, CAMERAS: REMOVE, REINSTALL AS REQ'D TO COMPLETE THE WORK OF THIS CONTRACT, PATCH ABANDONED HOLES PRIOR TO COATING. COORD. THIS WORK W/ DESIGNATED DISTRICT PERSONNEL.
E-26.2.1	EMERGENCY GENERATOR: LINE OF THE EX'G EMERGENCY GENERATOR TO REMAIN. THE GENERATOR SHALL REMAIN IN SERVICE THROUGHOUT THE DURATION OF THE CONTRACT.
E-26.2.2	EMERGENCY GENERATOR: EX'G WALL MOUNTED PANELS, DISCONNECTS AND DISTRIBUTION SYSTEMS, REMOVE AND REINSTALL AS REQUIRED TO ACCOMMODATE THE WORK OF THE CONTRACT. COORDINATION SHUTDOWNS WITH OWNER
E-26.3.1	LIGHTNING PROTECTION SYSTEMS: LIGHTNING PROTECTION SYSTEMS TO REMAIN. REMOVE AND REINSTALL IN CONJUNCTION WITH THE PROPOSED ROOF AND WALL CLADDING SCOPE OF WORK. REFER TO CONTRACT ELECTRICAL DRAWINGS.

DRAWING NOTE KEY: 'R' - REMOVED

ITEMS REPRESENT EXISTING BUILDING ELEMENTS INTENDED TO REMOVED FROM THE SITE, OR DELIVERED TO THE OWNER IF SO DESIGNATED OR DIRECTED.

R-2.1.1	CONCRETE DRIVES AND WALKS: REMOVE, REPLACE EX'G WALKS AND DRIVES WHERE NOTED AND AS REQ'D TO ACCOMMODATE THE WORK OF THIS CONTRACT.
R-2.1.2	PAVED ASPHALT AREAS: REMOVE EX'G PAVED ASPHALT DRIVES WHERE NOTED, AT THE PROPOSED MEETING ROOM ENTRANCE ADDITION, AND AS REQ'D TO ACCOMMODATE THE REQ'D STORM WATER PIPING RELOCATION .
R-2.1.3	
R-2.1.4	UTILITY STRUCTURES: EX'G TO UTILITY STRUCTURES, INCLUDING UTILITY POLES, GAS SERVICE AND METER, OIL TANKS AND ASSOCIATED BOLLARDS ARE TO TO BE REMOVED, PATCH ASPHALT, CONCRETE SURFACES.
R-2.2.2	COUNTER FLASHING REMOVAL: REMOVE EX'G STEEL COUNTER-FLASHING, PREPARE FOR NEW CONSTRUCTION.
R-2.2.3	SILL FLASHING REMOVAL: REMOVE EX'G STEEL SILL FLASHING, PATCH CONCRETE BASE AS REQ'D, PREPARE FOR NEW CONSTRUCTION
R-2.2.4	INSULATION DEMOLITION: REMOVE EX'G INSULATION AS REQ'D TO INSTALL COLD-FORMED BOX BEAM STEEL SIDING SUPPORT, REPLACE INSULATION UPON COMPLETION OF THE WORK.
R-3.1.1	MEETING ROOM VESTIBULE, CONCRETE LANDING, FOOTINGS AND RAMPS: EX'G TO BE REMOVED IN ITS ENTIRETY TO A DEPTH OF NOT LESS THAN 3'-0" BELOW ADJACENT FINISHED GRADE.
R-5.1.1	STEEL BOLLARD: EX'G BOLLARDS AND BOLLARD COVERS ARE TO REMAIN, AND SHALL BE PROTECTED THROUGHOUT CONSTRUCTION.
R-5.1.2	UNFINISHED STEEL COMPONENTS: CLEAN AND COAT GALVANIZED STEEL OVERHEAD DOOR JAMBS AND HEADERS. PREPARATION SHALL INCLUDE FILLING HOLES, CLEANING AND PRIMING RUST, CORROSION AND SIMILAR DETERIORATION.
R-5.2.1	BOX BEAM WALL SUPPORT: PROVIDE CONT. BOX BEAM CONSISTING OF (2) 2-6005162-43 STEEL STUDS AND TRACK AS A CONT. SPAN BETWEEN EX'G COLUMNS, W/ 16 GA. CLIPS TOP AND BOTTOM. PROVIDE BOX BEAM SUPPORT AT MID-SPAN
R-6.1.1	DIMENSIONAL LUMBER BLOCKING: MICROPRO MCA (UC3B) PRESSURE TRT'D LUMBER, SIZING AS NOTED. PROVIDE .060" SELF-ADHERING, ASPHALT BASED WEATHER BARRIER BETWEEN TRT'D LUMBER AT METAL SIDING / FRAMING.
R-7.6.1	EX'G ROOF, ASPHALT SHINGLE: REMOVE EX'G SHINGLES, UNDERLAYMENT AND MISCELLANEOUS TRIM IN ITS ENTIRETY. EX'G PLYWOOD SHEATHING TO REMAIN, REPLACE PER SPEC SECTIONS 011000, "SUMMARY" AND 017200, "UNIT PRICES"
R-7.6.2	EX'G ROOF, METAL ROOFING: REMOVE EX'G METAL ROOFING, UNDERLAYMENT AND MISCELLANEOUS TRIM IN ITS ENTIRETY. EX'G PLYWOOD SHEATHING TO REMAIN, REPLACE PER SPEC SECTIONS 011000, "SUMMARY" AND 017200, "UNIT PRICES"
R-7.6.3	EX'G RIDGE CAP: REMOVE EX'G RIDGE CAP.
R-7.6.4	EX'G ROOF EAVE, RAKE TRIM: REMOVE EX'G ROOF RAKE AND TRIM.
R-7.6.5	EX'G DRIP EDGE: REMOVE EX'G ROOF DRIP EDGE AND ASSOCIATED FASTENERS.
R-7.7.1	EX'G SIDING: REMOVE EX'G SIDING, PREPARE FOR NEW EXTERIOR WALL FINISH SYSTEMS.
R-7.7.1	EX'G SIDING: REMOVE EX'G SIDING, SHEATHING TO THE FRAMING, PREPARE FOR NEW EXTERIOR WALL FINISH SYSTEMS.
R-7.8.1	GUTTER / DOWNSPOUTS: EX'G GUTTERS, DOWNSPOUTS TO BE REMOVED, COORD. WITH THE REMOVAL AND RELOCATION OF THE EX'G STORM WATER COLLECTION SYSTEMS.
R-7.8.2	DOWNSPOUT BOOTS: EX'G DOWNSPOUT BOOTS LEADING TO UNDERGROUND STORMWATER SYSTEMS TO BE REMOVED. COORD. WITH THE REMOVAL AND RELOCATION OF THE EX'G STORM WATER COLLECTION SYSTEMS.
R-7.9.1	WEATHER BARRIER: .060" SELF-ADHERING, ASPHALT BASED HIGH TEMPERATURE WEATHER BARRIER UNDERLAYMENT OVER SUBSTRATE.
R-7.9.1	FIBER CEMENT BASEBOARD: 1" X 11.25" FIBER CEMENT TRIM BOARD, ROUGHSAWN TEXTURE, JAMES HARDIE OR EQ. AT THE ENTIRE PERIMETER OF BUILDING "A". COLOR TO BE 1 OF 16 MFGR'S STANDARD COLORS. PROVIDE TRIMS AT ALL EDGES.
R-7.9.2	FIBER CEMENT ACCESSORIES FOR 1" TRIM BOARDS: "J" TRIM, FRY-REGLET PROFILE TSJ, CLEAR ANOD. FIN. PER SPEC. SECTION 074610. INSTALL AT ALL BOARD ENDS, AND WHERE ABUTTING DOORS, OPENINGS AND OTHER OBSTRUCTIONS.
R-7.9.3	FIBER CEMENT ACCESSORIES FOR 1" TRIM BOARDS: "H" TRIM, FRY-REGLET PROFILE V9 VERT. MOULDING 1060, CLEAR ANOD. FIN. PER SPEC. SECTION 074610. INSTALL AT ALL BOARD JOINTS.
R-7.9.4	FIBER CEMENT ACCESSORIES FOR 1" TRIM BOARDS: OUTSIDE REVEAL CORNER, FRY-REGLET PROFILE OC7, CLEAR ANOD. FIN. PER SPEC. SECTION 074610. INSTALL AT ALL OUTSIDE CORNER CONDITIONS.
R-7.9.5	FIBER CEMENT ACCESSORIES FOR 1" TRIM BOARDS: DRIP EDGE TRIM, FRY-REGLET PROFILE H3 DOUBLE DRIP CAP, CLEAR ANOD. FIN. PER SPEC. SECTION 074610. INSTALL AT THE TOP OF ALL CEMENT BASEBOARD TRIM, TYP.
R-7.9.6	FIBER CEMENT FASTENER: PREFINISHED NO. 8 STAINLESS STEEL BUGLE HEAD SCREWS AS RECOMMENDED BY THE FIBER CEMENT TRIM MANUFACTURER.
R-7.9.7	FIBER CEMENT SPACER: 1-1/2 WIDE X 11" HIGH X 3/8 FIBER CEMENT SPACER. SPACING TO CORRESPOND WITH FASTENER SPACING.
R-7.9.7	FIBER CEMENT SPACER: 1-1/2 WIDE X 11" HIGH X 3/8 FIBER CEMENT SPACER. SPACING TO CORRESPOND WITH FASTENER SPACING.
E-7.6.1	ROOF, ASPHALT SHINGLE: REMOVE EX'G ASPHALT SHINGLE ROOFING AND UNDERLAYMENT.
E-7.6.2	NREMOVE ROOF, METAL: REMOVE LOW PROFILE METAL STANDING SEAM ROOFING AND UNDERLAYMENT.
E-7.6.3	EX'G RIDGE CAP: REMOVE
E-7.6.4	EX'G ROOF EAVE, RAKE TRIM: REMOVE.
R-7.8.1	GUTTERS AND DOWNSPOUTS: REMOVE EX'G GUTTER AND DOWNSPOUTS IN THEIR ENTIRETY.
R-7.9.1	STAINLESS STEEL SILL FLASHING: 20 GA. 304 STAINLESS STEEL SILL FLASHING, FORM TO FIT FROM COIL STOCK.
R-8.1.1	EX'G ENTRANCE VESTIBULE: EX'G ENTRANCE SYSTEM ENCLOSURE, FRAMING AND GLAZING TO BE REMOVED, PREPARE TO NEW CONSTRUCTION, REFER TO ARCHITECTURAL DETAILS
R-8.1.2	EX'G EXTERIOR DOOR(S): EX'G EXTERIOR DOOR, FRAME TO BE REMOVED AND REPLACED. PREPARE OPENING FOR NEW DOORS. REFER TO ARCHITECTURAL DRAWINGS AND SCHEDULES FOR DOOR, HARDWARE AND TRIM REQUIREMENTS.
R-8.2.1	EX'G WINDOWS: EX'G WINDOWS TO BE REMOVED AND REPLACED. PREPARE OPENING FOR NEW WINDOWS. REFER TO ARCHITECTURAL DRAWINGS AND SCHEDULES FOR WINDOW AND TRIM REQUIREMENTS.
R-22.3.1	PLUMBING ROOF VENT PENETRATIONS: PLUMBING VENT STACKS TO REMAIN, REPAIR DAMAGE, REMOVE EXCESS SEALANTS, PREPARE METAL COMPONENTS AND ADJ. ROOF SURFACE FOR COATING APPLICATION.
R-26.1.1	ELECTRICAL DEVICE / CONDUIT / WIRING / JUNCTION BOX: REMOVE ABANDONED WALL MOUNTED ITEMS. REMOVE WIRING AND CONDUCTORS AT THEIR SOURCE.
E-10.1.1	WALL MOUNTED SIGNAGE: REMOVE, REINSTALL AS REQ'D TO COMPLETE THE WORK OF THIS CONTRACT, PATCH ABANDONED HOLES PRIOR TO COATING.
R-22.1.1	PLUMBING CONSTRUCTION: EX'G ABANDONED OR INACTIVE PLUMBING EQUIPMENT, SERVICES, PIPING, VALVES AND ASSOCIATED CONSTRUCTION LOCATED W/I THE CONTRACT LIMIT LINE TO BE REMOVED, ABANDONED PIPING TO BE REMOVED AND CAPPED.
R-22.1.3	EX'G YARD HYDRANT, PIPING: CUT EX'G COPPER DOMESTIC WATER PIPING, YARD HYDRANT AND REMOVE, PREPARE FOR INSTALLATION OF NEW YARD HYRDANT.
R-23.2.1	HVAC WALL EXHAUST: REMOVE EX'G WALL MOUNTED EXHAUST FAN, INFILL OPENING WITH MASONRY TO MATCH COURSING, DEPTH OF EX'G ADJACENT CONSTRUCTION. REFER TO MECHANICAL DWGS FOR ADDITIONAL INFORMATION
N-22.2.2	NEW YARD HYDRANT, PIPING: PROVIDE JOSAM SERIES 114000-3 FREEZELESS GROUND HYDRANT, EXTEND 3/4" SERVICE, PROVIDE NEW SHUT-OFF VALVE, DRAIN AT POINT OF CONNECTION FOR WINTERIZATION AND 24" SQ. 4" THK CONCRETE PAD AT GRADE.
R-23.1.1	MECHANICAL CONSTRUCTION: EX'G ABANDONED OR INACTIVE MECHANICAL EQUIPMENT, TANKS, VENTS AND ASSOCIATED CONSTRUCTION LOCATED W/I THE CONTRACT LIMIT LINE TO BE REMOVED, ABANDONED PIPING TO BE REMOVED AND CAPPED.
R-26.1.1	ELECTRICAL DEVICE / CONDUIT / WIRING / JUNCTION BOX: REMOVE ABANDONED WALL MOUNTED ITEMS. REMOVE WIRING AND CONDUCTORS AT THEIR SOURCE.

DRAWING NOTE KEY: 'N' - NEW CONSTRUCTION

ITEMS REPRESENT NEW BUILDING ELEMENTS TO BE INCORPORATED INTO THE FINISHED CONSTRUCTION

N-0.0.1	BUILDING CLADDING GENERAL: CEMENTITIOUS SIDING AND CULTURED STONE TO BE PROVIDED AT THE ENTIRE BUILDING PERIMETER AS DETAILED AND NOTED.
N-2.1.1	CONCRETE DRIVES AND WALKS: NEW CONCRETE WALKS AND PAVED SURFACES, AREA AND DEPTH TO MATCH EX'G
N-2.1.4	UNDERGROUND STORM DRAINAGE: PROVIDE SDR-35 NEW STORM PIPING WHERE REQ'D TO REPLACE DAMAGED PIPING, 8" MIN. TO ACCOMMODATE NEW BUILDING SIDING, PROVIDE NEW NEW BOOTS AND ADAPTERS, REPLACE WHERE REQ'D.
N-2.5.1	GROUNDS RESTORATION: REPAIR, RESTORE GROUNDS FOLLOWING STORM WATER COLLECTION SYSTEM RELOCATION. PROVIDE 4" TOPSOIL AND SEED, SLOPE AWAY FROM BUILDING.
N-3.1.1	CONCRETE: CONC. SLAB 4 TURNED DOWN SLAB, PROVIDE 10 MIL VAPOR BARRIER UNDER SLAB AND OVER FOUNDATION INSULATION.
N-4.1.1	MANUFACTURED STONE: TYP. ALL MANUFACTURED STONE - ADHERED TO SCRATCH COAT W/ 1/4" FULL MORTAR BED. W/ TOOLED MORTAR JOINTS
N-4.1.2	MANUFACTURED STONE: WATERTABLE/SILL, 2-1/2" H. X 18" L. X3" W. PROVIDE AT TOP OF ALL ADHERED MANUFACTURED STONE.
N-4.2.1	MORTAR BED: 1/4" MORTAR SCRATCH COAT PLUS MORTAR SETTING BED.
N-4.2.2	EXPANDED LATH: HEAVY DUTY SECURE TO PLYWOOD IN PATTERN AS REQUIRED BY MANUFACTURER AND SPECIFICATIONS.
N-4.2.3	METAL SCREED: PROVIDE AT BASE OF ADHERED STONE, 2" ABOVE PAVING 4 6" ABOVE FINISH GRADE. SCREED TO EXTEND 6" ABOVE BOTTOM OF STONE.
N-4.3.1	CMU: 6" @ LOW VESTIBULE WALL.
N-5.1.1	STEEL BOLLARD: EX'G BOLLARDS AND BOLLARD COVERS ARE TO REMAIN, AND SHALL BE PROTECTED THROUGHOUT CONSTRUCTION.
N-5.1.2	UNFINISHED STEEL COMPONENTS: CLEAN AND COAT GALVANIZED STEEL OVERHEAD DOOR JAMBS AND HEADERS. PREPARATION SHALL INCLUDE FILLING HOLES, CLEANING AND PRIMING RUST, CORROSION AND SIMILAR DETERIORATION.
N-5.2.1	BOX BEAM WALL SUPPORT: PROVIDE CONT. BOX BEAM CONSISTING OF (2) 2-6005162-43 STEEL STUDS AND TRACK AS A CONT. SPAN BETWEEN EX'G COLUMNS, W/ 16 GA. CLIPS TOP AND BOTTOM. PROVIDE BOX BEAM SUPPORT AT MID-SPAN
N-6.1.1	WOOD FURRING: VERTICAL, FLAT FACE 2"X4" @ 16" O.C.
N-6.1.2	WOOD FURRING: HORIZONTAL PRESSURE TREATED, FLAT FACE 2"X6" IN AREAS WITHIN 6" OF GRADE OR PAVING.
N-6.1.3	WOOD FURRING: HORIZONTAL, FLAT FACE 2"X6" AT TOP OF WALL.
N-6.1.4	WOOD FURRING FASTENERS: SECURE WOOD FURRING TO EX'G CMU WALL W/ 5/16" HEAVY DUTY TAPCONS @ 16" O.C. VERT OR HOR . ALTERNATE SIDES OF FURRING. COUNTER SINK FASTENERS. EXTEND THROUGH 1/4" RIGID XPS INTO EX'G CMU 1 1/2" MIN.
N-6.2.1	WOOD STUD: 2"X4", PROVIDE STUDS 4 BLOCKING IN SIZES AS REQUIRED TO PROVIDE NAILING 4 SUPPORT @ WINDOW SYSTEM.
N-6.3.1	PLYWOOD: 3/4"
N-6.3.2	PLYWOOD: 1/2"
N-6.4.1	DECKING: T4G CEDAR
N-7.1.1	FIBER CEMENT SIDING: CEMENTITIOUS, BY JAMES HARDIE OR EQUAL. HARDIE PANEL 4' W X HEIGHT REQUIRED X 5/16" W/ 3/4" CEMENTITIOUS BATTENS @ EA. VERITCAL FURRING MEMBER. FASTENERS IN ACCORDANCE W/ MFGR. RECOMMENDATIONS.
N-7.1.2	FIBER CEMENT SIDING BATTENS: HARDIE TRIM BATTEN BOARDS, 1'-4" O.C., 3/4" X2"-1/2"X LENGTH REQUIRED.
N-7.1.3	FIBER CEMENT SIDING: CEMENTITIOUS, BY JAMES HARDIE OR EQUAL. HARDIE SHINGLE, STRAIGHT EGE PANEL 14" X 48" X .25" TH. FASTENERS IN ACCORDANCE W/ MFGR. RECOMMENDATIONS.
N-7.1.4	FIBER CEMENT TRIM: CEMENTITIOUS, BY JAMES HARDIE OR EQUAL. HARDIE TRIM, 3/4" X WIDTH INDICATED, 4" MIN. WIDTH. FASTENERS IN ACCORDANCE W/ MFGR. RECOMMENDATIONS.
N-7.1.5	PVC TRIM: BY AZEK OR EQUAL. SIZES AS INDICATED, 3/4" TH. MIN. X 4" WIDTH MIN.
N-7.2.1	RIGID XPS INSULATION : 1-1/2" TH, INSTALL BETWEEN FLAT FACE FURRING.
N-7.2.2	CONTINUOUS RIGID XPS INSULATION : 1/2" TH, CONTINUOUS UNDER ALL FURRING @ ALL AREAS TO BE PROVIDED WITH NEW MANUFACTURED STONE AND FIBER CEMENT SIDING.
N-7.2.3	FOUNDATION INSULATION : 2" TH, R-10, OWENS CORNING FOAMULAR NGX F-250 OR EQUAL. INSTALL 2'-0" VERTICALLY DOWN FOUNDATION AND 2'-0" INTO VESTIBULE AREA HORIZONTALLY.
N-7.3.1	BASE FLASHING: 0.040" ALUM. FLASHING 6" UP WALL AND SANDWICH BETWEEN HIGH + LOW WRB. EXTEND 2" ONTO WATERTABLE/SILL STONE W/ CLOSED HEM EDGE
N-7.3.2	HEAD FLASHING: 0.040" ALUM. FLASHING 2" UP WALL AND EXTEND 1" OVER WINDOW/STOREFRONT HEAD W/ CLOSED HEM EDGE
N-7.3.3	BASE FLASHING: 0.040" ALUM. FLASHING CONT. @ BASE OF CULTURED STONE. 6" UP WALL AND EXTEND TO E.O. ADHERED STONE.
N-7.3.4	WINDOW SILL FLASHING: 0.063" ALUM. FLASHING CONT. @ SILL. 2"" UP ALUM. SILL. PROVIDE END DAM E.S. 2" UP.
N-7.3.5	SEALANT: SEALANT, CLOSED CELL BACKER ROD 4 SHIMS AS REQUIRED. SEAL WINDOWS 4 DOORS BOTH SIDES, ALL AROUND PERIMETER.
N-7.4.1	WEATHER RESISTANT BARRIER (WRB): DRAINAGE PLANE OVER ALL FURRING 4 XPS INSULATION.
N-7.4.2	RAIN SCREEN: RAIN SLICKER MAX BY B. OBDYKE
N-7.5.1	WALL FINISH: DIRECT APPLIED POLYMER-MODIFIED PRIMER 4 FINISH SYNTHETIC STUCCO. PROVIDE WITHIN VESTIBULE @ ALL LOW NEW CMU WALLS.
N-7.5.2	WALL FINISH: MTL. SYNTHETIC STUCCO J-TRIM @ WINDOW 4 TERMINATIONS @ VESTIBULE NEW CMU WALLS.
N-7.6.1	NEW ROOF, ASPHALT SHINGLE: PROVIDE NEW ASPHALT SHINGLE ROOFING AND UNDERLAYMENT OVER EXISTING PLYWOOD ROOF SHEATHING
N-7.6.2	NEW ROOF, METAL: PROVIDE LOW PROFILE METAL STANDING SEAM ROOFING AND UNDERLAYMENT OVER EXISTING PLYWOOD ROOF SHEATHING
N-7.6.3	NEW RIDGE CAP: VENTING FIBERGLASS MODIFIED ASPHALT RIDGE CAP.
N-7.6.4	NEW ROOF EAVE, RAKE TRIM: ALUM., IN CONFIGURATIONS AS SHOWN.
N-7.7.1	GUTTER / DOWNSPOUTS: NEW GUTTERS AND DOWNSPOUTS AS SCHEDULES. REFER TO THE A13." ROOF PLAN AND SCHEDULES" FOR ADDITIONAL INFORMATION.
N-7.8.1	GUTTER / DOWNSPOUTS: NEW GUTTERS AND DOWNSPOUTS AS SCHEDULES. REFER TO THE A13." ROOF PLAN AND SCHEDULES" FOR ADDITIONAL INFORMATION.
N-7.8.2	DOWNSPOUT BOOTS: NEW RUL ADAPTER BOOT AND CLEANOUT, SIZED TO SUIT DOWNSPOUT
N-7.9.1	WEATHER BARRIER: .060" SELF-ADHERING, ASPHALT BASED HIGH TEMPERATURE WEATHER BARRIER UNDERLAYMENT OVER SUBSTRATE.
N-7.9.2	STAINLESS STEEL SILL FLASHING: 20 GA. 304 STAINLESS STEEL SILL FLASHING, FORM TO FIT FROM COIL STOCK.
N-8.1.2	EX'G ENTRANCE DOORS: COATING OF EX'G ENTRANCE DOORS AND TRIM IS EXCLUDED FROM THE SCOPE OF THIS CONTRACT, THE JOINT BETWEEN THE DOOR FRAME / TRIM AND THE COATED SIDING SHALL BE SEALED.
N-8.1.3	EX'G WINDOWS: COATING OF EX'G WINDOW COMPONENTS AND TRIM IS EXCLUDED FROM THE SCOPE OF THIS CONTRACT. THE JOINT BETWEEN THE WINDOW FRAME / TRIM AND THE COATED SIDING SHALL BE SEALED.
N-8.1.4	EX'G LOUVERS: COATING OF EX'G LOUVERS, LOUVER COMPONENTS AND TRIM IS EXCLUDED FROM THE SCOPE OF THIS CONTRACT. THE JOINT BETWEEN THE LOCKER FRAME / TRIM AND THE COATED SIDING SHALL BE SEALED.
N-8.3.0	ALUM. STOREFRONT SYSTEM: TYP. - YKK 45TU, FRONT SET, 2" X4-1/2", USE AT ALL ALUM. MEMBERS.
N-8.3.1	ALUM. STOREFRONT SYSTEM: VERITICAL JAMB AND HORIZONTAL SILLS 4 MULLIONS.
N-8.3.2	ALUM. STOREFRONT SYSTEM: 2-PIECE COMPRESSION HEAD.
N-8.3.3	ALUM. STOREFRONT SYSTEM: 4-1/2" X4-1/2" CORNER GLAZED FRAMING.
N-8.3.4	ALUM. STOREFRONT SYSTEM: DOOR TO GLAZING ALUM. MEMBERS.
N-8.3.5	ALUM. STOREFRONT SYSTEM: 22 GAUGE ALUM. TRIM CLADDING AND SILL TO MATCH COLOR OF ALUM. FRAMING SYSTEM. PROVIDE AT PERIMETER OF STUD SYSTEMS WHERE SHOWN.
N-9.1.1	INTERIOR WALL FINISH: PROVIDE NEW BUILDING INTERIOR FINISHES AS INDICTAED AND SCHEDULED AND AS REQ'D TO COMPLETE THE WORK OF THIS CONTRACT
N-9.1.2	WALL BASE: 6" H. VINYL COVE BASE (V.C.B.)
N-9.1.3	CARPET: 24"X24" CARPET TILE WALK OFF.
N-10.1.1	WALL MOUNTED SIGNAGE: SUPPLY AND INSTALL NEW WALL MOUNTED BUILDING SIGNAGE AS INDICATED OR DIRECTED. UTILIZE APPROPRIATE AND APPROVED FASTENERS AND MOUNTING METHODS.
N-22.1.1	PLUMBING ROOF VENT PENETRATIONS: PLUMBING VENT STACKS TO REMAIN, REPAIR DAMAGE, REMOVE EXCESS SEALANTS, PREPARE METAL COMPONENTS AND ADJ. ROOF SURFACE FOR COATING APPLICATION.
N-22.2.2	NEW YARD HYDRANT, PIPING: PROVIDE JOSAM SERIES 114000-3 FREEZELESS GROUND HYDRANT, EXTEND 3/4" SERVICE, PROVIDE NEW SHUT-OFF VALVE, DRAIN AT POINT OF CONNECTION FOR WINTERIZATION AND 24" SQ. 4" THK CONCRETE PAD AT GRADE.
N-23.1.1	HVAC ROOF EXHAUST / VENT PENETRATIONS: MECHANICAL VENT STACKS TO REMAIN, REPAIR DAMAGE, REMOVE EXCESS SEALANTS, PREPARE METAL COMPONENTS AND ADJ. ROOF SURFACE FOR COATING APPLICATION.

DATE	No.	REVISION
9/28/26	1	RELEASED FOR BID

LOT NO. 1

LRHSD PROJECT NO. REF21-42-8302

PROPOSED EXTERIOR BUILDING RESTORATION

LRHSD ADMINISTRATION BUILDING

93 WILLOW GROVE ROAD, SHAMONG, NEW JERSEY 08088

BLOCK NO. 27.02

SHAMONG TOWNSHIP

BURLINGTON COUNTY

Linda M. Vivenzi, AIA, Secretary/Treasurer
New Jersey Architect LIC # 21AI00106300, R.F.P. LIC # 25LI00651000

Drew C. Diegler, AIA, President
New Jersey Architect LIC # 21AI00188600

KEY PLAN:

PROJECT NORTH

THE DESIGN COLLABORATIVE
ARCHITECTS AND PLANNERS, P.A.
1940 ROUTE 9 NORTH
CAPE MAY COURT HOUSE, NEW JERSEY 08210
PHONE: 609 465 4111 FAX: 609 465 9358
WWW.TDCARCHITECT.COM

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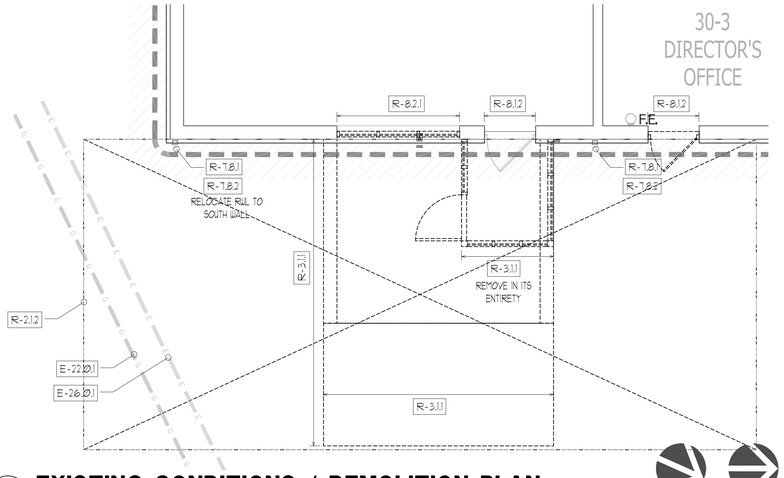
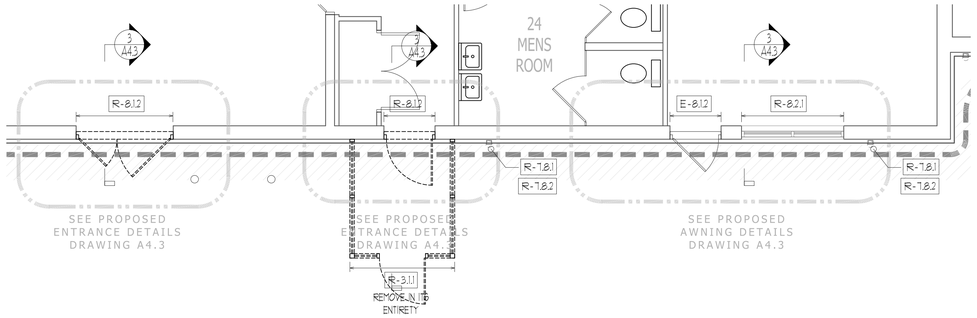


2 / D1.1 EXISTING CONDITIONS / DEMOLITION PLAN
TRAINING ROOM ENTRANCE

1/8"=1'-0"

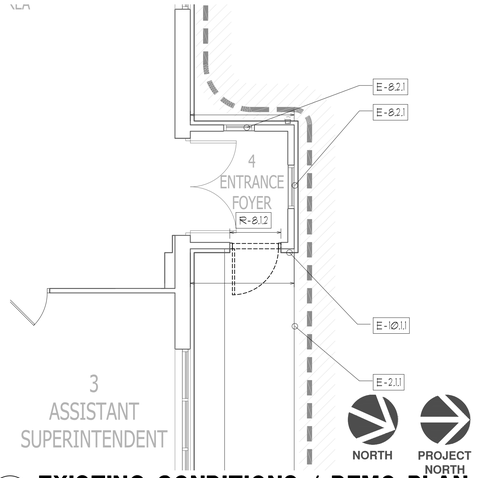
NORTH PROJECT NORTH



3 / D1.1 EXISTING CONDITIONS / DEMOLITION PLAN
EMPLOYEE & SUPERINTENDENT'S ENTRANCE

1/8"=1'-0"

NORTH PROJECT NORTH



4 / D1.1 EXISTING CONDITIONS / DEMO PLAN
MAIN ENTRANCE

1/8"=1'-0"

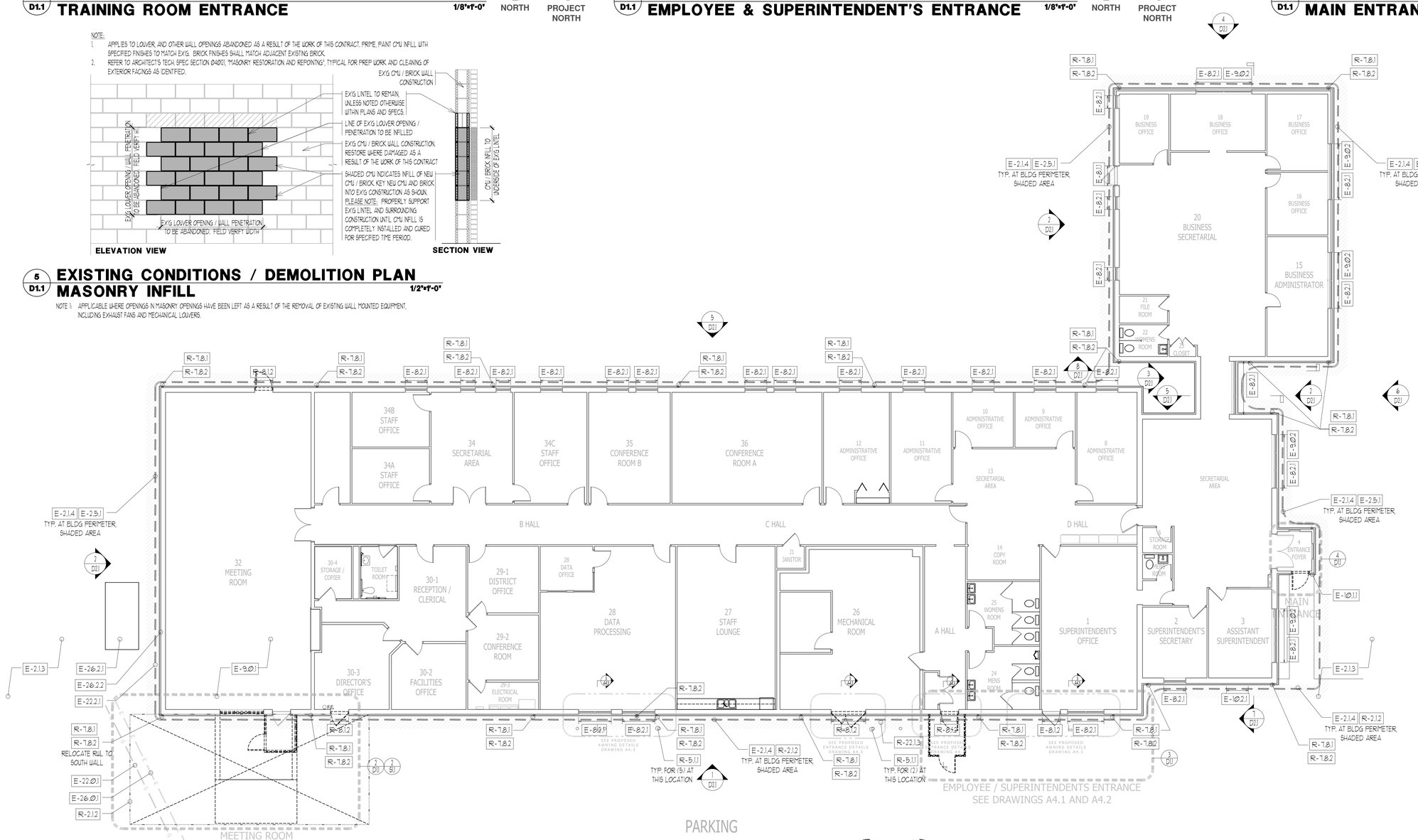
NORTH PROJECT NORTH

NOTE:
1. APPLIES TO LOUVER AND OTHER WALL OPENINGS ABANDONED AS A RESULT OF THE WORK OF THIS CONTRACT. PRIME, PAINT CMU INFILL WITH SPECIFIED FINISHES TO MATCH EXIG. BRICK FINISHES SHALL MATCH ADJACENT EXISTING BRICK.
2. REFER TO ARCHITECT'S TECH. SPEC SECTION 04001, "MASONRY RESTORATION AND REPOINTING", TYPICAL FOR PREP WORK AND CLEANING OF EXTERIOR FACINGS AS IDENTIFIED.

5 / D1.1 EXISTING CONDITIONS / DEMOLITION PLAN
MASONRY INFILL

1/2"=1'-0"

NOTE 1: APPLICABLE WHERE OPENINGS IN MASONRY OPENINGS HAVE BEEN LEFT AS A RESULT OF THE REMOVAL OF EXISTING WALL MOUNTED EQUIPMENT, INCLUDING EXHAUST FANS AND MECHANICAL LOUVERS.



1 / D1.1 EXISTING CONDITIONS / DEMOLITION PLAN

1/8"=1'-0"

N-0.0.1 BUILDING CLADDING GENERAL: CEMENTITIOUS SIDING AND CULTURED STONE TO BE PROVIDED AT THE ENTIRE BUILDING PERIMETER AS DETAILED AND NOTED.

NORTH PROJECT NORTH

NOTE 1: THE BUILDING WILL BE IN FULL USE THROUGHOUT THE COURSE OF THIS PROJECT. THE OWNER WILL REQUIRE FULL ACCESS AND SAFE ACCESS FOR THE DURATION OF THE PROJECT.
NOTE 2: REFER TO DRAWING D.1, DEMOLITION ELEVATIONS" FOR ADDITIONAL INFORMATION REGARDING DEMPOLITION SCOPE AND REQUIREMENTS.
NOTE 3: REFER TO DRAWINGS AS PREPARED BY CONCORD ENGINEERING FOR THE COMPLETE SCOPE OF MECHANICAL AND ELECTRICAL ALTERATIONS INCLUDED WITHIN THE SCOPE OF THIS PROJECT.

DATE	No.	REVISION
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LOT NO. 1
BLOCK NO. 27.02
BURLINGTON COUNTY
SHAMONG TOWNSHIP

LRHSD PROJECT NO. REF21-42-8302
PROPOSED EXTERIOR BUILDING RESTORATION
LRHSD ADMINISTRATION BUILDING
93 WILLOW GROVE ROAD, SHAMONG, NEW JERSEY 08088

Linda M. Vivenzi, AIA, Secretary/Treasurer
New Jersey Architect LIC # 21AI01806300, P.P. LIC # 35LI00650300

Drew C. Diegler, AIA, President
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PHONE: 609 465 4111 FAX: 609 465 9388
WWW.TDCARCHITECT.COM

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SCALE:	AS NOTED	DRAWN BY: DCD
COMM. No.	8302	CHECKED BY: DCD
DATE:	01/02/2025	

SHEET TITLE:
DEMOLITION PLANS & NOTES

SHEET No.:
D1.1

New Jersey ONE CALL
811 Know what's below. Call before you dig.

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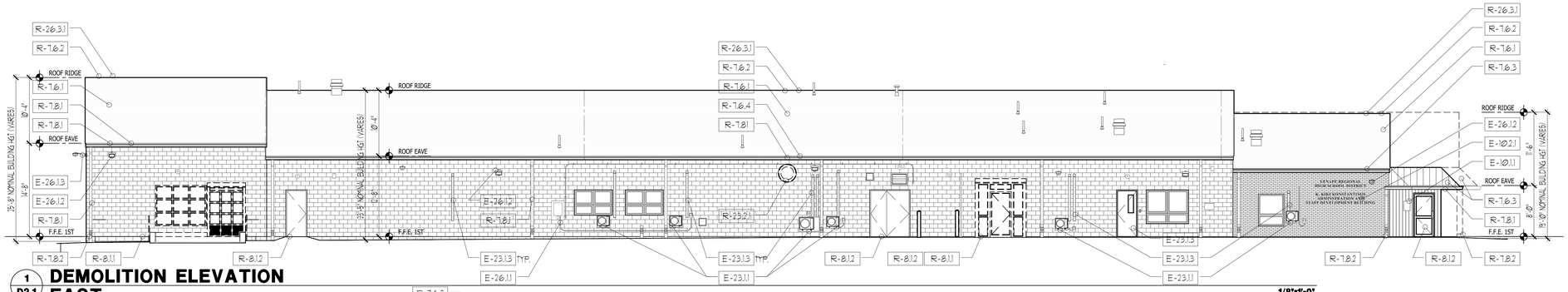
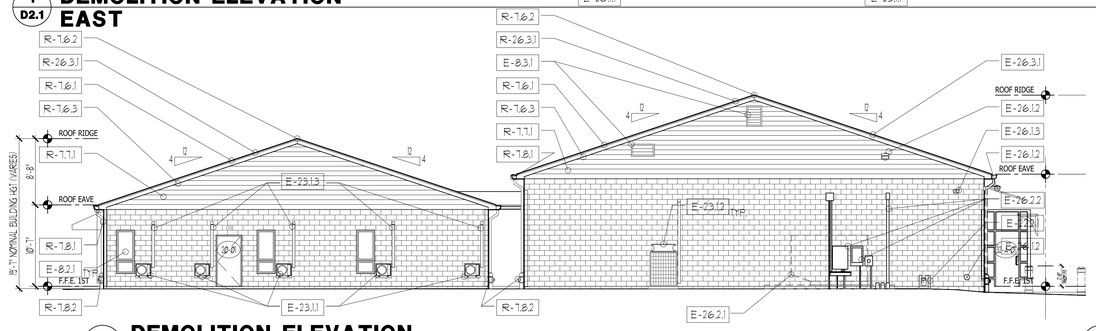


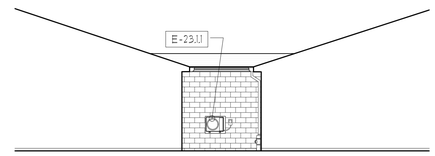
1 D2.1 DEMOLITION ELEVATION EAST

1/8"=1'-0"



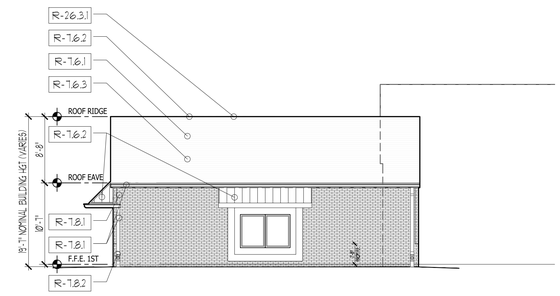
2 D2.1 DEMOLITION ELEVATION SOUTH

1/8"=1'-0"



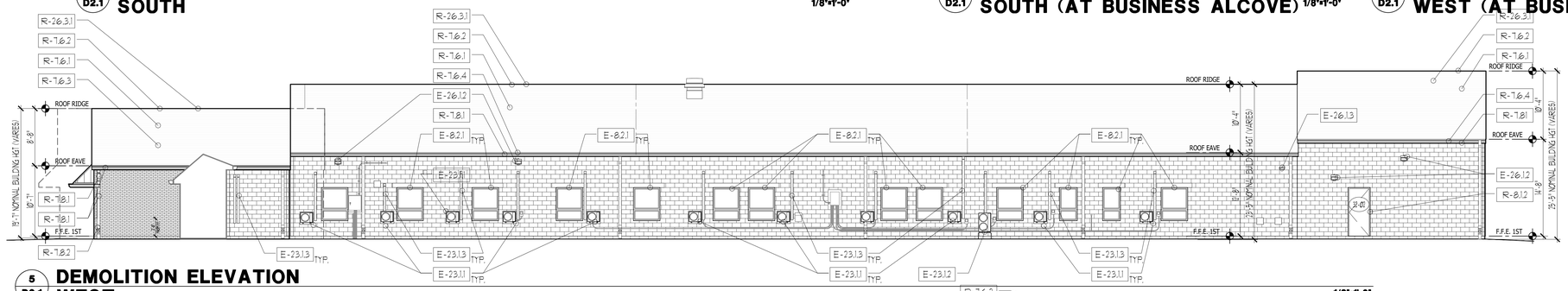
3 D2.1 DEMOLITION ELEVATION SOUTH (AT BUSINESS ALCOVE)

1/8"=1'-0"



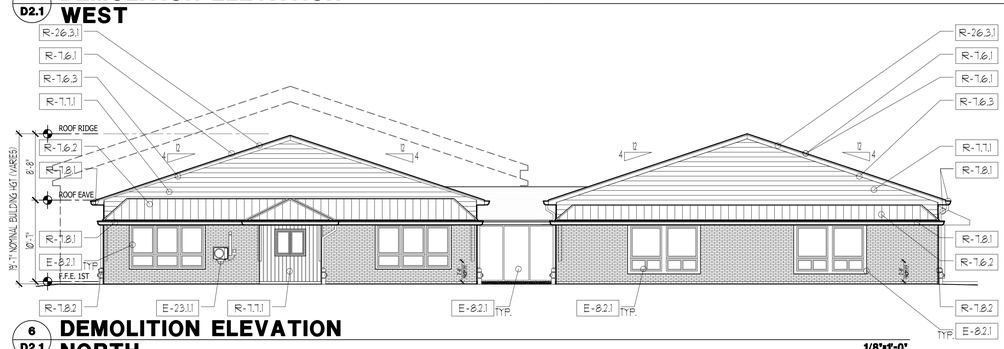
4 D2.1 DEMOLITION ELEVATION WEST (AT BUSINESS WING)

1/8"=1'-0"



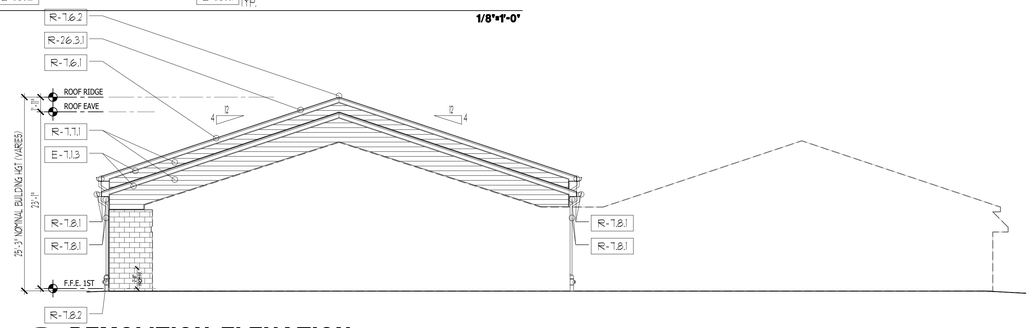
5 D2.1 DEMOLITION ELEVATION WEST

1/8"=1'-0"



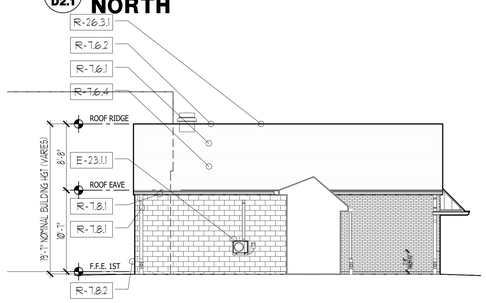
6 D2.1 DEMOLITION ELEVATION NORTH

1/8"=1'-0"



7 D2.1 DEMOLITION ELEVATION NORTH (SHOWING ELEVATION BEYOND)

1/8"=1'-0"



8 D2.1 DEMOLITION ELEVATION EAST (AT BUSINESS ALCOVE)

1/8"=1'-0"

DATE	No.	REVISION
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LOT NO. 1

LRHSD PROJECT NO. REF21-42-8302

PROPOSED EXTERIOR BUILDING RESTORATION

LRHSD ADMINISTRATION BUILDING

93 WILLOW GROVE ROAD, SHAMONG, NEW JERSEY 08088

BURLINGTON COUNTY

BLOCK NO. 27.02

SHAMONG TOWNSHIP

Linda M. Vivenzi, AIA, Secretary/Treasurer
New Jersey Architect LIC # 21AI00506300, P.P. LIC # 35LI00650300

Drew C. Diegler, AIA, President
New Jersey Architect LIC # 21AI00588600

KEY PLAN:

PROJECT NORTH

THE DESIGN COLLABORATIVE
ARCHITECTS AND PLANNERS, P.A.
1940 ROUTE 9 NORTH
CAPE MAY COURT HOUSE, NEW JERSEY 08210
PHONE: 609 465 4111 FAX: 609 465 9358
WWW.TDCARCHITECT.COM

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SCALE:	AS NOTED	DRAWN BY:	DCD
COMM. No.	8302	CHECKED BY:	DCD
DATE:	01/02/2025		

SHEET TITLE:
DEMOLITION BUILDING ELEVATIONS

SHEET No.:
D2.1

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ABBREVIATION LIST

AB.	ANCHOR BOLTS	FL / FLR.	FLOOR	PL	PLATE
@	AT	F.D.	FLOOR DRAIN	PLYWD.	PLYWOOD
ACOUS.	ACOUSTIC	FLUOR.	FLUORESCENT	P.S.	PIPE SPACE
ACT(AT)	ACOUSTIC TILE	F.O.	FACE OF	PSI	POUNDS PER SQUARE INCH
ACQ.	ALKALINE COPPER QUATERNARY	FPSC.	FIRE PROOF SELF CLOSING	PTD.	PAINTED
ACCU.	AIR COOLED CONDENSING UNIT	FR.	FRAME	PTN.	PARTITION
ADD'L	ADDITIONAL	FRT/W	FIRE RETARDANT TREATED (WOOD)	PVC.	POLYVINYL CHLORIDE
AFF.	ABOVE FINISHED FLOOR	FRGWB.	FIBERGLASS REINFORCED GYPSUM	QT.	QUARRY TILE
ALT.	ALTERNATE		WALLBOARD	R.	RADIUS / RISER
ALUM. / AL.	ALUMINUM		FLEXIBLE SHEET ROOFING	RAD.	RADIUS
&	AND	FSR.	FIBERGLASS REINFORCED POLYESTER	RD.	ROOF DRAIN
ANOD.	ANODIZED	FRP.	FOOTING	REBAR.	REINFORCING BAR
∠ / ∠S	ANGLE	FTG.	GYPSUM BOARD	REF. / REFRIG.	REFRIGERATOR
A.P.	ACOUSTICAL PANEL	GB.	GAGE	R/F	REFRIGERATOR / FREEZER
APPD	APPROVED	GA.	GALVANIZED	REQ'D.	REQUIRED
APPL.	APPLY	GALV.	GENERAL CLASSROOM	REINF.	REINFORCE (ING)
ARCH.	ARCHITECTURAL	GCR	GRADE	△ / REV.	REVISION
BRG.	BEARING	GD.	GYPSUM WALL BOARD	RFT	RUBBER FLOOR TILE
BD.	BOARD	GWB.	GYPSUM	RM.	ROOM
BLK.	BLACK	GYP.	HIGH	RT.	ROOF TOP
BOT. / B.	BOTTOM	H.	HEAD	R.V.	ROOF VENT
B.O.	BOTTOM OF	HD.	HOLLOW METAL	RGUC.	RAIN GATER CONDUCTOR
BU(R)	BUILT-UP (ROOF)	HM.	HORIZONTAL	RGUL.	RAIN GATER LEADER
CAB.	CABINET	HORIZ.	HIGH POINT	SC / SP. CT.	SPECIAL COATING
CB	CHALKBOARD	HP	HIGH PRESSURE SODIUM	SF	SQUARE FOOT
C.C.A.	COPPER CROMATED ARSENIC	HPS.	HANDRAIL	SHT.	SHEET
CER.	CERAMIC	HR.	HEIGHT	SIM.	SIMILAR
C.J.	CONTROL JOINT	HT.	HEATING, VENTILATION, &	SPEC (S)	SPECIFICATION (S)
CT.	CERAMIC TILE	H.V.A.C.	AIR CONDITIONING	SQ.	SQUARE
CH / C.	CHANNEL	IARF	INTERLOCKING ATHLETIC RUBBER	STD.	STANDARD
CL / ℄	CENTER LINE		FLOORING	STG.	STORAGE
CL.	CLOSET	ID.	INSIDE DIMENSION	STL. / ST.	STEEL
CLG.	CEILING	INSUL.	INSULATION	SS / ST. ST.	STAINLESS STEEL
COL.	COLUMN	JB.	JAMB	STRUCT.	STRUCTURAL
CMU	CONCRETE MASONRY UNIT	JT.	JOINT	SUSPD.	SUSPENDED
CNTR.	COUNTER	KIT.	KITCHEN	SW	SHORT WAY
CONC.	CONCRETE	LG.	LONG	T.	TREAD / THICKNESS / TOP
CONSTR.	CONSTRUCTION	LAM.	LAMINATED	T.B.	TACK BOARD
CONTR.	CONTRACTOR	LAB.	LABEL	T. & B.	TOP AND BOTTOM
CORR.	CORRIDOR	LAV.	LAVATORY	TEL.	TELEPHONE
CONT.	CONTINUOUS	LLH.	LONG LEG HORIZONTAL	THK.	THICK
D.	DEEP	LLV.	LONG LEG VERTICAL	TLT.	TOILET
DET.	DETAIL	LP.	LOW POINT	T.O.	TOP OF
Ø/DIA.	DIAMETER	LWC.	LIGHTWEIGHT CONCRETE	T.O.S.	TOP OF STEEL / TOP OF SLAB
DIST.	DISTRIBUTION (TOR)	MACH.	MACHINE	T.S.	TRANSITION STRIP + CARPET TO VINYL
DBL.	DOUBLE	MAS.	MASONRY	T.O.W.	TOP OF WALL
DMB	DRY MARKER BOARD	MAX.	MAXIMUM	TYP.	TYPICAL
DR.	DOOR	MBR.	MODIFIED BITUMEN SHEET ROOFING	U.C.	UTILITY CLOSET
D.S.	DOWN SPOUT	MDO.	MARINE DENSITY OVERLAY	UL.	UNDERWRITERS LABORATORIES
DWG(S).	DRAWING (S)	MECH.	MECHANICAL	UNO.	UNLESS NOTED OTHERWISE
EA.	EACH	MFGR.	MANUFACTURER	U.S.	UNDER SIDE
EFF/(C)	EFFICIENCY	MFG'D.	MANUFACTURED	USG.	UNITED STATES GYPSUM
E.J.	EXPANSION JOINT	MFS	MONOLITHIC EPOXY	U.V.	UNIT VENTILATOR
EL / ELEV.	ELEVATION		FLOOR SYSTEM	VCT.	VINYL COMPOSITION TILE
E.P.	ELECTRIC PANEL	MIN.	MINIMUM	VERT.	VERTICAL
EPDM.	ETHYLENE PROPYLENE DIENE-MONOMER	MO.	MASONRY OPENING	VHIFR.	VERY HIGH IMPACT FIBERGLASS REINFORCED
E.P.S.	EXTRUDED POLYSTYRENE	MT.	MARBLE THRESHOLD		
EQ.	EQUAL	MTD.	MOUNTED	V.I.F.	VERIFY IN FIELD
EQUIV.	EQUIVALENT	MTL.	METAL	VTR	VENT THRU ROOF
EQUIP.	EQUIPMENT	MW	MICROWAVE	VWM.	VERIFY WITH MANUFACTURER
E.S.	EACH SIDE	N.C.	NO CEILING	W	WIDTH
E.W.C.	ELECTRIC WATER COOLER	N.IC.	NOT IN CONTRACT	WD.	WOOD
EXG. / EXIST.	EXISTING	NO.	NUMBER	W/	WITH
EXP.	EXPANSION	NTS.	NOT TO SCALE	WR	WATER RESISTANT
EXT.	EXTERIOR	O.C.	ON CENTER	W.W.F.	WELDED WIRE FABRIC
F.A.	FIRE ALARM	OPER.	OPERATOR / TION	WP	WATER PROOF
F.E.	FIRE EXTINGUISHER	O.D.	OUTSIDE DIAMETER	W.C.	WATER CLOSET
FF.	FINISH FLOOR	PART.	PARTITION	WH	WALL HYDRANT
FIN.	FINISH	P.C.	PRE-CAST	Y.D.	YARD DRAIN

LOCATION MAP

PROJECT SCOPE

THE SCOPE OF THIS PROJECT INCLUDES ARCHITECTURAL, MECHANICAL AND ELECTRICAL RENOVATIONS AND ALTERATIONS REQUIRED TO RESTORE THE FACADE AND ROOFING AT THE DISTRICT ADMINISTRATION BUILDING. THE PROJECT INCLUDES A 288 SQ. FT. ADDITION, ROOF REPLACEMENT, SIDING INSTALLATION AND LIMITED DOOR AND WINDOW REPLACEMENT.

PINELANDS COMMISSION: THE ADDITION PROPOSED TOTALS 288 SF, IS BEING CONSTRUCTED OVER AN EXISTING IMPERVIOUS SURFACE, AND WILL GENERATE NO WASTEWATER FLOWS AND IS THEREFORE EXEMPT FROM THE PROJECT APPLICATION REQUIREMENTS STIPULATED WITHIN PINELANDS COMPREHENSIVE MANAGEMENT PLAN (N.J.A.C. 7:50) IN ACCORDANCE WITH 4.7 A.1.B.

CODE INFORMATION

USE GROUP:	B - BUSINESS
CONSTRUCTION TYPE:	5B
FIRE GRADING:	1 HOUR FLAME SPREAD, INTERIOR FINISH (ROOMS + ENCLOSED SPACES, IBC TABLE 803.9) CLASS C. INTERIOR FLOOR FINISH CLASS II, IBC 804.4.
USE OF BUILDING:	BUSINESS. NO CHANGE IN USE IS PROPOSED UNDER THE SCOPE OF THIS APPLICATION.
BUILDING HEIGHT:	40 FT. 1 STORY (506.3, 504.4. EXISTING - NO CHANGE PROPOSED)
ZONING REQUIREMENTS:	NO CHANGE IN USE PROPOSED
BUILDING AREA:	
ALLOWABLE BUILDING AREA:	9,000 SF. (506.2. ALLOWABLE AREA DETERMINATION, NON-FIRE SUPPRESSED.)
OPEN PERIMETER INCREASE:	6,750 SF. (506.3. FRONTAGE INCREASE. 100% OPEN, GREATER THAN 30' FRONTAGE DISTANCE.
ADJUSTED ALLOWABLE BUILDING AREA:	15,750 SF.
EXISTING BUILDING AREA:	14,145 SF.
PROPOSED ADDITION:	256 SF.
TOTAL PROPOSED BUILDING AREA:	14,401 SF.

THE FOLLOWING CODES ARE APPLICABLE TO THIS PROJECT:

A. NEW JERSEY UNIFORM CONSTRUCTION CODE, 5:23, AS AMENDED, NEW JERSEY DEPARTMENT OF COMMUNITY AFFAIRS. SHALL GOVERN THE WORK OF THIS PROJECT EXCEPT AS NOTED HEREIN. ALSO, SUBCODES AS APPLICABLE TO THE WORK:
B. NEW JERSEY BLAINSIER-FREE SUBCODE 5:23-3, AS AMENDED.
C. INTERNATIONAL BUILDING CODE (IBC) ED. 2021
D. INTERNATIONAL MECHANICAL CODE, 2021, AS AMENDED.
E. INTERNATIONAL ENERGY CONSERVATION CODE (2021 (RESIDENTIAL) AND ASHRAE 90.1-2019 (COMMERCIAL) INTERNATIONAL CODE COUNCIL, INC. (ICC).
F. NATIONAL STANDARD PLUMBING CODE, 2021, AS AMENDED.
G. ELECTRICAL SUBCODE, NATIONAL ELECTRICAL CODE / NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70 - 2020, AS AMENDED.
H. REHABILITATION SUBCODE - N.J.A.C. 5:23-6, AND SPECIFICALLY 5:23-6.4
I. OSHA REGULATIONS, AS APPLICABLE.
J. ADA (Americans with Disabilities Act) AS APPLICABLE.
K. (N.J.A.C.) NEW JERSEY ADMINISTRATIVE CODE, TITLE 6:1 CHAPTER 7.2, AS APPLICABLE.
L. ICC / ANSI A117.1 2017.
M. INTERNATIONAL FUEL GAS CODE, 2021, AS APPLICABLE
N. NFPA 13, 2021ED.
O. BS1682E (AMERICAN SOCIETY OF CIVIL ENGINEERS) CURRENT EDITION.
P. ASPA / SDPA1 / CSA 101 / ISO / ANSI-ISR AND ANSI-ISR.
Q. ASTM E1886-00 / ASTM E1996-00 AND 2006 AND MIABLE TESTING.

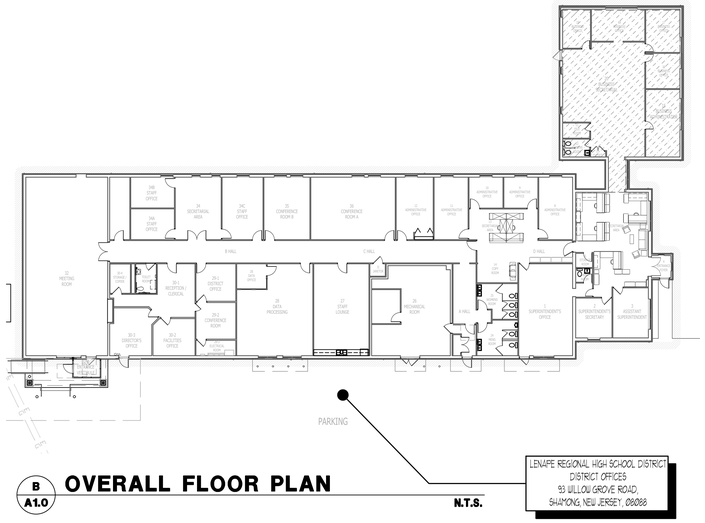
GENERAL NOTES:

1. SCHEDULE. SUBMIT SCHEDULE INDICATING PROPOSED METHODS AND SEQUENCE OF OPERATIONS FOR SELECTIVE DEMOLITION WORK TO ARCHITECT FOR REVIEW PRIOR TO COMMENCEMENT OF WORK. INCLUDE COORDINATION FOR SHUTOFF, CAPPING, AND CONTINUATION OF UTILITY SERVICES AS REQUIRED, TOGETHER W/ DETAILS FOR DUST AND NOISE CONTROL. PROVIDE DETAILED SEQUENCE OF DEMOLITION AND REMOVAL WORK TO ENSURE OWNER'S ONSITE OPERATIONS ARE NOT UNINTERRUPTED. COORDINATE WITH OWNER'S CONTINUING OCCUPATION OF PORTIONS OF EXISTING BUILDING.
2. STORAGE OR SALE OF REMOVED ITEMS ON SITE WILL NOT BE PERMITTED.
3. PROTECTIONS. PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION AS REQUIRED TO PROTECT OWNER'S PERSONNEL AND GENERAL PUBLIC FROM INJURY DUE TO DEMOLITION WORK.
4. PROVIDE PROTECTIVE MEASURES AS REQUIRED TO PROVIDE FREE AND SAFE PASSAGE OF OWNER PERSONNEL TO AND FROM OCCUPIED PORTIONS OF BUILDING.
5. PROTECT FROM DAMAGE EXISTING FINISH WORK THAT IS TO REMAIN IN PLACE AND BECOMES EXPOSED
6. CONSTRUCT TEMPORARY INSULATED SOLID DUSTPROOF PARTITIONS WHERE REQUIRED TO SEPARATE AREAS WHERE NOISY OR EXTENSIVE DIRT OR DUST OPERATIONS ARE PERFORMED. EQUIP PARTITIONS WITH DUSTPROOF DOORS AND SECURITY LOCKS IF REQUIRED. DAMAGES. PROMPTLY REPAIR DAMAGES CAUSED TO ADJACENT FACILITIES BY DEMOLITION WORK AT NO COST TO OWNER.
7. UTILITY SERVICES. MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN, KEEP IN SERVICE, AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OCCUPIED OR USED FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO GOVERNING AUTHORITIES.

SYMBOLS

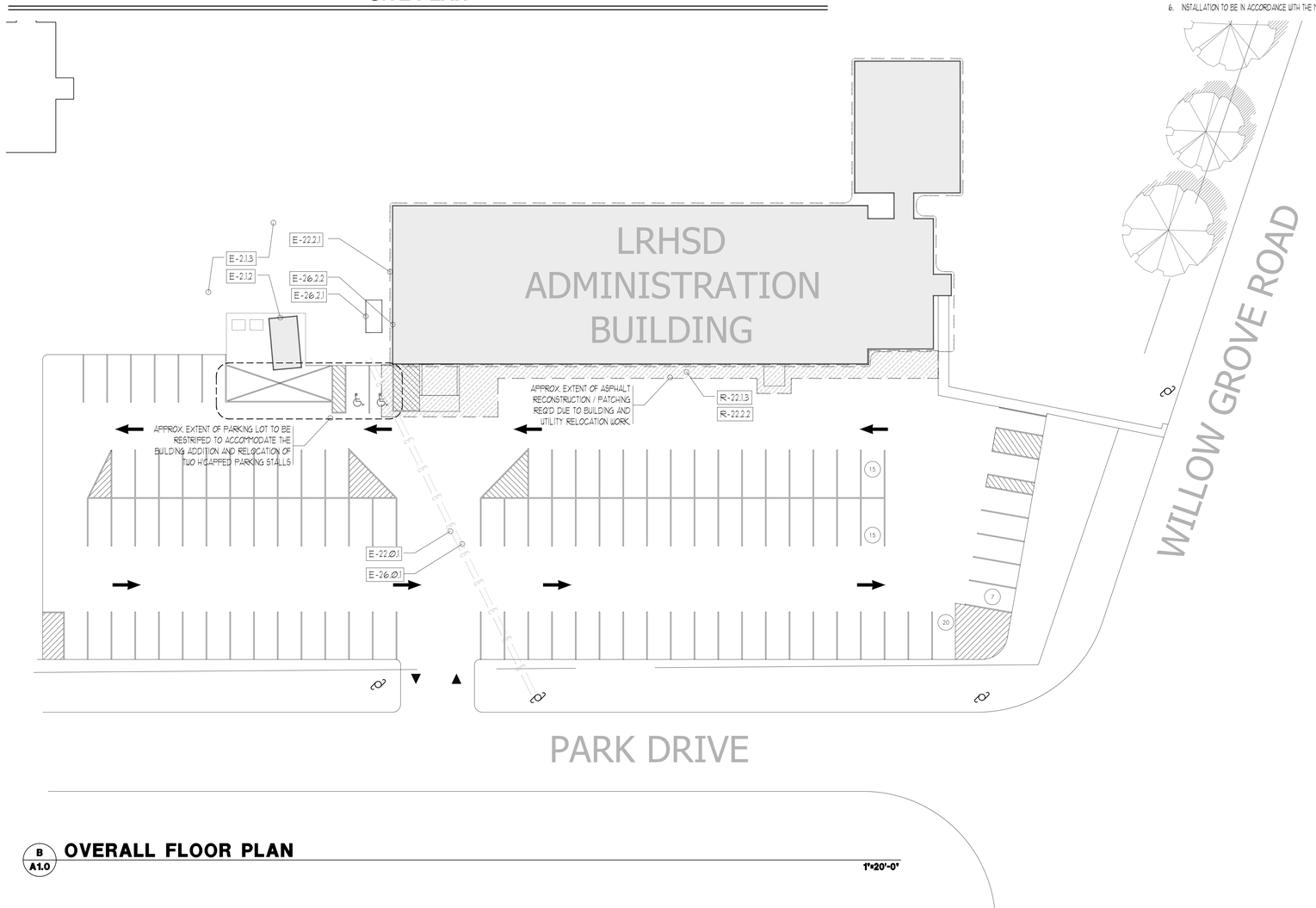
B / A.00	ELEVATION No. SHEET No.
4 / A.00	WALL SECTION No. SHEET No.
5 / A.00	BUILDING SECTION No. SHEET No.
6 / A.00	DETAIL SECTION No. SHEET No.
6 / A.00	DETAIL No. SHEET No.
0'-0"	DIMENSION
0'-0"	℄ TO OUTSIDE FACE
0'-0"	℄ DIMENSION
A B 0'-0"	℄ COLUMN TO ℄ COLUMN TO
	ENLARGEMENT
	CMU
	CMU W/ FIRE RATING (PLAN)
	BRICK
	WOOD BLOCKING
	FINISH WOOD
	CONCRETE
	INSULATION RIGID/SEMI-RIGID
	INSULATION BATT
	PLYWOOD LARGE SCALE
	STEEL

KEY PLAN

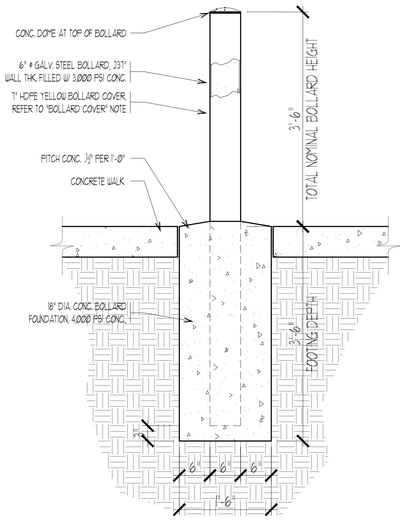


B / A1.0 **OVERALL FLOOR PLAN** N.T.S.

SITE PLAN



B / A1.0 **OVERALL FLOOR PLAN** 1"=20'-0"



4 / A1.0 **BOLLARD DETAIL**
TYP. FOR (2) 1"=1'-0"

BOLLARD COVER NOTE:

1. MANUFACTURER: "POST GUARD" ENCORE COMMERCIAL PRODUCTS, INC. OR APPD'D EQ.
2. MATERIALS: HDPE AND LDPE POLYETHYLENE, 0.125 INCH NOMINAL WALL THICKNESS. FLEXURAL MODULUS: 100,000 PSI, TENSILE STRENGTH: 4,000PSI
3. SIZE: (7" DIA X 60" LONG+) CONTRACTOR TO VERIFY LENGTH, AND CUT AS REQUIRED. SLEEVE HGT TO BE FROM THE TOP OF THE SURROUNDING PAVEMENT TO THE TOP OF THE EXPOSED PIPE.
4. COLOR: YELLOW.
5. TAPE COLOR: RED 3M SERIES REFLECTIVE TAPE, W/ MOLDED RECESS 5.875 INCHES APART
6. INSTALLATION TO BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

DATE	No.	REVISION
9/28/26	1	RELEASED FOR BID

LOT NO. 1

BURLINGTON COUNTY

LRHSD PROJECT NO. REF21-42-8302

PROPOSED EXTERIOR BUILDING RESTORATION

LRHSD ADMINISTRATION BUILDING

93 WILLOW GROVE ROAD, SHAMONG, NEW JERSEY 08088

BLOCK NO. 27.02

SHAMONG TOWNSHIP

Linda M. Vivenzi, AIA, Secretary/Treasurer
New Jersey Architect LIC # 21AI00506300 P.P. LIC # 25JA00650000

Drew C. Dingler, AIA, President
New Jersey Lic # 21AI00588600

KEY PLAN:

PROJECT NORTH

THE COLLABORATIVE DESIGN
ARCHITECTS AND PLANNERS, P.A.
1940 ROUTE 9 NORTH
CAPE MAY COURT HOUSE, NEW JERSEY 08210
PHONE: 609 465 4111 FAX: 609 465 9388
WWW.TDCARCHITECT.COM

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SCALE:	AS NOTED	DRAWN BY:	DCD
COMM. No.	8302	CHECKED BY:	DCD
DATE:	01/02/2025		

SHEET TITLE:
OVERALL PLANS & GENERAL NOTES

SHEET No.: **A1.0**

FILE G:\PROJECTS\8302\ARCHITECTURAL\A1-A8 SERIES\A1.0\8302 A1.0 LRHSD ADMINISTRATION.DWG DATE 9/29/2026 6:49 AM USER drew.dingler

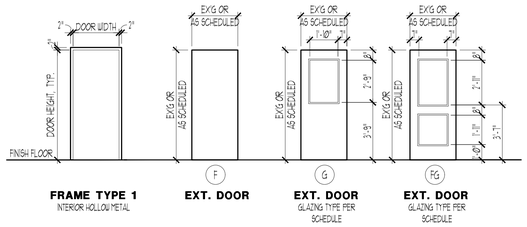
DOOR SCHEDULE - LRHSD ADMINISTRATION BUILDING RENOVATIONS

DOOR NO.	DOOR SIZE	DOOR TYPE	FRAME TYPE	FRAME DEPTH	DOOR MAT.	DOOR FIN.	DOOR LABEL	FRAME MAT.	FRAME FIN.	FRAME LABEL	GLASS	DETAIL HEAD	DETAIL JAMB	DETAIL SILL	THRESHOLD	HRDWR. SET	REMARKS
A-Ø1	(1) 3'-Ø" x 7'-Ø" x 1-3/4"	G	1	4-1/2"	FRP	FRP	N/A	ALUM.	COLOR ANOD.	N/A	G-A	EMHI	EMJI	EMSI	ALUM.	Ø1	
1-Ø1	EXG TO REMAIN	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	REFER TO "SPECIAL DOOR SCHEDULE" BELOW
4-Ø1	(1) 3'-Ø" x 7'-Ø" x 1-3/4"	FG	1	4-1/2"	FRP	FRP	N/A	ALUM.	COLOR ANOD.	N/A	G-A	EMHI	EMJI	EMSI	ALUM.	Ø1	
4-Ø2	EXG TO REMAIN	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	
20-Ø1	EXG TO REMAIN	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	
26-Ø1	2'-6 1/2"-6" x 7'-Ø" x 1-3/4"	F	1	4-1/2"	FRP	FRP	N/A	ALUM.	COLOR ANOD.	N/A	N/A	EMHI	EMJI	EMSI	ALUM.	Ø4	UNEQUAL LEAVES, ASTRAGAL BY DOOR MFGR
30-Ø1	(1) 3'-Ø" x 7'-Ø" x 1-3/4"	F	1	4-1/2"	FRP	FRP	N/A	ALUM.	COLOR ANOD.	N/A	N/A	EMHI	EMJI	EMSI	ALUM.	Ø1	
32-Ø1	EXG TO REMAIN	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	EXG	G-C	EXG	EXG	EXG	EXG	EXG	EXG DOOR TO REMAIN, PROVIDE 3M IMPACT FILM
32-Ø2	(1) 3'-Ø" x 7'-Ø" x 1-3/4"	F	1	4-1/2"	FRP	FRP	N/A	ALUM.	COLOR ANOD.	N/A	N/A	EMHI	EMJI	EMSI	ALUM.	Ø3	
32-A-Ø1	(1) 3'-Ø" x 7'-Ø" x 1-3/4"	FG	1	4-1/2"	ALUM.	COLOR ANOD.	N/A	ALUM.	COLOR ANOD.	N/A	G-B	EMHI	EMJI	EMSI	ALUM.	Ø1	

GENERAL DOOR SCHEDULE NOTES:
1. REFER TO DOOR HEAD, JAMB AND SILL DETAILS ON DRAWING A12 FOR ADDITIONAL INFORMATION.
2. FIGURES WITHIN PARENTHESIS PRECEDING THE DOOR SIZE (*) INDICATES THE NUMBER OF DOOR LEAVES.
3. FIGURES WITHIN PARENTHESIS FOLLOWING THE DOOR NUMBER (*) INDICATES THE QUANTITY OF DOOR LOCATIONS. REFER TO THE FLOOR PLANS
4. DOOR AND ALUMINUM FINISH TO BE COLOR ANODIZED. ALLOW FOR (2) SELECTIONS FOR BOTH DOORS AND FRAMES.
5. IMPACT FILM SHALL BE AVERY-DENNISON "SF CLEAR 7 MIL." WHERE IMPACT RESISTANT SECURITY FILM IS INDICATED WITHIN THE GLAZING NOTES BELOW.

SPECIAL DOOR SCHEDULE NOTES:
1. DOOR 1-Ø1 TO REMAIN AND SHALL BE PREPARED AND PAINTED WITH A SPECIAL COATING FINISH.

GLAZING SCHEDULE:
G-A: 1" INSULATED EXTERIOR LITE: 1/4" CLEAR TEMP. LOW-E #3 SURFACE INTERIOR LITE: 1/4" CLEAR TEMP. PROVIDE IMPACT RESISTANT SECURITY FILM AND IMPACT PROTECTION PROFILE GLAZING STOPS.
G-B: 1" INSULATED EXTERIOR LITE: 1/4" CLEAR TEMP. LOW-E #3 SURFACE INTERIOR LITE: 1/4" CLEAR TEMP.
G-C: APPLY PROVIDE IMPACT RESISTANT SECURITY FILM AND IMPACT PROTECTION PROFILE GLAZING STOPS TO EXG DOOR GLAZING, REMOVE ANY EXG FILM AND PREPARE EXG GLASS FOR NEW FILM APPLICATION.



FRAME TYPE 1 INTERIOR HOLLOW METAL | **EXT. DOOR** | **EXT. DOOR** GLAZING TYPE PER SCHEDULE | **EXT. DOOR** GLAZING TYPE PER SCHEDULE

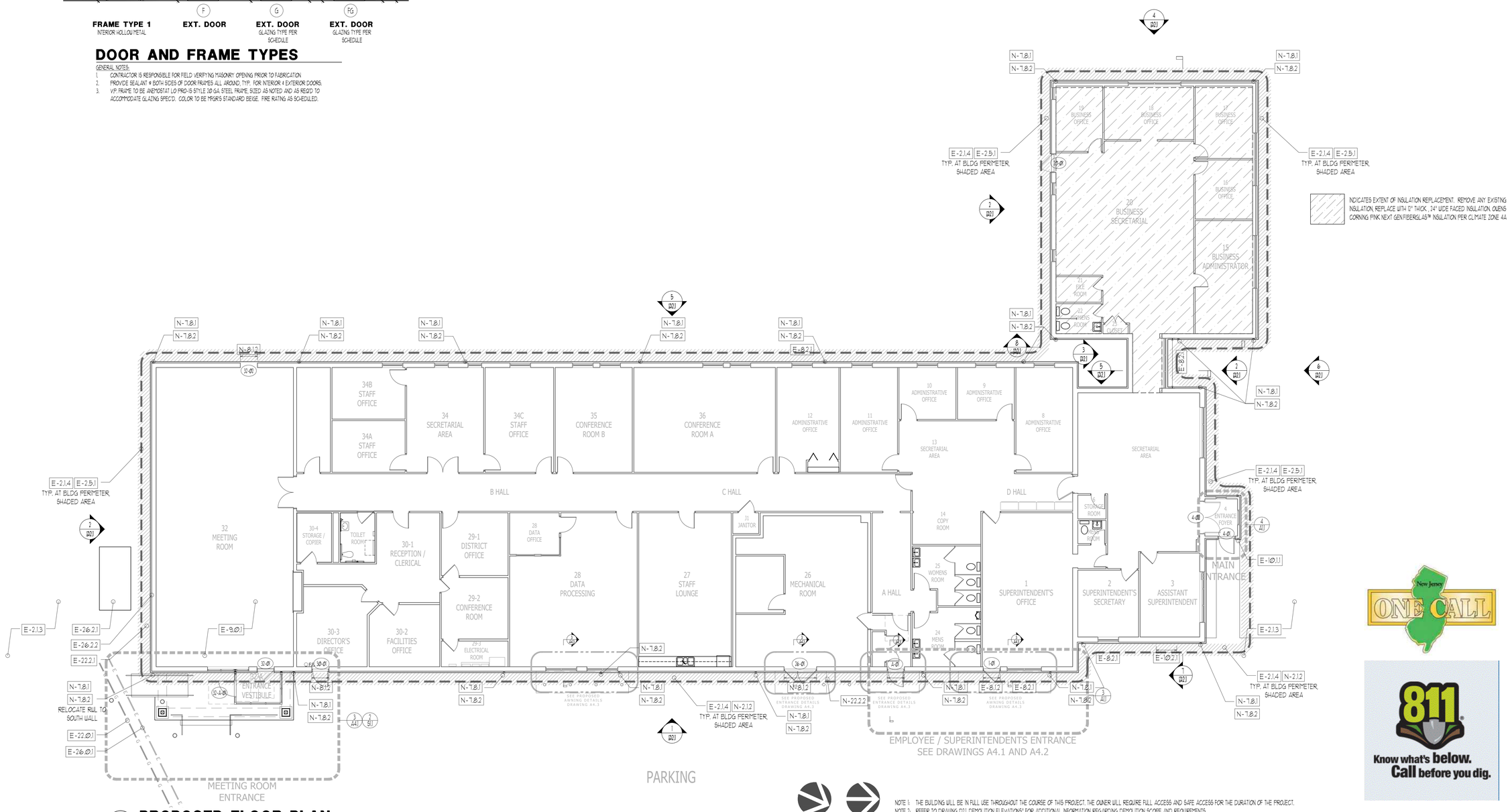
DOOR AND FRAME TYPES

GENERAL NOTES:
1. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING MASONRY OPENING PRIOR TO FABRICATION
2. PROVIDE SEALANT @ BOTH SIDES OF DOOR FRAMES ALL AROUND, TYP. FOR INTERIOR & EXTERIOR DOORS.
3. VIP. FRAME TO BE ANEMOSTAT LO PRO-16 STYLE 20 GA. STEEL FRAME, SIZED AS NOTED AND AS REQD TO ACCOMMODATE GLAZING SPEC'D. COLOR TO BE MFGR'S STANDARD BEIGE. FIRE RATING AS SCHEDULED.

ROOM FINISH SCHEDULE - LRHSD ADMINISTRATION BUILDING RENOVATIONS

ROOM NO.	ROOM NAME	FLOOR MAT.	FLOOR FINISH	FLOOR TYPE	FLOOR COLOR	BASE MAT.	BASE HT.	BASE COLOR	WALL MAT.	WALL FINISH	WALL COLOR	WAINSCOT MAT.	WAINSCOT FINISH	WAINSCOT COLOR	WAINSCOT HT.	CEILING MAT.	CEILING FINISH	CEILING COLOR	CEILING HT.	REMARKS SEE "ROOM FINISH NOTES - SPECIFIC" FOR NOTATIONS
32-A	ENTRANCE VESTIBULE	CONC.	CARPET TILE 1	N/A	BY OWNER	VINYL	6"	BY OWNER	5F. / CMU	STN. STUCCO/ CEMENT. SIDING	BY OWNER	N/A	N/A	N/A	N/A	TAG PANELS	FRE-FIN	WHITE	10'-0"	POLYMER MODIFIED STUCCO, BASE & FIN. COATS, CEMENTITOUS SIDING @ EXG CMU WALL.

ROOM FINISH SCHEDULE NOTES - GENERAL:
1. PAINTING AND SPECIAL COATING: ALL EXPOSED UNFINISHED SURFACES, INCLUDING WALLS AND EXPOSED CEILING CONSTRUCTION TO BE PAINTED WITH A SPECIAL COATING PRIMER COAT PLUS FINISH COATS AS NOTED. ALL PREVIOUSLY COATED INTERIOR WALLS TO BE PRIMED THEN PAINTED WITH ONE COAT SPECIAL COATING UNLESS NOTED OTHERWISE BY OWNER.
2. PROVIDE VINYL BASE AT ALL WALL BASE AREAS AND ALL TOE KICKS OF CASEWORK. PROVIDE 4" H. BASE @ TOE KICKS, & 6" H. AT ALL OTHER LOCATIONS.
3. FLAME SPREAD AND SMOKE DEVELOPED INDEXES FOR WALLS AND CEILING FINISHES SHALL BE IN ACCORDANCE WITH IBC AS FOLLOWS. MATERIALS SHALL BE TESTED IN ACCORDANCE WITH ASTM E84 OR UL 723. FLAME SPREAD - 200 MAX. SMOKE DEVELOPED - 450 MAX.
4. FINISHES DAMAGED OR AFFECTED BY THE SCOPE OF THE CONTRACT SHALL BE RESTORED TO MATCH THE EXISTING CONSTRUCTION, AND WHERE PATCH TO ACCOMMODATE PROPOSED CONSTRUCTION IS INDICATED. PATCH AND REPAIR ANY DAMAGED FINISHES AND PROVIDE NEW FINISHES TO MATCH EXG.
5. THE SCOPE OF THE WORK REQUIRES MODIFICATIONS TO THE EXISTING CONSTRUCTION. EXISTING ELECTRICAL DEVICES, RECEPTACLES, SWITCHES, CEILING MPE SYSTEMS, MECHANICAL DIFFUSERS, DUCTWORK, CEILING MOUNTED EQUIPMENT, FIRE ALARM DEVICES AND SPEAKERS SHALL BE SALVAGED DISCONNECTED AND RELOCATED AS REQUIRED TO ACCOMMODATE THE WORK OF THIS CONTRACT.
6. EXG FIRE ALARM AND FIRE SUPPRESSION DEVICES SHALL BE DISCONNECTED AND RECONNECTED AS REQUIRED TO ACCOMMODATE THE WORK OF THIS CONTRACT.
7. COLORS SHALL BE SELECTED BY THE OWNER, COLOR SELECTIONS SHALL BE FROM THE FULL RANGE OF COLORS REFERENCED WITHIN THE CONTRACT SPECIFICATIONS.
8. TYP. FINISHES NOTED APPLY TO ENTIRE ROOM, U.N.O.



1 / A1.1 PROPOSED FLOOR PLAN

N-Ø.Ø.1 BUILDING CLADDING, GENERAL; CEMENTITIOUS SIDING AND CULTURED STONE TO BE PROVIDED AT THE ENTIRE BUILDING PERIMETER AS DETAILED AND NOTED.

1/8"=1'-0"

NORTH | PROJECT NORTH

NOTE 1: THE BUILDING WILL BE IN FULL USE THROUGHOUT THE COURSE OF THIS PROJECT. THE OWNER WILL REQUIRE FULL ACCESS AND SAFE ACCESS FOR THE DURATION OF THE PROJECT.
NOTE 2: REFER TO DRAWING D2.1, DEMOLITION ELEVATIONS' FOR ADDITIONAL INFORMATION REGARDING DEMOLITION SCOPE AND REQUIREMENTS.
NOTE 3: REFER TO DRAWINGS AS PREPARED BY CONCORD ENGINEERING FOR THE COMPLETE SCOPE OF MECHANICAL AND ELECTRICAL ALTERATIONS INCLUDED WITHIN THE SCOPE OF THIS PROJECT.

DATE	No.	REVISION
9/28/26	1	RELEASED FOR BID

LOT NO. 1
LRHSD PROJECT NO. REF21-42-8302
PROPOSED EXTERIOR BUILDING RESTORATION
LRHSD ADMINISTRATION BUILDING
93 WILLOW GROVE ROAD, SHAMONG, NEW JERSEY 08088
BLOCK NO. 27.02
SHAMONG TOWNSHIP
BURLINGTON COUNTY

Linda M. Vivenzi, AIA, Secretary/Treasurer
New Jersey Architect LIC # 21AI01806300, P.P. LIC # 35LI00651000

Drew C. Diegler, AIA, President
New Jersey Architect LIC # 21AI01808600

KEY PLAN:

THE DESIGN COLLABORATIVE
ARCHITECTS AND PLANNERS, P.A.
1940 ROUTE 9 NORTH
CAPE MAY COURT HOUSE, NEW JERSEY 08210
PHONE: 609 465 4111 FAX: 609 465 9358
WWW.TDCARCHITECT.COM

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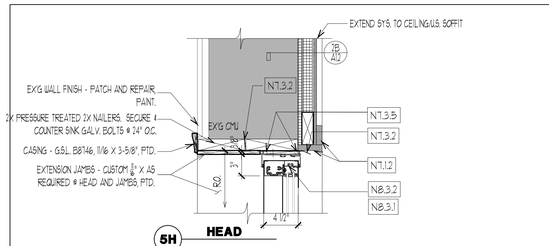
SCALE:	AS NOTED	DRAWN BY: DCD
COMM. No.	8302	CHECKED BY: DCD
DATE:	01/02/2025	

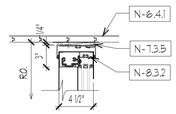
SHEET TITLE: FLOOR PLANS, SCHEDULES & DETAILS

SHEET No.: A1.1

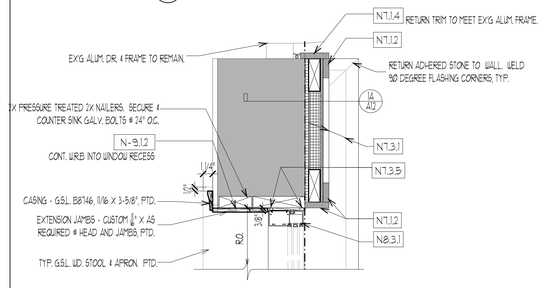
New Jersey ONE CALL
811 Know what's below. Call before you dig.



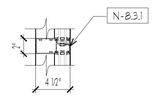
5H HEAD



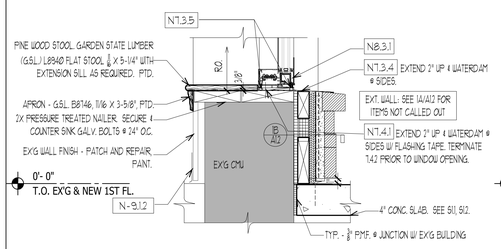
6H HEAD



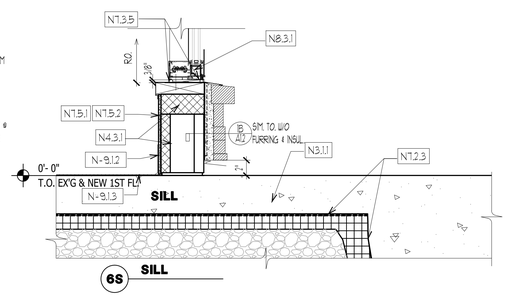
5J TYP. JAMB @ STOREFRONT



6J TYP. INTERMEDIATE MEMBER @ STOREFRONT



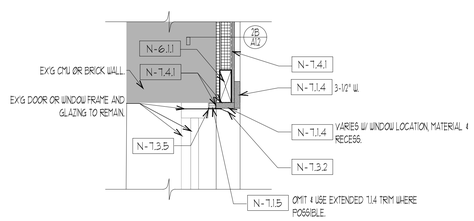
5S SILL



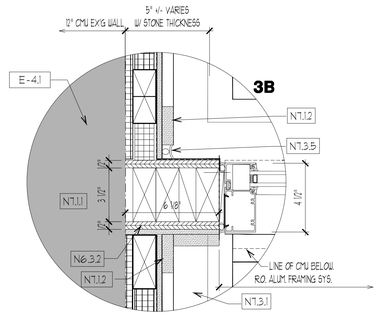
6S SILL

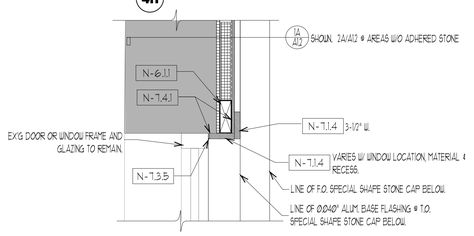
5 A1.2 DETAILS STOREFRONT 1-1/2"=1'-0"

6 A1.2 DETAILS STOREFRONT 1-1/2"=1'-0"

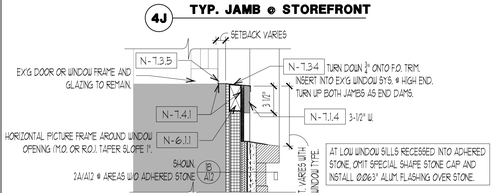


4H HEAD





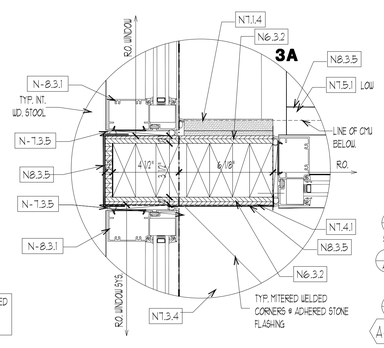
4J TYP. JAMB @ STOREFRONT

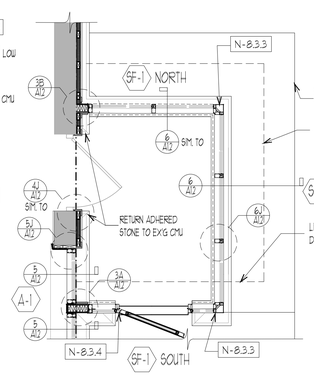


5S SILL

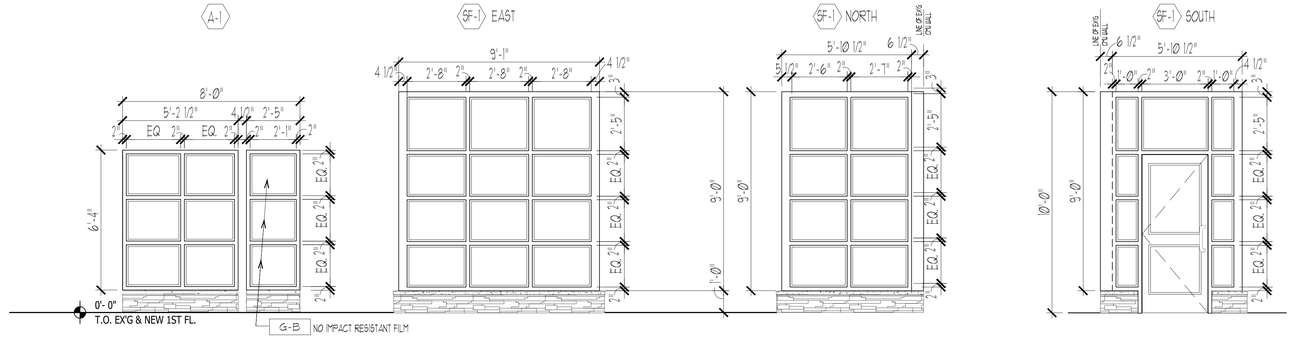
DEMO. NOTE: REMOVE EXG WINDOW TRIM AS NEEDED TO PROVIDE NEW FACADE TREATMENT AND WINDOW SURROUNDS AS SHOWN ON BUILDING ELEVATIONS AND DETAILS.

4 A1.2 DETAILS - DOORS & WINDOWS TO REMAIN 1-1/2"=1'-0"





3 A1.2 ENLARGED PLAN @ 32-A VESTIBULE ENLARGED DETAILS 1/4"=1'-0"



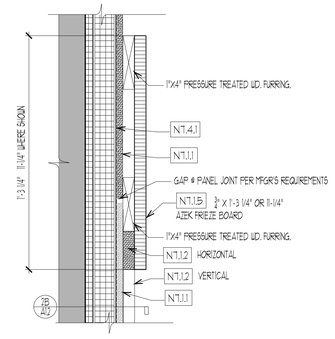
7 A1.2 SCHEDULE WINDOWS AND STOREFRONT 1/4"=1'-0"

G-A ALL GLAZING, U.N.O.

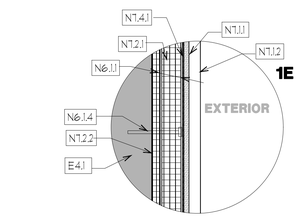
GLAZING NOTES

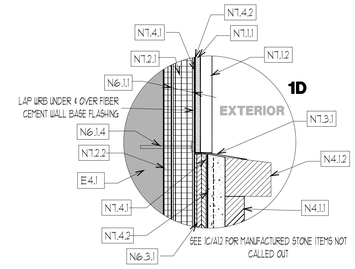
G-A: 1" INSULATED,
EXT. LITE - 1/4" CLEAR TEMP. LOW-E NO. 2 SURFACE
INT. LITE - 1/4" CLEAR TEMP.
INT. IMPACT RESISTANT SECURITY FILM AND IMPACT PROTECTION PROFILE GLAZING STOPS.

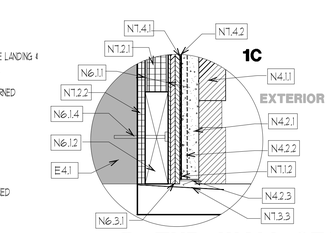
G-B: 1" INSULATED,
EXT. LITE - 1/4" CLEAR TEMP. LOW-E NO. 2 SURFACE
INT. LITE - 1/4" CLEAR TEMP.
NO IMPACT FILM.

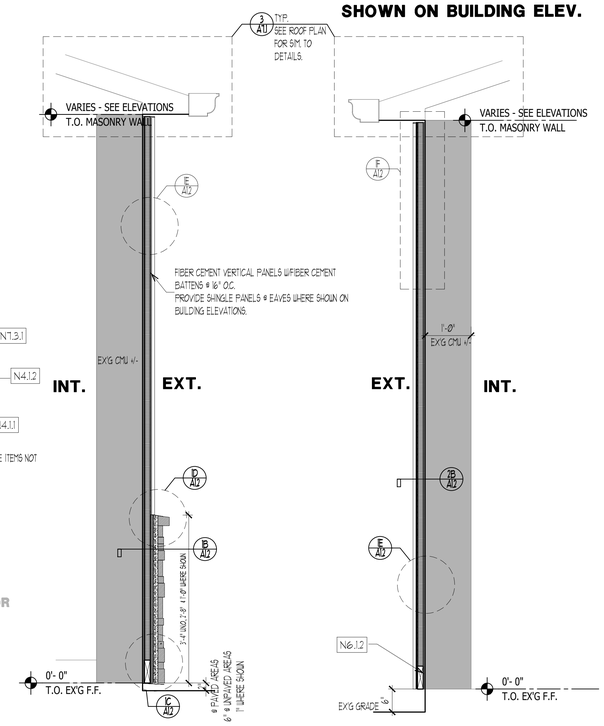


1F A1.2 TYP. DETAIL PVC FRIEZE BOARD PROVIDE AT LOCATIONS AS SHOWN ON BUILDING ELEV. 3"=1'-0"







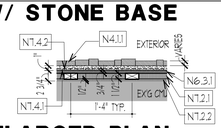


1A A1.2 TYP. WALL SECTION W/ STONE BASE 3/4"=1'-0"

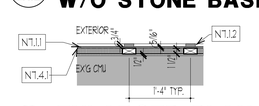
SYSTEM:
EXTERIOR
ADHERED CULTURED STONE
LATH AND MORTAR
RAIN SLICKER DRAINAGE
W.R.B.
3/4" PLYWOOD
1-1/2" XPS BETWEEN 2X4 FURRING
1/2" XPS
EXG CMU
INTERIOR

2A A1.2 TYP. WALL SECTION W/O STONE BASE 3/4"=1'-0"

SYSTEM:
EXTERIOR
HARDIE BATTENS
HARDIE PANELS 4' X 8'-Ø" X 3/8"
W.R.B.
1-1/2" XPS BETWEEN 2X4 FURRING
1/2" XPS
EXG CMU
INTERIOR



1B A1.2 ENLARGED PLAN W/ STONE BASE 3/4"=1'-0"



2B A1.2 ENLARGED PLAN W/O STONE BASE 3/4"=1'-0"

DATE	No.	REVISION
9/28/26	1	RELEASED FOR BID

LOT NO. 1

LRHSD PROJECT NO. REF21-42-8302
PROPOSED EXTERIOR BUILDING RESTORATION
LRHSD ADMINISTRATION BUILDING
93 WILLOW GROVE ROAD, SHAMONG, NEW JERSEY 08088

BURLINGTON COUNTY

BLOCK NO. 27.02

SHAMONG TOWNSHIP

Linda M. Vivenzi, AIA, Secretary/Treasurer
New Jersey Architect LICE # 21AI00486000, R.E.A.# 20GL00650300

Drew C. Douglas, AIA, President
New Jersey Lic. # 21AI00488600

KEY PLAN:

PROJECT NORTH

THE DESIGN COLLABORATIVE
ARCHITECTS AND PLANNERS, P.A.
1940 ROUTE 9 NORTH
CAPE MAY COURT HOUSE, NEW JERSEY 08210
PHONE: 609 465 4111 FAX: 609 465 9358
WWW.TDCARCHITECT.COM

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SCALE:	AS NOTED
DRAWN BY:	DCD
COMM. No.	8302
CHECKED BY:	DCD
DATE:	01/02/2025

SHEET TITLE:
STOREFRONT & WINDOW

SHEET No.:
A1.2

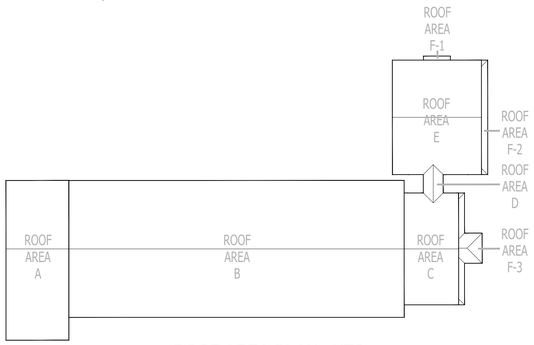
FILE G:\PROJECTS\8302\ARCHITECTURAL\A1-48 SERIES\A1.8302 A1.2 LRHSD ADMINISTRATION.DWG DATE 9/29/2026 12:36 PM USER mda (vivenzi)

ROOF AREA BREAKDOWN

AREA ID	LOCATION	SCOPE	PROPOSED ROOF FINISH	ROOF AREA HORIZONTAL PROJECTION	AVERAGE ROOF SLOPE	ROOF AREA ADJUSTED FOR SLOPE
ROOF AREA A	MEETING ROOM ROOF	BASE BID	ASPHALT SHINGLE ROOFING	2,062 S.F.	4.0 / 12	2,174 S.F.
ROOF AREA B	GENERAL OFFICE ROOF	BASE BID	ASPHALT SHINGLE ROOFING	9,414 S.F.	4.0 / 12	9,923 S.F.
ROOF AREA C	RECEPTION ROOF	BASE BID	ASPHALT SHINGLE ROOFING	1,249 S.F.	4.0 / 12	1,317 S.F.
ROOF AREA D	BREEZEWAY ROOF	BASE BID	ASPHALT SHINGLE ROOFING	75 S.F.	4.0 / 12	79 S.F.
ROOF AREA E	BUSINESS OFFICE ROOF	BASE BID	ASPHALT SHINGLE ROOFING	2,091 S.F.	4.0 / 12	2,204 S.F.
ROOF AREA F-1	AWNING METAL ROOF	BASE BID	STANDING SEAM METAL ROOF	510 S.F.	12.0 / 12	721 S.F.
ROOF AREA F-2	AWNING METAL ROOF	BASE BID	STANDING SEAM METAL ROOF	147 S.F.	12.0 / 12	208 S.F.
ROOF AREA F-3	AWNING METAL ROOF	BASE BID	STANDING SEAM METAL ROOF	22 S.F.	12.0 / 12	31 S.F.
TOTAL AREA IN CONTRACT - ROOF AREA-**A THROUGH** ROOF AREA-**F-3 SUBTOTAL**				**15,570 S.F.**		**16,657 S.F.**
TOTAL ROOF AREA				**15,570 S.F.**		**16,657 S.F.**

GENERAL ROOF AREA NOTES:

1. AREAS NOTED ARE APPROXIMATE; IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND QUANTITIES.
2. AREA CALCULATIONS ABOVE DO NOT INCLUDE ANY FACTORS FOR EAVE, RAKE OR FASCIAS, ROOF FLASHINGS, GUTTERS, DOWNSPOUTS, ROOF EXHAUST FANS, VENTILATORS,AND ROOF TOP EQUIPMENT, EQUIPMENT CURBS.



ROOF AREA PLAN: NTS

GENERAL NOTES:

1. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, SQUARE FOOT AREAS, MATERIALS, PERIMETER LENGTHS, ROOF EQUIPMENT LOCATIONS, ROOF EQUIPMENT CONDITIONS, QUANTITIES AND TYPES AT THE PROJECT SITE BEFORE PROCEEDING WITH THIS WORK. ALL DIMENSIONS INDICATED SHALL BE CONSIDERED AS PLUS OR MINUS (+/-.) FIGURES ARE PROVIDED FOR PRELIMINARY ESTIMATING ONLY.
3. EXISTING ASPHALT SHINGLE ROOFING SYSTEM, UNDERLAYMENT AND EXISTING PLYWOOD ROOF SHEATHING IS TO BE REMOVED AND DISPOSED OF. EXISTING DAMAGED OR DETERIORATED FRAMING AND BATT INSULATION SHALL BE RESTORED AS DELINEATED WITHIN SPECIFICATION SECTION 010000, SUMMARY OF THE WORK.
4. THE CONTRACTOR SHALL VERIFY ALL EXISTING ROOF DECK MATERIALS, SLOPES AND THICKNESSES AT THE PROJECT SITE.
5. THE ROOFING CONTRACTOR SHALL BE RESPONSIBLE TO INVESTIGATE AND DETERMINE THE ACTUAL EXISTING ROOF DECK MATERIALS INSTALLED, FOR ALL ROOF AREAS, AND TO DETERMINE THE APPROPRIATE FASTENERS TO BE USED FOR THIS WORK WITH PRIOR WRITTEN APPROVAL BY THE ARCHITECT AND THE ROOFING UNDERLAYMENT AND SHINGLE MANUFACTURER.
6. ALL NEW WOOD NAILERS, WOOD BLOCKING AND WOOD PLATES SHALL BE ACQ TREATED.
7. REMOVE EXISTING WOOD NAILERS THAT HAVE DETERIORATED OR ROTTED AND REPLACE WITH NEW ACQ TREATED LUMBER OF THE SAME SIZE AND SHAPE AS EXISTING.
8. PROVIDE APPROPRIATE FASTENERS: SCREWS, NAILS, GALV. EXPANSION BOLTS AS RECOMMENDED BY ROOFING MEMBRANE MANUFACTURER TO SECURE VARIOUS ACQ TREATED WOOD NAILERS, BLOCKING, AND GROUNDS TO ROOF STRUCTURE, WALLS, AND TO EACH OTHER FOR THIS WORK.

SCHEDULE NOTES:

1. THIS SCHEDULE IS PROVIDED FOR PRELIMINARY ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND EXISTING ROOF EQUIPMENT AT THE PROJECT SITE.
2. ALL EXISTING ROOF TOP MECHANICAL EQUIPMENT INDICATED TO REMAIN U.N.O. REMOVE AND REINSTALL AS REQUIRED TO ACCOMMODATE THE NEW WOOD DECK, INSULATION AND ASPHALT SHINGLE INSTALLATION.

DRAINAGE SYSTEM NOTES:

1. NO CHANGE IS PROPOSED IN THE EXISTING DRAINAGE SCHEDULE.
2. ALL EXISTING GUTTERS AND DOWNSPOUTS SHALL REMAIN, AND SHALL BE PROTECTED THROUGHOUT THE DURATION OF CONSTRUCTION. EXISTING FINISHES DAMAGED AS A RESULT OF THE WORK OF THIS CONTRACT SHALL BE REPACKED IN KIND AT NO ADDITIONAL COST TO THE OWNER.

DEMOLITION NOTES:

1. SCHEDULE: SUBMIT SCHEDULE INDICATING PROPOSED METHODS AND SEQUENCE OF OPERATIONS FOR SELECTIVE DEMOLITION WORK TO ARCHITECT FOR REVIEW PRIOR TO COMMENCEMENT OF WORK. INCLUDE COORDINATION FOR SHUTOFF, CAPPING, AND CONTINUATION OF UTILITY SERVICES AS REQUIRED, TOGETHER W/ DETAILS FOR DUST AND NOISE CONTROL. PROVIDE DETAILED SEQUENCE OF DEMOLITION AND REMOVAL WORK TO ENSURE OWNER'S ONSITE OPERATIONS ARE NOT UNINTERRUPTED. COORDINATE WITH OWNER'S CONTINUING OCCUPATION OF PORTIONS OF EXISTING BUILDING.
2. OCCUPANCY: OWNER WILL BE CONTINUOUSLY OCCUPYING AREAS OF THE BUILDING IMMEDIATELY ADJACENT TO AREAS OF SELECTIVE DEMOLITION. CONDUCT SELECTIVE DEMOLITION WORK IN MANNER THAT WILL MINIMIZE NEED FOR DISRUPTION OF OWNER'S NORMAL OPERATIONS. PROVIDE MINIMUM OF 72 HOURS ADVANCE NOTICE TO OWNER OF DEMOLITION ACTIVITIES WHICH WILL IMPACT OWNER'S NORMAL OPERATIONS. SPECIAL NOTE: TO THE GREATEST EXTENT POSSIBLE, DEMOLITION WORK WHICH COULD DISTURB THE OWNER'S NORMAL OPERATIONS WILL BE SCHEDULED TO OCCUR DURING THE OWNER'S OFF-PEAK OPERATION PERIOD, AS SPECIFIED BY THE OWNER.
3. STORAGE OR SALE OF REMOVED ITEMS ON SITE WILL NOT BE PERMITTED.
4. PROTECTIONS: PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION AS REQUIRED TO PROTECT OWNER'S PERSONNEL AND GENERAL PUBLIC FROM INJURY DUE TO DEMOLITION WORK.
5. PROVIDE PROTECTIVE MEASURES AS REQUIRED TO PROVIDE FREE AND SAFE PASSAGE OF OWNER PERSONNEL TO AND FROM OCCUPIED PORTIONS OF BUILDING.
6. PROTECT FROM DAMAGE EXISTING FINISH WORK THAT IS TO REMAIN IN PLACE AND BECOMES EXPOSED
7. CONSTRUCT TEMPORARY INSULATED SOLID DUSTPROOF PARTITIONS WHERE REQUIRED TO SEPARATE AREAS WHERE NOISY OR EXTENSIVE DIRT OR DUST OPERATIONS ARE PERFORMED. EQUIP PARTITIONS WITH DUSTPROOF DOORS AND SECURITY LOCKS IF REQUIRED. PROVIDE TEMPORARY WEATHER PROTECTION DURING INTERVAL BETWEEN DEMOLITION AND REMOVAL OF EXISTING CONSTRUCTION ON EXTERIOR SURFACES, AND INSTALLATION OF NEW CONSTRUCTION TO INSURE THAT NO WATER LEAKAGE OR DAMAGE OCCURS TO STRUCTURE OR INTERIOR AREAS OF EXISTING BUILDING. REMOVE PROTECTIONS AT COMPLETION OF WORK.
9. DAMAGES: PROMPTLY REPAIR DAMAGES CAUSED TO ADJACENT FACILITIES BY DEMOLITION WORK AT NO COST TO OWNER.
10. TRAFFIC: CONDUCT SELECTIVE DEMOLITION OPERATIONS AND DEBRIS REMOVAL IN A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES.
11. DO NOT CLOSE, BLOCK OR OTHERWISE OBSTRUCT STREETS, AMBULANCE ACCESS, DELIVERY ACCESS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT WRITTEN PERMISSION FROM AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS IF REQUIRED BY GOVERNING REGULATIONS.
12. UTILITY SERVICES: MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN, KEEP IN SERVICE, AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OCCUPIED OR USED FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO GOVERNING AUTHORITIES.
13. ENVIRONMENTAL CONTROLS: USE WATER SPRINKLING, TEMPORARY ENCLOSURES, AND OTHER SUITABLE METHODS TO LIMIT DUST AND DIRT RISING AND SCATTERING IN AIR TO LOWEST PRACTICAL LEVEL. COMPLY WITH GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION. DO NOT USE WATER WHEN IT MAY CREATE HAZARDOUS OR OBJECTIONABLE CONDITIONS SUCH AS ICE, FLOODING, AND POLLUTION.

EXISTING ROOF SCHEDULE

ROOF CORE INFORMATION IS BASED RANDOM TESTS PERFORMED. EXACT ROOFING COMPOSITION AND MATERIAL THICKNESS MAY VARY.

1. CONTRACTORS ARE ENCOURAGED TO PERFORM THEIR OWN TESTS FOR CONFIRMATION.
2. MATERIALS ARE LISTED FROM THE THE STRUCTURAL FRAMING TO UPPER ROOF SURFACE.

- 2" NOMINAL WOOD FRAMING - TRUSSES
- 3/8" NOMINAL PLYWOOD DECKING
- BUILDING / ROOFING PAPER
- (1) LAYER ASPHALT SHINGLE ROOFING / METAL STANDING SEAM ROOF, WHERE NOTED.

EXTERIOR RAIN WATER LEADERS - RECTANGULAR AND ROUND

	Type	Width	Depth	Free Area	Allowable Roof Area, NSPC Table 13.6.1 (*)	Comment
DS1	3" X 4"	3.00 In.	4.00 In.	12.00 sq. in.	2162.00 sq. ft.	Replace Ex'g
	4" X 4"	4.00 In.	4.00 In.	16.00 sq. in.	2993.00 sq. ft.	Replace Ex'g
DS2	4" X 5"	4.00 In.	5.00 In.	20.00 sq. in.	4238.00 sq. ft.	Replace Ex'g
	5" X 6"	5.00 In.	6.00 In.	30.00 sq. in.	7256.00 sq. ft.	Replace Ex'g

(*) PER THE TABLE ABOVE, ALLOWABLE ROOF AREA VALUES ARE AS INTERPOLATED FROM NSPC TABLE 13.6.1. VALUES, WHICH MEET OR EXCEED THE REQUIREMENTS OF THE AREAS BEING SERVED.

GU1 DESIGNATES 5" ALUM. "K" STYLE GUTTER, 0.032" GAUGE, BAKED ENAMEL FIN., W/ STRAP HANGERS

GU2 DESIGNATES 6" ALUM. "K" STYLE GUTTER, 0.032" GAUGE, BAKED ENAMEL FIN., W/ STRAP HANGERS

GUTTER SIZING:
ALLOWABLE SIZE OF GUTTERS AT STANDING SEAM ROOF AREAS IS BASED ON THE 2009 NATIONAL STANDARD PLUMBING CODE (NSPC), CHAPTER 13, AND THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST) BASED ON THE FOLLOWING FORMULA:

$$W = 0.0106\ M^{-4/7}\ I^{3/28}\ (LA)^{5/14}$$

WHERE:
A = AREA TO BE DRAINED (CALCULATIONS BASED ON A MAXIMUM OF 1,650 S.F.)
I = RAINFALL INTENSITY IN INCHES / HOUR (6 INCHES /HOUR PER N.J.A.C. 5:23-3.15)
L = LENGTH OF GUTTER IN FEET (CALCULATIONS BASED ON A MAXIMUM OF 30 FT.)
M = RATION OF GUTTER DEPTH TO WIDTH (0.8333 ASSUMED)

BASED ON THE ABOVE VALUES, A MAXIMUM GUTTER WIDTH OF 5.43 INCHES IS REQUIRED. GUTTERS SHALL BE 4" X 5"

VERTICAL ROOF DRAINAGE SIZING:
ALLOWABLE SIZE OF ROOF DRAINAGE PIPING AND RAINWATER LEADERS IS BASED ON THE 2021 NATIONAL STANDARD PLUMBING CODE (NSPC), CHAPTER 13, AND N.J.A.C. 5:23-3.15

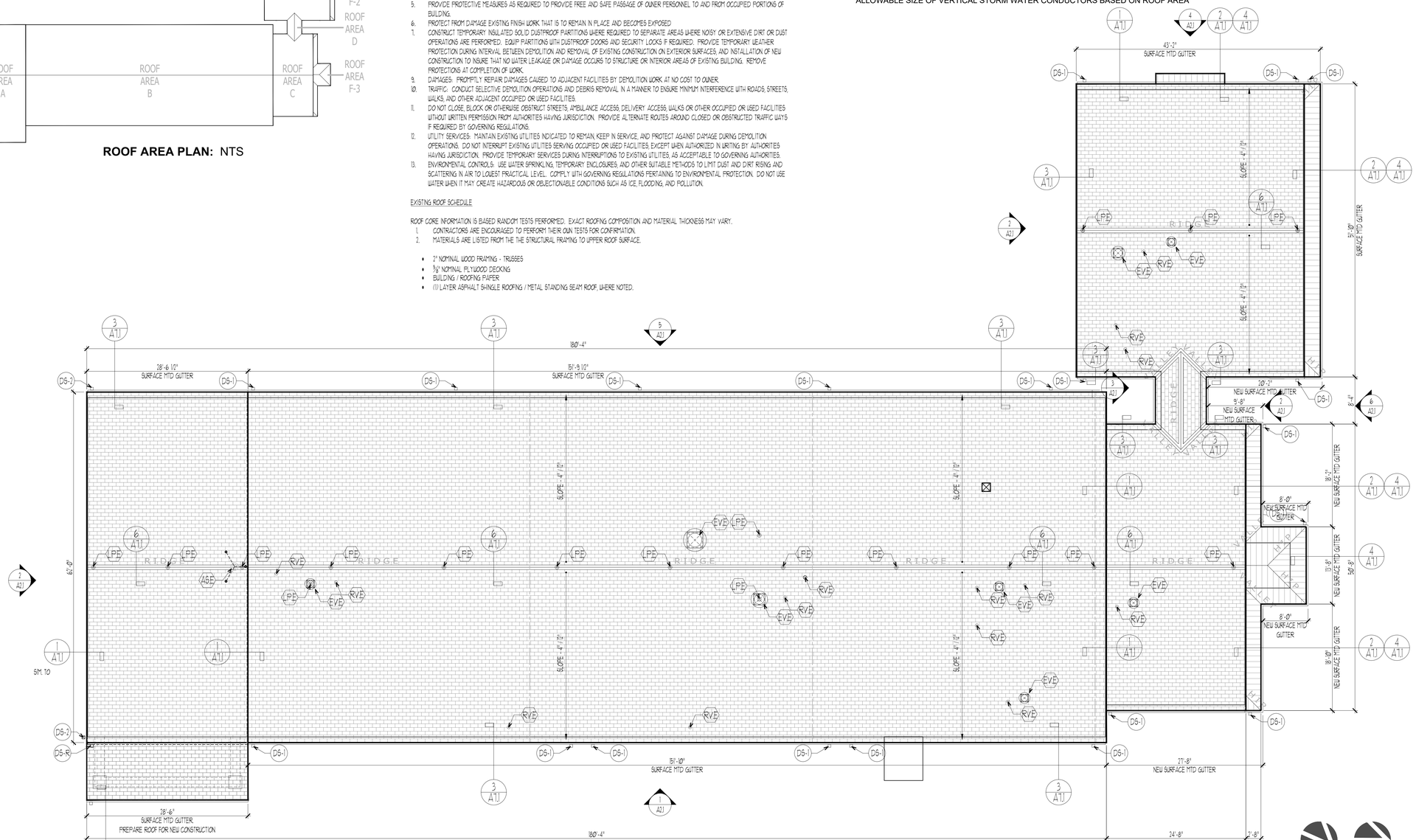
ALLOWABLE SIZE OF VERTICAL STORM WATER CONDUCTORS BASED ON ROOF AREA

LEGEND

ROOF AREA A — DESIGNATION OF ROOF AREA
ROOFTOP EXHAUST FAN
VENT STACK
ROOF DRAIN AND SUMP
LIGHTNING PROTECTION AIR TERMINAL

ROOF EQUIPMENT AND ACCESSORY SCHEDULE

NUMBER	DESCRIPTION	SIZE (+/-)	REMARKS
AS1	ANTENNAE STAND	VARIES, V.I.F.	TO REMAIN, SLAVAGE AND REMOUNT
EVE	EXT'G EXHAUST VENT	VARIES, V.I.F.	TO REMAIN, FLASH PER DETAIL
LPE	EXT'G AIR TERMINAL	VARIES, V.I.F.	TO REMAIN, RECERTIFY. REFER TO SPEC. SECTION 26-4113
RVE	EXT'G ROOF VENT	VARIES, V.I.F.	TO REMAIN, EXTEND V.T.R., FLASH PER DETAIL



1 A1.3 **PROPOSED ROOF PLAN** 1/8"=1'-0"

NOTE 1: THE EXISTING ROOF FRAMING CONSISTS OF WOOD TRUSSES AT 24" O.C.,PLYWOOD SHEATHING AND A COMBINATION OF LOOSE AND BATT INSULATION. CONDITIONS TO BE VERIFIED IN THE FIELD. FRAMING, SHEATHING AND INSULATION ARE TO REMAIN UNLESS NOTED OTHERWISE.
NOTE 2: REFER TO DRAWING A1.1 FOR ADDITIONAL ROOF DETAILS
NOTE 3: REFER TO DRAWINGS AS PREPARED BY CONCORD ENGINEERING FOR THE COMPLETE SCOPE OF MECHANICAL AND ELECTRICAL REQUIREMENTS.

NORTH
PROJECT NORTH

DATE	No.	REVISION
9/28/26	1	RELEASED FOR BID

LOT NO. 1
BLOCK NO. 27.02
LRHSD PROJECT NO. REF21-42-8302
PROPOSED EXTERIOR BUILDING RESTORATION
LRHSD ADMINISTRATION BUILDING
93 WILLOW GROVE ROAD, SHAMONG, NEW JERSEY 08088
SHAMONG TOWNSHIP
BURLINGTON COUNTY

Linda M. Vivenzi, AIA, Secretary/Treasurer
New Jersey Architect LIC # 21AI01060300, R.F.P. LIC # 25LI00651000

Drew C. Dingler, AIA, President
New Jersey Architect LIC # 21AI01088800

KEY PLAN:
PROJECT NORTH

THE DESIGN COLLABORATIVE
ARCHITECTS AND PLANNERS, P.A.
1940 ROUTE 9 NORTH
CAPE MAY COURT HOUSE, NEW JERSEY 08210
PHONE: 609 465 4111 FAX: 609 465 9358
WWW.TDCARCHITECT.COM

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COMM. No.	8302	CHECKED BY:	DCD
DATE:	01/02/2025		

SHEET TITLE:
ROOF PLAN & SCHEDULES

SHEET No.: A1.3

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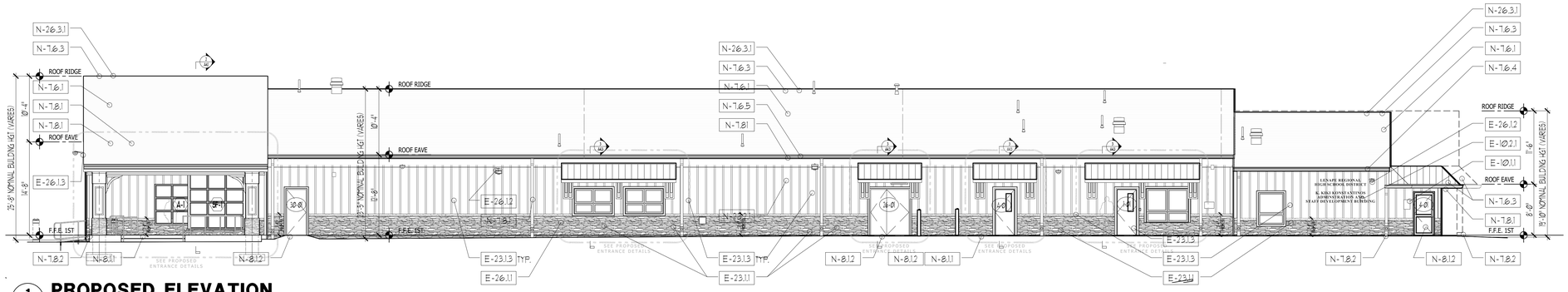
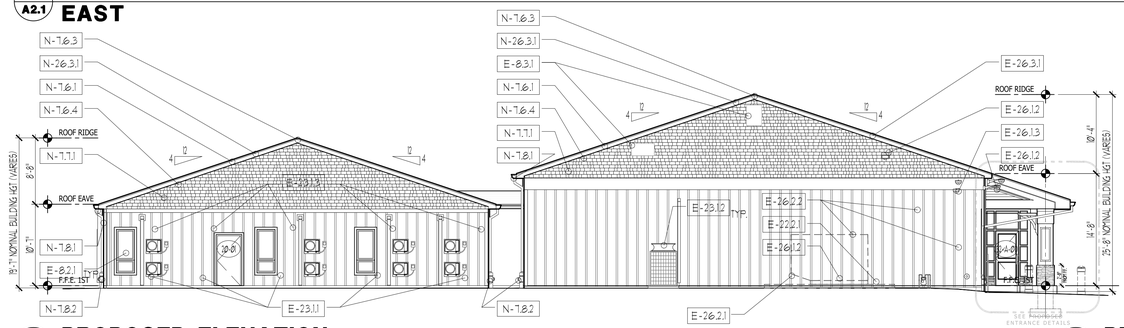


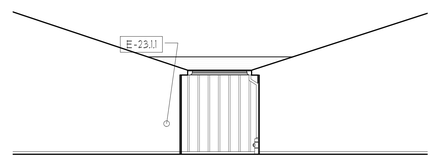
1 A2.1 PROPOSED ELEVATION EAST

1/8"=1'-0"



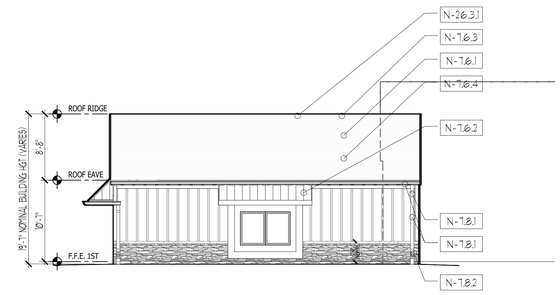
2 A2.1 PROPOSED ELEVATION SOUTH

1/8"=1'-0"



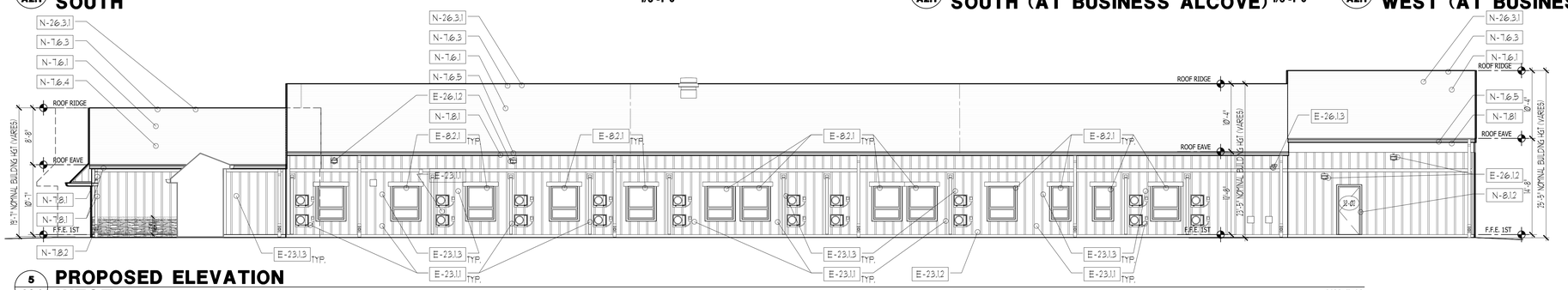
3 A2.1 PROPOSED ELEVATION SOUTH (AT BUSINESS ALCOVE)

1/8"=1'-0"



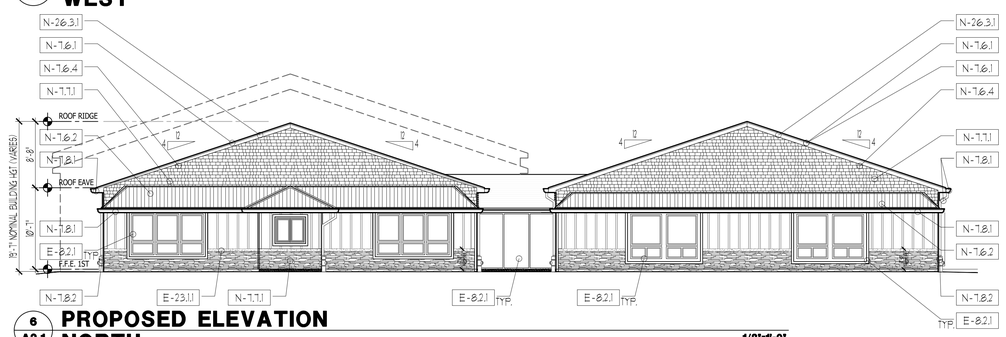
4 A2.1 PROPOSED ELEVATION WEST (AT BUSINESS WING)

1/8"=1'-0"



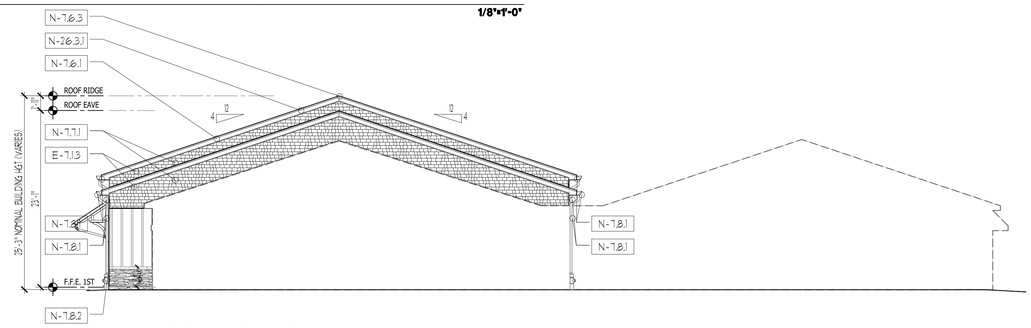
5 A2.1 PROPOSED ELEVATION WEST

1/8"=1'-0"



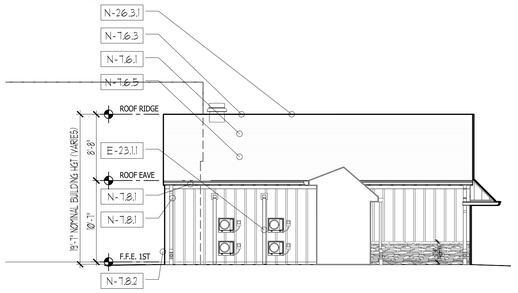
6 A2.1 PROPOSED ELEVATION NORTH

1/8"=1'-0"



7 A2.1 PROPOSED ELEVATION NORTH (SHOWING ELEVATION BEYOND)

1/8"=1'-0"



8 A2.1 PROPOSED ELEVATION EAST (AT BUSINESS ALCOVE)

1/8"=1'-0"

DATE	No.	REVISION
9/28/26	1	RELEASED FOR BID

LOT NO. 1

LRHSD PROJECT NO. REF21-42-8302

PROPOSED EXTERIOR BUILDING RESTORATION

LRHSD ADMINISTRATION BUILDING

93 WILLOW GROVE ROAD, SHAMONG, NEW JERSEY 08088

BLOCK NO. 27.02

SHAMONG TOWNSHIP

BURLINGTON COUNTY

Linda M. Vivenzi, AIA, Secretary/Treasurer
New Jersey Architect LIC # 21AI01006300; P.P. LIC # 35LI00651000

Drew C. Dingler, AIA, President
New Jersey Architect LIC # 21AI01088600

KEY PLAN:

PROJECT NORTH

THE DESIGN COLLABORATIVE
ARCHITECTS AND PLANNERS, P.A.
1940 ROUTE 9 NORTH
CAPE MAY COURT HOUSE, NEW JERSEY 08210
PHONE: 609 465 4111 FAX: 609 465 9338
WWW.TDCARCHITECT.COM

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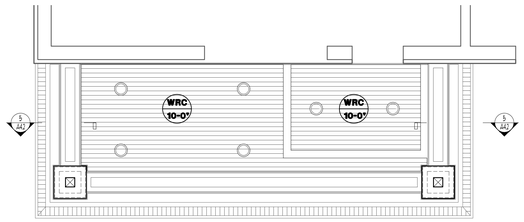
SCALE:	AS NOTED	DRAWN BY: DCD
COMM. No.	8302	CHECKED BY: DCD
DATE:	01/02/2025	

SHEET TITLE:
PROPOSED BUILDING ELEVATIONS

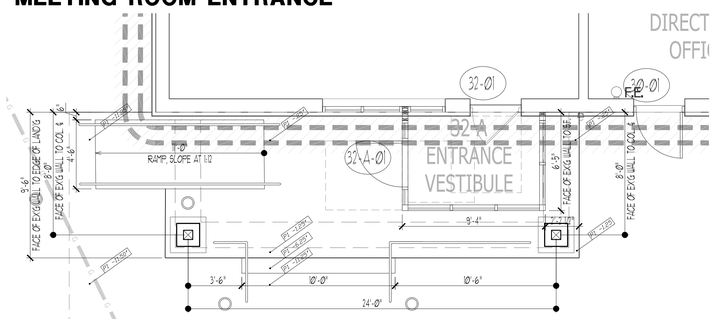
SHEET No.:
A2.1

FILE C:\PROJECTS\8302\ARCHITECTURAL\A1-A6 SERIES\A2\8302 A2.3 LRHSD ADMINISTRATION.DWG DATE 9/29/2026 7:13 AM USER drew dingler



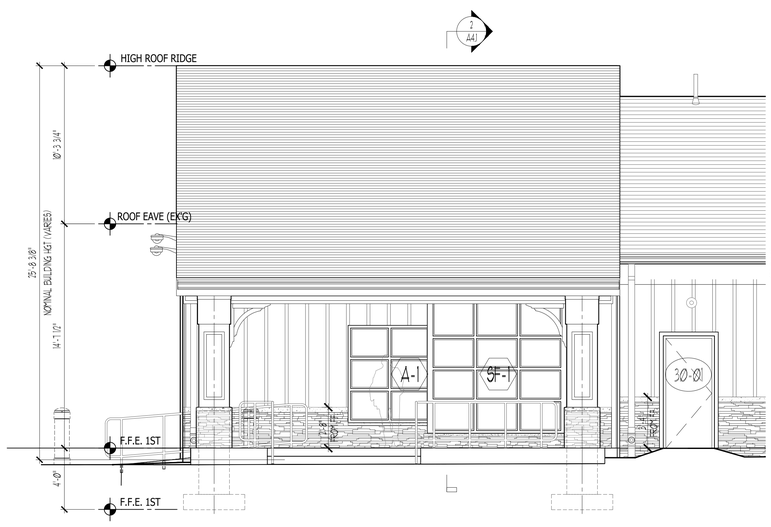
4 A4.1 PROPOSED REFLECTED CEILING PLAN MEETING ROOM ENTRANCE

1/4"=1'-0"



3 A4.1 PROPOSED FLOOR PLAN MEETING ROOM ENTRANCE

1/4"=1'-0"



1 A4.1 ENLARGED MEETING ROOM ENTRANCE EAST

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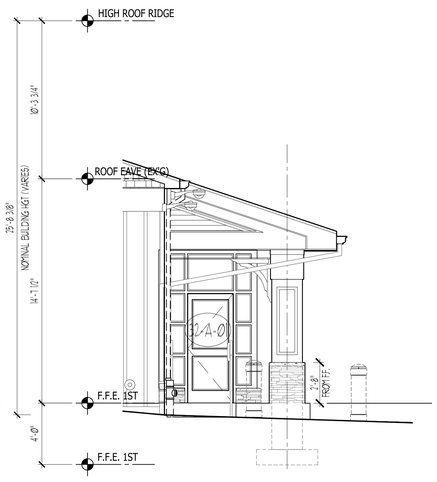
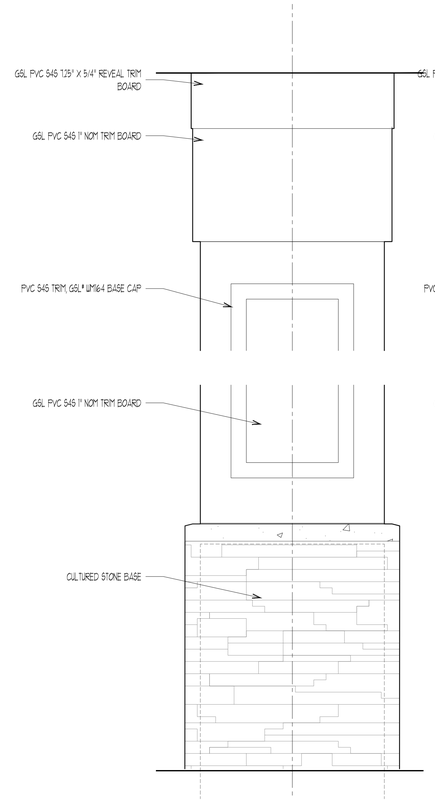


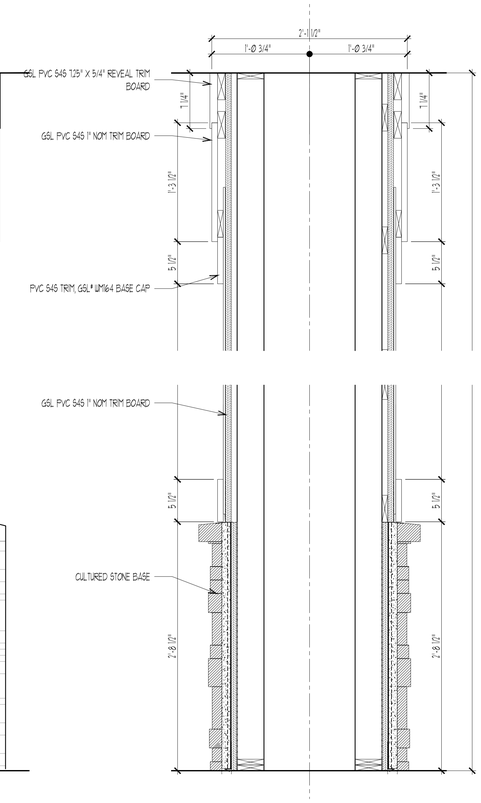
2 A4.1 ENLARGED MEETING ROOM ENTRANCE EAST

1/4"=1'-0"



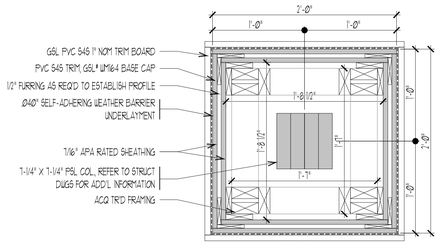
6A A4.1 ELEVATION ENTRANCE COLUMN

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

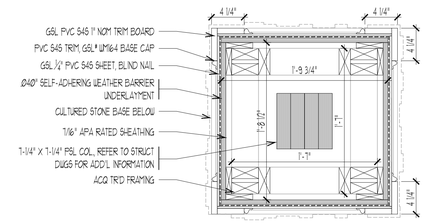


6B A4.1 SECTION ENTRANCE COLUMN

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



PLAN DETAIL "A"



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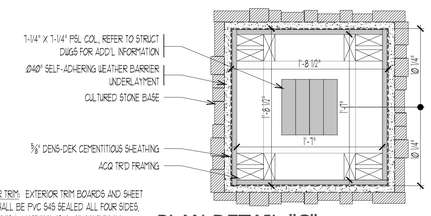

PLAN DETAIL "C"

EXTERIOR TRIM. EXTERIOR TRIM BOARDS AND SHEET NOTED SHALL BE PVC 545 SEALED ALL FOUR SIDES, SMOOTH FINISH. MATERIAL IS AVAILABLE FROM GARDEN STATE LUMBER PRODUCTS CORP. 22 MILLER ROAD, OAKLAND, NJ 07436 PHONE: 800-526-4708 FAX: 201-651-1666. www.gardenstatelumber.com

5 A4.1 PLAN DETAIL ENTRANCE COLUMN

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

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93 WILLOW GROVE ROAD, SHAMONG, NEW JERSEY 08088

BURLINGTON COUNTY

BLOCK NO. 27.02

SHAMONG TOWNSHIP

Linda M. Vivenzi, AIA, Secretary/Treasurer
New Jersey Architect LIC # 21AI00506300, P.P. LIC # 35LI00650300

Drew C. Diegler, AIA, President
New Jersey LIC # 21AI00588600

KEY PLAN:

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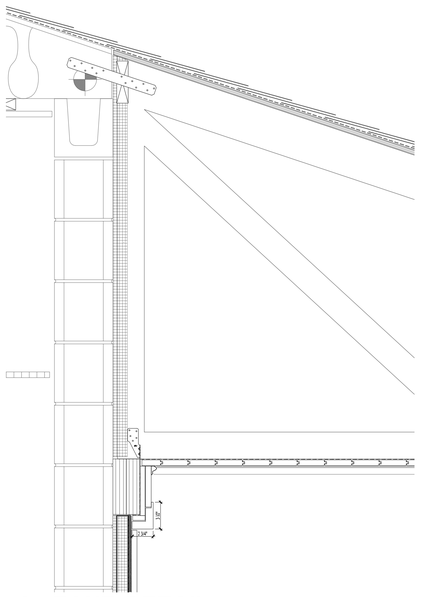
SCALE:	AS NOTED	DRAWN BY:	DCD
COMM. No.	8302	CHECKED BY:	DCD
DATE:	01/02/2025		

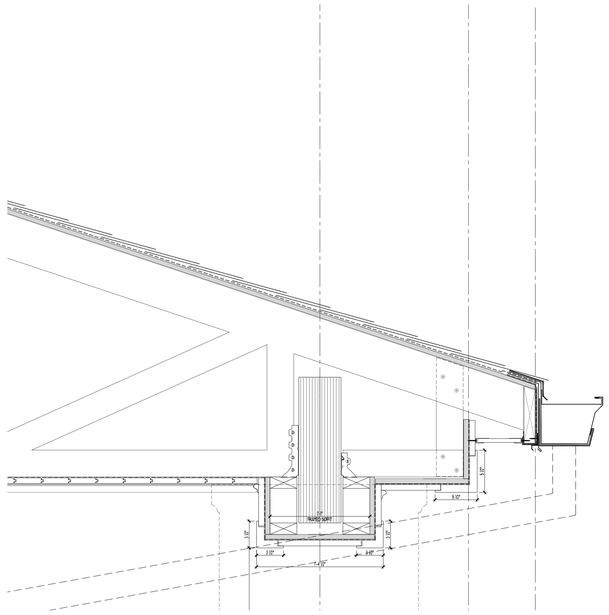
SHEET TITLE: MEETING ROOM ENTRANCE PLANS

SHEET No.: A4.1

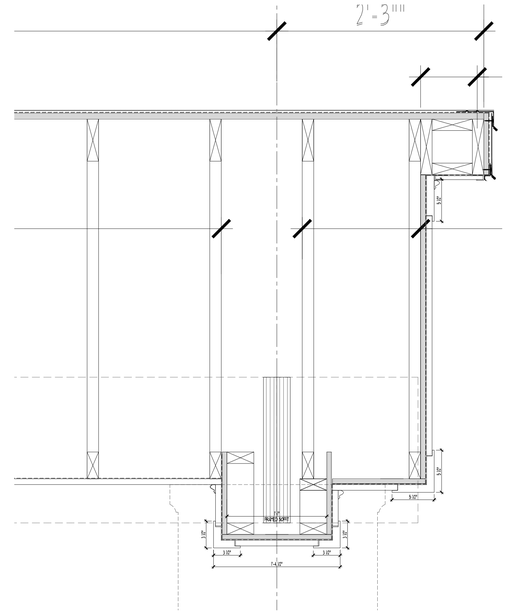
FILE G:\PROJECTS\8302\ARCHITECTURAL\A1-A8 SERIES\A4\8302 A4.0 LRHSD ADMINISTRATION.DWG DATE 9/29/2026 7:26 AM USER drew diegler



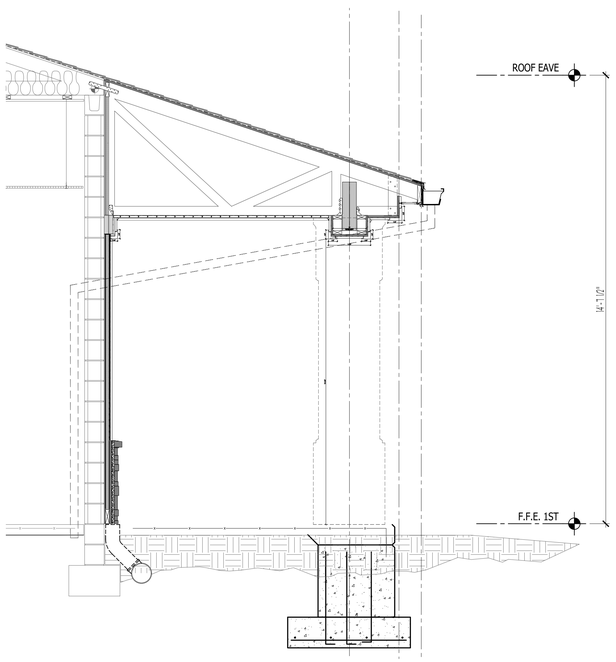
3 A4.2 **EAVE DETAIL**
AWNING 1-1/2"=1'-0"



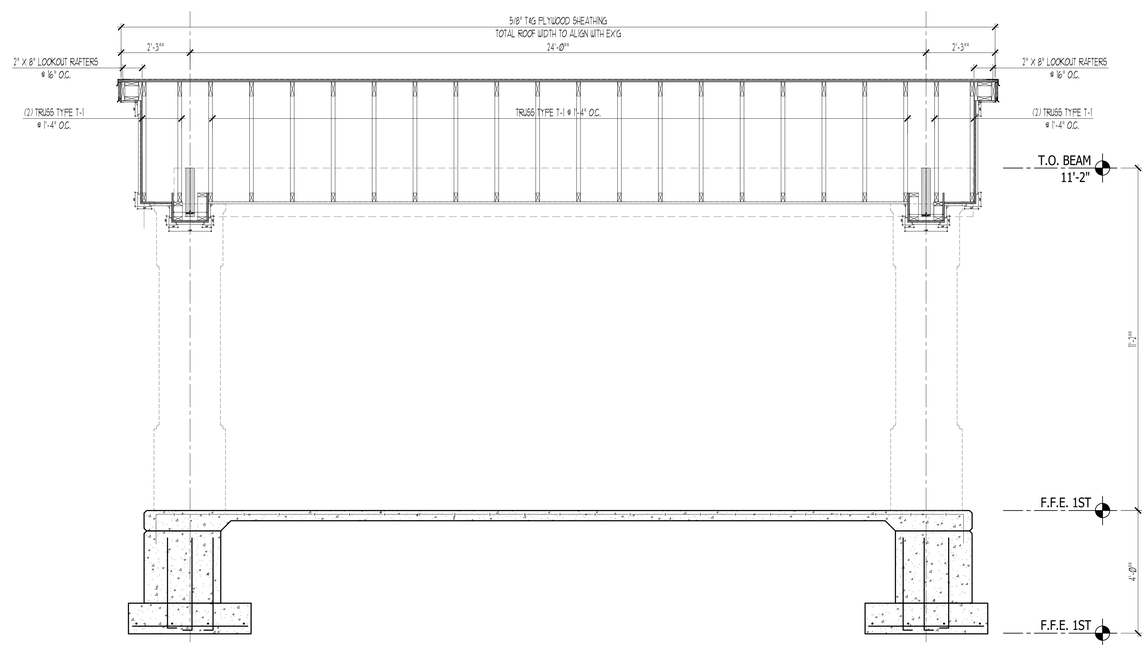
4 A4.2 **EAVE DETAIL**
AWNING 1-1/2"=1'-0"



5 A4.2 **EAVE DETAIL**
AWNING 1-1/2"=1'-0"



1 A4.2 **PROPOSED FLOOR PLAN**
MEETING ROOM ENTRANCE 1/2"=1'-0"



2 A4.2 **PROPOSED FLOOR PLAN**
MEETING ROOM ENTRANCE 1/2"=1'-0"

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BURLINGTON COUNTY

BLOCK NO. 27.02

SHAMONG TOWNSHIP

Drew C. Dingler, AIA, President
New Jersey Architect LIC # 21AI01088800

Linda M. Vivenzi, AIA, Secretary/Treasurer
New Jersey Architect LIC # 21AI01060300 P.P. LIC # 20LI00650300

KEY PLAN:

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CAPE MAY COURT HOUSE, NEW JERSEY 08210
PHONE: 609 465 4111 FAX: 609 465 9388
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SCALE:	AS NOTED	DRAWN BY:	DCD
COMM. No.:	8302	CHECKED BY:	DCD
DATE:	01/02/2025		

SHEET TITLE:
MEETING ROOM ENTRANCE DETAILS

SHEET No.:
A4.2

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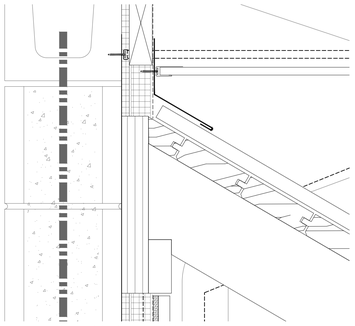
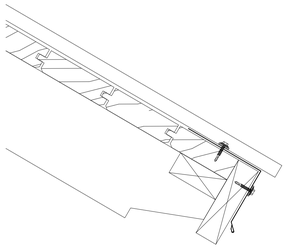
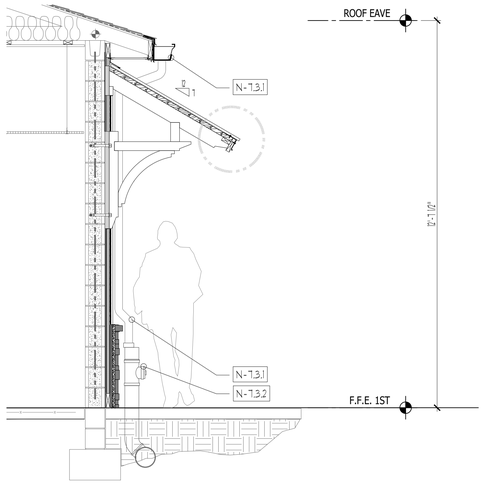


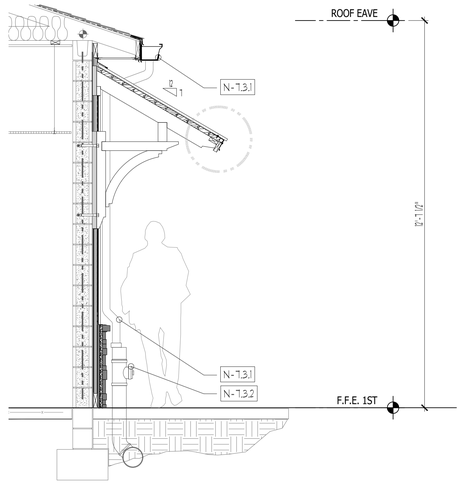
5 A4.3 **EAVE DETAIL AWNING** 3"=1'-0"



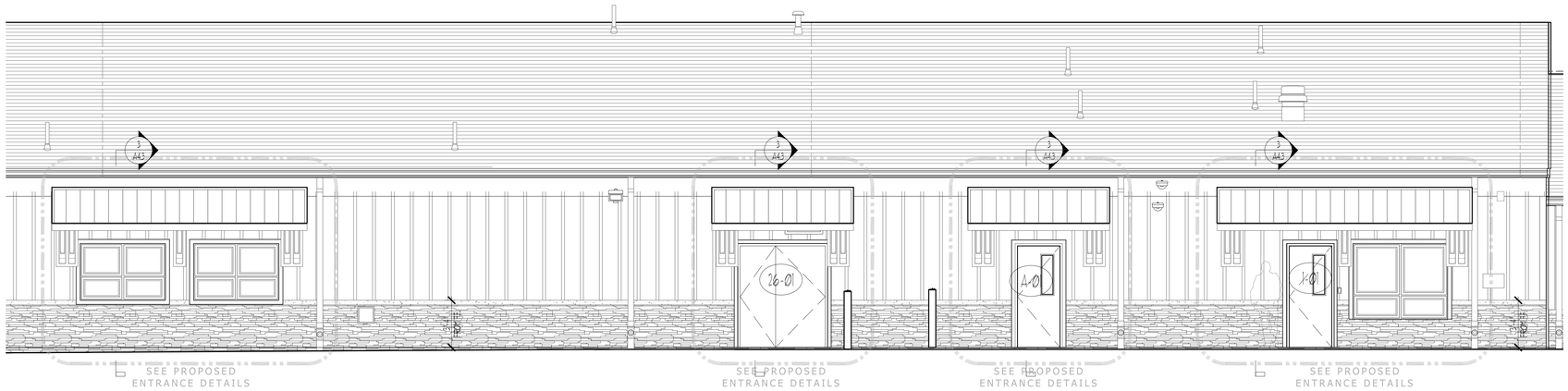
6 A4.3 **EAVE DETAIL AWNING** 3"=1'-0"



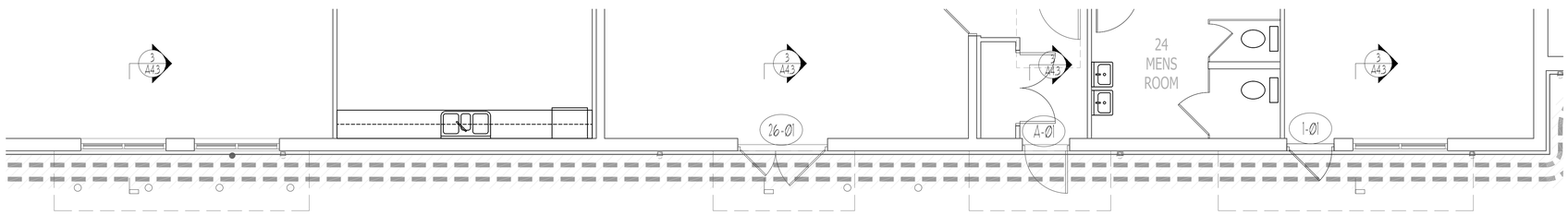
3 A4.3 **PROPOSED FLOOR PLAN SUPERINTENDENT'S OFFICE** 1/2"=1'-0"



4 A4.3 **PROPOSED FLOOR PLAN MEETING ROOM ENTRANCE** 1/2"=1'-0"



2 A4.3 **ENLARGED PARTIAL FLOOR PLAN EMPLOYEE AND SUPERINTENDENTS ENTRANCE** 1/2"=1'-0"



1 A4.3 **ENLARGED FRONT (EAST) BUILDING ELEVATION EMPLOYEE AND SUPERINTENDENTS ENTRANCE** 1/2"=1'-0"

DATE	No.	REVISION
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BURLINGTON COUNTY

BLOCK NO. 27.02

SHAMONG TOWNSHIP

Linda M. Vivenzi, AIA, Secretary/Treasurer
New Jersey Architect LIC # 21AI00506300, R.F. LIC # 20LI00650300

Drew C. Diegler, AIA, President
New Jersey Architect LIC # 21AI00588500

KEY PLAN:

PROJECT NORTH

THE DESIGN COLLABORATIVE
ARCHITECTS AND PLANNERS, P.A.
1940 ROUTE 9 NORTH
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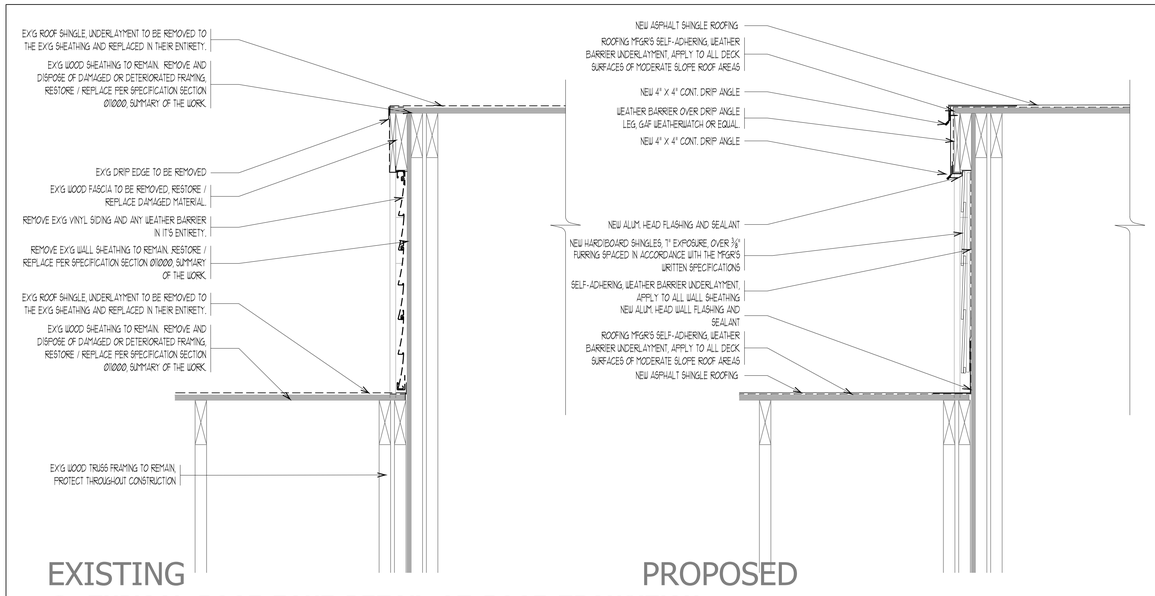
SCALE:	AS NOTED	DRAWN BY:	DCD
COMM. No.	8302	CHECKED BY:	DCD
DATE:	01/02/2025		

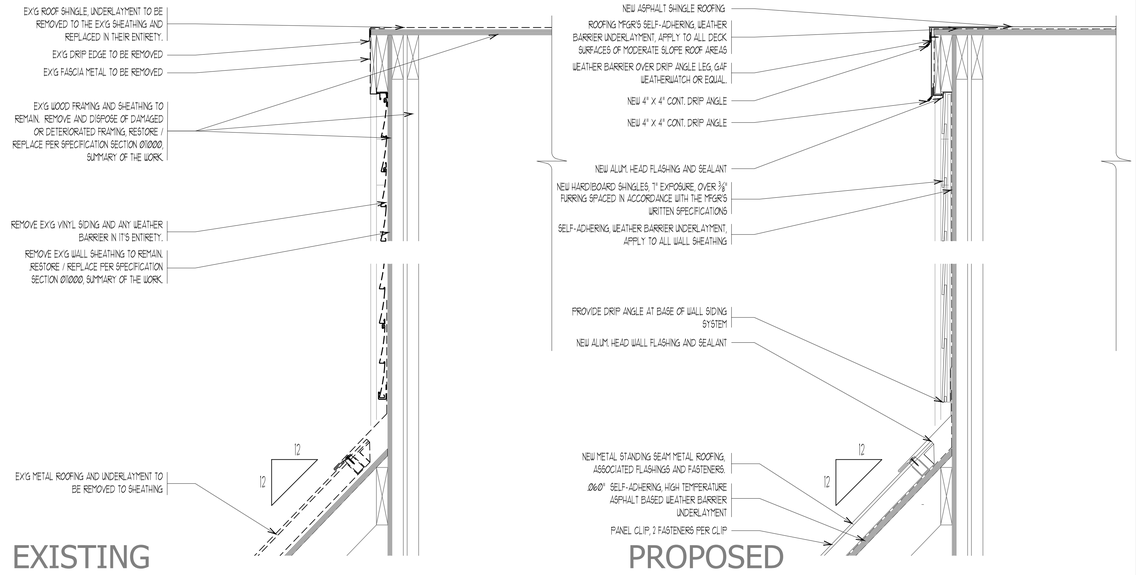
SHEET TITLE:
BUILDING AWNING PLANS & DETAILS

SHEET No.:
A4.3

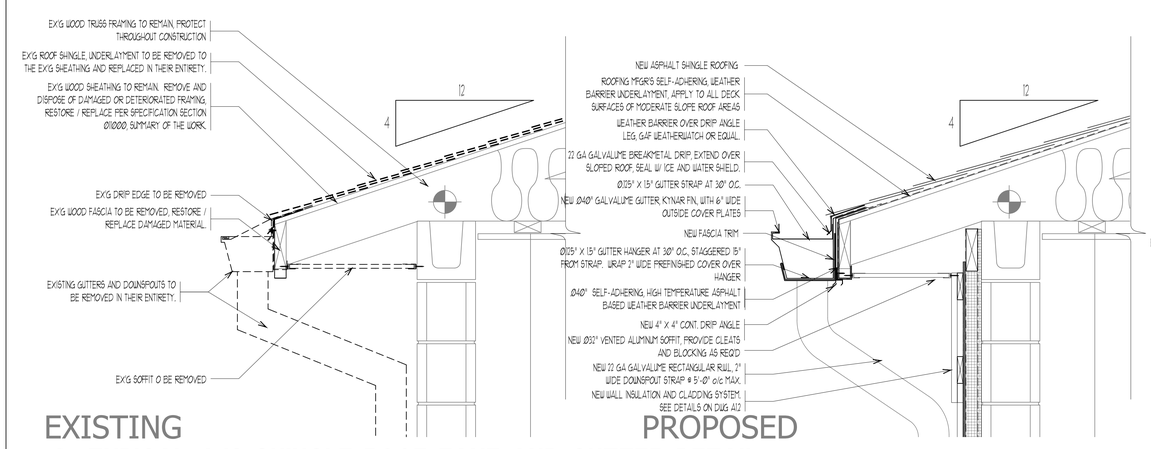
FILE G:\PROJECTS\8302\ARCHITECTURAL\A1-A8 SERIES\A#8302 A4.3 LRHSD ADMINISTRATION.DWG DATE 9/29/2026 7:29 AM USER drew diegler



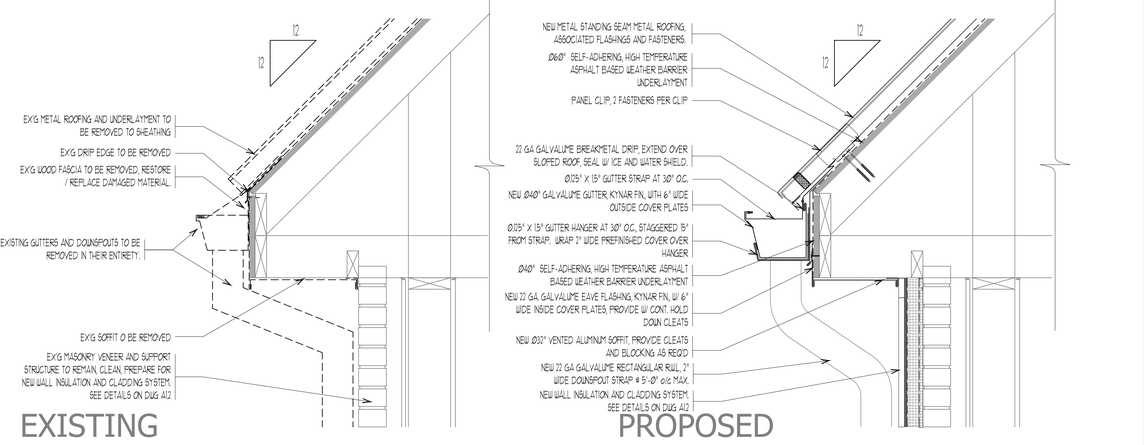
1 A7.1 TYPICAL ROOF EAVE DETAIL AT ROOF TRANSITION — 1-1/2"=1'-0"



2 A7.1 TYPICAL GABLE END AND METAL ROOF — 1-1/2"=1'-0"

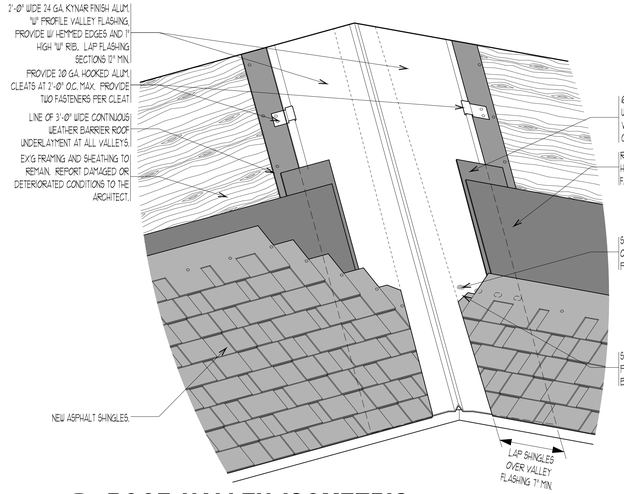


3 A7.1 TYPICAL 4:12 SHINGLE ROOF EAVE AND GUTTER DETAIL — 1-1/2"=1'-0"

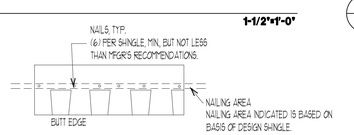


4 A7.1 TYPICAL METAL ROOF EAVE DETAIL — 1-1/2"=1'-0"

METAL ROOF NOTE:
1. METAL ROOF PITCH VARIES, VERIFY IN FIELD.
2. WEATHER BARRIER UNDERLAYMENT TO BE APPLIED TO ALL ROOF AND WALL SHEATHING.

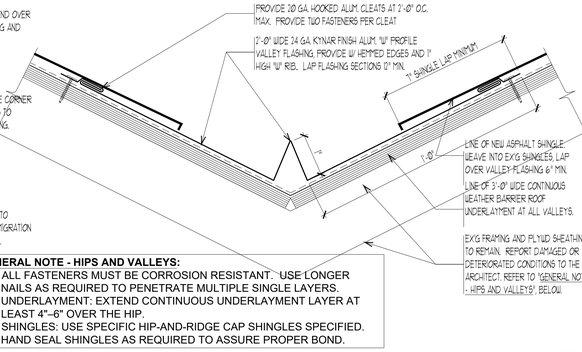


5 A7.1 ROOF VALLEY ISOMETRIC — N.T.S.



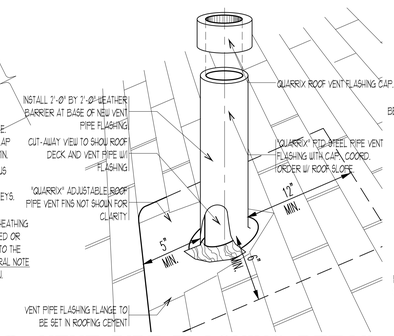
10 A7.1 PLAN: SHINGLE ATTACHMENT PATTERN — 3/4"=1'-0"

ATTACHMENT PATTERNS INDICATED ARE BASED ON BASIS OF DESIGN PRODUCT. PROVIDE SHINGLE MANUFACTURER'S ENHANCED ATTACHMENT PATTERN .

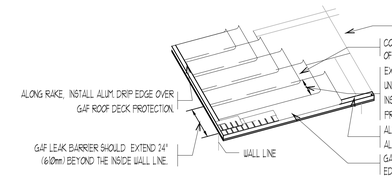


GENERAL NOTE - HIPS AND VALLEYS:
1. ALL FASTENERS MUST BE CORROSION RESISTANT. USE LONGER NAILS AS REQUIRED TO PENETRATE MULTIPLE SINGLE LAYERS.
2. UNDERLAYMENT: EXTEND CONTINUOUS UNDERLAYMENT LAYER AT LEAST 4"–6" OVER THE HIP.
3. SHINGLES: USE SPECIFIC HIP-AND-RIDGE CAP SHINGLES SPECIFIED.
4. HAND SEAL SHINGLES AS REQUIRED TO ASSURE PROPER BOND.

6 A7.1 ROOF VALLEY DETAIL — 3"=1'-0"

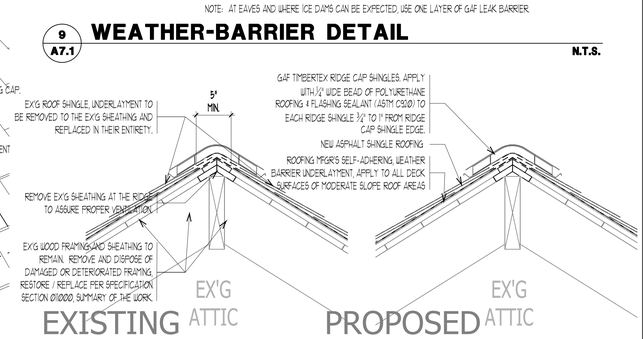


7 A7.1 VENT PIPE FLASHING DETAIL — 1"=1'-0"



NOTE: AT EAVES AND WHERE ICE DAMS CAN BE EXPECTED, USE ONE LAYER OF GAF LEAK BARRIER.

9 A7.1 WEATHER-BARRIER DETAIL — N.T.S.



EXISTING PROPOSED

6 A7.1 SECTION RIDGE DETAIL, TYP. — 1-1/2"=1'-0"

DATE	No.	REVISION
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SCALE:	AS NOTED	DRAWN BY: DCD
COMM. No.	8302	CHECKED BY: DCD
DATE:	01/02/2025	

SHEET TITLE: ROOF DETAILS

SHEET No.: A7.1

FILE G:\PROJECTS\8302\ARCHITECTURAL\A1-48 SERIES\A7.0 SERIES\LRHSD ADMIN.DWG DATE 9/28/2026 8:10 AM USER drew dingler

STRUCTURAL NOTES

GENERAL NOTES:

1. THIS PROJECT HAS BEEN DESIGNED USING THE 2021 INTERNATIONAL BUILDING CODE NEW JERSEY EDITION.
2. WORK OF THIS CONTRACT SHALL BE COORDINATED WITH THE REQUIREMENTS OF THE GEOTECHNICAL REPORT PREPARED BY THE ATLANTIC ENGINEERING LAB DATED SEPTEMBER 28, 2023.
3. STRUCTURAL SPECIAL INSPECTIONS ARE A REQUIREMENT FOR THIS PROJECT. A QUALIFIED INDEPENDENT INSPECTION AGENCY SHALL BE SELECTED TO PERFORM THIS SERVICE. ALL INSPECTIONS AS REQUIRED BY CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE (SEE THE FOLLOWING TABULAR REFERENCES) ARE REQUIRED AT A MINIMUM. FOR STEEL CONSTRUCTION REFER TO TABLE 1704.3, FOR CONCRETE CONSTRUCTION SEE TABLE 1704.4, FOR MASONRY CONSTRUCTION SEE TABLE 1704.5.3, FOR SOILS SEE TABLE 1704.7. SEE THE NOTES ON THIS DRAWING FOR ANY ADDITIONAL INSPECTIONS REQUIRED.
4. ALL CONTRACTORS AND SUBCONTRACTORS ARE RESPONSIBLE FOR ADHERING TO THE REQUIREMENTS AS INDICATED IN THE NOTES FOR THIS JOB. FAILURE OF THE CONTRACTOR TO READ THE STRUCTURAL NOTES DOES NOT PERMIT THE CONTRACTOR TO DEVIATE FROM THEIR REQUIREMENTS.
5. NO FIELD MODIFICATIONS TO ANY STRUCTURAL COMPONENTS SHALL BE MADE WITHOUT PRIOR APPROVAL BY THE STRUCTURAL ENGINEER. THIS INCLUDES, BUT IS NOT LIMITED TO REVISIONS DUE TO MIS-LOCATION, MISFIT, OR ANY OTHER CONSTRUCTION ERRORS.
6. ALL CONSTRUCTION AND DEMOLITION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES INCLUDING ALL OSHA REGULATIONS.
7. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL PEOPLE WHO MAY BE ON OR NEAR THE WORK AREA, BY MAINTAINING A SAFE WORK AREA, SAFE WORKING CONDITIONS, AND LIMITING ACCESS TO THE WORK AREA.
8. CONTRACTOR IS FULLY RESPONSIBLE FOR HIS WORKERS' SAFETY, SAFETY EQUIPMENT, FIRST AID, AND EMERGENCY HANDLING PROCEDURES.
9. CONTRACTOR SHALL PERSONALLY SUPERVISE THE WORK AND SHALL BE PRESENT AT THE WORK SITE AT ALL TIMES DURING CONSTRUCTION WORK. CONTRACTOR SHALL PROVIDE ADEQUATE PERSONNEL FOR THE PROPER COORDINATION AND EXPEDITING OF THE WORK.
10. THESE DRAWINGS SHALL NOT BE SCALED FOR PURPOSES OF CONSTRUCTION.
11. TYPICAL DETAILS ARE NOT NECESSARILY REFERENCED ON EVERY DRAWING SHEET AND SHALL BE USED BY THE CONTRACTOR AS REQUIRED FOR ALL CONDITIONS WHERE APPLICABLE.
12. IN CASE OF CONFLICT BETWEEN STRUCTURAL DRAWINGS AND OTHER DRAWINGS OF THIS PROJECT, CONTRACTOR SHALL IMMEDIATELY CONTACT ARCHITECT FOR CLARIFICATION PRIOR TO START OF WORK.
13. THE CONTRACTOR IS RESPONSIBLE FOR SURVEYING AND VERIFICATION OF EXISTING CONDITIONS INCLUDING BUT NOT LIMITED TO THE LOCATION, ELEVATIONS AND DIMENSIONS OF EXISTING WALLS AND FRAMING.
14. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION, AND TEMPORARY SHORING OF THE EXCAVATIONS AND BUILDING STRUCTURE AS REQUIRED DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION, DESIGN OF SHEETING, SHORING, SCAFFOLDING, FORM WORK, AND OTHER MEANS AND METHODS STRUCTURES SHALL BE DESIGNED BY ENGINEERS HIRED BY THE CONTRACTOR.
15. SECTIONS SHOWN ON PLANS APPLY TO SIMILAR CONDITIONS THROUGHOUT THE BUILDING.
16. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH ALL DRAWINGS FOR THE PROJECT FOR THE FOLLOWING INFORMATION.
    A. LOCATION OF ALL REQUIRED OPENINGS IN WALLS, FLOORS, ROOF, ETC. ALL OPENINGS MAY NOT BE INDICATED ON STRUCTURAL DRAWINGS.
    B. SIZE AND LOCATION OF ALL SLEEVES, INSERTS, AND DEPRESSIONS.
    C. LOCATION AND SIZE OF ALL EQUIPMENT HOUSE KEEPING PADS.

SHOP DRAWINGS AND SUBMITTALS:

1. FOR A LISTING OF SHOP DRAWINGS AND OTHER SUBMITTALS REQUIRED FOR THIS PROJECT SEE THE SHOP DRAWING AND SUBMITTAL REQUIREMENTS TABLE. CERTAIN SUBMITTALS MUST BE PREPARED UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF THE PROJECTS JURISDICTION. THE CONTRACTOR IS REQUIRED TO RETAIN SPECIALTY ENGINEERS AS REQUIRED TO PREPARE THESE SUBMITTALS.
2. SHOP DRAWINGS AND RELATED MATERIALS PREPARED BY SUPPLIERS AND SUBCONTRACTORS SHALL BE REVIEWED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTING TO THE ARCHITECT/STRUCTURAL ENGINEER. THE GENERAL CONTRACTOR SHALL REVIEW ALL SUBMISSIONS FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS, MEANS, METHODS, TECHNIQUES, SEQUENCES, AND OPERATION OF CONSTRUCTION, TECHNICAL CONTENT, COORDINATION OF TRADES, DIMENSIONAL ACCURACY, SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO, ALL OF WHICH ARE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL APPROVE AND SO STAMP EACH SUBMISSION.
3. SHOP DRAWINGS, WHERE REQUIRED, SHALL BE SUBMITTED AS FOLLOWS. PROVIDE ONE (1) ELECTRONIC PDF COPY TO THE ENGINEER FOR REVIEW. ONE (1) COPY WILL BE MARKED UP AND RETURNED FOR DISTRIBUTION AS REQUIRED BY THE CONTRACTOR. ALL SHOP DRAWINGS SHALL BE CHECKED PRIOR TO SUBMISSION. CONTRACTOR SHALL ALLOW (10) WORKING DAYS IN THE CONSTRUCTION SCHEDULE FOR SHOP DRAWING REVIEW. FAX SUBMITTALS OF SHOP DRAWINGS WILL NOT BE ACCEPTED.
4. STRUCTURAL DESIGN DRAWINGS (INCLUDING ORIGINAL CAD DRAWINGS) SHALL NOT BE USED AS THE BACKGROUNDS FOR THE PRODUCTION OF ANY SHOP DRAWINGS THAT ARE SUBMITTED FOR REVIEW. SHOP DRAWINGS PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED. THIS INCLUDES REBAR PLACEMENT DRAWINGS, FABRICATION DRAWINGS, ERECTION DRAWINGS, ERECTION DETAILS, ETC. THE CONTRACTOR SHALL PREPARE THEIR OWN SHOP DRAWINGS (INCLUDING DETAILS).
5. ANY DEVIATIONS FROM THE ORIGINAL DESIGN OR DESIGN CRITERIA AS SPECIFIED ON THE "ISSUED FOR CONSTRUCTION" DESIGN DOCUMENTS OF THE PROJECT SHALL BE NOTED (BUBBLED, NOTE, ETC.) ON THE SHOP DRAWINGS THAT ARE SUBMITTED FOR APPROVAL.
6. REVIEW OF SHOP DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF ANY CONTRACT REQUIREMENTS EVEN IF SUCH ITEMS ARE NOT SHOWN ON THE SHOP DRAWINGS. THE ENGINEER'S REVIEW OF SHOP DRAWINGS IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AND PROJECT REQUIREMENTS, AND DOES NOT IMPLY APPROVAL OR VARIANCE FROM THE CONTRACT DOCUMENTS. QUANTITIES WILL NOT BE CHECKED BY THE ENGINEER.
7. ALL REVISIONS TO SHOP DRAWINGS AFTER THE FIRST SUBMISSION SHALL BE APPROPRIATELY IDENTIFIED ON SUBSEQUENT SUBMISSIONS.
8. SUBSTITUTIONS TO PRODUCTS SPECIFIED ON THE DRAWINGS IS ACCEPTABLE PROVIDED THE FOLLOWING CRITERIA ARE MET. THE CONTRACTOR SHALL SUBMIT INFORMATION ON THE PRODUCT TO BE SUBSTITUTED THAT SUBSTANTIATES ITS PERFORMANCE ON AN EQUAL OR BETTER VALUE. CONTRACTOR SHALL ALLOW A MINIMUM OF (5) WORKING DAYS IN THE CONSTRUCTION SCHEDULE FOR REVIEW OF THE SUBSTITUTED PRODUCT BY THE ENGINEER.

CONCRETE:

1. THE PROVISIONS OF ACI 318-19 HAVE BEEN UTILIZED FOR THE DESIGN OF CONCRETE ELEMENTS ON THIS PROJECT.
2. FLOOR FINISH TOLERANCES FOR THE SLAB ON GRADE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 117. FLOOR FINISH TOLERANCE SHALL BE MEASURED USING A 10 FOOT STRAIGHTEDGE ANYWHERE ON THE SLAB AND ALLOWING IT TO REST UPON TWO HIGH SPOTS WITHIN 72 HOURS AFTER SLAB PLACEMENT. THE GAP AT ANY POINT BETWEEN THE STRAIGHT EDGE AND THE FLOOR SHALL NOT EXCEED 1/4".
3. ALL CONCRETE SHALL BE NORMAL WEIGHT, READY-MIX. ALL CONCRETE MIX DESIGNS SHALL BE DESIGNED BY ENGINEERS RETAINED BY THE CONCRETE SUPPLIER ACCORDING TO THE CRITERIA CONTAINED WITHIN THESE NOTES AND AS SHOWN ON THE CONTRACT DRAWINGS. SUBMIT ALL CONCRETE MIX DESIGNS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. ALL SUBMITTED MIX DESIGNS SHALL INCLUDE SAMPLE CYLINDER BREAK TEST RESULTS CONFIRMING COMPRESSIVE STRENGTH OF EACH MIX DESIGN.
4. ALL CONCRETE SHALL HAVE A WATER REDUCING ADMIXTURE AS REQUIRED TO INCREASE WORKABILITY. WORKABILITY SHALL NOT BE ACHIEVED THROUGH THE ADDITION OF WATER TO THE MIX. CONCRETE SLUMP PRIOR TO ADMIXTURE ADDITION SHALL BE A MAXIMUM OF 3 INCHES. PROPORTIONS OF CONCRETE ADMIXTURES SHALL BE DETERMINED BY THE CONCRETE MIX DESIGNER.
5. DO NOT USE ADMIXTURES THAT CONTAIN CHLORIDES. FLY ASH OR OTHER POZZOLANS SHALL NOT BE USED IN ANY CONCRETE UNLESS APPROVED BY THE ENGINEER.
6. ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITIONS OF THE FOLLOWING ACI PUBLICATIONS ACI 301 (SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS), ACI 302.1R (GUIDE TO CONCRETE FLOOR AND SLAB CONSTRUCTION), ACI 304 (GUIDE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE), ACI 311.4 (GUIDE FOR CONCRETE INSPECTION), ACI 315 (DETAILS AND DETAILING OF CONCRETE REINFORCEMENT), ACI 318 (BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE), ACI 347R (GUIDE TO FORMWORK FOR CONCRETE), AND ACI 546R (GUIDE TO CONCRETE REPAIR). IN ADDITION, REFER TO THE CRSI - MANUAL OF STANDARD PRACTICE FOR DETAILS ON THE FABRICATION AND PLACEMENT OF CONCRETE REINFORCING.
7. PRIOR TO FABRICATION OR SHIPMENT OF MATERIAL, THE CONTRACTOR SHALL SUBMIT AND RECEIVE APPROVAL OF SHOP DRAWINGS. SHOP DRAWINGS SHALL INDICATE BENDING DIAGRAMS, SPLICING, LAPPING, SHAPES, DIMENSIONS AND DETAILS OF ALL BAR REINFORCING. THE APPROVAL OF SHOP DRAWINGS WILL BE FOR ARRANGEMENT ONLY AND SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR ERRORS, OMISSIONS OR THE ACCURACY OF HIS OWN DIMENSIONS. DRAWINGS AND DETAILS SHALL CONFORM WITH ACI 315. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO THE OWNER'S REPRESENTATIVE.
8. ALL REINFORCING STEEL SHALL BE MANUFACTURED FROM HIGH STRENGTH BILLET STEEL CONFORMING TO ASTM DESIGNATION A615 GRADE 60.
9. FOOTING, SLAB, AND WALL REINFORCEMENT NOT SHOWN ON SECTIONS AND PLANS IS THE SAME AS THAT SHOWN IN SIMILAR SECTIONS AND AT SIMILAR LOCATIONS.
10. LAP ALL BARS PER TABLE 1 LAP SPLICE LENGTHS FOR CONCRETE. CLASS B. LAP ALL WWF A MINIMUM OF 3 INCHES.
11. CONTRACTOR SHALL PROVIDE ALL BOLSTERS, CHAIRS, BAR POSITIONERS, ETC. AS REQUIRED TO SET REBAR AND SLAB WWF TO REQUIRED DIMENSIONS INDICATED ON DRAWINGS.
12. CONTROL JOINTS FOR SLABS-ON-GRADE SHALL BE SAW CUT IN ACCORDANCE WITH THE PATTERN AS INDICATED ON THE STRUCTURAL DRAWINGS. THE SPACING OF CONTROL JOINTS SHALL BE ARRANGED SUCH THAT THE AREA OF CONCRETE SLAB BETWEEN CONTROL JOINTS DOES NOT EXCEED 225 SQUARE FEET (MAXIMUM). COORDINATE WITH THE STRUCTURAL CONTRACT DRAWINGS FOR TYPICAL CONTROL JOINT DETAILS.
13. CONSTRUCTION JOINTS IN SLABS AND GRADE BEAMS SHALL BE AT MID-SPAN AND KEY JOINTED WITH REINFORCING CONTINUOUS ACROSS JOINT. COORDINATE WITH ENGINEER FOR CONSTRUCTION JOINT LOCATIONS PRIOR TO CONSTRUCTION. CONSTRUCTION JOINTS ARE TO BE LOCATED WITH RESPECT TO PARTITIONS, FLOOR FINISHES, DEPRESSIONS, ETC. AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
14. PROVIDE CONTINUOUS KEYWAYS AND DOWELS IN THE TOP OF WALL FOOTINGS SUPPORTING CONCRETE WALLS. AT CONSTRUCTION JOINTS IN CONCRETE WALLS PROVIDE KEYWAYS AND CONTINUE REINFORCING THROUGH THE JOINT.
15. REFER TO ARCHITECTURAL DRAWINGS FOR ALL WATERPROOFING DETAILS AT FOUNDATIONS, WALLS, AND SLABS.
16. AT CONCRETE WALL INTERSECTIONS PROVIDE CORNER BARS EQUAL IN SIZE AND SPACING TO TYPICAL WALL REINFORCING STEEL.
17. EPOXY COATED REINFORCING STEEL SHALL CONFORM TO ASTM A775.
18. ALL CONCRETE PLACED AT TEMPERATURES BELOW 50 DEGREES F. SHALL CONFORM TO THE REQUIREMENTS OF ACI 306R "GUIDE TO COLD WEATHER CONCRETING". ALL CONCRETE PLACED IN HOT WEATHER SHALL CONFORM TO THE REQUIREMENTS OF ACI 305R " GUIDE TO HOT WEATHER CONCRETING".
19. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL SLEEVES, INSERTS, ANCHOR BOLTS, AND OTHER EMBEDDED ITEMS AS REQUIRED BY OTHER TRADES.
20. ALL CONCRETE SHALL BE PROPERLY CONSOLIDATED THROUGH THE USE OF VIBRATORS. VIBRATORS SHALL NOT BE USED TO TRANSPORT CONCRETE ALONG FORMWORK.
21. CONTRACTOR SHALL FOLLOW THE GUIDELINES IN ACI 303 - GUIDE TO CAST-IN-PLACE ARCHITECTURAL CONCRETE PRACTICE TO ACHIEVE SPECIFIED SURFACE FINISHES OF EXPOSED CONCRETE. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS ON FINISH.
22. UNLESS OTHERWISE SPECIFIED, A TESTING AGENCY SHALL BE EMPLOYED FOR EVALUATION AND QUALITY CONTROL OF CONCRETE PLACED. THE TESTING AGENCY PERFORMING ACCEPTANCE TESTING SHALL COMPLY WITH ASTM C1077. CONCRETE SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318. FREQUENCY OF CONCRETE TESTING SHALL MEET THE REQUIREMENTS OF ACI 318 AT A MINIMUM UNLESS REQUIRED OTHERWISE BY THE APPLICABLE BUILDING CODE.

FOUNDATIONS:

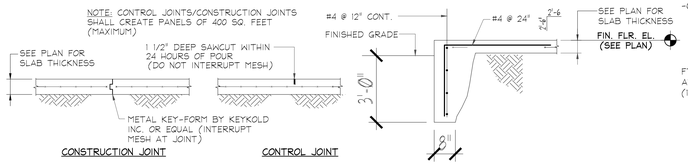
1. SPECIAL INSPECTIONS FOR EXISTING SITE SOIL CONDITIONS, FILL PLACEMENT, AND LOAD BEARING REQUIREMENTS SHALL BE IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE AND TABLE 1704.7.
2. BOTTOM OF ALL FOOTINGS HAVE BEEN DESIGNED TO BEAR ON SOIL CAPABLE OF SAFELY SUPPORTING 3,000 PSF.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE AUTHORITIES TO LOCATE ALL POTENTIALLY BURIED UTILITIES WITHIN THE PROPOSED PROJECT SITE BUILDING FOOTPRINT PRIOR TO COMMENCING EXCAVATION FOR NEW BUILDING FOUNDATIONS.
4. EXISTING FOUNDATIONS, SLABS, PAVEMENTS, UNDERGROUND UTILITIES, AND OTHER BELOW GRADE STRUCTURES SHALL BE REMOVED FROM THE PROPOSED PROJECT SITE BUILDING FOOTPRINT. REMOVE SURFACE VEGETATION, TOPSOIL, ROOT SYSTEMS, ORGANIC MATERIAL, EXISTING FILL, AND SOFT UNSUITABLE MATERIAL FROM THE BUILDING AREA.
5. CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING NEW FOUNDATION CONSTRUCTION ACTIVITIES ADJACENT TO EXISTING BUILDING FOUNDATIONS THAT ARE TO REMAIN (EVEN IF LOCATED ON AN ADJACENT PROPERTY). SINCE DRAWINGS FOR EXISTING CONSTRUCTION ARE NOT ALWAYS AVAILABLE DURING DESIGN, CERTAIN ASSUMPTIONS MAY BE MADE REGARDING EXISTING FOUNDATIONS BASED ON TYPICAL CONSTRUCTION PRACTICES. THESE ASSUMPTIONS TYPICALLY REQUIRE CONTRACTOR FIELD VERIFICATION PRIOR TO CONSTRUCTION OF THE NEW STRUCTURES. IN ANY EVENT, THE ENGINEER MUST BE NOTIFIED IMMEDIATELY IF EXISTING SITE OR FOUNDATION CONDITIONS DIFFER FROM THOSE SHOWN OR ASSUMED ON THE CONTRACT DRAWINGS. IN NO INSTANCE SHALL EXISTING BUILDING FOUNDATIONS BE UNDERMINED TO INSTALL NEW FOUNDATIONS. IF NEW BOTTOM OF FOOTING ELEVATIONS ARE LOWER THAN ADJACENT EXISTING BOTTOM OF FOOTING ELEVATIONS THE ENGINEER MUST BE NOTIFIED IMMEDIATELY TO PROVIDE ADDITIONAL DETAILS AS REQUIRED TO CONSTRUCT THE NEW FOUNDATIONS AT THE LOWER LEVEL.
6. THE CONTRACTOR MUST PROVIDE SURFACE DRAINAGE AND PUMPS TO PROTECT ALL EXCAVATION FROM FLOODING OR GROUND WATER INFILTRATION. FLOODING OF ANY EXCAVATION AFTER APPROVAL OF THE SUBGRADE WILL BE CAUSE FOR COMPLETE RE-PREPARATION OF THE SUBGRADE.
7. BOTTOM OF ALL FOOTINGS MUST BE INSPECTED AND APPROVED BY A REGISTERED SOILS ENGINEER BEFORE PLACING ANY CONCRETE. APPROVAL IN WRITING MUST INDICATE THE SOIL IS ADEQUATE TO SAFELY SUSTAIN A SOIL BEARING PRESSURE OF 3,000 PSF BELOW ALL FOOTINGS.
8. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF THREE FEET (3'-0") BELOW EXTERIOR FINISH GRADE.
9. STANDARD PROCEDURES FOR FROST PROTECTION OF FOUNDATIONS AND EXCAVATIONS SHALL BE EMPLOYED FOR WINTER CONSTRUCTION. BACKFILLING OF EXCAVATIONS SHALL BE DONE AS SOON AS POSSIBLE TO PROTECT FOUNDATIONS FROM FROST.
10. DUE TO THE PRESENCE OF UNSUITABLE BEARING MATERIALS, OVER EXCAVATION WILL BE REQUIRED IN SOME AREAS TO PROVIDE THE SAFE ALLOWABLE BEARING PRESSURE LISTED ABOVE. CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF THE REFERENCED GEOTECHNICAL REPORT LISTED ABOVE.
11. RETAINING WALLS SHALL HAVE CONTROL JOINTS AT 30 FEET MAXIMUM ON CENTERS UNLESS NOTED OTHERWISE.
12. UNLESS OTHERWISE DICTATED BY THE GEOTECHNICAL ENGINEER, ALL FILL AND BACKFILL SHALL BE COMPACTED IN 8 INCH MAXIMUM LIFTS TO NOT LESS THAN 95% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D1557.
13. HORIZONTAL REINFORCING BARS IN FOUNDATIONS SHALL BE CONTINUOUS. PROVIDE CORNER BARS AT ALL CORNERS AND INTERSECTIONS.
14. FOUNDATION PENETRATIONS SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER. PENETRATIONS SHALL BE THROUGH THE FOUNDATION STEM WALL OR 6" CLEAR BELOW FOOTINGS.
15. ALL CMU WALL FOUNDATION WALLS SHALL BE FILLED SOLID WITH 3,000 PSI GROUT BELOW FINISHED GRADE ELEVATION UNLESS NOTED OTHERWISE ON PLANS.

MASONRY:

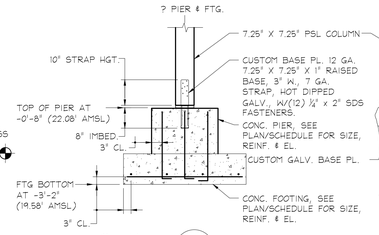
1. ALL IVANY BLOCK SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,800 PSI ON THE NET AREA OF INDIVIDUAL UNITS. ALL CMU SHALL BE ERECTED IN A RUNNING BOND PATTERN AND SHALL BE LAID IN A FULL BED OF MORTAR.
2. ALL MORTAR SHALL BE PORTLAND CEMENT/LIME CONFORMING TO ASTM C270. ALL IVANY BLOCK SHALL BE LAID USING ASTM C270 TYPE M MORTAR WITH A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAYS. DO NOT USE ADMIXTURES THAT CONTAIN CHLORIDES.
3. GROUT SHALL BE HIGH SLUMP MIX IN ACCORDANCE WITH ASTM SPECIFICATION C476 HAVING A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS. GROUT MUST HAVE A SLUMP OF 8 TO 11 INCHES. DO NOT USE ADMIXTURES THAT CONTAIN CHLORIDES. DO NOT SUBSTITUTE MORTAR FOR GROUT. CONSOLIDATION OF GROUT IN BLOCK CORES SHOULD BE ACHIEVED WITH A LOW VELOCITY MECHANICAL VIBRATOR WHICH HAS A 3/4 INCH HEAD. THE VIBRATOR IS NORMALLY ACTIVATED WITH FOR ONE OR TWO SECONDS IN EACH GROUTED CORE OF HOLLOW UNIT MASONRY.
4. LAID UP MASONRY STRENGTH f'm FOR THE COMPOSITE OF CMU, MORTAR AND GROUT FOR ALL STANDARD MASONRY WALLS SHALL BE 2,800 PSI FOR IVANY BLOCK AND PIERS.
5. ALL CONCRETE MASONRY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES ACI 530/ASCE 5/TMS 402" AND "SPECIFICATIONS FOR MASONRY STRUCTURES ACI 530.1/ASCE 6/TMS 602".
6. PERFORM INSPECTIONS OF MASONRY STRUCTURES IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE BUILDING CODE.
7. ALL REINFORCING BARS SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60.
8. PROVIDE HOT-DIPPED GALVANIZED LADDER TYPE HORIZONTAL JOINT REINFORCEMENT (MIN. 9 GAGE COLD DRAWN GALVANIZED STEEL WIRE) IN ACCORDANCE WITH ASTM A1064 AT 16" ON CENTER VERTICAL IN ALL MASONRY WALLS. SPACE HORIZONTAL JOINT REINFORCEMENT AT 8" INCHES ON CENTER IN ALL PARAPETS. USE SHOP FABRICATED SPECIAL PIECES AT ALL CORNERS AND TEES.
9. ALL CMU CORES WHICH CONTAIN VERTICAL REINFORCING BARS SHALL BE GROUTED SOLID. ALL CMU PIERS SHOWN ON PLAN SHALL BE COMPLETELY GROUTED SOLID IN ALL CORES. THERE WILL BE NO MORTAR AS WORK PROGRESSES IS NOT ACCEPTABLE.
10. MINIMUM LENGTH OF LAP SPLICES FOR VERTICAL REINFORCING SHALL NOT BE LESS THAN THE VALUE PROVIDED IN THE CMU REINFORCING LAP AND SPLICE LENGTH TABLE.
11. VERTICAL REINFORCING BARS SHALL BE SECURED AGAINST DISPLACEMENT PRIOR TO GROUTING BY GALVANIZED BAR POSITIONERS SPACED AT INTERVALS NOT TO EXCEED 112 BAR DIAMETERS. PROVIDE A MINIMUM OF TWO POSITIONERS PER INDIVIDUAL REINFORCING BAR.
12. SUBMIT CHECKED SHOP DRAWINGS WHICH DETAIL THE LOCATION OF VERTICAL REINFORCEMENT PLACEMENT FOR ALL WALLS AND PIERS. THESE DRAWINGS SHALL CONTAIN THE FOLLOWING INFORMATION: ELEVATIONS SHOWING LOCATION AND SIZE OF REINFORCING STEEL, LOCATION OF REINFORCING STEEL SPLICES, AND LOCATION OF BAR POSITIONERS. WALL DETAILS WHICH INDICATE WHERE REINFORCING STEEL IS LOCATED IN EACH CORE. (I.E. CENTER OF CORE, NEAR INTERIOR FACE OF WALL/PIER, NEAR EXTERIOR FACE OF WALL/PIER). DETAIL OF BAR POSITIONERS. PIER DETAILS AND ELEVATIONS SHOWING THE LOCATION AND SIZE OF REINFORCING STEEL, LOCATION OF REINFORCING STEEL SPLICES, AND LOCATION OF BAR POSITIONERS.
13. MASON TO DESIGN, FURNISH AND INSTALL ALL REQUIRED SHORING FOR ERECTION OF THE CMU MASONRY WALLS AND PIERS.
14. PROVIDE CONTROL JOINTS IN MASONRY WALLS AT A MAXIMUM SPACING OF 30 FEET ON CENTER UNLESS OTHERWISE NOTED ON THE CONTRACT DRAWINGS. CONTROL JOINTS SHALL BE LOCATED AT ALL CHANGES IN MASONRY WALL HEIGHT AND AT ALL CHANGES IN MASONRY WALL THICKNESS. COORDINATE WITH THE ARCHITECT FOR ALL MASONRY CONTROL JOINT LOCATIONS.
15. PROVIDE CONTINUOUS KNOCK-OUT CMU BOND BEAMS IN ALL WALLS AS PER THE FOLLOWING CRITERIA UNLESS NOTED OTHERWISE ON THE CONTRACT DRAWINGS. 8" KNOCK-OUT CMU BOND BEAMS SHALL BE REINFORCED WITH (1) #5 BAR CONTINUOUS AND 12" KNOCK-OUT CMU BOND BEAMS SHALL BE REINFORCED WITH (2) #5 BARS CONTINUOUS. ALL BOND BEAMS SHALL BE FILLED SOLID WITH 3,000 PSI GROUT.
    A. PROVIDE CONTINUOUS KNOCK-OUT BOND BEAMS AT THE TOP OF ALL CMU WALLS.
    B. PROVIDE CONTINUOUS KNOCK-OUT BOND BEAMS FOR ELEVATOR AND STAIR SHAFT WALLS AT EACH FLOOR.

POST-INSTALLED ADHESIVE ANCHORS & REINFORCING:

1. THE ADHESIVE ANCHOR SYSTEM USED FOR POST-INSTALLED ANCHORAGE TO CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF THE MOST RECENTLY PUBLISHED ACI 355.4, ACCEPTANCE CRITERIA FOR QUALIFICATION OF POST-INSTALLED ADHESIVE ANCHORS IN CONCRETE AND COMMENTARY.
2. THE ADHESIVE ANCHORS SHALL BE SUPPLIED AS AN ENTIRE SYSTEM. THE SYSTEM SHALL INCLUDE, BUT IS NOT LIMITED TO, THE NEW ADHESIVE CARTRIDGE, A CLEAN MIXING NOZZLE, EXTENSION TUBE, A DISPENSING GUN, AND ALL MANUFACTURER RECOMMENDED SUPPLIES FOR PROPERLY CLEANING THE DRILLED HOLE.
3. EYEBOLTS, THREADED STUDS, INTERNAL THREADED PARTS TO BE USED IN ADHESIVE ANCHOR ASSEMBLIES SHALL CONFORM TO ASTM A36, A193 (GRADE B7), A307, B348 (B0), OR F1554. STAINLESS STEEL ANCHOR RODS SHALL BE AISI TYPE 304 OR TYPE 316. THREADS SHALL BE UNC COARSE THREADS, UNLESS NOTED OTHERWISE. COMPATIBLE NUTS AND WASHERS SHALL BE FURNISHED WITH THE ALL-THREAD ROD AND CONSIDERED PART OF THE ASSEMBLY. THE COST OF THE HARDWARE SHALL BE CONSIDERED INCIDENTAL TO THE INSTALLED ADHESIVE ANCHOR ASSEMBLY.
4. NUTS, WASHERS, AND OTHER HARDWARE USED WITH AN ALL-THREADED BAR ADHESIVE ANCHOR SYSTEM SHALL HAVE A MATERIAL OR AN ALLOY DESIGNATION THAT MATCHES THE ALL-THREAD MATERIAL / ALLOY. GALVANIZED ASSEMBLIES SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. ELECTROPLATE GALVANIZING IS NOT ACCEPTABLE. DISSIMILAR METAL ASSEMBLIES SHALL BE SEPARATED BY NYLON, EPDM, OR OTHER APPROVED NON-METALLIC WASHERS.
5. REINFORCING BARS TO BE USED IN ADHESIVE ANCHORS ASSEMBLIES SHALL CONFORM TO ASTM A615.
6. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (F'c) OF 2,500 PSI AT THE TIME OF ADHESIVE ANCHOR INSTALLATION.
7. CONCRETE AT TIME OF ADHESIVE ANCHOR INSTALLATION SHALL HAVE A MINIMUM AGE OF 21 DAYS.
8. CONCRETE TEMPERATURE AT THE TIME OF ADHESIVE ANCHOR INSTALLATION SHALL BE AT LEAST 50 DEGREES F.
9. EMBEDMENT DEPTH AND ANCHOR PROJECTION (STICK-OUT) FROM THE CONCRETE SURFACE SHALL BE AS SHOWN ON THE DRAWING OR DETAIL FOR THE PARTICULAR ANCHOR OR GROUP OF ANCHORS BEING INSTALLED. ABSENT ANY INFORMATION, THE MINIMUM EMBEDMENT DEPTH SHALL BE 10 TIMES THE ANCHOR DIAMETER IN INCHES AND MINIMUM STICK-OUT SHALL BE AS REQUIRED TO MAKE THE CONNECTION.
10. ADHESIVES SHALL BE STORED AND INSTALLED AT THE SERVICE TEMPERATURE RANGES RECOMMENDED BY THE MANUFACTURER.
11. ADHESIVE ANCHORS SHALL BE INSTALLED BY QUALIFIED PERSONNEL TRAINED TO INSTALL ADHESIVE ANCHORS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER AND THE CONTRACT DOCUMENTS. POST-INSTALLED ADHESIVE ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.
12. INSTALLATION OF ADHESIVE ANCHORS HORIZONTALLY OR UPWARDLY INCLINED TO SUPPORT SUSTAINED TENSION LOADS SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY THE ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM. THESE ANCHORS ARE DESIGNATED WITH A (CERT) AFTER THE ANCHOR CALL-OUT. NOTE: SOME DOWNWARD INSTALLATIONS SHOWN ON THESE DRAWINGS SUPPORT SUSTAINED TENSION LOADS AND ARE SO DESIGNATED WITH A (CERT) AFTER THE ANCHOR CALL-OUT.
13. THE INSTALLER'S QUALIFICATIONS SHALL BE SUBMITTED AND APPROVED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
14. THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT REQUIRED TO INSTALL THE ADHESIVE ANCHOR INCLUDING, BUT NOT LIMITED TO, DRILLS, SETTING TOOLS, CLEAN-OUT BRUSHES, BLOW OUT BULBS, OIL-FREE COMPRESSED AIR, SHOP VACUUMS, WRENCHES, ETC.
15. ANCHORS SHALL BE INSTALLED IN HOLES DRILLED WITH A ROTARY IMPACT HAMMER DRILL OR ROCK DRILL.
16. ANCHOR HOLES SHALL BE THOROUGHLY CLEANED PRIOR TO ADHESIVE INJECTION, AS REQUIRED BY THE MANUFACTURERS PRINTED INSTALLATION INSTRUCTIONS.
17. ANCHORS TO BE INSTALLED IN THE ADHESIVE SHALL BE CLEAN, OIL-FREE, AND FREE OF LOOSE RUST, PAINT, OR OTHER COATINGS.
18. INSTALLED ADHESIVE ANCHORS SHALL BE SECURELY FIXED IN-PLACE TO PREVENT DISPLACEMENT WHILE THE ADHESIVE CURES. UNLESS SHOWN OTHERWISE ON THE DRAWINGS, ANCHORS SHALL BE INSTALLED PER

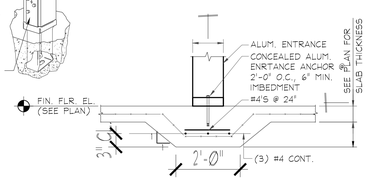


TYPICAL SLAB ON GRADE DETAILS TYPICAL TURNED DOWN SLAB DETAIL

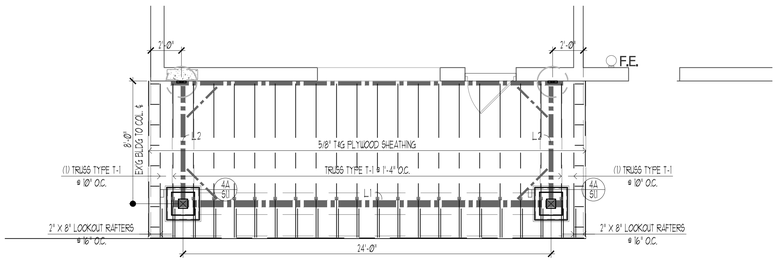


PIER FOOTING @ COLUMN

CONDITION AT MEETING ROOM PORCH OUTER COLUMNS. DESIGN BASED ON SIMPSON-STRONG TIE CBSQ COLUMN BASE, 22K LB. DOWNLOAD, 3.8K LB. UPLOAD, CUSTOM FABRICATED FOR LOAD AND 7.25" X 7.25" PSL COLUMN.



TYPICAL THICKENED SLAB DETAIL



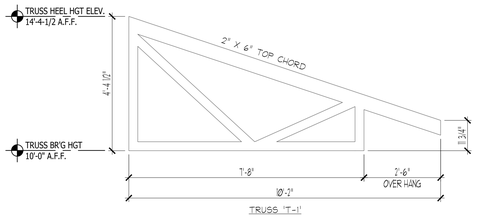
3 / S1.1 STRUCTURAL ROOF FRAMING PLAN
LRHSD MEETING ROOM ENTRANCE

1/4"=1'-0"

NOTES:

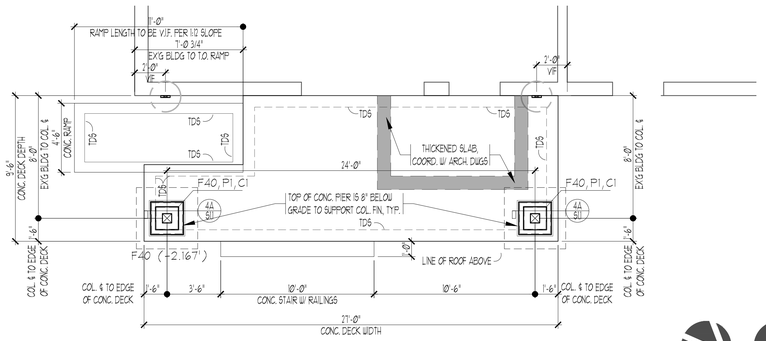
1. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF ROOF LINES, ROOF SLOPES, AND EXTENT OF WOOD FRAMING.
2. "TD5" REFERS TO TURNED DOWN SLAB, REFER TO STRUCTURAL DETAILS

NORTH PROJECT NORTH



7 / A4.1 PROPOSED TRUSS DIAGRAM
TRAINING ROOM ENTRANCE

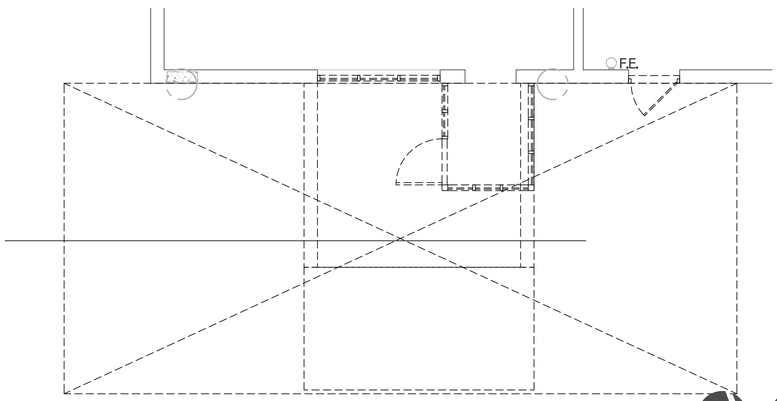
1/2"=1'-0"



2 / S1.1 STRUCTURAL PORTICO FOUNDATION / SLAB PLAN
LRHSD MEETING ROOM ENTRANCE

1/4"=1'-0"

NORTH PROJECT NORTH



1 / S1.1 STRUCTURAL DEMOLITION PLAN
LRHSD MEETING ROOM ENTRANCE

1/4"=1'-0"

NORTH PROJECT NORTH

SNOW DESIGN LOAD SCHEDULE
INTERNATIONAL BUILDING CODE (2021)

ITEM	SYMBOL	VALUE	REFERENCE
GROUND SNOW LOAD	P_g	20	FIGURE 1608.2
SNOW EXPOSURE FACTOR	C_e	1.0	TABLE 7-2
SNOW LOAD IMPORTANCE FACTOR	I_s	1.0	TABLE 1.5-2
THERMAL FACTOR	C_t	1.0	TABLE 7-3
FLAT-ROOF SNOW LOAD	P_f	20	SECTION 7.3

LATERAL LOAD DESIGN SCHEDULE
INTERNATIONAL BUILDING CODE (2021)

WIND LOAD

ITEM	SYMBOL	VALUE	REFERENCE
BASIC WIND SPEED (3 SEC. GUST)	V	131	FIGURE 1609
WIND LOAD IMPORTANCE FACTOR	–	1.00	TABLE 1604.5
WIND EXPOSURE CATEGORY	–	B	SECTION 1609.4.3

SEISMIC LOAD

ITEM	SYMBOL	VALUE	REFERENCE
IMPORTANCE FACTOR	I_E	1.25	TABLE 1604.5
SHORT PERIOD SPECTRAL ACCELERATION	S_{DS}	0.288	SECTION 1613.3.4
(1) SECOND PERIOD SPECTRAL ACCELERATION	S_{D1}	0.114	SECTION 1613.3.4
OCCUPANCY CATEGORY	–	III	SECTION 1604.5
SEISMIC DESIGN CATEGORY	–	B	TABLE 1613
SITE CLASSIFICATION	–	D	TABLE 20.3-1
BASIC SEISMIC-RESISTING SYSTEM	–	LIGHT FRAMED WALLS SHEATHED WITH WOOD STRUCTURAL PANELS	TABLE 12.2-1
RESPONSE MODIFICATION FACTOR	R	6.5	TABLE 12.2-1
DEFLECTION AMPLIFICATION FACTOR	C_d	4	TABLE 12.2-1
ANALYSIS PROCEDURE		EQUIVALENT LATERAL FORCE PROCEDURE	SECTION 12.0

DESIGN LOAD SCHEDULE
(ALL LOADS SHOWN ARE IN POUNDS PER SQ. FT.)

COMPONENT \ AREA	SLAB ON GRADE	ROOF	AWNING			
CONCRETE SLAB	100					
FRAMING		5	5			
CEILING		2				
COLLATERAL		3	3			
ROOFING & INSULATION		10	2			
TOTAL DEAD LOAD	50	25	10			
TOTAL LIVE LOAD	100	30	30			
TOTAL LOAD	150	50	40			

LINTEL SCHEDULE
(BEARING AND NON-BEARING WALLS)

MARK	WOOD
L-1	5-1/4" x 16" PSL BEAMS
L-2	3-1/2" x 16" PSL BEAMS

FOOTING SCHEDULE

MARK	SIZE	REINFORCING
F40	4'-0"x 4'-0"x 12"	(4) #5 EWB

PIER SCHEDULE

MARK	SIZE	REINFORCING
P1	24" x 24" CONC.	(8) #6 VERT w/ #3 TIES @ 12"

COLUMN SCHEDULE

MARK	SIZE	BASE PLATE	ANCHOR ROD (1554, GR. 36)
C1	7.25X7.25 PSL	3/4" X 1'-2" X 1'-2"	(4) 3/4" DIA.

DATE	No.	REVISION
9/10/26	1	RELEASED FOR BID

LOT NO. 1

LRHSD PROJECT NO. REF21-42-8302

PROPOSED EXTERIOR BUILDING RESTORATION

LRHSD ADMINISTRATION BUILDING

93 WILLOW GROVE ROAD, SHAMONG, NEW JERSEY 08088

BURLINGTON COUNTY

BLOCK NO. 27.02

SHAMONG TOWNSHIP

Linda M. Vivenzi, AIA, Secretary/Treasurer
New Jersey Architect LIC # 21AI00506300 P.P. LIC # 25UA00650300

Drew C. Dingler, AIA, President
New Jersey Architect LIC # 21AI00588500

KEY PLAN:

PROJECT NORTH

THE DESIGN COLLABORATIVE
ARCHITECTS AND PLANNERS, P.A.
1940 ROUTE 9 NORTH
CAPE MAY COURT HOUSE, NEW JERSEY 08210
PHONE: 609 465 4111 FAX: 609 465 5938
WWW.TDCARCHITECT.COM

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SCALE:	AS NOTED	DRAWN BY:	DCD
COMM. No.	8302	CHECKED BY:	DCD
DATE:	01/02/2025		

SHEET TITLE: STRUCTURAL PLANS & DETAILS

SHEET No.: S1.1

FILE G:\PROJECTS\8302\ARCHITECTURAL\A1-48 SERIES\S1.0 SERIES LRHSD ADMIN STRUCT.DWG DATE 9/28/2026 3:20 PM USER drew dingler

PROJECT CODES

APPLICABLE CODES

INTERNATIONAL BUILDING CODE - NJ EDITION 2024
REHABILITATION SUBCODE - NJAC 5:23-6
NATIONAL ELECTRIC CODE 2023

MISC. DWG. SYMBOLS

POINT OF CONNECTION

EQUIPMENT SYMBOL/PLAN NUMBER

EQUIPMENT NUMBER OR FLOW (GPM,CFM,ETC.) / PLAN DRAWING NUMBER

KEYED NEW WORK NOTE

KEYED DEMOLITION NOTE

SYMBOLS

208/120V PANELBOARD - SURFACE MOUNTED

480/277V PANELBOARD - SURFACE MOUNTED

208/120V PANELBOARD - RECESSED IN WALL

480/277V PANELBOARD - RECESSED IN WALL

30 — UNFUSED SAFETY SWITCH - NO. INDICATES SWITCH AMPERE RATING

30/20 — FUSED SAFETY SWITCH - NOS. INDICATE SWITCH/FUSE AMPERE RATINGS

1 30/20 — FUSED COMBINATION MAGNETIC STARTER - NOS. INDICATE STARTER NEMA RATING & SWITCH/FUSE AMPERE RATINGS

BRANCH CIRCUIT WIRING - CONCEALED

HOME RUN TO PANELBOARD

DUPLEX RECEPTACLE - 125V, 20A-MOUNTED 18" A.F.F.

GFI — DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTER PROTECTION - 125V, 20A-MOUNTED 18" A.F.F.

J — JUNCTION BOX - WALL MOUNT OR ABOVE CEILING (TYPICAL FOR ALL JUNCTION BOX SYMBOLS)

$X — WALL MOUNTED LIGHTING SWITCH. SUBSCRIPTS DENOTE THE FOLLOWING:
M - MOTOR-RATED

FACP — FIRE ALARM CONTROL PANEL

DOWNLIGHT LIGHTING FIXTURE

WALL PACK LIGHTING FIXTURE

WALL SCONCE LIGHTING FIXTURE

SECURITY CAMERA

ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
ADC	ABOVE DROP CEILING
C., CND	CONDUIT
B.C.	BELOW CEILING
DISC.	DISCONNECT
DWG	DRAWING
(E)	EXISTING
ER	EXISTING TO BE RELOCATED
EWC	ELECTRIC WATER COOLER
ETR	EXISTING TO REMAIN
F.P.C.	FIRE PROTECTION CONTRACTOR
G., GND	GROUND
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
K.E.C.	KITCHEN EQUIPMENT CONTRACTOR
KW	KILOWATTS
KVA	KILOVOLT AMPERES
N.E.C.	NATIONAL ELECTRIC CODE
PVC	POLYVINAL CHLORIDE CONDUIT, SCHEDULE 40
R	REMOVE
RE	RELOCATED EXISTING
SW	SWITCH
TVSS	TRANSIENT VOLTAGE SURGE SUPRESSOR
U.O.N.	UNLESS OTHERWISE NOTED
UG, U/G	UNDERGROUND
W/	WITH
WG	WIRE GUARD
WP	WEATHERPROOF
PH	PHASE
V	VOLT
4W	FOUR WIRE
25A	25 AMPERES

ELECTRICAL DEMOLITION NOTES

1. NOTES AND GRAPHIC REPRESENTATIONS SHALL NOT LIMIT THE EXTENT OF DEMOLITION REQUIRED. CONTRACTOR SHALL VISIT THE SITE, CAREFULLY EXAMINE EXISTING CONDITIONS AND SHALL PERFORM ALL DEMOLITION REQUIRED TO ACHIEVE THE FINAL DESIGN INTENT AS REQUIRED BY THE CONTRACT DOCUMENTS. EXTENT OF ALL DEMOLITION WORK SHALL BE COORDINATED WITH THE OWNER & ENGINEER.
2. ALL WORK REQUIRED TO REMAIN IN SERVICE BUT INTERFERING WITH THE ALTERATIONS SHALL BE RELOCATED AND RECONNECTED USING MATERIALS AND STANDARDS OF THIS CONTRACT.
3. ANY EQUIPMENT AND WIRING TO BE REMOVED SHALL BE DE-ENERGIZED PRIOR TO ANY DEMOLITION WORK.
4. EQUIPMENT INDICATED TO BE REMOVED SHALL BE TAKEN FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS AND ENVIRONMENTAL REGULATIONS. EQUIPMENT REQUIRED TO BE TURNED OVER TO THE OWNER SHALL BE PLACED IN A MUTUALLY ACCEPTABLE LOCATION.
5. PROCEDURE FOR FEEDERS AND BRANCH CIRCUITS TO BE RE-USED - REMOVE CONDUIT AND WIRING TO LOCATIONS WHICH AVOID CONFLICTS WITH NEW WORK. INSTALL JUNCTION BOXES, TAPE OFF CONDUCTORS AND IDENTIFY WITH PANEL AND CIRCUIT NUMBER.
6. ALL WORK SHALL BE PROPERLY IDENTIFIED AFTER DEMOLITION. UPDATE ALL PANEL SCHEDULES TO REFLECT EQUIPMENT AND CIRCUIT REMOVALS.

GENERAL ELECTRICAL NOTES

1. SOME LEGEND SYMBOLS AND ELECTRICAL PROJECT NOTES MAY NOT BE USED. SEE PLANS FOR APPLICABLE DEVICES.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2023 EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND THE SPECIFICATION.
3. ALL CIRCUIT BREAKERS SERVING HVAC EQUIPMENT SHALL BE UL LISTED AS 'HACR'.
4. THE DRAWINGS ARE DIAGRAMMATIC. EXACT LOCATION OF EQUIPMENT, WIRING AND RACEWAYS SHALL BE DETERMINED BY CONTRACTOR SUBJECT TO ENGINEER APPROVAL.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ELECTRICAL CHARACTERISTICS OF ALL NEW EQUIPMENT, MOTORS, ETC. BEFORE INSTALLING CABLING AND RACEWAY. IF THERE ARE ANY DISCREPANCIES BETWEEN THE ACTUAL RATING OF EQUIPMENT AT THE SITE AND THE DRAWINGS, THEN THE ENGINEER SHALL BE NOTIFIED.
6. ALL EMPTY CONDUITS SHALL HAVE A PULL STRING INSTALLED.
7. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS ON SITE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT.
8. ALL PANELS, WIRING DEVICES, BOXES, AND ENCLOSURES LOCATED OUTDOORS SHALL BE NEMA 3R. ALL PANELS, WIRING DEVICES, BOXES, AND ENCLOSURES LOCATED INDOORS SHALL BE NEMA 1.
9. ALL FUSES IN DISCONNECT SWITCHES SHOWN SHALL BE CLASS RK-1, FAST ACTING, UNLESS RECOMMENDED OTHERWISE BY THE EQUIPMENT SUPPLIER/MANUFACTURER.
10. THE ELECTRICAL CONTRACTOR TO PROVIDE MOUNTING SUPPORTS FOR ALL DISCONNECT SWITCHES. USE P1000 UNISTRUT FOR ALL INDOOR SUPPORTS AND GALVANIZED P1000 UNISTRUT FOR ALL OUTDOOR SUPPORTS.
11. ALL RACEWAYS PENETRATING FIRE RATED PARTITIONS, WALLS, AND CEILINGS SHALL BE SEALED USING APPROVED FIRE RATED SEALANT TO MATCH THE REQUIRED WALL FIRE RATING.
12. THE ELECTRICAL CONTRACTOR SHALL SECURE FROM OTHER CONTRACTORS ON THE PROJECT: SHOP DRAWINGS TO VERIFY CHARACTERISTICS OF ALL EQUIPMENT TO BE WIRED. IF THE CONTRACTOR FINDS DISCREPANCIES BETWEEN THE SHOP DRAWINGS AND THE ELECTRICAL PLANS, THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER PROMPTLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTIONS TO THE ELECTRICAL INSTALLATION IF THE DRAWING REVIEW IS NOT COMPLETED BY THE CONTRACTOR.
13. THE CONTRACTOR SHALL SUBMIT TO THE OWNER: CERTIFICATES OF INSPECTION FOR THE ELECTRICAL INSTALLATION FROM AN APPROVED INSPECTION AGENCY UPON COMPLETION OF ELECTRICAL WORK.
14. THE ENTIRE ELECTRICAL SYSTEM SHALL BE TESTED FOR PROPER GROUNDING AND OPERATION. TEST SHALL VERIFY THAT THE SYSTEM HAS NO SHORT CIRCUITS, OPENS, OVERLOADS, OR PANEL IMBALANCES. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND TEST INSTRUMENTS. ALL EQUIPMENT AND WIRING SYSTEMS SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE.
15. PRIOR TO FINAL ACCEPTANCE OF THE ELECTRICAL WORK, THE ELECTRICAL CONTRACTOR SHALL SUBMIT TO THE OWNER A WRITTEN STATEMENT GUARANTEEING ALL EQUIPMENT, MATERIALS, AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE OF THE PROJECT. UPON WRITTEN NOTICE TO THE CONTRACTOR DURING THE WARRANTY PERIOD, THE CONTRACTOR NO EXPENSE TO THE OWNER, SHALL REPAIR OR REPLACE ALL DEFECTIVE MATERIALS OR WORKMANSHIP.
16. ALL WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATION MAINTENANCE, AND REPAIR. MINOR DEVIATIONS FROM THE PLANS MAY BE MADE TO ACCOMPLISH THIS, SUBJECT TO THE APPROVAL OF THE ENGINEER.
17. ALL MATERIALS AND EQUIPMENT FURNISHED FOR THIS PROJECT SHALL BE NEW, LISTED, AND APPROVED BY UL.
18. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, INSPECTIONS, LICENSES AND PAY UTILITY COMPANY FEES WHERE REQUIRED.
19. ALL FUSED AND NON-FUSED DISCONNECT SWITCHES SHALL HAVE: 600 VOLT RATING FOR 480 VOLT CIRCUITS & 250 VOLT RATING FOR 208 VOLT CIRCUITS. SIZE FUSES TO COMPLY WITH NAMEPLATE RATING OF EQUIPMENT SERVED.
20. ELECTRICAL CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY ELECTRICAL LIGHT AND POWER AS REQUIRED FOR THE PROJECT WORK OF ALL TRADES DURING CONSTRUCTION.
21. ELECTRICAL CONTRACTOR SHALL CONCEAL ALL NEW WIRING ASSOCIATED WITH NEW SWITCH LOCATIONS AND RECEPTACLES WITHIN EXISTING TILED MASONRY WALLS. CONTRACTOR SHALL INSTALL JUNCTION BOXES ABOVE DROP CEILINGS IN THE LOCATION OF THE NEW DEVICES AS NECESSARY TO ACCESS EXISTING MASONRY CELLS. PROVIDE APPROPRIATE WALL SEALANT MATCHING RATING OF EXISTING WALLS WHERE PENETRATIONS ARE MADE ABOVE DROP CEILINGS.

MOUNTING HEIGHT CHART - ELECTRICAL EQUIPMENT

MOUNTING HEIGHT (AFF)	EQUIPMENT SYMBOL (OR REFER TO DESCRIPTION, NEXT COLUMN)	DESCRIPTION OF EQUIPMENT (DEVICES, OUTLETS, ETC.)	REMARKS
12'-0" U.O.N.		EXTERIOR WALL MOUNTED LIGHTING FIXTURES	SEE ARCHITECTURAL ELEVATIONS
10'-0"/8'-6"		BATTERY OPERATED EMERGENCY LIGHTING UNITS OR REMOTE MOUNTED HEADS	OR 1' BELOW CEILING WHICH EVER HEIGHT IS LOWER
8'-6"		PENDANT MOUNTED INDUSTRIAL AND STRIP LIGHTING FIXTURES	
8'-4"	SP	WALL MOUNTED CLOCKS AND SPEAKERS	OR 9" BELOW CEILING WHICH EVER HEIGHT IS LOWER
7'-6"		TOP OF EXIT SIGNS (NOT MOUNTED ABOVE A DOOR)	
ENTIRE LENS NOT LESS THAN 80"& NOT GREATER THAN 96"AFF		FIRE ALARM NOTIFICATION DEVICES	
6'-6"		CENTERLINE OF INTERIOR WALL MOUNTED FIXTURES	
6'-0"		MAXIMUM ELEVATION OF DISCONNECT SWITCHES, STARTERS AND CONTACTORS	
4'-6"		MAXIMUM ELEVATION OF WALL MOUNTED PHONES	3'-6" FOR ADA DEVICES
4'-0"		WALL MOUNTED WIREMOLD	
3'-6"	EP0 $ $3	WALL MOUNTED ELECTRICAL CONTROL DEVICES, SWITCHES, MANUAL MOTOR STARTERS	
OPERABLE PART OF PULL STATION NOT LESS THAN 3'-6" NOR MORE THAN 4'-0" AFF	F	WALL MOUNTED FIRE ALARM PULL STATION	
3'-0"		WALL MOUNTED RECEPTACLE IN MECHANICAL, ELECTRICAL, AND ELEVATOR ROOMS AND ON BUILDING EXTERIORS	
1'-6"	TV TEL	WALL MOUNTED RECEPTACLE, DATA OUTLET, TELEPHONE OUTLET OR SPECIAL RECEPTACLE	

1. MOUNTING HEIGHT OF EQUIPMENT LISTED SHALL BE AS INDICATED OR AS SPECIFIED ON THE DRAWINGS. ACTUAL MOUNTING HEIGHT MAY BE ADJUSTED TO FIELD CONDITIONS, INCLUDING THE WALL CONSTRUCTION ELEMENTS (BLOCKS, ETC.).
2. MOUNTING HEIGHT INDICATED FOR THE CENTERLINE OF THE DEVICE OR OUTLET, OR TO THE CENTER OF THE OPERATING CONTROL DEVICE, UNLESS NOTED OTHERWISE. HEIGHTS INDICATED ARE APPLICABLE OVER GRADE, PLATFORM AND OTHER OPERATING LEVELS
3. RECEPTACLES OUTLETS SHALL BE 4" ABOVE COUNTERTOP, 6" ABOVE TABLE OR DESKTOP, OR AS NOTED ON ELECTRICAL OR ARCHITECTURAL LAYOUTS AND DETAILS.
4. THIS CHART, INCLUDING THE NOTES, IS APPLICABLE EVEN IF THE MOUNTING HEIGHT IS SPECIFIED ON THE SYMBOL LIST.

DRAWING SHEET INDEX (8302)

SHEET NO.	DRAWING NUMBER	DRAWING TITLE	SCALE	ISSUE DATE 08/12/2026 ISSUED FOR BID
6	E0.0	ELECTRICAL LEAD SHEET	NTS	x
7	E0.1	ELECTRICAL SPECIFICATIONS & DETAILS	NTS	x
8	ED1.1	ELECTRICAL DEMOLITION FLOOR PLAN	1/8" = 1'-0"	x
9	ED1.2	ELECTRICAL DEMOLITION ELEVATIONS	1/8" = 1'-0"	x
10	E1.1	ELECTRICAL NEW WORK FLOOR PLAN	1/8" = 1'-0"	x
11	E1.2	ELECTRICAL NEW WORK ELEVATIONS	1/8" = 1'-0"	x
12	E2.1	ELECTRICAL PANEL SCHEDULES	NTS	x

ıum Wire Distances vs. Wire Size for 20A, 1 Phase Branch Circuit

Voltage (V)	Load Amps	Wire Size (Copper) #12	#10	#8	#6
		Run Distance (Ft)*			
120V	14	50	80	125	215
120V	12	55	100	150	225
120V	10	65	125	175	250
120V	5	125	200	-	-
277V	14	110	200	-	-
277V	12	125	225	-	-
277V	10	150	250	-	-
277V	5	300	-	-	-

* The above wire lengths are provided for reference only. Electrical Contractor is responsible to confirm voltage drop is less than 3% for the actual branch circuit routing.

1 / E0.0 TYPICAL VOLTAGE DROP CALCULATIONS
SCALE: NONE

ALL WORK SHOWN IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR, UNLESS NOTED OTHERWISE.

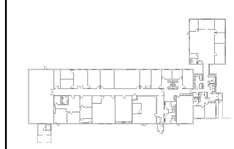
MEP ENGINEER:

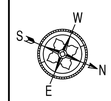
CONCORD ENGINEERING
P.A. 24GA27936700
Phila. Business License No. 107707
520 South Burnt Mill Road
Voorhees, New Jersey 08043
(856) 427-0200
www.concord-engineering.com

No.	Date	Description
1	09/10/26	RELEASED FOR BID

REVISIONS:

KEY PLAN:





John A. Marchiafava P. E.
New Jersey P. E. No. 24GE04992500

NOT FOR CONSTRUCTION

Professional Engineer
John A. Marchiafava P. E.

PROJECT: REF21-42-8302

LRHSD REFERENDUM
EXTERIOR BUILDING
RESTORATION

ADMINISTRATION BUILDING

93 WILLOW GROVE RD
SHAMONG, NEW JERSEY

DRAWING TITLE:

ELECTRICAL LEAD SHEET

DRAWN BY: TJT	SCALE: AS NOTED	DWG SIZE: 42x30	
CHECKED BY: LH	DRAWING NO. E0.0		REVISION 1
DATE: 09/10/2026			
PROJECT NO.: 8C22002.31			

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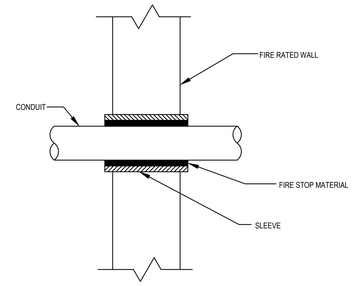
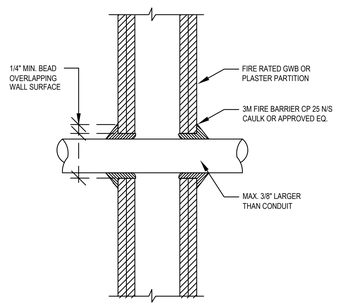
ELECTRICAL SPECIFICATIONS

ELECTRICAL SPECIFICATION
PART 1 - GENERAL
1.01 SUMMARY
A. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES REQUIRED FOR COMPLETE INSTALLATION OF ALL WORK INDICATED ON THE DRAWINGS OR SPECIFIED HEREIN.
B. OBTAIN ALL PERMITS AND APPROVALS REQUIRED BY AUTHORITIES HAVING JURISDICTION AND PAY THE ASSOCIATED PRINTING AND FILING COSTS.
C. VERIFY EXISTING CONDITIONS IN FIELD AND INCLUDE IN THE BID PRICE ALL WORK REQUIRED TO ACCOMMODATE EXISTING CONDITIONS.
D. PROVIDE TEMPORARY LIGHTING AND POWER AS REQUIRED BY THE GENERAL CONDITIONS. REMOVE ALL TEMPORARY SERVICES AT THE COMPLETION OF WORK.
1.02 QUALITY ASSURANCE
A. MATERIALS, EQUIPMENT AND INSTALLATION SHALL CONFORM TO THE LATEST EDITION OF ALL APPLICABLE CODES AND THE REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION, INCLUDING THE NATIONAL ELECTRICAL CODE, LOCAL ELECTRICAL CODES, AND APPLICABLE OSHA REQUIREMENTS. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE BUILDING STANDARDS AND THE REQUIREMENTS OF THE LOCAL UTILITY COMPANY.
B. MATERIALS, EQUIPMENT AND INSTALLATION SHALL CONFORM TO THE LATEST EDITION OF THE APPLICABLE REFERENCE STANDARDS PUBLISHED BY THE NFPA, UL, ANSI, IEEE AND NEMA.
C. THE CONTRACTOR SHALL PROVIDE THE SERVICES OF AN INDEPENDENT, LICENSED ELECTRICAL INSPECTION AGENCY TO INSPECT AND CERTIFY THAT THE WORK IS INSTALLED IN ACCORDANCE WITH APPLICABLE ELECTRICAL CODES. THE INSPECTION AGENCY SHALL BE ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
D. ALL WORK SHALL BE WARRANTIED IN WRITING TO BE FREE FROM DEFECTS IN MATERIALS AND/OR WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY THE OWNER. WARRANTY SHALL INCLUDE ALL COSTS OF PARTS, LABOR, TRAVEL AND LIVING EXPENSES REQUIRED TO REPAIR OR REPLACE DEFECTIVE ITEMS.
1.03 SUBMITTALS
A. SUBMIT THE FOLLOWING INFORMATION AS APPLICABLE AND AS REQUIRED FOR ALL WORK SPECIFIED UNDER THIS DIVISION:
1. MANUFACTURER'S PRODUCT DATA SHEETS AND SAMPLES WHERE REQUIRED.
2. SHOP DRAWIGS INCLUDING DIMENSIONED EQUIPMENT LAYOUTS, POINT-TO-POINT WIRING DIAGRAMS AND SEQUENCES OF OPERATION.
3. OPERATION AND MAINTENANCE MANUALS.
4. CERTIFIED FACTORY AND FIELD TEST REPORTS.
5. INDEPENDENT AGENCY CERTIFICATION OF CODE COMPLIANCE.
6. MANUFACTURERS CERTIFICATIONS, WARRANTIES AND SPARE PARTS.
B. ALL SUBMITTALS SHALL BE CLEARLY ANNOTATED TO DEMONSTRATE COMPLIANCE WITH CONTRACT REQUIREMENTS. REFER TO OTHER SECTIONS FOR ADDITIONAL SUBMITTAL REQUIREMENTS.
C. SUBSTITUTIONS TO SPECIFIED ITEMS MUST COMPLY WITH ALL SPECIFICATION REQUIREMENTS AND WILL ONLY BE PERMITTED WHERE SUBMITTED AND APPROVED IN WRITING.
1.04 DELIVERY, STORAGE AND HANDLING
A. ALL EQUIPMENT SHALL BE DELIVERED IN MANUFACTURER'S ORIGINAL PROTECTIVE PACKAGING AND STORED IN A CLEAN, DRY PLACE PROTECTED FROM WEATHER, FUMES, WATER, DUST AND PHYSICAL DAMAGE. TOUCH UP DAMAGED FINISHES TO MATCH THE ORIGINAL FINISH.
1.05 BASIC MATERIALS AND METHODS
A. COORDINATE ALL WORK WITH THE WORK OF OTHER TRADES PRIOR TO INSTALLATION. ASSIST IN THE PREPARATION OF COORDINATION DRAWINGS AS REQUIRED BY THE GENERAL CONDITIONS.
B. ANY SHUTDOWNS OF BUILDING POWER, FIRE ALARM AND SIGNAL SYSTEMS SHALL BE COORDINATED WITH THE OWNER AND BUILDING OPERATING PERSONNEL. WORK TO ACCOMMODATE OFF-HOUR SHUTDOWNS SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
C. CUT AND PATCH SURFACES AS REQUIRED. REPAIRS SHALL MATCH ORIGINAL FINISH. PENETRATIONS OF FIRE RATED PARTITIONS SHALL BE SEALED WITH APPROVED MATERIAL TO PROVIDE THE SAME RATING AS THE PARTITION. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FIRE RATED PARTITIONS.
D. EQUIPMENT, DEVICES AND ENCLOSURES SHALL BE RATED NEMA 1 FOR INTERIOR LOCATIONS, NEMA 3R FOR DAMP LOCATIONS AND NEMA 4 FOR EXTERIOR LOCATIONS.
E. PROVIDE 4" HIGH SEALED CONCRETE HOUSEKEEPING PADS BELOW ALL FLOOR MOUNTED EQUIPMENT AND AROUND ALL CONDUITS ENTERING FLOORS OF MECHANICAL EQUIPMENT ROOMS.
1.06 WARRANTY
A. GENSET: 5 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.
B. OTHER EQUIPMENT: MANUFACTURER STANDARD WARRANTY WITH OPTION TO EXTEND.
PART 2 - PRODUCTS
2.01 RACEWAYS
A. RIGID GALVANIZED STEEL (RGS) CONDUIT SHALL CONFORM TO UL 6. FITTINGS SHALL BE THREADED.
B. INTERMEDIATE METALLIC CONDUIT (IMC) SHALL CONFORM TO UL 1242. FITTINGS SHALL BE THREADED.
C. ELECTRICAL METALLIC TUBING (EMT) SHALL CONFORM TO UL 797. FITTINGS SHALL BE GLAND AND RING COMPRESSION TYPE.
D. FLEXIBLE METALLIC CONDUIT SHALL CONFORM TO UL 1. LIQUID TIGHT FLEXIBLE METAL CONDUIT SHALL CONFORM TO UL 360.
E. ALL CONDUIT FITTINGS AND CONNECTORS SHALL BE STEEL WITH INSULATED THROATS. DIE-FORMED ZINC FITTINGS ARE NOT ACCEPTABLE. BUSHINGS SHALL BE PROVIDED AT ALL CONDUIT TERMINATIONS. BUSHINGS LARGER THAN 1" SHALL BE GROUNDING TYPE. PVC BUSHINGS MAY BE UTILIZED ONLY FOR 3/4" BRANCH CIRCUIT CONDUITS TERMINATING AT PANELBOARDS.
F. MINIMUM RACEWAY SIZE SHALL BE 3/4". RACEWAYS SHALL BE RUN PARALLEL TO BUILDING STRUCTURAL LINES. RACEWAYS SHALL NOT BE RUN HORIZONTALLY BELOW 8'-0" AFF IN PARTITIONS. ALL EMPTY RACEWAYS SHALL BE FURNISHED WITH A 200 LB. TEST NYLON DRAG LINE.
G. CONDUIT UTILIZATION SHALL BE AS FOLLOWS:
1. RIGID GALVANIZED STEEL (RGS) - ALL EXTERIOR LOCATIONS, UNDERGROUND AND IN CONCRETE SLABS; EXPOSED IN MECHANICAL EQUIPMENT ROOMS BELOW 8'-0" AFF.
2. INTERMEDIATE METALLIC CONDUIT (IMC)- MAY BE USED IN LIEU OF RGS WHERE PERMITTED BY THE AUTHORITY HAVING JURISDICTION.
3. ELECTRICAL METALLIC TUBING (EMT) - INTERIOR CONCEALED AND EXPOSED LOCATIONS; EXPOSED IN MECHANICAL ROOMS ABOVE 8'-0" AFF. INTERIOR COMMUNICATIONS WIRING.
4. FLEXIBLE METALLIC CONDUIT - FINAL CONNECTIONS TO TRANSFORMERS AND LIGHTING FIXTURES IN INTERIOR LOCATIONS ABOVE ACCESSIBLE CEILINGS (MAX. LENGTH 6'-0"); WHERE APPROVED BY THE ENGINEER.
5. LIQUID TIGHT FLEXIBLE CONDUIT - FINAL CONNECTIONS TO MOTORS AND MECHANICAL EQUIPMENT: CONNECTIONS IN EXTERIOR LOCATIONS.
H. WIREWAYS AND AUXILIARY GUTTERS SHALL BE TWO PIECE STEEL CONSTRUCTION WITH ANSI 61 GRAY ENAMEL FINISH. COVERS SHALL BE COMBINATION HINGED AND SCREW-ON TYPE. HOUSINGS SHALL HAVE REGULARLY SPACED KNOCKOUTS FOR CONDUIT ENTRY. WIREWAYS SHALL BE MANUFACTURED BY SQUARE D OR APPROVED EQUAL. PROVIDE ALL END PIECES, CONNECTORS AND REQUIRED ACCESSORIES.
2.02 BOXES
A. OUTLET, PULL AND JUNCTION BOXES SHALL BE FABRICATED FROM STEEL AND CONFORM TO UL 50, UL514 AND NEMA OS1. BOXES FOR INTERIOR LOCATIONS SHALL BE CODE GAUGE, GALVANIZED SHEET STEEL. BOXES FOR MECHANICAL ROOMS AND EXTERIOR LOCATIONS SHALL BE CAST STEEL WITH GASKETED COVERS.
B. BOXES SHALL CONTAIN SUITABLE KNOCKOUTS. BARRIERS SHALL BE FURNISHED AS REQUIRED BY CODE AND TO SEPARATE SWITCHES FOR 277 VOLT CIRCUITS ON DIFFERENT PHASES.
C. BOXES SHALL BE SIZED AS REQUIRED BY CODE. COVERS GREATER THAN 50 LBS. SHALL BE DIVIDED INTO MULTIPLE SECTIONS.
2.03 WIRES, CABLES, SPLICES AND TERMINATIONS
A. POWER AND CONTROL WIRING SHALL BE TINNED COPPER, MINIMUM 98 % CONDUCTIVITY, WITH TYPE 'THHN/THWN-2' INSULATION RATED 600 VOLTS. MINIMUM WIRE SIZE SHALL BE #12 AWG FOR POWER, #14 AWG FOR CONTROL AND #18 AWG FOR LIMITED POWER CIRCUITS. CONDUCTORS SHALL BE SOLID FOR WIRE SIZES #10 AWG AND SMALLER AND STRANDED FOR WIRE SIZES #8 AWG AND LARGER. STRANDED CONDUCTORS MAY BE UTILIZED FOR CONTROL WIRING.
B. CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS: 208/120V PHASE - BLACK-A, RED-B, BLUE-C, WHITE-NEUTRAL, GREEN-GROUND, GREEN WITH TRACER.
C. CONDUCTOR SIZES SHALL BE INCREASED WHERE REQUIRED TO COMPENSATE FOR VOLTAGE DROP AND HIGH AMBIENT TEMPERATURE.
D. SPLICES FOR WIRE SIZES #10 AWG AND SMALLER SHALL BE MADE WITH SPRING CONNECTORS AND TAPE. SPLICES FOR WIRE SIZES #8 AWG AND LARGER SHALL BE COMPRESSION TYPE WITH PRE-MOLDED COVER AND TAPE.
E. TERMINATIONS OF POWER AND CONTROL WIRING SHALL BE COMPRESSION TYPE, WITH TWO-HOLE LUGS FOR WIRE SIZES #8 AWG AND LARGER. MECHANICAL LUGS MAY ONLY BE UTILIZED FOR TERMINATIONS AT BRANCH CIRCUIT PANELBOARDS.
2.04 WIRING DEVICES
A. WIRING DEVICES SHALL BE SPECIFICATION GRADE WITH NEMA CONFIGURATIONS AS INDICATED ON THE DRAWINGS. COLOR OF DEVICES SHALL BE AS SELECTED BY THE ARCHITECT. WIRING DEVICES SHALL BE MANUFACTURED BY ARROW-HART, HUBBELL, LEVITON, PASS & SEYMOUR OR APPROVED EQUAL.
B. FACEPLATES SHALL BE NON-MAGNETIC STAINLESS STEEL WITH BRUSHED FINISH. FACEPLATES SHALL BE FURNISHED FOR ALL COMMUNICATIONS OUTLETS AND SHALL BE CONFIGURED TO SUIT THE SYSTEM SUPPLIERS REQUIREMENTS. DEVICES MOUNTED ADJACENT TO EACH OTHER SHALL BE FURNISHED WITH A COMMON FACEPLATE.
C. MULTI-OUTLET ASSEMBLIES SHALL BE TWO PIECE STEEL CONSTRUCTION WITH BAKED ENAMEL FINISH. UNLESS OTHERWISE INDICATED ON THE DRAWINGS, ASSEMBLIES SHALL BE SINGLE CIRCUIT WITH SPECIFICATION GRADE NEMA 5-15R RECEPTACLES 6" ON CENTER. MULTI-OUTLET ASSEMBLIES SHALL BE WIREMOLD PLUGMOLD 2000 OR APPROVED EQUAL. PROVIDE ALL END FITTINGS, BLANK SECTIONS AND REQUIRED ACCESSORIES.
2.05 HANGERS AND SUPPORTS
A. THREADED RODS SHALL BE FULLY GALVANIZED, MINIMUM 3/8" DIAMETER. MODULAR CHANNEL SUPPORTS SHALL BE GALVANIZED STEEL. SUPPORT CLIPS AND FASTENERS SHALL BE LISTED AND APPROVED FOR THE APPLICATION. STRAPS AND CLAMPS SHALL BE MALLEABLE IRON.
B. SUPPORTS SHALL BE SIZED TO ACCOMMODATE THE LOAD REQUIRED. ALL WORK SHALL BE SUPPORTED INDEPENDENTLY OF THE WORK OF OTHER TRADES, INCLUDING CEILING SYSTEM SUPPORTS. ARMORED CABLE MAY, HOWEVER, BE SUPPORTED FROM MAIN CEILING SYSTEM SUPPORT CHANNELS.
C. PANELS AND EQUIPMENT LOCATED ON OTHER THAN MASONRY WALLS SHALL BE MOUNTED WITH MODULAR CHANNEL SUPPORTS SECURED TO THE BUILDING STRUCTURE.
2.06 SAFETY SWITCHES
A. SAFETY DISCONNECT SWITCHES SHALL BE 250V OR 600V AS REQUIRED, HEAVY DUTY, HORSEPOWER RATED, QUICK MAKE-QUICK BREAK DESIGN WITH HANDLES LOCKABLE IN THE OPEN (OFF) POSITION. SWITCH HOUSINGS SHALL INCLUDE COVER INTERLOCK AND LINE SIDE TERMINAL SHIELD AND GROUNDING LUG. FUSE CLIPS SHALL BE REJECTION TYPE. INTERRUPTING RATINGS SHALL BE A MINIMUM OF 100,000 AIC WHEN FUSED AND 12 TIMES THE CONTINUOUS CURRENT RATING WHEN UNFUSED AT RATED VOLTAGE.
B. SWITCHES USED AS A LOCAL DISCONNECT FOR A MOTOR CIRCUIT SHALL BE FURNISHED WITH AUXILIARY CONTACTS CONNECTED WITH 2#14 CONTROL WIRES TO INTERRUPT THE STARTER CONTROL CIRCUIT WHEN THE DISCONNECT SWITCH IS OPENED.
2.07 FUSES
A. FUSES SHALL BE SILVER-SAND CONSTRUCTION, TIME DELAY, CURRENT LIMITING TYPE RATED 600V OR 250V AS REQUIRED, 200,000 AIC. FUSES GREATER THAN 600 AMPS SHALL BE CLASS L. FUSES FOR MOTOR AND TRANSFORMER PROTECTION SHALL BE CLASS RK-1. ALL OTHER FUSES SHALL BE CLASS RK-5. FUSES SHALL BE MANUFACTURED BY BUSSMANN, CEFCO, GOULD-SHAWMUT OR APPROVED EQUAL.
3.01 GROUNDING
A. THE DISTRIBUTION SYSTEM SHALL BE COMPLETELY AND PROPERLY GROUNDED USING APPROVED FITTINGS. SEPARATE INSULATED GROUND CONDUCTORS SHALL BE RUN WITH ALL FEEDERS, RECEPTACLE BRANCH CIRCUITS AND FLEXIBLE CONNECTIONS TO LIGHTING FIXTURES AND EQUIPMENT.
3.02 IDENTIFICATION OF WORK
A. ALL PANELBOARDS, SAFETY SWITCHES, EQUIPMENT ENCLOSURES AND CABINETS SPECIFIED HEREIN SHALL BE CLEARLY IDENTIFIED WITH THE EQUIPMENT DESIGNATION, VOLTAGE AND AMPERE RATING, FUSE RATING, EQUIPMENT SERVED AND ORIGIN OF THE INCOMING FEED. IDENTIFICATION SHALL BE BY WHITE ON BLACK PLASTIC NAMEPLATE WITH 1/2" MINIMUM LETTERING ATTACHED BY SCREWS.
B. JUNCTION BOXES AND CONTROL PANELS SHALL BE IDENTIFIED WITH PANEL AND CIRCUIT NUMBERS OR SYSTEM NAME. FACEPLATES OF SWITCHES FOR EQUIPMENT SUCH AS REMOTE FANS AND MOTORIZED SCREENS SHALL BE IDENTIFIED WITH THE NAME OF THE DEVICE CONTROLLED. IDENTIFICATION SHALL BE BY INDELIBLE MARKER IN CONCEALED LOCATIONS AND ADHESIVE LABELS IN EXPOSED LOCATIONS. EMERGENCY DEVICES SHALL BE IDENTIFIED IN YELLOW.
C. EMPTY CONDUITS SHALL BE IDENTIFIED WITH TAGS AT BOTH ENDS INDICATING THE LOCATION OF TERMINATION AT THE OPPOSITE END.
3.03 STARTUP, TESTING AND ADJUSTMENT
A. PROVIDE THE SERVICES OF MANUFACTURERS' FACTORY TRAINED TECHNICIANS FOR SYSTEM STARTUP, TESTING, ADJUSTMENT, AND TRAINING.
B. THE FOLLOWING TESTS AND ADJUSTMENTS SHALL BE PERFORMED ON EQUIPMENT FURNISHED BY THIS CONTRACTOR AND OTHERS:
1. WIRING SYSTEMS - CONTINUITY, PHASE ROTATION, PHASE BALANCING AND INSULATION RESISTANCE (MEGGER).
2. GROUNDING SYSTEM - CONTINUITY AND RESISTANCE TO GROUND.
3. TESTING FIRM TO PROVIDE NETA ATS TESTING FOR EQUIPMENT.
3.04 DEMONSTRATION AND INSTRUCTION
A. DEMONSTRATE THAT ALL EQUIPMENT AND SYSTEMS ARE OPERATING IN ACCORDANCE WITH CONTRACT REQUIREMENTS.
3.05 PROJECT CLOSEOUT
A. AFTER COMPLETION OF PROJECT AND PRIOR TO REQUESTING FINAL PAYMENT, THE CONTRACTOR SHALL GIVE WRITTEN NOTICE THAT THE FOLLOWING ITEMS HAVE BEEN COMPLETED:
1. REQUIRED AGENCY APPROVALS AND CERTIFICATIONS.
2. FINAL CLEANING AND ADJUSTMENT OF LIGHTING FIXTURES AND EQUIPMENT.



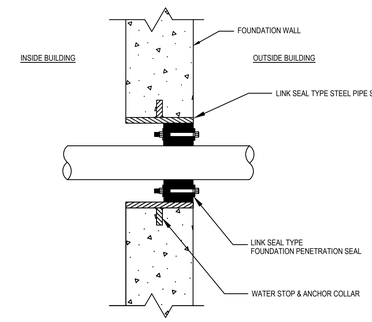
1 / E0.1 TYPICAL CONDUIT PENETRATION DETAIL #1
SCALE: NONE

NOTES:
1. USE THIS DETAIL WHERE CONDUITS PASS THRU FIRE RATED WALL.
2. WHERE CONDUITS PASS THRU FOUNDATION WALLS, FLOOR SLAB ON EARTH, ROOF, CONCRETE BEAM, BRICK WALL, OR WATER PROOF FLOORS, USE PIPE SLEEVES.
3. FIRESTOPPING OF CONDUIT PENETRATIONS SHALL UTILIZE THE CORRECT UL STANDARD FOR THE SPECIFIC WALL/FLOOR/CEILING TYPES AND RATINGS.



2 / E0.1 TYPICAL CONDUIT PENETRATION DETAIL #2
SCALE: NONE

NOTES:
1. FIRESTOPPING OF CONDUIT PENETRATIONS SHALL UTILIZE THE CORRECT UL STANDARD FOR THE SPECIFIC WALL/FLOOR/CEILING TYPES AND RATINGS.



3 / E0.1 TYPICAL CONDUIT PENETRATION DETAIL #3
SCALE: NONE

NOTES:
1. FOR SLEEVE DIAMETER USE MANUFACTURER'S SIZE RECOMMENDATION.
2. FIRESTOPPING OF CONDUIT PENETRATIONS SHALL UTILIZE THE CORRECT UL STANDARD FOR THE SPECIFIC WALL/FLOOR/CEILING TYPES AND RATINGS.

GENERAL FIRE STOP NOTES

1. REFER TO SECTION 260500 OF THE SPECIFICATIONS. FOR QUALITY CONTROL REQUIREMENTS, REFER TO THE QUALITY CONTROL PORTION OF THE SPECIFICATION.
2. DETAILS SHOWN ON THIS DRAWING ARE TYPICAL DETAILS. IF FIELD CONDITIONS DO NOT MATCH REQUIREMENTS OF TYPICAL DETAILS, APPROVED ALTERNATE DETAILS SHALL BE UTILIZED. FIELD CONDITIONS AND DIMENSIONS NEED TO BE VERIFIED FOR COMPLIANCE WITH THE DETAILS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
   * MINIMUM AND MAXIMUM WIDTH OF JOINTS
   * TYPE AND THICKNESS OF FIRE-RATED CONSTRUCTION.
   THE MINIMUM ASSEMBLY RATING OF THE FIRESTOP ASSEMBLY SHALL MEET OR EXCEED THE HIGHEST RATING OF THE ADJACENT CONSTRUCTION.
3. IF ALTERNATE DETAILS MATCHING THE FIELD CONDITIONS ARE NOT AVAILABLE, MANUFACTURER'S ENGINEERING JUDGMENT DRAWINGS ARE ACCEPTABLE. DRAWINGS SHALL FOLLOW THE INTERNATIONAL FIRESTOP COUNCIL (IFC) GUIDELINES FOR EVALUATING FIRESTOP SYSTEMS ENGINEERING JUDGMENTS.

   REFERENCES:
   * 2002 UNDERWRITER'S LABORATORIES FIRE RESISTANCE DIRECTORY, VOLUMES 1 & 2
   * NFPA 101 LIFE SAFETY CODE
   * NFPA 70 - NATIONAL ELECTRIC CODE 2023
   * ALL GOVERNING LOCAL AND REGIONAL BUILDING CODES
4. FIRESTOP SYSTEM INSTALLATION MUST MEET REQUIREMENTS OF ASTM E-814 (UL 1479) TESTED ASSEMBLIES THAT PROVIDE A FIRE RATING EQUAL TO THAT OF CONSTRUCTION BEING PENETRATED.
5. ALL RATED THROUGH-PENETRATION ASSEMBLIES SHALL BE PROMINENTLY LABELED WITH THE FOLLOWING INFORMATION:
   * ATTENTION: FIRE RATED ASSEMBLY
   * UL SYSTEM #
   * PRODUCT(S) USED
   * HOURLY RATING (F-RATING)
   * INSTALLATION DATE

ALL WORK SHOWN IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR, UNLESS NOTED OTHERWISE.

MEP ENGINEER:

CONCORD ENGINEERING
P.A. 24GA27936700
Phila. Business License No. 107707
520 South Burnt Mill Road
Voorhees, New Jersey 08043
(856) 427-0200
www.concord-engineering.com

No.	Date	Description
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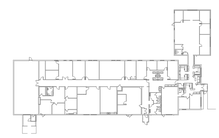

John A. Marchiafava P. E.
New Jersey P. E. No. 24GE04592500

NOT FOR CONSTRUCTION

Professional Engineer
John A. Marchiafava P. E.

PROJECT: REF21-42-8302

LRHSD REFERENDUM
EXTERIOR BUILDING
RESTORATION

ADMINISTRATION BUILDING

93 WILLOW GROVE RD
SHAMONG, NEW JERSEY

DRAWING TITLE:

ELECTRICAL SPECIFICATIONS & DETAILS

DRAWN BY: TJT	SCALE: AS NOTED	DWG SIZE: 42x30	
CHECKED BY: LH	DRAWING NO. E0.1		REVISION 1
DATE: 09/10/2026			
PROJECT NO.: 8C22002.31			

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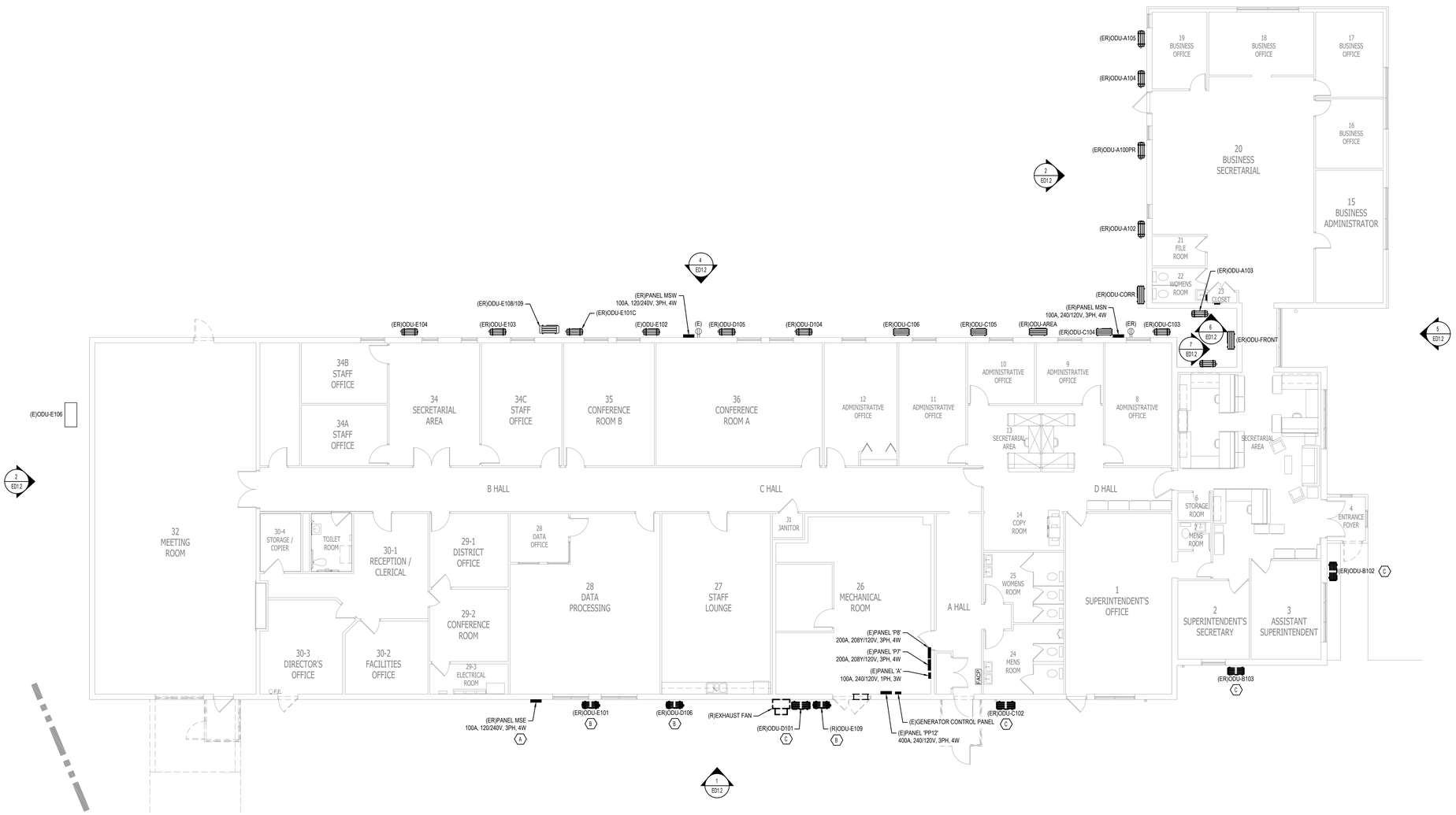

1 ED1.1 ELECTRICAL DEMOLITION FLOOR PLAN

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

0' 2' 4' 8' 16'

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

ALL WORK SHOWN IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR, UNLESS NOTED OTHERWISE.

DEMOLITION OF EXISTING SYSTEM NOTES:

GENERAL NOTES:

1. REFER TO ELECTRICAL LEAD SHEET, E0.0, FOR "NOTES" THAT PERTAIN TO THE SCOPE OF THIS PROJECT. REFER TO SPECIFICATIONS AND DETAILS FOR PROJECT DETAILS AND EXECUTION REQUIREMENTS.
2. THE ELECTRICAL CONTRACTOR SHALL ACCOMPLISH COMPLETE ELECTRICAL DEMOLITION OF ALL ELECTRICAL EQUIPMENT/DEVICES ASSOCIATED WITH THE REMOVAL OF MECHANICAL EQUIPMENT IDENTIFIED ON PLAN.
3. DEMOLITION OF THESE DEVICES SHALL INCLUDE, BUT NOT BE LIMITED TO, COMPLETE REMOVAL OF ALL BRANCH CIRCUIT POWER WIRING AND ASSOCIATED CONDUIT AND BOX SYSTEMS FROM THE AFFECTED MECHANICAL EQUIPMENT BACK TO THE PANEL OF ORIGIN. REMOVE EXISTING DISCONNECT SWITCHES, STARTERS AND OTHER ELECTRICAL EQUIPMENT ASSOCIATED WITH THE MECHANICAL EQUIPMENT AND SYSTEMS BEING DEMOLISHED.
4. THE ELECTRICAL CONTRACTOR SHALL MAKE AN ON SITE INSPECTION OF THE PROJECT AREA TO DETERMINE A FULL SCOPE OF DEMOLITION WORK BEFORE SUBMITTING A PROPOSAL.
5. THE ELECTRICAL CONTRACTOR SHALL PROVIDE APPROPRIATE FIRE RATED ABANDONMENT PLATES FOR ALL REMOVED FLOOR MOUNTED POKE THROUGH WIRING DEVICES.
6. ALL DEMOLISHED MATERIAL SHALL BE REMOVED FROM THE SITE BY THE ELECTRICAL CONTRACTOR. THE CONTRACTOR IS TO RECYCLE WHEREVER POSSIBLE. COORDINATE ALL REMOVAL AND DISPOSAL WITH THE OWNER WHO RESERVES THE RIGHT TO SALVAGE ANY HVAC OR ELECTRICAL COMPONENTS.
7. ALL POWER SHUT DOWNS MUST BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.
8. ALL DEMOLITION WORK SHALL BE DONE IN A SAFE AND ORDERLY MANNER AND IN ACCORDANCE WITH THE N.E.C., OSHA AND STATE REGULATIONS.
9. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE REMOVAL OF EQUIPMENT WITH OTHER TRADES SO AS NOT TO AFFECT THE OPERATION OF EXISTING SYSTEMS.
10. DO NOT DEMOLISH THE FOLLOWING ITEMS:
    - BRANCH CIRCUIT WIRING PASSING THROUGH THE AREA OF DEMOLITION BUT FEEDING OTHER WIRING DEVICES, LIGHT FIXTURES, AND OTHER EQUIPMENT NOT WITHIN THE SCOPE OF THE WORK.
    - EXISTING BRANCH CIRCUIT WIRING FOR HVAC EQUIPMENT TO REMAIN-UNLESS STATED ON MECHANICAL DEMOLITION PLAN.
11. ELECTRICAL CONTRACTOR MAY RE-USE TO THE MAXIMUM EXTENT POSSIBLE ALL WIRING AND RACEWAY ASSOCIATED WITH EXISTING EQUIPMENT BEING REMOVED. RE-USE OF WIRING, RACEWAY AND BREAKERS LOCATED IN LOCAL PANELS IS PERMITTED AS LONG AS IT MEETS THE INSTALLATION REQUIREMENTS OF THE NEW EQUIPMENT BEING PROVIDED. PROVIDE MEGGER TESTING OF CABLES TO BE RE-USED PER ANSI/NETA ATS-2021 STANDARDS.

DEMOLITION KEYED NOTES:

GENERAL: DEMOLITION NOTES ARE INDICATED WITH THE FOLLOWING SYMBOL (#) AND ARE NUMBERED AS FOLLOWS:

(A) ELECTRICAL CONTRACTOR SHALL RELOCATE EXISTING PANEL. DISCONNECT AND REMOVE EXISTING FEEDER BACK TO ACCESSIBLE LOCATION IN BUILDING. PROVIDE PULL BOX FOR RE-USE OF EXISTING FEEDER TO EXTEND EXISTING CIRCUITRY TO RELOCATED PANEL LOCATION. REFER TO NEW WORK PLANS FOR ADDITIONAL INFORMATION. DEMOLISH AND REMOVE ALL DOWNSTREAM CIRCUITRY.

(B) ELECTRICAL CONTRACTOR SHALL DISCONNECT EXISTING CONDENSING UNIT TO BE REMOVED. DEMOLISH AND REMOVE EXISTING CIRCUITRY BACK TO PANEL OF ORIGIN. EXISTING DISCONNECT SWITCH SHALL BE RE-USED AT NEW CONDENSING UNIT LOCATION. REFER TO NEW WORK PLANS FOR ADDITIONAL INFORMATION.

(C) ELECTRICAL CONTRACTOR SHALL DISCONNECT EXISTING CONDENSING UNIT TO BE RELOCATED. DISCONNECT AND REMOVE EXISTING FEEDER BACK TO ACCESSIBLE LOCATION IN BUILDING. PROVIDE NEW JUNCTION BOX FOR RE-USE OF EXISTING FEEDER TO EXTEND EXISTING CIRCUITRY TO RELOCATED CONDENSING UNIT LOCATION. EXISTING DISCONNECT SWITCH SHALL BE RE-USED AT RELOCATED CONDENSING UNIT LOCATION. REFER TO NEW WORK PLANS FOR ADDITIONAL INFORMATION.

MEP ENGINEER:

CONCORD ENGINEERING

P.A. 24GA27936700
Phila. Business License No. 107707

520 South Burnt Mill Road
Voorhees, New Jersey 08043
(856) 427-0200

www.concord-engineering.com

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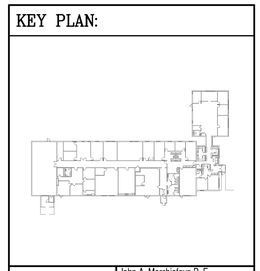

John A. Marchiafava P. E.
New Jersey P. E. No. 24GE04992500

NOT FOR CONSTRUCTION

Professional Engineer
John A. Marchiafava P. E.

PROJECT: REF21-42-8302

LRHSD REFERENDUM
EXTERIOR BUILDING
RESTORATION

ADMINISTRATION BUILDING

93 WILLOW GROVE RD
SHAMONG, NEW JERSEY

DRAWING TITLE:

ELECTRICAL DEMOLITION
FLOOR PLAN

DRAWN BY: TJT	SCALE: AS NOTED	DWG SIZE: 42x30	
CHECKED BY: LH	DRAWING NO. ED1.1		REVISION 1
DATE: 09/10/2026			
PROJECT NO.: 8C22002.31			

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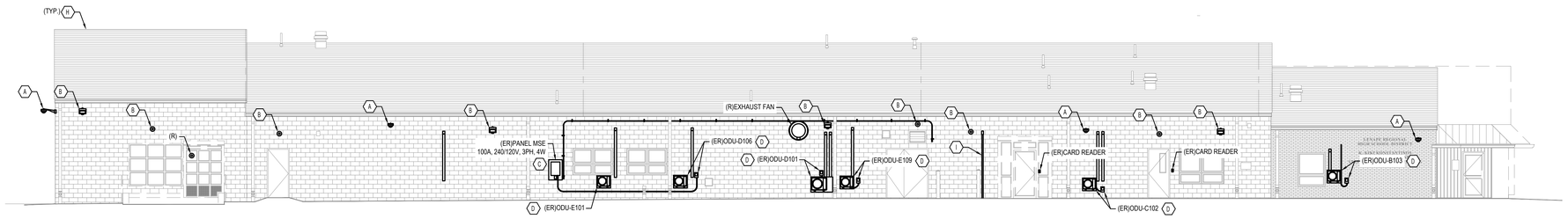
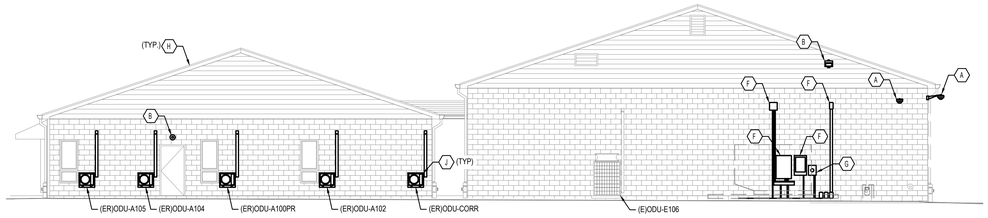
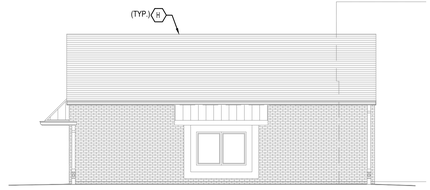


1 ED1.2 ELECTRICAL DEMOLITION EAST ELEVATION
SCALE: 1/8" = 1'-0"
SCALE BAR: 1/8"=1'-0"



2 ED1.2 ELECTRICAL DEMOLITION SOUTH ELEVATION
SCALE: 1/8" = 1'-0"
SCALE BAR: 1/8"=1'-0"



3 ED1.2 ELECTRICAL DEMOLITION WEST ELEVATION - BUSINESS WING
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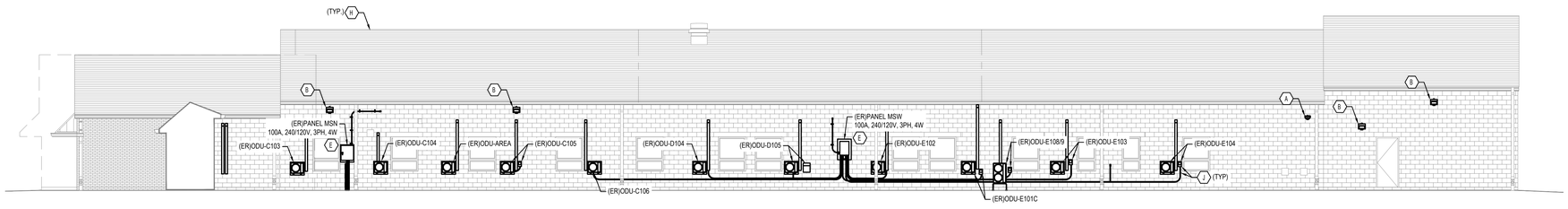
SCALE BAR: 1/8"=1'-0"



4 ED1.2 ELECTRICAL DEMOLITION WEST ELEVATION
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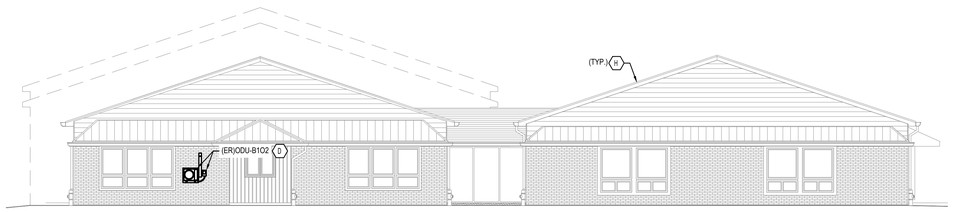
SCALE BAR: 1/8"=1'-0"



5 ED1.2 ELECTRICAL DEMOLITION NORTH ELEVATION
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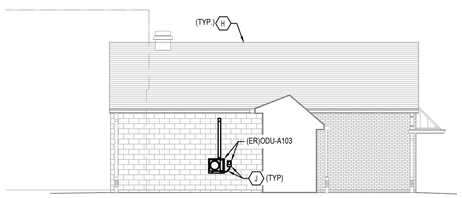
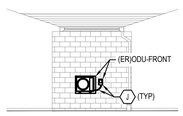
SCALE BAR: 1/8"=1'-0"



6 ED1.2 ELECTRICAL DEMOLITION EAST ELEVATION - BUSINESS ALCOVE
SCALE: 1/8" = 1'-0"
SCALE BAR: 1/8"=1'-0"



7 ED1.2 ELECTRICAL DEMOLITION SOUTH ELEVATION - BUSINESS ALCOVE
SCALE: 1/8" = 1'-0"
SCALE BAR: 1/8"=1'-0"

DEMOLITION OF EXISTING SYSTEM NOTES:

GENERAL NOTES:

1. REFER TO ELECTRICAL LEAD SHEET, E0.0, FOR "NOTES" THAT PERTAIN TO THE SCOPE OF THIS PROJECT. REFER TO SPECIFICATIONS AND DETAILS FOR PROJECT DETAILS AND EXECUTION REQUIREMENTS.
2. THE ELECTRICAL CONTRACTOR SHALL ACCOMPLISH COMPLETE ELECTRICAL DEMOLITION OF ALL ELECTRICAL EQUIPMENT/DEVICES ASSOCIATED WITH THE REMOVAL OF MECHANICAL EQUIPMENT IDENTIFIED ON PLAN.
3. DEMOLITION OF THESE DEVICES SHALL INCLUDE, BUT NOT BE LIMITED TO, COMPLETE REMOVAL OF ALL BRANCH CIRCUIT POWER WIRING AND ASSOCIATED CONDUIT AND BOX SYSTEMS FROM THE AFFECTED MECHANICAL EQUIPMENT BACK TO THE PANEL OF ORIGIN. REMOVE EXISTING DISCONNECT SWITCHES, STARTERS AND OTHER ELECTRICAL EQUIPMENT ASSOCIATED WITH THE MECHANICAL EQUIPMENT AND SYSTEMS BEING DEMOLISHED.
4. THE ELECTRICAL CONTRACTOR SHALL MAKE AN ON SITE INSPECTION OF THE PROJECT AREA TO DETERMINE A FULL SCOPE OF DEMOLITION WORK BEFORE SUBMITTING A PROPOSAL.
5. THE ELECTRICAL CONTRACTOR SHALL PROVIDE APPROPRIATE FIRE RATED ABANDONMENT PLATES FOR ALL REMOVED FLOOR MOUNTED POKE THROUGH WIRING DEVICES.
6. ALL DEMOLISHED MATERIAL SHALL BE REMOVED FROM THE SITE BY THE ELECTRICAL CONTRACTOR. THE CONTRACTOR IS TO RECYCLE WHEREVER POSSIBLE. COORDINATE ALL REMOVAL AND DISPOSAL WITH THE OWNER WHO RESERVES THE RIGHT TO SALVAGE ANY HVAC OR ELECTRICAL COMPONENTS.
7. ALL POWER SHUT DOWNS MUST BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.
8. ALL DEMOLITION WORK SHALL BE DONE IN A SAFE AND ORDERLY MANNER AND IN ACCORDANCE WITH THE N.E.C., OSHA AND STATE REGULATIONS.
9. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE REMOVAL OF EQUIPMENT WITH OTHER TRADES SO AS NOT TO AFFECT THE OPERATION OF EXISTING SYSTEMS.
10. DO NOT DEMOLISH THE FOLLOWING ITEMS:
    - BRANCH CIRCUIT WIRING PASSING THROUGH THE AREA OF DEMOLITION BUT FEEDING OTHER WIRING DEVICES, LIGHT FIXTURES, AND OTHER EQUIPMENT NOT WITHIN THE SCOPE OF THE WORK.
    - EXISTING BRANCH CIRCUIT WIRING FOR HVAC EQUIPMENT TO REMAIN-UNLESS STATED ON MECHANICAL DEMOLITION PLAN.
11. ELECTRICAL CONTRACTOR MAY RE-USE TO THE MAXIMUM EXTENT POSSIBLE ALL WIRING AND RACEWAY ASSOCIATED WITH EXISTING EQUIPMENT BEING REMOVED. RE-USE OF WIRING, RACEWAY AND BREAKERS LOCATED IN LOCAL PANELS IS PERMITTED AS LONG AS IT MEETS THE INSTALLATION REQUIREMENTS OF THE NEW EQUIPMENT BEING PROVIDED. PROVIDE MEGGER TESTING OF CABLES TO BE RE-USED PER ANSI/NETA ATS-2021 STANDARDS.

DEMOLITION KEYED NOTES:

GENERAL: DEMOLITION NOTES ARE INDICATED WITH THE FOLLOWING SYMBOL (#) AND ARE NUMBERED AS FOLLOWS:

- (A) ELECTRICAL CONTRACTOR SHALL REMOVE AND REINSTALL EXISTING EXTERIOR SECURITY CAMERA TO ACCOMMODATE NEW SIDING AS REQUIRED. PATCH ALL ABANDONED HOLES. COORDINATE DOWNTIME WITH DISTRICT PERSONNEL.
- (B) ELECTRICAL CONTRACTOR SHALL REMOVE AND REINSTALL EXISTING EXTERIOR LIGHTING FIXTURE TO ACCOMMODATE NEW SIDING AS REQUIRED. PATCH ALL ABANDONED HOLES. MAINTAIN EXISTING CIRCUITRY AND CONTROLS. REFER TO NEW WORK PLANS FOR FINAL LOCATION TO BE REINSTALLED.
- (C) ELECTRICAL CONTRACTOR SHALL RELOCATE EXISTING PANEL. DISCONNECT AND REMOVE EXISTING FEEDER BACK TO ACCESSIBLE CEILING IN BUILDING. PROVIDE PULL BOX FOR RE-USE OF EXISTING FEEDER TO EXTEND EXISTING CIRCUITRY TO RELOCATED PANEL LOCATION. REFER TO NEW WORK PLANS FOR ADDITIONAL INFORMATION. DEMOLISH AND REMOVE ALL DOWNSTREAM CIRCUITRY.
- (D) ELECTRICAL CONTRACTOR SHALL DISCONNECT EXISTING CONDENSING UNIT TO BE RELOCATED. DEMOLISH AND REMOVE EXISTING CIRCUITRY BACK TO PANEL OF ORIGIN. EXISTING DISCONNECT SWITCH SHALL BE RE-USED AT RELOCATED CONDENSING UNIT LOCATION. REFER TO NEW WORK PLANS FOR ADDITIONAL INFORMATION.
- (E) ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT TO EXISTING PANEL AND ASSOCIATED RECEPTACLE MOUNTED BELOW AS REQUIRED TO ACCOMMODATE NEW SIDING AS REQUIRED INSTALLATION OF NEW SIDING.
- (F) ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT TO EXISTING WALL MOUNTED EMERGENCY GENERATOR CONDUIT, ATS, E-STOP AND DISCONNECT SWITCH TO ACCOMMODATE NEW SIDING AS REQUIRED. ELECTRICAL CONTRACTOR SHALL MINIMIZE ALL SHUTDOWNS TO THE MAXIMUM EXTENT POSSIBLE. COORDINATE ANY REQUIRED SHUTDOWN WITH DISTRICT PERSONNEL.
- (G) ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT TO EXISTING WALL MOUNTED UTILITY METER AS REQUIRED TO ACCOMMODATE NEW SIDING AS REQUIRED. ELECTRICAL CONTRACTOR SHALL MINIMIZE ALL SHUTDOWNS TO THE MAXIMUM EXTENT POSSIBLE. COORDINATE ANY REQUIRED SHUTDOWN WITH DISTRICT PERSONNEL AND UTILITY COMPANY.
- (H) ELECTRICAL CONTRACTOR SHALL MAINTAIN EXISTING LIGHTNING PROTECTION SYSTEM. MODIFY AS REQUIRED TO ACCOMMODATE NEW ROOF AND WALL CLADDING SCOPE OF WORK.
- (I) ELECTRICAL CONTRACTOR SHALL VERIFY PURPOSE OF EXISTING CIRCUITRY AND DETERMINE IF WIRE SHALL REMAIN. TEMPORARILY SUPPORT THE EXISTING CIRCUITRY TO ACCOMMODATE NEW SIDING WHERE SERVING EXISTING EQUIPMENT TO REMAIN. DISCONNECT AND REMOVE IF NO LONGER SERVING EQUIPMENT.
- (J) ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT TO EXISTING WALL MOUNTED DISCONNECT SWITCHES AND CONDUIT TO ACCOMMODATE NEW SIDING AS REQUIRED. COORDINATE ALL REQUIRED SHUTDOWNS WITH DISTRICT PERSONNEL.

ALL WORK SHOWN IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR, UNLESS NOTED OTHERWISE.

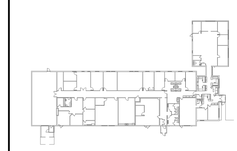
MEP ENGINEER:

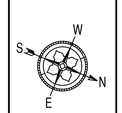
CONCORD ENGINEERING
P.A. 24GA27936700
Phila. Business License No. 107707
520 South Burnt Mill Road
Voorhees, New Jersey 08043
(856) 427-0200
www.concord-engineering.com

No.	Date	Description
1	09/10/26	RELEASED FOR BID

REVISIONS:

KEY PLAN:





John A. Marchialava P. E.
New Jersey P. E. No. 24GE04992500

NOT FOR CONSTRUCTION

Professional Engineer
John A. Marchialava P. E.

PROJECT: REF21-42-8302

LRHSD REFERENDUM
EXTERIOR BUILDING
RESTORATION

ADMINISTRATION BUILDING

93 WILLOW GROVE RD
SHAMONG, NEW JERSEY

DRAWING TITLE:

ELECTRICAL DEMOLITION
ELEVATIONS

DRAWN BY: TJT	SCALE: AS NOTED	DWG SIZE: 42x30	
CHECKED BY: LH	DRAWING NO. ED1.2		REVISION 1
DATE: 09/10/2026			
PROJECT NO.: 8C22002.31			

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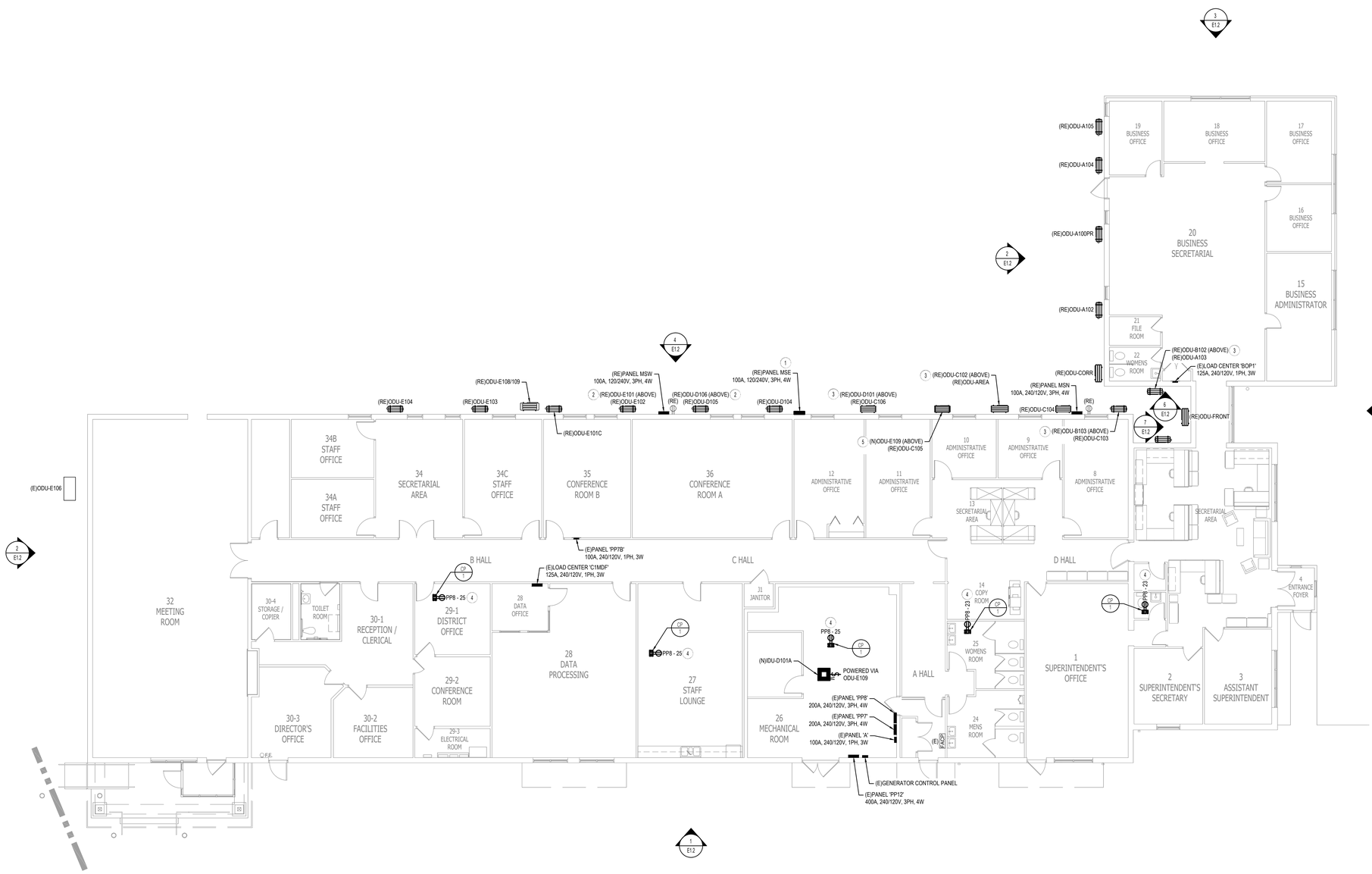


1 E1.1 ELECTRICAL NEW WORK FLOOR PLAN

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

0' 2' 4' 8' 16'

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

NEW WORK SYSTEM NOTES:

1. GENERAL NOTES:

A. REFER TO ELECTRICAL LEAD SHEETS, E0.0 FOR "NOTES" THAT PERTAIN TO THE SCOPE OF THIS PROJECT.

B. REFER TO BOOK SPECIFICATIONS FOR PROJECT DETAILS AND EXECUTION REQUIREMENTS.

C. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE.

D. CONTRACTOR SHALL PROVIDE ALL REQUIRED CONDUITS, RACEWAYS, CONDUCTORS, AND OTHER EQUIPMENT NECESSARY TO PROVIDE A COMPLETE WORKING SYSTEM.

E. ELECTRICAL CONTRACTOR SHALL INSTALL ALL (N) EQUIPMENT IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND SHALL MAINTAIN ALL CLEARANCES AS NOTED WITHIN THE WRITTEN INSTRUCTIONS.

F. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL ELECTRICAL EQUIPMENT, WIRING AND RACEWAY, AND MAKE ALL CONNECTIONS TO/FROM PANELBOARDS, DISCONNECT SWITCHES, ADJUSTABLE SPEED DRIVES, MOTOR STARTERS, AND THE END USE EQUIPMENT NECESSARY FOR A FULLY OPERATIONAL SYSTEM. COORDINATE WITH MECHANICAL CONTRACTOR.

G. ALL RACEWAYS PENETRATING FIRE RATED PARTITIONS, WALLS, AND CEILINGS SHALL BE SEALED USING APPROVED FIRE RATED SEALANT TO MATCH THE REQUIRED WALL FIRE RATING.

H. ALL POWER SHUT DOWNS MUST BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.

I. THE ELECTRICAL CONTRACTOR SHALL MAKE AN ON SITE INSPECTION TO DETERMINE THE FULL SCOPE OF WORK AND WORKING CONDITIONS BEFORE SUBMITTING A PROPOSAL.

J. ALL CIRCUIT BREAKERS SERVING HVAC EQUIPMENT SHALL BE UL LISTED AS 'HACR'.

K. THE DRAWINGS ARE DIAGRAMMATIC. EXACT LOCATION OF EQUIPMENT, WIRING AND RACEWAYS SHALL BE DETERMINED BY CONTRACTOR SUBJECT TO ARCHITECT APPROVAL.

L. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ELECTRICAL CHARACTERISTICS OF ALL NEW EQUIPMENT, MOTORS, ETC. BEFORE INSTALLING CABLING AND RACEWAY. IF THERE ARE ANY DISCREPANCIES BETWEEN THE ACTUAL RATING OF EQUIPMENT AT THE SITE AND THE DRAWINGS, THEN THE ENGINEER SHALL BE NOTIFIED.

M. THE CONTRACTOR SHALL SUBMIT TO THE OWNER: CERTIFICATES OF INSPECTION FOR THE ELECTRICAL INSTALLATION FROM AN APPROVED INSPECTION AGENCY UPON COMPLETION OF ELECTRICAL WORK.

N. ALL WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATION MAINTENANCE, AND REPAIR. MINOR DEVIATIONS FROM THE PLANS MAY BE MADE TO ACCOMPLISH THIS, SUBJECT TO THE APPROVAL OF THE ENGINEER.

O. THE ELECTRICAL CONTRACTOR SHALL USE MAXIMUM OF 6' OF FLEXIBLE CONDUIT FOR FOR EQUIPMENT SUBJECT TO VIBRATION, NOISE TRANSMISSION, OR MOVEMENT, AND FOR ALL MOTORS. USE LIQUID TIGHT FLEXIBLE CONDUIT IN WET OR DAMP LOCATIONS. INSTALL SEPARATE GROUND CONDUCTOR ACROSS FLEXIBLE CONNECTIONS.

P. ALL WIRING SHALL BE COPPER CONDUCTOR WITH 600 VOLT TYPE THHN, OR THWN INSULATION IN CONDUIT. THE MINIMUM SIZE WIRE FOR POWER CIRCUITS SHALL BE #12 AWG. SOLID CONDUCTORS SHALL BE USED FOR NUMBER 10 AND 12; STRANDED CONDUCTORS SHALL BE USED FOR NUMBER 8 AND LARGER. THE CONTRACTOR MAY USE METAL CLAD TYPE 'MC' WHERE ALLOWED BY THE NATIONAL ELECTRICAL CODE AND APPROVED FOR USE BY THE AUTHORITIES HAVING JURISDICTION.

Q. ALL MATERIALS AND EQUIPMENT FURNISHED FOR THIS PROJECT SHALL BE NEW, LISTED, AND APPROVED BY UL.

R. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, INSPECTIONS, LICENSES AND PAY UTILITY COMPANY FEES.

S. ALL FUSED AND NON-FUSED DISCONNECT SWITCHES SHALL HAVE: 600 VOLT RATING FOR 480 VOLT CIRCUITS. SIZE FUSES TO COMPLY WITH NAMEPLATE RATING OF EQUIPMENT SERVED.

T. THE ELECTRICAL CONTRACTOR SHALL PROVIDE NEW TYPEWRITTEN PANEL SCHEDULES WITHIN THE SCOPE OF THIS PROJECT. THIS INCLUDES ALL PANELS EVEN IF ONLY A FEW CIRCUITS WERE CHANGED AS A RESULT OF THIS PROJECT. WHERE ACTUAL FIELD CONDITIONS REQUIRE DIFFERENT CIRCUIT NUMBERS THAN THOSE INDICATED ON PLANS THE CONTRACTOR SHALL ADVISE OWNER OF CHANGES ON REQUIRED AS-BUILT DRAWINGS.

U. ELECTRICAL CONTRACTOR SHALL BE REQUIRED TO VERIFY EXISTING DEMAND LOADS ON EXISTING ELECTRICAL EQUIPMENT THAT IS BEING MODIFIED AS PART OF THIS SCOPE OF WORK AND ADVISE ENGINEER OF RECORD/OWNER WHERE THE EXISTING AND NEW EQUIPMENT LOADS EXCEED THE RATING OF THE EXISTING ELECTRICAL EQUIPMENT.

V. ELECTRICAL CONTRACTOR SHALL CONCEAL ALL NEW WIRING ASSOCIATED WITH NEW SWITCH LOCATIONS AND RECEPTACLES WITHIN EXISTING TILED MASONRY WALLS. CONTRACTOR SHALL INSTALL JUNCTION BOXES ABOVE DROP CEILINGS IN THE LOCATION OF THE NEW DEVICES AS NECESSARY TO ACCESS EXISTING MASONRY CELLS. PROVIDE APPROPRIATE WALL SEALANT MATCHING RATING OF EXISTING WALLS WHERE PENETRATIONS ARE MADE ABOVE DROP CEILINGS.

NEW WORK KEYED NOTES:

GENERAL: NEW WORK NOTES ARE INDICATED WITH THE FOLLOWING SYMBOL (·) AND ARE NUMBERED AS FOLLOWS:

1. ELECTRICAL CONTRACTOR SHALL RELOCATE EXISTING PANEL 'MSE'. PROVIDE ALL APPURTENANCES REQUIRES TO SECURELY MOUNT PANEL ALONG EXTERIOR AS SHOWN ON PLANS. SPLICE/EXTEND EXISTING FEEDER, IN KIND, FROM NEW PULL BOX TO RE-FEED THE RELOCATED PANEL.

2. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL NEW 2#12, 1#12G, 3/4"C TO POWER RELOCATED CONDENSING UNIT FROM EXISTING CIRCUIT BREAKER IN RELOCATED PANEL 'MSE'. EXISTING DISCONNECT SWITCH SHALL BE RE-USED AT RELOCATED CONDENSING UNIT LOCATION.

3. ELECTRICAL CONTRACTOR SHALL SPLICE/EXTEND EXISTING FEEDER, IN KIND, FROM NEW JUNCTION BOX TO RE-FEED THE RELOCATED CONDENSING UNIT. EXISTING DISCONNECT SWITCH SHALL BE RE-USED AT RELOCATED CONDENSING UNIT LOCATION.

4. ELECTRICAL CONTRACTOR SHALL UTILIZE AVAILABLE SPARE 20A/1P CIRCUIT BREAKERS IN PANEL 'PP8' (CIRCUIT #23 & #25) TO POWER NEW CONDENSATE PUMPS.

5. ELECTRICAL CONTRACTOR SHALL UTILIZE EXISTING SPARE 15 AMP 2 POLE BREAKER IN EXISTING PANEL 'MSE' (CIRCUIT #5 & #7) TO POWER NEW ODU-109 CONDENSING UNIT. PROVIDE ALL WIRING, RACEWAY LOCAL MEANS OF DISCONNECT AS REQUIRED FOR A COMPLETE INSTALLATION. POWER WIRING ASSOCIATED WITH NEW IDU SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR AND DERIVED FROM THE ODU. FINAL TERMINATIONS SHALL BE PERFORMED BY THE ELECTRICAL CONTRACTOR.

ALL WORK SHOWN IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR, UNLESS NOTED OTHERWISE.

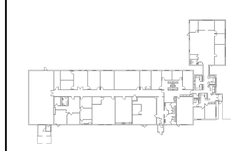
MEP ENGINEER:

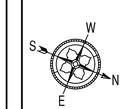
CONCORD ENGINEERING
P.A. 24GA27936700
Phila. Business License No. 107707
520 South Burnt Mill Road
Voorhees, New Jersey 08043
(856) 427-0200
www.concord-engineering.com

No.	Date	Description
1	09/10/26	RELEASED FOR BID

REVISIONS:

KEY PLAN:





John A. Marchiafava P. E.
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PROJECT: REF21-42-8302

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RESTORATION

ADMINISTRATION BUILDING

93 WILLOW GROVE RD
SHAMONG, NEW JERSEY

DRAWING TITLE:

ELECTRICAL NEW WORK
FLOOR PLAN

DRAWN BY: TJT	SCALE: AS NOTED	DWG SIZE: 42x30	
CHECKED BY: LH	DRAWING NO. E1.1		REVISION 1
DATE: 09/10/2026			
PROJECT NO.: 8C22002.31			

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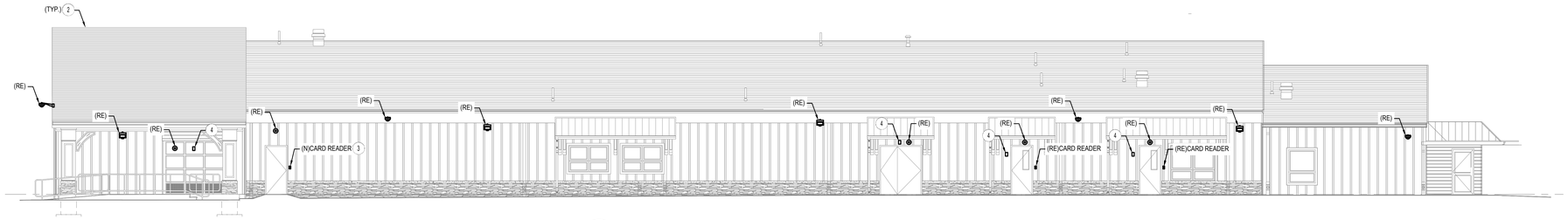
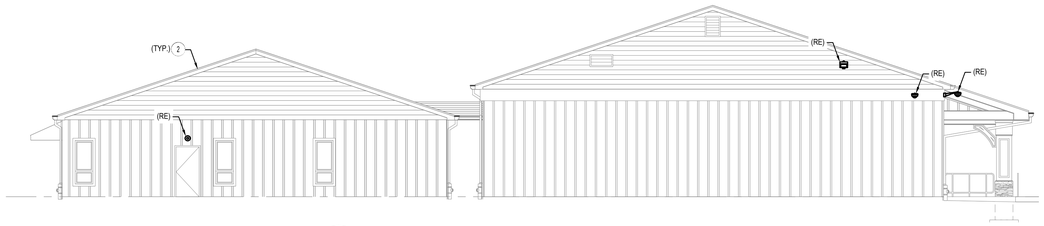
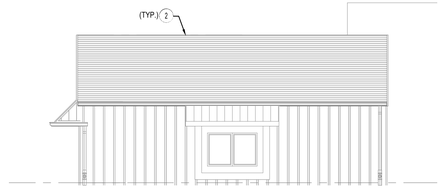


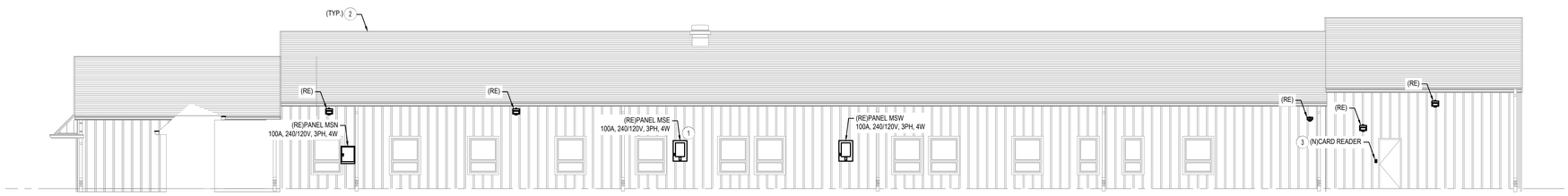
1 E1.2 ELECTRICAL NEW WORK EAST ELEVATION
SCALE: 1/8" = 1'-0"
0' 2' 4' 8' 16'
SCALE BAR: 1/8"=1'-0"



2 E1.2 ELECTRICAL NEW WORK SOUTH ELEVATION
SCALE: 1/8" = 1'-0"
0' 2' 4' 8' 16'
SCALE BAR: 1/8"=1'-0"



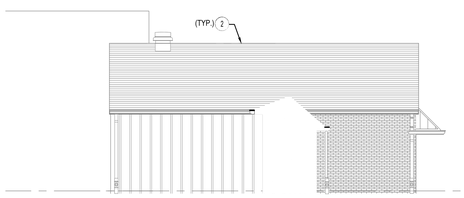
3 E1.2 ELECTRICAL NEW WORK WEST ELEVATION - BUSINESS WING
SCALE: 1/8" = 1'-0"
0' 2' 4' 8' 16'
SCALE BAR: 1/8"=1'-0"



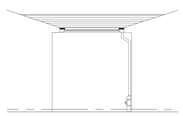
4 E1.2 ELECTRICAL NEW WORK WEST ELEVATION
SCALE: 1/8" = 1'-0"
0' 2' 4' 8' 16'
SCALE BAR: 1/8"=1'-0"

5 E1.2 ELECTRICAL NEW WORK NORTH ELEVATION
SCALE: 1/8" = 1'-0"
0' 2' 4' 8' 16'
SCALE BAR: 1/8"=1'-0"

NOTE: REFER TO SHEET E1.1 FOR SCOPE OF WORK ASSOCIATED WITH RELOCATING MECHANICAL EQUIPMENT.



6 E1.2 ELECTRICAL NEW WORK EAST ELEVATION - BUSINESS ALCOVE
SCALE: 1/8" = 1'-0"
0' 2' 4' 8' 16'
SCALE BAR: 1/8"=1'-0"



7 E1.2 ELECTRICAL NEW WORK SOUTH ELEVATION - BUSINESS ALCOVE
SCALE: 1/8" = 1'-0"
0' 2' 4' 8' 16'
SCALE BAR: 1/8"=1'-0"

NEW WORK SYSTEM NOTES:

1. GENERAL NOTES:

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F. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL ELECTRICAL EQUIPMENT, WIRING AND RACEWAY, AND MAKE ALL CONNECTIONS TO/FROM PANELBOARDS, DISCONNECT SWITCHES, ADJUSTABLE SPEED DRIVES, MOTOR STARTERS, AND THE END USE EQUIPMENT NECESSARY FOR A FULLY OPERATIONAL SYSTEM. COORDINATE WITH MECHANICAL CONTRACTOR.

G. ALL RACEWAYS PENETRATING FIRE RATED PARTITIONS, WALLS, AND CEILINGS SHALL BE SEALED USING APPROVED FIRE RATED SEALANT TO MATCH THE REQUIRED WALL FIRE RATING.

H. ALL POWER SHUT DOWNS MUST BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.

I. THE ELECTRICAL CONTRACTOR SHALL MAKE AN ON SITE INSPECTION TO DETERMINE THE FULL SCOPE OF WORK AND WORKING CONDITIONS BEFORE SUBMITTING A PROPOSAL.

J. ALL CIRCUIT BREAKERS SERVING HVAC EQUIPMENT SHALL BE UL LISTED AS 'HACR'.

K. THE DRAWINGS ARE DIAGRAMMATIC. EXACT LOCATION OF EQUIPMENT, WIRING AND RACEWAYS SHALL BE DETERMINED BY CONTRACTOR SUBJECT TO ARCHITECT APPROVAL.

L. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ELECTRICAL CHARACTERISTICS OF ALL NEW EQUIPMENT, MOTORS, ETC. BEFORE INSTALLING CABLING AND RACEWAY. IF THERE ARE ANY DISCREPANCIES BETWEEN THE ACTUAL RATING OF EQUIPMENT AT THE SITE AND THE DRAWINGS, THEN THE ENGINEER SHALL BE NOTIFIED.

M. THE CONTRACTOR SHALL SUBMIT TO THE OWNER: CERTIFICATES OF INSPECTION FOR THE ELECTRICAL INSTALLATION FROM AN APPROVED INSPECTION AGENCY UPON COMPLETION OF ELECTRICAL WORK.

N. ALL WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATION MAINTENANCE, AND REPAIR. MINOR DEVIATIONS FROM THE PLANS MAY BE MADE TO ACCOMPLISH THIS, SUBJECT TO THE APPROVAL OF THE ENGINEER.

O. THE ELECTRICAL CONTRACTOR SHALL USE MAXIMUM OF 6' OF FLEXIBLE CONDUIT FOR FOR EQUIPMENT SUBJECT TO VIBRATION, NOISE TRANSMISSION, OR MOVEMENT, AND FOR ALL MOTORS. USE LIQUID TIGHT FLEXIBLE CONDUIT IN WET OR DAMP LOCATIONS. INSTALL SEPARATE GROUND CONDUCTOR ACROSS FLEXIBLE CONNECTIONS.

P. ALL WIRING SHALL BE COPPER CONDUCTOR WITH 600 VOLT TYPE THHN, OR THWN INSULATION IN CONDUIT. THE MINIMUM SIZE WIRE FOR POWER CIRCUITS SHALL BE #12 AWG. SOLID CONDUCTORS SHALL BE USED FOR NUMBER 10 AND 12; STRANDED CONDUCTORS SHALL BE USED FOR NUMBER 8 AND LARGER. THE CONTRACTOR MAY USE METAL CLAD TYPE 'MC' WHERE ALLOWED BY THE NATIONAL ELECTRICAL CODE AND APPROVED FOR USE BY THE AUTHORITIES HAVING JURISDICTION.

Q. ALL MATERIALS AND EQUIPMENT FURNISHED FOR THIS PROJECT SHALL BE NEW, LISTED, AND APPROVED BY UL.

R. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, INSPECTIONS, LICENSES AND PAY UTILITY COMPANY FEES.

S. ALL FUSED AND NON-FUSED DISCONNECT SWITCHES SHALL HAVE: 600 VOLT RATING FOR 480 VOLT CIRCUITS. SIZE FUSES TO COMPLY WITH NAMEPLATE RATING OF EQUIPMENT SERVED.

T. THE ELECTRICAL CONTRACTOR SHALL PROVIDE NEW TYPEWRITTEN PANEL SCHEDULES WITHIN THE SCOPE OF THIS PROJECT. THIS INCLUDES ALL PANELS EVEN IF ONLY A FEW CIRCUITS WERE CHANGED AS A RESULT OF THIS PROJECT. WHERE ACTUAL FIELD CONDITIONS REQUIRE DIFFERENT CIRCUIT NUMBERS THAN THOSE INDICATED ON PLANS THE CONTRACTOR SHALL ADVISE OWNER OF CHANGES ON REQUIRED AS-BUILT DRAWINGS.

U. ELECTRICAL CONTRACTOR SHALL BE REQUIRED TO VERIFY EXISTING DEMAND LOADS ON EXISTING ELECTRICAL EQUIPMENT THAT IS BEING MODIFIED AS PART OF THIS SCOPE OF WORK AND ADVISE ENGINEER OF RECORD/OWNER WHERE THE EXISTING AND NEW EQUIPMENT LOADS EXCEED THE RATING OF THE EXISTING ELECTRICAL EQUIPMENT.

V. ELECTRICAL CONTRACTOR SHALL CONCEAL ALL NEW WIRING ASSOCIATED WITH NEW SWITCH LOCATIONS AND RECEPTACLES WITHIN EXISTING TILED MASONRY WALLS. CONTRACTOR SHALL INSTALL JUNCTION BOXES ABOVE DROP CEILINGS IN THE LOCATION OF THE NEW DEVICES AS NECESSARY TO ACCESS EXISTING MASONRY CELLS. PROVIDE APPROPRIATE WALL SEALANT MATCHING RATING OF EXISTING WALLS WHERE PENETRATIONS ARE MADE ABOVE DROP CEILINGS.

NEW WORK KEYED NOTES:

GENERAL: NEW WORK NOTES ARE INDICATED WITH THE FOLLOWING SYMBOL - AND ARE NUMBERED AS FOLLOWS:

1. ELECTRICAL CONTRACTOR SHALL RELOCATE EXISTING PANEL 'MSE' ALONG EXTERIOR WALL AS INDICATED ON PLANS. PROVIDE AND INSTALL ALL WIRING AND CONDUIT REQUIRED TO RE-FEED THE PANEL AND ASSOCIATED DOWNSTREAM EQUIPMENT. REFER TO PANEL SCHEDULES ON SHEET E2.1 FOR ADDITIONAL INFORMATION.

2. ELECTRICAL CONTRACTOR SHALL MAINTAIN EXISTING LIGHTNING PROTECTION SYSTEM. MODIFY AS REQUIRED TO ACCOMMODATE NEW ROOF AND WALL CLADDING SCOPE OF WORK.

3. ELECTRICAL CONTRACTOR SHALL TIE NEW CARD READER INTO EXISTING SYSTEM AND CARD READER POWER SUPPLY CIRCUIT. COORDINATE EXACT REQUIREMENTS WITH DISTRICT'S SECURITY VENDOR.

4. TIE NEW EXTERIOR WALL SCONCE (B.O.D. LITHONIA MODEL OLWP LED SWW2 120 PE DDB) INTO EXISTING EXTERIOR LIGHTING CIRCUIT AND CONTROLS. COORDINATE MOUNTING AND FINISH WITH ARCHITECT.

ALL WORK SHOWN IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR, UNLESS NOTED OTHERWISE.

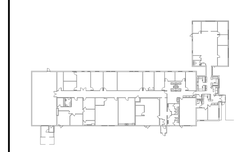
MEP ENGINEER:

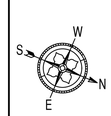
CONCORD ENGINEERING
P.A. 24GA27936700
Phila. Business License No. 107707
520 South Burnt Mill Road
Voorhees, New Jersey 08043
(856) 427-0200
www.concord-engineering.com

No.	Date	Description
1	09/10/26	RELEASED FOR BID

REVISIONS:

KEY PLAN:





John A. Marchiafava P. E.
New Jersey P. E. No. 24GE04592500

NOT FOR CONSTRUCTION

Professional Engineer
John A. Marchiafava P. E.

PROJECT: REF21-42-8302

LRHSD REFERENDUM
EXTERIOR BUILDING
RESTORATION

ADMINISTRATION BUILDING

93 WILLOW GROVE RD
SHAMONG, NEW JERSEY

DRAWING TITLE:

ELECTRICAL NEW WORK
ELEVATIONS

DRAWN BY: TJT	SCALE: AS NOTED	DWG SIZE: 42x30	
CHECKED BY: LH	DRAWING NO. E1.2		REVISION 1
DATE: 09/10/2026			
PROJECT NO.: 8C22002.31			

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Panel:	(E)PP12
Location:	MECHANICAL ROOM
Fed From:	UTILITY
Voltage:	240/120V High Leg Delta, 3P4W
Main Config:	MCB / Main Amps: 400
Bus Rating:	400A
Bus Mat'l:	CU
NEMA:	1
Mounting:	Surface
Panel Info:	

	Main Bkr SCA
	Branch Bkr SCA
	Branch Bkr Series SCA
X	100% Neutral Bus
X	Equipment Ground Bus
	Isolated Ground Bus
	Sub-Feed Lugs
	Sub-Feed Breaker ___ Amps
	Service Entrance Rated

(Demand Calculation does not include sub-panel loads)

Category	Conn.	D.F.	Demand	Conn.	D.F.	Demand
Lighting:	0	1.25	0			
Receptacles:	0	1.00	0	0	0.50	0
General:	0	1.25	0	0	1.00	0
Motors:	0	1.00	0	0	0.25	0
Electric Space Htg:	0	1.00	0			0
Kitchen:	0	1.00	0	1st & 2nd:		0
Noncoincident:	0	0.00	0			0
HVAC:	0	1.00	0	0	0.25	0
Demand VA:	0	Demand Amps:	0			

Ckt #	Load Description	Load VA	Breaker P	Breaker Trip	Wiring	Phase A	Phase B	Phase C	Wiring	Breaker Trip	Breaker P	Load VA	Load Description	Ckt #
3			3	60		0	0	0		40	3		(E) EXISTING LOAD	18
4	(E) EXISTING LOAD		-	-		0	0	0		-	-			19
5			-	-		0	0	0		-	-			20
6	(E) PWR - AC C102		2	20		0	0	0		15	2		(E) PWR - AC A103	21
7			-	-		0	0	0		-	-			22
8	(E) SPACE					0	0	0					(E) SPACE	23
9	(E) PWR - AC B103		2	15		0	0	0		20	3		(E) EXISTING LOAD	24
10			-	-		0	0	0		-	-			25
11	(E) SPACE					0	0	0		-	-			26
12			3	20		0	0	0		60	3		(E) PWR - PANEL MSE	27
13	(E) EXISTING LOAD		-	-		0	0	0		-	-			28
14			-	-		0	0	0		-	-			29
15			3	100		0	0	0		60	3		(E) PWR - PANEL MSW	30
16	(E) PWR - PANEL MSN		-	-		0	0	0		-	-			31
17			-	-		0	0	0		-	-			32
						0	0	0	VA					
									VA (Sub-Feed)					
						0	0	0	VA (Total)					
						0	0	0	Amperage					

Total Connected Load: 0 VA
Total Connected Amps: 0 A

Notes:

Panel:	(E)BOP1
Location:	BUSINESS CLOSET
Fed From:	
Voltage:	240/120V, 1P3W
Main Config:	MLO / Main Amps: 125
Bus Rating:	125
Bus Mat'l:	CU
NEMA:	1
Mounting:	Recessed
Panel Info:	

	Main Bkr SCA
	Branch Bkr SCA
	Branch Bkr Series SCA
X	100% Neutral Bus
X	Equipment Ground Bus
	Isolated Ground Bus
	Sub-Feed Lugs
	Sub-Feed Breaker ___ Amps
	Service Entrance Rated

(Demand Calculation does not include sub-panel loads)

Category	Conn.	D.F.	Demand	Conn.	D.F.	Demand
Lighting:	0	1.25	0			
Receptacles:	0	1.00	0	0	0.50	0
General:	0	1.25	0	0	1.00	0
Motors:	0	1.00	0	0	0.25	0
Electric Space Htg:	0	1.00	0			0
Kitchen:	0	1.00	0	1st & 2nd:		0
Noncoincident:	0	0.00	0			0
HVAC:	0	1.00	0	0	0.25	0
Demand VA:	0	Demand Amps:	0			

Ckt #	Load Description	Load VA	Breaker P	Breaker Trip	Wiring	Phase A	Phase B	Phase C	Wiring	Breaker Trip	Breaker P	Load VA	Load Description	Ckt #
1	(E) EXISTING LOAD		1	20		0	0	0		20	2		(E) EXISTING LOAD	2
3			2	20		0	0	0		-	-			4
5			-	-		0	0	0		20	1		(E) EXISTING LOAD	6
7	(E) EXISTING LOAD		2	20		0	0	0		20	1		(E) EXISTING LOAD	8
9			-	-		0	0	0		20	1		(E) EXISTING LOAD	10
11	(E) EXISTING LOAD		1	20		0	0	0		20	2		(E) PWR - SECURITY HEAD END	12
13	(E) SPACE					0	0	0		-	-			14
15	(E) EXISTING LOAD		1	20		0	0	0		30	2		(E) PWR - FRONT AREA MINI-SPLIT	16
17	(E) EXISTING LOAD		1	20		0	0	0		-	-			18
19	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	20
						0	0	0	VA					
									VA (Sub-Feed)					
						0	0	0	VA (Total)					
						0	0	0	Amperage					

Total Connected Load: 0 VA
Total Connected Amps: 0 A

Notes:

Panel:	(E)PP7
Location:	MECHANICAL ROOM
Fed From:	
Voltage:	240/120V High Leg Delta, 3P4W
Main Config:	MCB / Main Amps: 200
Bus Rating:	250A
Bus Mat'l:	CU
NEMA:	1
Mounting:	Surface
Panel Info:	

	Main Bkr SCA
	Branch Bkr SCA
	Branch Bkr Series SCA
X	100% Neutral Bus
X	Equipment Ground Bus
	Isolated Ground Bus
	Sub-Feed Lugs
	Sub-Feed Breaker ___ Amps
	Service Entrance Rated

(Demand Calculation does not include sub-panel loads)

Category	Conn.	D.F.	Demand	Conn.	D.F.	Demand
Lighting:	0	1.25	0			
Receptacles:	0	1.00	0	0	0.50	0
General:	0	1.25	0	0	1.00	0
Motors:	0	1.00	0	0	0.25	0
Electric Space Htg:	0	1.00	0			0
Kitchen:	0	1.00	0	1st & 2nd:		0
Noncoincident:	0	0.00	0			0
HVAC:	0	1.00	0	0	0.25	0
Demand VA:	0	Demand Amps:	0			

Ckt #	Load Description	Load VA	Breaker P	Breaker Trip	Wiring	Phase A	Phase B	Phase C	Wiring	Breaker Trip	Breaker P	Load VA	Load Description	Ckt #
1	(E) PWR - CONF. RM. PANEL		2	100		0	0	0		100	2		(E) PWR - PANEL 3	2
3			-	-		0	0	0		-	-			4
5	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	6
7	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	8
9	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	10
11	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	12
13	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	14
15	(E) PWR - ROOF EF		1	20		0	0	0		20	1		(E) EXISTING LOAD	16
17	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	18
19	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	20
21	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) LTG - WALL PACKS	22
23	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	24
25	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	26
27	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	28
29	(E) SPARE		1	20		0	0	0		20	1		(E) SPARE	30
31	(E) PWR - AC B102		2	15		0	0	0		20	1		(E) SPARE	32
33			-	-		0	0	0		20	1		(E) SPARE	34
35	(E) SPACE					0	0	0		60	2		(E) EXISTING LOAD	36
37	(E) SPACE					0	0	0		-	-			38
39	(E) SPACE					0	0	0		15	2		(E) PWR - AC D101	40
41	(E) SPACE					0	0	0		-	-			42
						0	0	0	VA					
									VA (Sub-Feed)					
						0	0	0	VA (Total)					
						0	0	0	Amperage					

Total Connected Load: 0 VA
Total Connected Amps: 0 A

Notes:

Panel:	(E)PP8
Location:	MECHANICAL ROOM
Fed From:	
Voltage:	208Y/120V, 3P4W
Main Config:	MCB / Main Amps: 200
Bus Rating:	250A
Bus Mat'l:	CU
NEMA:	1
Mounting:	Surface
Panel Info:	

	Main Bkr SCA
	Branch Bkr SCA
	Branch Bkr Series SCA
X	100% Neutral Bus
X	Equipment Ground Bus
	Isolated Ground Bus
	Sub-Feed Lugs
	Sub-Feed Breaker ___ Amps
	Service Entrance Rated

(Demand Calculation does not include sub-panel loads)

Category	Conn.	D.F.	Demand	Conn.	D.F.	Demand
Lighting:	0	1.25	0			
Receptacles:	0	1.00	0	0	0.50	0
General:	0	1.25	0	0	1.00	0
Motors:	0	1.00	0	0	0.25	0
Electric Space Htg:	0	1.00	0			0
Kitchen:	0	1.00	0	1st & 2nd:		0
Noncoincident:	0	0.00	0			0
HVAC:	0	1.00	0	0	0.25	0
Demand VA:	0	Demand Amps:	0			

Ckt #	Load Description	Load VA	Breaker P	Breaker Trip	Wiring	Phase A	Phase B	Phase C	Wiring	Breaker Trip	Breaker P	Load VA	Load Description	Ckt #
1	(E) EXISTING LOAD		2	30		0	0	0		70	2		(E) EXISTING LOAD	2
3			-	-		0	0	0		-	-			4
5	(E) PWR - PANEL 9		2	100		0	0	0		100	2		(E) PWR - PANEL PP8A	6
7			-	-		0	0	0		-	-			8
9	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	10
11	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	12
13	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	14
15	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	16
17	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	18
19	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) EXISTING LOAD	20
21	(E) EXISTING LOAD		1	20		0	0	0		20	1		(E) SPARE	22
23	(N)CONDENSATE PUMPS		1	20		0	0	0		20	1		(E) SPARE	24
25	(N)CONDENSATE PUMPS		1	20		0	0	0		20	1		(E) SPARE	26
27	(E) SPARE		1	20		0	0	0		20	1		(E) SPARE	28
29	(E) SPARE		1	20		0	0	0		20	1		(E) SPARE	30
31	(E) SPARE		1	20		0	0	0		20	1		(E) SPARE	32
33	(E) SPARE		1	20		0	0	0		20	1		(E) SPARE	34
35	(E) SPARE		1	20		0	0	0		20	1		(E) EXISTING LOAD	36
37	(E) SPARE		1	20		0	0	0					(E) SPARE	38
39	(E) SPACE					0	0	0					(E) SPACE	40
41	(E) SPACE					0	0	0					(E) SPACE	42
						0	0	0	VA					
									VA (Sub-Feed)					
						0	0	0	VA (Total)					
						0	0	0	Amperage					

Total Connected Load: 0 VA
Total Connected Amps: 0 A

Notes:

Panel:	(E)MSW
Location:	WEST EXTERIOR
Fed From:	PP12
Voltage:	240/120V High Leg Delta, 3P4W
Main Config:	MLO / Main Amps: 100
Bus Rating:	100A
Bus Mat'l:	CU
NEMA:	3R
Mounting:	Surface
Panel Info:	FED FROM 60A BREAKER IN PANEL PP12

10,000	Main Bkr SCA
10,000	Branch Bkr SCA
	Branch Bkr Series SCA
X	100% Neutral Bus
X	Equipment Ground Bus
	Isolated Ground Bus
	Sub-Feed Lugs
	Sub-Feed Breaker ___ Amps
	Service Entrance Rated

(Demand Calculation does not include sub-panel loads)

Category	Conn.	D.F.	Demand	Conn.	D.F.	Demand
Lighting:	0	1.25	0			
Receptacles:	0	1.00	0	0	0.50	0
General:	0	1.25	0	0	1.00	0
Motors:	0	1.00	0	0	0.25	0
Electric Space Htg:	0	1.00	0			0
Kitchen:	0	1.00	0	1st & 2nd:		0
Noncoincident:	0	0.00	0			0
HVAC:	0	1.00	0	0	0.25	0
Demand VA:	0	Demand Amps:	0			

Ckt #	Load Description	Load VA	Breaker P	Breaker Trip	Wiring	Phase A	Phase B	Phase C	Wiring	Breaker Trip	Breaker P	Load VA	Load Description	Ckt #
1	(E) SPACE					0	0	0		20	1		(E) RECEPT - GFCI #1	2
3	(E) EXISTING LOAD		2	40		0	0	0		20	2		(E) PWR - AC E102	4
5			-	-		0	0	0		-	-			6
7	(E) SPARE		1	20		0	0	0		15	2		(E) PWR - AC E103	8
9	(E) PWR - AC D105		2	20		0	0	0		-	-			10
11			-	-		0	0	0		20	2		(E) PWR - AC E104	12
13	(E) PWR - AC D104		2	20		0	0	0		-	-			14
15			-	-		0	0	0		15	2		(E) PWR - AC C106	16
17	(E) SPACE					0	0	0		-	-			18
						0	0	0	VA					
									VA (Sub-Feed)					
						0	0	0	VA (Total)					
						0	0	0	Amperage					

Total Connected Load: 0 VA
Total Connected Amps: 0 A

Notes:

Panel:	(E)MSN
Location:	WEST EXTERIOR
Fed From:	PP12
Voltage:	240/120V High Leg Delta, 3P4W
Main Config:	MLO / Main Amps: 100
Bus Rating:	100A
Bus Mat'l:	CU
NEMA:	3R
Mounting:	Surface
Panel Info:	FED FROM 100A BREAKER IN PANEL PP12

10,000	Main Bkr SCA
10,000	Branch Bkr SCA
	Branch Bkr Series SCA
X	100% Neutral Bus
X	Equipment Ground Bus
	Isolated Ground Bus
	Sub-Feed Lugs
	Sub-Feed Breaker ___ Amps
	Service Entrance Rated

(Demand Calculation does not include sub-panel loads)

Category	Conn.	D.F.	Demand	Conn.	D.F.	Demand
Lighting:	0	1.25	0			
Receptacles:	0	1.00	0	0	0.50	0
General:	0	1.25	0	0	1.00	0
Motors:	0	1.00	0	0	0.25	0
Electric Space Htg:	0	1.00	0			0
Kitchen:	0	1.00	0	1st & 2nd:		0
Noncoincident:	0	0.00	0			0
HVAC:	0	1.00	0	0	0.25	0
Demand VA:	0	Demand Amps:	0			

Ckt #	Load Description	Load VA	Breaker P	Breaker Trip	Wiring	Phase A	Phase B	Phase C	Wiring	Breaker Trip	Breaker P	Load VA	Load Description	Ckt #
1	(E) RECEPT - GFCI #1		1			0	0	0		20	1		(E) RECEPT - GFCI #2	2
3	(E) PWR - AC C103		2	15		0	0	0		15	2		(E) PWR - AC A105	4
5			-	-		0	0	0		-	-			6
7	(E) PWR - AC A100 PR		2	20		0	0	0		30	2		(E) PWR - AC A100	8
9			-	-		0	0	0		-	-			10
11	(E) PWR - AC A102		2	15		0	0	0		15	2		(E) PWR - AC C104	12
13			-	-		0	0	0		-	-			14
15	(E) PWR - AC A104		2	15		0	0	0		20	2		(E) PWR - AC 18K COMMON AREA	16
17			-	-		0	0	0		-	-			18
						0	0	0	VA					
									VA (Sub-Feed)					
						0	0	0	VA (Total)					
						0	0	0	Amperage					

Total Connected Load: 0 VA
Total Connected Amps: 0 A

Notes:

Panel:	(E)MSE
Location:	EAST EXTERIOR
Fed From:	PP12
Voltage:	240V Delta, 3P3W
Main Config:	MLO / Main Amps: 100
Bus Rating:	100A
Bus Mat'l:	CU
NEMA:	3R
Mounting:	Surface
Panel Info:	FED FROM 60A BREAKER IN PANEL PP12

10,000	Main Bkr SCA
10,000	Branch Bkr SCA
	Branch Bkr Series SCA
X	100% Neutral Bus
X	Equipment Ground Bus
	Isolated Ground Bus
	Sub-Feed Lugs
	Sub-Feed Breaker ___ Amps
	Service Entrance Rated

(Demand Calculation does not include sub-panel loads)

Category	Conn.	D.F.	Demand	Conn.	D.F.	Demand
Lighting:	0	1.25	0			
Receptacles:	0	1.00	0	0	0.50	0
General:	0	1.25	0	0	1.00	0
Motors:	0	1.00	0	0	0.25	0
Electric Space Htg:	0	1.00	0			0
Kitchen:	0	1.00	0	1st & 2nd:		0
Noncoincident:	0	0.00	0			0
HVAC:	0	1.00	0	0	0.25	0
Demand VA:	0	Demand Amps:	0			

Ckt #	Load Description	Load VA	Breaker P	Breaker Trip	Wiring	Phase A	Phase B	Phase C	Wiring	Breaker Trip	Breaker P	Load VA	Load Description	Ckt #
1	(E) PWR - AC E109		2	20		0	0	0		20	2		(E) PWR - AC E101	2
3			-	-		0	0	0		-	-			4
5	(N) ODU-E109	800	2	15	3#12, 1#12G, 3/4"C	0	0	800		20	2		(E) PWR - AC D106	6
7		800	-	-		800	0	0		-	-			8
9	(E) SPACE					0	0	0					(E) SPACE	10
11	(E) SPACE					0	0	0					(E) SPACE	12
13	(E) SPACE					0	0	0					(E) SPACE	14
15	(E) SPACE					0	0	0					(E) SPACE	16
17	(E) RECEPT - GFCI		1	2-		0	0	0					(E) SPACE	18
						800	0	800	VA					
									VA (Sub-Feed)					
						800	0	800	VA (Total)					
						6	0	6	Amperage					

Total Connected Load: 1,600 VA
Total Connected Amps: 4 A

Warning:The load category information has not been entered for all circuits.

Notes:

PANEL SCHEDULE NOTES:

1. THE SCOPE OF WORK DOES NOT INCLUDE THE REPLACEMENT OR INSTALLATION OF NEW CIRCUIT BREAKERS. PANEL SCHEDULES ARE SHOWN FOR REFERENCE OF CIRCUIT(S) ASSOCIATED WITH RELOCATED ELECTRICAL AND MECHANICAL EQUIPMENT.
2. ELECTRICAL LOADS ARE NOT ANTICIPATED TO BE IMPACTED BY THE SCOPE OF WORK.
3. WIRE SIZE OF BRANCH CIRCUITS SHALL BE MINIMUM #12 AWG, BUT NO LESS THAN PERMITTED BY THE NATIONAL ELECTRICAL CODE (NEC) FOR SPECIFIED OVERCURRENT PROTECTION. ANY DISCREPANCY MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO BID.
4. ALL CIRCUITS TO BE RUN WITH COPPER WIRE. ALUMINUM OR COPPER CLAD WIRE WILL NOT BE ACCEPTED. CONDUIT IS NOT ACCEPTABLE AS A GROUND.
5. ALL MATERIALS SHALL BE UL LABELED.
6. INSTALL NO MORE THAN THE EQUIVALENT OF (3) 90 DEGREE BENDS IN ANY CONDUIT RUN BETWEEN JUNCTION BOX OR PULL POINTS.

ALL WORK SHOWN IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR, UNLESS NOTED OTHERWISE.

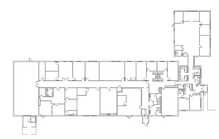
MEP ENGINEER:

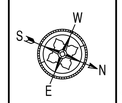
CONCORD ENGINEERING
P.A. 24GA27936700
Phila. Business License No. 107707
520 South Burnt Mill Road
Voorhees, New Jersey 08043
(856) 427-0200
www.concord-engineering.com

No.	Date	Description
1	09/10/26	RELEASED FOR BID

REVISIONS:

KEY PLAN:





John A. Marchiafava P. E.
New Jersey P. E. No. 24GE04992500

NOT FOR CONSTRUCTION

Professional Engineer
John A. Marchiafava P. E.

PROJECT: REF21-42-8302

LRHSD REFERENDUM
EXTERIOR BUILDING
RESTORATION

ADMINISTRATION BUILDING

93 WILLOW GROVE RD
SHAMONG, NEW JERSEY

DRAWING TITLE:

ELECTRICAL PANEL SCHEDULES

DRAWN BY: TJT	SCALE: AS NOTED	DWG SIZE: 42x30	
CHECKED BY: LH	DRAWING NO. E2.1		REVISION 1
DATE: 09/10/2026			
PROJECT NO.: 8C22002.31			

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ABBREVIATIONS

AC	AIR CONDITIONING UNIT
ACR	AIR CURTAIN
AD	ACCESS DOOR
AF	AIRFOIL
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AL	ACOUSTICAL LINING
AMD	AIR MEASURING DEVICE
AP	ACCESS PANEL
AS	AIR SEPARATOR
ATC	AUTOMATIC TEMPERATURE CONTROL
B	BOILER
BAS	BUILDING AUTOMATION SYSTEM
BBD	BOILER BLOWDOWN
BD	BACKDRAFT DAMPER
BF	BOILER FEED UNIT
BFP	BACK FLOW PREVENTER
BFW	BOILER FEEDWATER
BFWP	BOILER FEEDWATER PUMP
BHP	BRAKE HORSEPOWER
BI	BACKWARD INCLINE
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BOS	BOTTOM OF STEEL
BPD	BYPASS AIR DAMPER
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT PER HOUR
BV	BUTTERFLY VALVE
CL	CENTER LINE
CBD	CONTINUOUS BOILER BLOWDOWN
CC	COOLING COIL
CD	CEILING DIFFUSER
CF	CHEMICAL FEED UNIT
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CI	CAST IRON
CIP	CLEAN IN PLACE
COMP	COMPRESSOR
CON	CONCENTRIC
COND	CONDENSATE
CP	CONDENSATE PUMP
CRU	COMPUTER ROOM AIR CONDITIONING UNIT
CS - __	CLEAN STEAM - PSIG
CT	COOLING TOWER
CU	CONDENSING UNIT
CUH	CABINET UNIT HEATER
CV	CONSTANT VOLUME / CONTROL VALVE
CVB	CONSTANT VOLUME BOX
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
DA	DIRECT ACTING
DB	DRY BULB
DC	DUST COLLECTOR
DDC	DIRECT DIGITAL CONTROLS
DEH	DEHUMIDIFIER
DHWS/R	DOMESTIC HOT WATER SUPPLY / RETURN
DIA,/#	DIAMETER
DIFF	DIFFERENTIAL
DISCH	DISCHARGE
DL	DOOR LOUVER
DN	DOWN
DR	DRAIN
DWDI	DOUBLE WIDTH DOUBLE INLET
DX	DIRECT EXPANSION
D/L	DRILLING AND LOOPING
(E)	EXISTING TO REMAIN
EAT	ENTERING AIR TEMPERATURE
EBB	ELECTRIC BASEBOARD RADIATION
EC	EVAPORATIVE CONDENSOR
ECC	ECCENTRIC
EDH	ELECTRIC DUCT HEATER
EDR	EQUIVALENT DIRECT RADIATION
EF	EXHAUST FAN
EG	EXHAUST GRILLE
EGE	EMERGENCY GENERATOR EXHAUST
EH	ELECTRIC HEATER
EJ	EXPANSION JOINT
EMCS	ENERGY MONITORING CONTROL SYSTEM
EP	ELECTRIC-PNEUMATIC
ER	EXHAUST REGISTER
(ER)	EXISTING RELOCATED
ERU	ENERGY RECOVERY UNIT
ES	END SWITCH
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EUH	ELECTRIC UNIT HEATER
EWT	ENTERING WATER TEMPERATURE
EX	EXHAUST
(F)	FUTURE
°F	DEGREES FAHRENHEIT
F	FILTER
FC	FORWARD CURVED OR FLEX CONN.
FCU	FAN COIL UNIT
FCV	FLOW CONTROL VALVE
FD	FLOOR DRAIN OR FIRE DAMPER
FG	FIBERGLASS
FH	FUME HOOD
FHE	FUME HOOD EXHAUST
FLA	FULL LOAD AMPS
FM	FLOW METER
FOB	FLAT ON BOTTOM
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FOT	FLAT ON TOP
FOV	FUEL OIL VENT
FPB	FAN POWERED BOX
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FRP	FIBERGLASS REINFORCED PIPE
FS	FLOW SWITCH
FT	FEET OR FLASH TANK
FT/WG	FEET WATER GAUGE
F&T	FLOAT & THERMOSTATIC TRAP
FTR	FINNED TUBE RADIATION
FV	FACE VELOCITY
FZ	FREEZESTAT
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GRILLE OR GLYCOL RETURN
GRAV	GRAVITY
GS	GLYCOL SUPPLY
GV	GATE VALVE
H	HUMIDISTAT
HC	HEATING COIL
HD	HEAD
HEPA	HIGH EFFICIENCY PARTICULATE ARRESTANCE FILTER
HL	HIGH LIMIT
HOA	HAND-OFF AUTOMATIC SELECTOR SWITCH
H/O	HAND-OFF SELECTOR SWITCH WITH PILOT LIGHT
HP	HORSEPOWER OR HEAT PUMP
HPC	HIGH PRESSURE CONDENSATE
HPD	HIGH PRESSURE DRIP
HPS	HEAT PUMP SUPPLY
HPR	HEAT PUMP RETURN
HRU	HEAT RECOVERY UNIT
HUM	HUMIDITY OR HUMIDIFIER
HV	HEATING & VENTILATING UNIT
HW	HOT WATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HX	HEAT EXCHANGER
Hz	HERTZ
ID	INSIDE DIAMETER
I/L	INTERLOCK
IN	INCH
IN/WG	INCHES WATER GAUGE
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LB	POUND(S)
LB/HR	POUNDS PER HOUR
LD	LINEAR DIFFUSER
LF	LINEAR FEET
LH	LATENT HEAT
LPC	LOW PRESSURE CONDENSATE
LPD	LOW PRESSURE DRIP
LPS	LOW PRESSURE STEAM
LR	LINEAR RETURN
LRA	LOCKED ROTOR AMPS
LVR	LOUVER
LWT	LEAVING WATER TEMPERATURE
MAU	MAKEUP AIR UNIT
MB	MIXING BOX
MBH	1000 BTU PER HOUR
MOD	MOTOR OPERATED DAMPER
MPR	MEDIUM PRESSURE STEAM RETURN
MPS	MEDIUM PRESSURE STEAM SUPPLY
MU	MAKE UP WATER
(N)	NEW
NC	NORMALLY CLOSED
NG	NATURAL GAS
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OAD	OUTSIDE AIR DAMPER
OAI	OUTSIDE AIR INTAKE
OBD	OPPOSED BLADE DAMPER
OCC	OCCUPIED
OD	OUTSIDE DIAMETER
OED	OPEN END DUCT
OP	ORIFICE PLATE
OV	OUTLET VELOCITY
P	PUMP
PBD	PARALLEL BLADE DAMPER
PC - __	PUMPED CONDENSATE - PSIG
PD	PRESSURE DROP
PERF	PERFORATED
PH	PHASE
PHC	PREHEAT COIL
PNEU	PNEUMATIC
PRV	PRESSURE REDUCING VALVE
PSF	POUNDS PER SQUARE FOOT
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAUGE
PT	PRESSURE TRANSMITTER
PVC	POLYVINYL CHLORIDE
(R)	REMOVE EXISTING
RA	RETURN AIR OR REVERSE ACTING
RAD	RADIATION
RCP	RADIANT CEILING PANEL
RD	RETURN AIR DAMPER
(RE)	RELOCATE EXISTING
RE	RELIEF AIR
REFR	REFRIGERANT
RELD	RELIEF DAMPER
RF	RETURN AIR FAN
RG	RETURN AIR GRILLE
RH	RELATIVE HUMIDITY
RHC	REHEAT COIL
RHG	REFRIGERANT HOT GAS
RL	REFRIGERANT LIQUID
RO	ROOF OPENING
RPM	REVOLUTIONS PER MINUTE
RR	RETURN AIR REGISTER
RS	REFRIGERANT SUCTION
RTU	ROOFTOP UNIT
RV	REFRIGERANT VENT
S - __	STEAM - PSIG
SA	SUPPLY AIR
SD	SMOKE DAMPER OR SUPPLY DIFFUSER
SDA	SOUND ATTENUATOR
SEF	SMOKE EXHAUST FAN
SF	SUPPLY AIR FAN
SG	SUPPLY AIR GRILLE
SH	SENSIBLE HEAT
SMD	SMOKE DETECTOR
SP	STATIC PRESSURE
SQ FT	SQUARE FEET
SR	SUPPLY AIR REGISTER
SRD	SAFETY RELIEF VALVE DISCHARGE
SRV	SAFETY RELIEF VALVE
SS	STAINLESS STEEL
STM	STEAM
SUCT	SUCTION
SWSI	SINGLE WIDTH SINGLE INLET
S/R	SUPPLY AND RETURN
T	THERMOSTAT
TAB	TESTING AND BALANCING
TAD	TRANSFER AIR DUCT
TF	TERMINAL AIR FILTER
TEMP	TEMPERATURE
TH	TOTAL HEAT
THERM	THERMOMETER
TOD	TOP OF DUCT
TOP	TOP OF PIPE
TOS	TOP OF STEEL
TP	TOTAL PRESSURE
TSP	TOTAL STATIC PRESSURE
TT	TEMPERATURE TRANSMITTER
UC	UNDERCUT
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
UNOCC	UNOCCUPIED
UV	UNIT VENTILATOR
V	VENT OR VOLTS
VAC	VACUUM
VAV	VARIABLE AIR VOLUME
VB	VACUUM BREAKER
VD	MANUAL VOLUME DAMPER
VEL	VELOCITY
VF	VENTILATING FAN
VFD	VARIABLE FREQUENCY DRIVE
VI	VIBRATION ISOLATOR
VIB	VIBRATION
VIV	VARIABLE INLET VANES
VP	VACUUM PUMP
VTR	VENT THROUGH ROOF
WB	WET BULB
WC	WATER COLUMN
WG	WATER GAUGE
WMS	WIRE MESH SCREEN
WP	WATERPROOF
XP	EXPLOSION PROOF

DUCTWORK SYMBOLS

SYMBOL	DESCRIPTION
	SUPPLY/OUTSIDE AIR DUCT
	RETURN/EXHAUST AIR DUCT
	45° ENTRY TAKEOFF, RECTANGULAR TO RECTANGULAR
	90° TAKEOFF, RECTANGULAR TO ROUND, STRAIGHT
	90° TAKEOFF, RECTANGULAR TO ROUND BELLMOUTH W/ MANUAL VOLUME DAMPER
	90° TAKEOFF, ROUND TO ROUND, STRAIGHT
	90° CONICAL TAKEOFF, ROUND TO ROUND
	45° CONICAL LATERAL, ROUND TO ROUND
	45° LATERAL, ROUND TO ROUND
	45° WYE, ROUND TO ROUND
	END OF DUCT (CAPPED)
	SIDEWALL AIR TERMINAL W/VD (ARROWS DENOTE THROW DIRECTION)
	LINEAR DIFFUSER
FD	FIRE DAMPER - VERTICAL POSITION
	FIRE DAMPER - HORIZONTAL POSITION
	FLEXIBLE CONNECTION
	MANUAL VOLUME DAMPER
MOD	MOTOR OPERATED DAMPER
SD	SMOKE DETECTOR (DUCT-MOUNTED)
	EXHAUST AIR DESIGNATION
	RETURN AIR DESIGNATION
	SUPPLY AIR DESIGNATION

PIPING SYMBOLS

SYMBOL	DESCRIPTION
	MANUAL BALANCING VALVE WITH PRESSURE TAPS SEE SPECIFICATIONS FOR TYPE
	BALL VALVE
	GATE VALVE
	GLOBE VALVE
	BUTTERFLY VALVE
	PLUG VALVE
	VACUUM BREAKER
	CHECK VALVE
	ANGLE SHUTOFF VALVE SEE SPECIFICATIONS FOR TYPE
	ANGLE BALANCING/SHUTOFF VALVE SEE SPECIFICATIONS FOR TYPE
	TRIPLE DUTY VALVE
	COMBINATION BALANCING/SHUTOFF VALVE W/PRESSURE TAPS
	PRESSURE REDUCING VALVE
	SAFETY/RELIEF VALVE - PLAN AND ELEVATION
	PUMP - GENERIC
	PUMP - END SUCTION
B	BASKET STRAINER - ELEVATION AND PLAN
	Y-STRAINER WITH PLUG
	Y-STRAINER WITH DRAIN VALVE
	PRESSURE GAUGE WITH GAUGE COCK
	PRESSURE GAUGE WITH GAUGE COCK AND BOURDON TUBE
	THERMOMETER
P/T	PRESSURE/TEMPERATURE TEST FITTING
FM	FLOW METER
	PIPE UP AND DOWN
	TEE CONNECTION - STRAIGHT, DOWN, AND UP
	UNION
	END CAP
	BLIND FLANGE
	PIPE BELLOWS
	PIPE ANCHOR
	PIPE GUIDE (SLIDING)
	PIPE GUIDE (MOMENT)
	ELECTRICALLY HEAT TRACED PIPING
	AIR VENT - (MANUAL)
	AUTOMATIC AIR VENT
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
F	STEAM TRAP - FLOAT AND THERMOSTATIC
B	STEAM TRAP - BUCKET
T	STEAM TRAP - THERMOSTATIC
TH	STEAM TRAP - THERMODYNAMIC
P R	PITCH OF PIPE, RISE (R) DROP (D)
W H	EXPANSION LOOP AND SIZE

LINE DESIGNATIONS

CHWS	CHILLED WATER SUPPLY
CHWR	CHILLED WATER RETURN
CWS	CONDENSER WATER SUPPLY
CWR	CONDENSER WATER RETURN
HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN
HPS	HEAT PUMP SUPPLY
HPR	HEAT PUMP RETURN
GS	GLYCOL SUPPLY
GR	GLYCOL RETURN
FOS	FUEL OIL SUPPLY
FOR	FUEL OIL RETURN
FOV	FUEL OIL VENT
G	NATURAL GAS
C	COIL CONDENSATE DRAIN
MU	MAKE UP WATER
RV	REFRIGERANT VENT
RL	REFRIGERANT LIQUID
RS	REFRIGERANT SUCTION
	EXISTING PIPING/DUCTWORK TO REMAIN (WITH SERVICE DESIGNATION)
	EXISTING PIPING/DUCTWORK TO BE REMOVED (WITH SERVICE DESIGNATION)

CONTROLS

SYM. SYM. AUTOMATIC CONTROL DAMPER SYMBOLS:
OA = OUTSIDE AIR SA = SUPPLY AIR
RA = RETURN AIR SD = SMOKE DAMPER
EA = EXHAUST AIR FS = FIRE/SMOKE
RE = RELIEF AIR
BD = BACKDRAFT DAMPER

	THERMOSTAT - DUCT MOUNTED
	THERMOSTAT - WALL MOUNTED
H	HUMIDISTAT - DUCT MOUNTED
H	HUMIDISTAT - WALL MOUNTED
FZ	FREEZESTAT (LOW TEMPERATURE DETECTOR)
SP	STATIC PRESSURE SENSOR - DUCT MOUNTED
SP	SPACE STATIC PRESSURE SENSOR
	AUTOMATIC CONTROL VALVE (2 - WAY)
	AUTOMATIC CONTROL VALVE (3 - WAY)
	SOLENOID VALVE
FS	FLOW SWITCH
CO2 1	CO2 SENSOR
CO	CO DETECTOR
$	SWITCH

MISC. DWG. SYMBOLS

	POINT OF CONNECTION
	POINT OF DISCONNECT
	POINT OF CONNECTION FOR FUTURE WORK
	EQUIPMENT SYMBOL
	EQUIPMENT NUMBER OR FLOW (GPM,CFM,ETC.)
	DETAIL NUMBER
	DETAIL DRAWING NUMBER
	SECTION NUMBER
	SECTION DRAWING NUMBER
	PLAN NUMBER
	PLAN DRAWING NUMBER
-	KEYED DEMOLITION NOTE
-	KEYED NEW WORK NOTE

APPLICABLE CODES & STANDARDS

THE FOLLOWING CODES AND STANDARDS APPLY TO THIS PROJECT:

1. INTERNATIONAL BUILDING CODE (IBC) 2021, NJ EDITION.
2. NJAC REHABILITATION SUB-CODE 5:23-6
3. INTERNATIONAL MECHANICAL CODE (IMC) 2021.
4. INTERNATIONAL FUEL GAS CODE (IFGC) 2021.
5. NATIONAL STANDARD PLUMBING CODE (NSPC) 2021
6. NFPA 70 - NATIONAL ELECTRICAL CODE (NEC) 2020

GENERAL PROJECT NOTES

THE FOLLOWING NOTES APPLY TO ALL "M" MECHANICAL DRAWINGS:

1. ALL WORK SHALL FOLLOW THE REFERENCED APPLICABLE CODES AS ADOPTED AND MODIFIED BY THE STATE OF NEW JERSEY.
2. ALL WORK CONTAINED WITHIN THE MECHANICAL DRAWINGS AND SPECIFICATIONS IS THE RESPONSIBILITY OF THE SINGLE PRIME CONTRACTOR UNLESS OTHERWISE NOTED.
3. NOT ALL SYMBOLS, ABBREVIATIONS AND LINE DESIGNATIONS ARE NECESSARILY USED ON THIS PROJECT.
4. ALL HVAC EQUIPMENT, DUCTWORK, PIPING, SUPPORTS AND ACCESSORY LOCATIONS AND ROUTING SHALL BE COORDINATED WITH ALL OTHER TRADES AND FIELD VERIFIED PRIOR TO INSTALLATION TO PROVIDE REQUIRED CLEARANCES FOR ALL OTHER SYSTEMS.
5. SUPPLY, RETURN AND EXHAUST AIR OPENING LOCATIONS AND SIZES FOR ROOF MOUNTED MECHANICAL EQUIPMENT ARE SHOWN FOR DUCTWORK ROUTING ONLY. THE MECHANICAL CONTRACTOR SHALL VERIFY THE ACTUAL SIZES OF DUCT CONNECTIONS AND THE REQUIRED ROOF OPENING SIZES FOR THE ROOF MOUNTED EQUIPMENT AND COORDINATE THE FINAL LOCATION OF ROOF PENETRATIONS WITH THE GENERAL CONTRACTOR.
6. THE CONTRACTOR PROVIDING MECHANICAL TRADE WORK SHALL INSTALL ALL ROOF MOUNTED MECHANICAL EQUIPMENT CURBS AND FLASHING AND COORDINATE WITH THE CONTRACTOR PROVIDING GENERAL TRADES PRIOR TO THE APPLICATION OF THE BUILDING ROOFING. THE CONTRACTOR PROVIDING MECHANICAL TRADE WORK SHALL ALSO INSTALL ALL NECESSARY ROOF CURB COUNTER-FLASHING TO ACHIEVE A WATERTIGHT ROOFING SEAL.
7. DUCTWORK MAINS AND BRANCHES ARE SHOWN DIAGRAMMATICALLY AND FOR DESIGN CLARITY AND AT THE ROOM LEVEL ROUTING AND ARRANGEMENT IS SHOWN TO MINIMIZE NOISE CARRYOVER FROM MECHANICAL EQUIPMENT AND ADJOINING SPACES. CONTRACTOR MAY PROPOSE REROUTING, OFFSETS, RISES AND DROPS AS NECESSARY TO CLEAR INSTALLED TRUSSES, JOISTS AND OTHER INTERFERENCES. FINAL DUCTWORK LAYOUT WILL BE APPROVED IN REQUIRED DUCTWORK SHOP DRAWING SUBMITTAL REVIEW PRIOR TO INSTALLATION. DEVIATIONS FROM APPROVED DUCTWORK SHOP DRAWING TO SUIT FIELD CONDITIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
8. ALL PIPING/DUCTWORK/CONTROLS PENETRATING FIRE RATED PARTITIONS, WALLS AND CEILINGS SHALL BE SEALED ON BOTH SIDES USING AN APPROVED, UL LISTED FIRE SEALANT TO MATCH EXISTING WALL FIRE RATING. WHERE A PIPE/DUCT/CONTROL CONDUIT HAS BEEN REMOVED THAT PREVIOUSLY PENETRATED A FIRE RATED PARTITION, WALL OR CEILING, THE CONTRACTOR SHALL PATCH AND SEAL THE PENETRATION ON BOTH SIDES USING AN APPROVED, UL LISTED FIRE SEALANT TO MATCH EXISTING WALL FIRE RATING. ALL FIRESTOP SYSTEMS SHALL BE TESTED IN ACCORDANCE WITH ASTM E814. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
9. CONTRACTOR SHALL RE-APPLY FIREPROOFING IN TYPE AND THICKNESS TO MATCH EXISTING IN ANY AREAS WHERE EXISTING FIREPROOFING IS DAMAGED DO TO DEMOLITION OR NEW WORK ACTIVITIES. REFER TO ARCHITECTURAL SPECIFICATIONS FOR ADDITIONAL INFORMATION.
10. CONTRACTOR SHALL COORDINATE THE REPLACEMENT OF MECHANICAL EQUIPMENT WITH THE FACILITIES STAFF AND THE OWNER IN ADDITION TO ALL OTHER WORK BEING COMPLETED UNDER SEPARATE CONTRACTS. ALL ITEMS BEING REMOVED AS PART OF THE UPGRADES SHALL BE REMOVED FROM THE PREMISES AND DISPOSED OF IN ACCORDANCE WITH LOCAL REGULATIONS.
11. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR IN REGARDS TO THE DISCONNECT AND RECONNECT OF ALL EQUIPMENT BEING REMOVED AND/OR REPLACED IN-KIND AS INDICATED ON THE CONTRACT DOCUMENTS.
12. MECHANICAL CONTRACTOR SHALL FURNISH LOOSE MOTOR STARTERS AND DISCONNECT SWITCHES FOR INSTALLATION AND WIRING BY THE ELECTRICAL CONTRACTOR.
13. ELECTRICAL COORDINATION: CONTRACTOR PROVIDING MECHANICAL TRADE WORK SHALL COORDINATE VOLTAGES FOR EACH PIECE OF EQUIPMENT BEFORE PURCHASING EQUIPMENT WITH CONTRACTOR PROVIDING ELECTRICAL TRADE WORK.
14. HVAC TESTING & BALANCING (AIR & WATER) IS A PART OF THIS CONTRACT. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED TEST & BALANCE REPORTS, REFER TO PROJECT BOOK SPECIFICATIONS FOR DETAILS.
15. CONTRACTOR SHALL PROVIDE FLEXIBLE CONNECTIONS AT ALL DUCT CONNECTIONS TO EQUIPMENT. IF DUCT CONNECTION TO EQUIPMENT CANNOT BE MADE WITHOUT A HARD CONNECTION (E.G. MIXING BOX/FILTER RACK ASSEMBLY), CONTRACTOR SHALL PROVIDE FLEX CONNECTIONS FOR ALL DUCT CONNECTING WITH A HARD CONNECTION TO EQUIPMENT.
16. ALL EXISTING WALLS, CEILINGS, ROOF, FLOORS AND OTHER FINISHED SURFACES DAMAGED OR MODIFIED SHALL BE REPAIRED TO MATCH ADJACENT UNDISTURBED AREA. PATCH AND REPAIR SHALL MATCH EXISTING ADJACENT SURFACES AS TO THICKNESS, TEXTURE, MATERIALS AND COLOR. ALL ABANDONED OPENINGS SHALL BE PATCHED AND REPAIRED TO MATCH ADJACENT UNDISTURBED AREA AND ARCHITECTURE. ALL ROOF PENETRATIONS SHALL BE PERFORMED SUCH THAT WARRANTY IS MAINTAINED.
17. CONTRACTOR SHALL REMOVE, STORE AND RE-INSTALL ALL CEILING TILES AS REQUIRED TO ACCESS ABOVE CEILING AREAS TO ROUTE NEW PIPING OR INSTALL EQUIPMENT. CONTRACTOR SHALL SUPPLY MATCHING CEILING TILES FOR ANY BROKEN TILES THAT OCCUR DURING THE CONSTRUCTION.
18. CONTRACTOR SHALL MODIFY SPRINKLER PIPING SYSTEMS AS REQUIRED TO ALLOW NEW EQUIPMENT INSTALLATION AND DUCTWORK MODIFICATIONS. WORK SHALL BE PERFORMED BY A CERTIFIED SPRINKLER CONTRACTOR.
19. ALL NECESSARY STAGING AND MATERIAL STORAGE AREAS SHALL BE AS DIRECTED AND APPROVED BY THE OWNER.
20. ALL SYSTEMS THAT NEED TO BE DRAINED SHALL BE COORDINATED WITH THE OWNER.
21. ALL WORK SHALL BE PERFORMED TO NOT INTERFERE WITH THE NORMAL OPERATION OF THE FACILITIES. COORDINATE ANY NECESSARY SHUTDOWNS WITH THE FACILITY. MINIMIZE SHUTDOWNS TO LIMIT IMPACT OF INTERRUPTION OF COOLING, HEATING, DHW AND ELECTRICAL SERVICE TO THE FACILITY.
22. ALL MEANS OF EGRESS MUST BE KEPT FREE AND CLEAR OF ALL MATERIAL.
23. VERIFY ALL CONDITIONS, ELEVATIONS AND MEASUREMENTS SHOWN ON CONTRACT DRAWINGS. ALL DIMENSIONS AND ELEVATIONS FOR NEW AND EXISTING EQUIPMENT, PIPING AND APPARATUS ARE APPROXIMATE AND ARE ONLY FOR REFERENCE. SUBMIT SHOP DRAWINGS SHOWING ALL DIMENSIONS AND ELEVATIONS VERIFIED IN THE FIELD.
24. CONTRACTOR SHALL TEMPORARILY RELOCATE ALL PIPING, ELECTRICAL CONDUITS, LIGHTING, CONTROLS, ETC., TO ACCOMMODATE WORK UNDER THIS CONTRACT. RESTORE TO INITIAL OPERATING CONDITION AND FUNCTION UPON COMPLETION OF WORK. EXISTING PIPING IN WORK AREA SMALLER THAN 2" AND CONDUITS SMALLER THAN 1" ARE NOT EXPLICITLY SHOWN. CONDUCT FIELD SURVEY AS REQUIRED TO DETERMINE EXISTING CONDITIONS.
25. PROVIDE VALVED DRAINS ON ALL WATER PIPING SYSTEM LOW POINTS AND AS REQUIRED ON NEW EQUIPMENT. PROVIDE AIR VENTS AT PIPING SYSTEM HIGH POINTS AS REQUIRED FOR RELEASING AIR DURING STARTUP.
26. NO PIPING SMALLER THAN 3/4" EXCEPT AS NOTED.
27. PROVIDE WIRING AND RACEWAYS RELATED TO CONTROL OF MECHANICAL EQUIPMENT. RACEWAYS TO BE MINIMUM 3/4" RIGID CONDUIT.
28. CONTRACTOR SHALL REFER TO SPECIFICATIONS FOR MATERIAL PIPE SIZE & MATERIAL TYPE BY SYSTEM. FOR SYSTEMS REQUIRING DISSIMILAR METALS CONTRACTOR SHALL PROVIDE GALVANIC CORROSION AND CATHODIC PROTECTION (DIELECTRIC UNION, DIELECTRIC FITTING, ETC.) IN ACCORDANCE WITH THE SPECIFICATIONS.
29. CONTRACTOR IS RESPONSIBLE FOR CONDUCTING WALK-THROUGH OF SITE PRIOR TO SUBMITTING BID TO BE FAMILIAR WITH SITE CONDITIONS AND REQUIREMENTS.
30. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED CALCULATIONS (SIGNED AND SEALED BY AN ENGINEER LICENSED IN THE STATE OF NEW JERSEY) AND INSTALLATION INFORMATION TO SHOW COMPLIANCE WITH SEISMIC AND WIND FORCES IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE 2021, NJ EDITION. INFORMATION SHALL BE MADE AVAILABLE TO ENGINEER FOR REVIEW AND ALSO, MADE AVAILABLE UPON REQUEST FOR SUBMISSION TO CODE ENFORCEMENT. PROVIDE ALL SUPPORT SYSTEMS, SUPPLEMENTAL STEEL, ANCHORS, PIPE HANGERS AND ENGINEERING DOCUMENTATION NECESSARY TO PROVIDE A COMPLETE CODE COMPLIANT SYSTEM.

SCOPE OF WORK INFORMATION

PROJECT SCOPE OF WORK:

1. ALL WORK CONTAINED WITHIN THE DRAWINGS AND SPECIFICATIONS IS THE RESPONSIBILITY OF THE SINGLE PRIME CONTRACTOR, UNLESS OTHERWISE NOTED. REFER TO INDIVIDUAL DRAWING SHEETS AND SPECIFICATIONS FOR SPECIFIC REQUIREMENTS.
2. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS OF THE PROJECT.
3. REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR SPECIFIC MECHANICAL REQUIREMENTS AND COORDINATION.
4. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR SPECIFIC ARCHITECTURAL REQUIREMENTS AND COORDINATION.
5. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR SPECIFIC ELECTRICAL REQUIREMENTS AND COORDINATION.

DRAWING SHEET INDEX (8302)

SHEET NO.	DRAWING NUMBER	DRAWING TITLE	SCALE	DATE	ISSUE: ISSUED FOR BID (08/12/2026)
1	M0.0	MECHANICAL LEAD SHEET	NTS		x
2	M0.1	MECHANICAL SPECIFICATIONS	NTS		x
3	MD1.1	MECHANICAL DEMOLITION PLANS	1/8" = 1'-0"		x
4	M1.1	MECHANICAL NEW WORK FLOOR PLANS	1/8" = 1'-0"		x
5	M2.1	MECHANICAL DETAILS	AS NOTED		x

CONTROLS SCOPE OF WORK CLARIFICATIONS

CONTROLS SCOPE OF WORK CLARIFICATION:

A. THE LENAPE REGIONAL HIGH SCHOOL DISTRICT (LRHSD) WILL BE CONTRACTING DIRECTLY WITH THE DISTRICT'S PREFERRED CONTROLS CONTRACTOR TO COMPLETE WORK ASSOCIATED WITH THE HVAC CONTROLS SYSTEMS FOR THIS PROJECT UNDER A SEPARATE CONTRACT. THIS CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING THE WORK OF THE CONTROLS CONTRACTOR WITH THE WORK OF THIS CONTRACT.

B. THE DISTRICT CONTROLS CONTRACTOR WILL PROVIDE CONTROL PANELS AND CONTROLLERS FOR ALL EQUIPMENT THAT IS NOT SPECIFIED TO BE PROVIDED WITH A FACTORY MOUNTED BACNET CONTROLLER. THE CONTROLS CONTRACTOR WILL PROVIDE THE COMMUNICATION CABLE FROM THE FACTORY MOUNTED BACNET CONTROLLERS TO THE HVAC CONTROLS SYSTEM COMMUNICATION BACKBONE AND FROM ANY NEW CONTROL PANELS TO THE HVAC CONTROLS SYSTEM COMMUNICATION BACKBONE.

C. EXISTING WALL MOUNTED AND WIRELESS THERMOSTATS SERVING THE DUCTLESS SPLIT SYSTEMS WILL REMAIN. DISCONNECT EXISTING CONTROL WIRING BETWEEN THE EXISTING IDU AND THE ODU BEING RELOCATED. PROVIDE NEW CONTROL WIRING BETWEEN THE ODU BEING RELOCATED AND THE ASSOCIATED IDU. PROVIDE ADDITIONAL LENGTHS IN THIS WIRING AS REQUIRED. THESES SPLIT SYSTEMS ARE STAND-ALONE AND DO NOT REQUIRE INTEGRATION INTO THE DISTRICTS BMS.

D. REFER TO THE CONTRACT DRAWINGS AND SPECIFICATIONS FOR REQUIRED SCOPE OF WORK BY THIS CONTRACTOR.

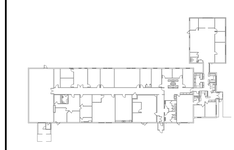
MEP ENGINEER:

CONCORD ENGINEERING
P.A. 24GA27936700
Phila. Business License No. 107707
520 South Burnt Mill Road
Voorhees, New Jersey 08043
(856) 427-0200
www.concord-engineering.com

No.	Date	Description
1	09/10/26	RELEASED FOR BID

REVISIONS:

KEY PLAN:



John A. Marchiafava P. E.
New Jersey P. E. No. 24GE04992500

NOT FOR CONSTRUCTION

Professional Engineer
John A. Marchiafava P. E.

PROJECT: REF21-42-8302

LRHSD REFERENDUM
EXTERIOR BUILDING RESTORATION

ADMINISTRATION BUILDING

93 WILLOW GROVE RD
SHAMONG, NEW JERSEY

DRAWING TITLE:
MECHANICAL LEAD SHEET

DRAWN BY: BTR	SCALE: AS NOTED	DWG SIZE: 42x30	
CHECKED BY: BTR	DRAWING NO. M0.0		REVISION 1
DATE: 09/10/2026			
PROJECT NO.: 8C22002.31			

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GENERAL MECHANICAL REQUIREMENTS

1. GENERAL NOTES, SYMBOL LISTS AND DETAILS ARE APPLICABLE TO ALL HVAC DRAWINGS LABELED "M".

2. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIALS AND LABOR TO PROVIDE COMPLETE AND WORKING MECHANICAL SYSTEMS WHETHER SPECIFIED OR IMPLIED.

3. THE ENTIRE MECHANICAL INSTALLATION SHALL CONFORM TO THE LOCAL CODE, STATE LAWS, AGA, BOCA, NBFU, NFPA, NSPC, ASME AND ALL OTHER APPLICABLE CODES. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, INSPECTIONS AND APPROVALS AS REQUIRED.

4. DO NOT SCALE THE DRAWINGS FOR EXACT DIMENSIONS. VERIFY ALL FIGURES, CONDITIONS, DIMENSIONS, ETC. AT THE JOB SITE.

5. THE CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES TO PREVENT INTERFERENCE BETWEEN BEAMS, STRUCTURES, PIPING, LIGHTING FIXTURES, EXISTING SYSTEMS AND UTILITIES, ETC.

6. ALL MATERIALS USED IN CONSTRUCTION SHALL HAVE A FLAME SPREAD RATING OF 25 OR LESS, A SMOKE DEVELOPMENT RATING OF 50 OR LESS, AND A FUEL CONTRIBUTED RATING OF 25 OR LESS. ALL MATERIALS SHALL BE "SELF-EXTINGUISHING".

7. ALL PIPING, CONDUIT AND DUCT PENETRATIONS OF "FIRE RATED BUILDING CONSTRUCTION" SHALL BE SLEEVED AND SEALED WITH A UL APPROVED FIRE BARRIER SYSTEM.

8. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.

9. CONTRACTOR SHALL LABEL ALL NEW HVAC EQUIPMENT, PIPING AND VALVES (INDOORS AND OUTDOORS) IN A PERMANENT MANNER. HVAC PIPING SHALL BE LABELED WITH SELF-ADHESIVE PIPE MARKERS EQUAL TO MARKING SERVICES INC. (MSI) SERIES MS-900 MARKERS. COMPLY WITH ASME A13.1 FOR LETTERING SIZE, LENGTH OF COLOR FIELD, COLORS, AND VIEWING ANGLES OF IDENTIFICATION. DIRECTION OF FLOW SHALL BE IDENTIFIED WITH MS-900 FLOW DIRECTIONAL ARROW TAPE. VALVES SHALL BE IDENTIFIED WITH BRASS VALVE TAGS, ATTACHED WITH SOLID BRASS CHAINS AND "S" HOOKS. VALVE TAGS SHALL BE COORDINATED WITH VALVE SCHEDULE PROVIDED IN OPERATION AND MAINTENANCE MANUAL. MECHANICAL EQUIPMENT SHALL BE LABELED WITH ENGRAVED PLASTIC TAGS WITH MOUNTING HOLES AND STAINLESS STEEL SCREWS. ALL LABELING SHALL HAVE HIGH CONTRAST BETWEEN LETTER AND BACKGROUND COLORS AND SHALL BE LOCATED FOR EASY VISIBILITY.

10. ALL HVAC EQUIPMENT AND APPLIANCES INSTALLED SHALL BEAR THE LABEL OF AN APPROVED AGENCY.

11. THE ENTIRE HVAC INSTALLATION SHALL BE PERFORMED IN ACCORDANCE WITH THE 2021 INTERNATIONAL MECHANICAL CODE AND ANY SUPPLEMENTS, INCLUDING THE NEW JERSEY UNIFORM CONSTRUCTION CODE – 2021 AND ITS SUPPLEMENTS.

12. PROVIDE VIBRATION ISOLATION MOUNTINGS FOR ALL MOTOR OPERATED EQUIPMENT.

13. ALL EXTERIOR WALL OPENINGS SHALL BE SLEEVED, CAULKED AND SEALED WITH A HIGH QUALITY SEALANT TO PREVENT INFILTRATION OF MOISTURE AND OUTSIDE AIR.

14. PROVIDE BALANCING OF ALL AIR SYSTEMS PER AABC OR NEBB STANDARDS. SUBMIT TEST DATA AND DEMONSTRATE IN FIELD AS REQUIRED BY THE SCOPE OF WORK.

15. SUBMIT 3/8" SCALE PIPING & SHEET METAL SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION AND INSTALLATION. COORDINATE WITH ALL TRADES.

16. SUBMIT FOR REVIEW, DUPLICATE SPECIFICATION SHEETS OF ALL EQUIPMENT SUPPLIED OR INSTALLED, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

16.1. SPLIT SYSTEM AIR-CONDITIONING WALL SUPPORTS.
16.2. REFRIGERANT PIPE, HANGERS, PIPE SUPPORT SYSTEMS, WALL SLEEVES.
16.3. CONDENSATE PIPE, HANGERS, PIPE SUPPORT SYSTEMS. WALL SLEEVES.
16.4. MECHANICAL INSULATION FOR REFRIGERANT AND CONDENSATE PIPE SYSTEMS.
16.5. SPLIT SYSTEM HEAT PUMP CONTROL WIRING.
16.6. CONDENSATE PUMP.

MECHANICAL RELOCATION AND ALTERATION

1. PROVIDE REMOVAL, RELOCATION, REROUTING AND RECONNECTING OF EXISTING MECHANICAL FACILITIES, AS SHOWN OR AS REQUIRED BY CONTRACT DOCUMENTS, TO ACCOMPLISH ALTERATION, RESTORATION AND TO ACCOMMODATE NEW CONSTRUCTION.

2. VERIFY THE LOCATION OF ALL RELATED EXISTING EQUIPMENT, PIPING AND OTHER MECHANICAL FACILITIES. PROVIDE FOR THE REMOVAL, RELOCATION, REROUTING AND RECONNECTING OF THIS WORK AS REQUIRED BECAUSE OF DEMOLITION METHODS OR SEQUENCES EMPLOYED. OBTAIN THE OWNER'S PERMISSION PRIOR TO COMMENCING ANY WORK.

3. WHERE EXISTING EQUIPMENT MUST REMAIN IN SERVICE DURING CONSTRUCTION, PROVIDE REROUTING AND RECONNECTING OF MECHANICAL SERVICES AS REQUIRED TO MAINTAIN CONTINUOUS SERVICE. MAINTAIN SYSTEM CONTINUITY AND OPERATION OF PIPING OR DUCTWORK CIRCUITS, WHETHER SPLICED, EXTENDED, RELOCATED OR NEWLY CONSTRUCTED.

4. ALL THREADED PIPING SHALL BE DISCONNECTED AT THE LOCATION INDICATED ON THE DEMOLITION DRAWINGS. ALL OPENINGS OF REMAINING VALVES, PIPING, FITTINGS AND EQUIPMENT SHALL BE CLOSED OFF WITH PIPE PLUGS OR PIPE CAPS AS REQUIRED TO PREVENT DEBRIS FROM ENTERING THE EXISTING SYSTEMS.

5. ALL PIPE HANGERS, SUPPORTS, AND/OR ANCHORS SHALL BE REMOVED ALONG WITH ALL PIPING SHOWN TO BE REMOVED.

6. INSULATION SHALL BE REMOVED FROM ALL PIPING, FITTINGS, VALVES AND EQUIPMENT DESIGNATED FOR DEMOLITION. COMPLY WITH ALL SAFETY PRECAUTIONS RELATED TO INSULATION REMOVAL.

HVAC TESTING AND BALANCING REQUIREMENTS

1. PROVIDE COMPLETELY TESTED, BALANCED AND CERTIFIED AIR SYSTEMS AS DEFINED BY THESE SPECIFICATIONS.

2. ALL INSTRUMENTS AND EQUIPMENT REQUIRED FOR TESTING AND BALANCING SHALL BE PROVIDED BY THIS CONTRACTOR.

3. THE TESTING AND BALANCING CONTRACTOR SHALL BE CERTIFIED BY THE ASSOCIATED AIR BALANCE COUNCIL (AABC) AND/OR THE NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB).

4. THE WORK SHALL BE PERFORMED BY REGULAR EMPLOYEES OF THE TESTING AND BALANCING CONTRACTOR SPECIFICALLY TRAINED IN THE TOTAL BALANCING OF AIR AND WATER SYSTEMS. THE WORK SHALL BE CONTINUOUSLY CONDUCTED UNDER THE DIRECT SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER.

5. PERFORM THE WORK, USING METHODS AND TEST FORMS PUBLISHED BY AABC NATIONAL STANDARDS FOR FIELD MEASUREMENTS AND INSTRUMENTATION, LATEST EDITION, OR EQUIVALENT NEBB METHODS AND FORMS.

6. DO NOT START TESTING AND BALANCING UNTIL EACH SYSTEM HAS BEEN CERTIFIED BY THE INSTALLING CONTRACTOR TO BE COMPLETE AND HAS BEEN TESTED AND REVIEWED.

7. THE OWNER'S REPRESENTATIVE SHALL, AT HIS DISCRETION, WITNESS FINAL BALANCING OF ALL SYSTEMS. THE TESTING AND BALANCING CONTRACTOR SHALL PROVIDE MINIMUM OF 10 WORKING DAYS PRIOR NOTICE TO THE OWNER'S REPRESENTATIVE FOR EACH SYSTEM TO BE BALANCED.

8. BALANCING SHALL ACHIEVE TOTAL DESIGN AIR FLOW RATES, WITHIN A TOLERANCE OF ±5% – AND OBTAIN SYSTEM ACTUAL OPERATING STATIC PRESSURE/HEAD AND PLOT THE SYSTEM CURVE ON THE CERTIFIED PUMP CURVE.

9. VERIFY THAT ALL THERMOSTATS AND THE DEVICES THEY CONTROL (SUCH AS VALVES AND DAMPERS) OPERATE AS THEY ARE INTENDED.

AIR CONDITIONING CONDENSATE DRAIN PIPING

1. PROVIDE PIPE, VALVES, FITTINGS AND OTHER MATERIALS AND EQUIPMENT AS SPECIFIED AND SHOWN FOR AIR CONDITIONING CONDENSATE DRAIN SYSTEMS.

2. APPROVED MANUFACTURERS: COPPER – NIBCO, APOLLO, WATTS OR EQUIVALVENT. PLASTIC – NIBCO, WATTS, HAYWARD OR APPROVED EQUIVALENT.

3. PIPE: 2 INCHES AND SMALLER – COPPER TUBING, SEAMLESS TYPE L, ASTM B88, SOLDERED ENDS OR SCHEDULE 40 PVC PIPE, PLENUM RATED WITH SOLVENT-WELDED JOINTS.

4. FITTINGS: 2 INCHES AND SMALLER, WROUGHT COPPER, PRESSURE FITTINGS, SOLDER TYPE, ANSI B16.22, ASTM B75 FOR COPPER PIPING OR PVC, SCH 40 WITH SOCKET-TYPE FITTINGS, ASTM D 2466 WITH PLENUM RATING.

5. SHUTOFF VALVES: 2 INCHES AND SMALLER – COPPER: 400 WOG / 150 SWP, BRONZE BALL VALVES ONE PIECE OR TWO PIECE SERVICEABLE IN LINE, FULL PORT, BRONZE TRIM, CHROME PLATED BRASS BALL, BLOW-OUT PROOF STEM, PTFE SEALS, SOLDERED OR THREADED ENDS FOR COPPER PIPING. PVC: 150 SWP, PLASTIC BALL VALVES ONE PIECE, FULL PORT, PVC BALL, PTFE SEAL, SOCKET WELD OR THREADED ENDS FOR PVC PIPING.

6. CHECK VALVES: 2 INCHES AND SMALLER – COPPER: 400 WOG / 200 SWP BRONZE SWING CHECK VALVES WITH REGRINDABLE BRONZE DISC, SCREW-IN CAP, SOLDERED ENDS FOR COPPER PIPING. PVC: 50 SWP, PVC SWING CHECK WITH SOCKET WELD ENDS FOR PVC PIPING.

INSULATION FOR MECHANICAL PIPING SYSTEMS

1. PROVIDE PIPE INSULATION, JACKETS AND INSULATION ACCESSORIES FOR MECHANICAL PIPING SYSTEMS

2. SUBMIT MANUFACTURER'S PRODUCT DATA SPECIFIED FOR REVIEW. SUBMIT SAMPLES OF PRODUCTS, LABELED AND IDENTIFIED, IF REQUESTED.

3. INSULATING MATERIALS AND ACCESSORIES SHALL HAVE A COMPOSITE FIRE AND SMOKE RATING AS TESTED UNDER ASTM E 84, NFPA 255 AND UL 723 PROCEDURES NOT TO EXCEED FLAME SPREAD – 25, SMOKE DEVELOPED – 50 (UNLESS NOTED OTHERWISE) AND FUEL CONTRIBUTED – 50.

4. ELASTOMERIC INSULATION

4.1. INSULATION MATERIAL SHALL BE FLEXIBLE, CELLULAR ELASTOMERIC, MOLDED, OZONE RESISTANT, 6 PCF DENSITY, AND SHALL COMPLY WITH ASTM C534. THERMAL CONDUCTIVITY "K" (BTUIN./HR.FT2 F) SHALL BE 0.28 AT 75 F, ASTM C177 OR C518. MINIMUM SERVICE TEMPERATURE SHALL BE –40 F. MAXIMUM SERVICE TEMPERATURE SHALL BE 220 F.
4.2. MAXIMUM MOISTURE ABSORPTION SHALL BE 1.0 PERCENT BY VOLUME, ASTM D1056. MOISTURE VAPOR TRANSMISSION SHALL BE 0.20 PERM INCHES, ASTM E96.
4.3. MAXIMUM FLAME SPREAD SHALL BE 25 PER ASTM E84. MAXIMUM SMOKE DEVELOPED SHALL BE 50 (3/4" AND BELOW) AND 100 (1" AND ABOVE) PER ASTM E84.
4.4. FOR ALL EXTERIOR PIPING AND FOR PIPING EXPOSED TO ULTRAVIOLET RADIATION, PROVIDE A PROTECTIVE INSULATION COATING, RUBATEX 374 OR EQUAL. APPLY WITH WATERPROOF VAPOR BARRIER ADHESIVE.
4.5. ELASTOMERIC INSULATION SHALL BE RUBATEX R-180-FS OR EQUIVALENT.

5. JACKETS

5.1. FIBERGLASS INSULATION ALL SERVICE JACKET – AP-T BY JOHNS-MANVILLE CORPORATION, SUPPLIED INTEGRAL WITH MICRO-LOK INSULATION. JACKET SHALL INCLUDE BONDED VAPOR-PROOF ALUMINUM FOIL-KRAFT AND 1.5 INCH WIDE LONGITUDINAL VAPOR-PROOF PRESSURE SENSITIVE CLOSURE SEAL WITH RELEASE PAPER.
5.2. OUTDOOR FIBERGLASS INSULATION METAL JACKET STAINLESS STEEL 0.010 INCH THICK HAVING Z LOCK JOINT LONGITUDINAL SEAM, LINED WITH FACTORY-LAMINATED MOISTURE BARRIER. INCLUDE 0.016 INCH THICK X 2 INCH WIDE PREFORMED ALUMINUM SPRING SNAPS CONTAINING PERMANENT PLASTIC SEALING COMPOUND AND 0.015 INCH THICK X 0.5 INCH WIDE STAINLESS STEEL BANKS.

6. ACCESSORIES

6.1. PRE-MOLDED FITTINGS – POLY-VINYL CHLORIDE (PVC), 20 MILS THICK FOR INDOOR USE, 30 MILS THICK FOR OUTDOOR USE, CONFORMING TO FS L-P-535E. PROVIDE 2-LAYER PRE-CUT INSULATION INSERTS MATCHED TO PIPE INSULATION, VAPOR BARRIER, MASTIC ADHESIVES AND TAPES. PVC COVERS SHALL BE "ZESTON" BY JOHNS-MANVILLE.

7. CONTRACTOR SHALL INSULATE ALL NEW PIPING IN TYPE AND THICKNESS AS NOTED IN THE INSULATION SCHEDULE WITHIN THIS SECTION. IN ADDITION, CONTRACTOR SHALL RE-INSULATE ALL EXISTING PIPING WITHIN CONTRACT AREA AS SPECIFIED HEREIN FOR ALL PIPING WHOSE INSULATION HAS BEEN REMOVED OR DAMAGED BASED ON THE INSULATION SCHEDULE THICKNESSES.

INSULATION FOR MECHANICAL PIPING SYSTEMS CONT'D

DESCRIPTION	COND DRAIN	REFRIG PIPE (RL&RS)
FLUID TEMPERATURE RANGE (°F)	35–75	35–150
INSULATION TYPE	FIBERGLASS OR ELASTOMER	ELASTOMER
INSULATION THICKNESS FOR INDOOR PIPE LOCATIONS	COND DRAIN	RL&RS
2" OR LESS	3/4"	1"
4" OR LESS	3/4"	1""
INSULATION THICKNESS FOR OUTDOOR PIPE LOCATIONS	COND DRAIN	RL&RS
2" OR LESS	N/A	2"
4" OR LESS	N/A	2"

NOTES:
1. REFER TO SECTIONS ABOVE FOR "JACKETING" AND/OR "FINISH" REQUIREMENTS FOR OUTDOOR PIPING.

REFRIGERANT PIPING

1. PROVIDE PIPE, VALVES, FITTINGS AND OTHER MATERIALS AND EQUIPMENT AS SPECIFIED AND SHOWN FOR AIR CONDITIONING REFRIGERANT PIPING SYSTEMS.

2. APPROVED MANUFACTURERS: SPORLAN, MUELLER, STREAMLINE, DANFOSS OR APPROVED EQUIVALENT.

3. LINE TEST PRESSURE FOR R-410A: LIQUID AND SUCTION LINES, 535 PSIG.

4. COPPER TUBE AND FITTINGS: DRAWN-TEMPER COPPER TUBE, ASTM B280, TYPE ACR. WROUGHT-COPPER FITTINGS, ASME B16.22.

5. SERVICE VALVES: 500-PSIG PRESSURE RATING; FORGED-BRASS BODY WITH COPPER STUBS, BRASS CAPS, REMOVABLE VALVE CORE, INTEGRAL BALL CHECK VALVE, AND WITH SOLDER-END CONNECTIONS.

6. SOLENOID VALVES: COMPLY WITH ARI 760; 250 DEG F TEMPERATURE RATING AND 400-PSIG WORKING PRESSURE; FORGED BRASS, WITH POLYTETRAFLUOROETHYLENE VALVE SEAT, 2-WAY, STRAIGHT-THROUGH PATTERN, AND SOLDER-END CONNECTIONS; MANUAL OPERATOR; FITTED WITH SUITABLE NEMA 250 ENCLOSURE OF TYPE REQUIRED BY LOCATION, WITH 1/2-INCH CONDUIT ADAPTER AND 24-V, NORMALLY CLOSED HOLDING COIL.

7. PRESSURE-REGULATING VALVES: COMPLY WITH ARI 770; PILOT OPERATED, FORGED BRASS OR CAST BRONZE, STAINLESS-STEEL BOTTOM SPRING, PRESSURE-GAGE TAPPINGS, 24-V DC STANDARD COIL, AND WROUGHT-COPPER FITTINGS FOR SOLDER-END CONNECTIONS; SUITABLE FOR REFRIGERANT SPECIFIED.

8. THERMOSTATIC EXPANSION VALVES: COMPLY WITH ARI 750; BRASS BODY WITH STAINLESS-STEEL PARTS; THERMOSTATIC-ADJUSTABLE, MODULATING TYPE; SIZE AND OPERATING CHARACTERISTICS AS RECOMMENDED BY MANUFACTURER OF EVAPORATOR, AND FACTORY SET FOR SUPERHEAT REQUIREMENTS; SOLDER-END CONNECTIONS; WITH SENSING BULB, DISTRIBUTOR HAVING SIDE CONNECTION FOR HOT-GAS BYPASS LINE, AND EXTERNAL EQUALIZER LINE.

9. HOT-GAS BYPASS VALVE: PULSATING-DAMPENING DESIGN, STAINLESS-STEEL BELLOWS AND POLYTETRAFLUOROETHYLENE VALVE SEAT; ADJUSTABLE; SIZED FOR CAPACITY EQUAL TO LAST STEP OF COMPRESSOR UNLOADING; WITH SOLDER-END CONNECTIONS.

10. STRAIGHT- OR ANGLE-TYPE STRAINERS: 500-PSIG WORKING PRESSURE; FORGED-BRASS OR STEEL BODY WITH STAINLESS-STEEL WIRE OR BRASS-REINFORCED MONEL SCREEN OF 80 TO 100 MESH IN LIQUID LINES UP TO 1-1/8 INCHES, 60 MESH IN LARGER LIQUID LINES, AND 40 MESH IN SUCTION LINES; WITH SCREWED CLEANOUT PLUG AND SOLDER-END CONNECTIONS.

11. MOISTURE/LIQUID INDICATORS: 500-PSIG MAXIMUM WORKING PRESSURE AND 200 DEG F OPERATING TEMPERATURE; ALL-BRASS BODY WITH REPLACEABLE, POLISHED, OPTICAL VIEWING WINDOW WITH COLOR-CODED MOISTURE INDICATOR; WITH SOLDER-END CONNECTIONS.

12. REPLACEABLE-CORE FILTER-DRYERS: 500-PSIG MAXIMUM WORKING PRESSURE; HEAVY GAGE PROTECTED WITH CORROSION-RESISTANT-PAINTED STEEL SHELL, FLANGED RING AND SPRING, DUCTILE-IRON COVER PLATE WITH STEEL CAP SCREWS; WROUGHT-COPPER FITTINGS FOR SOLDER-END CONNECTIONS; WITH REPLACEABLE-CORE KIT, INCLUDING GASKETS AND THE FOLLOWING:

12.1. FILTER-DRYER CARTRIDGE: PLEATED MEDIA WITH SOLID-CORE SIEVE WITH ACTIVATED ALUMINA, ARI 730 RATED FOR CAPACITY.

13. PERMANENT FILTER-DRYER: 350-PSIG MAXIMUM OPERATING PRESSURE AND 225 DEG F MAXIMUM OPERATING TEMPERATURE; STEEL SHELL AND WROUGHT-COPPER FITTINGS FOR SOLDER-END CONNECTIONS; MOLDED-FELT CORE SURROUNDED BY DESICCANT.

14. MUFFLERS: 500-PSIG OPERATING PRESSURE, WELDED-STEEL CONSTRUCTION WITH FUSIBLE PLUG; SIZED FOR REFRIGERATION CAPACITY.

MEP ENGINEER:

CONCORD ENGINEERING

P.A. 24GA27936700
Phila. Business License No. 107707

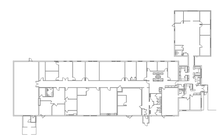
520 South Burnt Mill Road
Voorhees, New Jersey 08043
(856) 427-0200

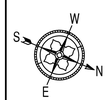
www.concord-engineering.com

No.	Date	Description
1	09/10/26	RELEASED FOR BID

REVISIONS:

KEY PLAN:





John A. Marchiafava P. E.
New Jersey P. E. No. 24GE04992500

NOT FOR CONSTRUCTION

Professional Engineer
John A. Marchiafava P. E.

PROJECT: REF21-42-8302

LRHSD REFERENDUM
EXTERIOR BUILDING
RESTORATION

ADMINISTRATION BUILDING

93 WILLOW GROVE RD
SHAMONG, NEW JERSEY

DRAWING TITLE:

MECHANICAL SPECIFICATIONS

DRAWN BY: BTR	SCALE: AS NOTED	DWG SIZE: 42x30	
CHECKED BY: BTR	DRAWING NO. M0.1		REVISION 1
DATE: 09/10/2026			
PROJECT NO.: 8C22002.31			

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DEMOLITION OF EXISTING SYSTEM NOTES:

GENERAL NOTES:

1. REFER TO MECHANICAL LEAD SHEET, M0.0 FOR "NOTES" THAT PERTAIN TO THE SCOPE OF THIS PROJECT.
2. CONTRACTOR SHALL COORDINATE THE REPLACEMENT OF MECHANICAL EQUIPMENT WITH THE OWNER AND OTHER TRADES SO AS NOT TO AFFECT THE OPERATION OF EXISTING SYSTEMS. PARTICULAR ATTENTION SHALL BE GIVEN TO UTILITY SERVICES, ELECTRIC, WATER AND BUILDING UTILITIES. ALL ITEMS REMOVED FROM THE EQUIPMENT AS PART OF THE RELOCATION SHALL BE REMOVED FROM THE PREMISES AND DISPOSED OF IN ACCORDANCE WITH LOCAL REGULATIONS.
3. CONTRACTOR SHALL VERIFY AND CATALOG ALL PERTINENT INFORMATION (MAKE, MODEL, DIMENSIONS, FAN ASSEMBLY, FAN MOTOR, VOLTAGE, CONTROL VALVE TYPE, ETC.) OF ALL EQUIPMENT TO BE RELOCATED PRIOR TO WORK BEING COMPLETED. EQUIPMENT DATA INFORMATION SHALL BE SUBMITTED AS A SUBMITTAL FOR REVIEW BY OWNER AND ENGINEER.
4. CONTRACTOR SHALL SUBMIT TO ARCHITECT & ENGINEER PRODUCT DATA FOR ALL ITEMS THAT ARE TO BE INCLUDED IN THE NEW WORK FOR REVIEW PRIOR TO COMMENCING WORK.

DEMOLITION KEYED NOTES:

GENERAL: DEMOLITION NOTES ARE INDICATED WITH THE FOLLOWING SYMBOL ⟨ ⟩ AND ARE NUMBERED AS FOLLOWS:

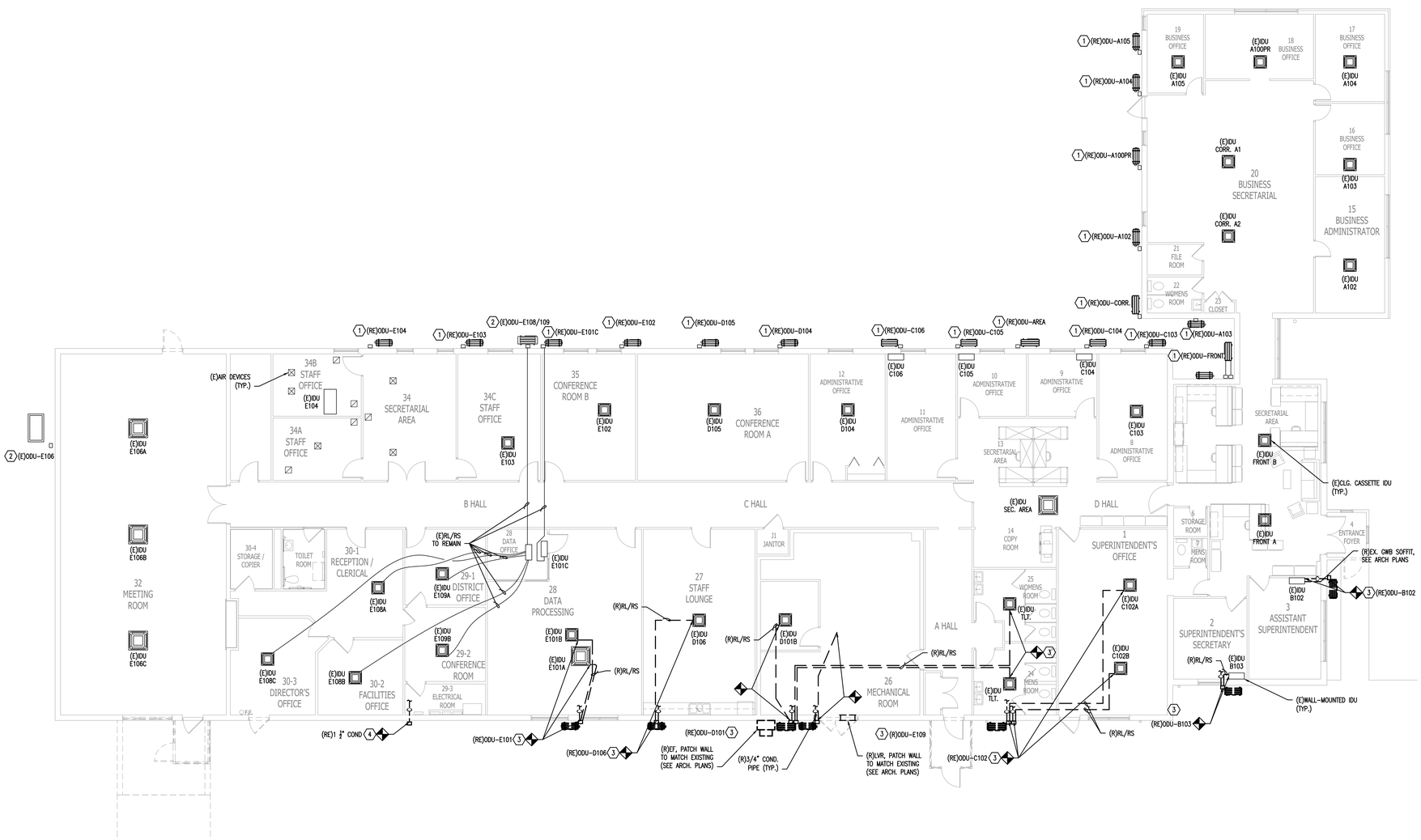
⟨1⟩ EXISTING OUTDOOR HEATPUMP UNIT, WALL SUPPORT, REFRIGERANT PIPE, CONDENSATE PIPE, VERTICAL PIPE ENCLOSURE, ELECTRICAL DISC. SW. ETC. TO BE REMOVED AND REINSTALLED TO ACCOMMODATE NEW SIDING. ASSOCIATED CASSETTE AND/OR WALL MOUNTED EVAPORATOR TO REMAIN.

⟨2⟩ EXISTING OUTDOOR HEATPUMP UNIT, SPLIT GROUND STAND SUPPORT, REFRIGERANT PIPE, CONDENSATE PIPE, VERTICAL PIPE ENCLOSURE, ELECTRICAL DISC. SW. ETC. TO REMAIN. ASSOCIATED CASSETTE AND/OR WALL MOUNTED EVAPORATOR TO REMAIN.

⟨3⟩ EXISTING OUTDOOR HEATPUMP UNIT, WALL SUPPORT, VERTICAL PIPE ENCLOSURE, ELECTRICAL DISC. SW. ETC. TO BE RELOCATED. RECLAIM REFRIGERANT PER EPA GUIDLINES. DISCONNECT, REMOVE AND DEMOLISH ALL REFRIGERANT PIPE FROM ODU & IDU WHERE INDICATED ON PLAN. VERTICAL CONDENSATE PIPE WITHIN EXTERIOR PIPE ENCLOSURE MAY BE REUSED, ALL OTHER CONDENSATE PIPING WHERE ODU IS BEING REPLACED SHALL BE REMOVED.. REMOVE ALL HANGERS AND APPURTENANCES ETC. PATCH ALL INTERIOR AND EXTERIOR WALL SURFACES ETC., TO MATCH EXISTING WHERE PIPE ENCLOSURES, PIPE HANGERS, ETC. ARE BEING REMOVED.

⟨4⟩ EXISTING VERTICAL PIPE ENCLOSURE W/1 1/2" COND. PIPE TO BE RELOCATED, PATCH EXTERIOR WALL PENETRATION TO MATCH EXISTING.

⟨5⟩ REMOVE EXISTING INDOOR CASSETTE AND ASSOCIATED OUTDOOR UNIT. REMOVE ALL ASSOCIATED REFRIGERANT PIPE, CONDENSATE PIPE AND ELECTRICAL WIRING ETC. REMOVE ALL EQUIPMENT AND PIPE SUPPORTS ETC. REMOVE ASSOCIATED THERMOSTATS. REMOVE EXISTING CU WALL HANGERS. PATCH ALL SURFACES TO MATCH EXISTING.



1 MD1.1 MECHANICAL FLOOR PLAN – DEMOLITION

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

0' 2' 4' 8' 16'
SCALE BAR: 1/8"=1'-0"

MEP ENGINEER:

CONCORD ENGINEERING

P.A. 24GA27936700
Phila. Business License No. 107707

520 South Burnt Mill Road
Voorhees, New Jersey 08043
(856) 427-0200

www.concord-engineering.com

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1	09/10/26	RELEASED FOR BID

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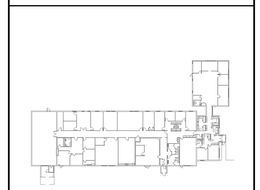
KEY PLAN:



John A. Marchiafava P. E.
New Jersey P. E. No. 24GE04992500

NOT FOR CONSTRUCTION

Professional Engineer
John A. Marchiafava P. E.

PROJECT: REF21-42-8302

LRHSD REFERENDUM
EXTERIOR BUILDING
RESTORATION

ADMINISTRATION BUILDING

93 WILLOW GROVE RD
SHAMONG, NEW JERSEY

DRAWING TITLE:

MECHANICAL DEMOLITION
FLOOR PLANS

DRAWN BY: RML	SCALE: AS NOTED	DWG SIZE: 42x30	
CHECKED BY: BTR	DRAWING NO. MD1.1	REVISION 1	
DATE: 09/10/2026			
PROJECT NO.: 8C22002.31			

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SPLIT-SYSTEM A/C UNIT SCHEDULE

			INDOOR UNIT (D101A)							OUTDOOR UNIT (E109)							
UNIT	MFR	LOCATION	MODEL #	TYPE	TOTAL COOLING (BTUH)	TOTAL HEATING (BTUH)	V/PH/HZ	MCA	MOCP	UNIT	MODEL #	TYPE	SEER	V/PH/HZ	MCA	MOCP	NOTES
(N)SS-1	FUJITSU	(D1C1A) RM. #26	ACUH09KUAS	CASSETTE	9,000	12,000	208V/1Ø/60	8.9	15	(N)CU-1	AOUH09KUAS1	R-32	24.4	208V/1Ø/60	8.9	15	ALL NOTES

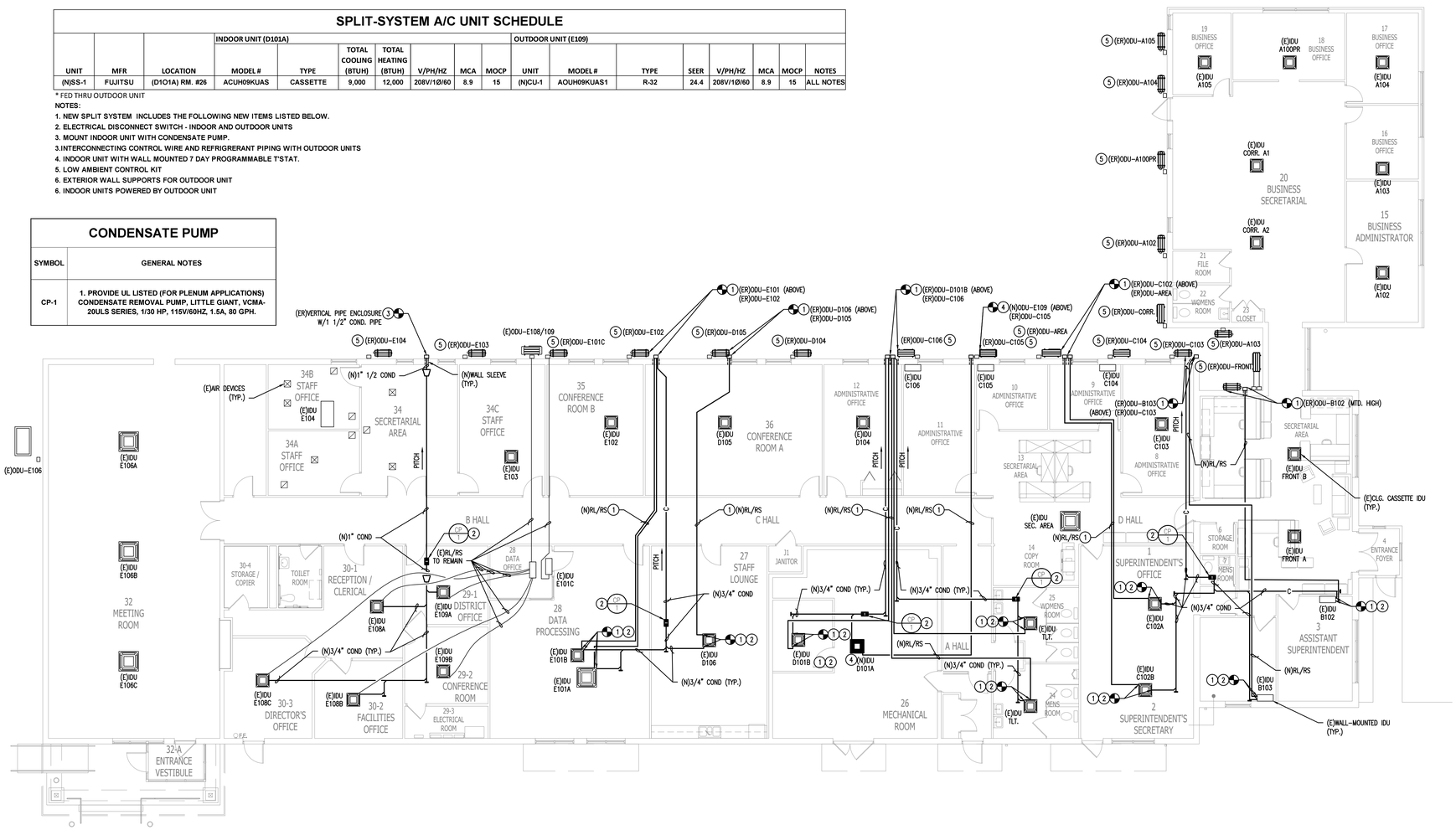
* FED THRU OUTDOOR UNIT

NOTES:

1. NEW SPLIT SYSTEM INCLUDES THE FOLLOWING NEW ITEMS LISTED BELOW.
2. ELECTRICAL DISCONNECT SWITCH - INDOOR AND OUTDOOR UNITS
3. MOUNT INDOOR UNIT WITH CONDENSATE PUMP.
3.INTERCONNECTING CONTROL WIRE AND REFRIGRERANT PIPING WITH OUTDOOR UNITS
4. INDOOR UNIT WITH WALL MOUNTED 7 DAY PROGRAMMABLE T'STAT.
5. LOW AMBIENT CONTROL KIT
6. EXTERIOR WALL SUPPORTS FOR OUTDOOR UNIT
6. INDOOR UNITS POWERED BY OUTDOOR UNIT

CONDENSATE PUMP

SYMBOL	GENERAL NOTES
CP-1	1. PROVIDE UL LISTED (FOR PLENUM APPLICATIONS) CONDENSATE REMOVAL PUMP, LITTLE GIANT, VCMA-20ULS SERIES, 1/30 HP, 115V/60HZ, 1.5A, 80 GPH.



1 M1.1 MECHANICAL FLOOR PLAN – NEW WORK

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

0' 2' 4' 8' 16'

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

MECHANICAL NEW WORK NOTES:

GENERAL NOTES:

1. REFER TO MECHANICAL LEAD SHEET, M0.0 FOR "NOTES" THAT PERTAIN TO THE SCOPE OF THIS PROJECT.
2. CONTRACTOR SHALL COORDINATE THE RELOCATION OF MECHANICAL EQUIPMENT WITH THE FACILITIES STAFF AND THE OWNER IN ADDITION TO ALL OTHER WORK BEING COMPLETED UNDER SEPARATE CONTRACTS. ALL ITEMS REMOVED FROM THE EQUIPMENT AS PART OF THE RELOCATION SHALL BE REMOVED FROM THE PREMSES AND DISPOSED OF IN ACCORDANCE WITH LOCAL REGULATIONS.
3. CONTRACTOR SHALL VERIFY AND CATALOG ALL PERTINENT INFORMATION (MAKE, MODEL, DIMENSIONS, FAN ASSEMBLY, FAN MOTOR, VOLTAGE, CONTROL VALVE TYPE, ETC.) OF ALL EQUIPMENT TO BE RELOCATED PRIOR TO WORK BEING COMPLETED. EQUIPMENT DATA INFORMATION SHALL BE SUBMITTED AS A SUBMITTAL FOR REVIEW BY OWNER AND ENGINEER.
4. CONTRACTOR SHALL PATCH, REPAIR, & PAINT AREAS OF EXISTING CONSTRUCTION WHERE EQUIPMENT HAS BEEN RELOCATED. COORDINATE WITH ARCHITECT AND OWNER TO MATCH EXISTING CONSTRUCTION AND FINISHES.
5. CONTRACTOR SHALL REMOVE AND STORE ALL CEILING TILES AS REQUIRED TO ACCESS ABOVE CEILING AREAS TO ROUTE NEW PIPING OR INSTALL EQUIPMENT. CONTRACTOR SHALL SUPPLY MATCHING CEILING TILES FOR ANY BROKEN TILES THAT OCCUR DURING THE CONSTRUCTION.
6. COORDINATE ALL NEW REFRIGERANT AND CONDENSATE PIPE LOCATIONS WITH ABANDONED EXISTING DUCT, EQUIPMENT, ELECTRICAL CONDUIT, EXISTING REFRIGERANT AND CONDENSATE PIPE AND APPURTENANCES ETC.

NEW WORK KEYED NOTES:

GENERAL: NOTES ARE INDICATED WITH THE FOLLOWING SYMBOL (#) AND ARE NUMBERED AS FOLLOWS:

1. RELOCATED EXISTING OUTDOOR HEATPUMP UNIT, WALL SUPPORT, VERTICAL PIPE ENCLOSURE, ELECTRICAL DISC. SW. ETC., ABOVE EXISTING ODU WHERE INDICATED ON PLAN. ASSOCIATED CASSETTE AND/OR WALL MOUNTED EVAPORATOR TO REMAIN. PROVIDE NEW REFRIGERANT PIPE SIZED ACCORDINGLY PER MFG'S RECOMMENDATIONS BASED ON REQUIREMENTS FOR R410A WITH EXTENDED PIPE LENGTHS AND CONNECT FROM EXISTING CASSETTE/WALL MTD. UNIT TO RELOCATED OUTDOOR HEATPUMP UNIT.
2. PROVIDE AND CONNECT NEW 3/4" CONDENSATE PIPE TO EXISTING CASSETTE AND OR WALL MTD IDU. ROUTE NEW CONDENSATE PIPE TO NEW CONDENSATE PUMP WHERE INDICATED ON PLAN. ROUTE NEW CONDENSATE PUMP DISCHARGE PIPE TO NEW EXTERIOR VERTICAL PIPE ENCLOSURE. FINAL LOCATION OF CONDENSATE PUMPS TO BE DETERMINED IN THE FIELD TO DETERMINE THE NEW REQUIRED PIPE PITCH.
3. RELOCATED EXISTING VERTICAL PIPE ENCLOSURE WITH 1 1/2" CONDENSATE PIPE. CONNECT NEW 1 1/2" HORIZONTAL CONDENSATE PIPE TO THE EXISTING VERTICAL CONDENSATE PIPE. SEAL WALL PENETRATION.
4. FURNISH AND INSTALL NEW CASSETTE AND OUTDOOR UNIT WHERE INDICATED ON FLOOR PLAN. INSTALL ALL BE REFRIGERANT PIPE, CONDENSATE PIPE, POWER AND CONTROL WIRING ETC. REQUIRED FOR A COMPLETE OPERATION. COORDINATE CONTROLS AND CONTROLLER WITH DISTRICT'S CONTROLS CONTRACTOR. PROVIDE ALL EQUIPMENT SUPPORTS AND WALL HANGER FOR A COMPLETE INSTALLATION. PROVIDE NEW WALL MOUNTED THERMOSTAT.
5. EXISTING OUTDOOR HEATPUMP UNIT, WALL SUPPORT, REFRIGERANT PIPE, CONDENSATE PIPE, VERTICAL PIPE ENCLOSURE, ELECTRICAL DISC. SW. ETC. TO BE REMOVED AND REINSTALLED TO ACCOMMODATE NEW SIDING. ASSOCIATED CASSETTE AND/OR WALL MOUNTED EVAPORATOR TO REMAIN.

MEP ENGINEER:

CONCORD ENGINEERING

P.A. 24GA27936700
Phila. Business License No. 107707

520 South Burnt Mill Road
Voorhees, New Jersey 08043
(856) 427-0200

www.concord-engineering.com

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1	09/10/26	RELEASED FOR BID

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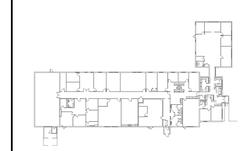

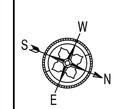

John A. Marchiafava P. E.
New Jersey P. E. No. 24GE04992500

NOT FOR CONSTRUCTION

Professional Engineer
John A. Marchiafava P. E.

PROJECT: REF21-42-8302

LRHSD REFERENDUM
EXTERIOR BUILDING
RESTORATION

ADMINISTRATION BUILDING

93 WILLOW GROVE RD
SHAMONG, NEW JERSEY

DRAWING TITLE:

MECHANICAL NEW WORK
FLOOR PLANS

DRAWN BY: RML	SCALE: AS NOTED	DWG SIZE: 42x30	
CHECKED BY: BTR	DRAWING NO. M1.1		REVISION 1
DATE: 09/10/2026			
PROJECT NO.: 8C22002.31			

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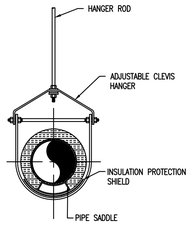
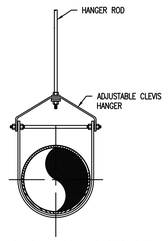


1 M2.1 PIPE SUPPORT DETAIL

SCALE: N.T.S.

NOTES:

1. SIZE CLEVIS AND ROLLER TO ADEQUATELY SUPPORT LOAD.
2. SIZE CLEVIS AND ROLLER TO FIT PIPE AND INSULATION THICKNESS.

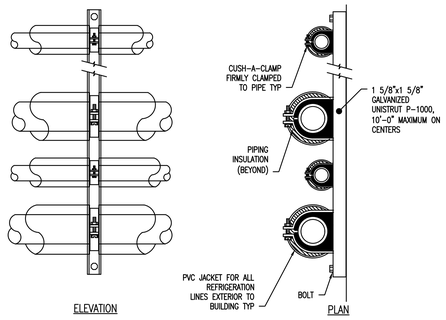


2 M2.1 PIPE SUPPORT DETAIL

SCALE: N.T.S.

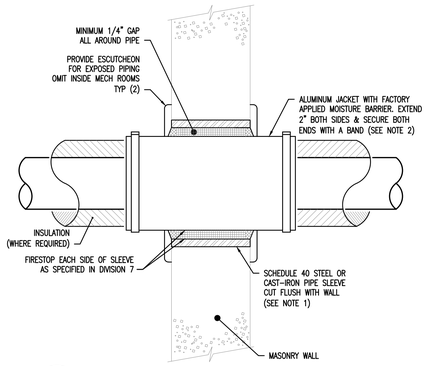
NOTES:

1. SIZE CLEVIS TO ADEQUATELY SUPPORT LOAD.
2. SPRING HANGER. SEE SPECIFICATION FOR USE.



3 M2.1 WALL MOUNTED REFRIGERATION PIPING SUPPORT DETAIL

SCALE: N.T.S.

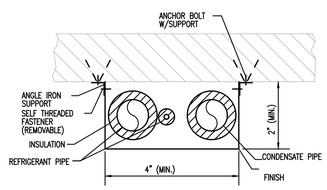


4 M2.1 WALL PENETRATION DETAIL

SCALE: N.T.S.

NOTES:

1. FOR GYP. BOARD WALLS PROVIDE MIN. 16 GAUGE GALV. STEEL SLEEVE W/ LOCK-TYPE LONGITUDINAL SEAM.
2. OMIT ALUMINUM JACKET IF PIPING IS UNINSULATED.
3. ALL EXTERIOR PIPING AND PENETRATIONS SHALL BE PAINTED WITH ONE COAT OF PRIMER SUITABLE FOR THE PAINTED SURFACE AND TWO COATS OF EXTERIOR GRADE PAINT W/ COLOR SELECTED BY OWNER.
4. ALL WALL PENETRATIONS SHALL BE FILLED TO MATCH EXITING. FIRE RATINGS TO BE DETERMINED BY ARCHITECT.



5 M2.1 PIPE ENCLOSURE DETAIL

SCALE: N.T.S.

NOTE:

1. PIPE ENCLOSURES (VERTICAL & HORIZONTAL) TO BE SIZED FOR RS/RL AND / OR CONDENSATE PIPE COLOR OF NEW ENCLOSURES TO BE DETERMINED BY THE ARCHITECT. FINAL ENCLOSURE SIZING SHALL BE COORDINATED IN FIELD. COORD. ENCL. SIZE WHERE SPLITTERS ARE REQUIRED. COORDINATE ENCLOSURE W/EC IN FIELD AT CONSOLE UNIT DISCONNECT SWITCH.
2. ALL WALL PENETRATIONS SHALL BE FILLED TO MATCH EXISTING. FIRE RATINGS TO BE DETERMINED BY ARCHITECT.

MEP ENGINEER:

CONCORD ENGINEERING
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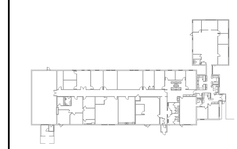

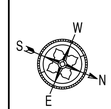

John A. Marchiafava P. E.
New Jersey P. E. No. 24GE04992500

NOT FOR CONSTRUCTION

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PROJECT: REF21-42-8302

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EXTERIOR BUILDING
RESTORATION

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93 WILLOW GROVE RD
SHAMONG, NEW JERSEY

DRAWING TITLE:

MECHANICAL DETAILS

DRAWN BY: RML	SCALE: AS NOTED	DWG SIZE: 42x30	
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