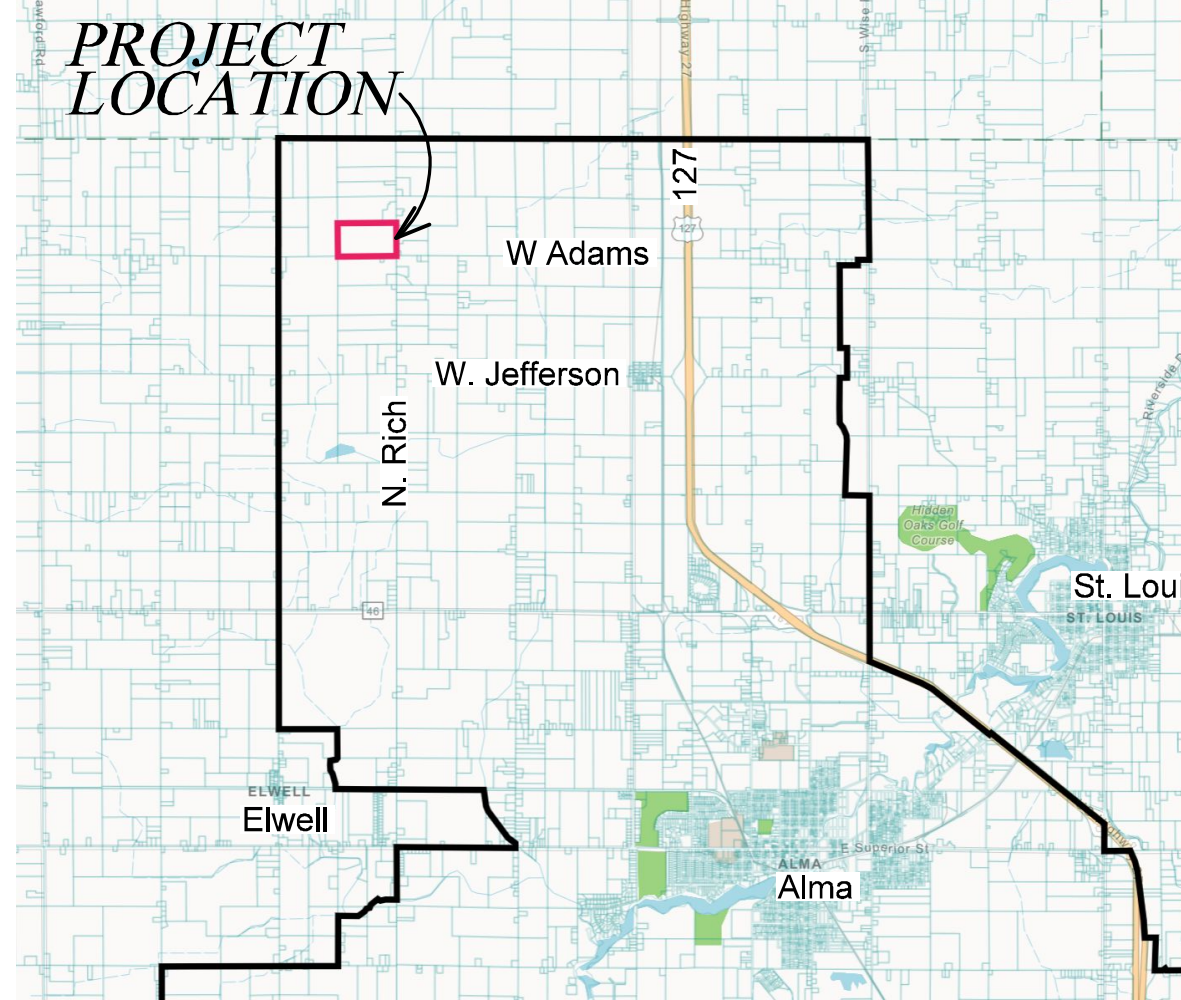


3 WORKING DAYS BEFORE YOU DIG
CALL MISS DIG
 800-487-7711
 www.MissDig.org

UTILITY WARNING
PROTECTION OF UNDERGROUND FACILITIES
PUBLIC ACT 53 OF 1974
 Underground and/or aboveground utility locations as may be indicated on the plan were obtained from utility owners or other documents and are not field located.
 A minimum of 72 hours (3 working days) prior to beginning construction, the contractor shall notify "MISS DIG" and have all underground utilities staked before any work may begin. (Excluding Saturday, Sunday, or Holidays)
 The contractor shall be responsible for the protection of all utilities that may interfere with construction. Protection of utilities shall be required as part of construction.



SITE VICINITY MAP

State Code Authorities Having Jurisdiction		
Mechanical	State of Michigan Construction Codes 517-241-9325	Michigan Mechanical Code 2021 Part 9A, based on IMC 2021 adopted as amended and effective March 12, 2024
Plumbing	State of Michigan Construction Codes 517-241-9330	Michigan Plumbing Code 2021 based on IPC 2021 adopted and effective March 12, 2024
Electrical	State of Michigan Construction Codes 517-241-9337	Michigan Electrical Rules, Part 8 based on NEC 2023 adopted as amended and effective March 12, 2024
Local Code Authorities Having Jurisdiction		
Zoning	Seville Township Zoning Ordinance Zoning Department (889) 285-2100	Seville Township Zoning Ordinance Special Land Use Permit Approved, Sept 10, 2025
Building	Gratiot County Community Development 989-875-5201	State of Michigan Building Code 2021, Incorporating the International Building Code 2021 with amendments & ICC/ANSI A117.1-2017 effective April 9, 2025
Barrier Free	Gratiot County Community Development 989-875-5201	Michigan Building Code 2015, Part 4 based on IBC 2015 adopted as amended and effective April 20, 2017, and referencing ICC/ANSI A117.1-2017.
Energy	Gratiot County Community Development 989-875-5201	Michigan Uniform Energy Code Rules, Part 10A, based ASHRAE energy standard for buildings except low-rise residential buildings ANSI/ASHRAE/IESNA standard 90.1-2007, including appendices A, B, C, and D
Fire	Gratiot County Central Dispatch 911 989-875-7606	
Health	Gratiot County Health Dept. 989-875-3681	
Other Authorities		
Sanitary	Gratiot County Health Dept. 989-875-3681	
Water Quality	Gratiot County Health Dept. 989-875-3681	
Storm Water Drainage	Gratiot County Drain Commission 989-875-5207	
Soil Erosion & Sedimentation Control	Gratiot County Control Division 989-875-5301	
County Roads	Clinton County Road Commission 989-875-3611	
Local Utilities		
Water	On Site Well	
Gas	Local Propane Provider	
Electric	Consumers Energy Electric Engineering 517-374-2320	

GENERAL PROJECT NOTES:

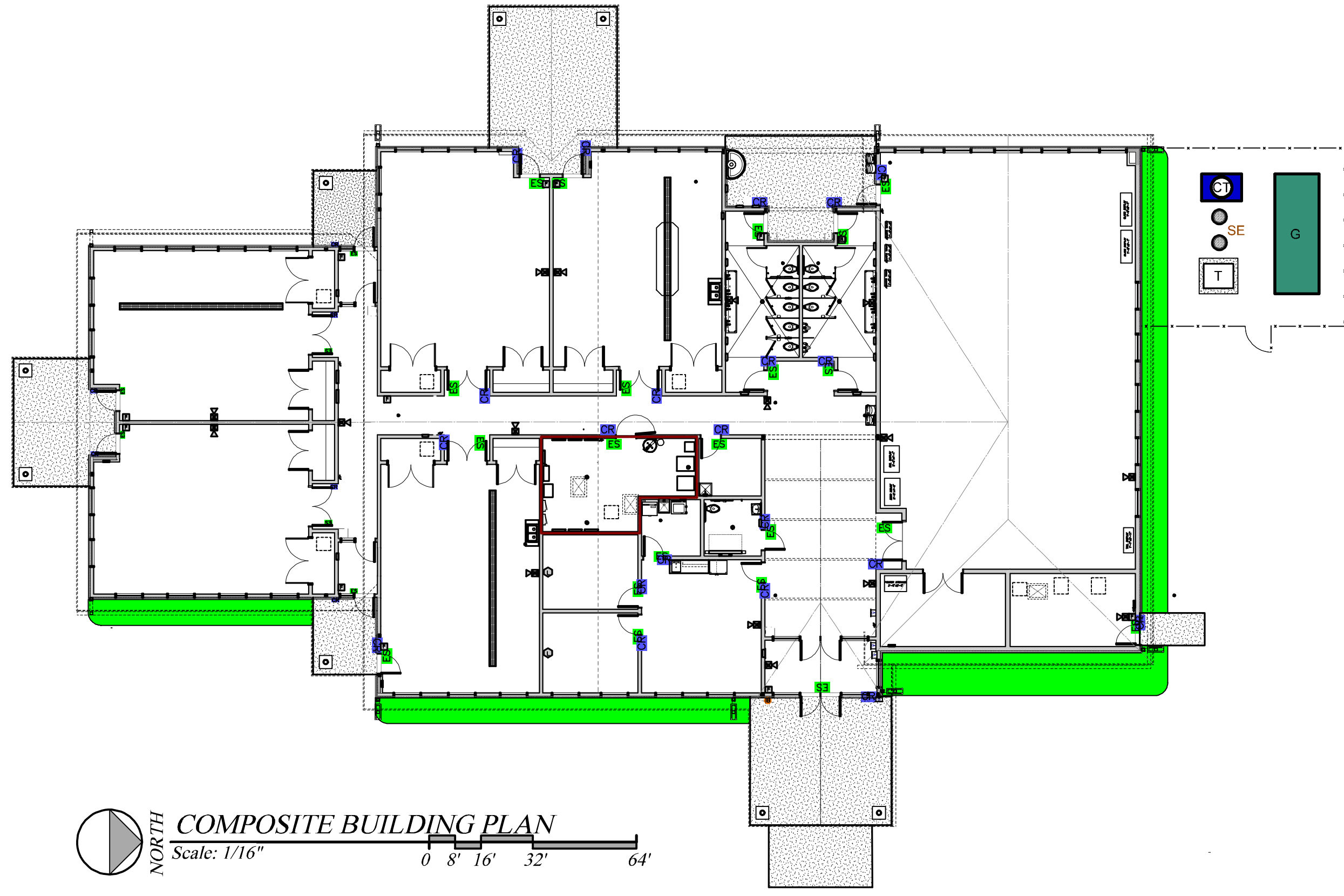
- The contractor shall be exclusively responsible for determining the exact utility locations and elevations prior to the start of construction. It is the contractor's responsibility to notify the various utility owners in accordance with Michigan Public Act No. 53 of 1974. 72 Hours or three (3) working days (excluding Saturday, Sunday, or Holidays) before you dig call Miss Dig 800-487-7711 or 811 (toll free).
- Before contractor commences construction, he shall check with all local utilities for verification of underground lines. All utilities shall be coordinated between existing services, proposed services and utility companies. Any abandoned service shall be terminated according to the utility company's requirements.
- Applicable Federal, State and Local Acts, Codes, Laws, Ordinances, and Regulations, etc. shall be considered as part of the requirements for this project and shall take precedence over these drawings and specifications. Advise the Architect in writing of potential conflicts between these drawings and possible interpretations of codes, ordinances, and regulations.
- Comply with State of Michigan Part 81 of 1994 PA 451, Soil Erosion and Sedimentation Control (SESC) and procedures of Department of Management and Budget (DTMB). These procedures and guidelines are provided in detail in the DTMB SESC Guidebook.
- All Site, Soil Erosion Control, Mechanical, Plumbing and Electrical work shall be performed by Contractors licensed for such work and who shall obtain the proper permits from local authorities.
- Separate trade permits, where applicable, shall be obtained prior to commencement of the work.
- It is the intent of these construction documents to construct a complete building with all building systems fully functional and usable at the completion of the work. These drawings indicate the general scope of the work to be provided.
- The approximate areas and dimensions indicated are to assist the contractor in determining the relative magnitude of project size and shall not be used as actual areas in determining quantities for bidding or ordering of material. The contractor is responsible for taking his or her own measurements of the existing conditions.
- Areas indicated are for determination of Construction & Occupancy requirements for conformance with the Building Code only. Prorating of Mechanical, Electrical, Storage and Accessory Areas for Lease Area Calculations are the responsibility of the Owner and Leasing Agent. Any other use of these numbers shall be checked and verified with actual construction by the professional responsible for preparing their reports.
- Contractor shall construct this project in accordance with the State-Developed-Base Single State Construction Code Act State of Michigan - Act 30 of 1972, Utilization of Public Facilities by Physically Limited Act 1 State of Michigan Act of 1969 and the Americans with Disabilities Act 2010.
 - Comply with State of Michigan Building Code 2021 Incorporating the International Building Code 2021 with amendments & ICC/ANSI A117.1-2017 effective April 9, 2025.
 - Comply with State of Michigan Energy Code 2021 - Michigan Uniform Energy Code Rules, Part 10A, based ASHRAE energy standard for buildings except low-rise residential buildings ANSI/ASHRAE/IESNA standard 90.1-2019 including appendices A, B, C, E, F, G, H, and I, with any amendments noted, adopted as effective April 22, 2025.
 - Comply with State of Michigan Mechanical Code 2021, based on IMC 2021 adopted and effective March 12, 2024
 - Comply with State of Michigan Plumbing Code 2021 based on IPC 2021 adopted and effective March 12, 2024
 - Comply with Michigan Electrical Rules, Part 8 based on NEC 2023 adopted as amended and effective March 12, 2024.
- UNIFORM TRAFFIC CODE**
 State of Michigan - Act 62 of 1956 (EXCERPT)
 (5) Notwithstanding the requirements of the uniform traffic code, a sign designating a parking space for persons with disabilities shall be 12 inches by 18 inches or larger, and shall be either blue or white and at a minimum contain the international handicapped symbol in contrasting colors of either blue or white in the center of the sign.
- Parking spaces and access aisles shall have surface slopes not steeper than 1:48. Access aisles shall be at the same level as the parking space they serve.
- Entry walks, sidewalks, paths, etc. shall have a slope no greater than 1:20 in direction of travel, and cross slope of no greater than 1:48.
- Entry area immediately outside doorways shall have a slope no greater than 1:20 in direction of travel, and cross slope of no greater than 1:48 in any direction and shall extend a minimum of 5 feet out from doorway and 2 feet minimum beyond the strike jamb.
- Drawing Notes and Project Specifications may be presented in any or all of the four following formats:
Descriptive: describes in detail the material to be used and the workmanship required to fabricate, erect and install the materials.
Performance: describes the general expectations of the final performance and result of that part of the project.
Reference: describes what reference standards are to be followed for a material, test method or installation procedure.
Proprietary: describes exactly what Manufacturer, Model, Catalog number and options are to be used.
 Contractor shall understand the difference between these formats and provide the proper results for each.
- The following definitions apply generally to the work.
 - Provide:** Furnish and install, complete and ready for intended use. All notes shall be considered as Provide unless specifically noted otherwise.
 - Furnish:** Supply and deliver to project site, ready for unloading, unloading, assembly, installation, and similar subsequent requirements.
 - Install:** Operations at project site, including loading, unloading, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing and protecting, cleaning and similar requirements.
 - Connect:** Provide the necessary materials to connect items furnished and assembled on site.
 - Prepare:** Prepare the necessary supports, rough opening, utility rough-in, base of sub-base, etc., for items to be installed by others.
 - Indicated:** Shown on drawings by notes, graphics or schedule, or written into other portions of contract documents. Terms such as "shown," "noted," "schedule," and "specified" have the same meaning as "indicated," and are used to assist the reader in locating particular information.
 - Reference:** Reference to Contractor and/or Construction Manager that may be included in notes with this set of drawings shall mean either the Contractor, or the Owner if there is not a General Contractor for the Project.
- All Contractors (General, Sub Contractors, Vendors and Suppliers) shall
 - Provide all miscellaneous labor, equipment, parts and accessories necessary to install complete and fully functional building systems, whether such miscellaneous labor, equipment, part or accessory is specifically described herein or not. At the completion of the work, the building shall be fully functional and useable by the Owner.
 - Visit the site prior to executing a contract for this project to examine the existing conditions. No additional payment will be approved by the owner for conditions that the Contractor could have identified through the pre-contract site visit.
 - Review all documents and shall notify the architect in writing of any discrepancies or inadequacies prior to starting work.
 - Review and verify all dimensions and notify Architect in writing of any discrepancies prior to Start of Work.
 - Review and verify that documents are coordinated.
 - It shall be satisfied that the documents indicate and provide for their work to be constructed, finished and functional. Commencement of work indicates acceptance of prior trades work. Completion of work shall provide that subsequent trades can complete their work.
 - Provide the highest quality of work and the greatest quantity of materials required for a complete project conforming to all noted codes, whether or not such materials required for such conformance are indicated in these plans.
 - Commencement of work shall indicate the Contractor's acceptance of these documents as being correct, complete and valid. Requests for changes based on claims of incomplete documents after Execution of Contract will not be accepted.
 - Any omissions or conflicts between the various elements of the contract documents shall be brought to the attention of the Architect before proceeding with any work so involved. In the event of conflicts within the contract documents, the Architect shall render interpretation.
 - Do not scale these drawings. Use dimensions indicated on the drawings and those verified at the project site. The owner's representative shall clarify any dimensions or areas that are unclear on the drawings. Scaling of these drawings or other methods to determine dimensions will not be acceptable. Bidders are responsible to field verify dimension to determine material quantities and sizes in preparing proposals. Discrepancies between actual conditions and the schematic information shown on drawings will not be cause for a change in the contract price or schedule.
- Contractor shall:
 - Maintain the construction site in a neat and clean manner, he shall legally dispose of all unused material from the site. At the end of the project the contractor shall clean all surfaces and leave the project in a clean state.
 - Provide access or access panels to all valves, dampers and other necessary adjustment items.
 - Where Demolition and/or removal of equipment exposes unfinished surfaces, openings, holes, missing trim, etc. Patch and repair surfaces to match adjacent surfaces so that demolition and removals can not be detected.
 - Coordinate with the mechanical and electrical contractors the location of ducts, piping, boxes, chases, conduits, etc.
 - Provide adequate clearances for servicing of equipment per code.
 - Provide new material patch, repair and refinish surfaces and supporting structure as required to provide new finished project where demolition exposes or damages damaged materials with materials equal or better quality of the material that was damaged.
- Contractor shall:
 - Each contractor be responsible for their own training, certification, licensing and permits and responsible for learning and complying with codes, standards or knowledge specific to their trade.
 - Provide and pay for temporary utilities such as water, electric, heat, etc. As necessary to complete project.
 - Include and pay for the cost of all labor and materials and all state sales and use taxes to complete the project in accordance with the documents.
 - Include, apply and pay the cost of all building permits and/or fees necessary to complete the construction of this project, its proper display and requests for inspections from the local authorities.
 - Furnish insurance in accordance with general conditions and as required by all state and local laws.
- CONSTRUCTION METHODS:**
 The Architect is not responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions since these are solely the Contractor's responsibility.
- CONSTRUCTION SAFETY:**
 These documents do not include the necessary components for construction safety. Safety, care of adjacent properties during construction, and compliance with local regulations regarding safety is, and shall be, the contractor's responsibility.
- CONSTRUCTION ADMINISTRATION:**
 The Architect's Basic Services do not include Construction Phase services. The Owner shall be responsible for interpreting the Contract Documents, reviewing submittals, certifying payments to the Contractor, and observing the Contractor's Work. The Owner assumes responsibility for discovering, correcting or mitigating errors, inconsistencies or omissions. The Owner may request the Architect in writing to provide specific Construction Phase services.
- OWNER-AUTHORIZED CHANGES:**
 If the Owner authorizes deviations, recorded or unrecorded, from the documents prepared by the Architect and Consultants without written agreement of the Architect, the Owner shall indemnify and hold harmless the Architect, Architect's consultants and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting in whole or in part from such deviations, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder.
- SPECIAL INSPECTOR AND RESPONSIBILITIES:**
 - Provide for Special Inspections on Steel, Steel Erection, Concrete, Masonry, Wood, Soils.
 - \$1103.3 Special Inspections - For Special Inspections - see Chapter 17.
 - \$1705.3 Concrete construction, Special inspections and tests of concrete construction shall be performed in accordance with this section and Table 1705.3.
 - \$1705.3 Concrete construction.
Exception: Special inspections and tests shall not be required for:
 1. Isolated spread concrete footings of buildings three stories or less above grade plane that are fully supported on earth or rock.
 - \$1705.3 Concrete construction.
Exception: Special inspections and tests shall not be required for:
 3. Nonstructural concrete slabs supported directly on the ground, including prestressed slabs on grade, where the effective prestress in the concrete is less than 150 psi (1.03 MPa).
 - \$1705.3 Concrete construction.
Exception: Special inspections and tests shall not be required for:
 4. Concrete foundation walls constructed in accordance with Table 1807.1.6.2.
 - \$1705.3.1 Welding of reinforcing bars Special inspections of welding and qualifications of special inspectors for reinforcing bars shall be in accordance with this section and Table 1705.6. The approved geotechnical report and the construction documents prepared by the registered design professionals shall be used to determine compliance. During fill placement, the special inspector shall verify that proper materials and procedures are used in accordance with the provisions of the approved geotechnical report.
 - \$1705.5.2 Metal-plate-connected wood trusses spanning 60 feet or greater. Where a truss clear span is 60 feet (19 288 mm) or greater, the special inspector shall verify that the temporary installation restraining and the permanent individual truss member restraining/bracing are installed in accordance with the approved truss submittal package.
 - \$1705.6 Soils. Special inspections and tests of existing site soil conditions, fill placement and load-bearing requirements shall be performed in accordance with this section and Table 1705.6. The approved geotechnical report and the construction documents prepared by the registered design professionals shall be used to determine compliance. During fill placement, the special inspector shall verify that proper materials and procedures are used in accordance with the provisions of the approved geotechnical report.
 - The special inspector shall be a qualified person who shall demonstrate competence, to the satisfaction of the building official, for inspection of the particular type of construction or operation requiring special construction.
 I. The special inspector shall observe the work assigned for conformance with the approved design drawings and specifications.
 m. The special inspector shall furnish inspection reports to the building official, the engineer or Architect of record, and other designated persons. All discrepancies shall be brought to the immediate attention of the contractor for correction then, if uncorrected, to the proper design authority and to the building official.
 n. The special inspector shall submit a final signed report to the Architect and Building Official stating whether the work requiring special inspection was, to the best of the inspectors knowledge, in conformance with the approved plans and specifications and the applicable workmanship provisions of this code.

GRATIOT-ISABELLA RESD

Forest Hills Nature Center

New Nature Center

11297 N Rich Rd
 Seville Township, Gratiot County
 Alma, Michigan 48801



DRAWING INDEX

G 0.1	TITLE SHEET, CODE DATA, PROJECT INFORMATION, DRAWING INDEX, & SITE PLAN
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A 1.2	FLOOR PLAN - PHASE 2, PLAN NOTES & DETAILS
A 1.3	ROOF PLAN - PHASE 1, ROOF PLAN NOTES & DETAILS
A 1.4	ROOF PLAN - PHASE 2, ROOF PLAN NOTES & DETAILS
A 1.11	REFLECTED CEILING FLOOR PLAN - PHASE 1, REFLECTED CEILING PLAN NOTES & DETAILS
A 1.12	REFLECTED CEILING FLOOR PLAN - PHASE 2, REFLECTED CEILING PLAN NOTES & DETAILS
A 2.1	EXTERIOR ELEVATIONS - PHASE 1
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A 4.4	ROOF FRAMING PLAN - PHASE 2, ROOF FRAMING PLAN NOTES & DETAILS
S 5.1	FRAMING DETAILS

The Drawings listed below have not been prepared by Roger L. Donaldson, AIA P.L.C. and therefore have not been approved or reviewed by Roger L. Donaldson, AIA P.L.C. for any purpose other than general coordination with the drawings listed above. Roger L. Donaldson, AIA P.L.C. assumes no responsibility for the design or accuracy contained herein.

SITE PLAN & CIVIL ENGINEERING DRAWINGS PREPARED BY:

KEYS Inc.	DESCRIPTION
1	SITE AND UTILITY PH. 1 PLAN
2	EXISTING CONDITIONS PLAN
3	GRADING PLAN PH. 1 PLAN
4	SOIL EROSION CONTROL PLAN
5	LANDSCAPE PLAN
6	SITE AND UTILITY PH. 2 PLAN
7	GRADING PH. 2 PLAN
8	LANDSCAPE PHASE 2 PLAN
9	DETAILS

MECHANICAL & ELECTRICAL DRAWINGS PREPARED BY:

MATRIX CONSULTING ENGINEERS, INC.

CIVIL	DESCRIPTION
C-400	SITE PLAN - SANITARY AND TOWER DRAIN
C-800	CIVIL DETAILS
MECHANICAL	DESCRIPTION
M-100	MECHANICAL - SYMBOLS, NOTES, AND ABBREVIATIONS
M-400	FLOOR PLAN - MECHANICAL NEW - PHASE 1
M-600	BELOW FLOOR PLAN - PIPING NEW - PHASE 1
M-601	FLOOR PLAN - PIPING NEW - PHASE 1
M-700	FLOOR PLAN - MECHANICAL & PIPING NEW - PHASE 2
M-701	MECHANICAL ENLARGEMENT
M-702	MECHANICAL ENLARGEMENT
M-800	MECHANICAL HYDRONIC DETAIL
M-801	MECHANICAL DETAILS
M-802	MECHANICAL DETAILS
M-803	MECHANICAL CONTROLS
M-900	MECHANICAL SCHEDULES
M-901	MECHANICAL SCHEDULES
PLUMBING	DESCRIPTION
P-100	PLUMBING - SYMBOLS, NOTES, AND ABBREVIATIONS
P-400	BELOW FLOOR PLAN - PLUMBING NEW - PHASE 1
P-401	FLOOR PLAN - PLUMBING NEW - PHASE 1
P-402	FLOOR PLAN - PLUMBING NEW - PHASE 2
P-700	PLUMBING ENLARGEMENTS
P-701	PLUMBING ENLARGEMENTS
P-900	PLUMBING SCHEDULES
ELECTRICAL	DESCRIPTION
E-100	ELECTRICAL - SYMBOLS, NOTES, AND ABBREVIATIONS
E-400	FLOOR PLAN - LIGHTING NEW
E-401	ELECTRICAL EMERGENCY PHOTOMETRICS
E-402	ELECTRICAL - COMCHECK REPORTS
E-500	FLOOR PLAN - POWER NEW
E-600	ELECTRICAL RISER DIAGRAM
E-700	ENLARGED FLOOR PLAN - MECH. ROOM - POWER NEW
E-800	ELECTRICAL DETAILS
E-900	ELECTRICAL PANEL SCHEDULES

DEFERRED SUBMITTALS
 Provide Truss Design including all necessary Permanent Bracing design, installation procedures and instructions for Trusses prepared by a Registered Design Professional licensed in the State of Michigan in accordance with Michigan Building Code 2015, Section 2303.4.1.

DESIGN PROFESSIONALS:

Architect: Roger L. Donaldson, AIA P.L.C.
 4787 Tartan Lane
 Holt, Michigan 48842-1935
 (517) 694-0011
 RogerLAD@comcast.net
 Project 24-43

Mechanical & Electrical Engineering: Craig Trerweiler P. E.
MATRIX Consulting Engineers, Inc.
 544 Chertsey Drive
 Lansing, MI 48917
 (517) 487-2511 Phone
 (517) 487-2544 Fax
 Project #250349.00

Surveyor & Civil Engineering: KEBS - Kyes Engineering Bryan Land Surveys
 2118 Haslett Road
 Haslett, Michigan 48840
 (517) 339-1014 Phone
 (517) 339-8047 Fax
 Job # E-104659

ROGER L. DONALDSON, AIA P.L.C.
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 4787 Tartan Lane
 Holt, Michigan 48842-1935
 (517) 694-0011
 RogerLAD@comcast.net

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Forest Hills Nature Center
New Nature Center
 Seville Township, Gratiot County
 Alma, Michigan 48801
PROJECT #24-43

CD	REV	DATE	DESCRIPTION
	01	04/29/2024	ISSUANCE

Prep. Date: 04/29/2024

TITLE SHEET, CODE DATA, DRAWING INDEX, SITE PLAN & PROJECT INFORMATION
SHEET TITLE

GO.1
SHEET NUMBER
 FILE NO. 24-43 A001

DATE: 04/29/2024 4:55 PM
 PLOT DATE & TIME: Wednesday, April 29, 2025 4:55 PM
 Plot Scale: 1/16" = 1'-0"
 Drawing File: C:\Projects\Chertsey\24-43\24-43-A001.dwg

GENERAL PLAN NOTES:

- Do not scale these drawings, use dimensions indicated on the drawings and those verified at the project site. Any dimensions or areas that are unclear on the drawings shall be clarified by the Owner's Representative. Scaling of these drawings or other methods to determine dimensions will not be acceptable.
- When references are made to Contractor, that includes Owner self performing construction work.
- Contractors shall review and verify all dimensions and shall notify Architect of any discrepancies.
- Contractor shall maintain Project in a dry condition at all times.
- Contractor shall be responsible for protection and safekeeping of all products stored at the site and within the building.
- Contractor shall coordinate all mechanical, plumbing, electrical and other trade work prior to placing concrete slabs, or gypsum drywall board.
- The contractor shall assume that he may be required to provide the highest quality of work and the greatest quantity of materials required for a complete project conforming to all noted codes, whether or not such materials required for such performance are indicated in these plans.
- Contractor shall properly store materials in accordance with manufacturer's instructions or recommendations. All materials shall be stored in a dry and safe manner. Materials that become wet shall be replaced or properly dried out prior to being used in the Project.
- All floor surfaces shall be slip resistant and securely attached in accordance with the MBO §1003.4. The static coefficient of friction for all floor surfaces shall be as 0.6 minimum.
- Egress doors shall be readily operable from the egress side without the use of a key or special knowledge or effort. (MBC §1010.1.9)
- Door handles, pulls, latches, locks and other operating devices on doors shall not require light grasping, light pinching or twisting of the wrist to operate. (MBC §1010.1.8.1)
- Exterior door concrete slab shall be flush with interior floor elevation with threshold no greater than 1/2" in height. Comply with ICC/ANSI §303.
- Provide address numbers of a size and in a location acceptable to the authority having jurisdiction. (IFC §505)
- Provide a Knox box for fire department access (IFC §506). Locate on buildings per fire marshal and verify with the Architect.
- Provide nonabsorbent finish and backing at Toilet Room Walls and Floor. Provide #4 Base, and Water Resistant Gypsum Drywall on surfaces adjacent to Toilet Closets, Lavatories, Men, Boy Basin and Drinking Fountains. (MBC §1210.2)
- All water faucets shall meet ICC/ANSI §309.4 requirements for operable parts - Operable parts shall be operable with one hand and shall not require light grasping, pinching, or twisting of the rest. The force required to activate operable parts shall be 5 pounds, maximum.
- Install suspended ceiling grid shall conform to generally accepted engineering practice and the requirements of MBC §608 and in accordance with ASTM C635 and ASTM C836-96 "standard practice for installation of metal ceiling suspension systems for acoustical tile and lay-in panels". Grid work shall be supported with a minimum of 1/2" gauge hanger wire to structure above at 4'-0" on center. Each wire.
- Provide raised character and braille exit signs. A sign stating "EXIT" in visual characters, raised characters and braille and complying with ICC A117.1 shall be provided adjacent to each door to an area of refuge, an exterior area for assisted rescue, an exit stairway or ramp, an exit passageway and the exit discharge. (MBC §1010.4)
- Provide Minimum 115 B-2A10B C Fire Extinguishers per 3,000 square feet of area. Maximum Distance of 75' to any Fire Extinguisher and as shown on the drawings. (MBC §905). Review placement with Fire Department/Marshal or Chief prior to installing.
- All wood in contact with earth, concrete, concrete masonry, clay masonry, or exposed to the weather shall be pressure treated to resist decay, level UCB (CCA 0.60) for Posts, UG3B (ACQ or ACZA 0.25) for deck, stringers, beam, framing and other lumber.
- Dimensions are to:
Exterior face of studs in exterior walls.
Face of Stud in new walls.
- In wet areas, use Moisture Resistant Drywall.
- Wall Construction: Owner may use the following wall construction methods as may be required and noted on the drawings.

INTERIOR WALL TYPE

INTERIOR WALL TYPE 0.1
Dimensioned at 7" nominal, 5/8" Gypsum Drywall each side of 2x6 Wood Studs at 2'-0" on center. Fill wall cavity with 3" dense mineral fiber sound attenuation blankets, friction fit. Minimum STC-45. Extend wall to bottom of structure above.

INTERIOR FIRE RATED WALL TYPE

INTERIOR FIRE RATED WALL TYPE 1.1 - 1 Hour Rated:
UL Design # U305
Dimensioned at 7" nominal, 5/8" Gypsum Drywall, Fire code Type "X" each side of 2x6 Wood Studs at 1'-4" on center. Fill wall cavity with 3" dense mineral fiber sound attenuation blankets, friction fit. Minimum STC-45. Extend wall to bottom of structure above.

EXTERIOR WALL TYPES:

EXTERIOR WALL TYPE E-1: (Typical)
Dimensioned at 8" nominal, 5/8" Gypsum Drywall over 4 mil vapor barrier at interior side of 1-1/2" x 5-1/2" Timberstrand Laminated Strand Lumber (LSL) Wood Studs @ 1'-4" on center. Fill wall cavity with 5-1/2" fiberglass thermal insulation bats (R-19 Min.), friction fit. Exterior shall be covered with 1" Continuous Rigid Insulation (R-5 Min.) and 7/16" Minimum exterior structural wood sheathing (ZIP System® R-Sheathing or equal).
Lower 2'-0" portion of wall covered with Stone Veneer and Cap (OR Stone - Splitface Granite Macking). Upper Wall covered with Hardie Board Pre-Finished Composite Siding. See Elevation for Siding profile.

EXTERIOR WALL TYPE E-2: (Main Hall)
Dimensioned at 9" nominal, 5/8" Gypsum Drywall over 4 mil vapor barrier at interior side of 1-1/2" x 7-1/4" Timberstrand Laminated Strand Lumber (LSL) Wood Studs @ 1'-4" on center. Fill wall cavity with 7-1/2" fiberglass thermal insulation bats (R-19 Min.), friction fit. Exterior shall be covered with 1" Continuous Rigid Insulation (R-5 Min.) and 7/16" Minimum exterior structural wood sheathing (ZIP System® R-Sheathing or equal).
Lower 2'-0" portion of wall covered with Stone Veneer and Cap (OR Stone - Splitface Granite Macking). Upper Wall covered with Hardie Board Pre-Finished Composite Siding. See Elevation for Siding profile.

CEILING TYPE F-1: (Mechanical Room F14)

GA File No. RC2602,
FM FC 172, 2-25-72, ITS, 8-4-88
Base layer 5/8" Type X gypsum wallboard applied at right angles to 2 x 10 wood joists 24" o.c. with 1 1/4" Type W or S drywall screws 24" o.c. Face layer 5/8" Type X gypsum wallboard or gypsum veneer base applied at right angles to joists with 1 7/8" Type W or S drywall screws 12" o.c. at joints and intermediate joints and 1 1/2" Type G drywall screws 12" o.c. placed 2" back on either side of end joints. Joints offset 24" from base layer joints. Wood joists supporting 1 1/2" plywood with exterior glue applied at right angles to joists with 8d nails. Appropriate roof covering.
Ceiling provides one hour fire resistance protection for framing, including trusses.

Fire Rated Construction Notes:

- Nails and Screws**
Nails are specified according to ASTM F347, "Standard Terminology of Nails for Use with Wood and Wood-Base Materials" or ASTM C625, "Standard Specification for Nails for the Application of Gypsum Board".
Nails used to attach gypsum board to wood framing should be cement-coated box nails or cement-coated cooler nails unless specified otherwise in the individual designs. Screws meeting ASTM C1002, "Standard Specification for Steel Self-Drilling Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs," or ASTM C954, "Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in thickness" may be substituted for nails, one for one, when the head diameter, length, and spacing equal or exceed the requirements for the specified nails.
- Gypsum Board Joint Treatment (Fire Taping)**
Unless otherwise specified in the individual designs, all gypsum board systems except those with predecorated or metal-covered surfaces have joints taped and joints and fastener heads covered with one coat of joint compound (fire taped). Base layers in multi-layer systems are not required to have joints or fastener heads taped or covered with joint compound.
- Gypsum Board Joint Treatment (all painted surfaces, unless noted otherwise)**
Unless otherwise specified in the individual designs, all gypsum board systems shall be finished to Level 4. All joints and interior angles shall have tape embedded in joint compound and shall be immediately wiped with a joint knife leaving a thin coating of joint compound over all joints and interior angles. Two separate coats of joint compound shall be applied over all flat joints and one separate coat of joint compound shall be applied over interior angles. Fastener heads and accessories shall be covered with three separate coats of joint compound. All joint compound shall be smooth and free of tool marks and ridges. Note: It is recommended that the prepared surface be coated with a drywall primer prior to the application of final finishes. GA-214-10c.

DRAWING LEGEND

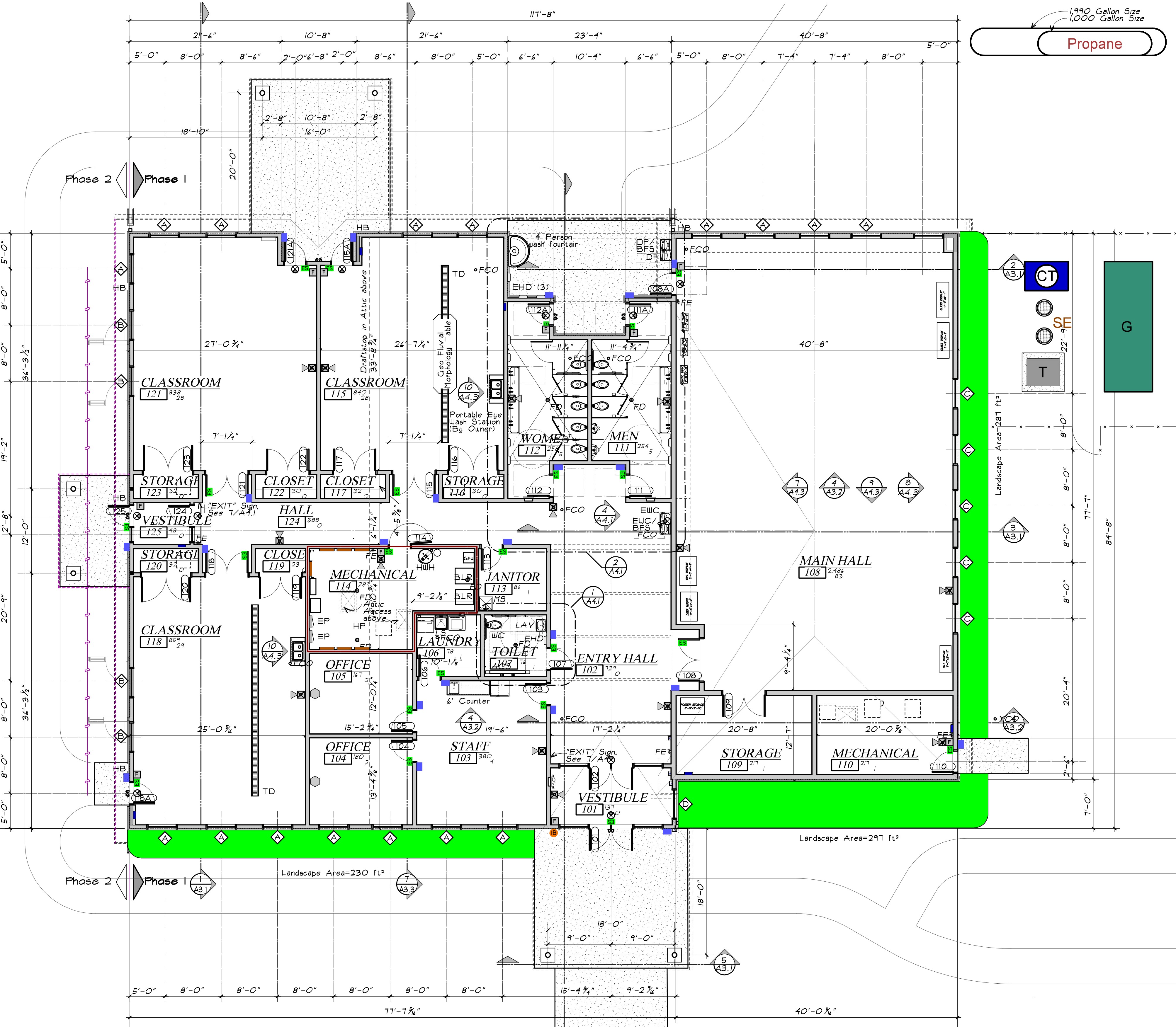
	Detail Number		
	Sheet where Detail is shown		
	Interior Elevation Number		
	Sheet where Interior Elevation is shown		
	Room Name		New Room Name
	Room Area sq.ft.		Room # of Occupants
	Room Number		
	New Door Number		Power Door Actuator
	New Wall		Card Reader
	New Door		Electric Strike
	Required Clearance Area		Intercom & Call Button/Camera
	Window Type		

GENERAL PLAN NOTES: (continued)

- Gypsum Board Joint Treatment Level 5 (where noted)**
All joints and interior angles shall have tape embedded in joint compound and shall be immediately wiped with a joint knife leaving a thin coating of joint compound over all joints and interior angles. Two separate coats of joint compound shall be applied over all flat joints and one separate coat of joint compound shall be applied over interior angles. Fastener heads and accessories shall be covered with three separate coats of joint compound. A thin skim coat of joint compound trowel applied, or a material manufactured especially for this purpose and applied in accordance with manufacturer's recommendations, applied to the entire surface. The surface shall be smooth and free of tool marks and ridges. Note: It is recommended that the prepared surface be coated with a drywall primer prior to the application of finish paint. GA-214-10c.
- Provide Labeling near new duct penetrations on each side of new Fire Rated Walls as indicated below. (MBC 2021 Section 703.7 Marking and identification).
Fire walls, fire barriers, fire partitions, smoke barriers and smoke partitions or any other wall required to have protected openings or penetrations shall be effectively and permanently identified with signs or standing. Such identification shall:
1. Be located in accessible concealed floor, floor-ceiling or attic spaces;
2. Be located within 15 feet (4572 mm) of the end of each wall and at intervals not exceeding 30 feet (9144 mm) measured horizontally along the wall or partition; and 3. Include lettering not less than 3 inches (76 mm) in height with a minimum 3/8 inch (9.5 mm) stroke in a contrasting color incorporating the suggested wording:
"FIRE AND/OR SMOKE BARRIER PROTECT ALL OPENINGS" or other wording.
Exception: Walls in Group R-2 occupancies that do not have a removable decorative ceiling allowing access to the concealed space.
- Provide Fire blocking maximum 10'-0" on center in concealed framing areas (soffits, bulkheads, etc.).
§718.2.1 Fireblocking materials - Fireblocking shall consist of the following materials:
1. Two-inch (51 mm) nominal lumber;
2. Two thicknesses of 1-inch (25 mm) nominal lumber with broken lap joints;
3. One thickness of 0.719-inch (18.3 mm) wood structural panels with joints backed by 0.719-inch (18.3 mm) wood structural panels;
4. One thickness of 0.75-inch (19.1 mm) particleboard with joints backed by 0.75-inch (19 mm) particleboard;
5. One-half-inch (12.7 mm) gypsum board;
6. One-fourth-inch (6.4 mm) cement-based millboard;
7. Batts or blankets of mineral wool, mineral fiber or other approved materials installed in such a manner as to be securely retained in place;
8. Cellulose insulation tested in the form and manner intended for use to demonstrate its ability to remain in place and to retard the spread of fire and hot gases;
9. Mass timber complying with Section 2304.11.
- See Sheet A 4.1 for Enlarged TOILET ROOM PLANS, INTERIOR ELEVATIONS.
- See Sheet A 4.2 for DOOR & FRAME SCHEDULE, DOOR TYPES, AND HARDWARE SCHEDULE.
- See Sheet A 4.2 for ROOM FINISH SCHEDULE.
- Provide all necessary nailers, blocking and grounds as required to support handrails, guardrails, doorstops, wall mounted cabinets, etc. Set work plumb, level and accurately out. (All nailers, blocking and grounds shall be non-combustible or fire-retardant).
- Control joints in gypsum board shall not exceed 30 feet, or as indicated on drawings or by Architect.
- Seal all openings around ducts, pipes, conduit, etc. Which pass through floors, walls, and roofs with an approved material and method.
- Pitch all grades and exterior slabs away from building for drainage.
- Slope floors uniformly 1/2" minimum in ten feet to floor drain.
- Provide vertical control joints in concrete @ 30'-0" on center Maximum unless otherwise noted.
- All slabs on grade shall have construction or control joints not to exceed 25'-0" spacing, unless otherwise noted. Construction joints shall be keyed.
- All interior slabs on grade shall be reinforced with 6X6-W1.4KW1.4 Welded Wire Fabric. Unless otherwise noted.
- Provide 3/4" remolded expansion joint material between floor slab and foundation walls where concrete slab is left exposed.
- Provide 2" Rigid Insulation below all floor slabs with heated floors and snow melt systems.
- Provide Control Joints in Exterior slabs at intervals not to exceed 10' x 10'.
- Provide Control Joints in Floor slabs at intervals not to exceed 20' x 20'.
- Provide Control Joints in Sidewalk slabs at intervals not to exceed 5' x 5'.
- DS = Downspout Location. Provide Downspout, Elbow, Extension Leader and 34" Long Concrete Splash Block at each location. Coordinate Locations during Construction with Owner.
- Ext Sign with Battery Backup.
- Fire Alarm Devices.
- EWC = Electric Water Cooler, Barrier free, comply with Rules for Barrier Free Design, Part 4 of the State of Michigan Building Code 2021. Comply with "Clean Drinking Water Access Act" State of Michigan Act 154 of 2023, be certified to meet NSF/ANSI standard 53 for lead reduction and NSF/ANSI standard 42 for particulate removal. Provide filter that is certified to meet NSF/ANSI standard 53 for lead reduction and NSF/ANSI standard 42 for particulate removal.
- BFS = Bottle Filling Station, Barrier free, comply with Rules for Barrier Free Design, Part 4 of the State of Michigan Building Code 2021. Comply with "Clean Drinking Water Access Act" State of Michigan Act 154 of 2023, be certified to meet NSF/ANSI standard 53 for lead reduction and NSF/ANSI standard 42 for particulate removal. Provide filter that is certified to meet NSF/ANSI standard 53 for lead reduction and NSF/ANSI standard 42 for particulate removal.

ABBREVIATIONS:

- AFF Above Finish Floor
- BFS Bottle Filling Station
- BLR Boiler
- CR Card Reader
- DF Drinking Fountain
- DS Downspout
- EH Electric Hand Dryer
- EP Electrical Panel
- ES Electric Strike
- EWC Electric Water Cooler
- FACP Fire Alarm Control Panel
- FCCO Floor Clean Out
- FD Floor Drain
- FE Fire Extinguisher, Maximum height 48" AFF
- GB Grab Bar (horizontal)
- GFU Glycol Feeder Unit
- HB Hose Bibb
- HP Heat Pump
- HWH Hot Water Heater
- IB Intercom & Call Button/Camera
- KDAT Kin Dried After Treatment
- LAV Lavatory
- LS Laundry Sink
- MBC Michigan Building Code, current edition
- o.c. On Center
- OB Outlet Box
- SC Shower Curtain
- SS Service Sink
- TD Trench Drain
- TTH Toilet Tissue Holder
- UR Urinal
- VB Vertical Grab Bar
- WD Washer / Dryer
- WC Water Closet (Toilet)
- YCO Yard Clean Out



FLOOR PLAN - PHASE 1
Scale: 1/8" = 1'-0"
Proposed Plan = 11,707 ft²
Proposed Design Occupancy = 214

ROGER L. DONALDSON, AIA P.L.C.
ARCHITECT
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Forest Hills Nature Center
New Nature Center
Seville Township, Gratiot County
Alma, Michigan 48801
PROJECT #24-43

CD 01/24/2024 Building and Plan Review
MARK DAYE DESCRIPTION
Pld. Date: 01/29/2024

FLOOR PLAN - PHASE 1, PLAN
NOTES & DETAILS
SHEET TITLE

A1.1
SHEET NUMBER
FILE NO.
24-43 A100

GENERAL PLAN NOTES:

- Do not scale these drawings, use dimensions indicated on the drawings and those verified at the project site. Any dimensions or areas that are unclear on the drawings shall be clarified by the Owner's Representative. Scaling of these drawings or other methods to determine dimensions will not be acceptable.
- When references are made to Contractor, that includes Owner self performing construction work.
- Contractors shall review and verify all dimensions and shall notify Architect of any discrepancies.
- Contractor shall maintain Project in a dry condition at all times.
- Contractor shall be responsible for protection and safekeeping of all products stored at the site and within the building.
- Contractor shall coordinate all mechanical, plumbing, electrical and other trade work prior to placing concrete slabs, or gypsum drywall board.
- The contractor shall assume that he may be required to provide the highest quality of work and the greatest quantity of materials required for a complete project conforming to all noted codes, whether or not such materials required for such performance are indicated in these plans.
- Contractor shall properly store materials in accordance with manufacturer's instructions or recommendations. All materials shall be stored in a dry and safe manner. Materials that become wet shall be replaced or properly dried out prior to being used in the Project.
- All floor surfaces shall be slip resistant and securely attached in accordance with the **MBC §1033.4**. The static coefficient of friction for all floor surfaces shall be as 0.6 minimum.
- Egress doors shall be readily operable from the egress side without the use of a key or special knowledge or effort. (**MBC §1010.1.9**)
- Door handles, pulls, latches, locks and other operating devices on doors shall not require light grasping, light pinching or twisting of the wrist to operate. (**MBC §1010.1.8.1**)
- Exterior door concrete slab shall be flush with interior floor elevation with threshold no greater than 1/2" in height. Comply with ICC/ANSI §303.
- Provide address numbers of a size and in a location acceptable to the authority having jurisdiction. (IFC §505)
- Provide a Knox box for fire department access (IFC §506). Locate on buildings per Fire Marshal and verify with the Architect.
- Provide nonabsorbent finish and backing at Toilet Room Walls and Floor. Provide 4" Base, and Water Resistant Gypsum Drywall on surfaces adjacent to Water Closets, Lavatories, Men Basin and Drinking Fountains. (**MBC §1210.2**)
- All water faucets shall meet ICC/ANSI §309.4 requirements for operable parts - Operable parts shall be operable with one hand and shall not require light grasping, pinching, or twisting of the rest. The force required to activate operable parts shall be 5 pounds maximum.
- Install suspended ceiling grid shall conform to generally accepted engineering practice and the requirements of **MBC §608** and in accordance with **ASTM C635** and **ASTM C836-96** standard practice for installation of metal ceiling suspension systems for acoustical tile and lay-in panels. Grid work shall be supported with a minimum of 1/2" gauge hanger wire to structure above at 4'-0" on center. Each bay.
- Provide raised character and braille exit signs. A sign stating "EXIT" in visual characters, raised characters and braille and complying with ICC A117.1 shall be provided adjacent to each door to an area of refuge, an exterior area for assisted rescue, an exit stairway or ramp, an exit passageway and the exit discharge. (**MBC §1013.4**)
- Provide Minimum (1) 5 lb 2A10B C Fire Extinguishers per 3,000 square feet of area. Maximum Distance of 75' to any Fire Extinguisher and as shown on the drawings. (**MBC §905**). Review planning with Fire Department/Marshal or Chief prior to installing.
- All wood in contact with earth, concrete, concrete masonry, clay masonry, or exposed to the weather shall be pressure treated to resist decay, level UCB (CCA 0.60) for Posts, UG38 (ACQ or ACZA 0.25) for deck, stringers, beam, framing and other lumber or batten.
- Dimensions are to:
 - Exterior face of studs in exterior walls.
 - Face of Stud in new walls.
- In wet areas, use Moisture Resistant Drywall.
- Wall Construction: Owner may use the following wall construction methods as may be required and noted on the drawings.

INTERIOR WALL TYPE

INTERIOR WALL TYPE 0.1
Dimensioned at 7" nominal, 5/8" Gypsum Drywall each side of 2x6 Wood Studs at 2'-0" on center. Fill wall cavity with 3" dense mineral fiber sound attenuation blankets, friction fit. Minimum STC-45. Extend wall to bottom of structure above.

INTERIOR FIRE RATED WALL TYPE

INTERIOR WALL TYPE 1.1 - 1 Hour Rated.
UL Design # U305
Dimensioned at 7" nominal, 5/8" Gypsum Drywall, Fire code Type "X" each side of 2x6 Wood Studs at 1'-4" on center. Fill wall cavity with 3" dense mineral fiber sound attenuation blankets, friction fit. Minimum STC-45. Extend wall to bottom of structure above.

EXTERIOR WALL TYPES:

EXTERIOR WALL TYPE E-1: (Typical)
Dimensioned at 8" nominal, 5/8" Gypsum Drywall over 4 mil vapor barrier at interior side of 1-1/2" x 5-1/2" Timberstrand Laminated Strand Lumber (LSL) Wood Studs @ 1'-4" on center. Fill wall cavity with 5-1/2" fiberglass thermal insulation batts (R-19 Min.), friction fit. Exterior shall be covered with 1" Continuous Rigid Insulation (R-5 Min.) and 7/16" Minimum exterior structural wood sheathing (ZIP System® R-Sheathing or equal).
Lower 2'-0" portion of wall covered with Stone Veneer and Cap (CR Stone - Splitface Granite Mackinaw)
Upper Wall covered with Hardie Board Pre-Finished Composite Siding. See Elevation for Siding profile.

EXTERIOR WALL TYPE E-2: (Main Hall)
Dimensioned at 9" nominal, 5/8" Gypsum Drywall over 4 mil vapor barrier at interior side of 1-1/2" x 7-1/4" Timberstrand Laminated Strand Lumber (LSL) Wood Studs @ 1'-4" on center. Fill wall cavity with 7-1/2" fiberglass thermal insulation batts (R-19 Min.), friction fit. Exterior shall be covered with 1" Continuous Rigid Insulation (R-5 Min.) and 7/16" Minimum exterior structural wood sheathing (ZIP System® R-Sheathing or equal).
Lower 2'-0" portion of wall covered with Stone Veneer and Cap (CR Stone - Splitface Granite Mackinaw)
Upper Wall covered with Hardie Board Pre-Finished Composite Siding. See Elevation for Siding profile.

INTERIOR FIRE RATED CEILING

CEILING TYPE F-1: (Mechanical Room T14)
GA File No. RC2602,
FM FC 172, 2-25-72, ITS, 8-4-98
Base layer 5/8" Type A gypsum wallboard applied at right angles to 2 x 10 wood joists 24" o.c. with 1 1/4" Type W or S drywall screws 24" o.c. Face layer 5/8" Type X gypsum wallboard or gypsum veneer base applied at right angles to joists with 1 7/8" Type W or S drywall screws 12" o.c. at joints and intermediate joints and 1 1/2" Type G drywall screws 12" o.c. placed 2" back on either side of end joints. Joints offset 24" from base layer joints. Wood joists supporting 1/2" plywood with exterior glue applied at right angles to joists with 8d nails. Appropriate roof covering.
Ceiling provides one hour fire resistance protection for framing, including trusses.

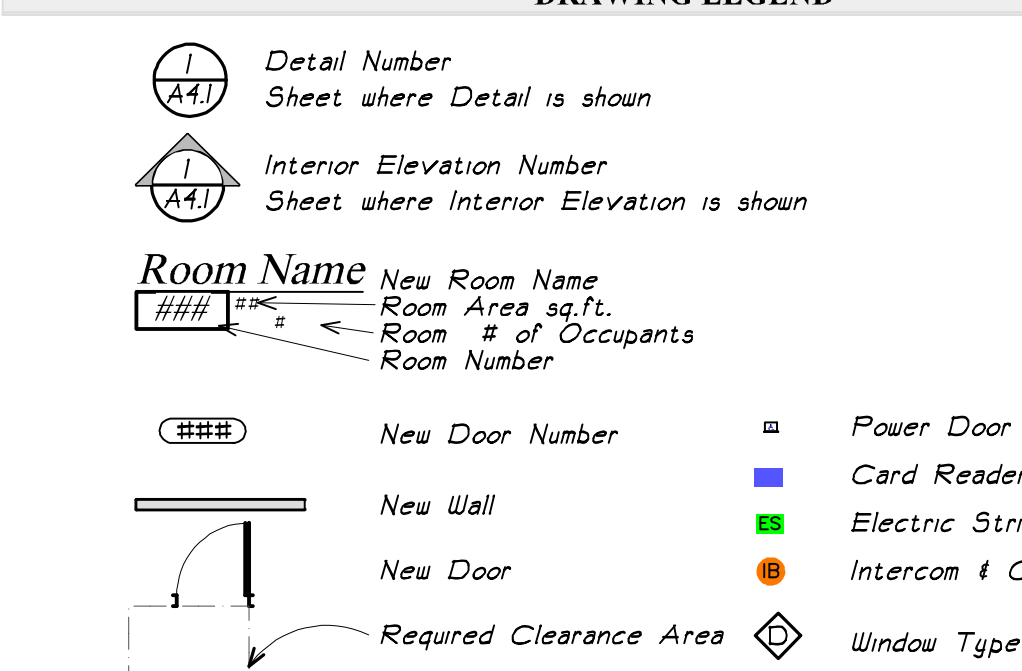
Fire Rated Construction Notes:

Nails and Screws
Nails are specified according to ASTM F347, "Standard Terminology of Nails for Use with Wood and Wood-Base Materials" or ASTM C614, "Standard Specification for Nails for the Application of Gypsum Board." Nails used to attach gypsum board to wood framing should be cement-coated box nails or cement-coated cooler nails unless specified otherwise in the individual designs. Screws meeting ASTM C1002, "Standard Specification for Steel Self-Drilling Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs," or ASTM C954, "Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness" may be substituted for nails, one for one, when the head diameter, length, and spacing equal or exceed the requirements for the specified nails.

Gypsum Board Joint Treatment (Fire Taping)
Unless otherwise specified in the individual designs, all gypsum board systems except those with predecorated or metal-covered surfaces have joints taped and joints and fastener heads covered with one coat of joint compound (fire taped). Base layers in multi-layer systems are not required to have joints or fastener heads taped or covered with joint compound.

Gypsum Board Joint Treatment (all painted surfaces, unless noted otherwise)
Unless otherwise specified in the individual designs, all gypsum board systems shall be finished to Level 4. All joints and interior angles shall have tape embedded in joint compound and shall be immediately wiped with a joint knife leaving a thin coating of joint compound over all joints and interior angles. Two separate coats of joint compound shall be applied over all flat joints and one separate coat of joint compound shall be applied over interior angles. Fastener heads and accessories shall be covered with three separate coats of joint compound. All joint compound shall be smooth and free of tool marks and ridges. Note: It is recommended that the prepared surface be coated with a drywall primer prior to the application of final finishes. GA-214-10c.

DRAWING LEGEND

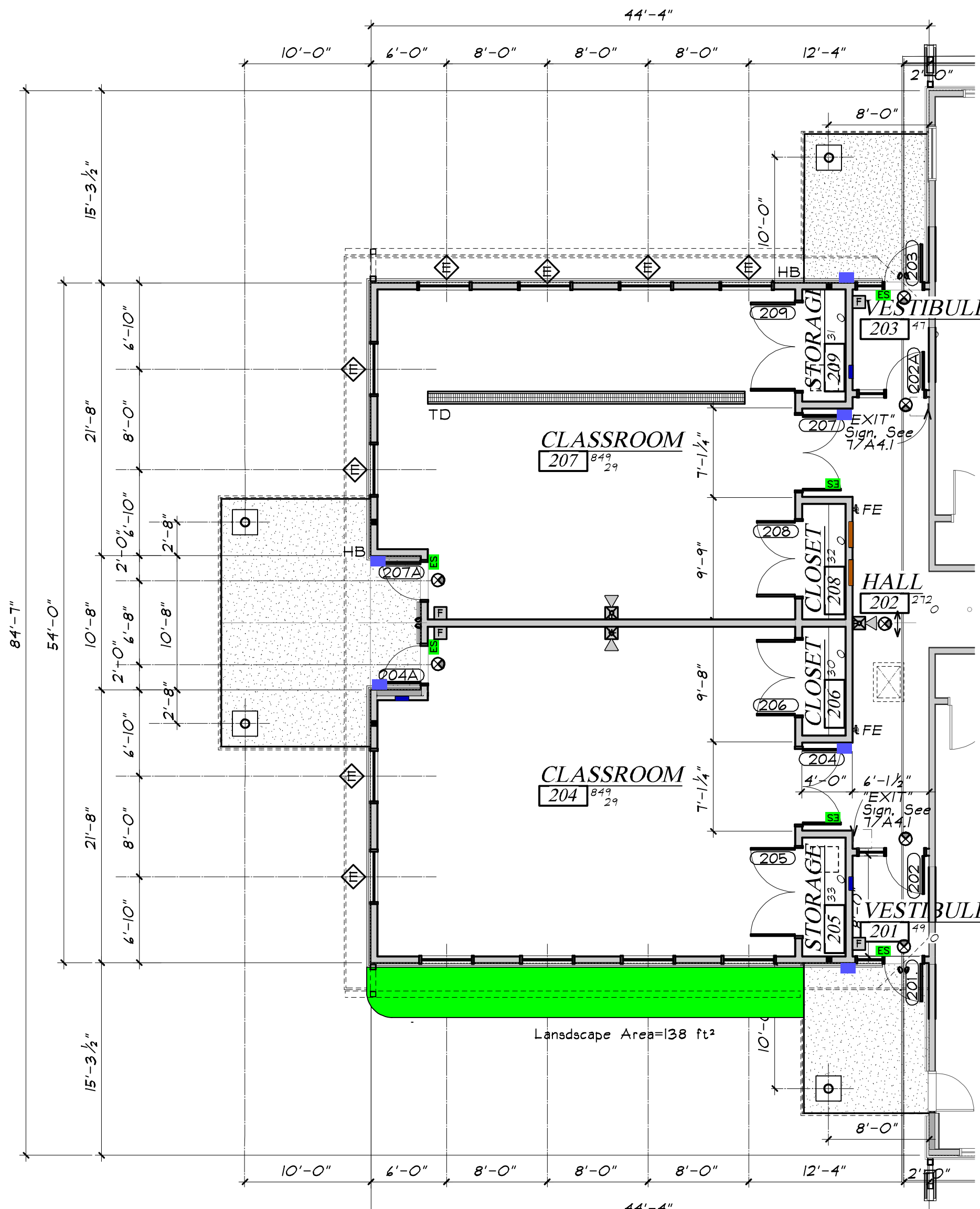
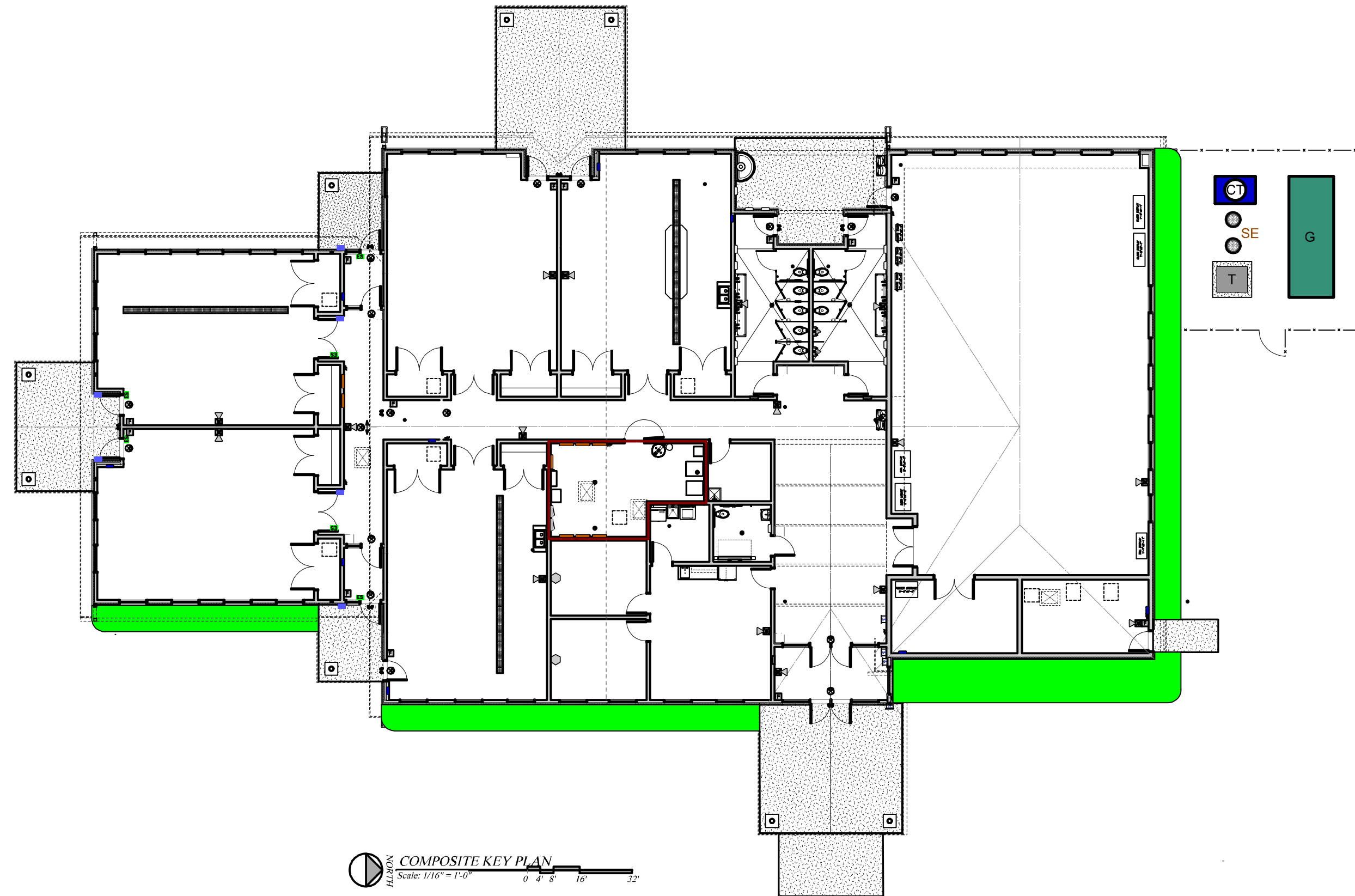


GENERAL PLAN NOTES: (continued)

- Gypsum Board Joint Treatment Level 5 (where noted)**
All joints and interior angles shall have tape embedded in joint compound and shall be immediately wiped with a joint knife leaving a thin coating of joint compound over all joints and interior angles. Two separate coats of joint compound shall be applied over all flat joints and one separate coat of joint compound shall be applied over interior angles. Fastener heads and accessories shall be covered with three separate coats of joint compound. A thin skim coat of joint compound trowel applied, or a material manufactured especially for this purpose and applied in accordance with manufacturer's recommendations, applied to the entire surface. The surface shall be smooth and free of tool marks and ridges. Note: It is recommended that the prepared surface be coated with a drywall primer prior to the application of finish paint. GA-214-10c.
- Provide Labeling near new duct penetrations on each side of new Fire Rated Walls as indicated below.
MBC 2021 Section 703.7 Marking and identification.
Fire walls, fire barriers, fire partitions, smoke barriers and smoke partitions or any other wall required to have protected openings or penetrations shall be effectively and permanently identified with signs or stenciling. Such identification shall:
 1. Be located in accessible concealed floor, floor-ceiling or attic spaces;
 2. Be located within 15 feet (4572 mm) of the end of each wall and at intervals not exceeding 30 feet (9144 mm) measured horizontally along the wall or partition; and 3. Include lettering not less than 3 inches (76 mm) in height with a minimum 3/8 inch (9.5 mm) stroke in a contrasting color incorporating the suggested wording.
FIRE AND/OR SMOKE BARRIER PROTECT ALL OPENINGS or other wording.
 Exception: Walls in Group R-2 occupancies that do not have a removable decorative ceiling allowing access to the concealed space.
- Provide Fire blocking maximum 10'-0" on center in concealed framing areas (soffits, bulkheads, etc.).
§718.2 Fireblocking materials - Fireblocking shall consist of the following materials:
 1. Two-inch (51 mm) nominal lumber.
 2. Two thicknesses of 1-inch (25 mm) nominal lumber with broken lap joints.
 3. One thickness of 0.719-inch (18.3 mm) wood structural panels with joints backed by 0.719-inch (18.3 mm) wood structural panels.
 4. One thickness of 0.75-inch (19.1 mm) particleboard with joints backed by 0.75-inch (19 mm) particleboard.
 5. One-half-inch (12.7 mm) gypsum board.
 6. One-fourth-inch (6.4 mm) cement-based millboard.
 7. Batts or blankets of mineral wool, mineral fiber or other approved materials installed in such a manner as to be securely retained in place.
 8. Cellulose insulation tested in the form and manner intended for use to demonstrate its ability to remain in place and to retard the spread of fire and hot gases.
 9. Mass timber complying with Section 2304.11.
- See Sheet A 4.1 for Enlarged TOILET ROOM PLANS, INTERIOR ELEVATIONS.
- See Sheet A 4.2 for DOOR & FRAME SCHEDULE, DOOR TYPES, and Hardware Schedule.
- See Sheet A 4.2 for ROOM FINISH SCHEDULE.
- Provide all necessary nailers, blocking and grounds as required to support handrails, guardrails, doorstops, wall mounted cabinets, etc. Set work plumb, level and accurately cut. (All nailers, blocking and grounds shall be non-combustible or fire-retardant).
- Control joints in gypsum board shall not exceed 30 feet, or as indicated on drawings or by Architect.
- Seal all openings around ducts, pipes, conduit, etc. Which pass through floors, walls, and roofs with an approved material and method.
- Pitch all grades and exterior slabs away from building for drainage.
- Slope floors uniformly 1/2" minimum in ten feet to floor drain.
- Provide vertical control joints in concrete @ 30'-0" on center Maximum unless otherwise noted.
- All slabs on grade shall have construction or control joints not to exceed 25'-0" spacing, unless otherwise noted. Construction joints shall be keyed.
- All interior slabs on grade shall be reinforced with 6X6-W1.4KW1.4 Welded Wire Fabric. Unless otherwise noted.
- Provide 3/4" remolded expansion joint material between floor slab and foundation walls where concrete slab is left exposed.
- Provide 2" Rigid Insulation below all floor slabs with heated floors and snow melt systems.
- Provide Control Joints in Exterior slabs at intervals not to exceed 10' x 10'.
- Provide Control Joints in Floor slabs at Intervals not to Exceed 20' x 20'.
- Provide Control Joints in Sidewalk slabs at intervals not to exceed 5' x 5'.
- DS = Downspout Location. Provide Downspout, Elbow, Extension Leader and 34" Long Concrete Splash Block at each location. Coordinate Locations during Construction with Owner.
- Ext Sign with Battery Backup.
- Fire Alarm Devices.
- EWC = Electric Water Cooler, Barrier free, comply with Rules for Barrier Free Design, Part 4 of the State of Michigan Building Code 2021. Comply with "Clean Drinking Water Access Act" State of Michigan Act 154 of 2023, be certified to meet NSF/ANSI standard 53 for lead reduction and NSF/ANSI standard 42 for particulate removal. Provide filter that is certified to meet NSF/ANSI standard 53 for lead reduction and NSF/ANSI standard 42 for particulate removal.
- BFS = Bottle Filling Station, Barrier free, comply with Rules for Barrier Free Design, Part 4 of the State of Michigan Building Code 2021. Comply with "Clean Drinking Water Access Act" State of Michigan Act 154 of 2023, be certified to meet NSF/ANSI standard 53 for lead reduction and NSF/ANSI standard 42 for particulate removal. Provide filter that is certified to meet NSF/ANSI standard 53 for lead reduction and NSF/ANSI standard 42 for particulate removal.

ABBREVIATIONS:

AF	Above Finish Floor
BFS	Bottle Filling Station
BLR	Boiler
CR	Card Reader
DF	Drinking Fountain
DS	Downspout
EHD	Electric Hand Dryer
EP	Electrical Panel
ES	Electric Strike
EWC	Electric Water Cooler
FACP	Fire Alarm Control Panel
FCO	Floor Clean Out
FD	Floor Drain
FE	Fire Extinguisher, Maximum height 48" AFF
GB	Grab Bar (horizontal)
GFU	Glycol Feeder Unit
HB	Hose Bibb
HP	Heat Pump
HWH	Hot Water Heater
IB	Intercom & Call Button/Camera
KDAT	Kin Dried After Treatment
LAV	Lavatory
LS	Laundry Sink
MBC	Michigan Building Code, current edition
o.c.	On Center
OB	Ouilet Box
SC	Shower Curtain
SS	Service Sink
TD	Trench Drain
TTH	Toilet Tissue Holder
UR	Urinal
VB	Vertical grab Bar
WD	Washer / Dryer
WC	Water Closet (Toilet)
YCO	Yard Clean Out



FLOOR PLAN - PHASE 2
Scale: 1/8" = 1'-0"

ROGER L. DONALDSON, AIA P.L.C.
ARCHITECT
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email: Roger.A@rldon.com

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Forest Hills Nature Center
New Nature Center
Seville Township, Gratiot County
11297 N Rich Rd
Alma, Michigan 48801
PROJECT #24-43

CD	02/28/2024	Building and Plan Review
CO	03/01/2024	Final Approval
MARK	DATE	DESCRIPTION
	04/29/2024	Plat Dec.

FLOOR PLAN - PHASE 2, PLAN
NOTES & DETAILS
SHEET TITLE

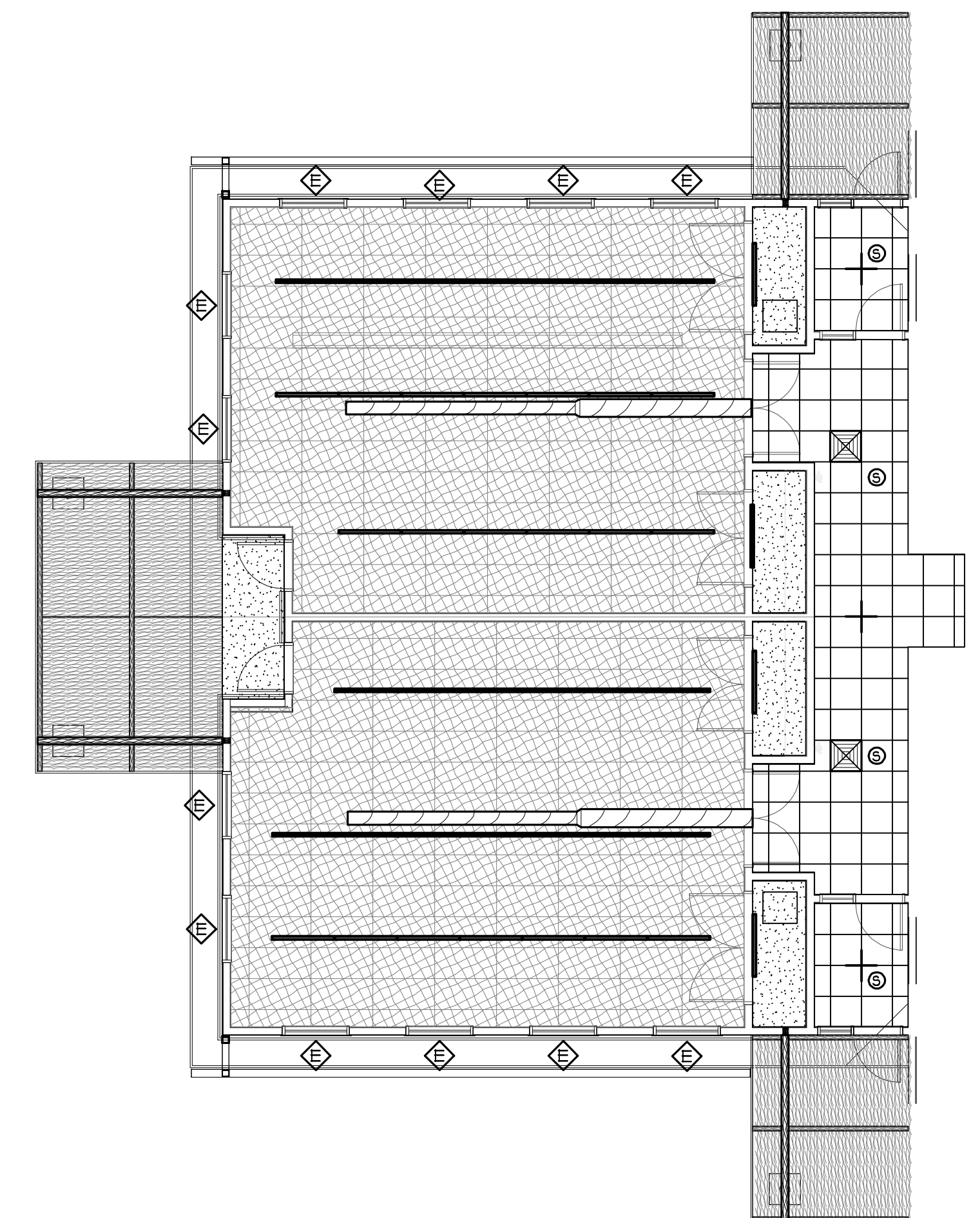
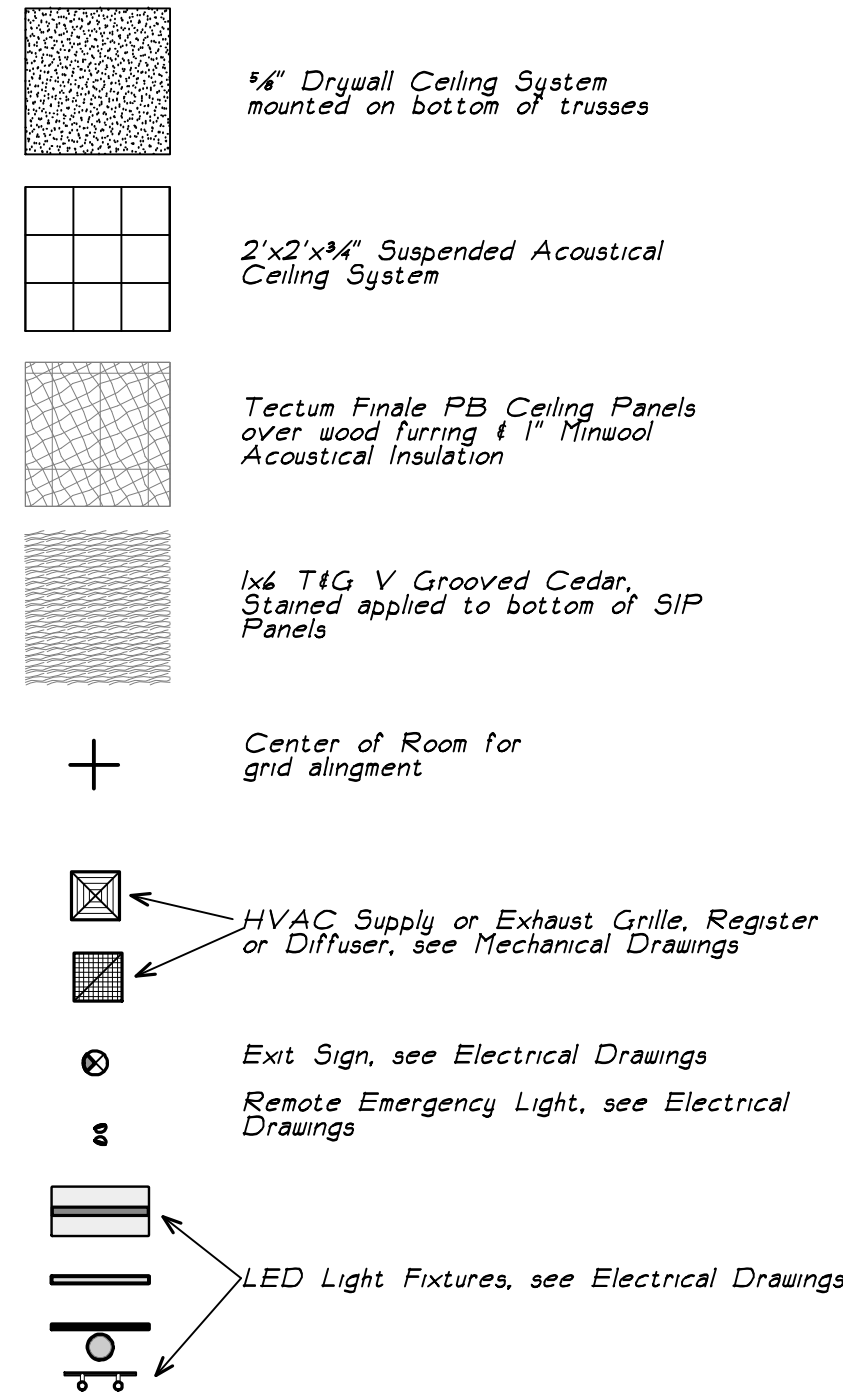
A1.2
SHEET NUMBER
FILE NO. 24-43 A100

Drawing File: E:\Projects\Climate\24-43\24-43-02-01.dwg Plot Date: 04/29/2024 4:55 PM PLOT DATE: TIME: Wednesday, Apr 29, 2024 4:55 PM

GENERAL REFLECTED CEILING NOTES:

1. Do not scale these drawings, use dimensions indicated on the drawings and those verified at the project site. Any dimensions or areas that are unclear on the drawings shall be clarified by the Owner's Representative. Scaling of these drawings or other methods to determine dimensions will not be acceptable.
2. Contractors shall review and verify all dimensions and shall notify Architect of any discrepancies.
3. Acoustical Ceiling Panels, 24" x24" x 3/4" Lay-In Panel, USG, Glacier #7070, White, Shadow Line (SL) Edge Detail, Provide Matching Suspension USG DX/DXL 15-16" Intermediate duty Grid System
4. Acoustical materials complying with the interior finish requirements of MBC 2021 §903 shall be installed in accordance with the manufacturer's recommendations and applicable provisions for applying interior finish.
5. Install suspended ceiling grid shall conform to generally accepted engineering practice and the requirements of MBC 2021 §908 and in accordance with ASTM C635 and ASTM C636-96 "standard practice for installation of metal ceiling suspension systems for acoustical tile and lay-in panels". Grid work shall be supported with a minimum of 1-12 gauge. Hanger wire to structure above at 4'-0" o.c. Each way.
6. See Room Finish Schedule for nominal ceiling heights in each room.
7. Cross mark, where indicated, identifies location of grid centering. Position grid to align with cross or panel off mark as indicated.
8. Relocate mechanical grilles, registers and diffusers in middle of grid to provide proper air distribution with new wall configuration.
9. Locate mechanical grilles, registers and diffusers in middle of grid as indicated refer to mechanical drawings for types and quantities. Verify layout with Architect prior to proceeding with work.
10. Locate light fixtures in grid as indicated. Position recessed circular light fixtures in center of grid or center of room as indicated. Refer to electrical drawings for types and quantities. Verify layout with Architect prior to proceeding with work.
11. Locate miscellaneous electrical systems (speakers, smoke detectors, etc) at center of 2x2 ceiling panels.

REFLECTED CEILING LEGEND



FLOOR PLAN - PHASE 2 - REFLECTED CEILING
 Scale: 1/8" = 1'-0"
 0 2' 4' 8' 16'

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**Forest Hills Nature Center
 New Nature Center**
 Seville Township, Gratiot County
 11297 N Rich Rd
 Alma, Michigan 48801
PROJECT #24-43

CD	04/29/2024	Building and Plan Review
DATE	04/29/2024	DESCRIPTION
DATE	04/29/2024	DESCRIPTION

**REFLECTED CEILING FLOOR PLAN -
 PHASE 2, REFLECTED CEILING PLAN
 NOTES & DETAILS**
SHEET TITLE

A1.12
SHEET NUMBER
 FILE NO.
 24-43 A100

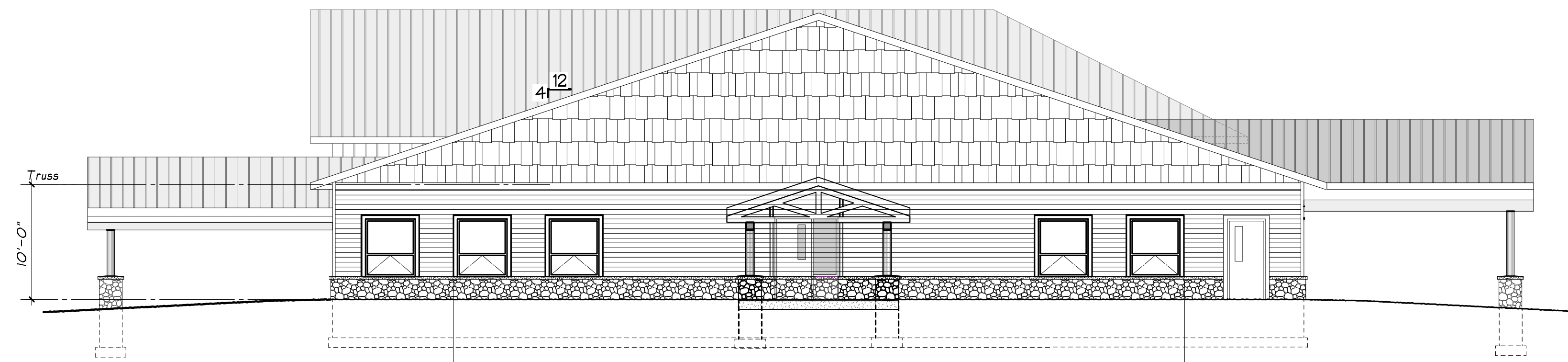
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 Plot Size: 11.0" x 17.0"



EAST ELEVATION - PHASE 1

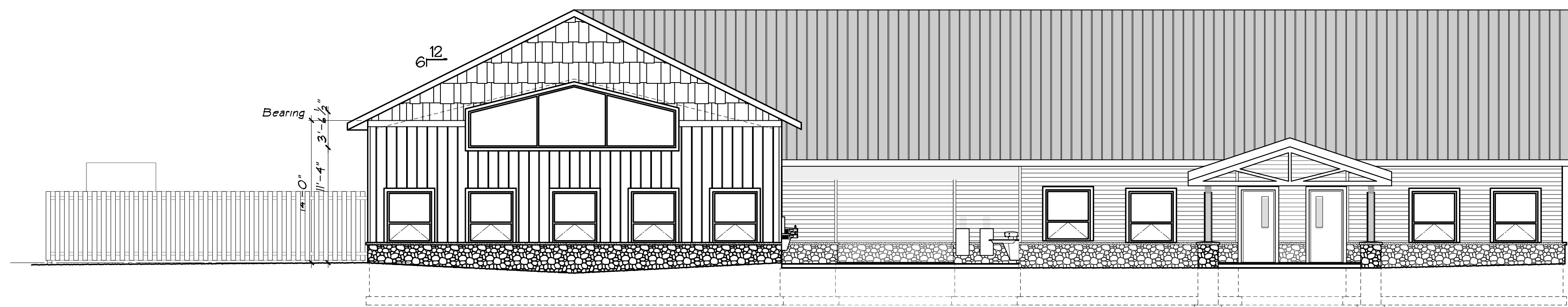
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Note: Glazing to be bird-friendly glass using fritted glass.



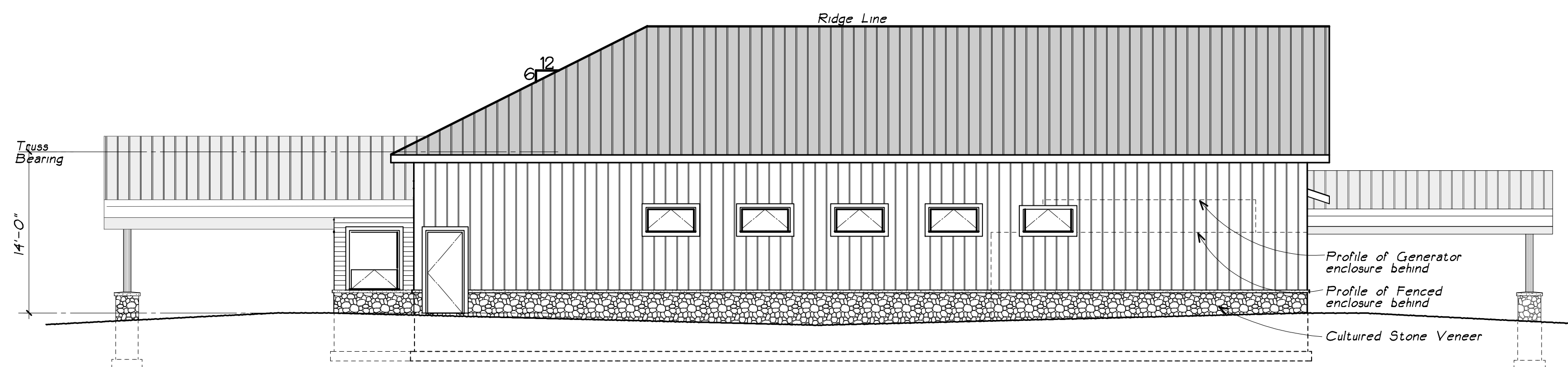
SOUTH ELEVATION - PHASE 1

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



WEST ELEVATION - PHASE 1

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



NORTH ELEVATION

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

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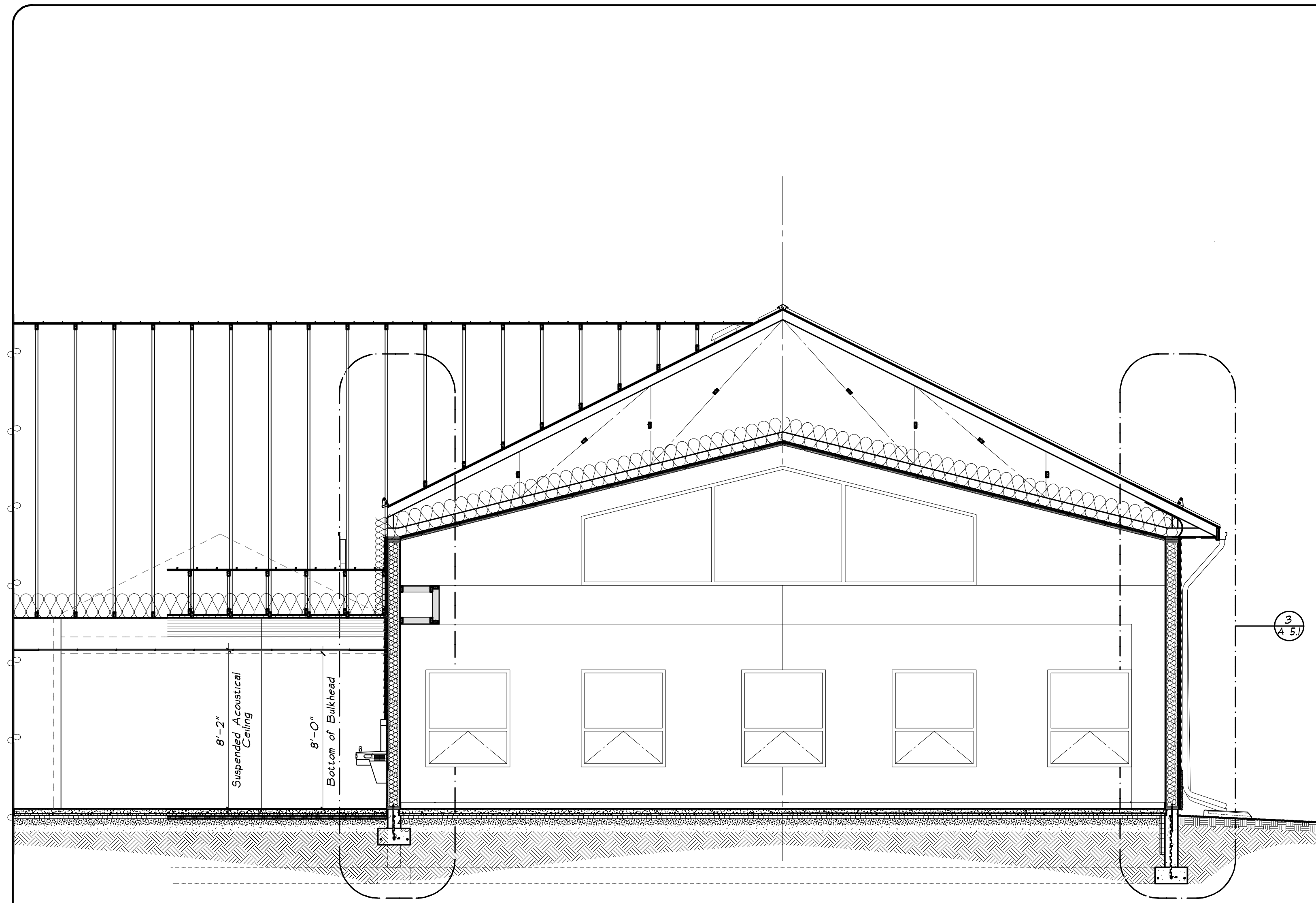
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 PROJECT #24-43

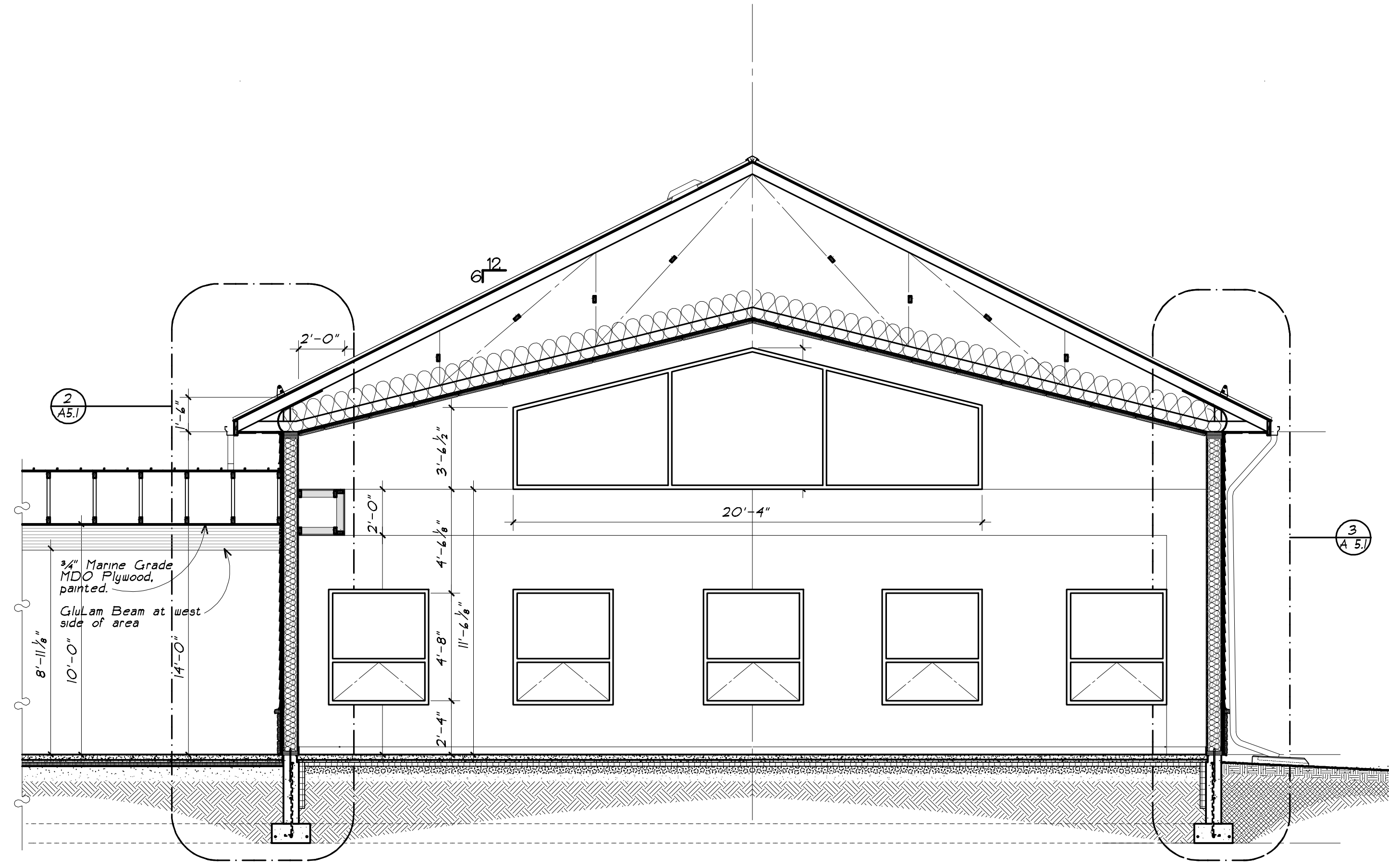
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CD	04/29/2024	Issue	Per: RLD
MARK	DATE	DESCRIPTION	PLT. DWR.

EXTERIOR ELEVATIONS - PHASE 1
 SHEET TITLE

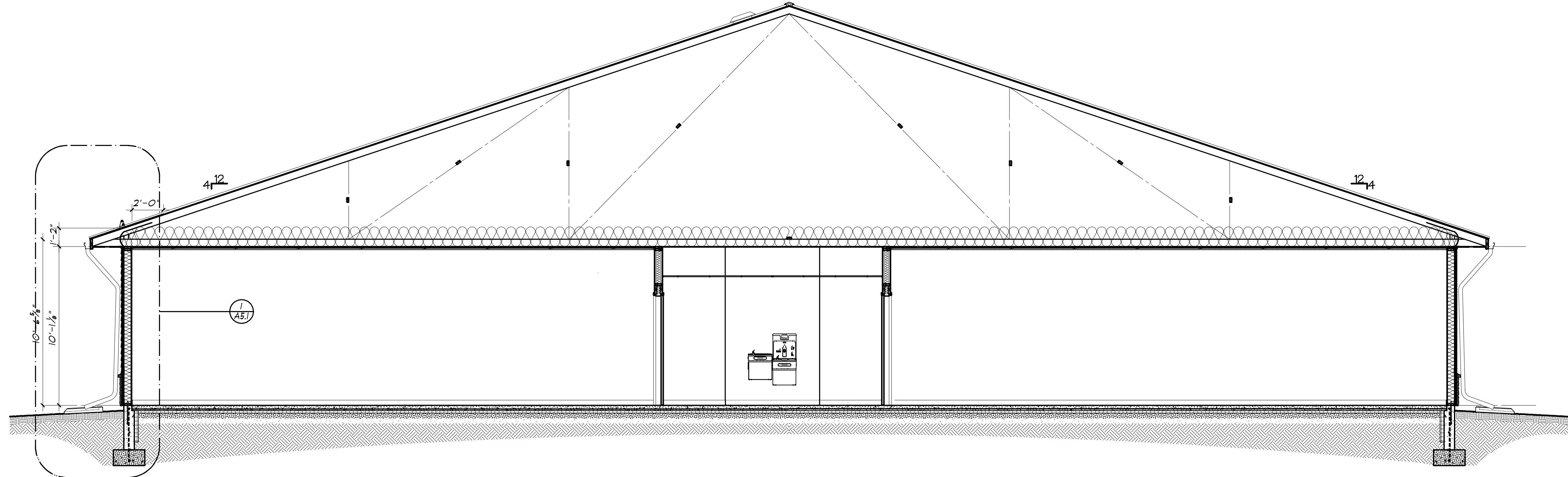
A2.1
 SHEET NUMBER
 FILE NO.
 24-43 A200



3
A3.1
BUILDING SECTION
1/4" = 1'-0"
0 1' 2' 4' 8'



2
A3.1
BUILDING SECTION
1/4" = 1'-0"
0 1' 2' 4' 8'



1
A3.1
BUILDING SECTION
1/4" = 1'-0"
0 1' 2' 4' 8'

Plot Date: 04/29/2024
 Plot Time: 4:57 PM
 Drawing File: D:\Projects\Cherry\24-43\24-43-A3.1.dwg
 Plot Scale: 1/8" = 1'-0"
 Plot Date: 04/29/2024
 Plot Time: 4:57 PM

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PROJECT #24-43

CD	DATE	DESCRIPTION
1	04/29/2024	Building and Plot Review
2	04/29/2024	Final Design
3	04/29/2024	Final Design

MARK DATE DESCRIPTION
 Plot Date: 04/29/2024

BUILDING SECTIONS
SHEET TITLE

A3.1
SHEET NUMBER
 FILE NO.
 24-43 A200

