Agenda
Historic District Commission

City of Kalamazoo

Tuesday, April 21, 2026 5:00 PM

City Commission Chambers at City Hall – 241 West South Street

A. CALL TO ORDER/ROLL CALL

1. 1. Kristi Breisach
   2. Katie Boertman
   3. James Johnson
   4. Dan Kastner - Chair
   5. Nelson Nave
   6. Dana Underwood - Vice-Chair

B. ADOPTION OF FORMAL AGENDA

C. APPROVAL OF MINUTES

1. Approval of the minutes from the Historic District Commission meeting on 17 March 2026.

D. PUBLIC COMMENTS

E. APPLICATION REVIEWS

1. 703 S Park - Alteration (removal of existing deck, construction of new deck) PHDC26-003
   Year Built: 1900
   Style: Colonial Revival
   Historic District: South Street - Vine Area

2. 471 W South ST - Alteration (Construction of new rear barrier free ramp, installation of one new door and window) PHDC26-004
   Year Built: 1923
   Style: Medeterranian
   Historic District: Single Resource

3. 111 Portage - Alteration (Installation of 2 signs) PHDC26-005
   Year Built: 1855
   Style: Italianate

Historic District: Haymarket

4. 830 W Vine - Alteration (Replacement of basement egress window) PHDA26-005
Year Built: 1875
Style: Italianate
Historic District: South Street - Vine Area

F. Action Item

1. Reappointment of Breisach and Johnson

G. COORDINATOR'S REPORT

1. Coordinator's Report

H. ADJOURNMENT

DISCLAIMER

Chapter 16, Section 22 of the City of Kalamazoo Code of Ordinance states:

Historical preservation is a public purpose. To serve that purpose, the Historic District Commission is hereby charged with the following responsibilities:

a) The Kalamazoo Historic District Commission is empowered to regulate Work on the exterior of historic resources and non-historic resources in historic districts in the City of Kalamazoo and shall otherwise have all powers invested in Historic District Commissions pursuant to the Local Historic Districts Act, MCLA § 399.201 et seq. 1970 PA 169, as Amended 1992.
b) To regulate Work on resources which, by City ordinance, are historic or non-historic resources located within local historic districts, including but not limited to the moving of any structure into or out of, or the building of any structure in, an historic district.

The following documents are available in the Community Planning and Economic Development Department located at 245 North Rose Street. These documents will help assist property owners in understanding the responsibilities of owning property in a local historic district: MCLA § 399.201 et seq. 1970 PA 169 as Amended 1992 (Michigan Local Historic District Act); Code of Ordinances City of Kalamazoo, Michigan (Chapter 16 - Historic District); Secretary of the Interiors Standards for Rehabilitation & Guidelines for Rehabilitating Historic Buildings, 1990; Standards and Guidelines for Kalamazoo Historic Districts, and maps of Kalamazoo Local Historic Districts. These documents and maps are also available on the city of Kalamazoo website at www.kalamazoocity.org/historicpreservation.

GUIDELINES FOR PUBLIC PARTICIPATION AT HDC MEETINGS

The Historic District Commission recognizes that citizens who make the effort to attend a Commission meeting often feel passionately about an issue. The following guidelines are not meant to discourage individual expression; rather, they exist to facilitate the orderly conduct of business and to ensure that all citizens who wish to address the Historic District Commission are able to do so in an atmosphere of civility and respect.

- Out of respect for business being conducted during the meeting, turn off all cell phones and pagers prior to the meeting.
- Citizens have opportunities to address the Historic District Commission at the following times during a meeting:
  - Address Non-agenda items at the beginning of the meeting. If you wish to speak about a specific review, please wait until that review comes to the commission.
  - Consideration of Regular Agenda items. Citizens are permitted to speak to the Commission on project reviews after the applicant has made their presentation and prior to the Historic District Commission discussion. The Chair will call for comments from the public.

A Note on Quorum and Historic District Commission Decisions

City of Kalamazoo Code of Ordinance – Chapter 16 – Historic District Commission – section 19 states: "A majority of the members of the Commission shall constitute a quorum. A majority of the appointed members is required to take action on all matters not of an administrative nature, but a majority of a quorum may deal with administrative matters." All applicants should be aware that the minimum of four of the commissioners must vote for a motion for a decision to be made in all actions. Applicants may choose to postpone their review to the next regularly scheduled meeting of the commission before the commission begins their deliberations if fewer than seven commissioners are present. The postponement form is available from the coordinator and must be filled out and signed before the applicant leaves the meeting.

KALAMAZOO HISTORIC DISTRICT COMMISSION
Agenda – Tuesday, March 27th, 2026
5:00 pm

241 W. South St. Kalamazoo, MI 49007

I. **Call to Order:** Mr. Kastner called the meeting to order at 5:00 PM

II. **Roll Call & Approval of Absences:**

Katie Boertman- Present
Dana Underwood – Absent
James Johnson-Present
Dan Kastner- Present
Kristi Breisach- Present

Motion made by Ms. Boertman to approve of the absence of Ms. Underwood with a second by Mr. Johnson. All commissioners approve

Mr. Pena read the disclaimer on record at 5:02 PM.

III. **Approval of Agenda**:

Motion made to approve agenda by Mr. Johnson with a 2nd by Ms. Boertman All commissioners approve.

IV. **Approval of Minutes**: January 20th, 2025

Incorrect minutes attached, January minutes will be reviewed at April meeting.

V. Actions Items:

1. Appointment of Nelson Nave to the Historic District Commission
- Resume provided
- Resides in the Historic District
- Current licensed architect
- Served on this commissions +/- 10 years ago

Motion made by Mr. Johnson to recommend the appointment of Nelson Nave to the Historic District Commission to the Kalamazoo City Commission with a second by Ms. Boertman. All commissioners approve.

2. Annual Report Review

VI. **Public Comment on <u>non-agenda</u> items:** No guests and no public comments.

VII. OLD BUSINESS: None

NEW BUSINESS: None

VIII. Coordinator's Report

- IK 2035 Neighborhood Meetings completed.

IX. Adjournment

Ms. Kastner adjourned the meeting at 5:33 PM.

_____	_____
Chairperson	Date
_____	_____
Historic Preservation Coordinator	Date
_____	_____
Recording secretary	Date

Historic District Commission Staff Report

City of Kalamazoo

TO: The Kalamazoo Historic District Commission

FROM: Luis Pena, Historic Preservation Coordinator

DATE: April 21, 2026

SUBJECT: 1. 703 S Park - Alteration (removal of existing deck, construction of new deck) PHDC26-003

PROPOSED WORK:

From the Description of Work Supplied by the Applicant: repurposing and replacing side porch. Eliminating roofed portion to make the area more useful for tenants (Grilling). Plan is to remove steps making deck only be accessible from inside the house as an added safety measure. Deck size is negotiable but plan now is 9.5' along house and extending 6' from house.

EVALUATION:

Project Details

Removal of an existing rear/side (south face) porch, installation of a step-less deck in place of the historic porch.

Applicable Critera

Secretary of the Interior's Standards for Rehabilitation

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
The side porch is a projection that contributes to the overall shape of the structure, and therefore the character of the structure. It should be noted, however, that the existing porch is toward the rear of the property and only a single story tall.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
The existing side/rear porch should be repaired rather than replaced. The side porch is likely original to the house, as it appears on a 1908 Sanborn map.

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
The proposed deck would be differentiated from the property stylistically (the deck would not have a roof or stairs). The proposed deck would also be roughly 9.5' x 6', projecting a third of the width of the house.

Local Historic District Standards and Guidelines:
Decks: Decks are allowed on the rear of a structure and may be constructed of cedar, cypress, redwood or pressure treated lumber. They should be placed in an unobtrusive location and be minimally visible from the street. Decks are exempt from the painted exterior woodwork requirement. Rails should be to standards as above but may be of pressure treated lumber and may be taller than porch rails, as required by the building code for the chosen site. Very low decks may not need a rail. The decking boards should be 5/4 lumber laid with small gaps between the boards. The boards may be parallel or perpendicular to the body of the house. The flooring boards should extend past the support framing over an apron board. A lattice porch skirt may be attached under the deck, using materials and techniques as specified for porches in the standards.
The proposed deck would be highly visible from the street, as it would be located on the side of the property (towards the back of the house).

Discussion
The existing porch is a character defining feature of the property, and should be preserved. The proposed porch would not be stylistically compatible with the historic structure, and the proposed porch would be about a third the width of the main structure.

POTENTIAL ACTIONS:

1. The proposed work complies with the Secretary of the Interior standards 2, 6 and 9. **Action: Motion to approve a Certificate of Appropriateness for the work as described in the application.**

2. More information is needed. **Action: Motion to postpone until the HDC meeting on 19 May 2026 and direct the applicant to provide the requested materials and information to the Historic Preservation Coordinator by noon on 12 May 2026.**

3. Denial of the application. **Action: Motion to deny the application based on Secretary of the Interior Standards 2, 6 and 9**.

THE CITY OF Kalamazoo

Community Planning and Economic Development
Historic District Commission
245 N. Rose Street
Kalamazoo, MI 49007
Telephone: (269) 337-8804; FAX (269) 337-8513
PenaL@kalamazoocity.org

APPLICATION FOR PROJECT REVIEW – Historic District Commission Hearing

COMPLETE Applications for review at the Historic District Commission meeting including payment of the $85 hearing fee must be received by NOON on the 2nd Tuesday of the month- the meeting is on the 3rd Tuesday of the month.

(PLEASE **PRINT** CLEARLY - See instructions on reverse side)

Property Address: 703 S Park St

Historic District: ■ South/Vine ☐ Stuart ☐ West Main Hill ☐ Rose Place ☐ Haymarket

Applicant: Mike Purwin
Mailing Add: 4057 S Rolling Rdg
City State & Zip: Wayland MI 49348
Phone: 2693306939
Email: mikepurwin @gmail.com

Owner: Mike Purwin (Same)
Mailing Add:
City, State Zip:
Phone:
Email: @

Contractor TBD

☐ **Work to be done by owner**

Proposed Work: Use additional sheets to describe work if necessary

Repurposing and replacing side porch. Eliminating roofed portion to mak

(x) *This property has at least one working smoke detector for each dwelling unit.*
*(Owner or applicant's initials) (Required) * see back*

Applicant's Signature: _____ Date: 3/16/24
Owner's Signature: _____ Date: _____
(if different)

APPLICATION CHECKLIST:
Include all these items are in your submission. Incomplete applications will be held until the next review hearing.

☐ Drawings 11x17 or smaller with dimensions
☐ Materials list
☐ Site plan including north arrow
☐ Other:
☐ $85 for HDC hearing & review fee – must be paid in advance to be placed on agenda – include WITH application – *Check payable to: City of Kalamazoo*

-For Historic Preservation Coordinator's Use Only-

Case Number: ~~PPZ~~ PHDC26-003
Zoning RM36 **Year built** 1900
Owned since 03/22/1999

Date Received*: 03/16/2026
Complete application Yes

COMMISSION
Meeting Date 04/21/2026
COMMENTS

Hearing fee paid $85
Check #

Approve in Concept *Date*
Letter mailed

FINAL ACTION

☐ Approve ☐ Site Visit ☐ Approve w/Conditions ☐ Deny ☐ Postpone ☐ Withdrawn
ACTION DATE
Certificate of Appropriateness Issued
Notice of Denial with appeals information
Notice to Proceed Comments

Revised November 22, 2019

APPLICATION FOR PROJECT REVIEW – Historic District Commission Hearing

COMPLETE Applications for review at the Historic District Commission meeting including payment of the $85 hearing fee must be received by NOON on the 2nd Tuesday of the month- the meeting is on the 3rd Tuesday of the month. Incomplete applications will be postponed until the next meeting.

Filling out the application – instructions and tips – PLEASE PRINT.

Property address: street address of the property where the work will be done
Applicant: Owner or the owner's contractor.
Mailing Address: Applicant's address
City, State & Zip:
Phone: Specify home or work
Email

Historic district: Stuart, South Street/Vine Area, Haymarket, West Main Hill or Rose Place
Owner: Legal owner of property
Mailing Address: Owner's address
City, State & Zip:
Phone: Specify home or work
Email

Name of the contractor if this project requires a building permit Or indicate ☐ work done by owner

Proposed Work: What work do you plan to do? Please be as specific as possible including a complete description of the part of the structure where work will be done.

Example #1: Rather than "Build new garage"
Say "Build new two car garage near northeast corner of lot, wooden frame with clapboard siding, paneled metal overhead door, service door on the north side and one window at the rear. "
Example #2: Instead of **"**New front door"
Say "Install a new wooden front door to fit original opening in width and height, to replace the existing metal paneled door. See drawing/photo for appearance" Specify the measurements of the width and height of the original opening. Include a storm door if that is part of the project

For more complex projects, please include as many **continuation or illustration sheets** as you need to present a clear picture to the commission of your proposed work.

- Drawings – black or blue black ink on white paper. Electronic submittions are encouraged. Drawings should include dimensions of the existing part of the building and the proposed work.
- You need submit only one set of drawings; city staff will make the necessary copies.
- Use the checklist to be sure you have supplied all the important information.
- For new construction) exterior stairs, new garage, reconstructing a porch, etc) a site plan WITH a north arrow is required.

*(_____) *This property has at least one working smoke detector for each dwelling unit. Please initial to verify at least one working smoke detector in each dwelling unit. This is REQUIRED by state law or the application will be considered incomplete.*

PHOTOS: The historic preservation coordinator is responsible for taking photographs of the proposed work and the structure. If you wish to take additional photos, one set is usually adequate for the commissioners to examine. You may also bring photos on a USB drive to share with the commission.

Emergency repairs: If damage occurs to a structure in a historic district, which requires emergency repairs, steps may be taken to secure the structure without the approval of the commission or the coordinator. Cover damaged windows or holes in a roof with tarps or wood to prevent further damage. Support dangling or loose elements or remove and store them. Notify the Coordinator of the damage to the structure on the first weekday available after the damage occurs and the coordinator will visit the structure as well as arranging a site visit by commission members to approve repairs if necessary. **THIS WILL BE DONE AS QUICKLY AS POSSIBLE IN ORDER TO FACILITATE REPAIRS OF THE STRUCTURE IN A TIMELY MANNER.**

If you have questions about completing this application for project review, please call the Historic Preservation Coordinator at: (269) 337-8804 or by email at PenaL@kalamazoocity.org

Revised November 22, 2019

Shared Dealer Locator Report

Mike P

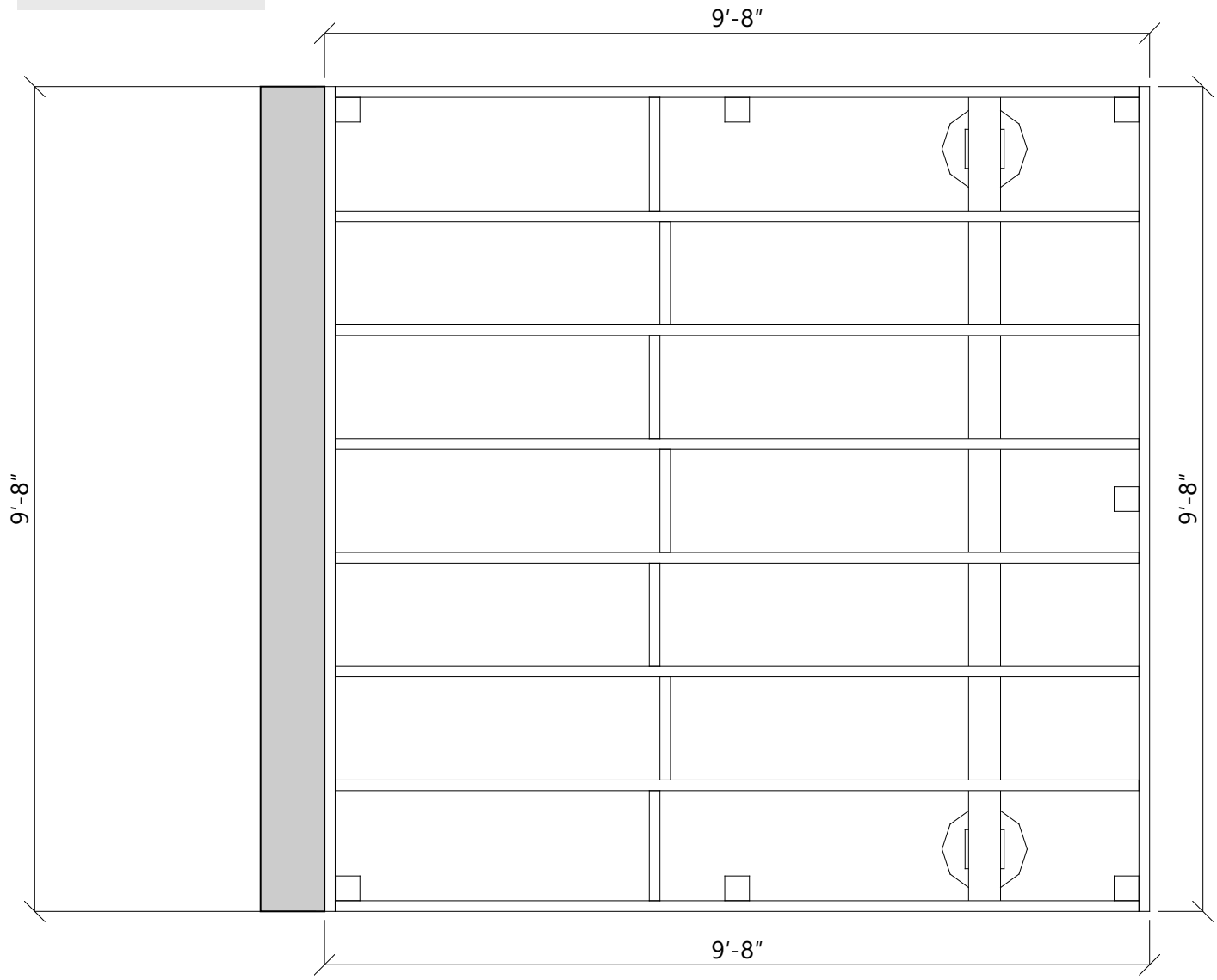
Deck Planner Software™ Report

All lengths, areas, weights, masses and structural forces are expressed in U.S. Customary units unless otherwise specified.

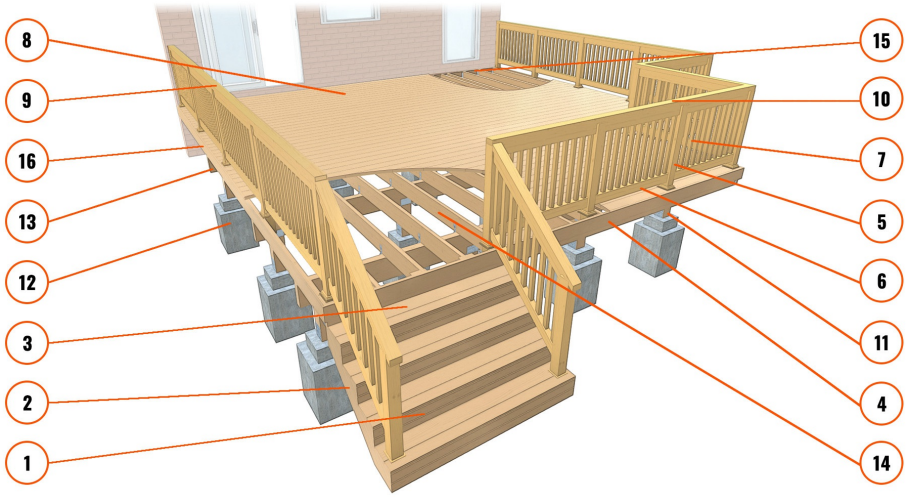
7/30/2024 6:27 PM by Deck Planner Software™

Your Planned Deck Design

Plan view construction



Glossary Of Decking Terms



1. Risers: The vertical boards attached to the stair stringers. Many localities require risers to prevent possible trip hazards.

2. Stringers: The structural support for stairs. They have limits on how much weight they can carry, so size and spacing are important considerations. Composite manufacturers provide recommended stringer spacing to support the tread material.

3. Treads: The horizontal stair surfaces on which deck users walk.

4. Rim Joist: Also known as edge bands, the rim joist wraps the deck and keeps the joists standing on edge, while also providing a solid surface for attaching railing posts. Proper attachment is critical to installing a safe railing.

5. Rail Post: Vertical lumber member that supports the handrail and resists the outward force of people leaning on the railings.

6. Bottom Rails: Lumber members that connect to the rail posts and provide a solid surface for securing the infills.

7. Infills: Also known as balusters or pickets, the infills are connected to the top and bottom rails and provide a barrier against falls.

8. Decking: When properly attached to each joist and rim joist, the decking surface (whether wood or composite material) helps unify the entire structure.

9. Rail Cap: Much like the decking, the rail cap unifies the railing system and provides a decorative feature.

10. Top Rails: These members have the same stabilizing function as the bottom rails.

11. Post: Vertical structural member that supports the beams and attaches the deck to the footings using a post base.

12. Footing: Concrete element that serves as the foundation of the deck.

13. Beams: Structural members that support the decking floor joists. Beams are made of doubling 2x material and can be installed as a laminate, sandwiched, or notched into the post.

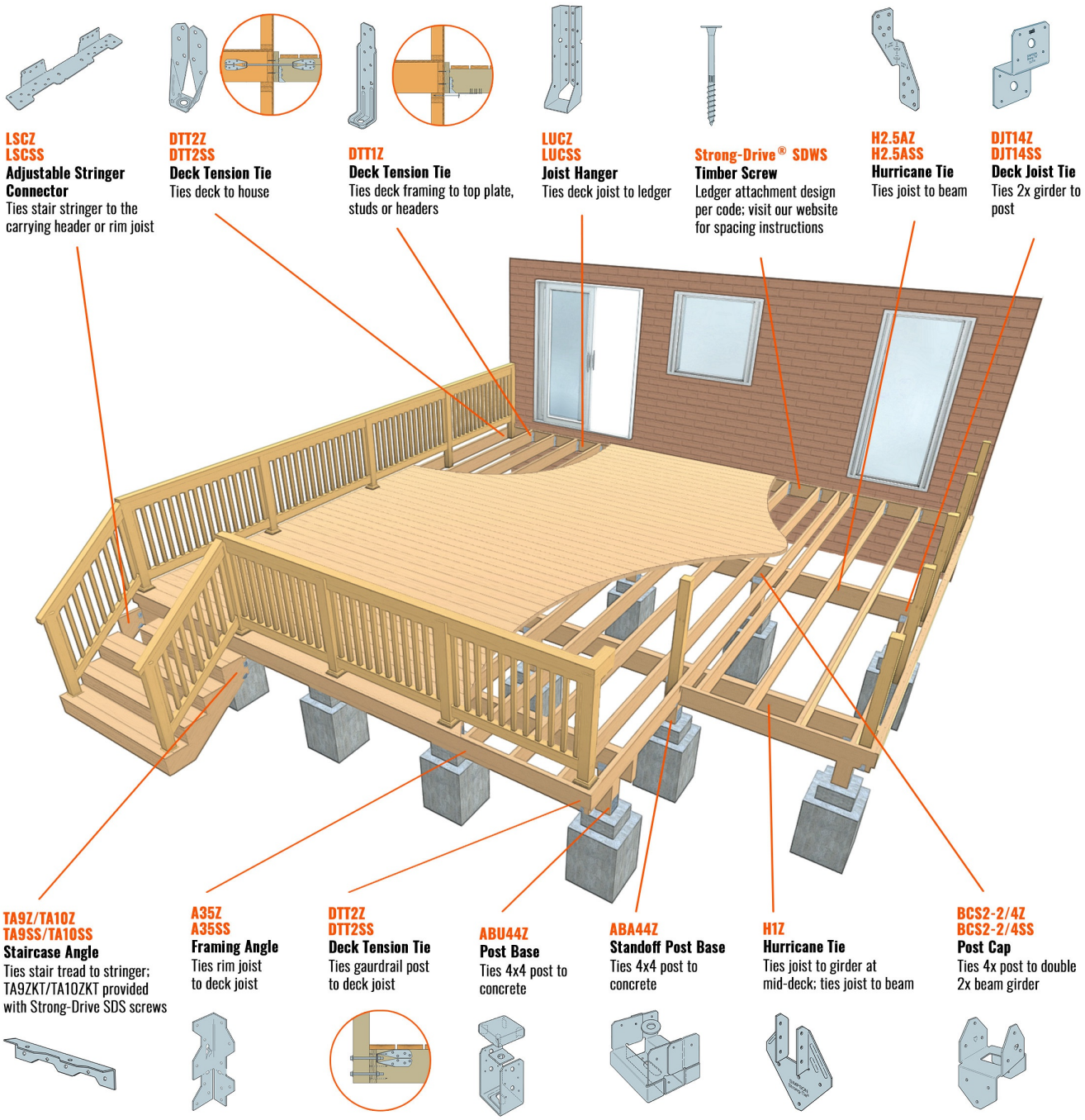
It is important to have a post of sufficient size and strength to support the beam. The beam should not be any wider than the thickness of the post, and should be secured with the correct post cap.

14. Joists: Wood members installed across the beams and spaced to accommodate the decking material. The joist spacing may depend on the angle at which the deck boards are applied.

15. Ledger: The ledger is a crucial connection because it attaches the deck to the house. The material used to construct the house may determine the type of connection. Consult local building officials on the recommended connection.

16. Fascia: Vertical boards that face outwards from the edges of the deck, attached to the rim joists. Fascia boards typically consist of a lumber species that matches the appearance of the decking material.

A Complete Connector System for Building Safer, Code-Compliant Decks



Installation Considerations

Building Code and Zoning Requirements

Check deed restrictions, building codes and zoning laws to make sure your deck complies. The local building jurisdiction will require a minimum setback from property lines. Check with local utility companies to make sure deck construction will not disturb underground piping or wiring (**dial 811 before you dig**)

A resource for general residential deck codes and building practices is the Prescriptive Residential Deck Construction Guide, by the American Wood Council (free download from www.awc.org).

The local building jurisdiction should be consulted to verify any building code requirements specific to the area.

Deck Function

While planning your deck, consider how it will be used. Sun/shade areas and possible views are common considerations.

Lumber

Pressure- or preservative-treated lumber, or lumber that is naturally decay resistant, should be used for durability. Cut edges should be field-treated with preservative.

Fasteners and Connectors

To resist corrosion, fasteners and connectors in contact with treated lumber should be ZMAX®, hot-dip galvanized (HDG) or made with stainless steel.

Consult with the building code, the preservative treatment manufacturer and strongtie.com to get recommendations for your conditions. Fasteners and connectors should be made of the same material (i.e. both of them galvanized, both of them HDG or both in stainless steel).

Ledger

Proper corrosion-resistant flashing should be installed between a deck ledger and the house. The ledger should be installed directly to the framing, with any siding removed.

Deck Area and Footing Layout

Batter boards (temporary wood supports, such as 2x4s), mason's string and a plumb bob can be used to lay out the deck area and footings. For a rectangular shape, the corners will be square when the lengths of the two diagonals are equal.

Footings

Holes for footings will need to be dug to a depth below the frost line.

Post Bracing

Diagonal bracing between posts and joists/beams should be installed according to the building code.

Posts and Beams

Allow an additional margin in length to the posts. Determine the desired deck floor height on the post and then cut to the appropriate length.

Attaching Joists

Attach joists to the ledger board with joist hangers.

Laying Decking

Drill pilot holes into the ends of boards to prevent splitting. Allow space between boards.

Guardrails

Guardrails must be adequately attached to the framing members of the deck. The building code has limits on the size of openings that are permitted in the guard system.

Stairs and Handrails

Stairs should be at least 36" wide. The building code has limits on the size of openings in a flight of stairs and specific directions for providing handrails.

Tools Required

The checklist provided should be used as a quick guide only,
and we highly recommend consulting some additional resources listed here:
www.strongtie.com/solutions/deckcenter

Concrete Work

- Pick
- Post hole digger
- Shovel
- Wheelbarrow
- Hoe and hose (to mix concrete)
- Tamper

Concrete Layout

- Stakes or batter boards
- String
- Transit

Safety

- Eye Protection
- Hearing protection
- Dust mask
- Gloves
- Kneepads

Wood Work

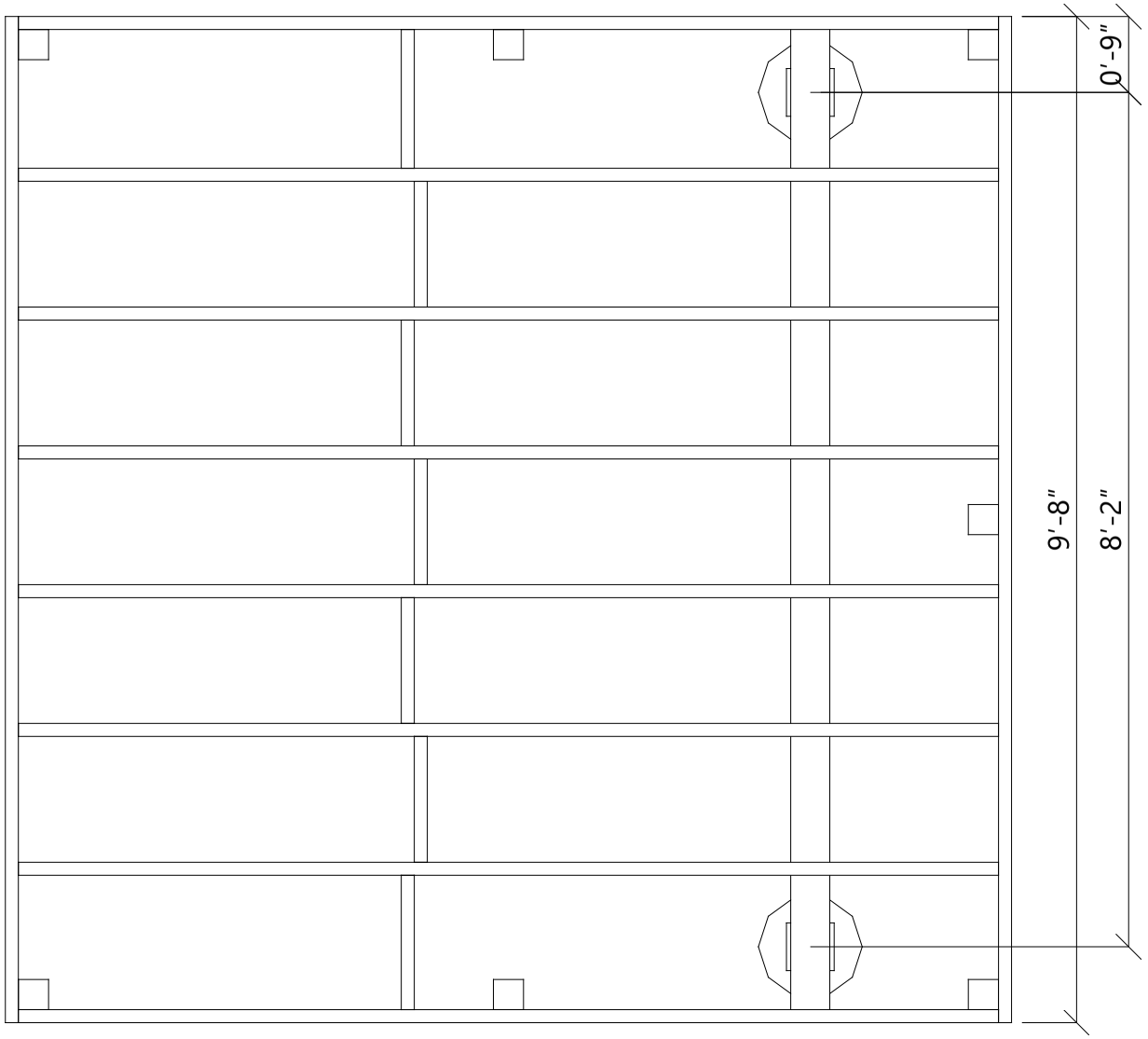
- Extension cord
- Circular saw
- Drills and bits
- Hammer
- Nail set
- Chisel
- Handsaw
- Ladder
- Mallet
- Tool belt

Wood Layout

- Tape measure
- Squares: Rafter/Speed, Framing
- Level/Levels
- Chalk line
- Pencils
- Plumb bob

Tips for the DIYer

- When cutting or drilling wood, always wear eye protection to prevent injury from flying wood particles.
- If cutting pressure treated material, wearing a fabric breathing mask will help to avoid ingestion of the dust.
- Wear gloves to protect from splinters.
- Invest in a pair of kneepads if you are doing floor jobs or working on a deck.
- Dispose of scraps in the regular trash or take to a landfill - do not burn pressure treated materials.



SIMPSON Strong-Tie	NOTES FROM THE CUSTOMER	DESIGN TITLE: MIKE P	DRAWING: 1		JOB ID
		CUSTOMER NAME: Mickey Delaio	SCALE: NOT TO SCALE	CHECKED BY	
		CUSTOMER EMAIL ADDRESS: rand48809@yahoo.com	DATE: 7/30/2024 6:27 PM	CHECK DATE	PAGE: 7
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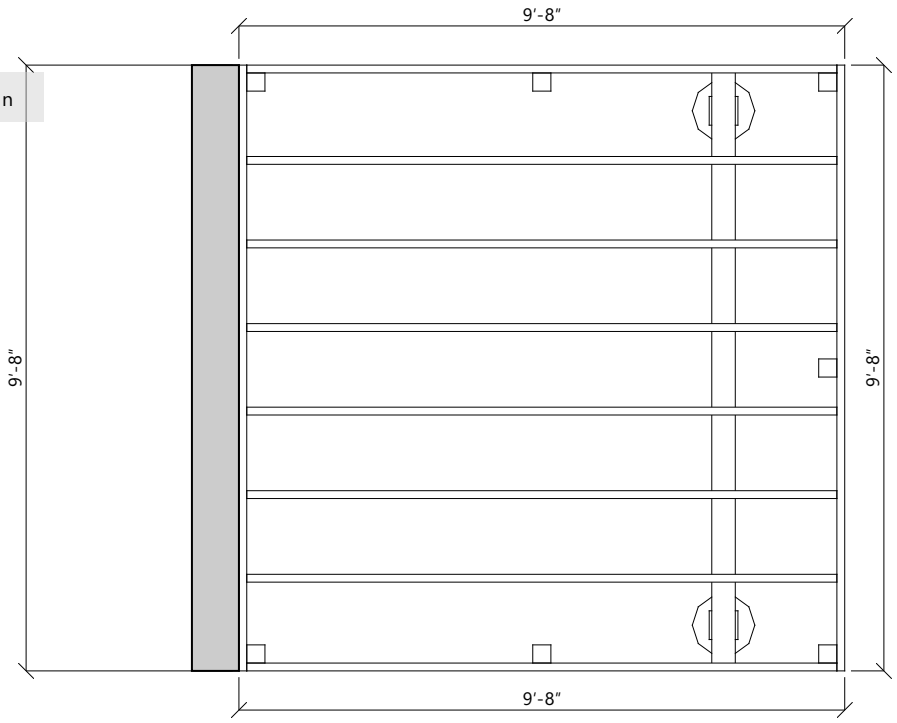
Permit Info

LEVEL 1

Plan view construction



Structural Information: Level 1

Height of level (top of decking)	36"
Max. joist span	91 1/4"
Max. joist cantilever	21 3/4"
Max. beam span	98 1/2"
Max. beam cantilever	6"
Footing depth	48"
Footing area (ea.)	9 1/2 ft²
Designed live load	40 lb/ft²
Designed dead load	10 lb/ft²

Deck and Post Height

Your design height is 36" from the top of the decking to the ground level. The top of the deck support posts will therefore be 19" above ground level."

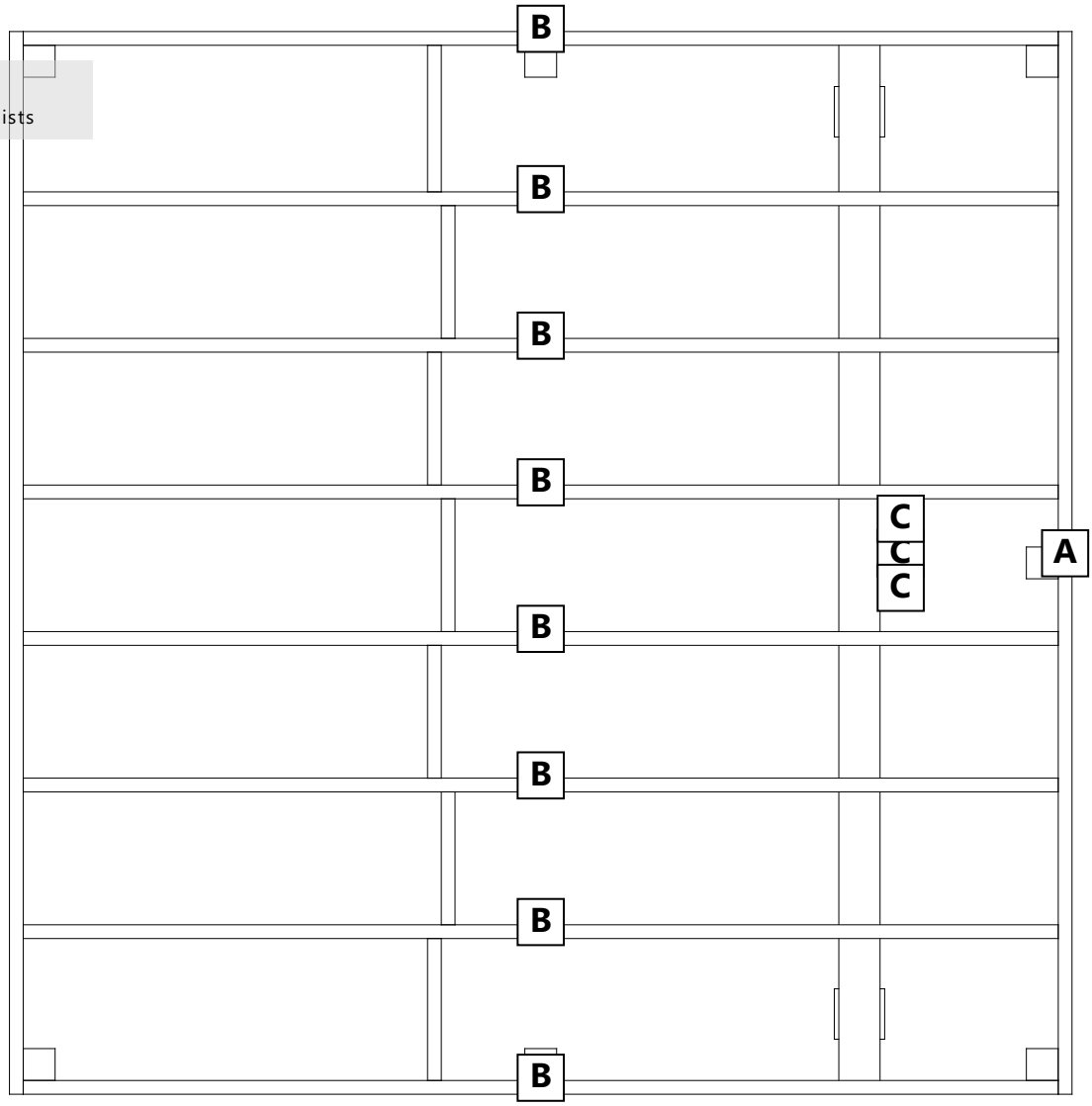
Joists

Set joists on top of beams, 16" center-to-center.

Materials Drawing

MATERIALS DRAWING 1

Plan view,
beams and joists



Materials Cut List

LEVEL 1

Label	Description	Qty	Length	Usage
A	2" x 8" x 10'- Wood SP (Square)	1	116"	Rim Joists
A	2" x 8" x 10'- Wood SP (Square)	1	116"	Ledgers
A	2" x 8" x 10'- Wood SP (Square)	1	116"	Joists
A	2" x 8" x 10'- Wood SP (Square)	1	116"	Blocking
	2" x 8" x 10'- Wood SP (Square)	1	116"	Rim Joists
	2" x 8" x 10'- Wood SP (Square)	1	116"	Ledgers
	2" x 8" x 10'- Wood SP (Square)	1	116"	Joists
	2" x 8" x 10'- Wood SP (Square)	1	116"	Blocking
B	2" x 8" x 10'- Wood SP (Square)	8	113"	Rim Joists
B	2" x 8" x 10'- Wood SP (Square)	8	113"	Ledgers
B	2" x 8" x 10'- Wood SP (Square)	8	113"	Joists
B	2" x 8" x 10'- Wood SP (Square)	8	113"	Blocking
	2" x 8" x 10'- Wood SP (Square)	2	16"	Rim Joists
	2" x 8" x 10'- Wood SP (Square)	2	16"	Ledgers
	2" x 8" x 10'- Wood SP (Square)	2	16"	Joists
	2" x 8" x 10'- Wood SP (Square)	2	16"	Blocking
	2" x 8" x 10'- Wood SP (Square)	5	14 1/2"	Rim Joists
	2" x 8" x 10'- Wood SP (Square)	5	14 1/2"	Ledgers
	2" x 8" x 10'- Wood SP (Square)	5	14 1/2"	Joists
	2" x 8" x 10'- Wood SP (Square)	5	14 1/2"	Blocking
C	2" x 10" x 10'- Wood SP (Square)	3	116"	Beams
	6" x 6" x 8'- Wood SP	2	18"	Posts/Footings

Railing Kit List

All Materials

Usage		Qty	SKU	Description
Stick Built Items				
	Railing Posts	7/7		Ball Cap
	Top Rails	6/6		Top Rail 2x4 6ft
	Bottom Rails	6/6		Bottom Rail 2x4 6ft
	Infill	84/84		Square Baluster 2x2 29in
	Railing Posts	2/2		4 x 4 x 16 - Redwood
	Railing Posts	1/1		4 x 4 x 8 - Redwood
	Railing Posts	7/7	DTT2Z	DTT2Z Connector (ZMAX®)(Fasteners and Washers included)

Estimated Materials List

All Materials

Usage	Qty	SKU	Description	Type
Decking	21		1" x 6" x 12'- Wood SP (Grooved)	Lumber
Fascia	3		2" x 12" x 12'- Wood SP	Lumber
Rim Joists	1		2" x 8" x 10'- Wood SP (Square)	Lumber
Ledgers	1		2" x 8" x 10'- Wood SP (Square)	Lumber
Joists	8		2" x 8" x 10'- Wood SP (Square)	Lumber
Blocking	1		2" x 8" x 10'- Wood SP (Square)	Lumber
Beams	3		2" x 10" x 10'- Wood SP (Square)	Lumber
Posts/Footings	1		6" x 6" x 8'- Wood SP	Lumber
Joists	8	H2.5AZ	H2.5AZ Hurricane Tie (ZMAX®)	Connector
Joists	12	LUS26Z	LUS26Z Joist Hanger with Double-Shear Nailing (ZMAX®)	Connector
Joists	4	LS50Z	LS50Z Skewable Angle (ZMAX®)	Connector
Joists	4	DTT2Z	DTT2Z Connector (ZMAX®)(Fasteners and Washers included)	Connector
Posts/Footings	2	BCS2-3/6Z	BCS2-3/6Z Post Cap (ZMAX®)	Connector
Posts/Footings	2	ABA66Z	ABA66Z Adjustable Post Base with Standoff (ZMAX®)	Connector
Posts/Footings	1		5/8" Diameter Straight Shank Carbide Drill Bit for Concrete & Masonry	Concrete
Posts/Footings	11		80lbs Bag (0.60 CF) Concrete Mix	Concrete

Usage	Qty	SKU	Description	Type
Posts/Footings	1		12" x 10' Construction Tube	ConstructionTube
Tape	2	BDFB1550	BDFB1550 - Butyl Deck Flash Barrier 1-5/8" x 50'	Tape
Tape	1	BDFB1220	BDFB1220 - Butyl Deck Flash Barrier 12" x 20'	Tape
Decking	1	S10250WPP	DWP #10 2-1/2IN 305SS FLAT T25 350CT	Fastener
Decking	1	S10250WP1	DWP #10 2-1/2IN 305SS FLAT T25 1#	Fastener
Fascia	2	T08175FS75TN02	#8X1.75 316SS FASCIA SCREW T20 TN02 75CT	Fastener
Fastener	1	fsbit	FASCIA SCREW COUNTERSINK BIT	Fastener
Rim Joists	1	SDWS16300QR75	3 IN SDWS Framing Screw 75ct	Fastener
Ledgers	2	SDWS22400DB-RC12	SDWS22400DB Structural Wood Screw (12)	Fastener
Joists	1	N8DHDG	Strong-Drive® SCN 1 1/2" x .131", 10 gauge, Smooth-Shank Connector Nail, Hot Dip Galvanized - 1 LB	Fastener
Joists	1	N10DHDG	Strong-Drive® SCN 1 1/2" x .148", 9 gauge, Smooth-Shank Connector Nail, Hot Dip Galvanized - 1 LB	Fastener
Joists	1	10DHDG	Strong-Drive® SCN 3" x .148", 9 gauge, Smooth-Shank Connector Nail, Hot Dip Galvanized - 1 LB	Fastener
Joists	4	1/2 MBHDGH	1/2" diameter HDG Machine Bolts: length calculated (1)	Fastener
Joists	4	NUT-1/2 MBHDG	Nut for 1/2" Bolt, Oversized Threads (Hot-Dip Galvanized) (1)	Fastener
Beams	2	SDWS22300DB-RC12	SDWS22300DB Structural Wood Screw (12)	Fastener
Posts/Footings	1	16DHDG	Strong-Drive® SCN 3 1/2" x .162", 8 gauge, Smooth-Shank Connector Nail, Hot Dip Galvanized - 1 LB	Fastener
Posts/Footings	2	THDB62600H4SSF1	5/8" x 6" Type 304 Stainless Steel Titen HD® Heavy-Duty Screw Anchor	Fastener

Dealer Locations

Approved dealers local to your ZIP code.

Dealer Name	Address	Phone
BIG L CORPORATION	5981 S Greenville Rd, Greenville, 48838-9547, US	(616) 754-9339
BIG L CORPORATION	620 S Main St, Sheridan, 48884-9740, US	(989) 291-3232
US LBM-STANDARD SUPPLY-ADA	6566 Fulton St E, Ada, 49301-9081, US	(616) 676-2108
Meekhoff Lumber	6045 28th St SE, Grand Rapids, 49546-6909, US	(616) 949-2140
LOWE'S #1514 (GRAND RAPIDS)	4297 Plainfield Ave NE, Grand Rapids, 49525-1611, US	(616) 447-7904

Please re-enter your ZIP code in the user settings of Deck planner and re publish a report if the results are not desirable.

Legal Disclaimer

Effective Date: July 30, 2024

LEGAL DISCLAIMER

We want you to have fun using the Simpson Strong-Tie® Deck Planner Software™ (the "App") as a tool that may assist you in selecting Simpson Strong-Tie® products for your structure. However, we care about safety. The output from the App, including any designs, specifications, product selection and reports (collectively, the "Report") is a product selection guide and is not a finished building plan. You may proceed and use the App and the Report only if you have carefully read this Disclaimer and agree to its terms.

The App is not designed to perform any of the engineering calculations or structural design required for building construction. Due to the size, shape, location or other considerations, the design set forth in the Report may require supporting structures that are not included in the Report. The App and Report are intended to be used only in conjunction with Simpson Strong-Tie® products. Before beginning any project, you should review all of the information about the Simpson Strong-Tie® products that is available on www.strongtie.com Any use of the App or the Report is at your own risk.

You should secure professional technical and/or engineering expertise to review and confirm the appropriateness and accuracy of all information in the Report, including, without limitation, all input and output from the App. You should consult with a trained professional to ensure that the products are properly specified for your particular environment (including, without limitation, that the products have the proper level of corrosion resistance based on your particular environmental conditions, materials, construction design and other factors) and to ensure that the products are used in accordance with the design limits and the structural, technical and environmental specifications set forth on www.strongtie.com The App is not a substitute for professional judgment or for independent design and testing for stress, safety and utility. You are responsible for ensuring that all measurements are correct and for verifying the Report's accuracy, completeness and suitability for your particular site conditions. Before beginning any project, you should confirm that the design set forth in the Report is safe and structurally sound for its size, location and anticipated use. If you have any doubts, concerns or questions, you should consult local experts, builders, architects and structural and soil engineers.

You should consult with local authorities to ensure that your project complies with all applicable zoning and building codes, requirements and practices, which vary greatly depending on your location. You are responsible for ensuring that the project (including the design set forth in the Report and any substitutions or modifications you make) complies with all applicable zoning and building codes, requirements and practices (including requirements for lighting).

Simpson Strong-Tie Company Inc. ("Simpson") cannot anticipate all of your working conditions or the characteristics of your materials and tools. You should seek professional assistance with respect to the construction of the structure. If you are involved in the construction of the project, for your safety you should consider your own skill level and use caution, care and good judgment when following the instructions. Always read and observe instructions and safety precautions provided by any tool or equipment manufacturer, and follow all accepted safety procedures.

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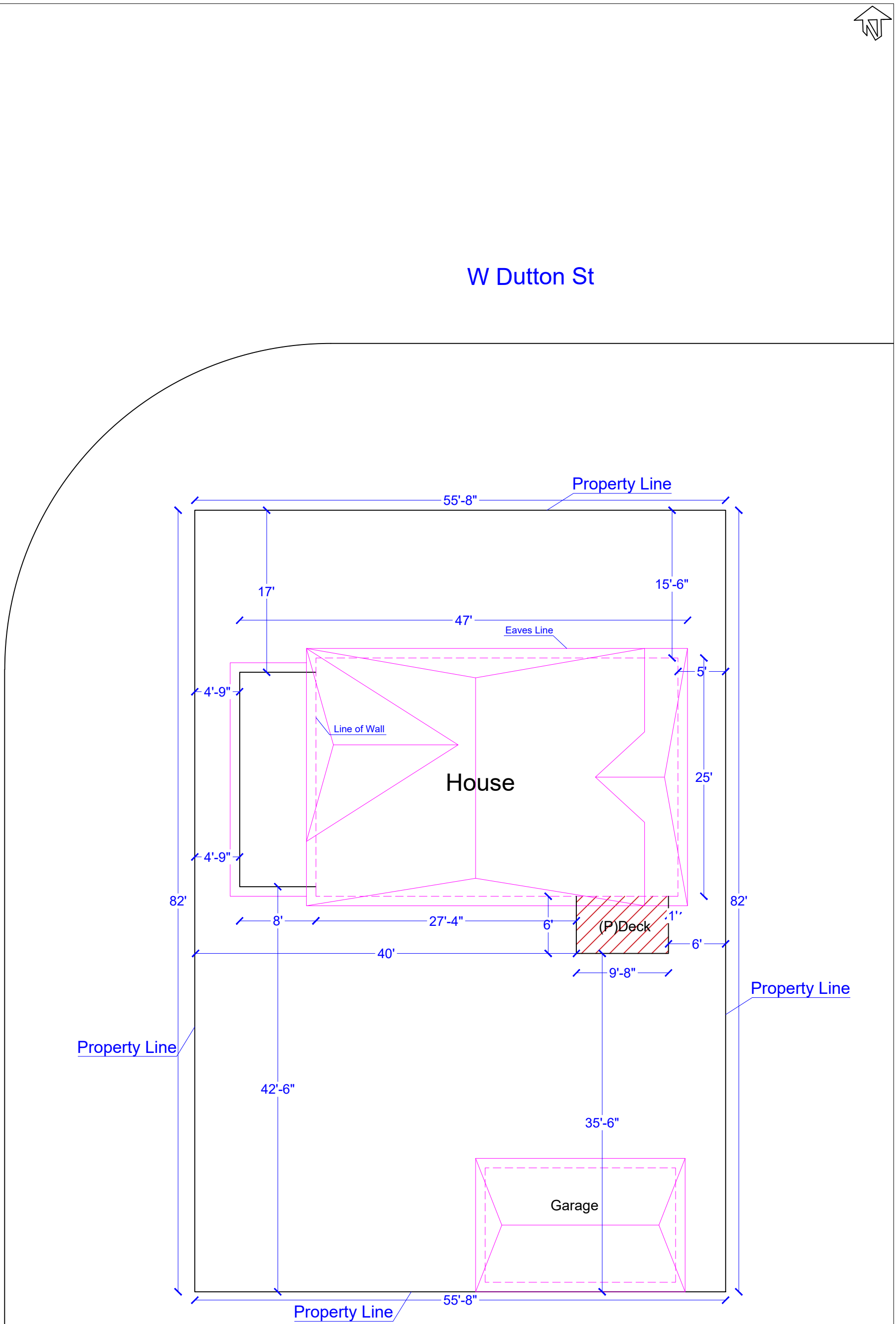


ADDRESS:703 S Park St, Kalamazoo, MI 49007, USA

Scale:1"=10'

Land:4567 SF House: 1815 SF	**THIS IS NOT A LEGAL SURVEY, NOR IS IT INTENDED TO BE OR REPLACE ONE** This work product represents only generalized locations of features, objects or boundaries and should not be relied upon as being legally authoritative for the precise location of any feature, object or boundary.

Historic District Commission Staff Report

City of Kalamazoo

TO: The Kalamazoo Historic District Commission

FROM: Luis Pena, Historic Preservation Coordinator

DATE: April 21, 2026

SUBJECT: 2. 471 W South ST - Alteration (Construction of new rear barrier free ramp, installation of one new door and window) PHDC26-004

PROPOSED WORK:

From the Description of Work Supplied by the Applicant: • Project Description: Add new exterior ramp and steps on the south side of the east
wing. Add new exterior door, interior landing, corridor, and ramp to connect to garden level inside of boiler room. Replace stair from garden level to sub-basement. Provide VPL to provide ADA access from new interior landing to sub-basement.
• Exterior modifications include addition of exterior concrete steps and handicap ramp with painted steel pipe railings, new insulated steel 2-panel rail and stile door with upper glazing, and infill of existing door opening with fixed window and masonry to match existing.

EVALUATION:

Project Details

Installation of a new barrier free ramp on the rear (south face) of the east wing of the building. The existing ramp will be demolished for the new ramp to be installed. The existing door will be infilled with a 6/1 wood window. The proposed window will be the same width as the existing door and same height as adjacent windows. The proposed door will replace a 6/1 window and will fit into the opening of the existing window. The door will be a steel 2 panel door with a quarter light.

Applicable Critera

Secretary of the Interior's Standards for Rehabilitation

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

While the door and window in question are historic, taken in isolation, they are not character defining (the door and window are sub grade and at the rear of the property). Removal of the window will not constitute the removal of features and spaces that characterize the property.

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
All the proposed work (installation of the window, the door and the installation of he ramp, including handrails), will not destroy historic materials that characterize the property (see note above regarding the removal of historic materials or alteration of features and spaces that characterize the property).The new work will be differentiated from the old through the use of modern materials (the proposed door will be a modern steel door, and the window will have false removable grilles on interior of windows, not attached to the glass). Additionally, the length and grade of the ramp will be a future indicator that the ramp was installed to comply with ADA requirements.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.
Because the proposed window and door work will be removing and replacing existing features (even though the locations will be changed), the property could be reverted to the original configuration, especially if the historic window and door are kept. Additionally, the dimensions of the original ramp could be reverted.

City of Kalamazoo Local Historic District Standards and Guidelines

Doors
The guidelines largely deal with the replacement of existing rear doors. The guidelines do state, however, the following:
- If possible, a salvaged door of the same approximate age and style should be used. *A new door is being being proposed in this case*
- The finish of the door shall be appropriate to the design of the building. *The 2 panel finish of the door is similar to the existing door and is appropriate to the design of the building.*
- *The primary or front door must be made of wood in an appropriate design. Metal paneled doors will be considered on the side and at the rear of a house.* The proposed door is at the rear of the property and is a panel metal door.

Windows
The guidelines do not deal with the new installation of windows, instead the guidelines largely deal with replacement of existing windows. There is an illustration showing how windows should replace doors, but it largely deals with the replacement of siding beneath the new window. There will not be wood siding beneath the window in this case, instead there will be concrete.

Barrier Free Access Ramps

All ramp designs must be reviewed by the full commission. Preferably, ramps will be placed at the rear or as unobtrusively as possible on the side of the structure. For example, if the only possible location for a ramp is at the front, its impact can be minimized with the use of pipe rail for the sides instead of a rail using balusters like a porch rail. If a portion of the porch rail must be removed to allow the ramp to be attached, that piece of rail shall be preserved and stored on the premises in a protected environment to allow for its preservation and possible restoration at a later date. (Sometimes the removed rail can be stored under the porch, hanging from large storage hooks attached to the frame.) A barrier free ramp should be designed to be removable with minimal impact on the historic structure.

The proposed ramp will be located at the rear of the property. As noted above, he proposed ramp could be removed in the future without negatively effecting the historic property.

Discussion

The National Park Services has published a preservation brief about making historic properties accessible, and a three step approach is recommend to identify and implement accessibility modifications that wil protect the integrity and historic character of historic properties:

1) Review the historical significance of the property and identify character-defining features; *The National Register Nomination for the Marlborough does not include much detail but the building is cited as being architecturally significant. Features listed are the U shape, the height of building, Mediterranean bracketing and tiling about the roof line, delicate colored glass windows and the courtyard to the west of the building. The proposed ramp will not impact any of the listed elements.*

2) Assess the property's existing and required level of accessibility; *Currently, there is a staircase to the front of the property, and a rear staircase. This does not allow ADA access to the building*

and 3) Evaluate accessibility options within a preservation context. *Placing the ramp at the rear of the will have minimum impact on the historic integrity.*

POTENTIAL ACTIONS:

1. The proposed work complies with the Secretary of the Interior standards 2, 9 and 10. **Action: Motion to approve a Certificate of Appropriateness for the work as described in the application.**

2. More information is needed. **Action: Motion to postpone until the HDC meeting on 19**

May 2026 and direct the applicant to provide the requested materials and information to the Historic Preservation Coordinator by noon on 12 May 2026.

3. Denial of the application. **Action: Motion to deny the application based on Secretary of the Interior Standards 2, 9 and 10**.

Community Planning and Economic Development
Historic District Commission
245 N. Rose Street
Kalamazoo, MI 49007
Telephone: (269) 337-8804; FAX (269) 337-8513
PenaL@kalamazoocity.org

RECEIVED April 16, 2026 BY: KJ

APPLICATION FOR PROJECT REVIEW – Historic District Commission Hearing

COMPLETE Applications for review at the Historic District Commission meeting including payment of the $85 hearing fee must be received by NOON on the 2nd Tuesday of the month- the meeting is on the 3rd Tuesday of the month.

(PLEASE **PRINT** CLEARLY - See instructions on reverse side)

Property Address: 471 West South Street, Kalamazoo, MI 49007

Historic District: ■ South/Vine ☐ Stuart ☐ West Main Hill ☐ Rose Place ☐ Haymarket

Applicant: Abonmarche Byce - Gregg Jones
Mailing Add: 306 S. Kalamazoo Mall
City State & Zip: Kalamazoo, MI 49007
Phone: 269-381-6170
Email: gjones @ abonmarche.com

Owner: The Marlborough Condominium Association, Mark Sloan - President
Mailing Add: 471 W. South Street
City, State Zip: Kalamazoo, MI 49007
Phone: 269-375-0327
Email: markcsloan @ gmail.com

Contractor Elite Construction; Kalamazoo, MI

☐ **Work to be done by owner**

Proposed Work: Use additional sheets to describe work if necessary

Please see attached description.

APPLICATION CHECKLIST:

Include all these items are in your submission. Incomplete applications will be held until the next review hearing.

■ Drawings 11x17 or smaller with dimensions
■ Materials list
■ Site plan including north arrow
■ Other:
☐ $85 for HDC hearing & review fee – must be paid in advance to be placed on agenda – include WITH application – *Check payable to: City of Kalamazoo*

(GJ) *This property has at least one working smoke detector for each dwelling unit.*
*(Owner or applicant's initials) (Required) * see back*

Applicant's Signature: _____ Date: 3/31/26
Owner's Signature: _____ Date: 3/31/26
(if different)

==========

-For Historic Preservation Coordinator's Use Only-

Case Number: ~~PPZxx~~ PHDC26-004 **Date Received*:** 04/16/2026
Zoning D3 **Year built** 1923 **Complete application** Yes
Owned since N/A

COMMISSION **Hearing fee paid $85** _____
Meeting Date 04/21/2026 Check # _____
COMMENTS _____

Approve in Concept *Date* _____ Letter mailed _____

FINAL ACTION

☐ Approve ☐ Site Visit ☐ Approve w/Conditions ☐ Deny ☐ Postpone ☐ Withdrawn
ACTION DATE _____
Certificate of Appropriateness Issued _____
Notice of Denial with appeals information _____
Notice to Proceed _____ Comments _____

Revised November 22, 2019

APPLICATION FOR PROJECT REVIEW – Historic District Commission Hearing

COMPLETE Applications for review at the Historic District Commission meeting including payment of the $85 hearing fee must be received by NOON on the 2nd Tuesday of the month- the meeting is on the 3rd Tuesday of the month. Incomplete applications will be postponed until the next meeting.

Filling out the application – instructions and tips – PLEASE PRINT.

Property address: street address of the property where the work will be done
Applicant: Owner or the owner's contractor.
Mailing Address: Applicant's address
City, State & Zip:
Phone: Specify home or work
Email

Historic district: Stuart, South Street/Vine Area, Haymarket, West Main Hill or Rose Place
Owner: Legal owner of property
Mailing Address: Owner's address
City, State & Zip:
Phone: Specify home or work
Email

Name of the contractor if this project requires a building permit Or indicate ☐ work done by owner

Proposed Work: What work do you plan to do? Please be as specific as possible including a complete description of the part of the structure where work will be done.

Example #1: Rather than "Build new garage"
Say "Build new two car garage near northeast corner of lot, wooden frame with clapboard siding, paneled metal overhead door, service door on the north side and one window at the rear. "
Example #2: Instead of "New front door"
Say "Install a new wooden front door to fit original opening in width and height, to replace the existing metal paneled door. See drawing/photo for appearance" Specify the measurements of the width and height of the original opening. Include a storm door if that is part of the project

For more complex projects, please include as many **continuation or illustration sheets** as you need to present a clear picture to the commission of your proposed work.

- Drawings – black or blue black ink on white paper. Electronic submittions are encouraged. Drawings should include dimensions of the existing part of the building and the proposed work.
- You need submit only one set of drawings; city staff will make the necessary copies.
- Use the checklist to be sure you have supplied all the important information.
- For new construction) exterior stairs, new garage, reconstructing a porch, etc) a site plan WITH a north arrow is required.

*(GJ) *This property has at least one working smoke detector for each dwelling unit. Please initial to verify at least one working smoke detector in each dwelling unit. This is REQUIRED by state law or the application will be considered incomplete.*

PHOTOS: The historic preservation coordinator is responsible for taking photographs of the proposed work and the structure. If you wish to take additional photos, one set is usually adequate for the commissioners to examine. You may also bring photos on a USB drive to share with the commission.

Emergency repairs: If damage occurs to a structure in a historic district, which requires emergency repairs, steps may be taken to secure the structure without the approval of the commission or the coordinator. Cover damaged windows or holes in a roof with tarps or wood to prevent further damage. Support dangling or loose elements or remove and store them. Notify the Coordinator of the damage to the structure on the first weekday available after the damage occurs and the coordinator will visit the structure as well as arranging a site visit by commission members to approve repairs if necessary. **THIS WILL BE DONE AS QUICKLY AS POSSIBLE IN ORDER TO FACILITATE REPAIRS OF THE STRUCTURE IN A TIMELY MANNER.**

If you have questions about completing this application for project review, please call the Historic Preservation Coordinator at: (269) 337-8804 or by email at PenaL@kalamazoocity.org

Revised November 22, 2019

Proposed work:

- Project Description: Add new exterior ramp and steps on the south side of the east wing. Add new exterior door, interior landing, corridor, and ramp to connect to garden level inside of boiler room. Replace stair from garden level to sub-basement. Provide VPL to provide ADA access from new interior landing to sub-basement.
- Exterior modifications include addition of exterior concrete steps and handicap ramp with painted steel pipe railings, new insulated steel 2-panel rail and stile door with upper glazing, and infill of existing door opening with fixed window and masonry to match existing.

306 S Kalamazoo Mall • 269.381.6170
261 East Kalamazoo Avenue, Suite 100 • 269.447.1800
Kalamazoo, MI 49007
abonmarche.com

PROJECT SUMMARY

Abonmarche Byce was tasked with the study and preparation of design options for improving ADA access to the Marlborough Condominiums. Our process included meeting with the Condo Board to discuss goals and objectives, site visits to confirm existing conditions, presentation to and input of condominium tenants, and a presentation of preliminary options to the Condo Board and tenants.

EXISTING CONDITIONS

The existing south courtyard area includes several features of the building:

- ADA building access with the existing elevator
- Loading dock
- Trash dumpster access and enclosure
- Access to the egress stair tower and freight elevator
- Access to parking

The existing ADA elevator currently has 3-stops and provides access to the grade level (0'0"), garden level (-4'0"), sub-basement level (-8'0"). This elevator is small, aged, replacement parts and repair are difficult to procure, and its current lifespan is limited.

SUMMARY OF OPTIONS STUDIED

- Option #1A – Replace existing elevator with new LULA to grade level
- Option #1B – Replace existing elevator with new LULA to first floor level
- **Selected Option #2A – Exterior ADA ramp with interior corridor and VPL**
- Option #2B – Exterior ADA ramp w/ interior corridor, VPL and garden level floor infill

OPTION #2A – EXTERIOR RAMP WITH INTERIOR CORRIDOR AND VPL

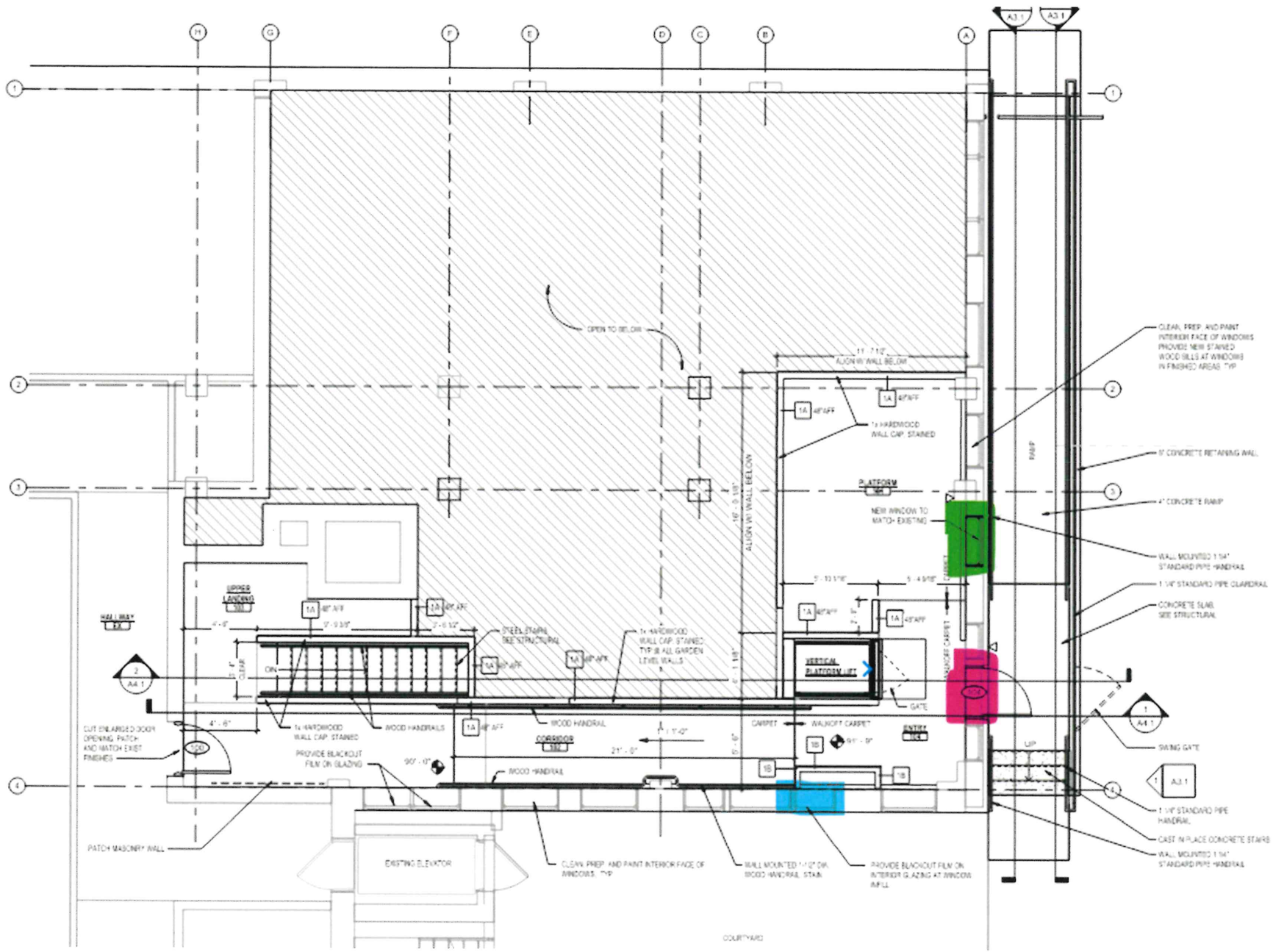
- Description: Add new exterior ramp and steps on the south side of the east wing. Add new exterior door, interior landing, corridor and ramp to connect to garden level inside of boiler room. Replace stair from garden level to sub-basement. Provide VPL to provide ADA access from new interior landing to sub-basement.
- Scope of Construction (includes but is not limited to):
  - Demolition asphalt and excavation for ramp and stairs
  - 5' wide x 30' long concrete ramp, stairs and lower landing
  - Concrete retaining wall, painted metal guardrail and handrails (stairs and ramp)
  - Demolition and modifications of existing window for new door opening (door, frame, and hardware), door to be insulated steel with 2-panel rail and stile look
  - Infill of existing door opening with masonry and window to match existing
  - 5' x 10' interior landing, 5' wide ramp and corridor; wood framed floor structure (optional mezzanine system); walls - drywall on wood stud framing
  - Interior finishes: Carpet, rubber base, painted gypboard, unfinished ceiling, clean and paint existing wall and ceiling surfaces
  - Vertical platform lift (VPL) grade to sub-basement level; 2-stop; 11.5' rise
  - New wood stair: Garden level to sub-basement level
  - Electrical work: Power to VPL, lighting and power outlets in corridor, rerouting of existing power cabling, lighting over exterior ramp, modify EV station
  - Provide leeching basin for drainage of exterior
  - Patching existing asphalt
  - Existing elevator to remain, no work

AREA OF WORK – SOUTH ELEVATION / EASTERN LEG

EXISTING ELEVATION OF SOUTH EXTERIOR WALL – LOCATION OF PROPOSED HANDICAP RAMP – NEW DOOR OPENING TO REPLACE EXISITNG WINDOW (RED); EXISTING DOOR TO BE INFILLED WITH MATCHING WINDOW, BRICK VENEER, AND CAST STONE SILL

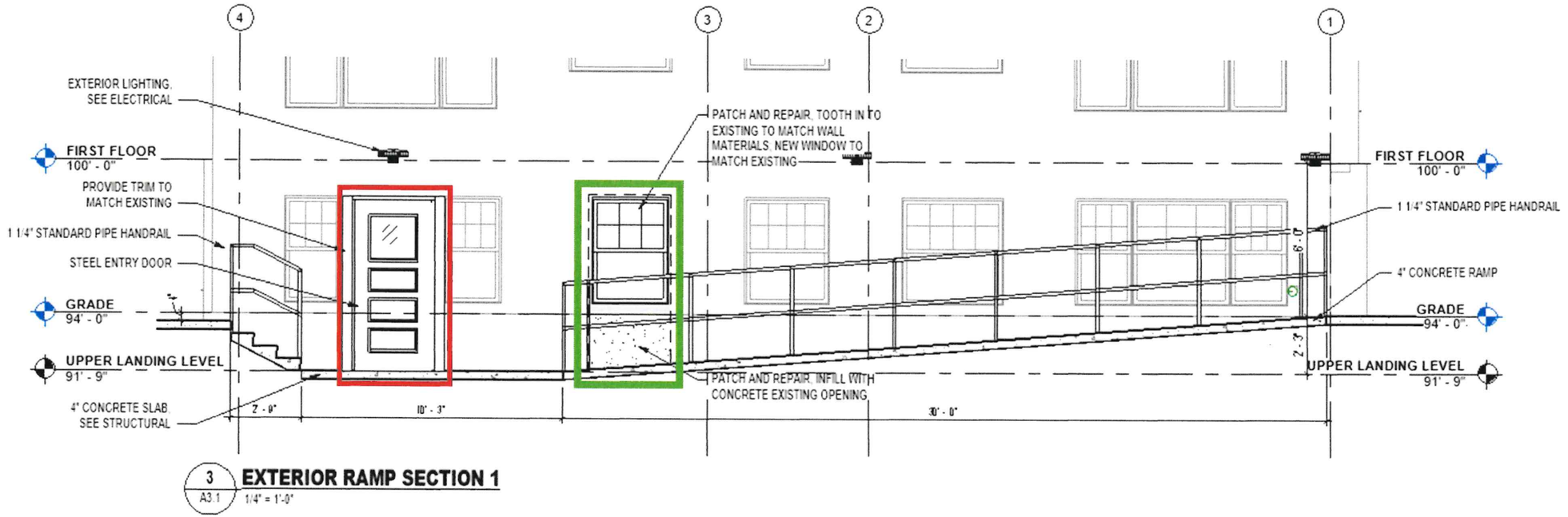
PRELIMINARY RENDERING OF PROPOSED EXTERIOR RAMP (CANOPY NOT PART OF FINAL DESIGN)

ABONMARCHE

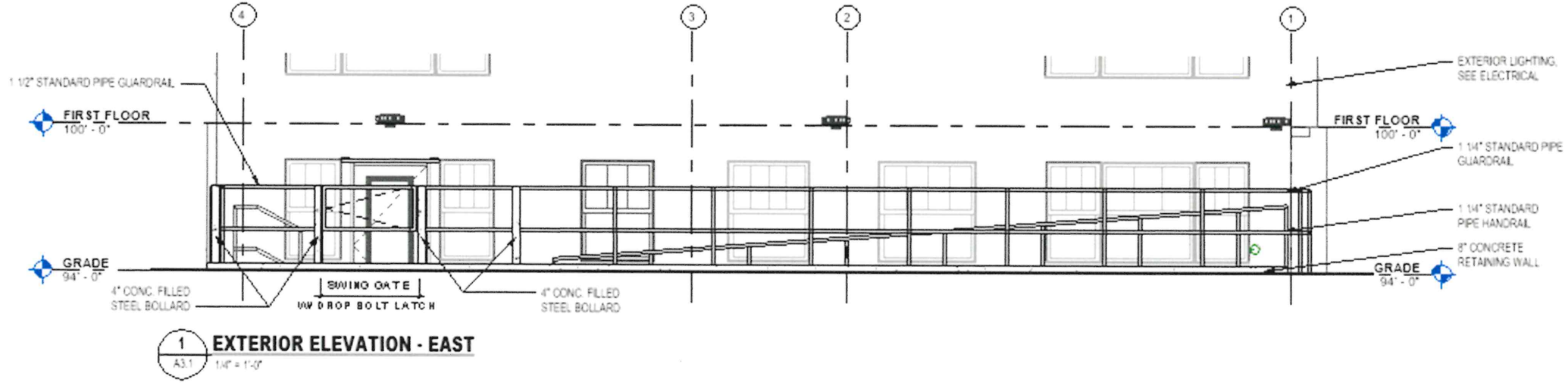


FLOOR PLAN – NEW DOOR OPENING TO REPLACE EXISITNG WINDOW (RED); EXISTING DOOR TO BE INFILLED WITH MATCHING WINDOW, BRICK VENEER, AND CAST STONE SILL (GREEN); BLACK OUT FILM TO BE APPLIED TO WEST WINDOW AT NEW ELECTRICAL CHASE (BLUE)

Historic District Application Package

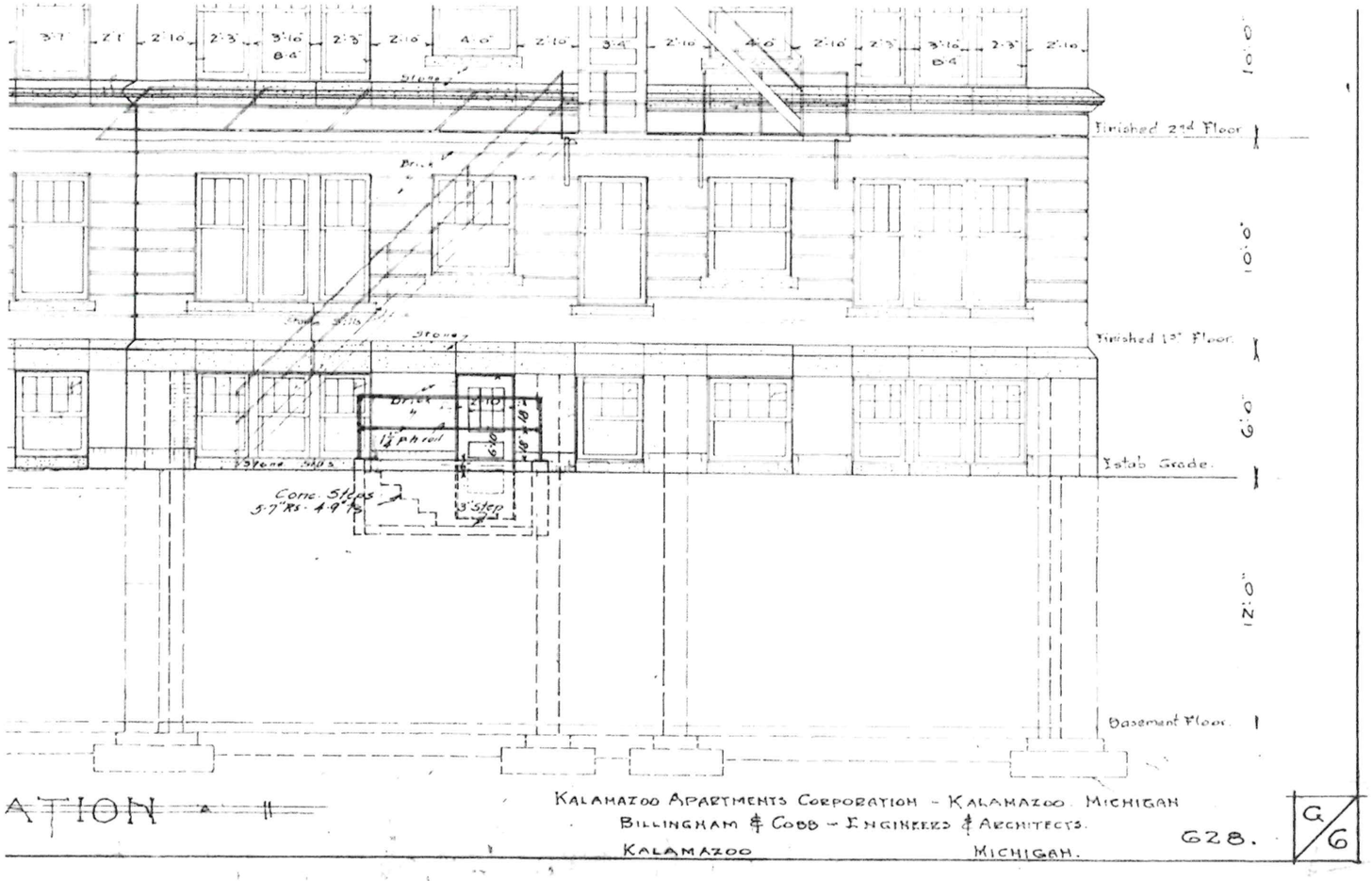


3 / A3.1 **EXTERIOR RAMP SECTION 1**
1/4" = 1'-0"



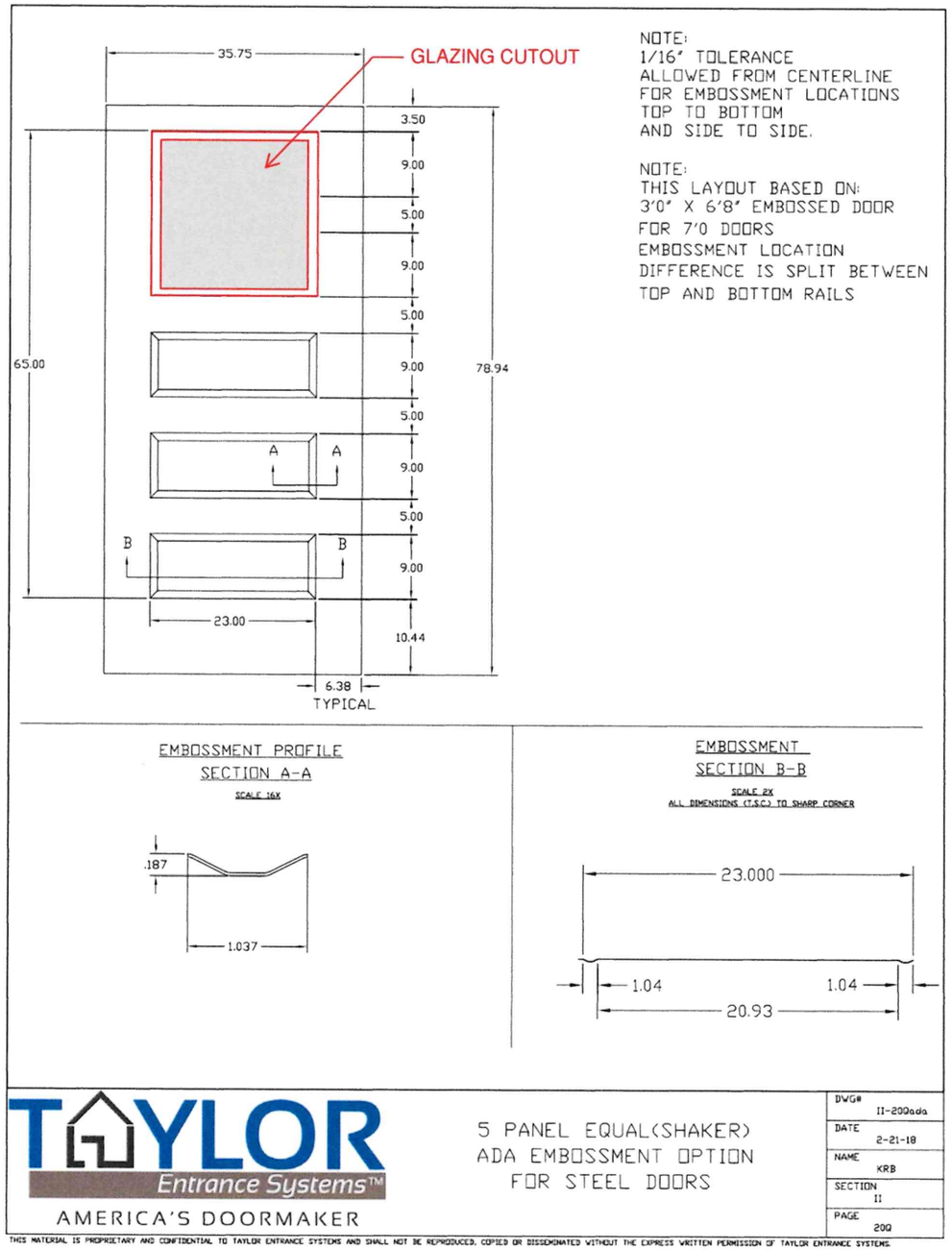
1 / A3.1 **EXTERIOR ELEVATION - EAST**
1/4" = 1'-0"

SOUTH EXTERIOR WALL ELEVATIONS – NEW DOOR OPENING TO REPLACE EXISITNG WINDOW (RED); EXISTING DOOR TO BE INFILLED WITH MATCHING WINDOW, BRICK VENEER, AND CAST STONE SILL (GREEN). BOLLARDS INCORPORATED INTO RAILING AT STAIRS AND DOORWAY. BOLLARDS ADDED BY FIRE MARSHAL FOR SEPARATION OF PEDESTRIAN AND VEHICULAR TRAFFIC.



Pipe railing at the existing stairwell is part of the original design. New railings are similar in design.

ABONMARCHE



CUT SHEET FOR NEW ENTRANCE DOOR AND WINDOW. TO BE PAINTED TO MATCH EXISTING. UPPER PANEL OF WINDOW TO HAVE MUNTINS TO MATCH EXISTING.

Historic District Application Package

GENERAL NOTES

A. ALL CONTRACTORS ARE RESPONSIBLE FOR PROVIDING COMPLETE INSTALLATION OF ALL COMPONENTS AND SHALL COORDINATE THEIR SCOPE OF WORK WITH ALL OTHER TRADES PRIOR TO SUBMITTING BIDS TO ENSURE THERE ARE NO MISSING OR DUPLICATE COMPONENTS WITH-IN THEIR SCOPE

B. DO NOT SCALE DRAWINGS. USE INDICATED DIMENSIONS ONLY.

C. SHOULD A CONTRACTOR FIND DISCREPANCIES OR AMBIGUITIES IN OR OMISSIONS FROM THE DRAWINGS OR SPECIFICATIONS, OR BE IN DOUBT ABOUT THEIR MEANING, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY.

D. CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE JOB DURING CONSTRUCTION LAYOUT AND ADVISE THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY WORK.

E. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS ON-SITE AND ADVISING ARCHITECT OF ANY DISCREPANCIES WITH DEMOLITION OR NEW WORK PLANS PRIOR TO PERFORMING ANY WORK.

F. CONTRACTOR SHALL NOTIFY ARCHITECT IMMEDIATELY IF ANY UNFORESEEN STRUCTURAL OR UTILITY RELATED ISSUES ARISE DURING DEMOLITION OR EXCAVATION.

G. ALL SPECIFIED ITEMS SHALL BE PROVIDED AND INSTALLED PER MANUFACTURERS WRITTEN REQUIREMENTS

BUILDING CODE INFORMATION

BUILDING CODE	2021 MICHIGAN BUILDING CODE
ENERGY CODE 90.1-2019)	2021 MICHIGAN ENERGY CODE (ASHRAE
PLUMBING CODE	2021 MICHIGAN PLUMBING CODE
MECHANICAL CODE	2021 MICHIGAN MECHANICAL CODE
ELECTRICAL CODE	2023 NATIONAL ELECTRIC CODE (NEC)
ACCESSIBILITY	ICC A117.1-2009

PROJECT CRITERIA

PROJECT DESCRIPTION:

EXTERIOR WORK:
- BUILDING AND SITE DEMOLITION
- NEW EXTERIOR ADA RAMP AND STAIRS
- STORM WATER SYSTEM
- EXTERIOR DOOR AND WINDOW MODIFICATIONS
- SNOW MELT PIPING
- NEW EXTERIOR LIGHTING AND ELECTRICAL WORK

INTERIOR WORK:
- INTERIOR DEMOLITION
- CONCRETE ROOF/COURTYARD DECK REPAIRS
- MODIFICATIONS TO TENANT STORAGE ROOMS
- NEW STAIR TO BASEMENT LEVEL
- NEW ADA ENTRY AND RAMP TO GARDEN LEVEL
- NEW VERTICAL PLATFORM LIFT TO BASEMENT LEVEL
- MODIFICATIONS OF EXISTING PLUMBING PIPING
- SNOW MELT SYSTEM - SEE ALTERNATES
- NEW INTERIOR LIGHTING AND ELECTRICAL WORK

RENOVATIONS FOR:

ADA ENTRY

MARLBOROUGH CONDOMINIUM ASSOCIATION

KALAMAZOO, MI. 49007

PERSPECTIVE VIEW

SHEET INDEX

PROJECT TEAM

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Kalamazoo, MI 49007

ELITE COMPANIES

CONSTRUCTION MANAGER
ELITE COMPANIES
211 E Water Street, Suite231
Kalamazoo, MI 49007

VICINITY MAP

LOCATION MAP

<ALTERNATES>

SNOW MELT SYSTEM - SEE MECHANICAL DRAWINGS - SHEET M800

BASE BID: SNOW MELT PIPING AND MANIFOLD.

ALTERNATE #1: BOILER SNOW MELT SYSTEM.

ALTERNATE #2: HEAT EXHANGER SNOW MELT SYSTEM.

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RENOVATIONS FOR:
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471 W SOUTH ST, KALAMAZOO, MI 49007
TITLE SHEET

FOR PERMITTING ONLY

STATE OF MICHIGAN
GREGG A. JONES
ARCHITECT
No 1301003305
LICENSED ARCHITECT

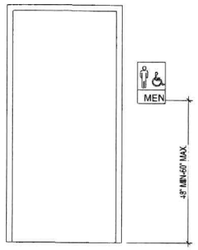
ISSUE DATE: 2026.03.27
PM: QA / QC:

#	ISSUANCE / REVISION	DATE

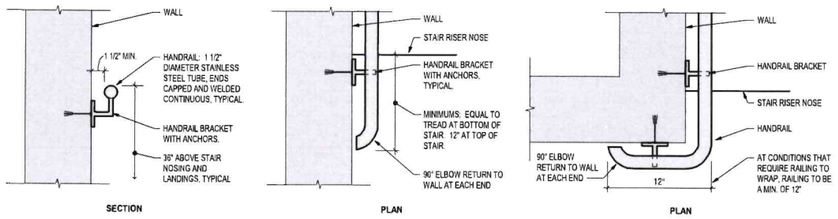
ORIGINAL SHEET IS 24"x36". USE DIMENSIONS SHOWN. DO NOT SCALE DRAWINGS.

PROJECT NO: 24-0128

T1.1



TYP. SIGNAGE
SCALE: 1/2" = 1'-0"



2 / T1.2 STAIR HANDRAIL - TYPICAL
1 1/2" = 1'-0"

WALL TYPE LEGEND

ABBREV.	GRAPHIC	DESCRIPTION	UL/STC RATING
1A		3 5/8" MTL STUD @ 16" O.C. WITH GYPSUM BOARD ON EACH SIDE WITH BATT INSULATION TO BOTTOM OF FLOOR ASSEMBLY	N/A
1B		3 5/8" MTL STUD @ 16" O.C. WITH GYPSUM BOARD ON ONE SIDE WITH BATT INSULATION TO BOTTOM OF FLOOR ASSEMBLY.	N/A
1C		7/8" MTL FURRING @ 16" O.C. WITH GYPSUM BOARD ON ONE SIDE.	N/A

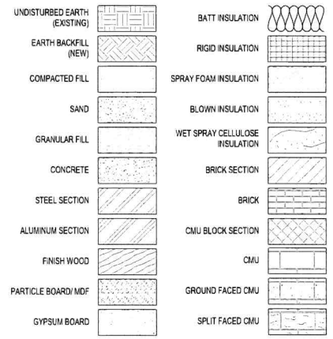
A. METAL STUDS SHALL BE 16" O.C. (TYP) AND SHALL BE CONTINUOUS TO FLOOR OR ROOF DECK, U.N.O.

B. PROVIDE WALL BRACING AS REQUIRED

C. PROVIDE WOOD BLOCKING FOR HANDRAILS, WALL MOUNTED ITEMS, ETC.

D. PROVIDE SLIP TYPE HEAD JOINT AT ALL METAL STUD WALLS

MATERIAL LEGEND



PLAN ABBREVIATIONS

A.C.	AIR CONDITIONING
ADJ.	ADJACENT
A.F.F.	ABOVE FIN. FLOOR
AL.	ALUMINUM
APPROX.	APPROXIMATE
ARCH.	ARCHITECT
&	AND
BM.	BEAM
B.M.	BENCH MARK
BRG.	BEARING
BITUM.	BITUMINOUS
BLKG.	BLOCKING
BD.	BOARD
BOT.	BOTTOM
B.O.F.	BOTTOM OF FOOTING
BLDG	BUILDING
C/C	CENTER TO CENTER
C.B.	CATCH BASIN
CEM.	CEMENT
CER.	CERAMIC
C.I.	CAST IRON
C.I.P.	CAST IN PLACE
C.J.	CONTROL JOINT
CLG.	CEILING
CL	CENTERLINE
CLO.	CLOSET
C.M.U.	CONCRETE MASONRY UNIT
C.O.	CLEAN OUT
COL.	COLUMN
CONTR.	CONTRACTOR
CONC.	CONCRETE
CONN.	CONNECTION
CONT.	CONTINUOUS
CPT.	CARPET
C.S.	CARPET STRIP
C.T.	CERAMIC TILE
D.L.	DEAD LOAD
D.	DEEP/DEPTH
DET.	DETAIL
DIA.	DIAMETER
DIM.	DIMENSION
DN.	DOWN
DWG.	DRAWING
EA.	EACH
ELEC.	ELECTRIC(AL)
ELEV., EL.	ELEVATION
E.W.	EACH WAY
EQ.	EQUAL
EXP.	EXPANSION
E.J.	EXPANSION JOINT
EXIST.	EXISTING
EXT.	EXTERIOR
EQUIP.	EQUIPMENT
F.O.B.	FACE OF BRICK
F.O.C.	FACE OF CONCRETE
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUD
FIN.	FINISH
F.D.	FLOOR DRAIN
FT.	FOOT/FEET
FTG.	FOOTING
FDN.	FOUNDATION
FURN.	FURNACE
GALV.	GALVANIZED
GA.	GAUGE
G.C.	GENERAL CONTRACTOR
GL.	GLASS
GR.	GRADE
GYP.	GYPSUM
H.C.	HOLLOW CORE
HDWE.	HARDWARE
H.M.	HOLLOW METAL
HORIZ.	HORIZONTAL
H.P.	HIGH POINT
HVAC	HEATING/VENTING/AIR COND.
HT., H.	HEIGHT/HIGH
HW.	HARDWOOD
I.D.	INSIDE DIAMETER
INSUL.	INSULATION
INT.	INTERIOR
INV.	INVERT
LAM.	LAMINATED
L.H.	LEFT HAND
LIN.	LINEAR
L.L.	LIVE LOAD
L.P.	LOW POINT
MAS.	MASONRY
MAT.	MATERIAL
MAX.	MAXIMUM
MET.	METAL
M.T.	MARBLE THRESHOLD
MTD.	MOUNTED
MECH.	MECHANICAL
MFR.	MANUFACTURER
M.H.	MANHOLE
MIN.	MINIMUM
MISC.	MISCELLANEOUS
M.O.	MASONRY OPENING
MR.	MIRROR
N.I.C.	NOT IN CONTRACT
NO., #	NUMBER
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
#	NUMBER/POUND
O.A.	OVERALL
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
O.H.	OVERHEAD
OPNG.	OPENING
OPP. HD.	OPPOSITE HAND
PTN.	PARTITION
P.C.	PRECAST
PLAM.	PLASTIC LAMINATE
PLAS.	PLASTER
PLYW.	PLYWOOD
P.L.	PROPERTY LINE
PNL.	PANEL
PR.	PAIR
P.S.F.	POUNDS PER S.F.
P.S.I.	POUNDS PER S.I.
P.T.	PRESSURE TREATED
P.V.C.	POLYVINYL CHLORIDE
PVMT.	PAVEMENT
Q.T.	QUARRY TILE
RAD.	RADIUS
R.A.	RETURN AIR
R. & G.	ROD & GROUT
R.D.	ROOF DRAIN
REINF.	REINFORCING
REQ'D.	REQUIRED
R.H.	RIGHT HAND
RM.	ROOM
R.O.	ROUGH OPENING
RND.	ROUND
S.A.	SUPPLY AIR
S.C.	SOLID CORE
SCHED.	SCHEDULE
SEC.	SECTION
S.F.	SQUARE FOOT
SHT., SH.	SHEET
S.I.	SQUARE INCH
SIM.	SIMILAR
SPEC.	SPECIFICATIONS
SQ.	SQUARE
STOR.	STORAGE
STL.	STEEL
STRUCT.	STRUCTURAL
SUSP.	SUSPEND(ED)
T & B	TOP & BOTTOM
TEL.	TELEPHONE
TG.	TEMPERED GLASS
T & G	TONGUE & GROOVE
THK.	THICKNESS
T.O.	TOP OF
T.O.C.	TOP OF CONCRETE
T.O.F.	TOP OF FOOTING
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
VCT.	VINYL COMPOSITION TILE
VWC.	VINYL WALL COVERING
W.C.	WATER CLOSET
WCT.	WAINSCOAT
WH.	WATER HEATER
WD.	WOOD
WWF.	WELDED WIRE FABRIC
W/	WITH
W/O	WITHOUT
XFMR.	TRANSFORMER

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RENOVATIONS FOR:
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REFERENCE SHEET

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ORIGINAL SHEET IS 24"x36". USE DIMENSIONS SHOWN, DO NOT SCALE DRAWINGS

PROJECT NO: 24-0128

T1.2

BUILDING DATA

PROJECT:
MARLBOROUGH ADA ELEVATOR AND BACK ENTRANCE

PROJECT ADDRESS:
471 W. SOUTH ST.
KALAMAZOO, MI. 49007

MUNICIPALITY:
CITY OF KALAMAOO

APPLICABLE BUILDING CODES:

BUILDING CODE	2021 MICHIGAN BUILDING CODE 2021 MICHIGAN REHABILITATION CODE
ENERGY CODE	2021 MICHIGAN COMMERCIAL ENERGY CODE (2021 IECC, ASHRAE 90.1-2019)
PLUMBING CODE	2021 MICHIGAN PLUMBING CODE
MECHANICAL CODE	2021 MICHIGAN MECHANICAL CODE
ELECTRICAL CODE	2023 NATIONAL ELECTRIC CODE (NEC)
ACCESSIBILITY	ICC A117.1-2017

MRC CHAPTER 3: PROVISIONS FOR ALL COMPLIANCE METHODS

SECTION 301.3 ALTERATION, ADDITION OR CHANGE OF OCCUPANCY: THE ALTERATION, ADDITION OR CHANGE OF OCCUPANCY OF ALL EXISTING BUILDINGS SHALL COMPLY WITH ONE OF THE METHODS LISTED IN SECTION 301.3.1, 301.3.2 OR 301.3.3 AS SELECTED BY THE APPLICANT. SECTIONS 301.3.1 THROUGH 301.3.3 SHALL NOT BE APPLIED IN COMBINATION WITH EACH OTHER.
EXCEPTION: SUBJECT TO THE APPROVAL OF THE CODE OFFICIAL, ALTERATIONS COMPLYING WITH THE LAWS IN EXISTENCE AT THE TIME THE BUILDING OR THE AFFECTED PORTION OF THE BUILDING WAS BUILT SHALL BE CONSIDERED IN COMPLIANCE WITH THE PROVISIONS OF THIS CODE. NEW STRUCTURAL MEMBERS ADDED AS PART OF THE ALTERATION SHALL COMPLY WITH THE MICHIGAN BUILDING CODE

SECTION 306.2 DESIGN: BUILDINGS AND FACILITIES SHALL BE DESIGNED AND CONSTRUCTED TO BE ACCESSIBLE IN ACCORDANCE WITH THIS CODE AND THE ALTERATION AND EXISTING BUILDING PROVISIONS IN ICC A117.1, AS APPLICABLE.

SECTION 306.7.5 ENTRANCES: WHERE AN ALTERATION INCLUDES ALTERATIONS TO AN ENTRANCE THAT IS NOT ACCESSIBLE AND THE FACILITY HAS AN ACCESSIBLE ENTRANCE, THE ALTERED ENTRANCE IS NOT REQUIRED TO BE ACCESSIBLE UNLESS REQUIRED BY 306.7.1. SIGNS COMPLYING WITH SECTION 1112 OF THE IBC TO BE PROVIDED

SECTION 306.7.7 ELEVATORS: ALTERED ELEMENTS OF EXISTING ELEVATORS SHALL COMPLY WITH THE MICHIGAN ELEVATOR CODE, R 408.7001 TO R 408.8695. THESE ELEMENTS SHALL ALSO BE ALTERED IN ELEVATORS PROGRAMMED TO RESPOND TO THE SAME HALL CALL CONTROL AS THE ALTERED ELEVATOR.

SECTION 306.7.8 PLATFORM LIFTS. PLATFORM OR WHEELCHAIR LIFTS COMPLYING WITH ICC/A 117.1 LISTED IN CHAPTER 16 OF THE MICHIGAN BUILDING CODE, AND INSTALLED IN ACCORDANCE WITH THE MICHIGAN ELEVATOR CODE, R 408.7001 TO R 408.8695 SHALL BE ALLOWED AS A COMPONENT OF AN ACCESSIBLE ROUTE. R 408.30561.

MRC CHAPTER 6: CLASSIFICATION OF WORK

SECTION 602.1 SCOPE. LEVEL 1 ALTERATIONS INCLUDE THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT OR FIXTURES USING NEW MATERIALS, ELEMENTS, EQUIPMENT OR FIXTURES THAT SERVE THE SAME PURPOSE.

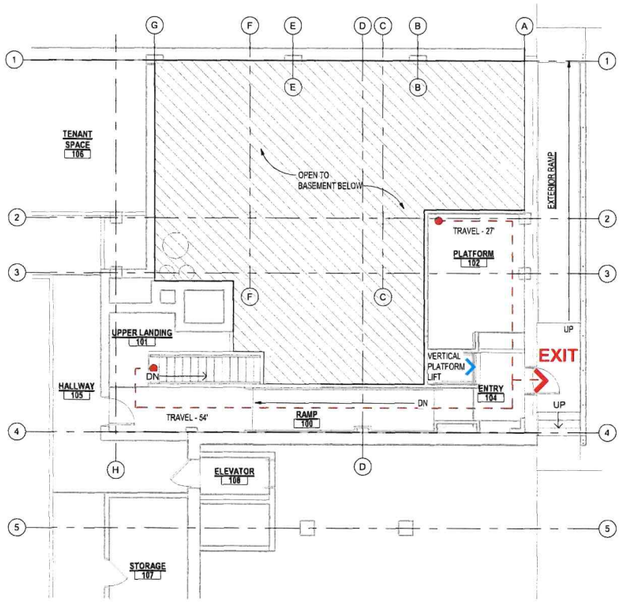
SECTION 602.2 APPLICATION. LEVEL 1 ALTERATIONS SHALL COMPLY WITH THE PROVISIONS OF CHAPTER 7.

MRC CHAPTER 8: ALTERATIONS - LEVEL 2

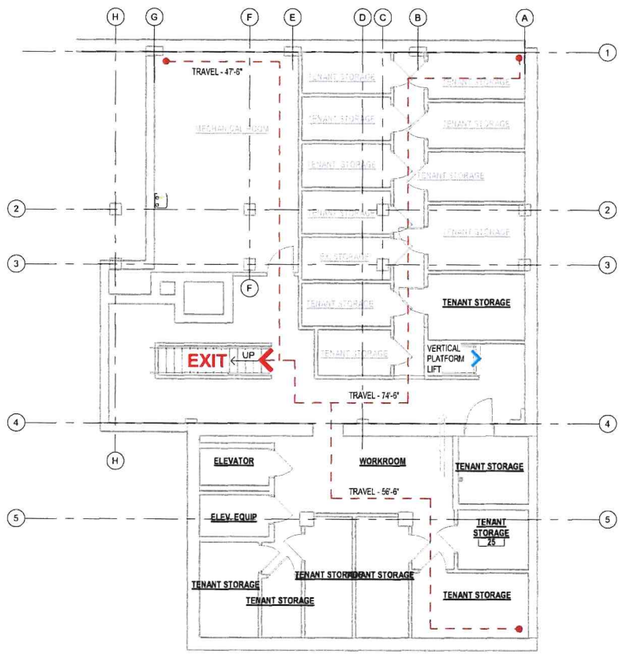
SECTION 801.1 SCOPE. LEVEL 2 ALTERATIONS AS DESCRIBED IN SECTION 603 SHALL COMPLY WITH THE REQUIREMENTS OF THIS CHAPTER. EXCEPTION: BUILDINGS IN WHICH THE RECONFIGURATION IS EXCLUSIVELY THE RESULT OF COMPLIANCE WITH THE ACCESSIBILITY REQUIREMENTS OF SECTION 306.7.1 SHALL BE PERMITTED TO COMPLY WITH CHAPTER 7.

SECTION 801.3 SYSTEM INSTALLATIONS. REQUIREMENTS RELATED TO WORK AREA ARE NOT APPLICABLE WHERE THE LEVEL 2 ALTERATIONS ARE LIMITED SOLELY TO ONE OR MORE OF THE FOLLOWING:

3. ALTERATIONS UNDERTAKEN FOR THE PRIMARY PURPOSE OF INCREASING THE ACCESSIBILITY OF A FACILITY.



N **GARDEN LEVEL CODE COMPLIANCE PLAN**
1/8" = 1'-0"



N **SUB BASEMENT - CODE COMPLIANCE PLAN**
1/8" = 1'-0"

GENERAL NOTES - LIFE SAFETY

A. ALL DOORS THROUGH FIRE WALLS TO HAVE FIRE RATING PER DOOR SCHEDULE W/ SMOKE SEALS & CLOSERS.

B. ALL REQUIRED EGRESS DOORS FROM PUBLIC SPACES TO EXTERIOR TO HAVE PANIC HARDWARE.

C. ALL HANDRAILS TO BE BETWEEN 34"-38" IN HEIGHT.

CODE COMPLIANCE PLAN LEGEND:

- PATH OF EGRESS
- EGRESS PATH BEGINING
- EGRESS PATH ID TAGS:
- 888'-0" X — EGRESS PATH TOTAL LENGTH
- EGRESS PATH ID
- X — EGRESS PATH ID - START
- EGRESS DIRECTION
- EXIT — EGRESS EXIT
- EXIT LIGHTING, SEE ELECTRICAL
- 30 MINUTE FIRE BARRIER
- 1 HOUR FIRE BARRIER
- 60 — FIRE PROTECTION RATING OF DOOR
- 1 HOUR HORIZONTIAL ASSEMBLY
- E.G.W. — EGRESS WINDOWS
- EXIT SIGN. COORDINATE ALL EXIT SIGNS WITH ELECTRICAL

NOTE: CONTRACTOR TO COORDINATE ALL EXIT SIGNS WITH ELECTRICAL PLANS.

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RENOVATIONS FOR:
MARLBOROUGH CONDOMINIUM ASSOCIATION
471 W SOUTH ST, KALAMAZOO, MI 49007
LIFE SAFETY PLAN

FOR PERMITTING ONLY

STATE OF MICHIGAN
GREGG A. JONES
ARCHITECT
No. 1301003305
LICENSED ARCHITECT

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PROJECT NO: 24-0128

T1.3

DIVISION 02 - EXISTING CONDITIONS

SECTION 024100
DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Selective demolition of built site elements.

B. Selective demolition of building elements for alteration purposes.

PART 2 PRODUCTS -- NOT USED

PART 3 EXECUTION

3.01 GENERAL PROCEDURES AND PROJECT CONDITIONS

A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
   1. Obtain required permits.
   2. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
   3. Provide, erect, and maintain temporary barriers and security devices.
   4. Conduct operations to minimize effects on and interference with adjacent structures and occupants.

B. Do not begin removal until receipt of notification to proceed from Owner.

C. Protect existing structures and other elements to remain in place and not removed.
   1. Provide bracing and shoring.
   2. Prevent movement or settlement of adjacent structures.
   3. Stop work immediately if adjacent structures appear to be in danger.

3.02 EXISTING UTILITIES

A. Coordinate work with utility companies. Notify utilities before starting work, comply with their requirements, and obtain required permits.

B. Protect existing utilities to remain from damage.

C. Do not disrupt public utilities without permit from authority having jurisdiction.

D. Remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.

3.03 SELECTIVE DEMOLITION FOR ALTERATIONS

A. Existing construction and utilities indicated on drawings are based on casual field observation and existing record documents only.
   1. Verify construction and utility arrangements are as indicated.
   2. Report discrepancies to Architect before disturbing existing installation.
   3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.

B. Maintain weatherproof exterior building enclosure, except for interruptions required for replacement or modifications; prevent water and humidity damage.

C. Remove existing work as indicated and required to accomplish new work.
   1. Remove items indicated on drawings.

D. Services including, but not limited to, HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications: Remove existing systems and equipment as indicated.
   1. Maintain existing active systems to remain in operation, and maintain access to equipment and operational components.
   2. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
   3. Verify that abandoned services serve only abandoned facilities before removal.
   4. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings. Remove back to source of supply where possible, otherwise cap stub and tag with identification.

E. Protect existing work to remain.
   1. Perform cutting to accomplish removal work neatly and as specified for cutting new work.
   2. Repair adjacent construction and finishes damaged during removal work.
   3. Patch to match new work.

3.04 DEBRIS AND WASTE REMOVAL

A. Remove debris, junk, and trash from site.

B. Leave site in clean condition, ready for subsequent work.

C. Clean up spillage and wind-blown debris from public and private lands.

DIVISION 05 - METALS

SECTION 055213
PIPE AND TUBE RAILINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Exterior handrails.

1.02 SUBMITTALS

A. Shop Drawings: Indicate profiles, sizes, connection attachments, anchorage, size and type of fasteners, and accessories.

PART 2 PRODUCTS

2.01 RAILINGS - GENERAL REQUIREMENTS

A. Design, fabricate, and test railing assemblies in accordance with the most stringent requirements of applicable local code.

B. Allow for expansion and contraction of members and building movement without damage to connections or members.

C. Dimensions: See drawings for configurations and heights.
   1. Rails: 1-1/2 inches (38 mm) diameter; round.

D. Provide anchors and other components as required to attach to structure; made of same materials as railing components unless otherwise indicated; where exposed fasteners are unavoidable provide flush countersunk fasteners.

E. Provide welding fittings to join lengths, seal open ends, and conceal exposed mounting bolts and nuts, including but not limited to elbows, T-shapes, splice connectors, flanges, escutcheons, and wall brackets.

2.02 STEEL RAILING SYSTEM

A. Steel Tube: ASTM A500/A500M Grade B cold-formed structural tubing.

B. Welding Fittings: Factory- or shop-welded from matching pipe or tube; seams continuously welded; joints and seams ground smooth.

2.03 FABRICATION

A. Accurately form components to suit specific project conditions and for proper connection to building structure.

B. Fit and shop assemble components in largest practical sizes for delivery to site.

C. Fabricate components with joints tightly fitted and secured. Provide splices and sleeves to accommodate site assembly and installation.

D. Welded Joints:
   1. Exterior Components: Continuously seal joined pieces by intermittent welds and plastic filler. Drill condensate drainage holes at bottom of members at locations that will not encourage water intrusion.
   2. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.

E. Finish: Shop primed.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive work.

3.02 PREPARATION

A. Supply items required to be cast into concrete or embedded in masonry with setting templates, for installation as work of other sections.

3.03 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Install components plumb and level, accurately fitted, free from distortion or defects, with tight joints.

C. Install railings in compliance with ADA Standards for accessible design at applicable locations.

D. Anchor railings securely to structure.

E. Conceal anchor bolts and screws whenever possible. Where not concealed, use flush countersunk fastenings.

3.04 TOLERANCES

A. Maximum Variation From Plumb: 1/4 inch (6 mm) per floor level, non-cumulative.

B. Maximum Offset From True Alignment: 1/4 inch (6 mm).

C. Maximum Out-of-Position: 1/4 inch (6 mm).

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

SECTION 061000
ROUGH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Nonstructural dimension lumber framing.

B. Concealed wood blocking, nailers, and supports.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
   1. If no species is specified, provide species graded by the agency specified, if no grading agency is specified, provide lumber graded by grading agency meeting the specified requirements.

2.02 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

A. Sizes: Nominal sizes as indicated on drawings, S4S.

B. Moisture Content: S-dry or MC19.

C. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
   1. Lumber: S4S, No. 2 or Standard Grade.
   2. Boards: Standard or No. 3.

PART 3 EXECUTION

3.01 PREPARATION

A. Where wood framing bears on cementitious foundations, install full width sill flashing continuous over top of foundation, lap ends of flashing minimum of 4 inches (100 mm) and seal.

B. Install sill gasket under sill plate of framed walls bearing on foundations; puncture gasket cleanly to fit tightly around protruding anchor bolts.

C. Coordinate installation of rough carpentry members specified in other sections.

3.02 INSTALLATION - GENERAL

A. Select material sizes to minimize waste.

B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including; shims, bracing, and blocking.

3.03 BLOCKING, NAILERS, AND SUPPORTS

A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.

B. In framed assemblies that have concealed spaces, provide solid wood fireblocking as required by applicable local code, to close concealed draft openings between floors and between top story and roof/attic space; other material acceptable to authorities having jurisdiction may be used in lieu of solid wood blocking.

C. In walls, provide blocking attached to studs as backing and support for wall-mounted items, unless item can be securely fastened to two or more studs or other method of support is explicitly indicated.

SECTION 062000
FINISH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Finish carpentry items including:
   1. Wood handrails.
   2. Wood window and door trim.
   3. Wood window sills.

PART 2 PRODUCTS

2.01 FINISH CARPENTRY ITEMS

A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS), unless noted otherwise.

B. Exterior Woodwork Items:
   1. Window Casings and Moldings: Softwood, prepare for paint finish.

C. Interior Woodwork Items:
   1. Moldings, Bases, Casings, and Miscellaneous Trim: Clear white pine; prepare for paint finish.
   2. Window Sills: Clear fir; prepare for transparent finish.
   3. Handrails: Clear fir; prepare for stained finish.

2.02 ACCESSORIES

A. Handrail Brackets:
   1. Basis-of-Design Product: Rockwood 701 - Hand Rail Bracket.
   2. Material and Finish: Cast brass, US26D satin chrome.
   3. Mounting: Exposed fasteners.
   4. Base: 2-13/16 in.
   5. Projection (to rail centerline): 3-1/2 in.

2.03 FABRICATION

A. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify adequacy of backing and support framing.

3.02 INSTALLATION

A. Install custom fabrications in accordance with AWI/AWMAC/WI (AWS) requirements for grade indicated.

B. Set and secure materials and components in place, plumb and level.

C. Carefully scribe work abutting other components, with maximum gaps of 1/32 inch (0.79 mm). Do not use additional overlay trim to conceal larger gaps.

3.03 PREPARATION FOR SITE FINISHING

A. Set exposed fasteners. Apply wood filler in exposed fastener indentations. Sand work smooth.

B. Before installation, prime paint surfaces of items or assemblies to be in contact with cementitious materials.

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

SECTION 079200
JOINT SEALANTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Nonsag gunnable joint sealants.

B. Joint backings and accessories.

1.02 SUBMITTALS

A. Product Data: Submit manufacturer's technical datasheets for each product to be used; include the following:
   1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
   2. Backing material recommended by sealant manufacturer.
   3. Substrates that product is known to satisfactorily adhere to and with which it is compatible.

B. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Nonsag Sealants: Available manufacturers include but are not limited to:
   1. Dow: www.dow.com/#sle.
   2. Pecora Corporation: www.pecora.com/#sle.
   3. Sika Corporation; usa.sika.com/#sle.
   4. Tremco Commercial Sealants & Waterproofing: www.tremcosealants.com/#sle.

2.02 JOINT SEALANT APPLICATIONS

A. Scope.
   1. Exterior Joints:
      a. Seal the following joints.
         1) Joints between doors, windows, and other frames or adjacent construction.
         2) Joints between different exposed materials.
         3) Wall penetrations for mechanical and electrical items .
   2. Interior Joints:
      a. Seal the following joints:
         1) Joints between door frames and window frames and adjacent construction.
         2) Wall penetrations for mechanical and electrical items..

B. Exterior Joints: Use nonsag nonstaining silicone sealant, unless otherwise indicated.

C. Interior Joints: Use nonsag polyurethane sealant, unless otherwise indicated.
   1. Wall and Ceiling Joints in Nonwet Areas: Acrylic emulsion latex sealant.

2.03 JOINT SEALANTS - GENERAL

A. Sealants and Primers: Provide products with acceptable levels of volatile organic compound (VOC) content; see Section 016116.

2.04 NONSAG JOINT SEALANTS

A. Nonstaining Silicone Sealant: ASTM C920, Grade NS, Uses M, A, G, and O; not expected to withstand continuous water immersion or traffic.
   1. Movement Capability: Plus and minus 25 percent, minimum.
   2. Color: To be selected by Architect from manufacturer's standard range.

B. Mildew-Resistant Silicone Sealant: ASTM C920, Grade NS, Uses M and A; single component, mildew resistant; not expected to withstand continuous water immersion or traffic.
   1. Color: White.

2.05 ACCESSORIES

A. Sealant Backing Materials, General: Materials placed in joint before applying sealants; assists sealant performance and service life by developing optimum sealant profile and preventing three-sided adhesion; type and size recommended by sealant manufacturer for compatibility with sealant, substrate, and application.

B. Sealant Backing Rod, Closed-Cell Type:
   1. Cylindrical flexible sealant backings complying with ASTM C1330 Type C.
   2. Size: 25 to 50 percent larger in diameter than joint width.

C. Primers: Type recommended by sealant manufacturer to suit application; nonstaining.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that joints are ready to receive work.

B. Verify that backing materials are compatible with sealants.

3.02 PREPARATION

A. Remove loose materials and foreign matter that could impair adhesion of sealant.

B. Clean joints, and prime as necessary, in accordance with manufacturer's instructions.

C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.

D. Mask elements and surfaces adjacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not be completely removable.

3.03 INSTALLATION

A. Install this work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.

B. Provide joint sealant installations complying with ASTM C1193.

C. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer, except where specific dimensions are indicated.

D. Install bond breaker backing tape where backer rod cannot be used.

E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.

F. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.

G. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

DIVISION 08 - OPENINGS

SECTION 081110
INSULATED STEEL DOORS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Insulated steel entrance door and adjustable frame system.

1.02 SUBMITTALS

A. Product Data:
   1. Manufacturer's data sheets on each product to be used.
   2. Preparation instructions and recommendations.
   3. Storage and handling requirements and recommendations.
   4. Typical installation methods.

B. Shop Drawings: Submit shop drawings showing relationship with adjacent construction, layout, profiles and product components, including anchorage, and accessories.
   1. Indicate door type, frame, steel, core, material thickness, reinforcements, anchorages, exposed fasteners locations, openings (glazed, paneled or louvered) and hardware arrangement.
   2. Include schedule identifying each unit, with door marks or numbers referencing numbering in schedules or drawings.

1.03 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
   1. Handle and store products according to manufacturer's recommendations published in technical materials.
   2. Leave product wrapped or otherwise protected and under clean, dry storage conditions until required.

B. Storage and Protection: Store materials protected from exposure to harmful weather conditions, at temperature and humidity conditions recommended by manufacturer.
   1. Door Storage:
      a. Doors shall be protected at corners to prevent damage or marring of finish.
      b. Doors shall be stored in an upright position under cover on building site on wood sills or on floors in a manner that will prevent rust and damage.
      c. Avoid creating a humidity chamber by using a plastic or canvas shelter and not venting the area covered.
   2. Frame Storage:
      a. Frames shall be stored in an upright position under cover on building site on wood sills or floors in a manner that will prevent rust and damage.
      b. Avoid creating a humidity chamber by using a plastic or canvas shelter and not venting the area covered.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Acceptable Manufacturer: Taylor Entrance Systems, Inc., West Branch, MI; Email: request info (Jason Hulett@taylordoor.com);Web: https://taylordoor.com

2.02 PERFORMANCE REQUIREMENTS

A. G40 Hot Dipped Galvanized Steel per ASTM A653.

B. Superior insulation values, even in sub-zero temperature ranges.
   1. Apparent U-Value of Opaque Doors: 0.17 Btu per sq ft per hour per degrees F (0.29 W per m per degrees K). For doors 1-3/4 inches (45 mm) thick, 24 gauge construction.
      a. Ratings do not apply to panels but to operable door frame assemblies.
      b. Test reports per NFRC 102 available to design professionals upon request.

C. Fire Protection: Tested performance.
   1. Doors up to 8 ft (2438 mm) in height: 90 minutes.

D. Security Rating: Grade 40.

E. Hurricane Impact Code Compliance: Pass.

F. Weldless Door Construction: No welds to provide blemishes or destruction of rust inhibiting galvanic coating.

G. Composite Lock Block: Eliminates typical wave in lock area while enhancing structural performance.

H. Prime Paint System: Thermosetting Polyester Prime Coil Coat.

2.03 SMOOTH STEEL ENTRANCE DOOR SYSTEMS

A. Basis of Design: WestGuard Collection as manufactured by Taylor Entrance Systems.
   1. Compliance: Grade 40 security rating.
   2. Door Panel Texture: Smooth.
   3. Door Panel Thickness: 1-3/4 inches (44 mm).
   4. Door Panel Style: 2-Panel Raised.
   5. Steel Face Sheet Thickness: 20 gauge, G40 (hot-dipped) galvanized steel.
   6. Finish: Door surfaces exposed to view; factory primed.
   7. Hinge Preps: 4-1/2 inch (115 mm) mortise commercial hinge prep.
   8. Lock Area Reinforcement: 4 x 10 inches (102 x 254 mm) composite lock block.
   9. Core: Polyurethane filled, low VOC, 2.00 lbs per cu ft (32 kg per cu m) density.
   10. Perimeter: Continuously reinforced unitized steel edge construction.
   11. Cutouts: Glazed upper panel.
   12. Bottom Sweeps: Metal retainer with composite (or dual durometer) slide on sweep.

B. Hardware Preparation: Location of hardware including but not limited to locks, hinges, latches, push/pull plates, and bars; exit devices, handle sets, closer reinforcing, roller latches and arm pulls. Conform to Steel Door Institute recommendations and details in manufacturer's literature.
   1. Doors: Mortised, reinforced, drilled and tapped to receive mortise hardware.
      a. Door Height up to 84 inches (2134 mm): Prepare for 3 hinges.
   2. Surface Applied Hardware: Field Drill and tap for mounting.
   3. Locks: Require flat faces.

C. Glazing:
   1. Glazing: Insulated, tempered glass.

D. Adjustable Frame System:
   1. Basis of Design: Pro18, Taylor Entrance Systems.
   2. Frame Type: Fitted frame, adjustable, two piece, 18 gauge steel. Interlocking base and closure for 1 inch (25 mm) throat adjustability.
   3. Casing: None.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin installation until substrates have been properly constructed and prepared.

B. Verify substrate conditions, previously installed under other sections, are acceptable for product installation in accordance with manufacturer's instructions.

C. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.

3.02 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using methods recommended by manufacturer for achieving the best result for substrate under the project conditions.

C. Field Painting Preparation.
   1. Before application of finish coat, surfaces must be dry and free of dirt, oil and dust.
   2. Finish Coat: Applied over a film that is intact. Field prime scratches or bare edges with a rust inhibiting paint before top coating.
      a. Comply with instructions provided by paint manufacturer.

3.03 INSTALLATION

A. Install in accordance with manufacturer's instructions, approved submittals, and in proper relationship with adjacent construction.

B. General:
   1. Set plumb, square, aligned, and without twist at correct elevation.
   2. Steel Frames: Install plumb, straight and true, rigidly secured in place, and properly braced.
   3. Comply with ANSI/DHI A115-IG installation guide.
   4. Comply with NFPA 80 installation standards.

C. Frame Installation Tolerances.
   1. Plumbness Tolerance: Measured through a line from intersecting corner of vertical members and the head to the floor, 0 to 0.063 inches (1.6 mm).
   2. Squareness Tolerance: Measured through a line 90 degrees from one jamb at upper corner of product, to opposite jamb; 0 to 0.063 inches (1.6 mm).
   3. Alignment Tolerance: Measured on jambs, through a horizontal line parallel to plane of wall, 0 to 0.063 inches (1.6 mm).
   4. Twist Tolerance: Measured at face corners of jambs, on parallel lines perpendicular to plane of wall, 0 to 0.063 inches (1.6 mm).

D. Secure anchorages and connections to adjacent construction.

E. Install hardware in accordance with manufacturers' template and instructions.

F. Install glazing materials and door silencers.

G. Finish exposed field welds to present a smooth uniform surface. Touch up with a rust inhibitive primer.

H. Touch up exposed surfaces scratched or marred during shipment, installation, or handling with a rust inhibitive primer.

I. Repainting: If necessary to field coat a factory finished door or frame, sand the door or frame for better adhesion and prime any bare metal.
   1. Test to confirm the primer and finish coat are compatible.

3.04 TESTING AND ADJUSTING

A. Adjust hinge sets, locksets and other hardware as recommended by manufacturer.

B. Lubricate using a manufacturer recommended lubricant compatible with door and frame coatings.

3.05 CLEANING AND PROTECTION

A. Clean installed products in accordance with manufacturer's recommendations prior to Substantial Completion.

B. Remove temporary coverings and protection of adjacent work areas. Remove construction debris from project site and legally dispose of debris.

C. Touch-up, repair or replace damaged products before Substantial Completion.

D. Protection: Protect installed product and finish surfaces from damage during construction.

SECTION 081113
HOLLOW METAL DOORS AND FRAMES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Hollow metal frames for wood doors.

1.02 SUBMITTALS

A. Product Data: Materials and details of design and construction, hardware locations, reinforcement type and locations, anchorage and fastening methods, and finishes; and one copy of referenced standards/guidelines.

B. Shop Drawings: Details of each opening, showing elevations, glazing, frame profiles and any indicated finish requirements.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Hollow Metal Doors and Frames: Available manufacturers include but are not limited to:
   1. Ceco Door, an Assa Abloy Group company; www.assaabloydss.com/#sle.
   2. Republic Doors, an Allegion brand; www.republicdoor.com#sle.

2.02 HOLLOW METAL FRAMES

A. Comply with standards and/or custom guidelines as indicated for corresponding door in accordance with applicable door frame requirements.

B. Interior Door Frames, Non-Fire Rated: Knock-down type.
   1. Frame Metal Thickness: 18 gauge, 0.042 inch (1.0 mm), minimum.
   2. Frame Finish: Factory primed and field finished.

2.03 FINISHES

A. Primer: Rust-inhibiting, complying with ANSI/SDI A250.10, door manufacturer's standard.

2.04 ACCESSORIES

A. Silencers: Resilient rubber, fitted into drilled hole; provide three on strike side of single door, three on center mullion of pairs, and two on head of pairs without center mullions.

B. Temporary Frame Spreaders: Provide for factory- or shop-assembled frames.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify that opening sizes and tolerances are acceptable.

C. Verify that finished walls are in plane to ensure proper door alignment.

3.02 INSTALLATION

A. Install doors and frames in accordance with manufacturer's instructions and related requirements of specified door and frame standards or custom guidelines indicated.

B. Coordinate frame anchor placement with wall construction.

C. Install door hardware as specified in Section 087100.

3.03 TOLERANCES

A. Clearances Between Door and Frame: Comply with related requirements of specified frame standards or custom guidelines indicated in accordance with SDI 117 or NAAMM HMMA 861.

B. Maximum Diagonal Distortion: 1/16 inch (1.6 mm) measured with straight edge, corner to corner.

SECTION 081416
FLUSH WOOD DOORS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Flush wood doors, flush configuration, non-rated.
   1. Solid core wood doors.
   2. Hollow core wood doors.

1.02 SUBMITTALS

A. Product Data: Indicate door core materials and construction; veneer species, type and characteristics.

B. Shop Drawings: Show doors and frames, elevations, sizes, types, swings, undercuts, beveling, blocking for hardware, factory machining, factory finishing, cutouts for glazing and other details.

C. Samples: Submit two samples of door veneer illustrating wood grain, stain color, and sheen.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Wood Veneer Faced Doors: Manufacturers include, but are not limited to:
   1. Forte Opening Solutions: www.forteopenings.com/#sle.
   2. VT Industries, Inc: www.vtindustries.com/#sle.

2.02 DOORS AND PANELS

A. Doors:
   1. Quality Standard: Custom Grade, Standard Duty performance, in accordance with AWI/AWMAC/WI (AWS), unless noted otherwise.

B. Interior Doors: 1-3/4 inches (44 mm) thick unless otherwise indicated; flush construction.
   1. Provide solid core doors at each location, except provide hollow core doors at locations noted on the drawings.

2.03 DOOR AND PANEL CORES

A. Non-Rated Solid Core and 20 Minute Rated Doors: Type particleboard core (PC); plies and faces as indicated.

B. Hollow Core Doors: Type - Standard (FSHC); plies and faces as indicated above.

2.04 DOOR FACINGS

A. Solid Core Doors - Veneer Facing for Transparent Finish: Red oak, veneer grade in accordance with quality standard indicated, plain sliced (flat cut), with book match between leaves of veneer, running match of spliced veneer leaves assembled on door or panel face[<>].

B. Hollow Core Doors - Veneer Facing for Transparent Finish: Natural birch, veneer grade in accordance with quality standard indicated, plain sliced (flat cut), with book match between leaves of veneer, running match of spliced veneer leaves assembled on door or panel face.

2.05 DOOR CONSTRUCTION

A. Fabricate doors in accordance with door quality standard specified.

B. Cores Constructed with stiles and rails.

C. Factory machine doors for hardware other than surface-mounted hardware, in accordance with hardware requirements and dimensions.

D. Factory fit doors for frame opening dimensions identified on shop drawings, with edge clearances in accordance with specified quality standard.

E. Provide edge clearances in accordance with the quality standard specified.

2.06 FINISHES - WOOD VENEER DOORS

A. Finish work in accordance with AWI/AWMAC/WI (AWS), Section 5 - Finishing for grade specified and as follows:
   1. Solid Core Doors - Transparent:
      a. System - 5, Varnish, Conversion.
      b. Stain: As selected by Architect.
      c. Sheen: Satin.
   2. Hollow Core Doors - Unfinished.

2.07 ACCESSORIES

A. Wood Door Frames: See Section 062000- Finish Carpentry.

B. Glazed Openings.
   1. Heat-Strengthened and Fully Tempered Glass: ASTM C1048.
   2. Glazing: Single vision units, 1/4 inch (6.4 mm) thick glass.
   3. Tint: Clear.

C. Glazing Stops: Wood, of same species as door facing, butted corners, prepared for countersink style tamper proof screws.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify that opening sizes and tolerances are acceptable.

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RENOVATIONS FOR:

MARLBOROUGH CONDOMINIUM ASSOCIATION

471 W SOUTH ST, KALAMAZOO, MI 49007

ARCHITECTURAL SPECIFICATIONS

FOR PERMITTING ONLY

STATE OF MICHIGAN
GREGG A. JONES
ARCHITECT
No. 1301063305
LICENSED ARCHITECT

ISSUE DATE: 2026.03.27

PM: QA / QC:

#	ISSUANCE / REVISION	DATE

ORIGINAL SHEET IS 24"x36". USE DIMENSIONS SHOWN. DO NOT SCALE DRAWINGS.

PROJECT NO: 24-0128

C. Do not install doors in frame openings that are not plumb or are out-of-tolerance for size or alignment.

3.02 INSTALLATION

A. Install doors in accordance with manufacturer's instructions and specified quality standard.

B. Factory-Finished Doors: Do not field cut or trim; if fit or clearance is not correct, replace door.

C. Use machine tools to cut or drill for hardware.

D. Coordinate installation of doors with installation of frames and hardware.

E. Coordinate installation of glazing.

3.03 ADJUSTING

A. Adjust doors for smooth and balanced door movement.

SECTION 085200
WOOD WINDOWS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Factory-fabricated wood windows with glazing.

B. Aluminum-framed storm window.

1.02 SUBMITTALS

A. Product Data: Show component dimensions, anchorage and fasteners, glass, and internal drainage details.

B. Shop Drawings: Indicate opening dimensions, framed opening tolerances, affected related work, and installation requirements.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Wood Windows:
1. Andersen Windows, Inc: www.andersenwindows.com#sle.
2. Pella Corp: www.pellacommercial.com#sle.

2.02 WOOD WINDOWS

A. Wood Windows: Wood frame and sash, factory fabricated and assembled.
1. Exterior Finish: Primed.
2. Interior Finish: Primed.
3. Configuration: Single-hung.
4. Window Product Types: H (VS) - Hung window (Vertical sliding window), in accordance with AAMA/WDMA/CSA 101/I.S.2/A440.
5. Factory glazed; dry glazing method.
6. Wood Species: Clear pine, preservative treated using treatment type suitable for required finish.
7. Frame and Sash Members: Mortise and tenon joints. Glue and steel pin joints to hairline fit, weather tight.
8. Weather Stop Flange: Continuous at perimeter of unit.
9. Clearances and Shim Spacing: Minimum required for installation and dynamic movement of perimeter seal.
10. Fasteners: Concealed from view.
11. Operable Units: Double weatherstripped.

2.03 COMPONENTS

A. Glazing: Double glazed, clear, Low-E coated, argon filled, with glass thicknesses as recommended by manufacturer for specified wind conditions.

B. Muntins/Grilles: Removable grilles on interior of windows, not attached to glass.
1. Pattern: Custom design, see drawings.
2. Bar Width: 3/4 inch (19 mm).
3. Color: Match interior and exterior of frame.

C. Operable Sash Weatherstripping: Wool pile, permanently resilient, profiled to effect weather seal.

D. Wood for Casings and Trim: Clear pine, clear preservative treated, of type suitable for required finish.

E. Flashing: Provide related flashings, with necessary anchors and attachment devices.

2.04 PERFORMANCE REQUIREMENTS

A. Comply with AAMA/WDMA/CSA 101/I.S.2/A440 requirements for the specific window type in accordance with the following:
1. Performance Class (PC): R.
2. Performance Grade (PG): 25, with minimum design pressure (DP) of 25.06 psf (1200 Pa).

2.05 HARDWARE

A. Hung Sash: Metal and nylon spiral friction slide cylinder, each sash, each jamb.

B. Sash lock: Lever handle with cam lock.

2.06 STORM WINDOW

A. Extruded aluminum frame with mitered and reinforced corners.
1. Frame Finish: Baked enamel, color to match existing storm windows.

B. Glazing:
1. Upper Panel: 1/4-inch tempered glass.
2. Lower Panel: Vinyl-coated fiberglass, window manufacturer's standard mesh.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install windows in accordance with manufacturer's instructions.

B. Attach window frame and shims to perimeter opening to accommodate construction tolerances and other irregularities.

C. Align window plumb and level, free of warp or twist. Maintain dimensional tolerances and alignment with adjacent work.

D. Set sill members and sill flashing in continuous bead of sealant.

3.02 TOLERANCES

A. Maximum Variation from Level or Plumb: 1/16 inch per 3 ft (1.6 mm per m) non-cumulative or 1/8 inch per 10 ft (3.2 mm per 3 m), whichever is less.

3.03 ADJUSTING

A. Adjust hardware for smooth operation and secure weathertight closure.

SECTION 087100
DOOR HARDWARE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Hardware for wood and hollow metal doors.

B. Weatherstripping and gasketing.

1.02 SUBMITTALS

A. Product Data: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project, and includes construction details, material descriptions, finishes, and dimensions and profiles of individual components.

B. Shop Drawings - Door Hardware Schedule: Submit detailed listing that includes each item of hardware to be installed on each door. Use door numbering scheme as included in Contract Documents.
1. Prepared by or under supervision of Architectural Hardware Consultant (AHC).
2. Provide complete description for each door listed.

1.03 DELIVERY, STORAGE, AND HANDLING

A. Package hardware items individually; label and identify each package with door opening code to match door hardware schedule.

PART 2 PRODUCTS

2.01 DESIGN AND PERFORMANCE CRITERIA

A. Provide specified door hardware as required to make doors fully functional, compliant with applicable codes, and secure to extent indicated.

B. Provide individual items of single type, of same model, and by same manufacturer.

C. Provide door hardware products that comply with the following requirements:
1. Accessibility: ADA Standards and ICC A117.1.

D. Fasteners:
1. Provide fasteners of proper type, size, quantity, and finish that comply with commercially recognized standards for proposed applications.
a. Provide phillips flat-head screws with heads finished to match door surface hardware unless otherwise indicated.

2.02 HINGES

A. Manufacturers:
1. McKinney; an Assa Abloy Group company: www.assaabloydss.com/#sle.
2. Hager Companies: www.hagerco.com#sle
3. Ives; an Allegion company: https://u.allegion.com/en/products/brands/ives.html

B. Hinges: Comply with BHMA A156.1, Grade 1.
1. Butt Hinges: Comply with BHMA A156.1 and BHMA A156.7 for templated hinges.
a. Provide hinge width required to clear surrounding trim.
2. Provide hinges on every swinging door.
3. Provide five-knuckle full mortise butt hinges unless otherwise indicated.
4. Provide following quantity of butt hinges for each door:
a. Doors From 60 inches (1.5 m) High up to 90 inches (2.3 m) High: Three hinges.

2.03 EXIT DEVICES

A. Manufacturers:
1. Corbin Russwin, Sargent, or Yale; an Assa Abloy Group company: www.assaabloydss.com/#sle.
2. BEST, dormakaba Group: www.bestaccess.com/#sle.
3. Von Duprin; an Allegion brand: www.allegion.com/us/#sle.

B. Exit Devices: Comply with BHMA A156.3, Grade 1.
1. Lever design to match lockset trim.
2. Provide cylinder with cylinder dogging or locking trim.
3. Provide exit devices properly sized for door width and height.
4. Provide strike as recommended by manufacturer for application indicated.
5. Provide less bottom rod (LBR) at scheduled locations to eliminate use of floor mounted strikes.
6. Provide UL (DIR) listed exit device assemblies for fire-rated doors and panic device assemblies for non-fire-rated doors.

2.04 CYLINDRICAL LOCKS

A. Manufacturers:
1. Corbin Russwin, Sargent, or Yale; an Assa Abloy Group company: www.assaabloydss.com/#sle.
2. BEST, dormakaba Group: www.bestaccess.com/#sle.
3. Schlage, an Allegion brand: www.allegion.com/us/#sle

B. Cylindrical Locks (Bored): Comply with BHMA A156.2, Grade 1, 4000 Series.
1. Bored Hole: 2-1/8 inch (54 mm) diameter.
2. Latchbolt Throw: 1/2 inch (12.7 mm), minimum.
3. Backset: 2-3/4 inch (70 mm) unless otherwise indicated.
4. Strikes: Provide manufacturer's standard strike for each latchset or lockset with strike box and curved lip extending to protect frame in compliance with indicated requirements.
a. Finish: To match lock or latch.
5. Trim: Provide lever handle or pull trim on outside of each lock, unless otherwise indicated.

2.05 ELECTROMECHANICAL LOCKS

A. Manufacturers:
1. Yale; an Assa Abloy Group company: Assure Lever Keypad: www.assaabloydss.com/#sle.
2. Schlage, an Allegion brand; Schlage Touch Keyless Touchscreen Lever: www.allegion.com/us/#sle.

B. Electromechanical Locks: Comply with BHMA A156.25, Grade 1, Security, 1000 Series.
1. Provide motor-driven or solenoid-driven locks, with strike that is applicable to frame.
2. Type: Cylindrical (Bored).
3. Power source: Battery.

2.06 DOOR PULLS

A. Door Pulls:
1. Basis-of-Design: Stanley 81-0560.
2. Size: 6-1/2 xy 1-3/4 inch.
3. Fasteners: Exposed.
4. Material: Zinc plated steel, unless otherwise indicated.

2.07 LOCK HASPS

A. Lock Hasps:
1. Basis-of-Design: Stanley 755-075.
2. Size: 4-1/2 inch.
3. Fasteners: Semi-concealed.
4. Material: Zinc plated steel, unless otherwise indicated.

2.08 CLOSERS

A. Manufacturers; Surface Mounted:
1. BEST, dormakaba Group: www.bestaccess.com/#sle.
2. Norton; an Assa Abloy Group company: www.assaabloydss.com/#sle.
3. LCN, an Allegion brand: www.allegion.com/us/#sle.

B. Closers: Comply with BHMA A156.4, Grade 1.
1. Type: Surface mounted to door.

2.09 PROTECTION PLATES

A. Manufacturers:
1. Rockwood; an Assa Abloy Group company: www.assaabloydss.com/#sle.
2. Hager Companies: www.hagerco.com#sle
3. Ives, an Allegion brand: www.allegion.com/us/#sle.

B. Protection Plates: Comply with BHMA A156.6.

C. Metal Properties: Stainless steel material.
1. Metal, Standard Duty: Thickness 0.050 inch (1.27 mm), minimum.

D. Edges: Beveled, on four sides unless otherwise indicated.

E. Fasteners: Countersunk screw fasteners.

2.10 KICK PLATES

A. Kick Plates: Provide along bottom edge of push side of every door with closer, except aluminum storefront and glass entry doors, unless otherwise indicated.
1. Size: 8 inch (203 mm) high by 2 inch (51 mm) less door width (LDW) on push side of door.

2.11 WALL STOPS

A. Manufacturers:
1. Rockwood; an Assa Abloy Group company: www.assaabloydss.com/#sle.
2. Hager Companies: www.hagerco.com#sle

B. Wall Stops: Comply with BHMA A156.16, Grade 1 and Resilient Material Retention Test as described in this standard.
1. Type: Bumper, concave, wall stop.
2. Material: Aluminum housing with rubber insert.

2.12 THRESHOLDS

A. Manufacturers:
1. Pemko, an Assa Abloy Group company: www.assaabloydss.com/#sle
2. National Guard Products, Inc: www.ngpinc.com/#sle.
3. Zero International, Inc: www.zerointernational.com#sle

B. Thresholds: Comply with BHMA A156.21.
1. Provide threshold at each exterior door, unless otherwise indicated.
2. Type: Flat surface.
3. Material: Aluminum.
4. Threshold Surface: Fluted horizontal grooves across full width.
5. Field cut threshold to profile of frame and width of door sill for tight fit.
6. Provide non-corroding fasteners at exterior locations.

2.13 WEATHERSTRIPPING AND GASKETING

A. Manufacturers:
1. Pemko; an Assa Abloy Group company: www.assaabloydss.com/#sle.
2. National Guard Products, Inc: www.ngpinc.com/#sle.
3. Reese Enterprises, Inc: www.reeseusa.com/#sle.
4. Zero International, Inc: www.zerointernational.com/#sle.

B. Weatherstripping and Gasketing: Comply with BHMA A156.22.
1. Head and Jamb Type: Self-adhesive.
2. Door Sweep Type: Door shoe with drip cap.
3. Material: Aluminum, with brush weatherstripping.
4. Provide weatherstripping on each exterior door at head, jambs, and meeting stiles of door pairs, unless otherwise indicated.
5. Provide door bottom sweep on each exterior door, unless otherwise indicated.

2.14 SILENCERS

A. Silencers: Provide at equal locations on door frame to mute sound of door's impact upon closing.
1. Single Door: Provide three on strike jamb of frame.
2. Material: Rubber, gray color.

2.15 FINISHES

A. Finishes: Provide door hardware of same finish, unless otherwise indicated.
1. Primary Finish: 625; bright chromium plated over nickel, with brass or bronze base material (former US equivalent US26); BHMA A156.18.
2. Finish: 626; satin chromium plated over nickel, with brass or bronze base material (former US equivalent US26D); BHMA A156.18.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install hardware in accordance with manufacturer's instructions and applicable codes.

B. Use templates provided by hardware item manufacturer.

C. Door Hardware Mounting Heights: Distance from finished floor to center line of hardware item. As indicated in following list; unless noted otherwise in Door Hardware Schedule or on drawings.
1. For Wood Doors: Install in compliance with DHI WDHS.3 recommendations.

D. Set exterior door thresholds with full-width bead of elastomeric sealant at each point of contact with floor providing a continuous weather seal; anchor thresholds with stainless steel countersunk screws.

3.02 ADJUSTING

A. Adjust hardware for smooth operation.

B. Adjust gasketing for complete, continuous seal; replace if unable to make complete seal.

SECTION 088000
GLAZING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Glazing units.

B. Plastic films.

1.02 SUBMITTALS

A. Product Data on Glazing Unit and Plastic Film Glazing Types: Provide structural, physical and environmental characteristics, size limitations, special handling and installation requirements.

B. Samples: Submit two samples of window film.

PART 2 PRODUCTS

2.01 GLASS MATERIALS

A. Float Glass: Provide float glass based glazing unless otherwise indicated.
1. Kind FT - Fully Tempered Type: Complies with ASTM C1048.

2.02 GLAZING UNITS

A. Monolithic Interior Vision Glazing:
1. Applications: Interior glazing unless otherwise indicated.
2. Glass Type: Fully tempered float glass.
3. Tint: Clear.
4. Thickness: 1/4 inch (6.4 mm), nominal.

2.03 PLASTIC FILMS

A. Decorative Plastic Film: Polyvinyl butyral (PVB) type.
1. Application: Locations as indicated on drawings.
2. Color: Dark grey.

PART 3 EXECUTION

3.01 INSTALLATION, GENERAL

A. Install glazing in compliance with written instructions of glass, gaskets, and other glazing material manufacturers, unless more stringent requirements are indicated, including those in glazing referenced standards.

3.02 INSTALLATION - DRY GLAZING METHOD (GASKET GLAZING)

A. Application - Exterior and/or Interior Glazed: Set glazing infills from either the exterior or the interior of the building.

B. Place setting blocks at 1/4 points with edge block no more than 6 inch (152 mm) from corners.

C. Rest glazing on setting blocks and push against fixed stop with sufficient pressure on gasket to attain full contact.

D. Install removable stops without displacing glazing gasket; exert pressure for full continuous contact.

3.03 INSTALLATION - PLASTIC FILM

A. Install plastic film with adhesive, applied in accordance with film manufacturer's instructions.

B. Place without air bubbles, creases or visible distortion.

C. Install film tight to perimeter of glass and carefully trim film with razor sharp knife. Provide 1/16 inch (1.6 mm) to 1/8 inch (3.2 mm) gap at perimeter of glazed panel unless otherwise required. Do not score the glass.

DIVISION 09 - FINISHES

SECTION 092116
GYPSUM BOARD ASSEMBLIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Metal stud wall framing.

B. Gypsum wallboard.

C. Joint treatment and accessories.

1.02 SUBMITTALS

A. Product Data:
1. Provide data on metal framing, gypsum board, accessories, and joint finishing system.

1.03 DELIVERY, STORAGE, AND HANDLING

A. Store gypsum products and accessories indoors and keep above freezing. Elevate boards above floor, on nonwicking supports, in accordance with manufacturer's recommendations.

PART 2 PRODUCTS

2.01 GYPSUM BOARD ASSEMBLIES

A. Provide completed assemblies complying with ASTM C840 and GA-216.

B. Interior Partitions: Provide completed assemblies with the following characteristics:
1. Acoustic Attenuation: STC of 45-49 calculated in accordance with ASTM E413, based on tests conducted in accordance with ASTM E90.

2.02 METAL FRAMING MATERIALS

A. Material and Product Requirements Criteria: AISI S201.

B. Steel Sheet: ASTM A1003/A1003M, subject to the ductility limitations indicated in AISI S220 or equivalent:
1. Corrosion Protection Coating Designation: G40, or equivalent in accordance with AISI S220.

C. Manufacturers - Metal Framing, Connectors, and Accessories:
1. ClarkDietrich: www.clarkdietrich.com/#sle.
2. Jaimes Industries: www.jaimesind.com/#sle.
3. MarinoWARE: www.marinoware.com/#sle.

D. Nonstructural Framing System Components: AISI S220; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 for the spacing indicated, with maximum deflection of wall framing of L/120 at 5 psf (L/120 at 240 Pa).
1. Studs: C-shaped with knurled or embossed faces.
2. Runners: U shaped, sized to match studs.
3. Furring Members: Hat-shaped sections, minimum depth of 7/8 inch (22 mm).

E. Partition Head To Structure Connections: Provide track fastened to structure with legs of sufficient length to accommodate deflection, for friction fit of studs cut short and fastened as indicated on drawings.

2.03 BOARD MATERIALS

A. Manufacturers - Gypsum-Based Board:
1. Georgia-Pacific Gypsum: www.gpgypsum.com/#sle.
2. Gold Bond Building Products, LLC provided by National Gypsum Company: www.goldbondbuilding.com/#sle.
3. USG Corporation: www.usg.com/#sle.

B. Gypsum Wallboard: Paper-faced gypsum panels as defined in ASTM C1396/C1396M, sizes to minimize joints in place; ends square cut.
1. Application: Use for vertical surfaces, unless otherwise indicated.
2. Thickness:
a. Vertical Surfaces: 5/8 inch (16 mm).

2.04 GYPSUM BOARD ACCESSORIES

A. Acoustic Insulation: ASTM C665; preformed mineral-fiber, friction fit type, unfaced; thickness 2 inches (50.8 mm).

B. Beads, Joint Accessories, and Other Trim: ASTM C1047, rigid plastic, galvanized steel, or rolled zinc, unless noted otherwise.

C. Joint Materials: ASTM C475/C475M and as recommended by gypsum board manufacturer for project conditions. Contractor's choice of the following:
1. Fiberglass Tape: 2 inch (50 mm) wide, coated glass fiber tape for joints and corners, except as otherwise indicated.
2. Paper Tape: 2 inch (50 mm) wide, creased paper tape for joints and corners, except as otherwise indicated.
3. Joint Compound: Drying type, vinyl-based, ready-mixed.

D. Screws for Fastening of Gypsum Panel Products to Cold-Formed Steel Studs Less than 0.033 inches (0.84 mm) in Thickness and Wood Members: ASTM C1002, self-piercing tapping screws, corrosion-resistant.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that project conditions are appropriate for work of this section to commence.

3.02 FRAMING INSTALLATION

A. Metal Framing: Install in accordance with ASTM C1007/AISI S220 and manufacturer's instructions.

B. Studs: Space studs at 16 inches on center (at 406 mm on center):
1. Extend partition framing to structure where indicated and to ceiling in other locations.
2. Partitions Terminating at Structure: Attach extended leg top runner to structure, maintain clearance between top of studs and structure, and brace both flanges of studs with continuous bridging.

C. Openings: Reinforce openings as required for weight of doors or operable panels, using not less than double studs at jambs.

D. Standard Wall Furring: Install at concrete walls scheduled to receive gypsum board, not more than 4 inches (100 mm) from floor and ceiling lines and abutting walls. Secure in place on alternate channel flanges at maximum 24 inches (600 mm) on center.

E. Blocking: Install wood blocking for support of wall mounted components.

3.03 ACOUSTIC ACCESSORIES INSTALLATION

A. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions.

3.04 BOARD INSTALLATION

A. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.

B. Single-Layer Nonrated: Install gypsum board in most economical direction, with ends and edges occurring over firm bearing.

C. Installation on Metal Framing: Use screws for attachment of gypsum board.

3.05 INSTALLATION OF TRIM AND ACCESSORIES

A. Control Joints: Place control joints consistent with lines of building spaces and manufacturer standards.

B. Corner Beads: Install at external corners, using longest practical lengths.

3.06 JOINT TREATMENT

A. Finish gypsum board in accordance with levels defined in ASTM C840, as follows:
1. Level 4: Walls and ceilings to receive paint finish or wall coverings, unless otherwise indicated.
2. Level 1: Fire-resistance-rated wall areas above finished ceilings, whether or not accessible in the completed construction.

B. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
1. Feather coats of joint compound so that camber is maximum 1/32 inch (0.8 mm).

3.07 TOLERANCES

A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet (3 mm in 3 m) in any direction.

SECTION 096500
RESILIENT BASE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Resilient base.

1.02 SUBMITTALS

A. Product Data: Provide data on specified products, describing physical and performance characteristics, including sizes, patterns and colors available, and installation instructions.

B. Selection Samples: Submit manufacturer's complete set of color samples for Architect's initial selection.

PART 2 PRODUCTS

2.01 RESILIENT BASE

A. Resilient Base: ASTM F1861, Type TP, rubber, thermoplastic; Style B, Cove.
1. Manufacturers: Available manufacturers include but are not limited to the following:
a. Roppe Corporation: www.roppe.com/#sle.
b. Tarkett Flooring: www.tarkett.com/#sle.
2. Critical Radiant Flux (CRF): Minimum 0.45 watt per square centimeter, when tested in accordance with ASTM E648 or NFPA 253.
3. Height: 4 inches (100 mm).
4. Thickness: 0.125 inch (3.2 mm).
5. Finish: Satin.
6. Length: Roll.
7. Color: To be selected by Architect from manufacturer's full range.

2.02 ACCESSORIES

A. Adhesive for Rubber Base: Manufacturer's recommended product.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive resilient base.

3.02 INSTALLATION - GENERAL

A. Starting installation constitutes acceptance of subfloor conditions.

B. Install in accordance with manufacturer's written instructions.

3.03 INSTALLATION - RESILIENT BASE

A. Fit joints tightly and make vertical. Maintain minimum dimension of 18 inches (45 mm) between joints.

B. Miter internal corners. At external corners, "V" cut back of base strip to 2/3 of its thickness and fold. At exposed ends, use premolded units.

C. Install base on solid backing. Bond tightly to wall and floor surfaces.

3.04 CLEANING

A. Remove excess adhesive from floor, base, and wall surfaces without damage.

B. Clean in accordance with manufacturer's written instructions.

SECTION 096813
TILE CARPETING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Carpet tile, fully adhered.

1.02 SUBMITTALS

A. Product Data: Provide data on specified products, describing physical and performance characteristics; sizes, patterns, colors available, and method of installation.

B. Samples: Submit two carpet tiles illustrating color and pattern design for each carpet color selected.

PART 2 PRODUCTS

2.01 MATERIALS

A. Tile Carpeting, Type _____: Tufted, manufactured in one color dye lot.

SECTION 099123
PAINTING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Exterior and interior painting.
1. Exterior surfaces include, but are not limited to:
a. Metal pipe railing.
b. Exterior wood trim.
c. Exterior face of steel door.
2. Interior surfaces include, but are not limited to:
a. Gypsum board surfaces.
b. Interior wood trim.
c. Interior face of steel door.
d. Hollow metal door frames.

1.02 SUBMITTALS

A. Product Data: Provide complete list of products to be used, with the following information for each:
1. Manufacturer's name, product name and/or catalog number, and general product category (e.g., "alkyd enamel").

B. Samples: Submit two paper "draw down" samples, 8-1/2 by 11 inches (216 by 279 mm) in size, illustrating range of colors available for each finishing product specified.

1.03 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.

B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.

C. Paint Materials: Store at minimum ambient temperature of 45 degrees F (7 degrees C) and a maximum of 90 degrees F (32 degrees C), in ventilated area, and as required by manufacturer's instructions.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Provide paints and finishes from the same manufacturer.

B. Paints:
1. Behr Paint Company: www.behr.com/#sle.
2. Pittsburgh Paints: www.pittsburghpaintsco.com/#sle
3. Sherwin-Williams Company: www.sherwin-williams.com/#sle

2.02 PAINTS AND FINISHES - GENERAL

A. Paints and Finishes: Ready-mixed, unless intended to be a field-catalyzed paint.
1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
2. Supply each paint material in quantity required to complete entire project's work from a single production run.
3. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

2.03 PAINT SYSTEMS - EXTERIOR

A. Paint E-OP - Exterior Surfaces to be Painted, Unless Otherwise Indicated: Including wood and shop primed metal.
1. Two top coats and one coat primer.
2. Primers:
a. Wood: Latex Primer for Exterior Wood.
b. Metal: Shop primed.
3. Top Coat: Exterior Latex.
a. Sheen: Semi-gloss.

2.04 PAINT SYSTEMS - INTERIOR

A. Paint I-OP - Interior Surfaces to be Painted, Unless Otherwise Indicated: Including gypsum board, wood, shop primed steel, and acoustical ceilings.
1. Two top coats and one coat primer.
2. Primers:
a. Wood and Gypsum Board: Interior Latex Primer Sealer.
b. Metal: Shop primed.
3. Top Coat: Interior Latex.
a. Sheen:
1) Gypsum Board: Satin.
2) Metal and Wood: Semi-gloss.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin application of paints and finishes until substrates have been adequately prepared.

B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.

C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.

D. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces is below the following maximums:
1. Gypsum Wallboard: 12 percent.
2. Interior Wood: 15 percent, measured in accordance with ASTM D4442.

3.02 PREPARATION

A. Clean surfaces thoroughly and correct defects prior to application.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.

D. Seal surfaces that might cause bleed through or staining of topcoat.

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RENOVATIONS FOR:
MARLBOROUGH CONDOMINIUM ASSOCIATION
471 W SOUTH ST, KALAMAZOO, MI 49007
ARCHITECTURAL SPECIFICATIONS

FOR PERMITTING ONLY

STATE OF MICHIGAN
GREGG A. JONES
ARCHITECT
No. 1301003305
LICENSED ARCHITECT

ISSUE DATE: 2026.03.27
PM: QA / QC:

#	ISSUANCE / REVISION	DATE

ORIGINAL SHEET IS 24"x36". USE DIMENSIONS SHOWN. DO NOT SCALE DRAWINGS.

PROJECT NO: 24-0128

E. Gypsum Board: Fill minor defects with filler compound. Spot prime defects after repair.

F. Ferrous Metal:
1. Shop-Primed Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.

G. Wood Surfaces to Receive Opaque Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats. Back prime concealed surfaces before installation.

3.03 APPLICATION

A. Apply products in accordance with manufacturer's written instructions.

B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.

C. Apply each coat to uniform appearance in thicknesses specified by manufacturer.

D. Sand wood and metal surfaces lightly between coats to achieve required finish.

E. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

F. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

SECTION 099300
STAINING AND TRANSPARENT FINISHING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Field application of stains and transparent finishes.

1.02 SUBMITTALS

A. Product Data: Provide complete list of products to be used, with the following information for each:
1. Manufacturer's name, product name and catalog number, and general product category.

B. Samples: Two samples on actual wood substrate to be finished indicating selected colors and sheens for each system, with specified coats cascaded.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Transparent Finishes and Stains: Manufacturers include, but are not limited to:
1. Behr Process Corporation: www.behr.com/#/
2. Cabot: www.cabotstain.com.
3. Minwax: www.minwax.com.

2.02 STAINS AND TRANSPARENT FINISHES - GENERAL

A. Finishes:
1. Provide finishes capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
2. Provide materials compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
3. Supply each finish material in quantity required to complete entire project's work from a single production run.
4. Do not reduce, thin, or dilute finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

2.03 INTERIOR STAIN AND TRANSPARENT FINISH SYSTEMS

A. Finish on Wood - window sills and handrails:
1. Stain: Semi-transparent stain for wood, water based.
2. Top Coat: Clear water-based varnish.
3. Top Coat Sheen:
a. Semi-Gloss: MPI gloss level 5; use this sheen at all locations.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin application of stains and finishes until substrates have been properly prepared.

B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.

3.02 PREPARATION

A. Clean surfaces thoroughly and correct defects prior to application.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.

3.03 APPLICATION

A. Apply products in accordance with manufacturer's written instructions.

B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.

C. Apply each coat to uniform appearance in thicknesses specified by manufacturer.

D. Sand wood surfaces lightly between coats to achieve required finish.

E. Reinstall items removed prior to finishing.

DIVISION 14 - CONVEYING EQUIPMENT

SECTION 144200
WHEELCHAIR LIFTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Vertical platform wheelchair lifts.

1.02 SUBMITTALS

A. Product Data: Include data on material descriptions, construction details, component dimensions and profiles, and finishes; include data on rated capacities, electrical and operating characteristics, and necessary accessories.

B. Shop Drawings: Include plans, elevations, sections, and attachment details; include equipment assembly details with dimensions, weights, loads, required clearances, components, size and location of anchors and required field connections, and methods for field assembly; provide diagrams indicating signal, power, and control wiring.

C. Project Record Documents: Accurately record actual locations of concealed items, conduits, and components.

D. Maintenance Materials: Provide the following for Owner's use in maintenance of wheelchair lifts and equipment:
1. Provide technical information for servicing operating equipment.
2. Spare Parts: Provide parts catalog with complete list of equipment replacement parts; identify each entry with equipment description and identifying code.
3. Provide legible schematic wiring diagrams of installed electrical equipment and changes made to this part of work; list symbols corresponding to identity or markings on wheelchair lifts structural and electrical components.

1.03 WARRANTY

A. Manufacturer Warranty: Provide 2-year manufacturer warranty to repair or replace wheelchair lift system components that fail in materials or workmanship. Complete forms in Owner's name and register with manufacturer.

PART 2 PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

A. Regulatory Requirements: Comply with ASME A18.1, ASME A17.1, applicable local codes, and authorities having jurisdiction (AHJ).

B. Accessibility Requirements: Comply with ADA Standards and ICC A117.1.

C. Structural Performance: Comply with ASCE 7 for loading of wheelchair lift components and assemblies.

D. Perform electrical work in accordance with NFPA 70.

2.02 VERTICAL PLATFORM WHEELCHAIR LIFTS

A. Manufacturers: Basis-of-Design Product:
1. Ascension Lift; Clarity 16E, Enclosed, Straight-Thru: www.ascension-lift.com.

B. Vertical Platform Wheelchair Lifts: Provide manufacturer's standard type that complies with indicated requirements. Use manufacturer's standard components for vertical platform wheelchair lifts as required for complete system unless otherwise indicated.
1. Type of Vertical Platform Wheelchair Lift:
a. Vertical platform wheelchair lift installed within field-fabricated shaftway provided by others; platform includes sidewalls in addition to optional shaftway access doors and frames as indicated on drawings.
2. Configuration:
a. Same side for entry/exit, with only front openings.
b. Number of Stops: 2.
c. Landing Openings, Self-Closing:
1) Lower landing with shaftway-mounted door.
2) Upper landing with enclosure mounted gate.
3. Location:
a. Interior of building, as indicated on drawings.
4. Lift Load Capacity: 750 lb (340 kg), maximum.
5. Lifting Height from Bottom to Upper Floor Level: As indicated on drawings.
6. Platform Width Clearance: 36 inches (914 mm).
7. Platform Length Clearance: 56 inches (1422 mm).
8. Platform Side Wall Panels: Nominal height of 42 inches (1067 mm), with galvanized steel sheet panels, and enclosed within rectangular extruded aluminium framework.
9. Platform Floor: Steel sheet with matte finish, having overall thickness not greater than 1-1/2 inches (38 mm).
a. Flooring: Manufacturer's standard black rubber flooring.
10. Drive System:
a. Roller chain hydraulic.
1) Rated Speed: 20 fpm (6.1 m/min), nominal.
11. Drive System Enclosure: Provide rectangular galvanized steel tube frame with flush steel sheet panels on sides and top to enclose drive system components; securely attach enclosure to adjacent substrate.

C. Shaftway Wall Components: Prehung, doors and gates mounted flush with inside wall of shaftway provided by others.
1. Door and Frame:
a. 16 gauge steel frame construction, galvanneal and paint ready.
b. 18 gauge steel door construction, with tempered narrow lite vision panel, galvannneal and paint ready.
2. Door Height: 80 inches (2032 mm), at landings indicated.
3. Door Width: 36 inches (915 mm), at landings indicated.
4. Upper Gate: Extruded aluminum frame with 16 gauge, 0.0598 inch (1.52 mm) galvanized steel sheet lower panel kick plate, and galvanized steel sheet upper panel.
5. Gate Height: 42 inches (1067 mm), at upper landing.
6. Gate Width: 36 inches (915 mm), at upper landing.

D. Controls and Hardware:
1. Call Station: Flush mount, 3-position switch.
2. Hinges: 4-1/2" NPR BB.
3. Electronic Keypad Lock.
4. Closers.
5. Door Interlocks: Basis-of-Design: Atlas Alldock-LP/RP 5.
6. Door Pull and Push Plate: Brushed aluminum.
7. Kickplates: Brushed aluminum, 10-in high x 2-inches less door width.

2.03 ELECTRICAL CHARACTERISTICS AND COMPONENTS

A. Electrical Characteristics:
1. 3 hp (2.2 kW).
2. 120 VAC, single-phase, 60 Hz.
3. Battery Power: Two, 12 volts DC batteries, with 115 volts AC, single-phase, dedicated charging circuit.

B. Platform Controls: Continuous pressure switch, one for each direction, with keyless operation.

C. Motor Control: Inverter control and other components as required by manufacturer for system indicated.

D. Disconnect Switch: Factory mount disconnect switch in control panel.

E. Emergency Operation: Provide battery-powered system to raise or lower lift to landing due to malfunction or loss of power.

F. Electrical Components, Boxes, Conduit, Wiring, and Devices: Comply with NFPA 70 and UL (DIR) or ITS (DIR) listed and labeled, and marked as applicable for proposed locations.

2.04 EQUIPMENT

A. Lubrication of Equipment: Provide grease fittings for lubricating bearings requiring periodic lubrication, automatic feed type grease cups, and visible and easily accessible lubrication points.

B. Guide Rails, Ropes, Counterweights, Sheaves, Attachment Brackets, and Anchors: Sized in accordance with local building code, including safety factors.

C. Maintenance Devices: Provide as necessary within wheelchair lift system, supported on structural members within accessible locations.

D. Emergency Alarm: Provide audible and visual alarm system that indicates emergency stop button on platform has been activated.

2.05 FINISHES

A. Baked-On Factory Finish for Structural Metal Surfaces: Clean surfaces of rust, oil, or grease and wipe clean with solvent; apply manufacturer's standard two-coat, baked-on finish consisting of primer and thermosetting top coat.
1. Color: Manufacturer's standard color.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that areas and conditions comply with installation tolerances and other conditions affecting this work.

B. Verify that locations for electrical rough-in connections to system equipment are in acceptable locations before installing equipment.

C. Verify that electrical power is available and of correct characteristics.

3.02 INSTALLATION

A. Install wheelchair lift system and components in accordance with manufacturer's written installation instructions.

B. Install wheelchair lift system securely to supporting structure, and flush with adjacent surfaces.

C. Install structural components using methods that comply with requirements indicated relative to layout and structural position.

3.03 ADJUSTING

A. Adjust wheelchair lift equipment to operate smoothly and safely.

B. Verify vertical travel of wheelchair lift system; adjust as necessary to maintain operating range indicated.

C. After installation, inspect exposed factory-finished wheelchair lift equipment and repair damaged finishes.

3.04 CLOSEOUT ACTIVITIES

A. Demonstrate proper operation of wheelchair lifts to Owner's designated representative.

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306 S. Kalamazoo Mall
Kalamazoo, MI 49007
T 269.381.6170
abonmarche.com

RENOVATIONS FOR:
MARLBOROUGH CONDOMINIUM ASSOCIATION
471 W SOUTH ST, KALAMAZOO, MI 49007
ARCHITECTURAL SPECIFICATIONS

FOR PERMITTING ONLY

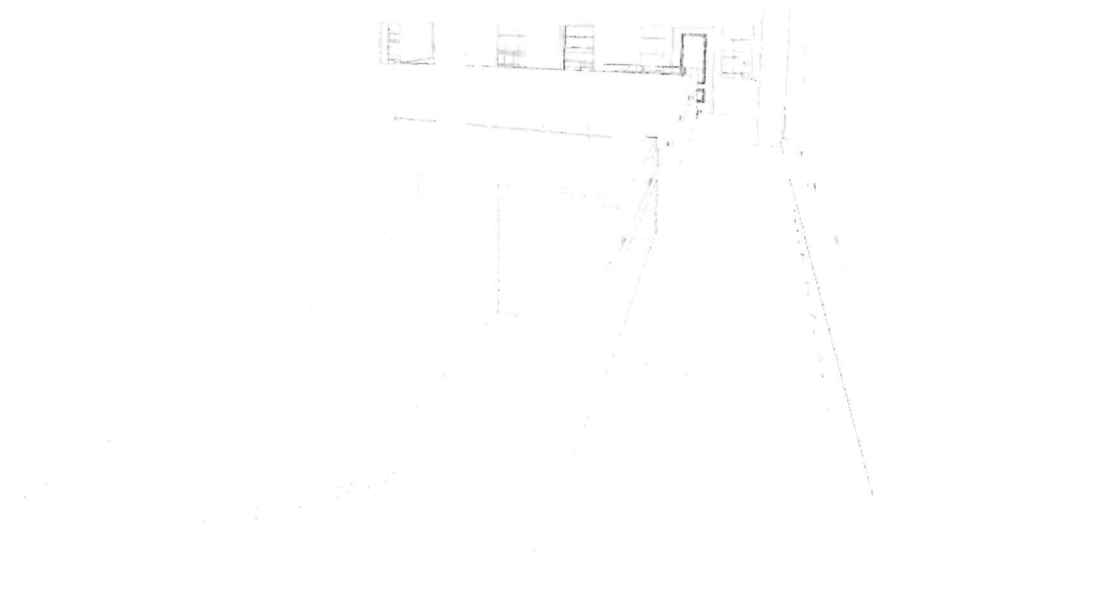
STATE OF MICHIGAN
GREGG A. JONES
ARCHITECT
No. 1301003305
LICENSED ARCHITECT

ISSUE DATE: 2026.03.27
PM: QA / QC:

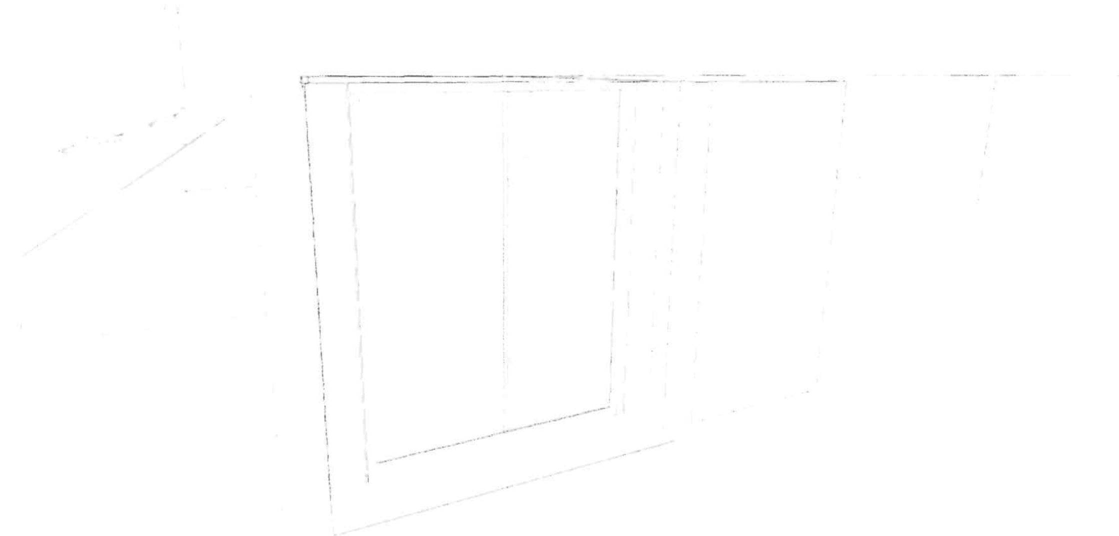
#	ISSUANCE / REVISION	DATE

ORIGINAL SHEET IS 24"x36". USE DIMENSIONS SHOWN. DO NOT SCALE DRAWINGS.

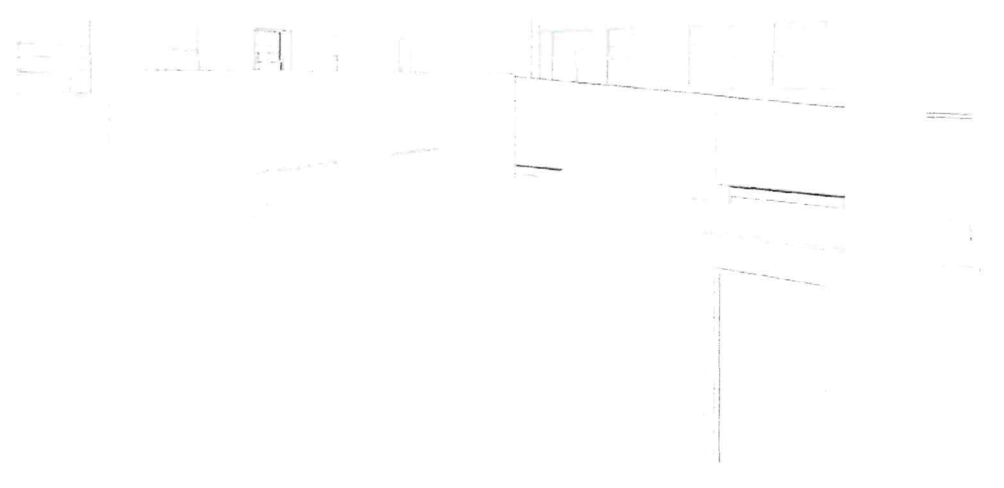
PROJECT NO: 24-0128



① **3D View 1**
SCALE:



② **3D View 2**
SCALE:



③ **3D View 3**
SCALE:

④ **3D View 4**
SCALE:

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RENOVATIONS FOR:
MARLBOROUGH CONDOMINIUM ASSOCIATION
471 W SOUTH ST, KALAMAZOO, MI 49007
INTERIOR PERSPECTIVES

FOR PERMITTING ONLY

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GREGG A. JONES
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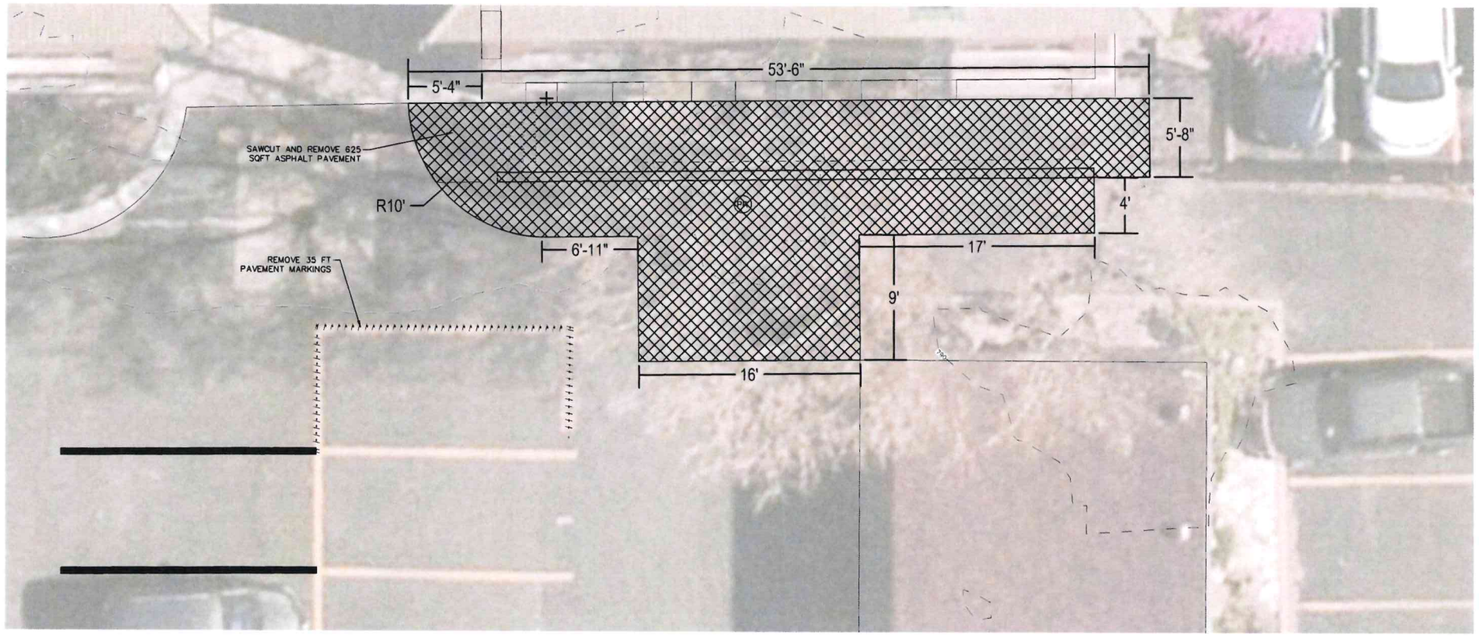
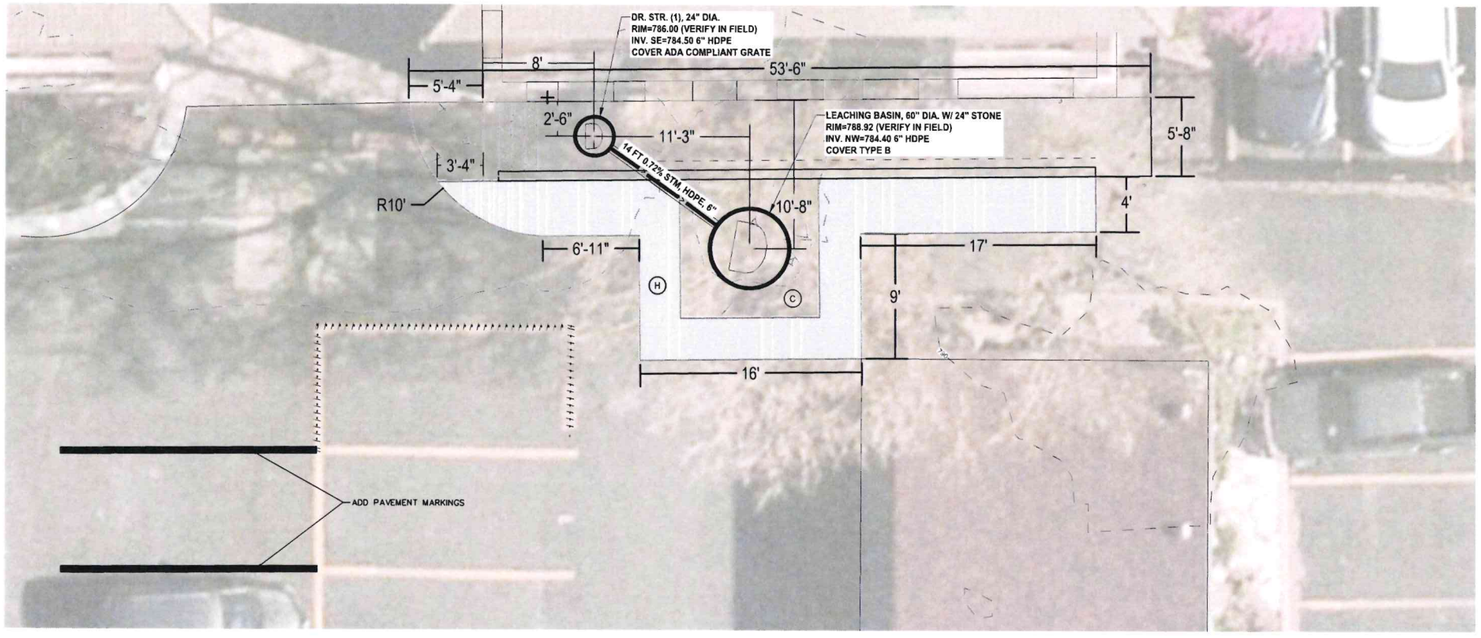
PROJECT NO: 24-0128

T1.1 C2.0



DEMOLITION PLAN



STORMWATER PLAN

LEGEND

- (H) HMA PAVEMENT, SEE TYPICAL CROSS SECTION PLAN FOR MIX DESIGNATION
- (C) CONCRETE, 6 INCH
- (PR) PAVT, REM, MODIFIED BRICK PVMT INCLUDED

SCALE IN FEET

1" = 5'

Know what's **below.** **Call** before you dig.

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RENOVATIONS FOR:

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CIVIL SITE IMPROVEMENTS

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STATE OF MICHIGAN
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ARCHITECT
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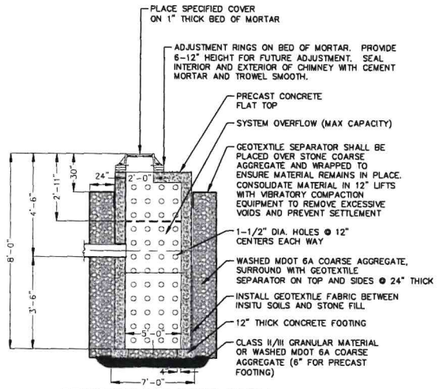
PROJECT NO: 24-0128

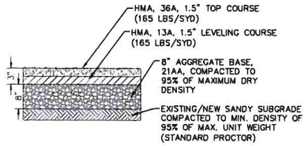
C1.0

O:\PROJECTS\2024\24-0128 PARKVIEW HILLS MARLBOROUGH CONDOS ADA ELEVATOR & BACK ENTRANCE\DRAWINGS_CIVIL\DRAWINGS\24-0128 C1.0.DWG 24x36 GEORGE WARING 10.2.2025 12:44 PM



STANDARD LEACHING BASIN

NOT TO SCALE



HMA PAVEMENT CROSS SECTION

NOT TO SCALE

LEACHING BASIN REQUIREMENTS		
REQUIREMENT	REQUIRED STORAGE (CFT)	PROVIDED STORAGE (CFT)
DETENTION	21 CFT	68 CFT
DETENTION + RETENTION	35 CFT	68 CFT
FLOOD CONTROL VOLUME	85 CFT	98 CFT

CONCRETE NOTES

1. REFERENCE STANDARDS:
   - 1.1. MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2020 EDITION
   - 1.2. ACI PRC-305 - GUIDE TO HOT WEATHER CONCRETING; 2020.
   - 1.3. ACI PRC-306 - GUIDE TO COLD WEATHER CONCRETING; 2016.
   - 1.4. ADA STANDARDS - 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN; 2010.
   - 1.5. ASTM C94/C94M - STANDARD SPECIFICATION FOR READY-MIXED CONCRETE; 2025.
   - 1.6. ASTM C309 - STANDARD SPECIFICATION FOR LIQUID MEMBRANE-FORMING COMPOUNDS FOR CURING CONCRETE; 2019.
2. SUBMITTALS: PROVIDE DATA ON ADMIXTURES
3. PRODUCTS:
   - 3.1. SUBBASE: 4" MIN. MDOT CL II SAND SUBBASE OR EQUAL. MAINTAIN SUBGRADE IN A SMOOTH AND COMPACTED CONDITION UNTIL CONCRETE IS PLACED.
   - 3.2. CONCRETE FORMS: WOOD OR METAL
   - 3.3. CONCRETE MATERIALS: COMPLY WITH ASTM C94/C94M.
   - 3.4. JOINT FILLER: PREFORMED EXPANSION, WITH A THICKNESS OF 1/2 INCH.
   - 3.5. CURING COMPOUND: SYNTHETIC, TYPE 2, AND BE PACKAGED IN CLEAN CONTAINERS, ACCORDING TO ASTM C309.
4. EXAMINATION:
   - 4.1. VERIFY GRADIENTS AND ELEVATIONS OF THE SUBGRADE ARE CORRECT AS SHOWN ON DRAWINGS. WHERE POOR SUBGRADE MATERIAL IS ENCOUNTERED, REMOVE AND REPLACE WITH SUITABLE MATERIAL.
   - 4.2. VERIFY COMPACTED SUBGRADE IS ACCEPTABLE, READY TO SUPPORT IMPOSED LOADS AND PAVING, AND READY TO RECEIVE WORK.
5. INSTALLATION:
   - 5.1. FORMING:
     - 5.1.1. ASSEMBLE FORMWORK TO PERMIT EASY STRIPPING AND DISMANTLING WITHOUT DAMAGING CONCRETE.
     - 5.1.2. SIDEWALK FORMS: PLACE AND SECURE FORMS TO LOCATION, DIMENSION, PROFILE, AND GRADIENT SHOWN ON DRAWINGS. HEIGHT EQUAL TO THE FULL DEPTH OF THE FINISHED SIDEWALK. COMPLY WITH ADA STANDARDS
   - 5.2. PLACEMENT:
     - 5.2.1. PLACE CONCRETE IN A SINGLE LIFT.
     - 5.2.2. CONSOLIDATE CONCRETE BY TAMPING AND SPADING.
     - 5.2.3. INSTALL WORK IN ACCORDANCE WITH 2020 MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.
   - 5.3. FINISHING:
     - 5.3.1. SIDEWALK PAVING: LIGHT BROOM, TEXTURE PERPENDICULAR TO DIRECTION OF TRAVEL, WITH EDGES LEVEL WITH ADJACENT SURFACES.
     - 5.3.2. PLACE CURING COMPOUND ON EXPOSED CONCRETE SURFACES IMMEDIATELY AFTER FINISHING. APPLY IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
6. PROTECTION:
   - 6.1. IMMEDIATELY AFTER PLACEMENT, PROTECT SIDEWALK FROM PREMATURE DRYING, EXCESSIVELY HOT OR COLD TEMPERATURES, AND MECHANICAL INJURY.
   - 6.2. DO NOT PERMIT PEDESTRIAN TRAFFIC OVER SIDEWALK FOR 3 DAYS MINIMUM AFTER FINISHING.

ASPHALT PAVING

1. REFERENCE STANDARDS:
   - 1.1. MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2020 EDITION.
   - 1.2. AI MS-2 - ASPHALT MIX DESIGN METHODS; 2015.
2. QUALITY ASSURANCE:
   - 2.1. PERFORM WORK IN ACCORDANCE WITH SECTION 501 OF THE MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, LATEST EDITION.
   - 2.2. MIXING PLANT: COMPLYING WITH STATE OF MICHIGAN HIGHWAYS STANDARD.
   - 2.3. OBTAIN MATERIALS FROM SAME SOURCE THROUGHOUT.
3. FIELD CONDITIONS:
   - 3.1. DO NOT PLACE ASPHALT WHEN AMBIENT AIR OR BASE SURFACE TEMPERATURE IS LESS THAN 40 DEGREES F, OR SURFACE IS WET OR FROZEN.
   - 3.2. PLACE BITUMEN MIXTURE WHEN TEMPERATURE IS NOT MORE THAN 15 F DEGREES BELOW BITUMEN SUPPLIER'S BILL OF LADING AND NOT MORE THAN MAXIMUM SPECIFIED TEMPERATURE.
4. USE DRY MATERIAL TO AVOID FOAMING. MIX UNIFORMLY.
5. SUBMIT PROPOSED MIX DESIGN OF EACH CLASS OF MIX FOR REVIEW PRIOR TO BEGINNING OF WORK.
6. TEST MIX DESIGN AND SAMPLES IN ACCORDANCE WITH AI MS-2.
7. EXAMINATION:
   - 7.1. VERIFY THAT COMPACTED SUBGRADE AND GRANULAR BASE IS DRY AND READY TO SUPPORT PAVING AND IMPOSED LOADS.
   - 7.2. VERIFY GRADIENTS AND ELEVATIONS OF BASE ARE CORRECT.
8. PLACE AND COMPACT AGGREGATE BASE COURSE
9. TACK COAT:
   - 9.1. APPLY TACK COAT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
   - 9.2. APPLY TACK COAT ON ASPHALT OR CONCRETE SURFACES AT THE RATE OF 0.10 (+/- 0.05) GALLONS PER SQUARE YARD IN ACCORDANCE WITH SECTION 501 OF THE MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, LATEST EDITION
   - 9.3. APPLY TACK COAT TO CONTACT SURFACES OF CURBS, GUTTERS AND ADJACENT PAVEMENT BUTT JOINTS OR SURFACES.
   - 9.4. PROTECT SURFACES OF MANHOLE FRAMES TO PREVENT BOND WITH ASPHALT PAVEMENT. DO NOT TACK COAT THESE SURFACES.
10. PLACING PAVEMENT:
    - 10.1. PLACE ASPHALT BINDER COURSE WITHIN 24 HOURS OF APPLYING PRIMER OR TACK COAT.
    - 10.2. PLACE ASPHALT WEARING COURSE WITHIN TWO HOURS OF PLACING AND COMPACTING BINDER COURSE.
    - 10.3. COMPACT PAVEMENT BY ROLLING TO SPECIFIED DENSITY. DO NOT DISPLACE OR EXTRUDE PAVEMENT FROM POSITION. HAND COMPACT IN AREAS INACCESSIBLE TO ROLLING EQUIPMENT.
    - 10.4. PERFORM ROLLING WITH CONSECUTIVE PASSES TO ACHIEVE EVEN AND SMOOTH FINISH, WITHOUT ROLLER MARKS.
11. IMMEDIATELY AFTER PLACEMENT, PROTECT PAVEMENT FROM MECHANICAL INJURY FOR 1 DAYS OR UNTIL SURFACE TEMPERATURE IS LESS THAN 140 DEGREES F.

DEMOLITON AND REMOVALS

1. EXCESS SOIL AND UNSUITABLE SOIL SHALL BE REMOVED FROM PROJECT SITE TO ANOTHER SITE PERMANENTLY.
2. CONTRACTOR SHALL OBTAIN ANY REQUIRED PERMITS AND IMPLEMENT EROSION CONTROL MEASURES IN ACCORDANCE WITH ANY LOCAL ORDINANCES.
3. REMOVE PAVING AND CURBS REQUIRED TO ACCOMPLISH NEW WORK.
4. FILL EXCAVATIONS AS SPECIFIED.
5. PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
6. CONDUCT OPERATIONS TO MINIMIZE EFFECTS ON AND INTERFERENCE WITH ADJACENT STRUCTURES AND OCCUPANTS.
7. CONDUCT OPERATIONS TO MINIMIZE OBSTRUCTION OF PRIVATE ENTRANCES AND EXITS. DO NOT OBSTRUCT REQUIRED EXITS AT ANY TIME. PROTECT PERSONS USING ENTRANCES AND EXITS FROM REMOVAL OPERATIONS.
8. PROTECT EXISTING STRUCTURES BY PROVIDING BRACING AND SHORING, AND STOPPING WORK IMMEDIATELY IF ADJACENT STRUCTURES APPEAR TO BE IN DANGER.
9. REMOVE DEBRIS, JUNK, AND TRASH FROM SITE.
10. LEAVE SITE IN CLEAN CONDITION, READY FOR SUBSEQUENT WORK.

GENERAL NOTES

1. MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2020 EDITION SHALL PREVAIL, UNLESS INDICATED OTHERWISE.
2. THREE WORKING DAYS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL REQUEST THE LOCATIONS OF ALL UTILITIES BY CALLING MISS DIG.
3. ALL EXISTING FEATURES AND IMPROVEMENTS (INCLUDING TREES, LANDSCAPING, ETC) NOT DESIGNATED FOR REMOVAL SHALL BE PROTECTED BY THE CONTRACTOR. DAMAGED ITEMS SHALL BE RESTORED TO THE ORIGINAL CONDITION AT THE CONTRACTORS EXPENSE. ALL TREES DAMAGED BEYOND SAVING, AS DETERMINED BY THE ENGINEER, SHALL BE REMOVED AND REPLACED WITH A NURSERY GROWN TREE AS SPECIFIED BY THE ENGINEER.
4. WHERE CONCRETE SIDEWALK IS ADJACENT TO THE BACK OF CURB, A 1/2" EXPANSION JOINT SHALL BE PLACED BETWEEN THE CURB AND SIDEWALK. PAYMENT IS INCLUDED IN CONCRETE SIDEWALK.
5. CONCRETE WALKS, STEPS, ETC. REQUIRING REPLACEMENT SHALL BE PAID AS CONCRETE SIDEWALK.
6. POSITIVE DRAINAGE SHALL BE MAINTAINED TO PREVENT ANY PONDING OF WATER OR ENCROACHMENT ONTO ADJACENT PROPERTIES.

EXISTING UTILITIES NOTES

1. USE CAUTION, THERE MAY BE EXISTING UTILITIES BELOW GROUND THAT WERE NOT MARKED NOR HAVE VISIBLE ABOVE GROUND EVIDENCE. SHOWN UTILITIES ARE TAKEN FROM SUBSTANTIAL ABOVE GROUND EVIDENCE AND APPROXIMATED FROM RECORD AS-BUILTS, WHEN AVAILABLE. MARKINGS INCLUDE, BUT NOT LIMITED TO, MANHOLES, HYDRANTS, VALVES, UTILITY PEDESTALS AND BOXES, AND MARKS/FLAGS SET ON THE GROUND SURFACE BY OTHERS. RIM ELEVATIONS HAVE BEEN APPROXIMATED WITH AS MUCH ACCURACY AS CAN BE ACHIEVED WITHOUT A SURVEY. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING UTILITY LOCATIONS AND DEPTHS, AS NECESSARY, PRIOR TO ALL CONSTRUCTION ACTIVITIES.
2. THE CONTRACTOR SHALL SUBMIT MISS DIG 811 TICKETS (3) WORKING PRIOR TO ANY CONSTRUCTION ACTIVITIES FOR VERIFICATION OF EXISTING UTILITY LOCATION. THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER IN WRITING IF ANY UNDERGROUND UTILITY PLAN DISCREPANCIES ARE DISCOVERED AND WOULD IMPACT PLANS.
3. THE CONTRACTOR SHALL PROTECT ALL POWER POLES FROM ANY CONSTRUCTION ACTIVITY DAMAGE.
4. THE CONTRACTOR IS RESPONSIBLE FOR ANY CONSTRUCTION UTILITY DAMAGE CAUSED BY CONSTRUCTION. COORDINATE THE REPAIR/REPLACEMENT OF DAMAGED UTILITY SERVICES WITH THE UTILITY OWNER APPROVAL.
5. THE CONTRACTOR IS RESPONSIBLE FOR ANY REQUIRED UTILITY COORDINATION BY UTILITY OWNERS.

STORM SEWER NOTES

1. ALL PROPOSED STORM PIPE SHALL BE IN ACCORDANCE WITH THE CITY OF KALAMAZOO STANDARDS AND SPECIFICATIONS.
2. ALL STORM PIPE SHALL BE ADS N-12 HDPE.
3. PIPE SHALL BE BEDDED PER PIPE MANUFACTURER, AND BACKFILLED WITH SUITABLE CLEAN GRANULAR MATERIAL.
4. STORM PIPE SHALL MAINTAIN 10'-0" MINIMUM HORIZONTAL AND 18" MINIMUM VERTICAL SEPARATION BETWEEN POTABLE WATER PIPES.
3. PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURES.
4. ALL TRENCH AND BEDDING SPECIFIED SHALL BE PER MDOT STANDARD PLAN SERIES R-83
5. DEWATERING, IF REQUIRED, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA PAYMENT SHALL BE MADE THEREFORE.
6. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH "AS-RECORDED" DRAWINGS OF INSTALLED UTILITIES UPON COMPLETION OF THE PROJECT.

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PROJECT NO: 24-0128

C2.0

DEMO EXISTING WINDOW AND SILL

DEMO EXISTING EXTERIOR DOOR

DEMO EXISITNG METAL RAILING

DEMO EXISITNG RETAINING WALL

DEMO EXISTING CONCRETE STAIRS

DEMO EXISTING PAVEMENT, SEE CIVIL

DEMO EXISTING EXTERIOR DOOR

DEMO EXISITNG METAL RAILING

DEMO EXISITNG RETAINING WALL

DEMO EXISTING WINDOW

SAWTOOTH AND REMOVE SECTION OF SILL TO PREPARE FOR NEW OPENING

DEMO EXISTING PAVEMENT, SEE CIVIL

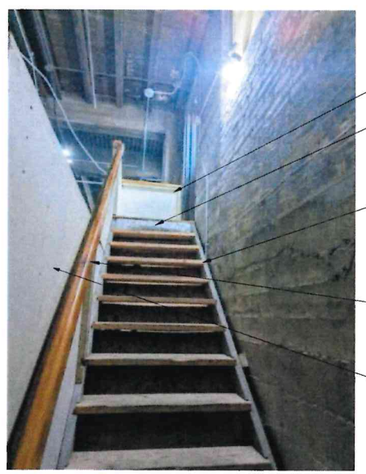
DEMOEXISITNG DOOR

DEMO EXISTING MTL FRAMED WALL

DEMO EXISTING WALL AND HANDRAIL

DEMO EXISTING STUD WALL

DEMO EXISITNG WOOD FRAMED STAIRS



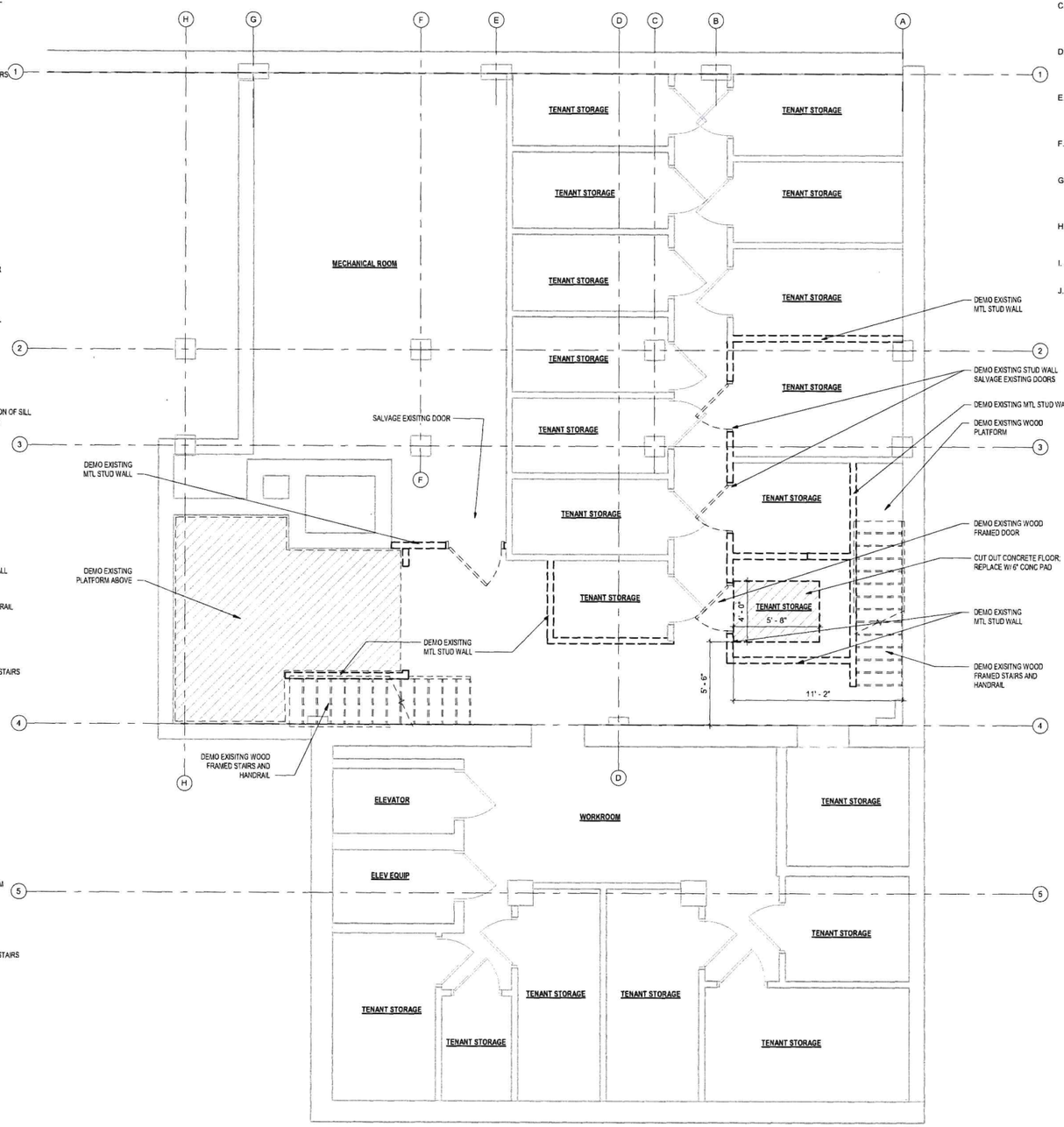
DEMO EXISTING WALL

DEMO EXISTING WOOD PLATFORM

DEMO EXISITNG WOOD FRAMED STAIRS

DEMO EXISTING HANDRAIL

DEMO EXISTING STUD WALL



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SUB BASEMENT DEMOLITION PLAN

1/4" = 1'-0"

GENERAL NOTES - DEMOLITION

A. ALL CONTRACTORS ARE RESPONSIBLE FOR PROVIDING COMPLETE INSTALLATION OF ALL COMPONENTS AND SHALL COORDINATE THEIR SCOPE OF WORK WITH ALL OTHER TRADES PRIOR TO SUBMITTING BIDS TO ENSURE THERE ARE NO MISSING OR DUPLICATE COMPONENTS WITH-IN THEIR SCOPE

B. DO NOT SCALE DRAWINGS. USE INDICATED DIMENSIONS ONLY.

C. AREA OF SLAB DEMOLITION SHOWN FOR REFERENCE ONLY. GENERAL CONTRACTOR SHALL COORDINATE ALL REQUIRED SLAB DEMOLITION WITH ALL DISCIPLINES TO DETERMINE FULL EXTENTS OF REMOVALS PRIOR TO SUBMITTING THEIR BIDS.

D. AREAS OF DEMOLITION SHALL BE CONTAINED WITHIN ROOMS BEING RENOVATED. DO NOT DEMO FLOORS, WALLS, ROOF, ETC., IN CORRIDORS OR ADJACENT ROOMS WITHOUT WRITTEN PERMISSION FROM OWNER AND ARCHITECT.

E. SHOULD A CONTRACTOR FIND DISCREPANCIES OR AMBIGUITIES IN OR OMISSIONS FROM THE DRAWINGS OR SPECIFICATIONS, OR BE IN DOUBT ABOUT THEIR MEANING, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY.

F. CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE JOB DURING CONSTRUCTION LAYOUT AND ADVISE THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY WORK.

G. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS ON-SITE AND ADVISING ARCHITECT OF ANY DISCREPANCIES WITH DEMOLITION OR NEW WORK PLANS PRIOR TO PERFORMING ANY WORK.

H. CONTRACTOR SHALL NOTIFY ARCHITECT IMMEDIATELY IF ANY UNFORESEEN STRUCTURAL OR UTILITY RELATED ISSUES ARISE DURING DEMOLITION OR EXCAVATION.

I. ALL SPECIFIED ITEMS SHALL BE PROVIDED AND INSTALLED PER MANUFACTURERS WRITTEN REQUIREMENTS.

J. ALL EXISTING CONDITIONS SCHEDULED TO REMAIN SHALL BE CLEANED AND

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BASEMENT - DEMOLITION PLAN

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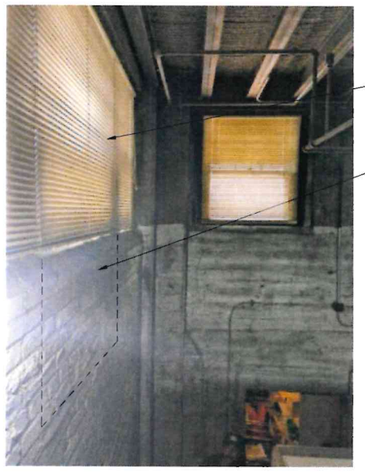
PROJECT NO: 24-0126

REMOVE EXISTING GLASS FROM WINDOW FRAME

DEMO AND REVISE LAYOUT OF EXISTING ELECTRICAL CONDUITS. SEE ELECTRICAL.

DEMO EXISTING WALL AND DOOR



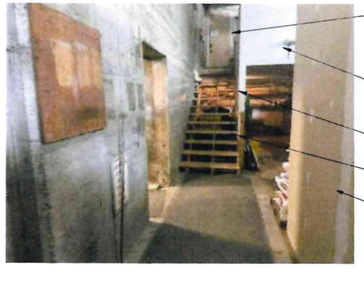
DEMO EXISTING WINDOW

DEMO. SAWTOOTH EXISTING CMU WALL TO CREATE NEW OPENING

DEMO EXISTING KNEE WALL

DEMO EXISTING WALL. SALVAGE DOOR

DEMO EXISTING DOOR AND EXISTING WALL



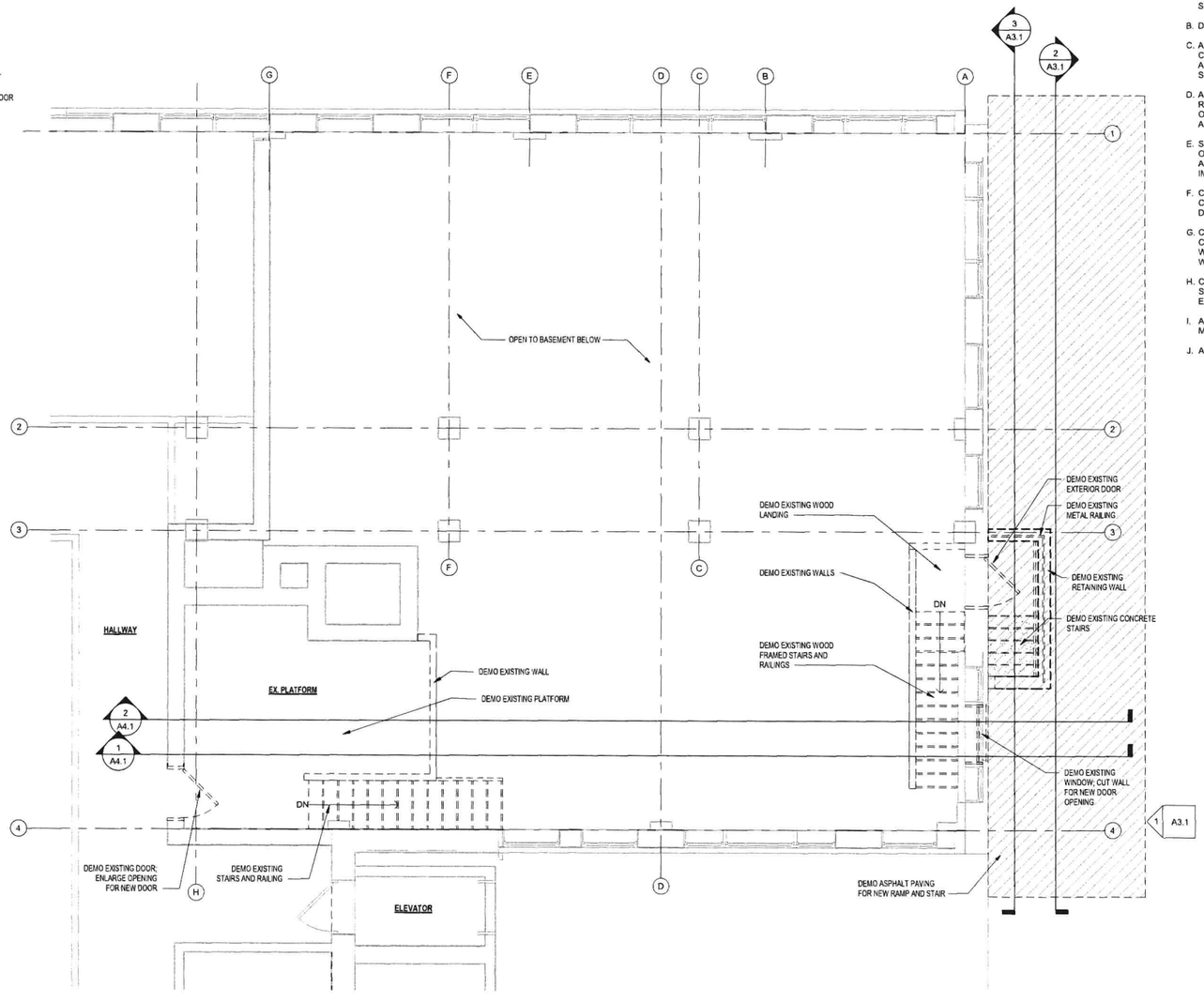
DEMO EXISTING DOOR; ENLARGE OPENING FOR NEW DOORWAY

DEMO EXISTING MTL FRAMED WALL

DEMO EXISTING WALL AND HANDRAIL

DEMO EXISITNG WOOD FRAMED STAIRS

DEMO EXISTING STUD WALL.



N

GARDEN LEVEL - DEMOLITION PLAN

1/4" = 1'-0"

GENERAL NOTES - DEMOLITION

A. ALL CONTRACTORS ARE RESPONSIBLE FOR PROVIDING COMPLETE INSTALLATION OF ALL COMPONENTS AND SHALL COORDINATE THEIR SCOPE OF WORK WITH ALL OTHER TRADES PRIOR TO SUBMITTING BIDS TO ENSURE THERE ARE NO MISSING OR DUPLICATE COMPONENTS WITH-IN THEIR SCOPE

B. DO NOT SCALE DRAWINGS. USE INDICATED DIMENSIONS ONLY.

C. AREA OF SLAB DEMOLITION SHOWN FOR REFERENCE ONLY. GENERAL CONTRACTOR SHALL COORDINATE ALL REQUIRED SLAB DEMOLITION WITH ALL DISCIPLINES TO DETERMINE FULL EXTENTS OF REMOVALS PRIOR TO SUBMITTING THEIR BIDS.

D. AREAS OF DEMOLITION SHALL BE CONTAINED WITH-IN ROOMS BEING RENOVATED. DO NOT DEMO FLOORS, WALLS, ROOF, ETC... IN CORRIDORS OR ADJACENT ROOMS WITHOUT WRITTEN PERMISSION FROM OWNER AND ARCHITECT.

E. SHOULD A CONTRACTOR FIND DISCREPANCIES OR AMBIGUITIES IN OR OMISSIONS FROM THE DRAWINGS OR SPECIFICATIONS, OR BE IN DOUBT ABOUT THEIR MEANING, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY.

F. CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE JOB DURING CONSTRUCTION LAYOUT AND ADVISE THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY WORK.

G. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS ON-SITE AND ADVISING ARCHITECT OF ANY DISCREPANCIES WITH DEMOLITION OR NEW WORK PLANS PRIOR TO PERFORMING ANY WORK.

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I. ALL SPECIFIED ITEMS SHALL BE PROVIDED AND INSTALLED PER MANUFACTURERS WRITTEN REQUIREMENTS.

J. ALL EXISTING CONDITIONS SCHEDULED TO REMAIN SHALL BE CLEANED AND

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RENOVATIONS FOR:

MARLBOROUGH CONDOMINIUM ASSOCIATION

471 W SOUTH ST, KALAMAZOO, MI 49007

GARDEN LEVEL - DEMOLITION PLAN

FOR PERMITTING ONLY

STATE OF MICHIGAN
GREGG A. JONES
ARCHITECT
No. 1301003305
REGISTERED ARCHITECT

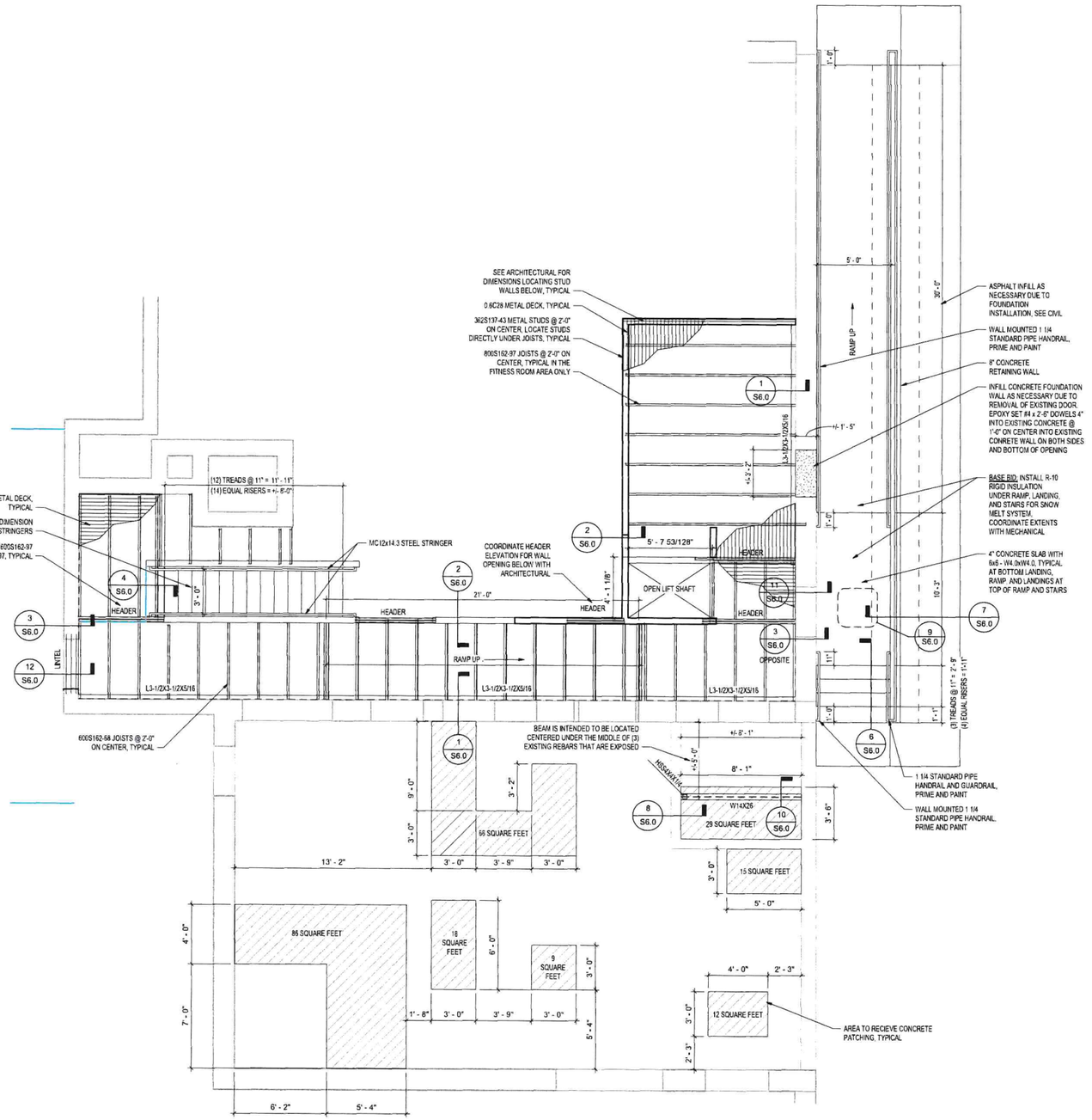
ISSUE DATE: 2026.03.27

PM: QA / QC:

#	ISSUANCE / REVISION	DATE

ORIGINAL SHEET IS 24"x36". USE DIMENSIONS SHOWN. DO NOT SCALE DRAWINGS.

PROJECT NO: 24-1028



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GARDEN LEVEL FRAMING PLAN

1/4" = 1'-0"

GENERAL:

1. VERIFY EXISTING CONDITIONS AND DIMENSIONS BEFORE STARTING WORK.
2. PROTECT ALL EXISTING WORK WHICH IS TO REMAIN AND RESTORE IN AN APPROVED MANNER ANY SUCH WORK WHICH BECOMES DAMAGED.
3. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
4. COORDINATE DETAILS AND DIMENSIONS ON THE STRUCTURAL DRAWINGS WITH RELATED REQUIREMENTS ON THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS. COORDINATE EXACT SIZES AND LOCATIONS OF FLOOR AND WALL OPENINGS, SLEEVES AND INSERTS WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS.
5. CONTRACTORS SHALL VERIFY ALL DIMENSIONS BEFORE STARTING WORK OR FABRICATING ANY STRUCTURAL MATERIAL. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES FOUND.
6. OWNER TO PROVIDE ALL SPECIAL INSPECTION AND TESTING BY INDEPENDENT TESTING COMPANIES AS REQUIRED.
7. THE BUILDING WILL BE OCCUPIED AND UTILIZED BY THE OWNER THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL MAINTAIN CLEAN, NEAT AND ORDERLY CONSTRUCTION AREAS. COORDINATE DELIVERIES WITH OWNER THAT MAY INTERFERE WITH OWNERS OPERATIONS. MATERIALS ARE NOT TO BE STORED IN THE BUILDING OUTSIDE OF THE CONSTRUCTION AREA, OWNER WILL DESIGNATE LAY DOWN AREAS AVAILABLE TO THE CONTRACTOR OUTSIDE OF THE BUILDING. COORDINATE WITH OWNER TO SCHEDULE ANY REQUIRED EQUIPMENT SHUT DOWNS.
8. CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED PERMITS.

DESIGN LOADS:

DESIGN LOADS PER SECTION 1603 OF THE 2021 MICHIGAN BUILDING CODE:

1. FLOOR LIVE LOAD: 100 PSF

FOUNDATIONS:

1. ASSUMED ALLOWABLE SOIL BEARING CAPACITY IS 2,000 PSF. CONTRACTOR TO VERIFY BEARING CAPACITY.
2. ENGINEERED FILL, IF REQUIRED TO CORRECT SUBGRADE DEFICIENCIES, SHALL CONSIST OF APPROVED FILL MATERIAL, SUCH AS CLEAN GRADED GRANULAR FILL PLACED IN 9 INCH MAXIMUM DEPTH LIFTS AND COMPACTED BY SUITABLE VIBRATORY EQUIPMENT. THE FILL IS TO BE COMPACTED SUCH THAT THE DRY DENSITY OF THE FILL IS EQUAL TO 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D-1557).
3. ALL SHEETING, SHORING AND BRACING REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

STRUCTURAL STEEL:

1. STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, AISC, 15TH EDITION.
2. MATERIAL STANDARDS:
   - WIDE FLANGE SHAPES = ASTM A992
   - ANGLES, PLATES AND CHANNELS = ASTM A572 Gr. 50
   - RECTANGULAR HSS = ASTM A500 Gr. C, Fy = 50ksi
   - ERECTION BOLTS = ASTM F3125 Gr. A325, 3/4"Ø U.N.O
   - ANCHOR BOLTS = ASTM F1554 Gr. 36, HEAVY HEX HEAD U.N.O.
   - GROUT = HIGH STRENGTH, NON-SHRINK.
   - WELDING ELECTRODE = E70xx.
3. FIELD MODIFICATION OF STRUCTURAL STEEL SHALL BE PERMITTED AND PERFORMED ONLY AFTER RECEIVING WRITTEN AUTHORIZATION OF THE STRUCTURAL ENGINEER.
4. STRUCTURAL STEEL TO BE PRIMED AND PAINTED.
5. WELDING SHALL BE IN ACCORDANCE WITH THE "AMERICAN WELDING SOCIETY" D1.1
6. STEEL DECK AND INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE STEEL DECK INSTITUTE.
7. PROVIDE STRUCTURAL STEEL SHOP DRAWINGS. DRAWINGS ARE TO INCLUDE DETAILS OF CUTS, CONNECTIONS, SPLICES, CAMBER, HOLES AND OTHER PERTINENT DATA. INCLUDE EMBEDMENT DRAWINGS. INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH, AND TYPE OF EACH WELD. INDICATE TYPE, SIZE, AND LENGTH OF BOLTS, DISTINGUISHING BETWEEN SHOP AND FIELD BOLTS.

COLD-FORMED METAL FRAMING:

1. COLD-FORMED METAL FRAMING SHALL CONFORM TO THE NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, AISI S100-12 AND THE NORTH AMERICAN STANDARD FOR COLD-FORMED STEEL FRAMING - GENERAL PROVISIONS, AISI S200-12.
2. COLD-FORMED METAL FRAMING PROPERTIES BASED ON PRODUCT TECHNICAL INFORMATION BY THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA).
3. MATERIAL STANDARDS (UNLESS NOTED OTHERWISE):
   - DESIGN THICKNESS 43 MILS (0.0451 in) OR LESS, Fy=33ksi
   - DESIGN THICKNESS 54 MILS (0.0566 in) OR GREATER, Fy=50ksi
4. ALL COLD-FORMED METAL FRAMING SHALL BE GALVANIZED WITH A MINIMUM G60 COATING.
5. FACTORY PUNCH-OUTS WILL BE LOCATED ALONG THE CENTERLINE OF THE WEBS OF THE MEMBERS AND HAVE A MINIMUM CENTER-TO-CENTER SPACING OF 2'-0". PUNCH-OUTS FOR MEMBERS GREATER THAN 2-1/2" DEEP ARE A MAXIMUM OF 1-1/2" WIDE x4" LONG. THE MINIMUM DISTANCE BETWEEN THE END OF A MEMBER AND THE NEAREST EDGE OF A PUNCH-OUT IS 1'-0"
6. PUNCH-OUTS ARE NOT PERMITTED IN HEADER MEMBERS.
7. SPLICES OF COLD-FORMED METAL FRAMING ARE NOT PERMITTED.
8. ALL SCREWS SHALL BE A MINIMUM OF #10 UNLESS NOTED OTHERWISE.
9. ALL SCREWS SHALL BE SELF-TAPPING AND HAVE A MINIMUM OF (3) THREADS EXTENDING THROUGH STEEL. SCREWS SHALL PENETRATE THE INDIVIDUAL COMPONENTS WITHOUT CAUSING PERMANENT SEPARATION BETWEEN THE COMPONENTS. SCREWS SHALL BE INSTALLED SUCH THAT THE THREADS OR HOLES ARE NOT STRIPPED.
10. ALL EXTERIOR WALL COLD-FORMED METAL STUDS SHALL BE 800S660-43, Fy = 33 KSI AT 1'-4" ON CENTER UNLESS NOTED OTHERWISE.
11. TRACK GAUGE TO MATCH STUD GAUGE UNLESS NOTED OTHERWISE.
12. SEE DETAIL 6/S610 FOR EXTERIOR WALL HEADER AND JAMB INFORMATION.

CONCRETE & REINFORCEMENT:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 318 & 301.
2. DEBRIS: REMOVE ALL DEBRIS FROM FORMS BEFORE POURING.
3. SEGREGATION OF AGGREGATES: CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL (AS IN WALLS, COLUMNS AND DROP CAPITALS) SO AS TO CAUSE SEGREGATION OF AGGREGATES. USE HOPPERS, CHUTES OR TRUNKS OF VARYING LENGTH SO THAT THE FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED EIGHT FEET, AND A SUFFICIENT NUMBER SHALL BE USED TO ENSURE THAT THE CONCRETE IS KEPT LEVEL AT ALL TIMES.
4. CONSTRUCTION JOINTS: CONSTRUCTION JOINTS SHALL HAVE ENTIRE SURFACE REMOVED TO EXPOSE CLEAN, SOLIDLY EMBEDDED AGGREGATE. THE CONTRACTOR SHALL OBTAIN THE ENGINEER'S APPROVAL OF CONSTRUCTION JOINT LOCATION IN SLABS AND BEAMS.
5. THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS SHALL NOT EXCEED THE SPECIFIED YIELD STRENGTH BY MORE THAN 18,000 PSI (RETEST SHALL NOT EXCEED THIS VALUE BY MORE THAN AN ADDITIONAL 3,000 PSI) AND THE RATIO OF THE ACTUAL ULTIMATE TENSILE STRESS TO THE ACTUAL TENSILE YIELD STRENGTH IS NOT LESS THAN 1.25
6. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A-615 GRADE 60, U.N.O.
7. WELDED WIRE FABRIC: WELDED WIRE FABRIC SHALL CONFORM TO ASTM A82 AND A185.
8. WELDING: TACK WELDING OF REBAR IS NOT PERMITTED UNLESS CALLED FOR OR APPROVED BY THE ENGINEER. WELDING OF STIRRUPS, TIES, INSERTS OR OTHER SIMILAR ELEMENTS TO LONGITUDINAL REINFORCING BARS SHALL NOT BE PERMITTED.
9. REBAR COVER. MINIMUM REBAR COVER FOR CONCRETE SHALL BE AS FOLLOWS:
   - CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
   - EXPOSED TO EARTH OR WEATHER: 2"
   - NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: 2"
10. TOLERANCES FOR REBAR PLACEMENT: TOLERANCE FOR LONGITUDINAL LOCATION OF BENDS AND ENDS OF REINFORCEMENT SHALL BE PLUS OR MINUS TWO (2) INCHES, EXCEPT AT DISCONTINUOUS ENDS OF MEMBERS WHERE TOLERANCES SHALL BE ±1/2 INCH.
11. TOLERANCES FOR COVER:
    - MEMBER DEPTH 12" OR LESS : -3/8"
    - MEMBER DEPTH GREATER THAN 12" : -1/2"
12. REDUCTION IN COVER SHALL NOT EXCEED 1/3 OF THE SPECIFIED CONCRETE COVER.
13. PROVIDE POSITIVE SUPPORT FOR REINFORCEMENT PRIOR TO PLACING CONCRETE TO ASSURE CORRECT POSITIONING AND TO MAINTAIN 3" MINIMUM CLEAR CONCRETE COVER AT BOTTOM AND SIDES OF ALL FOOTINGS AND THICKENED SLABS. PLACE SLAB REINFORCING ON CHAIRS.
14. CONCRETE WEIGHT: ALL CONCRETE SHALL BE OF NORMAL WEIGHT UNLESS NOTED OTHERWISE.
15. ALL CONCRETE SHALL BE ROCK CONCRETE CONFORMING TO ASTM C-33.
16. AGGREGATE: SIZE OF AGGREGATE SHALL CONFORM TO ASTM C33-03.
    - 3/4" ASTM SIZE C67
    - 1" ASTM SIZE C57
17. CEMENT: SHALL BE TYPE 1L PORTLAND.
18. INTERIOR SLABS THAT DO NOT RECEIVE A FINISH FLOORING MATERIAL SHALL BE SEALED AFTER CURING.
19. WHEN REINFORCEMENT IS LAP SPLICED, PROVIDE CLASS B SPLICE TYPICAL, UNLESS NOTED.
20. PROVIDE A 3/4" INCH CHAMFER ON ALL EXPOSED CORNERS OF CONCRETE, UNLESS NOTED OTHERWISE.
21. CONCRETE FINISHES:
    - EXTERIOR SLABS - LIGHT BROOM FINISH
    - INTERIOR SLABS ON GRADE - HARD STEEL TROWEL.
22. OPENING THROUGH WALLS, SLABS OR OTHER STRUCTURAL ELEMENTS NOT DETAILED ON THE STRUCTURAL DRAWINGS MUST BE SHOWN ON THE APPLICABLE REINFORCING STEEL SHOP DRAWINGS. THE FINAL LOCATION OF ALL OPENINGS MUST BE REVIEWED BY THE ENGINEER/ARCHITECT BEFORE THE CONCRETE IS PLACED.
23. REINFORCING AND ANCHOR SETTING EPOXY SHALL BE HILTI HIT-HY 200 OR EQUIVALENT.
24. CONCRETE MIXTURES:
    FOOTINGS AND FOUNDATION WALLS:
    - MINIMUM 28-DAY COMPRESSIVE STRENGTH: 3,500 PSI
    - MAXIMUM WATER/CEMENT RATIO: 0.45
    - SLUMP LIMIT: 4 INCHES, PLUS/MINUS 1 INCH
    - AIR CONTENT: 5.5%, PLUS/MINUS 1.5%

    INTERIOR SLABS-ON-GRADE:
    - MINIMUM 28-DAY COMPRESSIVE STRENGTH: 4,000 PSI
    - MAXIMUM WATER/CEMENT RATIO: 0.45
    - SLUMP LIMIT: 4 INCHES, PLUS/MINUS 1 INCH
    - AIR CONTENT: 3% MAX, NO AIR-ENTRAINING ADMIXTURE

    EXTERIOR SLABS-ON-GRADE:
    - MINIMUM 28-DAY COMPRESSIVE STRENGTH: 4,000 PSI
    - MAXIMUM WATER/CEMENT RATIO: 0.45
    - SLUMP LIMIT: 4 INCHES, PLUS/MINUS 1 INCH
    - AIR CONTENT: 6%, PLUS/MINUS 1.5%
25. PROVIDE SUBMITTALS FOR CONCRETE MIX DESIGNS. SUBMITTALS ARE TO INCLUDE MIXTURE IDENTIFICATION, MINIMUM 28-DAY COMPRESSIVE STRENGTH, MAXIMUM WATER/CEMENT RATIO, SLUMP LIMIT, AIR CONTENT, AND NOMINAL MAXIMUM AGGREGATE SIZE.

CONCRETE REPAIR:

1. ALL CONCRETE REPAIR WORK IS TO COMPLY WITH ACI 563. ACI RAP BULLETIN 6, AND ACI RAP BULLETIN 8
2. PREPARE ALL EXISTING REINFORCING STEEL AND CONCRETE SURFACES AS REQUIRED BY REPAIR MATERIAL MANUFACTURER.
3. INSTALL ALL PRODUCTS AS DIRECTED BY MANUFACTURER.
4. INSTALL SIKA FERROGARD 670 EMBEDDED GALVANIC ANODES @ A MAXIMUM SPACING OF 1'-7" ON CENTER AROUND THE PERIMETER OF CONCRETE REPAIR AREAS
5. APPLY SIKA ARMATEC-110 EPOCEM BONDING PRIMER AND REINFORCEMENT CORROSION PROTECTION TO ALL SURFACES RECEIVING REPAIR MATERIALS, EXCEPT CONNECTIONS OF GALVANIC ANODES.
6. INSTALL SIKAREPAIR-223 CEMENTITIOUS PATCHING MATERIAL IN AREAS NOTED ON PLAN.
7. IF THE CONTRACTOR DISCOVERS ADDITIONAL AREAS OF CONCRETE WHERE REPAIR IS RECOMMENDED DURING THE CONSTRUCTION PROCESS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

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GARDEN LEVEL FRAMING PLAN

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GREGG A. JONES
ARCHITECT
No. 1301063335
LICENSED ARCHITECT

ISSUE DATE: 2026.03.27

PM: QA / QC:

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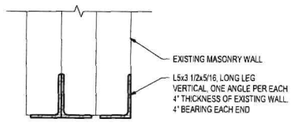
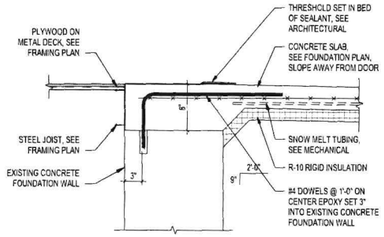
ORIGINAL SHEET IS 24"x36" - USE DIMENSIONS SHOWN. DO NOT SCALE DRAWINGS.

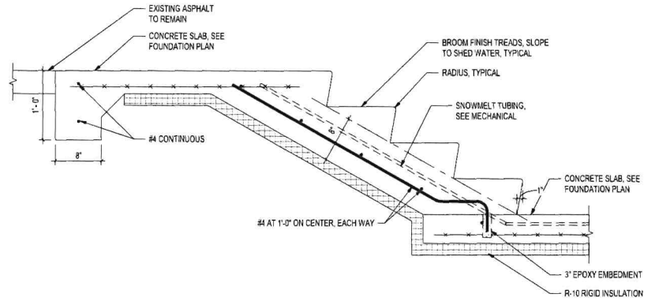
PROJECT ID: 25-0312



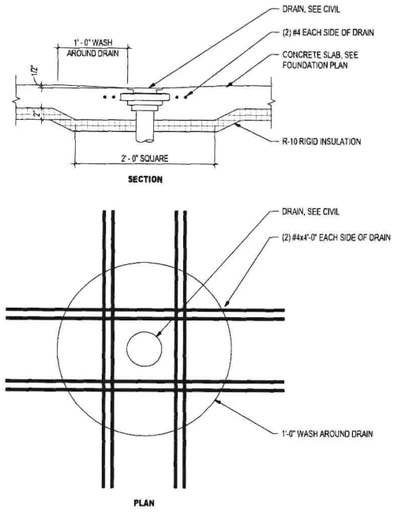
12 S6.0 **DOOR LINTEL** 1 1/2" = 1'-0"



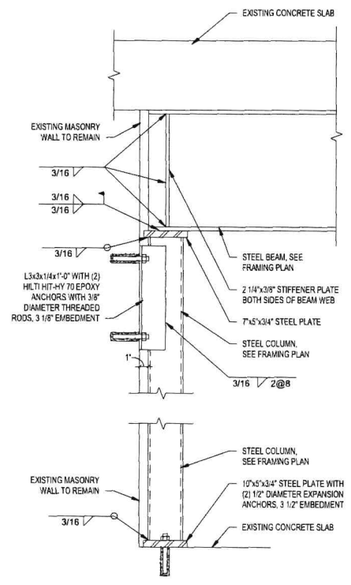
11 S6.0 **DOOR THRESHOLD** 1" = 1'-0"



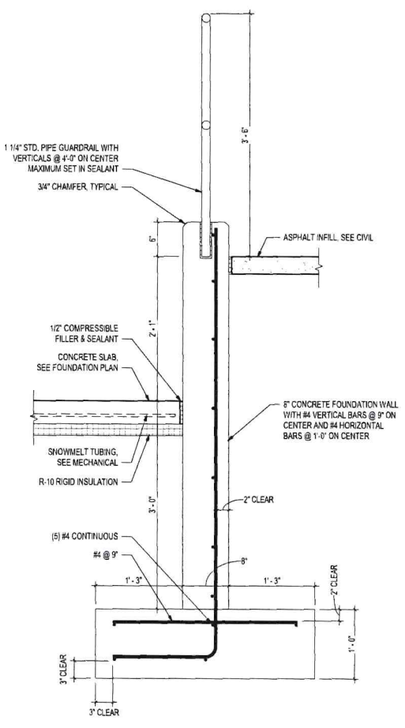
6 S6.0 **CONCRETE STAIR** 1" = 1'-0"



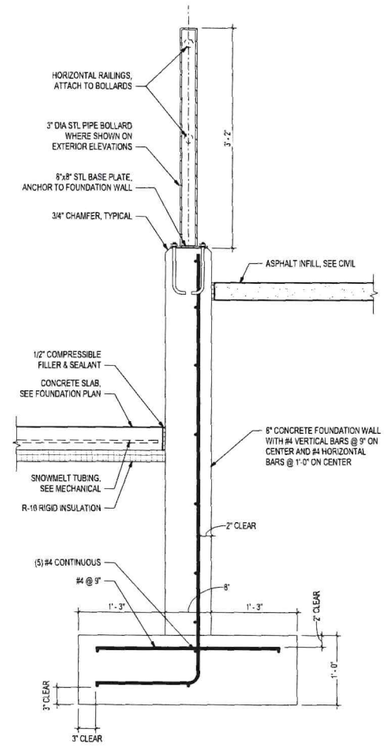
9 S6.0 **FLOOR DRAIN REINFORCEMENT** 1" = 1'-0"



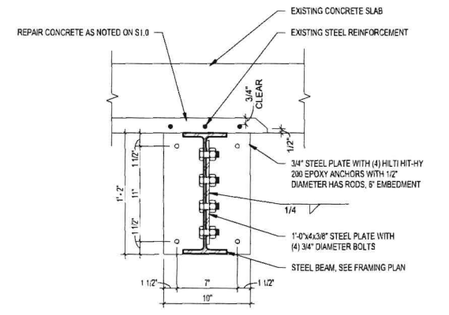
8 S6.0 **BEAM SUPPORT** 1 1/2" = 1'-0"



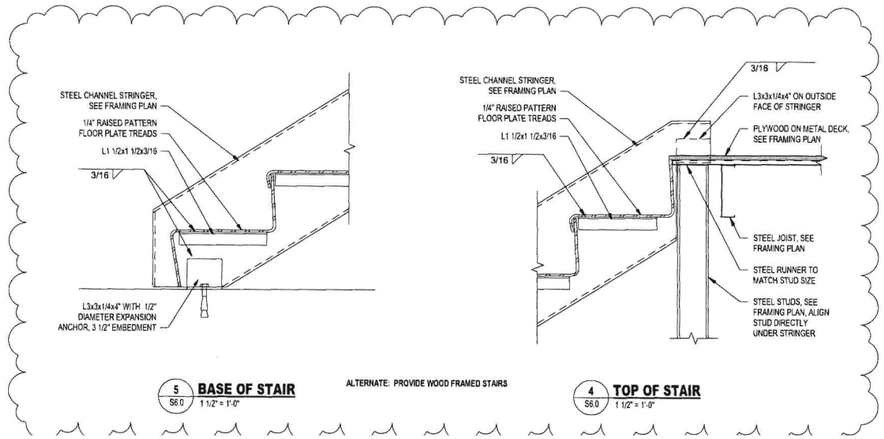
7 S6.0 **RETAINING WALL** 1" = 1'-0"



N S6.0 **RETAINING WALL @ BOLLARD** 1" = 1'-0"

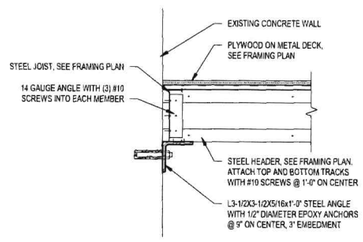


10 S6.0 **EXISTING SLAB REINFORCEMENT** 1 1/2" = 1'-0"

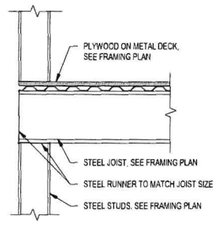


5 S6.0 **BASE OF STAIR** 1 1/2" = 1'-0"

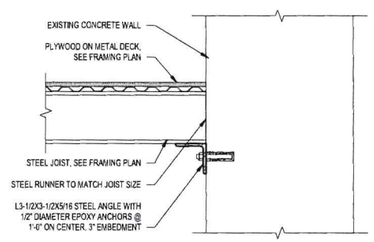
4 S6.0 **TOP OF STAIR** 1 1/2" = 1'-0"



3 S6.0 **HEADER BEARING @ CONCRETE WALL** 1 1/2" = 1'-0"



2 S6.0 **FLOOR EDGE** 1 1/2" = 1'-0"



1 S6.0 **DECK SUPPORT** 1 1/2" = 1'-0"

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STRUCTURAL DETAILS

FOR PERMITTING ONLY

STATE OF MICHIGAN
GREGG A. JONES
ARCHITECT
No. 1301063335
LICENSED ARCHITECT

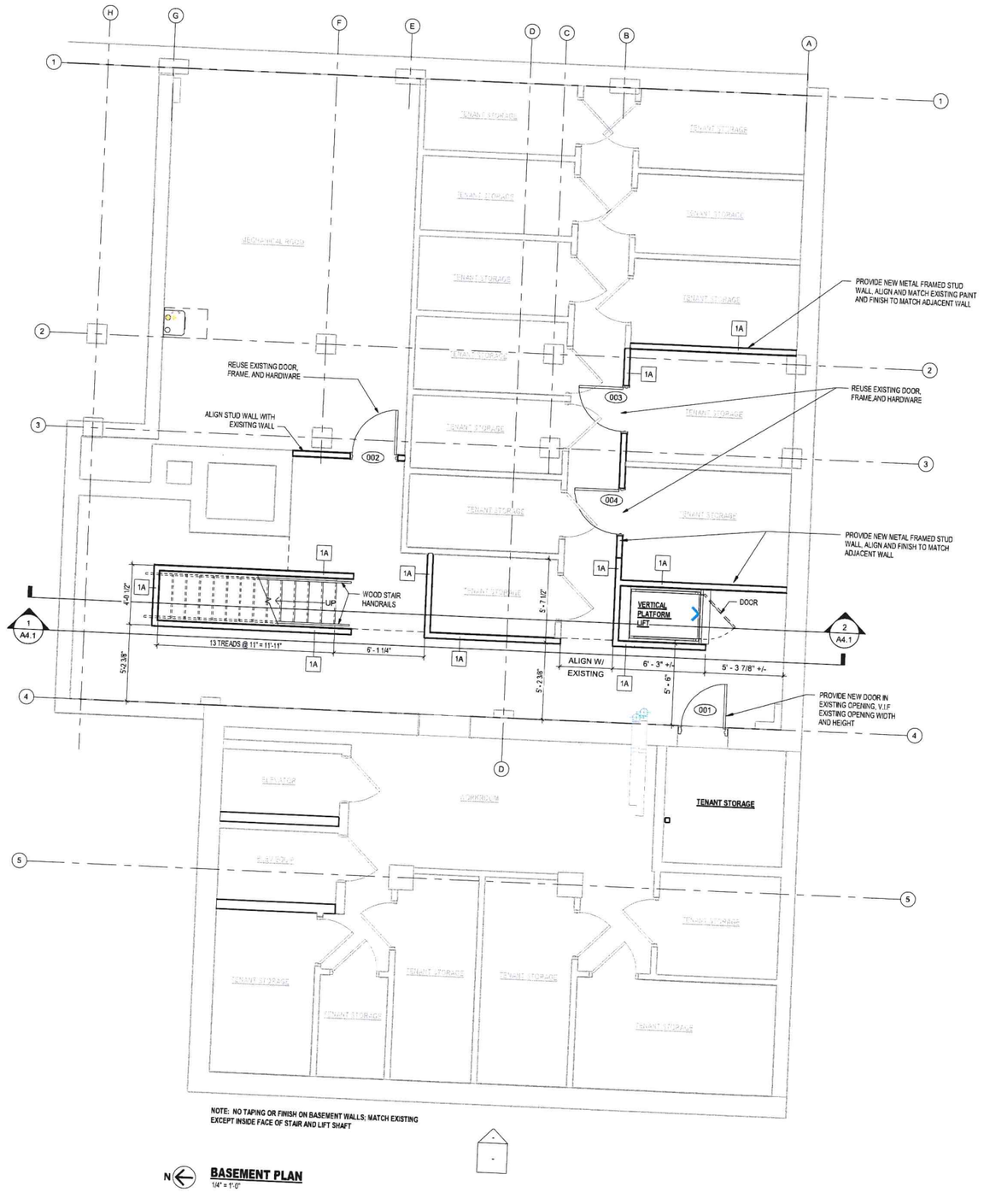
ISSUE DATE: 2026.03.27

P.M. QA / QC.

#	Revision 1 / ISSUANCE / REVISION	Date 1 / DATE

ORIGINAL SHEET IS 24"x36". USE DIMENSIONS SHOWN. DO NOT SCALE DRAWINGS.

PROJECT NO: 24-0128



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BASEMENT PLAN

1/4" = 1'-0"

GENERAL NOTES - FLOOR PLAN

A. DO NOT SCALE DRAWINGS - USE WRITTEN DIMENSIONS PROVIDED ONLY

B. ALL SPECIFIED ITEMS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR AS COMPLETE SYSTEMS WITH ALL ACCESSORY ITEMS REQUIRED FOR A COMPLETE INSTALLATION. GENERAL CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ALL TRADES, CONSTRUCTION TYPES, ETC...TO PREVENT EXCLUSION OR DUPLICATION. GENERAL CONTRACTORS BIDS SHALL BE ALL INCLUSIVE.

C. DRAWINGS ESTABLISH THE DESIGN INTENT OF WORK TO BE PERFORMED. ALL PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALL TRADES SHALL CAREFULLY COORDINATE WORK OF ALL OTHER TRADES. CONTRACTORS SHALL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING CONDITIONS AND FOR VERIFYING THEM WITH THE CONTRACT DOCUMENTS. ANY DISCREPANCIES OR CONFLICTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT AND THE OWNER PRIOR TO FABRICATION OR INSTALLATION.

D. VERIFY QUANTITY, SIZE, AND LOCATION OF ALL FLOOR, ROOF, AND WALL OPENINGS FOR ALL DISCIPLINES INCLUDING BUT NOT RESTRICTED TO MECHANICAL AND ELECTRICAL WORK WITH THE APPROPRIATE TRADE. PROVIDE ALL OPENINGS SHOWN OR REQUIRED FOR THE COMPLETION OF THE WORK. PROVIDE ALL LINTELS REQUIRED FOR THESE OPENINGS PER SPECIFICATIONS.

E. ALL DIMENSIONS ARE TO CENTERLINE OF STEEL, FACE OF STUDS, OR FACE OF MASONRY WALLS UNLESS NOTED OTHERWISE.

F. DIMENSIONS FOLLOWED BY +/- SHOULD BE REVIEWED AND ALL NECESSARY ADJUSTMENTS MADE PRIOR TO FABRICATION AND/OR INSTALLATION OF AFFECTED WORK. NOTIFY ARCHITECTS REPRESENTATIVE IF DISCREPANCIES ARISE BEFORE PROCEEDING WITH THE WORK REPRESENTATIVE.

G. CLEAN, PREP, AND PAINT INTERIOR FACE OF ALL WINDOWS IN PROJECT SCOPE.

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ORIGINAL SHEET @ 24X36

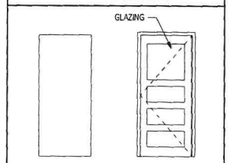
DOOR SCHEDULE

MARK	DOOR WIDTH	DOOR HEIGHT	DOOR THICKNESS	DOOR TYPE	FRAME MATERIAL	FRAME FINISH	FRAME TYPE	FIRE RATING	DETAILS HEAD	DETAILS JAMB	GLASS	FINISH HARDWARE	REMARKS
001	3' - 0"	6' - 8"	1 3/4"	F	WD	ST	1	-	8/A4.1	4/A4.1	-	H,PA,PU	
002	3' - 0"	6' - 8"	1 3/4"	F	WD	ST	1	-	-	-	-	EX	REUSE EXISTING DOOR AND HARDWARE, MATCH EXISTING DOOR FRAME
003	3' - 0"	6' - 8"	1 3/4"	EX	EX	EX	1	-	-	-	-	EX	REUSE EXISTING DOOR AND HARDWARE, MATCH EXISTING DOOR FRAME
004	3' - 0"	6' - 8"	1 3/4"	EX	EX	EX	1	-	-	-	-	EX	REUSE EXISTING DOOR AND HARDWARE, MATCH EXISTING DOOR FRAME
100	3' - 0"	7' - 0"	1 3/4"	F	WD	PT	1	-	10/A4.1	8/A4.1	-	H/E/C/	
104	3' - 0"	6' - 6"	1 3/4"	HG	STL	ST	1	-	13/A4.1	11/A4.1,12/A4.1	IG	C,H,K,KL,S,T,U,W	

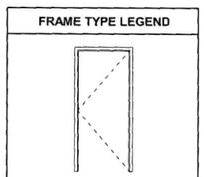
ROOM SCHEDULE

RM. NO.	ROOM NAME	FLOORING FINISH	BASE	WALL MATERIAL	WALL FINISH	CEILING FINISH	REMARKS
101	PLATFORM	CARPET	RUBBER BASE	GYP.	PAINT	NO WORK	PAINT EXISTING EXTERIOR WALL AND WINDOWS
102	CORRIDOR	CARPET	RUBBER BASE	GYP.	PAINT	NO WORK	PAINT EXISTING EXTERIOR WALL AND WINDOWS
103	UPPER LANDING	CARPET	RUBBER BASE	GYP.	PAINT	NO WORK	PAINT EXISTING EXTERIOR WALL AND WINDOWS
104	ENTRY	WALK OFF CARPET	RUBBER BASE	GYP.	PAINT	NO WORK	PAINT EXISTING EXTERIOR WALL AND WINDOWS

DOOR TYPE LEGEND



FRAME TYPE LEGEND



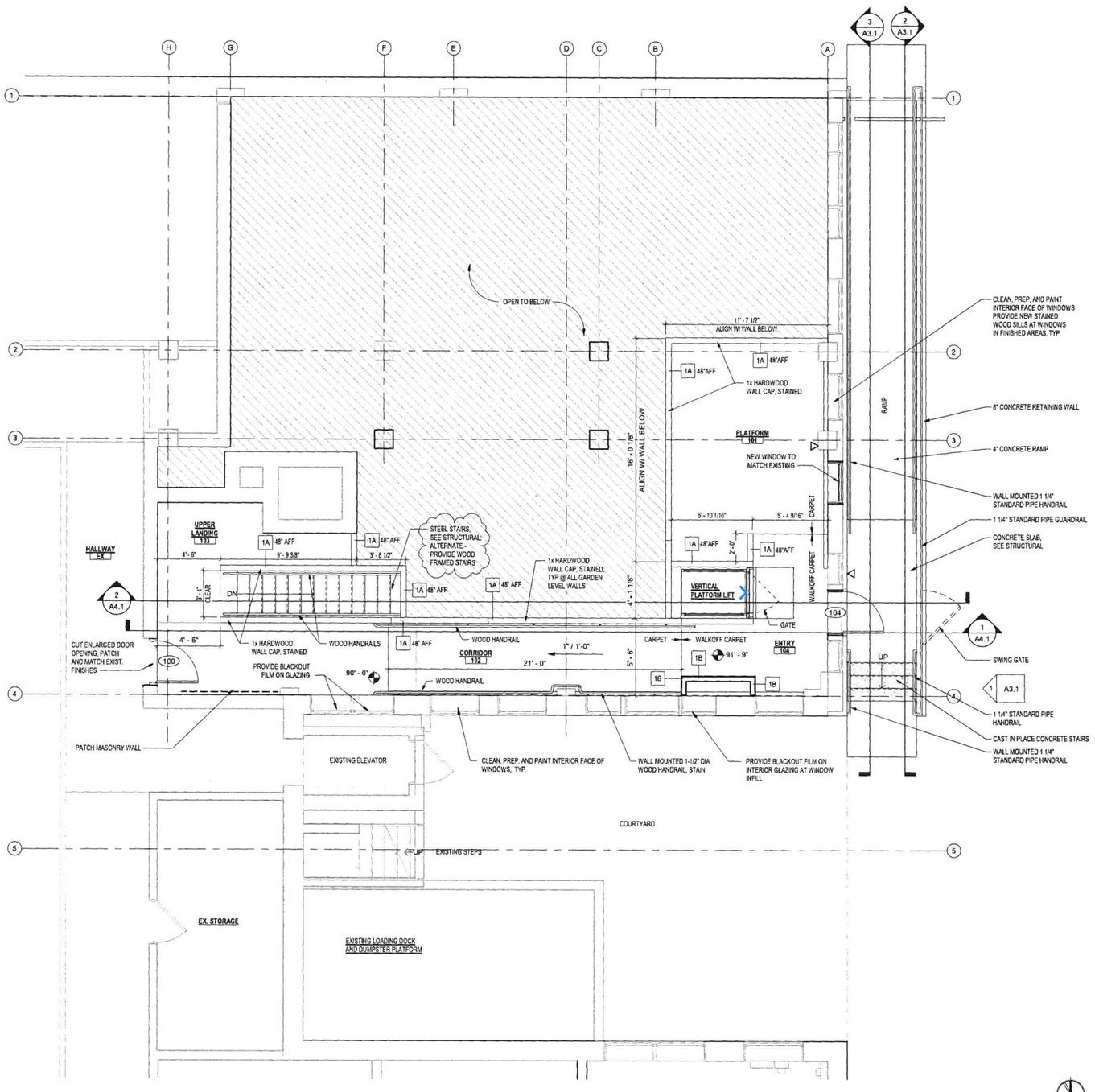
DOOR SCHEDULE LEGEND

GENERAL:
WxHxT = WIDTH x HEIGHT x THICKNESS
EX. = EXISTING
HM = HOLLOW METAL
STL = STEEL
WD = WOOD
SCWD = SOLID CORE WOOD

GLASS:
IG = INSULATING GLASS

HARDWARE:
ED = EXIT DEVICE
H = HINGES
KL = KEYPAD LOCK
SL = STORAGE ROOM LOCK
PA = HASP PAD LOCK
CL = DOOR CLOSER
KP = KICK PLATES
PU = PULL HANDLE
WS = WALL DOOR STOP
T = THRESHOLD
DBS = DOOR BOTTOM SWEEP
WS = WEATHERSTRIP

CORRIDOR MASONRY WALL PATCHING



N

CONSTRUCTION PLAN - LOWER LEVEL
1/4" = 1'-0"

GENERAL NOTES - FLOOR PLAN

A. DO NOT SCALE DRAWINGS - USE WRITTEN DIMENSIONS PROVIDED ONLY

B. ALL SPECIFIED ITEMS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR AS COMPLETE SYSTEMS WITH ALL ACCESSORY ITEMS REQUIRED FOR A COMPLETE INSTALLATION. GENERAL CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ALL TRADES, CONSTRUCTION TYPES, ETC...TO PREVENT EXCLUSION OR DUPLICATION. GENERAL CONTRACTORS BIDS SHALL BE ALL INCLUSIVE.

C. DRAWINGS ESTABLISH THE DESIGN INTENT OF WORK TO BE PERFORMED. ALL PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALL TRADES SHALL CAREFULLY COORDINATE WORK OF ALL OTHER TRADES. CONTRACTORS SHALL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING CONDITIONS AND FOR VERIFYING THEM WITH THE CONTRACT DOCUMENTS. ANY DISCREPANCIES OR CONFLICTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT AND THE OWNER PRIOR TO FABRICATION OR INSTALLATION.

D. VERIFY QUANTITY, SIZE, AND LOCATION OF ALL FLOOR, ROOF, AND WALL OPENINGS FOR ALL DISCIPLINES INCLUDING BUT NOT RESTRICTED TO MECHANICAL AND ELECTRICAL WORK WITH THE APPROPRIATE TRADE. PROVIDE ALL OPENINGS SHOWN OR REQUIRED FOR THE COMPLETION OF THE WORK. PROVIDE ALL LINTELS REQUIRED FOR THESE OPENINGS PER SPECIFICATIONS.

E. ALL DIMENSIONS ARE TO CENTERLINE OF STEEL, FACE OF STUDS, OR FACE OF MASONRY WALLS UNLESS NOTED OTHERWISE.

F. DIMENSIONS FOLLOWED BY +/- SHOULD BE REVIEWED AND ALL NECESSARY ADJUSTMENTS MADE PRIOR TO FABRICATION AND/OR INSTALLATION OF AFFECTED WORK. NOTIFY ARCHITECTS REPRESENTATIVE IF DISCREPANCIES ARISE BEFORE PROCEEDING WITH THE WORK REPRESENTATIVE.

G. CLEAN, PREP, AND PAINT INTERIOR FACE OF ALL WINDOWS IN PROJECT SCOPE.

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RENOVATIONS FOR:
MARLBOROUGH CONDOMINIUM ASSOCIATION
471 W SOUTH ST, KALAMAZOO, MI 49007
GARDEN LEVEL - PLAN

FOR PERMITTING ONLY

STATE OF MICHIGAN
GREGG A. JONES
ARCHITECT
No. 1301063305
LICENSED ARCHITECT

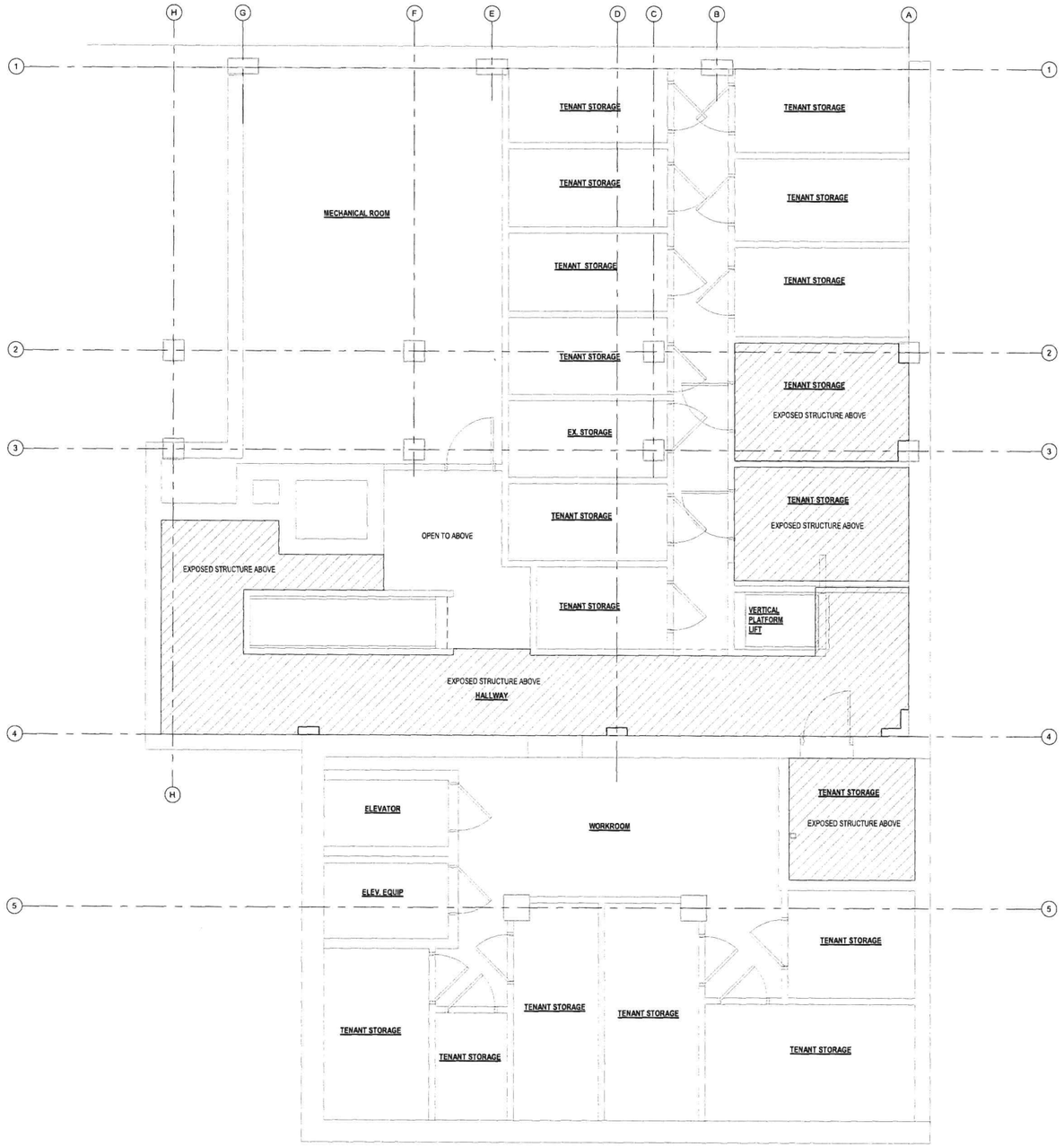
ISSUE DATE: 2026.03.27
PM: QA / QC:

#	Revision 1 ISSUANCE / REVISON	Date 1 DATE

ORIGINAL SHEET IS 24"x36". USE DIMENSIONS SHOWN. DO NOT SCALE DRAWINGS.

PROJECT NO: 24-0128

A1.0



N **SUB BASEMENT**
1/4" = 1'-0"

GENERAL NOTES - REFLECTED CEILING PLAN

A. REFER TO ELECTRICAL DRAWINGS FOR ADDTIONAL INFORMATION.

B. PAINT UNDERSIDE OF FLOORING STRUCTURE AND EQUIPMENT BLACK.

CEILING FINISH LEGEND

LINEAR PENDANT
SEE ELECTRICAL

EXIT SIGN
SEE ELECTRICAL

NOTE: SEE ELECTRICAL FOR FULL LIGHTING SYMBOL LIST

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BASEMENT LEVEL - REFLECTED CEILING PLAN

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GREGG A. JONES
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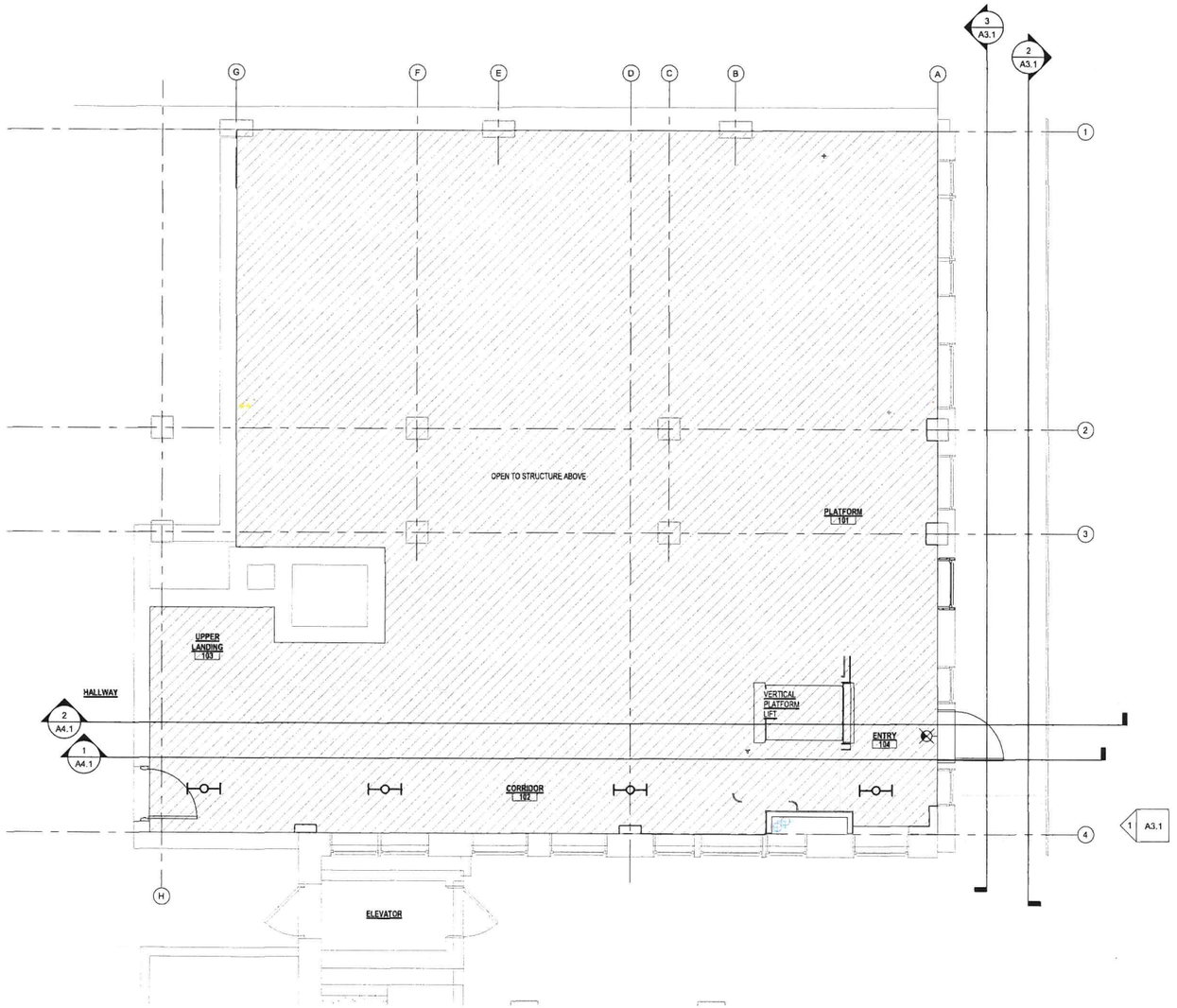
PM: QA / QC:

#	ISSUANCE / REVISION	DATE

ORIGINAL SHEET IS 24"x36". USE DIMENSIONS SHOWN. DO NOT SCALE DRAWINGS.

PROJECT NO: 25-072-0



N **GARDEN LEVEL FRAMING PLAN**
1/4" = 1'-0"

GENERAL NOTES - REFLECTED CEILING PLAN

A. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

B. PAINT UNDERSIDE OF FLOORING STRUCTURE AND EQUIPMENT BLACK.

CEILING FINISH LEGEND

LINEAR PENDANT
SEE ELECTRICAL

EXIT SIGN
SEE ELECTRICAL

NOTE: SEE ELECTRICAL FOR FULL LIGHTING SYMBOL LIST

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GARDEN LEVEL FLOOR - REFLECTED CEILING PLAN

FOR PERMITTING ONLY

STATE OF MICHIGAN
GREGG A JONES
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LICENSED ARCHITECT

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ORIGINAL SHEET IS 24"x36". USE DIMENSIONS SHOWN. DO NOT SCALE DRAWINGS.

PROJECT NO: 24-0128

A2.1

3 A3.1 **EXTERIOR RAMP SECTION 1**
1/4" = 1'-0"

2 A3.1 **EXTERIOR RAMP SECTION 2**
1/4" = 1'-0"

1 A3.1 **EXTERIOR ELEVATION - EAST**
1/4" = 1'-0"

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EXTERIOR ELEVATIONS

FOR PERMITTING ONLY

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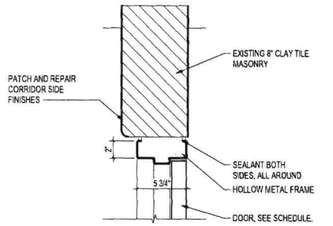
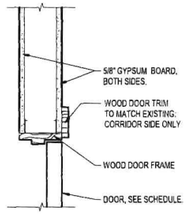
#	ISSUANCE / REVISION	DATE

ORIGINAL SHEET IS 24"x36". USE DIMENSIONS SHOWN. DO NOT SCALE DRAWINGS.

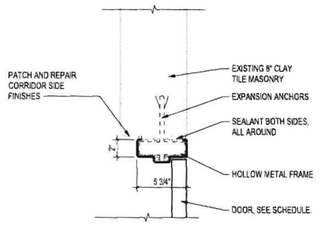
PROJECT NO: 25-0120



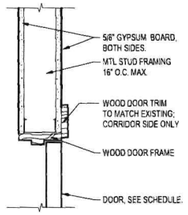
10 A4.1 **HM HEAD @ EXISTING MASONRY WALL**
1 1/2" = 1'-0"



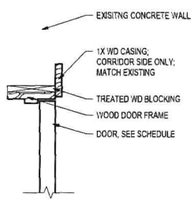
9 A4.1 **WD DOOR HEAD @ MTL. STUD WALL**
1 1/2" = 1'-0"



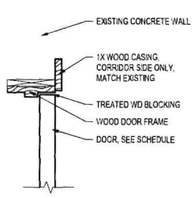
8 A4.1 **HM JAMB @ EXISTING MASONRY WALL**
1 1/2" = 1'-0"



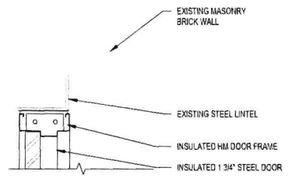
7 A4.1 **WD DOOR JAMB @ MTL. STUD WALL**
1 1/2" = 1'-0"



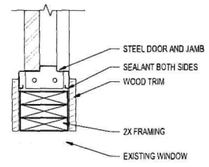
WD DOOR HEAD DETAIL
6 A4.1 **IN EXISTING CONCRETE WALL**
1 1/2" = 1'-0"



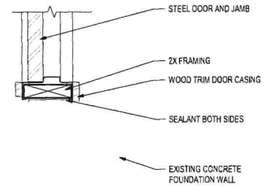
WD DOOR JAMB DETAIL
4 A4.1 **IN EXISTING CONCRETE WALL**
1 1/2" = 1'-0"



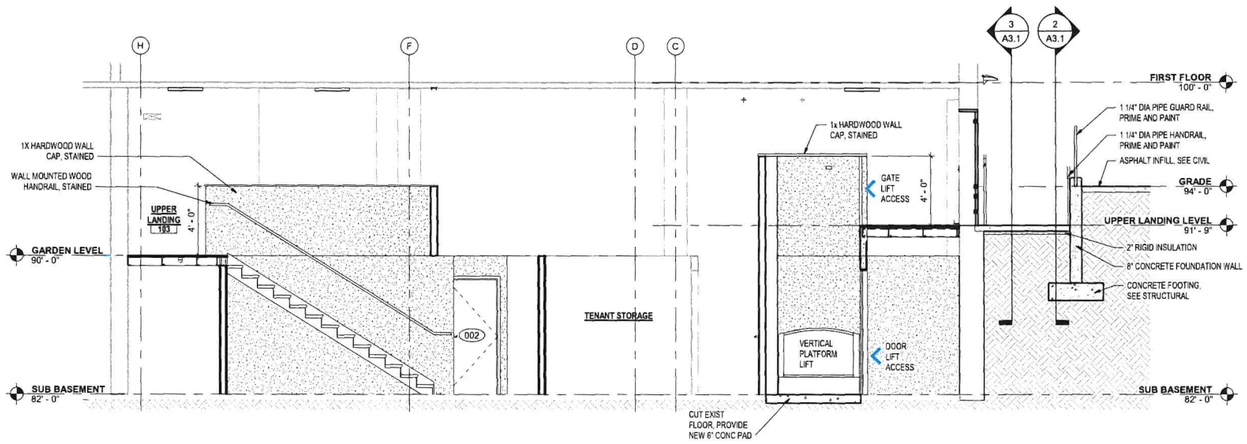
13 A4.1 **STL HEAD DETAIL @ EXISTING WALL**
1 1/2" = 1'-0"



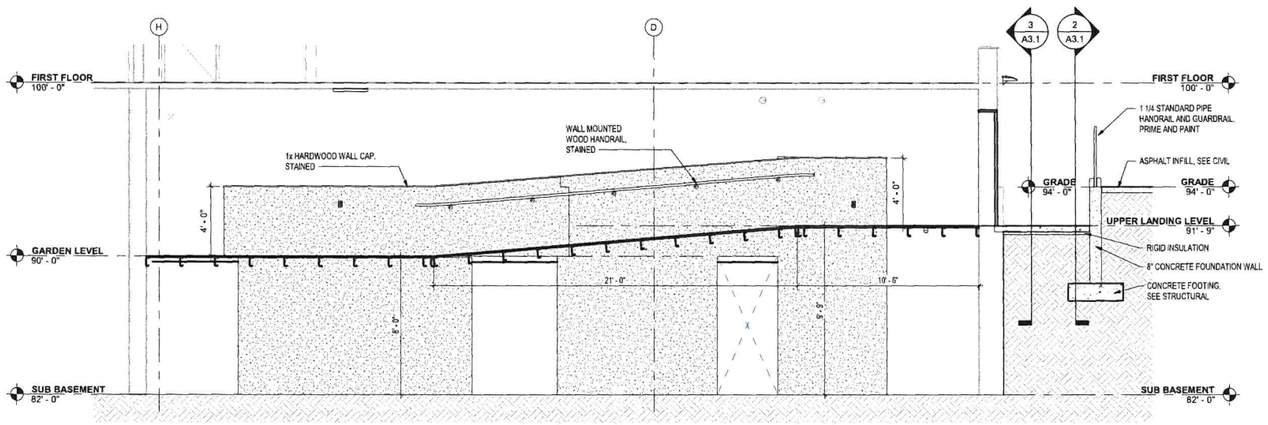
12 A4.1 **STL JAMB DETAIL @ EXISTING WINDOW**
1 1/2" = 1'-0"



11 A4.1 **STL JAMB DETAIL @ EXISTING FOUNDATION WALL**
1 1/2" = 1'-0"



2 A4.1 **NORTH/SOUTH SECTION**
1/4" = 1'-0"



1 A4.1 **INTERIOR RAMP SECTION**
1/4" = 1'-0"

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RENOVATIONS FOR:
MARLBOROUGH CONDOMINIUM ASSOCIATION
471 W SOUTH ST, KALAMAZOO, MI 49007
BUILDING SECTIONS

FOR PERMITTING ONLY

STATE OF MICHIGAN
GREGG A JONES
ARCHITECT
No. 1301003305
LICENSED ARCHITECT

ISSUE DATE: 2026.03.27
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PROJECT NO: 24-0128

A4.1

LEGEND:

- CA - COMPRESSED AIR
- CR - CHILLED RETURN
- CS - CHILLED SUPPLY
- COND - CONDENSATE
- G - GAS
- HR - HYDRONIC RETURN
- HS - HYDRONIC SUPPLY
- RL - REFRIGERANT LIQUID
- RS - REFRIGERANT SUCTION
- STM - STEAM
- DIRECTION OF FLOW
- DROP TEE IN-LINE
- SUPPLY AIR (SECTION)
- RETURN AIR (SECTION)
- EXHAUST AIR (SECTION)
- AIR FLOW DIRECTION
- CAP
- DROP
- RISE
- REDUCER
- UNION
- THREE-WAY CONTROL VALVE
- CONTROL VALVE
- GATE VALVE
- GLOBE VALVE
- BALL VALVE
- CHECK VALVE
- CALIBRATED BALANCING VALVE
- BUTTERFLY VALVE
- PLUG VALVE, GAS COCK
- PRESSURE REDUCING VALVE
- RELIEF VALVE
- PRESSURE GAUGE
- COMBINATION PRESSURE AND TEMPERATURE TEST PLUG WITH EXTENDED NECK AND CAP
- THERMOMETER
- TEMPERATURE WELL
- STRAINER WITH FULL SIZE BLOWDOWN VALVE WITH HOSE END AND CAP
- MANUAL AIR VENT
- PUMP
- POINT OF NEW CONNECTION TO EXISTING
- VOLUME CONTROL DAMPER IN DUCT
- FIRE DAMPER IN HORIZONTAL DUCT
- FIRE DAMPER IN VERTICAL DUCT
- M — MOTORIZED DAMPER
- T — THERMOSTAT
- S — SENSOR
- FLEXIBLE DUCT

ABBREVIATIONS:

AFF	ABOVE FINISH FLOOR	LWT	LEAVING WATER TEMPERATURE
ATR	AIR TEMPERATURE RISE	MAT	MIXED AIR TEMPERATURE
BF	BELOW FLOOR	MBH	1000 BRITISH THERMAL UNITS PER HOUR
BOD	BOTTOM OF DUCT	MIN	MINIMUM
BOS	BOTTOM OF STEEL	MFG	MANUFACTURER
BTUH	BRITISH THERMAL UNIT PER HOUR	NC	NORMALLY CLOSED
BV	BALANCE VALVE	NO	NORMALLY OPEN
CA	COMPRESSED AIR	OA	OUTSIDE AIR
CEF	CEILING EXHAUST FAN	OAL	OUTSIDE AIR LOUVER
CFH	CUBIC FEET PER HOUR	OD	OVERFLOW DRAIN
CFM	CUBIC FEET PER MINUTE	OF	OVERFLOW
CH	CABINET HEATER	OFCI	OWNER FURNISHED - CONTRACTOR INSTALLED
CO	CLEAN OUT	PD	PRESSURE DROP
CONC	CONCRETE	PT	PRESSURE/TEMPERATURE PLUG
CW	DOMESTIC COLD WATER	RD	ROOF DRAIN
DB	DECIBELS, SOUND PRESSURE LEVEL	RH	RELATIVE HUMIDITY/REHEAT
DN	DOWN	RPM	REVOLUTIONS PER MINUTE
EA	EXHAUST AIR/ EACH	BFP	BACKFLOW PREVENTER
EAL	EXHAUST/RELIEF AIR LOUVER	S	SINK
EAT	ENTERING AIR TEMPERATURE	SA	SUPPLY AIR
EDB	ENTERING DRY BULB	SCW	SOFT COLD WATER
EF	EXHAUST FAN	SIM	SIMILAR
ESP	EXTERNAL STATIC PRESSURE	SP	STATIC PRESSURE
EWB	ENTERING WET BULB	S.S.	STAINLESS STEEL
EWT	ENTERING WATER TEMPERATURE	ST	STORM
EXIST	EXISITING	TEMP	TEMPERATURE
FD	FLOOR DRAIN	TOD	TOP OF DUCT
FS	FLOW SWITCH	TOS	TOP OF STEEL
GPM	GALLONS PER MINUTE	TSP	TOTAL STATIC PRESSURE
HB	HOSE BIB	TYP	TYPICAL
HO	HUB OUTLET	V	VENT
HP	HORSEPOWER	VTR	VENT THROUGH ROOF
HW	DOMESTIC HOT WATER	WC	WATER CLOSET
HWR	DOMESTIC HOT WATER RETURN	WH	WATER HEATER
LAV.L	LAVATORY	WPD	WATER PRESSURE DROP
LAT	LEAVING AIR TEMPEATURE/LATENT HEAT	WTW	WALL TO WALL
LDB	LEAVING DRY BULB		
LWB	LEAVING WET BULB		

GENERAL CONTRACTOR REQUIREMENTS:

1. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, ORDINANCES, AND LAWS.
2. ARRANGE AND PAY FOR ALL PERMITS AND INSPECTIONS AS REQUIRED.
3. MAKE ARRANGEMENTS WITH AND PAY ALL CHARGES REQUIRED BY UTILITY COMPANIES FOR, WATER, AND SEWER SERVICES
4. ALL WORK SHALL BE PERFORMED TO FACILITATE EXPEDITIOUS PROGRESS ON THE WHOLE PROJECT COORDINATE WORK WITH OTHER TRADES TO MINIMIZE AND RESOLVE POTENTIAL CONFLICTS.
5. COMPLETED SYSTEM SHALL BE TESTED, BALANCED, AND GUARANTEED.
6. PROVIDE A GAS SHUTOFF VALVE AND DIRT LEG AT EACH PIECE OF GAS FIRED EQUIPMENT.
7. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE. THE CONTRACTOR SHALL PROVIDE FITTINGS, OFFSETS, ETC., AS NECESSARY TO PROPERLY COMPLETE THE INSTALLATION OF THE SYSTEMS.
8. CONTRACTOR TO FURNISH AND INSTALL WATER HAMMER ARRESTERS AT EACH VALVED FIXTURE.
9. ALL PIPES PASSING THRU FINISHED WALLS, PARTITIONS AND FLOORS SHALL BE FITTED WITH ADJUSTABLE ESCUTCHEONS, AND APPROPRIATE FIRE TOPPING WHERE REQUIRED.
10. FURNISH AND INSTALL ALL VALVING FOR THE PROPER SECTIONALIZING AND OPERATION OF THE PIPING SYSTEM.
11. LAYOUT PLUMBING WORK TO AVOID CONFLICTS WITH OTHER BUILDING COMPONENTS. ESTABLISH ELEVATION OF PUBLIC SEWER SYSTEM.
12. WHERE FIXTURES ARE MOUNTED TO WALLS SEAL ALL INTERSECTIONS WITH SILICONE CAULK.
13. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY DETAIL OF CONSTRUCTION. CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS NECESSARY FOR A COMPLETE CODE COMPLYING MECHANICAL SYSTEM TO BE IN PROPER WORKING ORDER.
14. PROVIDE APPROPRIATE FIRE STOPPING MATERIALS WHERE FIRE RATED ASSEMBLIES ARE PENETRATED.
15. MATERIALS EXPOSED WITHIN A PLENUM SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTEM E84. EXISTING AND NEW PVC PIPING WILL REQUIRE 1/2 INCH MINERAL FIBER INSULATION WITH VAPOR RETARDER FACING THAT MEETS ASTM E84.
16. CONTROLS: MECHANICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL CONDUIT AND WIRING FOR LOW VOLTAGE AND LINE VOLTAGE REQUIREMENTS FOR PROPER FUNCTION AND COMMUNICATION OF EQUIPMENT.

ALTERNATE: SNOWMELT EQUIPMENT LIST

P-1 INLINE PUMP
MANUFACTURER: BELL & GOSSETT
MODEL: 60-45
DUTY POINT FLOW: 5 GPM
DUTY POINT HEAD: 45 FT
MOTOR POWER: 0.5 HP
INPUT POWER: 0.38 HP
DUTY POINT RPM: 4166
FLUID TEMP: 68 DEG F

AS-1 AIR & DIRT SEPARATOR
MANUFACTURER: CALEFFI
MODEL: 551066A
CONNECTIONS: 1" SWEAT
FLOW: 9.3 GPM
HEAD: 1 FOOT MAXIMUM

ET-1 EXPANSION TANK
MANUFACTURER: BELL & GOSSETT
MODEL: B85
VOLUME: 23 GALLONS
ACCEPTANCE: 23 GALLONS

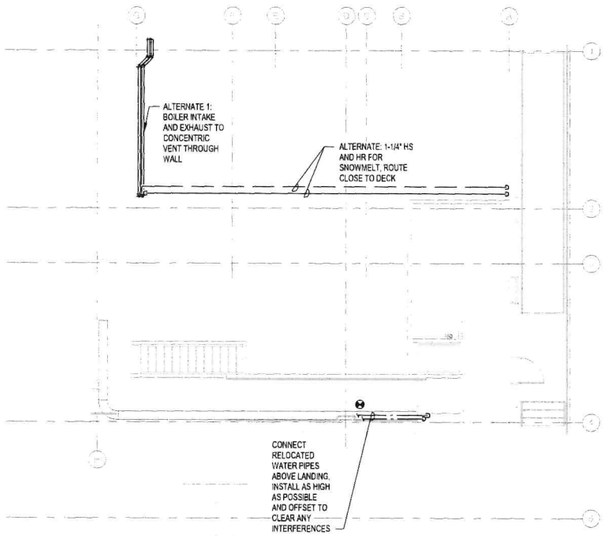
B-1 ALTERNATE 1: BOILER
MANUFACTURER: NTI
MODEL: TFTN085
WATER CONNECTION: 1-1/4"
GAS CONNECTION: 3/4"
INPUT: 39.6 MBH
HEATING CAPACITY: 38 MBH
EXHAUST PIPE MATERIAL: PVC

HE-1 ALTERNATE 2: HEAT EXCHANGER
MANUFACTURER: BELL & GOSSETT
MODEL: GPX
TYPE: DOUBLE-WALL PLATE
DELTA T: 25 DEG F
TOTAL HEAT EXCHANGED: 45,933.81 BTU/H
SNOWMELT OUTPUT TEMPERATURE: 110 F

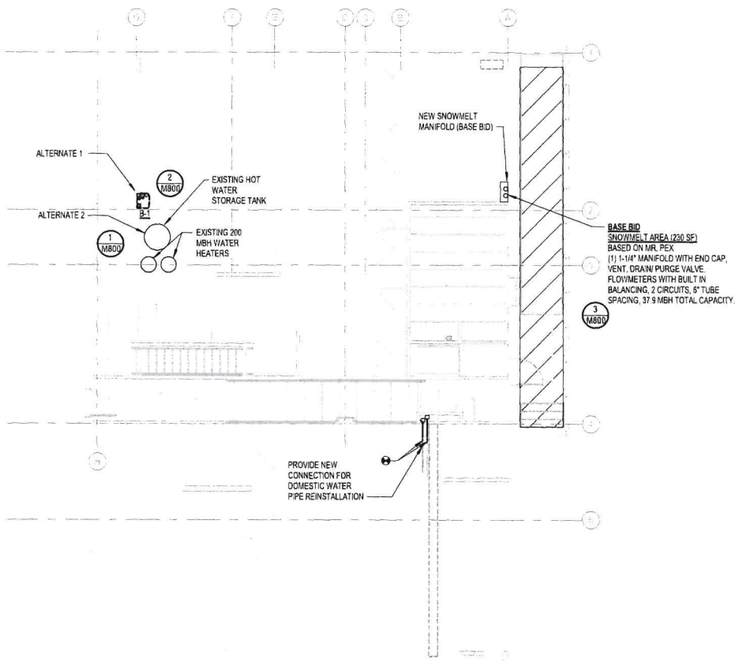
ALTERNATE: SNOWMELT SYSTEM

MARK	SQ FT	SYSTEM DETAILS				SYSTEM CAPACITY			MATERIAL			FLOW REQUIREMENTS			REMARKS
		WTD °F	TUBE DIA.	SPACING MAX	GLYCOL %	SUPPLY TEMP	MELTING OUTPUT BTU/HR	INPUT BTU/HR	# LOOPS	AVG. LOOP LENGTH	APPROX TUBE LENGTH	TOTAL FLOW GPM	GPM/LOOP	WPD FT.HD	
ZONE 1	250	25	5/8"	0'-6"	40	110	37,950	37,950	2	115	250	3.30	1.65	13.0	1

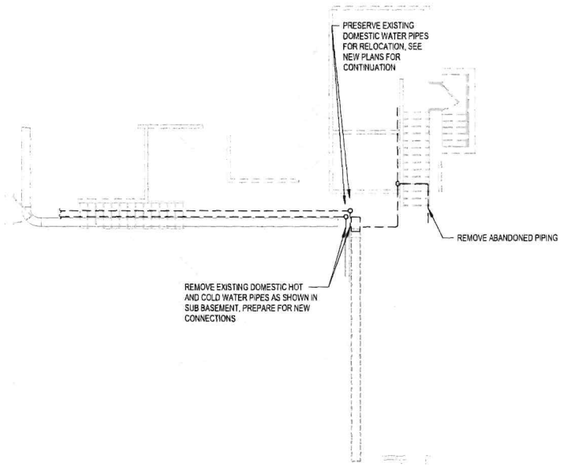
1. BASED ON "MR. PEX."



N **GARDEN LEVEL HVAC PLAN**



N **SUB-BASEMENT HVAC PLAN**



N **SUB-BASEMENT DEMOLITION PLAN**

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MARLBOROUGH CONDOMINIUM ASSOCIATION

471 W SOUTH ST, KALAMAZOO, MI 49007

MECHANICAL PLANS AND SCHEDULE

FOR PERMITTING ONLY

STATE OF MICHIGAN
GREGG A. JONES
ARCHITECT
No. 1301063305
LICENSED ARCHITECT

ISSUE DATE: 2026.03.27
PM: QA / QC:

#	ISSUANCE / REVISON	DATE

ORIGINAL SHEET IS 24"x36". USE DIMENSIONS SHOWN. DO NOT SCALE DRAWINGS.

PROJECT NO: 24-0128

DIVISON 23 - HEATING, VENTILATING AND AIR CONDITIONING (HVAC) SPECIFICATIONS

SECTION 230500 - COMMON WORK RESULTS FOR HVAC

A. INSTALL SLEEVES FOR PIPING PASSING THROUGH PENETRATIONS IN FLOORS, PARTITIONS, ROOFS, AND WALLS.

B. INSTALL SLEEVE-SEAL SYSTEMS IN SLEEVES IN EXTERIOR CONCRETE WALLS AND SLABS-ON-GRADE AT SERVICE PIPING ENTRIES INTO BUILDING. TIGHTEN BOLTS AGAINST PRESSURE PLATES THAT CAUSE SEALING ELEMENTS TO EXPAND AND MAKE A WATERTIGHT SEAL.

C. FIRE-BARRIER PENETRATIONS: MAINTAIN INDICATED FIRE RATING OF WALLS, PARTITIONS, CEILINGS, AND FLOORS AT PIPE PENETRATIONS. SEAL PIPE PENETRATIONS WITH FIRESTOP MATERIALS.

D. INSTALL ADJUSTABLE ESCUTCHEONS ON ALL PIPES PASSING THROUGH FINISHED WALLS, PARTITIONS AND FLOORS.

SECTION 230519 - METERS AND GAGES FOR HVAC PIPING

A. THERMOMETERS SHALL BE LIQUID IN GLASS METAL-CASE, COMPACT OR STANDARD SIZE GRADUATED WITH DEG F. STANDARD ASME B40.200. CONNECTOR SHALL BE ½" ASME B1.1 SCREW THREADS. ACCURACY TO PLUS MINUS 1 PERCENT. SCALE RANGE: 0-250 DEG F. AND 0-150 DEG C.

B. THERMOWELLS SHALL BE PRESSURE TIGHT, SOCKET TYPE MADE FOR INSERTION INTO TEE FITTING. STANDARD ASME B40.200. USE CNR FOR COPPER PIPING AND CRES FOR STEEL PIPING. HEAT TRANSFER MEDIUM SHALL BE MIXTURE OF GRAPHITE AND GLYCERIN.

C. PRESSURE GAUGES SHALL BE DIRECT MOUNTED METAL CASE DIAL TYPE, CAST ALUMINUM OR DRAWN STEEL. 4-1/2- INCH DIAMETER. STANDARD ASME B40.100. CONNECTION BRASS ASME B1.20.1 PIPE THREADED. ACCURACY GRADE B, PLUS OR MINUS 2 PERCENT. SCALE RANGE: 0-100 PSI.

D. INSTALL THERMOMETERS, THERMOWELLS AND PRESSURE GAUGES WERE INDICATED ON DRAWINGS.

SECTION 230523 - GENERAL DUTY VALVES FOR HVAC PIPING

A. BALL VALVES SHALL BE BRONZE, TWO PIECE FULL PORT, AND BRONZE OR BRASS TRIM, THREADED, SOLDERED OR PRESSED ENDS FOR POTABLE WATER SYSTEMS. STANDARD MSS SP-110.

B. BUTTERFLY VALVES SHALL BE IRON, SINGLE FLANGE(LUG-TYPE) OR FLANGELESS (WAFER TYPE) WITH ALUMINUM-BRONZE DISC FOR POTABLE WATER SYSTEMS. STANDARD MSS SP-67, TYPE 1.

C. CHECK VALVES SHALL BE BRONZE LIFT OR BRONZE SWING TYPE WITH NONMETALLIC DISC, CLASS 125. THREADED, SOLDERED OR PRESSED ENDS. STANDARD MSS SP-80, TYPE 2.

D. INSTALL SHUT-OFF VALVES TO ISOLATE EQUIPMENT, PARTS OF SYSTEMS AND VERTICAL RISERS, OR AS INDICATED ON THE DRAWINGS.

E. INSTALL VALVES IN POSITION TO ALLOW FULL VALVE ACTUATION MOVEMENT.

F. INSTALL VALVES WITH UNIONS, FLANGES OR COUPLINGS. ARRANGE TO ALLOW SPACE FOR SERVICE AND EQUIPMENT REMOVAL WITHOUT SYSTEM SHUT DOWN.

G. INSTALL SWING CHECK VALVES IN HORIZONTAL PIPING AND LIFT CHECK VALVES IN VERTICAL PIPING.

H. PROVIDE ACCESS WHERE VALVES ARE CONCEALED. COORDINATE SIZE AND LOCATION WITH GENERAL CONTRACTOR.

I. PROVIDE 2" EXTENDED NECK STEMS FOR INSULATED PIPING.

SECTION 230529 - HANGERS AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT

A. CONFORM TO ASME B31.9, ASTM F708.

B. METAL PIPE-HANGER INSTALLATION: COMPLY WITH MSS SP-69 AND MSS SP-89. INSTALL HANGERS, SUPPORTS, CLAMPS AND ATTACHMENTS AS REQUIRED TO PROPERLY SUPPORT PIPING FROM THE BUILDING STRUCTURE.

C. HANGERS FOR COLD PIPE SIZES 2 INCHES AND LARGER: CARBON STEEL, ADJUSTABLE, CLEVIS.

D. MULTIPLE OR TRAPEZE HANGERS: STEEL CHANNELS WITH WELDED SPACERS AND HANGER RODS.

E. VERTICAL SUPPORT: STEEL RISER CLAMP.

F. FLOOR SUPPORT FOR COLD PIPE: CAST IRON ADJUSTABLE PIPE SADDLE, LOCK NUT, NIPPLE, FLOOR FLANGE, AND CONCRETE PIER OR STEEL SUPPORT.

G. INSTALL HANGERS AND SUPPORTS COMPLETE WITH NECESSARY ATTACHMENTS, INSERTS, BOLTS, RODS, NUTS, WASHERS, AND OTHER ACCESSORIES.

H. INSTALL IN ACCORDANCE WITH ASME B31.1, ASME B31.5, ASME 31.9.

I. INSTALL HANGERS WITH MINIMUM ½ INCH SPACE BETWEEN FINISHED COVERING AND ADJACENT WORK.

J. PLACE HANGERS WITHIN 12 INCHES OF EACH HORIZONTAL ELBOW.

K. USE HANGERS WITH 1-1/2 INCH MINIMUM VERTICAL ADJUSTMENT.

L. PIPE HANGER SPACING SHALL BE PER CODE REQUIREMENTS.

SECTION 230548.13 - VIBRATION CONTROLS FOR HVAC PIPING AND EQUIPMENT

A. PROVIDE VIBRATION-CONTROL DEVICES FOR SYSTEMS AND EQUIPMENT WERE INDICATED IN EQUIPMENT SCHEDULES, DRAWINGS, OR WHERE THE SPECIFICATIONS INDICATE THEY ARE TO BE INSTALLED ON SPECIFIC EQUIPMENT AND SYSTEMS.

SECTION 230553 - IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT

A. PROVIDE EQUIPMENT LABELS FOR EACH PIECE OF SCHEDULED EQUIPMENT, UNIT NAME SHALL MATCH EQUIPMENT MARK ON SCHEDULE. EQUIPMENT TAG SHALL BE PLASTIC, OR METAL FASTENED WITH RIVETS, SELF-TAPPING SCREWS OR CONTACT TYPE PERMANENT ADHESIVE, COMPATIBLE WITH LABEL AND SUBSTRATE.

B. PROVIDE MANUFACTURED PIPE LABELS INDICATING PIPE SIZE, SYSTEM ABBREVIATION AND FLOW DIRECTION. INSTALL PIPE LABELS WITHIN THREE FEET OF EACH VALVE OR PIECE OF EQUIPMENT AND SPACED AT MAXIMUM INTERVALS OF 25 FEET.

C. PROVIDE VALVE TAGS WITH SYSTEM ABBREVIATION AND SIZE WITH BRASS OR ALUMINUM TAG. FASTEN WITH BRASS WIRE OR BEADED CHAIN.

D. SIZE LETTERS IN ACCORDANCE WITH ASME A13.1 FOR PIPING.

E. SIGN AND LABEL COLORS: WHITE LETTERS ON ANSI Z535.1 SAFETY-GREEN BACKGROUND.

SECTION 230593 - TESTING, ADJUSTING AND BALANCING FOR HVAC

A. ASHRAE/IES 90.1-2019 COMPLIANCE: APPLICABLE REQUIREMENTS IN AWSHRAE/IES 90.1-2019 SECTION 6.7.2.3 - "SYSTEM BALANCING"

B. TAB SPECIALISTS QUALIFICATIONS: CERTIFIED BY AABC.

C. VERIFY SYSTEMS ARE COMPLETE AND OPERABLE BEFORE COMMENCING WORK. VERIFY THE FOLLOWING:
   1. SYSTEMS ARE STARTED AND OPERATING IN SAFE AND NORMAL CONDITION.
   2. TEMPERATURE CONTROL SYSTEMS ARE INSTALLED COMPLETE AND OPERABLE.
   3. PROPER THERMAL OVERLOAD PROTECTION IS IN PLACE FOR ELECTRICAL EQUIPMENT.
   4. PROPER STRAINER BASKETS ARE CLEAN AND IN PLACE OR IN NORMAL POSITION.
   5. SERVICE AND BALANCING VALVES AND DAMPERS ARE OPEN.

D. TEST AND BALANCE AIR DISTRIBUTION SYSTEM WITHIN 10% OF CFM SHOWN ON PLAN.

E. TEST AND BALANCE WATER SYSTEMS WITHIN 10% OF GPM SHOWN ON PLAN.

F. PROVIDE BALANCE REPORT TO ENGINEER FOR REVIEW AT PROJECT COMPLETION.

SECTION 232113 – HVAC PIPING

A. COMPLY WITH THE CURRENT INTERNATIONAL FUEL GAS CODE FOR NATURAL GAS PIPING.

B. MINIMUM OPERATING-PRESSURE RATINGS: PIPING AND VALVES: 100 PSIG MINIMUM UNLESS OTHERWISE INDICATED.

C. NATURAL GAS PIPING: STEEL PIPE ASTM A53/A53M, SCHEDULE 40, BLACK. FITTINGS: ASME B16.3, MALLEABLE IRON OR ASTM A234/A234M, FORGED STEEL WELDING TYPE. JOINTS: THREADED, WELDED OR MEGAPRESS BY VIEGA.

D. DO NOT INSTALL GAS PIPING IN CONCEALED LOCATIONS UNLESS SLEEVED WITH THE SLEEVE OPEN AT BOTH ENDS.

E. DRIPS AND SEDIMENT TRAPS: INSTALL DRIPS AT POINTS WHERE CONDENSATE MAY COLLECT, INCLUDING SERVICE-METER OUTLETS. LOCATE WHERE ACCESSIBLE TO PERMIT CLEANING AND EMPTYING. CONSTRUCT DRIPS AND SEDIMENT TRAPS USING TEE FITTING WITH BOTTOM OUTLET PLUGGED OR CAPPED. USE NIPPLE A MINIMUM LENGTH OF 3 PIPE DIAMETERS, BUT NOT LESS THAN 3 INCHES LONG AND SAME SIZE AS CONNECTED PIPE. INSTALL WITH SPACE BELOW BOTTOM OF DRIP TO REMOVE PLUG OR CAP.

F. DO NOT INSTALL NATURAL-GAS PIPING IN OR THROUGH CIRCULATING AIR DUCTS, PLENUMS CLOTHES OR TRASH CHUTES, CHIMNEYS OR GAS VENTS (FLUES), VENTILATING DUCTS, OR DUMBWAITER OR ELEVATOR SHAFTS.

G. DO NOT INSTALL NATURAL-GAS PIPING IN SOLID WALLS OR PARTITIONS.

H. DO NOT USE NATURAL-GAS PIPING AS GROUNDING ELECTRODE.

I. INSTALL MANUAL GAS SHUTOFF VALVE FOR EACH GAS APPLIANCE.

J. WHEN REGULATORS ARE REQUIRED, INSTALL AFTER EACH SHUT-OFF VALVE WITH MAINTENANCE ACCESS SPACE ADEQUATE FOR SERVICING AND TESTING.

K. INSTALL NON-CONDUCTING DIELECTRIC CONNECTIONS WHEREVER JOINTING DISSIMILAR METALS.

L. ROUTE PIPING IN ORDERLY MANNER AND MAINTAIN GRADIENT.

M. ESTABLISH INVERT ELEVATIONS, SLOPES FOR DRAINAGE AND STORM PIPING 1/8 INCH PER FOOT MINIMUM.

N. INSTALL PIPING TO ALLOW FOR EXPANSION AND CONTRACTION WITHOUT STRESSING PIPE, JOINTS, OR CONNECTED EQUIPMENT.

O. INSTALL BYPASS CHEMICAL FEEDERS IN EACH HYDRONIC SYSTEM WHERE INDICATED. INSTALL IN UPRIGHT POSITION WITH TOP OF FUNNEL NOT MORE THAN 48 INCHES ABOVE THE FLOOR. INSTALL FEEDER IN MINIMUM NPS 3/4 BYPASS LINE, FROM MAIN WITH FULL-SIZE, FULL-PORT, BALL VALVE IN THE MAIN BETWEEN BYPASS CONNECTIONS. INSTALL NPS 3/4 PIPE FROM CHEMICAL FEEDER DRAIN TO NEAREST EQUIPMENT DRAIN AND INCLUDE A FULL-SIZE, FULL-PORT, BALL VALVE.

P. AFTER HYDRONIC SYSTEM COMPLETION FILL SYSTEM WITH FRESH WATER AND ADD LIQUID ALKALINE COMPOUND WITH EMULSIFYING AGENTS AND DETERGENTS TO REMOVE GREASE AND PETROLEUM PRODUCTS FROM PIPING. CIRCULATE SOLUTION FOR A MINIMUM OF 24 HOURS. DRAIN, CLEAN STRAINER SCREENS, AND REFILL WITH FRESH WATER.

Q. ADD INITIAL CHEMICAL TREATMENT AND TRAIN OWNER HOW TO MAINTAIN WATER QUALITY FOR EACH HYDRONIC SYSTEM.

R. FILL SYSTEMS THAT HAVE GLYCOL CONCENTRATIONS AS INDICATED ON THE DRAWINGS. GLYCOL MUST BE PREMIXED SOLUTION. MIXING GLYCOL WITH WATER ON SITE IS NOT ACCEPTABLE..

GENERAL CONTRACTOR SPECIFICATIONS

A. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, ORDINANCES, AND LAWS.

B. ARRANGE AND PAY FOR ALL PERMITS AND INSPECTIONS AS REQUIRED.

C. MAKE ARRANGEMENTS WITH AND PAY ALL CHARGES REQUIRED BY UTILITY COMPANIES FOR GAS, WATER, AND SEWER SERVICES.

D. COORDINATE INTERUPTIONS TO EXISTING UTILITIES AND EQUIPMENT WITH GENERAL CONTRACTOR AND BUILDING OWNER.

E. ALL WORK SHALL BE PERFORMED TO FACILITATE EXPEDITIOUS PROGRESS ON THE WHOLE PROJECT. COORDINATE WORK WITH OTHER TRADES TO MINIMIZE AND RESOLVE POTENTIAL CONFLICTS.

F. COMPLETED SYSTEM SHALL BE TESTED, BALANCED, AND GUARANTEED.

G. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE. THE CONTRACTOR SHALL PROVIDE FITTINGS, OFFSETS, ETC., AS NECESSARY TO PROPERLY COMPLETE THE INSTALLATION OF THE SYSTEMS.

H. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY DETAIL OF CONSTRUCTION. CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS NECESSARY FOR A COMPLETE CODE COMPLYING MECHANICAL AND PLUMBING SYSTEM.

I. PROVIDE APPROPRIATE FIRE STOPPING MATERIALS WHERE FIRE RATED ASSEMBLIES ARE PENETRATED.

J. MATERIALS EXPOSED WITHIN A PLENUM SHALL BE NONCOMUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTEM E84. EXISTING AND NEW PVC PIPING WILL REQUIRE 1/2 INCH MINERAL FIBER INSULATION WITH VAPOR RETARDER FACING THAT MEETS ASTM E84.

K. CONTROLS: MECHANICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL CONDUIT AND WIRING FOR LOW VOLTAGE AND LINE VOLTAGE REQUIREMENTS FOR PROPER FUNCTION AND COMMUNICATION OF EQUIPMENT.

L. WORK SHALL BE DONE COMPLETE IN ALL RESPECTS, INCLUDING THE FOLLOWING ITEMS BRIEFLY MENTIONED AND ALL OTHER ITEMS WHICH ARE INDICATED, SPECIFIED OR NECESSARY FOR A COMPLETE AND SATISFACTORY MECHANICAL AND PLUMBING SYSTEM.

M. FINAL LOCATION OF ALL CEILING FEATURES TO BE LOCATED PER REFLECTED CEILING PLAN.

N. ALL WORK AND MATERIALS SHALL BE GUARANTEED IN WRITING FOR ONE YEAR FROM PROJECT COMPLETION.

O. PROVIDE SHOP DRAWINGS FOR APPROVAL OF ALL SCHEDULED AND LISTED EQUIPMENT. SHOP DRAWINGS ARE TO BE SUBMITTED PER SPECIFICATION SECTION.

P. MODEL NUMBERS LISTED ON DRAWINGS ARE BASED ON MANUFACTURERS LISTED. THE CONTRACTOR MAY AT HIS OPTION PROVIDE AN "OR EQUAL" MANUFACTURED PRODUCT. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL COST ADDITIONS REQUIRED TO THE SYSTEM SHOULD AN "OR EQUAL" MANUFACTURER BE SELECTED.

Q. COORDINATE THE INSTALLATION OF THE WORK WITH ALL OTHER TRADES BEFORE INSTALLATION TO ELIMINATE CONFLICTS OVER AVAILABLE SPACE.

R. ARRANGE WITH OTHER TRADES FOR THE PROVISION OF ALL CHASES, SLOTS, AND OPENINGS NECESSARY FOR THE PROPER INSTALLATION OF THE MECHANICAL AND PLUMBING WORK.

S. COORDINATE THE INSTALLATION OF ALL REQUIRED SUPPORTING DEVICES.

T. WHERE ELECTRICAL CONNECTIONS ARE REQUIRED, CONFIRM REQUIREMENTS WITH PROJECT ELECTRICAL CONTRACTOR BEFORE ITEM IS ORDERED.

U. WHERE STARTERS, DISCONNECTS, ETC. ARE NOT SPECIFICALLY INDICATED ON THE ELECTRICAL DRAWINGS, THEY ARE TO BE PROVIDED BY THE MECHANICAL CONTRACTOR.

V. MAINTAIN A "CLEAN" SET OF PROJECT DRAWINGS FOR THE SOLE PURPOSE OF RECORDING DEVIATIONS FROM THE DESIGN. THIS SET OF DRAWINGS SHALL BE MAINTAINED WITH ALL MODIFICATIONS MARKED-UP AS WORK PROGRESSES. DRAWINGS TO BE TURNED OVER TO THE OWNER FOR FUTURE REFERENCE.

W. ALL OPENINGS IN PIPING AND DUCT WORK SYSTEMS SHALL BE PROTECTED DURING CONSTRUCTION TO PREVENT THE ENTRANCE OF FOREIGN MATERIALS.

X. ALL SYSTEMS FABRICATED ON SITE SHALL BE TESTED BY THE CONTRACTOR; TESTING SHALL INCLUDE THE PROVISION OF ALL NECESSARY EQUIPMENT, LABOR, AND FLUIDS.

Y. WHEN CONNECTIONS TO SITE SERVICES ARE REQUIRED CONFIRM LOCATIONS AND ELEVATION OF SAME PRIOR TO PROCEEDING WITH THE LAYOUT OF BUILDING SYSTEM.

Z. FLUSH AND TEST SYSTEM FOR LEAKS. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROPER LEAK-FREE OPERATION OF SYSTEM. SOLDER JOINTS WITH LEAD-FREE SOLDER.

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RENOVATIONS FOR:
MARLBOROUGH CONDOMINIUM ASSOCIATION
471 W SOUTH ST, KALAMAZOO, MI 49007
MECHANICAL SPECIFICATIONS

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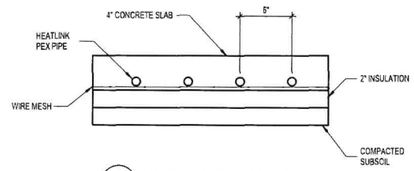
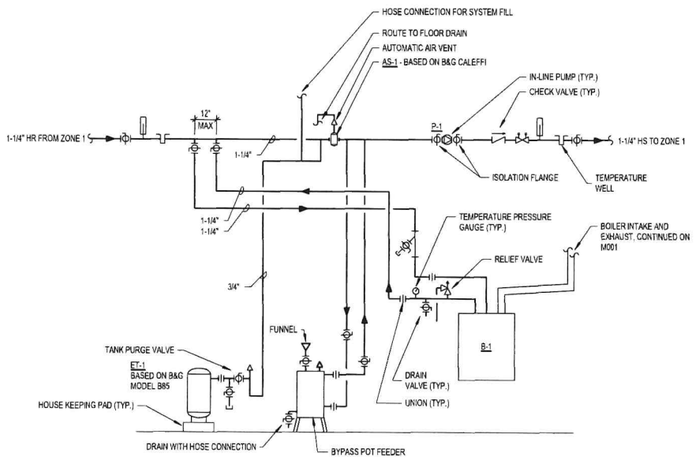
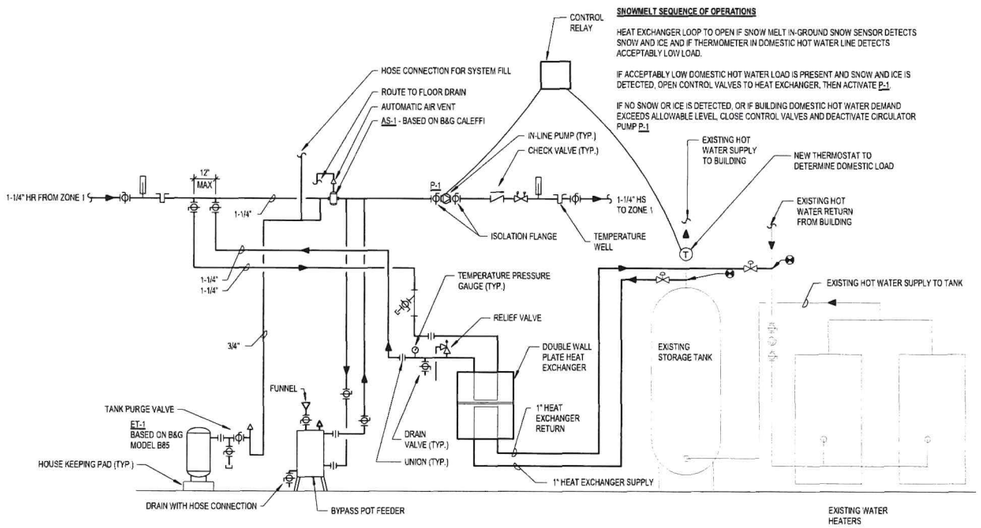


3 M800 **BASE BUILD: SNOWMELT SLAB PIPING**
SCALE: NONE



2 M800 **ALTERNATE 1: SNOWMELT BOILER SCHEMATIC**
SCALE: NONE



1 M800 **ALTERNATE 2: SNOWMELT HEAT EXCHANGER SCHEMATIC**
SCALE: NONE

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MECHANICAL DETAILS

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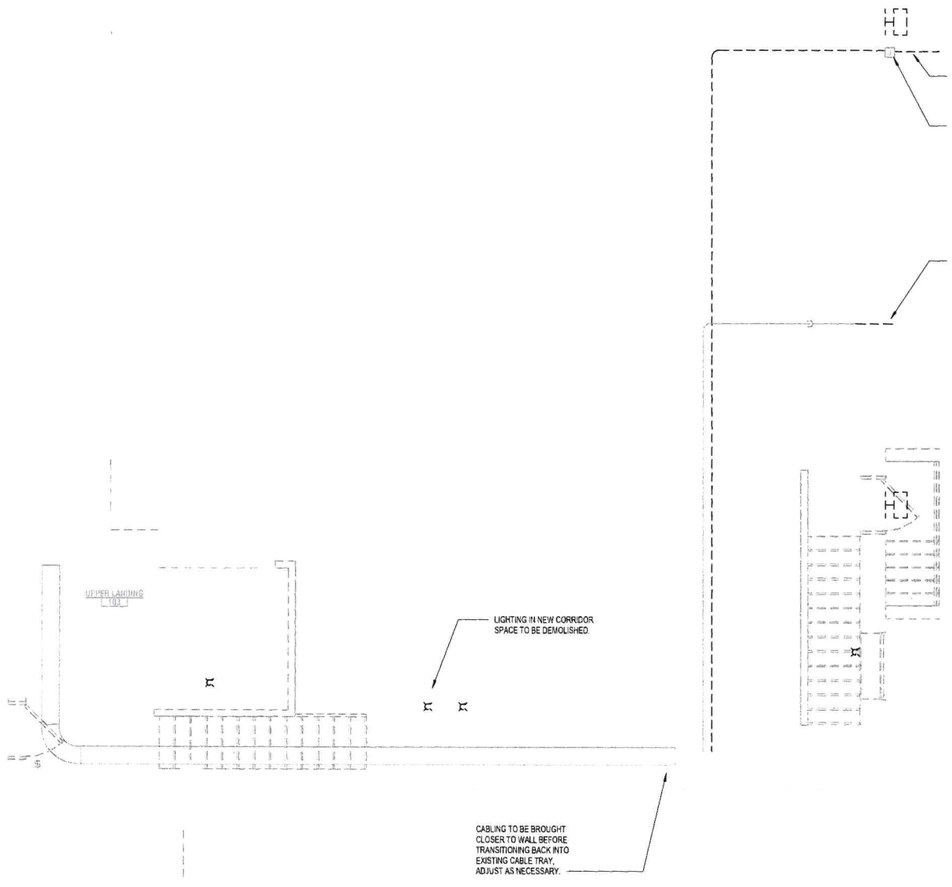

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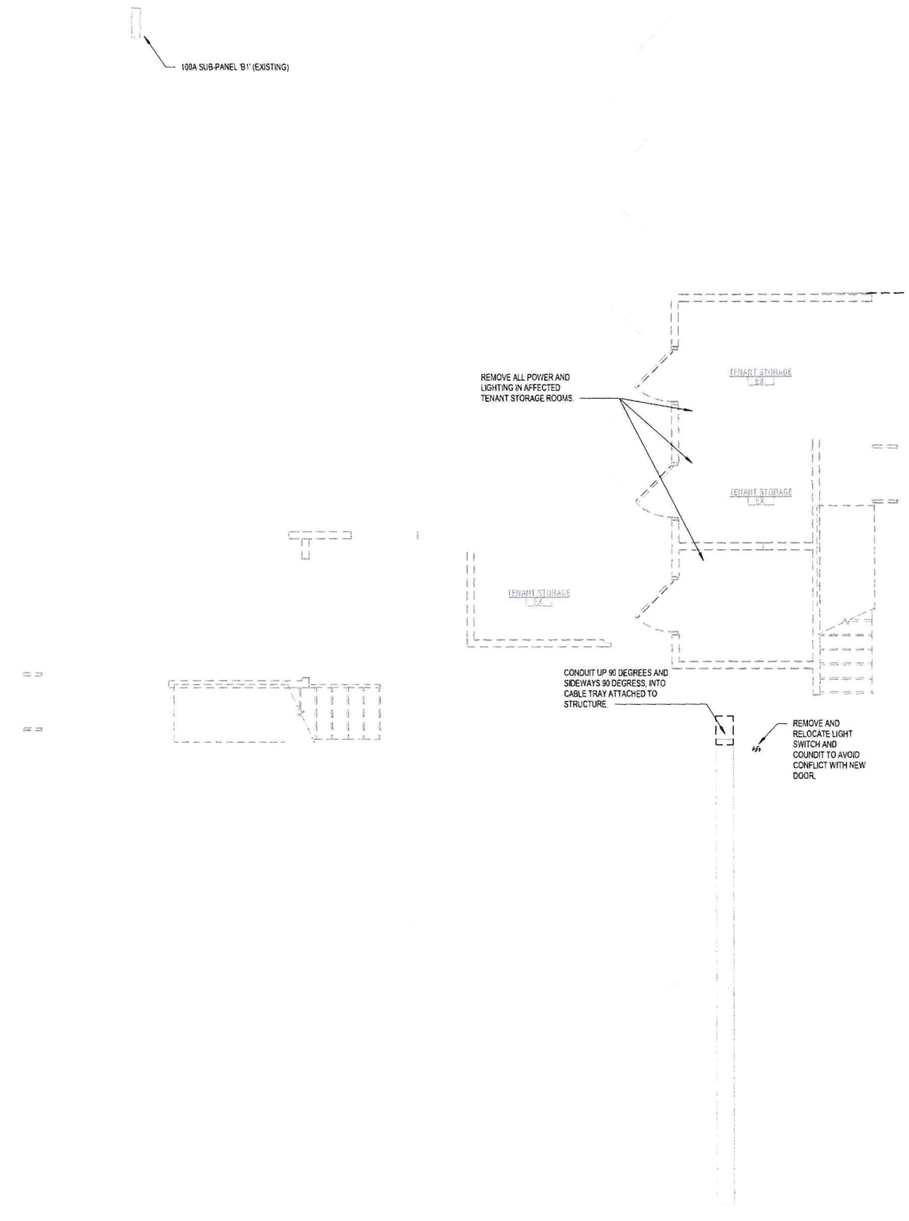
GARDEN LEVEL DEMOLITION PLAN

1/4" = 1'-0"



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SUB BASEMENT ELECTRICAL DEMOLITION PLAN

1/4" = 1'-0"

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RENOVATIONS FOR:

PARKVIEW HILLS - MARLBOROUGH BUILDING

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ELECTRICAL DEMOLITION PLAN

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PANEL B1 (EXISTING)

Location: MECHANICAL ROOM EX.
Supply From: EXISTING
Mounting: SURFACE
Voltage: 120/240V
Phases: 1
Wires: 3
A.I.C. Rating: EXISTING
Mains Rating: 100 A
Mains Type: MAIN CIRCUIT BREAKER

CKT	Description	Type	Trip	Poles	A		B		Poles	Trip	Type	Description	CKT
1	PANEL RECEPT	EX	20 A	1	0 VA	0 VA			1	20 A	EX	SPARE	2
3	SPARE	EX	20 A	1			0 VA	0 VA	1	20 A	EX	WATER HEATER	4
5	LTS - SUB BASEMENT		20 A	1	280 VA	0 VA			1	20 A	EX	SPARE	6
7	LTG - EXTERIOR		20 A	1			78 VA	0 VA	1	20 A	EX	LIGHTS	8
9	LIFT MOTOR		20 A	1	720 VA	0 VA			1	20 A	EX	HOT WATER HEATER	10
11	RCPTS - WALKWAY		20 A	1			360 VA	0 VA	1	20 A	EX	SPARE	12
13	RCPTS - STORAGE		20 A	1	720 VA	0 VA			2	20 A	EX	LIGHTS	14
15	RCPTS - LANDING		20 A	1			540 VA	0 VA					16
17	BOILER "B-1"		15 A	1	500 VA	0 VA			2	100 A	EX	MAIN	18
19	SNOW MELT PUMP		15 A	2			250 VA	0 VA					20
21					250 VA	--			1	--	EX	SPACE	22
23	SPACE	EX	--	1			--	--	1	--	EX	SPACE	24

Load Classification	Connected Load	Demand Factor	Demand Load
Lighting	292 VA	100.00%	292 VA
Receptacle	1620 VA	100.00%	1620 VA
Motor	1220 VA	100.00%	1220 VA
Other	500 VA	100.00%	500 VA

Panel Totals	
Total Connected Load:	3430 VA
Total Demand Load:	3430 VA
Total Connected Current:	14 A
Total Demand Current:	14 A

NOTES: (BLANK) - STANDARD BREAKER, (G) - GROUND FAULT CIRCUIT INTERRUPTER, (A) - ARC FAULT CIRCUIT INTERRUPTER, (S) - SHUNT TRIP, (C) - 100% CONTINUOUS RATED, (EX) - EXISTING CIRCUIT

LIGHT FIXTURE SCHEDULE

MARK	SYMBOL	LAMPS WATTS	LAMPS TYPE	MANUFACTURER	MTG.	REMARKS
IA		32 W	LED	LITHONIA: CLX-L48-5000LM-SEF-FDL-MVOLT-GZ10-40K-80CRI-WH OR EQUIVALENT	SURFACE	4' STRIPLIGHT. 5000 LUMENS, 4000K COLOR TEMPERATURE, 80CRI.
IB		43 W	LED	ELITE LIGHTING: 2-OC4-LED-5000L-DIM10-MVOLT-40K-85-FS-555 OR EQUIVALENT	SURFACE	2' STRIPLIGHT. 5000 LUMENS, 4000K COLOR TEMPERATURE, 85CRI.
WA		26 W	LED	MCGRAW-EDISON: GKO-PB2A-730-U-T2U-BK-CBP-MSIOIM-L20 OR EQUIVALENT	WALL 18'-0" ABOVE GRADE	EXTERIOR EGRESS LIGHT W/ EMERGENCY BATTERY BACKUP & MOTION/AMBIENT LIGHT SENSOR. 3848 DELIVERED LUMENS. DARK SKY APPROVED
XA		1 W	LED	SURE LITES: #CX - 71 OR EQUIVALENT	WALL 8'-0" AFF	EMERGENCY EXIT SIGN. PROVIDE FACES AND CHEVRONS AS SHOWN.

LIGHTING DEVICES SCHEDULE

CONDUITS AND OUTLETS BY	PROVIDED BY	INSTALLED BY	WIRED BY	E - ELECTRICAL M = MECHANICAL X = OTHERS SYMBOL	DESCRIPTION	M. H. TO CENTER
E	E	E	E	$OS	OCCUPANCY SENSOR SWITCH	44"
E	E	E	E	$	LIGHT SWITCH	44"

ELECTRICAL FIXTURE SCHEDULE

CONDUITS AND OUTLETS BY	PROVIDED BY	INSTALLED BY	WIRED BY	E - ELECTRICAL M = MECHANICAL X = OTHERS SYMBOL	DESCRIPTION	M. H. TO CENTER
E	X	X	E		SINGLE PHASE MOTOR	
E	X	X	E		PUSH-BUTTON CONTROL	42"
E	E	E	E		DUPLEX RECEPTACLE	18"
E	E	E	E		DUPLEX RECEPTACLE, ABOVE COUNTER OR AS NOTED	44"
E	E	E	E		GFCI RECEPTACLE, WP = WEATHERPROOF IN-USE COVER	18"

ELECTRICAL EQUIPMENT SCHEDULE

CONDUITS AND OUTLETS BY	INSTALLED BY	PROVIDED BY	WIRED BY	E - ELECTRICAL M = MECHANICAL X = OTHERS SYMBOL	DESCRIPTION	M. H. TO CENTER
E	E	E	E		FUSIBLE DISCONNECT SWITCH	

DATA DEVICES SCHEDULE

CONDUITS AND OUTLETS BY	PROVIDED BY	INSTALLED BY	WIRED BY	E - ELECTRICAL M = MECHANICAL X = OTHERS SYMBOL	DESCRIPTION	M. H. TO CENTER
E	X	X	X		DATA OUTLET	18"

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ELECTRICAL COVER

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DIVISION 26 - ELECTRICAL SPECIFICATIONS:

260500 - GENERAL PROVISIONS

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRIC CODE AND ALL AUTHORITIES HAVING JURISDICTION.
2. ARRANGE FOR SERVICE INSTALLATIONS WITH UTILITY COMPANY AND OWNER TO PAY ANY CHARGES THAT ARE IMPOSED. SECURE AND PAY FOR ALL PERMITS AND FEES.
3. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES FOR INSTALLATION OF ALL EQUIPMENT. FIELD VERIFICATION OF ALL DIMENSIONS IS REQUIRED, EXACT LOCATIONS, DISTANCES, AND LEVELS WILL BE GOVERNED BY ACTUAL FIELD CONDITIONS.
4. PROVIDE ALL SUPERVISION, LABOR, MATERIALS, INSTRUMENTATION AND EQUIPMENT NECESSARY TO EFFECTIVELY TEST, MEASURE AND VERIFY THE PERFORMANCE OF THE ELECTRICAL EQUIPMENT SYSTEMS. TEST FOR GROUNDS AND SHORT CIRCUITS.
5. PROVIDE SHOP DRAWINGS TO ENGINEER AND ARCHITECT FOR APPROVAL OF THE FOLLOWING PRODUCTS
   - MOTOR CONTROL EQUIPMENT
   - LIGHTING CONTROL DEVICES
   - LIGHTING FIXTURES
6. WORK SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE.

260519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

1. CONDUCTOR SIZES AS SHOWN ON ONE-LINE DIAGRAM AND POWER DRAWINGS.
2. COPPER BUILDING WIRE:
   A. DESCRIPTION: FLEXIBLE, INSULATED AND UNINSULATED, DRAWN COPPER CURRENT-CARRYING CONDUCTOR WITH AN OVERALL INSULATION LAYER OR JACKET, OR BOTH, RATED 600 V OR LESS.
   B. CONDUCTOR AND CABLE MARKING: COMPLY WITH WIRE AND CABLE MARKING ACCORDING TO UL'S "WIRE AND CABLE MARKING AND APPLICATION GUIDE."
   C. CONDUCTORS: COPPER, COMPLYING WITH ASTM B3 FOR BARE ANNEALED COPPER AND WITH ATSM B496 FOR STRANDED CONDUCTORS.
   D. CONDUCTOR INSULATION:
      a. TYPE THHN AND TYPE THWN-2: COMPLY WITH UL 83.
      b. TYPE XHHW-2: COMPLY WITH UL 44.
3. ALUMINUM BUILDING WIRE:
   A. DESCRIPTION: FLEXIBLE, INSULATED AND UNINSULATED, DRAWN ALUMINUM CURRENT-CARRYING CONDUCTOR WITH AN OVERALL INSULATION LAYER OR JACKET, OR BOTH, RATED 600 V OR LESS.
   B. CONDUCTOR AND CABLE MARKING: COMPLY WITH WIRE AND CABLE MARKING ACCORDING TO UL'S "WIRE AND CABLE MARKING AND APPLICATION GUIDE."
   C. CONDUCTORS: ALUMINUM, COMPLY WITH ASTM B800 AND ASTM B801.
   D. CONDUCTOR INSULATION:
      a. TYPE THHN AND TYPE THWN-2: COMPLY WITH UL 83.
      b. TYPE XHHW-2: COMPLY WITH UL 44.
4. METAL-CLAD CABLE, TYPE MC:
   A. DESCRIPTION: A FACTORY ASSEMBLY OF ONE OR MORE CURRENT-CARRYING INSULATED CONDUCTORS IN AN OVERALL METALLIC SHEATH.
   B. CONDUCTOR AND CABLE MARKING: COMPLY WITH WIRE AND CABLE MARKING ACCORDING TO UL'S "WIRE AND CABLE MARKING AND APPLICATION GUIDE."
   C. CIRCUITS
      a. SINGLE CIRCUIT
   D. CONDUCTORS: COPPER, COMPLY WITH ASTM B3 FOR BARE ANNEALED COPPER AND WITH ASTM B8 FOR STRANDED CONDUCTORS.
   E. GROUND CONDUCTOR: INSULATED
   F. CONDUCTOR INSULATION:
      a. TYPE TFN/THHN/THWN-2: COMPLY WITH UL 83.
      b. TYPE XHHW-2: COMPLY WITH UL 44.
   G. ARMOUR: STEEL INTERLOCKED.
5. CONNECTORS AND SPLICES:
   A. DESCRIPTION: FACTORY-FABRICATED CONNECTORS, SPLICES, AND LUGS OF SIZE, AMPACITY RATING, MATERIAL, TYPE, AND CLASS FOR APPLICATION AND SERVICE INDICATED; LISTED AND LABELED AS DEFINED IN NFPA 70, BY A QUALIFIED TESTING AGENCY, AND MARKED FOR INTENDED LOCATION AND USE.
6. EXECUTION:
   A. INSTALLATION, GENERAL
      a. CONCEAL CABLES IN FINISHED WALLS, CEILINGS, AND FLOORS UNLESS OTHERWISE INDICATED.
      b. USE MANUFACTURER-APPROVED PULLING COMPOUND OR LUBRICANT WHERE NECESSARY; COMPOUND USED MUST NOT DETERIORATE CONDUCTOR OR INSULATION. DO NOT EXCEED MANUFACTURER'S RECOMMENDED MAXIMUM PULLING TENSIONS AND SIDEWALL PRESSURE VALUES.
      c. INSTALL EXPOSED CABLES PARALLEL AND PERPENDICULAR TO SURFACES OF EXPOSED STRUCTURAL MEMBERS, AND FOLLOW SURFACE CONTOURS WHERE POSSIBLE.
      d. INSTALL SLEEVES AND SLEEVE SEALS AT PENETRATIONS OF EXTERIOR FLOOR AND WALL ASSEMBLIES.
   B. IDENTIFICATION
      a. IDENTIFY AND COLOR-CODE CONDUCTORS AND CABLES ACCORDING TO SECTION 260553 "IDENTIFICATION FOR ELECTRICAL SYSTEMS."
      b. IDENTIFY EACH SPARE CONDUCTOR AT EACH END WITH IDENTITY NUMBER AND LOCATION OF OTHER END OF CONDUCTOR, AND IDENTIFY AS SPARE CONDUCTOR
   C. FIRESTOPPING
      a. APPLY FIRESTOPPING TO ELECTRICAL PENETRATIONS OF FIRE-RATED FLOOR AND WALL ASSEMBLIES TO RESTORE ORIGINAL FIRE-RESISTANCE RATING OF ASSEMBLY ACCORDING TO SECTION 078413 "PENETRATION FIRESTOPPING."

260526 GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

INSTALL A COMPLETE GROUNDING SYSTEM FOR THE GROUNDED NEUTRALS, CONDUIT SYSTEM, PANEL BOARDS, MOTORS, MOTOR DRIVEN EQUIPMENT, SWITCHES, AND WIRING DEVICES. ALL ITEMS TO BE LISTED AND LABELED IN ACCORDANCE WITH NFPA 70, BY QUALIFIED ELECTRICAL TESTING LABORATORY RECOGNIZED BY AUTHORITIES HAVING JURISDICTION, AND MARKED FOR INTENDED LOCATION AND APPLICATION.

THE GROUNDING ELECTRODE SYSTEM SHALL CONSIST OF AN ELECTRODE 3/4" CU CLAD STEEL ROD 10'-0" LONG. THE GROUNDING ELECTRODE CONDUCTOR SHALL BE COPPER, CAD WELDED TO BOTH THE METAL UNDERGROUND WATER PIPE AND BUILDING STEEL.

ROUTE GROUNDING ELECTRODE CONDUCTOR FROM ELECTRICAL SERVICE GROUNDING POINT TO NEW METAL WATER SERVICE PIPING. PROVIDE WIRING TO BYPASS WATER METER AND INSURE CONTINUITY.

1. GROUNDING AND BONDING CONDUCTORS
   A. EQUIPMENT GROUNDING CONDUCTOR
      a. GENERAL CHARACTERISTICS: 600 V, THHN/THWN-2, COPPER ORTINNED-COPPER WIRE OR CABLE, GREEN COLOR, IN ACCORDANCE WITH SECTION 260519 "LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES."
   B. ASTM - BARE COPPER GROUNDING AND BONDING CONDUCTOR(COMPLY WITH ONE OR MORE OF THE FOLLOWING):
      a. SOFT OR ANNEALED COPPER WIRE: ASTM B3
      b. CONCENTRIC-LAY STRANDED COPPER CONDUCTOR: ASTM B8.
      c. TIN-COATED SOFT OR ANNEALED COPPER WIRE: ASTM B33.
      d. 19-WIRE COMBINATION UNILAY-STRANDED COPPER CONDUCTOR: ASTM B787/B787M.
2. GROUNDING AND BONDING CLAMPS
   A. DESCRIPTION: CLAMPS SUITABLE FOR ATTACHMENT OF GROUNDING AND BONDING CONDUCTORS TO GROUNDING ELECTRODES, PIPES, TUBING, AND REBAR. GROUNDING AND BONDING CLAMPS SPECIFIED IN THIS ARTICLE ARE ALSO SUITABLE FOR USE WITH COMMUNICATIONS APPLICATIONS; SEE SECTION 270526 "GROUNDING AND BONDING FOR COMMUNICATIONS SYSTEMS," FOR SELECTION AND INSTALLATION GUIDELINES.
   B. PERFORMANCE CRITERIA
      a. GROUNDING AND BONDING EQUIPMENT: UL CCN KDER; INCLUDING UL 467.
      b. GROUNDING AND BONDING EQUIPMENT FOR COMMUNICATIONS: UL CCN KDSH; INCLUDING UL 467.
3. GROUNDING AND BONDING CONNECTORS
   A. PERFORMANCE CRITERIA
      a. GROUNDING AND BONDING EQUIPMENT: UL CCN KDER; INCLUDING UL 467.
      b. GROUNDING AND BONDING EQUIPMENT FOR COMMUNICATIONS: UL CCN KDSH; INCLUDING UL 467.
4. GROUNDING AND BONDING BUSBARS
   A. DESCRIPTION: MISCELLANEOUS GROUNDING AND BONDING DEVICE THAT SERVES AS COMMON CONNECTION FOR MULTIPLE GROUNDING AND BONDING CONDUCTORS.
   B. PERFORMANCE CRITERIA
      a. GROUNDING AND BONDING EQUIPMENT: UL CCN KDER; INCLUDING UL 467.
   C. UL KDER - EQUIPMENT ROOM GROUNDING AND BONDING BUSBAR :
      a. GENERAL CHARACTERISTICS
         - BUS: RECTANGULAR BAR OF ANNEALED COPPER.
         - MOUNTING STAND-OFF INSULATORS: LEXAN OR PVC. COMPLY WITH UL 891 FOR USE IN 600 V SWITCHBOARDS, IMPULSE TESTED AT 5000 V.
5. GROUNDING (EARTHING) ELECTRODES
   A. DESCRIPTION: GROUNDING ELECTRODES INCLUDE METAL UNDERGROUND WATER PIPES, METAL BUILDING FRAMES, CONCRETE-ENCASED ELECTRODES, AND PIPE AND PLATE ELECTRODES.
   B. PERFORMANCE CRITERIA
      a. GROUNDING AND BONDING EQUIPMENT: UL CCN KDER; INCLUDING UL 467.
6. EXECUTION
   A. SELECTION OF BUSBARS
      a. GROUNDING BUS: INSTALL IN ELECTRICAL EQUIPMENT ROOMS, IN ROOMS HOUSING SERVICE EQUIPMENT, AND ELSEWHERE AS INDICATED.
         - INSTALL BUS HORIZONTALLY, ON INSULATED SPACERS 2 INCH MINIMUM FROM WALL, 6 INCH ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED.
   B. SELECTION OF GROUNDING AND BONDING CONDUCTORS
      a. CONDUCTORS: INSTALL SOLID CONDUCTOR FOR 8 AWG AND SMALLER, AND STRANDED CONDUCTORS FOR 6 AWG AND LARGER UNLESS OTHERWISE INDICATED.
      b. CUSTOM-LENGTH INSULATED EQUIPMENT BONDING JUMPERS: 6 AWG, 19-STRAND, TYPE THHN.
      c. BONDING CABLE: 28 KCMIL, 14 STRANDS OF 17 AWG CONDUCTOR, 1/4 INCH IN DIAMETER.
      d. BONDING CONDUCTOR: 4 AWG OR 6 AWG, STRANDED CONDUCTOR.
      e. BONDING JUMPER: COPPER TAPE, BRAIDED CONDUCTORS TERMINATED WITH COPPER FERRULES; 1-5/8 INCH WIDE AND 1/16 INCH THICK.
      f. TINNED BONDING JUMPER: TINNED-COPPER TAPE, BRAIDED CONDUCTORS TERMINATED WITH COPPER FERRULES; 1-5/8 INCH WIDE AND 1/16 INCH THICK.
   C. SELECTION OF CONNECTORS
      a. PIPE AND EQUIPMENT GROUNDING CONDUCTOR TERMINATIONS: BOLTED CONNECTORS.
      b. UNDERGROUND CONNECTIONS: WELDED CONNECTORS EXCEPT AT TEST WELLS AND AS OTHERWISE INDICATED.
      c. CONNECTIONS TO GROUND RODS AT TEST WELLS: BOLTED CONNECTORS.
      d. CONNECTIONS TO STRUCTURAL STEEL: WELDED CONNECTORS.
7. INSTALLATION:
   A. SPECIAL TECHNIQUES:
      a. CONDUCTORS:
         - ROUTE ALONG SHORTEST AND STRAIGHTEST PATHS POSSIBLE UNLESS OTHERWISE INDICATED OR REQUIRED BY CODE. AVOID OBSTRUCTING ACCESS OR PLACING CONDUCTORS WHERE THEY MAY BE SUBJECTED TO STRAIN, IMPACT, OR DAMAGE.
         - CONNECTIONS: MAKE CONNECTIONS SO POSSIBILITY OF GALVANIC ACTION OR ELECTROLYSIS IS MINIMIZED. SELECT CONNECTORS, CONNECTION HARDWARE, CONDUCTORS, AND CONNECTION METHODS SO METALS IN DIRECT CONTACT ARE GALVANICALLY COMPATIBLE.
         - USE ELECTROPLATED OR HOT-TIN-COATED MATERIALS TO ENSURE HIGH CONDUCTIVITY AND TO MAKE CONTACT POINTS CLOSER IN ORDER OF GALVANIC SERIES.
         - MAKE CONNECTIONS WITH CLEAN, BARE METAL AT POINTS OF CONTACT.
      b. BONDING STRAPS AND JUMPERS: INSTALL IN LOCATIONS ACCESSIBLE FOR INSPECTION AND MAINTENANCE EXCEPT WHERE ROUTED THROUGH SHORT LENGTHS OF CONDUIT.
      c. BONDING TO STRUCTURE: BOND STRAPS DIRECTLY TO BASIC STRUCTURE, TAKING CARE NOT TO PENETRATE ADJACENT PARTS.
      d. USE EXOTHERMIC-WELDED CONNECTORS FOR OUTDOOR LOCATIONS; IF DISCONNECT-TYPE CONNECTION IS REQUIRED, USE BOLTED CLAMP.
      e. GROUNDING AND BONDING FOR PIPING:
         - METAL WATER SERVICE PIPE: INSTALL INSULATED COPPER GROUNDING CONDUCTORS, IN CONDUIT, FROM BUILDING'S MAIN SERVICE EQUIPMENT, OR GROUNDING BUS, TO MAIN METAL WATER SERVICE ENTRANCES TO BUILDING. CONNECT GROUNDING CONDUCTORS TO MAIN METAL WATER SERVICE PIPES; USE BOLTED CLAMP CONNECTOR OR BOLT LUG-TYPE CONNECTOR TO PIPE FLANGE BY USING ONE OF LUG BOLTS OF FLANGE. WHERE DIELECTRIC MAIN WATER FITTING IS INSTALLED, CONNECT GROUNDING CONDUCTOR ON STREET SIDE OF FITTING. BOND METAL GROUNDING CONDUCTOR CONDUIT OR SLEEVE TO CONDUCTOR AT EACH END.
      f. WATER METER PIPING: USE BRAIDED-TYPE BONDING JUMPERS TO ELECTRICALLY BYPASS WATER METERS. CONNECT TO PIPE WITH BOLTED CONNECTOR.
         - BOND EACH ABOVEGROUND PORTION OF GAS PIPING SYSTEM DOWNSTREAM FROM EQUIPMENT SHUTOFF VALVE.
      g. BONDING INTERIOR METAL DUCTS: BOND METAL AIR DUCTS TO EQUIPMENT GROUNDING CONDUCTORS OF ASSOCIATED FANS, BLOWERS, ELECTRIC HEATERS, AND AIR CLEANERS. INSTALL TINNED BONDING JUMPER TO BOND ACROSS FLEXIBLE DUCT CONNECTIONS TO ACHIEVE CONTINUITY.
   B. ELECTRODES:
      a. GROUND RODS: DRIVE RODS UNTIL TOPS ARE 2 INCH BELOW FINISHED FLOOR OR FINAL GRADE UNLESS OTHERWISE INDICATED.
      b. INTERCONNECT GROUND RODS WITH GROUNDING ELECTRODE CONDUCTOR BELOW GRADE AND AS OTHERWISE INDICATED. MAKE CONNECTIONS WITHOUT EXPOSING STEEL OR DAMAGING COATING IF ANY.
      c. USE EXOTHERMIC WELDS FOR BELOW-GRADE CONNECTIONS.
      d. FOR GROUNDING ELECTRODE SYSTEM, INSTALL AT LEAST THREE RODS SPACED AT LEAST ONE-ROD LENGTH FROM EACH OTHER AND LOCATED AT LEAST SAME DISTANCE FROM OTHER GROUNDING ELECTRODES, AND CONNECT TO SERVICE GROUNDING ELECTRODE CONDUCTOR.
   C. CONCRETE-ENCASED ELECTRODE (UFER GROUND):
      a. FABRICATE IN ACCORDANCE WITH NFPA 70; USE MINIMUM OF 20 FT OF BARE COPPER CONDUCTOR NOT SMALLER THAN 4 AWG.
   D. GROUNDING AT SERVICE:
      a. EQUIPMENT GROUNDING CONDUCTORS AND GROUNDING ELECTRODE CONDUCTORS MUST BE CONNECTED TO GROUND BUS. INSTALL MAIN BONDING JUMPER BETWEEN NEUTRAL AND GROUND BUSES.
   E. EQUIPMENT GROUND
      a. INSTALL INSULATED EQUIPMENT GROUNDING CONDUCTORS WITH FEEDERS AND BRANCH CIRCUITS.

260529 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

1. SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS
   A. STEEL SLOTTED SUPPORT SYSTEMS: PERFORMED STEEL CHANNELS AND ANGLES WITH MINIMUM 13/32 INCH DIAMETER HOLES AT A MAXIMUM OF 8 INCH ON CENTER IN AT LEAST ONE SURFACE.
   B. CONDUIT AND CABLE SUPPORT DEVICES: STEEL STEEL AND MALLEABLE-IRON STAINLESS STEEL GLASS-FIBER-RESIN HANGERS, CLAMPS, AND ASSOCIATED FITTINGS, DESIGNED FOR TYPES AND SIZES OF RACEWAY OR CABLE TO BE SUPPORTED.
   C. SUPPORT FOR CONDUCTORS IN VERTICAL CONDUIT: FACTORY-FABRICATED ASSEMBLY CONSISTING OF THREADED BODY AND INSULATING WEDGING PLUG OR PLUGS FOR NONARMORED ELECTRICAL CONDUCTORS OR CABLES IN RISER CONDUITS. PLUGS MUST HAVE NUMBER, SIZE, AND SHAPE OF CONDUCTOR GRIPPING PIECES AS REQUIRED TO SUIT INDIVIDUAL CONDUCTORS OR CABLES SUPPORTED. BODY MUST BE MADE OF MALLEABLE IRON.
   D. STRUCTURAL STEEL FOR FABRICATED SUPPORTS AND RESTRAINTS: ASTM A36/A36M STEEL PLATES, SHAPES, AND BARS; BLACK AND GALVANIZED.
2. FABRICATED METAL EQUIPMENT SUPPORT ASSEMBLIES
   A. DESCRIPTION: WELDED OR BOLTED STRUCTURAL-STEEL SHAPES, SHOP OR FIELD FABRICATED TO FIT DIMENSIONS OF SUPPORTED EQUIPMENT.
3. EXECUTION
   A. INSTALLATION OF SUPPORTS
      a. COMPLY WITH NECA NEIS 101 FOR INSTALLATION REQUIREMENTS EXCEPT AS SPECIFIED IN THIS ARTICLE.
      b. RACEWAY SUPPORT METHODS: IN ADDITION TO METHODS DESCRIBED IN NECA NEIS 1, EMT MAY BE SUPPORTED BY OPENINGS THROUGH STRUCTURE MEMBERS, IN ACCORDANCE WITH NFPA 70.MOUNTING AND ANCHORAGE OF SURFACE-MOUNTED EQUIPMENT AND COMPONENTS: ANCHOR AND FASTEN ELECTRICAL ITEMS AND THEIR SUPPORTS TO BUILDING STRUCTURAL ELEMENTS BY THE FOLLOWING METHODS UNLESS OTHERWISE INDICATED BY CODE:
         - TO WOOD: FASTEN WITH LAG SCREWS OR THROUGH BOLTS.
         - TO NEW CONCRETE: BOLT TO CONCRETE INSERTS.
         - TO MASONRY: APPROVED TOGGLE-TYPE BOLTS ON HOLLOW MASONRY UNITS AND EXPANSION ANCHOR FASTENERS ON SOLID MASONRY UNITS.
         - TO EXISTING CONCRETE: EXPANSION ANCHOR FASTENERS.
         - TO STEEL: BEAM CLAMPS (MSS SP-58, TYPE 19, 21, 23, 25, OR 27), COMPLYING WITH MSS SP-69.
         - TO LIGHT STEEL: SHEET METAL SCREWS.
         - ITEMS MOUNTED ON HOLLOW WALLS AND NONSTRUCTURAL BUILDING SURFACES: MOUNT CABINETS, PANELBOARDS, DISCONNECT SWITCHES, CONTROL ENCLOSURES, PULL AND JUNCTION BOXES, TRANSFORMERS, AND OTHER DEVICES ON SLOTTED-CHANNEL RACKS ATTACHED TO SUBSTRATE.
   B. INSTALLATION OF FABRICATED METAL SUPPORTS
      a. CUT, FIT, AND PLACE MISCELLANEOUS METAL SUPPORTS ACCURATELY IN LOCATION, ALIGNMENT, AND ELEVATION TO SUPPORT AND ANCHOR ELECTRICAL MATERIALS AND EQUIPMENT.
      b. FIELD WELDING: COMPLY WITH AWS D1.1/D1.1M. SUBMIT WELDING CERTIFICATES..
   C. CONCRETE BASES
      a. ANCHOR EQUIPMENT TO CONCRETE BASE AS FOLLOWS:
         - PLACE AND SECURE ANCHORAGE DEVICES. USE SUPPORTED EQUIPMENT MANUFACTURER'S SETTING DRAWINGS, TEMPLATES, DIAGRAMS, INSTRUCTIONS, AND DIRECTIONS FURNISHED WITH ITEMS TO BE EMBEDDED.
         - INSTALL ANCHOR BOLTS TO ELEVATIONS REQUIRED FOR PROPER ATTACHMENT TO SUPPORTED EQUIPMENT.
         - INSTALL ANCHOR BOLTS ACCORDING TO ANCHOR-BOLT MANUFACTURER'S WRITTEN INSTRUCTIONS.

260533 - RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

1. COMPLY WITH NECA 1 AND NECA 101 FOR INSTALLATION REQUIREMENTS EXCEPT WHERE REQUIREMENTS ON DRAWINGS OR IN THIS ARTICLE ARE STRICTER. COMPLY WITH NFPA 70 LIMITATIONS FOR TYPES OF RACEWAYS ALLOWED IN SPECIFIC OCCUPANCIES AND NUMBER OF FLOORS.
2. PROVIDE CONDUIT TYPES AS SHOWN BELOW:
   A. INDOORS: APPLY RACEWAY PRODUCTS AS SPECIFIED BELOW UNLESS OTHERWISE INDICATED:
      a. EXPOSED AND SUBJECT TO PHYSICAL DAMAGE: ERMC-S EMT. LOCATIONS INCLUDE THE FOLLOWING:
         - LOCATIONS LESS THAN 8' ABOVE FINISHED FLOOR.
         - STUB UPS TO ABOVE SUSPENDED CEILINGS.
      b. EXPOSED AND NOT SUBJECT TO PHYSICAL DAMAGE: EMT-S.
      c. CONCEALED IN CEILINGS AND INTERIOR WALLS AND PARTITIONS: FMC
      d. DAMP OR WET LOCATIONS: CORROSION-RESISTANT EMT-S.
      e. CONNECTION TO VIBRATING EQUIPMENT (INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, ELECTRIC SOLENOID, OR MOTOR-DRIVEN EQUIPMENT: LFMC.
   B. SERVICE CONDUITS: RIGID GALVANIZED STEEL.
   C. MINIMUM RACEWAY SIZE: 3/4-INCH (16-MM) TRADE SIZE.
3. PROVIDE BOX TYPES AS SHOWN BELOW:
   A. INDOORS:
      a. TYPE 1 UNLESS OTHERWISE INDICATED.
      b. DAMP OR DUSTY LOCATIONS: TYPE 12.
      c. LOCATIONS EXPOSED TO AIRBORNE DUST, LINT, FIBERS, OR FLYINGS: TYPE 4.
4. EXECUTION
   A. REFERENCE STANDARDS FOR INSTALLATION: UNLESS MORE STRINGENT INSTALLATION REQUIREMENTS ARE SPECIFIED IN CONTRACT DOCUMENTS OR MANUFACTURERS' PUBLISHED INSTRUCTIONS, COMPLY WITH THE FOLLOWING:
      a. TYPE EMT-A: ARTICLE 358 OF NFPA 70 AND NECA NEIS 102.
      b. TYPE EMT-S: ARTICLE 358 OF NFPA 70 AND NECA NEIS 101.
      c. TYPE ERMC-A: ARTICLE 344 OF NFPA 70 AND NECA NEIS 102.
      d. TYPE ERMC-S: ARTICLE 344 OF NFPA 70 AND NECA NEIS 101.
      e. TYPE FMC-S: ARTICLE 348 OF NFPA 70 AND NECA NEIS 101.
      f. TYPE LFMC: ARTICLE 350 OF NFPA 70 AND NECA NEIS 101.
      g. TYPE PVC: ARTICLE 356 OF NFPA 70 AND NECA NEIS 111.
      h. EXPANSION FITTINGS: NEMA FB 2.40.
   B. INSTALLATION OF CONDUIT:
      a. SPECIAL INSTALLATION TECHNIQUES:
         - DO NOT INSTALL CONDUITS WITHIN 2 INCH OF THE BOTTOM SIDE OF A METAL DECK ROOF.
         - CUT CONDUIT PERPENDICULAR TO THE LENGTH. FOR CONDUITS METRIC DESIGNATOR 53 (TRADE SIZE 2) AND LARGER, USE ROLL CUTTER OR A GUIDE TO MAKE CUT STRAIGHT AND PERPENDICULAR TO THE LENGTH. REAM INSIDE OF CONDUIT TO REMOVE BURRS.
      b. TYPES ERMC:
         - THREADED CONDUIT JOINTS, EXPOSED TO WET, DAMP, CORROSIVE, OR OUTDOOR CONDITIONS: APPLY LISTED COMPOUND THAT MAINTAINS ELECTRICAL CONDUCTIVITY TO THREADS OF DUCT RACEWAY AND FITTINGS BEFORE MAKING UP JOINTS. FOLLOW COMPOUND MANUFACTURER'S PUBLISHED INSTRUCTIONS.
      c. TYPES FMC, LFMC, AND LFNC:
         - PROVIDE A MAXIMUM OF 72 INCH OF FLEXIBLE CONDUIT FOR EQUIPMENT SUBJECT TO VIBRATION, NOISE TRANSMISSION, OR MOVEMENT; AND FOR TRANSFORMERS AND MOTORS.
      d. TYPES PVC:
         - DO NOT INSTALL TYPE PVC, TYPE HDPE, OR TYPE EPEC CONDUIT WHERE AMBIENT TEMPERATURE EXCEEDS 122 DEG F. CONDUCTOR RATINGS MUST BE LIMITED TO 75 DEG C EXCEPT WHERE INSTALLED IN A TRENCH OUTSIDE BUILDINGS WITH CONCRETE ENCASEMENT, WHERE 90 DEG C CONDUCTORS ARE PERMITTED.
         - COVERS FOR ELECTRICAL SYSTEMS:WELDING AND FITTINGS.
   C. INSTALLATION OF BOXES AND COVERS FOR ELECTRICAL SYSTEMS
      a. REFERENCE STANDARDS FOR INSTALLATION:
         - OUTLET, DEVICE, PULL, AND JUNCTION BOXES: ARTICLE 314 OF NFPA 70.
      b. SPECIAL INSTALLATION TECHNIQUES:
         - PROVIDE BOXES IN WIRING AND RACEWAY SYSTEMS WHEREVER REQUIRED FOR PULLING OF WIRES, MAKING CONNECTIONS, AND MOUNTING OF DEVICES OR FIXTURES.
         - MOUNT BOXES AT HEIGHTS INDICATED ON DRAWINGS. IF MOUNTING HEIGHTS OF BOXES ARE NOT INDIVIDUALLY INDICATED, GIVE PRIORITY TO ADA REQUIREMENTS. INSTALL BOXES WITH HEIGHT MEASURED TO CENTER OF BOX UNLESS OTHERWISE INDICATED.
         - HORIZONTALLY SEPARATE BOXES MOUNTED ON OPPOSITE SIDES OF WALLS SO THEY ARE NOT IN THE SAME VERTICAL CHANNEL.
         - LOCATE BOXES SO THAT COVER OR PLATE WILL NOT SPAN DIFFERENT BUILDING FINISHES.
         - SUPPORT BOXES IN RECESSED CEILINGS INDEPENDENT OF CEILING TILES AND CEILING GRID.
         - SUPPORT BOXES OF THREE GANGS OR MORE FROM MORE THAN ONE SIDE BY SPANNING TWO FRAMING MEMBERS OR MOUNTING ON BRACKETS SPECIFICALLY DESIGNED FOR PURPOSE.
         - FASTEN JUNCTION AND PULL BOXES TO, OR SUPPORT FROM, BUILDING STRUCTURE. DO NOT SUPPORT BOXES BY CONDUITS.
         - SET NONMETALLIC FLOOR BOXES LEVEL. TRIM AFTER INSTALLATION TO FIT FLUSH WITH FINISHED FLOOR SURFACE.
   D. IDENTIFICATION:
      a. PROVIDE LABELS FOR CONDUIT ASSEMBLIES, DUCT RACEWAYS, BOXES, AND ASSOCIATED ELECTRICAL EQUIPMENT.
      b. PROVIDE WARNING SIGNS.
      c. LABEL EACH BOX WITH ENGRAVED METAL OR LAMINATED-PLASTIC NAMEPLATE.
   E. INTERFACES WITH OTHER WORK:
      a. COORDINATE WITH SECTION 078413 "PENETRATION FIRESTOPPING" FOR INSTALLATION OF FIRESTOPPING AT PENETRATIONS OF FIRE-RATED FLOOR AND WALL ASSEMBLIES.
      b. COORDINATE WITH SECTION 260529 "HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS" FOR INSTALLATION OF CONDUIT HANGERS AND SUPPORTS.INSTALLATION OF BOXES AND
   F. CLEANING
      a. REMOVE CONSTRUCTION DUST AND DEBRIS FROM BOXES BEFORE INSTALLING WALLPLATES, COVERS, AND HOODS.

260544 - SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING

1. EXECUTION
   A. INSTALLATION OF SLEEVES FOR NON-FIRE RATED ELECTRICAL PENETRATIONS:
      a. INTERIOR PENETRATION OF NON-FIRE RATED WALLS AND FLOORS
         - SEAL SPACE OUTSIDE OF SLEEVES WITH MORTAR OR GROUT. PACK SEALING MATERIAL SOLIDLY BETWEEN SLEEVE AND WALL OR FLOOR SO NO VOIDS REMAIN. TOOL EXPOSED SURFACES SMOOTH; PROTECT MATERIAL WHILE CURING.
         - SEAL ANNULAR SPACE BETWEEN SLEEVE AND RACEWAY OR CABLE, USING JOINT SEALANT APPROPRIATE FOR SIZE, DEPTH, AND LOCATION OF JOINT. COMPLY WITH REQUIREMENTS IN SECTION 079200 "JOINT SEALANTS.
      b. USE PIPE SLEEVES UNLESS PENETRATION ARRANGEMENT REQUIRES RECTANGULAR SLEEVED OPENING.
      c. SIZE PIPE SLEEVES TO PROVIDE 1/4 INCH ANNULAR CLEAR SPACE BETWEEN SLEEVE AND RACEWAY OR CABLE, UNLESS SLEEVE-SEAL SYSTEM IS TO BE INSTALLED.
      d. INSTALL SLEEVES FOR WALL PENETRATIONS UNLESS CORE-DRILLED HOLES OR FORMED OPENINGS ARE USED. INSTALL SLEEVES DURING ERECTION OF WALLS. CUT SLEEVES TO LENGTH FOR MOUNTING FLUSH WITH BOTH SURFACES OF WALLS. DEBURR AFTER CUTTING.
      e. INSTALL SLEEVES FOR FLOOR PENETRATIONS. EXTEND SLEEVES INSTALLED IN FLOORS 2 INCH ABOVE FINISHED FLOOR LEVEL. INSTALL SLEEVES DURING ERECTION OF FLOORS.
   B. SLEEVES FOR CONDUITS PENETRATING NON-FIRE-RATED WALL ASSEMBLIES:
      a. USE CIRCULAR METAL SLEEVES UNLESS PENETRATION ARRANGEMENT REQUIRES RECTANGULAR SLEEVED OPENING.
      b. SEAL SPACE OUTSIDE OF SLEEVES WITH APPROVED JOINT COMPOUND FOR WALL ASSEMBLIES.
   C. ABOVE GROUND, EXTERIOR-WALL PENETRATIONS: SEAL PENETRATIONS USING STEEL PIPE SLEEVES AND MECHANICAL SLEEVE-SEAL SYSTEMS. SIZE SLEEVES TO ALLOW FOR 1 INCH ANNULAR CLEAR SPACE BETWEEN PIPE AND SLEEVE FOR INSTALLING MECHANICAL SLEEVE SEALS.
   D. UNDERGROUND, EXTERIOR-WALL AND FLOOR PENETRATIONS:
      a. INSTALL STEEL PIPE SLEEVES WITH INTEGRAL WATERSTOPS, SIZE SLEEVES TO ALLOW FOR 1 INCH ANNULAR CLEAR SPACE BETWEEN RACEWAY OR CABLE AND SLEEVE FOR INSTALLING SLEEVE-SEAL SYSTEM. INSTALL SLEEVE DURING CONSTRUCTION OF FLOOR OR WALL.
      b. INSTALL STEEL PIPE SLEEVES. SIZE SLEEVES TO ALLOW FOR 1 INCH ANNULAR CLEAR SPACE BETWEEN RACEWAY OR CABLE AND SLEEVE FOR INSTALLING SLEEVE-SEAL SYSTEM. GROUT SLEEVE INTO WALL OR FLOOR OPENING.
   E. INSTALLATION OF RECTANGULAR SLEEVES AND SLEEVE SEALS
      a. INSTALL SLEEVES IN EXISTING WALLS WITHOUT COMPROMISING STRUCTURAL INTEGRITY OF WALLS. DO NOT CUT STRUCTURAL ELEMENTS WITHOUT REINFORCING THE WALL TO MAINTAIN THE DESIGNED WEIGHT BEARING AND WALL STIFFNESS.
      b. INSTALL CONDUITS AND CABLE WITH NO CROSSINGS WITHIN THE SLEEVE.
      c. FILL OPENING AROUND CONDUITS AND CABLES WITH EXPANDING FOAM WITHOUT LEAVING VOIDS.
      d. PROVIDE METAL SHEET COVERING AT BOTH WALL SURFACES AND FINISH TO MATCH SURROUNDING SURFACES. METAL SHEET MUST BE SAME MATERIAL AS SLEEVE.

260553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

1. COLOR AND LEGEND REQUIREMENTS
   A. RACEWAYS AND CABLES CARRYING CIRCUITS AT 1000 V OR LESS:
      a. BLACK LETTERS ON ORANGE FIELD.
      b. LEGEND: INDICATE VOLTAGE AND SYSTEM OR SERVICE TYPE.
   B. COLOR-CODING FOR PHASE- AND VOLTAGE-LEVEL IDENTIFICATION, 1000 V OR LESS: USE COLORS LISTED BELOW FOR UNGROUNDED SERVICE FEEDER AND BRANCH-CIRCUIT CONDUCTORS.
   C. COLOR MUST BE FACTORY APPLIED OR FIELD APPLIED FOR SIZES LARGER THAN 8 AWG IF AUTHORITIES HAVING JURISDICTION PERMIT.
      a. COLORS FOR 208Y/120 V CIRCUITS.
         - PHASE A: BLACK.
         - PHASE B: RED.
         - PHASE C: BLUE.
      b. COLOR FOR NEUTRAL: WHITE OR GRAY.
      c. COLOR FOR EQUIPMENT GROUNDS: BARE COPPER OR GREEN.
      d. COLORS FOR ISOLATED GROUNDS: GREEN WITH TWO OR MORE YELLOW STRIPES.
      e. EQUIPMENT IDENTIFICATION LABELS:
         - BLACK LETTERS ON WHITE FIELD.
2. LABELS
   A. VINYL WRAPAROUND LABELS: PREPRINTED, FLEXIBLE LABELS LAMINATED WITH CLEAR, WEATHER- AND CHEMICAL-RESISTANT COATING AND MATCHING WRAPAROUND CLEAR ADHESIVE TAPE FOR SECURING LABEL ENDS.
   B. SNAP-AROUND LABELS: SLIT, PRETENSIONED, FLEXIBLE, PREPRINTED, COLOR-CODED ACRYLIC SLEEVES, WITH DIAMETERS SIZED TO SUIT DIAMETERS AND THAT STAY IN PLACE BY GRIPPING ACTION.
   C. SELF-ADHESIVE WRAPAROUND LABELS: PREPRINTED, 3 MIL THICK, VINYL FLEXIBLE LABEL WITH ACRYLIC PRESSURE-SENSITIVE ADHESIVE.
      a. SELF-LAMINATION: CLEAR; UV-, WEATHER- AND CHEMICAL-RESISTANT; SELF-LAMINATING, PROTECTIVE SHIELD OVER LEGEND. LABELS SIZED SUCH THAT CLEAR SHIELD OVERLAPS ENTIRE PRINTED LEGEND.
      b. MARKER FOR LABELS:
         - MACHINE-PRINTED, PERMANENT, WATERPROOF, BLACK INK RECOMMENDED BY PRINTER MANUFACTURER.
   D. SELF-ADHESIVE LABELS: POLYESTER VINYL, THERMAL, TRANSFER-PRINTED, 3 MIL THICK, MULTICOLOR, WEATHER- AND UV-RESISTANT, PRESSURE-SENSITIVE ADHESIVE LABELS, CONFIGURED FOR INTENDED USE AND LOCATION.
      a. MINIMUM NOMINAL SIZE:
         - 1-1/2 BY 6 INCH FOR RACEWAY AND CONDUCTORS.
         - 3-1/2 BY 5 INCH FOR EQUIPMENT.
         - AS REQUIRED BY AUTHORITIES HAVING JURISDICTION.
3. TAGS
   A. METAL TAGS: BRASS OR ALUMINUM, 2 BY 2 BY 0.05 INCH, WITH STAMPED LEGEND, PUNCHED FOR USE WITH SELF-LOCKING CABLE TIE FASTENER.
   B. NONMETALLIC PREPRINTED TAGS: POLYETHYLENE TAGS, 0.015 INCH THICK, COLOR-CODED FOR PHASE AND VOLTAGE LEVEL, WITH FACTORY SCREENED PRINTED PERMANENT DESIGNATIONS; PUNCHED FOR USE WITH SELF-LOCKING CABLE TIE FASTENER.
4. INSTALLATION
   A. VERIFY AND COORDINATE IDENTIFICATION NAMES, ABBREVIATIONS, COLORS, AND OTHER FEATURES WITH REQUIREMENTS IN OTHER SECTIONS REQUIRING IDENTIFICATION APPLICATIONS, DRAWINGS, SHOP DRAWINGS, MANUFACTURER'S WIRING DIAGRAMS, AND OPERATION AND MAINTENANCE MANUAL. USE CONSISTENT DESIGNATIONS THROUGHOUT PROJECT.
   B. INSTALL IDENTIFYING DEVICES BEFORE INSTALLING ACOUSTICAL CEILINGS AND SIMILAR CONCEALMENT.
   C. VERIFY IDENTITY OF ITEM BEFORE INSTALLING IDENTIFICATION PRODUCTS.
   D. COORDINATE IDENTIFICATION WITH PROJECT DRAWINGS, MANUFACTURER'S WIRING DIAGRAMS, AND OPERATION AND MAINTENANCE MANUAL.
   E. APPLY IDENTIFICATION DEVICES TO SURFACES THAT REQUIRE FINISH AFTER COMPLETING FINISH WORK.
   F. INSTALL SIGNS WITH APPROVED LEGEND TO FACILITATE PROPER IDENTIFICATION, OPERATION, AND MAINTENANCE OF ELECTRICAL SYSTEMS AND CONNECTED ITEMS.

260923 - LIGHTING CONTROL DEVICES

1. INDOOR OCCUPANCY AND VACANCY SENSORS
   A. GENERAL REQUIREMENTS FOR SENSORS:
      a. WALL OR CEILING-MOUNTED, SOLID-STATE INDOOR OCCUPANCY VACANCY SENSORS.
      b. DUAL TECHNOLOGY.
      c. SEPARATE POWER PACK.
      d. LISTED AND LABELED IN ACCORDANCE WITH NFPA 70, BY A QUALIFIED ELECTRICAL TESTING LABORATORY RECOGNIZED BY AUTHORITIES HAVING JURISDICTION, AND MARKED FOR INTENDED LOCATION AND APPLICATION.
   B. OPERATION:
      a. OCCUPANCY SENSOR: UNLESS OTHERWISE INDICATED, TURN LIGHTS ON WHEN COVERAGE AREA IS OCCUPIED, AND TURN THEM OFF WHEN UNOCCUPIED; WITH A TIME DELAY FOR TURNING LIGHTS OFF, ADJUSTABLE OVER A MINIMUM RANGE OF 1 TO 15 MINUTES.
      b. VACANCY SENSOR: UNLESS OTHERWISE INDICATED, LIGHTS ARE MANUALLY TURNED ON AND SENSOR TURNS LIGHTS OFF WHEN THE ROOM IS UNOCCUPIED; WITH A TIME DELAY FOR TURNING LIGHTS OFF, ADJUSTABLE OVER A MINIMUM RANGE OF 1 TO 15 MINUTES.
      c. SENSOR OUTPUT: SENSOR IS POWERED FROM THE POWER PACK.
      d. POWER PACK: DRY CONTACTS RATED FOR 20 A LED LOAD AT 120 AND 277 V(AC). SENSOR HAS 24 V(DC), 150 MA, CLASS 2 POWER SOURCE.
   C. MOUNTING:
      a. SENSOR: SUITABLE FOR MOUNTING IN ANY POSITION IN A STANDARD DEVICE BOX OR OUTLET BOX.
      b. RELAY: EXTERNALLY MOUNTED THROUGH A 1/2 INCH KNOCKOUT IN A STANDARD ELECTRICAL ENCLOSURE.
      c. TIME-DELAY AND SENSITIVITY ADJUSTMENTS: RECESSED AND CONCEALED BEHIND HINGED DOOR.
      d. INDICATOR: DIGITAL DISPLAY, TO SHOW WHEN MOTION IS DETECTED DURING TESTING AND NORMAL OPERATION OF SENSOR.
      e. BYPASS SWITCH: OVERRIDE THE "ON" FUNCTION IN CASE OF SENSOR FAILURE.
   D. DUAL-TECHNOLOGY TYPE: WALL OR CEILING MOUNTED; DETECT OCCUPANTS IN COVERAGE AREA USING PIR AND ULTRASONIC DETECTION METHODS. THE PARTICULAR TECHNOLOGY OR COMBINATION OF TECHNOLOGIES THAT CONTROL ON-OFF FUNCTIONS IS SELECTABLE IN THE FIELD BY OPERATING CONTROLS ON UNIT.
2. EXECUTION
   A. INSTALLATION OF SENSORS
      a. COORDINATE LAYOUT AND INSTALLATION OF CEILING-MOUNTED DEVICES WITH OTHER CONSTRUCTION THAT PENETRATES CEILINGS OR IS SUPPORTED BY THEM, INCLUDING LIGHT FIXTURES, HVAC EQUIPMENT, SMOKE DETECTORS, FIRE-SUPPRESSION SYSTEMS, AND PARTITION ASSEMBLIES.
      b. INSTALL AND AIM SENSORS IN LOCATIONS TO ACHIEVE NOT LESS THAN 90 PERCENT COVERAGE OF AREAS INDICATED. DO NOT EXCEED COVERAGE LIMITS SPECIFIED IN MANUFACTURER'S INSTRUCTIONS.
   B. INSTALLATION OF CONTACTORS
      a. MOUNT ELECTRICALLY HELD LIGHTING CONTACTORS WITH ELASTOMERIC ISOLATOR PADS TO ELIMINATE STRUCTURE-BORNE VIBRATION UNLESS CONTACTORS ARE INSTALLED IN AN ENCLOSURE WITH FACTORY-INSTALLED VIBRATION ISOLATORS.

262726 - WIRING DEVICES

1. RECEPTACLES
   A. DUPLEX STRAIGHT-BLAD RECPTACLE
      a. GENERAL CHARACTERISTICS:
         - REFERENCE STANDARDS: UL CCN RTRT AND UL 498.
      b. OPTIONS
         - DEVICE COLOR: WHITE OR AS INDICATED ON ARCHITECTURAL DRAWINGS.
         - CONFIGURATION:
           1. GENERAL-DUTY, NEMA 5-20R.
           2. GENERAL-DUTY, SMOOTH FACE, NEMA 5-20R.
   B. GENERAL-GRADE DUPLEX STRAIGHT-BLADE RECEPTACLE AND GFCI DEVICE
      a. GENERAL CHARACTERISTICS:
         - REFERENCE STANDARDS: UL CCN KCXX, UL 498, UL 943, UL 1699, AND UL SUBJECT 1699A.
      b. OPTIONS
         - DEVICE COLOR: WHITE OR AS INDICATED ON ARCHITECTURAL DRAWINGS.
         - B. CONFIGURATION: HEAVY-DUTY, NEMA 5-20R.
2. EXECUTION
   A. INSTALLATION OF SWITCHES
      a. REFERENCE STANDARDS.
         - UNLESS MORE STRINGENT REQUIREMENTS ARE SPECIFIED IN CONTRACT DOCUMENTS OR MANUFACTURERS' INSTRUCTIONS, COMPLY WITH INSTALLATION INSTRUCTIONS IN NECA NEIS 130.
         - MOUNTING HEIGHTS: UNLESS OTHERWISE INDICATED IN CONTRACT DOCUMENTS, COMPLY WITH MOUNTING HEIGHTS RECOMMENDED IN NECA NEIS 1.
   B. INSTALLATION OF STRAIGHT-BLADE RECEPTACLES
      a. REFERENCE STANDARDS:
         - MOUNTING HEIGHTS: UNLESS OTHERWISE INDICATED IN CONTRACT DOCUMENTS, COMPLY WITH MOUNTING HEIGHTS RECOMMENDED IN NECA NEIS 1.
         - RECEPTACLE ORIENTATION: UNLESS OTHERWISE INDICATED IN CONTRACT DOCUMENTS, ORIENT RECEPTACLE TO MATCH CONFIGURATION DIAGRAM IN NEMA WD 6.

262816 - ENCLOSED SWITCHES AND CIRCUIT BREAKER

1. GENERAL REQUIREMENTS
   A. SOURCE LIMITATIONS: OBTAIN PRODUCTS FROM SINGLE MANUFACTURER.
2. FUSIBLE SWITCHES
   A. TYPE HD, HEAVY DUTY:
      a. SINGLE THROW.
      b. THREE POLE.
      c. 240 V(AC).
      d. 1200 A AND SMALLER.
      e. UL 98 AND NEMA KS 1, HORSEPOWER RATED, WITH CLIPS OR BOLT PADS TO ACCOMMODATE SPECIFIED FUSES.
      f. LOCKABLE HANDLE WITH CAPABILITY TO ACCEPT THREE PADLOCKS, AND INTERLOCKED WITH COVER IN CLOSED POSITION.
   B. ACCESSORIES
      a. EQUIPMENT GROUND KIT: INTERNALLY MOUNTED AND LABELED FOR COPPER AND ALUMINUM GROUND CONDUCTORS.
      b. NEUTRAL KIT: INTERNALLY MOUNTED; INSULATED, CAPABLE OF BEING GROUNDED AND BONDED; LABELED FOR COPPER AND ALUMINUM NEUTRAL CONDUCTORS.
      c. LUGS: MECHANICAL TYPE, SUITABLE FOR NUMBER, SIZE, AND CONDUCTOR MATERIAL.
3. ENCLOSURES
   A. ENCLOSED SWITCHES AND CIRCUIT BREAKERS: UL 489, NEMA KS 1, UL 50E, AND UL 50, TO COMPLY WITH ENVIRONMENTAL CONDITIONS AT INSTALLED LOCATION.
   B. CONDUIT ENTRY: UL 50E TYPES 4, 4X, AND 12 ENCLOSURES MAY NOT CONTAIN KNOCKOUTS. UL 50E TYPES 7 AND 9 ENCLOSURES MUST BE PROVIDED WITH THREADED CONDUIT OPENINGS IN BOTH ENDWALLS.
   C. SELECTION OF ENCLOSURES
4. INDOOR, DRY AND CLEAN LOCATIONS: UL 50E, TYPE 1.INSTALLATION
   A. SPECIAL TECHNIQUES:
      a. COORDINATE LAYOUT AND INSTALLATION OF SWITCHES, CIRCUIT BREAKERS, AND COMPONENTS WITH EQUIPMENT SERVED AND ADJACENT SURFACES. MAINTAIN REQUIRED WORKSPACE CLEARANCES AND REQUIRED CLEARANCES FOR EQUIPMENT ACCESS DOORS AND PANELS.
      b. INSTALL INDIVIDUAL WALL-MOUNTED SWITCHES AND CIRCUIT BREAKERS WITH TOPS AT UNIFORM HEIGHT UNLESS OTHERWISE INDICATED.
      c. TEMPORARY LIFTING PROVISIONS: REMOVE TEMPORARY LIFTING OF EYES, CHANNELS, AND BRACKETS AND TEMPORARY BLOCKING OF MOVING PARTS FROM ENCLOSURES AND COMPONENTS.
      d. INSTALL FUSES IN FUSIBLE DEVICES.

265119 - LED INTERIOR LIGHTING

1. LUMINAIRE REQUIREMENTS
   A. BASIS-OF-DESIGN: LIGHT FIXTURE SCHEDULE ON DRAWINGS.
2. INSTALLATION
   A. SUPPORTS:
      a. SIZED AND RATED FOR LUMINAIRE WEIGHT.
      b. ABLE TO MAINTAIN LUMINAIRE POSITION AFTER CLEANING AND RELAMPING.
      c. PROVIDE SUPPORT FOR LUMINAIRE WITHOUT CAUSING DEFLECTION OF CEILING OR WALL.
      d. LUMINAIRE-MOUNTING DEVICES SHALL BE CAPABLE OF SUPPORTING A HORIZONTAL FORCE OF 100 PERCENT OF LUMINAIRE WEIGHT AND A VERTICAL FORCE OF 400 PERCENT OF LUMINAIRE WEIGHT.
   B. FLUSH-MOUNTED LUMINAIRES:
      a. SECURED TO OUTLET BOX.
      b. ATTACHED TO CEILING STRUCTURAL MEMBERS AT FOUR POINTS EQUALLY SPACED AROUND CIRCUMFERENCE OF LUMINAIRE.
      c. TRIM RING FLUSH WITH FINISHED SURFACE.
   C. WALL-MOUNTED LUMINAIRES:
      a. ATTACHED TO STRUCTURAL MEMBERS IN WALLS.
      b. DO NOT ATTACH LUMINAIRES DIRECTLY TO GYPSUM BOARD.
   D. CEILING-GRID-MOUNTED LUMINAIRES:
      a. SECURE TO ANY REQUIRED OUTLET BOX.
      b. SECURE LUMINAIRE TO THE LUMINAIRE OPENING USING APPROVED FASTENERS IN A MINIMUM OF FOUR LOCATIONS, SPACED NEAR CORNERS OF LUMINAIRE.
      c. USE APPROVED DEVICES AND SUPPORT COMPONENTS TO CONNECT LUMINAIRE TO CEILING GRID AND BUILDING STRUCTURE IN A MINIMUM OF FOUR LOCATIONS, SPACED NEAR CORNERS OF LUMINAIRE.

265619 - LED EXTERIOR LIGHTING

1. LUMINAIRE REQUIREMENTS
   A. BASIS-OF-DESIGN: LIGHT FIXTURE SCHEDULE ON DRAWINGS.
2. INSTALLATION
   A. SUPPORTS:
      a. SIZED AND RATED FOR LUMINAIRE WEIGHT.
      b. ABLE TO MAINTAIN LUMINAIRE POSITION AFTER CLEANING AND RELAMPING.
      c. PROVIDE SUPPORT FOR LUMINAIRE WITHOUT CAUSING DEFLECTION OF CEILING OR WALL.
      d. LUMINAIRE-MOUNTING DEVICES SHALL BE CAPABLE OF SUPPORTING A HORIZONTAL FORCE OF 100 PERCENT OF LUMINAIRE WEIGHT AND A VERTICAL FORCE OF 400 PERCENT OF LUMINAIRE WEIGHT.
   B. WALL-MOUNTED LUMINAIRES:
      a. ATTACHED TO STRUCTURAL MEMBERS IN WALLS.
   C. WIRING METHOD: INSTALL CABLES IN RACEWAYS. CONCEAL RACEWAYS AND CABLES.
   D. INSTALL LUMINAIRES LEVEL, PLUMB, AND SQUARE WITH FINISHED GRADE UNLESS OTHERWISE INDICATED.INSTALL LUMINAIRES AT HEIGHT AS INDICATED ON DRAWINGS.
   E. COORDINATE LAYOUT AND INSTALLATION OF LUMINAIRES WITH OTHER CONSTRUCTION.
   F. ADJUST LUMINAIRES THAT REQUIRE FIELD ADJUSTMENT OR AIMING.
3. ADJUSTING
   A. OCCUPANCY ADJUSTMENTS: WHEN REQUESTED WITHIN 12 MONTHS OF DATE OF SUBSTANTIAL COMPLETION, PROVIDE ON-SITE ASSISTANCE IN ADJUSTING THE DIRECTION OF AIM OF LUMINAIRES TO SUIT OCCUPIED CONDITIONS. MAKE UP TO TWO VISITS TO PROJECT DURING OTHER-THAN-NORMAL HOURS FOR THIS PURPOSE. SOME OF THIS WORK MAY BE REQUIRED DURING HOURS OF DARKNESS.
      a. DURING ADJUSTMENT VISITS, INSPECT ALL LUMINAIRES. REPLACE LAMPS OR LUMINAIRES THAT ARE DEFECTIVE.
      b. PARTS AND SUPPLIES SHALL BE MANUFACTURER'S AUTHORIZED REPLACEMENT PARTS AND SUPPLIES.

ABONMARCHE BYCE
Surveying
Engineering
Architecture

306 S. Kalamazoo Mall
Kalamazoo, MI 49007
T 269.381.6170
abonmarche.com

RENOVATIONS FOR:
PARKVIEW HILLS - MARLBOROUGH BUILDING
471 W SOUTH ST, KALAMAZOO, MI 49007
ELECTRICAL SPECIFICATIONS

FOR PERMITTING ONLY

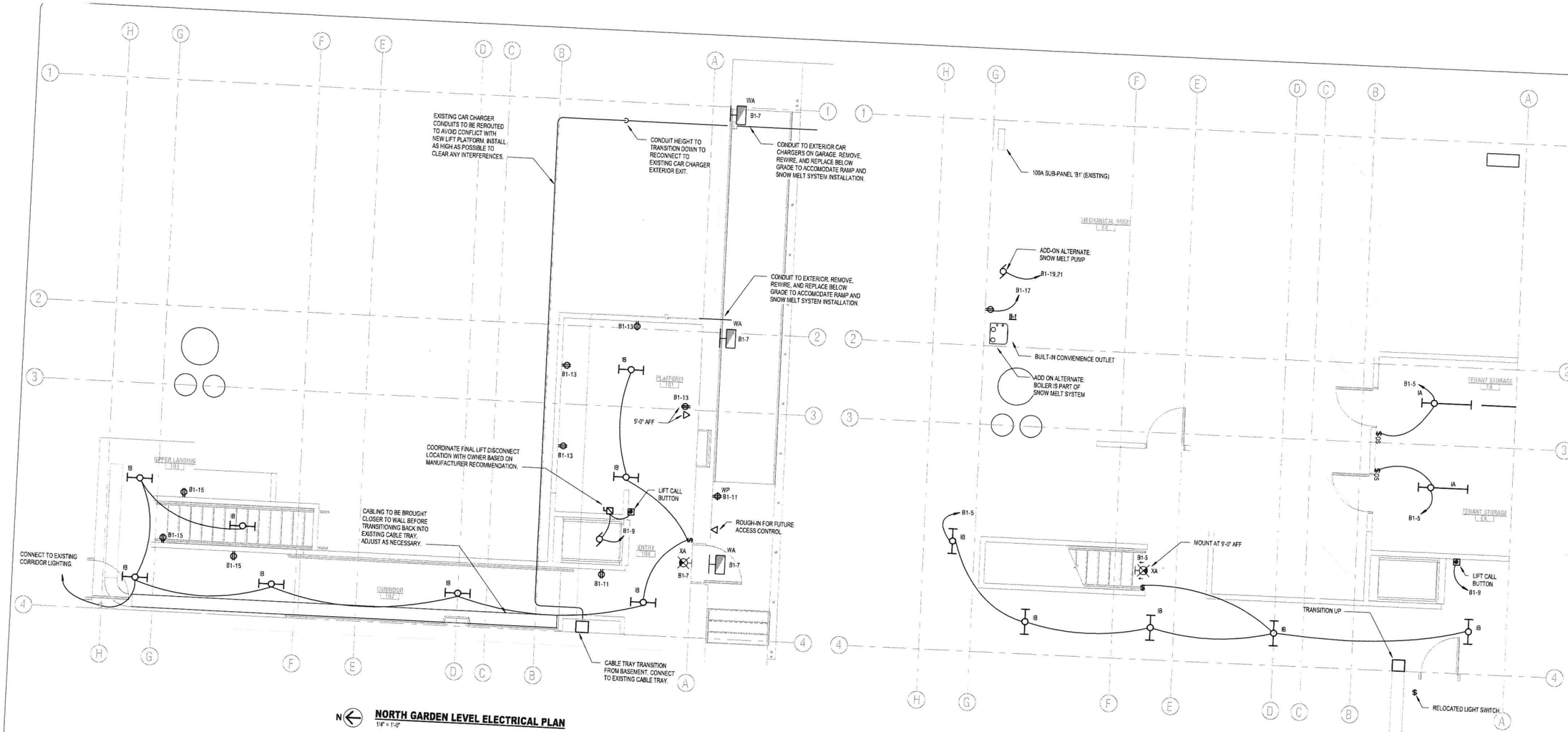
GREGG A. JONES
ARCHITECT
No 1301063305

ISSUE DATE: 2026.03.27
PM:
QA / QC:

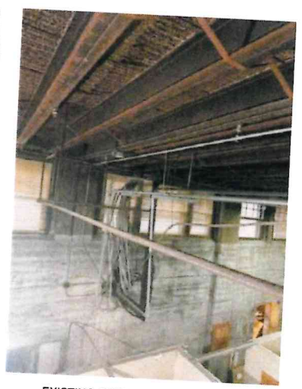
#	ISSUANCE / REVISION	DATE

ORIGINAL SHEET IS 24"x36". USE DIMENSIONS SHOWN. DO NOT SCALE DRAWINGS.

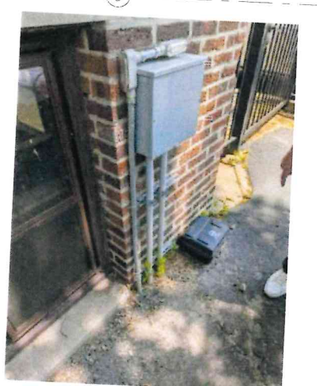
PROJECT NO. 24-0128



N **NORTH GARDEN LEVEL ELECTRICAL PLAN**
1/4" = 1'-0"



EXISTING CABLING TO BE BROUGHT CLOSER TO WALL BEFORE TRANSITIONING BACK INTO EXISTING CABLE TRAY.



EXTERIOR EXIT POINT FOR ELECTRIC CAR CHARGERS. CONNECTIONS TO BE REMOVED, REWIRED, AND REPLACED BELOW GRADE TO ACCOMODATE RAMP AND SNOW MELT SYSTEM INSTALLATION.

N **SUB BASEMENT ELECTRICAL PLAN**
1/4" = 1'-0"

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RENOVATIONS FOR:
PARKVIEW HILLS - MARLBOROUGH BUILDING
471 W SOUTH ST, KALAMAZOO, MI 49007
ELECTRICAL PLANS

FOR PERMITTING ONLY

STATE OF MICHIGAN
GREGG A. JONES
ARCHITECT
No 1301003305
LICENSED ARCHITECT

ISSUE DATE: 2026.03.27
PM: QA / QC:

N **SOUTH GARDEN LEVEL ELECTRICAL PLAN**
1/4" = 1'-0"

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RENOVATIONS FOR:

PARKVIEW HILLS - MARLBOROUGH BUILDING

471 W SOUTH ST, KALAMAZOO, MI 49007

SOUTH GARDEN LEVEL ELECTRICAL PLAN

FOR PERMITTING ONLY

STATE OF MICHIGAN
GREGG A. JONES
ARCHITECT
No. 1301000305
LICENSED ARCHITECT

ISSUE DATE: 2026.03.27

PM: QA / QC:

ISSUANCE / REVISION

ORIGINAL SHEET IS 24"x36"

Historic District Commission Staff Report

City of Kalamazoo

TO: The Kalamazoo Historic District Commission

FROM: Luis Pena, Historic Preservation Coordinator

DATE: April 21, 2026

SUBJECT: 3. 111 Portage - Alteration (Installation of 2 signs) PHDC26-005

PROPOSED WORK:

From the Description of Work Supplied by the Applicant: Install 2 wall signs on building. 1 on west, 1 on north. Signs are illuminated and secured in mortar joints.

EVALUATION:

Project Details

Installation of 2 signs on the property, one on the north face and one on the west face of the property.

Applicable Critera

Secretary of the Interior's Standards for Rehabilitation

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

The proposed signs can be installed in a way that will not destroy the property, by anchoring the signs in the mortar joints. The applicant states this is how the sign will be anchored. The signs will be differentiated from the historic building through the use of new materials and technologies (plastic and metal signs with internal illumination). The proposed signs are compatible with the historic building in massing, size and scale.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

As the proposed signs will be anchored in the mortar joins, they could be removed in the future without impairing the historic character of the building.

Local Historic District Standards and Guidelines

- Signs shall not be placed so as to conceal or disfigure any architectural feature of a building. The style and size of all signs shall be visually compatible with the buildings on which they are attached. *The proposed signs will not conceal or disfigure any architectural features on the building.*

Discussion
The proposed signs would not impair the historic character of the property, and the proposed signs could be removed in the future without impairing the historic character of the structure.

POTENTIAL ACTIONS:

1. The proposed work complies with the Secretary of the Interior standards 9 and 10. **Action: Motion to approve a Certificate of Appropriateness for the work as described in the application.**

2. More information is needed. **Action: Motion to postpone until the HDC meeting on 19 May 2026 and direct the applicant to provide the requested materials and information to the Historic Preservation Coordinator by noon on 12 May 2026**

3. Denial of the application. **Action: Motion to deny the application based on Secretary of the Interior Standards 9 and 10**.

THE CITY OF Kalamazoo

Community Planning and Economic Development
Historic District Commission
245 N. Rose Street
Kalamazoo, MI 49007
Telephone: (269) 337-8804; FAX (269) 337-8513
PenaL@kalamazoocity.org

APPLICATION FOR PROJECT REVIEW – Administrative review

(PLEASE **PRINT** CLEARLY - See instructions on reverse side)

Property Address: 200 E MICHIGAN AVE
Historic District: ☐ South/Vine ☐ Stuart ☐ West Main Hill ☐ Rose Place ☑ Haymarket
Applicant: RWL SIGN CO. Owner: PEREGRINE PENINSULA
Mailing Add: 6185 West K.L. Mailing Add: 200 E MICHIGAN
City State & Zip: KALAMAZOO MI 49009 City, State Zip: KALAMAZOO MI 49007
Phone: 269-372-3629 x3 Phone: 269-276-6386
Email: JASON @ RWLSIGN.COM Email: Natalie @ Peregrine Company. COM
Contractor: RWL SIGN CO.
☐ **Work to be done by owner**
☒ **Contractors name:** JASON HEADLEY
Proposed Work: (Use additional sheets to describe work if necessary)

INSTALL 2 WALL SIGNS ON BUILDING. 1 ON WEST, 1 ON NORTH. SIGNS ARE ILLUMINATED AND SECURED IN MORTAR JOINTS.

Application Checklist:
☐ Drawings 11x17 or smaller with dimensions
☐ Materials list
☐ Site plan including north arrow
☐ Other

☐ $35 - HDC review fee – charged with building permit

NTV This property has at least one working smoke detector for each dwelling unit.
(Owner or applicant's initials, required) * see back

Applicant's Signature: Jayson Headley Date: 3/28/26
Owner's Signature: Natalie Valentine Date: 4-7-26
(if different)

-For Historic Preservation Coordinator's Use Only-

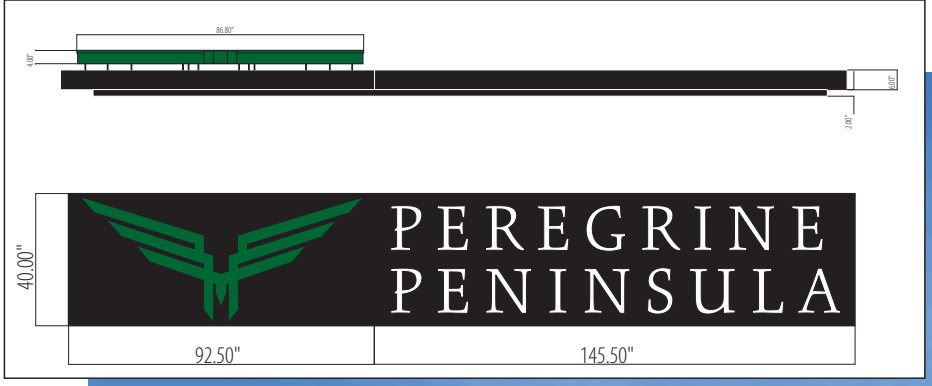
Case Number PHDC26-005 **Date Received** 04-07-2026
Zoning D1 **YEAR BUILT** **Complete application** Yes
Owned since 12/05/2024 **Fee Paid $35**
☐ This project will require a building permit with a $35 administrative review fee.
☐ This project will not require a building permit, there is a $35 administrative review fee
☒ Referred to the Historic District Commission for review at a monthly hearing - $85 hearing fee.
Meeting date 04/21/2026

ADMINISTRATIVE
Staff Review Date _____ ☐ Approve ☐ Site Visit ☐ Approve w/Conditions
COMMENTS

Certificate of Appropriateness Issued _____
Notice to Proceed _____

Referred to Historic District Commission for hearing* _____ $85 fee Hearing date _____

Revised 15 August 2024


86.80"
4.00"
6.00"
2.00"
40.00"
PEREGRINE
PENINSULA
92.50"
145.50"


PEREGRINE
PENINSULA
FOR LEASE
SIDEWALK
CLOSED
SAUGATUCK

Peregrine Peninsula North Face

SCALE: NTS

PAGE: 1 OF 1

Historic District Commission Staff Report

City of Kalamazoo

TO: The Kalamazoo Historic District Commission

FROM: Luis Pena, Historic Preservation Coordinator

DATE: April 21, 2026

SUBJECT: 4. 830 W Vine - Alteration (Replacement of basement egress window) PHDA26-005

PROPOSED WORK:

From the Description of Work Supplied by the Applicant: Replace egress window in basement bedroom The window is on the right side of the house under the stairs to the upstairs level. We will be replacing with identical size and same operation. Also upon 2nd inspection the window had been replaced in the past with a vinyl exterior, wood interior window. We would be replacing with a full vinyl window.

EVALUATION:

Project Details
Replace existing basement egress window with vinyl egress window.

Applicable Critera

Secretary of the Interior's Standards for Rehabilitation

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
The window in question being replaced is not historic. The new window will be differentiated from the old through the use of modern material. The proposed window will fit the existing opening., thus protecting the historic integrity.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.
The proposed window could be removed in the future without impairing the historic character of the property.

Local Historic District Standards and Guidelines
Windows

- The dimension of the original window must be retained. *It appears the original dimensions will be retained.*
- Aluminum and vinyl clad windows do not meet the above requirements. Vinyl plastic windows are not acceptable because they are made of non-historic materials and do not comply with the Secretary of the Interior's Standards for Rehabilitation. *According to the applicant, the existing window is vinyl clad*

Discussion
The existing window was administratively approved for installation in 2017, but it should be noted that the application submitted in 2017 stated the window would be wood. The placement of the window is not visible from the street, and the installation of a synthetic window would not detract from the historic character of the property.

POTENTIAL ACTIONS:

1. The proposed work complies with the Secretary of the Interior standards 9 and 10. **Action: Motion to approve a Certificate of Appropriateness for the work as described in the application.**

2. More information is needed. **Action: Motion to postpone until the HDC meeting on 19 May 2026 and direct the applicant to provide the requested materials and information to the Historic Preservation Coordinator by noon on 12 May 2026.**

3. Denial of the application. **Action: Motion to deny the application based on Secretary of the Interior Standards 9 and 10.**

THE CITY OF Kalamazoo

Community Planning and Economic Development
Historic District Commission
245 N. Rose Street
Kalamazoo, MI 49007
Telephone: (269) 337-8804; FAX (269) 337-8513
PenaL@kalamazoocity.org

APPLICATION FOR PROJECT REVIEW – Historic District Commission Hearing

COMPLETE Applications for review at the Historic District Commission meeting including payment of the $85 hearing fee must be received by NOON on the 2nd Tuesday of the month- the meeting is on the 3rd Tuesday of the month.

(PLEASE **PRINT** CLEARLY - See instructions on reverse side)

Property Address: 830 W. VINE ST.

Historic District: ☑ South/Vine ☐ Stuart ☐ West Main Hill ☐ Rose Place ☐ Haymarket

Applicant: IAN VINCENT Owner: IAN VINCENT

Mailing Add: 830 W. VINE ST. Mailing Add: 830 W. VINE ST.

City State & Zip: KALAMAZOO, MI → City, State Zip: 49008

Cell Phone: 269-599-3912 Cell Phone: 269-599-3912

Email: ianvincent1222@gmail.com → Email: ianvincent1222@gmail.com

Contractor All Seasons Windows & Exteriors → Cameron VanFleet

☐ **Work to be done by owner**

Proposed Work: Use additional sheets to describe work if necessary

Replace egress window in basement bedroom. The window is on the right side of the house under the stairs to the upstairs level. Cameron VanFleet will be e-mailing accompanying photos.

(IV) *This property has at least one working smoke detector for each dwelling unit.*
*(Owner or applicant's initials) (Required) * see back*

Applicant's Signature: Ian Vincent Date: 3/15/26

Owner's Signature: _____ Date: _____
(if different)

APPLICATION CHECKLIST:
Include all these items are in your submission. Incomplete applications will be held until the next review hearing.

- ☐ Drawings 11x17 or smaller with dimensions
- ☐ Materials list
- ☐ Site plan including north arrow
- ☐ Other:
- ☑ $85 for HDC hearing & review fee – must be paid in advance to be placed on agenda – include WITH application – *Check payable to: City of Kalamazoo*

-For Historic Preservation Coordinator's Use Only-

Case Number: PPZ- **PHDA26-005** **Date Received*:** 03/15/2026
Zoning RM15 **Year built** 1875 **Complete application** Yes
Owned since _____

COMMISSION
Meeting Date 04/21/2026
COMMENTS _____

Hearing fee paid $85 _____
Check # _____

Approve in Concept *Date* _____ Letter mailed _____

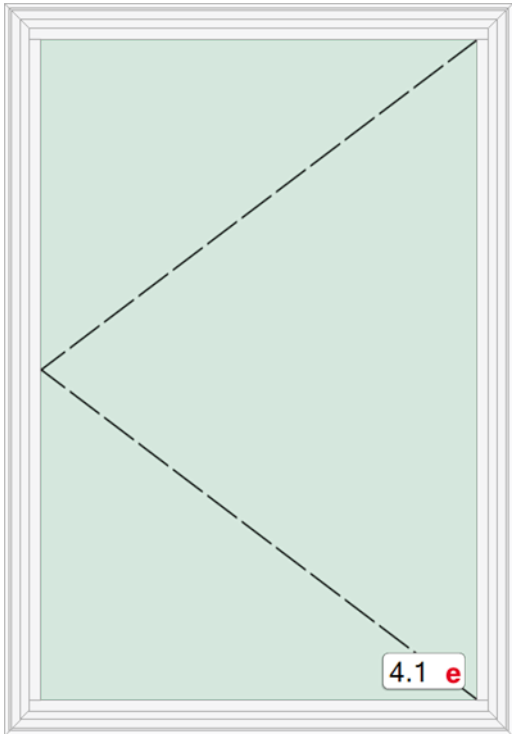
FINAL ACTION

☐ Approve ☐ Site Visit ☐ Approve w/Conditions ☐ Deny ☐ Postpone ☐ Withdrawn
ACTION DATE _____
Certificate of Appropriateness Issued _____
Notice of Denial with appeals information _____
Notice to Proceed _____ Comments _____

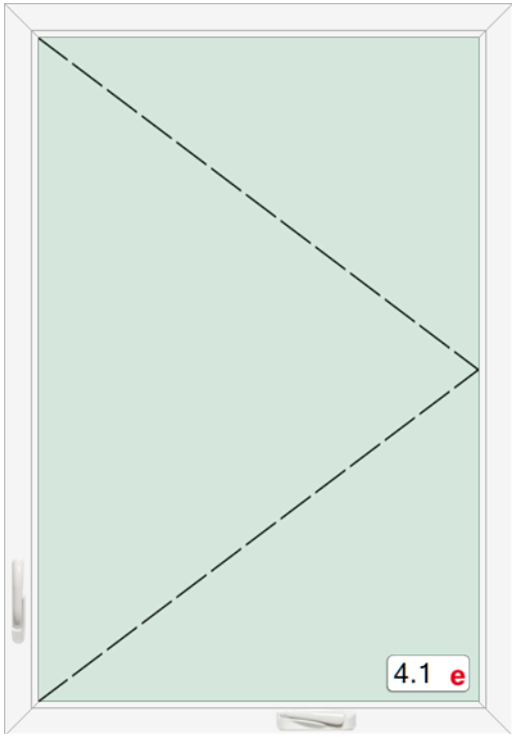
Revised November 22, 2019

YOUR PROFESSIONAL-CLASS PRODUCT

Aspect AP500 Series 525 - 1-Lite Casement - Hinged Left (OLI)



OUTSIDE VIEW



INSIDE VIEW

ALL SEASON WINDOWS AND EXTERIORS
269-385-4475
5400 Meredith St.
Portage, MI 49002

QUOTE INFORMATION

Job: Ian Vincent
Order #14856385-1
Qty: 1

DETAILS

Aspect Window - AP500 Series

525 - 1-Lite Casement - Hinged Left (OLI)
White
Exact Size: 28 1/2" x 41"
Corner Drive System
Stainless Steel ROTO Hardware
White Lock-out Crank Handle
INNERGY Thermal Sash Reinforcement
Extruded Full Screen (White) with BetterVue Screen Mesh
Polyfoam Wrap (Four-sided)
Integral Nail Fin
Frame Depth with Accessory: 2 1/16"
ComforTech DLA
Double Strength Glass (1/8" per pane)
3/4" IG Thickness

Installation Instructions

SIZING

Opening Width Range:	28 3/4" to 29"
Opening Height Range:	41 1/4" to 41 1/2"
Window Size:	28 1/2" x 41"
United Inches:	70
Egress Size:	16 13/32" x 35 9/16"
Egress Square Foot:	4.0525
Egress Meets Criteria:	No
Operable Sash Size:	26 7/8" x 39 3/8"
Operable Glass Size:	24 3/4" x 37 1/4" x 3/4"
Operable Glass Viewable Size:	23 7/8" x 36 3/8"
Full Screen:	24 13/16" x 37 5/16"
Casement Screen Notch:	13 15/16"

Structural

Product: Vinyl Casement Window
Cert #: 462-H-009.01
Class: LC-PG50
Max Test Size: 36" x 75"
Test Std: AAMA/WDMA/CSA 101/I.S.2/A440-08/-11/-17

WINDOW & DOOR MANUFACTURERS ASSOCIATION WDMA Hallmark Certification

ENERGY

ENERGY PERFORMANCE RATINGS

U-Factor (U.S/I-P)	Solar Heat Gain Coefficient
0.26	0.27

ADDITIONAL PERFORMANCE RATINGS

Visible Transmittance	Condensation Resistance
0.51	60.00

Air Infiltration (cfm/ft2)
<= 0.02

CPD: PRD-N-103-01936-00001

Advisory Boards and Commissions Appointee Nomination Report

City of Kalamazoo

RECOMMENDATION
The Historic District Commission (HDC) recommends that the Mayor approve the reappointment of Kristi Breisach and James Johnson for reappointment of terms that would expire 01/01/2029.

SPECIAL REQUIREMENTS FOR THIS POSITION
All Historic District Commissioners are required by ordinance to have "a clearly demonstrated interest in or knowledge of historic preservation."

SELECTION PROCESS

Applicants Considered
There have been no new applications at this time.

NOMINEE QUALIFICATIONS

Dual Board Memberships
Neither Commissioner Johnson nor Breisach are serving on other boards.

Residency
Both Commissioner Johnson lives in the Winchell neighborhood and commissioner Breisach lives in the Vine neighborhood.

Term Limits
This is the second full term for both Commissioners, they will not be eligible for another consecutive term.

Training, Experience, Education and Skills

Commissioner Johnson is a history teacher at Loy Norrix high school. Commissioner Breisach lives in a historic house in the Vine neighborhood and local historic district.

Contribution to Diversity
Both Breisach and Johnson are 33-44 and white.

NOMINATION RATIONALE
The Commission recommends the reappointment of Commissioners Johnson and Breisach based on their interest in preservation, enthusiasm for preservation, and their experience serving their term on the commission.

CITY CLERK'S CERTIFICATION
The nominees' qualifications regarding dual board memberships, residency, and term limits have been reviewed and verified by the City Clerk's Office.

Scott A. Borling, City Clerk

Historic District Commission Staff Report

City of Kalamazoo

TO: The Kalamazoo Historic District Commission

FROM: Luis Pena, Historic Preservation Coordinator

DATE: April 21, 2026

SUBJECT: Coordinator's Report

PROPOSED WORK:

EVALUATION:

Project Details

Applicable Critera

Secretary of the Interior's Standards for Rehabilitation

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of

deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Discussion

POTENTIAL ACTIONS:

1. The proposed work complies with the Secretary of the Interior standards [enter #'s]. **Action: Motion to approve a Certificate of Appropriateness for the work as described in the application.**

2. More information is needed. **Action: Motion to postpone until the HDC meeting on [date] and direct the applicant to provide the requested materials and information to the Historic Preservation Coordinator by noon on [enter due date].**

3. Denial of the application. **Action: Motion to deny the application based on Secretary of the Interior Standards [enter #'s]**.

Historic District Commission Staff Report

City of Kalamazoo

TO: The Kalamazoo Historic District Commission

FROM: Luis Pena, Historic Preservation Coordinator

DATE: 21 April 2026

SUBJECT: Historic Preservation Coordinator's Report

Historic District Reviews

Review Type	Cost	Number of Reviews	Totals
Administrative	$35	11	$2310
Hearing	$85	2	$1275
		81	$3585

Administrative Reviews:
276 E Michigan – façade repairs following car crash
259 E Michigan – Same as above
817 Davis - roof
426 Pearl - roof
151 Prospect - roof
805 S Park – Porch Reparirs
820 W Lovell - Roof
207 Elm- roof
301 W Vine - Fence
1331 Grand – Wood front door replacement
1211 Merrill – wood screen door replacement

Community Planning and Economic Development Department | 245 N. Rose Street, Ste 100, Kalamazoo, MI 49007
Voice: (269) 337-8744 | Fax: (269) 337-8513 | www.kalamazoocity.org