

## Request for Cost Proposals

### **Renovation of former fire department garage for senior programs and general use**

Casco Township Hall  
7104 107th Ave  
South Haven, MI 49090

Casco Township, Allegan County, Michigan

### **Cost Proposals due Monday June 16, 2025, 7:00 pm**

Casco Township is seeking cost proposals from licensed building contractors to renovate the fire station side of the existing Casco Township Hall located at 7104 107th Ave, South Haven, MI 49090. All contractors must respond to the requirements outlined in this Request for Proposals (RFP).

Proposals shall be submitted in a sealed envelope marked "RFP/Casco Building renovation" by Monday June 16, 2025 at 7:00 pm. The proposals will be publicly opened and read aloud at the monthly Casco Township Board meeting scheduled for 6/16/25 at 7:00 pm at the Township Hall.

Ten (10) copies of the bid shall be submitted in a sealed envelope by June 16, 2025 at 7:00 pm. Mail or deliver to:

RFP/Casco Building renovation  
Casco Township  
7104 107th Ave  
South Haven MI 49090

It is anticipated that a contractor will be selected at a special meeting of the Casco Township Board scheduled for 7:00 pm on Monday June 23, 2025.

**Reservation of rights:** Casco Township reserves the right to 1) reject any and all bids; 2) waive any errors or irregularities in the bidding process or in any bid; 3) rebid all or part of the project; 4) negotiate with any bidder for a reduced price, or for an increased price to include any alternates that the bidder may propose; 5) reduce the scope of the project and rebid or renegotiate with any bidder regarding the revised project; and 6) defer or abandon the project. The Township also reserves the right to request supplemental information if deemed necessary.

**Disclosure of RFP responses:** All information in a bidder's proposal, including any attachments or exhibits, is subject to possible disclosure under the Michigan Freedom Of Information Act. Any information submitted in response to the RFP will generally be subject to disclosure at the time the bids are opened.

The Township prepares its specifications to afford all firms the equal opportunity to compete.

**Background:** The construction site is the western half of the existing Township Hall, built in the mid-1980s, used by the Fire Department until 2010. The goal of the renovation is to make the large open space (former fire department garage) safe and accessible for senior citizen use and general Township use including the conducting of senior programs, meetings and elections.

**Scope of work:**

The project must include

- installing ADA doors and restrooms
- leveling the floor
- installing HVAC
- Lighting
- addressing the current septic field (age 40+ years) and septic capacity for new restrooms.

Additional project aspects include storage, office space, removal of garage doors, installation of windows, room dividers and sound mitigation to accommodate multiple groups in the space at once, and an outdoor covered patio, as depicted in the included drawings.

The Township board welcomes contractor input on various aspects of the project, especially cost efficient approaches to HVAC, flooring, lighting, and windows. Alternatives may be outlined in the proposal to allow for discussion with the Board.

Cost is a significant factor in the evaluation process. The award will be made to the lowest responsive and responsible bidder.

Please see the attached drawings that depict the desired elements of the renovation and favored layout.

**On-site visits:** Contractors may visit the site. **Because the Township Hall does NOT offer full time open hours, visits to the site must be pre-arranged.** Weekend and evening visits can be accommodated.

**Visits should be scheduled** with Julie Cowie, project facilitator, [juliemcowie@gmail.com](mailto:juliemcowie@gmail.com) and/or 269-214-1227 (text or voice).

Contractors may also contact the architect, Brian Peterson, [sonofpete@rocketmail.com](mailto:sonofpete@rocketmail.com), 269-767-1811 (text or voice).

**Project schedule, contractor requirements and performance expectation:** Proposals must include a project schedule with benchmarks. Casco Township prefers that construction begin 3Q25 and conclude within 12 months.

The project is funded in part by a State grant with a designated time frame. The Township seeks a very basic renovation that meets the minimum requirements for safety and accessibility.

Contractors should furnish a list of clients/references.

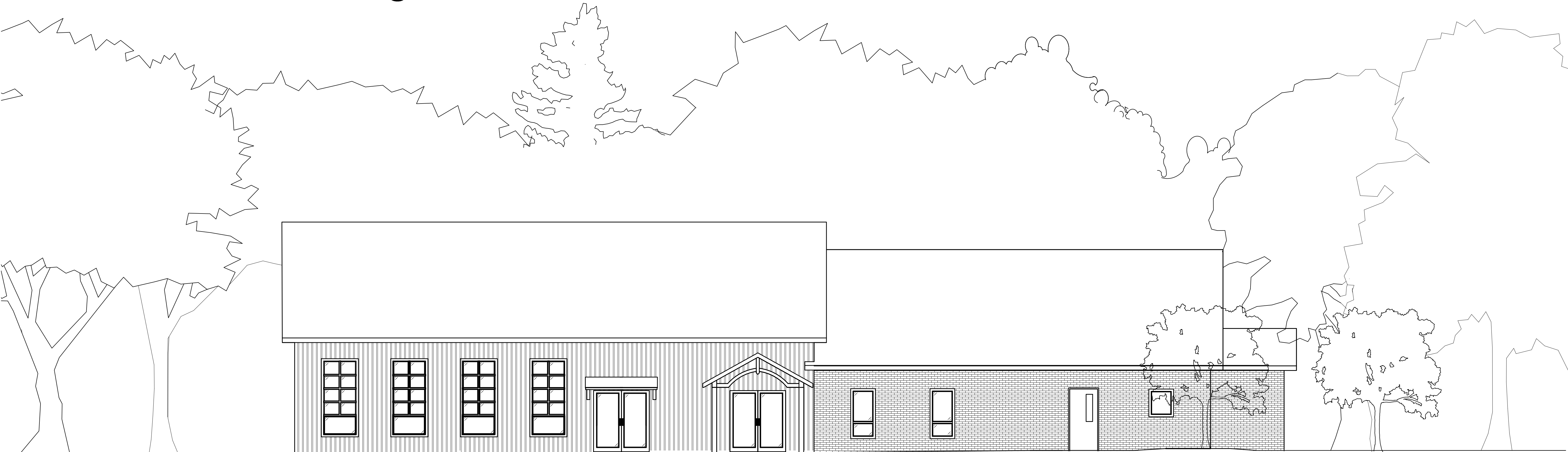
The contractor shall not delegate or subcontract the project to another general contractor.

Twelve pages of drawings follow this page.

Questions about the bid process should be directed to Julie Cowie, project facilitator at [juliemcowie@gmail.com](mailto:juliemcowie@gmail.com) and 269-214-1227 (text or voice).

# Casco Township Hall Project

South Haven, Michigan



## SHEET INDEX:

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| 1  | TITLE   |
| 2  | SITE  |
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### NOTES:

- LOCATION: ALLEGAN COUNTY
- OCCUPANCY: R
- TYPE OF CONST: VB
- WIND: 90-110
- NUMBER OF STORIES: 1
- FOUNDATION - EXISTING
- FENESTRATIOAN U FACTOR = .32
- MIN. CEILING R VALUE = 38
- MIN. WALL R VALUE = 20

### APPLICABLE CODES

BUILDING CODE:	MICHIGAN BUILDING CODE 2015
PLUMBING CODE:	MICHIGAN PLUMBING CODE 2006
MECHANICAL CODE:	MICHIGAN MECHANICAL CODE 2009
ELECTRICAL CODE:	INCORPORATING 2011 NEC EDITION OF THE NATIONAL ELECTRIC CODE

### NOTES

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

CONTRACTORS SHALL VERIFY AND CHECK ALL DIMENSIONS ON THE JOB DURING CONSTRUCTION AND ADVISE THE DESIGNER OF ANY DISCREPANCIES.

DO NOT SCALE DRAWINGS. USE INDICATED DIMENSIONS ONLY.

Casco Township Hall Project

South Haven, Michigan

Scale

Sheet

Date

3.17.2025

Project

1

Brian Peterson

269.767.1811



107th Avenue

71st Street

Site plan details:

- Building:** A large rectangular building with a central section and two side wings. Arrows indicate interior flow.
- Parking:** Multiple parking spaces are shown, including a row of 12 spaces labeled "additional 12 parking spaces if necessary in the future".
- Landscaping:** Various trees and shrubs are depicted around the building and parking areas.
- Infrastructure:** Includes a dumpster, future lamp posts, existing and proposed lights, and a bike rack.
- Access:** Several "existing bldg. access" points are marked, along with "existing overhead doors to be removed" and "existing light to be removed".
- Materials:** Areas are labeled "gravel", "concrete", and "asphalt".
- Other Features:** A "possible patio space", "possible future walkway to front", and "power lines entering bldg. underground" are noted.

**Legend:**

- existing building (shaded gray)
- Site (North arrow and scale 1/16"=1')
- Parcel Number: 7104 107th
- COM AT W 1 1359.41' TH TO POB SEC
- Lot Square Footage: Square F Covered, Square F Covered material

# Casco Township Hall Project

## South Haven, Michigan

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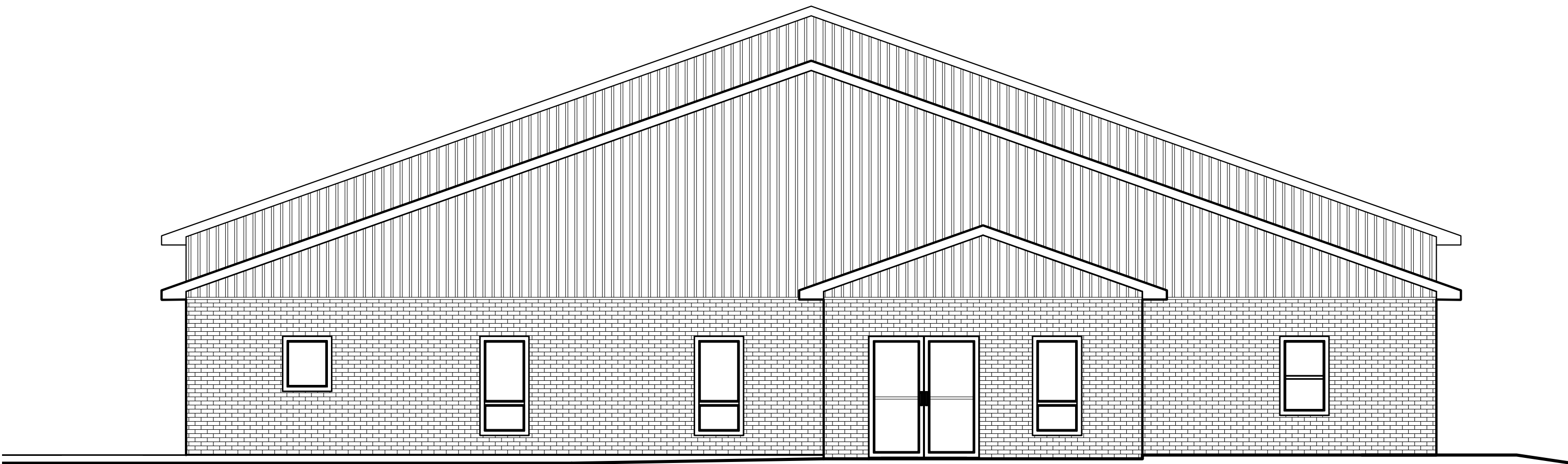
Brian Peterson  
269.767.1811



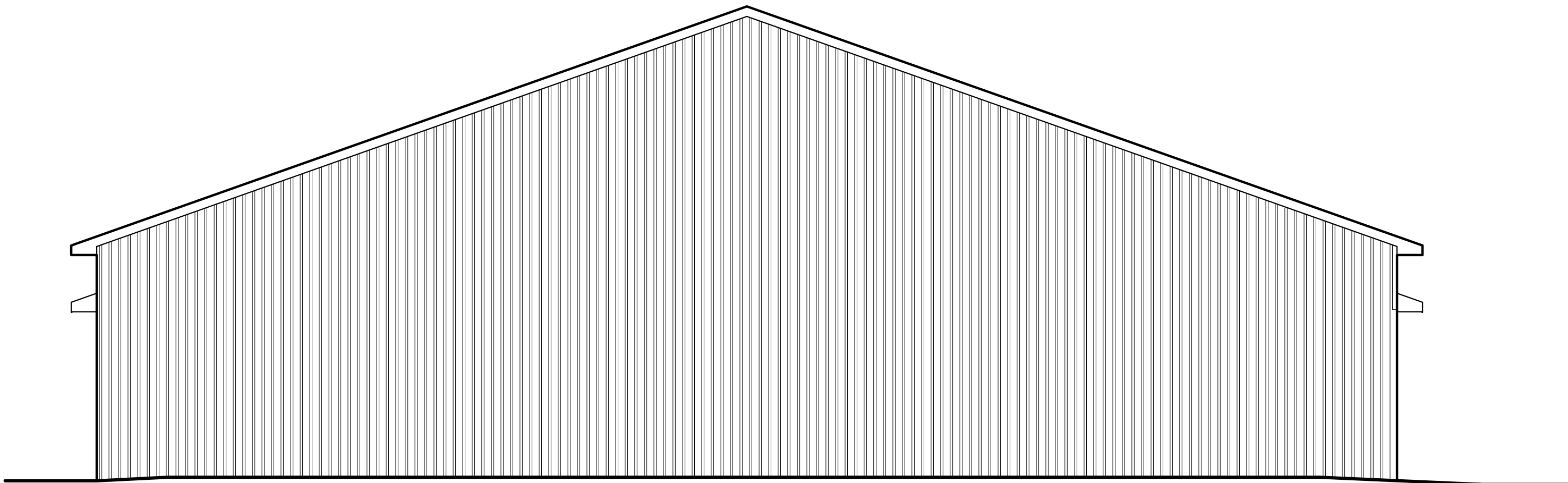
South  
3/16"=1'



North  
3/16"=1'



East  
3/16"=1'



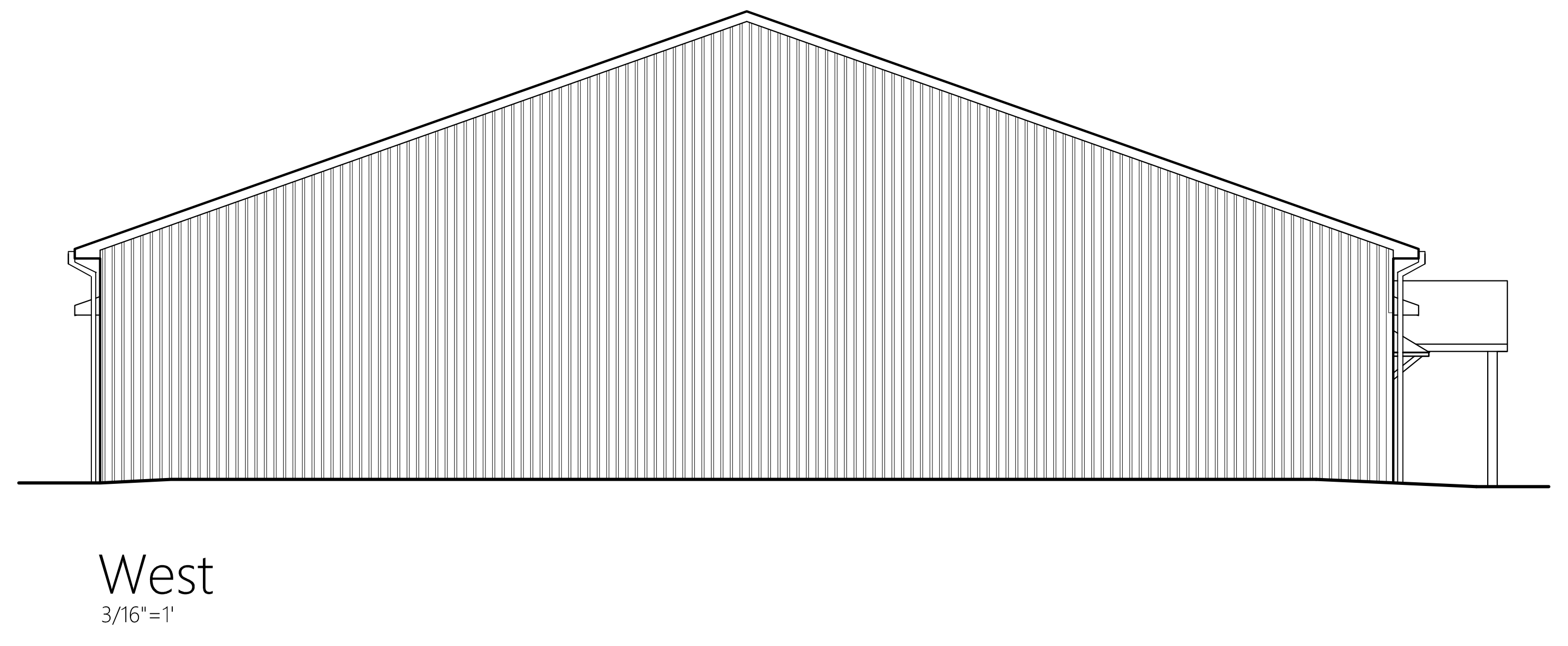
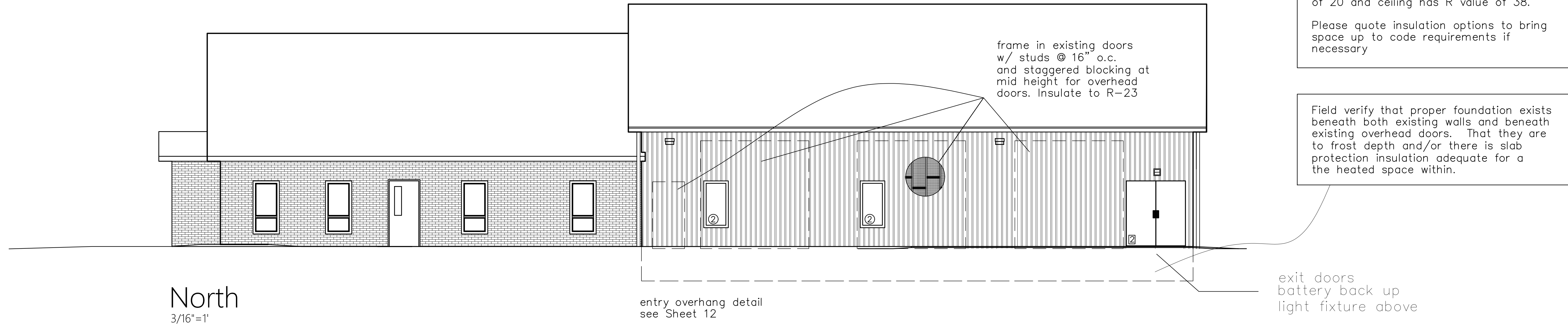
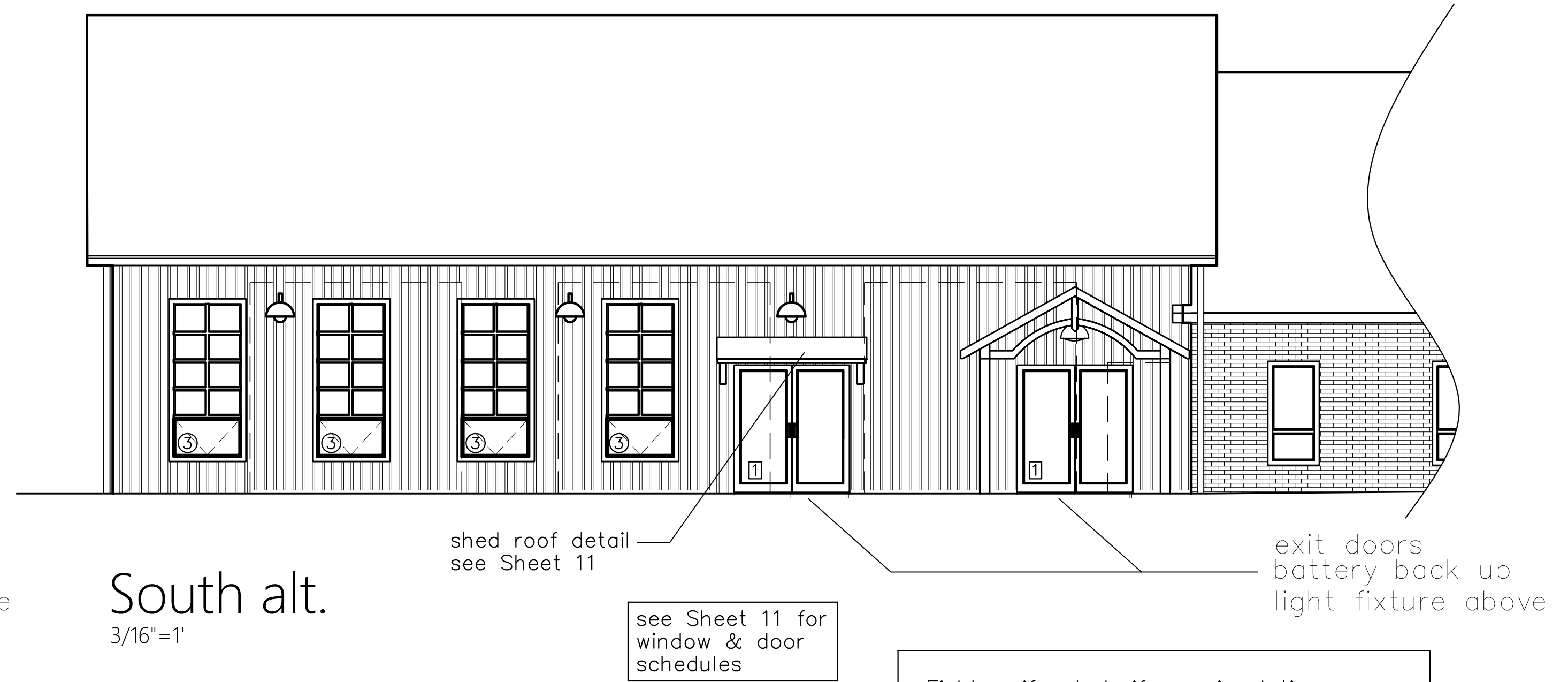
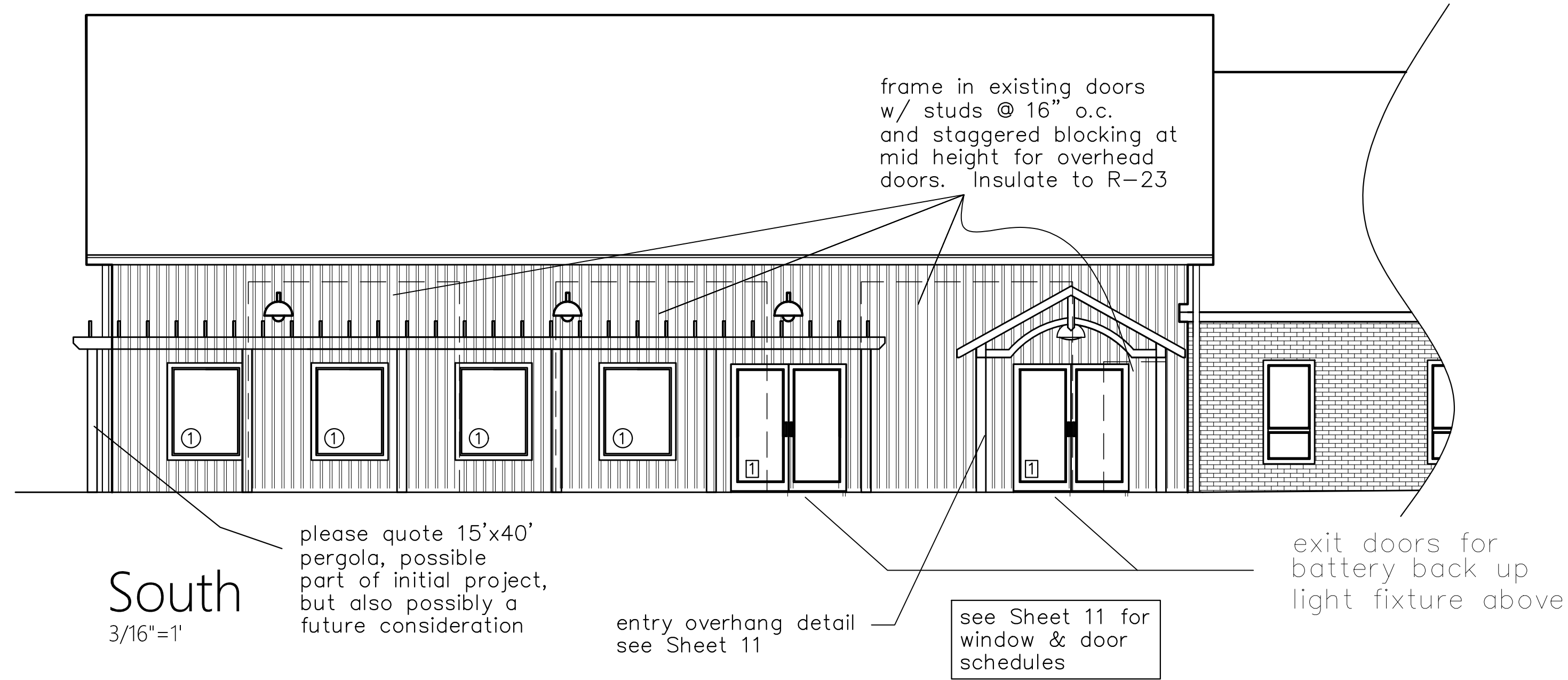
West  
3/16"=1'

Casco Township Hall Project  
South Haven, Michigan

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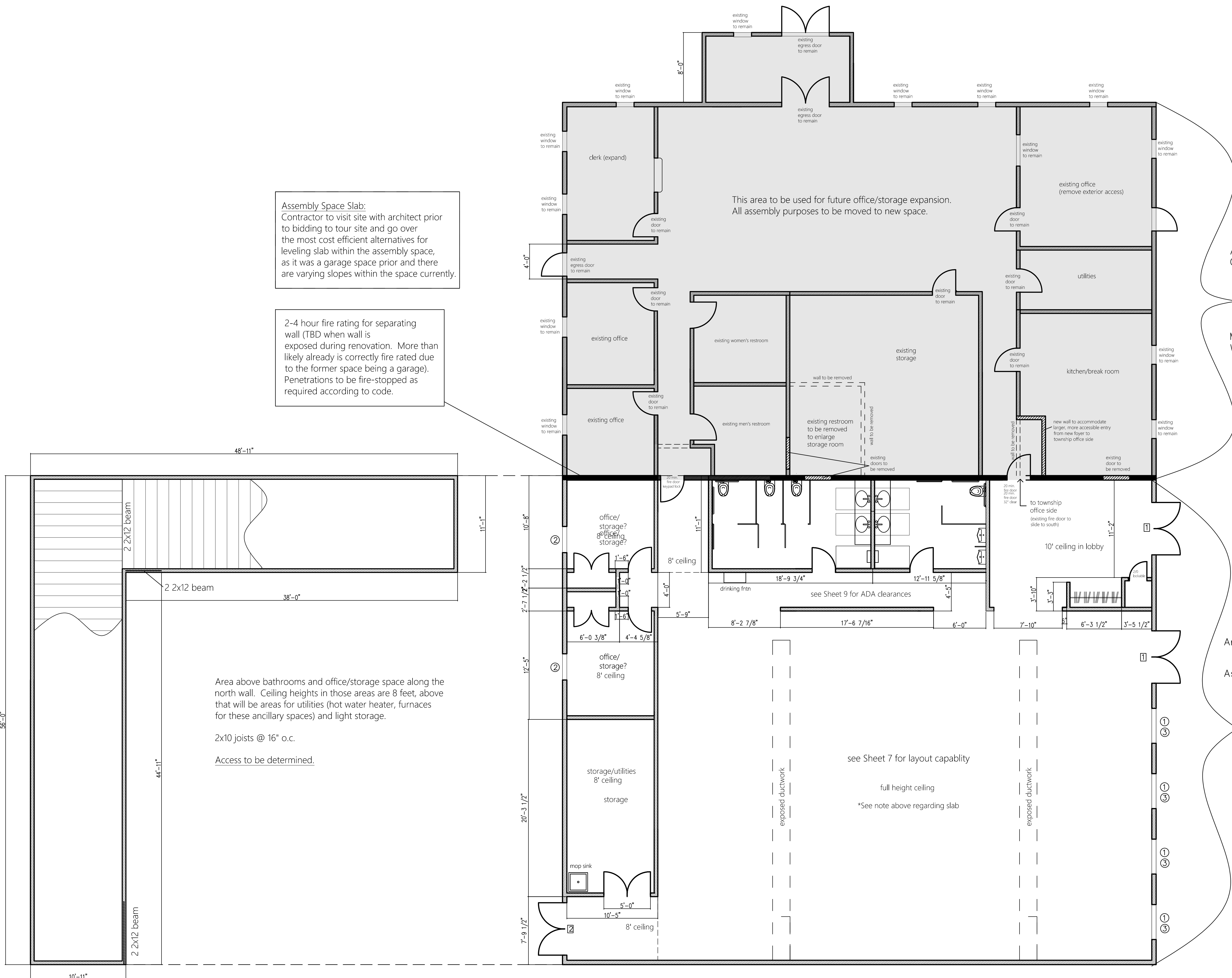
# Casco Township Hall Project

South Haven, Michigan

Scale  
Date  
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Project

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Assembly Space Slab:  
Contractor to visit site with architect prior to bidding to tour site and go over the most cost efficient alternatives for leveling slab within the assembly space, as it was a garage space prior and there are varying slopes within the space currently.

2-4 hour fire rating for separating wall (TBD when wall is exposed during renovation. More than likely already is correctly fire rated due to the former space being a garage). Penetrations to be fire-stopped as required according to code.

Area above bathrooms and office/storage space along the north wall. Ceiling heights in those areas are 8 feet, above that will be areas for utilities (hot water heater, furnaces for these ancillary spaces) and light storage.

2x10 joists @ 16" o.c.  
Access to be determined.

Area 1: Existing Office (Group B)  
square footage – approx. 2,700 s.f.  
occupancy load – approx. 10  
(@ 300 s.f. per occupant)  
parking spaces – approx. 10

Men's: 1 WC (1 per 150), 1 lav  
Women's: 2 WC (1 per 75), 1 lav

Area 2: Existing Structure, Change of Use  
Assembly (A3) Community Hall (formerly garage space)  
  
square footage – approx. 3,900 s.f.  
occupancy load – approx. 108  
  
parking spaces – approx. 36  
ADA restrooms, 3 fixtures each

Storage  
3/16"=1'

Floorplan  
occupancies  
3/16"=1'

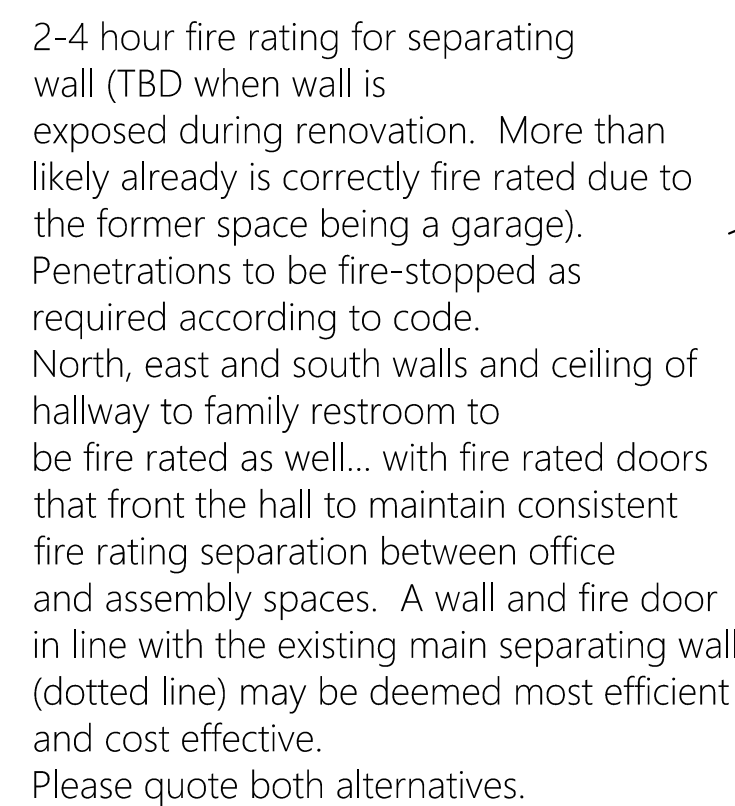
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$$3/16" = 1'$$

ALL TRANSITIONS OF NEW WORK TO EXISTING (WALLS, FLOORS, AND CEILINGS) WORK SHALL BE CAREFULLY EXECUTED. EXISTING CONSTRUCTION SHALL BE REPAIRED AS NEEDED AND PATCHED TO MATCH FINISHES OF ADJACENT SURFACES.

ALL EXPOSED PIPES, CONDUITS OR DUCTS IN FINISHED AREAS, WHETHER SHOWN ON DRAWINGS OR NOT, SHALL BE FURRED OUT WITH GYPSUM BOARD.

ALL MATERIALS AND CONSTRUCTION TO BE INCORPORATED IN THE WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE ASTM SPECIFICATIONS APPLICABLE AND SHALL CONFORM TO THE STANDARDS AND RECOMMENDATIONS OF THE VARIOUS TRADE INSTITUTES (A.C.I., A.I.S.C., ETC.) WHERE APPLICABLE.

ALL WORK SHALL BE CONSIDERED NEW UNLESS OTHERWISE INDICATED

NO PLANS SHALL BE SCALED; DIMENSIONS SHALL BE USED.

THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION OF EXISTING WORK AND NEWLY ADDED WORK.

THE CONTRACTOR SHALL REPAIR AND RESTORE TO ITS ORIGINAL CONDITION ALL WORK AND ITEMS DAMAGED AS A RESULT OF BUILDING OPERATIONS AND SHALL LEAVE THE WORK COMPLETED TO THE TRUE INTENT OF THE DRAWINGS AND SPECIFICATIONS AND TO THE SATISFACTION OF THE ARCHITECT AND OWNER.

ANY DISTURBANCE OR DAMAGE TO THE EXISTING BUILDINGS OR UTILITIES RESULTING EITHER DIRECTLY OR INDIRECTLY FROM THE OPERATION OF THIS CONTRACT SHALL BE PROMPTLY REPAIRED, RESTORED OR REPLACED TO THE SATISFACTION OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.

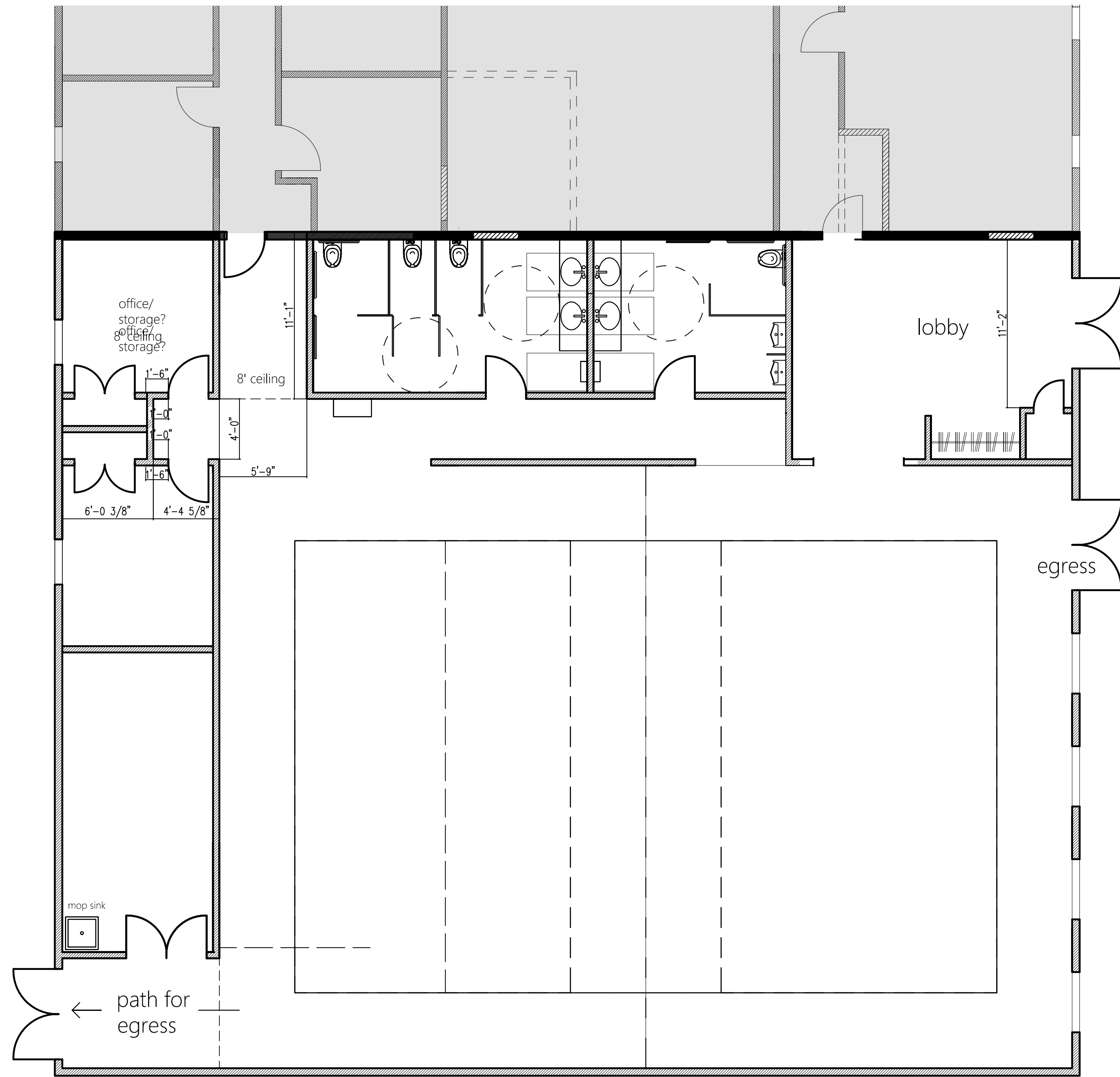
# Casco Township Hall Project

South Haven, Michigan

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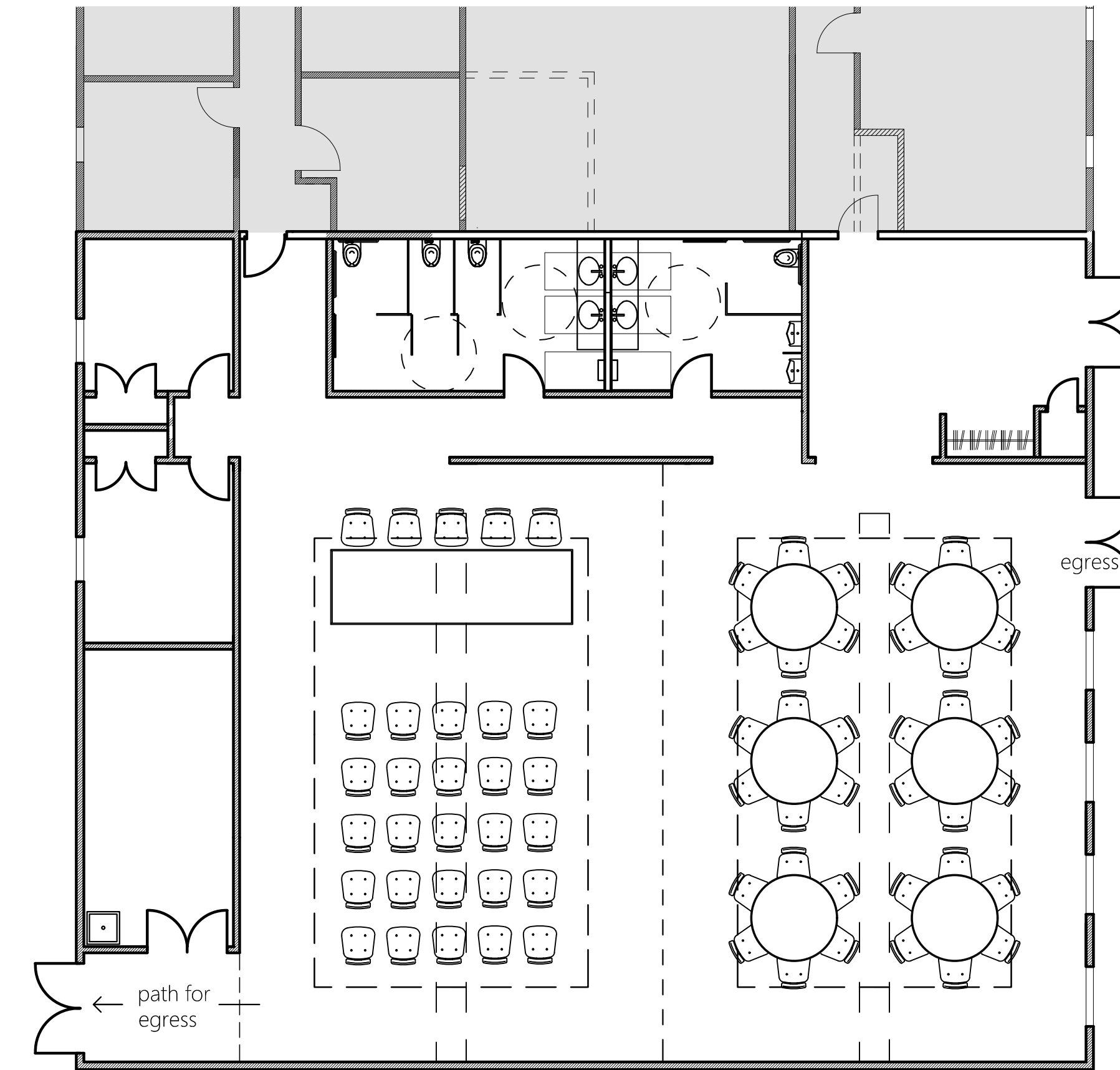
## MAIN SPACE DIMENSIONS

3/16"=1'

- one large space: 1,395 square feet (minus 5 feet free around perimeter of main room for ease of egress)
- Occupant load: 93 at 15 square feet per occupant  
(less concentrated use without fixed seating....  
senior activities, township meetings, elections)
- two separate spaces: 540 square feet each (minus 5 feet free around perimeter of each separate space for ease of egress)
- Occupant load for each: 36 at 15 square feet per occupant  
(less concentrated use without fixed seating....  
senior activities, township meetings, lectures, etc.)

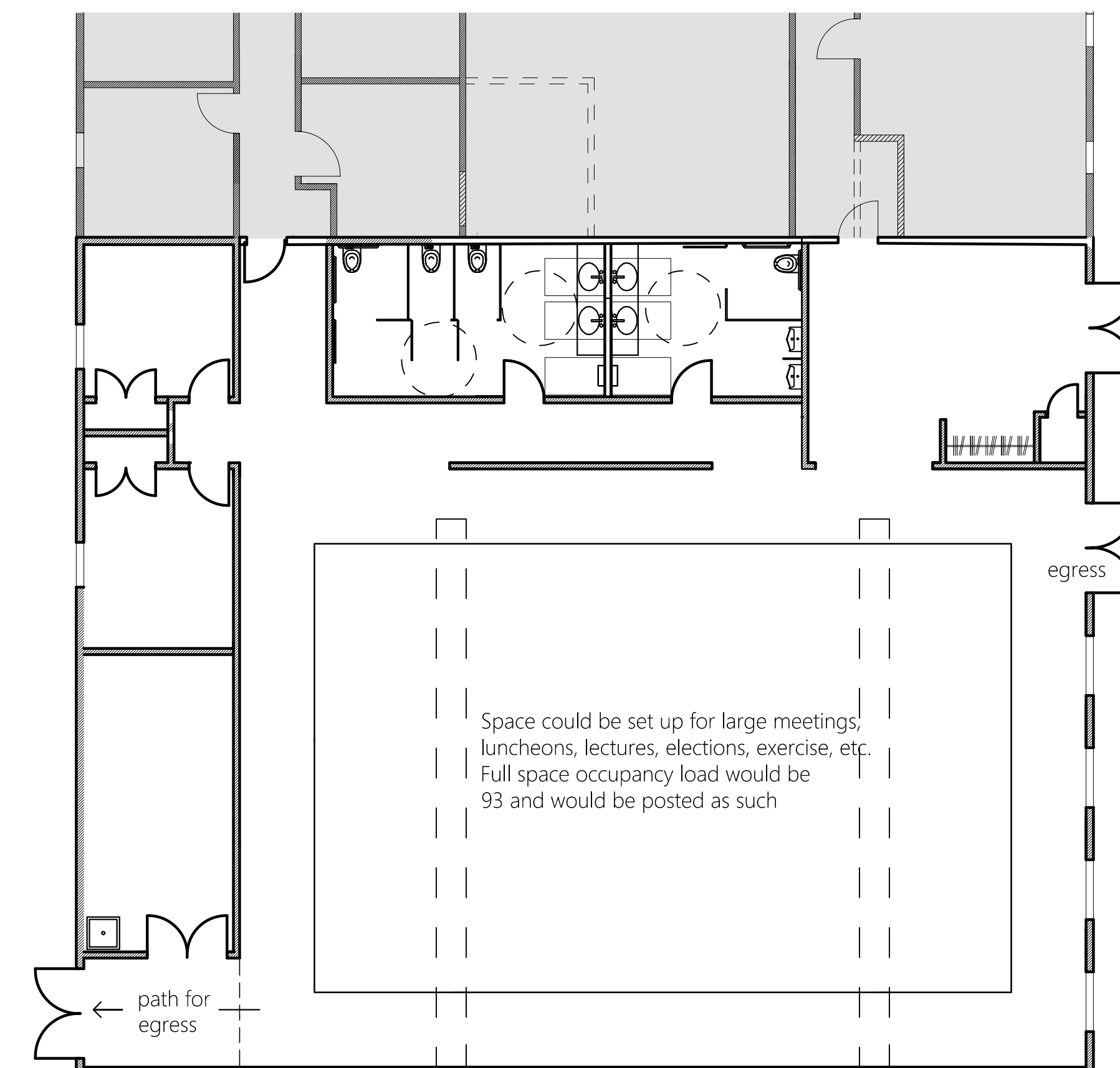
Occupancy for other spaces:

Foyer: about 12  
Offices: 2 or 3



## Two Separated Spaces

(type of portable room dividers to be determined)  
1/8"=1'



## One Large Open Space

1/8"=1'

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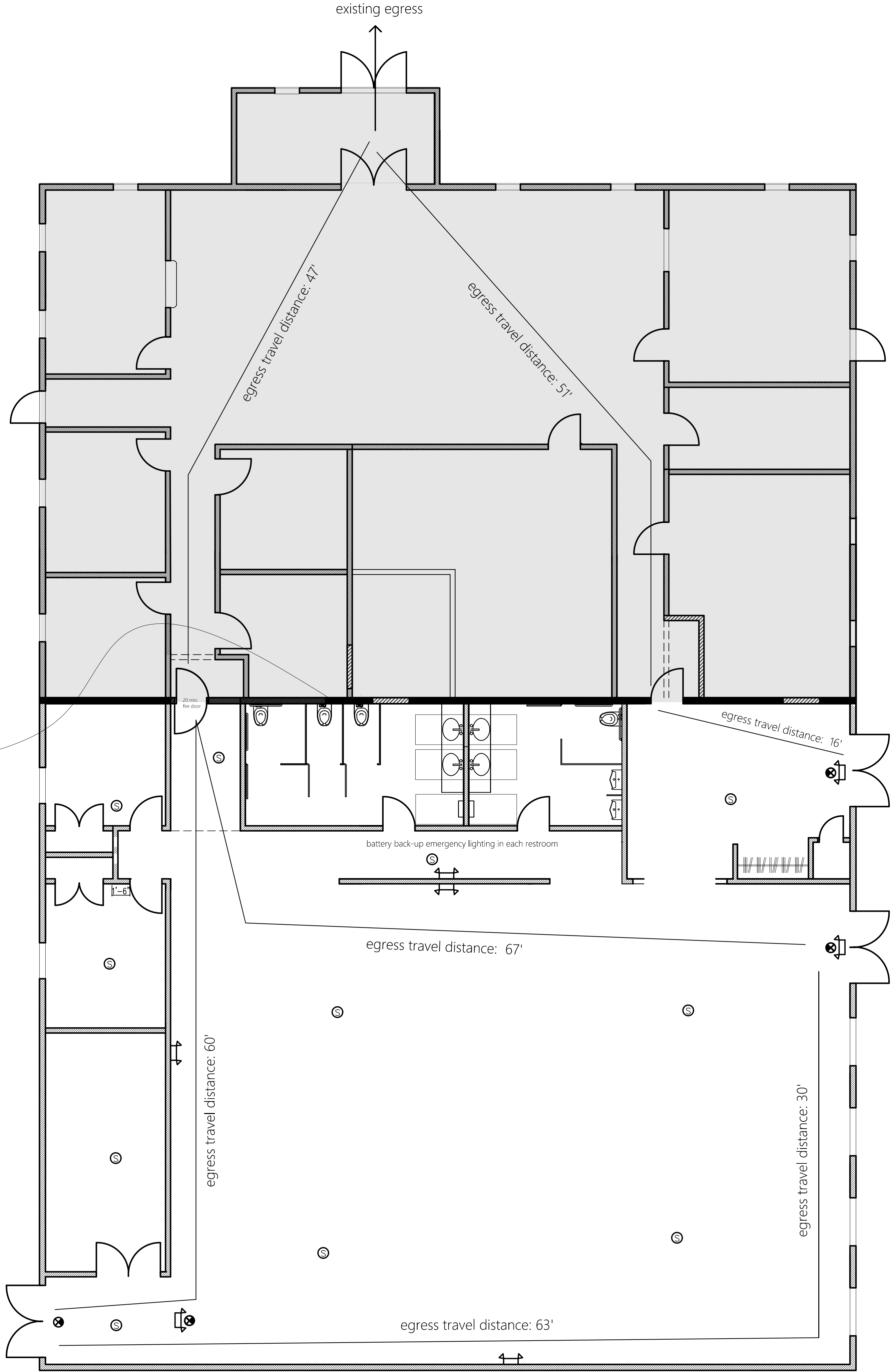
Text:

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2-4 hour fire rating, dependant on the width and condition of block wall and mortar joints (TBD when wall is exposed during renovation). Penetrations to be fire-stopped as required according to code.

clear door width:  
108x.2= 22.0"  
required: min. 32"  
proposed: 72"  
(panic hardware)



Floorplan  
life safety  
3/16"=1'

Illuminated Exit Sign  
Emergency Lighting

Note: Exit and emergency lighting to be placed, installed, maintained and ensured to perform to Chapter 7 of the NFPA 101, Life Safety Code.

Install emergency lighting according to manufacturers specifications regarding placement to ensure proper illumination as specified by 7.9.2.1 of NFPA 101, Life Safety Code.

Fire Alarms/Smoke Detectors will be provided as per 420.6 of the MBC 1025 and IBC 2015

Smoke alarms and illuminated exit lighting already exists currently in existing office space

Fire Alarms/Smoke Detectors will be provided as per 420.6 of the MBC 1025 and IBC 2015 and NFPA 101 9.6.2.1(2)

All doors to have 32" clear opening (404.2.3) and entry doors to have ADA threshold (404.2.5)

48"x48" clear floor space for outswing door, push side (48" deep and width of door plus 12" latch side space width) and 60"x48" or 60" pull side (60" deep and width of door plus 18" min., 24" preferred latch side space width) (404.2.4)

All door hardware to comply with ADA 404.2.7

Illuminated EXIT signs will be placed above each egress door and within the main space to direct towards the egress doors. These signs will have emergency electric system backup.

Emergency lighting will be located within the large space as well with an emergency electric system back up to help direct people towards the egress doors if the power goes out.

There will be a lighting fixture with battery back up above the exterior of all egress doors

Four 2-A, 2-B or C fire extinguisher will be placed within the space... one each at both emergency egress doors, the foyer and near the restrooms

All doors to have 32" clear opening (404.2.3) and exterior doors to have ADA threshold (404.2.5)

48"x48" clear floor space for outswing doors, push side (48" deep and width of door plus 12" latch side space width) and 60"x48" or 60" pull side (60" deep and width of door plus 18" min., 24" preferred latch side space width) (404.2.4)

All doors to have closer and latch

All door hardware to comply with aDA 404.2.7

Ensure exit signs are mounted above the doors and visible from 75 feet away. All egress lighting is to point down to illuminate the egress path of travel.

All fire extinguishers are to be ABC extinguishers, unless noted otherwise. All extinguishers are to be tagged with the current year's inspection on it. Annual inspections are to occur for all fire extinguishers.

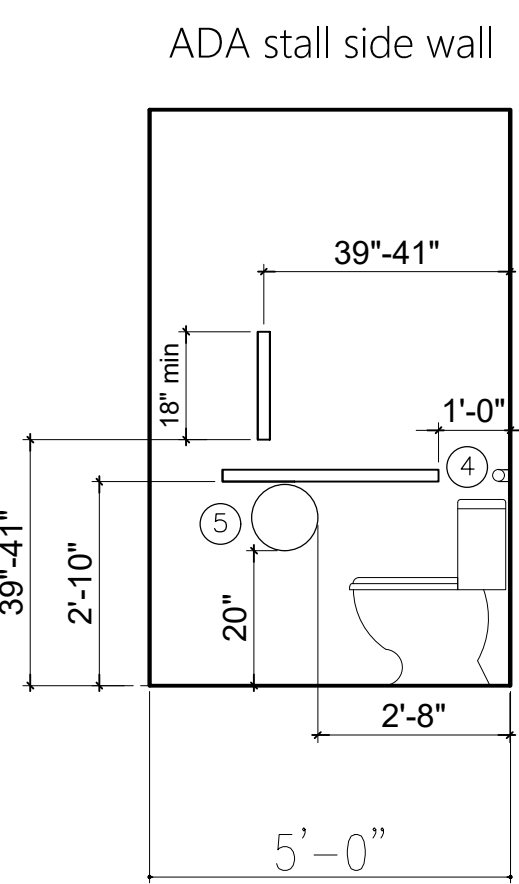
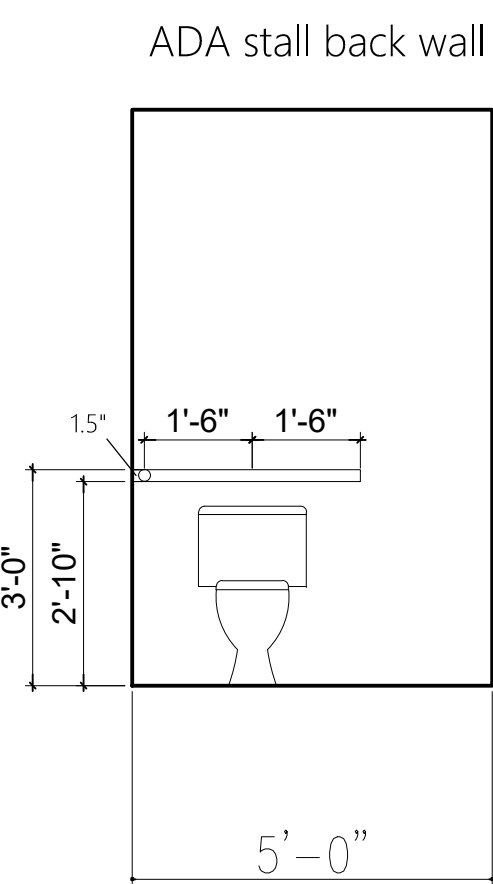
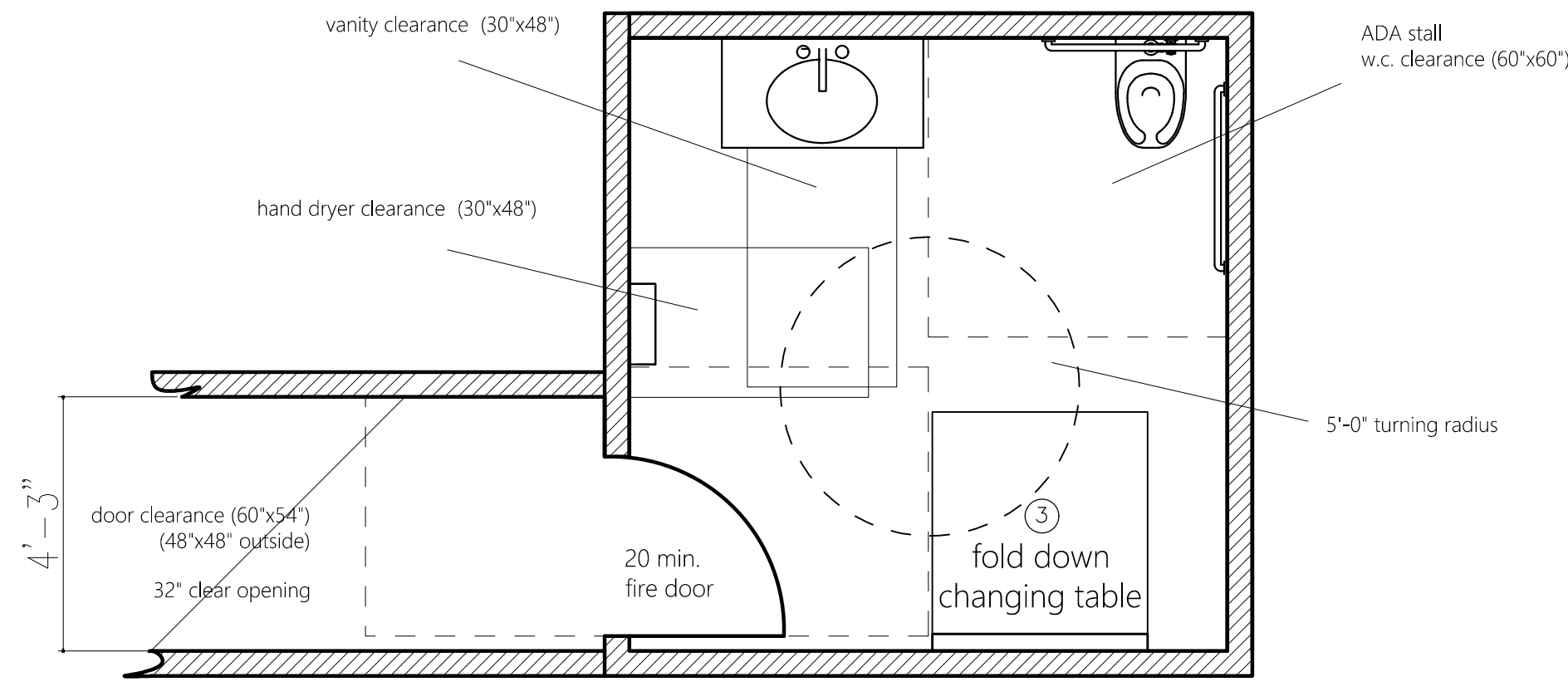
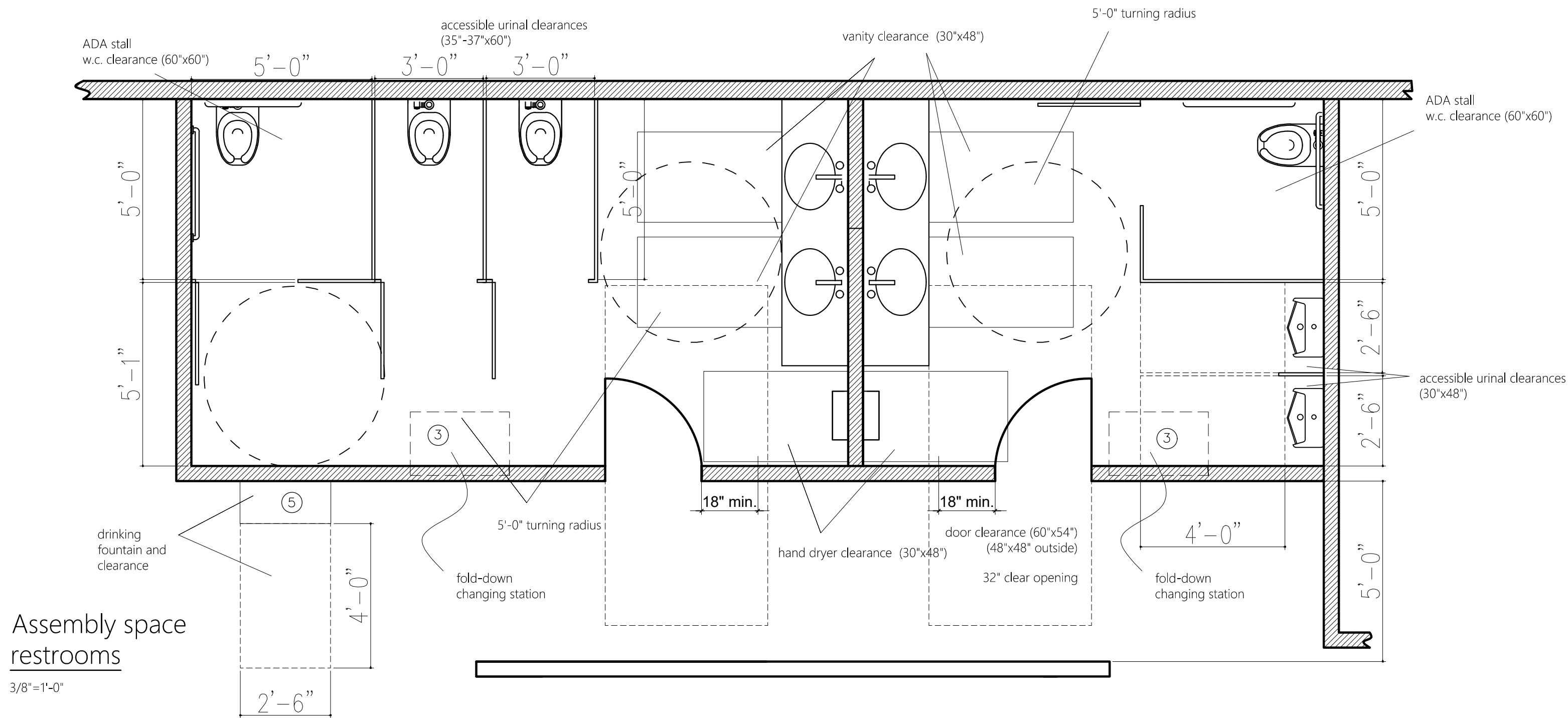
# Casco Township Hall Project

South Haven, Michigan

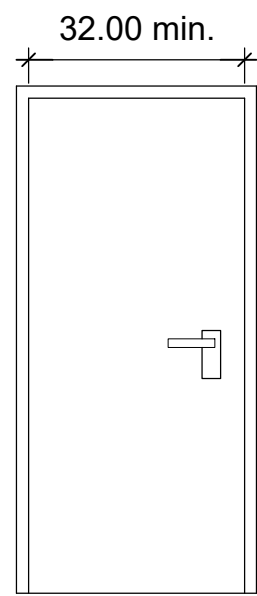
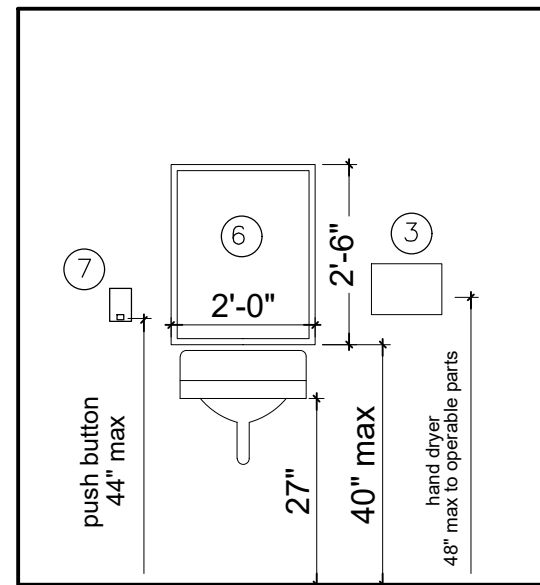
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example vanity dimensional requirements



3 HINGES  
1 CLOSER

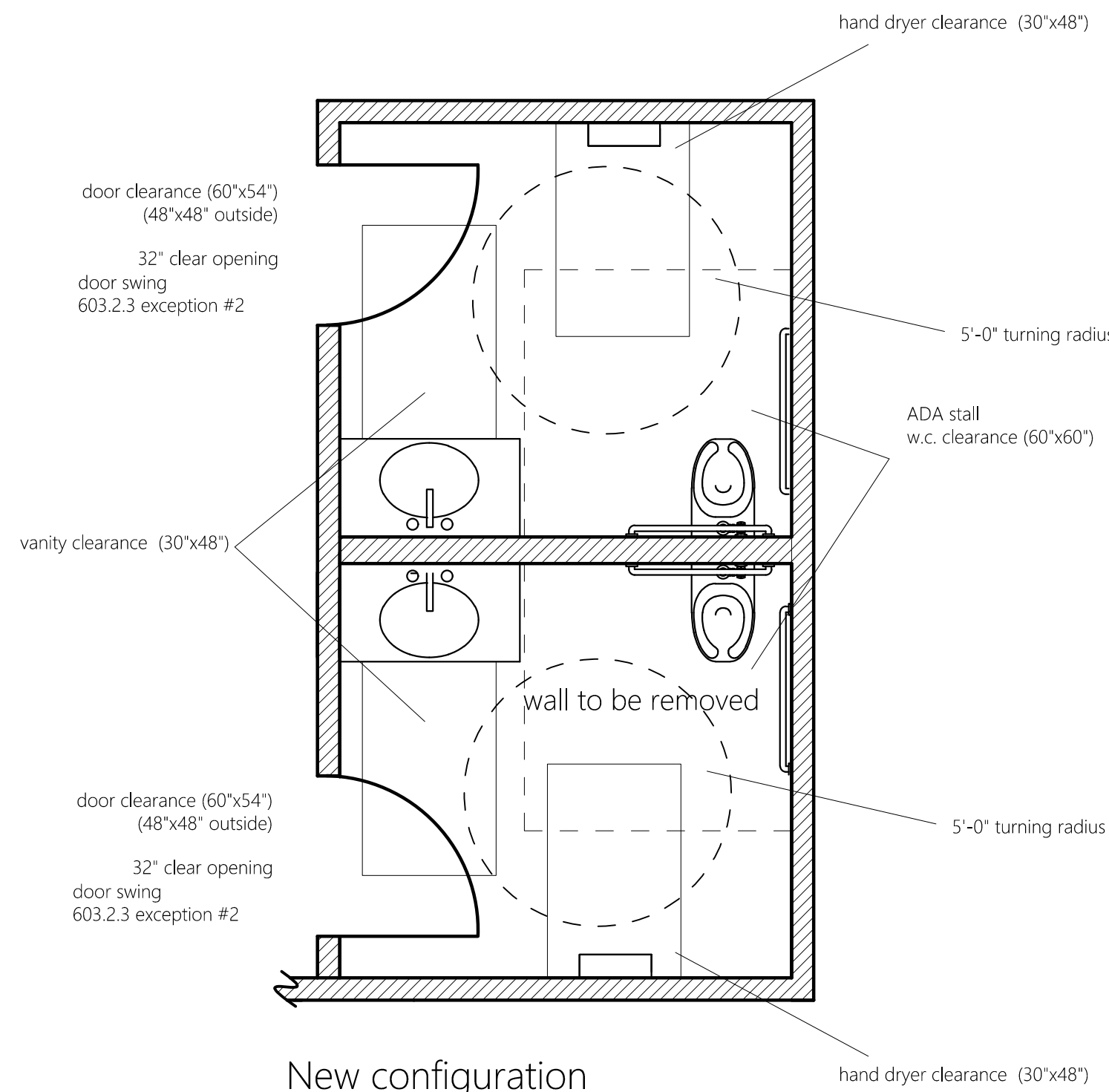
FLUSH  
PAINTED  
REPLICATE  
EXISTING

ROOM FINISH SCHED.									
		floor	base	all walls		ceiling			
		finish	finish	mat.	finish	mat.	finish	color	remarks
		stl	pt	wd	mat.	pt	DA		
1	restroom								DA=DensArmor Plus Abuse-Resistant Interior Panel, or similar moisture/mold/vandal resistant panel.

OPENINGS							
	door			frame			remarks
	mat.	finish	color	mat.	finish	color	
A	restroom doors	STL	PT	*	STL	PT	*
							-Lever type handle -Must allow for 32" min. clear width with door open.

PLUMBING & ANCILLARY FIXTURES			
	Item	Manufacturer & Item Number	Notes
1	Toilet	Amer. Standard Madera ADA Everclean Flushometer	Installed as drawn on Sheet 4 *
2	Lavatory	Amer. Standard Comrade Wall-Mounted Sink	Installed as drawn on Sheet 4 * with ADA compliant faucet
3	Changing Station	Bobrick Koala Kare KB200-01	Install at 30" above floor *
4	Hand Dryer	Bobrick 7120 Trimline ADA Hand Dryer	Install at 40" above floor *
5	Drinking Fountain	Halsey Taylor Lever Handle 4540 Bracket Fountain	27" min. knee clearance 36" max spout height *
6	Grab Bars	Bradley 817 Series 1.5"	Installed as drawn on Sheet 4 *
7	Toilet Paper Dispenser	Bobrick B2890	Installed as drawn on Sheet 4 *
8	Mirror	Bobrick B165 2430	Installed as drawn on Sheet 4 *
9	Soap Dispenser	Bobrick B-2111	Installed as drawn on Sheet 4 *

\* In compliance with ADA regulations



# Casco Township Hall Project

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Sheet

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269.767.1811





Lighting Layout

3/16"=1'

OUTLETS TO BE PLACED BY CODE, BUT CUSTOM OUTLET LOCATIONS AS WELL AS SWITCH LOCATIONS TO BE DETERMINED AFTER WALK THROUGH WITH OWNER AND ELECTRICAL CONTRACTOR

SEE LIFE SAFETY SHEET (SHEET 8) FOR INFORMATION AND LOCATION OF EMERGENCY LIGHTING AND ILLUMINATED EXIT SIGNAGE

1. ALL WORK SHALL CONFORM TO THE LATEST MICHIGAN BUILDING CODE, NATIONAL AND STATE ELECTRICAL CODE, STATE REGULATION AND AGENCIES HAVING JURISDICTION.
2. CONTRACTOR SHALL VISIT THE SITE WITH THE ARCHITECT AND/OR OWNER AND BECOME FAMILIAR WITH CONDITIONS PRIOR TO PROVIDING QUOTE. IT IS THE CONTRACTOR RESPONSIBILITY TO VERIFY ALL EXISTING SITE CONDITIONS, BOTH ABOVE AND BELOW THE SURFACE AND WITHIN THE EXISTING STRUCTURE PRIOR TO COMMENCING WORK. CONTRACTOR SHALL NOTIFY THE FACILITY'S REPRESENTATIVE OF ANY DISCREPANCIES FROM THE CONTRACT DOCUMENTS. IF EXISTING FIELD CONDITIONS ARE AT VARIANCE WITH THE RENOVATION LAYOUT, THE CONTRACTOR SHALL NOTIFY THE FACILITY'S REPRESENTATIVE AND AWAIT INSTRUCTIONS FROM FACILITY'S REPRESENTATIVE. ANY DISCREPANCIES BETWEEN THE INFORMATION SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO COMMENCING WORK.
3. ALL DIMENSIONS AND EXISTING EQUIPMENT ARE FOR GRAPHIC REPRESENTATION. ALL DIMENSIONS AND CONDITIONS ARE TO BE VERIFIED IN THE FIELD.
4. CONTRACTOR SHALL REPAIR AND RESTORE ALL DAMAGES CAUSED BY HIS WORK. REPAIRS HAS TO BE MADE TO THE SATISFACTION OF FACILITY AT THE CONTRACTOR EXPENSES.
5. DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL ITEMS TO BE REMOVED AS SHOWN IN DEMOLITION DRAWINGS. ALL MATERIAL REMOVED SHALL BE DISPOSED OF LEGALLY OFF THE SITE BY A LICENSED DEMOLITION COMPANY.
6. DO NOT LOAD OR PERMIT ANY PART OF EXISTING BUILDING TO BE LOADED WITH ANY MATERIAL OR EQUIPMENT THAT MAY ENDANGER ITS STRUCTURAL INTEGRITY.
7. ALL STREETS AND WALKWAYS SHALL BE KEPT CLEAR AND CLEAN AT ALL TIME. ALL REQUIRED WALK PROTECTION AND BARRICADES SHALL BE INCLUDED.
8. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS GOVERNING THIS WORK. THE CONTRACTOR SHALL COORDINATE DEMOLITION WITH APPLICABLE AGENCIES, UTILITIES COMPANIES, AND/OR SUB-CONTRACTORS.
9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR ANY DAMAGE AND/OR RESTORE ANY INTERRUPTION TO ANY UTILITY SERVICE THAT MAY BE CAUSED BY THE CONTRACTORS CONSTRUCTION OR EQUIPMENT, AT THE CONTRACTOR'S EXPENSE, WITH NO ADDITIONAL EXPENSE TO THE CITY.
10. THE CONTRACTOR IS TO USE CARE DURING CONSTRUCTION TO AVOID DISTURBING OR DAMAGING ADJACENT ABOVE-GRADE OR SUBGRADE STRUCTURES, FACILITIES, CURBS, PAVEMENTS, AND PERIMETER FENCING. ANY DAMAGE RESULTING FROM THIS WORK WILL BE RESTORED TO THE SATISFACTION OF FACILITY AT THE CONTRACTOR EXPENSE.
11. THE CONTRACTOR SHALL REMOVE, EXCAVATE, AND DISPOSE ALL MATERIALS ACCORDING TO SPECIFICATION. THE CONTRACTOR SHALL DISPOSE OF ALL ITEMS AND MATERIALS REMOVED AND NOT SALVAGED IN A LEGAL MANNER.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPROVED AGENCIES PRIOR TO COMMENCING WORK.
13. WHERE HEAVY EQUIPMENT IS BROUGHT ON SITE, THE AREA OF TRAVEL SHALL BE PLATED TO DISTRIBUTE THE LOAD AND TO PREVENT DAMAGE TO THE GROUNDS.

LEGEND:

ALL LED

	STANDARD SURFACE-MOUNTED - CEILING		CEILING FAN
	IC RATED RECESSED LIGHTING OR SURFACE MOUNT LED FIXTURE		120A/20A DUPLEX RECEPTACLES FOR INTERIOR FLUSH MOUNTING
	LARGE LED PENDANTS		THREE PRONG RECEPTACLE FOR WASHER/DRYER & STOVE (IF ELECTRIC)
	EXHAUST FAN - CEILING		120A/20A FLUSH MOUNTED WALL SWITCHES - SINGLE POLE & 3-WAY
	SURFACE-MOUNTED - WALL		
	EXTERIOR GRADE ELECTRICAL MATERIALS A 120V/20 WEATHERTIGHT DUPLEX RECEPTACLE, GFCI-PROTECTED & DEDICATED, & 120V SURFACE-MOUNTED OUTLET		
	SMOKE ALARM		

ALL OUTLETS PLACED AS REQUIRED BY CODE

PLAN TO BE REVIEWED BY OWNERS AND ELECTRICIAN

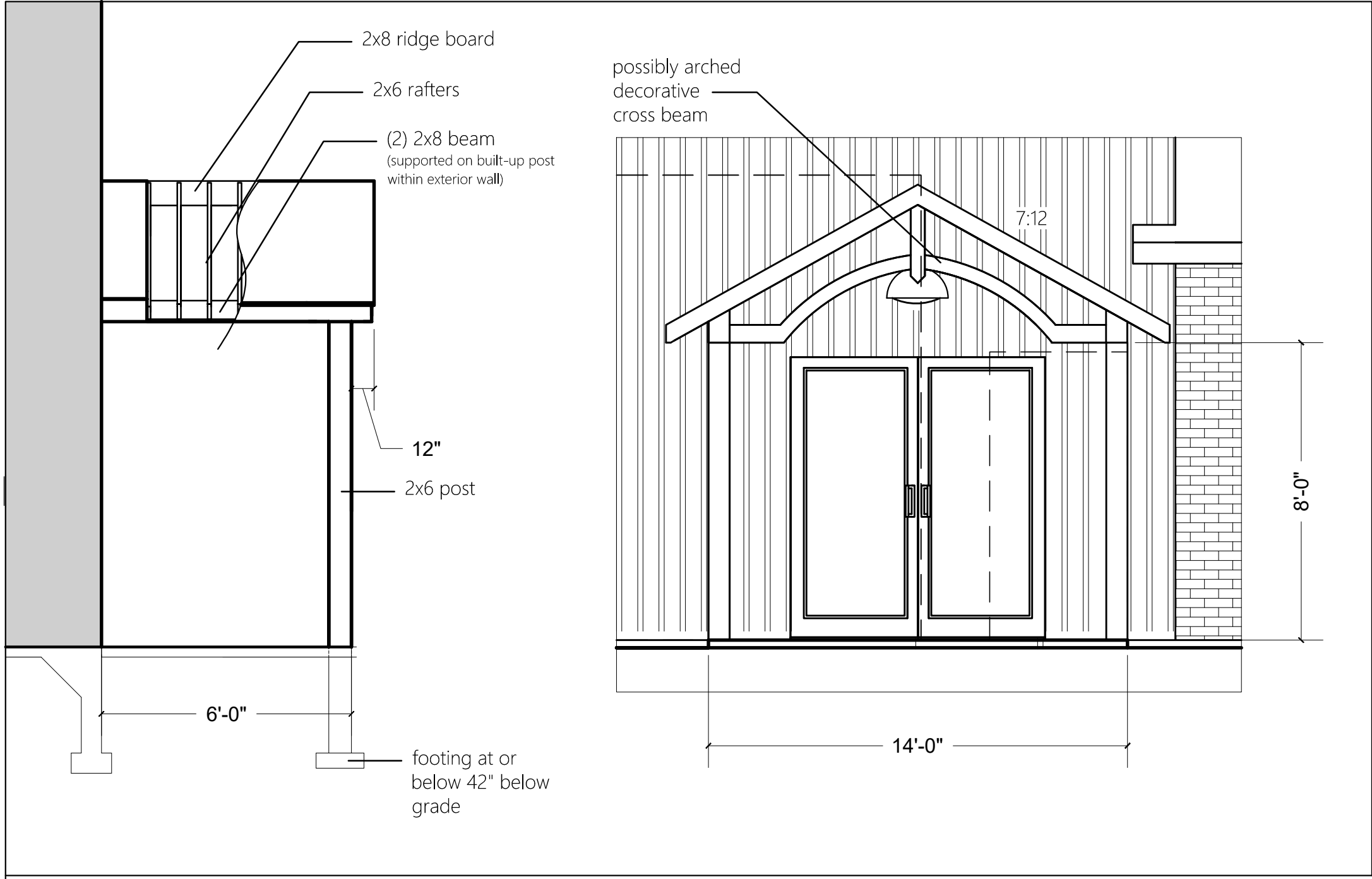
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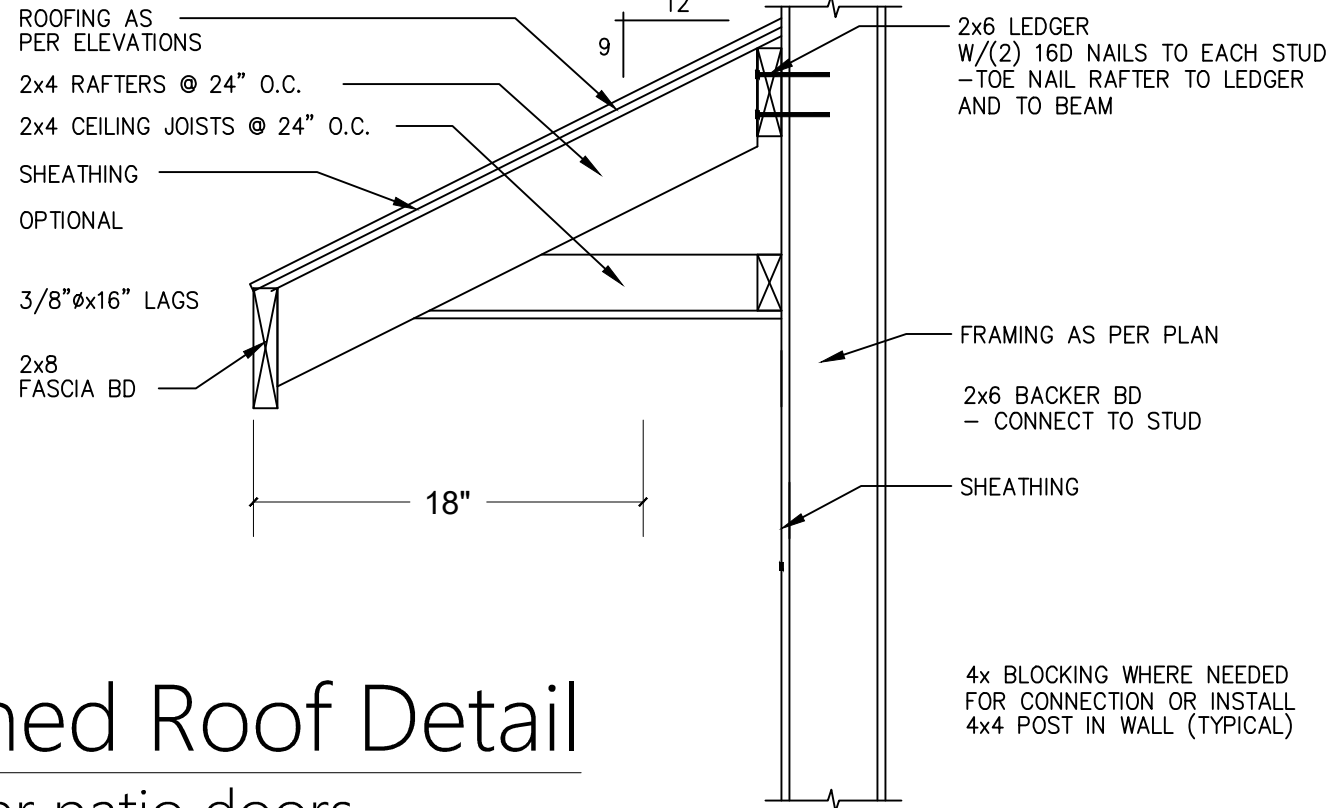


## Entry Overhang Detail

NTS

### NOTES:

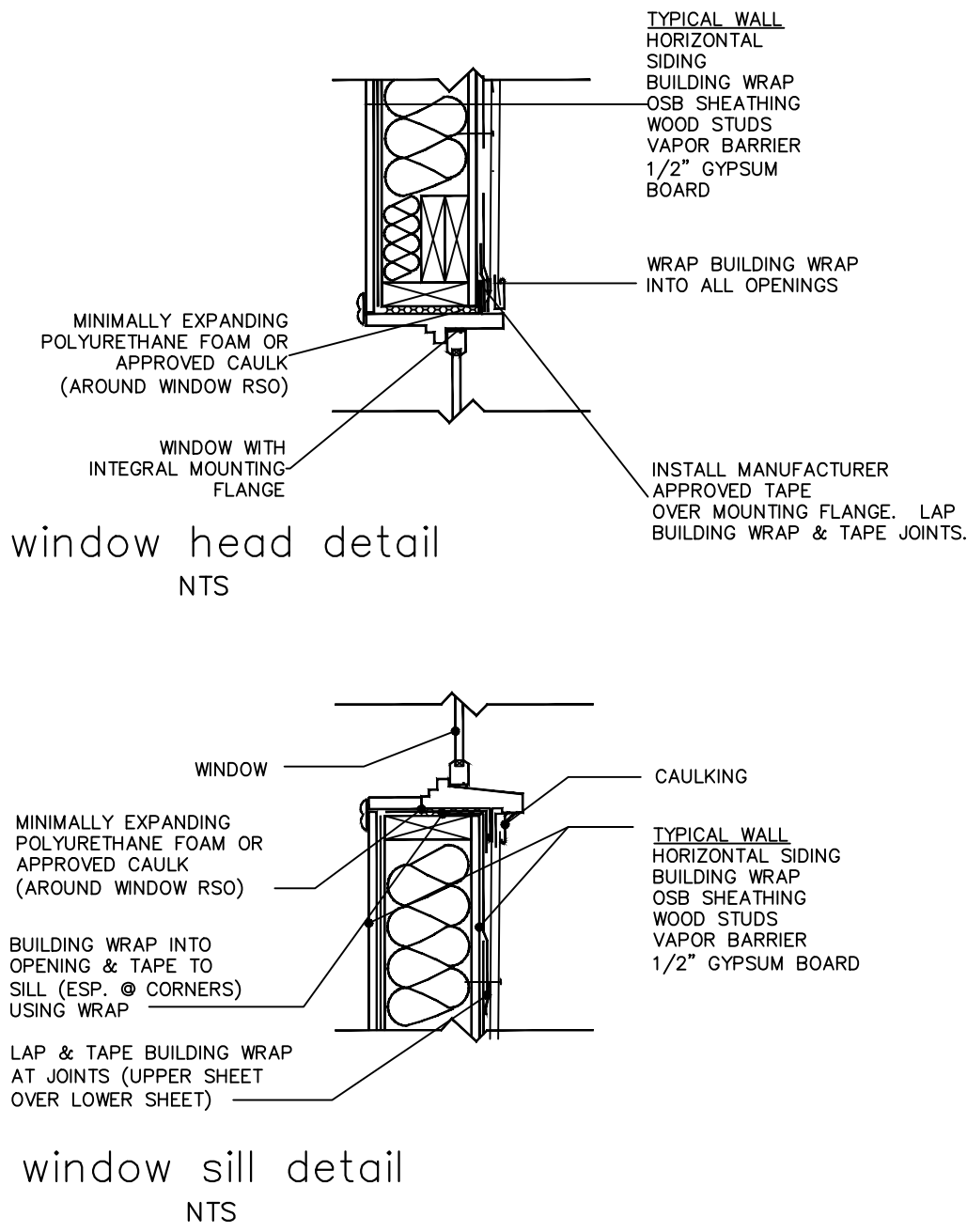
IF BRACE IS PLACED BETWEEN STUDS EITHER:  
OPTION 1-PLACE STUD FOR CONNECTION  
OPTION 2-PLACE 4x BLOCKING FOR CONNECTION  
-BRACE MAY BE CONNECTED TO HEADERS, BEAMS,  
RIM JOISTS, TOP PLATES, ETC.  
-LAGS MAY BE LONGER FOR THESE CONNECTIONS AS NEEDED.



## Shed Roof Detail

over patio doors

NTS



WINDOW SCHEDULE			
NO.	DIMENSION/ WxH (rough)	MATERIAL/MANUFACTURER	NOTES
1	3'-6"x5'-0"	TBD	fixed picture windows (south windows option)
2	2'-0"x4'-6"		casements office/storage windows
3	3'-6"x2'-0" (awning) 3'-6"-6'-0" (fixed)		awning window below, fixed 8 lite unit above

NOTE: - ALL INSULATED WINDOWS (UNLESS NOTED)

DOOR SCHEDULE			
NO.	DIMENSION/ WxH (rough)	MATERIAL/MANUFACTURER	NOTES
1	72.5"x80.25" outswing	TBD	double exterior egress full lite, lockable
2	72.5"x80.25" outswing		double exterior egress panic hardware

Interior doors type and fire rating (if necessary) noted on plan and Sheet 11

Interior door style to be determined by owner

### GENERAL NOTES

#### R311.7.1 Width.

Stairways shall not be less than 36 inches (914 mm) in clear width at all points above the permitted handrail height and below the required headroom height. Handrails shall not project more than 4.5 inches (114 mm) on either side of the stairway and the minimum clear width of the stairway at and below the handrail height, including treads and landings, shall not be less than 3-1/2 (787 mm) where a handrail is installed on one side and 27 inches (698 mm) where handrails are provided on both sides. The width of spiral stairways shall be in accordance with Section R311.7.9.1.

Exception: The width of spiral stairways shall be in accordance with Section R311.7.9.1.

#### R311.7.7 Handrails.

Handrails shall be provided on at least one side of each continuous run of treads or flight with four or more risers.

#### R311.7.7.1 Height.

Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm).

Exceptions:

- The use of a volute, turnout or starting easing shall be allowed over the lowest tread.
- When handrail fittings or bendings are used to provide continuous transition between flights, the transition from handrail to guardrail, or used at the start of a flight, the handrail height at the fittings or bendings shall be permitted to exceed the maximum height.

### WOOD TRUSS SPECIFICATIONS STAIRWAYS AND HANDRAILS HANDLING AND ERECTION SPECIFICATIONS

1. Designs shall conform with the latest versions of (NDS), "National Design Specification for Wood Construction" by the American Forest & Paper Association, and Design Standard for Metal Plate Connected Wood Truss Construction by the American Standard (ANSI) and the Truss Plate Institute (T.P.I.) and the local code jurisdiction.

2. Trusses shall be spaced as indicated on the plans unless the designer determines that different spacing is required to meet deflection requirements.

3. Maximum deflection of floor trusses shall be limited to 1/360 for total load and 1/480 for live load. Maximum deflection of roof trusses shall be limited to 1/240 for total loads and 1/360 for live load u.n.o.

4. Adequate camber shall be built into floor and parallel chord roof trusses to compensate for normal dead load deflection.

5. Design loads:

Roof: 30 p.s.f. top chord live load \* (or per "Michigan Residential Code" snow load)

7 p.s.f. top chord

10 p.s.f. bottom chord dead load \*\*

floor: 40 p.s.f. live load (per "Michigan Residential Code")

10 p.s.f. top chord dead load \*\*\*

5 p.s.f. bottom chord dead load

\* A 15% increase on allowable stresses for short term loading is allowed. Drift loading shall be accounted for per the current "Michigan Residential Code" requirements.

\*\* Add additional attic storage live loads per the current "Michigan Residential Code" requirements.

\*\*\* Tile, marble, or other special features shall be designed using the appropriate dead loads and deflection limitations. Partition loads shall also be considered where appropriate.

### STRUCTURAL STEEL SPECIFICATIONS

#### REINFORCING STEEL SPECIFICATIONS

1. Structural steel shapes, plates, bars, etc. Are to be ASTM A-36 (unless noted other wise) designed and constructed per the 1989 AISC "Specifications For The Design, Fabrication, And Erection Of Steel For Buildings", and the latest edition of the AISC "Manual Of Steel Construction".

2. Steel columns shall be ASTM A-501, Fy=36 KSI. Structural tubing shall be ASTM A500, grade B, Fy=46 KSI.

3. Welds shall conform with the latest AWS D11 "Specifications For Welding In Building Construction", And shall utilize E70XX electrodes unless noted otherwise.

4. Bolted connections shall utilize ASTM A-325 bolts tightened to a "snug fit" condition (unless noted otherwise).

1. Reinforcing bars, dowels and ties shall conform to ASTM-615 grade 60 requirements and shall be free of rust, dirt, and mud.

2. Welded wire fabric shall conform to ASTM a-185 and be positioned at the mid height of slabs U.N.O.

3. Reinforcing shall be placed and securely tied in place sufficiently ahead of placing of concrete to allow inspection and correction, if necessary without delaying the concrete placement.

4. Extend reinforcing bars a minimum of 36" around corners and lap bars at splices a minimum of 24" U.N.O.

5. Welding of reinforcing steel is not allowed.

#### R314.3 Smoke Alarms

Smoke alarms shall be installed in the following locations:

- In each sleeping room.
- Outside each separate sleeping area in the immediate vicinity of the bedrooms.
- On each additional story of the dwelling, including basements and habitable attics but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

#### SMOKE ALARMS

#### R703.7.5 Flashing.

1. Exterior window and door openings. Flashing at exterior window and door openings shall extend to the surface of the exterior wall finish or to the water-resistive barrier for subsequent drainage.

2. At the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting lips on both sides under stucco copings.

3. Under and at the ends of masonry, wood or metal copings and sills.

4. Continuously above all projecting wood trim.

5. Where exterior porches, decks or stairs attach to a wall or floor assembly of wood-frame construction.

6. At wall and roof intersections. 1.7. At built-in gutters.

\* Min. net clear opening of 5.7 sq. ft. (second floor bedrooms)

\* Min. net clear opening of 5.0 sq. ft. (first floor bedrooms only)

\* Min. net clear opening ht. of 24 inches

\* Min. net clear opening width of 20 inches

\* Max. sill ht. above finish floor of 44 inches

#### EGRESS WINDOW REQUIREMENTS

#### AREAS THAT REQUIRE SAFETY GLAZING

1. Trusses are to be handled with particular care during fabrication, bundling, loading, delivery, unloading and installation in order to avoid damage and weakening of the trusses.

2. Temporary and permanent bracing for holding the trusses in a straight and plumb position is always required and shall be designed and installed by the erecting contractor. Temporary bracing during installation, includes cross bracing between the trusses to prevent toppling or "dominoing" of the trusses.

3. Permanent bracing shall be installed in accordance with the latest of the "National Design Standard", as published by the American Forest & Paper Association and H.I.B.-91 and D.S.B.-85 as published by the truss plate institute. Permanent bracing consists of lateral and diagonal bracing not to exceed spacing requirements of the truss fabricator. Top chords of trusses must be continuously braced by roof sheathing unless otherwise note on the truss shop drawings. Bottom chords must be braced at intervals not to exceed 10' o.c. or as noted on the truss fabricators drawings.

4. Construction loads greater than the design loads of the trusses shall not be applied to the trusses at any time.

5. No loads shall be applied to the truss until all fastening and required bracing is installed.

6. The supervision of the truss erecting shall be under the direct control of persons(s) experienced in the installation and proper bracing of wood trusses.

7. Field modification or cutting of pre-engineered roof trusses is strictly prohibited without expressed prior written consent and details from a licensed professional structural engineer experienced in wood truss design and modifications.

1. All top soil, organic and vegetative material should be removed prior to construction. Any required fill shall be clean, granular material compacted to at least 95% of maximum dry density as determined by ASTM D-1557.

2. Foundations bearing on existing soils have been designed for a minimum allowable soil bearing capacity of 3000 psf, u.n.o.

3. Notify the engineer/architect if the allowable soil bearing capacity is less than 3000 psf so that the foundations can be redesigned for the new allowable bearing capacity.

#### 1. R404.1.7 Backfill placement.

Backfill shall not be placed against the wall until the wall has sufficient strength and has been anchored to the floor above or has been sufficiently braced to prevent damage by the backfill.

#### R506.2.1. Fill.

ill material shall be free of vegetation and foreign material. The fill shall be compacted to assure uniform support of the slab, and except where approved, the fill depths shall not exceed 24 inches for clean sand or gravel and 8 inches for earth.

#### R506.2.3 Vapor retarder.

A 6 mil polyethylene or approved vapor retarder with joints lapped not less than 6 inches shall be placed between the concrete floor slab and the base course or the prepared subgrade where no base course exists.

1. Concrete work shall conform to the requirements of ACI 301-96, "Specifications for Structural Concrete for Buildings", except as modified as supplemental requirements.

2. Concrete shall have a minimum of 3000 psi, 28 day compressive strength, unless noted otherwise, (4 sacks) & a water/cement ratio not to exceed 6 gallons per sack). Exterior concrete slabs shall have a minimum of 4000 psi, 28 day compressive strength, & 4% air entrainment.

3. The use of additives such as fly ash or calcium chloride is not allowed without prior review from the architect.

#### R405.1 Concrete or masonry foundations.

Drains shall be provided around all concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. Drainage tiles, gravel or crushed stone drains, perforated pipe or other approved systems or materials shall be installed at or below the area to be protected and shall discharge by gravity or mechanical means into an approved drainage system. Gravel or crushed stone drains shall extend at least 1 foot beyond the outside edge of the footing and 6 inches above the top of the footing and be covered with an approved filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper, and the drainage tiles or perforated pipe shall be placed on a minimum of 2 inches of washed gravel or crushed rock at least one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches of the same material.

Exception: A drainage system is not required when the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group 1 Soils, as detailed in Table R405.1.

### GENERAL SITE NOTES:

1. CONTRACTOR MUST BE LICENSED AND BONDED BY THE CITY.

2. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE.

3. CONTRACTOR SHALL COMPLY TO TH FULLEST EXTENT WITH ALL REGULATIONS GOVERNING THE DEMOLITION, REMOVAL, TRANSPORTATION AND DISPOSAL OF ALL DEMOLITION DEBRIS.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING DISCONNECTION OF ALL UTILITIES SERVING THE EXISTING SITE WITH THE APPROPRIATE UTILITY COMPANY, AND SHALL OBTAIN APPROVAL FROM SAME TO COMMENCE DEMOLITION ACTIVITIES.

5. CONSTRUCTION SHALL COMPLY WITII ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.

6. ALL SIDEWALKS SHALL HAVE A MINIMUM SLOPE OF 1/4" PER FOOT.

7. EXPANSION JOINTS TO BE PLACED WHERE BUILDING FOUNDATION MEETS CONCRETE SIDEWALK.

8. ALL WATER SERVICE LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH GOVERNING REGULATIONS.

9. IN THE EVENT PLANS OR STANDARD DETAILS CONFLICT WITH THE CITY PLUMBING ORDINANCES, CITY ORDINANCES SHALL CONTROL AND BE ADHERED TO IN ALL CASES.

10. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES

11. CONTRACTOR SHALL MAKE EVERY EFFORT POSSIBLE TO MINIMIZE THE DISTURBANCE OF ALL EXISTING SHRUBS, LAWNS, AND OTHER LANDSCAPING FEATURES AND SHALL COORDINATE REMOVAL OF TREES WITH OWNERS

12. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE CITY UTILITY DEPARTMENT AS TO LOCATION AND SCHEDULING OF TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO EXISTING UTILITIES.

13. DRAWINGS TO NOT PURPORT TO SHOW ALL EXISTING UTILITIES.

14. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.

15. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.

16. CONTRACTOR SHALL VISIT EXISTING CONDITIONS OF THE SITE.

17. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY, STATE, FEDERAL AND OSHA REGULATIONS.

18. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST FILED LOCATION OF UTILITIES.

Casco Township Hall Project

South Haven, Michigan

Scale

Date

Project

3.17.2025

Sheet

11

Brian Peterson

269.767.1811



06 00 00 - Wood, Plastics, and Composites  
Contractor shall review construction documents and provide labor and materials pertaining to carpentry work as required in said documents and as specified herein, while complying with all applicable building codes.

06 10 00 - Rough Carpentry  
Lumber shall be of live, sound stock and properly dried. Pressure treated lumber shall be used where any lumber shall come into contract with concrete, masonry block or soil and when using as support members for decks, porches or balconies. Lumber for use at exterior shall have a maximum 12 percent moisture content, for dry climates 9 percent is recommended. Provide adequate bracing and shoring during the construction process. Studs and joists cut to install plumbing and/or wiring shall be reinforced by adding metal or wood structural reinforcing to strengthen member back to original capacity and maintain structural integrity. Holes bored shall not be larger than 1/3 the depth and not closer than 2" to the top or bottom of the joist.

06 11 00 - Wood Framing  
Floor Framing - Information below pertains to conventional stick framing, if pre-engineered trusses are used follow manufactures guidelines for installation. Pressure treated lumber shall be used where any lumber shall come into contract with concrete, masonry block, roof curbing or roof blocking.

Girders: Install girders in pockets formed in the foundation or on top of the sill plate. The pocket should allow a minimum of 1/2" on both sides for circulation.

Girders: solid wood, two or more 2" planks, laminated veneer lumber, glue-lam beams, steel beams

Sills: Install single 2"x 6", 4"x 6" or double 2"x 6" solid pressure treated lumber horizontally on foundation. Bore holes in sills for anchor bolts.

Floor Joists: Space floor joists 16" on center (OC) depending on type of construction, load bearing and spanning capabilities of wood species. Joists shall rest on a minimum 1 1/2" of bearing wood or 3" of masonry. Cut joists flush with the outside edge of sill. If joists are lapped over girder, the minimum amount of lap is 4" and maximum overhang is 12". Do not lap at wood I-beams. Joists shall be installed so that the end of the sub-floor sheets fall directly on the center of the floor joists. Nail joists at each bearing point using one 8d or 10d nail on each side. Nails shall be at least 1 1/2" from ends. Wood cross bridging shall be at least nominal 1" x 3" lumber with two 6d nails at each end. Install one row of bridging for 12'-0" spans and less, over 12'-0" spans install two rows of bridging.

Exterior Walls - All exterior walls shall be constructed with 2"x4" wood studs at 16"on center (OC), with single bottom plates and double top plates throughout. Provide solid blocking at mid-height of all walls. For exterior corner joints, install (3) 2"x 4"s, 2"x 6"s nailed together. Where interior partitions meet exterior walls, install 2 studs fastened together with 2"x 4", 2"x 6" blocks approximately one foot long. One block is placed at the bottom, one at the top and one about center of the studs.

Where exterior openings occur on 2"x 4" exterior walls, provide structural headers designed with (2) 2" x 10"s with a 1/2" continuous plywood flitch plate glued and nailed between the 2"x10"s. (For 2"x 6" exterior walls provide (3) pieces of 2"x 10" lumber fastened securely together.) At window sills, provide a single piece of 2"x 4", 2"x 6" lumber. Provide double jacks or liners for openings 6'-0"wide or greater, unless otherwise noted. Provide 1/2" plywood sheathing and 1"x 4" diagonal bracing at exterior wall corners for shear wall strength and stiffness.

Fascia and Soffit - Provide and install wood, aluminum or vinyl fascia and soffit. See construction documents for complete architectural details.

Interior Walls  
All interior walls shall be wood studs, with single bottom plates and double top plates throughout.

Ceiling Joists: The size of ceiling joists are determined by span, load and the kind and grade of lumber. Check appropriate spanning charts with local building officials. At openings in ceilings, double joists for structural rigidity.

Roof Framing: Construction components vary according to geographical location and the size of the overall structure. The size of joists are determined by span, load and the kind and grade of lumber. Check appropriate spanning charts with local building officials. At openings in roof, double joists for structural rigidity. For ridges, hips and valleys, install laminated veneer lumber when ridge, hip or valley spans are greater than 28'-0". Provide Simpson H2.5 anchors at all rafters or trusses to plates and at alternate studs.

Roof Decking - Provide and install exterior sheathing of APA rated and code certified CDX plywood panels or OSB. Sheathing shall be installed with the face grain running across the rafters, vertical joints staggered. Nails shall be 6d or 8d common smooth, ring-shank or spiral thread nails spaced 6" apart on the ends and 12" apart inside. Install with plywood "H" clips between each piece of decking, every 48". Install one layer of moisture barrier 15# or 30# felt, overlapped a minimum of 6".

Decks, Porches, Balconies - Exterior grade lumber shall be used for exterior decks, porches or balconies. Provide and install galvanized joist hangers to connect 2"x 10" floor joists to the main structure every 12"-16"on center (OC). All handrails shall be constructed so as to prevent passage of a 4" sphere. Provide handrail and detailing as shown in construction documents. Stain and seal wood a minimum of 6 months after installation to allow for proper curing. Wood type shall be: redwood, cedar, treated pine, etc.

06 16 00 - Sheathing  
Between studs and sheathing, install one layer of approved moisture barrier overlapped a minimum of 6". Provide and install exterior sheathing of 1/2" rated plywood panels, fiberboard, gypsum board or rigid foam board. For plywood panels, use 6d nails spaced 6" apart on the edges and 12" apart on the studs. For fiberboard sheathing, fasten with roofing nails or button caps spaced 3" apart at edges and 6" apart in the center, a minimum of 3/8" from edges. For Gypsum sheathing use roofing nails or button caps, spaced 4" apart around the edges and 8" apart on the studs. inside. For rigid foam board consult EIFS system for specific manufacturers recommendations.

06 16 23 - Subflooring  
3/4" tongue and groove plywood sub-floor shall be installed with both nails and approved sub-floor adhesive. Stagger joints a minimum 2 stud spaces. For attic access, install necessary plywood walkways to meet applicable building codes.

06 20 00 - Finish Carpentry  
All architectural trim and woodwork shall be No. 1 grade material suitable for appropriate finishes. Wood that will be stained shall be clear of knots with concealed joints.

06 22 00 - Millwork  
Moisture content for interior woodwork shall be 8-10 percent to reduce excess shrinking. Provide and install interior wood trim as shown in construction documents. Install quarter round molding between hardwood floor, ceramic tile or other hard surface material and baseboard trim.

07 00 00 - Thermal and Moisture Protection  
Contractor shall review construction documents and provide labor and materials pertaining to thermal and moisture protection work as required in said documents and as specified herein, while complying with all applicable building codes.

07 10 00 - Dampproofing and Waterproofing  
All joints and penetrations in walls, floors, and roofs shall be made watertight using approved methods and materials. Waterproofing and dampproofing recommendations contained herein are minimum, check with local code officials for additional requirements.  
Slab Foundations - Install a minimum (6 mil) polyethylene vapor barrier in all slabs, directly underneath concrete. Lap joints not less than 12 inches and tape and seal in accordance with manufacturers guidelines.  
Crawlspace Foundations - Install a minimum (4 mil) polyethylene vapor barrier in all crawlspace areas. Lap joints not less than 12 inches and seal in accordance with manufacturers guidelines.

07 13 13 - Felt  
On all roof surfaces install a minimum 15, 30 # asphalt impregnated roofing felt. For roofs that are steeper than a 6:12 pitch use a single layer of felt. For roofs with less than a 6:12 pitch install a double layer of felt and overlap a minimum of 18". Overlap felt a minimum of 4" vertically and 12" horizontally. Continue felt 6" up all vertical surfaces and 4" over gutter and valley metal. Fasten all edges with large headed galvanized nails on 6" centers. Lay courses parallel with eaves. Do not stretch courses.

**03 00 00 - Concrete**  
Contractor shall review construction documents and provide labor and materials pertaining to concrete and foundations as required in said documents and as specified herein, while complying with all applicable building codes.

**03 05 00 - Common Work Results for Concrete**  
All concrete work shall be designed on the basis of "Strength Design" in accordance with ACI 318 "Building Code Requirements for reinforced Concrete." Concrete work shall be proportioned in accordance with ACI 301 "Specifications for Structural Concrete" and ACI 211.1 "Recommended Practice for Selecting Proportions for Normal Weight Concrete". Concrete slabs, patios, driveways, walls and foundations shall be constructed of a minimum 3000 psi concrete, 28 day test, with a 4" minimum to 6" maximum slump maximum, air-entrained to 5 - 8%. No additional water shall be added to concrete after slump test is recorded. Concrete should be a mix of high grade Portland cement, clean sand or granular fill and washed gravel or crushed stone as coarse aggregate per ACI 530. Maximum aggregate size shall be 3/4". All aggregates shall conform to ASTM C33. Gravel should be well graded and not exceed 1 1/2" in size. Water shall not exceed 5 1/2 gallons for each bag, unless sand is very dry. Concrete shall be mixed using an approved batch machine or mobile mixer until uniform in color and providing a 4" minimum to 6" maximum slump.

**03 10 00 - Concrete Forming and Accessories**  
Provide all labor, materials and equipment necessary for the completion of the plain and reinforced concrete called for on the plans. Concrete when deposited shall have a temperature ranging between a minimum of 50 degrees Fahrenheit and a maximum of 90 degrees Fahrenheit.

**Construction of Forms** - Construct wood forms of sound material, and of the correct shape and dimensions, constructed tightly and of sufficient strength. Brace and tie the forms together. Make joints and seams mortar tight. Install leakage control materials in accordance with manufacturer's installation instructions.

**Embedded Items** - make provisions for sleeves, anchors, inserts, water-stops and other features.

**Form Ties** - Use form ties of sufficient strength and in sufficient quantities to prevent spreading of the forms. Place ties at least 1 inch away from the finished surface of the concrete. Do not use ties consisting of twisted wire loops. Leave inner rods in concrete when forms are stripped. Space all form ties equidistant and symmetrical and line up both vertically and horizontally.

**Cleanouts and Access Panels** - Provide removable cleanout sections or access panels at the bottom of all forms to permit inspection and effective cleaning of loose dirt, debris and water material. Clean all forms and surfaces to receive concrete of all chips, sawdust, and other debris and thoroughly blow out with compressed air just before concrete is placed.

**03 15 13 - Concrete Accessories**  
Provide 1/2" thick by 4" wide bituminous expansion joint material at all surfaces where slabs adjoin raised slab, crawlspace or basement stem-wall CMU or poured foundations.

**03 21 00 - Reinforcing Steel**  
Reinforcing steel (rebar) shall be minimum ASTM A615, grade 40. All reinforcement splices shall be as follows: #5 bars 25" minimum, #7 bars 35" minimum. All rebar (reinforcing steel) shall be located 3" clear from bottom and side of footing and 2" clear from top. Locate vertical rebar (reinforcing steel) 4'-0" on center (OC). All reinforcement splices shall be in accordance with ACI 318 for "Strength Design." All reinforcement steel shall be accurately placed, rigidly supported, and firmly tied in place with bar supports and spacers in accordance with ACI 301 and ACI 318.

**03 22 00 - Welded Wire Fabric Reinforcing**  
Welded wire fabric shall conform to ASTM A105 and be located in the center of the depth. Install at slab on grade conditions.

**03 30 00 - Footings**  
Center all footings on walls, piers, or columns above unless otherwise noted. All footings shall rest on undisturbed virgin soil with minimum soil bearing allowable of 2500 psf, tested for 95 percent compaction, or 3/4" stone compacted in 12" lifts to 95 percent density if fill is required. Footings at building perimeter shall be a minimum of 12" below frost line and 20" wide, (check with local building officials for frost line level) constructed of 3000 psi concrete. Provide 3 - #5 rebar (reinforcing steel) continuous through footers. Provide #5 rebar (reinforcing steel) corner bars at all corners and intersections of footers, beams and walls. Each side should overlap 2'-0", with a 90 degree bend. Footers shall bear on undisturbed soil and kept free from ground water. Underneath load-bearing walls and interior or exterior column footings, thicken slabs within a 1' radius to 12"thick.

**03 35 00 - Concrete Finishing**  
Repair of surface defects shall begin immediately after removal of form or pouring of slab foundation. Provide smooth steel trowel finish for all interior slab areas and garage surfaces. Provide broom finish texture for all exterior slabs. Slope exterior patio or porch slabs away from building at 1/4" of drop in elevation for every 1'-0" in distance. At garage slab, provide positive drainage and taper lip at garage/overhead door. Patch all voids and depressions exceeding 3/8 inch in any direction.

08 50 00 - Windows  
Confirm that openings are compliant with all applicable building codes concerning egress, lighting and ventilation requirements. Temper all glass located within 2'-0" from exterior doors, all glass in doors and above tub enclosures. Provide and install necessary windows and appropriate hardware to operate and lock windows. Hardware Finish shall be: TBD by owner.

08 71 00 - Door Hardware  
Finish hardware shall include keyed deadbolt locksets at all exterior doors. Interior doors shall be a combination of privacy and passage locks. Hardware shall be as per allowance. Specify in chart below the type of hardware for each door. All exterior locksets shall be keyed the same.

08 71 01 - Door Hardware - Thresholds  
Provide and install thresholds (material TBD) and appropriate door sweeps at exterior doors.

09 29 00 - Gypsum Board  
Gypsum board must be held firmly against the framing while fastening to avoid later movement of gypsum board on the shank of the nails or screws.

Nails or Screws: Nails and screws shall be a minimum 3/8" and a maximum of 1/2" from edges and ends of wallboard and the heads shall be seated slightly below the surface without breaking the paper. Nails shall be spaced not to exceed 7" on ceilings or 8" on sidewalls. Head diameter shall be a nominal 1/4" with the length 1 1/2" to penetrate a minimum of 7/8" into nailing member. Nails shall meet the minimum requirements of ASTM C514 and may include coated, etched treated or annular ring shanks to improve withdrawal resistance. Drywall screws shall meet the minimum requirements of ASTM C1002. Bugle-shaped heads shall be 0.315" in nominal diameter and contain a No. 2 Phillips driving recess. Type "W" screws are designed for easier fastening in wood.

Joints: At gypsum wallboard joints install a 2" strong, cross threaded tape with a cross tensile strength of 45 lbs per lineal inch. Press a strong, good quality tape firmly onto sheathing joints and around openings, imbedded in joint cement. At corners and angles, install metal corner beads as specified by manufacturer. If corners are rounded, install corner reinforcement as required. Spread gypsum wallboard mud at all tape joints, corner beads, nails and screw penetrations and where a smooth surface is needed. Apply second coat of wallboard mud after a minimum 24 hours. After drying (minimum 48 hours), sand all joints and other areas to a smooth consistent surface.

Interior Walls: Sheath walls and ceilings with 1/2" gypsum wallboard, either vertically with long edges parallel to framing, or horizontally with long edges at right angles to framing members. Offset joints between layers at least 10"

Ceilings: Apply a single layer of 1/2" gypsum wallboard across the supports and fasten with nails or screws. Offset joints between layers at least 10". Nails are spaced 6"on center (OC) with 1 1/4" heads. Screws are spaced 12" on center (OC). Ceiling finish shall be smooth.

Fire-Rated Gypsum Wallboard: In garages, around gas water heaters and as required by applicable building codes, install 5/8" Type "X" fire-rated gypsum wallboard. Nails shall be 1 3/4" long, spaced a maximum of 4" on center (OC) around perimeter and 8" on center (OC) in the field of the board.

Water Resistant Gypsum Wallboard: Around showers, tubs, whirlpools, or as required by applicable building codes, install 1/2" water resistant drywall.

09 60 00 - Flooring  
Contractor shall properly clean all surfaces to be covered and install appropriate underlayment or preparation per manufacturers recommendations.

09 91 23 - Interior Painting  
All nail heads shall be set below the surface and finished smooth. Joints should be taped and covered with a suitable drywall joint compound. Sand the spackled nail heads and joint compound smooth and dust well before priming. Interior walls shall receive a primer coat and two coats of flat or semi-gloss paint. Surfaces shall be sanded before each finish layer is applied.

Specify Wall Paint: TBD by owner

09 93 00 - Interior Wood  
Wood surfaces shall be sanded smooth before finish is applied. Putty areas with a wood based filler where nails or other defects appear in the surface.

15 00 00 - Mechanical  
Contractor shall review construction documents and provide labor and materials pertaining to the mechanical systems, as required, while complying with all applicable building codes.

22 00 00 - Plumbing  
Plumbing shall be a fully operational system of hot and cold water. Provide and install all piping, soil, vents, drains, sewage removal and water supply systems to connect with appropriate water and sewage systems. Provide and install appropriate insulation around piping. All permits and inspections are to be obtained by contractor as required by local building codes and the Uniform Plumbing Code.

Provide shut-off valves at sinks, toilets, water heater and other fixtures as required. Test all pipes under 100 lbs pressure per building code requirements.

Waste Drainage - Install sewage clean-out at the end of each horizontal drainage run and every 100 feet per building code requirements. Vents shall be installed throughout plumbing connections and connected with the vertical stacks and vented through the roof. Check with local building code officials for specific venting requirements.

# Casco Township Hall Project

## South Haven, Michigan

Scale	Date	Project
	3.17.2025	

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