

COMMUNITY DEVELOPMENT DEPARTMENT

45175 Ten Mile Road Novi, MI 48375 (248) 347-0415 Phone (248) 735-5600 Facsimile www.cityofnovi.org

ZONING BOARD OF APPEALS STAFF REPORT

FOR: City of Novi Zoning Board of Appeals ZONING BOARD APPEALS DATE: March 9, 2021

REGARDING: 24847 Dinser Drive, Parcel # 50-22-20-301-023 (PZ21-0010)

BY: Larry Butler, Deputy Director Community Development

GENERAL INFORMATION:

Applicant

Kensington Family Homes

Variance Type

Dimensional Variance

Property Characteristics

Zoning District: Residential Acreage

Location: East of Wixom Road and North of Ten Mile Road

Parcel #: 50-22-20-301-023

Request

The applicant is requesting variances from the Novi Zoning Ordinance Section 3.1.1 for a proposed aggregate side yard setback of 45 feet (50 feet required, variance of 5 feet). This variance will accommodate the building of a new home. This property is zoned Residential Acreage (RA).

II. STAFF COMMENTS:

III. RECOMMENDATION:

The Zoning Board of Appeals may take one of the following actions:

1.	I	move	that	we	<u>grant</u>	the	variance	in	Case	No.	PZ21-0010,	sought	by for
	 di	fficulty re	equiring	J							oner has sho	own prac	
						ecaus	er will be ur e					d with res	pect
		(b) The	e prope	erty is u	ınique b	ecaus	se				·		
		(c) Pe	titioner	did nc	ot create	e the c	condition be	caus	e		·	_	

	(d)				nted w ause								acent c 	or su	rroun	ding
	(e)	The			consiste			·					ordinar —	nce	beca	ause
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2. I	mo	ve			deny					Case	No.	PZ2	1-0010,	SOI	ught	by
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pre		The inclu	uding_	circu	ımstanc hrougho	es	and	l	feat	ures	C	of	the		prop	,
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	(d)				ould res					e adja	cent	and s	surrounc	ling	orope	erties
	(e)		_		ariance						•	and in	itent of	the c	ordina	ance

Should you have any further questions with regards to the matter please feel free to contact me at (248) 347-0417.

Larry Butler Deputy Director Community Development City of Novi



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ZONING BOARD OF APPEALS APPLICATION

APPLICATION MUST BE FILLED OUT COMPLETELY

I. PROPERTY INFORMATION (Addre	ess of subject ZBA Ca	ase)	Application Fee:	250.00
PROJECT NAME / SUBDIVISION Vacant Land South of Delmont Drive	e on the West side o	I	Meeting Date:3	
ADDRESS 24847 DIMSU		LOI/SIUIE/SPACE #		
SIDWELL # 50-22-03 _ 01 _ 023	May be o	btain from Assessing ent (248) 347-0485	ZBA Case #: PZ_2	1 - 0010
CROSS ROADS OF PROPERTY Vacant Land South of Delmont Driv				
IS THE PROPERTY WITHIN A HOMEOWNER'S ASSO		REQUEST IS FOR:	_	
☐ YES 🗹 NO				OPERTY LI SIGNAGE
DOES YOUR APPEAL RESULT FROM A NOTI	CE OF VIOLATION OR	CITATION ISSUED?	s 🗹 NO	
II. APPLICANT INFORMATION			L SELECTION AND	
A, APPLICANT	EMAIL ADDRESS	FamilyHomes.com	CELL PHONE NO. (734) 645-0231	
NAME	Julie@Rensington	r army fornes.com	TELEPHONE NO.	
Julie Longo			EAVING.	
ORGANIZATION/COMPANY			FAX NO.	
Kensington Family Homes ADDRESS		CITY	STATE	ZIP CODE
28317 Beck Road, E17		Wixom,	MI	48393
	The state of the s	THE PROPERTY OWNER	L OF U. BUONE NO.	
Identify the person or organization that.	EMAIL ADDRESS		734-645 T	0231
owns the subject property:			TELEPHONE NO.	
H366, UC			FAVAIO	
ORGANIZATION/COMPANY			FAX NO.	
ADDRESS 26317 But red, Et		CITY WI XOM	STATE	ZIP CODE 48393
III. ZONING INFORMATION				
A. ZONING DISTRICT				
☑ R-A □ R-1 □ R-2	☐ R-3 ☐ R-4	☐ RM-1 ☐ RM-2	□мн	
☐ I-1 ☐ I-2 ☐ RC	☐ TC ☐ TC-1	OTHER	<u>a</u>	
B. VARIANCE REQUESTED				
INDICATE ORDINANCE SECTION (S) AND		: Minimum side yard setb	ack from 20 to 15	
	/ariance requested			7
2. Section 3.1.1	/ariance requested	(Combined side yard se	tback from 50 to 45)	<u> </u>
3. Section	Variance requested			
4. Section	Variance requested			
IV. FEES AND DRAWNINGS				
A. FEES				
☐ Single Family Residential (Existing	g) \$200 🗌 (With Viol	ation) \$250 🗹 Single Fam	nily Residential (New) \$	\$250
☐ Multiple/Commercial/Industrial	\$300 🔲 (With Viol	ation) \$400 🗌 Signs \$300) ☐ (With Violation):	\$400
House Moves \$300		leetings (At discretion of B	oard) \$600	
B. DRAWINGS 1-COPY & 1 DIG	ITAL COPY SUBMITTE	D AS A PDF		at proporty lines
 Dimensioned Drawings and Plans 		 Existing & propose 	d distance to adjacer g & proposed signs, if	applicable
Site/Plot PlanExisting or proposed buildings or a	addition on the prop	erty • Floor plans & eleva	ations	
Number & location of all on-site p	parking, if applicable		tion relevant to the Va	ariance application



ZONING BOARD OF APPEALS APPLICATION

V. VARIANCE
A. VARIANCE (S) REQUESTED
☑ DIMENSIONAL ☐ USE ☐ SIGN
There is a five-(5) hold period before work/action can be taken on variance approvals.
B. SIGN CASES (ONLY) Your signature on this application indicates that you agree to install a Mock-Up Sign ten-(10) days before the schedule ZBA meeting. Failure to install a mock-up sign may result in your case not being heard by the Board, postponed to the next schedule ZBA meeting, or cancelled. A mock-up sign is NOT to be actual sign. Upon approval, the mock-up sign must be removed within five-(5) days of the meeting. If the case is denied, the applicant is responsible for all costs involved in the removal of the mock-up or actual sign (if erected under violation) within five-(5) days of the meeting.
C. ORDINANCE
City of Novi Ordinance, Section 3107 – Miscellaneous
No order of the Board permitting the erection of a building shall be valid for a period longer than one-(1) year, unless a building permit for such erection or alteration is obtained within such period and such erection or alteration is started and proceeds to completion in accordance with the terms of such permit.
No order of the Board permitting a use of a building or premises shall be valid for a period longer than one-hundred and eighty-(180) days unless such use is establish within such a period; provided, however, where such use permitted is dependent upon the erection or alteration or a building such order shall continue in force and effect if a building permit for such erection or alteration is obtained within one-(1) year and such erection or alteration is started and proceeds to completion in accordance with the terms of such permit.
D. APPEAL THE DETERMINATION OF THE BUILDING OFFICIAL
PLEASE TAKE NOTICE:
The undersigned hereby appeals the determination of the Building Official / Inspector or Ordinance made
CONSTRUCT NEW HOME/BUILDING ADDITION TO EXISTING HOME/BUILDING ISIGNAGE
□ ACCESSORY BUILDING □ USE □ OTHER
VI. APPLICANT & PROPERTY SIGNATURES
VI. APPLICANT & PROPERTY SIGNATURES A. APPLICANT 2/8/2021
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VI. APPLICANT & PROPERTY SIGNATURES A. APPLICANT Applicant signature B. PROPERTY OWNER If the applicant is not the owner, the property owner must read and sign below: The undersigned affirms and acknowledges that he, she or they are the owner(s) of the property described in this
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VI. APPLICANT & PROPERTY SIGNATURES A. APPLICANT Applicant Agnature B. PROPERTY OWNER If the applicant is not the owner, the property owner must read and sign below: The undersigned affirms and acknowledges that he, she or they are the owner(s) of the property described in this application, and is/are aware of the contents of this application and related enclosures. Property Owner Signature VII. FOR OFFICIAL USE ONLY DECISION ON APPEAL: GRANTED DENIED
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The Zoning Board of Appeals (ZBA) will review the application package and determine if the proposed Dimensional Variance meets the required standards for approval. In the space below, and on additional paper if necessary, explain how the proposed project meets each of the following standards. (Increased costs associated with complying with the Zoning Ordinance will not be considered a basis for granting a Dimensional Variance.)

Standard #1. Circumstances or Physical Conditions.

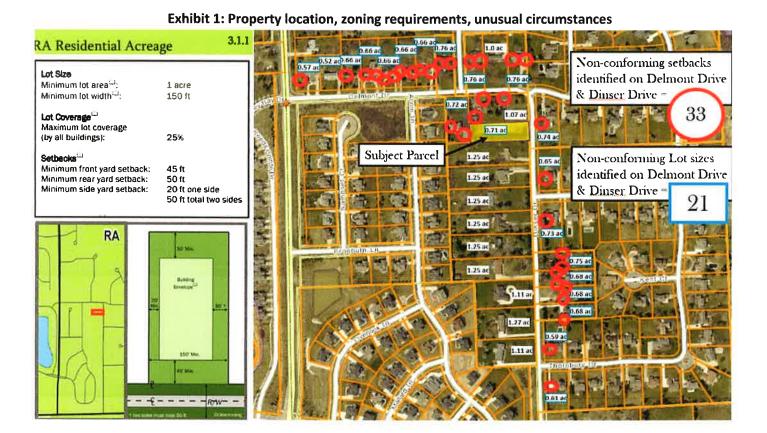
Explain the <u>circumstances or physical conditions</u> that apply to the property that do not apply generally to other properties in the same zoning district or in the general vicinity. Circumstances or physical conditions may include:

a. <u>Shape of Lot.</u> Exceptional narrowness, shallowness or <u>shape of a specific property</u> in existence on the effective date of the Zoning Ordinance or amendment. <u>Applicable, described below:</u>

The need for a variance is due to **unique shape and circumstances peculiar to this property.** These conditions create an unnecessary hardship that requires relief. The existing lot size does not conform to the RA district minimum size required (1 Acre.) It measures 0.71 acres, like most of the existing lots on Delmont Drive and Dinser Drive. If the lot sizes on this block complied with the RA requirements, this variance, and the all other existing non-conformities on the street, would not be required. The **size of the property is unusual** in that it is smaller than the standard RA lot size and it is surrounded by properties with similar circumstances that have similar non-conformities. It is reasonable to request this minor side setback reduction (5', one side) which is to-scale with the existing lot size and similar to surrounding properties. A**ll other setback standards of the R-A district can be met.**

There are at least 21 other lots on these two drives that do not comply with the RA minimum lot size, and at least 33 instances of smaller setbacks than those required by RA standards. It would be impractical to allow the irregular configuration of the property to detrimentally impact the applicant. It would not serve the purpose of the minimum side yard setback requirement, which is to create consistency with similar adjacent lots.

The City of Novi Ordinance Section 3104 allows the Zoning board of Appeals to permit modification of the "minimum side yard setback" requirement prescribed in the Zoning Ordinance because the property configuration clearly demonstrates that the shape & circumstances of the property is unique and not generally applicable to other properties in the RA district. The legal requirement has been met.



- b. Environmental Conditions. Exceptional topographic or environmental conditions Not Applicable, Not required
- c. Abutting Property. The adjacent property would prohibit literal enforcement. Not Applicable/Not Required.

Standard #2. Not Self-Created.

Describe the immediate practical difficulty causing the need for the Dimensional Variance, that the need for the requested variance is not the result of actions of the property owner or previous property owners (i.e., is **not self-created**).

The applicant's problem is **not self-created.** The problem is an **unnecessary hardship** on the property owner requiring relief. The applicant did not have a hand in creating the multiple lots on Delmont Drive and Dinser Drive that are non-conforming in both size and setbacks. The intent of the ordinance was to create **similar lot sizes within the district to ensure compatibility.** The applicant is seeking similar treatment to the precedent that have been set on these two streets. The applicant had no hand in creating this the situation. The **City of Novi Ordinance Section 3104** allows the **Zoning board of Appeals** to permit **modification of the "minimum side yard setback" requirement** prescribed in the Zoning Ordinance because **the practical difficulty was not self-created**, and the legal standard has been met. (see Exhibit 1)

Standard #3. Strict Compliance.

Explain how the Dimensional Variance in <u>strict compliance</u> with regulations governing area, setback, frontage, height, bulk, density, or other dimensional requirements will unreasonably prevent the property owner from using the property for a permitted purpose or will render conformity with those regulations unnecessarily burdensome.

The property cannot be reasonably used for the purposes permitted which creates an unnecessary hardship. Without ZBA approval to modify the "minimum side setback," the property owner will be unreasonably prevented from using the property for the intended purpose, which is to provide similar homes on similar lot configurations. Strict compliance with the 20' side setback requirement would reduce the property to an unusually narrow house, or prevent a side entry garage, which would be out of character for the area. This would be contrary to the intent of the ordinance. The intent of the Zoning requirements could not be achieved without the variance. The City of Novi Ordinance Section 3104 allows the Zoning board of Appeals to permit modification of the "minimum side yard setback" requirement prescribed in the Zoning Ordinance because strict compliance with the 20' minimum side yard setback will unreasonably prevent use of the property in the intended manner, like the vast majority of surrounding properties enjoy. The legal standard has been met.

Standard #4. Minimum Variance Necessary.

Explain how the Dimensional Variance requested is the minimum variance necessary to do substantial justice to the applicant as well as to other property owners in the district.

The variance requested is <u>the minimum variance necessary</u>. The existing lot width (100') is 50' short of the RA standard. The reduction in combined side yard setbacks is 10% of the requirement (5'variance/50' combined) and is significantly smaller than the EXISTING lot width non-conformity (50/150 =33%.) No other variances to the RA lot requirements are being requested, making this the minimum necessary to do substantial justice to the applicant. The resulting lot setbacks will be to scale with the lot size and significantly larger than most of the non-conforming lots in existence on these streets. The City of Novi Ordinance Section 3104 allows the Zoning board of Appeals to permit modification of the "minimum side yard setback" requirement prescribed in the Zoning Ordinance because the requested variance is the minimum variance necessary and the legal standard has been met.

Standard #5. Adverse Impact on Surrounding Area.

Explain how the Dimensional Variance <u>will not cause</u> an <u>adverse impact</u> on surrounding property, property values, or the use and enjoyment of property in the neighborhood or zoning district.

The variance will not alter the character of the area. The residential lots on Delmont and Dinser are also smaller than the RA district requires and contain significantly more and significantly greater setback variances than that being requested by the applicant. Approving the variance will allow a similar home to be built on the parcel, providing substantial justice to the petitioner and surrounding property owners. The City of Novi Ordinance Section 3104 allows the Zoning board of Appeals to permit modification of the "minimum side yard setback" requirement prescribed in the Zoning Ordinance because the variance will not cause an adverse impact on surrounding parcels, and the legal standard has been met. (see Exhibit 2 below)

Petitioner has met all requirements set forth in the ordinance to grant the variance.

All the Elements of Practical Difficulty exist.

We respectfully request your support.

De mont De Delmont 22-20-301-022 22-20-301-022 Front place dent to align 22' City Water 25' side setback 22-20-301:02 Garage mater Septic 100' Augusta Plan 49' 20' side setback Tree Save Tree Save

Exhibit 4: Proposed site configuration



Community Development Department

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ZONING BOARD OF APPEALS VARIANCE APPLICATION CHECKLIST

The following items are required for a complete Variance application. Incomplete applications will be returned. √ | Signed Application Form Complete the Zoning Board of Appeals application form. Application must be signed by the applicant and the property owner (if different). Response to Variance Review Standards - Dimensional, Use, or Sign Select the applicable Review Standards for the requested Variance and complete in full. Use additional paper if needed. If you don't know which Review Standards to complete, call the Community Development Department at 248.347.0415 for guidance. Dimensioned Site Plan (1 copy & 1 digital copy submitted as a PDF) Existing or proposed buildings or additions on the property. Number and location of all on-site parking spaces. Existing and proposed distances to adjacent property lines. Location of existing and proposed signs, if applicable. Any other information relevant to the Variance application. ✓ Dimensioned Drawings and Plans (1 copy & 1 digital copy submitted as a PDF) Floor plans and elevations with all proposed buildings and additions. All existing and proposed signs on the property (photographs may be used). For use variances, include floor plan showing the existing and proposed layout and functions of each area. For multi-family residential structures or projects, a summary showing the existing and proposed number of dwelling units by type (efficiency, one-bedroom, two-bedroom, etc.) √ Other Helpful Information – Optional (1 copy & 1 digital copy submitted as a PDF) Photographs of the lot or structure that shows the special conditions or circumstances described in the application. Photographs or maps that show how other properties in the area enjoy the same type of property rights related to the Variance. Letters of support from the neighbors who would be most affected by your request.

Additional Information

House Moves \$300

Fee (make check payable to the City of Novi)

Special Meetings (At discretion of Board) \$600

Single Family Residential (New) \$250

Signs \$300 (With Violation) \$400

Single Family Residential (Existing) \$200 (With Violation) \$250

Multiple/Commercial/Industrial \$300 (With Violation) \$400

In the course of reviewing the application, the Planning Department staff may request additional information from the applicant.



Community Development Department

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REVIEW STANDARDS DIMENSIONAL VARIANCE

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Standard #1. Circumstances or Physical Conditions.

Explain the circumstances or physical conditions that apply to the property that do not apply generally to other properties in the same zoning district or in the general vicinity. Circumstances or physical conditions may include:

a.	 a. Shape of Lot. Exceptional narrowness, shallowness or shape of a specific printer in existence on the effective date of the Zoning Ordinance or amendment	nt.
	See attached	
	and/or	
b.	 b. Environmental Conditions. Exceptional topographic or environmental correction other extraordinary situations on the land, building or structure. ✓ Not Applicable ☐ Applicable If applicable, describe be 	
	and/or	
C.	 c. Abutting Property. The use or development of the property immediately at to the subject property would prohibit the literal enforcement of the requirement of the Zoning Ordinance or would involve significant practical difficulties. ✓ Not Applicable	rements

Standard #2. Not Self-Created.

Describe the immediate practical difficulty causing the need for the Dimensional Variance, that the need for the requested variance is not the result of actions of the property owner or previous property owners (i.e., is not self-created).

See attached

Standard #3. Strict Compliance.

Explain how the Dimensional Variance in strict compliance with regulations governing area, setback, frontage, height, bulk, density or other dimensional requirements will unreasonably prevent the property owner from using the property for a permitted purpose, or will render conformity with those regulations unnecessarily burdensome.

See attached

Standard #4. Minimum Variance Necessary.

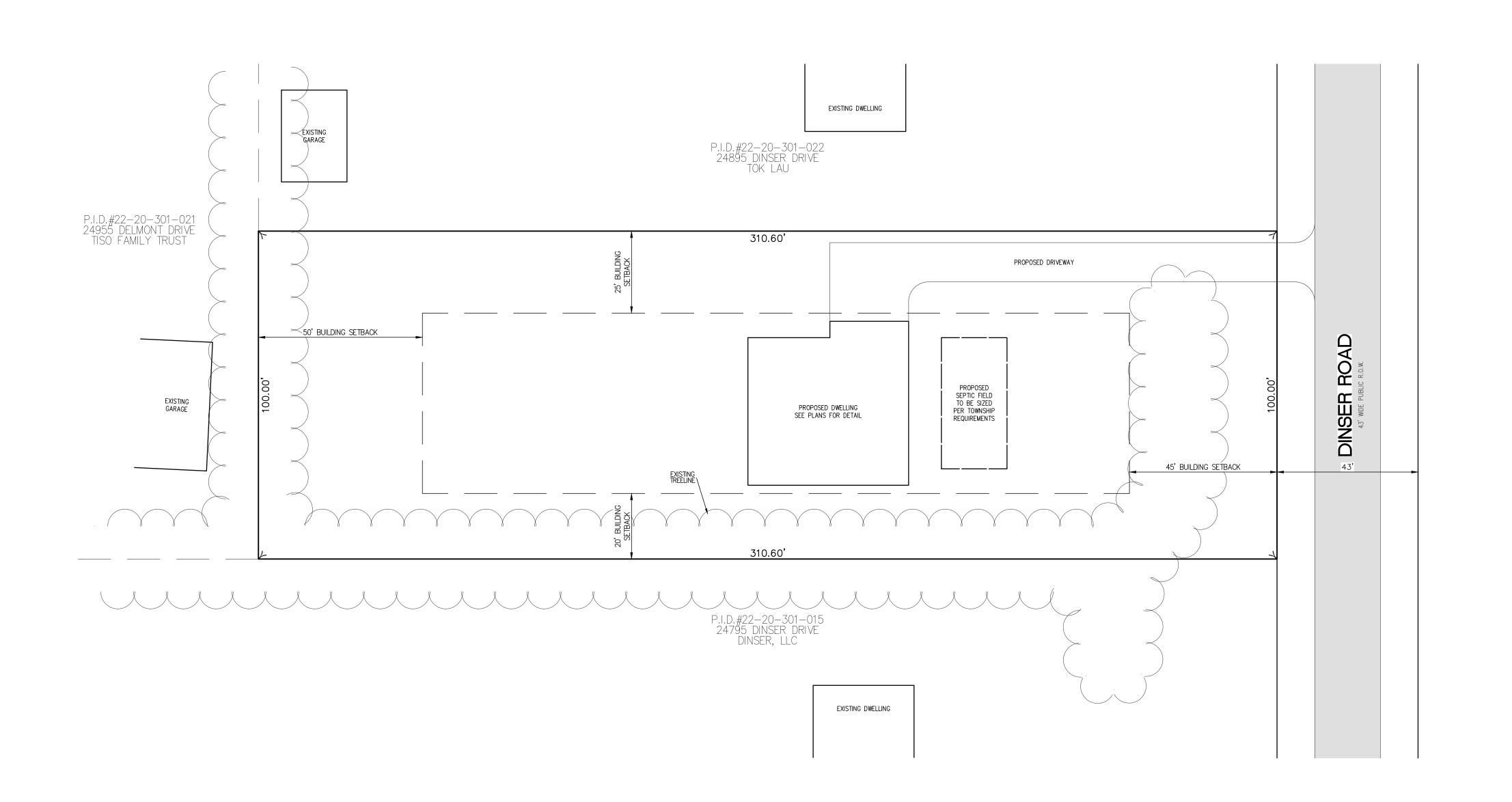
Explain how the Dimensional Variance requested is the minimum variance necessary to do substantial justice to the applicant as well as to other property owners in the district.

See attached

Standard #5. Adverse Impact on Surrounding Area.

Explain how the Dimensional Variance will not cause an adverse impact on surrounding property, property values, or the use and enjoyment of property in the neighborhood or zoning district.

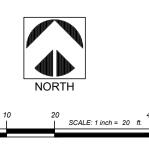
See attached



EXISTING LEGAL DESCRIPTION AS PROVIDED

T1N-R8E, SECTION 20, PART OF THE SW 1/4 BEGINNING AT A POINT DISTANT N89°50'00"E 1092.00 FEET & SOUTH 150.00 FEET FROM THE W 1/4 CORNER, THENCE N89°5000"E 310.60 FEET, THENCE SOUTH 100.00 FEET, THENCE S89°50'00"W 310.60 FEET, THENCE NORTH 100.00 FEET TO THE POINT OF BEGINNING. CONTAINS 0.71 ACRES.

BUILDER INFORMATION
KENSINGTON FAMILY HOMES
28317 BECK ROAD — E17
WIXOM, MI 48393
(248) 965—0123



49287 WEST ROAD, WIXOM, MI 48393 PH: (248) 773-7656, FAX: (866) 690-4307 PAPER SIZE: 24x36

PROPOSED PARCEL LAYOUT
24847 DINSER DRIVE

The

PART OF THE SW 1/4 SECTION 20
TOWN 1 NORTH - RANGE 8 EAST
CITY OF NOVI
OAKLAND COUNTY, MICHIGAN

THE HAMPTON

1640 F.F./1473 S.F.= 3046 TOTAL CONSTRUCTION S.F.

1.0	COVER SHEET	5.1.1	FRONT ELEVATIONS/ROOF		OPTION	IS INCLUDE ELECTRICAL	OPT 11.7	OPT 3 CAR SIDE W/6' EXT.
1.1	NOTES	5.2.1	RGHT.SIDE/REAR ELEV.		AND BR		OPT 11.8	OPT 3 CAR SIDE W/4' EXT.
		5.3.1	LEFT SIDE ELEVATION		OPT 9.1.1	OPT 9' ELEVATION	OPT 11.9	OPT 3 CAR SIDE W/2' EXT.
2.0.1	FOUNDATION NOTES						OPT 11.10	OPT STD. W/6' EXT & 3 CAR
2.1.1	FOUNDATION PLAN	6.1.1	BUILDING SECTIONS		OPT 10.1.1	OPT GARDEN VIEW PLAN	OPT 11.11	OPT STD.W/4' EXT & 3 CAR
2.2.1-E	FND. ELECTRICAL PLAN	6.2.1	STAIR SECTION		OPT 10.1.2	OPT GARDEN VIEW ELEVS.	OPT 11.12	OPT STD. W/2' EXT & 3 CAR
2.3.1-M	FND. MECHANICAL PLAN						OPT 11.13	OPT STD. W/6' EXT & 4' BUMP
		D.	STANDARD PLAN DETAILS		OPT 10.2.1	OPT DAYLIGHT PLAN	OPT 11.14	OPT STD. W/4' EXT & 4' BUMP
3.1.1	1ST FLOOR PLAN	 F.	FOUNDATION DETAILS		OPT 10.2.2	OPT DAYLIGHT ELEVATIONS	OPT 11.15	OPT STD. W/2' EXT & 4' BUMP
3.2.1-E	1ST ELECTRICAL PLAN	S.	STRUCTURAL OPT. DETAILS	ž Č)			OPT 11.16	OPT 4' EXTENSION
3.3.1-M	1ST MECHANICAL PLAN				OPT 10.3.1	OPT WALK-OUT PLAN	OPT 11.17	OPT 2' EXTENSION
3.4.1-B	1ST BRACING PLAN			<u> </u>	OPT 10.3.2	OPT WALK-OUT ELEVATIONS	OPT 11.18	OPT SIDE ENTRY W/4' EXT
3.4.2-B	1ST BRACING CALCS			9			OPT 11.19	OPT SIDE ENTRY W/2' EXT
3.4.3-B	BRACING OPTIONS			U Ž	OPT 11.1	OPT 4' SIDE BUMP GARAGE		
4.1.1	2ND FLOOR PLAN				OPT 11.2	OPT 6' EXTENSION	OPT 12.1.1	OPT FIRST FLOOR OPTIONS
4.2.1-E	2ND ELECTRICAL PLAN				OPT 11.3	OPT SIDE ENTRY GARAGE	OPT 12.2.1	OPT SECOND FLOOR OPTS.
4.3.1-M	2ND MECHANICAL PLAN				OPT 11.4	OPT SIDE ENTRY W/6' EXT.		
4.4.1-B	2ND BRACING PLAN				OPT 11.5	OPT 3 CAR FRONT ENTRY	OPT 13.1	OPT EAT IN KITCHEN
4.4.2-B	2ND BRACING CALCS				OPT 11.6	OPT 3 CAR SIDE ENTRY	OPT 14.1	OPT RAISED LOFT

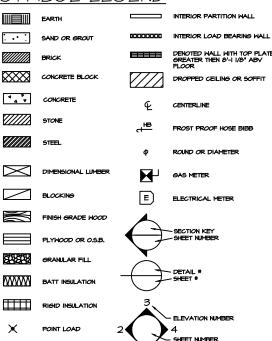
THE STATE FINAL PENTEN KNZ

JAGNA FINAL PENTEN KNZ

JAGNA FINAL PENTEN KNZ

JAGNA WO LIVE*

SYMBOL LEGEND



FOUNDATION NOTES:

- FOUNDATION DESIGN IS BASED ON MINIMUM SOIL BEARING VALUE OF
- 2. MINIMUM FROST LINE DEPTH IS 42". VERIFY WITH LOCAL
- 3. BACKFILL SHALL BE COMPLETED WITH CLEAN FILL FREE OF DEBRIS, ORGANIC MATTER, AND FROZEN GROUND.
- 4. FINAL GRADE SHALL BE MINIMUM 8" BELOW FINISHED SIDING WITH A 6" FALL WITHIN FIRST IO' FROM FOUNDATION OR 5%, 2% MINIMUM SLOPE WHEN GREATER THAN IO' FROM FOUNDATION.
- 5. TREATED LUMBER TO BE USED FOR ALL WOOD IN CONTACT WITH CONCRETE INCLUDING MUDSILL.
- 6. VERIFY AND PROVIDE REQUIRED SLEEVES FOR MECHANICAL, ELECTRICAL, $\boldsymbol{\epsilon}$ PLUMBING.

CONCRETE NOTES:

- I. ALL CONCRETE SHALL CONFORM TO LOMBARDO COMPANIES' CONCRETE GUIDELINES.
- 2. CONCRETE SHALL BE DESIGNED AND TESTED AS OUTLINED IN THE SPECIFICATIONS.
- 3. ALL CEMENT SHALL CONFORM TO ASTM C-94
- 4. ANCHOR STRAPS, DOWELS, INSERTS, ETC. SHALL BE SECURELY TIED IN PLACE PRIOR TO POURING CONCRETE.
- 5. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR MISCELLANEOUS ITEMS TO BE CAST INTO CONCRETE AND FLOOR DEPRESSIONS, PITS, ETC.
- 6. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF EXPANSION JOINTS, SCORING, ETC. FOR CONCRETE SLABS.
- 7. MINIMUM TRENCH WIDTHS: ALL TRENCH FOTTING SHALL COMPLY WITH
- 8. ALL FOOTING CONCRETE: MIN. 3000 PSI. COMPRESSIVE STRENGTH AT 28 DAYS, 6" MAX. SLUMP, AGGREGATE-I I/2" MAX., NOT LESS THAN 3/4".
- 9. ALL EXTERIOR FLATHORK AND GARAGE SLAB; MIN 4000 PSI. COMPRESSIVE STRENGTH AT 26 DAYS, 6" MAX. SLIMP, AGGREGATE-3/4" MAX., 5 % AIR ENTRAINING ON ALL GARAGE FLOORS, STOOPS AND SIDENALKS.
- IO. ALL WALL WORK CONCRETE: MIN 3000 PSI COMPRESSIVE STRENGTH AT 28 DAYS, 6" MAX. SLUMP, AGGREGATE-3/4" MAX., 5% AIR ENTRAINING ON ALL WALLS.
- II. GARAGE FLOOR TO HAVE A MINIMUM SLOPE OF 1/8" PER FOOT FROM BACK OF GARAGE TO FRONT OF GARAGE.
- 12. CALCIUM CHLORIDE MAY NOT BE USED AS AN ACCELERATOR.

REINFORCING STEEL NOTES:

- I. ALL BARS SHALL BE CLEAN OF LOOSE FLAKY RUST, GREASE OR OTHER MATERIALS LIKELY TO IMPAIR BOND.
- 2. ALL REINFORGING BARS SHALL BE ACCURATELY AND SECURELY PLACED BEFORE POURING CONCRETE
- 3. RE-BAR INSTALLATION NOTE. BEND BARS AT ALL FOOTING CORNERS AND EXTEND MINIMUM IS TIMES DIAMETER (9" FOR #4, 12" FOR #5)

MRC CHAPTER II MICHIGAN ENERGY CODE COMPLIANCE SUMMARY

INSULATION SCHEDULE:

CEILING = R-38

WALLS = R-13

BOND JOIST = SPRAY FOAM (BASF 'SPRAYTITE-178') THERMAL BARRIER NOT REQUIRED IF MAX 8" THICK ON WALLS, I2" ON CEILINGS AND 'FLAME SEAL TB INTUMESCENT COATING IS APPLIED. (PER ICC-ESR-2642)

BASEMENT WALLS = R-II VINYL FACED INSIDE BLANKET

WINDOWS = LOW-E (U=0.35)

-SEE REPORT BY D.E. NELSON FOR PERFORMANCE ANAYALSIS OF BUILDING ENVELOPE -PROVIDE COMPLETE SEALING OF BUILDING ENVELOPE PER MUEC SEC 402.4

MECHANICAL SYSTEM TO CONFORM WITH MUEC SECTION 403, INCLUDING, BUT NOT LIMITED TO: -PROGRAMMABLE THERMOSTAT

-SEAL ALL DUCTWORK, AIR HANDLERS, FILTER BOXES AND RETURN AIR CAVITIES -REQUIRED WHOLE HOUSE MECHANICAL VENTILATION SHALL BE PROVIDED BY AN OUTSIDE AIR DUCT CONNECTED TO THE RETURN DUCT WITH AN ECM MOTOR

ELECTRICAL POWER & LIGHTING SYSTEM

-AT LEAST 75% OF LAMPS IN PERMANENT FIXTURES SHALL BE HIGH EFFICACY LAMPS.

AN AIR LEAKAGE TEST ("BLOWER DOOR") SHALL BE PERFORMED IN COMPLIANCE WITH MUEC SECTION 402.4.2.I

PER MRC SEC R316, ALL FOAM PLASTIC SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 75, A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 450, AND SHALL BE PROTECTED BY THERMAL BARRIER OF MIN. 1/2 INCH GYPSUM BOARD OR OTHER APPROVED MATERIALS, UNLESS NOTED OTHER WISE.

FRAMING NOTES:

- I. ALL STRUCTURAL LUMBER SHALL BE GRADED IN ACCORDANCE WITH STANDARD GRADING RULES.
- 2. STRUCTURAL HEADERS SHALL BE SPF(N) #2 OR BETTER, UNLESS NOTED OTHERWISE. LOAD BEARING WALL STUDS SPF(N) #2 OR BETTER, UNLESS NOTED OTHERWISE, NON-LOAD BEARING WALL STUDS SPF(N) STUD GRADE OR BETTER, UNLESS NOTED OTHERWISE.
- 3. LAMINATED VENEER LUMBER SHALL PROVIDE DESIGN VALUES EQUAL TO OR EXCEEDING THE Fb = 2600 PSI, Fv = 285 PSI, E = 1,800,000 PSI
- 4. NON BEARING WALL STUDS SHALL BE 2X4 SPF(N) STUD GRADE AT 24" O.C., UNLESS NOTED OHERWISE.
- 5. ALL NAILING TO BE PER THE CURRENT MICHIGAN RESIDENTIAL CODE, UNLESS NOTED OTHERWISE.
- 6. FLOOR AND ROOF TRUSS SYSTEM DESIGN SHALL BE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER AND PERFORMED UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER.
- TRUSS MANUFACTURER SHALL SUBMIT TWO (2) SETS OF SEALED SHOP DRAWINGS TO OWNER FOR APPROVAL OF TRUSSES AND BEAMS PRIOR TO SUBMITTAL TO CITY.
- 8. PROVIDE BACKING FOR STAIR SKIRT BOARDS AT LANDING. PROVIDE BACKING FOR HANDRAILS AND HANDRAIL BRACKETS AT A POINT 34"-38" ABOVE NOSING. PROVIDE BLOCKING AT NEWEL POST UNDER FLOOR BETWEEN JOISTS. PROVIDE BLOCKING FOR TOWEL BARS AT 59" AFF. PROVIDE BLOCKING FOR TOILET PAPER HOLDERS AT 26" AFF.
- 9. PROVIDE BLOCKING TO WALLS PERPENDICULAR TO ROOF TRUSSES FOR SHEETROCK APPLICATION.
- IO. DOOR BETWEEN GARAGE AND HABITABLE SPACE TO BE MIN. I 3/6" SOLID WOOD, MIN. I -3/6" SOLID CORE OR HONEYCOMB STEEL, OR MINIMUM 20 MINUTE FIRE RATED DOOR WITH CLOSER, PER MRC R302.5.I.
- II. FIRE RATED SEPARATION BETWEEN GARAGE AND HABITABLE SPACE I/2" GYPSUM BOARD WALLS AND 5/8"- TYPE X ON THE ENTIRE CEILING PER MRC R302.6
- 12. ALL INTERIOR PREHING DOORS TO BE OFFSET 3" FROM INSIDE OF CORNERS OF A ROOM TO START OF DOOR OPENING UNLESS OTHERWISE NOTED BY DIMENSIONS.
- I3. ALL INTERIOR PREHING DOORS TO HAVE A TYPICAL R.O. HEADER HEIGHT AND R.O. WIDTH PER SHEET D.9 FOR ALL DOORS.
- 14. ALL INTERIOR BI-FOLD DOORS TO HAVE A TYPICAL R.O. HEADER HEIGHT AND R.O. WIDTH PER SHEET D.9 FOR ALL DOORS
- 15. PROVIDE TREATED PLATES UNDER ALL STAIR STRINGERS.
- 16. HOUSEWRAP TO BE USED AS EXTERIOR WIND WASH BARRIER AND SHALL BE CONTINUOUS TO THE UNDERSIDE OF THE RAFTER OR TRUSS TOP CORD. ALL SEAMS MUST BE SEALED. ALL EXTERIOR WALL SHEATHING PENETRATIONS MUST BE SEALED.

IT. DRILLING & NOTCHING -STUDS

DRILLING: ANY STUD MAY BE DRILLED IF HOLE IS NO MORE THAN 60 PERCENT OF STUD WIDTH, AND HOLE IS MIN. 5/6 INCH FROM EDGE OF STUD. STUDG IN EXTERIOR WALLS OR INTERIOR BEARING PARTITIONS, WITH HOLES BETWEEN 40 AND 60 PERCENT OF STUD WIDTH, SHALL BE DOUBLED, AT NO MORE THAN TWO SUCCESSIVE STUD LOCATIONS.

NOTCHING: STUDG IN EXTERIOR WALLS OR INTERIOR BEARING PARTITIONS MAY BE NOTCHED UP TO 25 PERCENT OF IT'S WIDTH. INTERIOR NON-LOAD BEARING PARTITIONS, NOT MORE THAN 40 PERCENT OF IT'S WIDTH.

I.B. <u>DRILLING & NOTCHING -TOP PLATE</u>
IF A TOP PLATE IS DRILLED OR NOTCHED MORE THAN 50 PERCENT OF ITS WIDTH, A GALVANIZED METAL
TIE, MIN. I6 GA. X. I-I/2" WIDE SHALL BE FASTENED ACROSS THE OPENING EXTENDING 6" MIN. PASSED
EACH SIDE. FASTEN EACH SIDE OF TIN WITH MIN. 8-IOd X I-I/2" NAILS.

CODE DATA

APPLICABLE BUILDING CODE 2015 MICHIGAN RESIDENTIAL CODE (MRC)

- INCLUDING CH. II (MICHIGAN ENERGY CODE)

FIRE PROTECTION SYSTEM

NOT REQUIRED

DESIGN CRITERIA

BASIC WIND SPEEDS; V=115 MPH (MRC, FIGURE R301.2(4)) GROUND SNOW LOADS; Pa=30 PSF (MRC, FIGURE R301.2(5)) SEISMIC DESIGN CATEGORY: A (MRC FIGURE R301.2(2)

WEATHERING PROBABILITY FOR CONC: SEVERE (MRC FIGURE R301.2(3)

LIVE LOADS (MRC TABLE R301.5)

ROOMS OTHER THAN SLEEPING ROOMS = 40 PSF SLEEPING ROOMS = 30 PSF

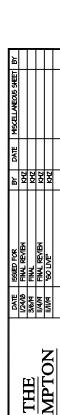
HABITABLE ATTICS & ATTICS WITH FIXED STAIRS = 30 PSF ATTICS WITH LIMITED STORAGE = 20 PSF

ATTICS WITHOUT STORAGE = 10 PSF

BALCONIES & DECKS = 40 PSF

GUARDRAILS AND HANDRAILS = 200 POUND POINT LOAD APPLIED AT ANY DIRECTION AT ANY POINT ALONG

THE TOP.



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FOUNDATION NOTES:

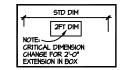
NOTE: ALL <u>DAYLIGHT</u> & <u>WALKOUT</u> WINDOW AND DOORWALL HEADERS ARE (2)2XI2 WITH 3JACK STUDS EACH END.

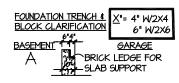
IF 6/O DOORWALL IS PURCHASED IN A 2 STORY HOME, HEADER SHALL BE (3)2XI2 WITH 3 JACK STUDS EACH END.

COORDINATE GRADE DROP WITH PLOT PLAN FOR STEPS IN WALL.

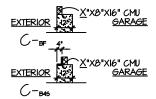
EGRESS WINDOW <u>DELETED</u> WITH DAYLIGHT OR WALK-OUT.

8'-10" POURED WALL STANDARD WITH DAYLIGHT & WALKOUT.

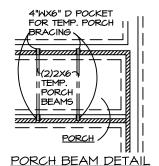








BASEMENT



FOUNDATION PLAN NOTES

2. ALL ANGLED WALLS AND FOOTINGS ARE 45 DEGREES UNLESS OTHERWISE NOTED.

4. ALL CONCENTRATED LOADS FROM BEAMS OR GIRDER TRUSSES TO TRANSFER TO FOUNDATION VIA POSTS, BEAMS AND/OR SOLID BLOCKING.

5. FIELD LOCATE SANITARY SUMP(S) TO BE WITHIN IO'-O" OF DRAINS (AS REQUIRED).

6. PROVIDE BEARING PLATES AT TOP AND BOTTOM OF ALL STEEL COLUMNS.

7. COLUMN BEARING PLATES BEARING ON FOUNDATION WALLS TO BE ANCHORED.

6. PROVIDE STEEL ANCHOR BOLTS AT 6'-0' OC.
MAX, AND 12' MAX, FROM EACH BND OF MUDSILL,
MN, 2 BOLTS PER PLATE TO BE BRIBEDDED MIN
T' INTO FOUNDATION WALL, 12" INTO CONCRETE
BLOCK, STRAPS MAY BE SUBSTITUTED FOR
BOLTS AT SAME LOCATIONS, BUT SPACED NOT
GREATER THAN MANUFACTURERS TESTED
SPACINS.

4. PROVIDE MIN. 3° CONCRETE COVER AT BELOM SLAB UTILITY LOCATIONS. WHEN CONCRETE ENCASHENT OF UTILITY LINES IS REQUIRED. INCREASE SLAB THICKNESS AT THE UTILITY. UTILITIES SHALL BE PLACED SUFFICIENTLY BELOW SLAB TO MAINTAIN PROPER COVERAGE.

IO. BLEEDER LINES SHALL BE INSALLTED 20'-O" ON CENTER.

12. FOUNDATION DESIGN IS BASED ON A MINIMUM SOIL BEARING CAPACITY OF 2,500 PSF. CAPACITY SHALL BE FIELD YERFIED BY A SOILS TESTING BYSINEER. IN CASE OF LOVER VALUES, FOOTING WIDTHS SHALL BE INCREASED TO COMPLY WITH MRC TABLE R403.1.

W = WATER MANIFOLD

BEAM SIZES FOR REFERENCE FOR POCKET:

W8X10 = 4" X 7-7/8" W8X15 = 4" X 8-1/4" W8X18 = 5-1/4" X 8-1/8" W8X21 = 5-1/4" X 8-1/4"

-7'-10' POURED WALL HEIGHT STANDARD -8'-10' POURED WALL HEIGHT

OPTIONAL
-8'-10' IS STANDARD W/ DAY-LIGHT &
WALK-DUT OPTIONS

GROUNDING ELECTRODE SYSTEM NOTE:
PER 2015 MRC SECTION ESGOD, AT LEAST ONE OF
THE FOUR FOLLOWING ELECTRODES MUST BE
PROVIDED. IF ANY OF THESE FOUR ARE PRESENT, THEY "SHALL BE BONDED TOGETHER TO FORM A

RECUNDING ELECTRODE".

I. E360&I.I METAL UNDERGROUND WATER PIPE. (IF PLASTIC WATER SERVICE PIPE IS USED, METHOD #2, 3, or 4 MUST BE PROVIDED)

2. E3608.1.2 CONCRETE ENCASED ELECTRODE. (#4
RE-BARS OR LARGER IN THE FOOTING, OR MIN 4

AMG COPPER) 3. E3606.I.3 GROUND RINGS 4. E3608.I.4 ROD AND PIPE ELECTRODES. (MIN. 8)

RE-BAR INSTALLATION NOTE: BEND BARS AT ALL FOOTING CORNERS AND EXTEND MINIMUM IS TIMES DIAMETER (9" FOR #4, 12" FOR #5)

NIMUM HORIZONTAL REINFORCEMENT FOR BASEMENT MINIMM HORIZONTAL REINFORCEMENT FOR BASEME WALL5 (HRC TABLE R404.1.2(1) -5TD T-10" POUR. #4 BAR 12" FROM TOP & AT MID HEIGHT OF WALL -OPT 8'-10" POUR. #4 BAR 12" FROM TOP & AT SRD POINTS OF WALL HEIGHT

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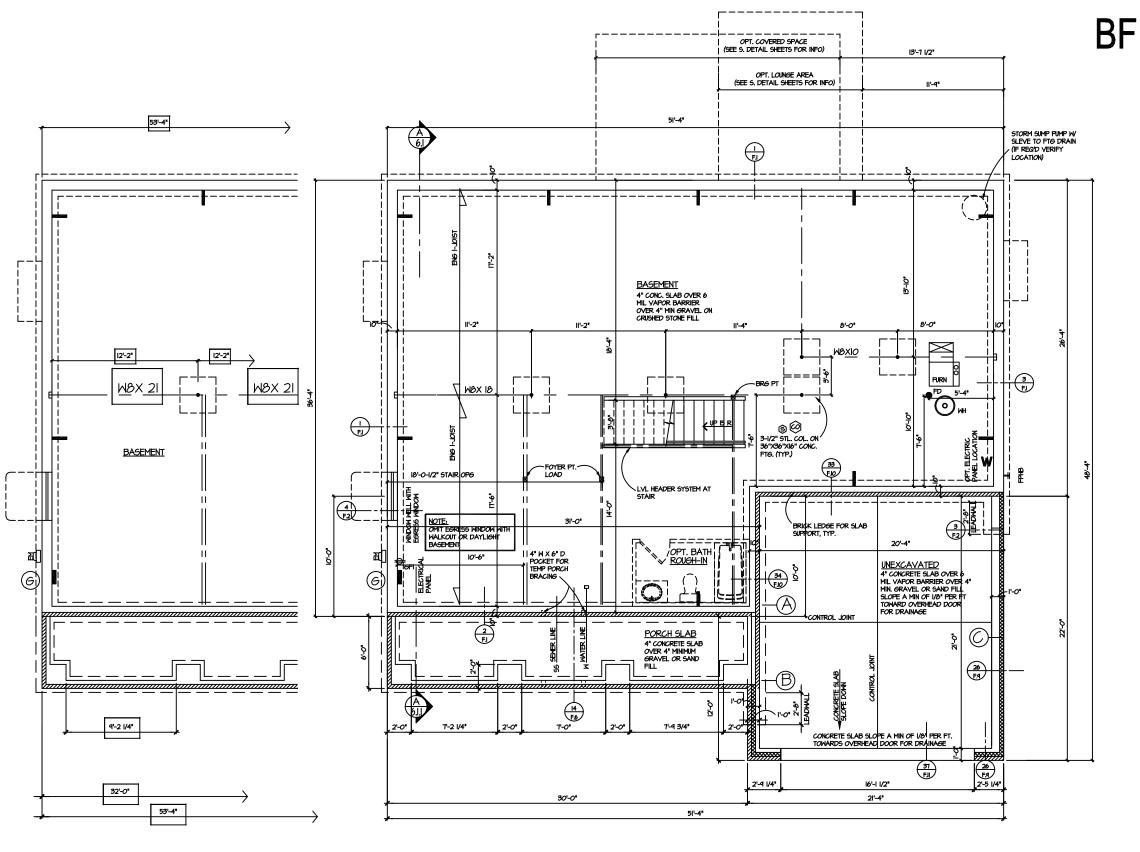
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-0" ON 24X36 PAPER WHEN PRINTED AT 200%

E: (UNLESS NOTED

SHEET



STD DIM

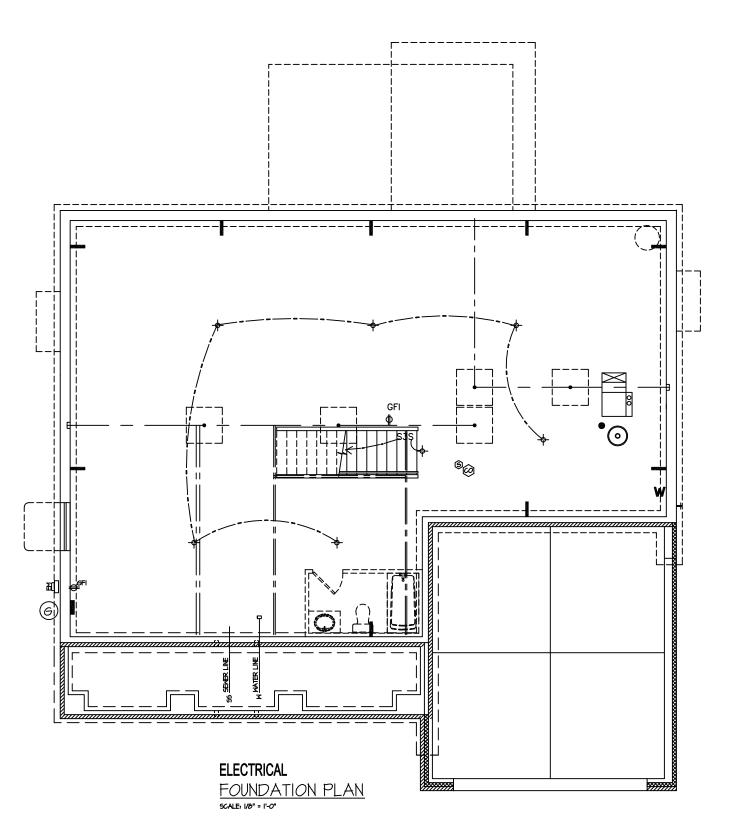
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NOTE:
CRITICAL DIMENSION
CHAINSE FOR 2'-0'
EXTENSION

FOUNDATION PLAN

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

BF FOUNDATION PLAN SCALE, 1/8" = 1'-0"



	ENTIAL ELECTRICAL MBOL LEGEND
F -	LIGHT FIXTURES
•	RECESSED CAN LIGHT
_	RECESSED CAN - DIRECTIONAL
•	
<u></u>	CEILING MOUNTED FIXTURE
 	WALL MOUNTED FIXTURE
ΨP.c.	PULL CHAIN FIXTURE WALL SCONCE
•	
	<u>OUTLETS</u>
=	DUPLEX RECEPTACLE
= ⊖eFi	GROUND FAULT INTERRUPTING CIRCUIT
₩P	WEATHERPROOF RECEPTACLE
-	HALF SWITCHED RECEPTACLE
≡ ∰2,	RANGE/DRYER 220V OUTLET
APPLIANCE(I)	DIRECT WIRE CONNECTION
•	TELEPHONE OUTLET
Ā	CATY (TELEVISION) OUTLET
•	THERMOSTAT
-++	UNDER-COUNTER OUTLETS
®	GENERATOR PREP OUTLET
	<u>SMITCHES</u>
S	SINGLE POLE SWITCH
S3	THREE-WAY SWITCH
S4	FOUR-WAY SWITCH
SD	DIMMER SWITCH
	MISC FIXTURES
•	EXHAUST FAN
-	EXHAUST FAN/LIGHT
	EXHAUST FAN/LIGHT/HEAT
\$	SMOKE DETECTOR
<u> </u>	CARBON MONOXIDE DETECTOR
	ELECTRICAL PANEL
0	DISPOSAL
4	DOORBELL CHIMES
8	DOORBELL
	OPTIONAL CEILING FAMILIGHT

ELECTRICAL PLAN NOTES:

I. ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST EDITION OF NEC. LOCAL AND STATE CODES, ORDINANCES AND REGULATIONS, INCLUDING THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT (CSHA)

2. ALL ELECTRICAL SYSTEMS AND EQUIPMENT SHALL CONFORM TO ALL NATIONAL, STATE, AND LOCAL BUILDING CODES.

3. COORDINATE ALL NEW UNDERGROUND ELECTRICAL WORK WITH NEW AND EXISTING UTILITIES BEFORE INSTALLATION.

4, ALL ELECTRICAL MATERIALS SHALL BE NEW AND BEAR THE "UL" LABEL \emph{OR} LISTING.

5. FUSES SHALL BE "UL" LISTED, DUAL-ELEMENT, REJECTION TYPE. 6. ALL DUPLEX RECEPTACLES SHALL BE SPECIFICATION GRADE 125 VOLT, IS AMP, GROUNDED TYPE.

7. SWITCHES SHALL BE I5 AMP, I20/27T VOLT, SPECIFICATION GRADE SINGLE, DOUBLE, ETC., AS INDICATED.

 $\pmb{\delta}.$ LIGHTING AND RECEPTACLE BRANCH CIRCUIT BREAKERS SHALL BE RATED FOR SHITCHING DUTY.

FLUSH MOUNT ALL EQUIPMENT AND CONCEAL ALL CONDUIT OR WIRING IN WALLS AND CEILING SPACES IN FINISHED AREAS.

IO. ALL CABINETS, MOTOR FRAMES, STARTERS, CONDUIT OR WIRING IN WALLS AND CEILING SPACES IN FINISHED AREAS.

II. TEST CIRCUITS AS SOON AS CONDUCTORS ARE INSTALLED AND MAKE FINAL OPERATING TEST WHEN WORK IS COMPLETE.

12. THE ELECTRICAL CONTRACTOR SHALL VERIPY EXACT LOCATIONS AND PROVIDE ROUGH-INS FOR ALL EQUIPMENT FURNISHED BY OTHERS.

13. THE ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATIONS OF HIS EQUIPMENT AND WORK WITH OTHER BUILDING TRADES TO AVOID INTERFERENCE BETHEEN HIS WORK AND THE WORK OF OTHER BUILDING TRADES.

I4. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE 6FIC AND/OR NEATHER PROOF RECEPTACLES WHERE REQUIRED BY THE LATEST MICHIGAN RESIDENTIAL CODE AND FIRE CODE.

IS. ALL SMOKE DETECTORS TO BE LOCALLY CERTIFIED, IIO V WITH BATTERY BACKUP, MIRED IN SERIES, INTERCONNECTED TO ALL OTHERS, IN THE IMMEDIATE VICINITY OF ALL BEPROOM DOORS, MIN I SMOKE DETECTOR PER FLOOR. MIN I SMOKE DETECTOR PER SLEEPING ROOM PER LATEST MICHIGAN RESIDENTIAL CODE, NEC, \$ NFPA AS REFERENCED.

I6. ALL ELECTRICAL AND MECHANICAL EQUIPMENT (I.E. FURNACES, A/C UNITS, ELECTRICAL PANELS, SANITARY SUMP PITS, DRAIN TILE SUMP AND WATER HEATERS) ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS.

IT. ELECTRICAL CONTRACTOR TO PROVIDE REQUIRED DIRECT HOOK-UPS/CUTOFFS.

I. INSTALL DOORBELL TRANSFORMERS WITHIN THE DOORBELL CHIME BOX

I9. ALL DUPLEX RECEPTACLES (INTERIOR AND EXTERIOR) TO BE TAMPER RESISTENT (PER 2015 MRC E 4002.14)

20. PROVIDE SINGLE STATION CARBON MONOXIDE DETECTOR OUTSIDE OF BEDROOMS PER 2015 MRC SECT R315 AND MIN I PER FLOOR INCLUDING BASEMENT

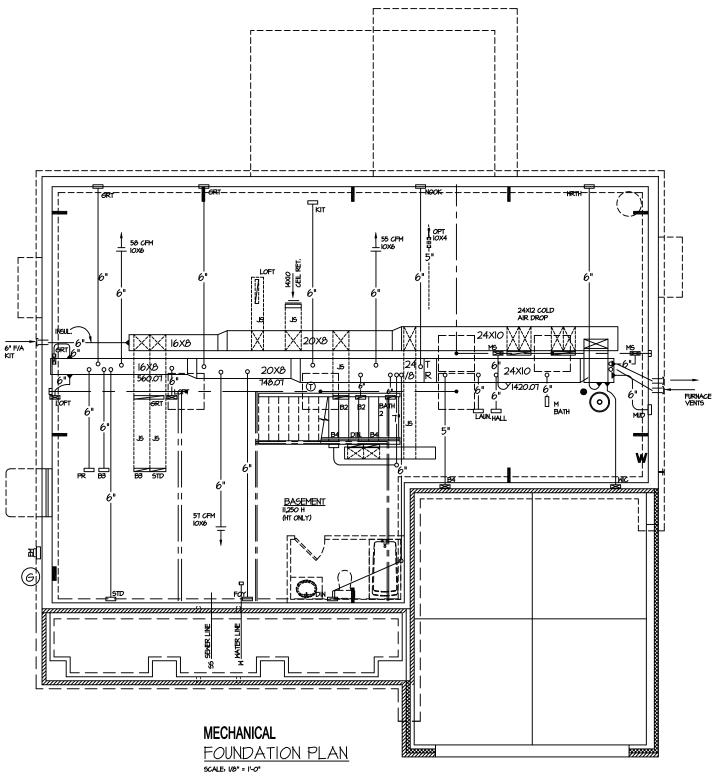
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NI ESS NOTED OTHERWISE 1/8" = 1'-0" ON 11X17 PA	HIO	FRWICE 1/8	 -	- - -	ON 11X1	7 7

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MECHANICAL NOTES:

I.) LOAD CALCULATIONS BASED ON ACCA MANUAL 'J'.
2.) SYSTEM DESIGN BASED ON ACCA MANUAL 'D'.

3.) ALL DUCTHORK TO BE FABRICATED AND INSTALLED PER SMACNA DUCT CONSTRUCTION STANDARDS FOR METAL AND FLEXIBLE DUCTS.

4.) ALL DUCTWORK TO BE SEALED IN COMPLIANCE WITH APPLICABLE SECTION OF THE CURRENT MICHIGAN RESIDENTIAL CODE.

5.) THERMOSTATS TO BE PROGRAMMABLE IN COMPLIANCE WITH APPLICABLE

SECTION OF CURRENT MICHIGAN UNIFORM ENERGY CODE.
6) OUTDOOR AIR INTAKES AND EXHAUSTS TO HAVE AUTOMATIC OR GRAVITY

O/ COUNTY OF THE COUNTY OF THE

INSULATION.

8.) ALL DUCTWORK LOCATED WITHIN THE BUILDING ENVELOPE ASSEMBLY TO HAVE

A MINIMUM R-8 INSULATION.

4.) SUPPLY BRANCH RUNS TO HAVE VOLUME DAMPERS IO.) MAIN SUPPLY DUCT 40 DEGREE ELBOWS TO HAVE TURNING VANES AND RADIUS

III) PROVIDE CANVAS CONNECTORS ON MAIN SUPPLY AND RETURN DUCTS AT FURNACE.

12) FLEXIBLE DUCT BRANCH RING ARE TO BE KEPT SHORT, STRAIGHT AND

UNRESTRICTED BY CRUSHING OR CRIMPING.
13.) AIR VOLUMES SHOWN ARE COOLING CFM'S (U.NO.).

14.) USE EXTENDED PLENUM TYPE FITTINGS (EP) ONLY.
15.) BATH AND DRYER VENTS TO BE DUCTED TO OUTSIDE.

(6.) DIFFUSERS AND GRILLES BY HART AND COOLEY OR APPROVED EQUAL.

(1) CONDENSER SEER RATING TO BE A MINIMUM OF 13.

IB) REFRIGERANT PIPING SUCTION LINE TO BE INSULATED TO A MIN. R-4 WITH A SURFACE PERMEANCE NOT TO EXCEED .05 PERM.

19.) DUCTWORK SEALING TO COMPLY MITH R-403.2.2 AND R-1601.4.1
20.) DUCT LEAKAGE TESTING FOR DUCTS OUTSIDE THE THERMAL ENVELOPE TO

COMPLY WITH CHAPTER II.
21) FAN EFFICIENCY FOR MECH VENTILATION SYSTEMS TO COMPLY WITH TABLE N-II03512 OR BE ENERGY STAR RATED.

22) DRYER EXHAUST DUCT LENGTHS TO COMPLY WITH TABLE M-1502.45.J
23) OTHER EXHAUST DUCTS TO COMPLY WITH TABLE 1506.2
24.) CONDENSATE DRAINS TO COMPLY WITH M-1411.33

25.) CONDENSATE PUMPS TO COMPLY WITH M-1411.4

WHOLE HOUSE MECHANICAL VENTILATION: (MRC SEC MISOT.3.3 AND NIIO3.5) PROVIDE ELECTRONICALLY COMMITATED MOTOR (ECM.)

HVAC SPECIFICATIONS

ZONE NO. __

TOTAL HEAT LOSS: 83,092 BTUH

TOTAL HEAT GAIN: 42,490 BTUH

FURNACE: MAKE = LENNOX OR EQUAL MODEL NO. ML 193 UH 110 60C

INPUT HEATING: <u>IIO,000</u> BTUH OUTPUT HEATING: 103,000 BTUH

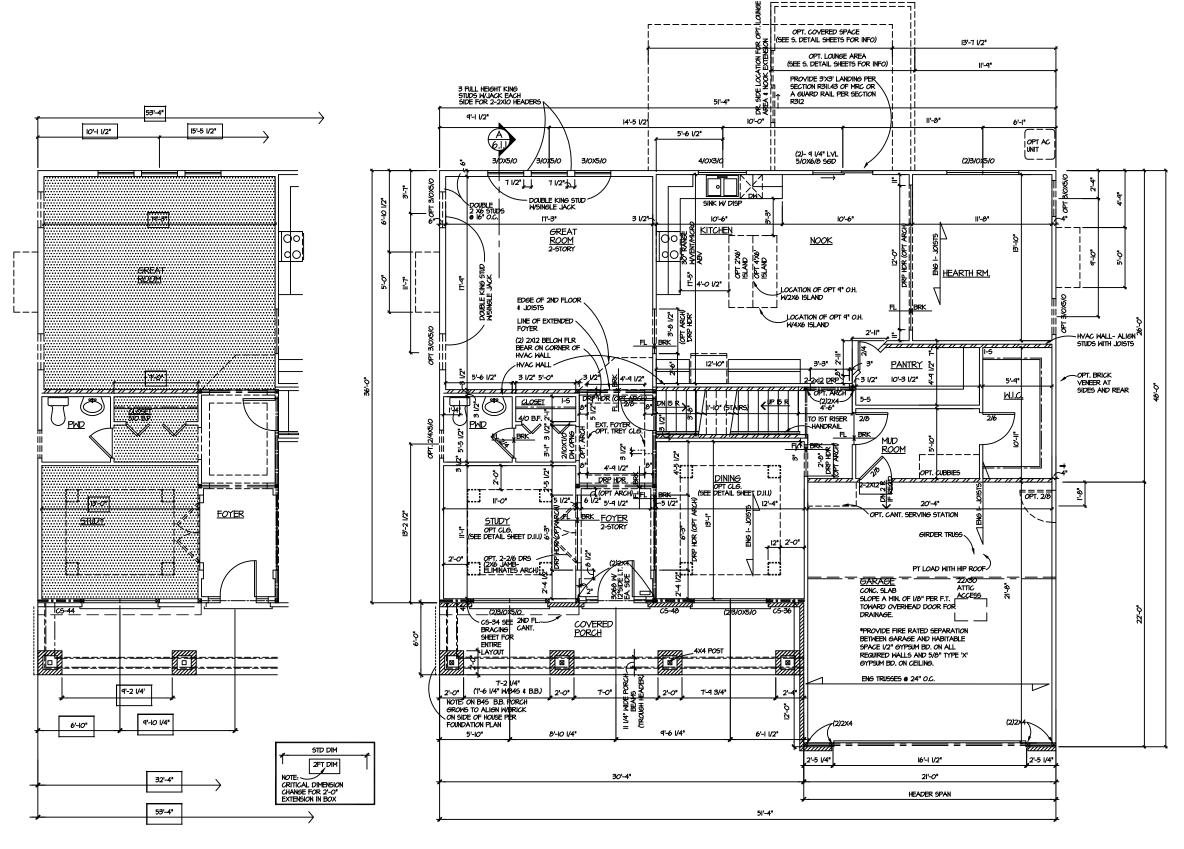
BLOWER MOTOR HP = I

COIL & CONDENSER 5 TON CAPACITY 60 MBH

AIR VOLUME CAPACITY (CLG.): 2000 CFM

JOB NUMBER 4958-518

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2' EXTENSION FIRST FLOOR PLAN SCALE: 1/8" = 1'-0"

FIRST FLOOR PLAN

FLOOR PLAN NOTES

I. ALL UNDIMENSIONED INTERIOR PARTITIONS (††) ARE 3-1/2" ROUGH, EXTERIOR PARTITIONS ARE 4", DIMENSIONED TO SHEATHING UNLESS OTHERWISE NOTED.

2. ALL ANGLED PARTITIONS ARE 45 DEGREES UNLESS OTHERWISE NOTED.

3. ALL CONCENTRATED LOADS SHALL BE TRANSFERRED TO FOUNDATION VIA BEAMS, POSTS AND/OR SOLID BLOCKING.

4. (2) 2xIO HEADERS MIN AT ALL BEARING WALL OPENINGS UNLESS OTHERWISE NOTED.

5. POSTS AT HEADERS IN 2x6 WALLS SHALL BE (2)2x6 MIN. POSTS AT HEADERS IN 2x4 WALLS SHALL BE (2) 2x4 MIN.

6. ALL TRUSSES TO BEAR ON EXTERIOR WALLS AND/OR GIRDER TRUSSES UNLESS OTHERWISE NOTED.

8. MINDOM SUPPLIER TO VERIEY AT LEAST ONE MINDOM IN ALL BEDROCKIS TO HAVE A CLEAR EIGRESS OPENING OF 5.1 50, 5T, MITH MIN. CLEAR DIMENSION OF 24* IN HEIGHT AND 20* IN MIDTH, SILL HEIGHT NOT GREATER THAN 44* ABOVE FLOOR, PER CURRENT MICHGAN RESIDENTIAL CODE SECTION RSIO, MIERRE THE MINDOM OPENING IS MORE THAN 12* ABOVE GRADE, OR SURFACE BELOW, THE LOWEST PART OF CLEAR OPENING SHALL BE MIN. 24 INCHES ABOVE THE FINISHED FLOOR OF THE ROOM IT IS IN. PER MRC SECTION RGIS.

9. HAND FRAME ALL EXTERIOR WALLS (ABOVE &'-I I/&') TO UNDERSIDE OF ROOF SHEATHING -PROVIDE FIRESTOPPING EVERY &'-I I/&' VERTICALLY IN WALLS > &'-I I/&'

IO. ALL STAIR HANDRAILS TO BE MIN. 34" - MAX. 36" ABOVE NOSING AND TERMINATE IN A NEWEL POST OR SAFETY TERMINALS, WITH DIAMETER OF 1-1/4" TO 2" DIAMETER.

II. ALL GUARDRAILS TO BE MIN 36" ABOVE FLOOR SURFACE OR TREAD NOSING INCLUDING RAILS AT OPEN SIDES OF STAIRS, ADJUSTED TO ACCOMODATE HAND RAIL.

12. BALLUSTERS IN GUARD RAILS ALONG FLOOR OPENING TO BE SPACED SUCH THAT A 4" SPHERE CANNOT PASS BETWEEN BALLUSTERS.

14. MIN. CLEAR HEAD HEIGHT AT STAIRS SHALL BE 6'-0", MEASURED VERTICALLY FROM SLOPED PLANE ADJOINING TREAD NOSING, OR FROM FLOOR SURFACE OF LANDING.

15. ALL ELECTRICAL AND MECHANICAL EQUIPMENT ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS; CONTRACTOR TO VERIFY.

16. ALL NON LOAD BEARING DROPPED HEADERS SHALL BE 12" TALL WITH 8' 1-16" AND 4" 1-16" CEILINGS. WHEN TRAY CEILING OPT IS PRESENT, MAINTIAN 6'-8" FROM DECK IN TRAY CEILING ROOMS ONLY...

17. FOR ADDITIONAL NOTES SEE SHEET 1.2.

IB. SPACE STUDS I6" O.C. ALL INTERIOR NON-BEARING PARTITIONS.

19. ALL ATTIC ACCESS TO BE INSULATED & GASKETED MIN. 22X30

20. ALL COAT & BEDROOM CLOSETS =12" DEEP ALL LINEN & PANTRY CLOSETS =15" DEEP (5) SHELVES

FIRST FLOOR 8'-0" STD CLG. WINDOW HEAD HEIGHT 7'-0 7/8" AFF TYP. SEE FLOOR PLAN FOR EXCEPTIONS DUE TO HEADER SIZE

FIRST FLOOR 9'-O" OPT. CLG. WINDOW HEAD HEIGHT 8'-O 7/8" AFF TYP. SEE FLOOR PLAN FOR EXCEPTIONS.

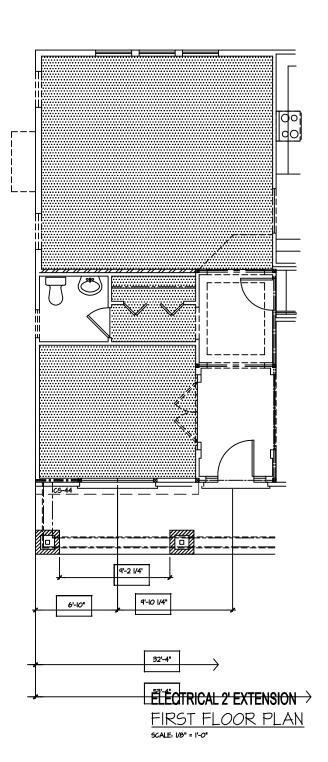
SECOND FLOOR 8'-0" STD CLG. WINDOW HEAD HEIGHT 7'-0 7/8" AFF TYP. SEE FLOOR PLAN FOR EXCEPTIONS DUE TO HEADER SIZE. (IF APPLICABLE)

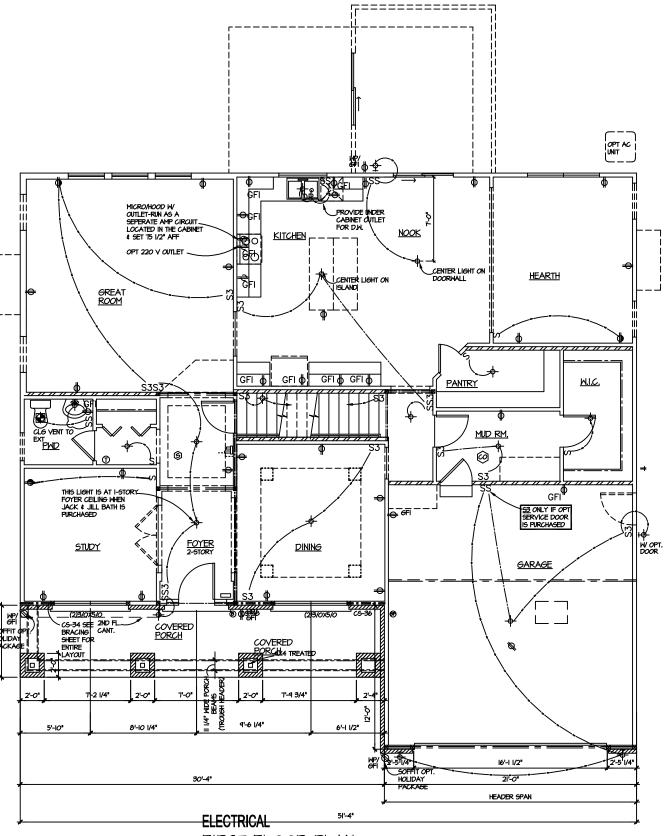
Z O 1/8 DATE 1/24/16 3/6/19 11/4/19 1/2/3/19 2/25/20 NOTED (UNLESS เพ

JOB NUMBER 4958-518

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MI SHEET NO.





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

RESIDENTIAL ELECTRICAL SYMBOL LEGEND LIGHT FIXTURES RECESSED CAN LIGHT ■ RECESSED CAN - DIRECTIONAL CEILING MOUNTED FIXTURE - WALL MOUNTED FIXTURE PULL CHAIN FIXTURE WALL SCONCE OUTLETS DUPLEX RECEPTACLE GROUND FAULT INTERRUPTING CIRCUIT -OGFI ₩P WEATHERPROOF RECEPTACLE HALF SMITCHED RECEPTACLE RANGE/DRYER 220V OUTLET DIRECT WIRE CONNECTION ▼ TELEPHONE OUTLET 図 CATY (TELEVISION) OUTLET Ф THERMOSTAT GENERATOR PREP OUTLET SWITCHES S SINGLE POLE SHITCH S3 THREE-WAY SWITCH S4 FOUR-WAY SWITCH SD DIMMER SMITCH MISC FIXTURES EXHAUST FAN EXHAUST FANLIGHT EXHAUST FANALIGHT/HEAT SMOKE DETECTOR (ARBON MONOXIDE DETECTOR ELECTRICAL PANEL O DISPOSAL TOORBELL CHIMES ® DOORBELL OPTIONAL CEILING FAWLIGHT

ELECTRICAL PLAN NOTES:

I. ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST EDITION OF NEC. LOCAL AND STATE CODES, ORDINANCES AND REGULATIONS, INCLUDING THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT

2. ALL ELECTRICAL SYSTEMS AND EQUIPMENT SHALL CONFORM TO ALL NATIONAL, STATE, AND LOCAL BUILDING CODES.

3, COORDINATE ALL NEW UNDERSROUND ELECTRICAL WORK WITH NEW AND EXISTING UTILITIES BEFORE INSTALLATION.

4. ALL ELECTRICAL MATERIALS SHALL BE NEW AND BEAR THE "UL" LABEL OR LISTING.

5. FUSES SHALL BE "UL" LISTED, DUAL-ELEMENT, REJECTION TYPE.

6. ALL DUPLEX RECEPTACLES SHALL BE SPECIFICATION GRADE 125 VOLT, IS AMP, GROUNDED TYPE.

1. SAITCHES SHALL BE 15 AMP, 120/211 VOLT, SPECIFICATION GRADE SINGLE, DOUBLE, ETC., AS INDICATED.

 $\boldsymbol{\delta}.$ LIGHTING AND RECEPTACLE BRANCH CIRCUIT BREAKERS SHALL BE RATED FOR SMITCHING DUTY.

9, FLUSH MOUNT ALL EQUIPMENT AND CONCEAL ALL CONDUIT OR WIRING IN WALLS AND CEILING SPACES IN FINISHED AREAS.

IO. ALL CABINETS, MOTOR FRAMES, STARTERS, CONDUIT OR WIRING IN WALLS AND CEILING SPACES IN FINISHED AREAS.

II. TEST CIRCUITS AS SOON AS CONDUCTORS ARE INSTALLED AND MAKE FINAL OPERATING TEST WHEN WORK IS COMPLETE.

13. THE ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATIONS OF HIS EQUIPMENT AND WORK WITH OTHER BUILDING TRADES TO AVOID INTERFERENCE BETWEEN HIS WORK AND THE WORK OF OTHER BUILDING TRADES.

IA. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE OFIC AND/OR MEATHER PROOF RECEPTACLES WHERE REQUIRED BY THE LATEST MICHIGAN RESIDENTIAL CODE AND FIRE CODE.

IS, ALL SMOKE DETECTORS TO BE LOCALLY CERTIFIED, IIO V WITH BATTERY BACKUP, MIRED IN SERIES, INTERCONNECTED TO ALL OTHERS, IN THE IMMEDIATE VICINITY OF ALL BEFORD DOORS, MIN I SMOKE DETECTOR PER FLOOR, MIN. I SMOKE DETECTOR PER FLOOR, MIN. I SMOKE DETECTOR PER SHOOM PER LATEST MICHIGAN RESIDENTIAL CODE, NEC., \$

I6. ALL ELECTRICAL AND MECHANICAL EQUIPMENT (I.E. FURNACES, A/C UNITS, ELECTRICAL PANELS, SANITARY SUMP PITS, DRAIN TILE SUMP AND WATER HEATERS) ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS.

IT. ELECTRICAL CONTRACTOR TO PROVIDE REGUIRED DIRECT HOOK-UPS/CUTOFFS.

IB. INSTALL DOORBELL TRANSFORMERS WITHIN THE DOORBELL CHIME BOX

I4. ALL DUPLEX RECEPTACLES (INTERIOR AND EXTERIOR) TO BE TAMPER RESISTENT (PER 2015 MRC E 4002.14)

20. PROVIDE SINGLE STATION CARBON MONOXIDE DETECTOR OUTSIDE OF BEDROOMS PER 2015 MRC SECT R315 AND MIN I PER FLOOR INCLUDING BASEMENT

KMZ LINAL	II/4/14 FINAL REVIEW KMZ	ZW3		(UNLESS NOTED OTHERWISE) $1/8$ " = 1'-0" ON $11X17$ PA
JANIH LINAL	II/4/19 FINAL REVI	ININA 60 LINE		STHERW
7777				(UNLESS NOTED C

JOB NUMBER

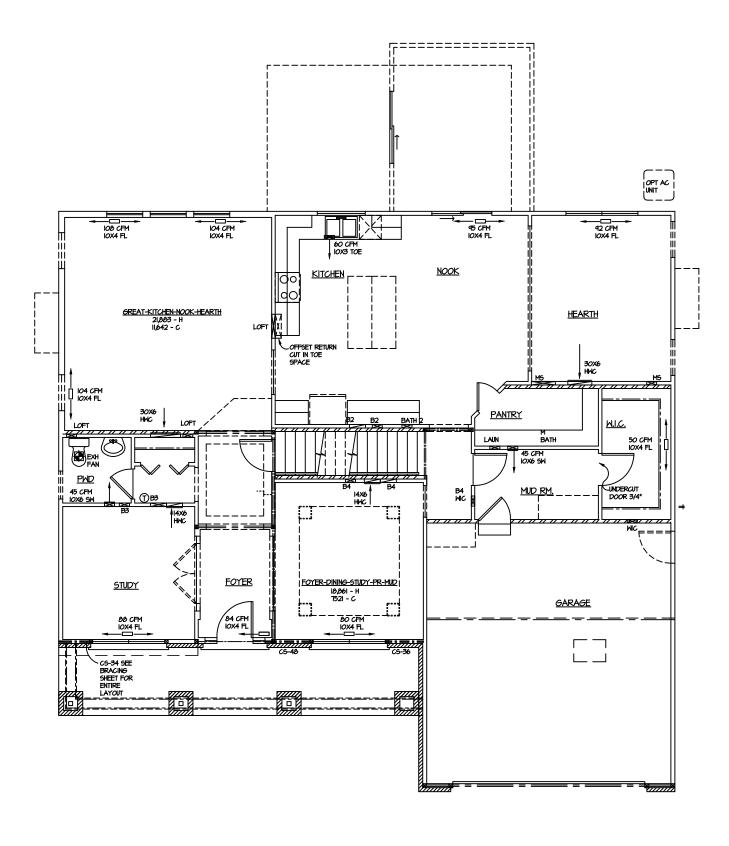
4958-518

MI SHEET NO.

WHEN PRINTED

PAPER

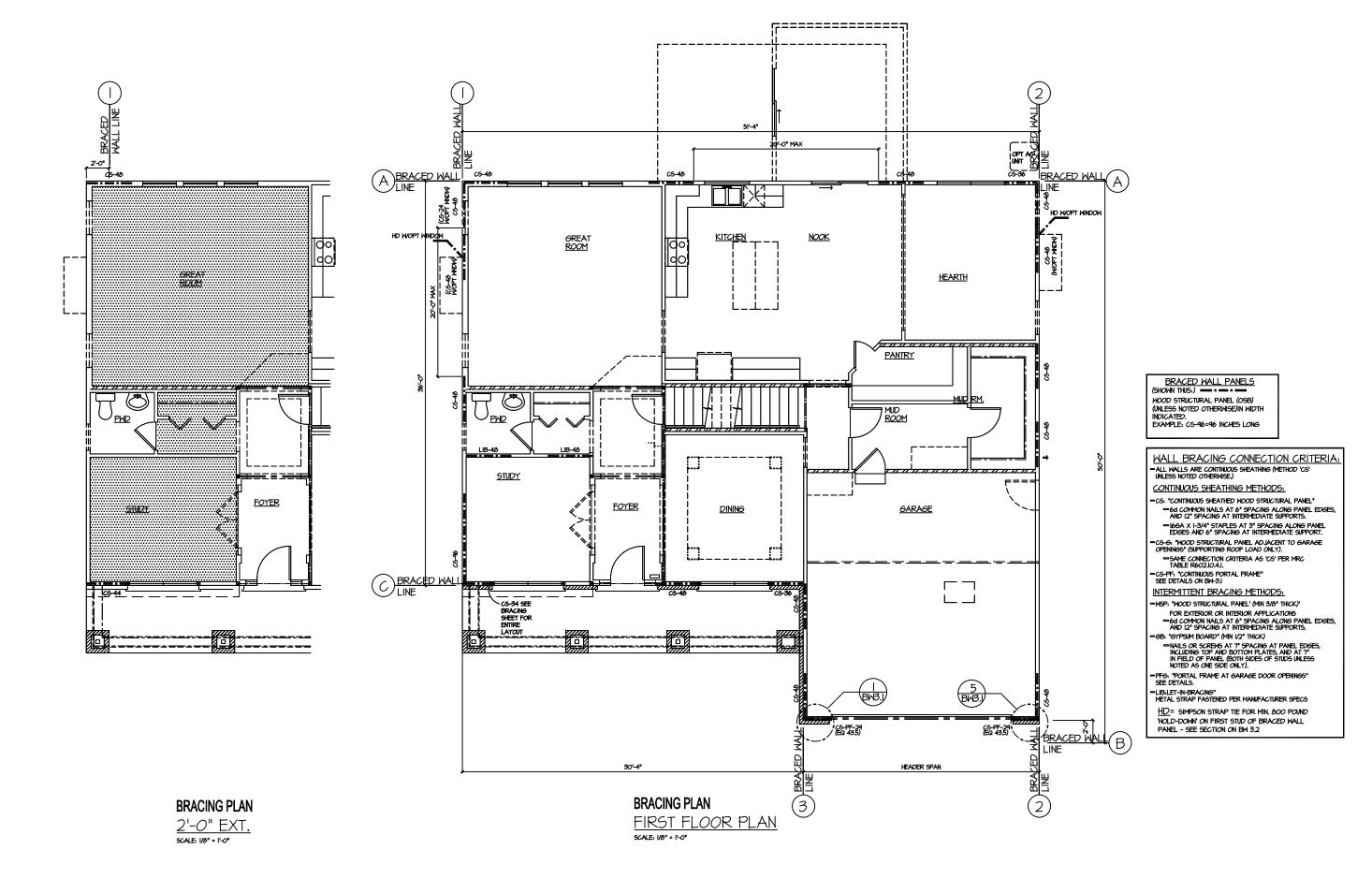
24X36



MECHANICAL FIRST FLOOR PLAN Scale: 1/0" = 1'-0"

1'-0" ON 24X36 PAPER WHEN PRINTED AT 200% JOB NUMBER

4958-518 **MI** SHEET NO. 3.3.1-M



4958-518

MI SHEET NO. 3.4.I-B

FIRST FLOOR:

					201.511.5				
				<u>MALL t</u>	<u> 3RACINE</u>	<u> DATA:</u> FIRST FL	-00R		
LINE	METHOD	SPACING	# LINE	MALL HT.	ROOF EAVE	<u>INTERPOLATED</u>	CALCULATED	BRACING LENGTH	PASSED
		(IN FEET)	MULTIPLIER		TO RIDGE	REQUIRED BRACING	REQUIRED	PROVIDED (IN FEET)	
			2=1.0 3=1.3		MULTIPLIER	<u>LENGTH</u>	BRACING LENGTH		
			4=1.45	10'=1.0 12'=1.1		TABLE R602.10.1.2(IN FEET)	(IN FEET)		
Α	C5	50'(B)	1.0	.45	.985	I4. <i>0</i>	13.10	I5'- <i>0</i> "	YE5
В	CS	50'(A)	1.0	I <i>.O</i>	.86	7.5	6.45	7'-3"	YES
C	CS	36'(A)	1.0**	.95	.985	10.5	9.83	9'-10"	YES
- 1	CS	51'-4"(2)	1.0	.95	.985	14.40	13.47	16'-0"	YES
2	CS	51'-4"(1)	1.0	1.0	.985	14.40	14.18	16'-0"	YES
3	C5	30'-4"(1)	l.O**	.45	.86	9.08	7.42	&'-O"	YES

*ROOF EAVE TO RIDGE HEIGHT=9'-6" HOUSE, 7'-8" GARAGE **LINE MULTIPLIER = 1.0 PER MRC TABLE R602.10.3(2), FOOTNOTE C

SECOND FLOOR:

				MALL E	BRACINE	DATA: SECOND	FLOOR		
LINE	METHOD					INTERPOLATED	CALCULATED	BRACING LENGTH	
		(IN FEE T)	MULTIPLIER 2=1,0		<u>TO RIDGE</u> MULTIPLIER	REQUIRED BRACING LENGTH	REQUIRED BRACING LENGTH	PROVIDED(IN FEET)	PASSED
			3=1.3 4=1.45	10'=1.0 12'=1.1		TABLE R602.10.1.2(IN FEET)			
Α	C5	32'(B)	1.0	.9	.97	5.2	4.54	11'-10"	YES
В	CS	32'(A)	1.0	.9	.97	5.2	4.54	14'-4"	YES
1	CS	51'-4"(2)	1.0	.9	.97	7.7	6.72	12'-0"	YES
2	C5	5l'-4"(l)	1.0	.9	.97	7.7	6.72	12'-0"	YES

*ROOF EAVE TO RIDGE HEIGHT=9'-6" **LINE MULTIPLIER = 1.0 PER MRC TABLE R602.10.3(2), FOOTNOTE C

| THE | 12460 FOR | BY | DATE | MSCELANEOUS SHEET BY | DATE | DATE

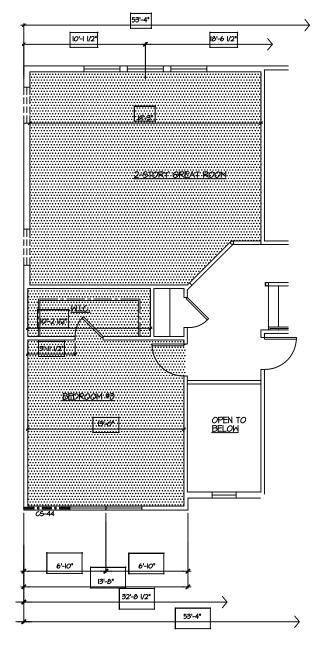
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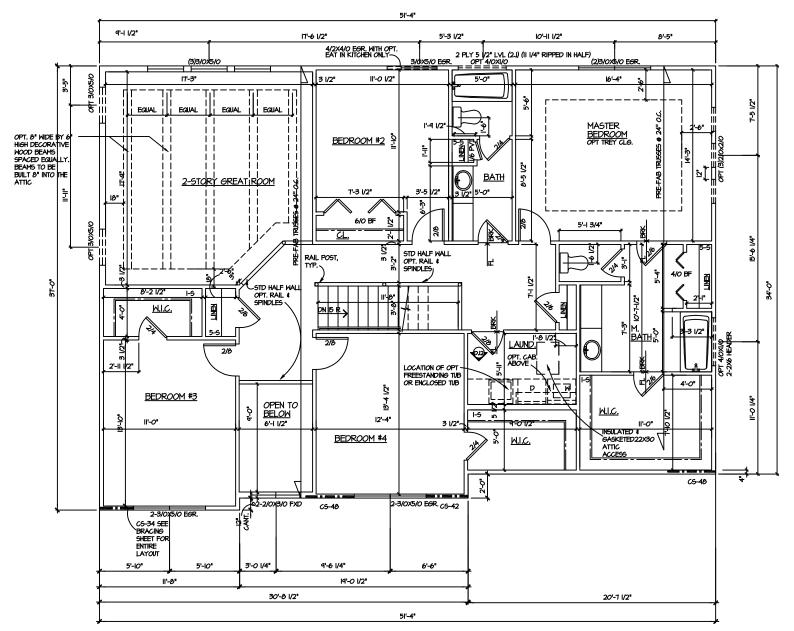
1'-0" ON 24X36 PAPER WHEN PRINTED AT 200%

JOB NUMBER 4958-518 MI SHEET NO. 3.4.3-B

				<u> </u>	NALL BR	RACING I	DATA:			
DESCRIPTION	LINE	METHOD	SPACING (IN FEET)	# LINE MULTIP 2=1,0 4=1,45	MALL HT. MULTIPLIER		INTERPOLATED REQUIRED BRACING LENGTH (FEET)	CALCULATED REQUIRED BRACING LENGTH	BRACING LENGTH PROVIDED(IN FEET)	PASSED
				3=1.3 5+=1.60	8'=0.9.0 0'= .0 9'=0.95 2'= .	MULTIPLIER	TABLE R602.10.1.2	(IN FEET)		
2- SEG	В	CS	50'-0" (A)	1.0	1.0	.86	1.5	6.45	8'-0"	YE5
3-FEG	I	CS	57'-8" (4)	1.0	.95	.985	16.30	15.25	16'-0"	YES
3-FEG W4' EXT	4	C S	57'-8" (4)	1.0	1.0	.70	8.65	6.05	8'-O"	YES
W/2' EXT	2	C 5	51'-4" (I)	1.0**	.45	.985	14.40	13.47	14'-8"	YES
	D	CS	30'-0" (I)	1.0**	1.0	.70	4.5	3.15	8'-0"	YES
	В	CS	48'-0" (A)	1.0	1.0	.86	7.2	6.19	9'-3"	YES
3-FEG W6' EXT		CS	57'-8" (4)	1.0	.45	.985	16.30	15.25	16'-0"	YES
	4	CS	57'-8" (4)	1.0	1.0	.70	8.65	6.05	8'-0"	YES
	2	C5	51'-4" <i>(</i> 1)	1.0**	.95	.985	14.40	13.47	14'-8"	YES
	D	CS	30'-0" (I)	1.0**	1.0	.70	4.5	3.15	8'-0"	YES
	В	CS	50'-0" (A)	1.0	1.0	.86	7.5	6.45	9'-3"	YES
3-SEG	В	CS	50'-0" (A)	1.0	1.0	.86	7.5	6.45	8'-0"	YES
3-SEG W6' EXT W4' EXT W2' EXT	2	C5	51'-4" (1)	1.0	1.0	.985	14.40	14.18	16'-10"	YE5
2-SEG W2' EXT	В	CS	50'-0" (A)	1.0	1.0	.86	7.5	6.45	8'-O"	YES
W/4' EXT W/6' EXT	2	CS	51'-4" (1)	1.0	1.0	.985	14.40	14.18	20'-0"	YES
2-FEG W2' EXT W4' EXT W6' EXT	2	C5	5I'-4" <i>(</i> I <i>)</i>	1.0	1.0	.985	14.40	14.18	20'-0"	YES
4' STORAGE BUMP 2-FEG W2' EXT &	B 2	CS CS	48'-0" (A) 50'-0" (I)	I.O I.O	I.O I.O	.86 .985	7.2 14.0	6.I9 I3.79	'-3"	YES YES
4'BUMP 2-FEG W/4' EXT & 4'BUMP			30 0 (1)	1.0	1.0	COM.	14.0	15. M	15'-1 <i>0</i> "	ILO
2-FEG W6' EXT &	В	CS	50'-0" (A)	1.0	1.0	.86	7.5	6.45	II'-3"	YES
4'BUMP	2	C5	50'-O" (I)	1.0	1.0	.985	14.0	13.79	15'-10"	YES

OPTIONS:





2' EXTENSION SECOND FLOOR PLAN SCALE, 100" = 1'-0"



SECOND FLOOR PLAN

FLOOR PLAN NOTES

- I. ALL UNDIMENSIONED INTERIOR PARTITIONS (††) ARE 3-1/2" ROUGH, EXTERIOR PARTITIONS ARE 4", DIMENSIONED TO SHEATHING UNLESS OTHERWISE NOTED.
- 2. ALL ANGLED PARTITIONS ARE 45 DEGREES UNLESS OTHERWISE NOTED.
- 3. ALL CONCENTRATED LOADS SHALL BE TRANSFER TO FOUNDATION VIA BEAMS, POSTS AND/OR SOLID BLOCKING.
- 4. (2) 2xio Headers Min at all bearing wall openings unless otherwise noted.
- 5. POSTS AT HEADERS IN 2x6 WALLS SHALL BE (2)2x6 MIN. POSTS AT HEADERS IN 2x4 WALLS SHALL BE (2) 2x4 MIN.
- 6. ALL TRUSSES TO BEAR ON EXTERIOR WALLS AND/OR GIRDER TRUSSES UNLESS OTHERWISE NOTED.
- 1. TRUSS MANUFACTURER TO SIZE MEMBERS, FASTENER HANGERS AND SET SPACING FOR ALL TRUSSES.
- 8. MINDON SUPPLIER TO VERIPY AT LEAST ONE MINDOM IN ALL BEDROOMS TO HAVE A CLEAR EGRESS OPENING OF 5.1 39, FT, WITH MIN. CLEAR DIRENSION OF 24" IN HEIGHT AND 20" IN NIDTH, SILL HEIGHT NOT GREATER THAN 44" ABOVE FLOOR, PER CURRENT MICHIGAN RESIDENTIAL CODE SECTION R3IO, INTERE THE MINDOM OPENING IS MORE THAN 12" ABOVE GRADE, OR SURFACE BELON, THE LOWEST PART OF CLEAR OPENING SHALL BE MIN. 24 INCHES ABOVE THE FINISHED FLOOR OF THE ROOM IT IS IN, PER MRC SECTION R6IS.
- 4. HAND FRAME ALL EXTERIOR WALLS (ABOVE 8'-1 1/8')
 TO UNDERSIDE OF ROOF SHEATHING -PROVIDE
 FIRESTOPPING EVERY 8'-1 1/8' VERTICALLY IN WALLS >
 8'-1 1/8'
- IO. ALL STAIR HANDRAILS TO BE MIN. 34" MAX. 36" ABOVE NOSING AND TERMINATE IN A NEWEL POST OR SAFETY TERMINALS, WITH DIAMETER OF I-I/4" TO 2" DIAMETER.
- II. ALL GUARDRAILS TO BE MIN 36' ABOVE FLOOR SURFACE OR TREAD NOSING INCLUDING RAILS AT OPEN SIDES OF STAIRS, ADJUSTED TO ACCOMODATE HAND RAIL.
- 12. BALLUSTERS IN GUARD RAILS ALONG FLOOR OPENING TO BE SPACED SUCH THAT A 4" SPHERE CANNOT PASS BETWEEN BALLUSTERS.
- I3. BALLUSTERS IN GUARD RAILS AT OPEN SIDES OF STAIRS TO BE SPACED SUCH THAT A 4-3/0" SPHERE CANNOT PASS BETWEEN BALLUSTERS.
- 14. MIN. CLEAR HEAD HEIGHT AT STAIRS SHALL BE 6'-6", MEASURED VERTICALLY FROM SLOPED PLANE ADJOINING TREAD NOSING, OR FROM FLOOR SURFACE OF LANDING.
- 15. ALL ELECTRICAL AND MECHANICAL EQUIPMENT ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS; CONTRACTOR TO VERIFY.
- I6. ALL NON LOAD BEARING DROPPED HEADERS SHALL BE I2" TALL WITH 8" I-16" AND 4" I-16" CEILINGS, MEN TRAY CEILING OPT IS PRESENT, MAINTIAN 6"-6" FROM DECK IN TRAY CEILING ROOMS ONLY..
- 17. FOR ADDITIONAL NOTES SEE SHEET 1.2.
- 18. SPACE STUDS 16" O.C. ALL INTERIOR NON-BEARING PARTITIONS.
- I9. ALL ATTIC ACCESS TO BE INSULATED & GASKETED MIN. 22X30
- 20. ALL COAT & BEDROOM CLOSETS =12" DEEP I ROD/I SHELF ALL LINEN & PANTRY CLOSETS =15" DEEP (5) SHELVES

FIRST FLOOR &'-O" STD CLG.
WINDOW HEAD HEIGHT T'-O T/B"
AFF TYP. SEE FLOOR PLAN FOR
EXCEPTIONS DUE TO HEADER
SIZE.

FIRST FLOOR 9'-0" OPT. CLG. WINDOW HEAD HEIGHT 8'-0 1/8" AFF TYP. SEE FLOOR PLAN FOR EXCEPTIONS.

SECOND FLOOR 8'-0" STD CLG. MINDOW HEAD HEIGHT 7'-0 7/8" AFF TYP. SEE FLOOR PLAN FOR EXCEPTIONS DUE TO HEADER SIZE. (IF APPLICABLE)



JOB NUMBER 4958-518

MI SHEET NO. NOTED

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SHEET

ELECTRICAL
SECOND FLOOR PLAN
SCALE: 1/0" = 1-0"

1'-0" ON 24X36 PAPER WHEN PRINTED AT 200% JOB NUMBER 4958-518

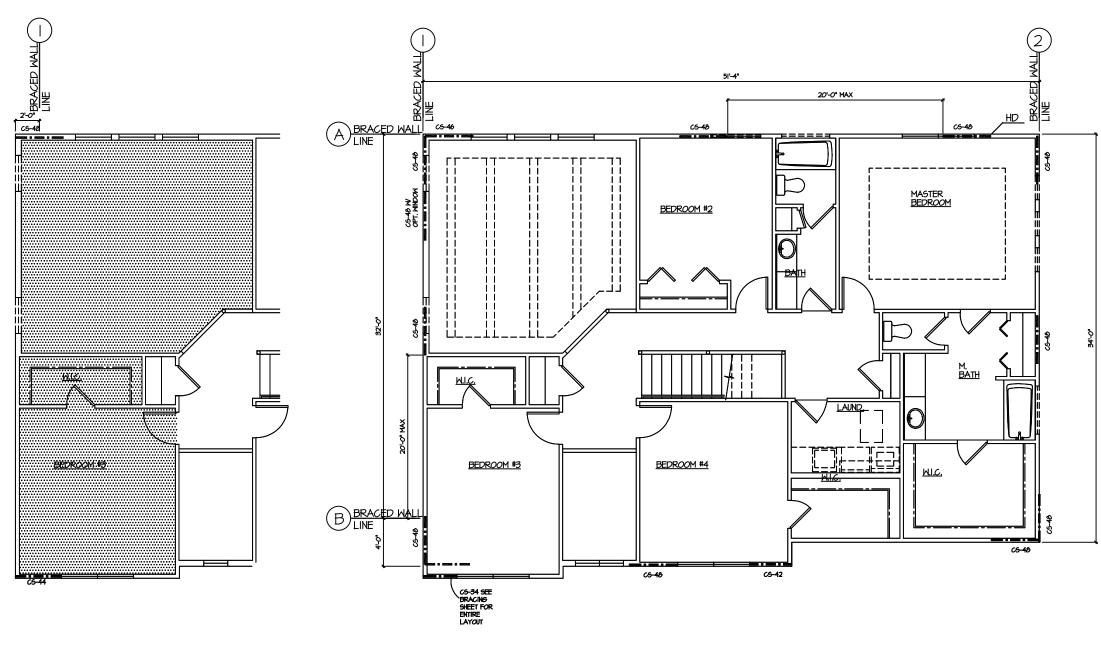
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MECHANICAL SECOND FLOOR PLAN SCALE: 1/80" = 1'-0"

1'-0" ON 24X36 PAPER WHEN PRINTED AT 200% (UNLESS NOTED JOB NUMBER 4958-518

MI

4.3.I-M



BRACING PLAN

2'-0" EXT. SCALE: 1/8" = 1'-0"

BRACING PLAN SECOND FLOOR PLAN SCALE: 1/8" = 1'-0"

BRACED WALL PANELS (SHOWN THUS:) WOOD STRUCTURAL PANEL (OSB) (UNLESS NOTED OTHERWISE)IN WIDTH INDICATED.
EXAMPLE: CS-96=96 INCHES LONG

WALL BRACING CONNECTION CRITERIA:

-ALL WALLS ARE CONTINUOUS SHEATHING (METHOD 'CS' UNLESS NOTED OTHERWISE.)

CONTINUOUS SHEATHING METHODS:

-CS: "CONTINUOUS SHEATHED WOOD STRUCTURAL PANEL" =6d COMMON NAILS AT 6" SPACING ALONG PANEL EDGES, AND 12" SPACING AT INTERMEDIATE SUPPORTS. = 166A X 1-3/4" STAPLES AT 3" SPACING ALONG PANEL EDGES AND 6" SPACING AT INTERMEDIATE SUPPORT.

-CS-6: "MOOD STRUCTURAL PANEL ADJACENT TO GARAGE OPENINGS" (SUPPORTING ROOF LOAD ONLY). =SAME CONNECTION CRITERIA AS 'CS' PER MRC TABLE R602.10.4.1.

CS-PF: "CONTINUOUS PORTAL FRAME" SEE DETAILS ON BW-3.1

INTERMITTENT BRACING METHODS:

=W5P; "WOOD STRUCTURAL PANEL' (MIN 3/6" THICK)' FOR EXTERIOR OR INTERIOR APPLICATIONS =6d COMMON NAILS AT 6" SPACING ALONG PANEL EDGES, AND 12" SPACING AT INTERMEDIATE SUPPORTS.

-6B: "GYPSUM BOARD" (MIN 1/2" THICK) MAILS OR SCRENS AT T" SPACING AT PANEL EDGES, INCLIDING TOP AND BOTTOM PLATES, AND AT T" INCLIDING TOP ANEL (BOTH SIDES OF STUDS UNLESS NOTED AS ONE SIDE ONLY).

-PFG; "PORTAL FRAME AT GARAGE DOOR OPENINGS" SEE DETAILS.

LIB.LET-IN-BRACING"
METAL STRAP FASTENED PER MANUFACTURER SPECS

HD= SIMPSON STRAP TIE FOR MIN. 800 POUND "HOLD-DOWN" ON FIRST STUD OF BRACED WALL
PANEL - SEE SECTION ON BW 3.2

SHEET BY						
MISCELL ANEOUS SHEET						
DATE						
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	FINAL REVIEW	HINAL	HINAL REVIEW	,eo line		
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外	TLILL	IHE		TAMPION		

JOB NUMBER

4958-518 MI 4.4.I-B

FIRST FLOOR:

	WALL BRACING DATA: FIRST FLOOR										
LINE	METHOD	SPACING	# LINE	WALL HT.	. ROOF EAVE INTERPOLATED		CALCULATED	BRACING LENGTH	PASSED		
		(IN FEET)		MULTIPLIER		REQUIRED BRACING	REQUIRED	PROVIDED(IN FEET)			
			2=I,0 3=I,3	8'=0.9.0 9'=0.95	MULTIPLIER	<u>LENGTH</u>	BRACING LENGTH				
			4=1.45	10'=1.0 12'=1.1		TABLE R602.10.1.2(IN FEET)	(IN FEET)				
Α	C 5	50'(B)	1.0	.95	.485	14.0	13.10	I5'-O"	YES		
В	C 5	50'(A)	1.0	1.0	.86	7.5	6.45	7'-3"	YES		
C	C5	36'(A)	1.0**	.95	.985	10.5	9.83	9'-10"	YES		
1	CS	51'-4"(2)	1.0	.95	.985	14.40	13.47	16'-0"	YES		
2	C5	5I'-4"(I)	1.0	1.0	.985	14.40	14.18	16'-0"	YES		
3	C5	30'-4"(1)	1.0**	.95	.86	9.08	7.42	8'-O"	YES		

*ROOF EAVE TO RIDGE HEIGHT=9'-6" HOUSE, 7'-8" GARAGE **LINE MULTIPLIER = 1.0 PER MRC TABLE R602.10.3(2), FOOTNOTE C

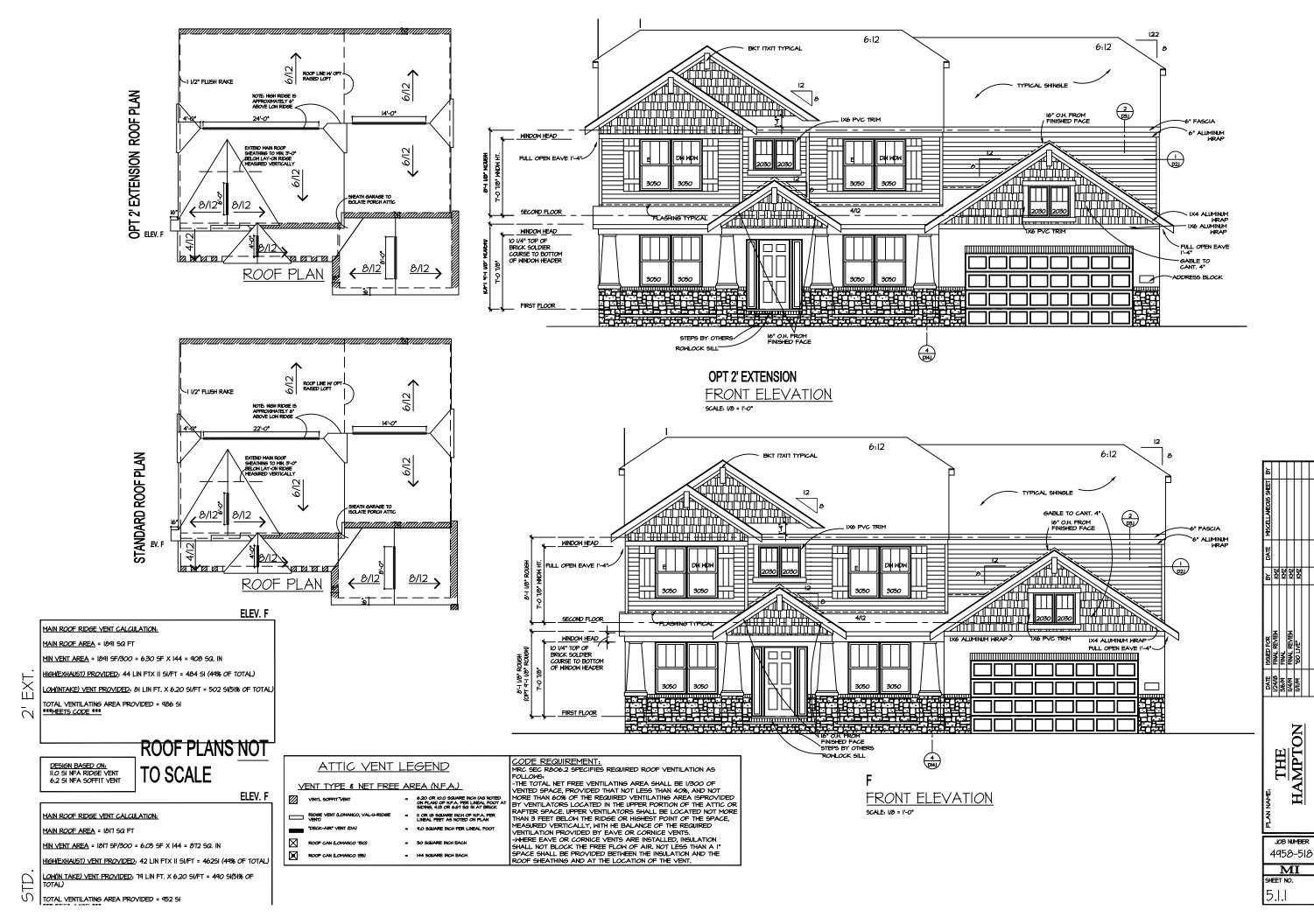
SECOND FLOOR:

	<u>WALL BRACING DATA:</u> SECOND FLOOR										
LINE	METHOD					INTERPOLATED	CALCULATED	BRACING LENGTH			
		(IN FEE T)	MULTIPLIER 2=1,0	8'=0.9.0	<u>TO RIDGE</u> MULTIPLIER	REQUIRED BRACING LENGTH	REQUIRED BRACING LENGTH	PROVIDED(IN FEET)	PASSED		
			3=1 <i>.</i> 3 4=1.45	q'=0.45 0'= .0 2'= .		TABLE R602.10.1.2(IN FEET)					
Α	C5	32'(B)	1.0	.9	.97	5.2	4.54	11'-10"	YES		
В	CS	32'(A)	1.0	.9	.97	5.2	4.54	14'-4"	YES		
1	CS	51'-4"(2)	1.0	.9	.97	7.7	6.72	12'-0"	YES		
2	C5	5l'-4"(l)	1.0	.9	.97	7.7	6.72	12'-0"	YES		

*ROOF EAVE TO RIDGE HEIGHT=9'-6" **LINE MULTIPLIER = 1.0 PER MRC TABLE R602.10.3(2), FOOTNOTE C

JOB NUMBER 4958-518 **MI**

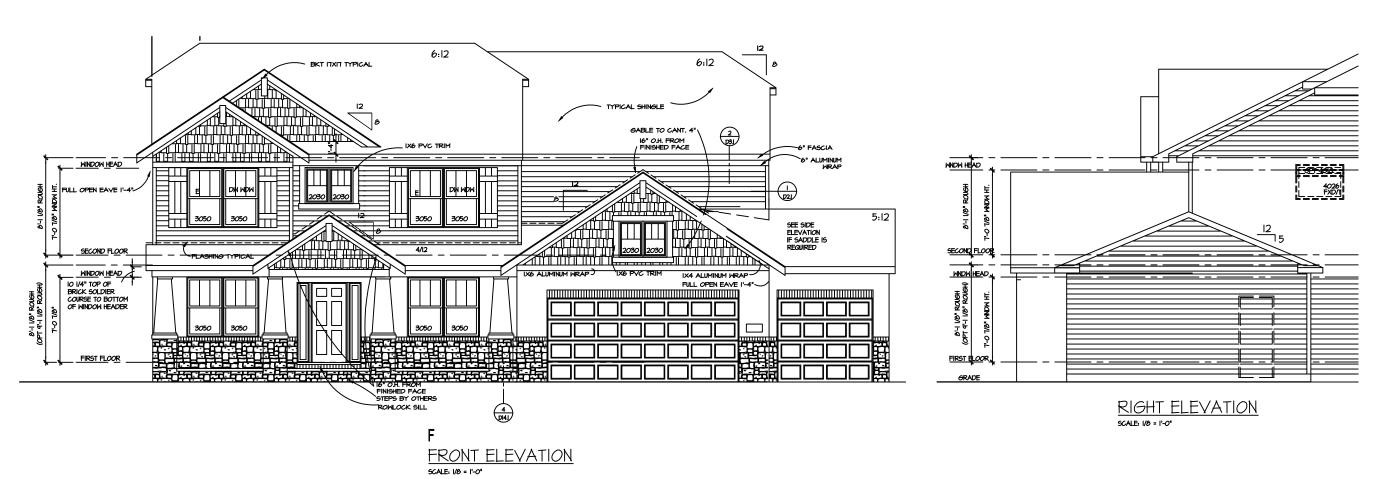
MI SHEET NO.

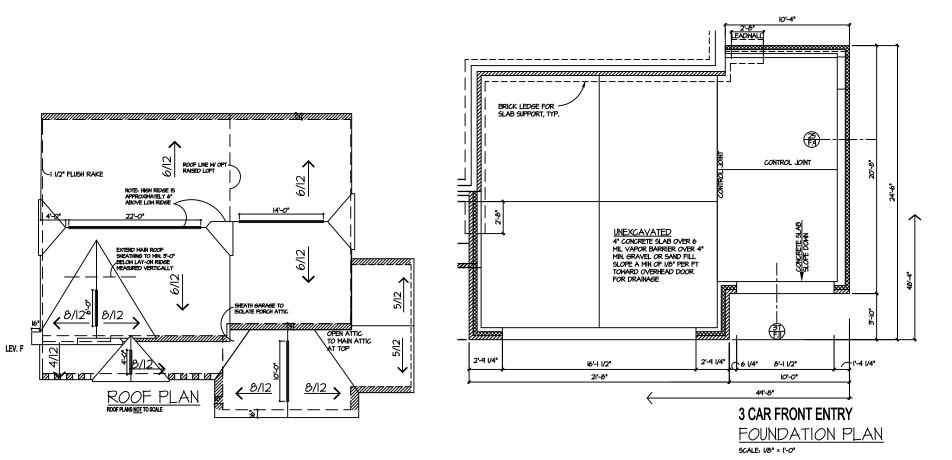


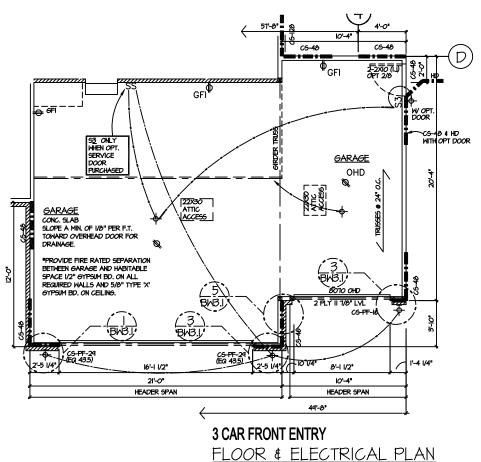
24X36 PAPER WHEN PRINTED (UNLESS NOTED

JOB NUMBER

MI SHEET NO.





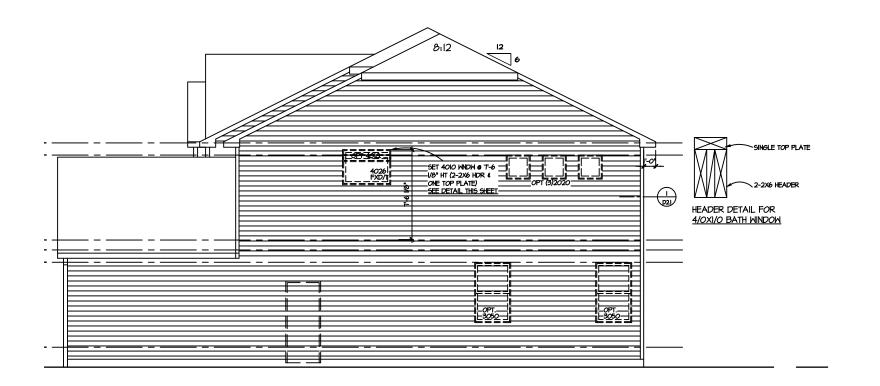


SCALE: 1/8" = 1'-0"

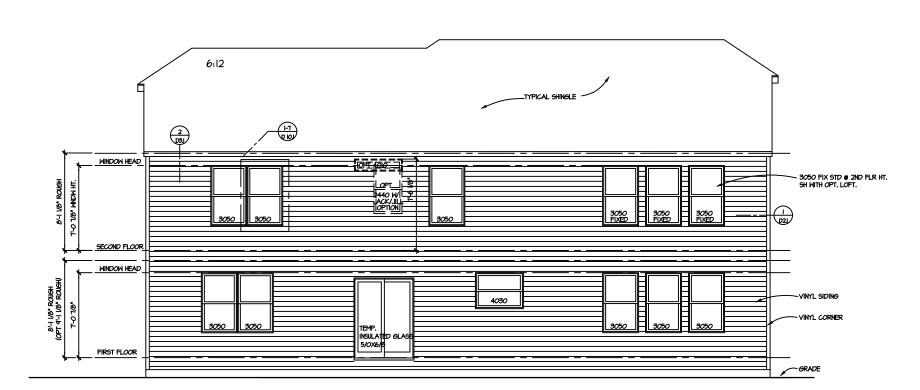
THE HAMPTON

JOB NUMBER 4958-518

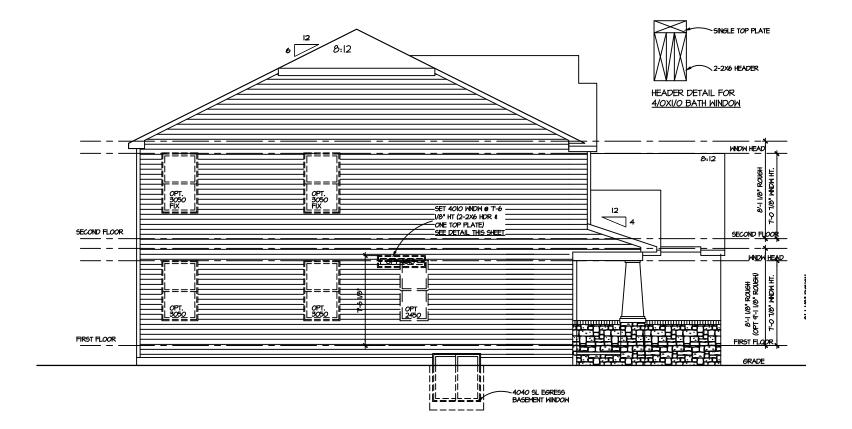
MI SHEET NO. SHEET



RIGHT ELEVATION SCALE: 1/0"



REAR ELEVATION SCALE, 1/8" = 1'-0"



1'-0" ON 24X36 PAPER WHEN PRINTED AT 200% ON 11X17 PAPER, 1/4" SCALE: (UNLESS NOTED OTHERWISE) 1/8" $\frac{\overline{THE}}{\overline{HAMPTON}}$

JOB NUMBER 4958-518

MI SHEET NO. 5.3.1

SHEET

BY DATE NYZ NYZ NYZ NYZ NYZ NYZ SCALE: (UNLESS NOTED JOB NUMBER

4958-518

SHEET

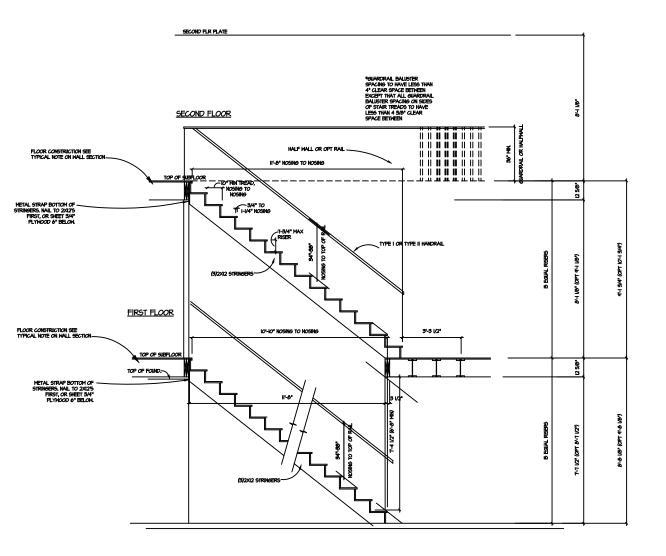
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-0" ON 24X36 PAPER WHEN PRINTED AT 200%

 $\frac{\overline{THE}}{\overline{HAMPTON}}$

JOB NUMBER 4958-518

MI SHEET NO. SHET



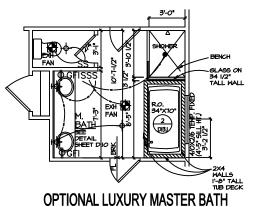
STAIR SECTION SCALE 1/4 = 1'-0"

*VERIFY FINISH FLOOR MATERIAL FOR RISER HEIGHT.

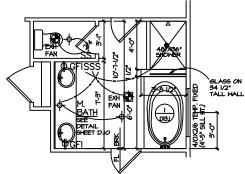
THE HAMPTON

JOB NUMBER 4958-518

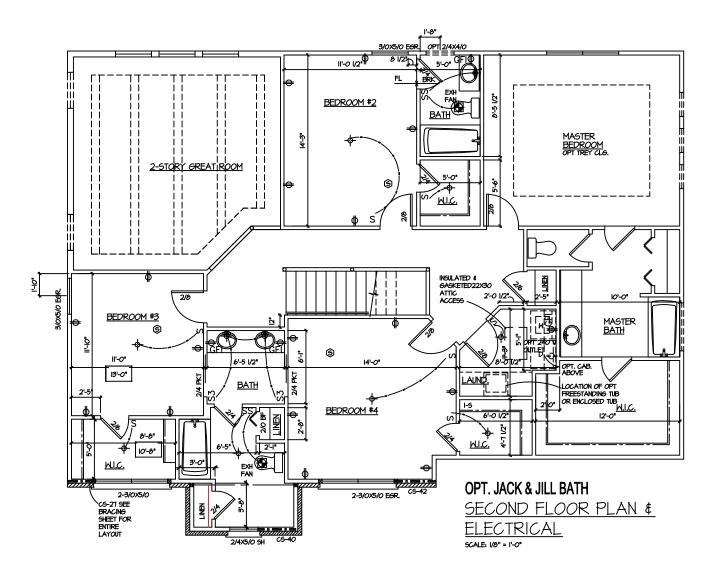
MI SHEET NO.

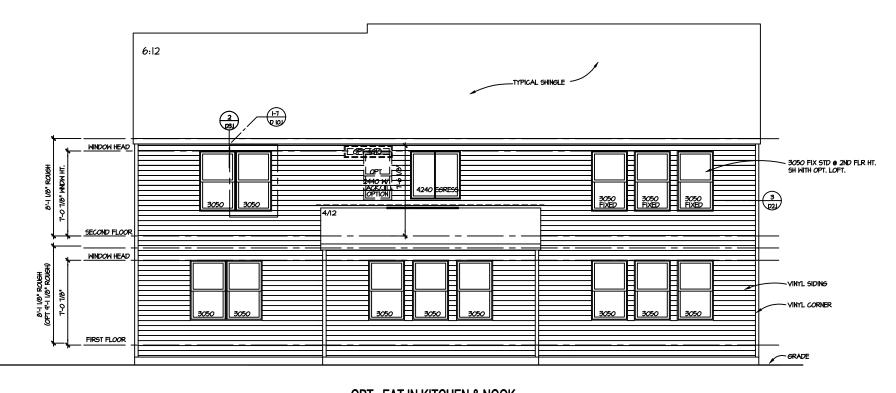


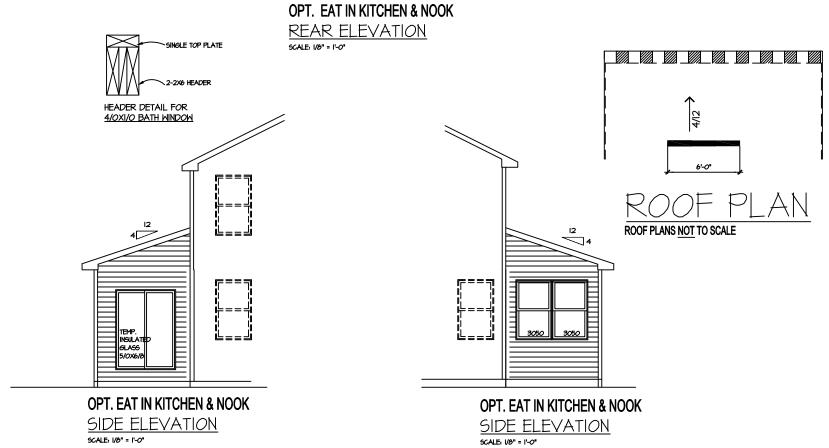
SECOND FLOOR PLAN &
ELECTRICAL
SCALE: 1/8" = 1'-0'

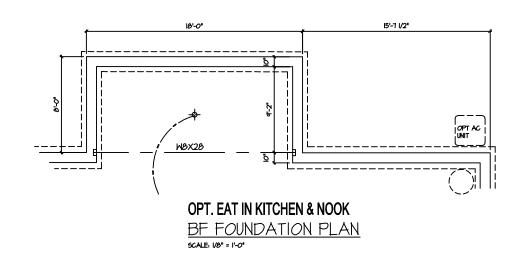


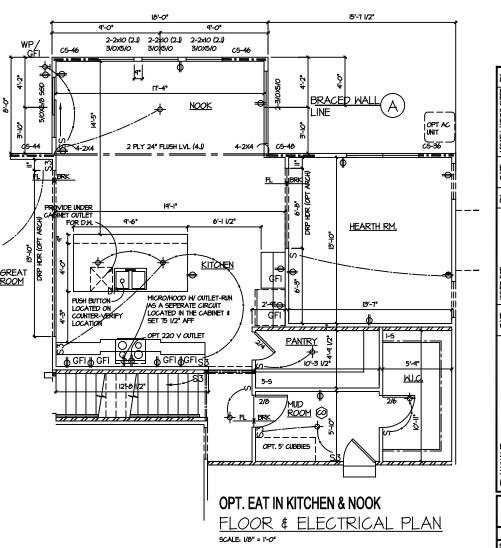
OPTIONAL DELUXE MASTER BATH
SECOND FLOOR PLAN &
ELECTRICAL
SCALE, 1/80" = 1'-0"



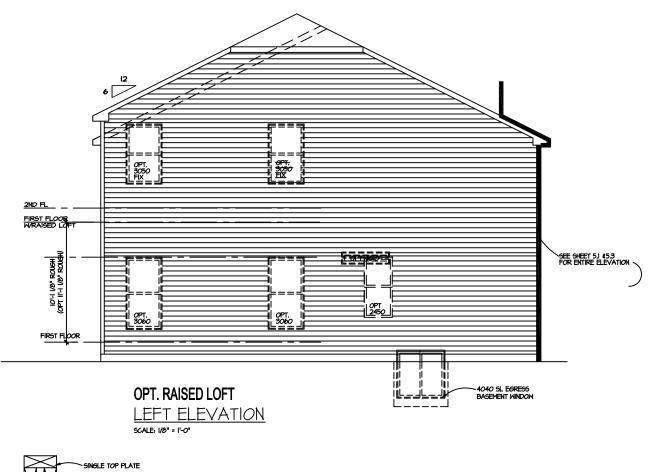


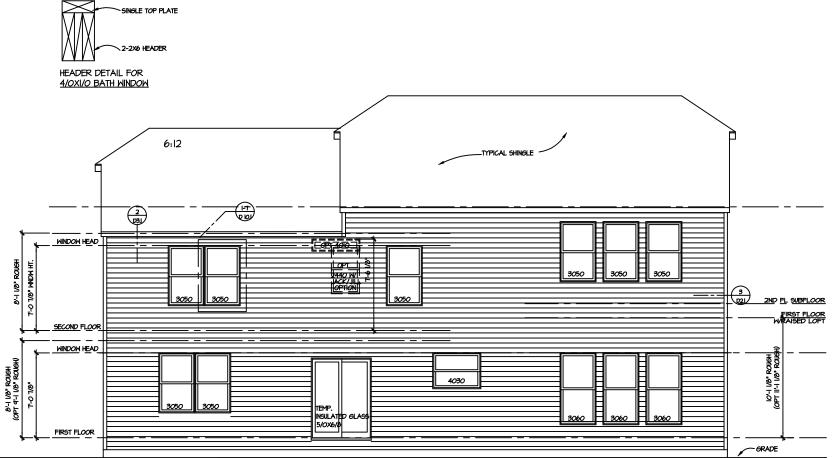


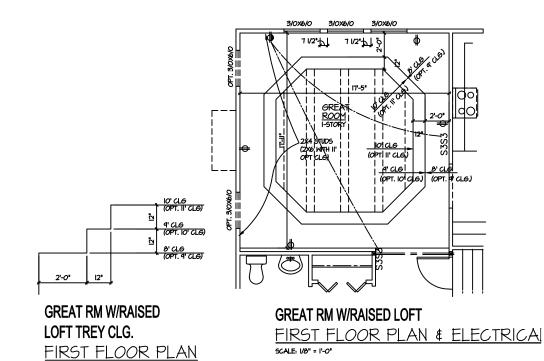












SCALE: 1/8" = 1'-0"

