

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: November 10, 2020

REGARDING: 22652 Montebello Court, Parcel # 50-22-27-453-021 (PZ20-0041)

BY: Larry Butler, Deputy Director Community Development

. GENERAL INFORMATION:

Applicant

Compo Builders Inc

Variance Type

Dimensional Variance

Property Characteristics

Zoning District: Single Family Residential

Location: West of Novi Road and North of Nine Mile Road

Parcel #: 50-22-27-453-021

Request

The applicant is requesting variance from the Novi Zoning Ordinance Section 4.19.1.E.i for a proposed 1,002 square foot garage (850 square feet permitted by code, variance of 152 square feet). This variance would accommodate the building the garage for a proposed new residential home. This property is zoned Single Family Residential (R-3).

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.	PZ20-004	11 , sc	ught	by for
		Ffi ou deur se									ner has	shown	prac	
	all	micuity re	equiring	9							·			
		٠,					ner will be un e		,	•		nited wi	th resp	ect
		(b) The	e prope	erty is u	ınique b	ecaus	se				·	_		
		(c) Pe	titioner	did nc	ot create	the c	condition be	caus	se					

		·
	(d) The relief granted will not unreasonably interfere with adjacent or surrounding properties because
	(e) The relief if consistent with the spirit and intent of the ordinance because
	(f) The variance granted is subject to:
		1
		2
		3
		4
2.		nove that we <u>deny</u> the variance in Case No. PZ20-0041 , sought by because Petitioner has not shown
	for prac	tical difficulty requiring because Petitioner has not shown
		a) The circumstances and features of the property including are not unique because they
		exist generally throughout the City.
	(b) The circumstances and features of the property relating to the variance request are self-created because
	(c) The failure to grant relief will result in mere inconvenience or inability to attain highe economic or financial return based on Petitioners statements that
	(d) The variance would result in interference with the adjacent and surrounding properties by
	(e) Granting the variance would be inconsistent with the spirit and intent of the ordinance to
		···

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



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

ZONING BOARD OF APPEALS APPLICATION

APPLICATION MUST BE FILLED OUT COMPLETELY

I. PROPERTY INFORMATION (Address of subject ZB)	Application Fee:						
PROJECT NAME / SUBDIVISION		Meeting Date:					
ADDRESS LOT/SIUTE/SPACE #							
SIDWELL # May be obtain from Assessing 50-22 Department (248) 347-0485 ZBA Case #: PZ							
50-22 Department of the CROSS ROADS OF PROPERTY	Timent (240) 347-0403						
IS THE PROPERTY WITHIN A HOMEOWNER'S ASSOCIATION JURISDICTIC	N? REQUEST IS FOR:						
☐ YES ☐ NO	☐ RESIDENTIAL ☐ C	OMMERCIAL 🗆 VACANT PE	roperty 🗆 signage				
DOES YOUR APPEAL RESULT FROM A NOTICE OF VIOLATION (OR CITATION ISSUED?	☐ YES ☐ NO					
II. APPLICANT INFORMATION							
A. APPLICANT EMAIL ADDRESS		CELL PHONE NO.					
NAME		TELEPHONE NO.					
ORGANIZATION/COMPANY		FAX NO.					
ADDRESS	CITY	STATE	ZIP CODE				
B. PROPERTY OWNER CHECK HERE IF APPLICANT IS A	ALSO THE PROPERTY OWNER	1					
Identify the person or organization that owns the subject property:		CELL PHONE NO.					
NAME		TELEPHONE NO.					
ORGANIZATION/COMPANY		FAX NO.					
			_				
ADDRESS	CITY	STATE	ZIP CODE				
III. ZONING INFORMATION							
A. ZONING DISTRICT							
\square R-A \square R-1 \square R-2 \square R-3 \square R-4	4 \square RM-1 \square RM-2	□ MH					
□I-1 □I-2 □RC □TC □TC	C-1 OTHER						
B. VARIANCE REQUESTED							
INDICATE ORDINANCE SECTION (S) AND VARIANCE REQUEST	ED:						
1. Section Variance requeste	ed						
2. Section Variance requeste	ed						
3. Section Variance requeste	ed						
4. Section Variance requeste	ed						
IV. FEES AND DRAWNINGS							
A. FEES							
☐ Single Family Residential (Existing) \$200 ☐ (With V	'iolation) \$250 🗆 Single F	amily Residential (New) \$	250				
☐ Multiple/Commercial/Industrial \$300 ☐ (With V	iolation) \$400 \square Signs \$	300 ☐ (With Violation) \$	400				
☐ House Moves \$300 ☐ Specia	l Meetings (At discretion c	of Board) \$600					
B. DRAWINGS 1-COPY & 1 DIGITAL COPY SUBMIT							
Dimensioned Drawings and Plans (Pl. 4 Pl.)		osed distance to adjacen					
Site/Plot Plan Evisting or proposed buildings or addition on the proposed buildings or addition of the proposed buildings of the prop		ting & proposed signs, if a	applicable				
Existing or proposed buildings or addition on the proNumber & location of all on-site parking, if applical		evations nation relevant to the Va	riance application				
Truy extra information of all of site parking, in applicable							



ZONING BOARD OF APPEALS APPLICATION

V. VARIANCE	
A. VARIANCE (S) REQUESTED	
M DIMENSIONAL ☐ USE ☐ SIGN	
There is a five-(5) hold period before work/action can be taken on variance approval	S.
B. SIGN CASES (ONLY) Your signature on this application indicates that you agree to install a Mock-Up Sign to meeting. Failure to install a mock-up sign may result in your case not being heard by the schedule ZBA meeting, or cancelled. A mock-up sign is NOT to be actual sign. Upon a removed within five-(5) days of the meeting. If the case is denied, the applicant is respectively of the mock-up or actual sign (if erected under violation) within five-(5) days of the mock-up or actual sign (if erected under violation) within five-(5) days of the mock-up or actual sign (if erected under violation) within five-(5) days of the mock-up or actual sign (if erected under violation) within five-(5) days of the mock-up or actual sign (if erected under violation) within five-(5) days of the meeting.	ne Board, postponed to the next pproval, the mock-up sign must be ponsible for all costs involved in the
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 to building permit for such erection or alteration is obtained within such period and such proceeds to completion in accordance with the terms of such permit.	onger than one-(1) year, unless a erection or alteration is started and
No order of the Board permitting a use of a building or premises shall be valid for a per eighty-(180) days unless such use is establish within such a period; provided, however, dependent upon the erection or alteration or a building such order shall continue in for such erection or alteration is obtained within one-(1) year and such erection or alteration in accordance with the terms of such permit.	where such use permitted is orce and effect if a building permit
D. APPEAL THE DETERMINATION OF THE BUILDING OFFICIAL	
PLEASE TAKE NOTICE:	
The undersigned hereby appeals the determination of the Building Official / Inspector	
\square construct new home/building \square addition to existing home/building \square] signage
□ ACCESSORY BUILDING □ USE □ OTHER	-3
VI. APPLICANT & PROPERTY SIGNATURES	Salls-1443-12
A. APPLICANT	
o h ()	#.la/.lana()
Applicant Signature	E/26/2020
Approvin algranate	Date
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 application, and is/are aware of the contents of this application and related enclosure	e property described in this
application, and is one dware of the contents of this application and related enclosure	∌s.
()anie Wille	8/26/2020
Properly Owner Signature	A STATE OF THE PROPERTY OF
I The state of the	Date
VII. FOR OFFICIAL USE ONLY	Date
VII. FOR OFFICIAL USE ONLY DECISION ON APPEAL:	Date
DECISION ON APPEAL: GRANTED DENIED	
DECISION ON APPEAL:	
DECISION ON APPEAL: GRANTED DENIED	

NOVI cityofnovi.org

Community Development Department

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

REVIEW STANDARDS DIMENSIONAL VARIANCE

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 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:

	-		nallowness or shape of a specific property e Zoning Ordinance or amendment.
	Not Applicable	☐ Applicable	If applicable, describe below:
		and/	/or
		and	OI .
oth	er extraordinary	situations on the lar	copographic or environmental conditions or did, building or structure.
	Not Applicable	☐ Applicable	If applicable, describe below:
		_	
		and/	or
c Abi	utting Property T	he use or develonm	ent of the property immediately adjacent
	•	•	he literal enforcement of the requirements
	• • •	•	ve significant practical difficulties.
	_	☐ Applicable	If applicable, describe below:

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).

Standard #3. Strict Compliance.

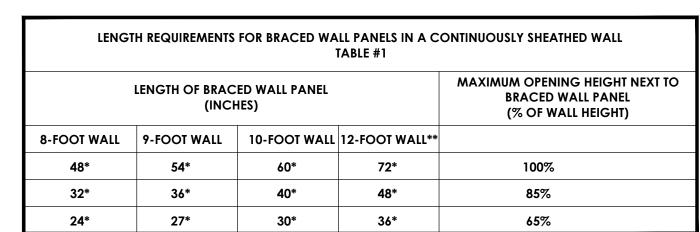
Explain how the Dimensional Variance in strict compliance with regulations governing area, setback, frontage, height, bulk, density or other dimensional requirements will unreasonably prevent the property owner from using the property for a permitted purpose, or will render conformity with those regulations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

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.

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.



(C)INTERSECTION OF INTERIOR AND EXTERIOR WALLS

*THESE VALUES CAN BE REDUCED BY 50% IF SHEATHING IS PROVIDED ON INTERIOR AND EXTERIOR *12 FOOT TALL STUDS SUPPORTING ONLY A ROOF MAY BE 2 X 4 @ 16" O.C. 12 FOOT TALL STUDS SUPPORTING ONE OR TWO FLOORS AND A ROOF SHALL BE 2×6 @ $16^{\prime\prime}$ O.C. INTERIOR - GYPSUM WALL BOARD 8d NAILS @ 6" O.C.— INTERIOR INSTALL IN ACCORDANCE (AT PANEL EDGES) W/ CHAPTER T 16d NAILS - GYPSUM WALL BOARD a 24" O.C. INSTALL IN ACCORDANCE W/ CHAPTER 1 - WOOD STRUCTURAL PANEL DOOR JAMB 16d NAILS INSTALL IN ACCORDANCE a 24" O.C. w/ TABLE #1 - WOOD STRUCTURAL PANEL 8d NAILS @ 6" O.C.-**INTERIOR EXTERIOR** EXTERIOR INSTALL IN ACCORDANCE (AT PANEL EDGES) w/ TABLE #1 ----8d NAILS @ 12" O.C. —8d NAILS @ 12" O.C. ON ALL FRAMING MEMBERS ON ALL FRAMING MEMBERS **DOOR JAMB** NOT AT PANEL EDGES NOT AT PANEL EDGES **EXTERIOR** 2X6 TURNED @ INT, WALL-

(B) INSIDE CORNER DETAIL

R311.7.2 HEADROOM THE HEADROOM IN STAIRWAYS SHALL BE NOT LESS THAN 6'-8" MEASURED VERTICALLY FROM THE SLOPED LINE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING OR PLATFORM ON THAT PORTION OF THE STAIRWAY.

(A) OUTSIDE CORNER DETAIL

R311.7.8 HANDRAILS

HANDRAILS THAT HAVE MINIMUM AND MAXIMUM HEIGHTS OF 34" AND 38" RESPECTIVELY. MEASURED VERTICALLY FROM THE NOSING OF THE TREAD,

R311.7.5 STAIR TREADS AND RISERS

14 RISERS W/ RISER HEIGHT @ 1 3/4" EACH WITH A TREAD DEPTH OF 10,00" EACH (NOSE TO NOSE W/ A NOSE OVERHANG OF $\frac{3}{4}$ " TO $\frac{1}{4}$ "), THE GREATEST RISER HEIGHT SHALL NOT EXCEED THE SHORTEST BY 3/8", LIKEWISE THE SHORTEST RUN

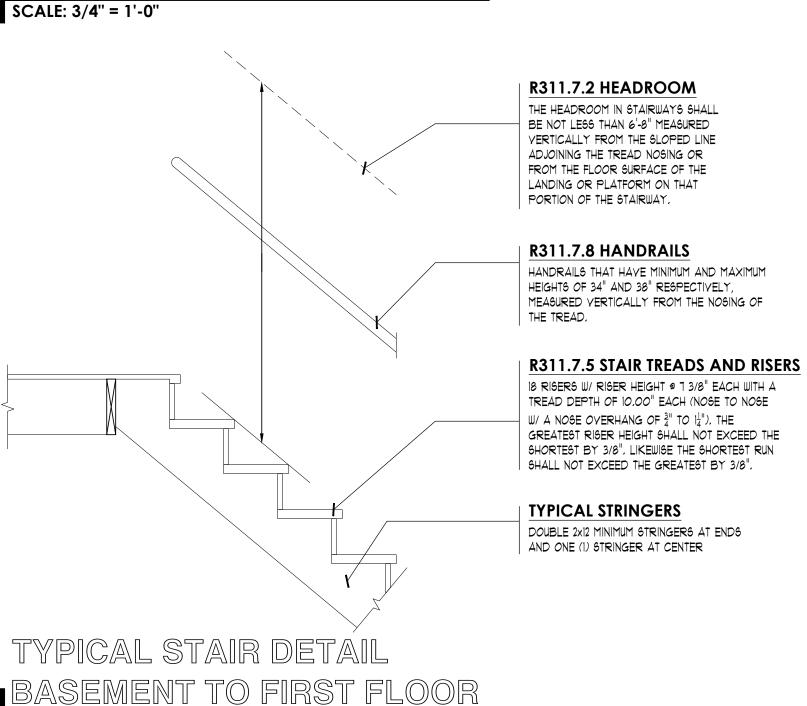
TYPICAL STRINGERS

DOUBLE 2x12 MINIMUM STRINGERS AT ENDS AND ONE (1) STRINGER AT CENTER

TYPICAL STAIR DETAIL

BASEMENT TO GARAGE

SCALE: 3/4" = 1'-0"



WOOD TRUSS SPECIFICATIONS

. 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

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.

FLOOR JOIST LOADING CRITERIA

5. Design loads:

FIRST FLOOR LOADING: LIVE LOAD 40 P.S.F. DEAD LOAD 15 P.S.F. TOTAL LOAD 55 P.S.F. LIVE LOAD DEFLECTION L/480 TOTAL LOAD DEFLECTION L/240

SECOND FLOOR LOADING: LIYE LOAD 40 P.S.F. DEAD LOAD 10 P.S.F. TOTAL LOAD 50 P.S.F. LIVE LOAD DEFLECTION L/480 TOTAL LOAD DEFLECTION L/240

FLOOR W/CERAMIC TILE/MARBLE LIVE LOAD 40 P.S.F. DEAD LOAD 25 P.S.F. TOTAL LOAD 65 P.S.F. LIVE LOAD DEFLECTION L/720

TOTAL LOAD DEFLECTION L/360

EXT, DECK JOIST LOADING CRITERIA

DECK LOADING: LIVE LOAD 50 P.S.F. DEAD LOAD 10 P.S.F. TOTAL LOAD 60 P.S.F. LIVE LOAD DEFLECTION L/360 TOTAL LOAD DEFLECTION L/240

TOP CHORD LIVE LOAD 20 P.S.F. DEAD LOAD 1 P.S.F. BOTT, CHORD LIVE LOAD 10 P.S.F.

ROOF TRUSS LOADING CRITERIA

LIVE LOAD 20 P.S.F. (UNINHABITABLE ATTICS WITH STORAGE) DEAD LOAD 10 P.S.F.

(UNINHABITABLE ATTICS W/OUT STORAGE)

CONC. DECK JOIST LOADING CRITERIA

WIND LOAD 115 MPH OR AS REQUIRED BY

DECK LOADING: LIVE LOAD 50 P.S.F. DEAD LOAD 50 P.S.F. TOTAL LOAD 100 P.S.F. LIVE LOAD DEFLECTION L/360 TOTAL LOAD DEFLECTION L/240

• 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"

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

• All conventional framed floor decks shall be 2 x 10 *2 or 2 x 12 *2 Douglas Fir or

HANDLING AND ERECTION SPECIFICATIONS

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

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 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

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

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

SOIL REQUIREMENTS & EARTH WORK AND CONCRETE

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

. 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.

Fill 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

R506.2.3 Yapor 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 I 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.

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 I Soils, as detailed in Table R405.1.

STRUCTURAL STEEL SPECIFICATIONS

- . 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
- 4500, grade B, Fy=46 KSI. 3. Welds shall conform with the latest AWS DI.1 "Specifications For Welding In Building Construction", And shall utilize ETOXX electrodes unless noted otherwise.
- 4. Bolted connections shall utilize ASTM A-325 bolts tightened to a "snug fit" condition (unless noted otherwise).

REINFORCING STEEL SPECIFICATIONS

- 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
- 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.

STAIRWAYS AND HANDRAILS

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.

Exception: The width of spiral stairways shall be in accordance with Section R311.7.10.1.

Handrails shall be provided on at least one side of each continuous run of treads or

flight with four or more risers.

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. 2. When handrail fittings or bendings are used to provide continuous transition between flights, the transition from handrail to quardrail, or used at the start of a flight, the handrail height at the fittings or bendings shall be permitted to exceed the maximum

SMOKE ALARMS

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. 3. 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.

CARBON MONOXIDE DETECTOR

A Carbon monoxide device shall be located in the vicinity of the bedrooms, which may include I device capable of detecting carbon monoxide near all adjacent bedrooms; in areas within the dwelling adjacent to an attached garage; and in areas adjacent to any fuel-burning appliances. Carbon Monoxide Detectors shall not be placed within fifteen feet of fuel-burning heating or cooking appliances such as gas stoves, furnaces, or fireplaces, or in or near very humid areas such as bathrooms.

FLASHING AND WEEPHOLES

Flashing shall be located beneath the first course of masonry above finished ground level above the foundation wall or slab and at other points of support, including structural floors, shelf angles and lintels when masonry veneers are designed in accordance with Section R703.7. See Section R703.8 for additional requirements.

R703.8.6 Weepholes. Weepholes shall be provided in the outside wythe of masonry walls at a maximum spacing

diameter. Weepholes shall be located immediately above the flashing. R703.4 Flashing.

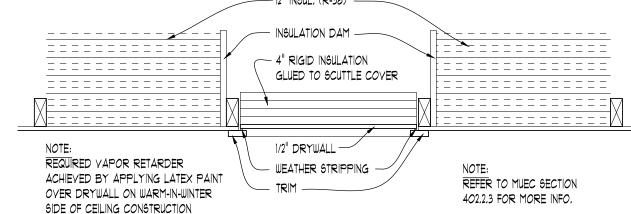
of 33 inches (838 mm) on center. Weepholes shall not be less than 3/16 inch (5 mm) in

Approved corrosion-resistant flashing shall be applied shingle-fashion in a manner to prevent entry of water into the wall cavity or penetration of water to the building structural framing components. Self-adhered membranes used as flashing shall comply with AAMA 711. The flashing shall extend to the surface of the exterior wall finish. Approved corrosion- resistant flashings shall be installed at all of the following locations:

- 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.

FIREPLACES

RIOOI.10 Hearth extension dimensions. Hearth extensions shall extend at least 16 inches (406 mm)in front of and at least 8 inches (203 mm) beyond each side of the fireplace opening,) or larger, 2 Where the fireplace opening is 6 square feet (0.6 m the hearth extension shall extend at least 20 inches (508 mm) in front of and at least 12 inches (305 mm) beyond each side of the fireplace



ATTIC ACCESS DETAIL

1. Glazed openings of a size through which a 3-inch diameter (76 mm) sphere

R308.4.2 Glazing adjacent to doors.

is unable to pass

Decorative glazing.

EGRESS WINDOW REQUIREMENTS

* 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

be specific hazardous for the purposes of glazing.

R308.4 Hazardous locations.

R308.4.1 Glazing in doors.

to be a hazardous location.

Exceptions:

* 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)

AREAS THAT REQUIRE SAFETY GLAZING

Glazing in an individual fixed or operable panel adjacent to a door shall be considered to be a hazardous location where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) above the floor or walking surface and it meets either of the following conditions:

. Where the glazing is within 24 inches (610 mm) of either side of the door in the plane of the door in a closed position.

The locations specified in Sections R308.4.1 through R308.4.7 shall be considered to

Glazing in fixed and operable panels of swinging, sliding and bifold doors considered

2. Where the glazing is on a wall perpendicular to the plane of the door in a closed position and within 24 inches (610 mm) of the hinge side of an in-swinging door.

Exceptions: 1. Decorative glazing.

- 2. Where there is an intervening wall or other permanent barrier between the
- door and the glazing. 3. Where access through the door is to a closet or storage area 3 feet (914 mm) or less in depth. Glazing in this application shall comply with Section R308.4.3.
- 4. Glazing that is adjacent to the fixed panel of patio doors.

R308.4.3 Glazing in windows.

Glazing in an individual fixed or operable panel that meets all of the following conditions shall be considered to be a hazardous location:

- . The exposed area of an individual pane is larger than 9 square feet (0.836 m2) 2. The bottom edge of the glazing is less than 18 inches (457 mm) above the floor,
- 3. The top edge of the glazing is more than 36 inches (914 mm) above the floor; and
- 4. One or more walking surfaces are within 36 inches (914 mm), measured horizontally and in a straight line, of the glazing.

Exceptions:

I. Decorative glazing. 2. When a horizontal rail is installed on the accessible side(s) of the glazing 34 to 38 inches (864 to 965) above the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot (750 N/m) without contacting the glass and be a minimum of 1-1/2 inches (38 mm) in

cross sectional height 3. Outboard panes in insulating glass units and other multiple glazed panels when the bottom edge of the glass in 25 feet (7620 mm) or more above grade, a roof, walking surfaces, or other horizontal [within 45 degrees (0.79 rad.) of horizontal I surface adjacent to the glass exterior.

R308.4.4 Glazing in quards and railings.

Glazing in guards and railings, including structural baluster panels and nonstructural in-fill paneis, regardiess of area or height above a walking surface shall be considered to be

R308.4.5 Glazing and wet surfaces.

Glazing in walls, enclosures or fences containing or facing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers and indoor swimming pools where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) measured vertically above any standing or walking surface shall be considered to be a hazardous location. This shall apply to single glazing and each pane in multiple glazing.

Glazing that is more than 60 inches (1524 mm), measured horizontally and in a straight line, from the water's edge of a bathtub, hot tub, spa, whirlpool or swimming pool or from the edge of a shower, sauna or steam

R308.4.6 Glazing adjacent to stairs and ramps.

Glazing where the bottom exposed edge of the glazing is less than 36 inches (914 mm) above the plane of the adjacent walking surface of stairways, landings between flights of stairs and ramps shall be considered to be a hazardous location.

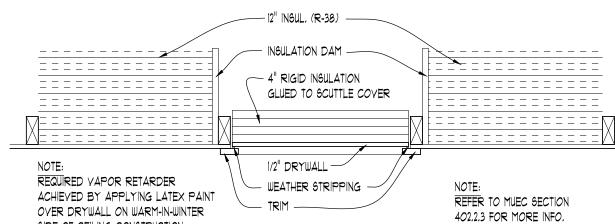
. Where a rail is installed on the accessible side(s) of the glazing 34 to 38 inches (864 to 965 mm) above the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot (730 N/m) without contacting the glass and have a cross-sectional height of not less than $1\frac{1}{2}$ inches (38 mm).

2. Glazing 36 inches (914 mm) or more measured horizontally from the walking

R308.4.7 Glazing adjacent to the bottom stair landing.

Glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 36 inches (914 mm) above the landing and within a 60-inch (1524 mm) horizontal arc less than 180 degrees from the bottom tread nosing shall be considered to be a hazardous

The glazing is protected by a guard complying with Section R312 and the place of the glass is more than 18 inches (457 mm) from the ground.





ASSOCIATES VWW.TKHOMEDESIGN.COI 26030 PONTIAC TRAIL SOUTH LYON, MI 48178 PHONE: (248)-446-1960

FAX: (248)-446-1961

yright 2014 tk design and associates) NOT SCALE DRAWINGS, USE CALCULATED DIMENSIONS ONLY ONTRACTOR TO FIELD VERIFY ALL DRAWING ASPECTS BEFORE STRUCTION, DISCREPANCIES AND DESIGN CHANGES SHALL BI PORTED TO THE DESIGNER IN WRITTEN FORM IMMEDIATELY ALL MISS DIG AT 680-482-7271 3 DAYS PRIOR TO ANY EXCAVATION RUCTION IS THE SOLE RESPONSIBILITY OF THE PERMIT HOLDE

D BUILDERS
I RESIDENC
EBELLO CRT
OT 21
OYI, MI _ COMPO MILLEN I MONTEE

JOB No. 20-139 DRAWN: \mathbf{AG} CHECKED: \mathbf{BF} **REVIEW:** 5-1-2020 6-15-2020 FINAL: REVISED 6-25-2020 REVISED 7-14-2020 REVISED 7-30-2020

PER PLAN

SHEET#

SCALE:

GN1

TABLE R404.1.2(1) MINIMUM HORIZONTAL REINFORCEMENT FOR CONCRETE BASEMENT WALLS ^{a,b}							
MAXIMUM UNSUPPORTED HEIGHT OF BASEMENT WALL (feet)	LOCATION OF HORIZONTAL REINFORCEMENT						
≤ 8	One N. 4 bar within 12 inches of the top of the wall story and one No. 4 bar near mid-height of the wall story						
> 8	One N. 4 bar within 12 inches of the top of the wall story and one No. 4 bar near third points in the wall story						

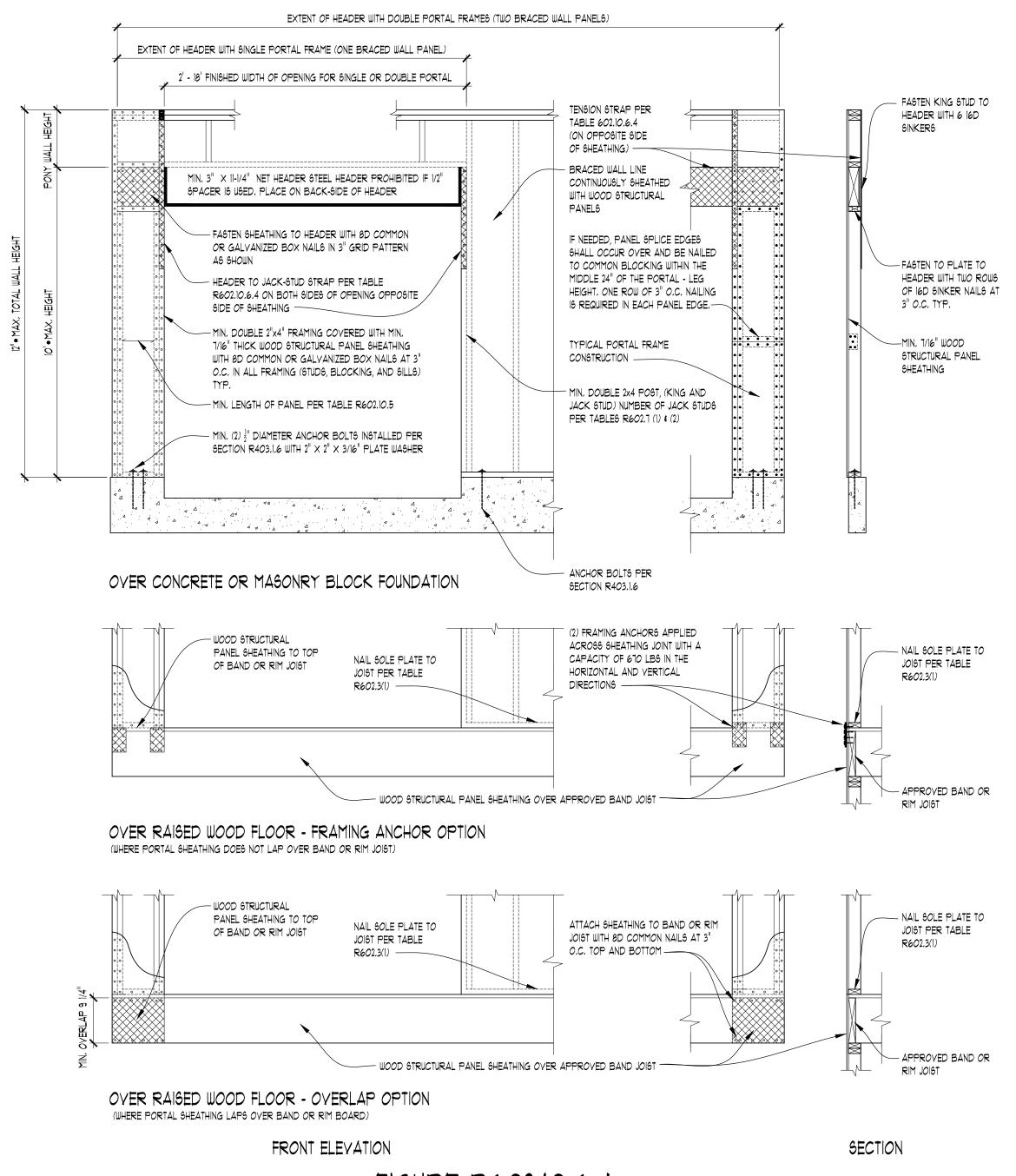
- Horizontal reinforcement requirements are for reinforcing bars with a minimum yield strength of 40,000 psi and concrete with a minimum concrete compressive strength
- b. See Section R404.1.2.2 for minimum reinforcement required for foundation walls supporting above-grade concrete walls.

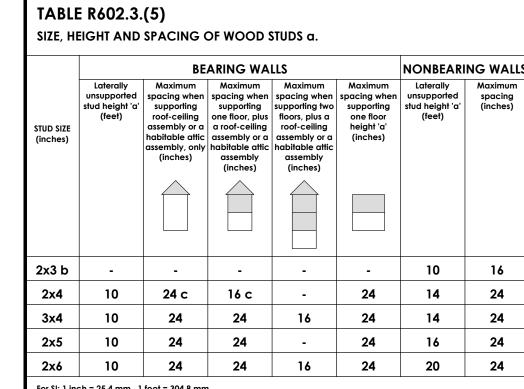
TABLE R40	4.1.2(8)												
MINIMUM VE CONCRETE BA	RTICAL REINFORCE <i>N</i> ASEMENT WALLS ^{b,c,d,e}	NENT FOR (f,h,i,k,n,o	8-, 8-, 10-,	12 INCH N	IOMINAL F	LAT							
		MINIMUM VERTICAL REINFORCEMENT - BAR SIZE AND SPACING (INCHES)											
		Soil classes ^a and design lateral soil (psf per foot of depth)											
MAXIMUM WALL HEIGHT (feet)	MAXIMUM UNBALANCED BACKFILL HEIGHT®			, SW, SP 0		GM,	GC, SM, S 4		I ML	SC,		d incorgar 60	ic CL
	(feet)	Minimum nominal wall thickness (inches)											
		6	8	10	12	6	8	10	12	6	8	10	12
F	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
5	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
6	5	NR	NR	NR	NR	NR	NR'	NR	NR	4 @ 35	NR'	NR	NR
	6	NR	NR	NR	NR	5 @ 48	NR	NR	NR	5 @ 36	NR	NR	NR
	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
7	5	NR	NR	NR	NR	NR	NR	NR	NR	5 @ 47	NR	NR	NR
,	6	NR	NR	NR	NR	5 @ 42	NR	NR	NR	6 @ 43	5 @ 48	NR ¹	NR
	7	5 @ 46	NR	NR	NR	6 @ 42	5 @ 46	NR ¹	NR	6 @ 34	6 @ 48	NR	NR
	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	NR	NR	4 @ 38	NR'	NR	NR	5 @ 43	NR	NR	NR
8	6	4 @ 37	NR ¹	NR	NR	5 @ 37	NR	NR	NR	6 @ 37	5 @ 43	NR'	NR
	7	5 @ 40	NR	NR	NR	6 @ 37	5 @ 41	NR ¹	NR	6 @ 34	6 @ 43	NR	NR
	8	6 @ 43	5 @ 47	NR¹	NR	6 @ 34	6 @ 43	NR	NR	6 @ 27	6 @ 32	6 @ 44	NR
	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	NR	NR	4 @ 35	NR	NR	NR	5 @ 40	NR	NR	NR
	6	4 @ 34	NR	NR	NR	6 @ 48	NR	NR	NR	6 @ 36	6 @ 39	NR	NR
9	7	5 @ 36	NR	NR	NR	6 @ 34	5 @ 37	NR	NR	6 @ 33	6 @ 38	5 @ 37	NR
	8	6 @ 38	5 @ 41	NR¹	NR	6 @ 33	6 @ 38	5 @ 37	NR ¹	6 @ 24	6 @ 29	6 @ 39	4 @ 48 ^m
	9	6 @ 34	6 @ 46	NR	NR	6 @ 26	6 @ 30	6 @ 41	NR	6@19	6 @ 23	6 @ 30	6 @ 39
	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	NR	NR	4 @ 33	NR'	NR	NR	5 @ 38	NR	NR	NR
	6	5 @ 48	NR ¹	NR	NR	6 @ 45	NR	NR	NR	6 @ 34	5 @ 37	NR	NR
10	7	6 @ 47	NR	NR	NR	6 @ 34	6 @ 48	NR	NR	6 @ 30	6 @ 35	6 @ 48	NR'
	8	6 @ 34	5 @ 38	NR	NR	6 @ 30	6 @ 34	6 @ 47	NR ¹	6 @ 22	6 @ 26	6 @ 35	6 @ 45 ^m
	9	6 @ 34	6 @ 41	4 @ 48	NR¹	6 @ 23	6 @ 27	6 @ 35	4 @ 48 ^m	DR	6 @ 22	6 @ 27	6 @ 34
	10	6 @ 28	6 @ 33	6 @ 45	NR	DR ^j	6 @ 23	6 @ 29	6 @ 38	DR	6 @ 22	6 @ 22	6 @ 28

For SI:1 foot = 304.8 mm; 1 inch = 25.4 mm; 1 pound per square foot per foot = 0.1571 kPa²/m, 1 pound per square inch = 6.895 kPa/mm.

- Soil classes are in accordance with the Unified Soil Classification System. Refer to Table R405.1. Table values are based on reinforcing bars with a minimum yield strength of 60,000 psi.
- Vertical reinforcement with a yield strength of less than 60,000 psi and or bars of a different size than specified in the table are permitted in accordance with Section
- d. NR indicates no vertical reinforcement is required, except for 6-inch nominal walls formed with stay-in-place forming systems in which case vertical reinforcement shall be #4@48 inches on center.
- Allowable deflection criterion is L/240, where L is the unsupported height of the basement wall in inches. Interpolation is not permitted. Where walls will retain 4 feet or more of unbalanced backfill, they shall be laterally supported at the top and bottom before backfilling
- Vertical reinforcement shall be located to provide a cover of 1.25 inches measured from the inside face of the wall. The center of the steel shall not vary form the specified location by more than the greater of 10 percent of the wall thickness or 3/8-inch. Concrete cover for reinforcement measured from the inside face of the wall shall not be less than 3/4-inch. Concrete cover for reinforcement measure from the outside
- face of the wall shall not be less than $1\frac{1}{2}$ inches for No. 5 bars and smaller, and not less than 2 inches for larger bars. DR means design is required in accordance with the applicable building code, or where there is no code in accordance with ACI 318.
- Concrete shall have a specified compressive strength, fc, of not less than 2,500 psi at 28 days, unless a higher strength is required by footnote I or m. The minimum thickness is permitted to be reduced 2 inches, provided the minimum specified compressive strength of concrete, fc, is 4,000 psi.
- m. A plain concrete wall with a minimum nominal thickness of 12 inches is permitted, provided minimum specified compressive strength of concrete, fc is 3,500 psi. See Table R608.3 for tolerance from nominal thickness permitted for flat walls. o. The use of this table shall be prohibited for soil classifications not shown.

				TENSION STRAP CAPACITY REQUIRED (pounds) ^{a,b}						
MINIMUM WALL STUD FRAMING NOMINAL	MAXIMUM PONY	MAXIMUM TOTAL	MAXIMUM OPENING WALL HEIGHT (feet)	Ultimate Design Wind Speed V _{ult} (mph)						
SIZE AND GRADE	WALL HEIGHT (feet)	WALL HEIGHT (feet)		110	115	130	110	115	130	
	(ieei)	(icei)	(leel)		Exposure	В		Exposure	С	
	0	10	18	1,000	1,000	1,000	1,000	1,000	1,050	
			9	1,000	1,000	1,000	1,000	1,000	1,750	
	1	10	16	1,000	1,025	2,050	2,075	2,500	3,950	
			18	1,000	1,275		2,400	2,850	DR	
			9	1,000	1,000	1,475	1,500	1,500 1,875	3,125	
2 x 4 No. 2 Grade	2	10	16	1,775	2,175	3,525	3,550	4,125	DR	
			18	2,075	2,500	3,950	3,975	DR	DR	
			9	1,150 1,500 2,650 2,675 3	3,175	DR				
	2	12	16	2,875	3,375	DR	DR	I V _{ult} (mph) 115		
			18	3,425	3,975	DR	DR			
	4	12	9	2,275	2,750	DR	DR	DR	\$\text{Aposure C}\$ 1,000	
	4	12	12	3,225	3,775	DR	DR	DR		
			9	1,000	1,000	1,700	1,700	2,025	3,050	
	2	12	16	1,825	2,150	3,225	3,225	3,675	DR	
2 x 6 Stud Grade			18	2,200	2,550	3,725	3,750	DR	DR	
2 2.2 2. 2 2. 2 2. 2 2 2 2 2 2 2 2 2 2			9	1,450	1,750	2,700	2,725	3,125	DR	
	4	12	16	2,050	2,400	DR	DR	DR	DR	
			18	3,350	3,800	DR	DR	DR	DR	





- For SI: 1 inch = 25.4 mm. 1 foot = 304.8 mm.
- Listed heights are distances between points of lateral support placed perpendicular to the plan of the wall. Bearing walls shall be sheathed on not less than one side or bridging shall be installed not greater than 4 feet apart measured vertically from either end of the stud. Increases in unsupported height are permitted where in compliance with Exception 2 of Section R602.3.1 or designed in accordance with accepted engineering
- Shall not be used in exterior walls.
- A habitable attic assembly supported by 2 x 4 studs is limited to a roof span of 32 feet. Where the roof span exceeds 32 feet, the wall studs shall be increased to 2×6 or the studs shall be designed in accordance with accepted engineering practice.

SIZE OF STEEL ANGLE a,c,d (inches)	NO STORY ABOVE	ONE STORY ABOVE	TWO STORIES ABOVE	NO. OF ½" OR EQUIVALEN REINFORCING BARS b,c
3x3x ¹ / ₄	6'-0"	4'-6"	3'-0"	1
4x3x ¹ / ₄	8'-0"	6'-0"	4'-6"	1
$5x3\frac{1}{2}x\frac{5}{16}$	10'-0"	8'-0"	6'-0"	2
6x3½x5/16	14'-0"	9'-6"	7'-0"	2
$2-6\times3\frac{1}{2}\times\frac{5}{16}$	20'-0"	12'-0"	9'-6"	4

- Depth of reinforcing lintels shall not be less than 8 inches and all cells of hollow masonry lintels shall be grouted solid. Reinforcing bars shall extend not less than 8 inches into the support.
- Steel members indicated are adequate typical examples; other steel members meeting structural design
- Either steel angle or reinforced lintel shall span opening.

TYPICAL CON	IVENTIONAL	ROOF FRAM	ING	
* RIDGE BEAM SIZE	E WILL BE EQUAL	TO THE RAFTER C	CUT EDGE *	
RAFTER SPANS	0'-0" - 4'-0"	4'-0" - 8'-0"	8'-0" - 12'-0"	12'-0" - 16'-0"
IIIMRER SI7E	2×4	2×6	2×8	2v12



TK DESIGN ASSOCIATES

VWW.TKHOMEDESIGN.C 26030 PONTIAC TRAIL SOUTH LYON, MI 48178 PHONE: (248)-446-1960 FAX: (248)-446-1961

PYRIGHT 2014 TK DESIGN AND ASSOCIATES DO NOT SCALE DRAWINGS, USE CALCULATED DIMENSIONS ONI CONTRACTOR TO FIELD VERIFY ALL DRAWING ASPECTS BEFORE NSTRUCTION, DISCREPANCIES AND DESIGN CHANGES SHALL BE ONSTRUCTION, DISCRET ANCIES AND DESIGN CHANGES STALE BE EPORTED TO THE DESIGNER IN WRITTEN FORM IMMEDIATELY CALL MISS DIG AT 680-482-7271 3 DAYS PRIOR TO ANY EXCAVATION NSTRUCTION IS THE SOLE RESPONSIBILITY OF THE PERMIT HOLDER

COMPO BUILDERS
MILLEN RESIDENCE
MONTEBELLO CRT
LOT 21
NOVI, MI

JOB No.	20-139
DRAWN: CHECKED:	AG BF
REVIEW:	5-1-2020
FINAL:	6-15-2020
REVISED REVISED REVISED	6-25-2020 7-14-2020 7-30-2020

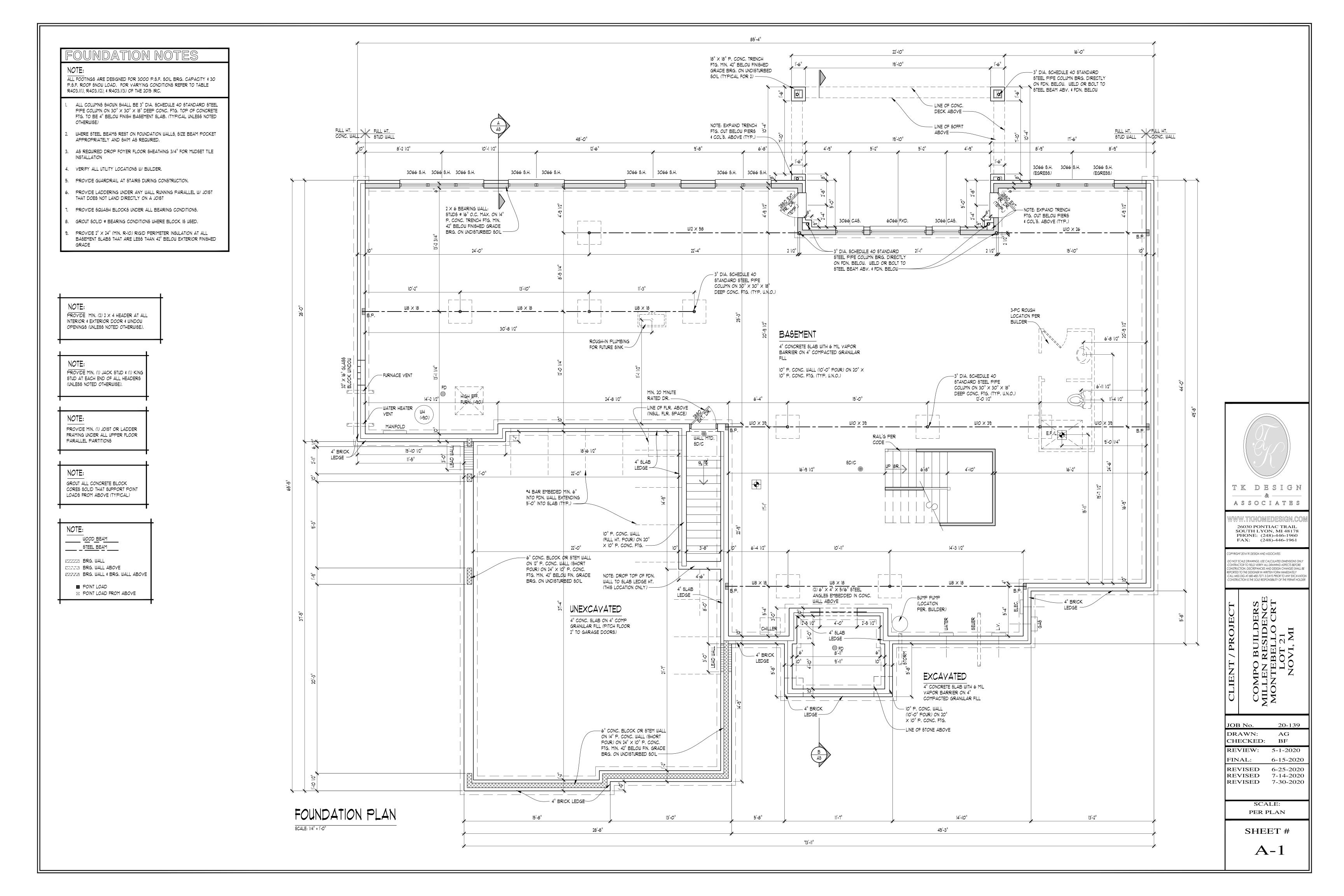
SCALE: PER PLAN

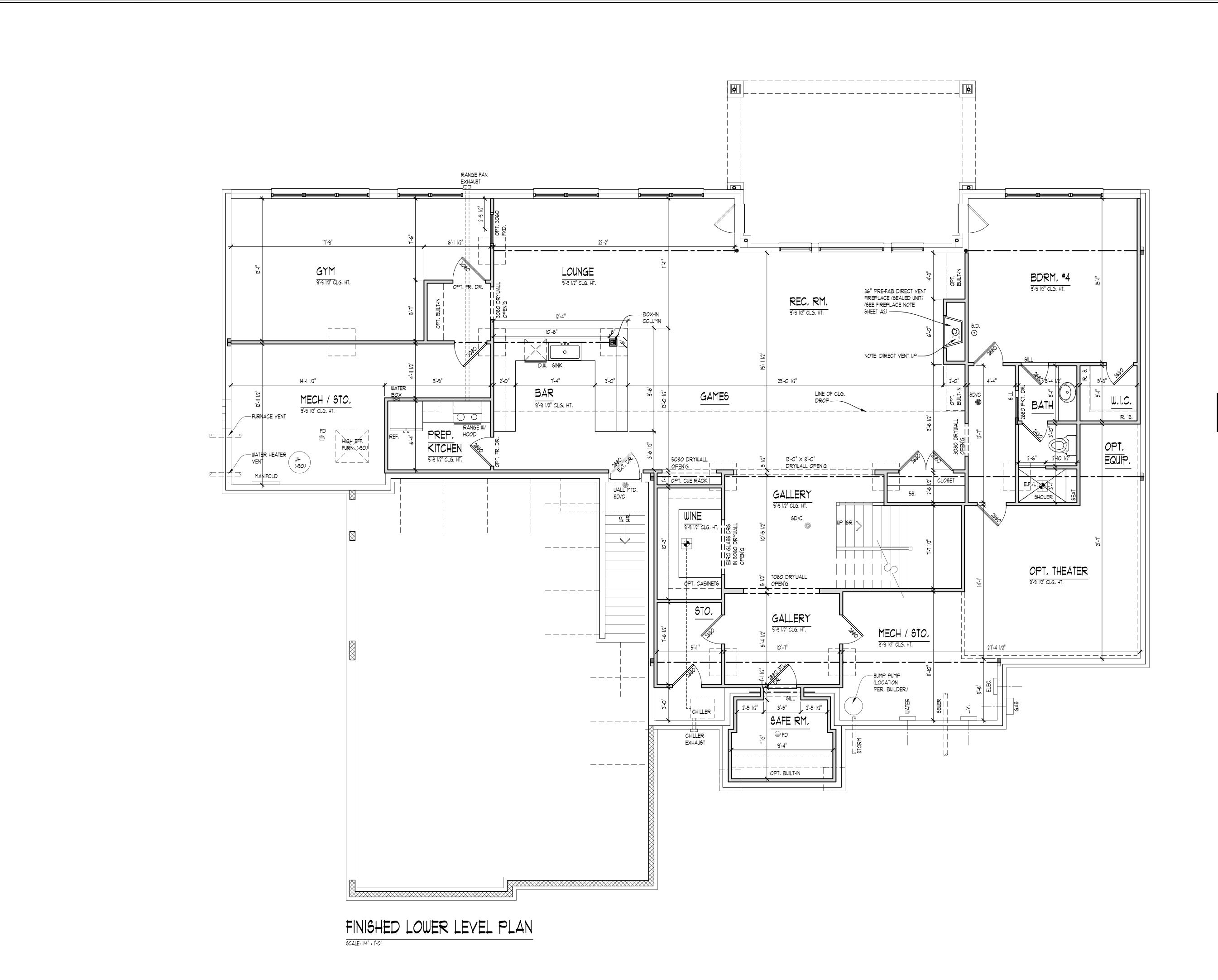
SHEET#

GN2

FIGURE R602.10.6.4 METHOD CS-PF: CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION

FOR SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm





FIN, LOWER LEVEL 2241 S.F.

OPT. THEATHER / EQUIP. 211 S.F.



TK DESIGN
&
ASSOCIATES

WWW.TKHOMEDESIGN.COI 26030 PONTIAC TRAIL SOUTH LYON, MI 48178 PHONE: (248)-446-1960 FAX: (248)-446-1961

COPYRIGHT 2014 TK DESIGN AND ASSOCIATES

DO NOT SCALE DRAWINGS, USE CALCULATED DIMENSIONS ONLY
CONTRACTOR TO FIELD VERIFY ALL DRAWING ASPECTS BEFORE
CONSTRUCTION, DISCREPANCIES AND DESIGN CHANGES SHALL BE
REPORTED TO THE DESIGNER IN WRITTEN FORM IMMEDIATELY
CALL MISS DIG AT 680-482-7271 3 DAYS PRIOR TO ANY EXCAVATION
CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE PERMIT HOLDER

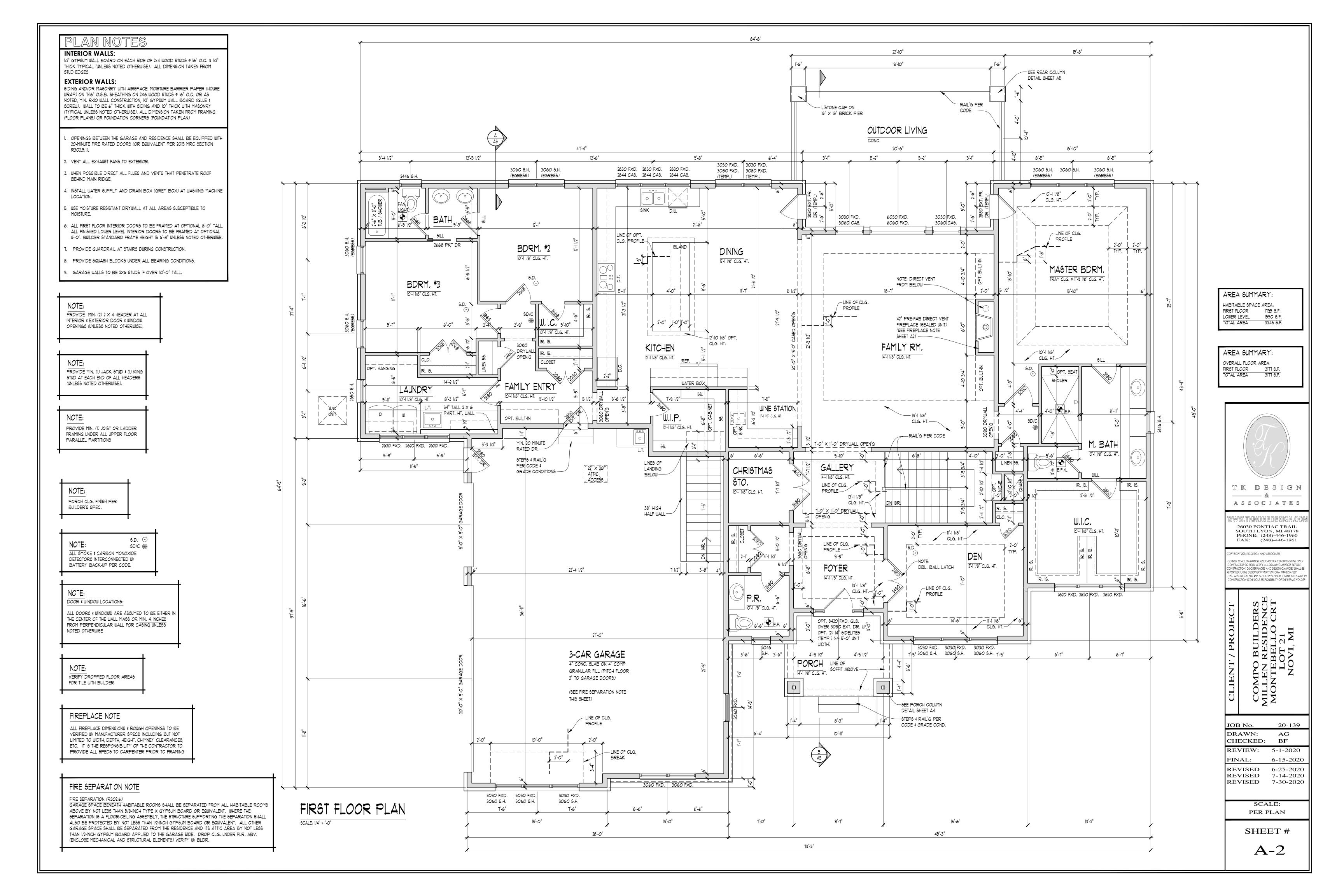
CLIENT / PROJECT
COMPO BUILDERS
MILLEN RESIDENCE
MONTEBELLO CRT
LOT 21
NOVI, MI

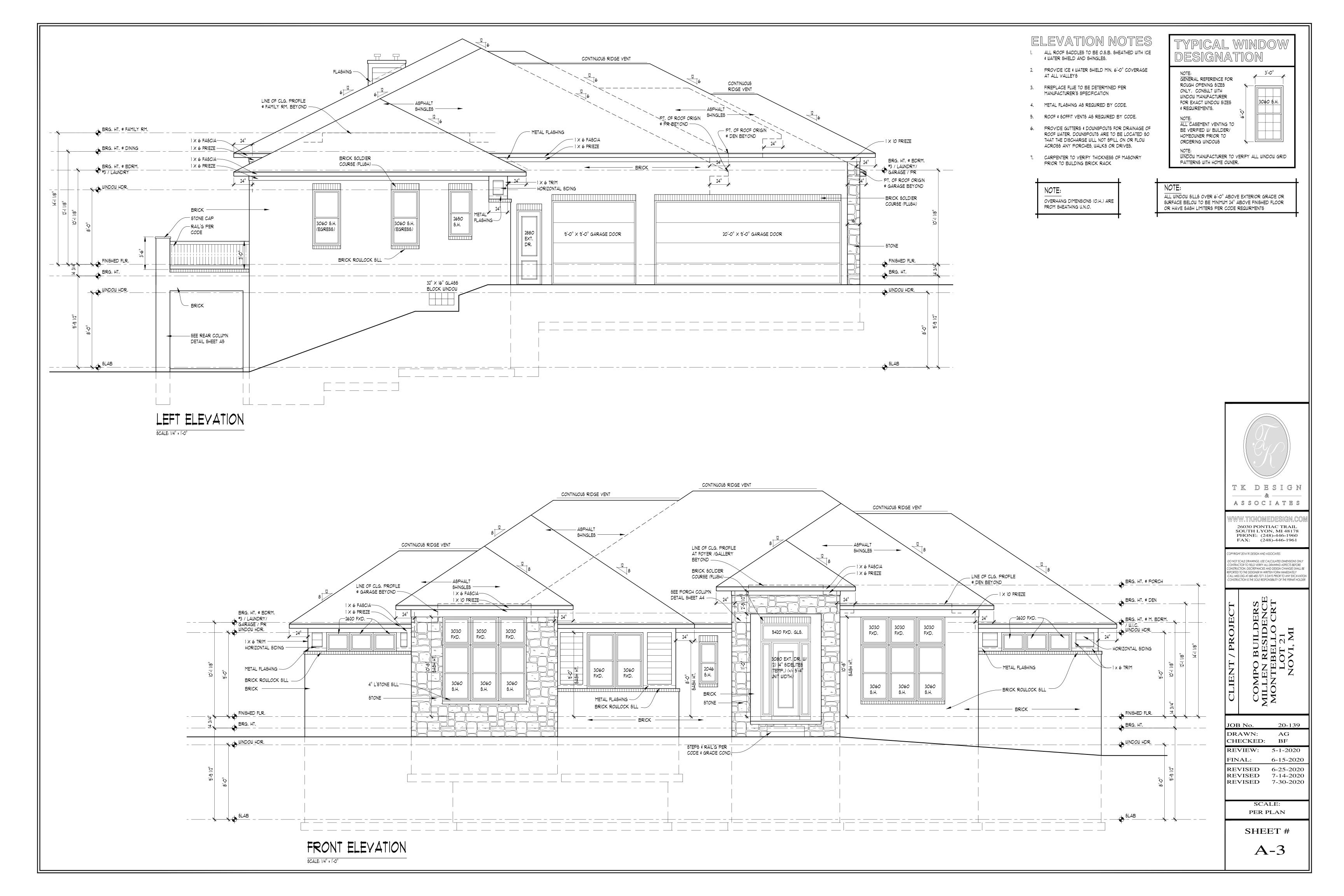
JOB No.	20-139
DRAWN:	AG
CHECKED:	BF
REVIEW:	5-1-2020
FINAL:	6-15-2020
REVISED	6-25-2020
REVISED	7-14-2020
REVISED	7-30-2020

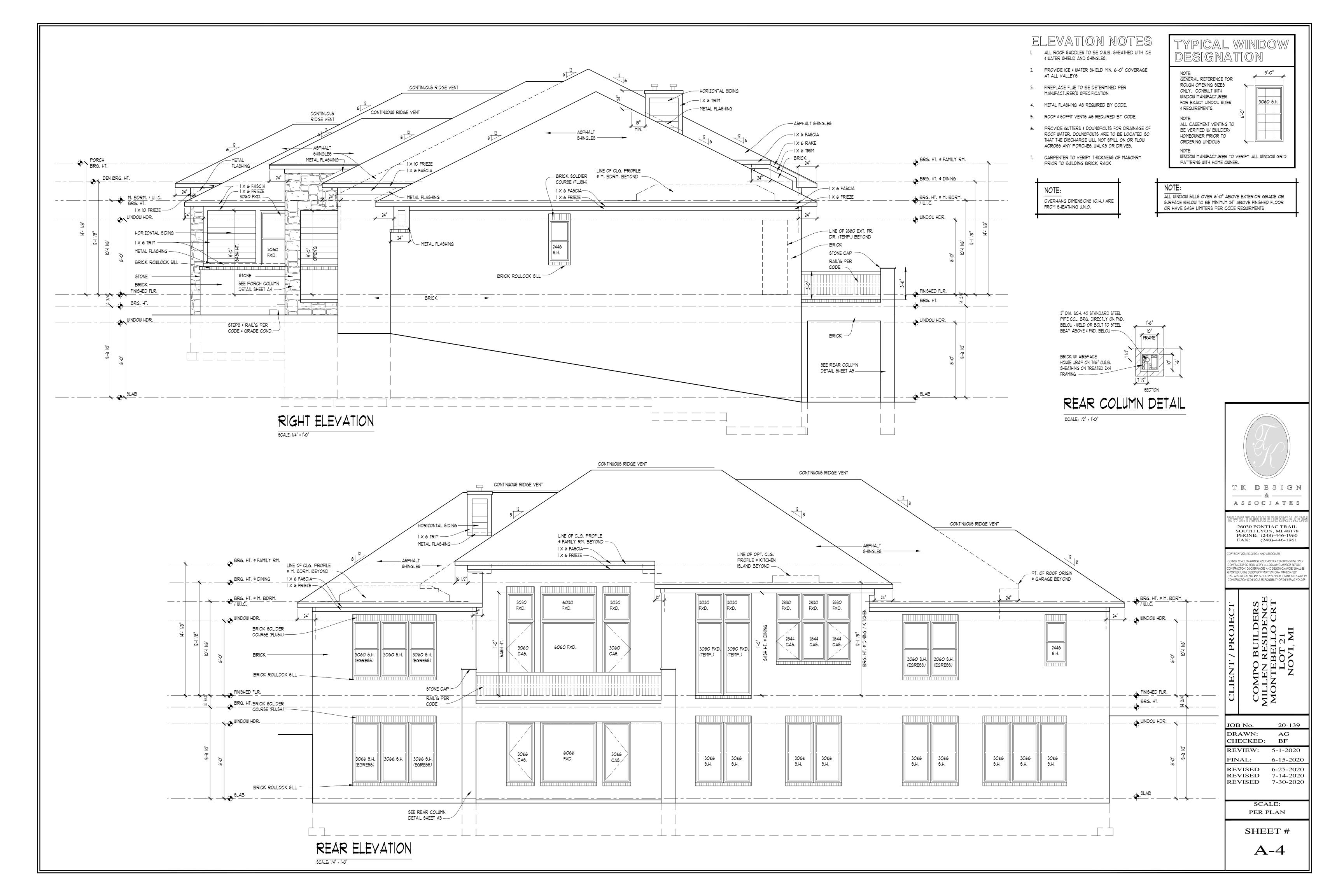
SCALE: PER PLAN

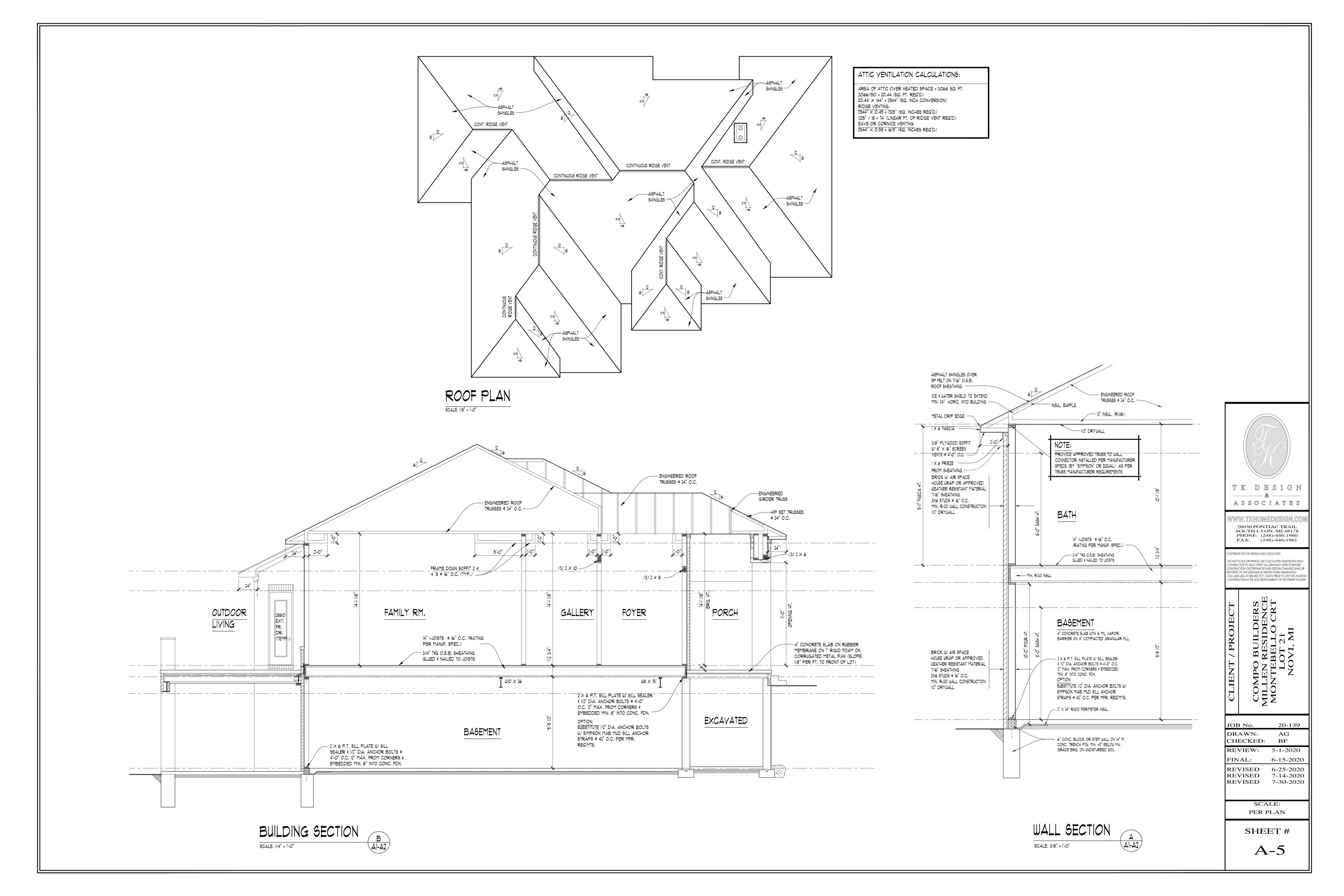
SHEET#

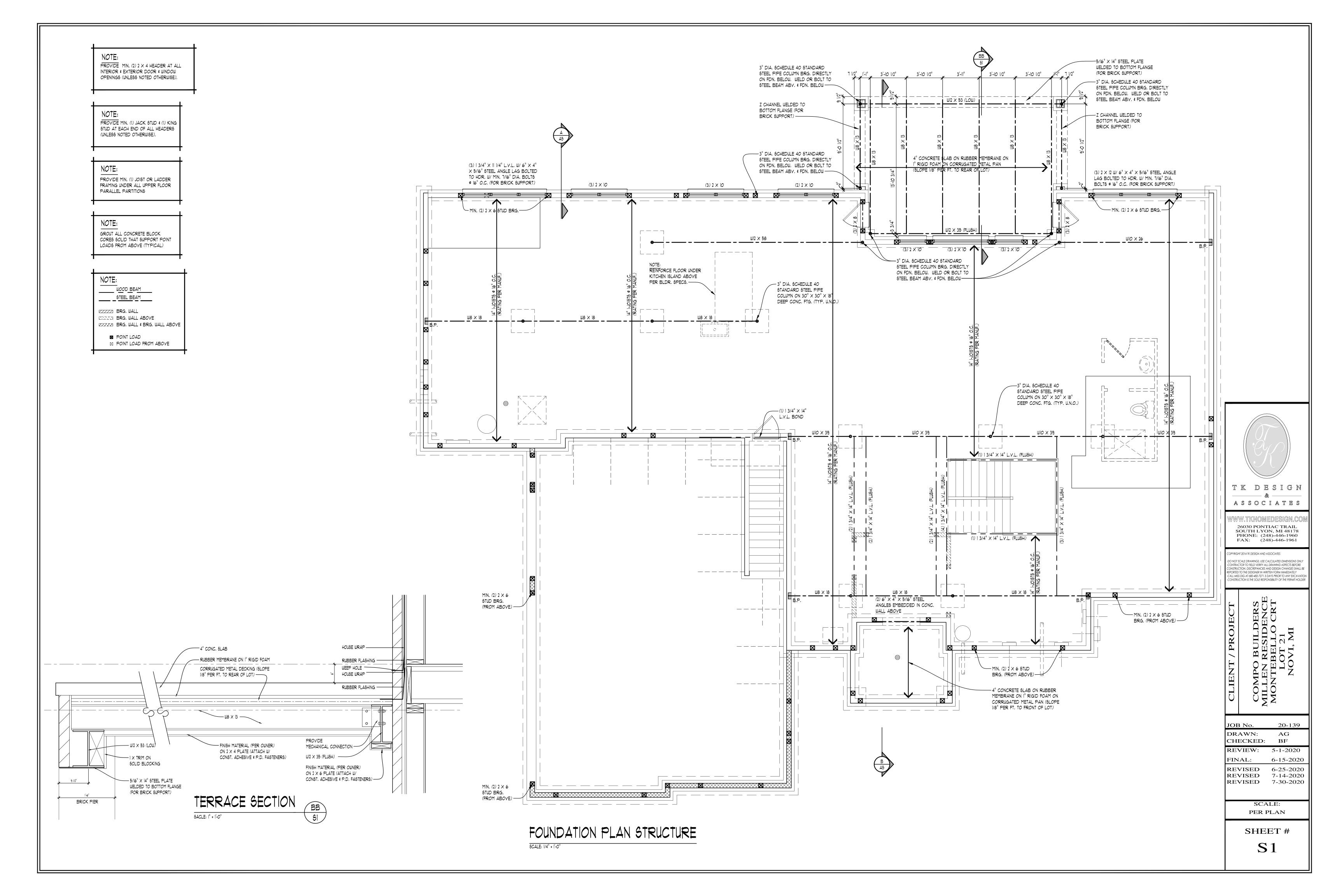
FB-1

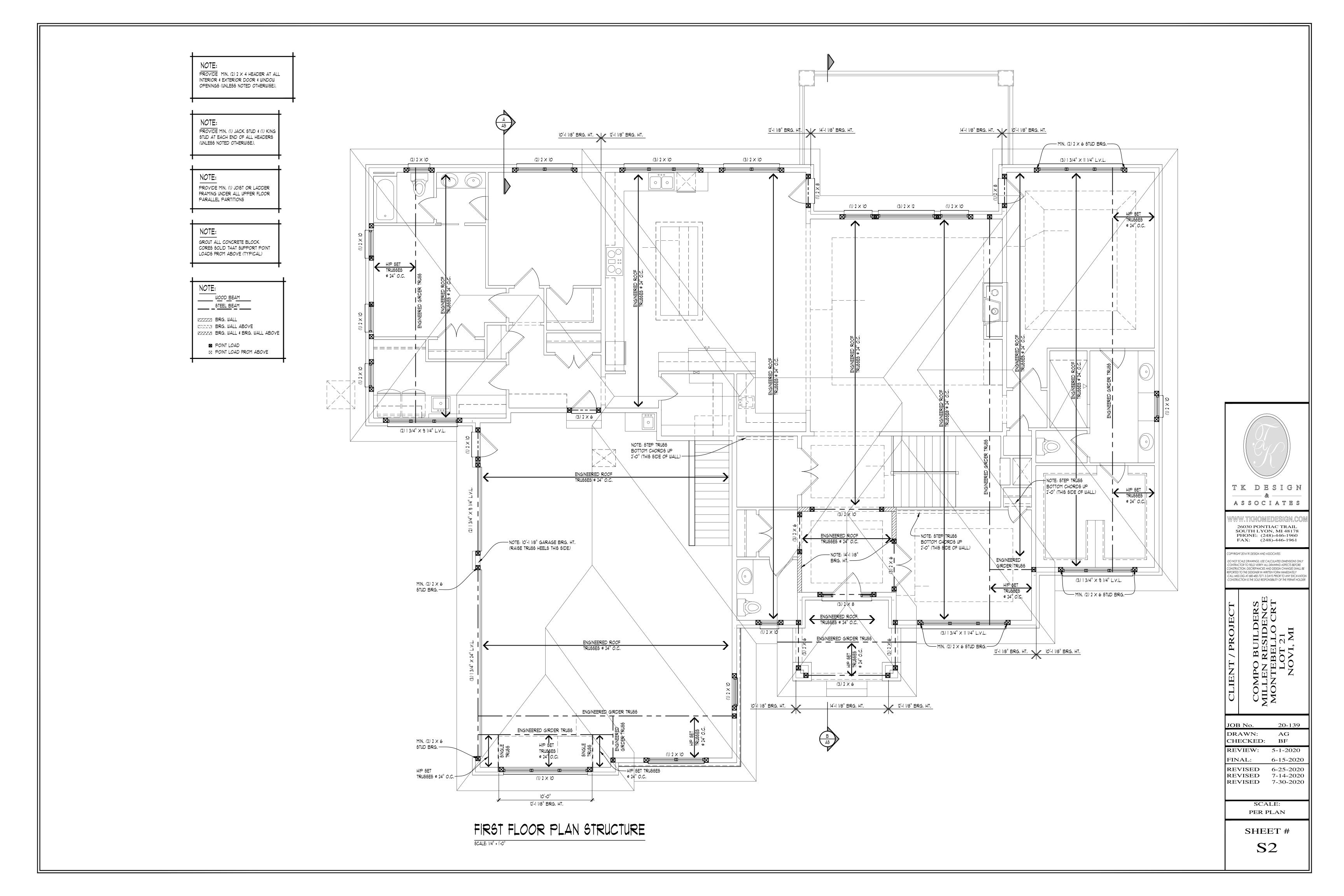


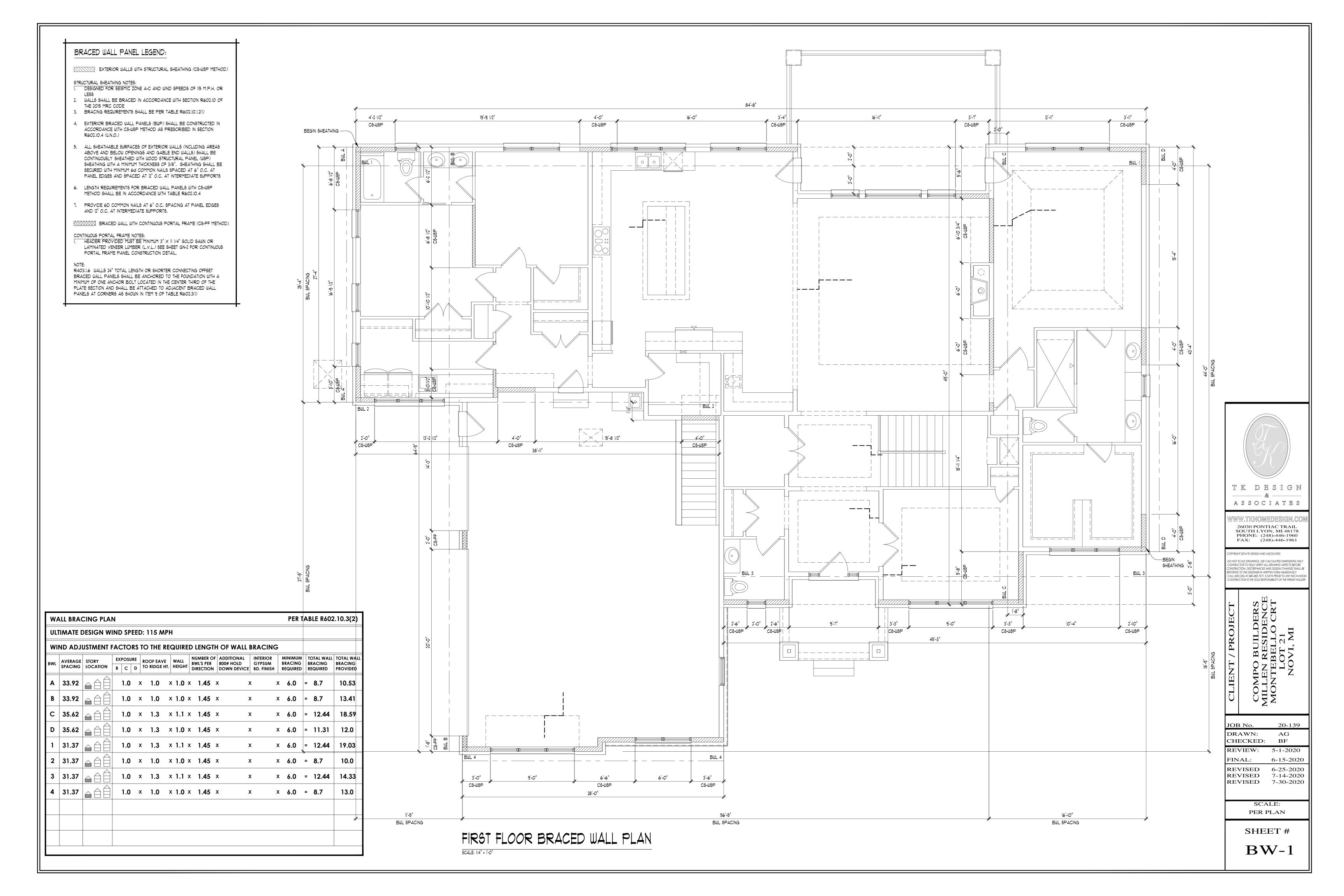






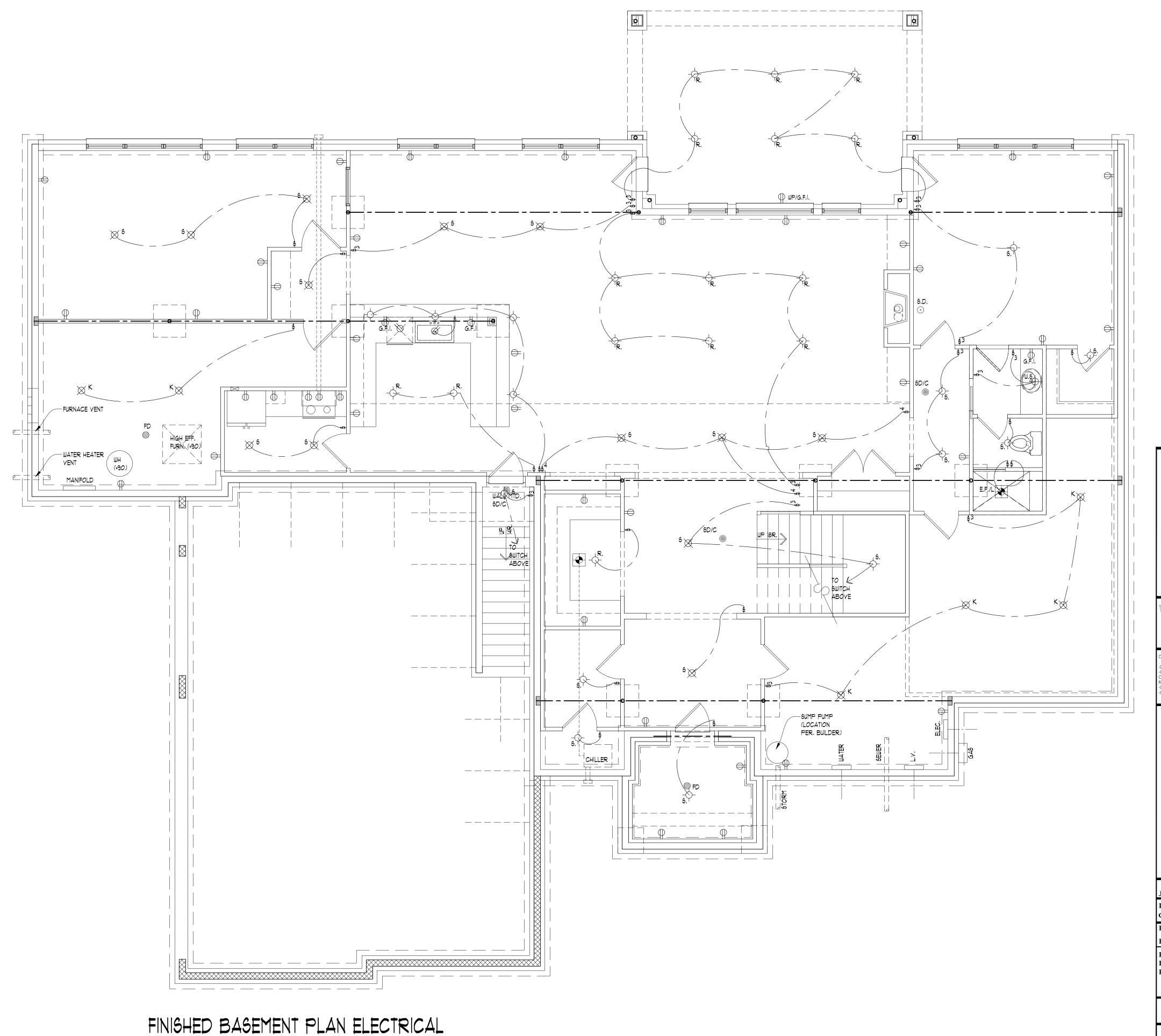






ELECTRICAL SYMBOL KEY

GRAPHIC SYMBOL	DESCRIPTION	GRAPHIC SYMBOL	DESCRIPTION
⊕ _R ,	RECESSED WHITE BAFFLE 6" FIXTURE		PADDLE TYPE CEILING FAN W/ LIGHT
-_4"	RECESSED WHITE BAFFLE 4" FIXTURE	E.F.	RECESSED EXHAUST, LOW NOISE, FAN
÷K.	KEYLESS FIXTURE	•	FAN / LIGHT COMBO
4"	RECESSED ADJUSTABLE WALL WASH FIXTURE	Ф	ELECTRICAL OUTLET WALL MOUNTED
 ∅5	SURFACE MOUNTED INCANDESCENT FIXTURE	⊕ ^{G,F,I,}	ELECTRICAL OUTLET GROUND FAULT INTERRUPTED TYPICAL WIRED THROUGHOUT ROOM
*	HANGING DECORATIVE FIXTURE, PENDANT OR CHANDALIER	₩P/G.F.I.	WATER PROTECTED ELECTRICAL OUTLET GROUND FAULT INTERRUPTED
-\(\rightarrow\)-\(\rightarrow\)-\(\rightarrow\)	PULL-CHAIN OPERATED SURFACE MOUNTED INCANDESCENT FIXTURE	⊕ ^{H/C}	SPLIT WIRED ELECTRICAL OUTLET CONTROLLED BY A SWITCH
₩.S.	WALL MOUNTED INCANDESCENT DECORATIVE SCONCE	⊕ ²²⁰	220 YOLT ELECTRICAL OUTLET
W.\$,	WALL MOUNTED COMPACT FLURESCENT LOW PROFILE DECORATIVE SCONCE	Φ	ELECTRICAL OUTLET FLOOR MOUNTED
USB	UNIVERSAL SERIAL BUS	\$	POWER SWITCH
→ PH	PHONE LINE	\$ ₃	3-WAY POWER SWITCH
─ <\!\	CABLE T.Y.	6. D. ⊙	\$MOKE DETECTOR INTER-CONNECTED W/ BATTERY BACKUP PER CODE
± GAS	GAS LINE	SD/C	SMOKE DETECTOR / CARBON MONOXIDE DETECTOR INTER-CONNECTED W/ BATTERY BACKUP PER CODE
	SURFACE MOUNTED FLOURESCENT W/ACRYLIC DIFFUSER	E	ELECTRIC METER
∫ .	KEYLESS FIXTURE - JUNCTION BOX	G	GAS METER



SCALE: 1/4" = 1'-0"



TK DESIGN
&
ASSOCIATES

WW.TKHOMEDESIGN.COI 26030 PONTIAC TRAIL SOUTH LYON, MI 48178 PHONE: (248)-446-1960 FAX: (248)-446-1961

COPYRIGHT 2014 TK DESIGN AND ASSOCIATES

DO NOT SCALE DRAWINGS, USE CALCULATED DIMENSIONS ONLY
CONTRACTOR TO HIELD VERIFY ALL DRAWING ASPECTS BEFORE
CONSTRUCTION, DISCREPANCIES AND DESIGN CHANGES SHALL BE
REPORTED TO THE DESIGNER IN WRITTEN FORM IMMEDIATELY
CALL MISS DIG AT 680-482-7271 3 DAYS PRIOR TO ANY EXCAVATION
CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE PERMIT HOLDER

CLIENT / PROJECT
COMPO BUILDERS
MILLEN RESIDENCE
MONTEBELLO CRT
LOT 21
NOVI, MI

20-139
AG BF
5-1-2020
6-15-2020
6-25-2020 7-14-2020 7-30-2020

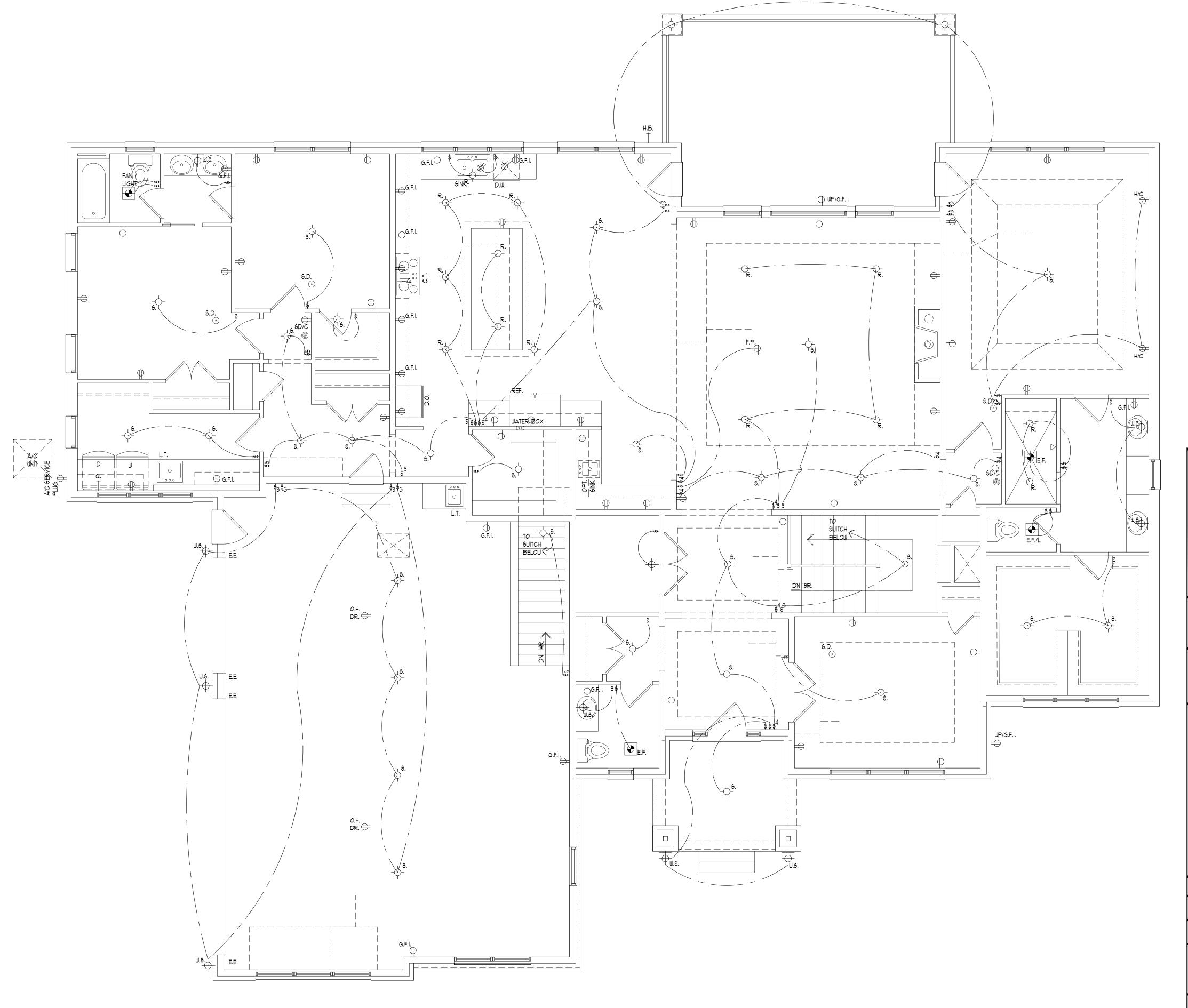
SCALE: PER PLAN

E-1

SHEET#

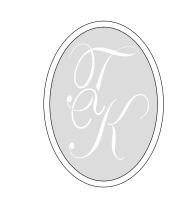
ELECTRICAL SYMBOL KEY

GRAPHIC SYMBOL	DESCRIPTION	GRAPHIC SYMBOL	DESCRIPTION
→ _{R.}	RECESSED WHITE BAFFLE 6" FIXTURE		PADDLE TYPE CEILING FAN W/ LIGHT
4"	RECESSED WHITE BAFFLE 4" FIXTURE	E.F.	RECESSED EXHAUST, LOW NOISE, FAN
÷ _{K.}	KEYLESS FIXTURE	•	FAN / LIGHT COMBO
- 	RECESSED ADJUSTABLE WALL WASH FIXTURE	Ф	ELECTRICAL OUTLET WALL MOUNTED
⊠ 6	SURFACE MOUNTED INCANDESCENT FIXTURE	G.F.I.	ELECTRICAL OUTLET GROUND FAULT INTERRUPTED TYPICAL WIRED THROUGHOUT ROOM
* _H	HANGING DECORATIVE FIXTURE, PENDANT OR CHANDALIER	₩P/G.F.I.	WATER PROTECTED ELECTRICAL OUTLET GROUND FAULT INTERRUPTED
P.C.	PULL-CHAIN OPERATED SURFACE MOUNTED INCANDESCENT FIXTURE	⊕ ^{H/C}	SPLIT WIRED ELECTRICAL OUTLET CONTROLLED BY A SWITCH
₩.s.	WALL MOUNTED INCANDESCENT DECORATIVE SCONCE	⊕ ²²⁰	220 YOLT ELECTRICAL OUTLET
₩.\$.	WALL MOUNTED COMPACT FLURESCENT LOW PROFILE DECORATIVE SCONCE	Φ	ELECTRICAL OUTLET FLOOR MOUNTED
USB	UNIYERSAL SERIAL BUS	\$	POWER SWITCH
→ PH	PHONE LINE	\$ ₃	3-WAY POWER SWITCH
─ <	CABLE T.Y.	\$. D. ⊙	SMOKE DETECTOR INTER-CONNECTED W/ BATTERY BACKUP PER CODE
±gas	GAS LINE	SD/C	SMOKE DETECTOR / CARBON MONOXIDE DETECTOR INTER-CONNECTED W/ BATTERY BACKUP PER CODE
	SURFACE MOUNTED FLOURESCENT W/ACRYLIC DIFFUSER	E	ELECTRIC METER
J.>	KEYLESS FIXTURE - JUNCTION BOX	G	GAS METER



FIRST FLOOR PLAN ELECTRICAL

SCALE: 1/4" = 1'-0"



TK DESIGN
&
ASSOCIATES

WWW.TKHOMEDESIGN.COM 26030 PONTIAC TRAIL SOUTH LYON, MI 48178 PHONE: (248)-446-1960 FAX: (248)-446-1961

COPYRIGHT 2014 TK DESIGN AND ASSOCIATES

-DO NOT SCALE DRAWINGS, USE CALCULATED DIMENSIONS ONLY
-CONTRACTIOR TO FIELD VERIFY ALL DRAWING ASPECTS BEFORE
CONSTRUCTION, DISCREPANCIES AND DESIGN CHANGES SHALL BE
REPORTED TO THE DESIGNER IN WRITTEN FORM IMMEDIATELY
-CALL MISS DIG AT 680-482-7271 3 DAYS PRIOR TO ANY EXCAVATION
-CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE PERMIT HOLDER

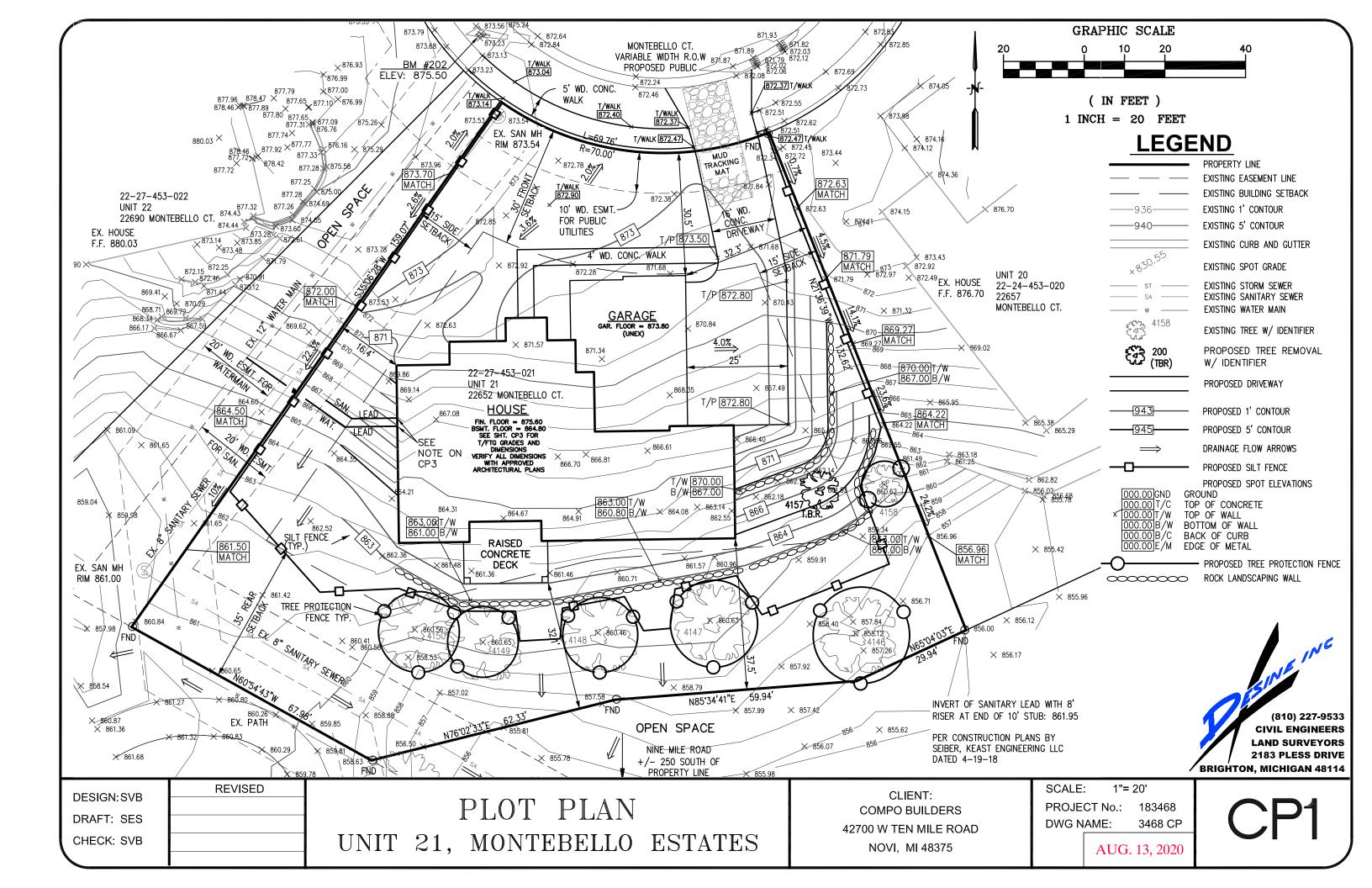
CLIENT / PROJECT
COMPO BUILDERS
MILLEN RESIDENCE
MONTEBELLO CRT
LOT 21
NOVI, MI

JOB No.	20-139
DRAWN: CHECKED:	AG BF
REVIEW:	5-1-2020
FINAL:	6-15-2020
REVISED REVISED	6-25-2020 7-14-2020
REVISED	7-30-2020

SCALE: PER PLAN

E-2

SHEET#



BENCHMARKS

DATUM BASED ON CITY OF NOVI BM, REF: "MONTEBELLO ESTATES" O.C.C.S.P. No. 2172

BENCHMARK #2742

"X" ON NORTH RIM OF SANITARY
MANHOLE LOCATED 15' NORTH OF THE
C/L OF NINE MILE ROAD AND 160' EAST
OF DRIVE #44000 NINE MILE ROAD
ELEVATION = 873.24 (USGS DATUM)

BENCHMARK #3411

"X" ON NORTH RIM OF GATEWELL
LOCATED IN THE SOUTHWEST QUAD OF
THE INTERSECTION OF NINE MILE ROAD
AND CENTER STREET, 50' WEST OF THE
CENTERLINE OF CENTER STREET
ELEVATION = 873.64 (USGS DATUM)

BENCHMARK #202

ARROW ON HYDRANT, LOCATED NEAR
THE NORTHEASTERLY CORNER OF UNIT

ELEVATION = 875.50 (NAVD 88)

BENCHMARK #203

SOUTHEASTERLY CORNER OF
TRANSFORMER PAD, LOCATED ON THE
COMMON LINE OF UNITS 19 AND 18.
ELEVATION = 876.64 (NAVD 88)

1/8" SAW CUT CONTROL JOINT

1" DEEP FOR 4" THICK OR

2" DEEP FOR 6" THICK
SPACING TO MATCH WIDTH

4" THICK CONC. WALK W/ BROOM
FINISH U.N.O. ON PLAN

6" COMPACTED MDOT 21AA
SHALL BE EXTENDED A MINIMUM
OF 6" BEYOND THE FORMS.

STRIP TOPSOIL AND COMPACTED
ACCEPTABLE SUBGRADE

SIDEWALK CROSS SECTION

NOT TO SCALE

- 1. SEE PLAN FOR WIDTH OF SIDEWALK.
- 2. PROVIDE CONCRETE TYPE PER LOCAL CODE. (4000 PSI AIR ENTRAINED)
- 3. WALK THROUGH DRIVEWAY SHALL BE 6" THICK.
- 4. SIDEWALK MAXIMUM CROSS SLOPE OF 2%.
- 5. LONGITUDINAL SIDEWALK SLOPE (FINISHED)
 SHOULD NOT EXCEED 5%-7% (8.3% MAXIMUM).
- ALL SIDEWALKS SHALL BE CONSTRUCTED ACCORDING TO THE AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS.
- SIDEWALK SHALL BE 5' WIDE AND 4" THICK (6" THICK AT DRIVES).

TREE NOTES

- 1) APPLICANT TO COMPLY WITH CITY OF NOVI WOODLAND ORDINANCE, CHAPTER 37 DURING CONSTRUCTION.
- 2) A WOODLAND PERFORMANCE FINANCIAL GUARANTEE FOR THE REPLACEMENT TREE CREDITS SHALL BE PAID BY THE APPLICANT PRIOR TO THE ISSUANCE OF BUILDING PERMITS.
- 3) REQUIRED REPLACEMENT TREES WILL BE PLANTED ON THE OWNERS LOT AND THE LANDSCAPE PLAN IS TO BE PROVIDED. THE LANDSCAPE PLAN IS TO BE IN CONFORMANCE WITH THE CITY OF NOVI WOODLAND ORDINANCE, CHAPTER 37 AND BE CONSISTENT WITH THE NOVI LANDSCAPE DESIGN MANUAL. IF SUITABLE REPLACEMENT LOCATIONS ARE NOT AVAILABLE ON SITE FOR ALL REQUIRED REPLACEMENT TREES THE APPLICANT SHALL PAY INTO THE CITY TREE FUND THE APPROPRIATE AMOUNT. A WOODLAND MAINTENANCE GUARANTEE WILL BE PROVIDED PER THE CITY OF NOVI WOODLAND ORDINANCE, CHAPTER 37.
- 4) NO GRADING SHALL OCCUR IN THE CRITICAL ROOT ZONE OF EXISTING TREES. TREE PROTECTION FENCE SHALL BE PROVIDED AT THE EDGE OF THE CRITICAL ROOT ZONE OF TREES TO REMAIN.
- 5) ALL ON-SITE WOODLAND REPLACEMENT TREES TO BE PROPOSED AND INSTALLED SHALL COMPLY WITH THE CITY OF NOVI WOODLAND ORDINANCE.

GENERAL NOTES

- 1) City of Novi Benchmarks #2742 & 3411 are from "MONTEBELLO ESTATES" O.C.C.S.P. No. 2172 by Seiber, Kast Engineering LLC. Benchmarks #202 & #203 are established by DESINE Inc.
- 3) All work to comply with current City of Novi requirements.
- 4) Sump discharge shall be 4" dia. SCH.40 PVC at 2% slope, Minimum.
- 5) Water lead shall be min. 1" dia. Type K copper or HDPE SDR 9.
- 6) Sanitary lead shall be 6" dia. SDR 23.5 at 1% slope, Minimum.
- 7) Drive shall be 22' wide at back of curb and 16' wide at face of walk.
- 8) Tree protection fence to be installed around trees to remain.

TREE SCHEDULE

TAG NO.	DIAMETER	COMMON NAME	BOTANICAL NAME	CONDITION	REMARKS
4146	23	Red Oak	Quercus rubra	Good	Save
4147	21	Red Oak	Quercus rubra	Good	Save
4148	22	Red Oak	Quercus rubra	Good	Save
4149	27	Red Oak	Quercus rubra	Good	Save
4150	24	Red Oak	Quercus rubra	Good	Save
4157	14	Black Cherry	Prunus serotina	Good	TBR
4158	9,11	Common Mulberry	Morus alba	Good	Save

TREE SCHEDULE FROM CONSTRUCTION PLANS BY SEIBER, KEAST ENGINEERING LLC DATED 4-19-18

LEGAL DESCRIPTION

Unit 21 of "Montebello Estates," a part of the Southeast 1/4 of Section 27, Town 1 North, Range 8 East, City of Novi, Oakland County, Michigan, according to the Master Deed thereof, designated as Livingston County Condominium Subdivision Plan No. 2172, and as described in Act 59 of the Public Acts of 1978, as amended.

Tax ID No.: 22-27-453-021

Also known as: Vacant, Montebello Court, Novi, Mi

(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

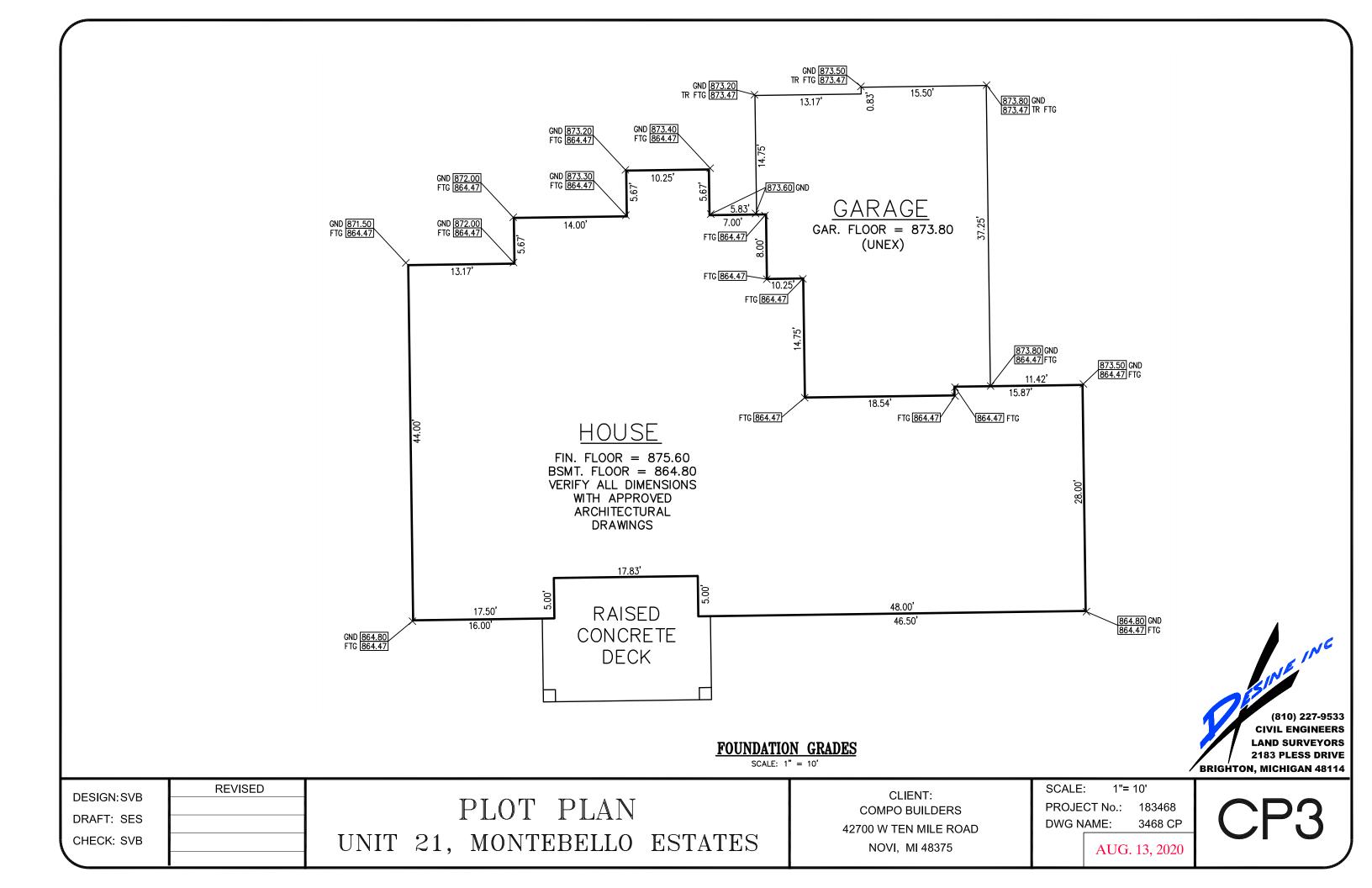
DESIGN:SVB	REVISED
22010111012	
DRAFT: SES	
CHECK: SVB	
\	

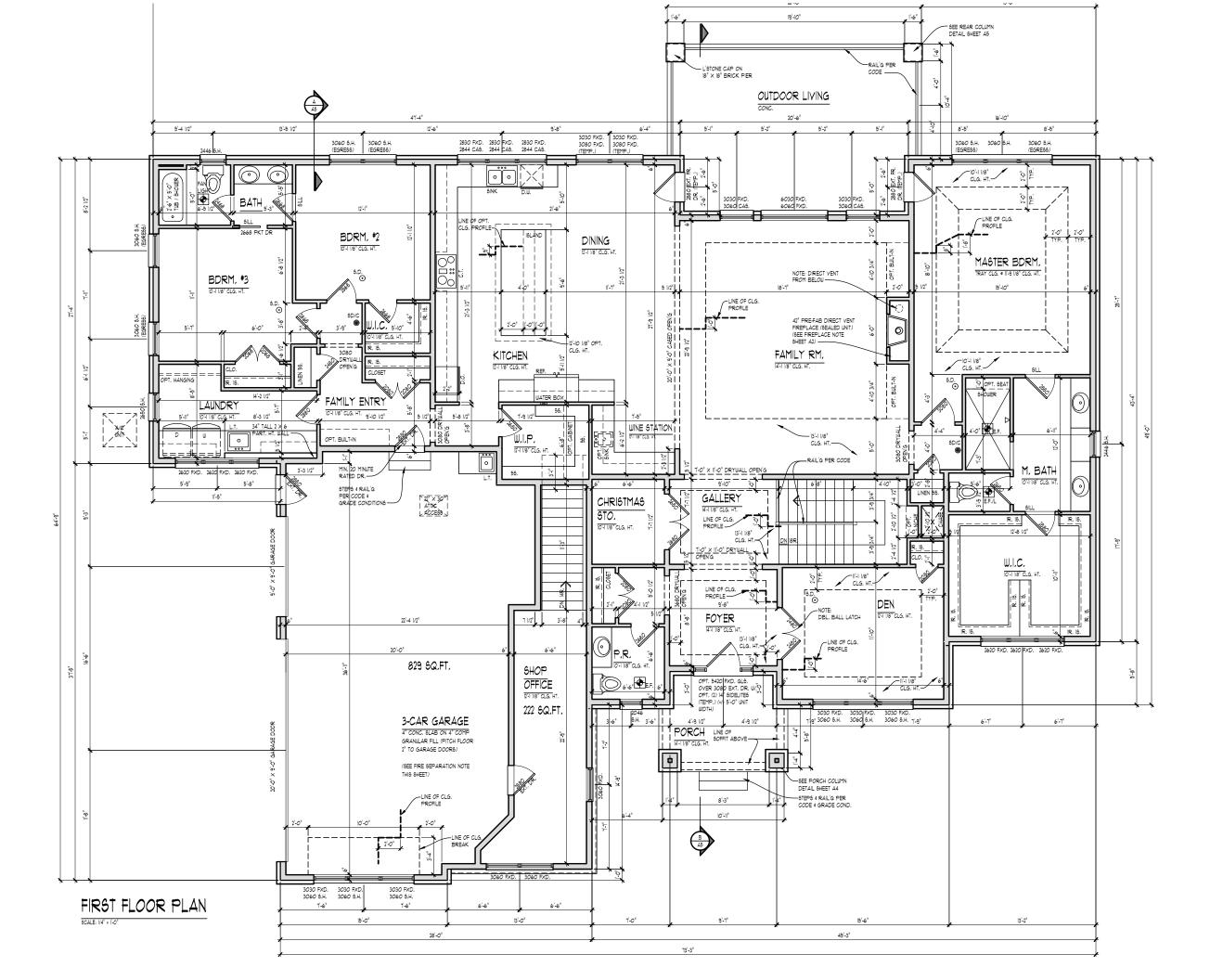
PLOT PLAN
UNIT 21, MONTEBELLO ESTATES

CLIENT: COMPO BUILDERS 42700 W TEN MILE ROAD NOVI. MI 48375 SCALE: N/A
PROJECT No.: 183468
DWG NAME: 3468 CP

AUG. 13, 2020

CP2







Oppermann, Katherine

From:

Stan@StanWilliams.com

Sent:

Friday, October 2, 2020 5:18 PM

To:

Oppermann, Katherine

Subject:

Case PZ20-0041

Request for variance for large garage for 22652 Montebellow Ct, Parcel #50-22-27-453-021

We're the closest residence to this new house (yet to be built). Our property line is adjacent to the Montebellow estates. We have no objection to the overside garage, as long as they're not testing race engines inside or something like that.

stan williams, owner 43635 Cottisford St. Northville (in Novi), MI 48167

248-344-4423