

**CITY OF HANOVER
PLANNING COMMISSION MEETING
SEPTEMBER 30, 2019
AGENDA**

CHAIR
STAN KOLASA

COUNCIL LIAISON
DOUG HAMMERSENG

BOARD MEMBERS
JIM SCHENDEL
MICHAEL CHRISTENSON
MICHELLE ARMSTRONG
DEAN KUITUNEN

- 1. Call to Order and Pledge of Allegiance: 7:00 p.m.**
- 2. Approval of Agenda**
- 3. Approval of Minutes from August 26, 2019, Regular Meeting**
- 4. Citizen's Forum**
- 5. Public Hearing**
 - a. An Amendment to a Planned Unit Development in the Bridges At Hanover**
- 6. Unfinished Business**
- 7. New Business**
 - a. Zoning Review of Shoreland Section**
- 8. Reports and Announcements**
 - a. Planning Commission Reports**
 - b. Liaison Report**
 - c. Staff Reports**
- 9. Adjournment**

**CITY OF HANOVER
PLANNING COMMISSION MEETING
AUGUST 26, 2019
DRAFT MINUTES**

Call to Order/Pledge of Allegiance

Stan Kolasa called the August 26, 2019, Planning Commission Meeting to order at 7:00 pm. Members present were Stan Kolasa, Jim Schendel, Michelle Armstrong, Dean Kuitunen, and Mike Christenson. Also present City Planner Cindy Nash, City Engineer Nick Preisler, Council Liaison Doug Hammerseng and Administrative Assistant Amy Biren. Guests were present.

Approval of Agenda

MOTION by Schendel to approve the amended agenda, seconded by Armstrong.

Motion carried unanimously.

Approval of Minutes from the June 24, 2019, Regular Meeting

MOTION by Armstrong to approve the June 24, 2019, minutes, seconded by Schendel.

Motion carried unanimously.

Citizen's Forum

None

Public Hearing

Amendment to an Interim Use Permit to Extend the Ending Date for the Mahler Pit

Kolasa closed the Planning Commission meeting and opened the Public Hearing at 7:01 pm.

Nash reminded the Board members that the amendment is for the existing gravel pit and that they had reviewed this in November 2018 and recommended extending the operation until August 31, 2019. Fehn Companies have been working on bringing an application for a new interim use permit (IUP) that would expand the parcels involved in mining. This amendment does not address the new IUP which the application has not been received by the City. The amendment is asking that the current operation continue until the end of this year, December 31, 2019.

Schendel asked if there have been any problems with the current operation. Nash replied that there have not been any issues.

Nash did say that comments received have been directly related to the new IUP proposal.

Kolasa closed the Public Hearing and re-opened the Planning Commission meeting at 7:03 pm.

MOTION by Christenson to recommend sending it to Council for approval to extend the current IUP until December 31, 2019, seconded by Kuitunen.

Motion carried unanimously.

Review the Environmental Assessment Worksheet (EAW) for the Mahler Aggregate Mine

Kolasa closed the Planning Commission meeting and opened the Public Hearing at 7:04 pm.

Nash stated that the EAW before the Board was for the proposed expansion of the Mahler Aggregate Mine (Mahler Pit). It lays out the basic facts regarding impacts on the environment and that Council will determine whether an Environmental Impact Statement (EIS) is needed. If Council makes a negative declaration, it does not indicate approval for the proposed expansion. It is just an environmental review.

Armstrong asked for clarification on a negative declaration. Nash explained that a negative declaration means that an EIS is not needed and the environmental assessment has been completed. If a positive declaration is given, a further in-depth study is needed (EIS). Some projects are at a sized where an EIS is required from the start. Usually an EIS occurs when there is an environmental impact that does not have sufficient information and further analysis needs to be done. Armstrong asked for an example. Nash said that she worked on a project that involved mining in the floodplain of the Minnesota River and an EIS was required.

Travis Hunter, 1401 Oakwood: He is concerned with the condition of 15th Street and would recommend that there is consideration of improving it before extended use occurs with the mine expansion.

Nash replied that the City has been in discussion with St. Michael regarding 15th Street. The concerns about this will be addressed with the application of the new IUP and conditions will be set during that time.

Marjory Hart, 11229 16th Street, St. Michael: She is concerned with the possible contamination of the Crow River by pollutants. (Received via email.)

Nash reminded the Planning Commission that the Public Comment Period for the EAW continues until September 11th so the Board does not need to take any action tonight. All of the public comments will be compiled and shared with Council after the comment period has closed. At that meeting, Council will determine if there is enough information regarding the environmental impact and decide if an EIS is needed.

Kolasa closed the Public Hearing and re-opened the Planning Commission meeting at 7:17 pm.

Unfinished Business

None

New Business

None

Reports

Christenson asked if the City had received any complaints about dirt bike noise coming from private properties. Biren replied that she was unaware of any complaints regarding dirt bikes, rather the complaints received have been about large trucks jake braking on the main highways. Christenson also expressed concern about the growing number of ATVs and golf carts that are on the streets and the issue of safety.

Armstrong asked about the trees being taken down as part of the future Crow River Heights West project. Nash replied that taking down trees is part of the grading plan and that if trees are removed that were to remain, the City does have an ordinance to address that which includes a fine system. Preisler explained that trees do need to be removed to obtain the needed lower elevations of the homes. He continued saying that as part of the grading process, the developer cannot go past the grading limits and silt fences are placed within the grading limits to serve as a reminder.

Kolasa asked about the stock piles of dirt in the development, particularly the one that is closest to Beebe Lake Road. Preisler said that particular pile will be there for a longer period of time as it will used when the later phases of the development are done. Usually, the stock piles are present for a shorter period of time. The goal is to balance the grading with the dirt taken from the site.

Hammerseng informed the Board that Council will be having a special meeting on Wednesday in order to work on next year's budget.

Nash let the Board know that Hanover grew in size when two annexations were approved by the State: Riverside Estates and the triangular piece north of the Mahler Pit.

Kuitunen asked about the progress of the River Town Villas. Nash replied that the site has too much dirt and they were running into problems with where to go with the excess. Council had extended the timeframe for the developer's agreement and recording the final plat to the end of the year. She believes that the developer's agreement and a grading plan will come to Council in October.

Biren informed the Board that work on the columbarium site at the Hanover City Cemetery will start shortly. She described the plan approved by Council.

Sarah Watercott, 1044 Emerald Street, and another guest arrived and wanted to give input related to the Mahler Pit.

Watercott stated she has concerns with the working hours and it coming closer to homes. She hears the back-up noise and the mining noise when she is in and outside of her home. She wants to know if the noise aspect has been considered and will the berm be high enough as she can see mining operation from her property. She is also concerned with it devaluing her property.

Nash responded that the concerns and questions expressed are more intended for the public hearing that will occur when the application of the proposed expansion is received. All of these details will be reviewed by staff at that point and the public will be able to participate in the public hearing. Biren also reassured Watercott that residents will receive another notification when that public hearing is to take place and that at this time, the City has not received an application so a date is unknown.

Watercott also expressed concern with mining being done under and around the high line. Preisler assured her that there were standards that needed to be met and that the power company will be aware of the project.

Adjournment

MOTION by Armstrong to adjourn, seconded by Schendel.

Motion carried unanimously.

Meeting adjourned at 7:46 pm.

ATTEST:

Amy L. Biren
Administrative Assistant

Collaborative Planning, LLC

Memorandum

Date: September 24, 2019
To: Planning Commission
From: Cindy Nash, City Planner
RE: Bridges PUD Amendment (Additional Architecture)

JP Brooks is purchasing many of the townhome lots in the Bridges of Hanover and has applied for an amendment to the Planned Unit Development to add additional townhome architecture.

The proposed architecture consists of both villas and twinhomes and is very similar to, but not exactly the same as, the existing architecture that is approved. They are trying to add additional floor plans to what is available so that it appeals to other buyers with the hope that the units can be built out quicker. A copy of the architecture is in the packet, with the exception of a proposed twinhome design which will be brought to the meeting.

The HOA participated in a meeting with the builder and city staff and have provided an email to city staff dated September 11, 2019 that they approve the proposed architecture.

Evaluation of Request

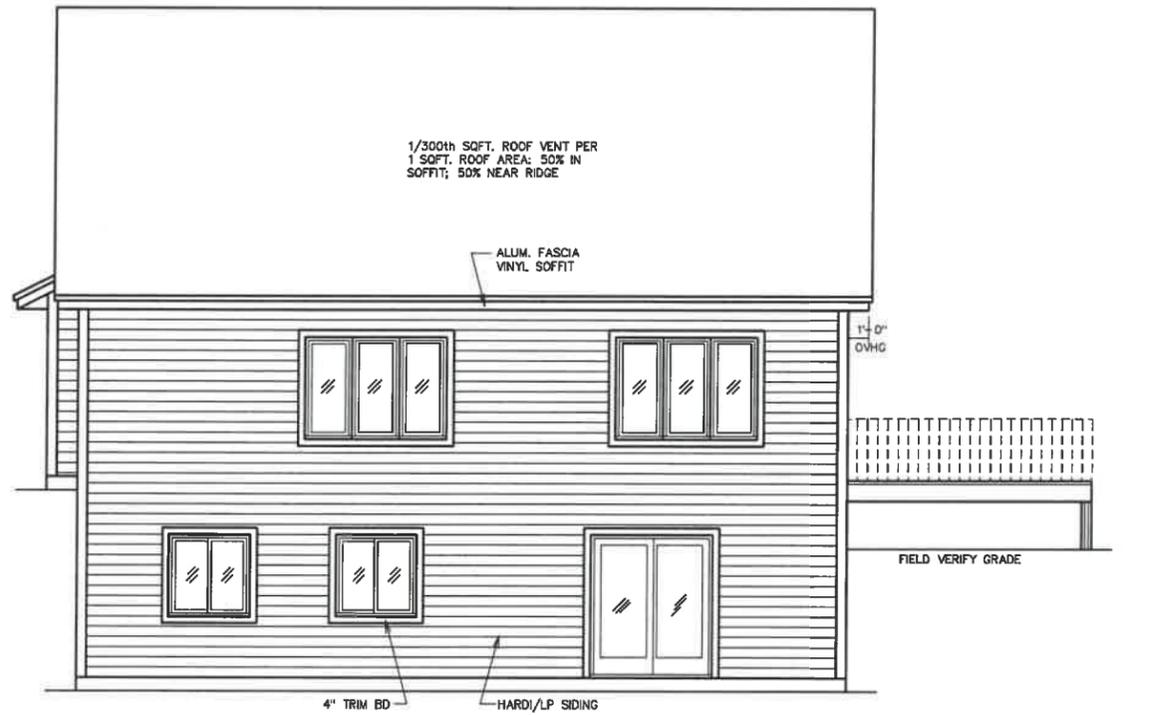
The proposed architecture is very similar to those already in place on the site and is agreeable to the HOA.

Recommendation

Staff recommends approval of this amendment to the Planned Unit Development subject to the following conditions:

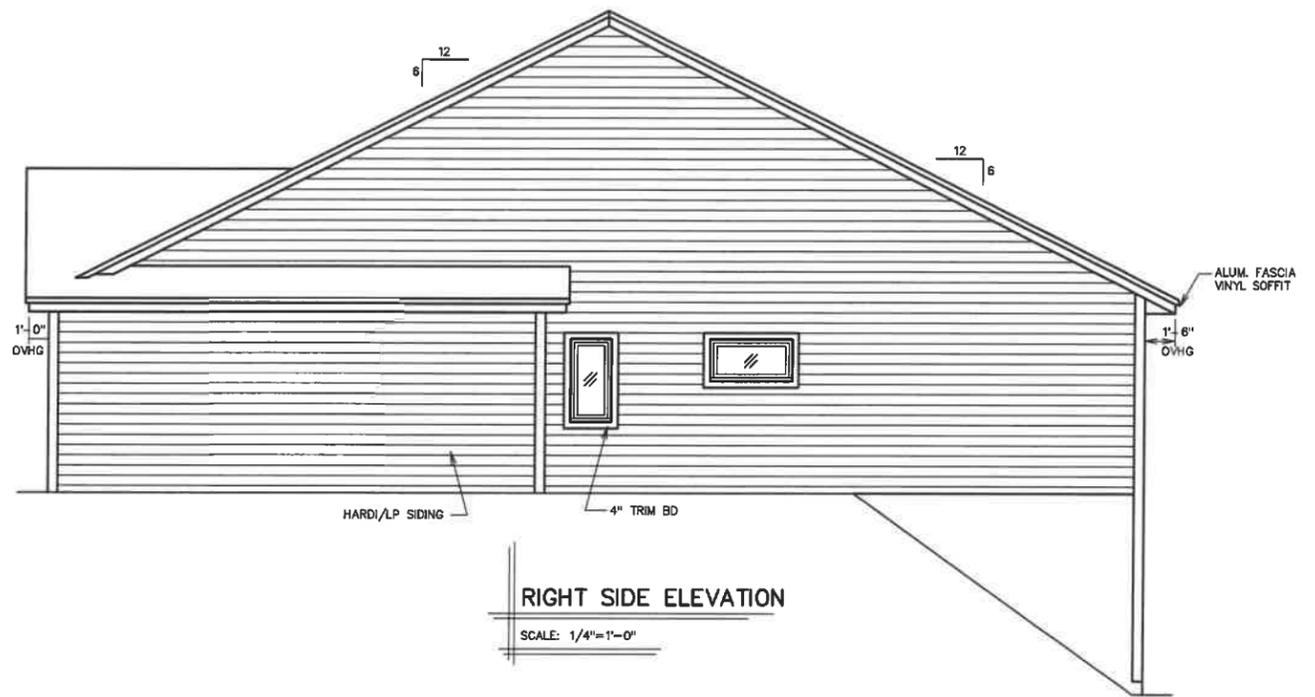
1. The architecture attached as Exhibit A is approved to be used in the townhome portions of the Planned Unit Development, in addition to architecture previously approved.
2. All previous conditions of the resolutions approving the planned unit development and the development agreement associated with the development are not changed by this resolution and are incorporated herein by reference.

- Current Example -



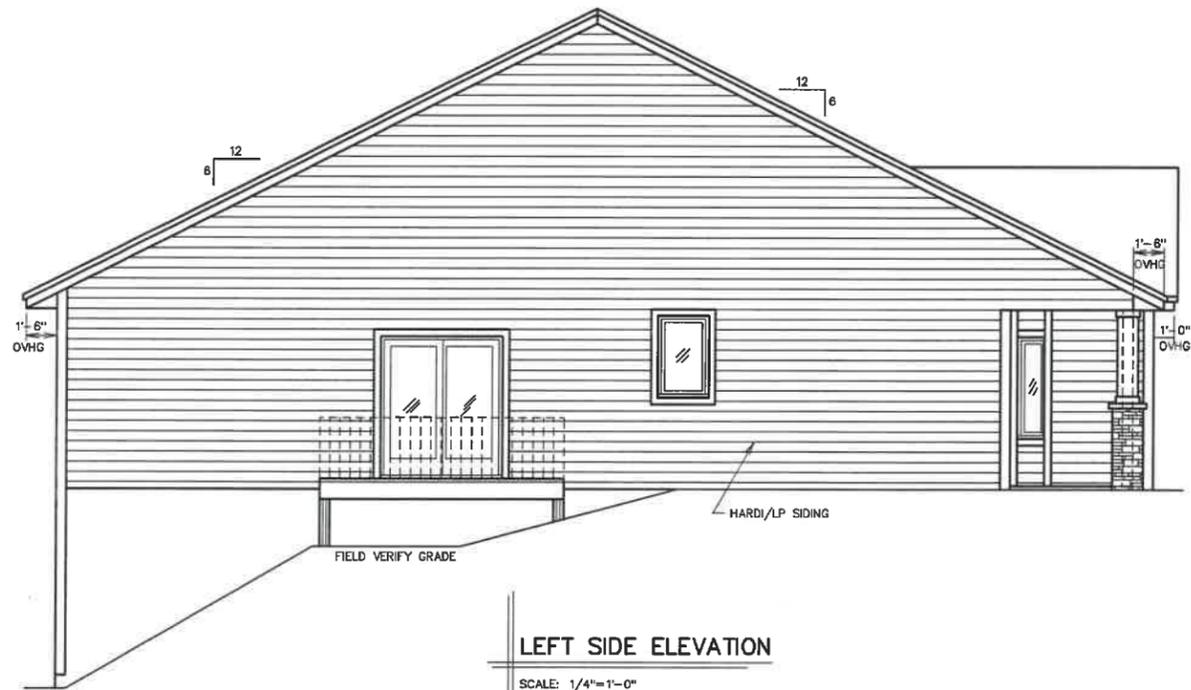
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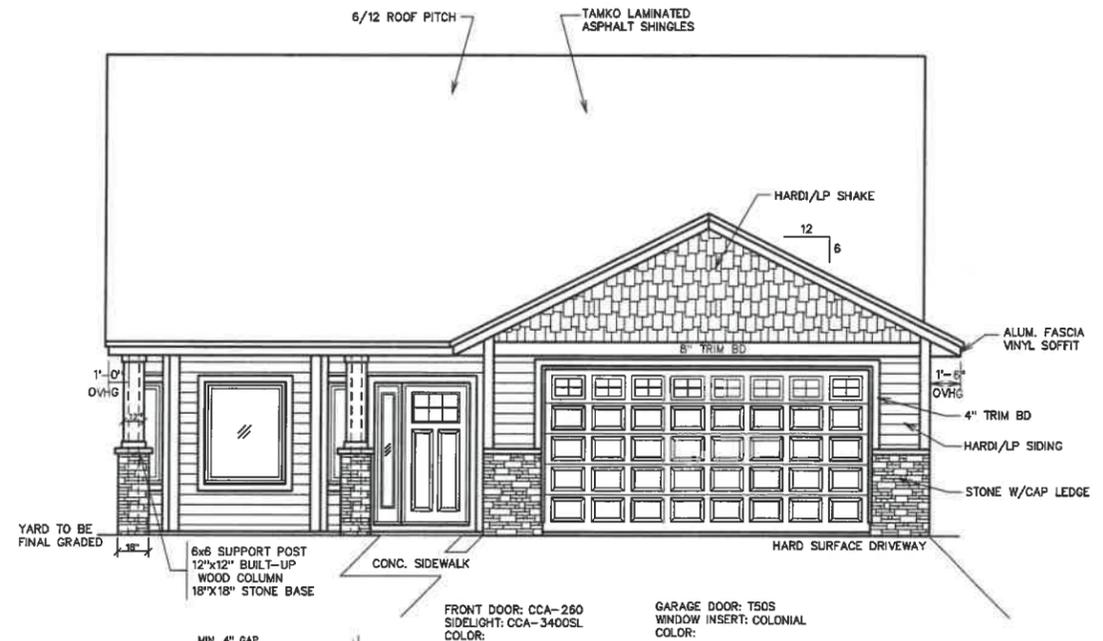
RIGHT SIDE ELEVATION

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



LEFT SIDE ELEVATION

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



FRONT ELEVATION

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

FIRST FLOOR SQ. FT.:	1,466
FIN. BSM'T SQ. FT.:	1,061
TOTAL SQ. FT.:	2,527

DATE	07/26/17
REV.	
MEM.	
PRELIM.	
DRN TYPE	

XXXX SETTERS LANE
MODEL

HANDOVER

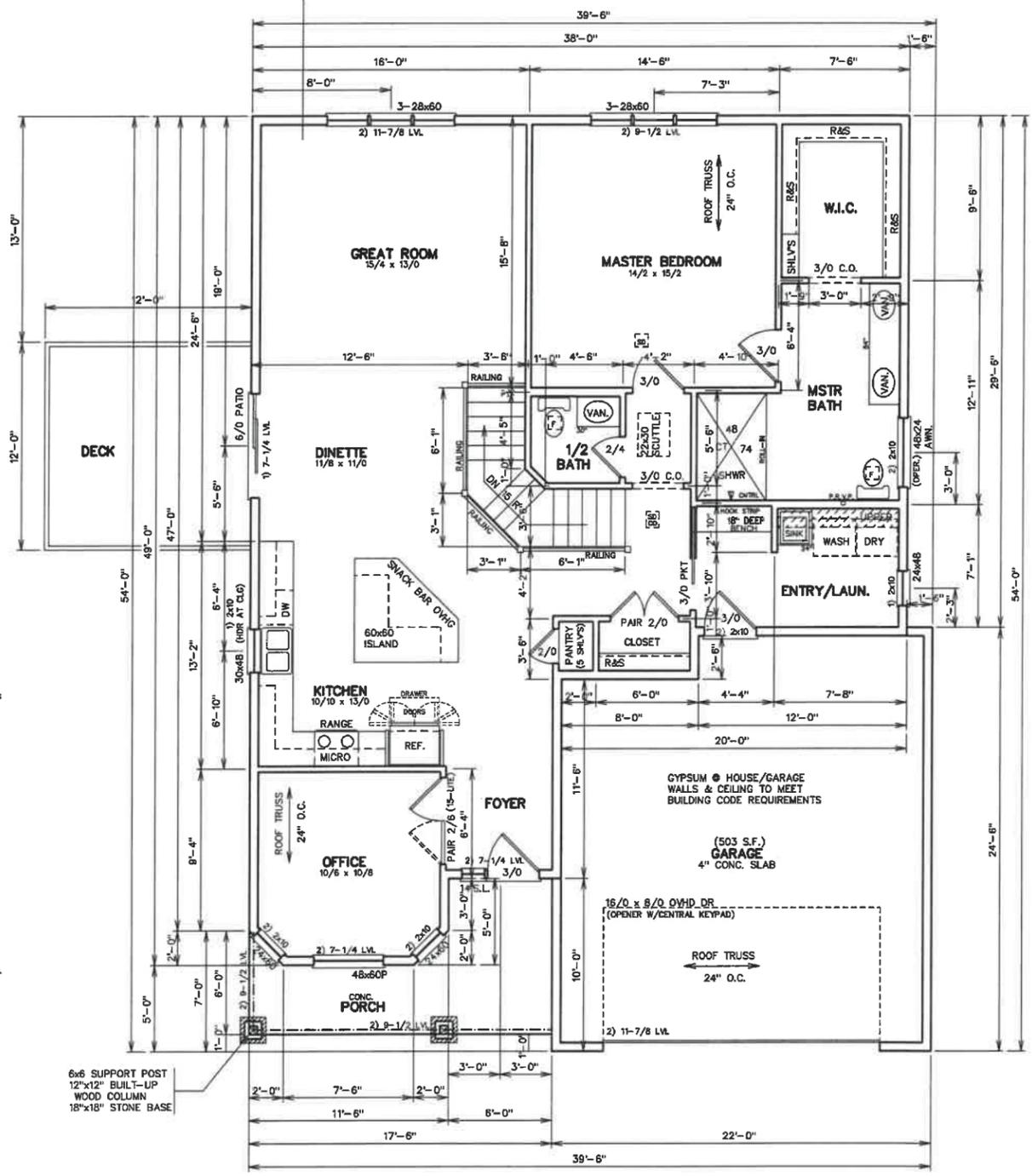
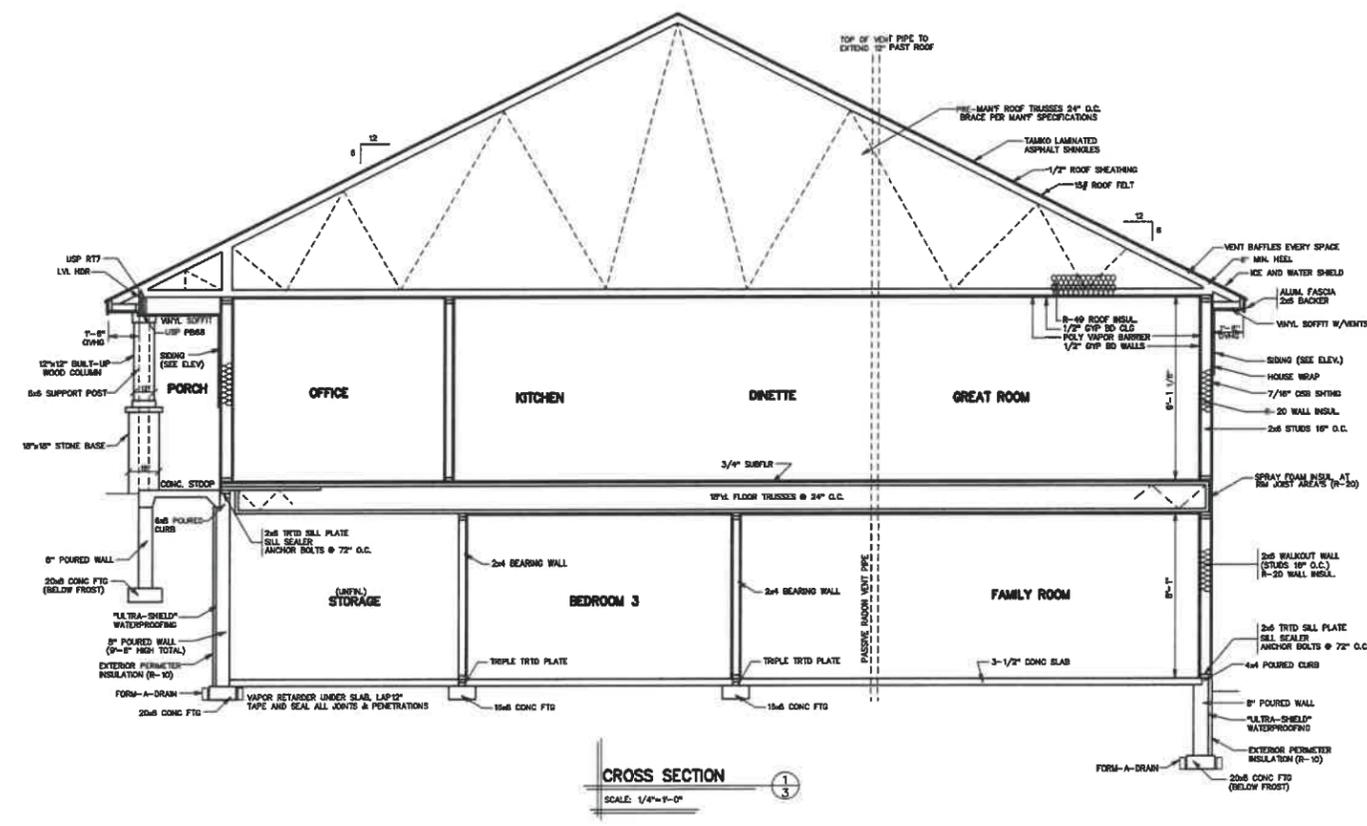
DIK BUILDERS, INC.
PAGE 1 of 3
INDEX NO. 17 026

Current

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- Current Example -

13



NOTE: EXTERIOR DIMENSIONS BASED ON FACE OF SHTNG TO FACE OF SHTNG

FIRST FLOOR PLAN

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

SO. FT.: 1,466

NOTE: ALL INT. & EXT. BEARING OPENINGS LESS THAN 4'-0" SHALL HAVE 2-2x10 HEADERS ALL OTHER HEADERS TO BE 3-2x10 UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS. VERIFY ALL HEADER CHANGERS FROM THE LUMBER CO., TRUSS CO. AND/OR BUILDING OFFICIALS.

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ALL LVL. BEAMS ARE TO BE VERIFIED PRIOR TO CONSTRUCTION.

MECHANICAL & ELECTRICAL NOTES

PLACEMENT OF MECHANICAL COMPONENTS WILL BE DETERMINED BY BUILDING CODES AND MAY VARY FROM THAT SHOWN

ELECTRICAL TO BE PROVIDED TO CODE. LOCATIONS OF OULETS MAY VARY FROM THAT SHOWN. UPGRADES AND ADDITIONS MUST BE SPECIFIED ON PLANS.

SMOKE DETECTORS TO BE INTERCONNECTED, HARDWIRED, WITH BATTERY BACK-UP. ONE PER LEVEL AND EACH BEDROOM

NOTE: FIRST FLOOR TO HAVE 9'-1 1/8" RGH CLG HGT

NOTE: WINDOWS TO BE CASEMENT UNITS CALLED OUT BY SIZE (ADJUST AS REQ'D PER MANF) (THERMO-TECH CASEMENT UNITS)

PAGE 3 of 3	INDEX NO. 17 026	DRAWN ERL	DATE 07/25/17	THIS PLAN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT. THE ARCHITECT ASSUMES NO LIABILITY FOR THE ACCURACY OF THE INFORMATION PROVIDED BY THE CLIENT. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE BUILDING AS SHOWN ON THESE PLANS. THE ARCHITECT IS NOT RESPONSIBLE FOR THE DESIGN OR CONSTRUCTION OF ANY OTHER WORK OR FOR THE PERFORMANCE OF ANY OTHER WORK. THE ARCHITECT'S LIABILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE BUILDING AS SHOWN ON THESE PLANS. THE ARCHITECT IS NOT RESPONSIBLE FOR THE DESIGN OR CONSTRUCTION OF ANY OTHER WORK OR FOR THE PERFORMANCE OF ANY OTHER WORK.
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Current

REVISIONS	BY
XXXXX	XX

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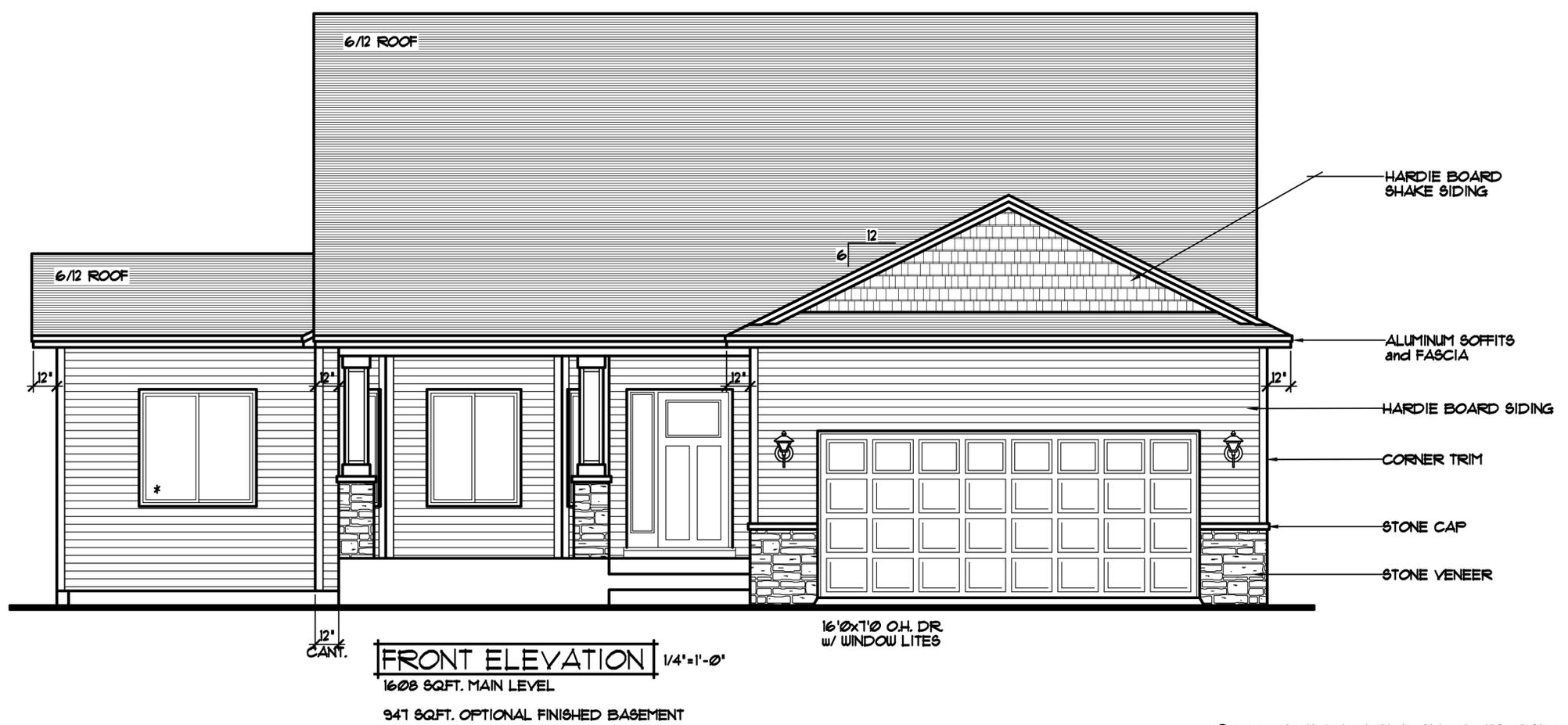
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LEVEL HEIGHT INFORMATION TABLE		
LEVEL	R.C.H.	TOP OF WINDOW RO.
BASEMENT	8'-0"	6'-10 1/2"
MAIN LEVEL	9'-1 1/8"	6'-10 1/2"

NOTE III
PROVIDE STANDARD ENERGY HEEL @ ALL ROOF TRUSSES (TYP.)

NOTE III
WINDOWS w/ '*' REQUIRE SASH LIMITER (TYP.)

- GENERIC WINDOWS SPEC'D.
- ALUMINUM SOFFITS & FASCIA
- HARDIE BOARD SIDING/CORNER TRIM (TYP.)
- HARDIE BOARD SHAKE SIDING WHERE SHOWN
- STONE VENEER WHERE SHOWN



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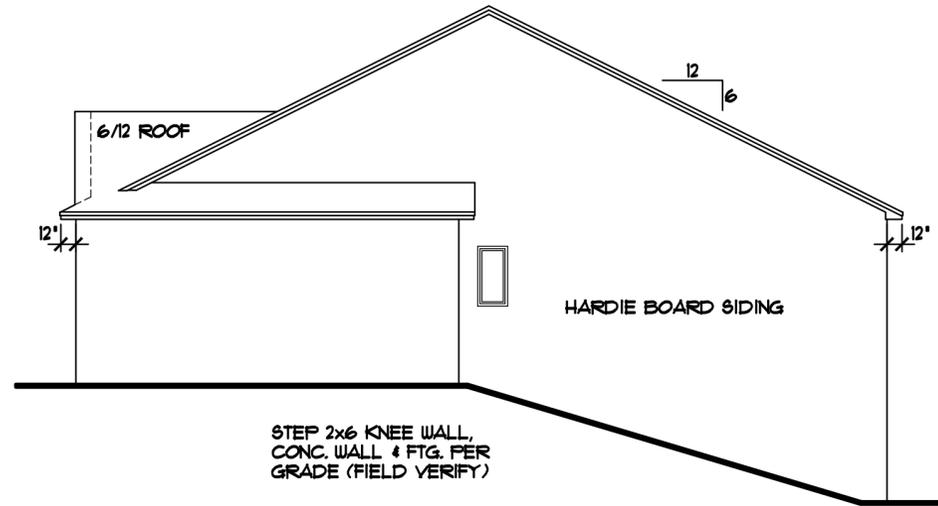
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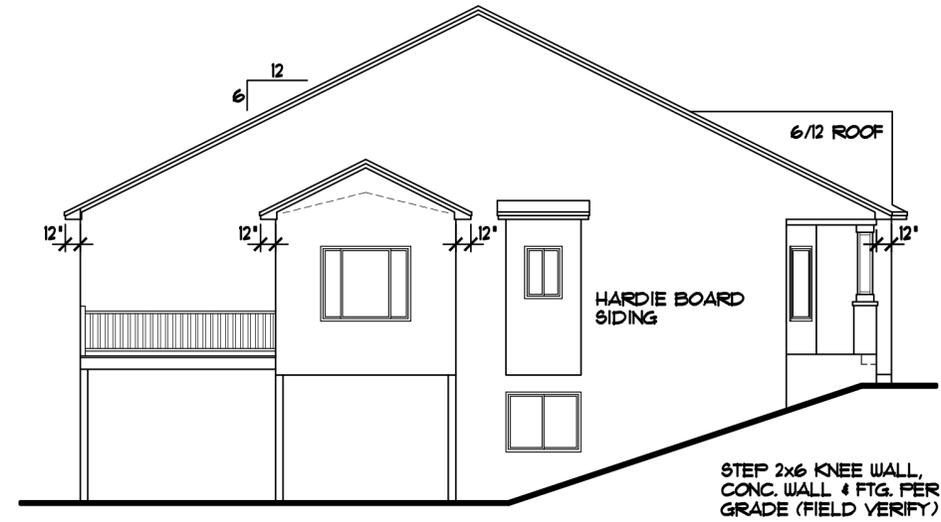
QUALITY HOME BUILDERS

DRAWN L.V.
CHECKED XX
DATE: 08/08/2019
SCALE: AS NOTED
CADD FILE # 19221
SHEET 1 of 7

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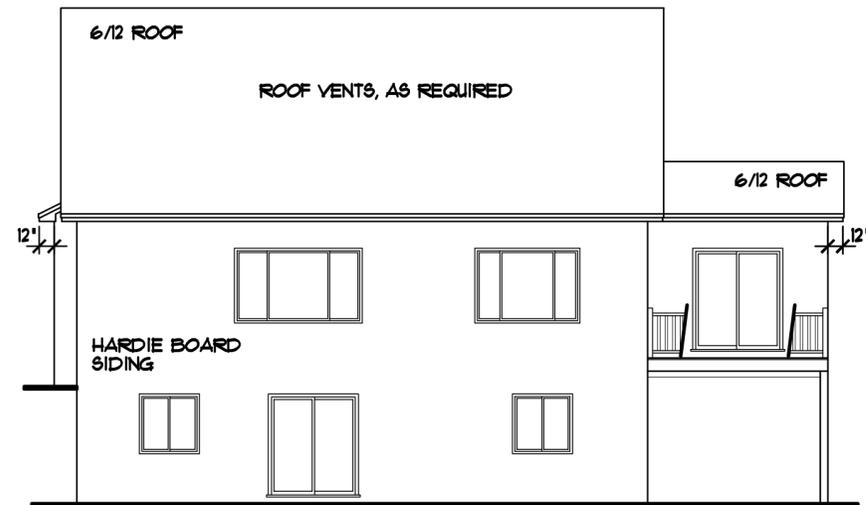
RIGHT ELEVATION 1/8"=1'-0"



LEFT ELEVATION 1/8"=1'-0"

NOTE!!!
PROVIDE STANDARD
ENERGY HEEL @ ALL
ROOF TRUSSES (TYP.)

NOTE!!!
WINDOWS w/ "x" REQUIRE
SASH LIMITER (TYP.)



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

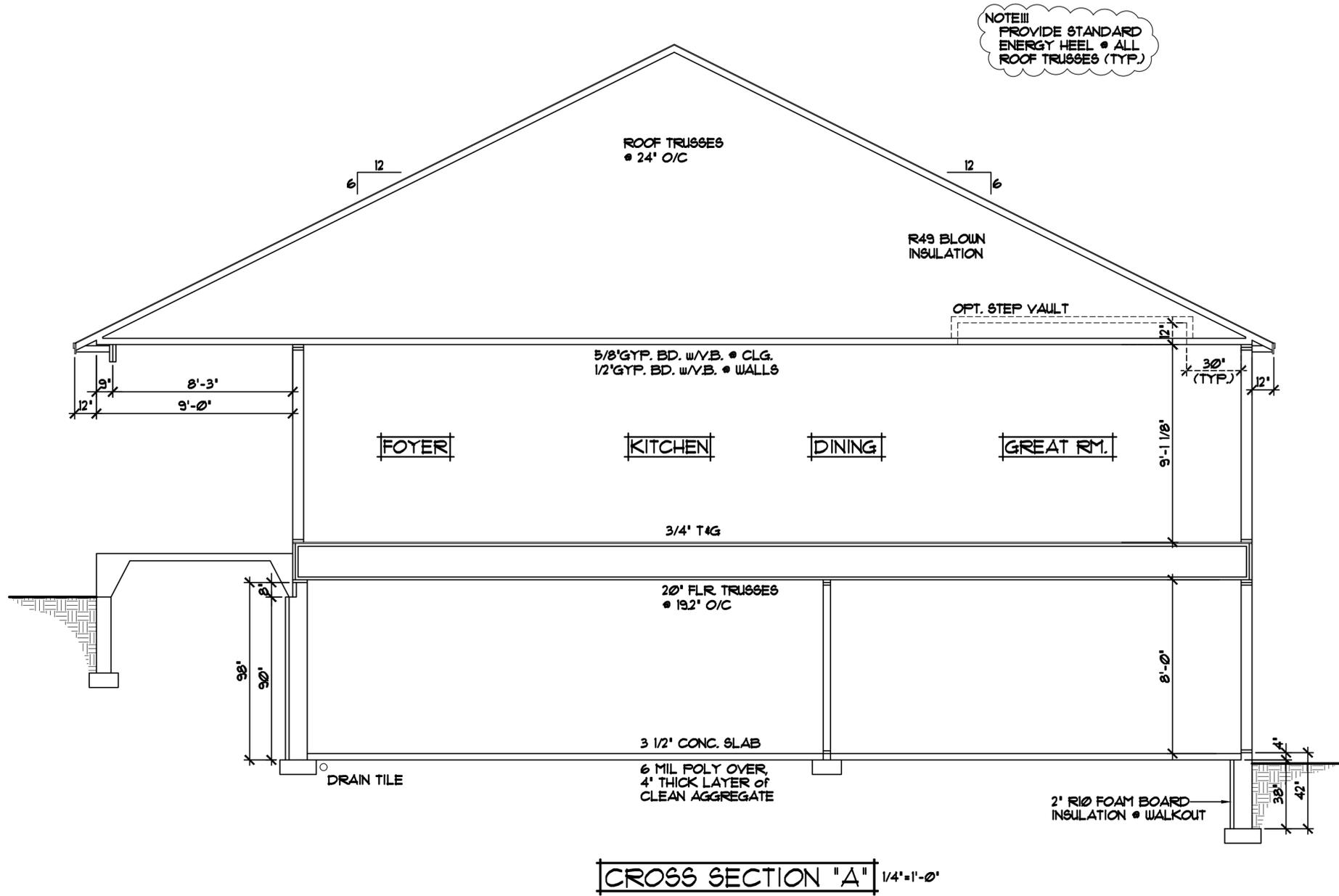
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BUILT BY:
JP Brooks
QUALITY HOME BUILDERS



ROOF CONSTRUCTION:

- PREMANUFACTURED ROOF TRUSSES - ENGINEERED BY SUPPLIER - SLOPES VARY - SEE PLAN
- R49 BLOWN FIBERGLASS INSULATION
- 1/150 ROOF VENT AT SOFFITS, 1/150 VENT AT RIDGE
- AIR CHUTE AT EACH TRUSS SPACE
- 1/2" ROOF SHEATHING
- 15° ROOFING FELT
- ICE & WATER MEMBRANE APPLIED 24" FAST EXTERIOR WALL
- ASPHALT SHINGLES,

SOFFIT / FASCIA:

- 2x6 SUB-FASCIA
- MAINTENANCE FREE FASCIA COVER
- MAINTENANCE FREE VENTED SOFFIT

WALL CONSTRUCTION:

- HOUSE WRAP
- 1/16" OSB SHEATHING
- 2x6 STUDS • 16" O.C.
- WINDOWS PER SPEC'S.
- R-21 F.G. BATT INSULATION
- 4 MIL POLY VAPOR BARRIER
- 1/2" GYPSUM BOARD

RIM AREA CONSTRUCTION:

- CLOSED CELL SPRAYED FOAM INSUL. R20 (MINIMUM) • RIM AREA AND R30 (MINIMUM) • CANTS.

WALL CONSTRUCTION:

- SAME AS ABOVE

SILL CONSTRUCTION:

- 2x8 SILL PLATE & SEALER (2x6 ENGINEERED PLATE • WALKOUT AREAS)
- 1/2" ANCHOR BOLTS • 48" O.C.

FOUNDATION INSULATION:

- FOUNDATION EXTERIOR- 2" R-10 RIGID FOAM BOARD INSULATION
- FOUNDATION INTERIOR- 1" R-5 RIGID FOAM BOARD INSULATION

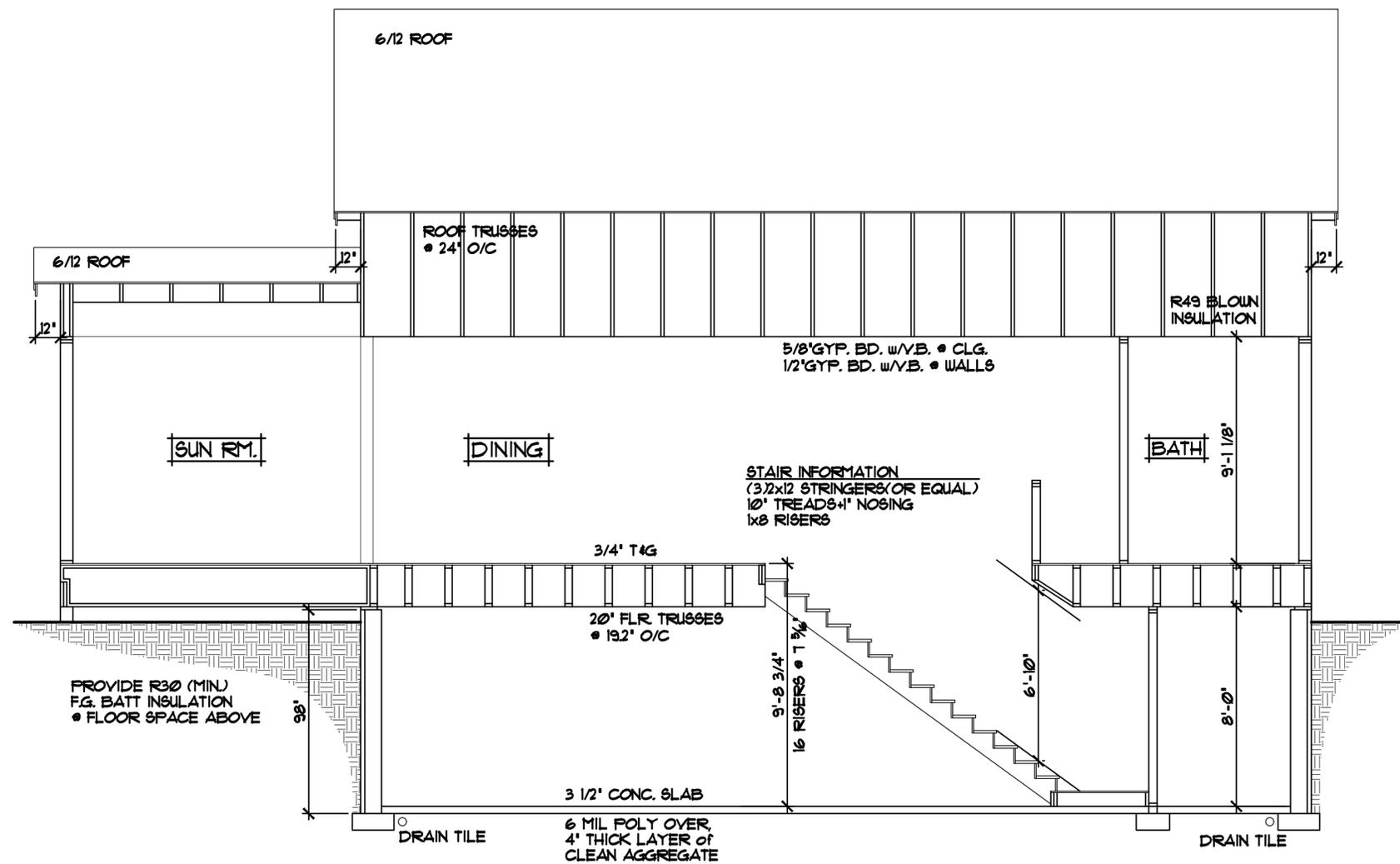
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CROSS SECTION "B" 1/4" = 1'-0"

ROOF CONSTRUCTION:

- PREMANUFACTURED ROOF TRUSSES - ENGINEERED BY SUPPLIER - SLOPES VARY - SEE PLAN
- R49 BLOWN FIBERGLASS INSULATION
- 1/150 ROOF VENT AT SOFFITS, 1/150 VENT AT RIDGE
- AIR CHUTE AT EACH TRUSS SPACE
- 1/2" ROOF SHEATHING
- 15" ROOFING FELT
- ICE & WATER MEMBRANE APPLIED 24" FAST EXTERIOR WALL
- ASPHALT SHINGLES,

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- MAINTENANCE FREE VENTED SOFFIT

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SILL CONSTRUCTION:

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- 1/2" ANCHOR BOLTS • 48" O.C.

FOUNDATION INSULATION:

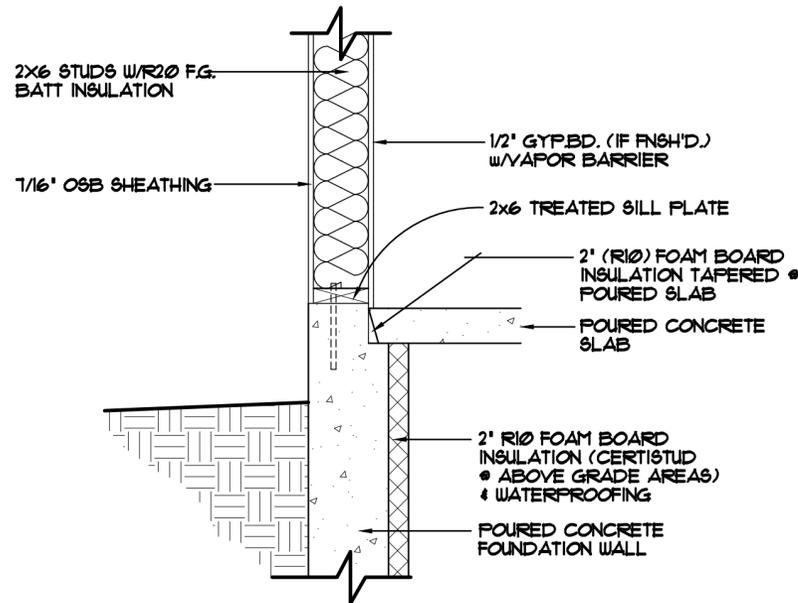
- FOUNDATION EXTERIOR- 2' R-10 RIGID FOAM BOARD INSULATION
- FOUNDATION INTERIOR- 1' R-5 RIGID FOAM BOARD INSULATION

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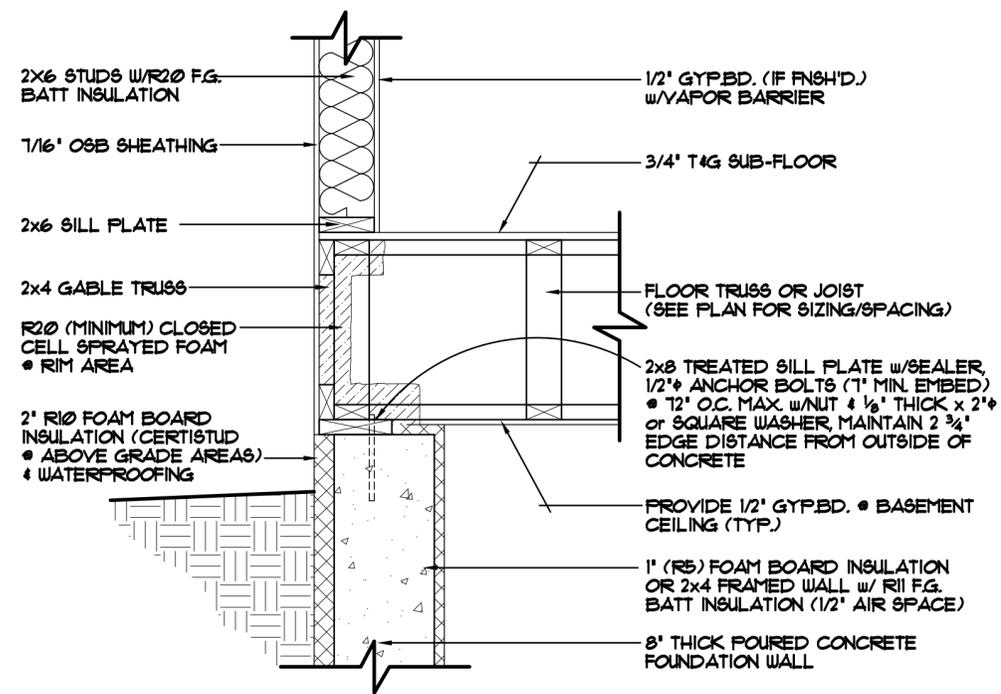
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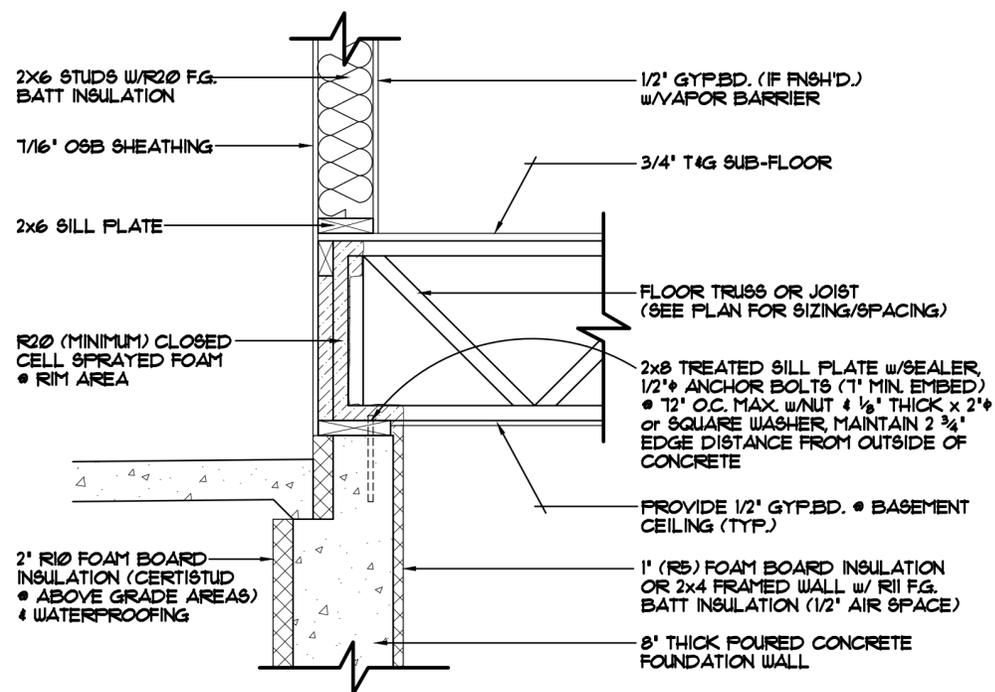




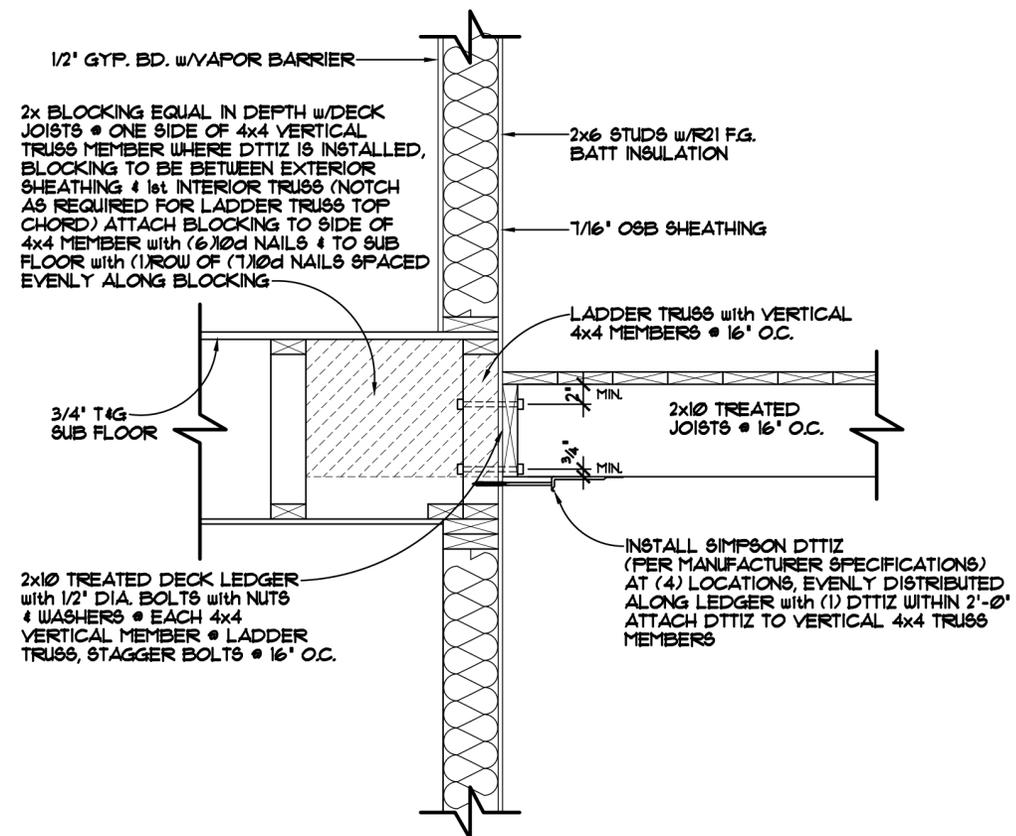
FOUNDATION/RIM AREA DETAIL "A-1" 1'-1'-0"
 STANDARD WALKOUT SILL/FOUNDATION AREA
 FOUNDATION NOT HELD IN



FOUNDATION/RIM AREA DETAIL "A-2" 1'-1'-0"
 STANDARD RIM AREA, TRUSSES/JOISTS PARALLEL TO FOUNDATION WALL
 FOUNDATION HELD IN 2'



FOUNDATION/RIM AREA DETAIL "A-3" 1'-1'-0"
 BRICK LEDGED RIM AREA, TRUSSES/JOISTS PERPENDICULAR TO FOUNDATION WALL
 FOUNDATION HELD IN 2'



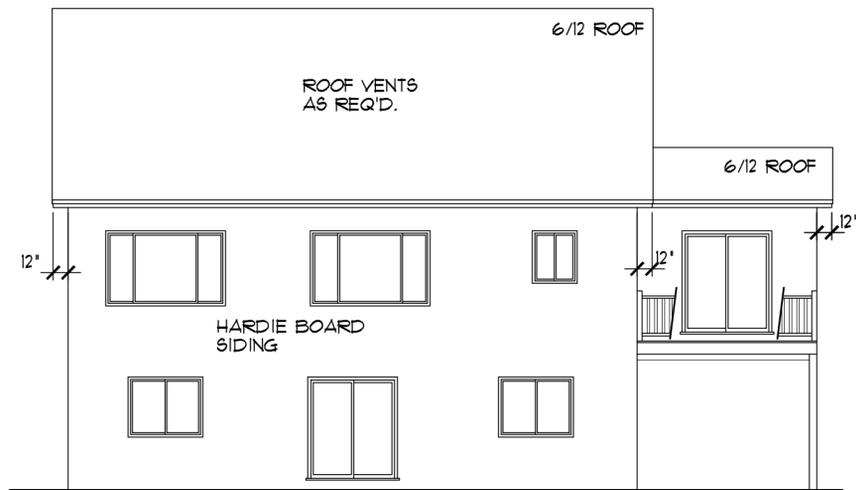
DECK LEDGER DETAIL 1'-1'-0"

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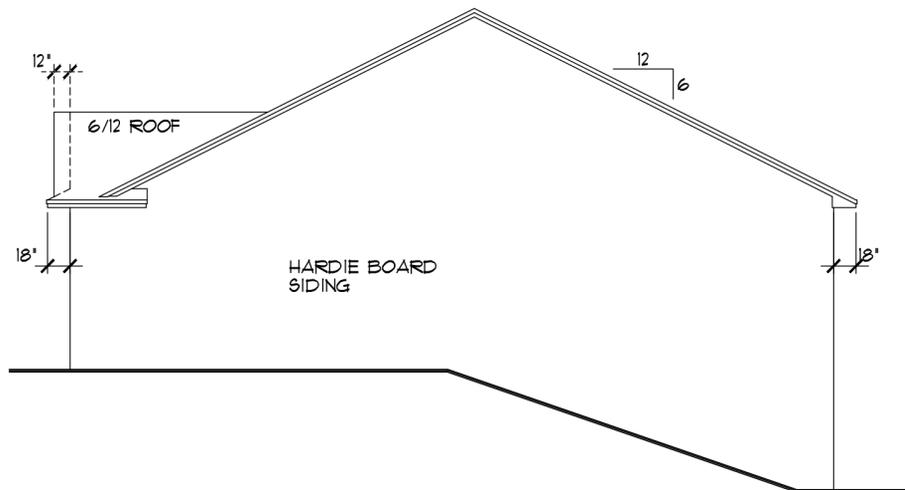
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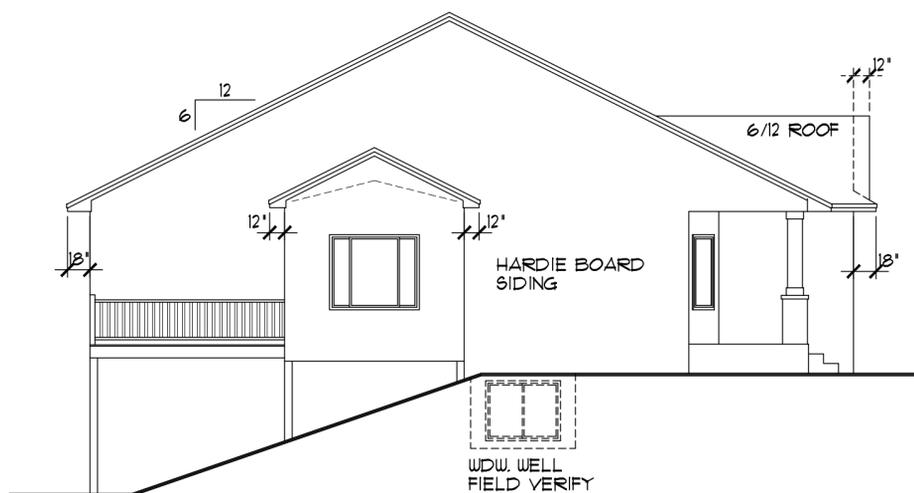


REAR ELEVATION 1/8"=1'-0"



RIGHT ELEVATION 1/8"=1'-0"

STEP 2x6 KNEE WALL, CONC. WALL & FTG. PER GRADE (FIELD VERIFY)



STEP 2x6 KNEE WALL, CONC. WALL & FTG. PER GRADE (FIELD VERIFY)

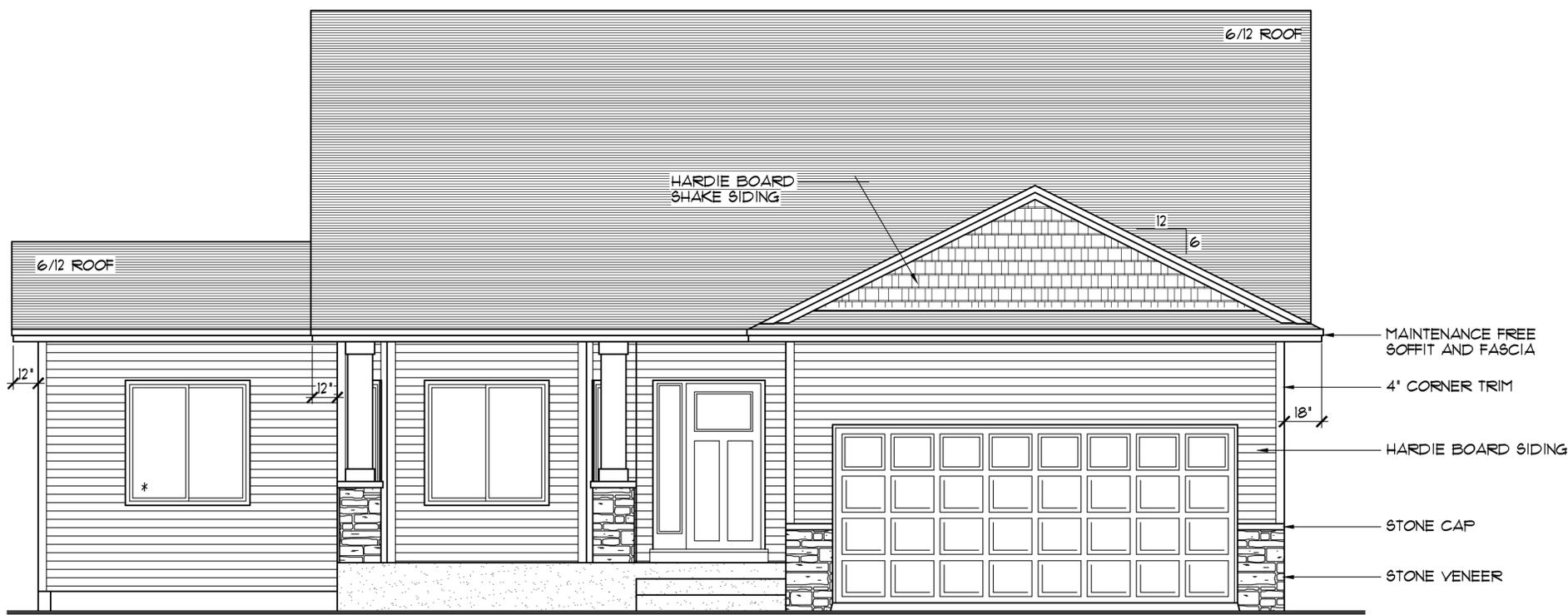
LEFT ELEVATION 1/8"=1'-0"

LEVEL HEIGHT INFORMATION TABLE		
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BASEMENT	8'-2"	6'-10 1/2"
MAIN LEVEL	9'-1 1/8"	6'-10 1/2"

- JELD WEN WINDOWS SPEC'D.
- MAINTENANCE FREE SOFFITS & FASCIA
- STONE VENEER WHERE SHOWN
- HARDIE BOARD SIDING/CORNER TRIM (TYP.)
- HARDIE BOARD SHAKE SIDING WHERE SHOWN

NOTE!!!
ADJUST HEEL HEIGHT @ MAIN LEVEL 10/12 TRUSSES w/ 18' OVERHANG TO MATCH 7/12 TRUSSES w/18' OVERHANG (TYP.)

NOTE!!!
PROVIDE STANDARD ENERGY HEEL @ ALL ROOF TRUSSES (TYP.)



FRONT ELEVATION 1/4"=1'-0"

1325 SQFT. ABOVE GRADE
951 SQFT. OPTIONAL FINISHED BASEMENT
2282 SQFT. TOTAL FINISHED AREAS

144 SQFT. SUN ROOM

THE: **RIVERWOOD PLAN**

REVISIONS	BY	DATE
18046	RB.	

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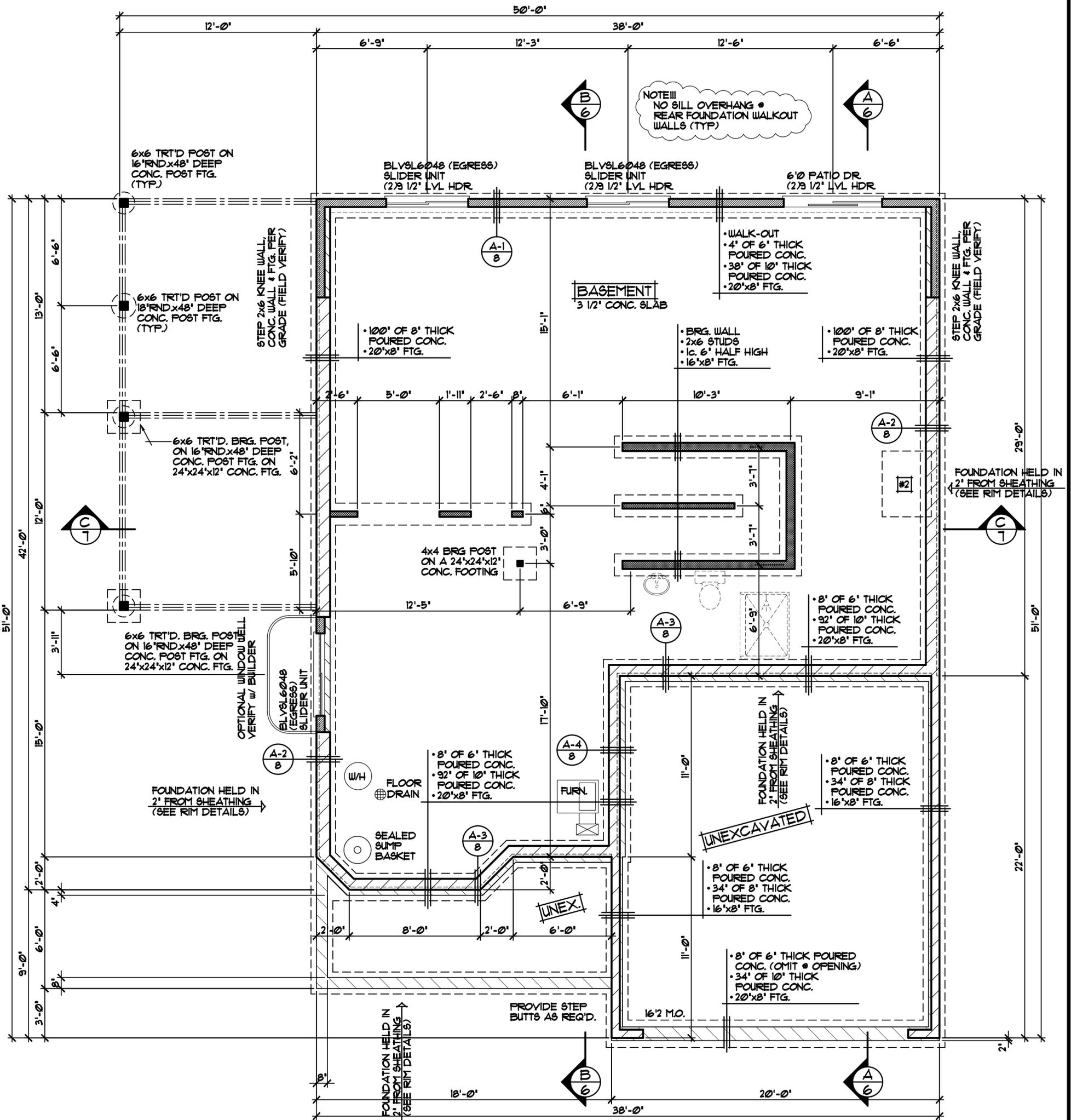
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SHEET 1 OF 8			



FOUNDATION PLAN 1/4"=1'-0"

GENERAL CONSTRUCTION NOTES

- #1 GIRDER FLOOR TRUSS (BASEMENT STAIR AREA)
- #2 (MAIN LEVEL FLOOR SYSTEM) RECESS FLOOR TRUSSES 4" BELOW CURBLESS WALK IN SHOWER

FRAMING & CONSTRUCTION NOTES

- 8'-2" PLATE HEIGHT • ENTIRE LOWER LEVEL (UNLESS NOTED OTHERWISE)
- PROVIDE 1/2" GYP. BD. • BASEMENT CEILING & ALLOW 80 SQFT. (MAX) OPEN CLG. AREA FOR MECHANICAL, FIRE BLOCK TRUSS SPACE • PERIMETER OF OPEN AREA

NOTE!!! VERIFY ALL MECHANICAL EQUIPMENT LOCATIONS, LOCATIONS ON PLAN ARE REPRESENTATION ONLY

FOUNDATION CONST. NOTES

- POURED CONCRETE FOUNDATION, VERIFY ALL WALL DIMENSIONS w/ FOUNDATION CONTRACTOR
- ALL EXTERIOR FOUNDATION DIMENSIONS ARE TO OUTSIDE OF EXTERIOR FOAM BOARD INSUL. OR SHEATHING, FOUNDATION TO BE HELD IN WHERE NOTED/SHOWN
- PROVIDE 2" R10 FOAM BOARD INSULATION • EXTERIOR FOUNDATION WALLS & 1" R5 FOAM BOARD INSULATION AT INTERIOR SIDE OF FOUNDATION WALLS (TYP.)
- INSULATION & AIR BARRIER TO BE CONT. OVER TOP OF FOUNDATION WALLS (TYP.)

DOOR & WINDOW NOTES

- JELD WEN WINDOWS SPECIFIED, VERIFY ROUGH OPENING SIZES FOR DOORS & WINDOWS w/ MANUFACTURER
- WINDOWS with '*' REQUIRE A SASH STOPPER (TYP.)
- ALL WINDOW & DOOR OPENINGS TO HAVE (22x10 #2 GRADE HEADER or BETTER (UNLESS NOTED OTHERWISE)
- TOP OF R.O. FOR ALL WINDOWS ON LOWER LEVEL TO BE 6'-10 1/2" FROM FLOOR (UNLESS NOTED OTHERWISE)

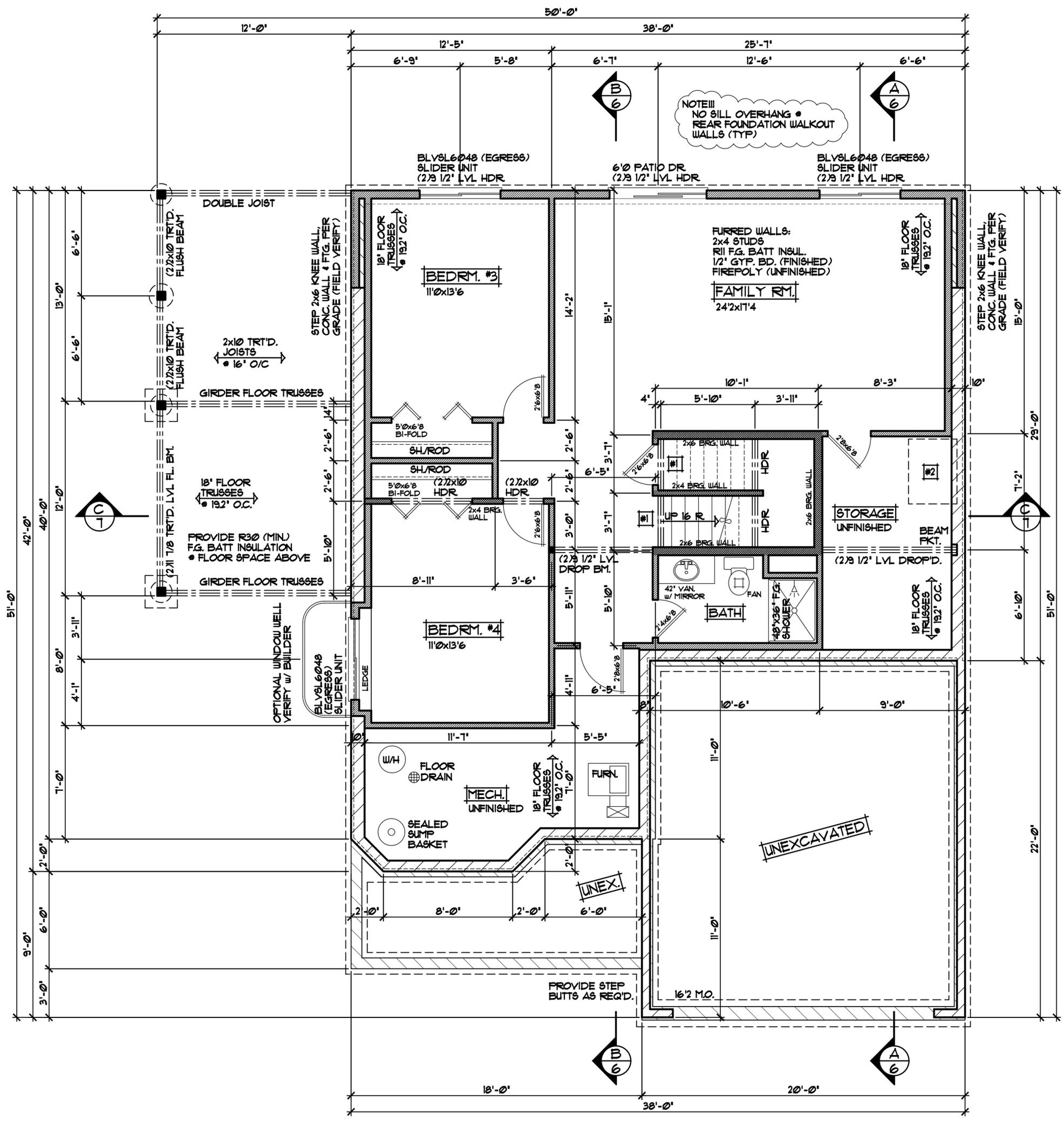
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OPTIONAL BASEMENT FINISHING PLAN 1/4"=1'-0"
 951 SQFT. FINISHED BASEMENT AREA

GENERAL CONSTRUCTION NOTES

- #1 GIRDER FLOOR TRUSS (BASEMENT STAIR AREA)
- #2 (MAIN LEVEL FLOOR SYSTEM) RECESS FLOOR TRUSSES 4' BELOW CURBLESS WALK IN SHOWER

FRAMING & CONSTRUCTION NOTES

- 8'-2" PLATE HEIGHT • ENTIRE LOWER LEVEL (UNLESS NOTED OTHERWISE)
- PROVIDE 1/2" GYP. BD. • BASEMENT CEILING & ALLOW 80 SQFT. (MAX) OPEN CLG. AREA FOR MECHANICAL, FIRE BLOCK TRUSS SPACE • PERIMETER OF OPEN AREA

NOTE!!!
 VERIFY ALL MECHANICAL EQUIPMENT LOCATIONS, LOCATIONS ON PLAN ARE REPRESENTATION ONLY

FOUNDATION CONST. NOTES

- POURED CONCRETE FOUNDATION, VERIFY ALL WALL DIMENSIONS w/ FOUNDATION CONTRACTOR
- ALL EXTERIOR FOUNDATION DIMENSIONS ARE TO OUTSIDE OF EXTERIOR FOAM BOARD INSUL. OR SHEATHING, FOUNDATION TO BE HELD IN WHERE NOTED/SHOWN
- PROVIDE 2" R10 FOAM BOARD INSULATION • EXTERIOR FOUNDATION WALLS & 1" R5 FOAM BOARD INSULATION AT INTERIOR SIDE OF FOUNDATION WALLS (TYP.)
- INSULATION & AIR BARRIER TO BE CONT. OVER TOP OF FOUNDATION WALLS (TYP.)

DOOR & WINDOW NOTES

- JELD WEN WINDOWS SPECIFIED, VERIFY ROUGH OPENING SIZES FOR DOORS & WINDOWS w/ MANUFACTURER
- WINDOWS with "S" REQUIRE A SASH STOPPER (TYP.)
- ALL WINDOW & DOOR OPENINGS TO HAVE (2) 2x10 #2 GRADE HEADER or BETTER (UNLESS NOTED OTHERWISE)
- TOP OF RO. FOR ALL WINDOWS ON LOWER LEVEL TO BE 6'-10 1/2" FROM FLOOR (UNLESS NOTED OTHERWISE)

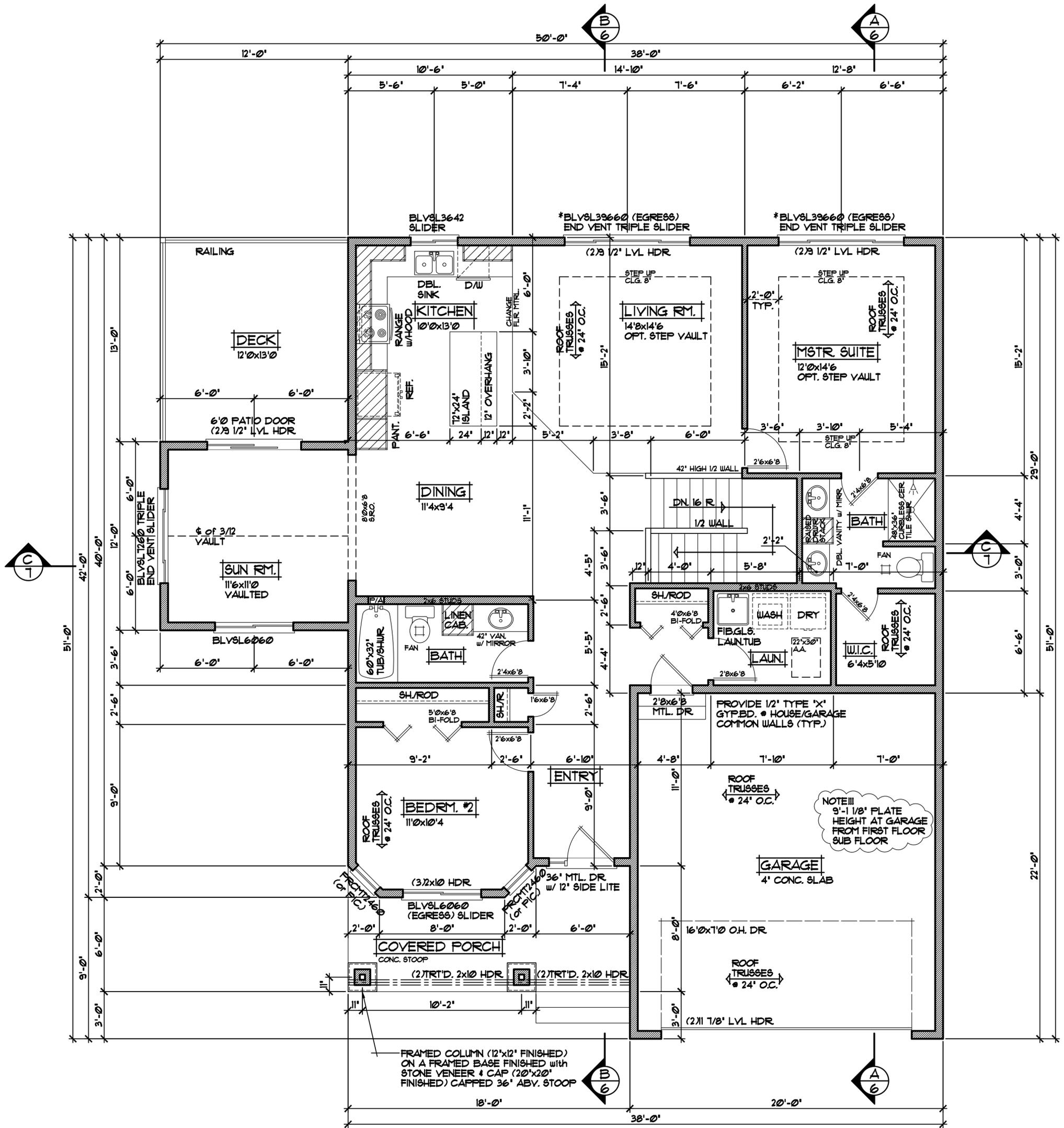
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MAIN LEVEL PLAN 1/4"=1'-0"
1325 SQFT. MAIN LEVEL

FRAMING NOTES

- 9'-1 1/8" PLATE HEIGHT • ENTIRE MAIN LEVEL (UNLESS NOTED OTHERWISE)
- FRAME ALL GARAGE STUDS w/ 2x6 STUDS • 16" O.C. (TYP.)

DOOR & WINDOW NOTES

- JELD WEN WINDOWS SPECIFIED. VERIFY ROUGH OPENING SIZES FOR DOORS & WINDOWS w/ MANUFACTURER
- WINDOWS with "*" REQUIRE A SASH STOPPER (TYP.)
- ALL WINDOW & DOOR OPENINGS TO HAVE (2)2x10 #2 GRADE HEADER or BETTER (UNLESS NOTED OTHERWISE)
- TOP OF RO. FOR ALL WINDOWS ON MAIN LEVEL TO BE 6'-10 1/2" FROM SUB-FLOOR (UNLESS NOTED OTHERWISE)

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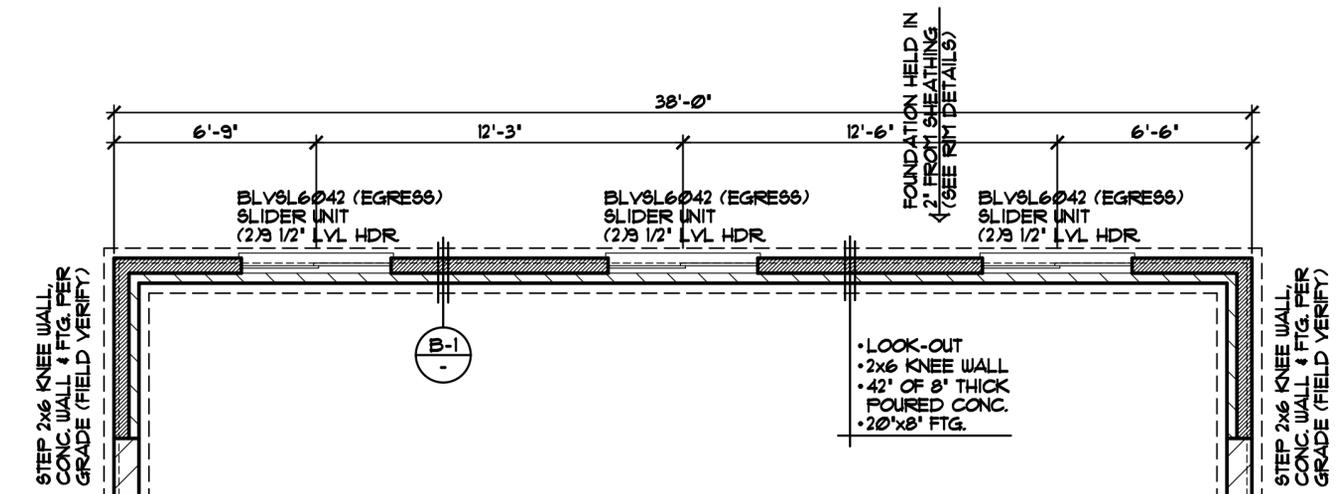


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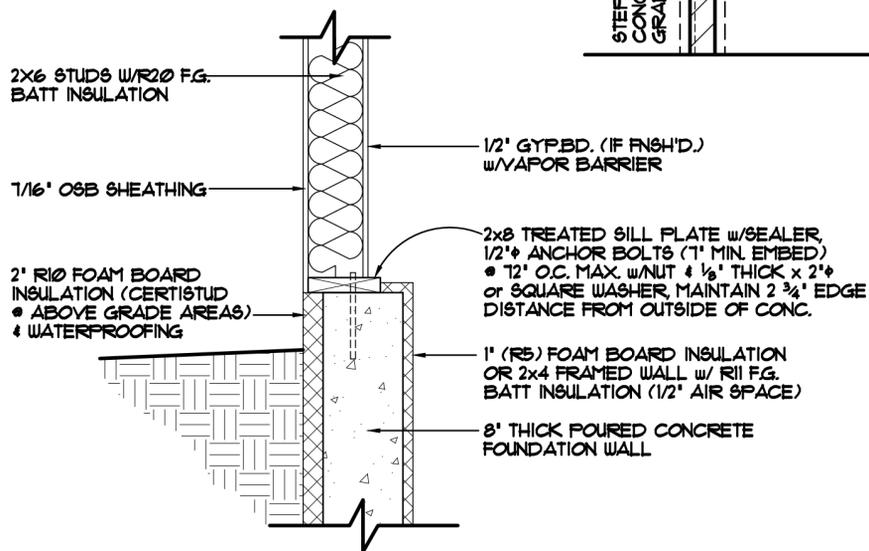


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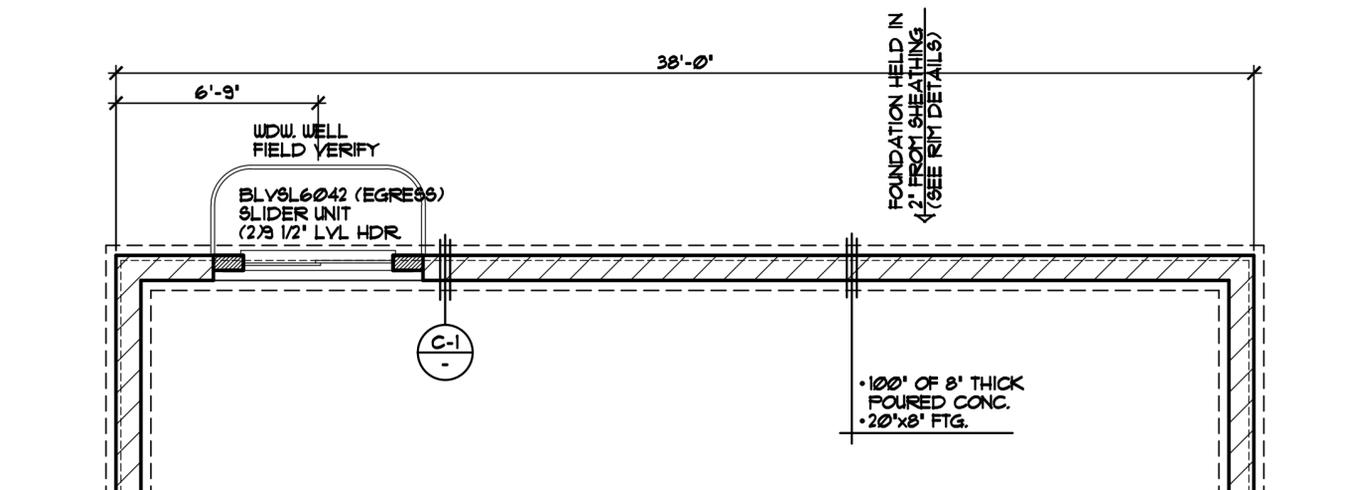


LOOKOUT OPTION
FOUNDATION PLAN 1/4"=1'-0"

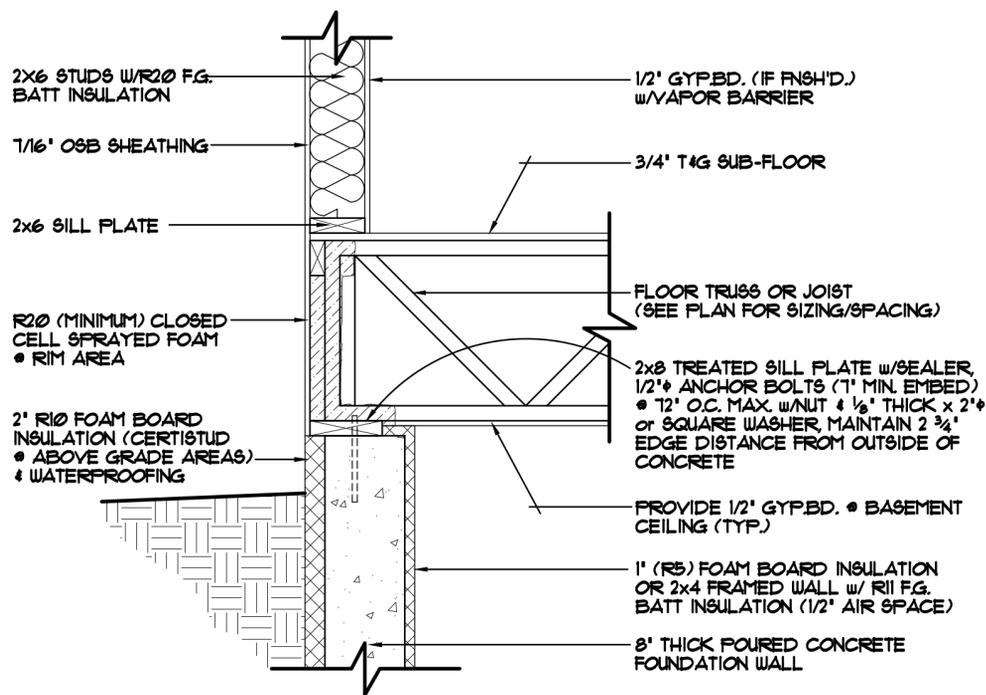


FOUNDATION/RIM AREA DETAIL "B-1" 1"=1'-0"

STANDARD DAYLIGHT SILL/FOUNDATION AREA
 FOUNDATION HELD IN 2"



FULL BASEMENT OPTION
FOUNDATION PLAN 1/4"=1'-0"



FOUNDATION/RIM AREA DETAIL "C-1" 1"=1'-0"

STANDARD RIM AREA, TRUSSES/JOISTS PERPENDICULAR TO FOUNDATION WALL
 FOUNDATION HELD IN 2"

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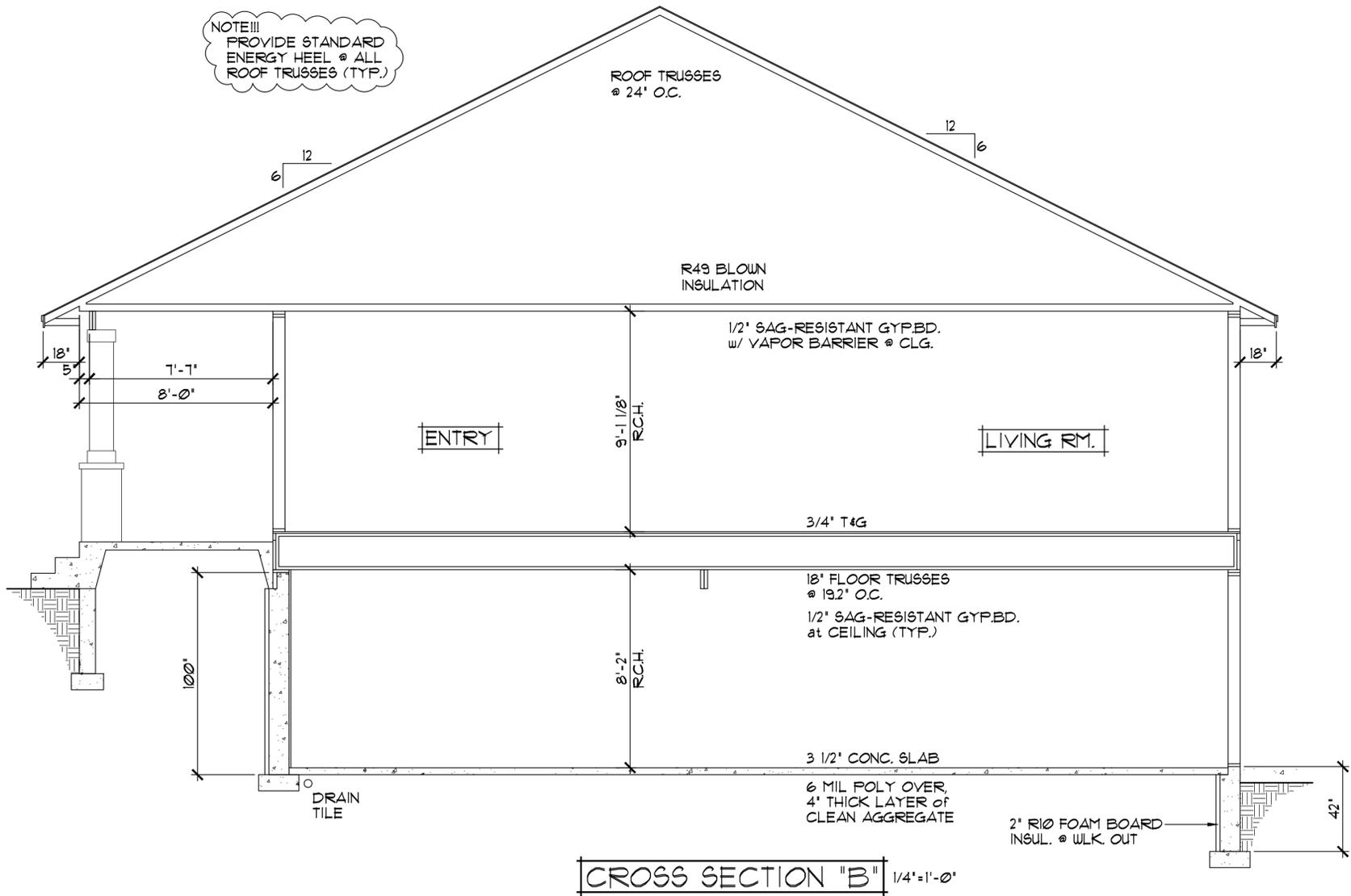
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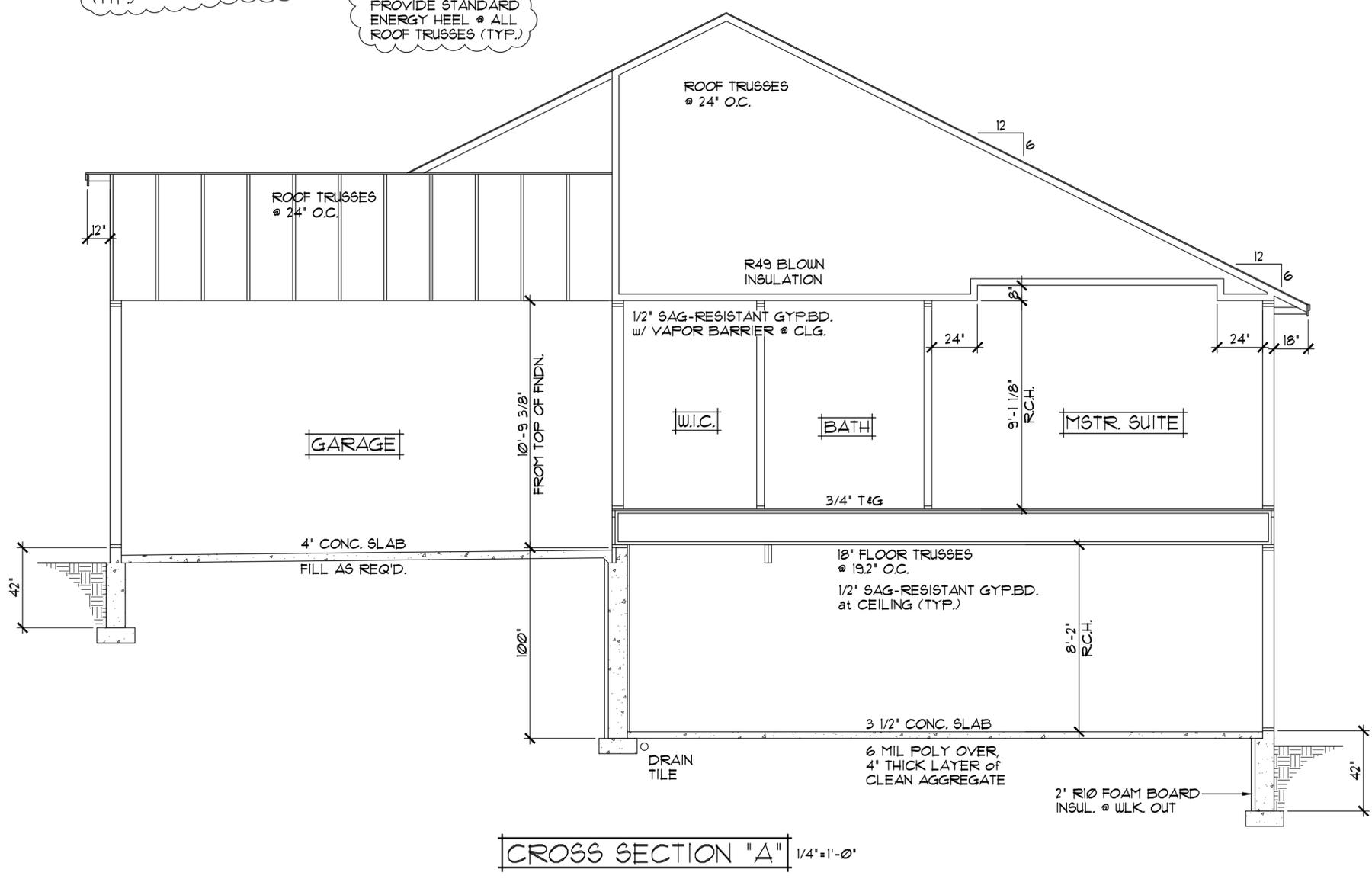
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NOTE!!!
PROVIDE STANDARD ENERGY HEEL @ ALL ROOF TRUSSES (TYP.)

NOTE!!!
ADJUST HEEL HEIGHT @ MAIN LEVEL 10/12 TRUSSES w/ 18\"/>

NOTE!!!
PROVIDE STANDARD ENERGY HEEL @ ALL ROOF TRUSSES (TYP.)



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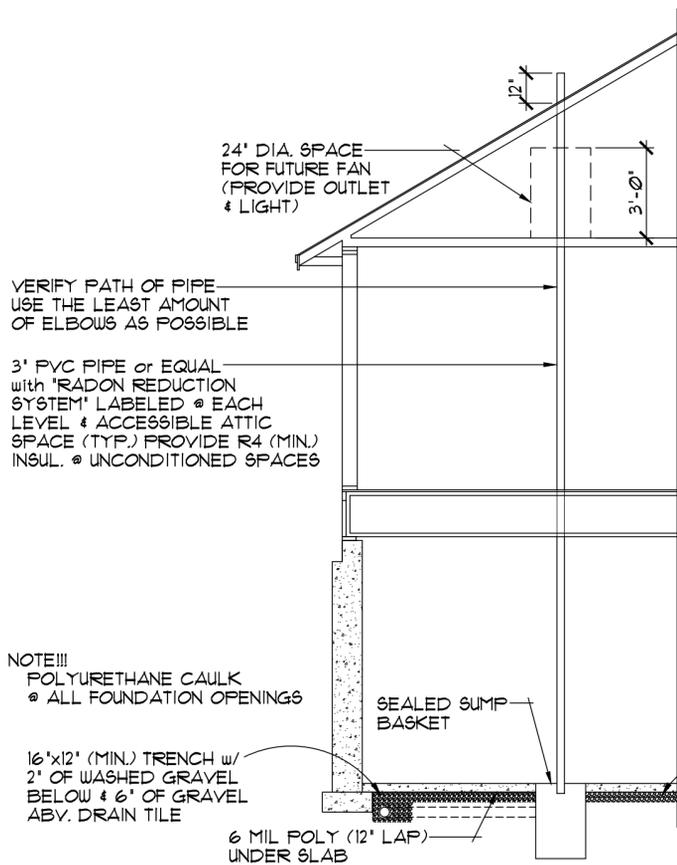
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VERIFY PATH OF PIPE USE THE LEAST AMOUNT OF ELBOWS AS POSSIBLE

3" PVC PIPE or EQUAL with "RADON REDUCTION SYSTEM" LABELED @ EACH LEVEL & ACCESSIBLE ATTIC SPACE (TYP.) PROVIDE R4 (MIN.) INSUL. @ UNCONDITIONED SPACES

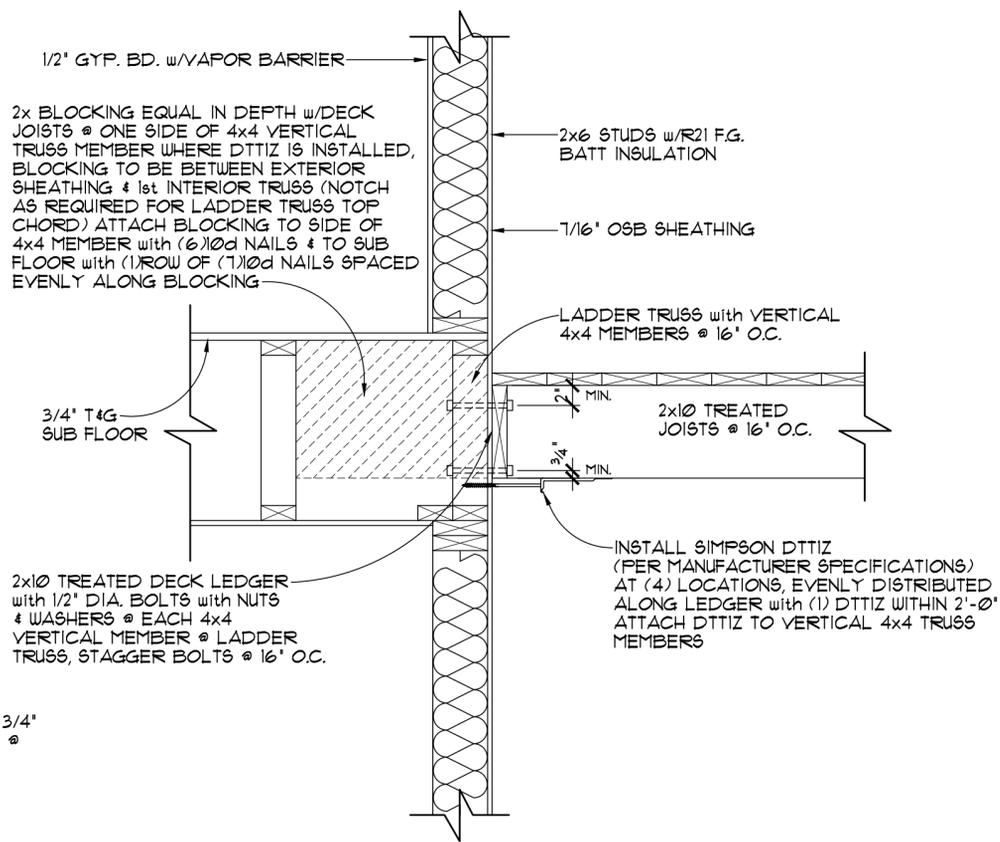
NOTE!!! POLYURETHANE CAULK @ ALL FOUNDATION OPENINGS

16"x12" (MIN.) TRENCH w/ 2" OF WASHED GRAVEL BELOW & 6" OF GRAVEL ABV. DRAIN TILE

6 MIL POLY (12" LAP) UNDER SLAB

UNIFORM LAYER OF 3/4" CLEAN AGGREGATE @ 4" THICK (MIN.)

ALTERNATE METHOD FOR PASSIVE RADON MITIGATION SYSTEM



1/2" GYP. BD. w/VAPOR BARRIER

2x BLOCKING EQUAL IN DEPTH w/DECK JOISTS @ ONE SIDE OF 4x4 VERTICAL TRUSS MEMBER WHERE DTTIZ IS INSTALLED, BLOCKING TO BE BETWEEN EXTERIOR SHEATHING & 1st INTERIOR TRUSS (NOTCH AS REQUIRED FOR LADDER TRUSS TOP CHORD) ATTACH BLOCKING TO SIDE OF 4x4 MEMBER WITH (6) 10d NAILS & TO SUB FLOOR WITH (1) ROW OF (1) 10d NAILS SPACED EVENLY ALONG BLOCKING

2x6 STUDS w/R21 F.G. BATT INSULATION

7/16" OSB SHEATHING

LADDER TRUSS WITH VERTICAL 4x4 MEMBERS @ 16" O.C.

2x10 TREATED JOISTS @ 16" O.C.

3/4" T&G SUB FLOOR

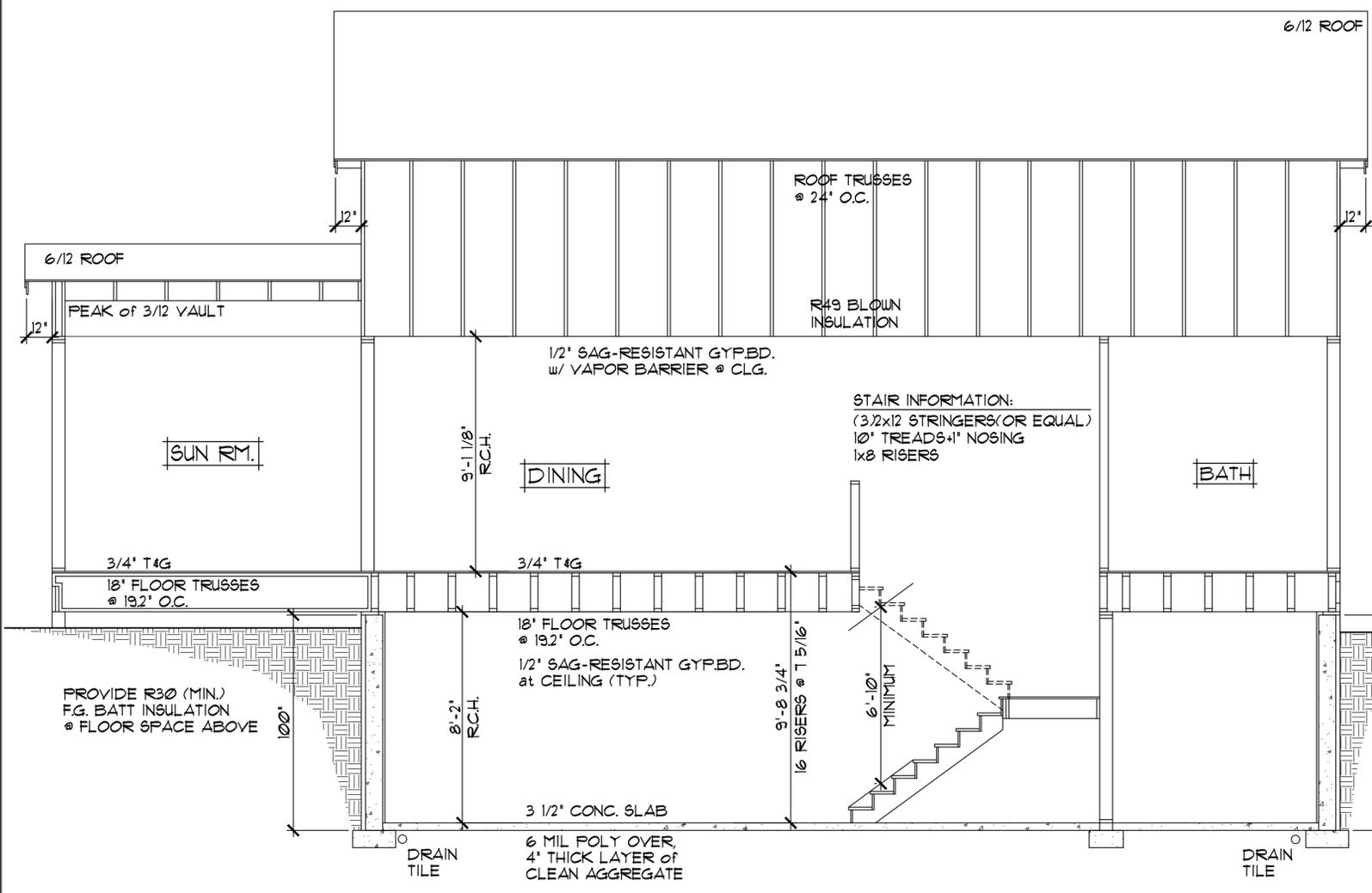
2x10 TREATED DECK LEDGER WITH 1/2" DIA. BOLTS WITH NUTS & WASHERS @ EACH 4x4 VERTICAL MEMBER @ LADDER TRUSS, STAGGER BOLTS @ 16" O.C.

INSTALL SIMPSON DTTIZ (PER MANUFACTURER SPECIFICATIONS) AT (4) LOCATIONS, EVENLY DISTRIBUTED ALONG LEDGER WITH (1) DTTIZ WITHIN 2'-0" ATTACH DTTIZ TO VERTICAL 4x4 TRUSS MEMBERS

DECK LEDGER DETAIL 1"=1'-0"

NOTE!!! ADJUST HEEL HEIGHT @ MAIN LEVEL 10/12 TRUSSES w/ 18" OVERHANG TO MATCH 7/12 TRUSSES w/18" OVERHANG (TYP.)

NOTE!!! PROVIDE STANDARD ENERGY HEEL @ ALL ROOF TRUSSES (TYP.)



- ROOF CONSTRUCTION:**
- PREMANUFACTURED ROOF TRUSSES - ENGINEERED BY SUPPLIER - SLOPES VARY - SEE PLAN
 - R49 BLOWN FIBERGLASS INSULATION
 - 1/150 ROOF VENT AT SOFFITS, 1/150 VENT AT RIDGE
 - AIR CHUTE AT EACH TRUSS SPACE
 - 15/32" ROOF SHEATHING
 - 15" ROOFING FELT
 - ICE & WATER MEMBRANE APPLIED 24" PAST EXTERIOR WALL
 - ASPHALT SHINGLES

- SOFFIT / FASCIA:**
- 2x6 SUB-FASCIA
 - MAINTENANCE FREE FASCIA COVER
 - MAINTENANCE FREE VENTED SOFFIT

- WALL CONSTRUCTION:**
- HOUSE WRAP
 - 7/16" OSB SHEATHING
 - 2x6 STUDS @ 16" O.C.
 - WINDOWS PER SPEC'S
 - R-20 F.G. BATT INSULATION
 - 4 MIL POLY VAPOR BARRIER
 - 1/2" GYPSUM BOARD

- RIM AREA CONSTRUCTION:**
- CLOSED CELL SPRAYED FOAM INSUL. R20 (MINIMUM) @ RIM AREA AND R30 (MINIMUM) @ CANTS.

- SILL CONSTRUCTION:**
- 2x8 SILL PLATE & SEALER (2x6 PLATE @ WALKOUT AREAS)
 - 1/2" ANCHOR BOLTS @ 48" O.C.

- FOUNDATION CONSTRUCTION:**
- FOUNDED CONCRETE WALL FOUNDATION (WALL THICKNESS VARIES, SEE FOUNDATION PLAN FOR SIZES)

- FOUNDATION INSULATION:**
- FOUNDATION EXTERIOR- 2" R-10 RIGID FOAM BOARD INSULATION
 - FOUNDATION INTERIOR- 1" R-5 RIGID FOAM BOARD INSULATION

- SLAB CONSTRUCTION:**
- 3 1/2" FOUNDED CONCRETE FLOOR
 - 6 MIL POLY VAPOR BARRIER UNDER SLAB
 - UNIFORM LAYER OF 3/4" CLEAN AGGREGATE 4" THICK (MINIMUM)
 - SAND FILL AS REQUIRED

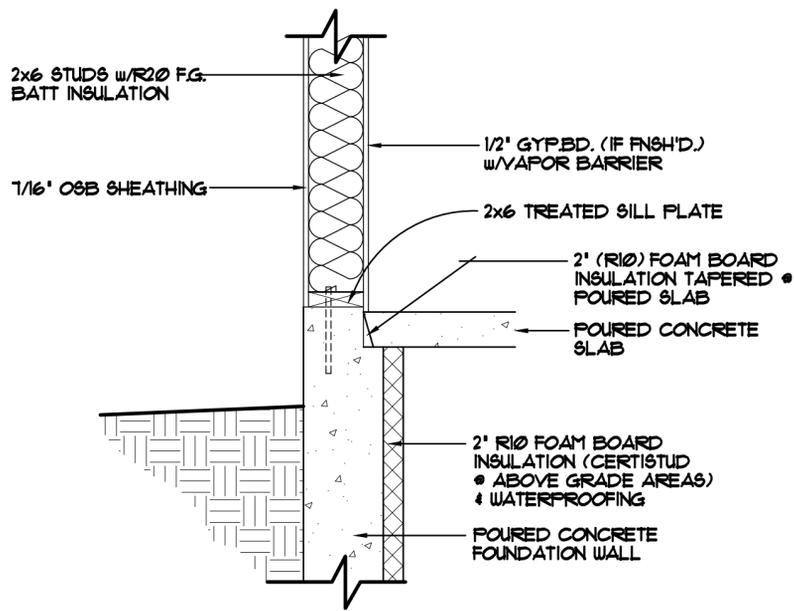
CROSS SECTION "C" 1/4"=1'-0"

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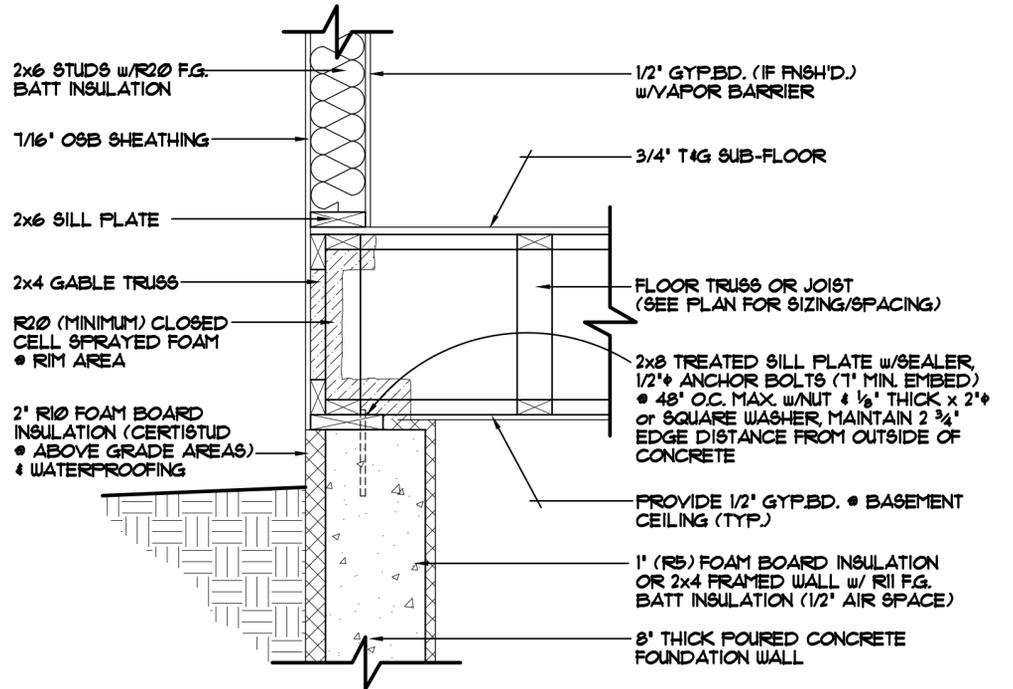
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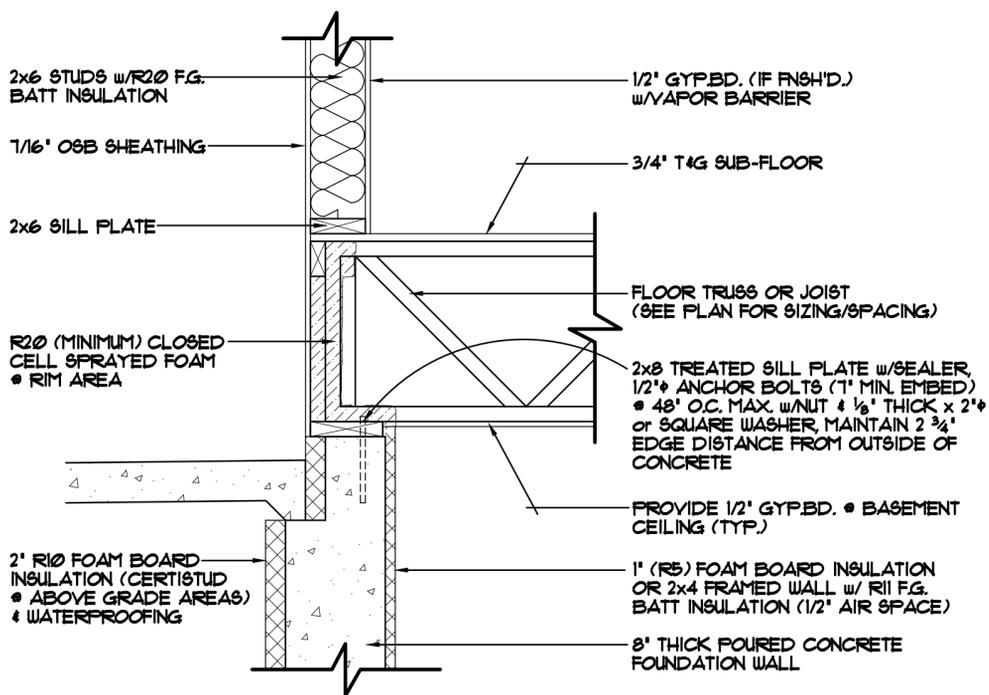
FOUNDATION/RIM AREA DETAIL "A-1" 1"=1'-0"

STANDARD WALKOUT SILL/FOUNDATION AREA
FOUNDATION NOT HELD IN



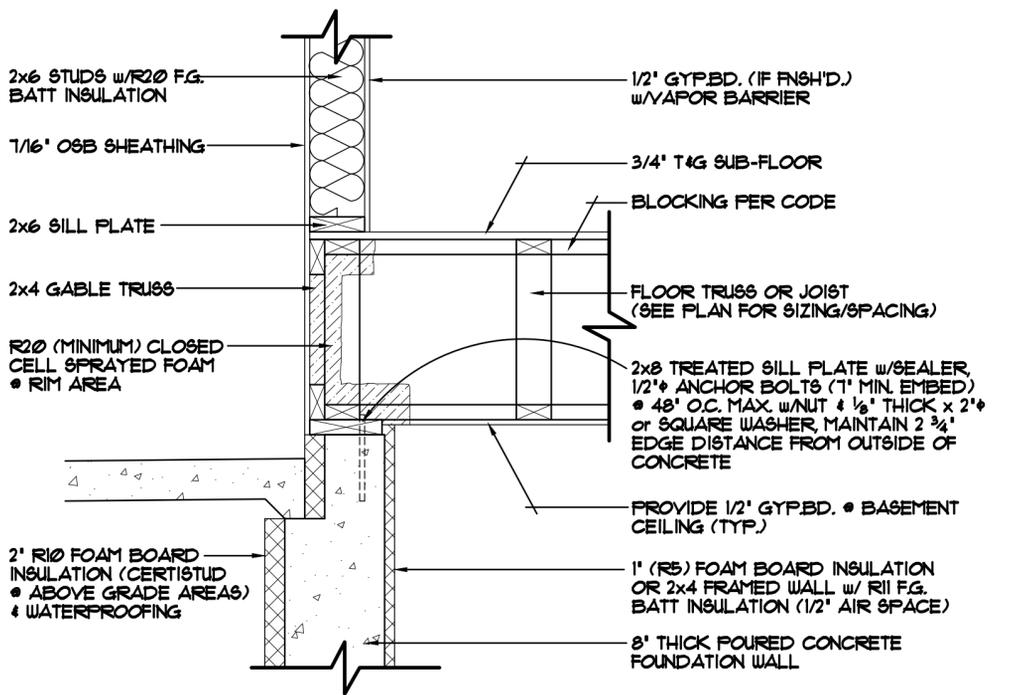
FOUNDATION/RIM AREA DETAIL "A-2" 1"=1'-0"

STANDARD RIM AREA, TRUSSES/JOISTS PARALLEL TO FOUNDATION WALL
FOUNDATION HELD IN 2'



FOUNDATION/RIM AREA DETAIL "A-3" 1"=1'-0"

BRICK LEDGED RIM AREA, TRUSSES/JOISTS PERPENDICULAR TO FOUNDATION WALL
FOUNDATION HELD IN 2'



FOUNDATION/RIM AREA DETAIL "A-4" 1"=1'-0"

BRICK LEDGED RIM AREA, TRUSSES/JOISTS PARALLEL TO FOUNDATION WALL
FOUNDATION HELD IN 2'

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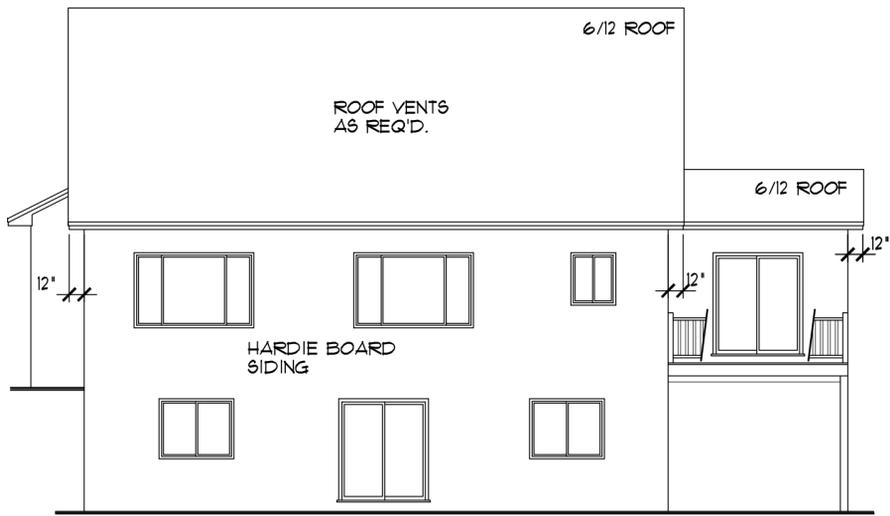
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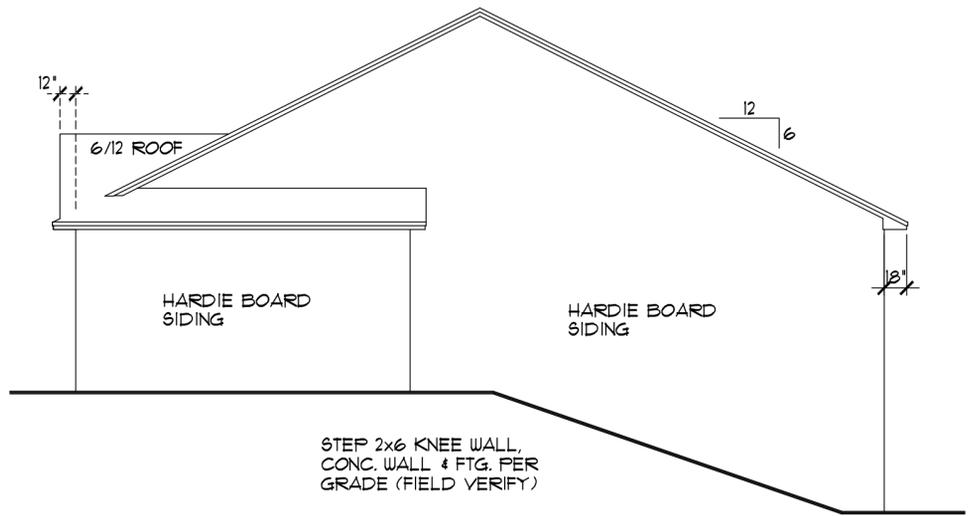
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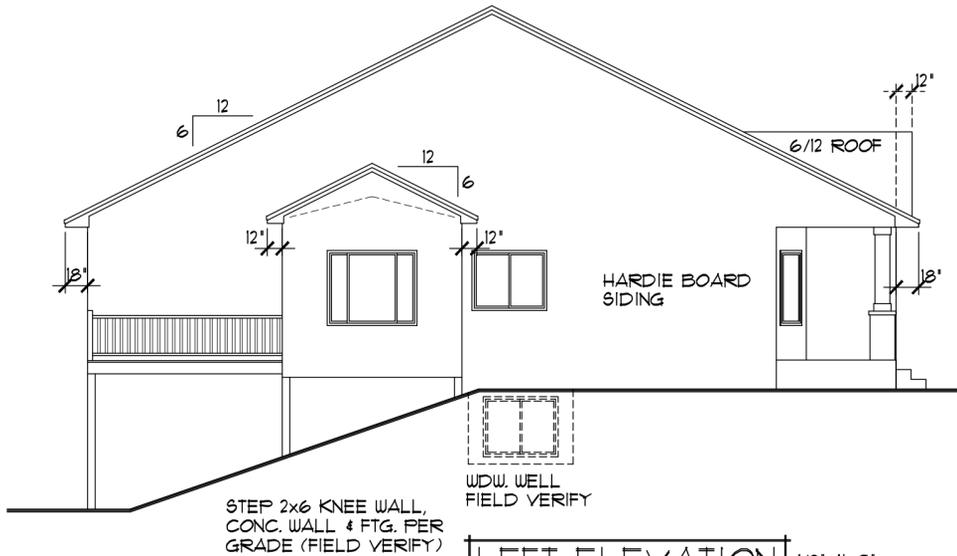
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REAR ELEVATION 1/8"=1'-0"



LEFT ELEVATION 1/8"=1'-0"



LEFT ELEVATION 1/8"=1'-0"

LEVEL HEIGHT INFORMATION TABLE		
LEVEL	R.C.H.	TOP OF WINDOW R.O.
BASEMENT	8'-2"	6'-10 1/2"
MAIN LEVEL	9'-1 1/8"	6'-10 1/2"

- JELD WEN WINDOWS SPEC'D.
- MAINTENANCE FREE SOFFITS & FASCIA
- STONE VENEER WHERE SHOWN
- HARDIE BOARD SIDING/CORNER TRIM (TYP.)
- HARDIE BOARD SHAKE SIDING WHERE SHOWN

NOTE!!!
ADJUST HEEL HEIGHT @
MAIN LEVEL 10/12 TRUSSES
w/ 18" OVERHANG TO MATCH
7/12 TRUSSES w/18" OVERHANG
(TYP.)

NOTE!!!
PROVIDE STANDARD
ENERGY HEEL @ ALL
ROOF TRUSSES (TYP.)



FRONT ELEVATION 1/4"=1'-0"

1512 SQFT. ABOVE GRADE
1080 SQFT. OPTIONAL FINISHED BASEMENT
2652 SQFT. TOTAL FINISHED AREAS

144 SQFT. SUN ROOM

REVISIONS	BY	DATE
19230	REB.	

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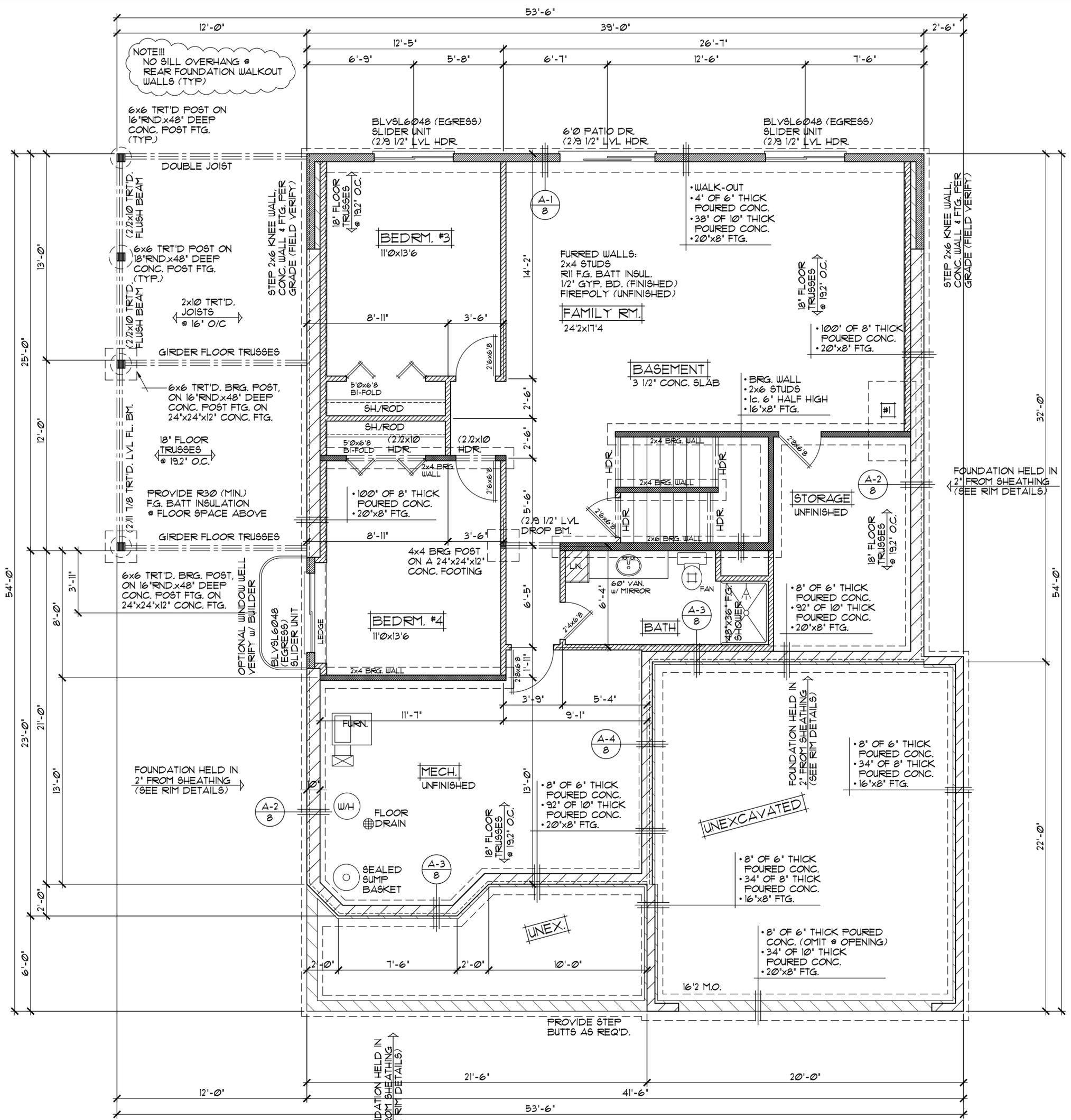


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DRAWN	L.V.	DATE:	08/29/2019
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		CADD FILE #	19243



FOUNDATION PLAN 1/4"=1'-0"
1080 SQ.FT. OPTIONAL FINISHED BASEMENT AREA

GENERAL CONSTRUCTION NOTES

#1 (MAIN LEVEL FLOOR SYSTEM) RECESS FLOOR TRUSSES 4' BELOW CURBLESS WALK IN SHOWER

FRAMING & CONSTRUCTION NOTES

- 8'-2" PLATE HEIGHT @ ENTIRE LOWER LEVEL (UNLESS NOTED OTHERWISE)
- PROVIDE 1/2" GYP. BD. @ BASEMENT CEILING & ALLOW 80 SQ.FT. (MAX) OPEN CLG. AREA FOR MECHANICAL, FIRE BLOCK TRUSS SPACE @ PERIMETER OF OPEN AREA

NOTE!!! VERIFY ALL MECHANICAL EQUIPMENT LOCATIONS, LOCATIONS ON PLAN ARE REPRESENTATION ONLY

FOUNDATION CONST. NOTES

- POURED CONCRETE FOUNDATION, VERIFY ALL WALL DIMENSIONS w/ FOUNDATION CONTRACTOR
- ALL EXTERIOR FOUNDATION DIMENSIONS ARE TO OUTSIDE OF EXTERIOR FOAM BOARD INSUL. OR SHEATHING, FOUNDATION TO BE HELD IN WHERE NOTED/SHOWN
- PROVIDE 2" R10 FOAM BOARD INSULATION @ EXTERIOR FOUNDATION WALLS & 1" R5 FOAM BOARD INSULATION AT INTERIOR SIDE OF FOUNDATION WALLS (TYP.)
- INSULATION & AIR BARRIER TO BE CONT. OVER TOP OF FOUNDATION WALLS (TYP.)

DOOR & WINDOW NOTES

- JELD WEN WINDOWS SPECIFIED, VERIFY ROUGH OPENING SIZES FOR DOORS & WINDOWS w/ MANUFACTURER
- WINDOWS with "x" REQUIRE A SASH STOPPER (TYP.)
- ALL WINDOW & DOOR OPENINGS TO HAVE (2)2"x10" #2 GRADE HEADER or BETTER (UNLESS NOTED OTHERWISE)
- TOP OF RO. FOR ALL WINDOWS ON LOWER LEVEL TO BE 6'-10 1/2" FROM FLOOR (UNLESS NOTED OTHERWISE)

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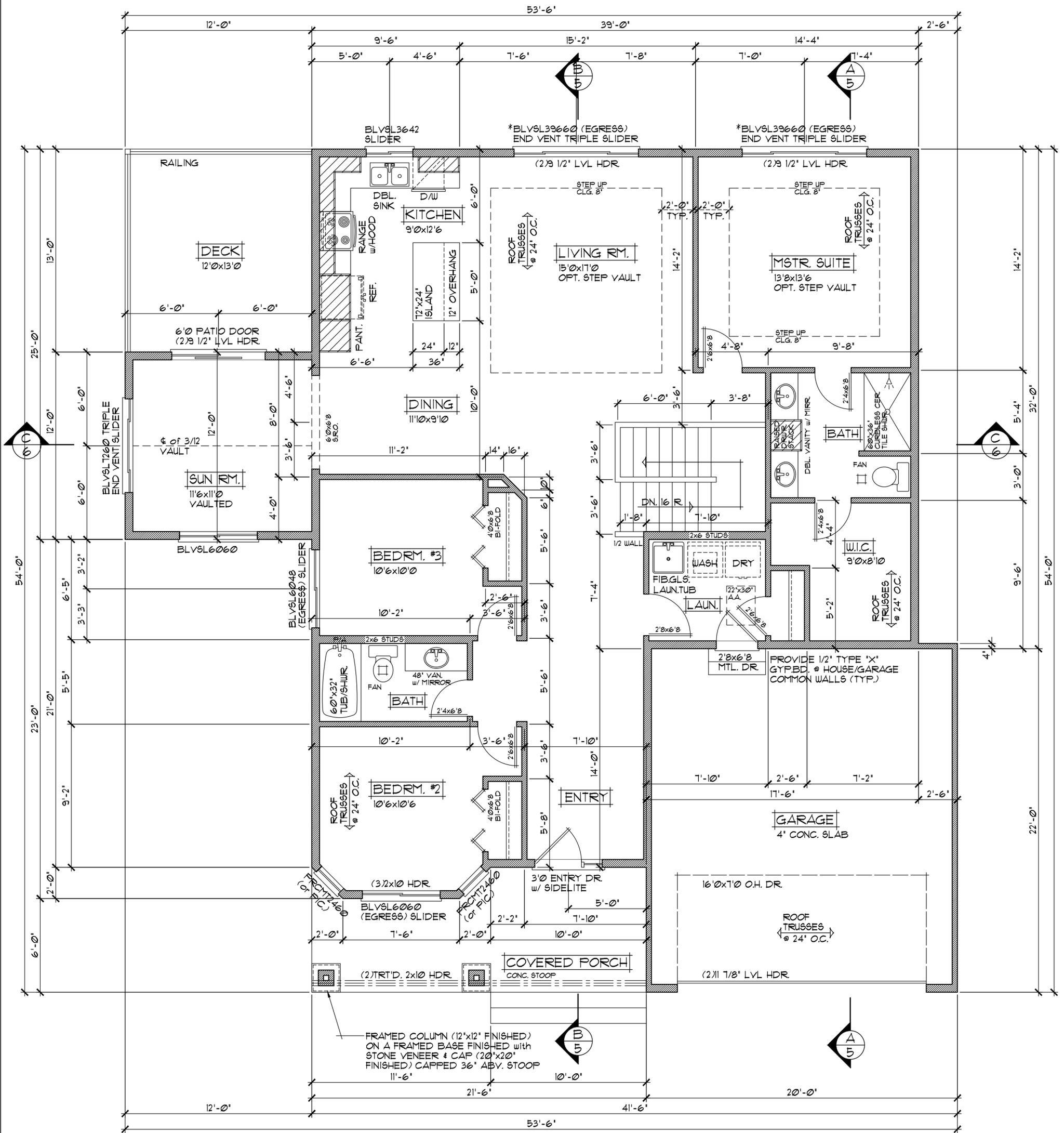
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MAIN LEVEL PLAN 1/4"=1'-0"
1512 SQ.FT. MAIN LEVEL

FRAMING NOTES

- 9'-1 1/8" PLATE HEIGHT @ ENTIRE MAIN LEVEL (UNLESS NOTED OTHERWISE)
- FRAME ALL GARAGE STUDS w/ 2x6 STUDS @ 16" O.C. (TYP.)

DOOR & WINDOW NOTES

- JELD WEN WINDOWS SPECIFIED. VERIFY ROUGH OPENING SIZES FOR DOORS & WINDOWS w/ MANUFACTURER
- WINDOWS with "*" REQUIRE A SASH STOPPER (TYP.)
- ALL WINDOW & DOOR OPENINGS TO HAVE (2)2x10 #2 GRADE HEADER or BETTER (UNLESS NOTED OTHERWISE)
- TOP OF RO. FOR ALL WINDOWS ON MAIN LEVEL TO BE 6'-10 1/2" FROM SUB-FLOOR (UNLESS NOTED OTHERWISE)

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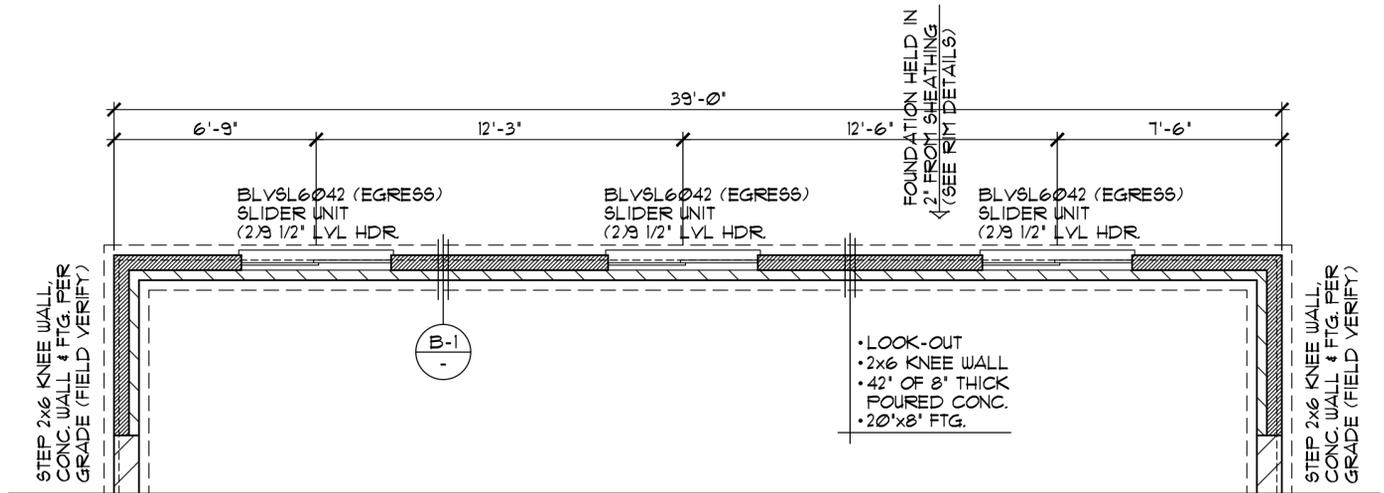
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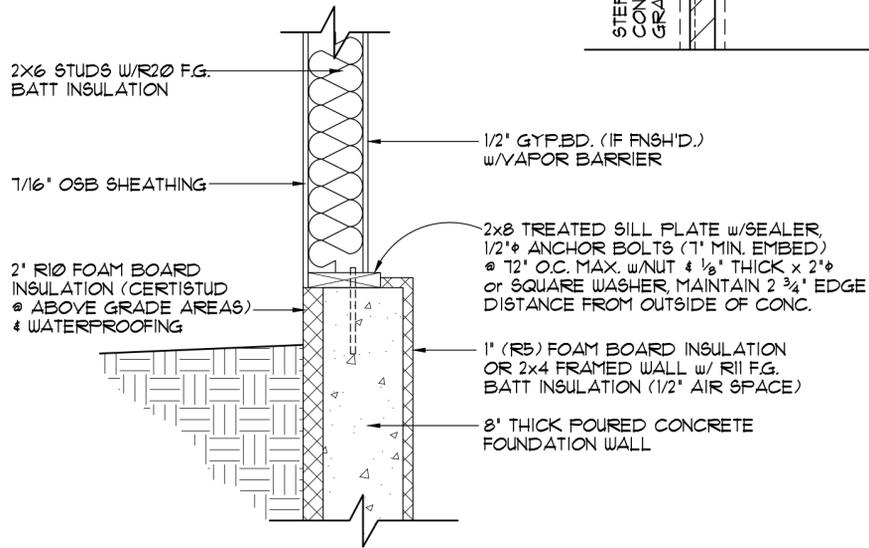
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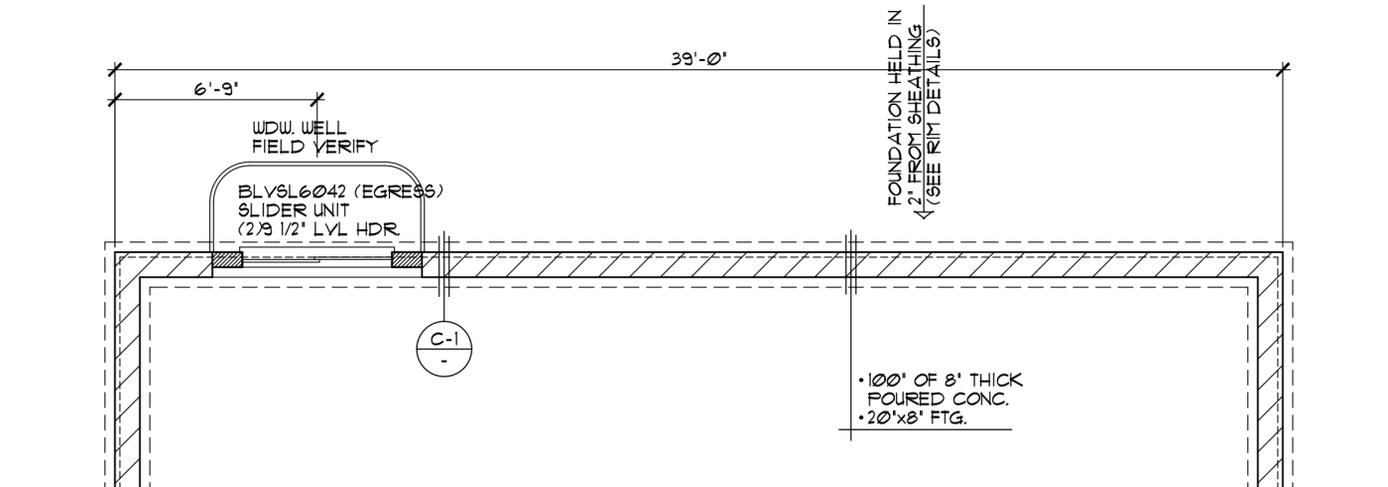


LOOKOUT OPTION
FOUNDATION PLAN 1/4"=1'-0"

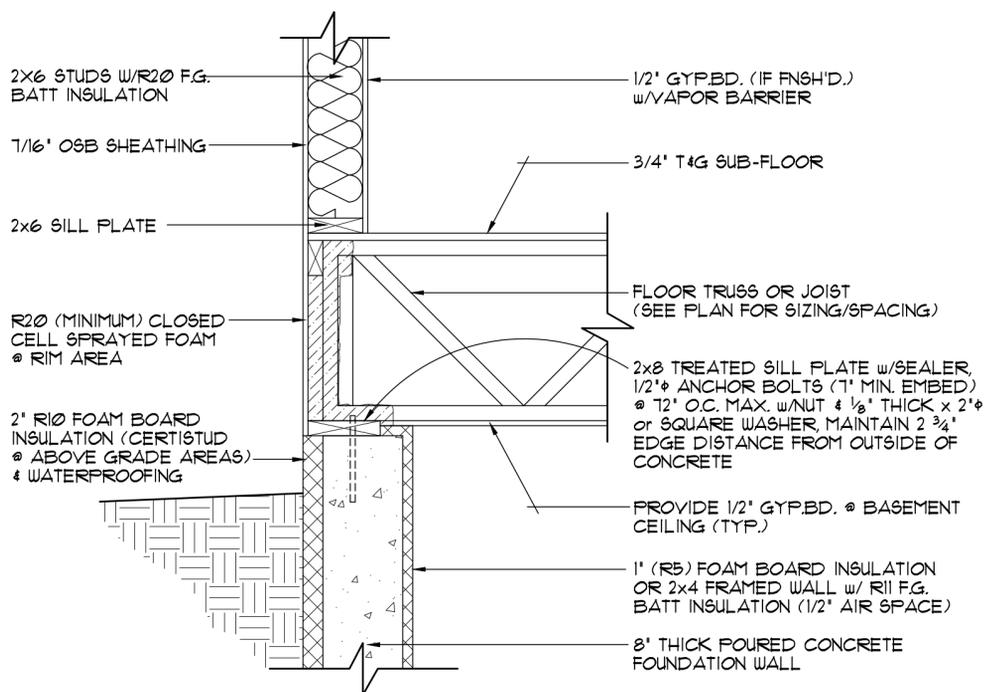


FOUNDATION/RIM AREA DETAIL "B-1" 1"=1'-0"

STANDARD DAYLIGHT SILL/FOUNDATION AREA
 FOUNDATION HELD IN 2"



FULL BASEMENT OPTION
FOUNDATION PLAN 1/4"=1'-0"



FOUNDATION/RIM AREA DETAIL "C-1" 1"=1'-0"

STANDARD RIM AREA, TRUSSES/JOISTS PERPENDICULAR TO FOUNDATION WALL
 FOUNDATION HELD IN 2"

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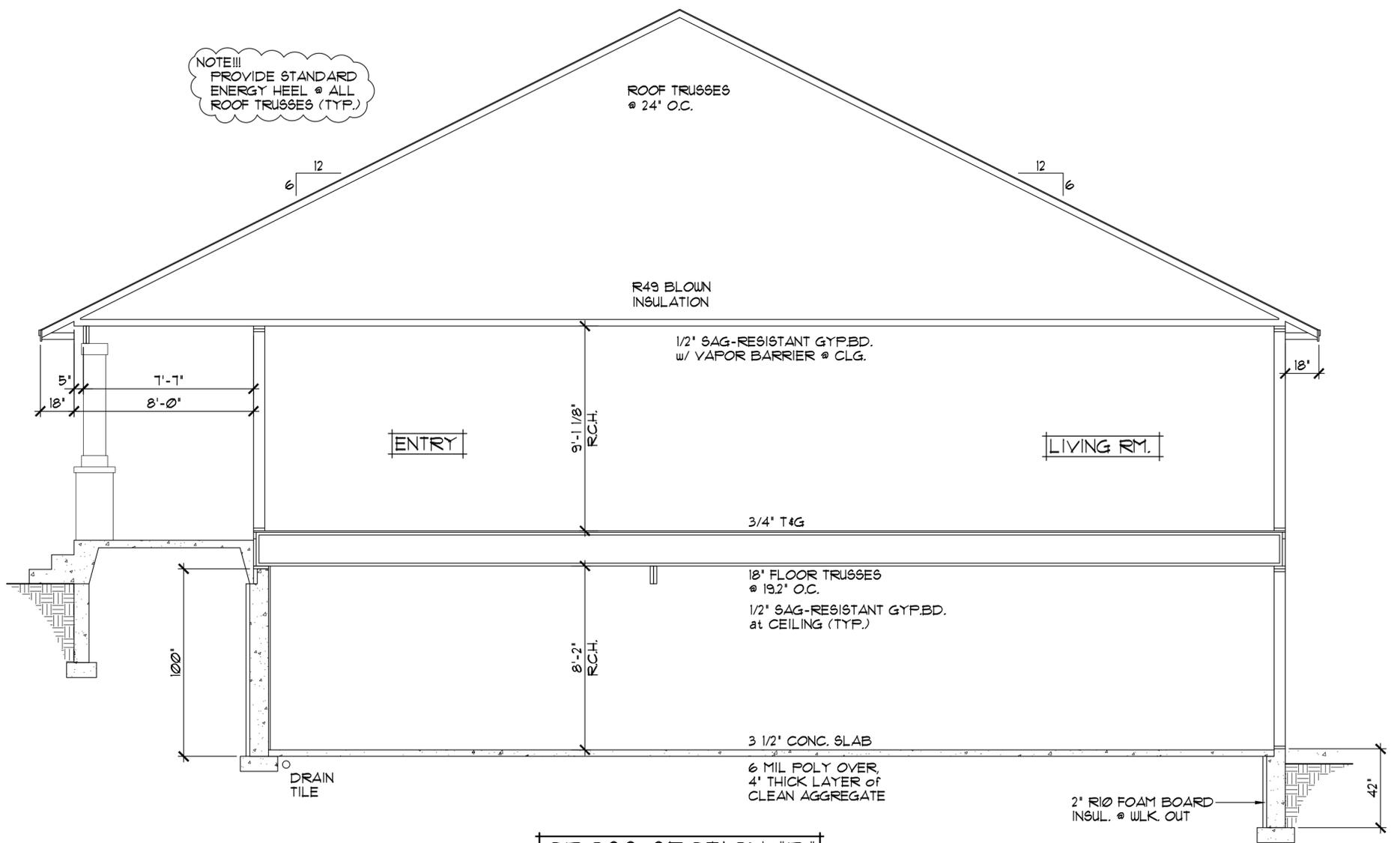
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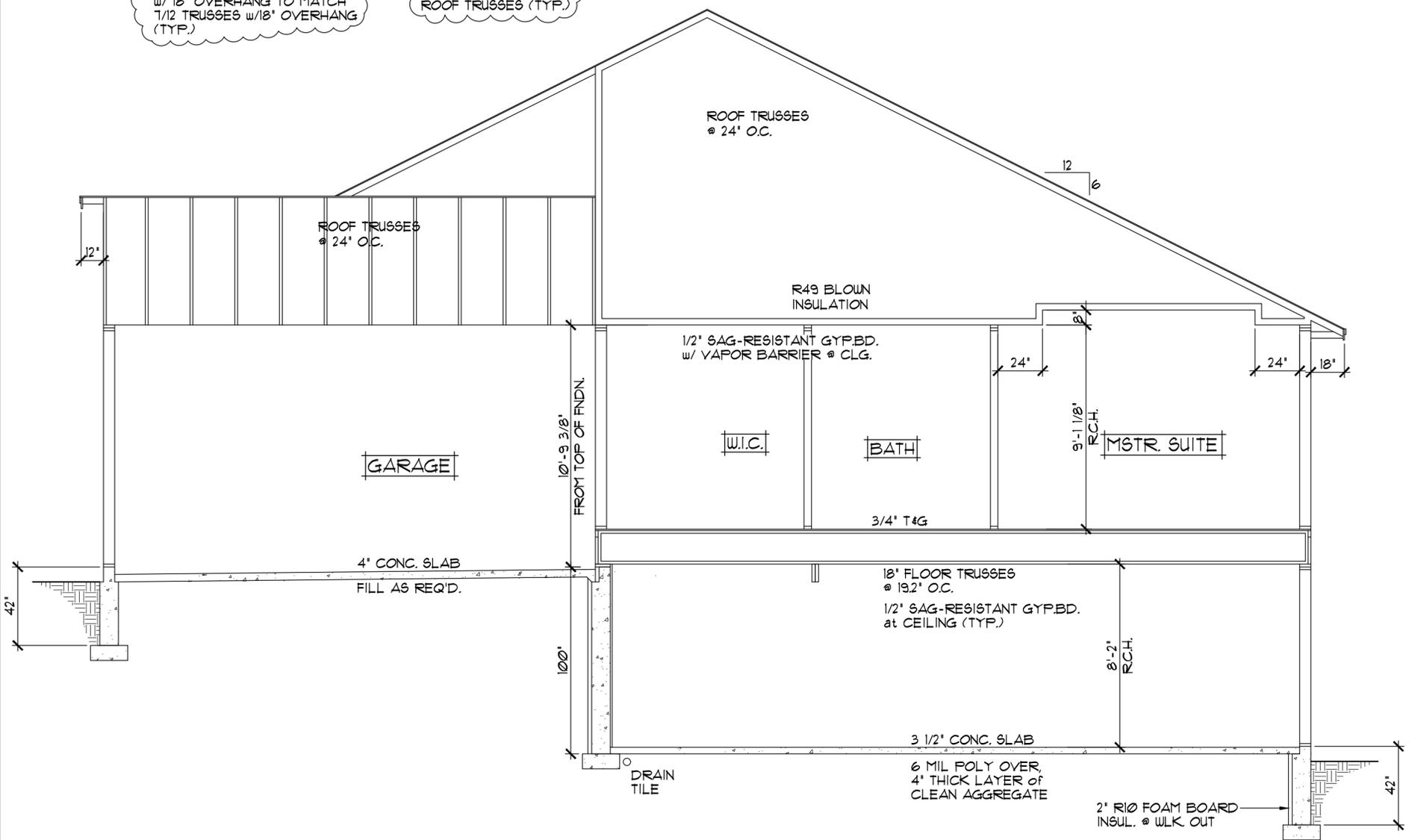
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NOTE!!!
PROVIDE STANDARD
ENERGY HEEL @ ALL
ROOF TRUSSES (TYP.)

NOTE!!!
ADJUST HEEL HEIGHT @
MAIN LEVEL 10/12 TRUSSES
w/ 18\"/>

NOTE!!!
PROVIDE STANDARD
ENERGY HEEL @ ALL
ROOF TRUSSES (TYP.)



CROSS SECTION "A" 1/4"=1'-0"

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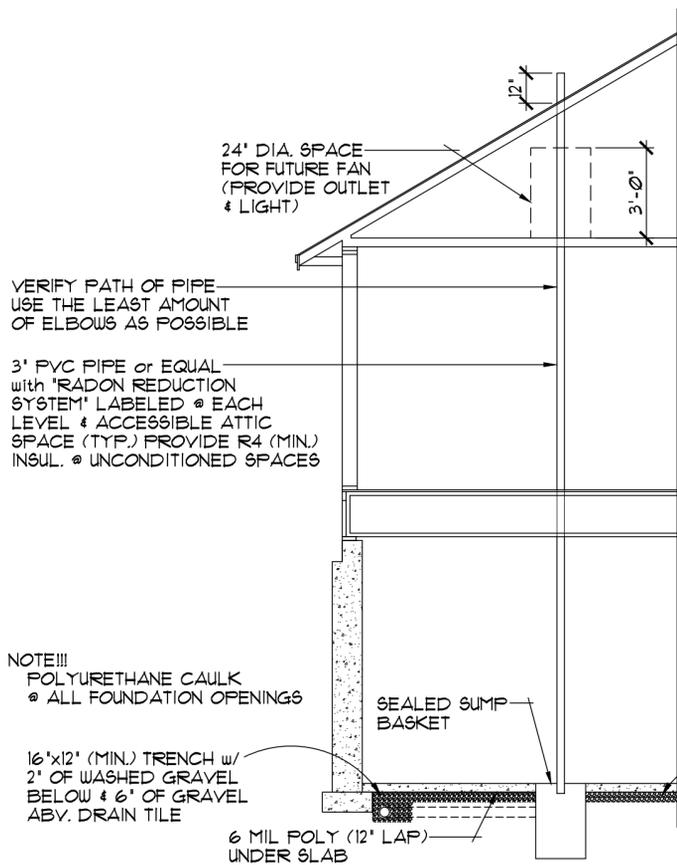
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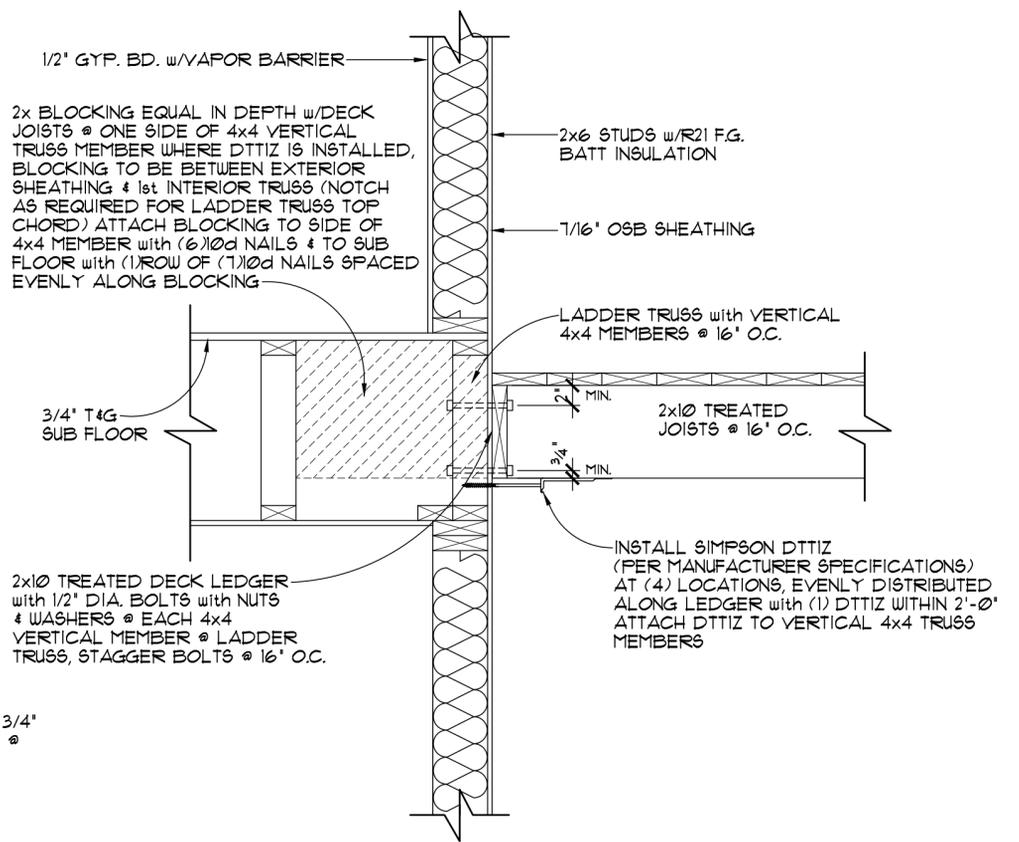
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OF 7



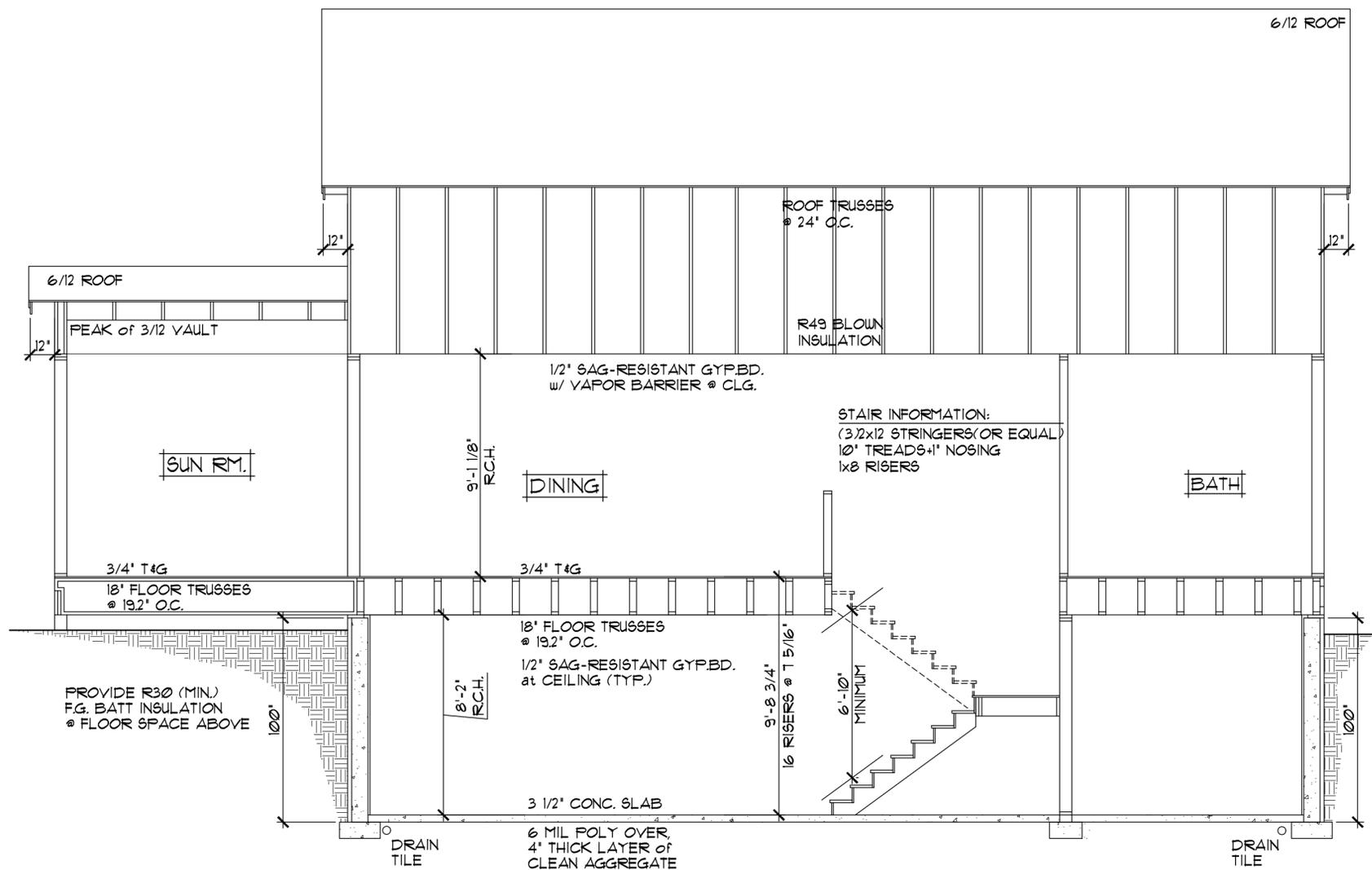
ALTERNATE METHOD FOR PASSIVE RADON MITIGATION SYSTEM



DECK LEDGER DETAIL 1"=1'-0"

NOTE!!!
ADJUST HEEL HEIGHT @ MAIN LEVEL 10/12 TRUSSES w/ 18' OVERHANG TO MATCH 7/12 TRUSSES w/18' OVERHANG (TYP.)

NOTE!!!
PROVIDE STANDARD ENERGY HEEL @ ALL ROOF TRUSSES (TYP.)



CROSS SECTION "C" 1/4"=1'-0"

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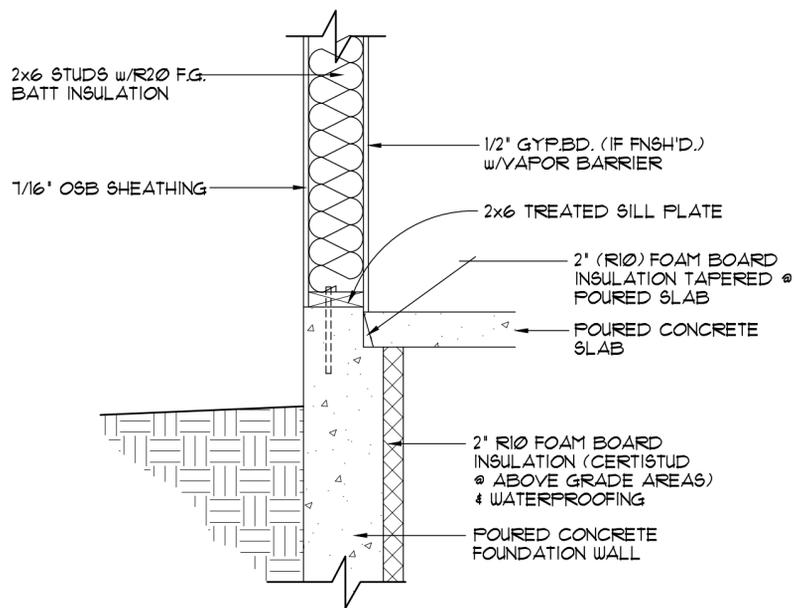
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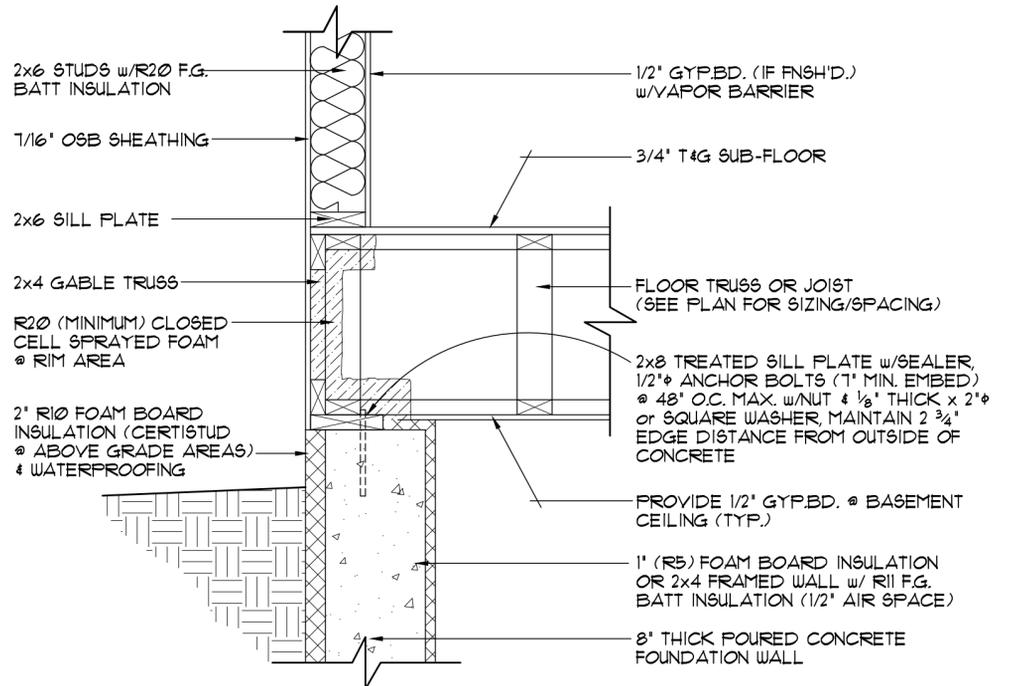
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QUALITY HOME BUILDERS

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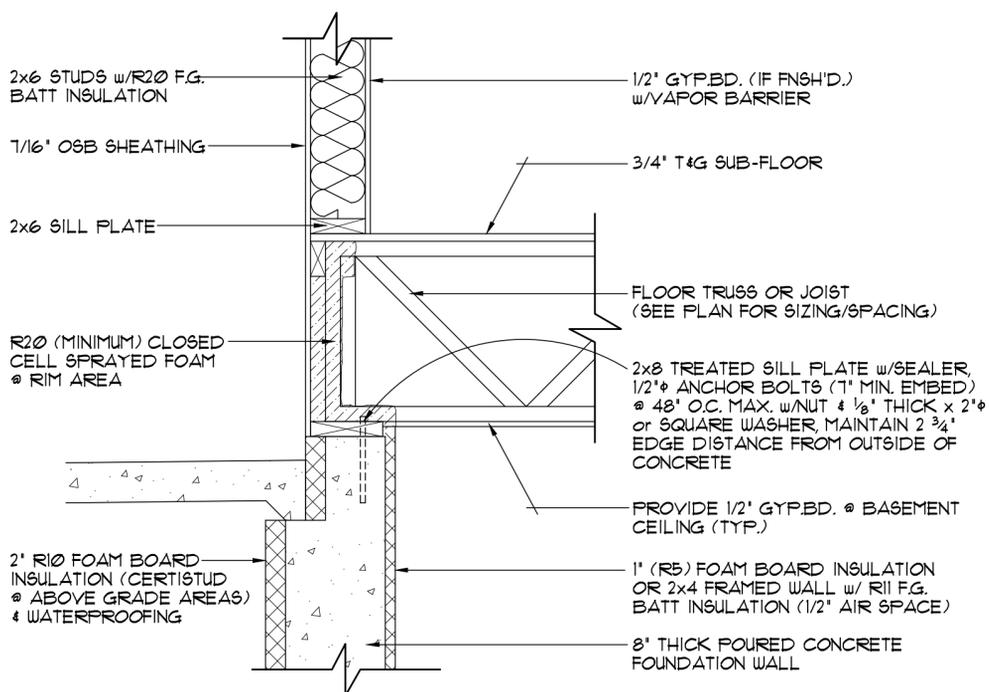
FOUNDATION/RIM AREA DETAIL "A-1" 1"=1'-0"

STANDARD WALKOUT SILL/FOUNDATION AREA
FOUNDATION NOT HELD IN



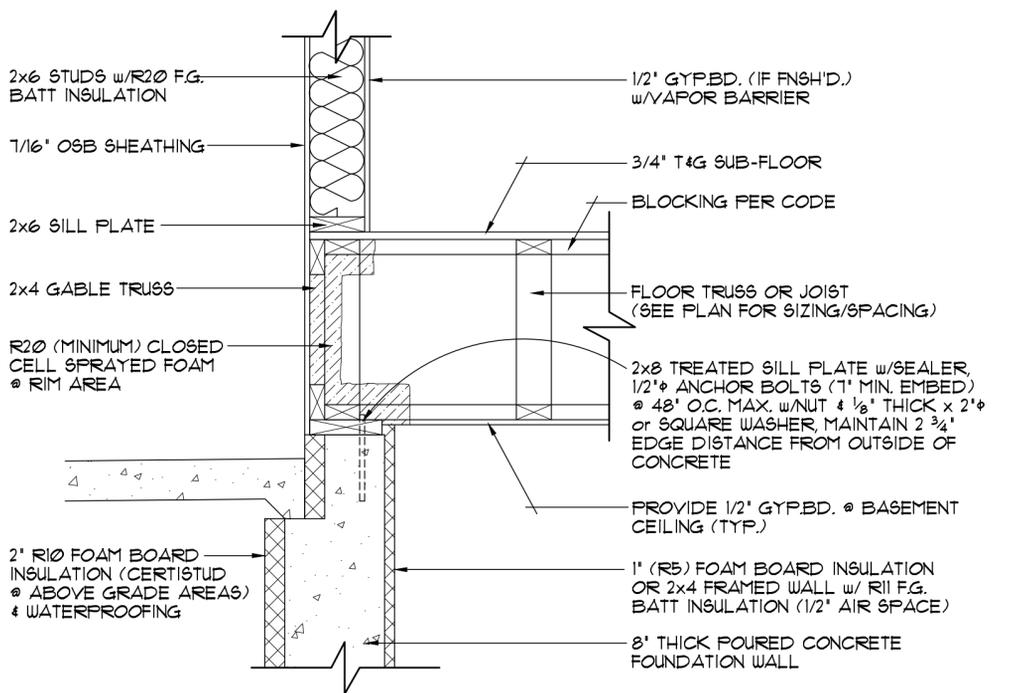
FOUNDATION/RIM AREA DETAIL "A-2" 1"=1'-0"

STANDARD RIM AREA, TRUSSES/JOISTS PARALLEL TO FOUNDATION WALL
FOUNDATION HELD IN 2'



FOUNDATION/RIM AREA DETAIL "A-3" 1"=1'-0"

BRICK LEDGED RIM AREA, TRUSSES/JOISTS PERPENDICULAR TO FOUNDATION WALL
FOUNDATION HELD IN 2'



FOUNDATION/RIM AREA DETAIL "A-4" 1"=1'-0"

BRICK LEDGED RIM AREA, TRUSSES/JOISTS PARALLEL TO FOUNDATION WALL
FOUNDATION HELD IN 2'

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JP Brooks
QUALITY HOME BUILDERS

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Collaborative Planning, LLC

Memorandum

Date: September 25, 2019
To: Planning Commission
From: Cindy Nash, AICP EDFP
RE: Draft Ordinance Modifications -- Shoreland

As a part of the larger ordinance updates, the City's shoreland ordinance also needed to be updated. Due to the complexity of this ordinance, preliminary review of the ordinance is proposed at the September meeting.

The City's ordinance was modified significantly in the 2000's, but had not received proper approval through the DNR. The ordinance is not consistent in many respects with the state model ordinance. All ordinances are required to be reviewed and approved by the DNR.

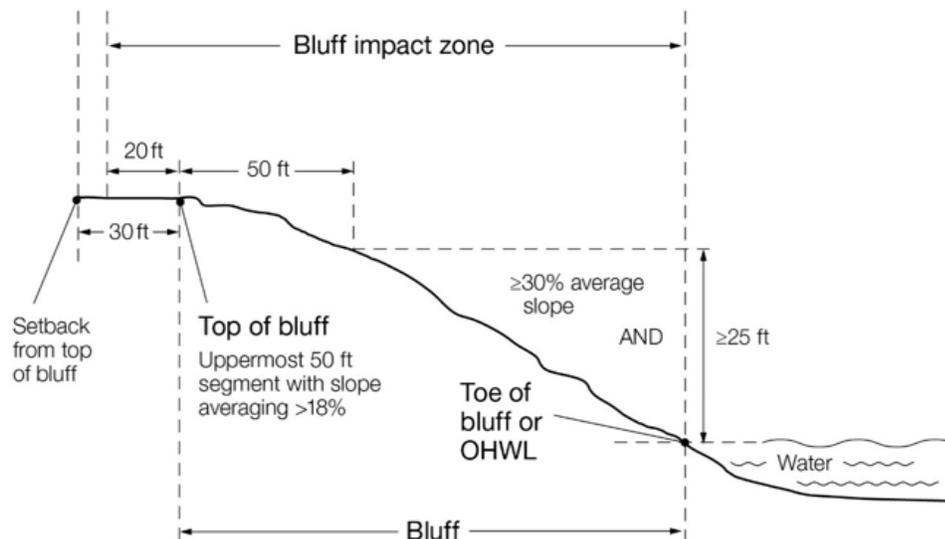
In the packet is a copy of the state model ordinance with commentary on why those items are in the model ordinance. A redlined version of the City's ordinance is also included (excerpted to only include shoreland related items).

Amended Definitions:

Bluff. A topographic feature such as a hill, cliff, or embankment having all of the following characteristics:

- a. Part of all of the feature is located in a shoreland area;
- b. The slope rises at least twenty-five (25) feet above the ordinary high water level of the water body.
- c. The grade of the slope from the toe of the bluff to a point twenty-five (25) feet or more above the ordinary high water level toe of the bluff averages thirty (30) percent or greater, except that an area with an average slope of less than 18 percent over a distance of at least 50 feet shall not be considered part of the bluff.
- d. The slope must drain toward the water body.

Bluff, Bluff Impact Zone, Top and Toe of Bluff



- d. An area with an average slope of less than eighteen (18) percent over a distance for fifty (50) feet or more shall not be considered part of the bluff.

Bluff, Toe of. The lower point of a fifty (50) foot segment with an average slope exceeding eighteen (18) percent, or the ordinary high water level, whichever is higher.

~~*Bluff, Top of.* For the purposes of measuring setbacks, the higher point of a 50-foot segment with an average slope exceeding 18 percent.~~

~~*Boathouse.* A structure used solely for the storage of boats or boating equipment. A facility as defined by Minnesota Statutes Section 103G.245.~~

~~*Buffer.* As related to shoreland ordinance requirements, a vegetative feature as defined by Minnesota Statutes, Section 03F.48.~~

Building line. A line parallel to the street right-of-way line at any story level of a building and representing the minimum distance which all or any part of the building is set back from said right-of-way line. As related to shoreland requirements, it is also a line parallel to a lot line or the ordinary high water level at the required setback beyond which a structure may not extend.

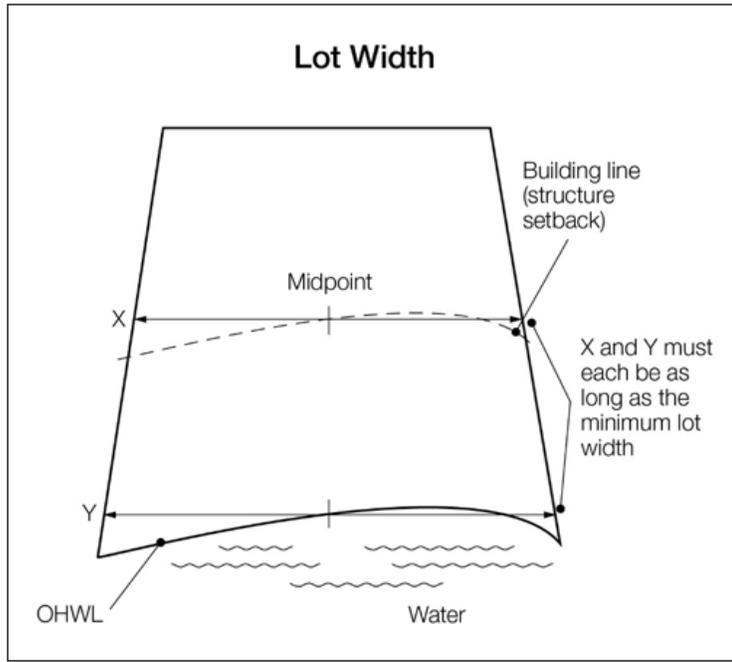
~~*Impervious surface.* A constructed hard surface that prevents or retards entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development, including rooftops; decks; sidewalks; patios; swimming pools; parking lots; concrete, asphalt, or gravel driveways; and other similar surfaces.~~
~~*Impervious Surface.* A constructed hard surface that either prevents or retards the entry of water into the soil, and causes water to runoff the surface in greater quantities and at an increased rate of flow than existed prior to development. Examples include roof tops, sidewalks, patios, driveways, parking lots, storage areas, and concrete, asphalt, or gravel roads.~~

~~*Intensive vegetation clearing.* The complete removal of trees or shrubs in a contiguous patch, strip, row, or block.~~

Lot width. The maximum-minimum horizontal distance between:

a. the side lot lines of a lot at the setback line.

b. The side lot lines at the ordinary high water level, if applicable.



- ▲ Ordinary high water level. The boundary of public waters and wetlands, and shall be an elevation delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape, commonly that point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial. For watercourses, the ordinary high water level is the elevation of the top of the bank of the channel. For reservoirs and flowages, the ordinary high water level is the operating elevation of the normal summer pool.

Public Water. Any water as defined in Minnesota Statutes, Section 103G.005, Subd. 15, 15a. Any waters of the State that serve a beneficial public purpose, as defined in Minnesota Statutes 1974, Section 105.37, and Subdivision 6. However, no lake, pond, or flowage of less than 10 acres in size and no river or stream having a total drainage area less than two square miles need be regulated by the municipality for the purposes of these regulations. A body of water created by a private user where there was no previous shoreland, as defined herein, for a designated private use authorized by the Commissioner shall be exempt from the provisions of these regulations. The official determination of the size and physical limits of drainage areas of rivers and streams shall be made by the Commissioner. The official size of lakes, ponds, or flowages shall be the areas listed in the Division of Waters, Soils, and Minerals Bulletin 25, An Inventory of Minnesota Lakes, or in the event that lakes, ponds, or flowage are not listed therein, official determination of

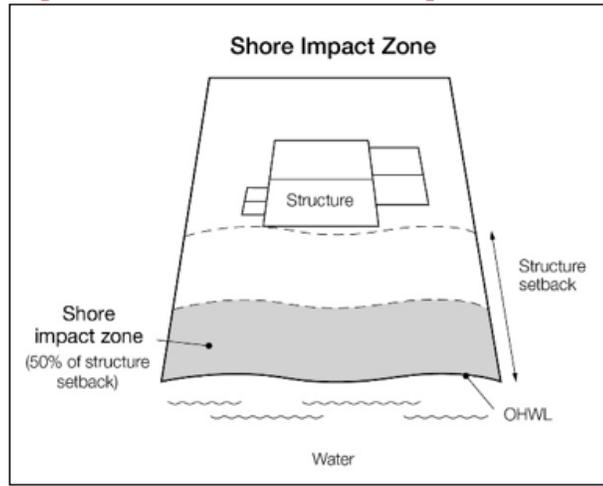
Semi-Public Use. The use of land by a private, nonprofit organization to provide a public service that is ordinarily open to some persons outside the regular constituency of the organization. A use owned or operated by a non-profit, religious or charity dependent institution and providing educational, cultural, recreational, religious or similar types of public programs.

Setback. The minimum horizontal distance between a structure, sewage treatment system, or other facility and an ordinary high water level, sewage treatment system, top of a bluff, road, highway, property line, or other facility.

Sewage treatment system. “Sewage treatment system” has the meaning given under Minnesota Rules, part 7080.1100, Subp. 82. Sewage Disposal System. Any system for the collection, treatment and dispersion of sewage including but not limited to septic tanks, soil absorption systems, and drain fields.

Sewer system. Pipelines or conduits, pumping stations, and force main, and all other construction, devices, appliances, or appurtenances used for conducting sewage or industrial waste or other wastes to a point of ultimate disposal.

Shore impact zone. Land located between the ordinary high water level of a public water and a line parallel to it at a setback of 50 percent of the structure setback.



Shoreland. Land located within the following distances from public water (i) 1,000 feet from the ordinary high water level of a lake, pond, or flowage; and (ii) 300 feet from a river or stream, or the landward extent of a flood plain designated by ordinance on such a river or stream, whichever is greater. The practical limits of shorelands may be less than the statutory limits whenever the waters involved are bounded by topographic divides that extend landward from the waters for lesser distance and when approved by the Commissioner.



Shore recreation facilities. Swimming areas, docks, watercraft mooring areas and launching ramps and other water recreation facilities.

Water-oriented accessory structure or facility. A small, above ground building or other improvement, except stairways, fences, docks, and retaining walls, which, because of the relationship of its use to surface water, reasonably needs to be located closer to public waters than the normal structure setback. Examples of such structures and facilities include, watercraft and watercraft equipment storage structures, gazebos, screen houses, fish houses, pump houses, saunas, patios, and detached decks. Boathouses and boat storage structures given the meaning under Minnesota Statutes, Section 103G.245 are not a water-oriented accessory structures.

Water-dependent use. The use of land for commercial, industrial, public or semi-public purposes, where access to and use of a public water is an integral part of the normal conduct of operation. Marinas, resorts, and restaurants with transient docking facilities are examples of commercial uses typically found in shoreland areas.

General Changes in other sections of the zoning ordinance:

1. Impervious surface limits cannot exceed 25% in shoreland areas. The current zoning ordinance states 30% in non-residential zones in shoreland areas.

SEC. 10.33 SHORELAND MANAGEMENT OVERLAY DISTRICT

- A. PURPOSE: The intent of the SD, Shoreland Management Overlay District is to guide the wise development and utilization of Shorelands of public waters for the preservation of water quality, natural characteristics, economic values, and the general health, safety and welfare of all public waters in the City. The provisions of the SD, Shoreland Management Overlay District shall, in effect, be applied as an "overlay" to other Districts, except for the FP Floodplain Overlay District.
- B. PUBLIC WATERS CLASSIFICATION: The Public Waters Classification for City of Hanover, as approved by the Commissioner of Natural Resources, are listed and described herein:

<u>Lake or Stream No.</u>	<u>Lake or Stream Name</u>	<u>Classification</u>
86-24	Crow River Unnamed Wetland	General Development Natural Environment

- C. PERMITTED USES: The following uses are permitted within the SD, Shoreland Management Overlay District provided the use is permitted in the underlying Zoning District.
 1. Agricultural uses such as pasture, grazing, outdoor plant nurseries, horticulture, truck farming, forestry, and wild crop harvesting.
 2. Parks and wayside, which do not maintain overnight camping facilities.
 3. Nature areas, hiking and riding trails, wildlife preserves, and designated official wetland areas.
 4. Designated historical sites.
 5. Permitted uses allowed in the following zoning districts:

- ~~RA-AG Residential~~/Agricultural District
- ~~RR Rural Residential~~
- R-1 Neighborhood Residential District
- ~~R-1A A Single Family Residential District~~
- R-2 Multiple Family Residential District
- B-1 Downtown River Commercial District
- B-2 Highway Business District
- I-1 Limited Industrial District
- I-2 General Industrial District
- I-3 Industrial Park

- INS Institutional District
- CD Conservation Design Overlay
- FP Floodplain Overlay District
- FW Floodway District
- FF Flood Fringe District
- PUD Planned Unit Development Overlay District
- SD Shoreland Management Overlay District
- W Wetlands Overlay District

D. **CONDITIONAL USES:** The following uses are permitted by conditional use permit within the SD; Shoreland Management Overlay District provided the use is permitted as a conditional use in the underlying zoning district

1. All approved aerial or underground utility line crossings such as electrical, telephone, telegraph or gas lines that cannot be reasonably located in other than an SD, Shoreland Management Overlay District.
2. ~~Non residential structures used solely in conjunction with raising wild animals or fish provided the structures are of a design approved by the Commissioner and City as being compatible with other general allowable uses of the district.~~
3. Other uses of the same general character as listed in Section 10.33(C) (Shoreland Management Overlay District – Permitted Uses) of this Article.
4. Conditional uses allowed in the following zoning districts:

- ~~RA-AG Residential~~/Agricultural District
- RR Rural Residential
- R-1 Neighborhood Residential District
- ~~R-1A A Single Family Residential District~~
- R-2 Multiple Family Residential District
- B-1 Downtown River Commercial District
- B-2 Highway Business District
- I-1 Limited Industrial District
- I-2 General Industrial District
- I-3 Industrial Park
- INS Institutional District
- CD Conservation Design Overlay
- FP Floodplain Overlay District
- FW Floodway District
- FF Flood Fringe District
- PUD Planned Unit Development Overlay District
- SD Shoreland Management Overlay District
- W Wetlands Overlay District

- 5. Signs permitted by conditional use identified in Section 10.67 (Signs) of this Chapter
- 6. Organized group camps.
- 7. Water supply buildings, reservoirs, wells, elevated tanks, regional pipe lines and power lines, public sewage treatment facilities, sanitary landfill operation and similar essential public utility and service structures.
- 8. Public swimming pool, private swimming pools serving more than one family.

E. ACCESSORY USES: The following uses shall be permitted accessory uses within the SD, Shoreland Management Overlay District:

- 1. Private garage.
- 2. Park structures, including shelter, toilets, storage buildings, garages, observation towers or buildings, caretakers living quarters, parking, etc.
- 3. Other accessory uses customarily incidental to the uses permitted in Section 10.32(C) (Shoreland Management Overlay District - Permitted Uses) and Section 10.32 (D) (Shoreland Management Overlay District - Conditional Uses) of this Article.
- 4. Boathouses, docks and piers.

F. SPECIAL LAND USE PROVISIONS

1. Commercial, Industrial, Public, and Semipublic Use Standards.

A. Water-dependent uses may be located on parcels or lots with frontage on public waters provided that:

- a. The use complies with provisions of Section 7.0;
- b. The use is designed to incorporate topographic and vegetative screening of parking areas and structures;
- c. Uses that require short-term watercraft mooring for patrons must centralize these facilities and design them to avoid obstructions of navigation and to be the minimum size necessary to meet the need; and
- d. Uses that depend on patrons arriving by watercraft may use signs and lighting, provided that:

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(1) Signs placed in or on public waters must only convey directional information or safety messages and may only be placed by a public authority or under a permit issued by the county sheriff; and

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(2) Signs placed within the shore impact zone are:

(a) No higher than ten feet above the ground, and no greater than 32 square feet in size; and

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(b) If illuminated by artificial lights, the lights must be shielded or directed to prevent illumination across public waters; and

(3) Other lighting may be located within the shore impact zone or over public waters if it is used to illuminate potential safety hazards and is shielded or otherwise directed to prevent direct illumination across public waters. This does not preclude use of navigational lights.

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B. Commercial, industrial, public, and semi-public uses that are not water-dependent must be located on lots or parcels without public waters frontage, or, if located on lots or parcels with public waters frontage, must either be set back double the ordinary high water level setback or be substantially screened from view from the water by vegetation or topography, assuming summer, leaf-on conditions.

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2. Agriculture Use Standards.

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A. Buffers.

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a. The shore impact zone for parcels with permitted agricultural land uses is equal to a line parallel to and 50 feet from the ordinary high water level.

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b. General cultivation farming, grazing, nurseries, horticulture, truck farming, sod farming, and wild crop harvesting are permitted uses if steep slopes and shore and bluff impact zones are maintained in perennial vegetation or operated under an approved conservation plan that includes alternative riparian water quality practices consistent with the field office technical guides of the local soil and water conservation district or the Natural Resource Conservation Service, and as approved by the local soil and water conservation district.

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B. New animal feedlots are not allowed in shoreland. Modifications or expansions to existing feedlots or resumption of old feedlots are conditional uses and must meet the following standards:

a. Feedlots must be designed consistent with Minnesota Rules, Chapter 7020;

b. Feedlots must not further encroach into the existing ordinary high water level setback or the bluff impact zone and must not expand to a capacity of 1,000 animal units or more; and,

c. Old feedlots not currently in operation may resume operation consistent with Minnesota Statutes, Section 116.0711.

3. Forest Management Standards.

A. The harvesting of timber and associated reforestation must be conducted consistent with the applicable provisions of the Sustaining Minnesota Forest Resources: Voluntary Site-Level Forest Management Guidelines for Landowners, Loggers and Resource Managers.

B. Intensive vegetation clearing for forest land conversion to another use is a conditional use subject to an erosion control and sedimentation plan developed and approved by the soil and water conservation district.

4. Mining and Extractive Use Standards. Mining and extractive uses are not permitted.

FG. HEIGHT, YARD AND LOT REGULATIONS: The height, yard and lot regulations shall be:

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Lot Area and Width Standards. After the effective date of this ordinance, all new lots must meet the minimum lot area and lot width requirements in Sections 6.25 and 6.26, subject to the following standards:

1. Only lands above the ordinary high water level can be used to meet lot area and width standards;

2. Lot width standards must be met at both the ordinary high water level and at the building line;

3. The sewer lot area dimensions can only be used if publicly owned sewer system service is available to the property;

4. Residential subdivisions with dwelling unit densities exceeding those in Sections 6.25 and 6.26 are allowed only if designed and approved as residential PUDs under Section 10.0 of this ordinance; and

5. Lake Minimum Lot Area and Width Standards;

<u>General Development – No Sewer</u>				
	<u>Riparian</u>		<u>Nonriparian</u>	
	<u>Lot Area (sf)</u>	<u>Lot Width (ft)</u>	<u>Lot Area (sf)</u>	<u>Lot Width (ft)</u>
<u>Single</u>	<u>20,000</u>	<u>100</u>	<u>40,000</u>	<u>150</u>
<u>Duplex</u>	<u>40,000</u>	<u>180</u>	<u>80,000</u>	<u>265</u>
<u>Triplex</u>	<u>60,000</u>	<u>260</u>	<u>120,000</u>	<u>375</u>
<u>Quad</u>	<u>80,000</u>	<u>340</u>	<u>160,000</u>	<u>490</u>
<u>General Development – Sewer</u>				
	<u>Riparian</u>		<u>Nonriparian</u>	
	<u>Lot Area (sf)</u>	<u>Lot Width (ft)</u>	<u>Lot Area (sf)</u>	<u>Lot Width (ft)</u>
<u>Single</u>	<u>15,000</u>	<u>75</u>	<u>10,000</u>	<u>75</u>
<u>Duplex</u>	<u>26,000</u>	<u>135</u>	<u>17,500</u>	<u>135</u>
<u>Triplex</u>	<u>38,000</u>	<u>195</u>	<u>25,000</u>	<u>190</u>
<u>Quad</u>	<u>49,000</u>	<u>255</u>	<u>32,500</u>	<u>245</u>
<u>Natural Environment – No Sewer</u>				
	<u>Riparian</u>		<u>Nonriparian</u>	
	<u>Lot Area (sf)</u>	<u>Lot Width (ft)</u>	<u>Lot Area (sf)</u>	<u>Lot Width (ft)</u>
<u>Single</u>	<u>80,000</u>	<u>200</u>	<u>80,000</u>	<u>200</u>
<u>Duplex</u>	<u>120,000</u>	<u>300</u>	<u>160,000</u>	<u>400</u>
<u>Triplex</u>	<u>160,000</u>	<u>400</u>	<u>240,000</u>	<u>600</u>
<u>Quad</u>	<u>200,000</u>	<u>500</u>	<u>320,000</u>	<u>800</u>
<u>Natural Environment – Sewer</u>				
	<u>Riparian</u>		<u>Nonriparian</u>	

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<u>General Development – No Sewer</u>				
	<u>Lot Area (sf)</u>	<u>Lot Width (ft)</u>	<u>Lot Area (sf)</u>	<u>Lot Width (ft)</u>
<u>Single</u>	<u>40,000</u>	<u>125</u>	<u>20,000</u>	<u>125</u>
<u>Duplex</u>	<u>70,000</u>	<u>225</u>	<u>35,000</u>	<u>220</u>
<u>Triplex</u>	<u>100,000</u>	<u>325</u>	<u>52,000</u>	<u>315</u>
<u>Quad</u>	<u>130,000</u>	<u>425</u>	<u>65,000</u>	<u>410</u>

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6. River/Stream Minimum Lot Width Standards. There are no minimum lot area requirements for rivers and streams. The lot width standards in feet are:

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	<u>Remote</u>	<u>Forested</u>	<u>Transition</u>	<u>Agricultural</u>	<u>Urban & Tributary</u>	
					<u>No Sewer</u>	<u>Sewer</u>
<u>Single</u>	<u>300</u>	<u>200</u>	<u>250</u>	<u>150</u>	<u>100</u>	<u>75</u>
<u>Duplex</u>	<u>450</u>	<u>300</u>	<u>375</u>	<u>225</u>	<u>150</u>	<u>115</u>
<u>Triplex</u>	<u>600</u>	<u>400</u>	<u>500</u>	<u>300</u>	<u>200</u>	<u>150</u>
<u>Quad</u>	<u>750</u>	<u>500</u>	<u>625</u>	<u>375</u>	<u>250</u>	<u>190</u>

1. RA – Shoreland Management Overlay District Requirements:
 - a. Lot Area: 2.5 acres (all uses)

2. R-1 – Shoreland Management Overlay District Requirements:
 - a. Lot Area: 20,000 sq. ft. for all uses (General Development Waters)
 - b. Lot Area: 80,000 sq. ft. for all uses (Natural Environment Water)
 - e. Lot Width at Building Line: 200 feet (Natural Environment Water)

3. R-1A – Shoreland Management Overlay District Requirements:
 - a. Lot Area: 12,000 sq. ft. for all uses (General Development Waters)
 - b. Lot Area: 15,000 sq. ft. for all uses (Natural Environment Water)
 - e. Lot Width at Building Line: 100 feet (Natural Environment Water)

4. R-2 – Shoreland Management Overlay District Requirements:
 - a. Lot Area: 20,000 sq. ft. for multiple residences (General Development Water)
 - b. Lot Area: 80,000 sq. ft. for multiple residences (Natural Environment Water)

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e. ~~Lot Width at Building Line: 200 feet (Natural Environment Water)~~

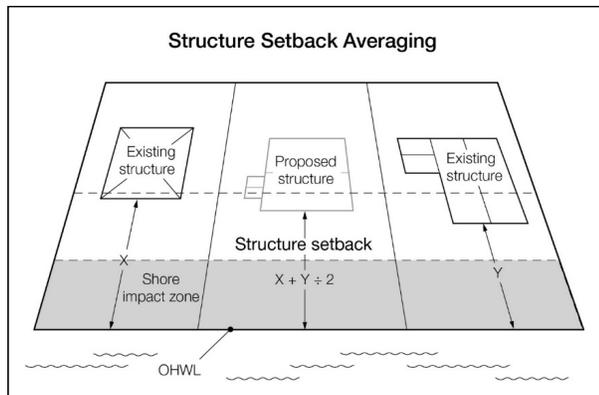
H. Placement, Height, and Design of Structures.

1. Placement of Structures and Sewage Treatment Systems on Lots.
When more than one setback applies to a site, structures and facilities must be located to meet all setbacks, and comply with the following OHWL setback provisions:

Classification	Structures		Sewage Treatment System
	No Sewer	Sewer	
<u>Lakes</u>			
Natural Environment	150	150	150
Recreational Development	100	75	75
General Development	75	50	50
<u>Rivers and Streams</u>			
Remote	200	200	150
Forested and Transition	150	150	100
Agriculture, Urban and Tributary	100	50	75

A. OHWL Setbacks. Structures, impervious surfaces, and sewage treatment systems must meet setbacks from the Ordinary High Water Level (OHWL), except that one water-oriented accessory structure or facility, designed in accordance with Section 7.3 of this ordinance, may be set back a minimum distance of ten (10) feet from the OHWL:

B. Setback averaging. Where structures exist on the adjoining lots on both sides of a proposed building site, structure setbacks may be altered without a variance to conform to the adjoining setbacks from



the OHWL, provided the proposed structure is not located in a shore impact zone or in a bluff impact zone:

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C. Setbacks of decks. Deck additions may be allowed without a variance to a structure not meeting the required setback from the ordinary high water level if all of the following criteria are met:

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(1) The structure existed on the date the structure setbacks were established;

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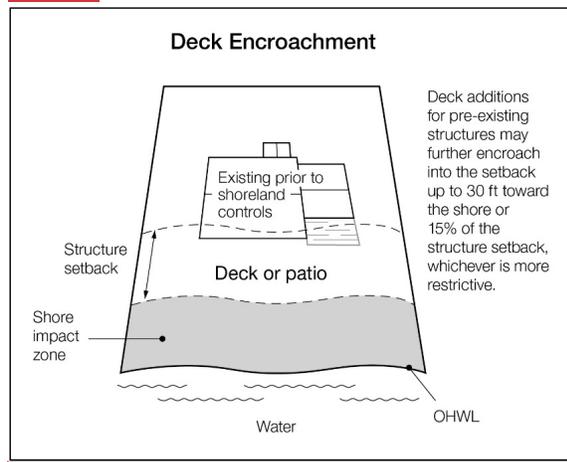
(2) A thorough evaluation of the property and structure reveals no reasonable location for a deck meeting or exceeding the existing ordinary high water level setback of the structure;

(3) The deck encroachment toward the ordinary high water level does not exceed 15 percent of the existing setback of the structure from the ordinary high water level or is no closer than 30 feet from the OHWL, whichever is more restrictive; and

(4) The deck is constructed primarily of wood, and is not roofed or screened.

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D. Additional structure setbacks. Structures must also meet the following setbacks, regardless of the waterbody classification:

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<u>Setback from:</u>	<u>Setback</u>
<u>Top of bluff</u>	<u>30</u>
<u>Unplatted cemetery</u>	<u>50</u>
<u>Right-of-way line of federal, state, or county highway</u>	<u>50</u>
<u>Right-of-way line of town road, public street, or other roads not classified</u>	<u>20</u>

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E. Bluff Impact Zones. Structures, impervious surfaces, and accessory facilities, except stairways and landings, must not be placed within bluff impact zones.

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2. Height of Structures. All structures in residential districts in cities, except churches and nonresidential agricultural structures, must not exceed 25 feet in height.

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3. Lowest Floor Elevation. Structures must be placed in accordance with any floodplain regulations applicable to the site. Where these controls do not exist, the elevation to which the lowest floor, including basement, is placed or flood-proofed must be determined as follows:

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A. For lakes, by placing the lowest floor at a level at least three feet above the highest known water level, or three feet above the ordinary high water level, whichever is higher;

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B. For rivers and streams, by placing the lowest floor at least three feet above the highest known flood elevation. If data are not available, by placing the lowest floor at least three feet above the ordinary high water level, or by conducting a technical evaluation to determine effects of proposed construction upon flood stages and flood flows and to establish a flood protection elevation. Under all three approaches, technical evaluations must be done by a qualified engineer or hydrologist consistent with Minnesota Rules, parts 6120.5000 to 6120.6200, governing the management of flood plain areas. If more than one approach is used, the highest flood protection elevation determined must be used for placing structures and other facilities; and

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C. If the structure is floodproofed instead of elevated under items A and B above, then it must be floodproofed in accordance with Minnesota Rules, part 6120.5900 Subp. 3 (D).

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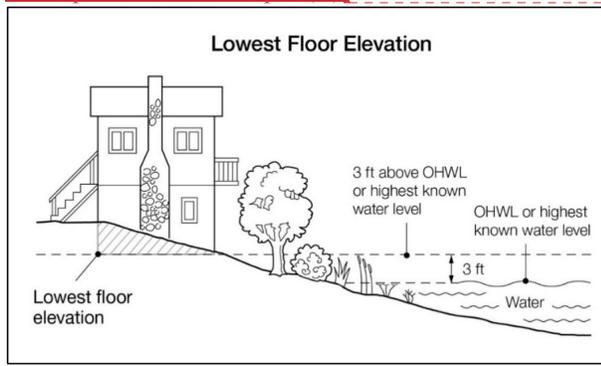
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~~4. Significant Historic Sites. No structure may be placed on a significant historic site in a manner that affects the values of the site unless adequate information about the site has been removed and documented in a public repository.~~

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~~5. Water Supply and Sewage Treatment.~~

~~6.51 Water supply. Any public or private supply of water for domestic purposes must meet or exceed standards for water quality of the Minnesota Department of Health and the Minnesota Pollution Control Agency.~~

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~~6.52 Sewage treatment. Any premises used for human occupancy must be connected to a publicly-owned sewer system, where available or comply with Minnesota Rules, Chapters 7080 – 7081.~~

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~~5. Commercial, Industrial or Institutional Structures—Shoreland Management Overlay District Requirements:~~

~~a. Lot Area: 20,000 sq. ft. (General Development Water)~~

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~~b. Lot Width at Building Line: 100 feet (General Development Water)~~

~~c. Lot Area: 80,000 sq. ft. (Natural Environment Water)~~

~~d. Lot Width at Building Line: 200 feet (Natural Environment Water)~~

~~6. Shoreland Setback Requirements:~~

~~a. General Development Waters: 75 feet from ordinary high water mark~~

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~~b. Natural Environment Waters: 200 feet from ordinary high water mark~~

~~c. Industrial and permitted open space uses requiring location on public waters may be allowed by conditional use permit closer to the public waters than identified in items 1 and 2 above.~~

~~d. Boathouses foundations shall be located a minimum of ten (10) feet landward from the ordinary high water mark further provided that said boathouses are not used for habitation and do not contain sanitary facilities.~~

~~7. Building Coverage Regulations. Not more than thirty (30) percent of the lot shall be occupied by buildings.~~

~~8. Bluff Impact Zones. Structures and accessory facilities, except stairways and landings, must not be placed within bluff impact zones.~~

~~9. Impervious Surface Coverage. The total area of all impervious surfaces on a lot shall not exceed thirty (30) percent of the total lot area.~~

~~a. Exceptions.~~

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- ~~1) Boathouses may be located landward of the ordinary high water mark by conditional use permit provided they are not used for habitation and they do not contain sanitary facilities.~~
- ~~2) Location of piers and docks shall be controlled by applicable state and local regulations.~~
- ~~3) Where development exists on both sides of a proposed building site, structural setbacks may be altered to take setbacks of existing structures into account.~~
- ~~11. Floor Elevation Regulations. The elevation of the lowest floor of all structures except boathouses, docks, and piers shall be at least four (4) feet above the highest known water level.~~

~~G. GENERAL REGULATIONS:~~

~~1. Front Yard Street and Shoreland Setback Adjustments. When more than seventy-five (75) percent of the frontage along a shoreline development or on a side of a street or between intersections is occupied by structures having setbacks from street centerlines or shorelines of a greater or lesser amount than herein required, the average setback of all existing buildings between street intersections or the shoreline development boundaries shall be maintained by all new or relocated principal structures even though such average setback may be different from the setback requirements stipulated in this Article.~~

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- 2. Substandard Lots. Lots of record in the office of the County Register of Deeds on June 16, 2003, the date of enactment of the Article governing the SD, Shoreland Management Overlay District, which do not meet the requirements of that Chapter, may be allowed as building sites provided such use is permitted in the zoning district, the lot is in separate ownership from abutting lands and sanitary and dimensional requirements of the SD, Shoreland Management Overlay District provisions are complied with insofar as practicable. The City Council will, consistent with these standards and criteria, set a minimum size for substandard lots or impose other restrictions on the development of substandard lots, including the prohibition of development until the substandard lot(s) are served by public sewer and water.
- 3. Shoreland Alterations.
 - a. Natural vegetation in shoreland areas shall be preserved insofar as practical and reasonable in order to retard surface runoff and soil erosion, and to utilize excess nutrients. The removal of natural

vegetation shall be controlled in accordance with the following criteria:

- 1) Clear cutting shall be prohibited, except as necessary for placing public roads, utilities, structures, and parking areas.
 - 2) Natural vegetation shall be restored insofar as feasible after any construction project.
 - 3) Selective cutting of trees and underbrush shall be allowed as long as sufficient cover is left to screen motor vehicles and structures when viewed from the water.
- b. Grading and filling in Shoreland areas or any other substantial alteration of the natural topography shall be controlled by the following criteria:
- 1) The smallest amount of bare ground shall be exposed for as short a time as feasible.
 - 2) Temporary ground cover, such as mulch, shall be used and permanent vegetation cover, such as sod, shall be provided.
 - 3) Methods to prevent erosion and trap sediment shall be employed.
 - 4) Fill shall be stabilized to accepted engineering standards.
- c. Alterations of Beds of Public Waters.
- 1) Any work that will change or diminish the course, current, or cross section of any public water shall be approved by the Commissioner before the work is begun. This includes construction of channels and ditches, lagooning, dredging of lakes or stream bottom for removal of muck, silt or weeds, and filling in the lake or stream bed. Approval shall be construed to mean the issuance by the Commissioner of a permit under the procedures of Minnesota Statutes Section 105.42 and other related statutes, as may be amended, supplemented or replaced from time to time.
 - 2) Excavations on shorelands where the intended purpose is connection to a public water, such as boat slips, canals, lagoons, and harbors, shall be controlled by this Article. Permission for such excavations may be given only after the Commissioner has approved the proposed connection to

public waters. Approval shall be given only if the proposed work is consistent with applicable state regulations for work in beds of public waters.

H. PARKING REGULATIONS, PLACEMENT OF ROADS AND PARKING AREAS:

1. In granting permits as allowed in Section 10.33 (Shoreland Management Overlay District - Permitted Uses) of this Chapter, the parking regulations of the underlying zoning district shall apply.

2. Placement and Design of Roads, Driveways, and Parking Areas. Public and private roads and parking areas must be designed to take advantage of natural vegetation and topography to achieve maximum screening as viewed from public waters and comply with the following standards:

A. Roads, driveways, and parking areas must meet structure setbacks and must not be placed within bluff and shore impact zones, when other reasonable and feasible placement alternatives exist. If no alternatives exist, they may be placed within these areas, and must be designed to minimize adverse impacts;

B. Watercraft access ramps, approach roads, and access-related parking areas may be placed within shore impact zones provided the vegetative screening and erosion control conditions of this subpart are met;

C. Private facilities must comply with the grading and filling provisions of Section 10.33 of this ordinance; and

D. For public roads, driveways and parking areas, documentation must be provided by a qualified individual that they are designed and constructed to minimize and control erosion to public waters consistent with the field office technical guides of the local soil and water conservation district, or other applicable technical materials.

~~The placement of roads and parking areas shall be controlled in order to retard the runoff of surface waters and excess nutrients. The placement of roads and parking areas shall be controlled in accordance with the following criteria:~~

- ~~a. No impervious road or parking surface shall be placed within fifty (50) feet of the ordinary high water mark.~~
- ~~b. Where feasible and practical, all roads and parking areas shall meet the setback requirements established for structures in this Chapter.~~
- ~~e. Natural vegetation or other natural materials shall be used in order to screen parking areas when viewed from the water.~~

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~~I. SANITARY PROVISIONS:~~

~~1. Water Supply:~~

~~a. Any public or private supply of water for domestic purposes shall conform to the laws and regulations of the State of Minnesota.~~

~~2. Sewage and Waste Disposal:~~

~~a. Any premises used for human occupancy shall be provided with an adequate method of sewage disposal to be maintained in accordance with City standards and Minnesota Rule 7080 as may be amended, supplemented or replaced from time to time. Municipal collection and treatment facilities used where available or feasible.~~

~~c. Public sewage disposal and commercial solid waste, and industrial waste disposal shall be subject to the standards, criteria, rules, and regulations of the Minnesota Pollution Control Agency.~~

I. Planned Unit Developments (PUDs)

1. Density Determination. Proposed new or expansions to existing planned unit developments must be evaluated using the following procedures.

Step 1. Identify Density Analysis Tiers. Divide the project parcel into tiers by drawing one or more lines parallel to the ordinary high water level at the following intervals, proceeding landward:

Classification	Tier Depth	
	No Sewer (ft)	Sewer (ft)
General Development Lakes – 1st tier	200	200
General Development Lakes – all other tiers	267	200
Recreational Development Lakes	267	267
Natural Environment Lakes	400	320
All Rivers	300	300

Step 2. Calculate Suitable Area for Development. Calculate the suitable area within each tier by excluding all wetlands, bluffs, or land below the ordinary high water level of public waters.

Step 3. Determine Base Density:

A. For residential PUDs, divide the suitable area within each tier by the minimum single residential lot area for lakes to determine the allowable number of dwelling units, or base density, for each tier. For

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rivers, if a minimum lot area is not specified, divide the tier width by the minimum single residential lot width.

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B. For commercial PUDs:

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(1) Determine the average area for each dwelling unit or dwelling site within each tier. Include both existing and proposed dwelling units and sites in the calculation.

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(a) For dwelling units, determine the average inside living floor area of dwelling units in each tier. Do not include decks, patios, garages, or porches and basements, unless they are habitable space.

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(b) For dwelling sites (campgrounds), determine the area of each dwelling site as follows:

(c) For manufactured homes, use the area of the manufactured home, if known, otherwise use 1,000 sf.

I. For recreational vehicles, campers or tents, use 400 sf.

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II. Select the appropriate floor area/dwelling site area ratio from the following table for the floor area or dwelling site area determined in Section 10-130

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<u>Inside Living Floor Area or Dwelling Site Area (sf)</u>	<u>Floor Area/Dwelling Site Area Ratio</u>		
	<u>General Development Lakes w/Sewer – all tiers</u>	<u>General Development Lakes w/ sewer other tiers</u>	
<u>< 200</u>	<u>.040</u>	<u>.020</u>	<u>.010</u>
<u>300</u>	<u>.048</u>	<u>.024</u>	<u>.012</u>
<u>400</u>	<u>.056</u>	<u>.028</u>	<u>.014</u>
<u>500</u>	<u>.065</u>	<u>.032</u>	<u>.016</u>
<u>600</u>	<u>.072</u>	<u>.038</u>	<u>.019</u>
<u>700</u>	<u>.082</u>	<u>.042</u>	<u>.021</u>

General Development Lakes w/ sewer other tiers

Recreational Development Lakes Forested and Transition Rivers

Inside Living Floor Area or Dwelling Site Area (sf)	Floor Area/Dwelling Site Area Ratio	General Development Lakes w/Sewer – all tiers	General Development Lakes w/no sewer – 1st tier	Natural Environment
	800	.091	.046	.023
900	.099	.050	.025	
1,000	.108	.054		
1,100	.116	.058		
1,200	.125	.064		
1,300	.133	.068		
1,400	.142	.072		
> 1,500	.150	.075		

Multiply the suitable area within each tier determined in Section [redacted] by the floor area or dwelling site area ratio to yield the total floor area or dwelling site area for each tier to be used for dwelling units or dwelling sites.

Divide the total floor area or dwelling site area for each tier calculated in Section [redacted] by the average inside living floor area for dwelling units or dwelling site area determined in [redacted]. This yields the allowable number of dwelling units or dwelling sites, or base density, for each tier.

C. Allowable densities may be transferred from any tier to any other tier further from the waterbody, but must not be transferred to any tier closer to the waterbody.

D. All PUDs with densities at or below the base density must meet the design standards in Section [redacted].

Step 4. Determine if the Site can Accommodate Increased Density:

E. The following increases to the dwelling unit or dwelling site base densities determined Section [redacted] are allowed if the design criteria in

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Section [redacted] of this ordinance are satisfied as well as the standards in Section [redacted] item [redacted].

Shoreland Tier

Maximum density increase within each tier (percent)

- 1st
- 2nd
- 3rd
- 4th
- 5th

- 50
- 100
- 200
- 200
- 200

Structure setbacks from the ordinary high water level;

Are increased to at least 50 percent greater than the minimum setback; or

The impact on the waterbody is reduced an equivalent amount through vegetative management, topography, or additional acceptable means and the setback is at least 25 percent greater than the minimum setback.

2. Design Criteria. All PUDs must meet the following design criteria.

A. All residential planned unit developments must contain at least five dwelling units or sites.

B. On-site water supply and sewage treatment systems must be centralized and meet the standards in Section [redacted] of this ordinance. Sewage treatment systems must meet the setback standards of Section [redacted] item [redacted] of this ordinance.

C. Dwelling units or dwelling sites must be clustered into one or more groups and located on suitable areas of the development.

D. Dwelling units or dwelling sites must be designed and located to meet the dimensional standards in Sections [redacted] and [redacted].

(2) Shore recreation facilities:

(3) Must be centralized and located in areas suitable for them based on a suitability analysis.

(4) The number of spaces provided for continuous beaching, mooring, or docking of watercraft must not exceed one for each allowable dwelling unit or site in the first tier (notwithstanding existing mooring sites in an existing commercially used harbor).

(d) Launching ramp facilities, including a small dock for loading and unloading equipment, may be provided for use by occupants of dwelling units or sites located in other tiers.

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(e) Structures, parking areas, and other facilities must be treated to reduce visibility as viewed from public waters and adjacent shorelands by vegetation, topography, increased setbacks, color, or other means acceptable to the local unit of government, assuming summer, leaf-on conditions. Vegetative and topographic screening must be preserved, if existing, or may be required to be provided.

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(f) Accessory structures and facilities, except water oriented accessory structures, must meet the required structure setback and must be centralized.

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III. Water-oriented accessory structures and facilities may be allowed if they meet or exceed design standards contained in Section 7.3 of this ordinance and are centralized.

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Minnesota Model Shoreland Management Ordinance

Introduction

This model is intended to help local governments develop new shoreland ordinances and amend existing ordinances. This model ordinance is consistent with Minnesota's shoreland management rules (6120.2500 – 6120.3800). The model ordinance includes some provisions that differ from those in rule. This is because the model is periodically updated to be consistent with changes made to statute and other agency rules since the rules were published in 1989. The model also contains administrative language not in rule to help clarify and administer provisions in the ordinance.

Blue bold text in the “Ordinance Language” column indicates any language that provides clarity on topics not sufficiently addressed in rule, or reflects a higher standard than the minimum in rule. This text is “optional” and is identified as such in the “Commentary” column.. Higher standards may be additions to or deletions from the rules.

Key Protection Provisions

Some shoreland ordinance provisions provide greater levels of shoreland protection than other provisions. Many of these “key protection provisions” deal with dimensional standards. Some of these provisions may not be applicable in all communities. If they are applicable, they must be as strict as the model language, otherwise deviations must be approved by the DNR consistent with the implementation flexibility criteria in rule (6120.2800 Subp. 3). Approval to deviate from key protection provisions usually requires some type of offsetting higher standard on another provision in the ordinance, and must be negotiated and documented in an agreement with the DNR before the DNR will provide conditional approval of the ordinance or ordinance amendment.

Black bold text in the “Ordinance Language” column identifies key protection provisions. (Note that the first word or phrase in all provisions is bolded for document formatting consistency).

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Ordinance Language	Commentary
<p>1.0 STATUTORY AUTHORIZATION AND POLICY</p> <p>1.1 Statutory Authorization. This shoreland ordinance is adopted pursuant to the authorization and policies contained in Minnesota Statutes, Chapter 103F, Minnesota Regulations, Parts 6120.2500 - 6120.3900, and the planning and zoning enabling legislation in Minnesota Statutes, Chapter 394 (for counties) or Chapter 462 (for municipalities).</p> <p>1.2 Policy. The Legislature of Minnesota has delegated responsibility to local governments of the state to regulate the subdivision, use and development of the shorelands of public waters and thus preserve and enhance the quality of surface waters, conserve the economic and natural environmental values of shorelands, and provide for the wise use of waters and related land resources. This responsibility is hereby recognized by (<i>insert name of Community</i>).</p> <p>2.0 GENERAL PROVISIONS AND DEFINITIONS</p> <p>2.1 Jurisdiction. The provisions of this ordinance apply to the shorelands of the public water bodies as classified in Section 4.1 of this ordinance, and to the shorelands of public water bodies greater than 10 acres in unincorporated areas in which the city has, by ordinance, extended the application of its zoning regulations as provided by Minnesota Statute, Chapter 462.357 Subd 1. Pursuant to Minnesota Regulations, Parts 6120.2500 - 6120.3900, no lake, pond, or flowage less than 10 acres in size in municipalities or 25 acres in size in unincorporated areas need be regulated in a local government’s shoreland regulations. A body of water created by a private user where there was no previous shoreland may, at the discretion of the governing body, be exempt from this ordinance.</p> <p>2.2 Enforcement. The (<i>insert name of local government or designated official</i>) is responsible for the administration and enforcement of this ordinance. Any violation of the provisions of this ordinance or failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with grants of variances or conditional uses constitutes a misdemeanor and is punishable as defined by law. Violations of this ordinance can occur regardless of whether or not a permit is required for a regulated activity listed in Section 3.2 of this ordinance.</p> <p>2.3 Severability. If any section, clause, provision, or portion of this ordinance is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this ordinance shall not be affected thereby.</p> <p>2.4 Abrogation and Greater Restrictions. It is not intended by this ordinance to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance imposes greater restrictions, the provisions of this ordinance shall prevail. All other ordinances inconsistent with this ordinance are hereby repealed to the extent of the inconsistency only.</p> <p>2.5 Definitions. Unless specifically defined below, words or phrases used in this ordinance shall be interpreted to give them the same meaning they have in common usage and to give this ordinance its most reasonable</p>	<p>1.1. <i>Ensures that LGU authority to administer and enforce the ordinance is connected to state regulatory policy.</i></p> <p>1.2. <i>Reinforces the responsibility of local governments to regulate shorelands in their jurisdiction.</i></p> <p>2.1. <i>Identifies the size of waterbodies that must be included in the ordinance as directed by rule. Water bodies meeting these thresholds must be listed in Section 4.0. Optional provision for cities that have extra-territorial zoning authority.</i></p> <p>2.2 – 2.4. <i>If these provisions are already included in the zoning ordinance, they are not needed.</i></p> <p>2.5. <i>These definitions are the minimum necessary for a compliant ordinance. Some definitions may not be needed if a given feature or land use is not present or not allowed in the community.</i></p>

Ordinance Language

Commentary

application. For the purpose of this ordinance, the words “must” and “shall” are mandatory and not permissive. All distances, unless otherwise specified, are measured horizontally.

2.511 **Accessory structure or facility.** Any building or improvement subordinate to a principal use.

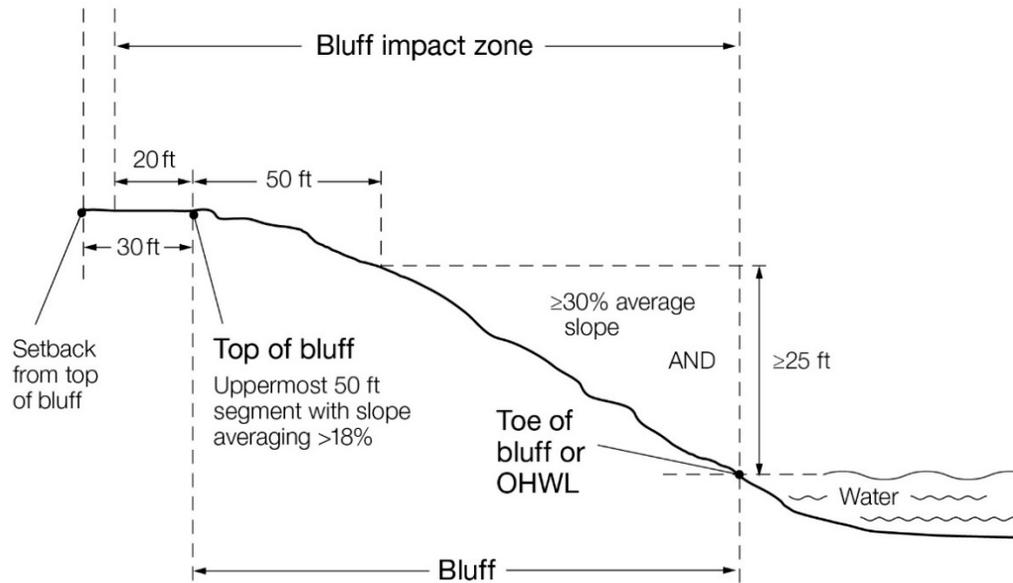
2.512 **Animal feedlot.** A facility as defined by [Minnesota Rules, part 7020.0300](#).

2.513 **Bluff.** A topographic feature such as a hill, cliff, or embankment having the following characteristics:

- A. Part or all of the feature is located in a shoreland area;
- B. The slope rises at least 25 feet above the toe of bluff;
- C. The grade of the slope from the toe of the bluff to a point 25 feet or more above the toe of the bluff averages 30 percent or greater, except that an area with an average slope of less than 18 percent over a distance of at least 50 feet shall not be considered part of the bluff; and
- D. The slope must drain toward the waterbody.

2.513. The DNR’s bluff mapping tool, a GIS script, is available for download from the [Minnesota Geospatial Commons](#). This tool is helpful for identifying bluffs for general mapping and planning purposes.

Bluff, Bluff Impact Zone, Top and Toe of Bluff



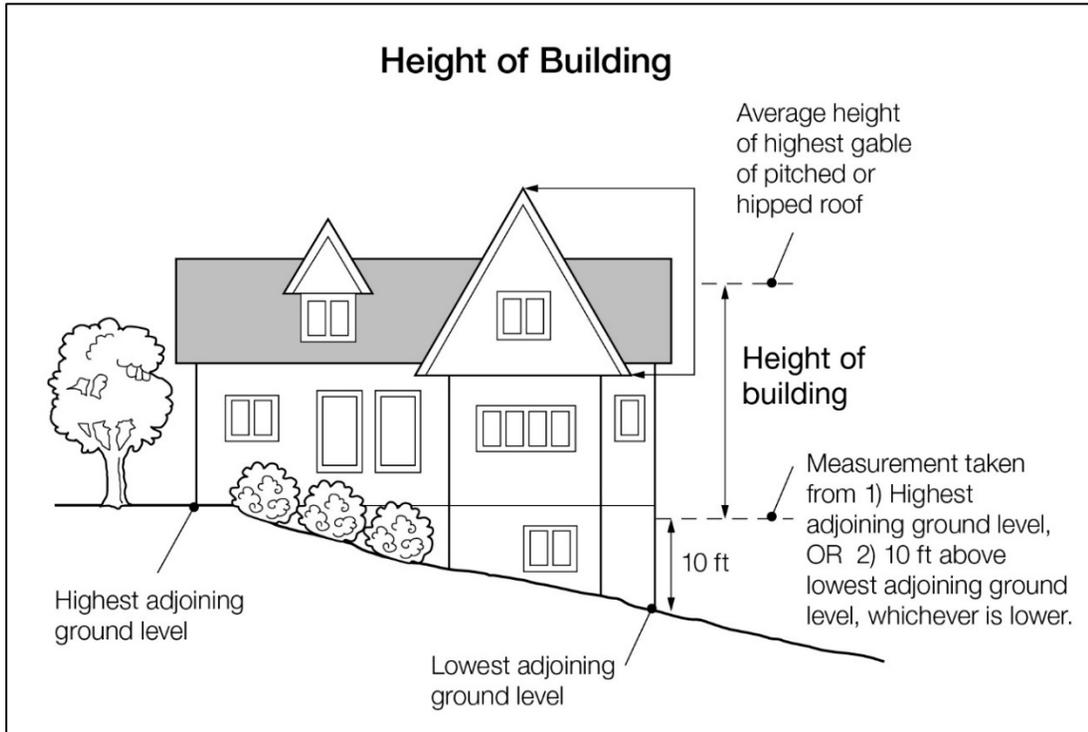
2.514 **Bluff impact zone.** A bluff and land located within 20 feet of the top of a bluff.

Ordinance Language	Commentary
<p>2.515 Bluff, Toe of. The lower point of a 50-foot segment with an average slope exceeding 18 percent or the ordinary high water level, whichever is higher.</p>	
<p>2.516 Bluff, Top of. For the purposes of measuring setbacks, the higher point of a 50-foot segment with an average slope exceeding 18 percent.</p>	
<p>2.517 Boathouse. A facility as defined by Minnesota Statutes Section 103G.245.</p>	<p>2.517. Boathouses are prohibited by statute, and are different than water-oriented accessory structures (2.558) which are allowed in the rules.</p>
<p>2.518 Buffer. A vegetative feature as defined by Minnesota Statutes, Section 103F.48.</p>	
<p>2.519 Building line. A line parallel to a lot line or the ordinary high water level at the required setback beyond which a structure may not extend.</p>	
<p>2.520 Controlled access lot. A lot used to access public waters or as a recreation area for owners of nonriparian lots within the same subdivision containing the controlled access lot.</p>	
<p>2.521 Commercial planned unit developments. Developments that provide transient, short-term lodging spaces, rooms, or parcels and their operations are essentially service-oriented. For example, hotel/motel accommodations, resorts, recreational vehicle and camping parks, and other primarily service-oriented activities are commercial planned unit developments.</p>	
<p>2.522 Commercial use. The principal use of land or buildings for the sale, lease, rental, or trade of products, goods, and services.</p>	
<p>2.523 Commissioner. The commissioner of the Department of Natural Resources.</p>	
<p>2.524 Conditional use. A land use or development as defined by ordinance that would not be appropriate generally but may be allowed with appropriate restrictions upon a finding that certain conditions as detailed in the zoning ordinance exist, the use or development conforms to the comprehensive land use plan of the community, and the use is compatible with the existing neighborhood.</p>	
<p>2.525 Deck. A horizontal, unenclosed platform with or without attached railings, seats, trellises, or other features, attached or functionally related to a principal use or site and at any point extending more than three feet above ground.</p>	<p>2.525. Any feature meeting this definition is also a structure (see structure definition) and then must meet structure setbacks.</p>
<p>2.526 Duplex, triplex, and quad. A dwelling structure on a single lot, having two, three, and four units, respectively, attached by common walls and each unit equipped with separate sleeping, cooking, eating, living, and sanitation facilities.</p>	
<p>2.527 Dwelling site. A designated location for residential use by one or more persons using temporary or movable shelter, including camping and recreational vehicle sites.</p>	
<p>2.528 Dwelling unit. Any structure or portion of a structure, or other shelter designed as short- or long-term living quarters for one or more persons, including rental or timeshare accommodations such as motel, hotel, and resort rooms and cabins.</p>	

Ordinance Language

Commentary

- 2.529 **Extractive use.** The use of land for surface or subsurface removal of sand, gravel, rock, industrial minerals, other nonmetallic minerals, and peat not regulated under [Minnesota Statutes, Sections 93.44 to 93.51](#).
- 2.530 **Forest land conversion.** The clear cutting of forested lands to prepare for a new land use other than reestablishment of a subsequent forest stand.
- 2.531 **Guest cottage.** A structure used as a dwelling unit that may contain sleeping spaces and kitchen and bathroom facilities in addition to those provided in the primary dwelling unit on a lot.
- 2.532 **Height of building.** The vertical distance between the highest adjoining ground level at the building or ten feet above the lowest adjoining ground level, whichever is lower, and the highest point of a flat roof or average height of the highest gable of a pitched or hipped roof.



- 2.533 **Impervious surface.** A constructed hard surface that prevents or retards entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development, including rooftops; decks; sidewalks; patios; swimming pools; parking lots; concrete, asphalt, or gravel driveways; and other similar surfaces.
- 2.534 **Industrial use.** The use of land or buildings for the production, manufacture, warehousing, storage, or transfer of goods, products, commodities, or other wholesale items.

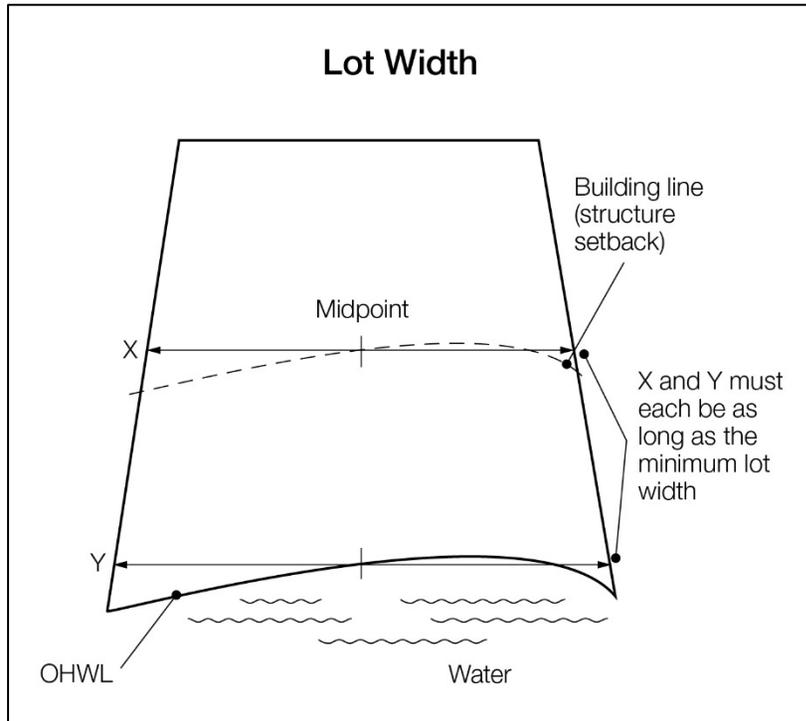
2.533. *Optional definition. An impervious surface definition is not in rule, but is very helpful for administering the required impervious surface standards in Section 8.4 of this model. This definition was developed as part of the 2010 shoreland rule update project, which, although never adopted, many local governments found to be helpful. Gravel driveways are defined as impervious since soils*

Ordinance Language

Commentary

- 2.535 **Intensive vegetation clearing.** The complete removal of trees or shrubs in a contiguous patch, strip, row, or block.
- 2.536 **Lot.** A parcel of land designated by plat, metes and bounds, registered land survey, auditors plot, or other accepted means and separated from other parcels or portions by said description for the purpose of sale, lease, or separation.
- 2.537 **Lot width.** The minimum distance between:
- A. Side lot lines measured at the midpoint of the building line; and
 - B. Side lot lines at the ordinary high water level, if applicable.

become compacted after use and impair infiltration of water, and they are often paved over by property owners without need for a permit.



- 2.538 **Metallic minerals and peat.** "Metallic minerals and peat" has the meaning given under [Minnesota Statutes, Sections 93.44 to 93.51](#).
- 2.539 **Nonconformity.** Any legal use, structure or parcel of land already in existence, recorded, or authorized before the adoption of official controls or amendments to those controls that would not have been permitted to become established under the terms of the official controls as now written.
- 2.540 **Ordinary high water level.** The boundary of public waters and wetlands, and shall be an elevation delineating the highest water level which has been maintained for a sufficient period of time to leave

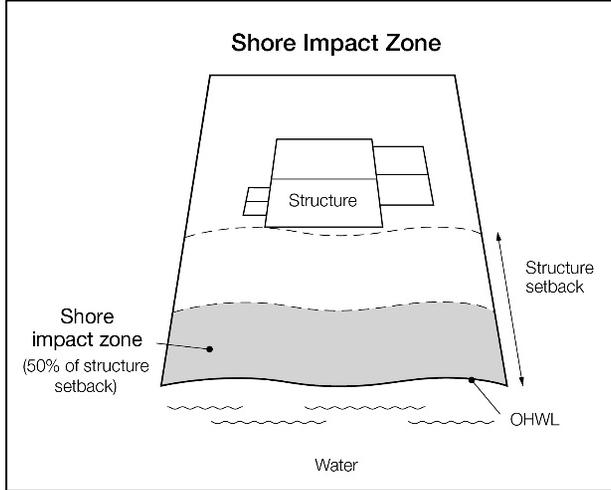
2.540. This is the same definition as 103G.005 Subd. 14.

Ordinance Language	Commentary
<p>evidence upon the landscape, commonly that point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial. For watercourses, the ordinary high water level is the elevation of the top of the bank of the channel. For reservoirs and flowages, the ordinary high water level is the operating elevation of the normal summer pool.</p> <p>2.541 Planned unit development. A type of development characterized by a unified site design for a number of dwelling units or dwelling sites on a parcel, whether for sale, rent, or lease, and also usually involving clustering of these units or sites to provide areas of common open space, density increases, and a mix of structure types and land uses. These developments may be organized and operated as condominiums, time-share condominiums, cooperatives, full fee ownership, commercial enterprises, or any combination of these, or cluster subdivisions of dwelling units, residential condominiums, townhouses, apartment buildings, dwelling grounds, recreational vehicle parks, resorts, hotels, motels, and conversions of structures and land uses to these uses.</p> <p>2.542 Public waters. Any water as defined in Minnesota Statutes, Section 103G.005, Subd. 15, 15a.</p> <p>2.543 Residential planned unit development. A use where the nature of residency is nontransient and the major or primary focus of the development is not service-oriented. For example, residential apartments, manufactured home parks, time-share condominiums, townhouses, cooperatives, and full fee ownership residences would be considered as residential planned unit developments. To qualify as a residential planned unit development, a development must contain at least five dwelling units or sites.</p> <p>2.544 Resort. “Resort” has the meaning in Minnesota Statute, Section 103F.227.</p> <p>2.545 Semipublic use. The use of land by a private, nonprofit organization to provide a public service that is ordinarily open to some persons outside the regular constituency of the organization.</p> <p>2.546 Setback. The minimum horizontal distance between a structure, sewage treatment system, or other facility and an ordinary high water level, sewage treatment system, top of a bluff, road, highway, property line, or other facility.</p> <p>2.547 Sewage treatment system. “Sewage treatment system” has the meaning given under Minnesota Rules, part 7080.1100, Subp. 82.</p> <p>2.548 Sewer system. Pipelines or conduits, pumping stations, and force main, and all other construction, devices, appliances, or appurtenances used for conducting sewage or industrial waste or other wastes to a point of ultimate disposal.</p>	

Ordinance Language

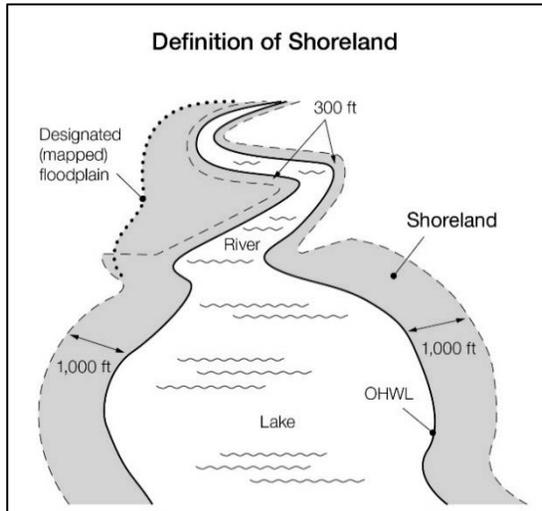
Commentary

2.549 **Shore impact zone.** Land located between the ordinary high water level of a public water and a line parallel to it at a setback of 50 percent of the structure setback.



2.550 **Shoreland.** "Shoreland" means land located within the following distances from public waters:

- A. 1,000 feet from the ordinary high water level of a lake, pond, or flowage; and
- B. 300 feet from a river or stream, or the landward extent of a floodplain designated by ordinance on a river or stream, whichever is greater.



Ordinance Language	Commentary
<p>2.551 Shore recreation facilities. Swimming areas, docks, watercraft mooring areas and launching ramps and other water recreation facilities.</p> <p>2.552 Significant historic site. Any archaeological site, standing structure, or other property that meets the criteria for eligibility to the National Register of Historic Places or is listed in the State Register of Historic Sites, or is determined to be an unplatted cemetery that falls under the provisions of Minnesota Statutes, Section 307.08. A historic site meets these criteria if it is presently listed on either register or if it is determined to meet the qualifications for listing after review by the Minnesota state archaeologist or the director of the Minnesota Historical Society. All unplatted cemeteries are automatically considered to be significant historic sites.</p> <p>2.553 Steep slope. Land where agricultural activity or development is either not recommended or described as poorly suited due to slope steepness and the site's soil characteristics, as mapped and described in available county soil surveys or other technical reports, unless appropriate design and construction techniques and farming practices are used in accordance with the provisions of this ordinance. Where specific information is not available, steep slopes are lands having average slopes over 12 percent, as measured over horizontal distances of 50 feet or more, which are not bluffs.</p> <p>2.554 Structure. Any building or appurtenance, including decks, except aerial or underground utility lines, such as sewer, electric, telephone, telegraph, gas lines, towers, poles, and other supporting facilities.</p> <p>2.555 Subdivision. Land that is divided for the purpose of sale, rent, or lease, including planned unit developments.</p> <p>2.556 Suitability analysis. An evaluation of land to determine if it is appropriate for the proposed use. The analysis considers factors relevant to the proposed use and may include the following features: susceptibility to flooding; existence of wetlands; soils, erosion potential; slope steepness; water supply, sewage treatment capabilities; water depth, depth to groundwater and bedrock, vegetation, near-shore aquatic conditions unsuitable for water-based recreation; fish and wildlife habitat; presence of significant historic sites; or any other relevant feature of the natural land.</p> <p>2.557 Variance. "Variance" means the same as that defined in Minnesota Statutes, Section 394.27 Subd. 7 (for counties) or Section 462.357 Subd. 6 (2) (for municipalities).</p> <p>2.558 Water-oriented accessory structure or facility. A small, above ground building or other improvement, except stairways, fences, docks, and retaining walls, which, because of the relationship of its use to surface water, reasonably needs to be located closer to public waters than the normal structure setback. Examples of such structures and facilities include, watercraft and watercraft equipment storage structures, gazebos, screen houses, fish houses, pump houses, saunas, patios, and detached decks. Boathouses and boat storage structures given the meaning under Minnesota Statutes, Section 103G.245 are not a water-oriented accessory structures.</p>	<p>2.553. <i>Optional deletion. This is a difficult definition to administer. Simplifying this definition to include only average slopes over 12% will make administration easier and improve resource protection.</i></p> <p>2.558. <i>Optional addition. Local governments may consider saunas and patios as water-oriented accessory structures (WOAS). This may help clarify administration. The treatment of patios, specifically, in the shore impact zone (SIZ) is a common source of confusion. As a WOAS, patios could be allowed in the SIZ and counted towards the size limitation of WOAS in Section 7.3.</i></p>

Ordinance Language	Commentary
<p>2.559 Water-dependent use. The use of land for commercial, industrial, public or semi-public purposes, where access to and use of a public water is an integral part of the normal conduct of operation. Marinas, resorts, and restaurants with transient docking facilities are examples of commercial uses typically found in shoreland areas.</p> <p>2.559 Wetland. “Wetland” has the meaning given under Minnesota Rule, part 8420.0111.</p> <p>3.0 ADMINISTRATION</p> <p>3.1 Purpose. The purpose of this Section is to identify administrative provisions to ensure the ordinance is administered consistent with its purpose.</p> <p>3.2 Permits.</p> <p>3.21 A permit is required for the construction of buildings or building additions (including construction of decks and signs), the installation and/or alteration of sewage treatment systems, and those grading and filling activities not exempted by Section 8.3 of this ordinance.</p> <p>3.22 A certificate of compliance, consistent with Minnesota Rules Chapter 7082.0700 Subp. 3, is required whenever a permit or variance of any type is required for any improvement on or use of the property. A sewage treatment system shall be considered compliant if the only deficiency is the system’s improper setback from the ordinary high water level.</p> <p>3.3 Application materials. Application for permits and other zoning applications such as variances shall be made to the <i>(insert designated official)</i> on the forms provided. The application shall include the necessary information so that the <i>(insert designated official)</i> can evaluate how the application complies with the provisions of this ordinance.</p> <p>3.4 Certificate of Zoning Compliance. The <i>(insert designated official)</i> shall issue a certificate of zoning compliance for each activity requiring a permit as specified in Section 3.2 of this ordinance. This certificate will specify that the use of land conforms to the requirements of this ordinance. Any use, arrangement, or construction at variance with that authorized by permit shall be deemed a violation of this ordinance and shall be punishable as provided in Section 2.2 of this ordinance.</p> <p>3.5 Variances. Variances may only be granted in accordance with Minnesota Statutes, Section 394.27 (for counties) or Section 462.357 (for municipalities) and are subject to the following:</p> <p>3.51 A variance may not circumvent the general purposes and intent of this ordinance; and</p> <p>3.52 For properties with existing sewage treatment systems, a certificate of compliance, consistent with Minnesota Rules Chapter 7082.0700 Subp. 3, is required for variance approval. A sewage treatment system shall be considered compliant if the only deficiency is the system’s improper setback from the ordinary high water level.</p>	<p><i>3.1. All purpose statements in the model are optional but strongly encouraged. They help explain the intent of zoning provisions, which is useful to local governments for explaining provisions to property owners and developing findings for variance decisions.</i></p> <p><i>3.5. The statutory criteria for evaluating variance applications are broad, one-size-fits-all, for use with all variances. Variances to shoreland protection standards affect public waters, resources to be protected for all state residents. Because of the special status of these waters, communities may want to establish special criteria for evaluating shoreland variances to ensure variances do not adversely affect public water resources.</i></p>

Ordinance Language	Commentary
<p>3.6 Conditional Uses. All conditional uses in the shoreland area are subject to a thorough evaluation of the waterbody and the topographic, vegetation, and soil conditions to ensure:</p> <p>3.61 The prevention of soil erosion or other possible pollution of public waters, both during and after construction;</p> <p>3.62 The visibility of structures and other facilities as viewed from public waters is limited;</p> <p>3.63 There is adequate water supply and on-site sewage treatment; and</p> <p>3.64 The types, uses, and numbers of watercraft that the project will generate are compatible in relation to the suitability of public waters to safely accommodate these watercraft.</p> <p>3.7 Mitigation.</p> <p>3.71 In evaluating all variances, conditional uses, zoning and building permit applications, the zoning authority shall require the property owner to address, when appropriate, the following conditions, when related to and proportional to the impact, to meet the purpose of this ordinance, to protect adjacent properties, and the public interest:</p> <p>A. Advanced storm water runoff management treatment;</p> <p>B. Reducing impervious surfaces;</p> <p>C. Increasing setbacks from the ordinary high water level;</p> <p>D. Restoration of wetlands;</p> <p>E. Limiting vegetation removal and/or riparian vegetation restoration;</p> <p>F. Provisions for the location, design, and use of structures, sewage treatment systems, water supply systems, watercraft launching and docking areas, and parking areas; and</p> <p>G. Other conditions the zoning authority deems necessary.</p> <p>3.72 In evaluating plans to construct sewage treatment systems, roads, driveways, structures, or other improvements on steep slopes, conditions to prevent erosion and to preserve existing vegetation screening of structures, vehicles, and other facilities as viewed from the surface of public waters assuming summer, leaf-on vegetation shall be attached to permits.</p> <p>3.8 Nonconformities.</p> <p>3.81 All legally established nonconformities as of the date of this ordinance may continue, but will be managed according to Minnesota Statutes, Sections 394.36 Subd. 5 (for counties) and 462.357 Subd. 1e (for cities) and other regulations of this community for alterations and additions; repair after damage; discontinuance of use; and intensification of use.</p>	<p>3.71. <i>This language is consistent with Minnesota Statute, sections 394.36 Subd. 5(f) (counties) and 462.357 Subd. 1e(i)(municipalities). Conditions come verbatim from statute or are a slight modification of statutory conditions and those from 6120.3900 Subp. 3A (b). Optional deletion provides stronger authority to apply conditions. The phrase “when related to and proportional to the impact” makes clear that conditions will be appropriately applied.</i></p> <p>3.81. <i>Variances to statutory requirements (394.36 Subd. 5 (d) or 462.357 Subd. 1e (g)) to combine contiguous nonconforming lots under common ownership are prohibited.</i></p>

Ordinance Language	Commentary
<p>3.82 All additions or expansions to the outside dimensions of an existing nonconforming structure must meet the setback, height, and other requirements of Sections 5.0 to 8.0 of this ordinance. Any deviation from these requirements must be authorized by a variance.</p>	<p>3.82. Consistent with Minnesota Statutes, sections 394.36, Subd. 4 (counties) and 462.357, Subd. 1e (municipalities).</p>
<p>3.9 Notifications to the Department of Natural Resources.</p>	<p>3.9. DNR's preferred notification method is via email to the appropriate DNR Area Hydrologist.</p>
<p>3.91 All amendments to this shoreland ordinance must be submitted to the Department of Natural Resources for review and approval for compliance with the statewide shoreland management rules. The (insert local government name) will submit the proposed ordinance amendments to the commissioner or the commissioner's designated representative at least 30 days before any scheduled public hearings.</p>	<p>3.91. Submittal of ordinances and amendments to the DNR is required under statute. The optional language provides for submittal of amendments earlier than the 10 day notification required of public hearings (Section 3.92). Submittal of amendments 30 days prior to public hearing is mutually beneficial; it provides DNR with sufficient time to complete a review and make an approval decision in time for public hearings, thus minimizing delays in the local government's adoption schedule.</p>
<p>3.92 All notices of public hearings to consider variances, ordinance amendments, or conditional uses under shoreland management controls must be sent to the commissioner or the commissioner's designated representative at least ten (10) days before the hearings. Notices of hearings to consider proposed subdivisions/plats must include copies of the subdivision/plat.</p>	
<p>3.93 All approved ordinance amendments and subdivisions/plats, and final decisions approving variances or conditional uses under local shoreland management controls must be sent to the commissioner or the commissioner's designated representative and postmarked within ten days of final action. When a variance is approved after the Department of Natural Resources has formally recommended denial in the hearing record, the notification of the approved variance shall also include the summary of the public record/testimony and the findings of facts and conclusions which supported the issuance of the variance.</p>	
<p>3.94 Any request to change the shoreland management classification of public waters within (insert local government name) must be sent to the commissioner or the commissioner's designated representative for approval, and must include a resolution and supporting data as required by Minnesota Rules, part 6120.3000, subp.4.</p>	<p>3.94. Reclassifications require a formal request, and are usually only approved to correct an error in the original classification. Provisions for implementation flexibility (6120.2800, Subp. 3), rather than reclassification, may be used for requesting changes in standards for certain areas. Local governments may also adopt special protection classifications, a useful approach for applying higher standards around waters in need of greater protection.</p>
<p>3.95 Any request to reduce the boundaries of shorelands of public waters within (insert local government name) must be sent to the commissioner or the commissioner's designated representative for approval and must include a resolution and supporting data. The boundaries of shorelands may be reduced when the shoreland of water bodies with different classifications overlap. In these cases, the topographic divide between the water bodies shall be used for adjusting the boundaries.</p>	
<p>3.10 Mandatory EAW. An Environmental Assessment Worksheet consistent with Minnesota Rules, Chapter 4410 must be prepared for projects meeting the thresholds of Minnesota Rules, part 4410.4300, Subparts 19a, 20a, 25, 27, 28, 29, and 36a.</p>	<p>3.10. Mandatory EAWs are required for many projects in shorelands. In most cases, the local government is the Responsible Government Unit (RGU) for completing the EAW.</p>
<p>4.0 SHORELAND CLASSIFICATION SYSTEM AND LAND USES</p>	
<p>4.1 Shoreland Classification System.</p>	<p>4.1. The ordinance must list all public water shoreland within the community's jurisdiction including public waters not in the jurisdiction but with surrounding shoreland that is in the jurisdiction.</p>

Ordinance Language	Commentary																															
<p>4.11 Purpose. To ensure that shoreland development on the public waters of <i>(insert local government name)</i> is regulated consistent with the classifications assigned by the commissioner under Minnesota Rules, part 6120.3300.</p> <p>4.12 The shoreland area for the waterbodies listed in Sections 4.13 to 4.15 are defined in Section 2.550 and are shown on the Official Zoning Map.</p> <p>4.13 Lakes are classified as follows:</p>	<p>4.12. Optional provision. It is helpful to show the shoreland areas for lakes and rivers on the zoning map along with their classifications.</p> <p>4.13. Cities must list lakes that are 10 or more acres, and counties 25 or more acres (Minnesota Rules, part 6120.2500, Subp. 13). Cities that annex land or townships that incorporate with lakes that are 10 acres or more must amend their ordinances to include those lakes. List lakes along with the DNR public waters ID number.</p> <p>4.14. List river names here along with township, range and section number of the river reach.</p> <p>Optional. Communities with sensitive shorelines or waters that are at risk to degradation due to nonpoint source nutrient pollution may designate those waters (lakes and rivers) with a special protection classification and regulate the shoreland of those waters with more restrictive development standards such as lot area, setback, riparian buffers, etc.</p>																															
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<p>4.14 Rivers and Streams are classified as follows:</p>																																
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<p>4.15 All public rivers and streams shown on the Public Waters Inventory Map for <i>(insert name of county)</i>, a copy of which is adopted by reference, not given a classification in Section 4.14 shall be considered "Tributary."</p> <p>4.2 Land Uses.</p> <p>4.21 Purpose. To identify land uses that are compatible with the protection and preservation of shoreline resources in order to conserve the economic and environmental values of shoreland and sustain water quality.</p> <p>4.22 Shoreland district land uses listed in Sections 4.23 and 4.24 are regulated as:</p> <p>A. Permitted uses (P). These uses are allowed, provided all standards in this ordinance are followed;</p> <p>B. Conditional uses (C). These uses are allowed through a conditional use permit. The use must be evaluated according to the criteria in Section 3.6 of this ordinance and any additional conditions listed in this ordinance; and</p> <p>C. Not permitted uses (N). These uses are prohibited.</p> <p>4.23 Land uses for lake classifications:</p>	<p>4.15. <i>Instead of this provision, local governments may list all tributaries in the table in Section 4.14, and/or provide a map of all watercourses subject to the tributary class. This is a practical alternative if the number of tributaries is relatively small.</i></p> <p>4.22. <i>Land uses in the shoreland district are listed as permitted, not permitted, or conditional for each water body classification. Land uses for each lake classification are in Section 4.23, and uses for each river classification are in 4.24.</i></p> <p><i>Local governments may further clarify if the listed "permitted" uses are allowed <u>with or without a permit</u>. Uses listed as "conditional" require a Conditional Use Permit (CUP). Underlying zoning should be consistent with these uses to alleviate potential conflicts.</i></p>																																						
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Ordinance Language				Commentary
Industrial	C	C	N	<i>New feedlots are prohibited in shorelands per Minnesota Rules, part 7020. Minnesota statute 116.0711 allows the resumption of existing feedlots.</i>
Agricultural: cropland and pasture	P	P	P	
Agricultural feedlots - New	N	N	N	
Agricultural feedlots - Expansion or resumption of existing	C	C	C	
Forest management	P	P	P	
Forest land conversion	C	C	C	
Extractive use	C	C	C	
Mining of metallic minerals and peat	P	P	P	

4.24 Land uses for river and stream classifications:

Land Uses	Remote	Forested	Transition	Agriculture	Urban	Tributary
Single residential	P	P	P	P	P	P
Duplex, triplex, quad residential	C	P	P	P	P	P
Residential PUD	C	C	C	C	C	C
Water-dependent commercial - As accessory to a residential planned unit development	C	C	C	C	C	C
Commercial	C	C	C	C	P	P
Commercial PUD - Limited expansion of a commercial PUDs involving up to six additional dwelling units or sites may be allowed as a permitted use provided the provisions of Section 10.0 of this ordinance are satisfied.	C	C	C	C	C	C
Parks & historic sites	C	C	C	C	C	C
Public, semipublic	C	C	C	C	P	P
Industrial	N	C	N	N	C	C

Ordinance Language							Commentary
Agricultural: cropland and pasture	P	P	P	P	P	P	<p><i>New feedlots are prohibited in shorelands per Minnesota Rules, part 7020. Minnesota statute 116.0711 allows the resumption of existing feedlots.</i></p> <p><i>5.0. The uses and their special conditions in this section must be in the shoreland ordinance if the use is allowed. If not, the provision may be excluded from this section, however, it should be added to the land use tables in 4.23 and 4.24 and listed as "N." Note that some of these uses are conditional uses and must be identified as such in use tables 4.23 and 4.24.</i></p> <p><i>5.11.D. This provision was modified from rules for consistency with the Supreme Court decision in Reed vs Town of Gilbert regarding the first amendment and signage.</i></p>
Agricultural feedlots - New	N	N	N	N	N	N	
Agricultural feedlots - Expansion or resumption of existing	C	C	C	C	C	C	
Forest management	P	P	P	P	P	P	
Forest land conversion	C	C	C	C	C	C	
Extractive use	C	C	C	C	C	C	
Mining of metallic minerals and peat	P	P	P	P	P	P	
<p>5.0 SPECIAL LAND USE PROVISIONS</p> <p>5.1 Commercial, Industrial, Public, and Semipublic Use Standards.</p> <p>5.11 Water-dependent uses may be located on parcels or lots with frontage on public waters provided that:</p> <p>A. The use complies with provisions of Section 7.0;</p> <p>B. The use is designed to incorporate topographic and vegetative screening of parking areas and structures;</p> <p>C. Uses that require short-term watercraft mooring for patrons must centralize these facilities and design them to avoid obstructions of navigation and to be the minimum size necessary to meet the need; and</p> <p>D. Uses that depend on patrons arriving by watercraft may use signs and lighting, provided that:</p> <p>(1) Signs placed in or on public waters must only convey directional information or safety messages and may only be placed by a public authority or under a permit issued by the county sheriff; and</p> <p>(2) Signs placed within the shore impact zone are:</p> <p>(a) No higher than ten feet above the ground, and no greater than 32 square feet in size; and</p> <p>(b) If illuminated by artificial lights, the lights must be shielded or directed to prevent illumination across public waters; and</p>							

Ordinance Language	Commentary
<p>(3) Other lighting may be located within the shore impact zone or over public waters if it is used to illuminate potential safety hazards and is shielded or otherwise directed to prevent direct illumination across public waters. This does not preclude use of navigational lights.</p> <p>5.12 Commercial, industrial, public, and semi-public uses that are not water-dependent must be located on lots or parcels without public waters frontage, or, if located on lots or parcels with public waters frontage, must either be set back double the ordinary high water level setback or be substantially screened from view from the water by vegetation or topography, assuming summer, leaf-on conditions.</p> <p>5.2 Agriculture Use Standards.</p> <p>5.21 Buffers.</p> <p>A. The shore impact zone for parcels with permitted agricultural land uses is equal to a line parallel to and 50 feet from the ordinary high water level.</p> <p>B. General cultivation farming, grazing, nurseries, horticulture, truck farming, sod farming, and wild crop harvesting are permitted uses if steep slopes and shore and bluff impact zones are maintained in perennial vegetation or operated under an approved conservation plan that includes alternative riparian water quality practices consistent with the field office technical guides of the local soil and water conservation district or the Natural Resource Conservation Service, and as approved by the local soil and water conservation district.</p> <p>5.22 New animal feedlots are not allowed in shoreland. Modifications or expansions to existing feedlots or resumption of old feedlots are <u>conditional uses</u> and must meet the following standards:</p> <p>A. Feedlots must be designed consistent with Minnesota Rules, Chapter 7020;</p> <p>B. Feedlots must not further encroach into the existing ordinary high water level setback or the bluff impact zone and must not expand to a capacity of 1,000 animal units or more; and,</p> <p>C. Old feedlots not currently in operation may resume operation consistent with Minnesota Statutes, Section 116.0711.</p> <p>5.3 Forest Management Standards.</p> <p>5.31 The harvesting of timber and associated reforestation must be conducted consistent with the applicable provisions of the Sustaining Minnesota Forest Resources: Voluntary Site-Level Forest Management Guidelines for Landowners, Loggers and Resource Managers.</p> <p>5.32 Intensive vegetation clearing for forest land conversion to another use is a conditional use subject to an erosion control and sedimentation plan developed and approved by the soil and water conservation district.</p> <p>5.4 Extractive Use Standards. Extractive uses are conditional uses and must meet the following standards:</p>	<p><i>5.21. The DNR will consider a 50-foot average, 30-foot minimum buffer and language defining alternative water quality practices consistent with Minnesota Statutes, section 103F.48 as being consistent with 6120.3300, Subp. 7. Please see guidance and model language for acceptable language..</i></p> <p><i>5.21.B. Optional deletion. Eliminating the option to use alternative practices instead of the required buffer will reduce nutrient runoff and improve surface water quality.</i></p>

Ordinance Language	Commentary																									
<p>5.41. Site Development and Restoration Plan. A site development and restoration plan must be developed, approved, and followed over the course of operation. The plan must:</p> <ul style="list-style-type: none"> A. Address dust, noise, possible pollutant discharges, hours and duration of operation, and anticipated vegetation and topographic alterations; B. Identify actions to be taken during operation to mitigate adverse environmental impacts, particularly erosion; and C. Clearly explain how the site will be rehabilitated after extractive activities end. <p>5.42 Setbacks for Processing Machinery. Processing machinery must meet structure setback standards from ordinary high water levels and from bluffs.</p> <p>5.5 Metallic Mining Standards. Mining of metallic minerals and peat is a permitted use provided the provisions of Minnesota Statutes, Sections 93.44 to 93.51, are satisfied.</p>																										
<p>6.0 DIMENSIONAL AND GENERAL PERFORMANCE STANDARDS</p>																										
<p>6.1 Purpose. To establish dimensional and performance standards that protect shoreland resources from impacts of development.</p>																										
<p>6.2 Lot Area and Width Standards. After the effective date of this ordinance, all new lots must meet the minimum lot area and lot width requirements in Sections 6.25 and 6.26, subject to the following standards:</p>																										
<p>6.21 Only lands above the ordinary high water level can be used to meet lot area and width standards;</p>																										
<p>6.22 Lot width standards must be met at both the ordinary high water level and at the building line;</p>																										
<p>6.23 The sewer lot area dimensions can only be used if publicly owned sewer system service is available to the property;</p>																										
<p>6.24 Residential subdivisions with dwelling unit densities exceeding those in Sections 6.25 and 6.26 are allowed only if designed and approved as residential PUDs under Section 10.0 of this ordinance; and</p>																										
<p>6.25 Lake Minimum Lot Area and Width Standards:</p>																										
<table border="1"> <thead> <tr> <th colspan="5" style="background-color: #ffffcc;">General Development – No Sewer</th> </tr> <tr> <th></th> <th colspan="2">Riparian</th> <th colspan="2">Nonriparian</th> </tr> <tr> <th></th> <th>Lot Area (sf)</th> <th>Lot Width (ft)</th> <th>Lot Area (sf)</th> <th>Lot Width (ft)</th> </tr> </thead> <tbody> <tr> <td>Single</td> <td>20,000</td> <td>100</td> <td>40,000</td> <td>150</td> </tr> <tr> <td>Duplex</td> <td>40,000</td> <td>180</td> <td>80,000</td> <td>265</td> </tr> </tbody> </table>	General Development – No Sewer						Riparian		Nonriparian			Lot Area (sf)	Lot Width (ft)	Lot Area (sf)	Lot Width (ft)	Single	20,000	100	40,000	150	Duplex	40,000	180	80,000	265	<p>6.25. Local governments may want to require larger lot area and width standards than those listed. Larger lots reduce density and risk of surface water use overcrowding and preserve lakeshore character. Larger lots also reduce the amount of development and impervious surfaces along sensitive shorelines providing protection to waters sensitive to nutrient pollution.</p>
General Development – No Sewer																										
	Riparian		Nonriparian																							
	Lot Area (sf)	Lot Width (ft)	Lot Area (sf)	Lot Width (ft)																						
Single	20,000	100	40,000	150																						
Duplex	40,000	180	80,000	265																						

Ordinance Language						Commentary
	Triplex	60,000	260	120,000	375	
	Quad	80,000	340	160,000	490	
General Development – Sewer						
	Riparian		Nonriparian			
	Lot Area (sf)	Lot Width (ft)	Lot Area (sf)	Lot Width (ft)		
	Single	15,000	75	10,000	75	
	Duplex	26,000	135	17,500	135	
	Triplex	38,000	195	25,000	190	
	Quad	49,000	255	32,500	245	
Recreational Development – No Sewer						
	Riparian		Nonriparian			
	Lot Area (sf)	Lot Width (ft)	Lot Area (sf)	Lot Width (ft)		
	Single	40,000	150	40,000	150	
	Duplex	80,000	225	80,000	265	
	Triplex	120,000	300	120,000	375	
	Quad	160,000	375	160,000	490	
Recreational Development – Sewer						
	Riparian		Nonriparian			
	Lot Area (sf)	Lot Width (ft)	Lot Area (sf)	Lot Width (ft)		
	Single	20,000	75	15,000	75	
	Duplex	35,000	135	26,000	135	
	Triplex	50,000	195	38,000	190	
	Quad	65,000	255	49,000	245	

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Natural Environment – No Sewer				
	Riparian		Nonriparian	
	Lot Area (sf)	Lot Width (ft)	Lot Area (sf)	Lot Width (ft)
Single	80,000	200	80,000	200
Duplex	120,000	300	160,000	400
Triplex	160,000	400	240,000	600
Quad	200,000	500	320,000	800
Natural Environment – Sewer				
	Riparian		Nonriparian	
	Lot Area (sf)	Lot Width (ft)	Lot Area (sf)	Lot Width (ft)
Single	40,000	125	20,000	125
Duplex	70,000	225	35,000	220
Triplex	100,000	325	52,000	315
Quad	130,000	425	65,000	410

6.26 **River/Stream Minimum Lot Width Standards. There are no minimum lot area requirements for rivers and streams. The lot width standards in feet are:**

	Remote	Forested	Transition	Agricultural	Urban & Tributary	
					No Sewer	Sewer
Single	300	200	250	150	100	75
Duplex	450	300	375	225	150	115
Triplex	600	400	500	300	200	150
Quad	750	500	625	375	250	190

6.26. Local governments may want to establish minimum lot area requirements and require larger lot width and area standards than those listed.

Ordinance Language	Commentary						
<p>6.3 Special Residential Lot Provisions.</p> <p>6.31 Subdivisions of duplexes, triplexes, and quads are conditional uses on Natural Environment Lakes and must also meet the following standards:</p> <ul style="list-style-type: none"> A. Each building must be set back at least 200 feet from the ordinary high water level; B. Each building must have common sewage treatment and water systems in one location and serve all dwelling units in the building; C. Watercraft docking facilities for each lot must be centralized in one location and serve all dwelling units in the building; and D. No more than 25 percent of a lake’s shoreline can be in duplex , triplex, or quad developments. <p>6.32. One guest cottage may be allowed on lots meeting or exceeding the duplex lot area and width dimensions presented in Sections 6.25 and 6.26, provided the following standards are met:</p> <ul style="list-style-type: none"> A. For lots exceeding the minimum lot dimensions of duplex lots, the guest cottage must be located within an area equal to the smallest duplex-sized lot that could be created including the principal dwelling unit; B. A guest cottage must not cover more than 700 square feet of land surface and must not exceed 15 feet in height; and C. A guest cottage must be located or designed to reduce its visibility as viewed from public waters and adjacent shorelands by vegetation, topography, increased setbacks or color, assuming summer leaf-on conditions. <p>6.33 Controlled access lots are permissible if created as part of a subdivision and in compliance with the following standards:</p> <ul style="list-style-type: none"> A. The lot must meet the area and width requirements for residential lots, and be suitable for the intended uses of controlled access lots as provided in item D; B. If docking, mooring, or over-water storage of more than six (6) watercraft is to be allowed at a controlled access lot, then the width of the lot (keeping the same lot depth) must be increased by a percentage of the requirements for riparian residential lots for each watercraft beyond six, consistent with the following table: <table border="1" data-bbox="436 1279 1031 1487"> <thead> <tr> <th colspan="2">Controlled Access Lot Frontage Requirements</th> </tr> <tr> <th>Ratio of lake size to shore length (acres/mile)</th> <th>Required percent increase in frontage</th> </tr> </thead> <tbody> <tr> <td>Less than 100</td> <td>25%</td> </tr> </tbody> </table>	Controlled Access Lot Frontage Requirements		Ratio of lake size to shore length (acres/mile)	Required percent increase in frontage	Less than 100	25%	<p>6.31. <i>If a community does not have NE lakes this provision may be omitted. If a community has NE lakes but prohibits duplex, triplex or quads on NE lakes, this provision may be omitted. However, duplex, triplex or quad structures must be listed in the land use tables 4.23 and 4.24 as “N.”</i></p> <p>6.32. <i>If a community does not allow guest cottages or secondary dwelling units, this provision may be omitted. However, guest cottages must be listed in the land use tables 4.23 and 4.24 as “N.”</i></p> <p>6.33. <i>Controlled access lots are the only method to allow riparian access for non-riparian property and are only allowed at the time of subdivision. Creation of access easements on riparian lots to allow access to the water are not permitted. Communities concerned about overcrowding of surface waters may choose to prohibit controlled access lots. If a community does not allow controlled access lots, this provision may be omitted. However, controlled access lots must be listed in the land use tables in 4.23 and 4.24 as “N.”</i></p>
Controlled Access Lot Frontage Requirements							
Ratio of lake size to shore length (acres/mile)	Required percent increase in frontage						
Less than 100	25%						

Ordinance Language			Commentary																						
	100 – 200	20%																							
	201 – 300	15%																							
	301 – 400	10%																							
	Greater than 400	5%																							
<p>C. The lot must be jointly owned by all purchasers of lots in the subdivision or by all purchasers of nonriparian lots in the subdivision who are provided riparian access rights on the access lot; and</p> <p>D. Covenants or other equally effective legal instruments must be developed that:</p> <p>(1) Specify which lot owners have authority to use the access lot;</p> <p>(2) Identify what activities are allowed. The activities may include watercraft launching, loading, storage, beaching, mooring, docking, swimming, sunbathing, or picnicking;</p> <p>(3) Limit the total number of vehicles allowed to be parked and the total number of watercraft allowed to be continuously moored, docked, or stored over water;</p> <p>(4) Require centralization of all common facilities and activities in the most suitable locations on the lot to minimize topographic and vegetation alterations; and</p> <p>(5) Require all parking areas, storage buildings, and other facilities to be screened by vegetation or topography as much as practical from view from the public water, assuming summer, leaf-on conditions.</p>																									
<p>6.4 Placement, Height, and Design of Structures.</p> <p>6.41 Placement of Structures and Sewage Treatment Systems on Lots. When more than one setback applies to a site, structures and facilities must be located to meet all setbacks, and comply with the following OHWL setback provisions:</p>																									
	<table border="1"> <thead> <tr> <th rowspan="2">Classification</th> <th colspan="2">Structures</th> <th rowspan="2">Sewage Treatment System</th> </tr> <tr> <th>No Sewer</th> <th>Sewer</th> </tr> </thead> <tbody> <tr> <td colspan="4">Lakes</td> </tr> <tr> <td>Natural Environment</td> <td>150</td> <td>150</td> <td>150</td> </tr> <tr> <td>Recreational Development</td> <td>100</td> <td>75</td> <td>75</td> </tr> <tr> <td>General Development</td> <td>75</td> <td>50</td> <td>50</td> </tr> </tbody> </table>		Classification	Structures		Sewage Treatment System	No Sewer	Sewer	Lakes				Natural Environment	150	150	150	Recreational Development	100	75	75	General Development	75	50	50	<p><i>6.4. Local governments may apply stricter standards than those listed here. Increasing structure setbacks can help reduce the risk of erosion in near shore areas and enhance the aesthetic character of lakes and shorelands. Larger setbacks also allow room for larger riparian buffers. Increasing septic system setbacks increases reduces the risk of subsurface effluent reaching surface waters.</i></p>
Classification	Structures			Sewage Treatment System																					
	No Sewer	Sewer																							
Lakes																									
Natural Environment	150	150	150																						
Recreational Development	100	75	75																						
General Development	75	50	50																						

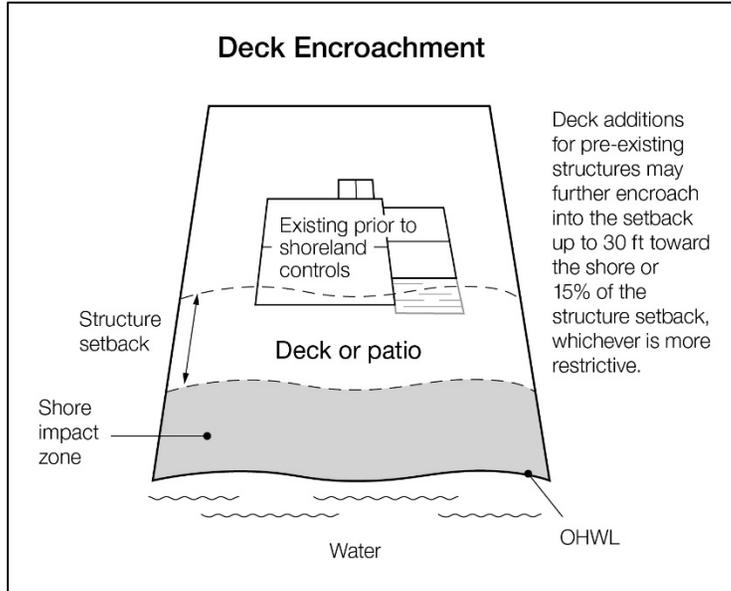
Ordinance Language				Commentary
Rivers and Streams				
Remote	200	200	150	
Forested and Transition	150	150	100	
Agriculture, Urban and Tributary	100	50	75	
<p>A. OHWL Setbacks. Structures, impervious surfaces, and sewage treatment systems must meet setbacks from the Ordinary High Water Level (OHWL), except that one water-oriented accessory structure or facility, designed in accordance with Section 7.3 of this ordinance, may be set back a minimum distance of ten (10) feet from the OHWL:</p> <p>B. Setback averaging. Where structures exist on the adjoining lots on both sides of a proposed building site, structure setbacks may be altered without a variance to conform to the adjoining setbacks from the OHWL, provided the proposed structure is not located in a shore impact zone or in a bluff impact zone;</p>				<p>6.41.A. <i>Optional language. Keeping impervious surfaces away from the riparian edge is important for reducing the risk of erosion in the near shore area and nutrient loading into surface waters due to runoff. Section 7.3 of this ordinance allows for some exceptions for impervious surfaces in the near shore area.</i></p> <p>6.41.B. <i>Local governments may choose to exclude this provision from their ordinance or only apply it to nonconforming lots.</i></p>
<p>Structure Setback Averaging</p>				<p>6.41.C. <i>Local governments may choose to exclude this provision from their ordinance.</i></p>
<p>C. Setbacks of decks. Deck additions may be allowed without a variance to a structure not meeting the required setback from the ordinary high water level if all of the following criteria are met:</p> <ol style="list-style-type: none"> (1) The structure existed on the date the structure setbacks were established; (2) A thorough evaluation of the property and structure reveals no reasonable location for a deck meeting or exceeding the existing ordinary high water level setback of the structure; 				

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(3) The deck encroachment toward the ordinary high water level does not exceed 15 percent of the existing setback of the structure from the ordinary high water level or is no closer than 30 feet from the OHWL, whichever is more restrictive; and

(4) The deck is constructed primarily of wood, and is not roofed or screened.



D. *Additional structure setbacks.* Structures must also meet the following setbacks, regardless of the waterbody classification:

Setback from:	Setback (ft)
Top of bluff	30
Unplatted cemetery	50
Right-of-way line of federal, state, or county highway	50
Right-of-way line of town road, public street, or other roads not classified	20

6.41.D. Local governments may apply stricter standards than those listed. The presence of permeable soils on top of bedrock, combined with steep slopes or bluffs, can increase risk of septic effluent leakage out the sides of slopes or bluffs. Establishing septic system setbacks from the top of bluffs can reduce this risk.

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<p>E. Bluff Impact Zones. Structures, impervious surfaces, and accessory facilities, except stairways and landings, must not be placed within bluff impact zones.</p> <p>6.42 Height of Structures. All structures in residential districts in cities, except churches and nonresidential agricultural structures, must not exceed 25 feet in height.</p> <p>6.43 Lowest Floor Elevation. Structures must be placed in accordance with any floodplain regulations applicable to the site. Where these controls do not exist, the elevation to which the lowest floor, including basement, is placed or flood-proofed must be determined as follows:</p> <p>A. For lakes, by placing the lowest floor at a level at least three feet above the highest known water level, or three feet above the ordinary high water level, whichever is higher;</p> <p>B. For rivers and streams, by placing the lowest floor at least three feet above the highest known flood elevation. If data are not available, by placing the lowest floor at least three feet above the ordinary high water level, or by conducting a technical evaluation to determine effects of proposed construction upon flood stages and flood flows and to establish a flood protection elevation. Under all three approaches, technical evaluations must be done by a qualified engineer or hydrologist consistent with Minnesota Rules, parts 6120.5000 to 6120.6200 governing the management of flood plain areas. If more than one approach is used, the highest flood protection elevation determined must be used for placing structures and other facilities; and</p> <p>C. If the structure is floodproofed instead of elevated under items A and B above, then it must be floodproofed in accordance with Minnesota Rules, part 6120.5900 Subp. 3 (D).</p> <div data-bbox="352 878 1136 1341" data-label="Diagram"> <p>The diagram, titled "Lowest Floor Elevation", illustrates the required clearance for a building's lowest floor. It shows a cross-section of a building on a sloping terrain. A dashed horizontal line represents the "OHWL or highest known water level". A vertical double-headed arrow indicates a "3 ft" clearance between the "Lowest floor elevation" (also marked with a dashed line) and the OHWL line. The area below the OHWL line is labeled "Water".</p> </div> <p>6.44 Significant Historic Sites. No structure may be placed on a significant historic site in a manner that affects the values of the site unless adequate information about the site has been removed and documented in a public repository.</p>	<p>6.41.E. <i>Optional. Keeping impervious surfaces out of the bluff impact zone is important for reducing the risk of slope erosion and failure and nutrient loading into surface waters due to runoff.</i></p> <p>6.43. <i>These provisions apply to areas where there are no mapped floodplains or floodplain studies for determining elevations. If ALL shoreland areas in a community have been mapped/have studies, these provisions may be omitted.</i></p>

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<p>6.5 Water Supply and Sewage Treatment.</p> <p>6.51 Water supply. Any public or private supply of water for domestic purposes must meet or exceed standards for water quality of the Minnesota Department of Health and the Minnesota Pollution Control Agency.</p> <p>6.52 Sewage treatment. Any premises used for human occupancy must be connected to a publicly-owned sewer system, where available or comply with Minnesota Rules, Chapters 7080 – 7081.</p> <p>7.0 PERFORMANCE STANDARDS FOR PUBLIC AND PRIVATE FACILITIES</p> <p>7.1 Placement and Design of Roads, Driveways, and Parking Areas. Public and private roads and parking areas must be designed to take advantage of natural vegetation and topography to achieve maximum screening as viewed from public waters and comply with the following standards:</p> <p>7.11 Roads, driveways, and parking areas must meet structure setbacks and must not be placed within bluff and shore impact zones, when other reasonable and feasible placement alternatives exist. If no alternatives exist, they may be placed within these areas, and must be designed to minimize adverse impacts;</p> <p>7.12 Watercraft access ramps, approach roads, and access-related parking areas may be placed within shore impact zones provided the vegetative screening and erosion control conditions of this subpart are met;</p> <p>7.13 Private facilities must comply with the grading and filling provisions of Section 8.3 of this ordinance; and</p> <p>7.14 For public roads, driveways and parking areas, documentation must be provided by a qualified individual that they are designed and constructed to minimize and control erosion to public waters consistent with the field office technical guides of the local soil and water conservation district, or other applicable technical materials.</p> <p>7.2 Stairways, Lifts, and Landings. Stairways and lifts are the preferred alternative to major topographic alterations for achieving access up and down bluffs and steep slopes to shore areas. Stairways, lifts, and landings must meet the following design requirements:</p> <p>7.21 Stairways and lifts must not exceed four feet in width on residential lots. Wider stairways may be used for commercial properties, public recreational uses, and planned unit developments;</p> <p>7.22 Landings for stairways and lifts on residential lots must not exceed 32 square feet in area. Landings larger than 32 square feet may be used for commercial properties, public-space recreational uses, and planned unit developments;</p> <p>7.23 Canopies or roofs are not allowed on stairways, lifts, or landings;</p> <p>7.24 Stairways, lifts, and landings may be either constructed above the ground on posts or pilings, or placed into the ground, provided they are designed and built in a manner that ensures control of soil erosion;</p>	

Ordinance Language	Commentary
<p>7.25 Stairways, lifts, and landings must be located in the most visually inconspicuous portions of lots, as viewed from the surface of the public water assuming summer, leaf-on conditions, whenever practical; and</p> <p>7.26 Facilities such as ramps, lifts, or mobility paths for physically handicapped persons are also allowed for achieving access to shore areas, if they are consistent with the dimensional and performance standards of subitems 7.21 to 7.25 and the requirements of Minnesota Rules, Chapter 1341.</p> <p>7.3 Water-oriented Accessory Structures or Facilities. Each residential lot may have one water-oriented accessory structure or facility if it complies with the following provisions:</p> <p>7.31 The structure or facility must not exceed ten feet in height, exclusive of safety rails, and cannot occupy an area greater than 250 square feet. The structure or facility may include detached decks not exceeding eight feet above grade at any point or at-grade patios;</p> <p>7.32 The structure or facility is not in the Bluff Impact Zone;</p> <p>7.33 The setback of the structure or facility from the ordinary high water level must be at least ten feet;</p> <p>7.34 The structure is not a boathouse or boat storage structure as defined under Minnesota Statutes, Section 103G.245;</p> <p>7.35 The structure or facility must be treated to reduce visibility as viewed from public waters and adjacent shorelands by vegetation, topography, increased setbacks or color, assuming summer, leaf-on conditions;</p> <p>7.36 The roof may be used as an open-air deck with safety rails, but must not be enclosed with a roof or sidewalls or used as a storage area;</p> <p>7.37 The structure or facility must not be designed or used for human habitation and must not contain water supply or sewage treatment facilities;</p> <p>7.38 As an alternative for general development and recreational development waterbodies, water-oriented accessory structures used solely for storage of watercraft and boating-related equipment may occupy an area up to 400 square feet provided the maximum width of the structure is 20 feet as measured parallel to the shoreline; and</p> <p>7.39 Water-oriented accessory structures may have the lowest floor placed lower than the elevation specified in Section 6.43 if the structure is constructed of flood-resistant materials to the elevation, electrical and mechanical equipment is placed above the elevation and, if long duration flooding is anticipated, the structure is built to withstand ice action and wind-driven waves and debris.</p>	<p><i>7.3. If a community does not allow water-oriented accessory structures or facilities (WOAS), this provision may be omitted. However, such structures and facilities must be listed in the land use tables in 4.23 and 4.24 as "N."</i></p> <p><i>7.31. Optional addition. Including "patios" as a water-oriented accessory structure (WOAS) or facility makes patios subject to the limitations of this provision. This helps to simplify administration and limit the amount of impervious surfaces within the shore impact zone. "Patios" should only be included here if they are also included in the definition of WOAS in Section 2.558. It's acceptable to allocate the 250 SF limit between multiple structures and facilities.</i></p> <p><i>7.36. Optional addition. The additional language helps to clarify structure design and keep such structures smaller and less noticeable. Rules don't specifically prohibit roofs but they do say "must not be enclosed" A reasonable interpretation is that roofs constitute an enclosure.</i></p>
<p>8.0 VEGETATION AND LAND ALTERATIONS</p>	<p><i>8.0. These standards prohibit or limit vegetation removal in specified areas. These are difficult to administer and enforce, and once vegetation has</i></p>

Ordinance Language	Commentary
<p>8.1 Purpose. Alterations of vegetation and topography are regulated to prevent erosion into public waters, fix nutrients, preserve shoreland aesthetics, preserve historic values, prevent bank slumping, sustain water quality, and protect fish and wildlife habitat.</p> <p>8.2 Vegetation Management.</p> <p>8.21 Removal or alteration of vegetation must comply with the provisions of this subsection except for:</p> <ul style="list-style-type: none"> A. Vegetation alteration necessary for the construction of structures and sewage treatment systems under validly issued permits for these facilities; B. The construction of public roads and parking areas if consistent with Section 7.1 of this ordinance; C. Forest management uses consistent with Section 5.3 of this ordinance; and D. Agricultural uses consistent with Section 5.2 of this ordinance. <p>8.22 Intensive vegetation clearing in the shore and bluff impact zones and on steep slopes is prohibited. Intensive clearing outside of these areas is allowed if consistent with the forest management standards in Section 5.3 of this ordinance.</p> <p>8.23 Limited clearing and trimming of trees and shrubs in the shore and bluff impact zones and on steep slopes, is allowed to provide a view to the water from the principal dwelling and to accommodate the placement of stairways and landings, picnic areas, access paths, livestock watering areas, beach and watercraft access areas, and permitted water-oriented accessory structures or facilities, provided that:</p> <ul style="list-style-type: none"> A. The screening of structures, vehicles, or other facilities as viewed from the water, assuming summer, leaf-on conditions, is not substantially reduced; B. Existing shading of water surfaces along rivers is preserved; C. Cutting debris or slash shall be scattered and not mounded on the ground; and D. Perennial ground cover is retained. <p>8.24 Removal of trees, limbs, or branches that are dead, diseased, dying, or pose safety hazards is allowed without a permit.</p> <p>8.25 Fertilizer and pesticide runoff into surface waters must be minimized through use of vegetation, topography or both.</p> <p>8.3 Grading and Filling.</p> <p>8.31 Grading and filling activities must comply with the provisions of this subsection except for the construction of public roads and parking areas if consistent with Section 7.1 of this ordinance.</p> <p>8.32 Permit Requirements.</p>	<p><i>been removed there are no requirements to restore it. Communities concerned about the loss of riparian vegetation and habit, erosion control and aesthetics may consider requiring a permit for vegetation removal, and/or establishing a requirement to maintain a riparian buffer. Such a standard could include provisions for required width/depth and vegetation type as well as allowances for views and recreational areas.</i></p> <p><i>8.23 C and D. Optional. These standards provide additional guidance and practices that enhance habitat and protect water quality.</i></p> <p><i>8.3. Note that Minnesota Rules, part 4410.4300, Subp. 36a provides thresholds for mandatory EAWs for certain land conversions and alterations in shoreland. The local government is the Responsible Government Unit (RGU) unless otherwise specified.</i></p>

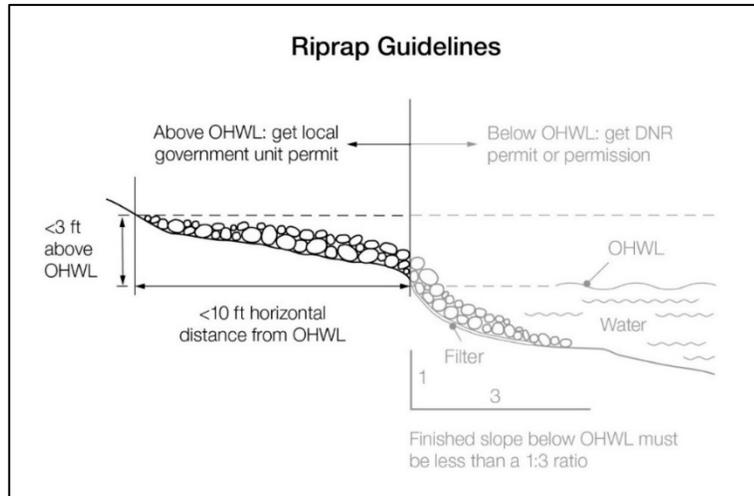
Ordinance Language	Commentary
<p>A. Grading, filling and excavations necessary for the construction of structures, sewage treatment systems, and driveways, if part of an approved permit, do not require a separate grading and filling permit. However, the standards in Section 8.33 of this ordinance must be incorporated into the permit.</p> <p>B. For all other work, including driveways not part of another permit, a grading and filling permit is required for:</p> <p>(1) the movement of more than ten (10) cubic yards of material on steep slopes or within shore or bluff impact zones; and</p> <p>(2) the movement of more than 50 cubic yards of material outside of steep slopes and shore and bluff impact zones.</p> <p>8.33 Grading, filling and excavation activities must meet the following standards:</p> <p>A. Grading or filling of any wetland must meet or exceed the wetland protection standards under Minnesota Rules, Chapter 8420 and any other permits, reviews, or approvals by other local state, or federal agencies such as watershed districts, the DNR or US Army Corps of Engineers;</p> <p>B. Land alterations must be designed and implemented to minimize the amount of erosion and sediment from entering surface waters during and after construction consistently by:</p> <p>(1) Limiting the amount and time of bare ground exposure;</p> <p>(2) Using temporary ground covers such as mulches or similar materials;</p> <p>(3) Establishing permanent vegetation cover as soon as possible;</p> <p>(4) Using sediment traps, vegetated buffer strips or other appropriate techniques;</p> <p>(5) Stabilizing altered areas to acceptable erosion control standards consistent with the field office technical guides of the soil and water conservation district;</p> <p>(6) Not placing fill or excavated material in a manner that creates unstable slopes. Plans to place fill or excavated material on steep slopes must be reviewed by qualified professionals for continued slope stability and must not create finished slopes of 30 percent or greater;</p> <p>(7) Fill or excavated material must not be placed in bluff impact zones;</p> <p>(8) Any alterations below the ordinary high water level of public waters must first be authorized by the commissioner under Minnesota Statutes, Section 103G;</p> <p>(9) Alterations of topography are only allowed if they are accessory to permitted or conditional uses and do not adversely affect adjacent or nearby properties; and</p>	<p><i>8.32.A. The 1999 model ordinance included driveways in this provision even though they are not included in rule. If ordinances include driveways in this provision they should also include the driveway language in 8.32.B. to communicate that driveways, as a stand alone project, do need a permit if they meet the stated disturbance thresholds.</i></p> <p><i>8.33. LGUs may reference their erosion and sediment control BMPs instead of using these, if similar.</i></p>

Ordinance Language

Commentary

(10) Placement of natural rock riprap, including associated grading of the shoreline and placement of a filter blanket, is permitted if:

- (a) the finished slope does not exceed three feet horizontal to one foot vertical;**
- (b) the landward extent of the riprap is within ten feet of the ordinary high water level; and**
- (c) the height of the riprap above the ordinary high water level does not exceed three feet.**



8.34 Connections to public waters. Excavations to connect boat slips, canals, lagoons, and harbors to public waters require a public waters permit and must comply with [Minnesota Rules, Chapter 6115](#).

8.4 Stormwater Management.

8.41 General Standards:

- A. When possible, existing natural drainageways, and vegetated soil surfaces must be used to convey, store, filter, and retain stormwater runoff before discharge to public waters.
- B. Development must be planned and conducted in a manner that will minimize the extent of disturbed areas, runoff velocities, erosion potential, and reduce and delay runoff volumes. Disturbed areas must be stabilized as soon as possible and appropriate facilities or methods used to retain sediment on the site.
- C. When development density, topography, soils, and vegetation are not sufficient to adequately handle stormwater runoff, constructed facilities such as settling basins, skimming devices, dikes, waterways, ponds and infiltration may be used. Preference must be given to surface drainage, vegetation, and infiltration rather than buried pipes and man-made materials and facilities.

8.34. DNR permits for public water excavations require that the local government have a DNR-approved shoreland zoning ordinance (Minnesota Statute, Section 103G.245) as a condition of a public water permit approval. The DNR may deny a permit for public waters excavations if there is no shoreland ordinance or if the current ordinance is not consistent with the ordinance the DNR has approved.

8.41. These are common stormwater management BMPs. If any of these specific provisions exist elsewhere in a local ordinance and are similar, they may be omitted here.

Ordinance Language	Commentary
<p>8.42 Specific Standards:</p> <p>A. Impervious surfaces of lots must not exceed 25 percent of the lot area.</p> <p>B. When constructed facilities are used for stormwater management, documentation must be provided by a qualified individual that they are designed and installed consistent with the field office technical guide of the local soil and water conservation district or the Minnesota Stormwater Manual, as applicable.</p> <p>C. New constructed stormwater outfalls to public waters must be consistent with Minnesota Rules, part 6115.0231.</p>	<p><i>8.42.A. Local governments may reduce the maximum amount of impervious surface allowed. Reducing the amount of allowed impervious surface will reduce the runoff volume and rate reducing the risk of erosion and nutrient loading into surface waters. Requiring a lower minimum (15% or 20%) only on new lots avoids the creation of nonconformities.</i></p>
<p>9.0 SUBDIVISION/PLATTING PROVISIONS</p> <p>9.1 Purpose. To ensure that new development minimizes impacts to shoreland resources and is safe and functional.</p> <p>9.2 Land suitability. Each lot created through subdivision, including planned unit developments authorized under Section 10.0 of this ordinance, must be suitable in its natural state for the proposed use with minimal alteration. A suitability analysis must be conducted for each proposed subdivision, including planned unit developments, to determine if the subdivision is suitable in its natural state for the proposed use with minimal alteration and whether any feature of the land is likely to be harmful to the health, safety, or welfare of future residents of the proposed subdivision or of the community.</p> <p>9.3 Consistency with other controls. Subdivisions and each lot in a subdivision shall meet all official controls so that a variance is not needed later to use the lots for their intended purpose.</p> <p>9.4 Water and Sewer Design Standards.</p> <p>9.41 A potable water supply and a sewage treatment system consistent with Minnesota Rules, Chapters 7080 – 7081 must be provided for every lot.</p> <p>9.42 Each lot must include at least two soil treatment and dispersal areas that support systems described in Minnesota Rules, parts 7080.2200 to 7080.223 or site conditions described in part 7081.0270, subparts 3 to 7, as applicable.</p> <p>9.43 Lots that would require use of holding tanks are prohibited.</p> <p>9.5 Information requirements.</p> <p>9.51 Topographic contours at ten-foot intervals or less from United States Geological Survey maps or more current sources, showing limiting site characteristics;</p> <p>9.52 The surface water features required in Minnesota Statutes, section 505.021, Subd. 1, to be shown on plats, obtained from United States Geological Survey quadrangle topographic maps or more current sources;</p>	<p><i>9.51. In addition to paper based topographic information, MnTOPO is a web-based application for viewing, printing and downloading high-resolution elevation data. It can also be used to generate elevation profiles for locating bluffs, watershed boundaries or other topographical features of interest.</i></p>

Ordinance Language	Commentary
<p>9.53 Adequate soils information to determine suitability for building and sewage treatment capabilities for every lot from the most current existing sources or from field investigations such as soil borings, percolation tests, or other methods;</p> <p>9.54 Information regarding adequacy of domestic water supply; extent of anticipated vegetation and topographic alterations; near-shore aquatic conditions, including depths, types of bottom sediments, and aquatic vegetation; and proposed methods for controlling stormwater runoff and erosion, both during and after construction activities;</p> <p>9.55 Location of 100-year flood plain areas and floodway districts from existing adopted maps or data; and</p> <p>9.56 A line or contour representing the ordinary high water level, the “toe” and the “top” of bluffs, and the minimum building setback distances from the top of the bluff and the lake or stream.</p> <p>9.6 Dedications. When a land or easement dedication is a condition of subdivision approval, the approval must provide easements over natural drainage or ponding areas for management of stormwater and significant wetlands.</p> <p>9.7 Platting. All subdivisions that cumulatively create five or more lots or parcels that are 2-1/2 acres or less in size shall be processed as a plat in accordance with Minnesota Statutes, Chapters 462.358 Subd. 3a (cities) and 505. No permit for construction of buildings or sewage treatment systems shall be issued for lots created after the adoption of this ordinance unless the lot was previously approved as part of a formal subdivision.</p> <p>9.8 Controlled Access Lots. Controlled access lots within a subdivision must meet or exceed the lot size criteria in Section 6.33 of this ordinance.</p>	<p>9.7. <i>Optional. “Cumulatively” is recommended to close a loophole where a parcel is subdivided at different times, each time creating fewer than 5 parcels to avoid the requirement to plat. Both Minnesota Statutes, sections 462 and 394 say official controls are to provide for “orderly” development. Applying this provision cumulatively to parcels supports this purpose.</i></p>
<p>10.0 PLANNED UNIT DEVELOPMENTS (PUDs)</p> <p>10.1 Purpose. To protect and enhance the natural and scenic qualities of shoreland areas during and after development and redevelopment of high density residential and commercial uses.</p> <p>10.2 Types of PUDs Permissible. Planned unit developments (PUDs) are allowed for new projects on undeveloped land, redevelopment of previously built sites, or conversions of existing buildings and land. Deviation from the minimum lot size standards of Section 6.2 of this ordinance is allowed if the standards in this Section are met.</p> <p>10.3 Processing of PUDs. Planned unit developments must be processed as a conditional use. An expansion to an existing commercial PUD involving 6 or less new dwelling units or sites since the date this ordinance was adopted is permissible as a permitted use provided the total project density does not exceed the allowable densities calculated in the project density evaluation procedures in Section 10.5. Approval cannot occur until all applicable environmental reviews are complete.</p> <p>10.4 Application for a PUD. The applicant for a PUD must submit the following documents prior to final action on the application request:</p>	<p><i>10.0 Shoreland PUDs require a conditional use permit (CUP) and are best thought of as a conditional use to allow higher density in shoreland areas. Provisions in this section are conditions of approval that are <u>required</u> to approve a Shoreland PUD (CUP) and cannot be weakened through the negotiation process of a local government’s general PUD ordinance. If a community does not allow PUDs in shoreland, Section 10.0 should be omitted. However, PUDs must be listed in the land use tables in 4.23 and 4.24 as “N.”</i></p> <p><i>If the local government does not have DNR-approved shoreland PUD provisions in its ordinance but still allows PUDs in shoreland, Minnesota Rules, part 6120.3800, Subp. 1 gives the DNR authority to review PUDs in shoreland for compliance with state rules. In this case, the ordinance must have a provision that states “The DNR must approve all PUDs located in shorelands.”</i></p>

Ordinance Language	Commentary														
<p>10.41 Site plan and/or plat showing:</p> <ul style="list-style-type: none"> A. Locations of property boundaries; B. Surface water features; C. Existing and proposed structures and other facilities; D. Land alterations; E. Sewage treatment and water supply systems (where public systems will not be provided); F. Topographic contours at ten-foot intervals or less; and G. Identification of buildings and portions of the project that are residential, commercial, or a combination of the two (if project combines commercial and residential elements). <p>10.42 A property owners association agreement (for residential PUD’s) with mandatory membership, and consistent with Section 10.6 of this ordinance.</p> <p>10.43 Deed restrictions, covenants, permanent easements or other instruments that:</p> <ul style="list-style-type: none"> A. Address future vegetative and topographic alterations, construction of additional buildings, beaching of watercraft, and construction of commercial buildings in residential PUDs; and B. Ensure the long-term preservation and maintenance of open space in accordance with the criteria and analysis specified in Section 10.6 of this ordinance. <p>10.44 A master plan/site plan describing the project and showing floor plans for all commercial structures.</p> <p>10.45 Additional documents necessary to explain how the PUD will be designed and will function.</p> <p>10.5 Density Determination. Proposed new or expansions to existing planned unit developments must be evaluated using the following procedures.</p> <p>10.51 Step 1. Identify Density Analysis Tiers. Divide the project parcel into tiers by drawing one or more lines parallel to the ordinary high water level at the following intervals, proceeding landward:</p>	<p>10.5. Determining and evaluating proposed project density may be complex depending on the project. Please review the Residential PUD Guidance Document for determining density and/or contact your Area Hydrologist for assistance.</p>														
<table border="1" data-bbox="163 1154 1423 1442"> <thead> <tr> <th data-bbox="163 1154 976 1211" rowspan="2">Classification</th> <th colspan="2" data-bbox="976 1154 1423 1211">Tier Depth</th> </tr> <tr> <th data-bbox="976 1211 1215 1268">No Sewer (ft)</th> <th data-bbox="1215 1211 1423 1268">Sewer (ft)</th> </tr> </thead> <tbody> <tr> <td data-bbox="163 1268 976 1325">General Development Lakes – 1st tier</td> <td data-bbox="976 1268 1215 1325">200</td> <td data-bbox="1215 1268 1423 1325">200</td> </tr> <tr> <td data-bbox="163 1325 976 1382">General Development Lakes – all other tiers</td> <td data-bbox="976 1325 1215 1382">267</td> <td data-bbox="1215 1325 1423 1382">200</td> </tr> <tr> <td data-bbox="163 1382 976 1442">Recreational Development Lakes</td> <td data-bbox="976 1382 1215 1442">267</td> <td data-bbox="1215 1382 1423 1442">267</td> </tr> </tbody> </table>	Classification	Tier Depth		No Sewer (ft)	Sewer (ft)	General Development Lakes – 1st tier	200	200	General Development Lakes – all other tiers	267	200	Recreational Development Lakes	267	267	
Classification		Tier Depth													
	No Sewer (ft)	Sewer (ft)													
General Development Lakes – 1st tier	200	200													
General Development Lakes – all other tiers	267	200													
Recreational Development Lakes	267	267													

Ordinance Language			Commentary
Natural Environment Lakes	400	320	
All Rivers	300	300	
<p>10.52 Step 2. Calculate Suitable Area for Development. Calculate the suitable area within each tier by excluding all wetlands, bluffs, or land below the ordinary high water level of public waters.</p> <p>10.53 Step 3. Determine Base Density:</p> <p>A. For residential PUDs, divide the suitable area within each tier by the minimum single residential lot area for lakes to determine the allowable number of dwelling units, or base density, for each tier. For rivers, if a minimum lot area is not specified, divide the tier width by the minimum single residential lot width.</p> <p>B. For commercial PUDs:</p> <p>(1) Determine the average area for each dwelling unit or dwelling site within each tier. Include both existing and proposed dwelling units and sites in the calculation.</p> <p>(a) For dwelling units, determine the average inside living floor area of dwelling units in each tier. Do not include decks, patios, garages, or porches and basements, unless they are habitable space.:</p> <p>(b) For dwelling sites (campgrounds), determine the area of each dwelling site as follows:</p> <p>I. For manufactured homes, use the area of the manufactured home, if known, otherwise use 1,000 sf.</p> <p>II. For recreational vehicles, campers or tents, use 400 sf.</p> <p>(2) Select the appropriate floor area/dwelling site area ratio from the following table for the floor area or dwelling site area determined in Section 10.53 B. 1.</p>			<p><i>10.53.A. For LGUs that have specified a minimum lot area for river lots, the process for determining base density for lakes and rivers will be the same – tier area divided by lot area.</i></p>

Ordinance Language		Floor Area/Dwelling Site Area Ratio			Commentary
Inside Living Floor Area or Dwelling Site Area (sf)		General Development Lakes w/Sewer – all tiers	General Development Lakes w/no sewer – all other tiers	Natural Environment Lakes	
		General Development Lakes w/no sewer – 1st tier	Recreational Development Lakes	Remote Rivers	
		Agricultural, Urban and Tributary Rivers	Forested and Transition Rivers		
	≤ 200	.040	.020	.010	
	300	.048	.024	.012	
	400	.056	.028	.014	
	500	.065	.032	.016	
	600	.072	.038	.019	
	700	.082	.042	.021	
	800	.091	.046	.023	
	900	.099	.050	.025	
	1,000	.108	.054	.027	
	1,100	.116	.058	.029	
	1,200	.125	.064	.032	
	1,300	.133	.068	.034	
1,400	.142	.072	.036		
≥ 1,500	.150	.075	.038		
<p>(3) Multiply the suitable area within each tier determined in Section 10.52 by the floor area or dwelling site area ratio to yield the total floor area or dwelling site area for each tier to be used for dwelling units or dwelling sites.</p> <p>(4) Divide the total floor area or dwelling site area for each tier calculated in Section 10.53 B. 3 by the average inside living floor area for dwelling units or dwelling site area determined in 10.53 B 1. This yields the allowable number of dwelling units or dwelling sites, or base density, for each tier.</p>					

Ordinance Language	Commentary												
<p>C. Allowable densities may be transferred from any tier to any other tier further from the waterbody, but must not be transferred to any tier closer to the waterbody.</p> <p>D. All PUDs with densities at or below the base density must meet the design standards in Section 10.6</p> <p>10.54 Step 4. Determine if the Site can Accommodate Increased Density:</p> <p>A. The following increases to the dwelling unit or dwelling site base densities determined Section 10.53 are allowed if the design criteria in Section 10.6 of this ordinance are satisfied as well as the standards in Section 10.54, item B:</p> <table border="1" data-bbox="338 472 911 854"> <thead> <tr> <th>Shoreland Tier</th> <th>Maximum density increase within each tier (percent)</th> </tr> </thead> <tbody> <tr> <td>1st</td> <td>50</td> </tr> <tr> <td>2nd</td> <td>100</td> </tr> <tr> <td>3rd</td> <td>200</td> </tr> <tr> <td>4th</td> <td>200</td> </tr> <tr> <td>5th</td> <td>200</td> </tr> </tbody> </table> <p>B. Structure setbacks from the ordinary high water level:</p> <p>(1) Are increased to at least 50 percent greater than the minimum setback; or</p> <p>(2) The impact on the waterbody is reduced an equivalent amount through vegetative management, topography, or additional acceptable means and the setback is at least 25 percent greater than the minimum setback.</p> <p>10.6 Design Criteria. All PUDs must meet the following design criteria.</p> <p>10.61 General Design Standards.</p> <p>A. All residential planned unit developments must contain at least five dwelling units or sites.</p> <p>B. On-site water supply and sewage treatment systems must be centralized and meet the standards in Section 6.5 of this ordinance. Sewage treatment systems must meet the setback standards of Section 6.41, item A of this ordinance.</p>	Shoreland Tier	Maximum density increase within each tier (percent)	1 st	50	2 nd	100	3 rd	200	4 th	200	5 th	200	<p><i>10.54. This provision allows very high densities leading to overcrowding of surface waters and increases the risk to phosphorus sensitive lakes and sensitive shoreline areas. Even without this density bonus provision, the Shoreland PUD allows for significantly greater density over standard lot and block subdivisions due to design flexibility of not requiring a minimum lot size. Local governments concerned about overuse of surface waters, degradation of water quality, compatibility with adjacent development, and overall community character should omit this density bonus provision.</i></p>
Shoreland Tier	Maximum density increase within each tier (percent)												
1 st	50												
2 nd	100												
3 rd	200												
4 th	200												
5 th	200												

Ordinance Language	Commentary
<p>C. Dwelling units or dwelling sites must be clustered into one or more groups and located on suitable areas of the development.</p> <p>D. Dwelling units or dwelling sites must be designed and located to meet the dimensional standards in Sections 6.3 and 6.4:</p> <p>E. Shore recreation facilities:</p> <p>(1) Must be centralized and located in areas suitable for them based on a suitability analysis.</p> <p>(2) The number of spaces provided for continuous beaching, mooring, or docking of watercraft must not exceed one for each allowable dwelling unit or site in the first tier (notwithstanding existing mooring sites in an existing commercially used harbor).</p> <p>(3) Launching ramp facilities, including a small dock for loading and unloading equipment, may be provided for use by occupants of dwelling units or sites located in other tiers.</p> <p>F. Structures, parking areas, and other facilities must be treated to reduce visibility as viewed from public waters and adjacent shorelands by vegetation, topography, increased setbacks, color, or other means acceptable to the local unit of government, assuming summer, leaf-on conditions. Vegetative and topographic screening must be preserved, if existing, or may be required to be provided.</p> <p>G. Accessory structures and facilities, except water oriented accessory structures, must meet the required structure setback and must be centralized.</p> <p>H. Water-oriented accessory structures and facilities may be allowed if they meet or exceed design standards contained in Section 7.3 of this ordinance and are centralized.</p> <p>10.62 Open Space Requirements.</p> <p>A. Open space must constitute at least 50 percent of the total project area and must include:</p> <p>(1) Areas with physical characteristics unsuitable for development in their natural state;</p> <p>(2) Areas containing significant historic sites or unplatted cemeteries;</p> <p>(3) Portions of the shore impact zone preserved in its natural or existing state as follows:</p> <p>(a) For existing residential PUD's, at least 50 percent of the shore impact zone</p> <p>(b) For new residential PUDs, at least 70 percent of the shore impact zone.</p> <p>(c) For all commercial PUD's, at least 50 percent of the shore impact zone.</p> <p>B. Open space may include:</p>	<p><i>10.62. Open space provides significant ecological, recreational, and economic benefits. Local governments may want to add additional specifications for its design and maintenance. This could include specifying the amount and type of native vegetation, its long-term maintenance, and connectivity to adjacent natural areas. Other options include limiting the amount of open space that may be used for high intensity recreational areas (trails, playgrounds, etc.), stormwater and sewage treatment, etc.</i></p> <p><i>10.62.B.(3). WCA or other non-public water wetlands may be included in open space. Public waters,</i></p>

Ordinance Language	Commentary
<p>(1) Outdoor recreational facilities for use by owners of dwelling units or sites, by guests staying in commercial dwelling units or sites, and by the general public;</p> <p>(2) Subsurface sewage treatment systems if the use of the space is restricted to avoid adverse impacts on the systems; and</p> <p>(3) Non-public water wetlands.</p> <p>C. Open space shall not include:</p> <p>(1) Dwelling sites or lots, unless owned in common by an owners association;</p> <p>(2) Dwelling units or structures, except water-oriented accessory structures or facilities;</p> <p>(3) Road rights-of-way or land covered by road surfaces and parking areas;</p> <p>(4) Land below the OHWL of public waters; and</p> <p>(5) Commercial facilities or uses.</p> <p>10.63 Open Space Maintenance and Administration Requirements.</p> <p>A. Open space preservation. The appearance of open space areas, including topography, vegetation, and allowable uses, must be preserved and maintained by use of deed restrictions, covenants, permanent easements, public dedication, or other equally effective and permanent means. The instruments must prohibit:</p> <p>(1) Commercial uses (for residential PUD's);</p> <p>(2) Vegetation and topographic alterations other than routine maintenance;</p> <p>(3) Construction of additional buildings or storage of vehicles and other materials; and</p> <p>(4) Uncontrolled beaching of watercraft.</p> <p>B. Development organization and functioning. Unless an equally effective alternative community framework is established, all residential planned unit developments must use an owners association with the following features:</p> <p>(1) Membership must be mandatory for each dwelling unit or dwelling site owner and any successive owner;</p> <p>(2) Each member must pay a pro rata share of the association's expenses, and unpaid assessments can become liens on units or dwelling sites;</p> <p>(3) Assessments must be adjustable to accommodate changing conditions; and</p>	<p>including public water wetlands, are already public open space and cannot be counted as open space.</p> <p>10.62.C.(1). Optional. "Dwelling sites" are not the same as lots (see definition in Section 2). Dwelling sites in a residential subdivision is the area within a lot not covered by a dwelling unit or structure (plus a buffer area around the sites or structures) that can be included as open space. Privately owned residential "open space" is very difficult to manage and maintain for ecological benefits, even with the required conservation easements. Communities concerned about developing and maintaining valuable habitat and water quality through open space preservation or about the ability to "administer" protection of open space on residential lots, may choose to add "lots, unless owned in common by an owners association."</p> <p>10.62.C.(4) clarifies that open space cannot include land below the OHWL of public waters. Use of the water above this land is already a "public" open space. The purpose of the open space is to set-aside and permanently protect private land for recreation, habitat, and water quality purposes and to offset higher development densities allowed.</p>

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<p style="text-align: center;">(4) The association must be responsible for insurance, taxes, and maintenance of all commonly owned property and facilities.</p> <p>10.64 Erosion Control and Stormwater Management.</p> <p>A. Erosion control plans must be developed and must be consistent with the provisions of Section 8.3 of this ordinance. Erosion control plans approved by a soil and water conservation district may be required if project size and site physical characteristics warrant.</p> <p>B. Stormwater management facilities must be designed and constructed to manage expected quantities and qualities of stormwater runoff. For commercial PUDs, impervious surfaces within any tier must not exceed 25 percent of the tier area, except that 35 percent impervious surface coverage may be allowed in the first tier of general development lakes with an approved stormwater management plan and consistency with Section 8.0 of this ordinance.</p> <p>10.7 Conversions. Local governments may allow existing resorts or other land uses and facilities to be converted to residential PUDs if all of the following standards are met:</p> <p>10.71 Proposed conversions must be evaluated using the same procedures for residential PUDs involving new construction. Inconsistencies between existing features of the development and these standards must be identified;</p> <p>10.72 Deficiencies involving water supply and sewage treatment, structure color, impervious coverage, open space, and shore recreation facilities must be corrected as part of the conversion or as specified in the conditional use permit;</p> <p>10.73 Shore and bluff impact zone deficiencies must be evaluated and reasonable improvements made as part of the conversion. These improvements must include, where applicable, the following:</p> <p>A. Removal of extraneous buildings, docks, or other facilities that no longer need to be located in shore or bluff impact zones;</p> <p>B. Remedial measures to correct erosion, improve vegetative cover and improve screening of buildings and other facilities as viewed from the water; and</p> <p>C. Conditions attached to existing dwelling units located in shore or bluff impact zones that preclude exterior expansions in any dimension or substantial alterations. The conditions must also provide for future relocation of dwelling units, where feasible, to other locations, meeting all setback and elevation requirements when they are rebuilt or replaced.</p> <p>10.74 Existing dwelling unit or dwelling site densities that exceed standards in Section 10.5 of this ordinance may be allowed to continue but must not be allowed to be increased, either at the time of conversion or in the future. Efforts must be made during the conversion to limit impacts of high densities by</p>	<p><i>10.64.B. Optional. Local governments may choose to require a 25% impervious surface limit in all tiers.</i></p>

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requiring seasonal use, improving vegetative screening, centralizing shore recreation facilities, installing new sewage treatment systems, or other means.	