Statement of Proposed Use & Project Description
4205 Xerxes Avenue South
Minneapolis MN, 55410
March 21, 2014

Contact Information:
Will Spencer/ Mark Larson, AIA
Rehkamp Larson Architects, Inc
2732 W 43rd St Minneapolis, MN 55410
Phone: 612. 825. 7275
Email: will@rehkamplarson.com

Owner:
Matthew Zarracina
2730 W Lake St #608
Minneapolis, MN 55410
Phone: 315. 378. 5528
Email: matthew.zarracina@gmail.com

Statement of Proposed Use & Project Description

The homeowner wishes to use this property to build a new single family home. The current dwelling on the property has severe structural issues and is near unlivable, per signed appraisal (attached). A new single family home has been designed, in keeping with all zoning rules and regulations, as well as taking into great consideration the scale and character of the existing housing stock of the neighborhood as well as soil, drainage and landscaping improvements.

Statement of hardship
4205 Xerxes Avenue South
Minneapolis, MN 55416
Matthew L Zarracina, owner
315.378.5528
matthew.zarracina@gmail.com

Mark Larson, applicant on behalf of owner
Rehkamp Larson Architects
2732 W. 43rd Street
Minneapolis, MN 55410
612.285.7275
mark@rehkamplarson.com

Minneapolis Code of Ordinances, applicable sections:

> **CHAPTER 590.** PROVIDING FOR A MORATORIUM ON THE DEMOLITION, NEW CONSTRUCTION, OR ESTABLISHMENT OF SINGLE AND TWO-FAMILY RESIDENTIAL DWELLINGS IN THE R1, R1A, R2, AND R2B ZONING DISTRICTS IN THE NEIGHBORHOODS OF LINDEN HILLS, FULTON, ARMATAGE, KENNY, AND LYNNHURST
>
> **590.50. Hardship.** In cases of hardship, any person having a legal or equitable interest in land and aggrieved by the requirements of this interim ordinance may apply to the city council for a waiver of all or a portion of the applicable restrictions as provided in Chapter 529 of the zoning code. A waiver may be granted where the city council finds substantial hardship caused by the restrictions and finds that the waiver will not unduly affect the integrity of the planning process or the purposes for which the interim ordinance is enacted.

Statement of Proposed Use & Project Description

The project is a demolition and rebuild of a structurally unsound property purchased by a resident who is the current owner. The project is the culmination of a 1.5 yearlong effort in coordination with Rehkamp Larson Architects and Hage construction to identify an urban infill opportunity. The owner purchased the property in October 2013 and planning began immediately to design a new structure that would fit within all existing zoning ordinances as well as exemplify the character of the community in both size and architecture. Our intent in October was to submit for a demolition and construction permit in early March of 2014. Our team was ready to submit for all necessary permits the week of 3/10/14. We are asking for no variances from current zoning ordinances.

Circumstances unique to the property

> **590.50. Hardship.** In cases of hardship, any person having a legal or equitable interest in land and aggrieved by the requirements of this interim ordinance may apply to the city council for a waiver of all or a portion of the applicable restrictions as provided in Chapter 529 of the zoning code. A waiver may be granted where the city council finds substantial hardship caused by the restrictions and finds that the waiver will not unduly affect the integrity of the planning process or the purposes for which the interim ordinance is enacted.

Structural Hardship: The existing property has been a vacant property for the past four years (per the residents at 4201 Xerxes Ave South). The property in its current condition is uninhabitable. An appraisal conducted in January of 2014 cited the following structural conditions which precluded the owner from obtaining a line of credit relating to the ability to safely inhabit the property:

- Cracks in the foundation on the Basement Egress Wall
- Attempts to true the Mantle/Fireplace displays how much the home has sunk in the soil
- A platform/false floor built of floor in the front of the home to make a level floor for the living area
- A large crack next to front entry door

The appraiser concluded with the following comments justifying the inability to accurately appraise the property:

> "Based on previous experience involving the subject property the appraiser has knowledge of a foundation and soil issues at the property located at 4205 Xerxes Ave S.
>
> In reference to a prior inspection of the home by Hallson Construction, LLC of Minneapolis and Safe Have Engineering on 09/03/2013 the following was discovered. The soil in the subjects area of Minneapolis is quite substandard as a result the front of the house appears to be level N to S, but the North side from front to back has sunk approximately 11 inches and the South side from front to back has sunk approximately 16 inches. Based on an estimate by the inspecting construction company, the foundation corrections will have a cost of $72,000-$84,000 to make this home 100% correct.
>
> Based on this the appraiser feels the home has physical deficiencies that could affect the livability, soundness and structural integrity of the property.
>
> Neil R Rupp
> Certified Residential Appraiser #20573702
> Metro One Appraisals, Inc."

Financial Hardship: The owner fully understands the risks involved with real estate and with this property. Our team made steps to appropriately identify and account for all potential and known issues. To date the owner has incurred the following total costs:

- $210,000 for the property purchase in cash
    - The purchase was made in cash
    - The owner had borrow $50,000 against his 401K and take $60,000 from his Roth IRA to be able to obtain the cash needed to execute the transaction
    - The owner was able to obtain an interest only line of credit to replenish depleted retirement accounts (after 3 attempts and 4 months)
    - The owner is currently unable to transfer the interest only line of credit into a fixed rate mortgage until he is able to inhabit the property
- $21,000 for architectural fees

    - The owner specifically hired Rehkamp Larson architects to design a new structure that fits within all current zoning ordinances
        - The new foundation is 14% larger than the current foundation (and the new foundation will bring the property within code)
        - The new house is sized appropriately for the block and is only 4' 3" higher than the existing structure
        - The new structure contains no variance requests based on current zoning
- $3000 for a soil sample and structural engineer
    - The foundation of the new structure will be constructed to account for the soil quality

The monthly financing costs of the lump sum payments and rent costs are as follows:

- $725/mo in 2 interest only loans ($275/mo and $450/mo respectively) required to refund the owners retirement accounts and cover the aforementioned architectural and engineering costs (the owner is not able to roll these into a conventional mortgage due to the structural issues precluding his ability to live there)
- $2077/mo for the owners current rent

Based on our ability to submit on 3/10 for demolition and construction and a standard approval turnaround of 2 weeks, our project should have begun on 3/24/14. Should an exemption be granted on 4/3 or 4/4 our project could then reasonably be expected to start on 4/18/14 or 4/21/14. This one month delay will have cost the owner ~$2800. This will continue to cost the owner ~$2800/mo for every additional month the project is delayed and ~$34,000 total for the year of the moratorium. The owner is not a developer and does not have the ability to reprioritize projects or defer any of these costs, he will have to burden them all.

This discussion does not attempt to quantify as of yet, but the council should be aware of, the following additional costs that will impact due to the moratorium

- $365 waiver fee (this would not be required had the moratorium not been enacted)
- Additional hourly expenses the owner will incur for documentation prep for the waiver application
- Interest rate risk due to the expectation of increasing rates based on Fed actions
- Increase material costs
- Increase in rent (current agreement ends on 7/31/14)

The owner is asking for a hardship waiver and for the approval for the project to recommence as it has been submitted as confirms to all current ordinances, requires no variances, and due to the financial burden incurred by the owner for every day this project is delayed is significant and prohibits him from inhabiting the property.

Subject Photo Page

Borrower/Client	Matthew Zarracina						
Property Address	4205 Xerxes Ave S						
City	Edina	County	Hennepin	State	MN	Zip Code	55410
Lender	USAA Home Equity						

Subject Front

4205 Xerxes Ave S
Sales Price
GLA
Total Rooms
Total Bedrms
Total Bathrms
Location N;Res;
View
Site
Quality
Age 87

Subject Rear

Subject Street

Interior Photos

Borrower/Client	Matthew Zarracina						
Property Address	4205 Xerxes Ave S						
City	Edina	County	Hennepin	State	MN	Zip Code	55410
Lender	USAA Home Equity						

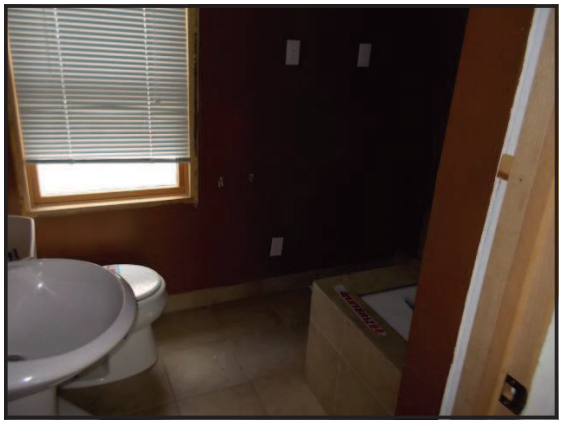
Front 2

Street 2

Garage

Address

Living Room



Bathroom

Interior Photos

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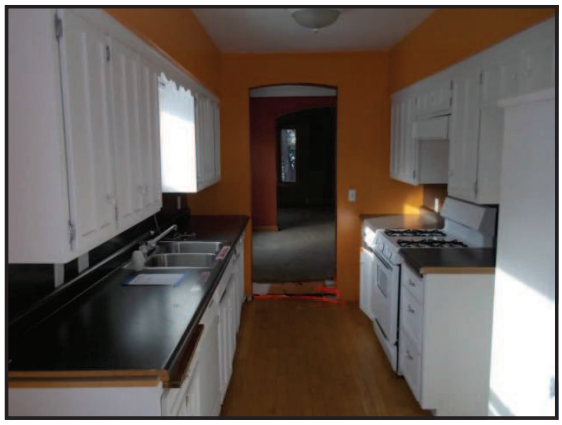
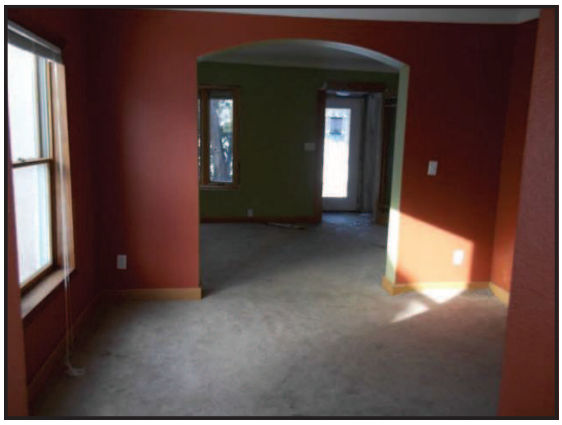


Kitchen



Dining Room

Bedroom

Bedroom

2nd Floor Family Room

2nd Floor Stairs

Interior Photos

Borrower/Client	Matthew Zarracina						
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Lender	USAA Home Equity						

2nd Floor (Could be Closet) To Small For GLA

Basement

Basement Egress Wall (See cracks)

Mantle is True/Fireplace displays how much the home has sunk int the soil.

Platform/false floor built of floor in the front of the home to make a level floor for the living area.

Crack Next to front entry door.

Supplemental Addendum

File No. 17888545

Borrower/Client	Matthew Zarracina			
Property Address	4205 Xerxes Ave S			
City	Edina	County Hennepin	State MN	Zip Code 55410
Lender	USAA Home Equity			

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Neil R Rupp
Certified Residential Appraiser #20573702
Metro One Appraisals, Inc

Sether, Shanna M

From: Will Spencer <will@rehkamplarson.com>
Sent: Monday, March 24, 2014 12:09 PM
To: christy@lindenhills.org; Palmisano, Linea
Cc: Sether, Shanna M; Matthew Zarracina; Mark Larson
Subject: Waiver Application for 4205 Xerxes Ave S attached

Ms Prediger & Council Member Palmisano

Hello, my name is Will Spencer and I am with Rehkamp Larson Architects. Our office is applying for a waiver of the current residential housing moratorium for a potential project at 4205 Xerxes Avenue South. We are applying on behalf of Matthew Zarracina, the property owner.
Attached you will find all of the documents for a complete application for your review. Please let us know of any questions, and if you wouldn't mind, please reply to confirm that you have received this email and were able to open the documents. We have filed the proper paperwork with Shanna Sether in the planning Department and look forward to talking about the project more on April 3rd at the hearing. In addition to these documents, Hage Construction will be preparing a Construction & Site Management narrative to explain how they will manage the job site to meet and exceed current City of Minneapolis Ordinances.

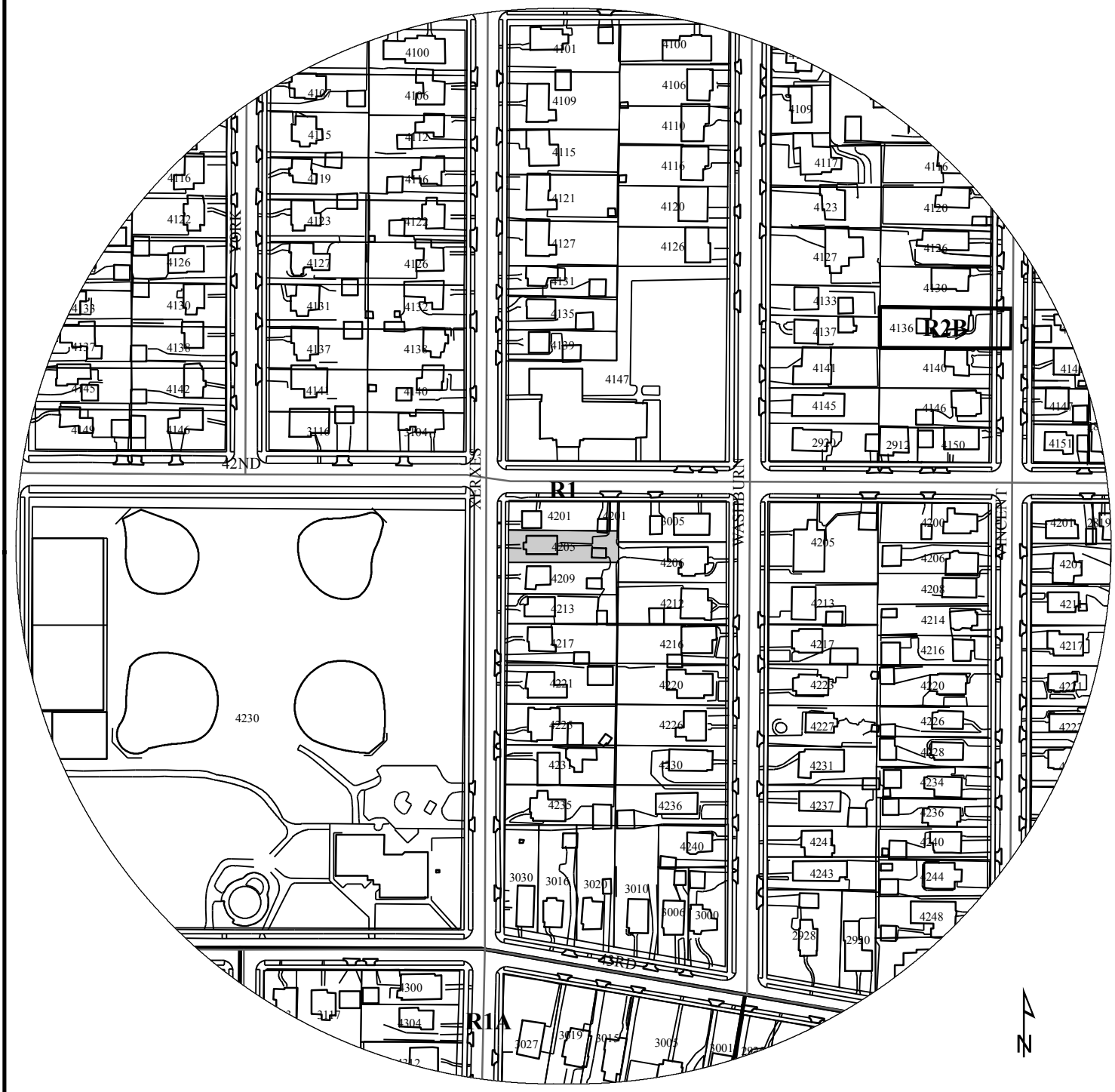
Thank you,

Will

WILL SPENCER
REHKAMP LARSON ARCHITECTS INC.
2732 West 43rd Street, Minneapolis, MN 55410
T 612-285-7275 W rehkamplarson.com

Rehkamp Larson Architects, Inc. **13th**

NAME OF APPLICANT WARD



PROPERTY ADDRESS

4205 Xerxes Avenue South

FILE NUMBER

BZZ-6486

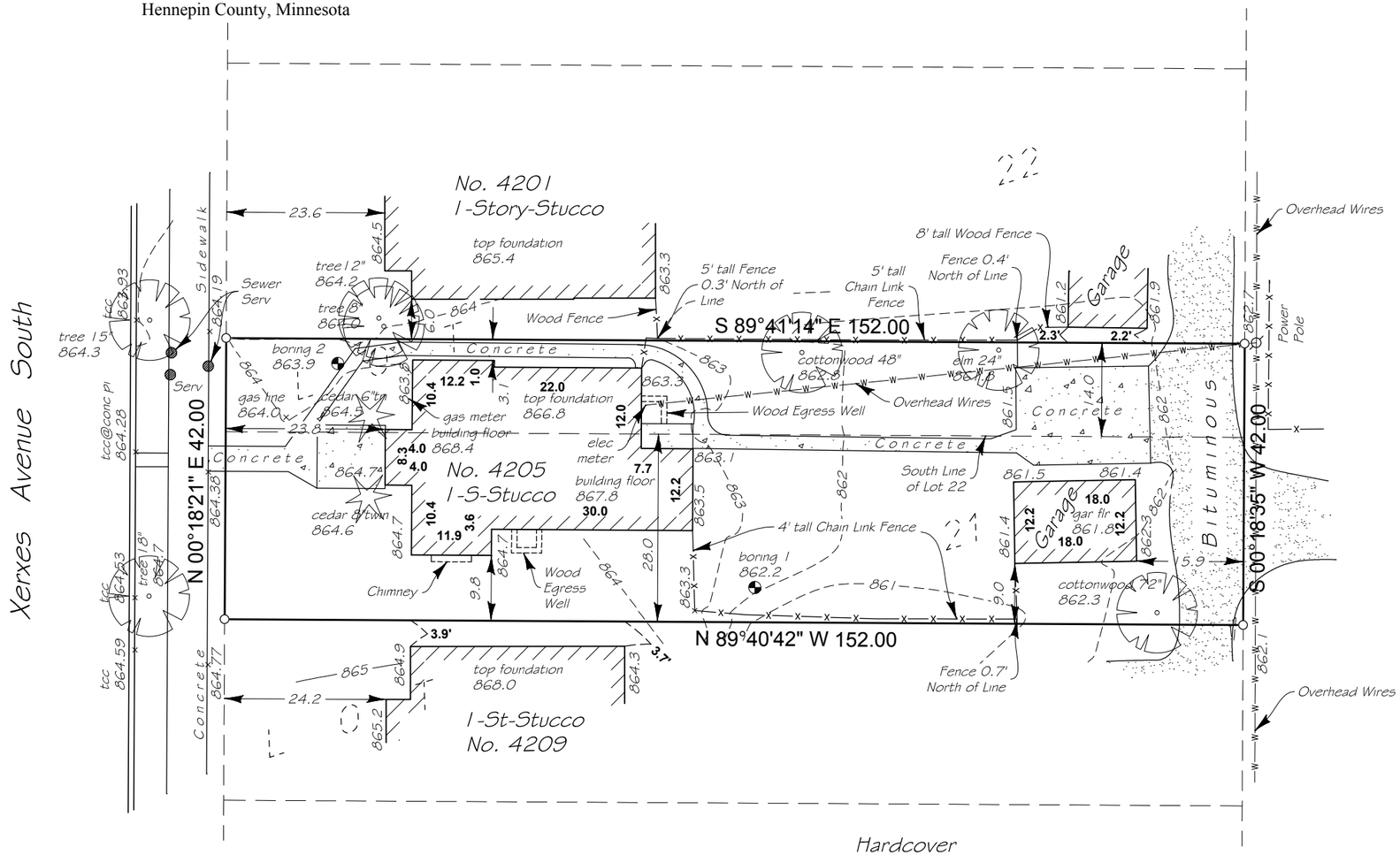
Existing Conditions Survey For:

HAGE & COMPANY

Property Address: 4205 Xerxes Avenue South
Minneapolis, MN

Benchmark: Minneapolis Benchmark
Monument No. 254
Elevation = 863.12

Property located in Section
8, Township 28, Range 24,
Hennepin County, Minnesota



The North 28 feet of Lot 21 and the South 14 feet of Lot 22, all in Block 24, FIRST DIVISION OF REMINGTON PARK Hennepin County, Minnesota

Note: Possible ingress, egress easement over easterly portion of property. No documentation provided.

Basis for bearings is assumed

INVOICE NO. 82137
F.B.NO. 1067-77
SCALE: 1" = 20'

- Denotes Found Iron Monument
- Denotes Iron Monument
- Denotes Wood Hub Set for excavation only
- Denotes Existing Contours
- Denotes Proposed Contours
- x000.0 Denotes Existing Elevation
- 000.0 Denotes Proposed Elevation
- Denotes Surface Drainage

NOTE: Proposed grades are subject to results of soil tests. Proposed building information must be checked with approved building plan and development or grading plan before excavation and construction. Proposed grades shown on this survey are interpolations of proposed contours from the drainage, grading and/or development plans.

NOTE: The relationship between proposed floor elevations to be verified by builder.

_____ Proposed Top of Block
_____ Proposed Garage Floor
_____ Proposed Lowest Floor
Type of Building
_____

The Gregory Group, Inc.
d.b.a.
LOT SURVEYS COMPANY
Established in 1962
LAND SURVEYORS
REGISTERED UNDER THE LAWS OF STATE OF MINNESOTA
7601 73rd Avenue North
Minneapolis, Minnesota 55428
(763) 560-3093
Fax No. 560-3522

Surveyors Certificate

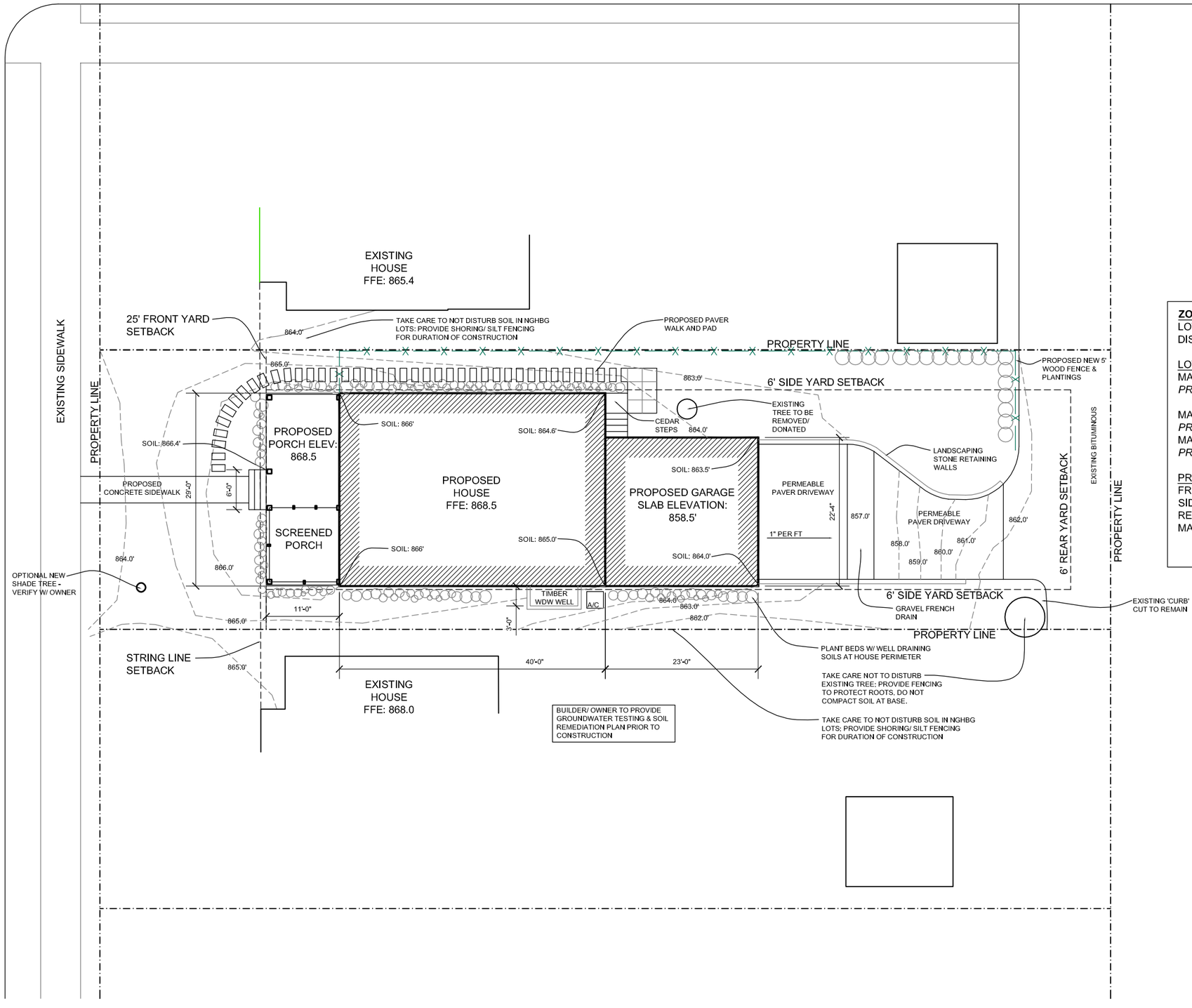
The only easements shown are from plats of record or information provided by client.

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed land Surveyor under the laws of the State of Minnesota

Surveyed this 18th day of November 2013.
Revised January 13, 2014 (spot elev. & fence heights)

Signed _____
Gregory R. Prasch, Minn. Reg. No. 24992

Rev	Drawn By J. Munson
	File Name 1rp-21-24fb106777inv82137.dwg



ZONING SUMMARY:

LOT SIZE - 42'x152' (6,384 SF)
DISTRICT - R1

LOT COVERAGE:

MAXIMUM F.A.R. (50%)	3,192 SF
*PROPOSED F.A.R**	*2,585 SF (40%)*
**INCL 263 SF OF ATTACHED GARAGE*	
MAX LOT COVER (50%)	3,192 SF
PROPOSED COVER	*2,000 SF (31%)*
MAX IMPERVIOUS (65%)	4,149 SF
PROPOSED IMP	*3,470 SF (55%)*

PRIMARY STRUCTURE SETBACKS:

FRONT YARD - 25'
SIDE YARDS - 6'
REAR YARD - 6'
MAX HT - 30'

1 PROPOSED SITE DIAGRAM

north

SCALE: 1/8" = 1'-0" ON 24X36, 1/16" = 1'-0" ON 11X17

REHKAMP LARSON ARCHITECTS INC.
2732 West 43rd Street, Mpls, MN 55410
Tel. 612-285-7275 Fax. 612-285-7274

The Zarracina Residence
4205 Xerxes Ave S
Minneapolis, MN 55410

PROJECT PHASE:
Construction Documents
PROJECT NUMBER:
13-056
ISSUE DATE:
February 28, 2014

DRAWN BY:
WS, ML

A01

SITE DIAGRAM

THE ZARRACINA RESIDENCE
4205 Xerxes Ave S
Minneapolis, MN 55410

DRAWING INDEX:

OWNER:

Matthew Zarracina
4205 Xerxes Avenue S

ARCHITECT:

REHKAMP LARSON ARCHITECTS
2732 W 43rd St
Minneapolis, MN 55410
t: 612 285 7275
f: 612 285 7274
contacts:
Mark Larson, AIA
e: mark@rehkamplarson.com
Will Spencer
e: will@rehkamplarson.com

CONTRACTOR:

HAGE & COMPANY
10218 Hage Drive
Rogers, MN 55374
t:763 498 7611
contacts:
Kerry Hage
m: 763 286 3369

STRUCTURAL ENGINEER:

BUNKERS & ASSOCIATES
6687 Forest St
Farmington, MN 55024
t: 651. 366. 2853
contacts:
Eric Bunkers, PE

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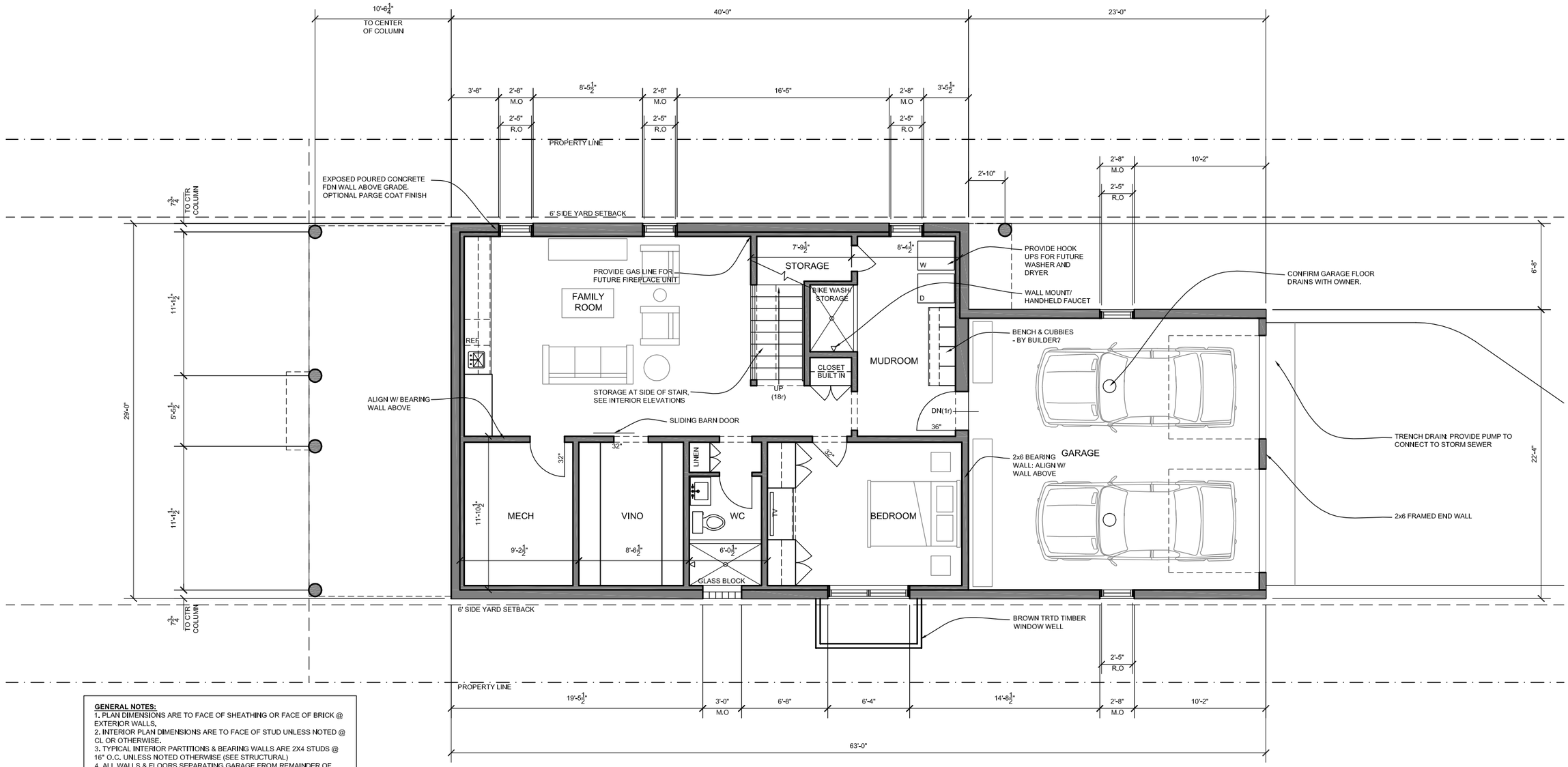

GENERAL NOTES:

1. PLAN DIMENSIONS ARE TO FACE OF SHEATHING OR FACE OF BRICK @ EXTERIOR WALLS.
2. INTERIOR PLAN DIMENSIONS ARE TO FACE OF STUD UNLESS NOTED @ CL OR OTHERWISE.
3. TYPICAL INTERIOR PARTITIONS & BEARING WALLS ARE 2X4 STUDS @ 16" O.C. UNLESS NOTED OTHERWISE (SEE STRUCTURAL)
4. ALL WALLS & FLOORS SEPARATING GARAGE FROM REMAINDER OF HOUSE TO BE U.L. RATED 1 HOUR CONSTRUCTION.
5. COORDINATE ALL MECHANICAL OPENINGS IN WALLS, FLOORS, CEILINGS, ROOFS OR OTHERWISE W/ ARCHITECT.
6. PROVIDE SHOP DRAWINGS FOR ARCHITECT REVIEW FOR TRUSSES, WINDOWS, DOORS, COUNTERS, MILLWORK, AND ANY OTHER CUSTOM FABRICATION. ALLOW 10 BUSINESS DAYS FOR SHOP DRAWING REVIEW.
7. NO SPRAY TEXTURED CEILINGS
8. ALL KITCHEN CABINETS TO GO FULL HEIGHT TO CEILING U.N.O.
9. FLASHING IN ACCORDANCE WITH I.R.C. AND MINNESOTA LATH & PLASTER BUREAU'S PUBLICATION "STUCCO IN RESIDENTIAL CONSTRUCTION

1 LOWER LEVEL FLOOR PLAN

SCALE: 1/4" = 1'-0" ON 24X36, 1/8" = 1'-0" ON 11X17

north 0 2 4 8

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WS, ML

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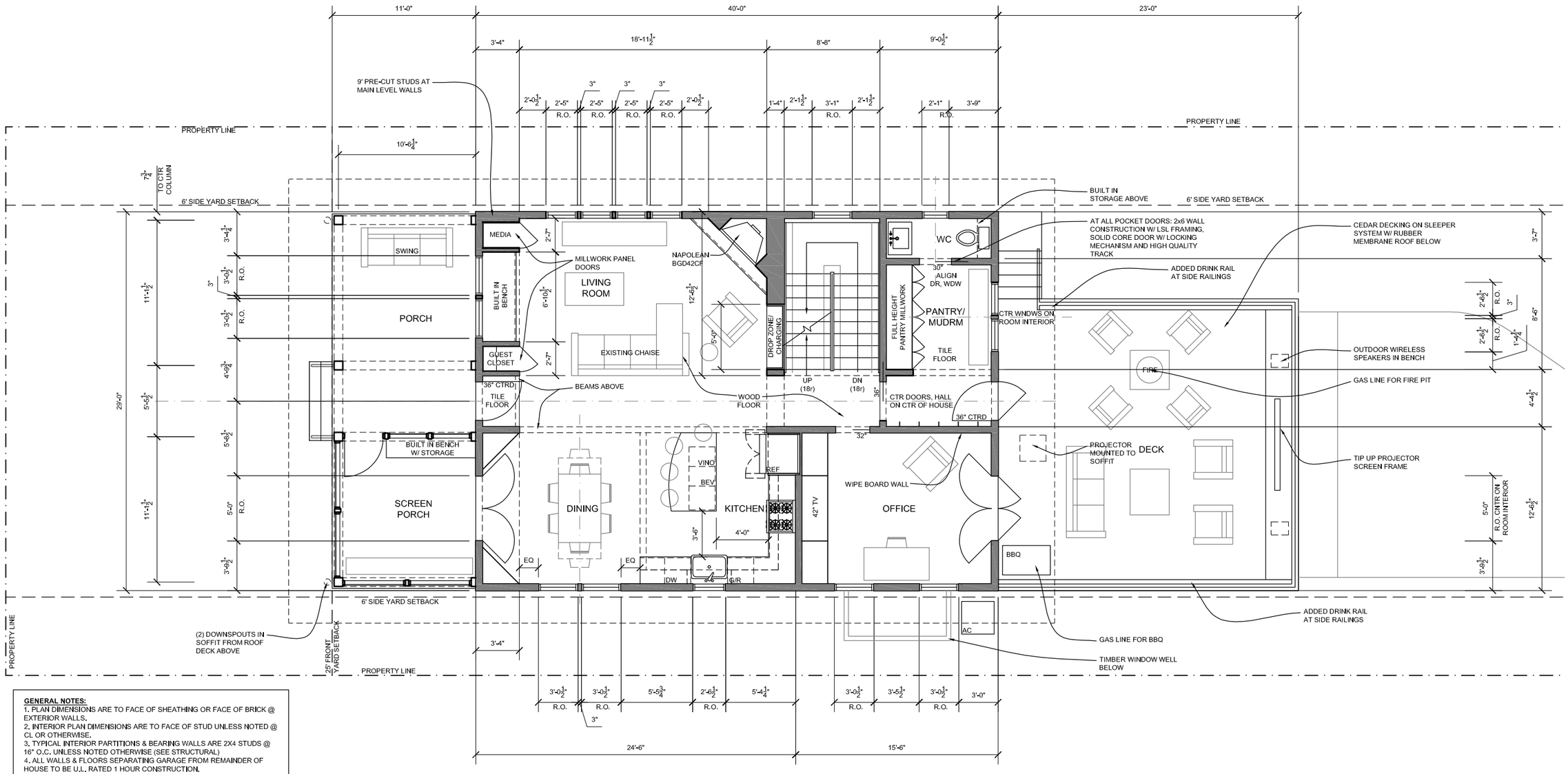
LOWER LEVEL FLOOR PLAN



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1 MAIN LEVEL FLOOR PLAN
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north 0 2 4 8

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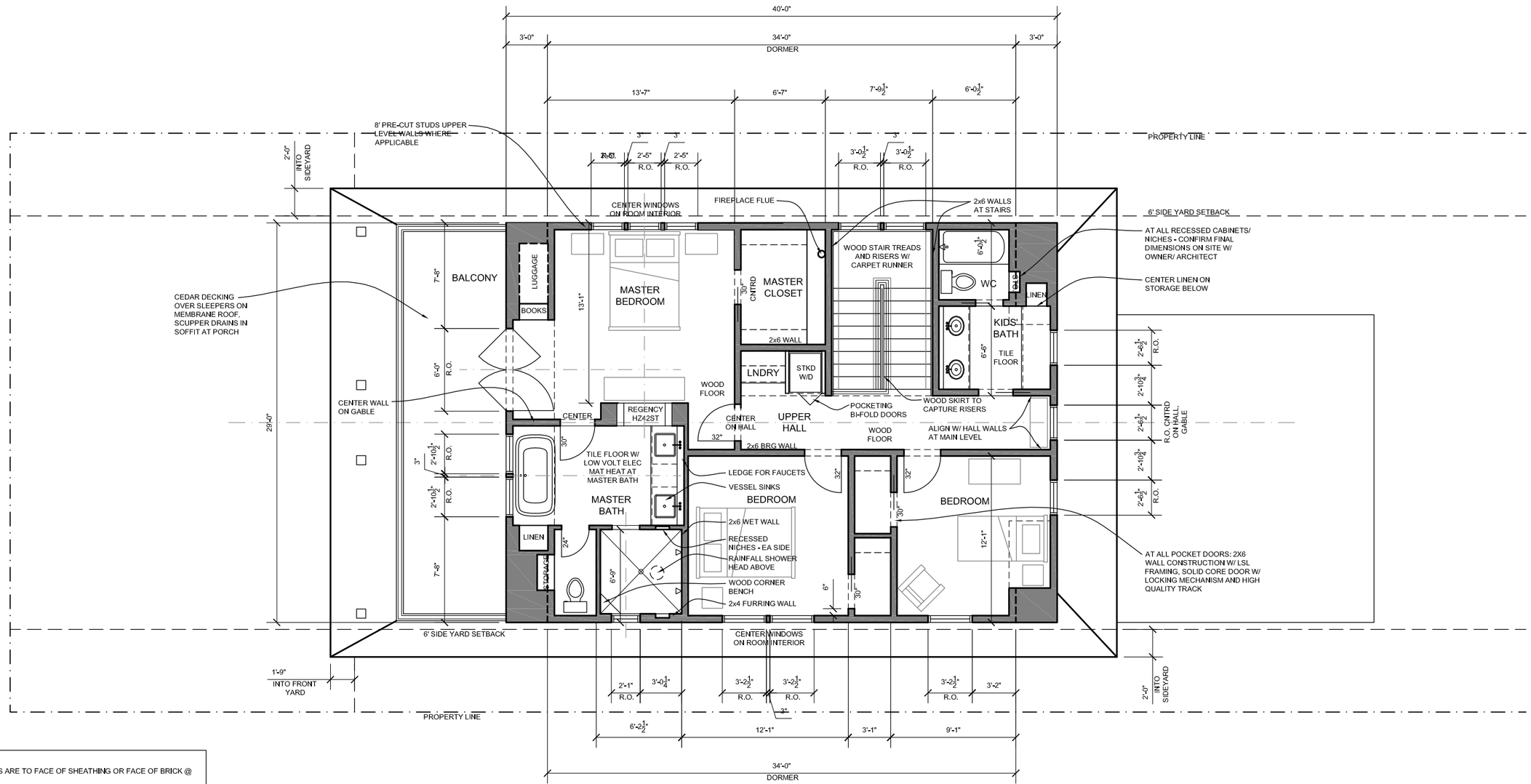
MAIN LEVEL FLOOR PLAN



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1 **UPPER LEVEL FLOOR PLAN**
SCALE: 1/4" = 1'-0" ON 24X36, 1/8" = 1'-0" ON 11X17

north 0 2 4 8

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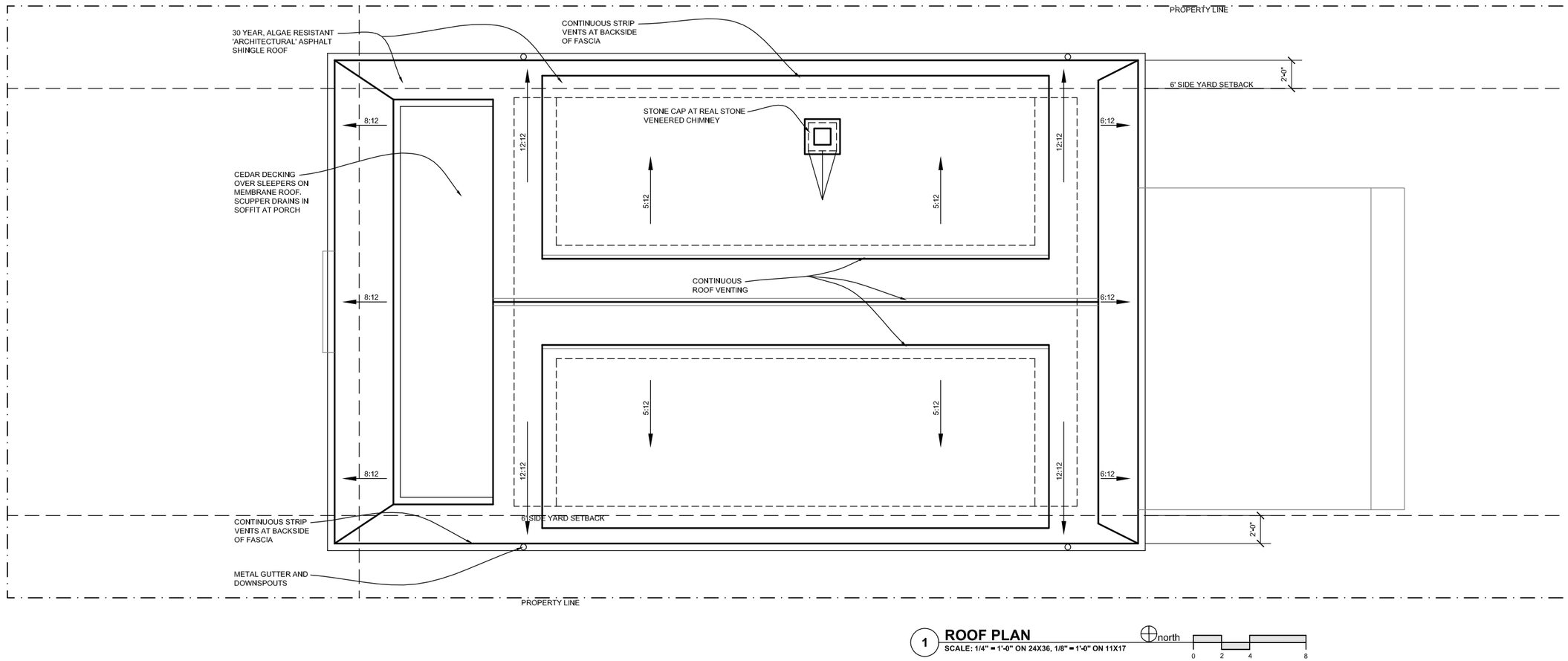
UPPER LEVEL FLOOR PLAN



1 **ROOF PLAN**
SCALE: 1/4" = 1'-0" ON 24X36, 1/8" = 1'-0" ON 11X17

north
0 2 4 8

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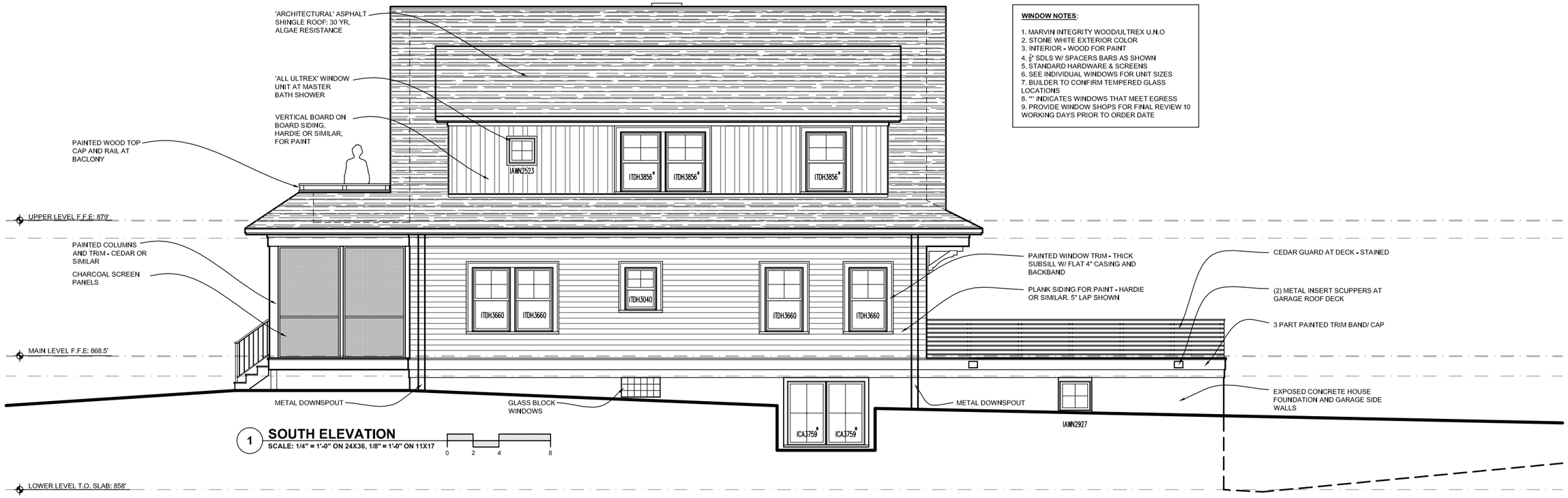
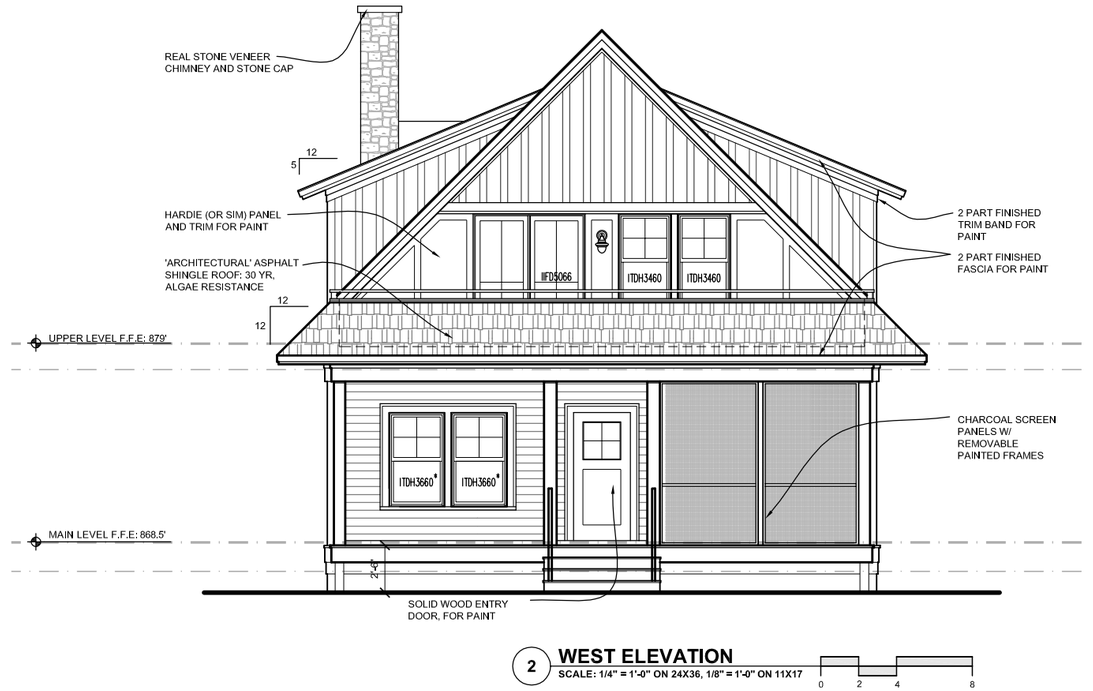
ROOF PLAN



1 **SOUTH ELEVATION**
SCALE: 1/4" = 1'-0" ON 24X36, 1/8" = 1'-0" ON 11X17

WINDOW NOTES:

1. MARVIN INTEGRITY WOOD/ULTREX U.N.O
2. STONE WHITE EXTERIOR COLOR
3. INTERIOR - WOOD FOR PAINT
4. 7/8" SDLS W/ SPACERS BARS AS SHOWN
5. STANDARD HARDWARE & SCREENS
6. SEE INDIVIDUAL WINDOWS FOR UNIT SIZES
7. BUILDER TO CONFIRM TEMPERED GLASS LOCATIONS
8. "*" INDICATES WINDOWS THAT MEET EGRESS
9. PROVIDE WINDOW SHOPS FOR FINAL REVIEW 10 WORKING DAYS PRIOR TO ORDER DATE



2 **WEST ELEVATION**
SCALE: 1/4" = 1'-0" ON 24X36, 1/8" = 1'-0" ON 11X17

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Construction Documents

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DRAWN BY:
WS, ML

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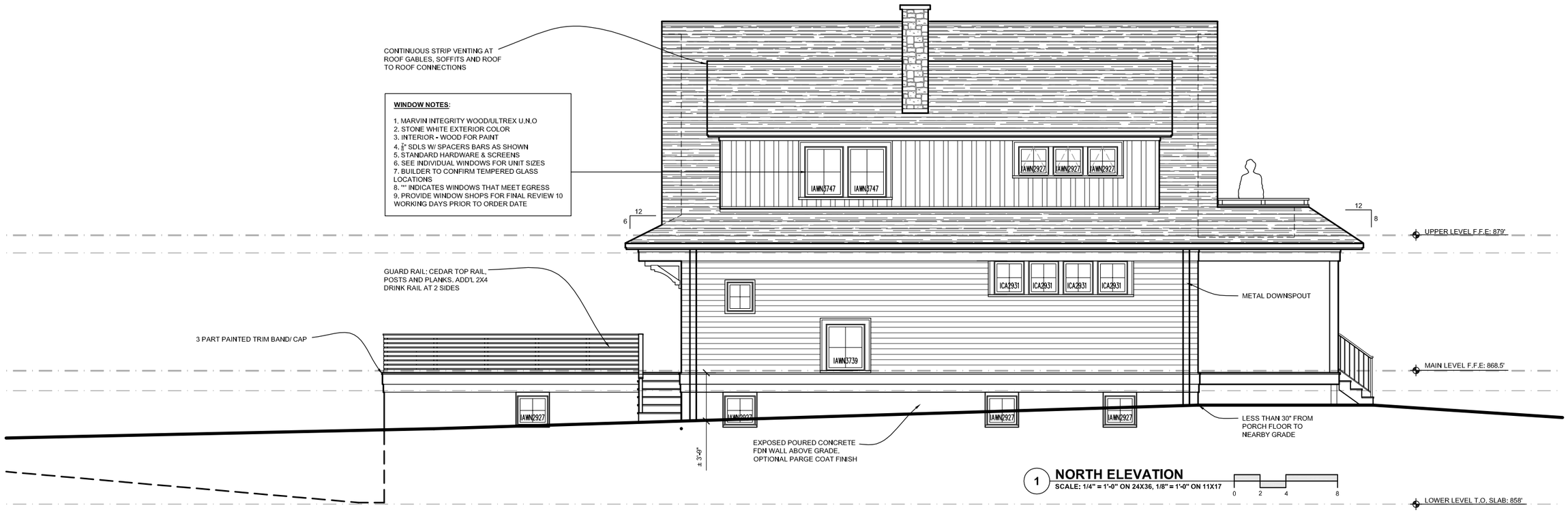
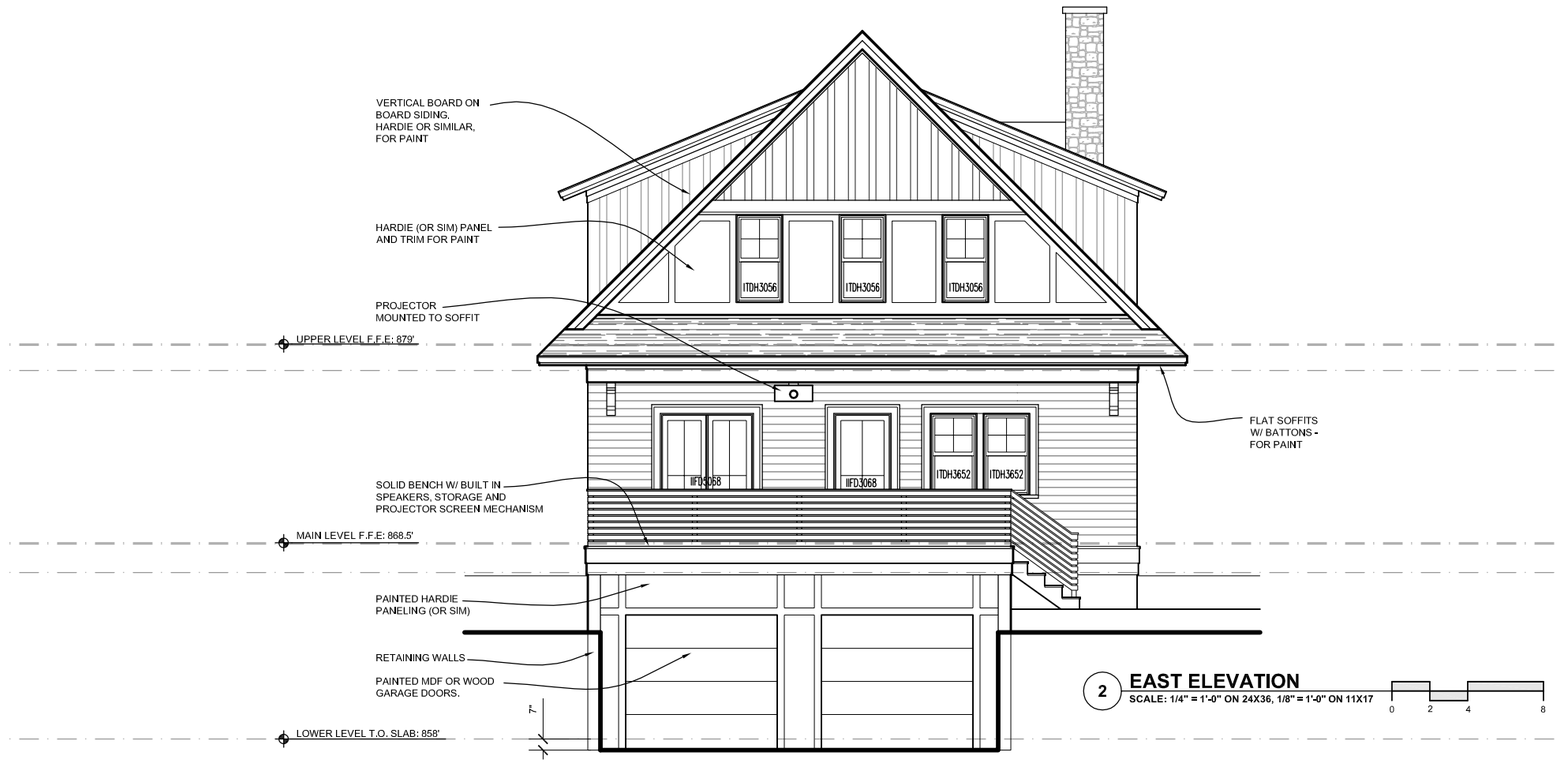
EXTERIOR ELEVATIONS



1 NORTH ELEVATION

SCALE: 1/4" = 1'-0" ON 24X36, 1/8" = 1'-0" ON 11X17

0 2 4 8



2 EAST ELEVATION

SCALE: 1/4" = 1'-0" ON 24X36, 1/8" = 1'-0" ON 11X17

0 2 4 8

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EXTERIOR ELEVATIONS

GENERAL MATERIAL ASSEMBLIES

1A ROOF ASSEMBLY :
- ARCHITECTURAL ASPHALT SHINGLE- VERIFY SELECTION W/ OWNER
- TYPE 30 FELT INTERLAY
- 5/8" PLYWOOD ROOF SHEATHING
- ROOF STRUCT. (SEE S13)
-INSULATION TO R38 MIN. (ABOVE HEATED SPACES)
- 5/8" GYP. BD. AT CEILING EXCEPT WHERE NOTED OTHERWISE

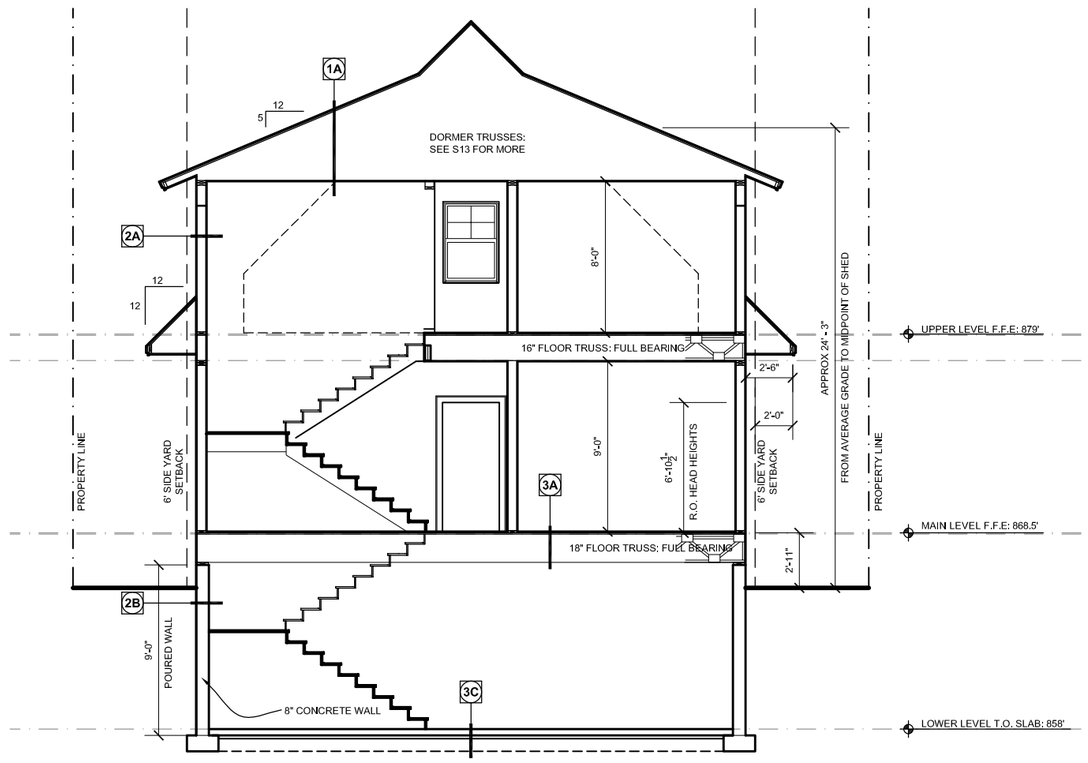
2A **EXTERIOR WALL** (ABOVE GRADE) (R-19 MIN)
-CEMENT FIBER COMPOSITE SIDING - SMOOTH W/5-6" EXPOSURE OR CEDAR
-WEATHER BARRIER
-2X6 FRAMED WALL WITH PLYWOOD SHEATHING
-INTERIOR WALL FINISH

2B **FOUNDATION WALL** (R-10 MIN)
-WELL-DRAINING GRAN BACKFILL W/ PERIMETER DRAIN TILE & SUMP
-WATERPROOFING
-EXPOSED POURED CONCRETE FOUNDATION WALL
THESE ITEMS A HOUSE WALLS ONLY:
-INTERIOR VAPOR BARRIER
-2x4 FRAMED ENERGY WALL W/ RIGID INSULATION
-INTERIOR WALL FINISH

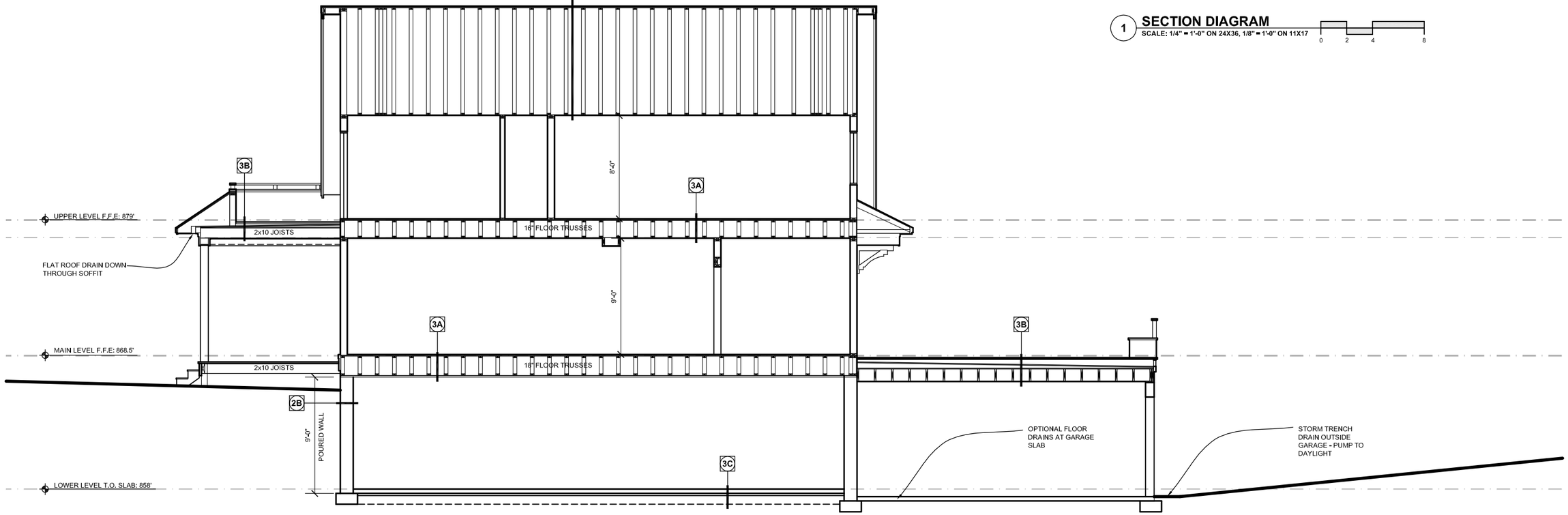
3A **FLOOR ASSEMBLY**
-FINISH FLOOR - WOOD OR TILE, SEE PLANS
-3/4" SUBFLOOR
-FLOOR OPEN-WEB FLOOR TRUSSES- SEE STRUCTURAL (COORDINATE TRUSSES TO ALLOW FOR MECH. DUCT RUNS)
-CEILING FINISH PER CEILING PLAN

3B **FLOOR ASSEMBLY** (UPPER LEVEL @ DECKING)
-WOOD DECKING (IPE OR CEDAR)
-2x SLEEPERS WITH RUBBER MEMBRANE ROOFING SYSTEM
-PLYWOOD SUBFLOOR GLUED & NAILED
-FLOOR TRUSSES- SEE STRUCTURAL
-FINISHED CEILING AT PORCH OR GARAGE - SEE PLANS

3C **FLOOR ASSEMBLY** (BASEMENT)
-4" CONCRETE
-2" RIGID INSULATION (R-10)
-VAPOR BARRIER TAPED AT SEAMS AND SEALED AT EDGES
-2" MIN COMPACTED GRANULAR FILL
-TO MEET CODE REQUIREMENTS FOR RADON
-PERIMETER DRAIN TILE



1 **SECTION DIAGRAM**
SCALE: 1/4" = 1'-0" ON 24X36, 1/8" = 1'-0" ON 11X17



2 **SECTION DIAGRAM**
SCALE: 1/4" = 1'-0" ON 24X36, 1/8" = 1'-0" ON 11X17

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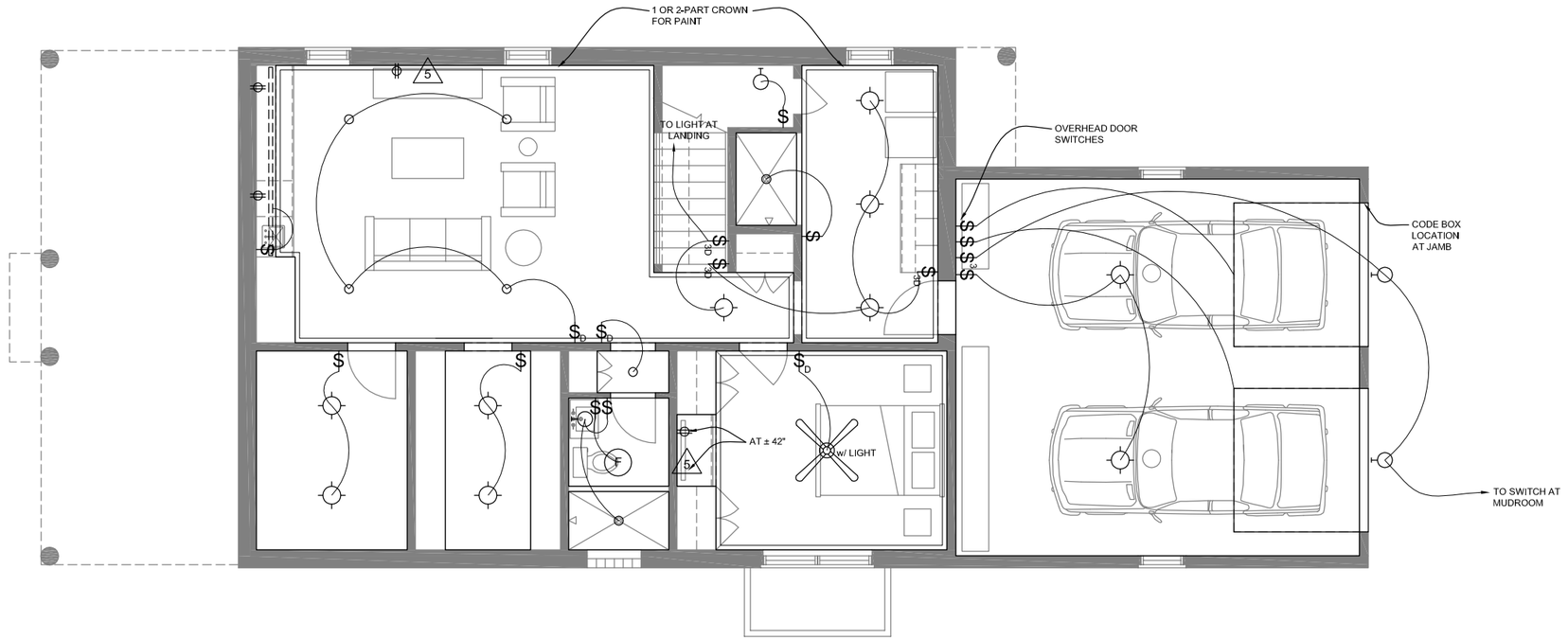
SECTION DIAGRAMS

ELECTRICAL SYMBOLS

- RECESSED LIGHT (5" DIAMETER INDOOR, 6" OUTDOOR)
- 5" DIAMETER RECESSED DIRECTIONAL LIGHT
- WALL MOUNTED LIGHT
- UNDER CABINET LIGHT / PUCK LIGHT
- PENDANT LIGHT
- CEILING MOUNTED LIGHT
- CEILING MOUNTED SQUARE LIGHT
- EXTERIOR POST LANDSCAPE FIXTURE
- EXTERIOR FLOOD LIGHT
- UNDERCABINET LED STRIP LIGHT
- CEILING FAN
- IN WALL FIXTURE
- DUPLEX OUTLET
- USB OUTLET/ USB COMBO
- FOURPLEX OUTLET
- SWITCHED OUTLET
- FLOOR DUPLEX OUTLET
- 5 CABLE/ DATA
- T TELEPHONE
- T THERMOSTAT
- F FAN
- SEC SECURITY CONTROL PANEL
- SMOKE DETECTOR
- $ SWITCH
- $3 THREE-WAY SWITCH
- $4 FOUR-WAY SWITCH
- $D DIMMER SWITCH
- $T TIMER SWITCH
- $M MOTION DETECTION SWITCH

NOTES:

1. ALL VISIBLE AV, MECHANICAL & ELECTRICAL EQUIPMENT TO BE COORDINATED WITH OWNER ON SITE
2. CENTER LIGHTS IN CEILING UNLESS OTHERWISE NOTED
3. PROVIDE CODE REQUIRED POWER RECEPTACLES IN ADDITION TO THOSE SHOWN ON ELECTRICAL PLANS
4. ALL CEILINGS TO BE GYP. BD. WITH SMOOTH TEXTURE - UNLESS OTHERWISE NOTED
5. VERIFY LOCATION OF SWITCHES AND LIGHTS WITH OWNER & ARCHITECT AT WALKTHRU
6. VERIFY FINISH OF SWITCHES, PLATES, & RECESSED LIGHTS WITH OWNER & ARCHITECT
7. LEAVE TAILS AT ALL SCONCES AND CEILING LIGHTS THAT ARE CENTERED ON FURNITURE OR CABINETS (i.e. DINING...)
8. ALL FLOOR OUTLETS TO HAVE RECESSED PLUG w/ FLUSH PLATE.



1 **LOWER LEVEL LIGHTING** north
SCALE: 1/4" = 1'-0" ON 24X36, 1/8" = 1'-0" ON 11X17
0 2 4 8

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LOWER LEVEL LIGHTING

ELECTRICAL SYMBOLS

- RECESSED LIGHT (5" DIAMETER INDOOR, 6" OUTDOOR)
- 5" DIAMETER RECESSED DIRECTIONAL LIGHT
- WALL MOUNTED LIGHT
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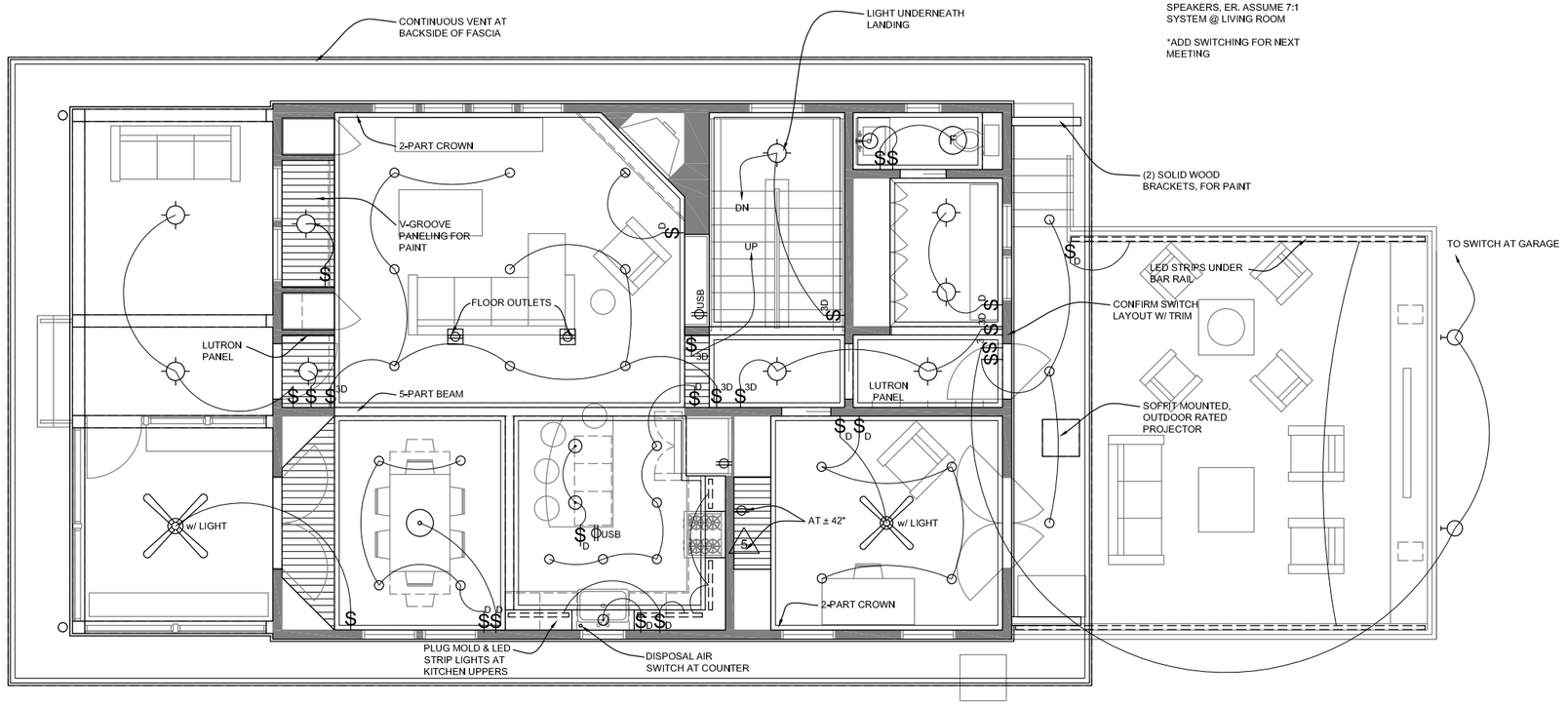

GENERAL NOTES:

*SEE AV QUOTE FOR SPEAKERS, ER. ASSUME 7:1 SYSTEM @ LIVING ROOM

*ADD SWITCHING FOR NEXT MEETING

1 MAIN LEVEL LIGHTING
SCALE: 1/4" = 1'-0" ON 24X36, 1/8" = 1'-0" ON 11X17

north 0 2 4 8

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MAIN LEVEL LIGHTING

ELECTRICAL SYMBOLS

- RECESSED LIGHT (5" DIAMETER INDOOR, 6" OUTDOOR)
- 5" DIAMETER RECESSED DIRECTIONAL LIGHT
- WALL MOUNTED LIGHT
- UNDER CABINET LIGHT / PUCK LIGHT
- PENDANT LIGHT
- CEILING MOUNTED LIGHT
- CEILING MOUNTED SQUARE LIGHT
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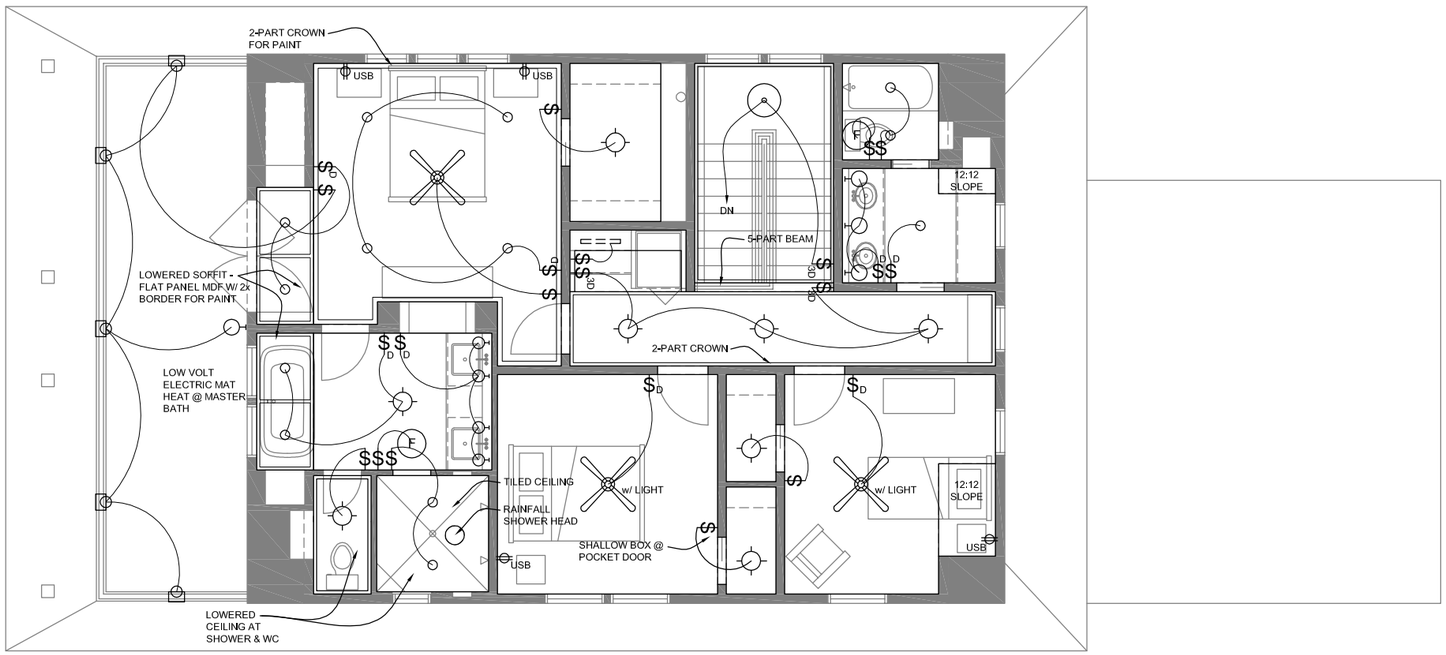

1 **UPPER LEVEL LIGHTING**
SCALE: 1/4" = 1'-0" ON 24X36, 1/8" = 1'-0" ON 11X17

north 0 2 4 8

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UPPER LEVEL LIGHTING

STRUCTURAL NOTES

Unless noted otherwise on the plans and/or in the details, these notes shall apply. If there are discrepancies between the plans/details and these notes, the contractor shall conform to the more stringent requirements, unless clarified with the Structural Engineer of Record (SER) prior to work.

MATERIAL STRENGTHS

Structural Steel Fasteners
- Anchor rods - ASTM F1554, Gr. 36, Fy = 36 ksi
- Threaded rods - ASTM A36, Fy = 36 ksi

Reinforcing Steel
- Deformed Bars - ASTM A615, Gr. 60, Fy = 60 ksi
- Weldable Bars - ASTM A706, Gr. 60, Fy = 60 ksi
- Fabric - ASTM A185, Fy = 70 ksi

Concrete
- f 'c = compressive strength in 28 days
  - 4,000 psi unless noted otherwise
  - 3,000 psi for footings

Structural Lumber
- All dimensional lumber - #2 Spruce Pine Fir (SPF) or equal
- Laminated Veneer Lumber (LVL)
  - E = 1,900,000 psi
  - Fb = 2600 psi
- Laminated Strand Lumber (LSL)
  - E = 1,550,000 psi
  - Fb = 2,325 psi
- Parallel Strand Lumber (PSL)
  - E = 2,000,000 psi
  - Fb = 2900 psi
- Treated lumber - #2 Southern Pine or equal

DESIGN LOADS

Roof
- Dead load: 17 psf (7 psf top chord + 10 psf bottom chord)
- Snow load: Roof snow load = 35 psf

Floors
- Dead load: 20 psf (10 psf top chord + 10 psf bottom chord)
- Live loads: 40 psf

Wind
- 90 mph (3 second gust)
- Exposure B, I = 1.0

TEMPORARY BRACING

Contractor is responsible for bracing, without overstressing, all structural elements as required at all stages of construction until completion of this project. Provide temporary lateral support for all walls until walls are adequately braced by permanent structure. Shore foundation walls retaining earth until floor framing and basement slab are in place. Use caution when operating equipment adjacent to foundation walls.

GENERAL SOIL NOTES

The structure has been designed assuming poor soils.
We recommend a qualified geotechnical engineer shall confirm the assumed soils in a geotechnical report, and the site shall be prepared in accordance.
Any discrepancies in the assumed allowable soil bearing pressure shall be reported immediately.
Remove all top soil, uncompacted fill, or other poor soil from the construction area.
Slope the site to drain away from the building.
Install gutters and downspouts with long extensions.
Install drain tile.
Backfill with granular soils.

HELICAL PILE FOUNDATIONS

See plans for service load requirements for piles.
See details for concrete cap or pier requirements and reinforcing.
Helical pile contractor to record equipment used, pile dimensions, tip elevations, final depth, final installation torque and other pertinent installation date as required.

FOOTINGS/FOUNDATIONS

All footings are to be formed. All stumps, roots and debris must be removed from the soil to a depth of at least 12" below the surface of the ground in the area occupied by the building. Footings shall be placed on virgin soil or compacted granular fill.
Wall footings are cast-in-place concrete with continuous reinforcing placed 3" clear of bottom and 2" clear at top and sides.
Wall footings are centered under walls and column footings under columns.
Wall footings shall be a minimum of 10" thick with a 4" projection each side of wall. Reinforce with 2 - #4 continuous bottom bars unless noted.
Column footings shall be a minimum of 12" thick, with plan dimensions as shown on drawing. Reinforce with #4 bottom bars at 8" o.c. each way unless noted.
Provide 30 bar diameter lap at splices and full crossing lap at corners and intersections. Tie all reinforcing in place. Set footing reinforcing on chairs or masonry brick to obtain 3" clearance from bottom of footing.
Maintain minimum frost depth of 42" for all exterior footings.
Top of footing shall be placed 8" below the top of slabs on grade, or placed to maintain frost depth, whichever is deeper.
Step footings in a uniform manner using a 2:1 horizontal to vertical slope.
Cast dowels in footing for foundation walls above. Dowels shall be the same quantity, size, and spacing as the vertical wall reinforcing. Dowels shall be 30" long and extend to 3" clear of bottom of footing.
Contractor shall be responsible for implementing hot weather concrete requirements per ACI 305 and cold weather concrete requirements per ACI 306.
Shore all foundation walls appropriately before backfilling and compacting.
Where foundation walls support unbalanced load on opposite sides of the building, such as a daylight basement, the rim board shall be attached to the sill with a 20 gage metal angle clip at 24" o.c., with five 8d nails per leg, or a connector supplying 230 pounds per lineal foot capacity.
Foundations supporting wood shall extend at least 6" above the adjacent finished grade.
At foundation endwalls, provide perpendicular full-height blocking at 24" o.c. in the first three joist spaces. Glue and nail to joists and subfloor. Attach to sill plate with 2 - USP MP5 clips or equal.
The contractor shall verify the location of all existing underground utilities and tanks prior to beginning excavation.
The contractor shall follow Figure R403.1.7.1 in the IRC for foundation clearances to slopes unless indicated otherwise by the soils engineer.

CONCRETE

Provide ready-mixed concrete per ASTM C94. Portland cement shall be ASTM C150, Type I. Use only one brand of cement throughout the work.
Provide concrete aggregates meeting the requirements of ASTM C33.
Maximum aggregate size shall be 3/4" for grade beams and slabs. Water shall be clean, free of deleterious amounts of acids, alkalis, or organic materials, and shall be considered potable. Provide admixtures to reduce water content, provide air-entrainment, or alter the quality of the concrete to meet the job conditions.
Reinforce poured concrete walls with #4 at 12" o.c. horizontally and #4 at 12" o.c. vertically each face unless noted.
Place reinforcing 2" clear to outside face and 1 1/2" clear to inside face of concrete wall.
Provide #4 x 4'-0" long (equal legs) horizontal reinforcing corner bars at 12" o.c. at outside corner of wall and 3 - #4 vertical support bars.
All wall openings larger than 12" shall have 2 - #5 at all sides extending 2'-0" beyond each edge of opening with 2 - #5 x 4'-0" diagonal bars at each corner of opening.
Wall reinforcing shall be continuous through columns and pilasters.
Provide full development and splice lengths per Concrete Reinforcing Steel Institute (CRSI) or ACI 318 requirements.
All concrete exposed to weather, freeze-thaw conditions or de-icing chemicals shall contain 5% - 7% entrained air.
Slump shall be determined by ASTM C143 as follows:

Footings	3" - 4"
Walls, columns	3" - 5"
Slabs on grade	3" - 4"
Structural slabs, beams	3" - 4"

Concrete shall not be laid when the temperature of the outside air is below 40 degrees Fahrenheit, unless approved methods are used during construction to prevent damage to the concrete. All materials used and surfaces built upon shall be free of snow and ice.
Wood beams pocketed into concrete shall be provided with a 1/2" air space on top, end, and sides unless treated wood or steel plates are used.
Concrete shall not bear permanently on wood members.

SLABS ON GRADE

All slabs on grade shall be reinforced as shown on the plans.
Do not cut structural slabs.
Do not add control joints.

STRUCTURAL STEEL

All structural steel shall be designed, fabricated, and erected according to the specifications of the American Institute of Steel Construction (A.I.S.C.) Latest Adoption.
Structural steel supplier shall supply all cap plates, bearing assemblies, base plates, stiffeners, splices, and connections, and shall design same unless noted on drawings.
All welding shall be done by the shielded arc process using E70 electrodes in accordance with the rules of the American Welding Society (A.W.S.) Structural Welding Code, Latest Adoption. All welders shall be certified by the rules of the American Welding Society.
Tighten anchor bolts and grout column base plates before installing steel beams.
Provide complete detailed shop drawings to the contractor for review and approval prior to fabrication.

DIMENSION LUMBER

Design assumes lumber is free of significant splits and checks, and contractor will visually inspect during installation.
Sills and all other lumber in contact with concrete or masonry and within 8" of finished grade shall be preservative treated wood. In crawlspaces or unexcavated areas within the building foundation, wood shall be preservative treated for joists within 18" of exposed ground and/or girders within 12" of exposed ground.
Preservative treated wood shall be in accordance with the American Wood Protection Association, Standard U1.
All lumber is to be grade stamped, which is to contain grading agency, mill number or name, grade of lumber, species or species grouping or combination designation, rules under which graded, where applicable, and condition of seasoning at time of manufacture.
All lumber shall be seasoned to a moisture content of 19% or less, with the indication of "S-Dry" on the grade stamp.
All lumber shall be protected from the elements.
Sill plates to be bolted to foundation wall with 5/8" diameter anchor bolts at 3'-0" o.c. maximum. Bolts to extend 13" minimum into solidly grouted foundation wall. Each sill plate to have a minimum of 2 bolts with one bolt located not more than 12 inches or less than 4 1/2 inches from each end of the plate section. Use 1/8" x 2" washers, slightly crushing plate.
Minimum nailing shall be in accordance with Table R602.3(1) of the 2006 IRC unless noted otherwise.
All walls shall have a single bottom plate and double top plate.
Exterior walls shall be 2 x 6 studs @ 16" o.c. unless noted otherwise.
Interior bearing walls shall be 2 x 6 studs @ 16" o.c. unless noted otherwise.
Interior non-load-bearing walls shall be 2 x 4 studs @ 16" o.c. unless noted otherwise
Typical openings to have a minimum of 2 bearing (trimmer or jack) studs and 1 full-height king stud.
Headers not noted to be 2 - 2 x 6 up to 4'-0" span and 2 - 2 x 8 from 4'-0" to 6'-0" span.
Wood headers shall have a minimum 3" length of bearing at each end or bear the entire length of the bearing studs.
Beams shall bear on a minimum of 3" along their length and fully along their width and have a minimum of 2 typical wall studs supporting them.
Joists shall bear the full width of supporting members (stud wall, beams, etc.).
Provide solid vertical blocking at all joist spaces below wood columns.
Provide matching columns to foundation at lower levels below columns comprised of 3 or more studs.
All beams and joists not bearing on supporting members shall be framed with prefabricated joist hangers.
Beams or headers made of 2 - 2x's with 1/2" spacer shall be nailed together with 16d nails (.162" x 3 ½") at 16" o.c. along each edge, typical for each lumber ply
Spacing of bridging for joists shall not exceed 8'-0".
Double all joists under parallel partitions or single floor truss.
All plywood and OSB shall be installed per American Plywood Association standards, including the use of construction adhesive for fastening to floor joists.
All fasteners and hangers in contact with treated lumber shall be G185 hot dipped galvanized or equal.
Lumber grading rules and wood species shall conform to Voluntary Product Standard PS 20-99 as published by the Department of Commerce. Grading rules shall be by an agency certified by the Board of Review of the American Lumber Standards Committee,
Performance requirements, adhesive bond performance, panel construction and workmanship, dimensions and tolerances, marking, and moisture content of Wood-based Structural-use Panels shall conform to Voluntary Product Standard PS 2-92, as published by the Department of Commerce.
Place sheetrock wall control joints max 30ft apart.

WOOD TRUSSES

Responsibilities of the contractor, building designer, truss manufacturer, and truss designer shall follow the publication "TPI 1-2002 National Design Standard for Metal Plate Connected Wood Truss Construction."
Truss supplier shall notify SER of any proposed revisions to the layout indicated on this plan. Revisions that affect the structural design will not be allowed without prior written approval by the SER.
Verify allowable bearing locations for girder trusses with SER prior to final design stage. Provide metal bearing enhancers as necessary to utilize stud columns shown on plan.
All prefabricated wood trusses shall be furnished in accordance with designs using the design loads and span conditions indicated, including designing gable end truss webs for perpendicular to face wind loads.
Truss manufacturer shall provide a truss layout and drawings prior to beginning construction.
Trusses shall be designed for top and bottom chord superimposed dead and live loads as indicated above.
Truss supplier shall design trusses to support additional dead load from, but not limited to, sprinkler lines, and rain leader systems, piping, cable trays, ductwork, etc., as per IBC. Coordinate with mechanical/electrical as required.
General contractor to verify location and magnitude of all such loads with truss supplier and SER prior to fabrication of trusses.
See architectural plans for attic draft stop locations and design roof trusses accordingly.
Live load deflection of roof trusses shall be limited to 1/360 of the span.
Live load deflection of floor trusses shall be limited to 1/480 of the span.
Design trusses for top chord bearing or bottom chord bearing as shown on drawings.
Truss configuration, pitch, overhang, etc. shall be indicated on the architectural drawings.
Spacing of roof trusses shall not exceed 24" o.c.
Spacing of floor trusses shall not exceed 24" o.c.
Lumber for wood trusses shall be in accordance with manufacturer's recommendations.
Truss manufacturer to provide girder trusses, hip jacks, and step-down trusses as required and designed to support all superimposed loads. Provide hip-sets, dormers, and piggy-back trusses as required.
Truss manufacturer to specify if roof sheathing needs to be applied before placing "over-framing".
Provide metal framing anchors at truss bearing to mechanically fasten truss to bearing wall or supporting member as shown in details.
Truss manufacturer shall provide truss to truss connection hangers.
Bridging, and bracing of truss compression and tension members, shall be installed in accordance with the truss manufacturer's design and directions.
No cutting, notching, or modifications of trusses will be allowed without the manufacturer's written approval.
Contractor shall provide permanent and temporary diagonal, lateral, and cross bracing in accordance with the publication "BCSI 1-03 Building Component Safety Information, Guide to Good Practice for Handling, Installing and Bracing of Metal Plate Connected Wood Trusses" by the Truss Plate Institute and Wood Truss Council of America and as otherwise necessary. For spans longer than 60ft., contractor shall hire a structural engineer to design the necessary bracing.
Permanent bottom chord bracing and web bracing shall be located as shown on the truss drawings and shall be minimum 2 x 4 with 2 - 16d nails to end walls and trusses, lapping two truss spaces at splices.

WALL SHEATHING

Wall sheathing shall be minimum 15/32" thick APA rated panels, rated for spacing of supporting members. A minimum 32/16 span rating is recommended. Block all joints.
Provide Exterior or Exposure 1 grade. Panels shall be continuous over two or more spans, and long dimension of panel shall be either perpendicular or parallel to supports. Fasten wall sheathing with 8d nails spaced at 4" o.c. at supported edges and 8" o.c. at intermediate supports. Leave an 1/8" gap at all end and edge joints to allow for expansion. Stagger end joints of panels. Refer to plan and notes for any special shear wall nailing and bolting conditions. Gypsum sheathing to be a minimum of 1/2" thick fastened with 6d cooler or wallboard nails at 7" o.c. to all framing members unless noted otherwise.

ROOF SHEATHING

Roof sheathing shall be minimum 19/32" thick APA rated panels, rated for spacing of supporting members. A minimum of 40/20 span rating is recommended. Provide panel clips, one between each support, for supports spaced greater than 16" o.c.
Provide Exterior or Exposure 1 grade. Panels shall be continuous over two or more spans, and long dimension of panel shall be perpendicular to supports. Fasten roof sheathing with 8d nails spaced at 4" o.c. at supported edges and 8" o.c. at intermediate supports. Leave an 1/8" gap at all end and edge joints to allow for expansion. Design of roof sheathing assumes that the roof will be properly insulated and ventilated. Refer to APA publication N335N "Proper Installation of APA Rated Sheathing for Roof Applications."

FLOOR SHEATHING

Floor sheathing shall be minimum 23/32" thick tongue and groove APA rated panels, rated for spacing of supporting members. A minimum of 48/24 span rating is recommended. Provide Exposure 1 grade. Panels shall be continuous over two or more spans, and long dimension of panel shall be perpendicular to supports. Fasten sheathing with construction adhesive and 8d nails spaced at 4" o.c. at supported edges and 8" o.c. at intermediate supports.

ENGINEERED LUMBER I-JOISTS

I-joist members noted on drawings are manufactured by Anthony. Alternate at contractors option of equal design properties.
Depths shown on plan are actual.
Notching or cutting of I-joist flanges is not permitted.
Web openings may occur under strict limitations by the joist manufacturer.
I-joists shall bear the full width of supporting members.
Install web stiffeners, blocking between members, and nail to supporting members as per manufacturers recommendations.

LVL WOOD MEMBERS

LVL members noted on drawings are engineered laminated veneer lumber as manufactured by Anthony. Alternate at contractor's option of equal design properties.
Sizes shown on plan are actual size.

PSL WOOD MEMBERS

PSL members noted on drawings are engineered parallel strand lumber as manufactured by Anthony. Alternate at contractor's option of equal design properties.
Sizes shown on plan are actual size.

LSL WOOD MEMBERS

LSL members noted on drawings are engineered laminated strand lumber as manufactured by Anthony. Alternate at contractor's option of equal design properties.
Sizes shown on plan are actual size.

ADHESIVE/EXPANSION ANCHORS

Adhesive and expansion anchors shall be provided and installed in strict accordance with the manufacturer's instructions. Adhesive anchoring system to be Simpson SET adhesive. Concrete screws shall be Simpson Titen. Alternate anchoring system may be submitted for approval. "Fast Set epoxy" is not permitted. Reference drawings for additional information and requirements.

WOOD HEADER SCHEDULE

MARK	SIZE
H1	2 - 2 X 6
H2	2 - 2 X 8
H3	3 - 2 X 8
H4	2 - 2 X 10
H5	3 - 2 X 10
H6	2 - 2 X 12
H7	3 - 2 X 12
H8	2 - 1 3/4 X 7 1/4 LVL
H9	3 - 1 3/4 x 7 1/4 LVL
H10	2 - 1 3/4 X 9 1/2 LVL
H11	3 - 1 3/4 X 9 1/2 LVL
H12	4 - 1 3/4 X 9 1/2 LVL
H13	2 - 1 3/4 X 11 7/8 LVL
H14	3 - 1 3/4 X 11 7/8 LVL
H15	4 - 1 3/4 X 11 7/8 LVL
H16	2 - 1 3/4 X 14 LVL
H17	3 - 1 3/4 X 14 LVL
H18	4 - 1 3/4 X 14 LVL
H19	2 - 1 3/4 X 16 LVL
H20	3 - 1 3/4 X 16 LVL
H21	4 - 1 3/4 X 16 LVL
H22	2 - 1 3/4 X 18 LVL
H23	3 - 1 3/4 X 18 LVL
H24	4 - 1 3/4 X 18 LVL

NOTE: (X)F INDICATES "FLUSH" BEAM/HEADER (TOP OF BEAM = TOP OF JOISTS)
(X)B (BOTTOM OF HEADER = BOTTOM OF JOISTS)

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EB

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STRUCTURAL NOTES

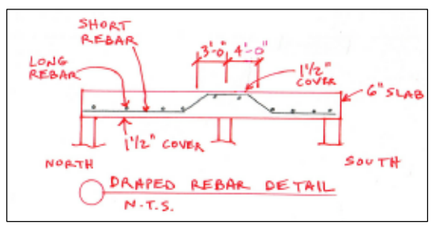
WOOD HEADER SCHEDULE

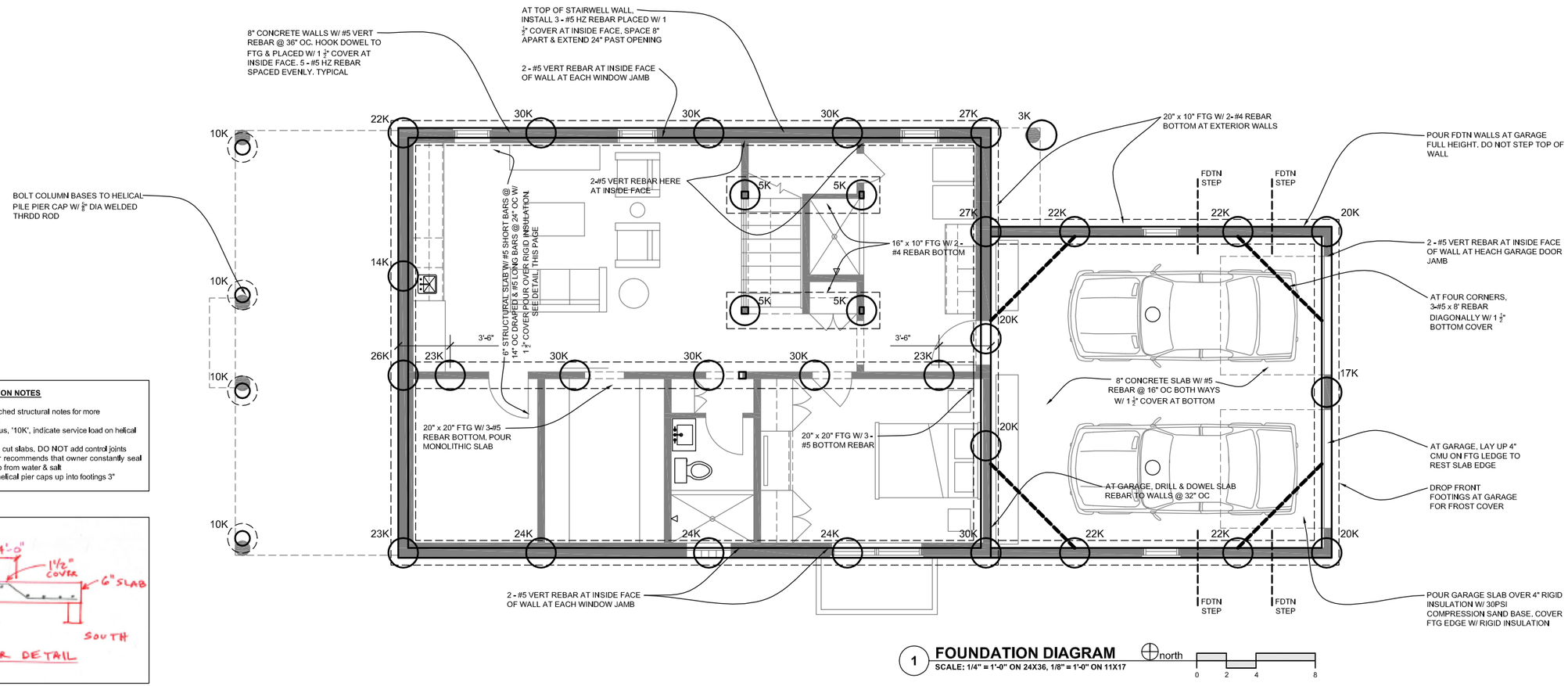
MARK	SIZE
LVL	2 - 2 X 6
LVL	2 - 2 X 8
LVL	3 - 2 X 8
LVL	2 - 2 X 10
LVL	3 - 2 X 10
LVL	2 - 2 X 12
LVL	3 - 2 X 12
LVL	2 - 1 3/4 X 7 1/4 LVL
LVL	3 - 1 3/4 x 7 1/4 LVL
LVL	2 - 1 3/4 X 9 1/2 LVL
LVL	3 - 1 3/4 X 9 1/2 LVL
LVL	4 - 1 3/4 X 9 1/2 LVL
LVL	2 - 1 3/4 X 11 7/8 LVL
LVL	3 - 1 3/4 X 11 7/8 LVL
LVL	4 - 1 3/4 X 11 7/8 LVL
LVL	2 - 1 3/4 X 14 LVL
LVL	3 - 1 3/4 X 14 LVL
LVL	4 - 1 3/4 X 14 LVL

NOTE: ⊖ INDICATES "FLUSH" BEAM/HEADER (TOP OF BEAM = TOP OF JOISTS)
⊖ (BOTTOM OF HEADER = BOTTOM OF JOISTS)

FOUNDATION NOTES

1. See attached structural notes for more Information.
2. Notes thus, '10K', indicate service load on helical piers
3. DO NOT cut slabs, DO NOT add control joints
4. Engineer recommends that owner constantly seal garage slab from water & salt
5. Embed helical pier caps up into footings 3"





1 **FOUNDATION DIAGRAM**
SCALE: 1/4" = 1'-0" ON 24X36, 1/8" = 1'-0" ON 11X17

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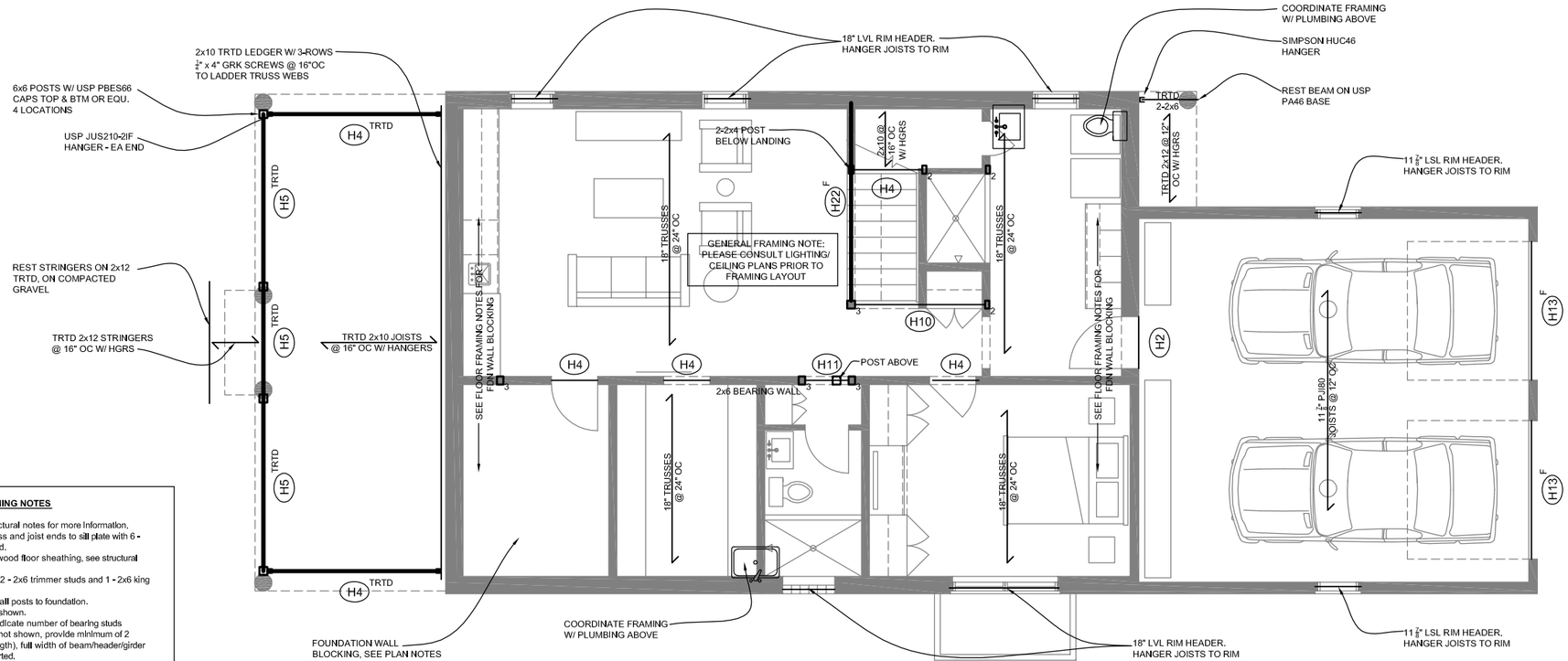
FOUNDATION DIAGRAM



1 **MAIN LEVEL FLOOR FRAMING** north
SCALE: 1/4" = 1'-0" ON 24X36, 1/8" = 1'-0" ON 11X17
0 2 4 8

WOOD HEADER SCHEDULE

MARK	SIZE
H1	2 - 2 X 6
H2	2 - 2 X 8
H3	3 - 2 X 8
H4	2 - 2 X 10
H5	3 - 2 X 10
H6	2 - 2 X 12
H7	3 - 2 X 12
H8	2 - 1 3/4 X 7 1/4 LVL
H9	3 - 1 3/4 x 7 1/4 LVL
H10	2 - 1 3/4 X 9 1/2 LVL
H11	3 - 1 3/4 X 9 1/2 LVL
H12	4 - 1 3/4 X 9 1/2 LVL
H13	2 - 1 3/4 X 11 7/8 LVL
H14	3 - 1 3/4 X 11 7/8 LVL
H15	4 - 1 3/4 X 11 7/8 LVL
H16	2 - 1 3/4 X 14 LVL
H17	3 - 1 3/4 X 14 LVL
H18	4 - 1 3/4 X 14 LVL
H19	2 - 1 3/4 X 16 LVL
H20	3 - 1 3/4 X 16 LVL
H21	4 - 1 3/4 X 16 LVL
H22	2 - 1 3/4 X 18 LVL
H23	3 - 1 3/4 X 18 LVL
H24	4 - 1 3/4 X 18 LVL

NOTE: (X)F INDICATES "FLUSH" BEAM/HEADER (TOP OF BEAM = TOP OF JOISTS)
(X)B (BOTTOM OF HEADER = BOTTOM OF JOISTS)

MAIN FLOOR FRAMING NOTES

1. See attached structural notes for more Information.
2. Attach all floor truss and joist ends to sill plate with 6 - 10dx3" nails each end.
3. Use 3/4" T&G plywood floor sheathing, see structural notes for nailing.
4. Provide minimum 2 - 2x6 trimmer studs and 1 - 2x6 king stud unless noted.
5. Block solid below all posts to foundation.
6. Locate girders as shown.
7. Marks thus, "2", Indicate number of bearing studs required. If number not shown, provide mInImum of 2 studs (3" bearing length), full width of beam/header/girder truss must be supported.
8. Interior bearing stud walls to be 2x6 at 16" o.c.
9. Provide bolted 2x top plates with 3/8" diameter bolts at 32" oc to top flanges at steel beams.
10. Provide 2x8 treated sill plate with galvanized 5/8"x12" anchor bolts at 36" oc with 1/8"x2" galvanized washers slightly crushing plate.
11. At all endwalls, Install 18" LSL blocks on edge In first 3 truss spaces at 24" oc and place tight to sill plate and floor truss top chords glued and screwed.
12. Attach exterior wall sole plates with 5 - 16d nails per ft.

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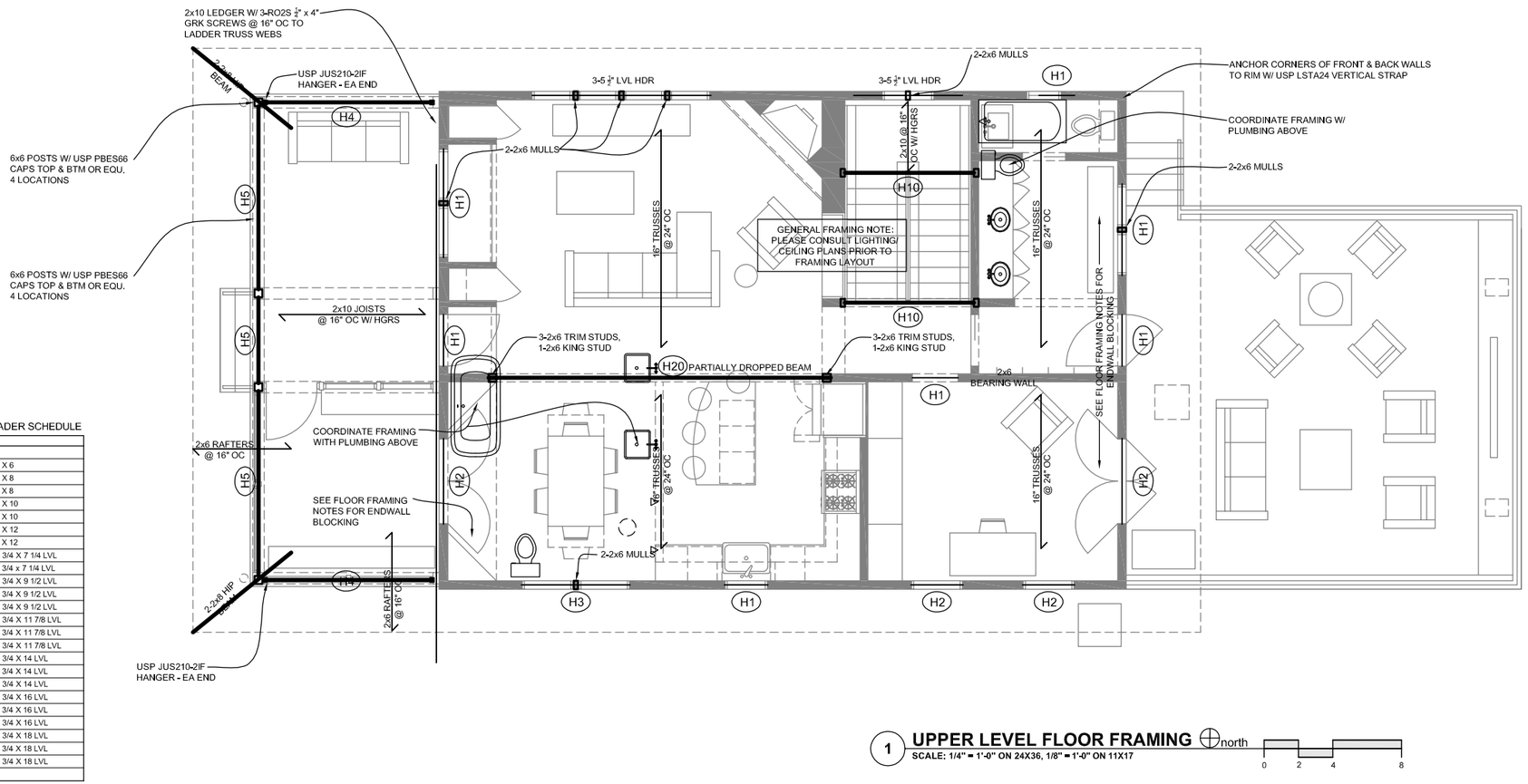
MAIN LEVEL FLOOR FRAMING



1 **UPPER LEVEL FLOOR FRAMING** north
SCALE: 1/4" = 1'-0" ON 24X36, 1/8" = 1'-0" ON 11X17

0 2 4 8

UPPER LEVEL FLOOR FRAMING NOTES

1. See attached structural notes for more information.
2. Attach all roof truss ends with USP RT7A ties to wall plates.
3. Attach all floor truss ends with 2 - 1/4"x5" GRK screws each end to wall plates.
4. Use 5/8" plywood roof sheathing, see structural notes for nailing.
5. Use 3/4" T&G plywood floor sheathing, see structural notes for nailing.
6. Provide minimum 2 - 2x6 trimmer studs and 1 - 2x6 king stud unless noted.
7. Block solid below all posts to foundation.
8. Locate girders as shown.
9. Marks thus, "2", indicate number of bearing studs required. If number not shown, provide minimum of 2 studs (3" bearing length), full width of beam/header/girder truss must be supported.
10. Attach flush headers to wall plates with USP RT7A ties each end.
11. Extend plywood wall sheathing up face of truss heel and nail to trusses. Stop short for venting as required.
12. Exterior stud walls to be 2x6 at 16" o.c.
13. Attached endwall ladder floor truss bottom chord to wall plates with 4 - 16d nails per ft.
14. Provide bolted 2x top plates with 3/8" diameter bolts at 32" oc to top flanges at steel beams.
15. Provide 2x6 top and bottom blocks with 1/2" plywood in between at 3ft.oc nailed to wall top plates and first truss top chord with 4 - 16d nails each end at both endwalls.

WOOD HEADER SCHEDULE

MARK	SIZE
H1	2 - 2 X 6
H2	2 - 2 X 8
H3	3 - 2 X 8
H4	2 - 2 X 10
H5	3 - 2 X 10
H6	2 - 2 X 12
H7	3 - 2 X 12
H8	2 - 1 3/4 X 7 1/4 LVL
H9	3 - 1 3/4 x 7 1/4 LVL
H10	2 - 1 3/4 X 9 1/2 LVL
H11	3 - 1 3/4 X 9 1/2 LVL
H12	4 - 1 3/4 X 9 1/2 LVL
H13	2 - 1 3/4 X 11 7/8 LVL
H14	3 - 1 3/4 X 11 7/8 LVL
H15	4 - 1 3/4 X 11 7/8 LVL
H16	2 - 1 3/4 X 14 LVL
H17	3 - 1 3/4 X 14 LVL
H18	4 - 1 3/4 X 14 LVL
H19	2 - 1 3/4 X 16 LVL
H20	3 - 1 3/4 X 16 LVL
H21	4 - 1 3/4 X 16 LVL
H22	2 - 1 3/4 X 18 LVL
H23	3 - 1 3/4 X 18 LVL
H24	4 - 1 3/4 X 18 LVL

NOTE: (A) INDICATES "FLUSH" BEAM/HEADER (TOP OF BEAM = TOP OF JOISTS)
(A)' (BOTTOM OF HEADER = BOTTOM OF JOISTS)

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UPPER LEVEL FLOOR FRAMING

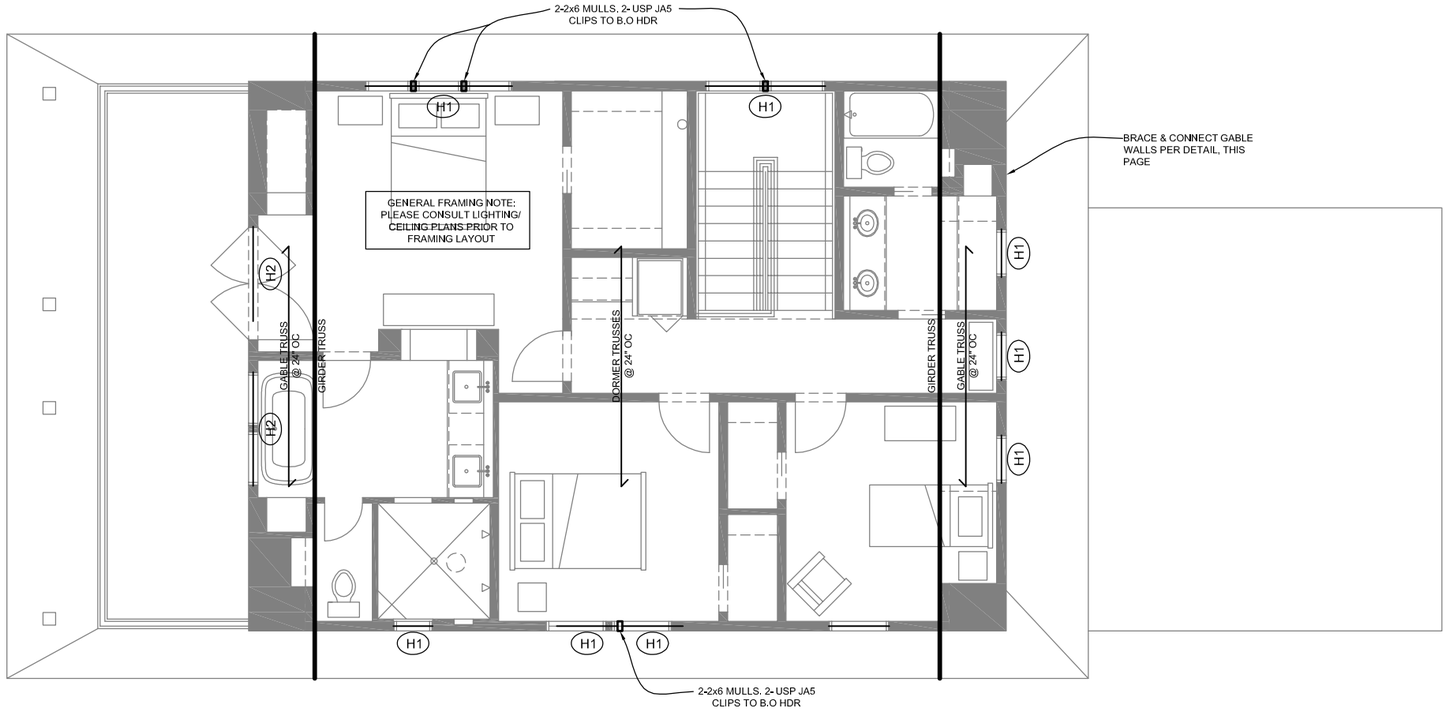
WOOD HEADER SCHEDULE

MARK	SIZE
H1	2 - 2 X 6
H2	2 - 2 X 8
H3	3 - 2 X 8
H4	2 - 2 X 10
H5	3 - 2 X 10
H6	2 - 2 X 12
H7	3 - 2 X 12
H8	2 - 1 3/4 X 7 1/4 LVL
H9	3 - 1 3/4 x 7 1/4 LVL
H10	2 - 1 3/4 X 9 1/2 LVL
H11	3 - 1 3/4 X 9 1/2 LVL
H12	4 - 1 3/4 X 9 1/2 LVL
H13	2 - 1 3/4 X 11 7/8 LVL
H14	3 - 1 3/4 X 11 7/8 LVL
H15	4 - 1 3/4 X 11 7/8 LVL
H16	2 - 1 3/4 X 14 LVL
H17	3 - 1 3/4 X 14 LVL
H18	4 - 1 3/4 X 14 LVL
H19	2 - 1 3/4 X 16 LVL
H20	3 - 1 3/4 X 16 LVL
H21	4 - 1 3/4 X 16 LVL
H22	2 - 1 3/4 X 18 LVL
H23	3 - 1 3/4 X 18 LVL
H24	4 - 1 3/4 X 18 LVL

NOTE: (A) INDICATES "FLUSH" BEAM/HEADER (TOP OF BEAM = TOP OF JOISTS)
(A) (BOTTOM OF HEADER = BOTTOM OF JOISTS)

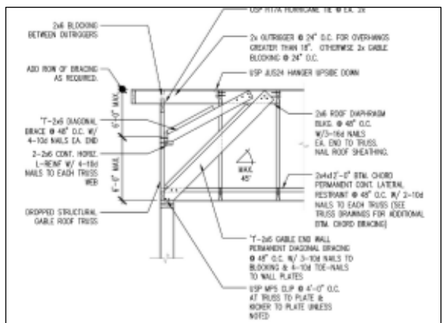
ROOF FRAMING NOTES

1. See attached structural notes for more information.
2. Attach all truss ends with USP RT7A ties to wall plates.
3. Use 5/8" plywood roof sheathing, see structural notes for nailing.
4. Provide minimum 2 - 2x trimmer studs and 1 - 2x king stud unless noted.
5. Block solid below all posts to foundation.
6. Locate girders as shown.
7. Marks thus, "2", indicate number of bearing studs required. If number not shown, provide minimum of 2 studs (3" bearing length), full width of beam/header/girder truss must be supported.
8. Mend all fascia board butt splices with USP LSTA24 horizontal strap.
9. Extend plywood wall sheathing up face of truss heel and nail to trusses. Stop short for venting as required.



1 **ROOF FRAMING DIAGRAM**
SCALE: 1/4" = 1'-0" ON 24X36, 1/8" = 1'-0" ON 11X17

north
0 2 4 8



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Date 3-6-14
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ROOF FRAMING DIAGRAM

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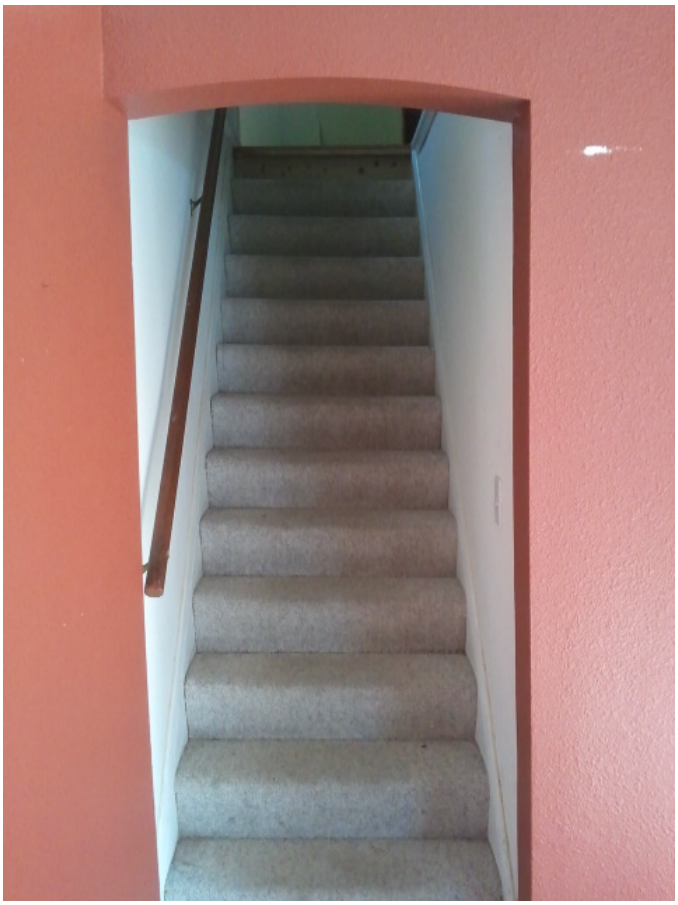

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4205 Xerxes Ave S Photos Page 4

4205 Xerxes Ave S Photos Page 5

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There appear to be several potential issues with the proposed plan:

- Groundwater may be an issue with the proposed basement/garage floor elevations and trench drain in the driveway. The project proposer should be required to adequately demonstrate that pumping of groundwater will not be necessary, as a discharge to the City system will not be permitted.
- The proposed tuck under garage being lower than the alley creates a significant risk of flooding of that structure. The garage would be the low point on the block, collecting all runoff from the area. The garage should be re-designed so this does not occur.
- The proposed grading creates steep slopes along the side yards, negatively impacting the adjacent properties in terms of stormwater runoff. This should be corrected.
- An erosion and sediment control plan would be required for the project. As Shanna stated, it has not been provided.

Let me know if you have comments or questions on these items. Thanks.

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