GENERAL NOTES & SPECIFICATIONS

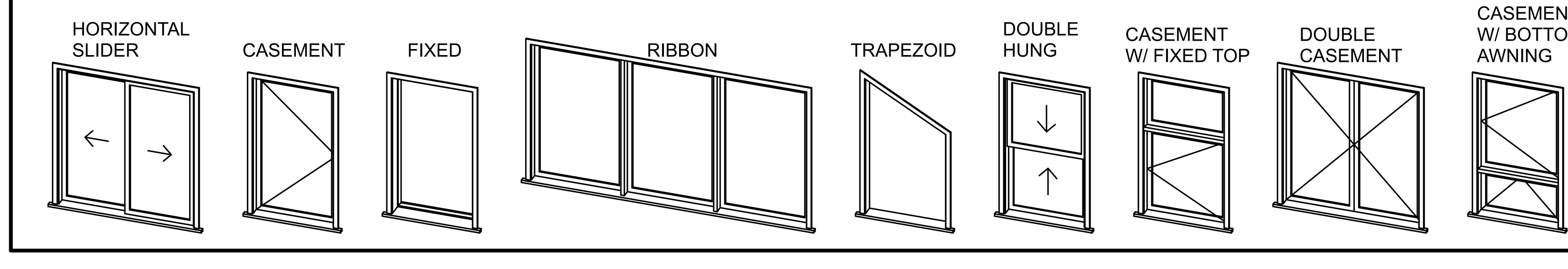
1. ALL WORK SHALL COMPLY WITH ALL BUILDING CODES HAVING JURISDICTION.
2. EACH CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS. SAID CONTRACTORS SHALL REPORT TO THE GENERAL CONTRACTOR, IN WRITING, ANY DISCREPANCIES BETWEEN THE DRAWINGS AND/OR THE SITE CONDITIONS BEFORE PROCEEDING WITH BIDDING AND PERFORMANCE OF THE WORK. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
3. ALL SYMBOLS AND ABREVIATIONS WITHIN THESE CONSTRUCTION DOCUMENTS ARE TO BE CONSIDERED CONSTRUCTION STANDARDS. ANY QUESTIONS AS TO THEIR MEANING SHALL BE ADDRESSED TO THE DESIGNER, IN WRITING, FOR CLARIFICATION.
4. ALL NEW GYPSUM WALLBOARD SHALL BE ML 5/8" THICKNESS, UNLESS OTHERWISE NOTED ON THESE PLANS. ALL OUTSIDE CORNERS SHALL HAVE METAL CORNER BEADS. TYPE MOISTURE RESISTANT (MR) GYPSUM WALLBOARD SHALL BE USED AT ALL PLUMBING WALLS.
5. ANY INTERIOR DESIGN, MECHANICAL AND ELECTRICAL DRAWINGS ARE SUPPLEMENTARY TO THESE BUILDING PLANS. IT SHALL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO REVIEW THESE PLANS BEFORE INSTALLING ELECTRICAL AND MECHANICAL WORK. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THESE PLANS AND OTHER DRAWINGS WHICH WOULD CAUSE AN AWKWARD INSTALLATION, IT SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER FOR CLARIFICATION PRIOR TO INSTALLATION.
6. ALL NEW PLUMBING WORK SHALL BE "DESIGN-BUILD" BY THE PLUMBING CONTRACTOR. HE SHALL BE RESPONSIBLE FOR PREPARING ALL DRAWINGS, DIAGRAMS AND CALCULATIONS WHICH ARE REQUIRED FOR OBTAINING BUILDING PERMITS AND PAYMENT OF THE REQUIRED FEES.
7. ALL NEW ELECTRICAL WORK SHALL BE "DESIGN-BUILD" BY THE ELECTRICAL CONTRACTOR. HE SHALL BE RESPONSIBLE FOR PREPARING ALL THE DRAWINGS, DIAGRAMS AND CALCULATIONS WHICH ARE REQUIRED FOR OBTAINING BUILDING PERMITS AND PAYMENT OF THE REQUIRED FEES.
8. ALL NEW HEATING/AIR CONDITIONING WORK SHALL BE "DESIGN-BUILD" BY THE HEATING/AIR CONDITIONING CONTRACTOR. HE SHALL BE RESPONSIBLE FOR PREPARING ALL DRAWINGS, DIAGRAMS AND CALCULATIONS WHICH ARE REQUIRED FOR OBTAINING PERMITS AND PAYMENT OF THE REQUIRED FEES.
9. SITE PREPARATION, EXCAVATION AND GRADING SHALL BE DONE IN CONFORMANCE WITH THE LOCAL BUILDING CODE.
10. THESE PLANS ARE COPYRIGHTED BY THE PROJECT DESIGNER AND ARE INTENDED FOR THE ONE-TIME USE FOR THE PROPERTY SPECIFIED HEREIN. USE OF THESE PLANS FOR ANY OTHER PURPOSE IS STRICTLY PROHIBITED.
11. THE BUILDER SHALL PROVIDE A STREET ADDRESS ON THE JOB SITE PRIOR TO AND DURING CONSTRUCTION.
12. THE DESIGNER PREPARING THESE PLANS SHALL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL PROPOSED CHANGES TO THESE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PROJECT ENGINEER.
13. IN THE EVENT OF CONFLICT BETWEEN THESE PLANS AND THE PLANS APPROVED BY THE GOVERNING AGENCY, THE APPROVED PLANS TAKE PRECEDENCE.
14. THE PROJECT CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO THE BEGINNING OF CONSTRUCTION, AND SHALL REPORT ANY DISCREPANCIES TO THE PROJECT ENGINEER. ANY DISCREPANCIES DISCOVERED DURING CONSTRUCTION SHALL BE IMMEDIATELY REPORTED TO THE PROJECT DESIGNER.
15. *PLEASE NOTE, WE RECOMMEND WAITING FOR DELIVERY OF LOG PACKAGE BEFORE ORDERING WINDOWS AND DOORS FROM MANUFACTURER. GENERAL CONTRACTOR TO DOUBLE CHECK WINDOW SIZES AND R.O. DIMENSIONS LISTED IN THE SCHEDULES W/ MANUFACTURES LISTED R.O. DIMENSIONS AND W/ OPENING DIMENSIONS IN LOG WORK TO ENSURE A PERFECT FIT.

WINDOW SCHEDULE

ID	Home Story	Library Part Name	Quantity	Carpenter's R.O.
W1	Basement	W2 Casement 25	1	5'-0"×5'-0"
W2	Basement	W2 Casement 25	2	6'-0"×5'-0"
W3	Basement	W1 Casement 25	1	2'-0"×2'-6"
W4	1st FLOOR	W Triple Sash 25	1	9'-0"×5'-0"
W5	1st FLOOR	W Triple Sash 25	2	8'-0"×5'-0"
W6	1st FLOOR	W1 Casement 25	1	2'-6"×4'-0"
W7	1st FLOOR	W2 Casement 25	2	5'-0"×4'-0"
W8	1st FLOOR	W1 Casement 25	1	3'-0"×3'-6"
W9	2nd FLOOR	W Ribbon 25	2	8'-0"×5'-0"
W10	2nd FLOOR	W Ribbon 25	2	9'-0"×5'-0"

DOOR SCHEDULE

ID	Home Story	Library Part Name	Orientation	Quantity	W x H Size	Carpenter's R.O.
D1	Basement	D2 Sliding 25	SLD	1	6'-0"×6'-8"	6'-2" X 6'-10"
D2	Basement	D2 25	DBL	1	6'-0"×6'-8"	6'-2" X 6'-10"
D3	1st FLOOR	D3 Sliding 01 25	SLD	1	9'-0"×6'-8"	9'-2" X 6'-10"
D4	1st FLOOR	D1 1Sidelight 25	LH	1	3'-0"×6'-8"	5'-2" X 6'-10" -SIDELIGHT 2068
D5	1st FLOOR	D1 Garage 01 25	OVERHEAD	1	16'-0"×8'-0"	16'-2" X 8'-2"
D6	1st FLOOR	D1 25	LH	1	3'-0"×6'-8"	3'-2" X 6'-10"



Eades Residence

PROJECT DATA

OWNER/APPLICANT
Eades

PROJECT LOCATION
248 Old Quarry Rd
Woodlawn
Ontario
K0A 3M0

LEGAL DESCRIPTION

PROJECT DESCRIPTION
PROPOSED NEW SINGLE FAMILY RESIDENCE

ZONING R-1

CONSTRUCTION TYPE

OCCUPANCY TYPE

AREA TABULATION

Square Footage	
FLOOR	Area
BASEMENT	1,473.69
FIRST FLOOR	1,476.01
GARAGE	524.12
	3,473.82 ft²

BUILDING CODE LEGEND

THESE PLANS SHALL COMPLY WITH THE FOLLOWING:

2015 NATIONAL BUILDING CODE
2015 NATIONAL MECHANICAL CODE
2015 NATIONAL PLUMBING CODE
2015 NATIONAL ELECTRIC CODE

DESIGN CRITERIA:

CODE: 2015 NATIONAL BUILDING CODE
SNOWLOAD: 36 PSF
SEISMIC ZONE:
DESIGN WIND SPEED:

SHEET INDEX

LICENSED PROFESSIONAL ENGINEER
May 8, 2023
M. W. ZEITOUN
100157514
PROVINCE OF ONTARIO
"Structural Only"

- ALL DIMENSIONS TO BE VERIFIED ON SITE BY GENERAL CONTRACTOR
- ALL DIMENSIONS ARE CONSTRUCTION TIME DIMENSIONS
- IT IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS & SPECIFICATIONS ON THIS SET OF PLANS BEFORE STARTING CONSTRUCTION
- ALL LOG DIAMETER SIZE TO BE MEASURED AT MID SPAN
- BUILDER IS RESPONSIBLE FOR COMPLYING WITH ALL LOCAL BUILDING CODES AND PRACTICES

I HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN ACTIVITIES WHICH BEAR THIS DECLARATION AND I HAVE MET THE REQUIREMENTS OF THE OBC AS A REGISTERED DESIGNER

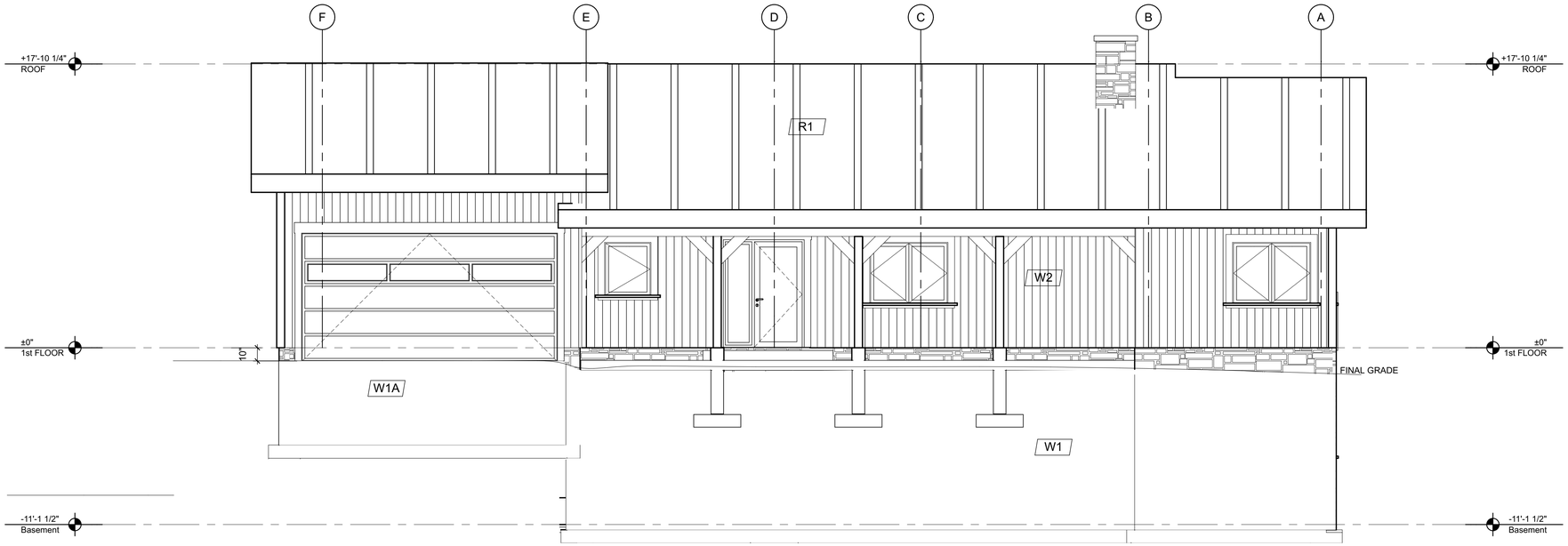
KEALEY & TACKABERRY LOG HOMES

REVISION:	DATE:	DESCRIPTION:
ENG.	MAR. 14/22	
REV. 2		
REV. 3		

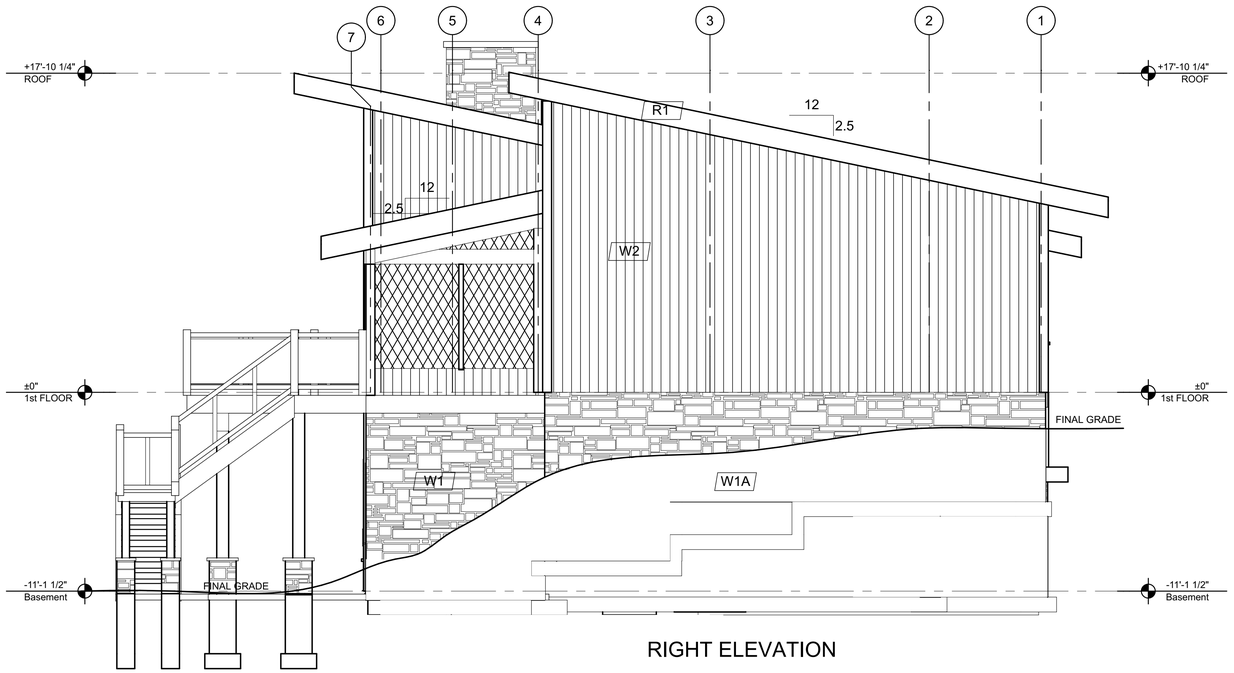
SCALE: N.T.S.
DATE: APR. 10, 2023
DRAWN BY: G.C.
CHECKED BY: C.C.

LOG BUILDER : KEALEY & TACKABERRY LOG HOMES
CLIENT : Eades
TITLE: COVER SHEET

A-1
15



FRONT ELEVATION



RIGHT ELEVATION

"Structural Only"

- ALL DIMENSIONS TO BE VERIFIED ON SITE BY GENERAL CONTRACTOR
- ALL DIMENSIONS ARE CONTROLLING OVER SCALED DIMENSIONS
- IT IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS & SPECIFICATIONS ON THIS SET OF PLANS BEFORE STARTING CONSTRUCTION
- ALL CONSTRUCTION SHALL BE ASSESSED AT MID SPAN
- BUILDER IS RESPONSIBLE FOR COMPLYING WITH ALL LOCAL BUILDING CODES AND PRACTICES

I HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN ACTIVITIES WHICH I HAVE DESCRIBED AND I HAVE MET THE REQUIREMENTS OF THE OBC AS A REGISTERED DESIGNER

KEALEY & TACKABERRY LOG HOMES

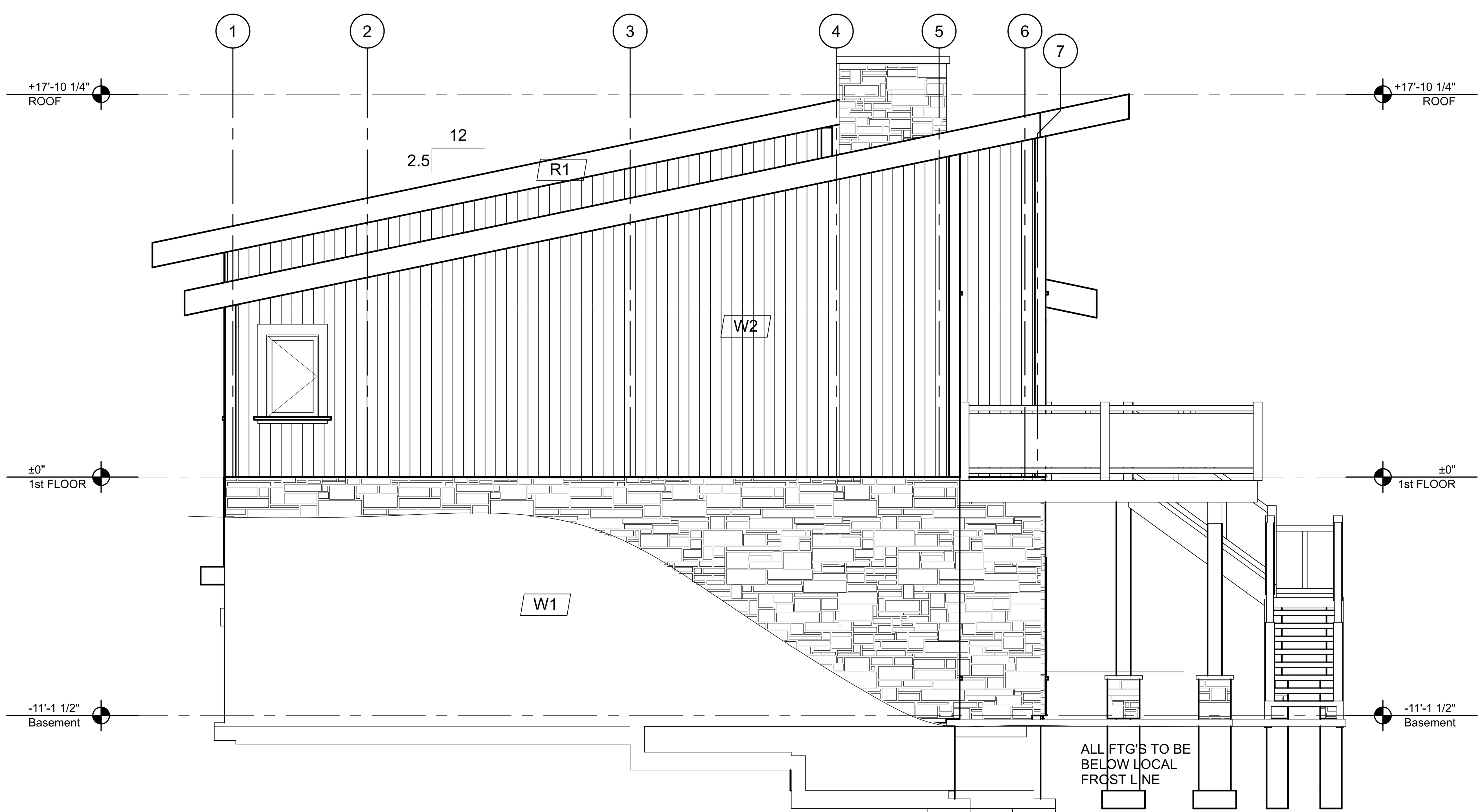
LOG BUILDER :	KEALEY & TACKABERRY LOG HOMES
CLIENT :	Eades
TITLE:	ELEVATIONS
SCALE:	1/4" = 1'-0"
DATE:	APR. 10, 2023
DRAWN BY:	G.C.
CHECKED BY:	C.C.

REVISION:	DATE:	DESCRIPTION:
ENG.	MAR. 14/22	
REV. 2		
REV. 3		

A-2

15

BACK ELEVATION



LEFT ELEVATION

- ALL DIMENSIONS TO BE VERIFIED ON SITE BY GENERAL CONTRACTOR
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- ALL LOG DIAMETER SIZE TO BE MEASURED AT MID SPAN
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I HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN ACTIVITIES WHICH BEAR THIS DECLARATION AND I HAVE MET THE REQUIREMENTS OF THE OBC AS A REGISTERED DESIGNER

KEALEY & TACKABERRY LOG HOMES

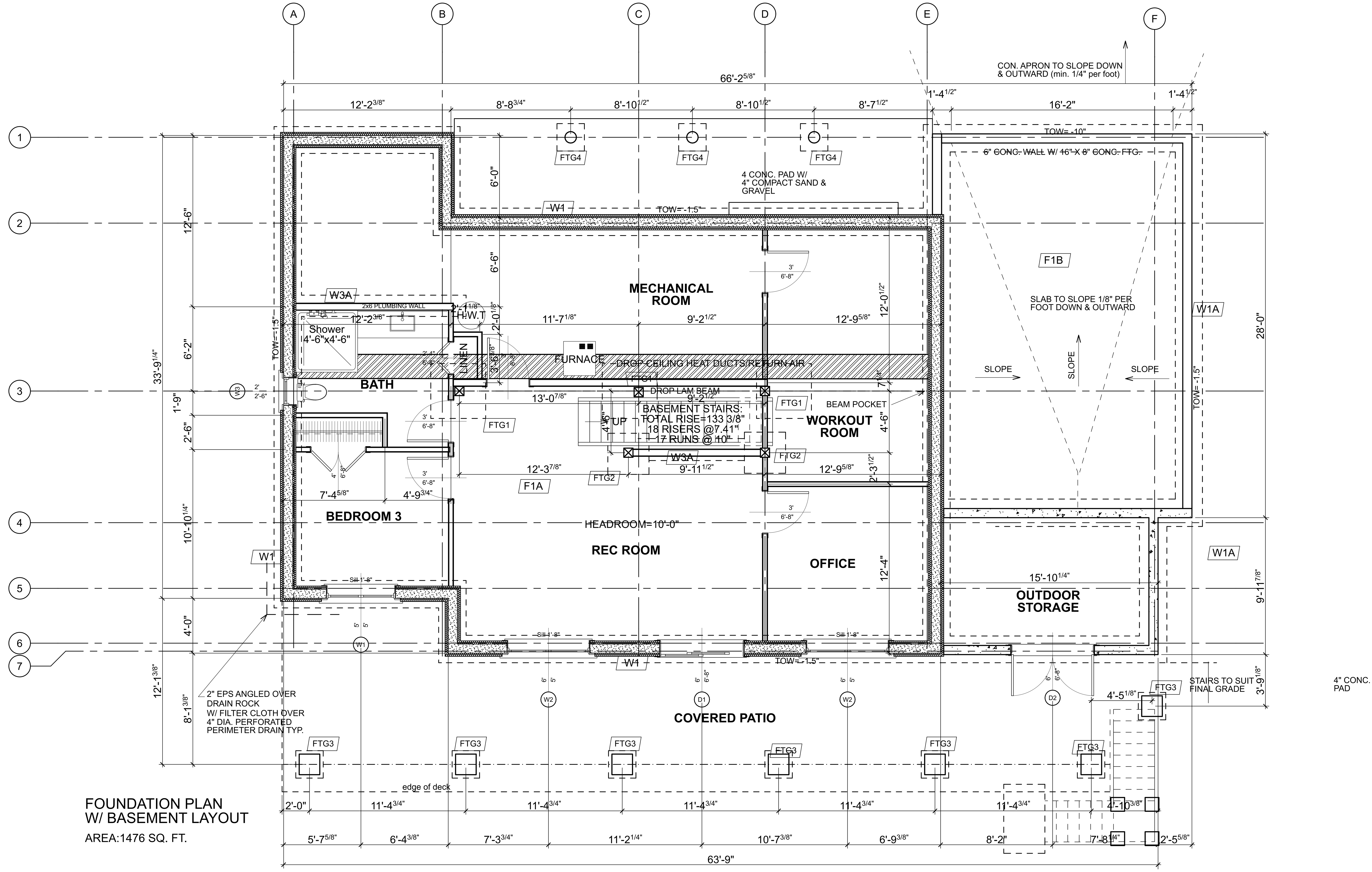
REVISION:	DATE:	DESCRIPTION:
ENG.	MAR. 14/22	
REV. 2		
REV. 3		

SCALE: 1/4" = 1'-0"
DATE: APR. 10, 2023
DRAWN BY: G.C.
CHECKED BY: C.C.

LOG BUILDER : KEALEY & TACKABERRY LOG HOMES
CLIENT : Eades
TITLE: ELEVATIONS

A-3
15

LICENSED PROFESSIONAL ENGINEER
May 8, 2023
M. W. ZEITOUN
100157514
PROVINCE OF ONTARIO
"Structural Only"



FOUNDATION PLAN W/ BASEMENT LAYOUT

AREA:1476 SQ. FT.

CONSTRUCTION MATERIALS

W1 — TYPICAL FOUNDATION WALL
AMVIC ICF 8" WIDE CONC. WALL
ON 24"x10" CONC. FTG.

W1A — TYPICAL FOUNDATION WALL
8" WIDE CONC. WALL
ON 20"x10" CONC. FTG.

W2 — TYPICAL FRAME EXTERIOR WALL
VERTICAL SIDING
ON # 30 FELT
ON 1 11/16" INSULATED SHEATHING
2X6 @ 16" O.C. FRAME WALL
R24 BATT INSULATION
6 MIL POLY V.B.
INT. FINISH TO OWNERS SPECS.

W3A — TYPICAL INTERIOR FRAME WALL (LOAD BEARING)
INT. PARTITION WALLS TO BE:
1/2" GWB BOTH SIDES
2X6 @ 16" O.C FRAME WALL
ON 8" CONC. CURB ON 24"x10" CONC. FTG.

W3B — TYPICAL INTERIOR FRAME WALL
INT. PARTITION WALLS TO BE:
1/2" GWB BOTH SIDES
2X4 @ 16" O.C FRAME WALL

FTG1 — TYPICAL SPOT FOOTING
4'x4'x10" CONC. PAD
3-15M 3" COVER
8"x8" CONC. PIER
W/ EMBEDDED METAL
SADDLE BRACKET TO
8"x8" D-FIR POST
TO SUPPORT BEAM

FTG2 — TYPICAL SPOT FOOTING
3'x3'x10" CONC. PAD
8"x8" CONC. PIER
W/ EMBEDDED METAL
SADDLE BRACKET TO
8x8 D-FIR POST
TO SUPPORT BEAM

FTG3 — TYPICAL SPOT FOOTING
2'x2'x10" CONC. PAD
10" DIA. SONOTUBE
W/ EMBEDDED METAL
SADDLE BRACKET TO
8x8 D-FIR POST
TO SUPPORT BEAM

FTG4 — TYPICAL SPOT FOOTING
3'x3'x10" CONC. PAD
10" DIA. SONOTUBE
W/ EMBEDDED METAL
SADDLE BRACKET TO
LOG POST
TO SUPPORT BEAM

F1A — TYPICAL BASEMENT FLOOR
4" CONC. SLAB @ ALL
LIVING SPACE ON
6 MIL POLY V.B. ON
MIN. 4" RIGID INSULATION OR
TO MIN. R-VALUE FOR LOCAL ENERGY CODE
4" COMPACT SAND OR GRAVEL

F1B — TYPICAL GARAGE FLOOR
5" CONC. SLAB
6 MIL POLY V.B. ON
4" COMPACT SAND OR GRAVEL

F2 — TYPICAL FIRST FLOOR FRAMING
3/4" T&G PLY SUBFLOOR
11 7/8" TJI FL. JST@ 16" O.C.
CLG. FINISH TO OWNERS SPECS.

R1 — TYPICAL ROOF TO BE:
METAL CLADDING
ON 2x4 HORIZ. STRAPPING @ 2' O.C.
ON 1x4 VERT. STRAPPING @ 2' O.C.
ON ICE & WATER SHIELD OR #30 FELT
STRUCTURAL INSULATED PANELS
1x6 T&G ROOF DECKING
OVER 8" WIDE X 12" HIGH TIMBER RAFTERS

R2 — TYPICAL ROOF TO BE:
METAL CLADDING
ON #30 FELT
1/2" PLYWOOD SHEATHING
W/ EDGE CLIPS BETWEEN RAFTERS
2x8 @ 2' O.C. RAFTERS
CLG. FINISH TO OWNERS SPECS.

FOUNDATION NOTES

EXTERIOR OF 2X6 STUDS TO BE FLUSH TO EXTERIOR FACE OF ICF CONCRETE FORM.

ALL FOOTING SIZES TO BE ENGINEERED FOR SITE SOIL BEARING PRESSURE.

CONCRETE REINFORCEMENT TABLE TO BE VERIFIED BY ENG.

BASEMENT FOOTING: REFER TO A-8 FOR WALL AND STRIP FOOTING REINFORCEMENT

ALL DECK POSTS & LEAN-TO ROOF POSTS CONCRETE FOOTINGS WITH 15M REBAR ON 12" GRID
WIRE MESH REINFORCEMENT IN ALL CONC. SLABS TO AVOID CRACKS
CONC. POST (SONOTUBE) VERTICAL REBAR REINFORCEMENT TO BE 2-NO 4 REBAR

STONE VENEER SUPPORT:

NOTE: STONE VENEER MAY BE SUPPORTED ON SOLID GROUTED CMU LOCATED BETWEEN CONC. FTGS. & GRADE OR GENERAL CONTRACTOR MAY PROVIDE A 12" THICK CONC. FOUNDATION WALL (3-10M T&B) W/ A 4" WIDE X3'-0" FORMED STONE LEDGE

FOUNDATION:
SOIL BEARING PRESSURE IS ASSUMED TO BE A MINIMUM OF 1500 P.S.F.
ALL FTGS. TO BEAR ON FIRM UNDISTURBED MATERIAL
ALL CONC. TO BE 2500 PSI @ 28 DAYS.

GENERAL NOTES

TOCW= TOP OF CONCRETE WALL

ALL LINTELS TO BE 3 1/8" X 9" LAM LINTEL UNLESS OTHERWISE NOTED

NOTE: 5/8" ANCHOR BOLTS PLACED 24" AWAY FROM CORNERS AND @ 32" O.C. C/W NUTS & WASHERS AROUND PERIMETER

LICENSED PROFESSIONAL ENGINEER
May 8, 2023
M. W. ZEITOUN
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PROVINCE OF ONTARIO
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- ALL LOG DIAMETER SIZE TO BE MEASURED AT MID SPAN
- BUILDER IS RESPONSIBLE FOR COMPLYING WITH ALL LOCAL BUILDING CODES AND PRACTICES

I HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN ACTIVITIES WHICH BEAR THIS DECLARATION AND I HAVE MET THE REQUIREMENTS OF THE OBC AS A REGISTERED DESIGNER

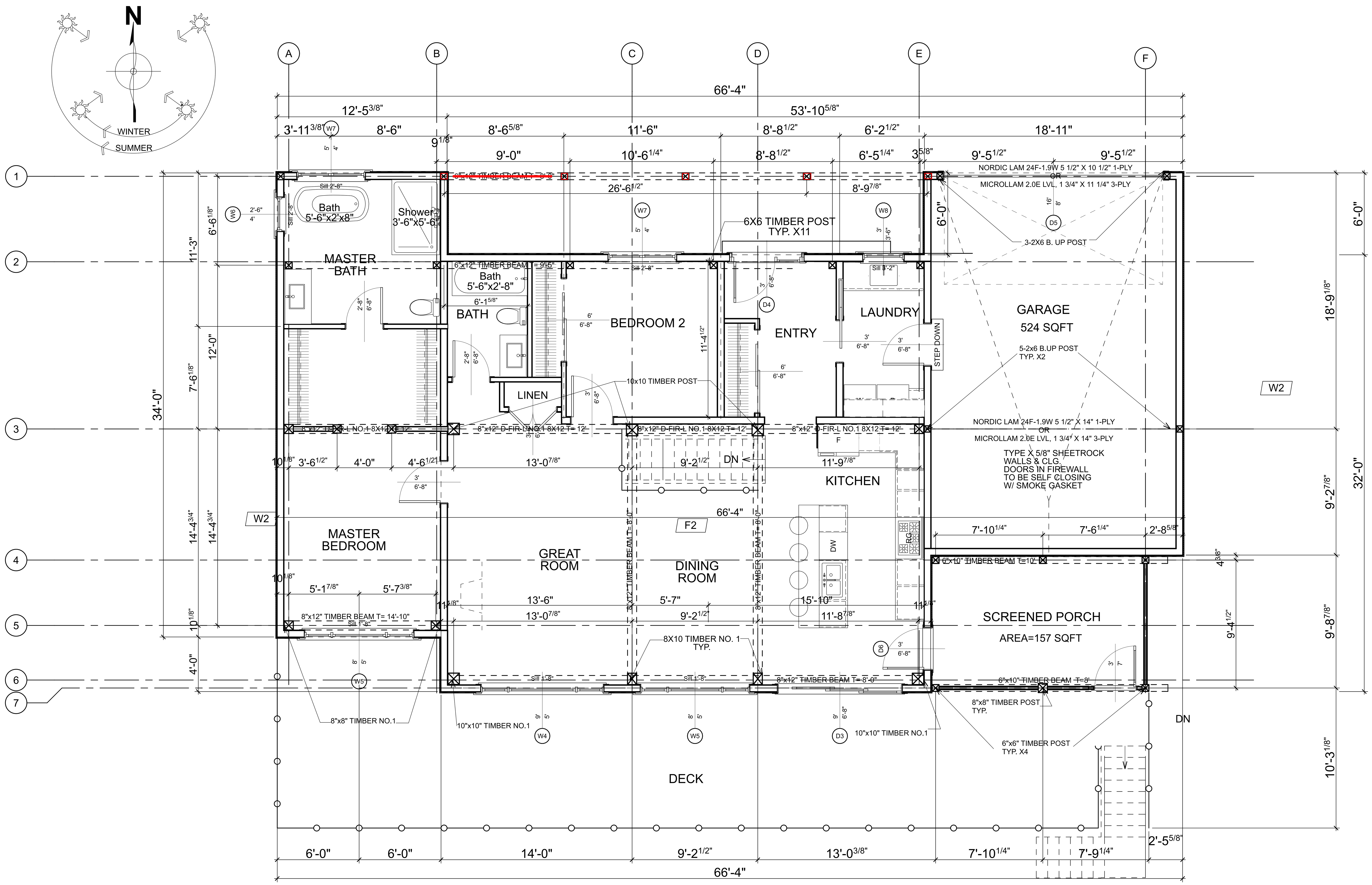
KEALEY & TACKABERRY LOG HOMES

REVISION:	DATE:	DESCRIPTION:
ENG.	MAR. 14/22	
REV. 2		
REV. 3		

SCALE: 1/4" = 1'-0"
DATE: APR. 10, 2023
DRAWN BY: G.C.
CHECKED BY: C.C.

LOG BUILDER : KEALEY & TACKABERRY LOG HOMES
CLIENT : Eades
TITLE: FOUNDATION PLAN

A-4



FIRST FLOOR PLAN

AREA: 1476 SQ.FT.

CONSTRUCTION MATERIALS

W1 — TYPICAL FOUNDATION WALL
AMVIC ICF 8" WIDE CONC. WALL
ON 24"x10" CONC. FTG.

W1A — TYPICAL FOUNDATION WALL
8" WIDE CONC. WALL
ON 20"x10" CONC. FTG.

W2 — TYPICAL FRAME EXTERIOR WALL
VERTICAL SIDING
ON # 30 FELT
ON 1 11/16" INSULATED SHEATHING
2X6 @ 16" O.C. FRAME WALL
R24 BATT INSULATION
6 MIL POLY V.B.
INT. FINISH TO OWNERS SPECS.

W3A — TYPICAL INTERIOR FRAME WALL (LOAD BEARING)
INT. PARTITION WALLS TO BE:
1/2" GWB BOTH SIDES
2X6 @ 16" O.C FRAME WALL
ON 8" CONC. CURB ON 24"x10" CONC. FTG.

W3B — TYPICAL INTERIOR FRAME WALL
INT. PARTITION WALLS TO BE:
1/2" GWB BOTH SIDES
2X4 @ 16" O.C FRAME WALL

FTG1 — TYPICAL SPOT FOOTING
4'x4'x10" CONC. PAD
3-15M 3" COVER
8"x8" CONC. PIER
W/ EMBEDDED METAL
SADDLE BRACKET TO
8"x8" D-FIR POST
TO SUPPORT BEAM

FTG2 — TYPICAL SPOT FOOTING
3'x3'x10" CONC. PAD
8"x8" CONC. PIER
W/ EMBEDDED METAL
SADDLE BRACKET TO
8x8 D-FIR POST
TO SUPPORT BEAM

FTG3 — TYPICAL SPOT FOOTING
2'x2'x10" CONC. PAD
10" DIA. SONOTUBE
W/ EMBEDDED METAL
SADDLE BRACKET TO
8x8 D-FIR POST
TO SUPPORT BEAM

FTG4 — TYPICAL SPOT FOOTING
3'x3'x10" CONC. PAD
10" DIA. SONOTUBE
W/ EMBEDDED METAL
SADDLE BRACKET TO
LOG POST
TO SUPPORT BEAM

F1A — TYPICAL BASEMENT FLOOR
4" CONC. SLAB @ ALL
LIVING SPACE ON
6 MIL POLY V.B. ON
MIN. 4" RIGID INSULATION OR
TO MIN. R-VALUE FOR LOCAL ENERGY CODE
4" COMPACT SAND OR GRAVEL

F1B — TYPICAL GARAGE FLOOR
5" CONC. SLAB
6 MIL POLY V.B. ON
4" COMPACT SAND OR GRAVEL

F2 — TYPICAL FIRST FLOOR FRAMING
3/4" T&G PLY SUBFLOOR
11 7/8" TJI FL. JST@ 16" O.C.
CLG. FINISH TO OWNERS SPECS.

R1 — TYPICAL ROOF TO BE:
METAL CLADDING
ON 2x4 HORIZ. STRAPPING @ 2' O.C.
ON 1x4 VERT. STRAPPING @ 2' O.C.
ON ICE & WATER SHIELD OR #30 FELT
STRUCTURAL INSULATED PANELS
1x6 T&G ROOF DECKING
OVER 8" WIDE X 12" HIGH TIMBER RAFTERS

R2 — TYPICAL ROOF TO BE:
METAL CLADDING
ON #30 FELT
1/2" PLYWOOD SHEATHING
W/ EDGE CLIPS BETWEEN RAFTERS
2x8 @ 2' O.C. RAFTERS
CLG. FINISH TO OWNERS SPECS.

TIMBER WORK GENERAL NOTES

ALL DIMENSIONS ARE CONSTRUCTION DIMENSIONS.
ALL DIMENSIONS TO BE VERIFIED ON SITE BY GEN. CONTRACTOR BEFORE STARTING CONSTRUCTION

TOW= TOP OF WALL
TOW= 0 @ TOP OF SUBFLOOR
T= TOP OF TIMBER
B= BOTTOM OF TIMBER
TYP.= TYPICAL

ALL LINTELS TO BE 3 1/8" X 9" LAM LINTEL UNLESS OTHERWISE NOTED

ALL TIMBER WORKS TO BE ENG.

- ALL DIMENSIONS TO BE VERIFIED ON SITE BY GENERAL CONTRACTOR
- ALL DIMENSIONS ARE CONSTRUCTION TIME DIMENSIONS
- IT IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS & SPECIFICATIONS ON THIS SET OF PLANS BEFORE STARTING CONSTRUCTION
- ALL LOG DIAMETER SIZE TO BE MEASURED AT MID SPAN
- BUILDER IS RESPONSIBLE FOR COMPLYING WITH ALL LOCAL BUILDING CODES AND PRACTICES

I HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN ACTIVITIES WHICH BEAR THIS DECLARATION AND I HAVE MET THE REQUIREMENTS OF THE OBC AS A REGISTERED DESIGNER

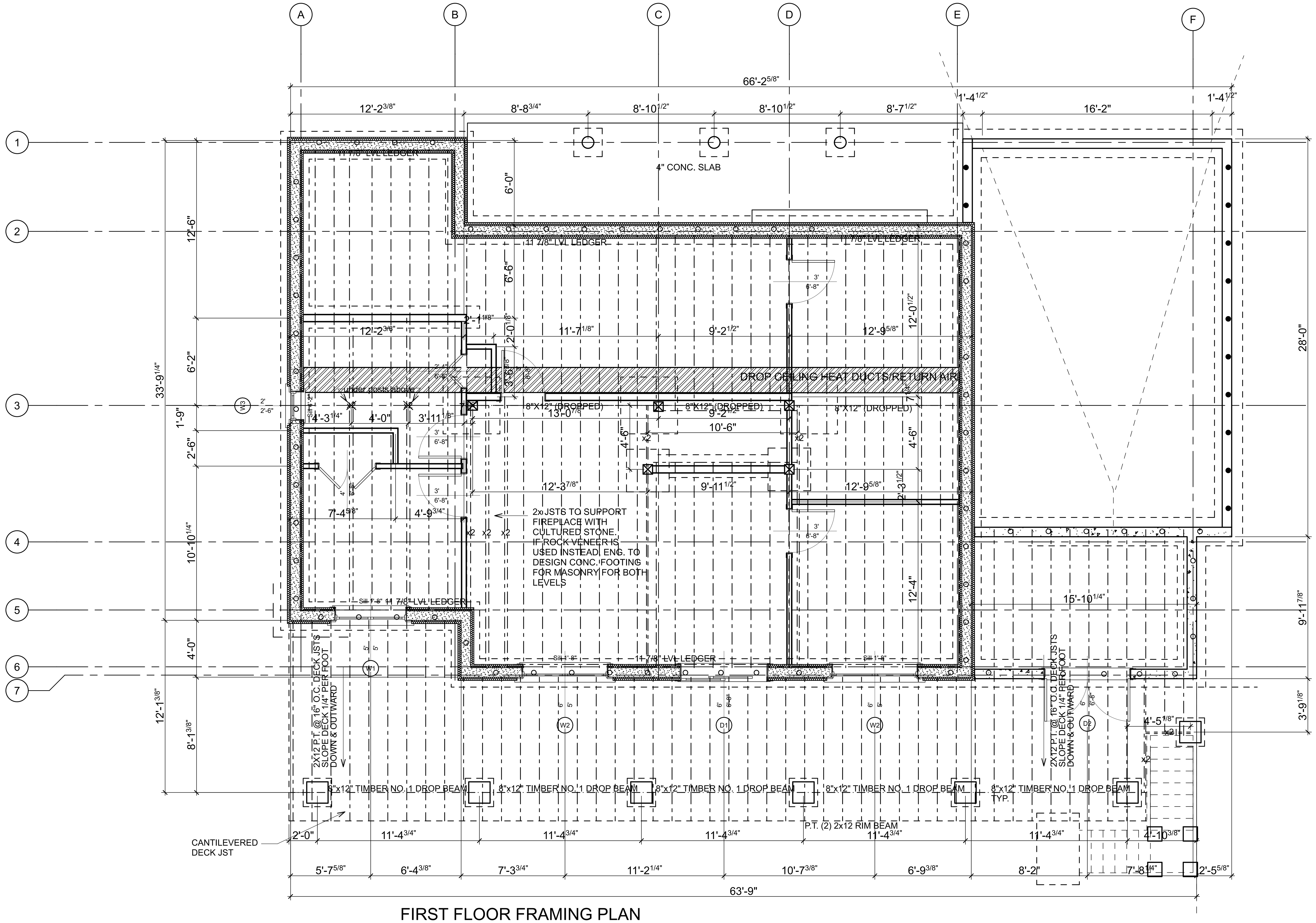
KEALEY & TACKABERRY LOG HOMES

REVISION:	DATE:	DESCRIPTION:
ENG.	MAR. 14/22	
REV. 2		
REV. 3		

SCALE:	1/4" = 1'-0"
DATE:	APR. 10, 2023
DRAWN BY:	G.C.
CHECKED BY:	C.C.

LOG BUILDER : KEALEY & TACKABERRY LOG HOMES
CLIENT : Eades
TITLE: FIRST FLOOR PLAN

A-5



FIRST FLOOR FRAMING PLAN

● 5/8" DIA. ANCHORBOLTS @ 32" O.C. PLACED UPRIGHT (90°) 3" AWAY FROM EXT. FACE OF CONC.

CONSTRUCTION MATERIALS

W1 TYPICAL FOUNDATION WALL
AMVIC ICF 8" WIDE CONC. WALL
ON 24"x10" CONC. FTG.

W1A TYPICAL FOUNDATION WALL
8" WIDE CONC. WALL
ON 20"x10" CONC. FTG.

W2 TYPICAL FRAME EXTERIOR WALL
VERTICAL SIDING
ON # 30 FELT
ON 1 11/16" INSULATED SHEATHING
2X6 @ 16" O.C. FRAME WALL
R24 BATT INSULATION
6 MIL POLY V.B.
INT. FINISH TO OWNERS SPECS.

W3A TYPICAL INTERIOR FRAME WALL (LOAD BEARING)
INT. PARTITION WALLS TO BE:
1/2" GWB BOTH SIDES
2X6 @ 16" O.C FRAME WALL
ON 8" CONC. CURB ON 24"x10" CONC. FTG.

W3B TYPICAL INTERIOR FRAME WALL
INT. PARTITION WALLS TO BE:
1/2" GWB BOTH SIDES
2X4 @ 16" O.C FRAME WALL

FTG1 TYPICAL SPOT FOOTING
4'x4'x10" CONC. PAD
3-15M 3" COVER
8"x8" CONC. PIER
W/ EMBEDDED METAL
SADDLE BRACKET TO
8"x8" D-FIR POST
TO SUPPORT BEAM

FTG2 TYPICAL SPOT FOOTING
3'x3'x10" CONC. PAD
8"x8" CONC. PIER
W/ EMBEDDED METAL
SADDLE BRACKET TO
8x8 D-FIR POST
TO SUPPORT BEAM

FTG3 TYPICAL SPOT FOOTING
2'x2'x10" CONC. PAD
10" DIA. SONOTUBE
W/ EMBEDDED METAL
SADDLE BRACKET TO
8x8 D-FIR POST
TO SUPPORT BEAM

FTG4 TYPICAL SPOT FOOTING
3'x3'x10" CONC. PAD
10" DIA. SONOTUBE
W/ EMBEDDED METAL
SADDLE BRACKET TO
LOG POST
TO SUPPORT BEAM

F1A TYPICAL BASEMENT FLOOR
4" CONC. SLAB @ ALL
LIVING SPACE ON
6 MIL POLY V.B. ON
MIN. 4" RIGID INSULATION OR
TO MIN. R-VALUE FOR LOCAL ENERGY CODE
4" COMPACT SAND OR GRAVEL

F1B TYPICAL GARAGE FLOOR
5" CONC. SLAB
6 MIL POLY V.B. ON
4" COMPACT SAND OR GRAVEL

F2 TYPICAL FIRST FLOOR FRAMING
3/4" T&G PLY SUBFLOOR
11 7/8" TJI FL. JST@ 16" O.C.
CLG. FINISH TO OWNERS SPECS.

R1 TYPICAL ROOF TO BE:
METAL CLADDING
ON 2x4 HORIZ. STRAPPING @ 2' O.C.
ON 1x4 VERT. STRAPPING @ 2' O.C.
ON ICE & WATER SHIELD OR #30 FELT
STRUCTURAL INSULATED PANELS
1x6 T&G ROOF DECKING
OVER 8" WIDE X 12" HIGH TIMBER RAFTERS

R2 TYPICAL ROOF TO BE:
METAL CLADDING
ON #30 FELT
1/2" PLYWOOD SHEATHING
W/ EDGE CLIPS BETWEEN RAFTERS
2x8 @ 2' O.C. RAFTERS
CLG. FINISH TO OWNERS SPECS.

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● BUILDER IS RESPONSIBLE FOR COMPLYING WITH ALL LOCAL BUILDING CODES AND PRACTICES

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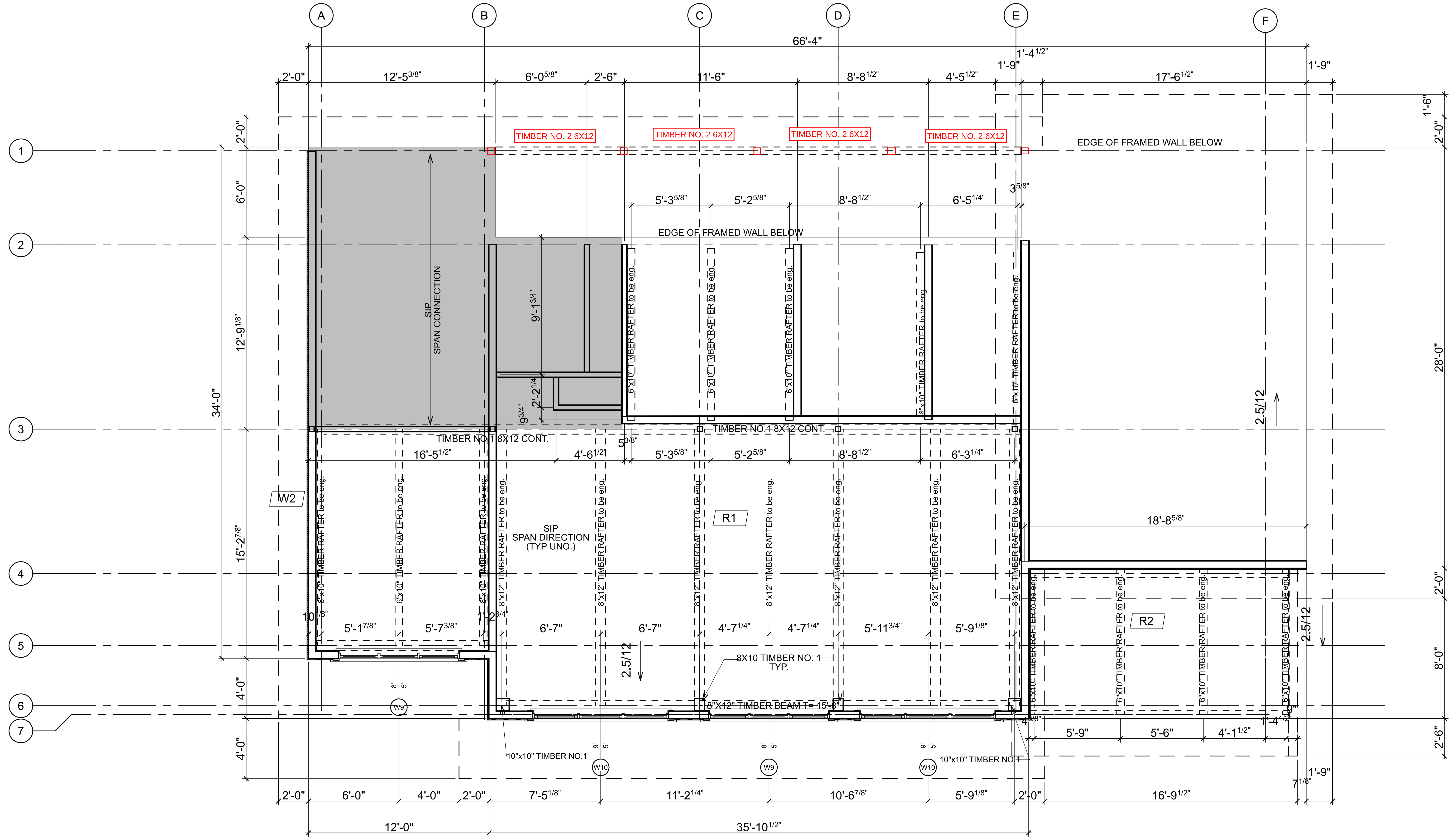
KEALEY & TACKABERRY LOG HOMES

SCALE: 1/4" = 1'-0"	REVISION:	DATE:	DESCRIPTION:
DATE: APR. 10, 2023	ENG.	MAR. 14/22	
DRAWN BY: G.C.	REV. 2		
CHECKED BY: C.C.	REV. 3		

LOG BUILDER : KEALEY & TACKABERRY LOG HOMES
CLIENT : Eades
TITLE: FIRST FLOOR FRAMING PLAN

A-6
15



ROOF PLAN

SNOW LOAD: 50 lbs/ SQ. FT.

Roof Area		
Element ID	Pitch	Surface Area
2.5/12	11.77°	231.53
2.5/12	11.77°	767.08
2.5/12	11.77°	2,209.22
		3,207.83 ft²

CONSTRUCTION MATERIALS

W1 TYPICAL FOUNDATION WALL
AMVIC ICF 8" WIDE CONC. WALL
ON 24"x10" CONC. FTG.

W1A TYPICAL FOUNDATION WALL
8" WIDE CONC. WALL
ON 20"x10" CONC. FTG.

W2 TYPICAL FRAME EXTERIOR WALL
VERTICAL SIDING
ON # 30 FELT
ON 1 11/16" INSULATED SHEATHING
2X6 @ 16" O.C. FRAME WALL
R24 BATT INSULATION
6 MIL POLY V.B.
INT. FINISH TO OWNERS SPECS.

W3A TYPICAL INTERIOR FRAME WALL (LOAD BEARING)
INT. PARTITION WALLS TO BE:
1/2" GWB BOTH SIDES
2X6 @ 16" O.C FRAME WALL
ON 8" CONC. CURB ON 24"x10" CONC. FTG.

W3B TYPICAL INTERIOR FRAME WALL
INT. PARTITION WALLS TO BE:
1/2" GWB BOTH SIDES
2X4 @ 16" O.C FRAME WALL

FTG1 TYPICAL SPOT FOOTING
4'x4'x10" CONC. PAD
3-15M 3" COVER
8"x8" CONC. PIER
W/ EMBEDDED METAL
SADDLE BRACKET TO
8"x8" D-FIR POST
TO SUPPORT BEAM

FTG2 TYPICAL SPOT FOOTING
3'x3'x10" CONC. PAD
8"x8" CONC. PIER
W/ EMBEDDED METAL
SADDLE BRACKET TO
8x8 D-FIR POST
TO SUPPORT BEAM

FTG3 TYPICAL SPOT FOOTING
2'x2'x10" CONC. PAD
10" DIA. SONOTUBE
W/ EMBEDDED METAL
SADDLE BRACKET TO
8x8 D-FIR POST
TO SUPPORT BEAM

FTG4 TYPICAL SPOT FOOTING
3'x3'x10" CONC. PAD
10" DIA. SONOTUBE
W/ EMBEDDED METAL
SADDLE BRACKET TO
LOG POST
TO SUPPORT BEAM

F1A TYPICAL BASEMENT FLOOR
4" CONC. SLAB @ ALL
LIVING SPACE ON
6 MIL POLY V.B. ON
MIN. 4" RIGID INSULATION OR
TO MIN. R-VALUE FOR LOCAL ENERGY CODE
4" COMPACT SAND OR GRAVEL

F1B TYPICAL GARAGE FLOOR
5" CONC. SLAB
6 MIL POLY V.B. ON
4" COMPACT SAND OR GRAVEL

F2 TYPICAL FIRST FLOOR FRAMING
3/4" T&G PLY SUBFLOOR
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100157514
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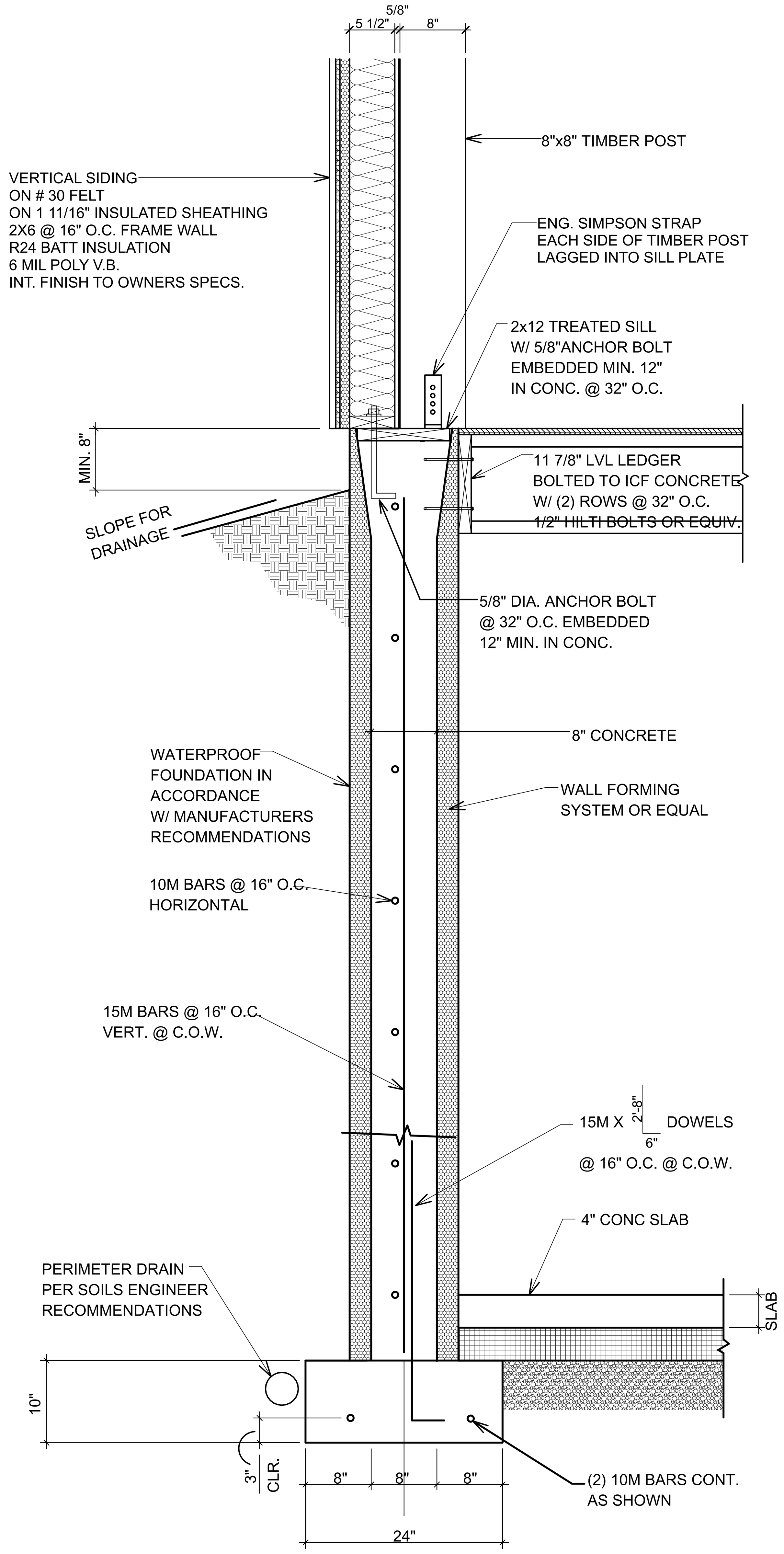
"Structural Only"

LOG BUILDER : KEALEY & TACKABERRY LOG HOMES
CLIENT : Eades
TITLE : ROOF PLAN

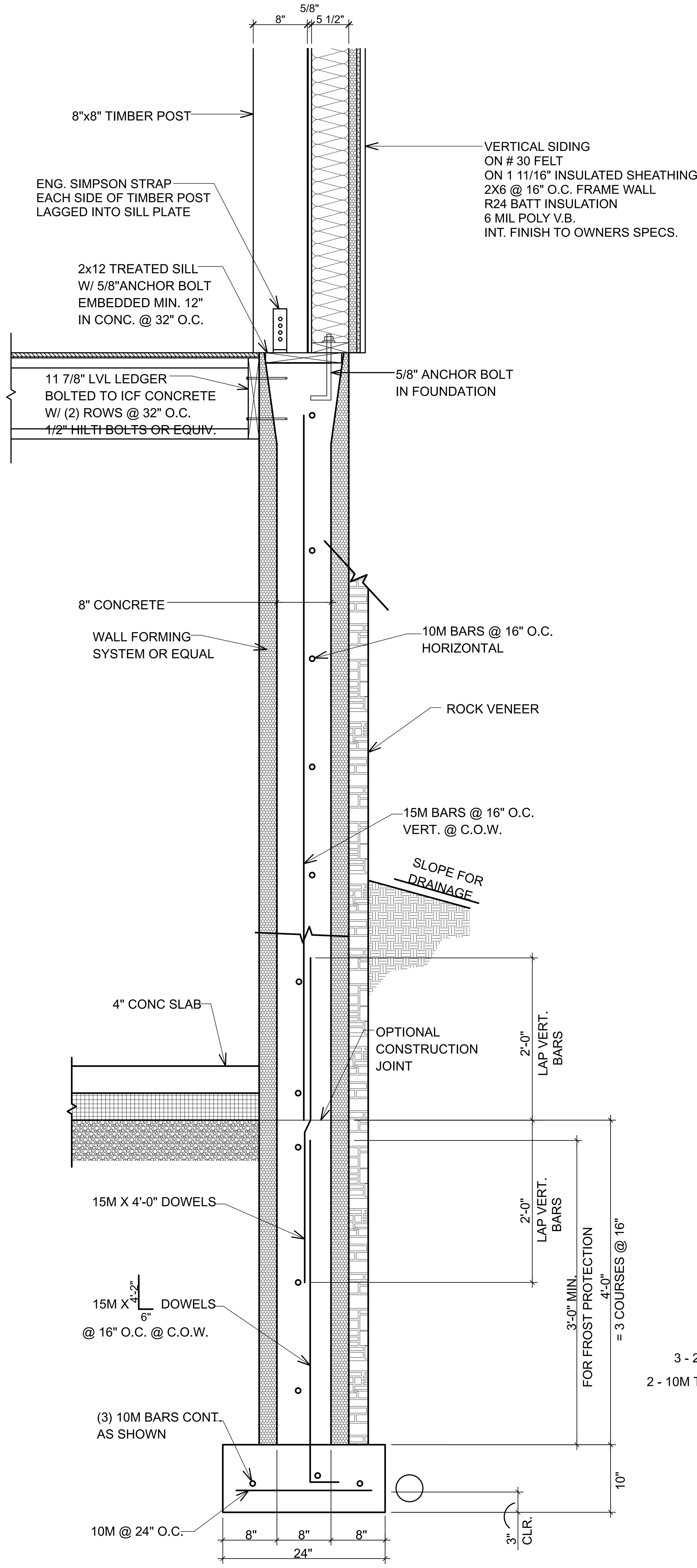
A-7

15



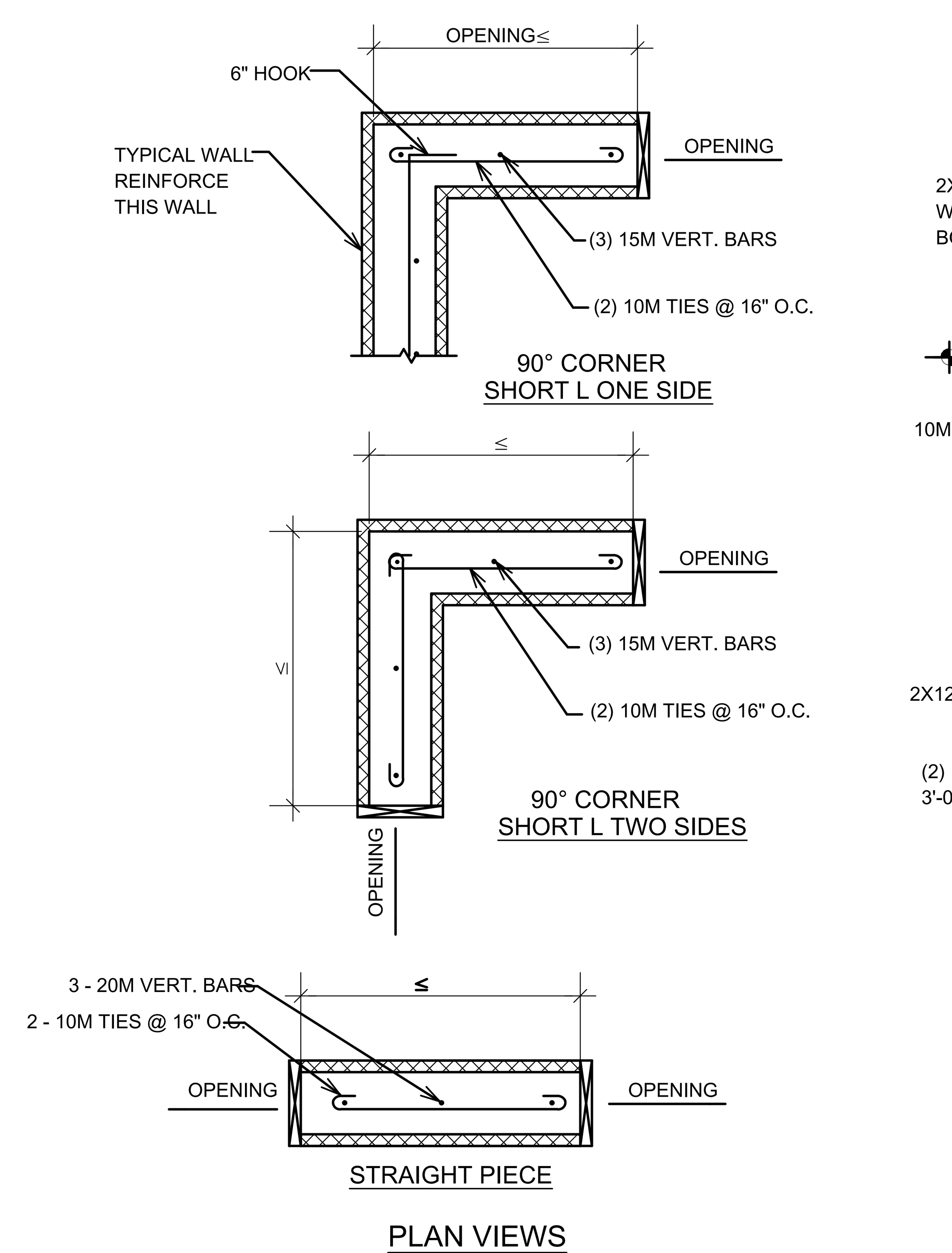
1 TYPICAL HOUSE WALL SECTION

NTS MV:12



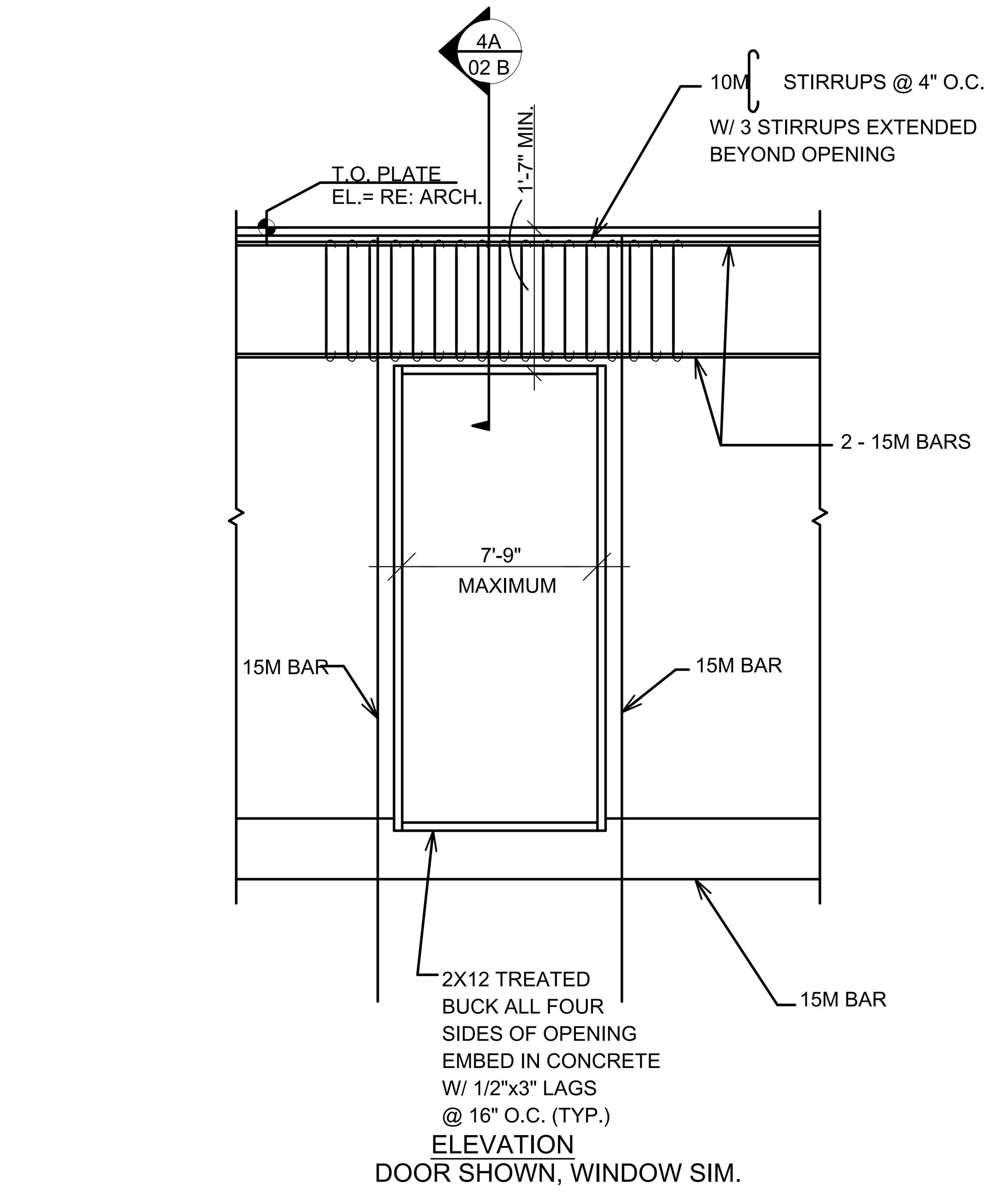
2 TYPICAL BACK WALL SECTION

NTS MV:12



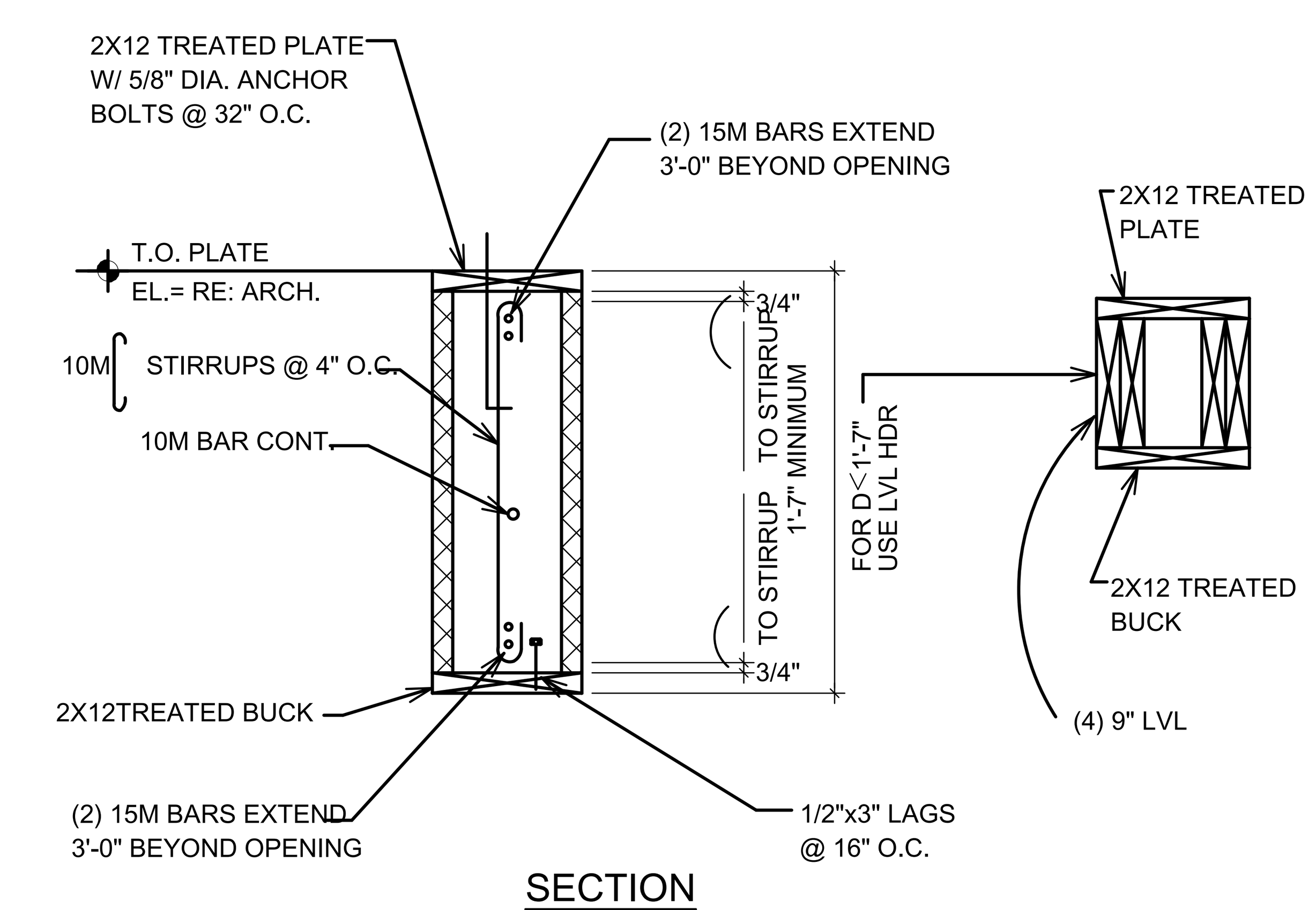
3 TYPICAL DETAILS FOR SHORT LENGTHS OF WALL

NTS MV:16



4 TYPICAL DOOR/WINDOW OPENING

NTS MV:24



4A TYP. HEADER IN CONC. INSULATED FORM WALL

NTS MV:12

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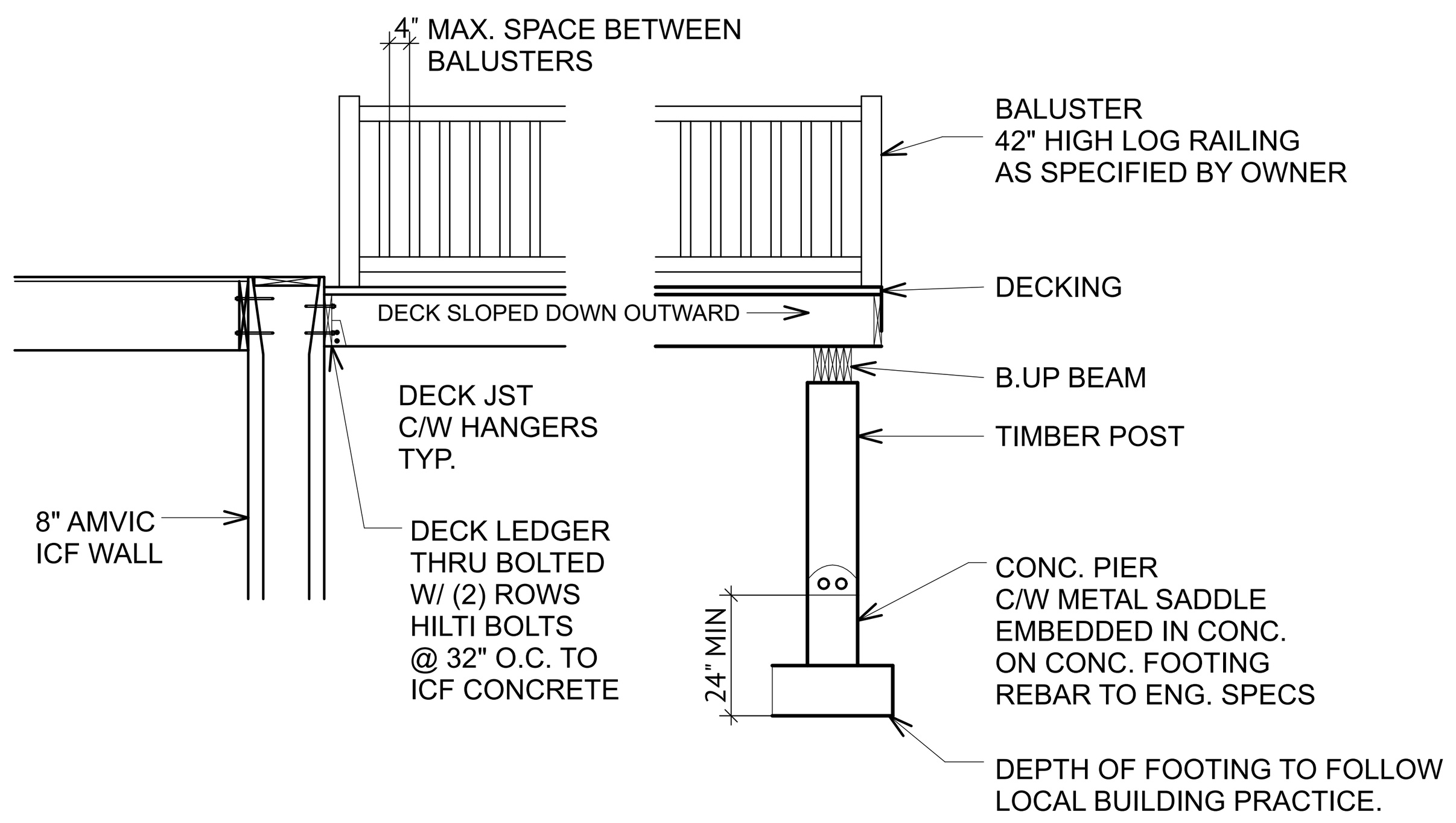
CLIENT : Eades

TITLE: DETAILS

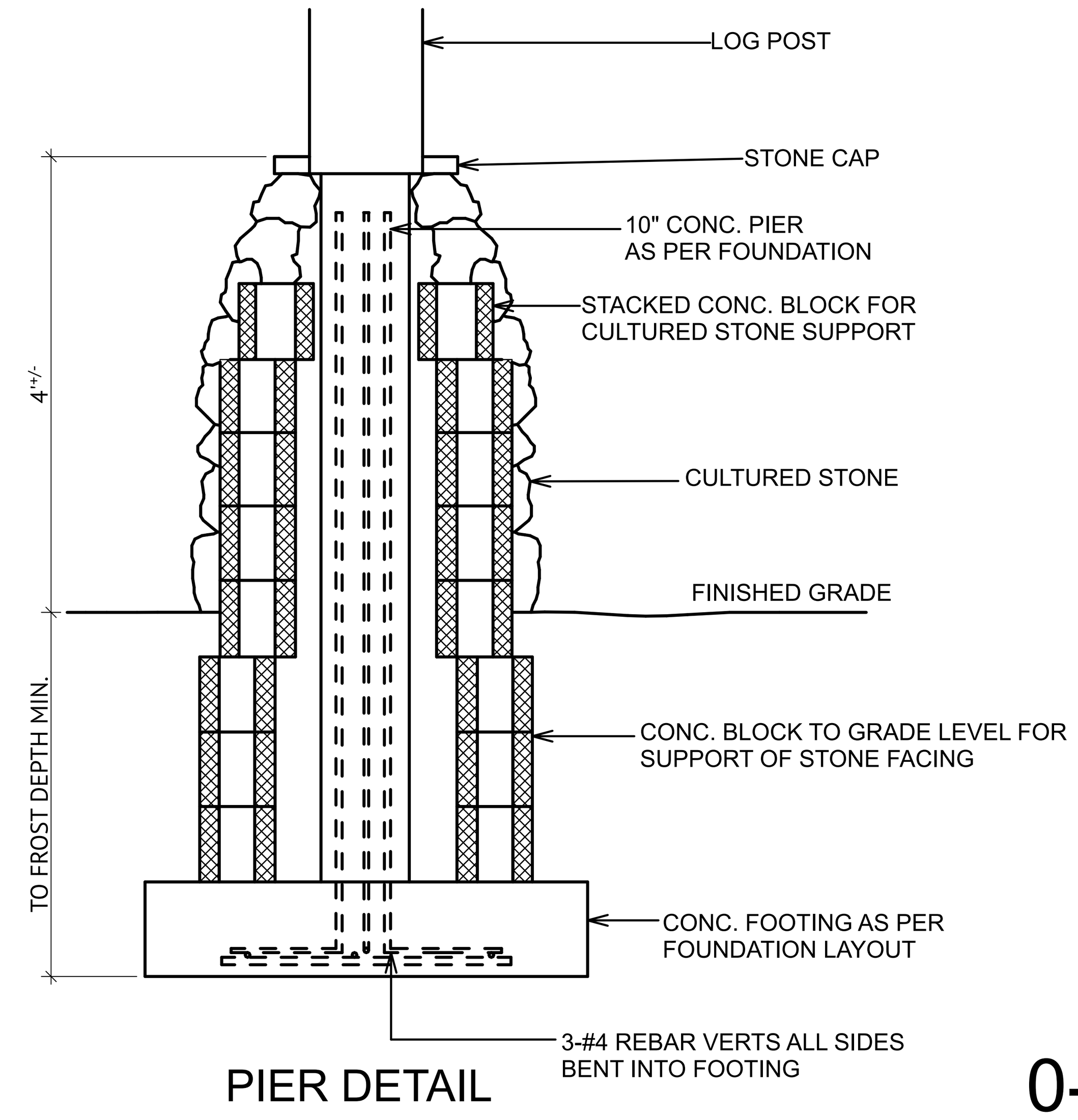
A-8

15



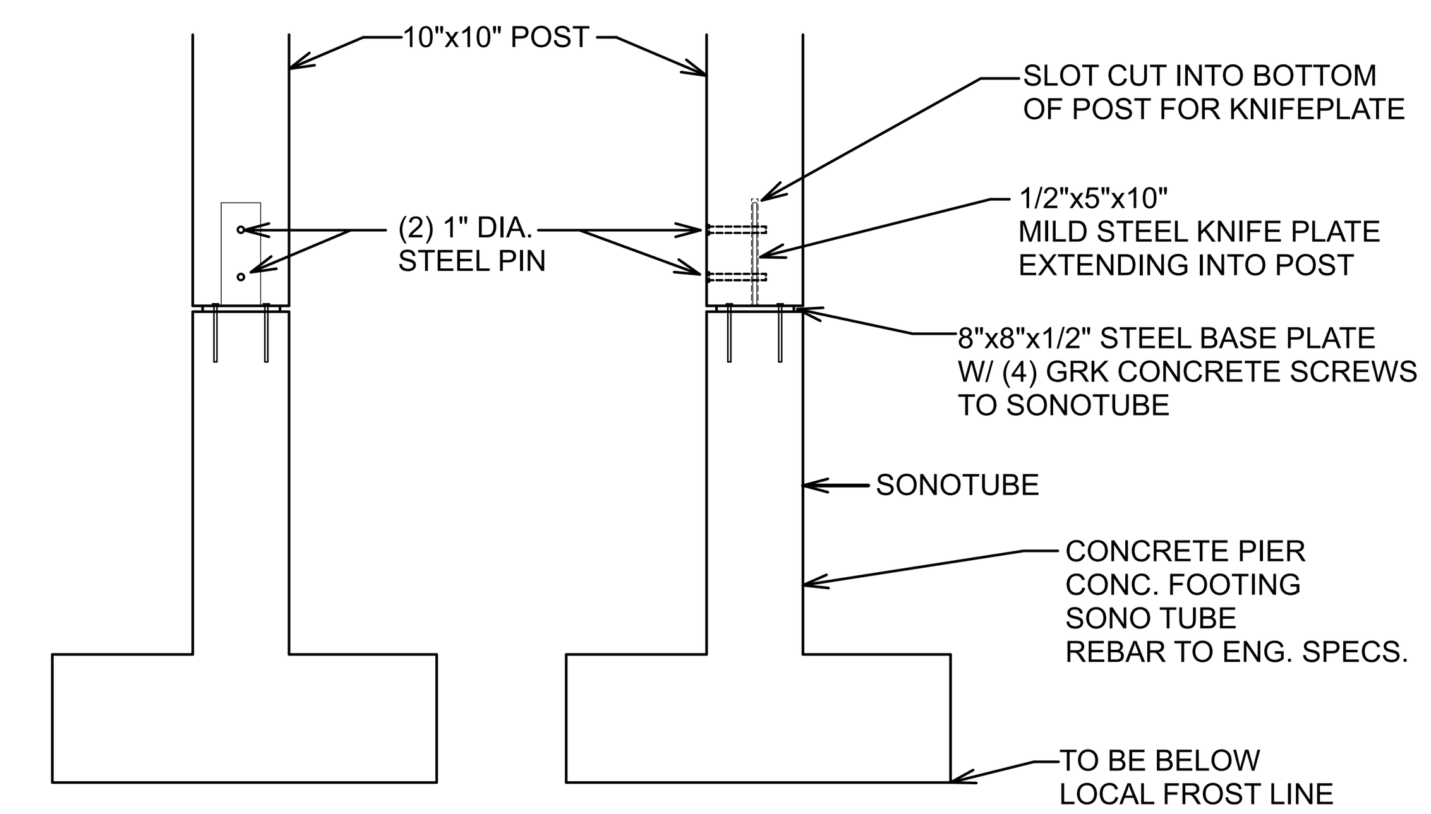
DECK BEAM / POST DETAIL

0-A



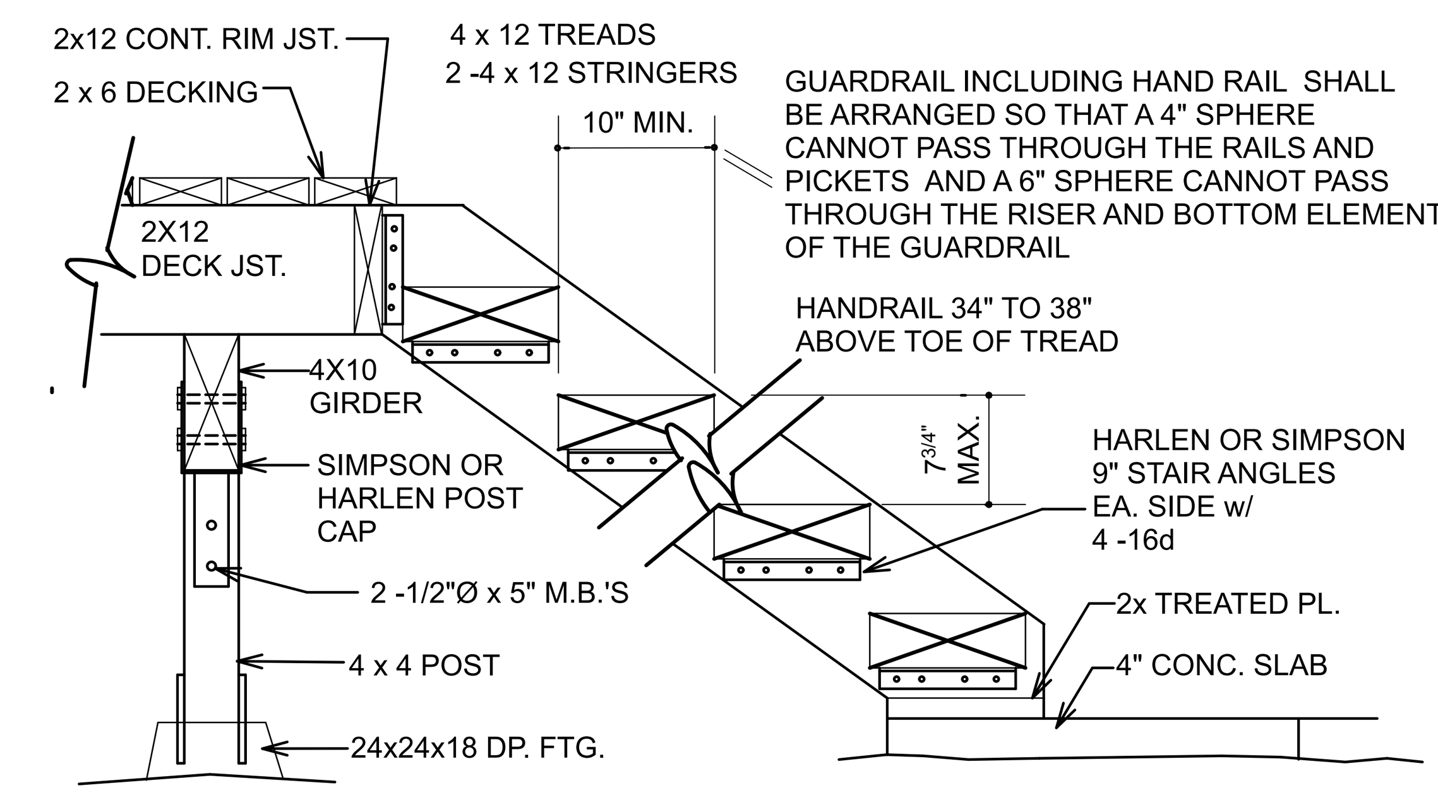
PIER DETAIL

0-B



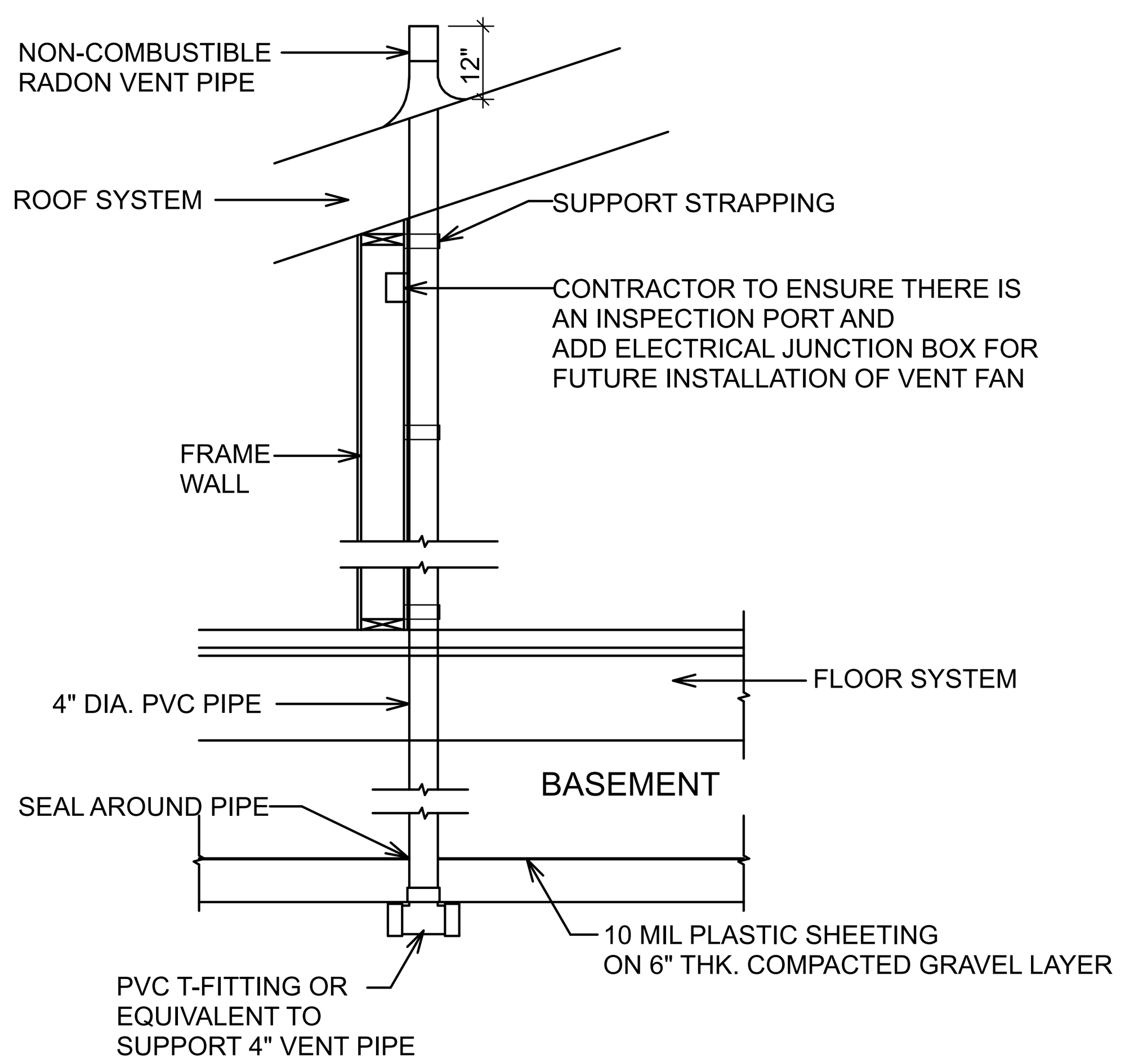
TIMBER POST TO CONC. SUPPORT DETAIL

0-C



EXTERIOR STAIR DETAIL

0-D



RADON MITIGATION SYSTEM DETAIL

0-E

0-F

0-G

0-H

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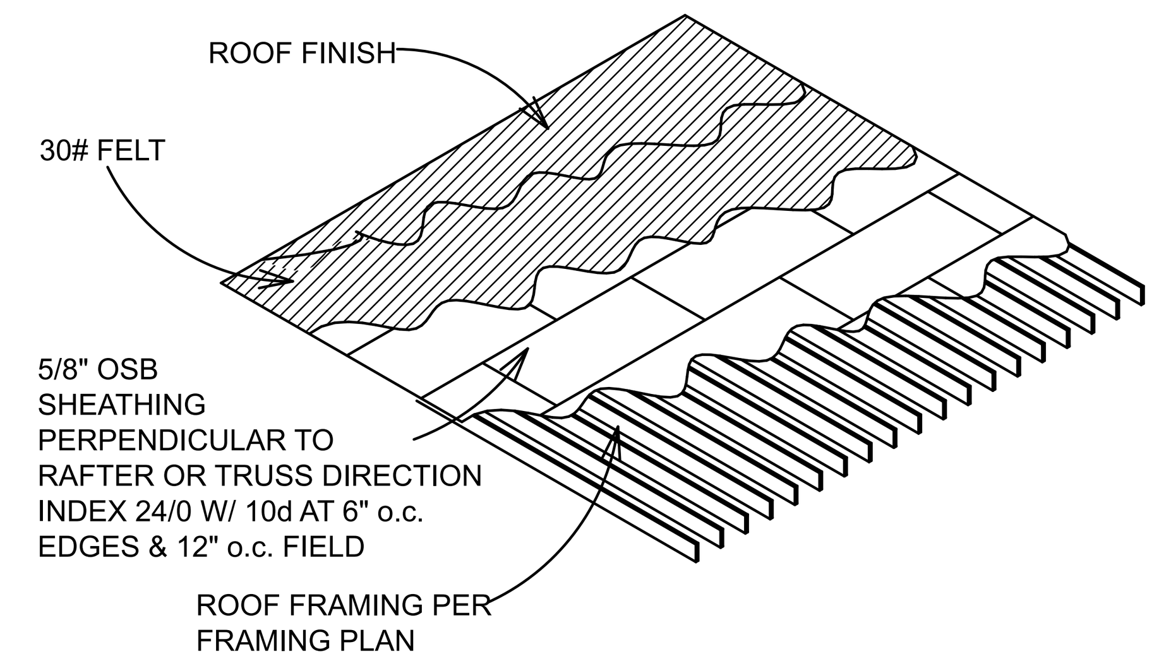
A-9

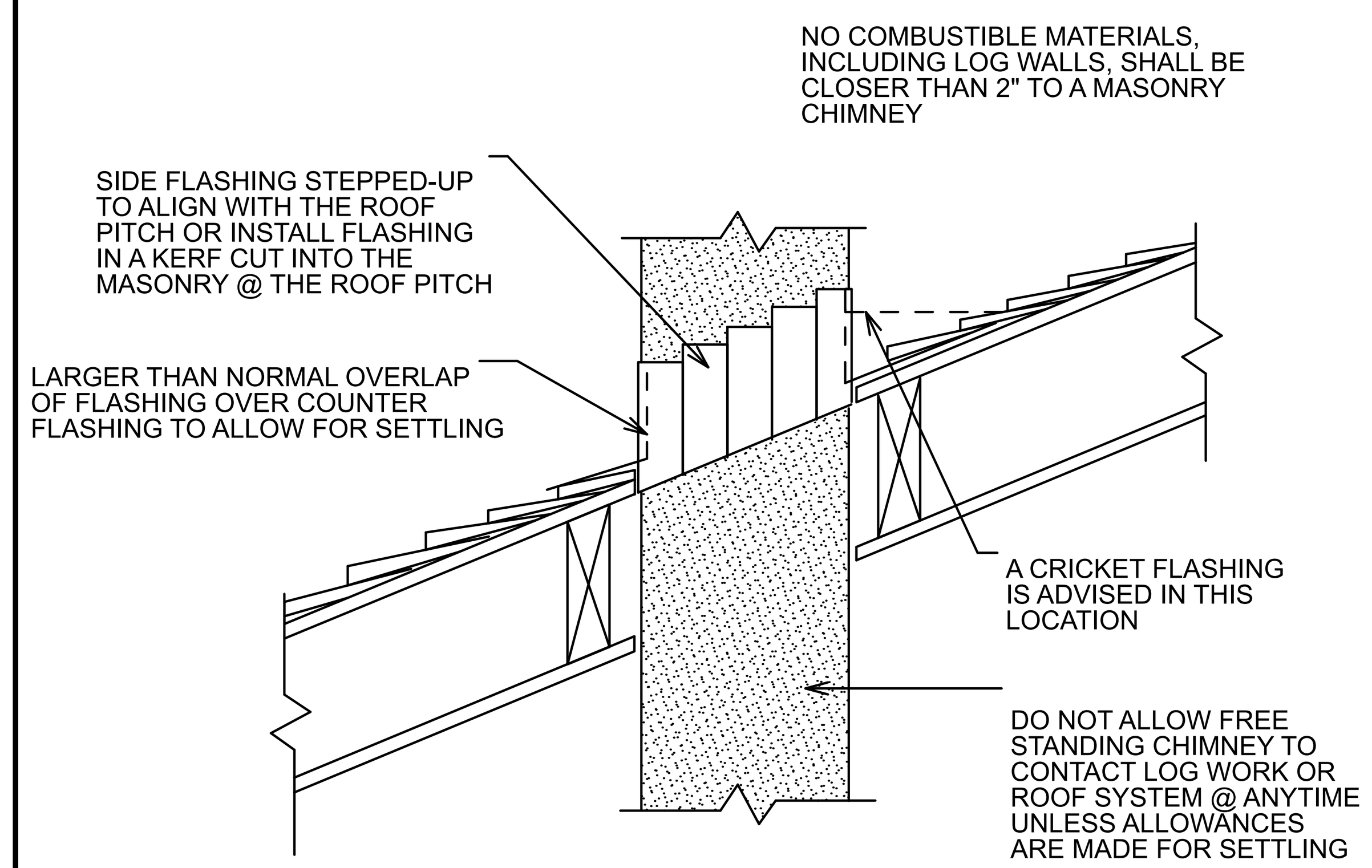
15



ROOF SHEATHING DIAGRAM

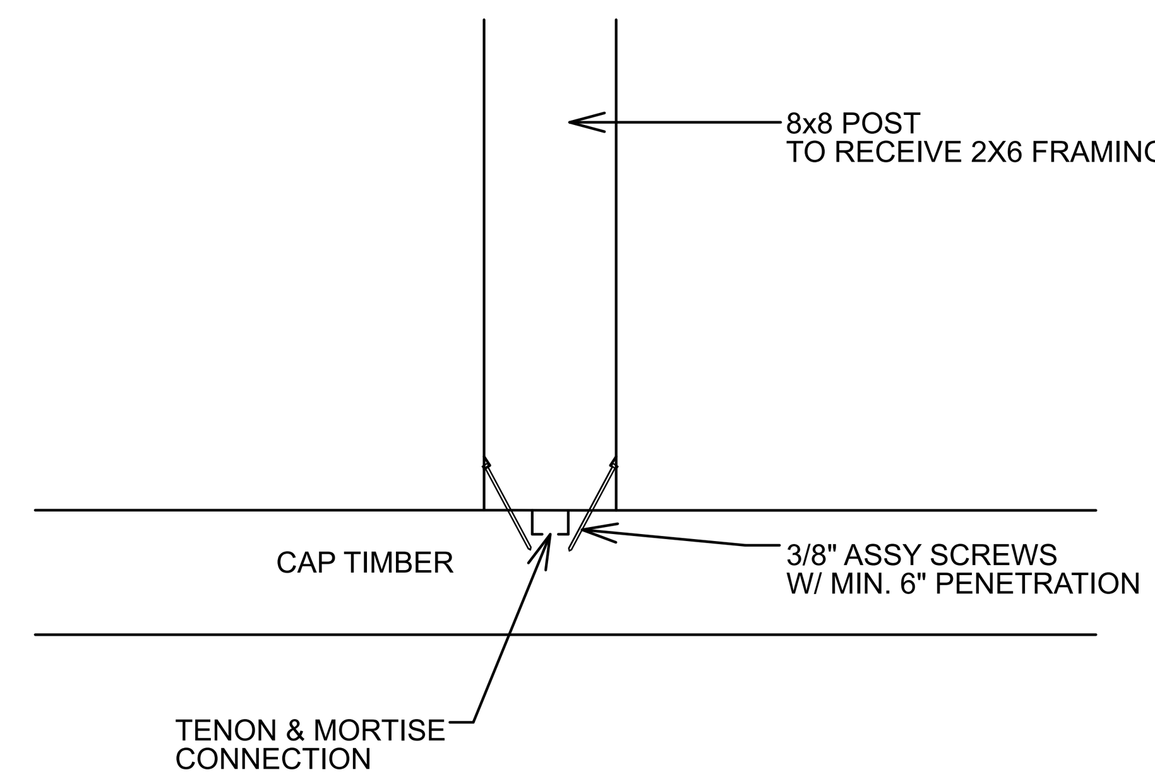
NO SCALE

2-A



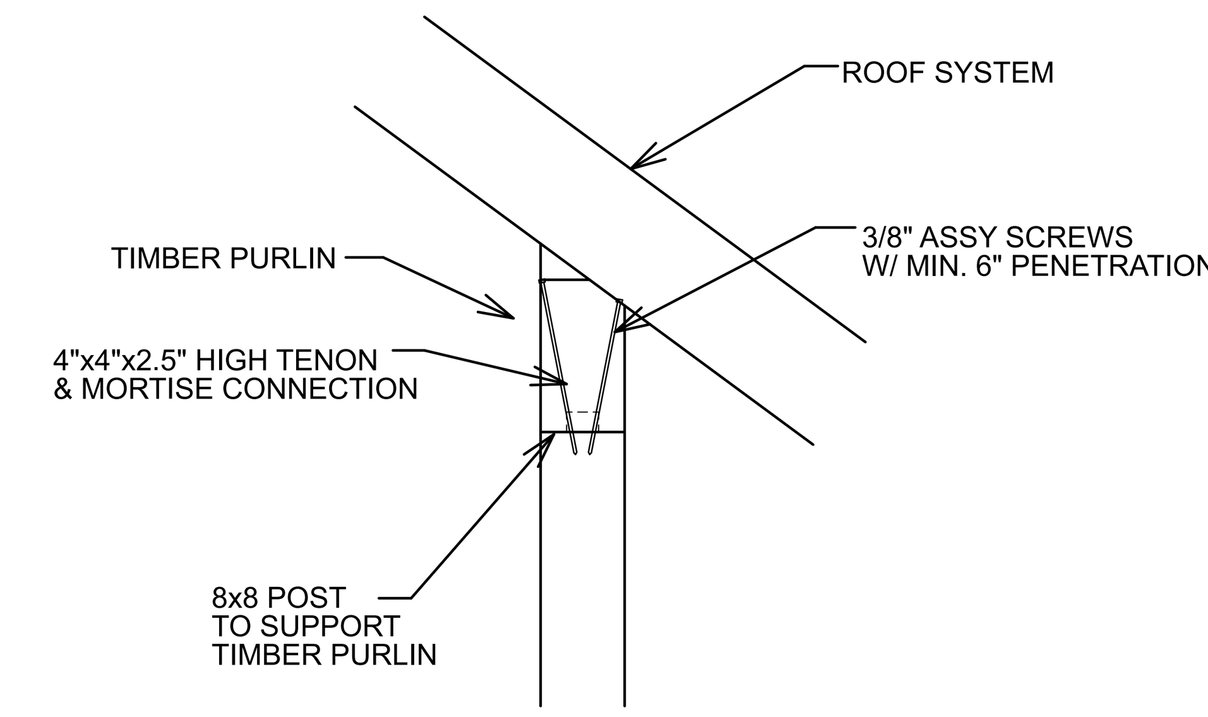
SETTLING & FLASHING @
FIREPLACES & CHIMNEYS

2-B



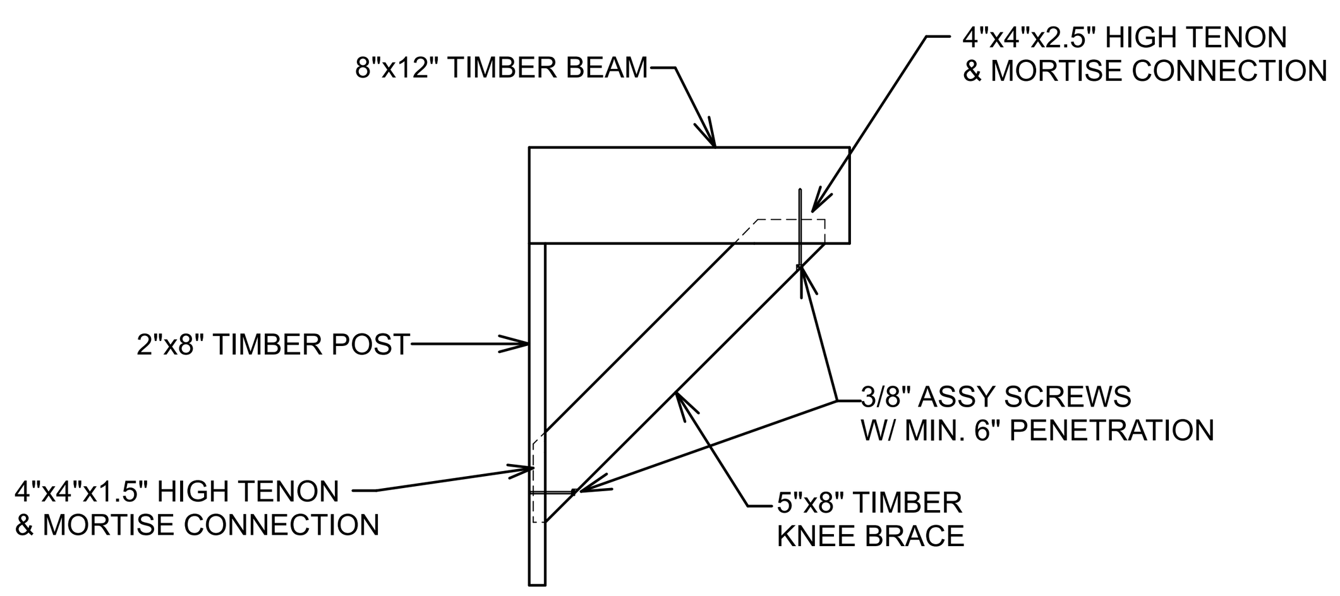
POST TO CAP TIMBER CONNECTION

2-C



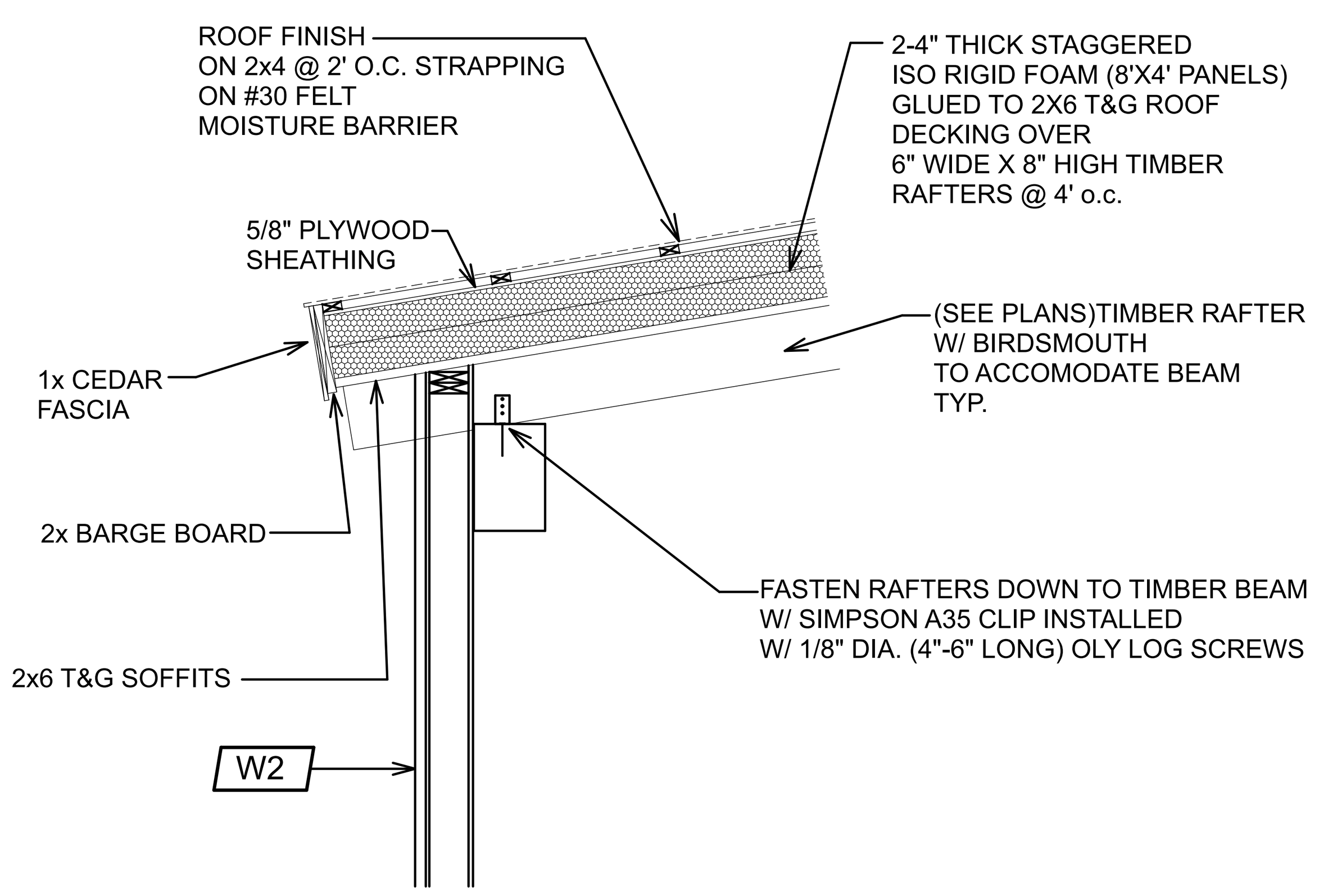
PURLIN TO POST CONNECTION

2-D



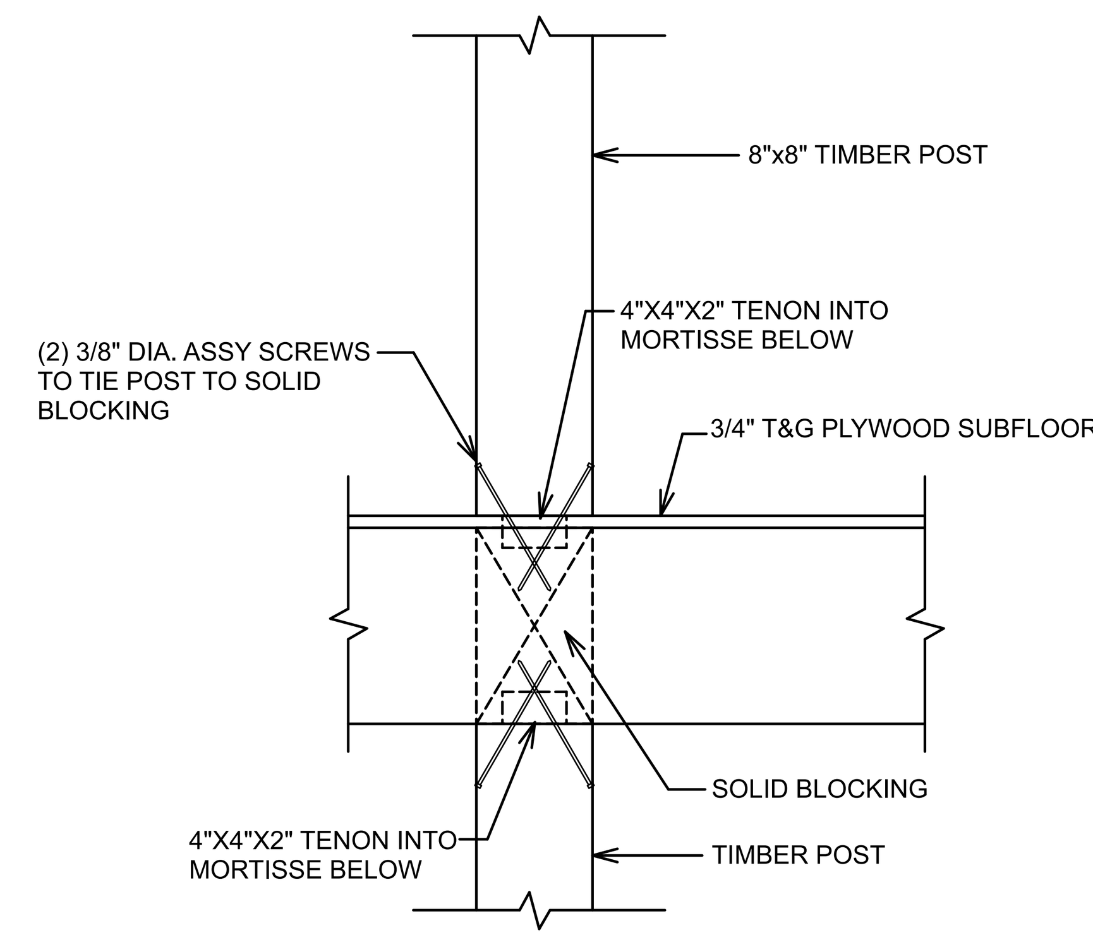
TIMBER KNEE BRACE DETAIL

2-E



RAFTERS TO TIMBER PURLIN CONNECTION

2-F



TIMBER POST TO FLOOR SYSTEM

2-G

2-H

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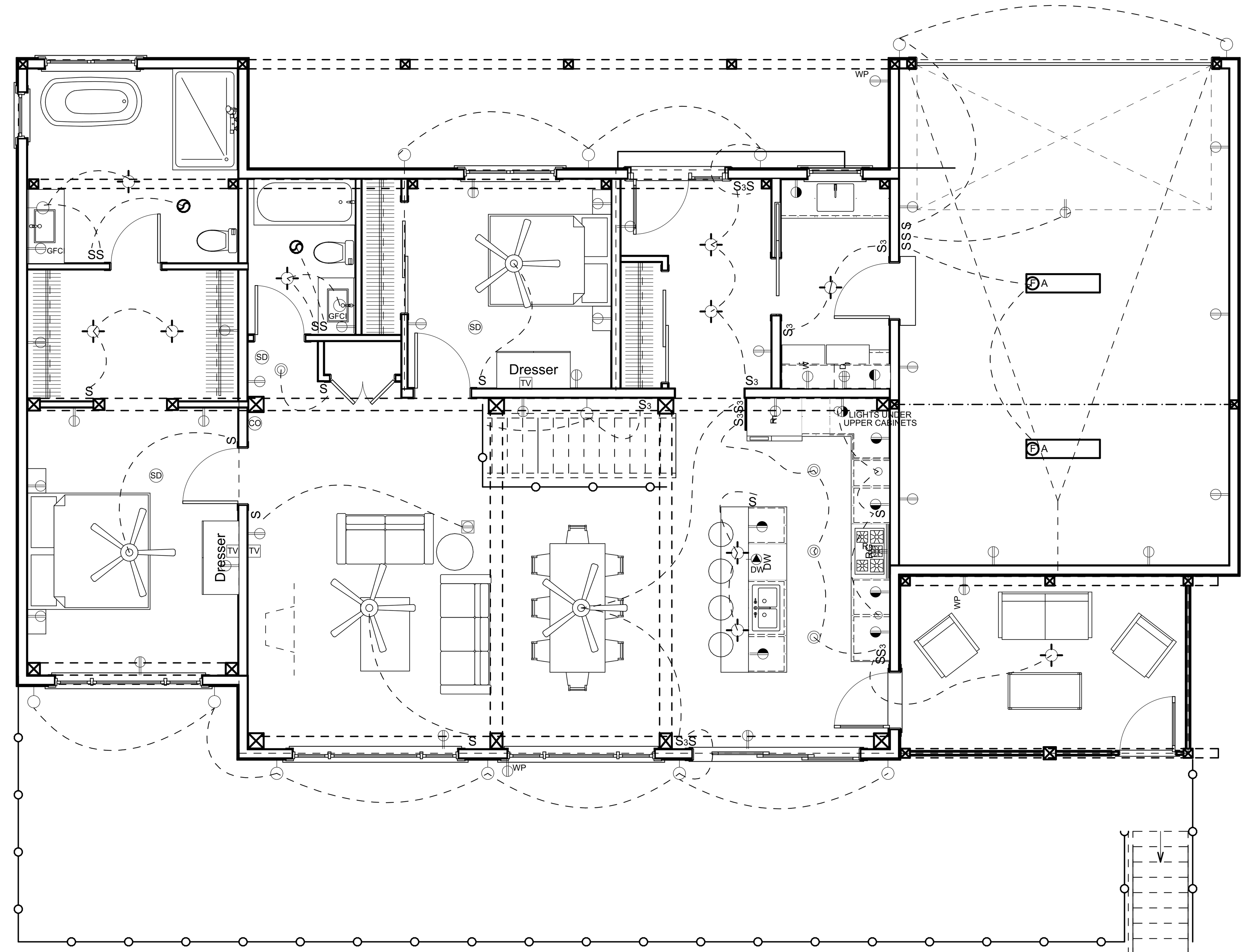
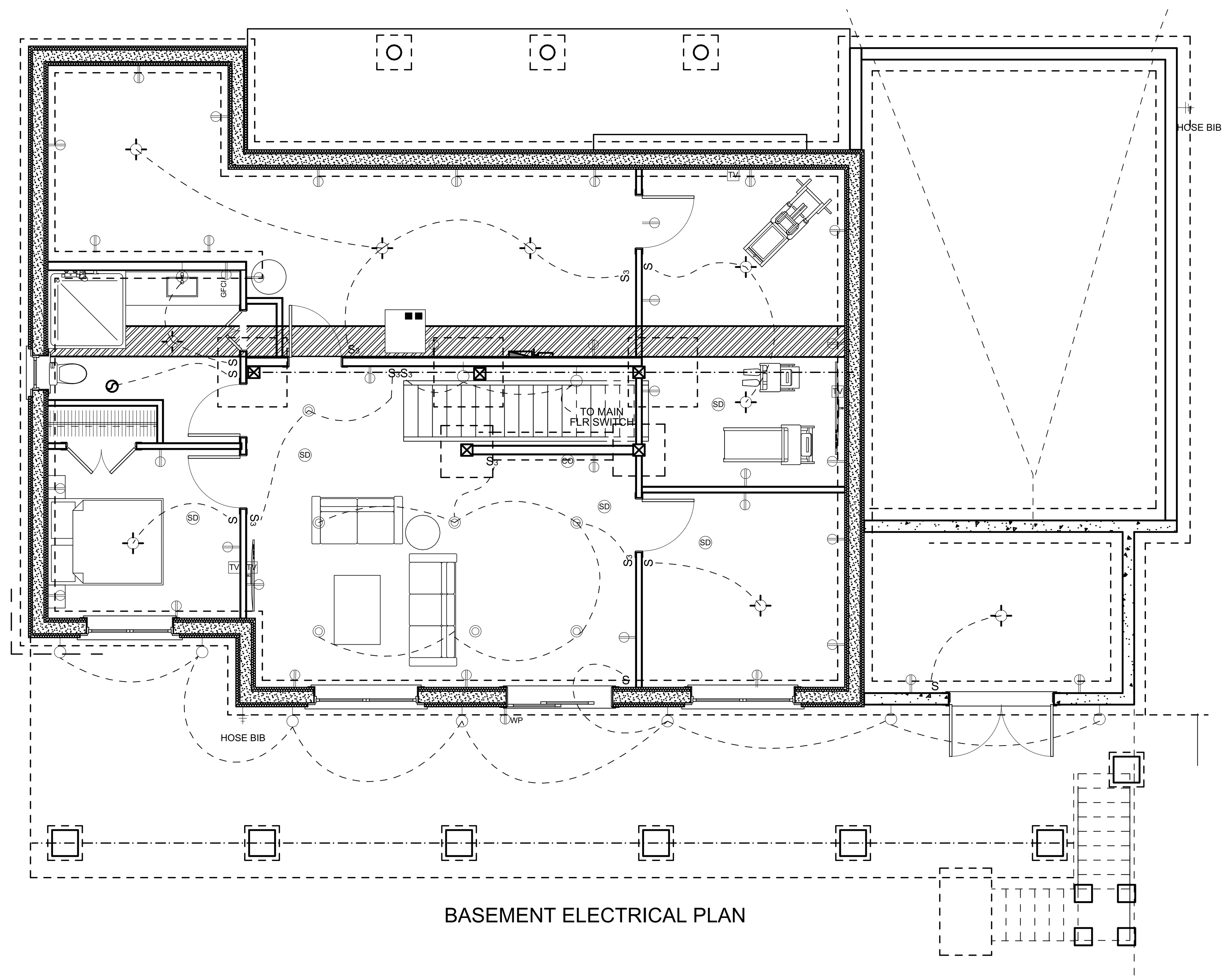
A-10
15



FIRST FLOOR ELECTRICAL PLAN



BASEMENT ELECTRICAL PLAN

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	VOLT	WATT	WIRES	OUTLET	REMARKS
	DUPLEX RECEPTACLE	120	1200	2#12+	5-15 R	
WP	OUTSIDE DUPLEX RECEPTACLE	120	1200	2#12+	5-15 R	
R	REFRIGERATOR RECEPTACLE	120	1200	2#12+	5-15 R	
W	WASHER RECEPTACLE	120	1200	2#12+	5-15 R	
D	DRYER RECEPTACLE	240	5200	3#10+	14-30 R	
R	RANGE RECEPTACLE	240	5200	3#10+	14-30 R	
	DUPLEX REC. SPLIT CIRCUIT	120	1200	2#12+	5-15 R	
DW	DISH WASHER RECEPTACLE	120	1200	2#12+	5-15 R	
FR	FREEZER RECEPTACLE	240	5200	3#10+	14-30 R	
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	120	1200	2#12+	5-15 R	
	INFLOOR RECEPTACLE	120	1200	2#12+	5-15 R	
	EXHAUST FAN	120	1200	2#12+	5-15 R	
	PHONE					
TV	CABLE OUTLET					
	BROADBAND CABLE					
	SATELLITE CABLE					
SD	SMOKE ALARM RECEPTACLE	120	1200	2#12+	5-15 R	
CO	CARBON MONOXIDE DETECTOR	120	1200	2#12+	5-15 R	
	BELL/BUZZER RECEPTACLE	120	1200	2#12+	5-15 R	
	PUSH BUTTON RECEPTACLE	120	1200	2#12+	5-15 R	
	CEILING OUTLET	120	1200	2#12+	5-15 R	
	RECESSED CEILING OUTLET	120	1200	2#12+	5-15 R	
	WALL MOUTING LIGHT	120	1200	2#12+	5-15 R	
MS	MOTION SENSOR LIGHT	120	1200	2#12+	5-15 R	
A	1-4' FLUORESCENT	120	1200	2#12+	5-15 R	
RA	2-8' FLUORESCENT	120	1200	2#12+	5-15 R	
S	SINGLE POLE SWITCH	120	1200	2#12+	5-15 R	
S_3	THREE WAY SWITCH	120	1200	2#12+	5-15 R	
S_4	FOUR WAY SWITCH	120	1200	2#12+	5-15 R	
	POWER PANEL					
	CIRCUIT BREAKER PANEL					50 CIRCUIT BREAKERS
M	METER BASE					
	BASEBOARD HEATER	120	1200	2#12+	5-15 R	
T	THERMOSTAT					
	HOSE BIB					

GENERAL ELECTRICAL NOTES:

1. SERVICE SIZE TO BE 200 AMPS WITH A 50 CIRCUIT BREAKER PANEL.
   SERVICE BREAKER RATING TO BE 200 AMPS.
   HOT CONDUCTORS TO BE 2-#1R90 (XLPE) COPPER (BLACK, RED OR BLUE)
   NEUTRAL CONDUCTOR TO BE 1-#4R90 (XLPE) COPPER (WHITE)
   SERVICE CONDUIT TO INSIDE TO BE 1 1/4" IN DIAMETER.
   SERVICE GROUNDING CONDUCTOR TO BE MINIMUM #4 BARE COPPER.
2. ALL WORK TO CONFORM TO APPLICABLE ELECTRICAL CODES & LOCAL CODES & BYLAWS.
3. ALL ABOVE COUNTER RECEPTACLE TO BE 12" ABOVE TOP OF COUNTER.
   WASHER & DRYER OUTLETS TO BE BEHIND MACHINES 2' MAX. ABOVE FLOOR.
   ALL OTHER WALL PLUGS & PHONE OUTLET TO BE 1' ABOVE FLOOR.
   ALL SWITCHES & THERMOSTATS TO BE 4' ABOVE FLOOR.

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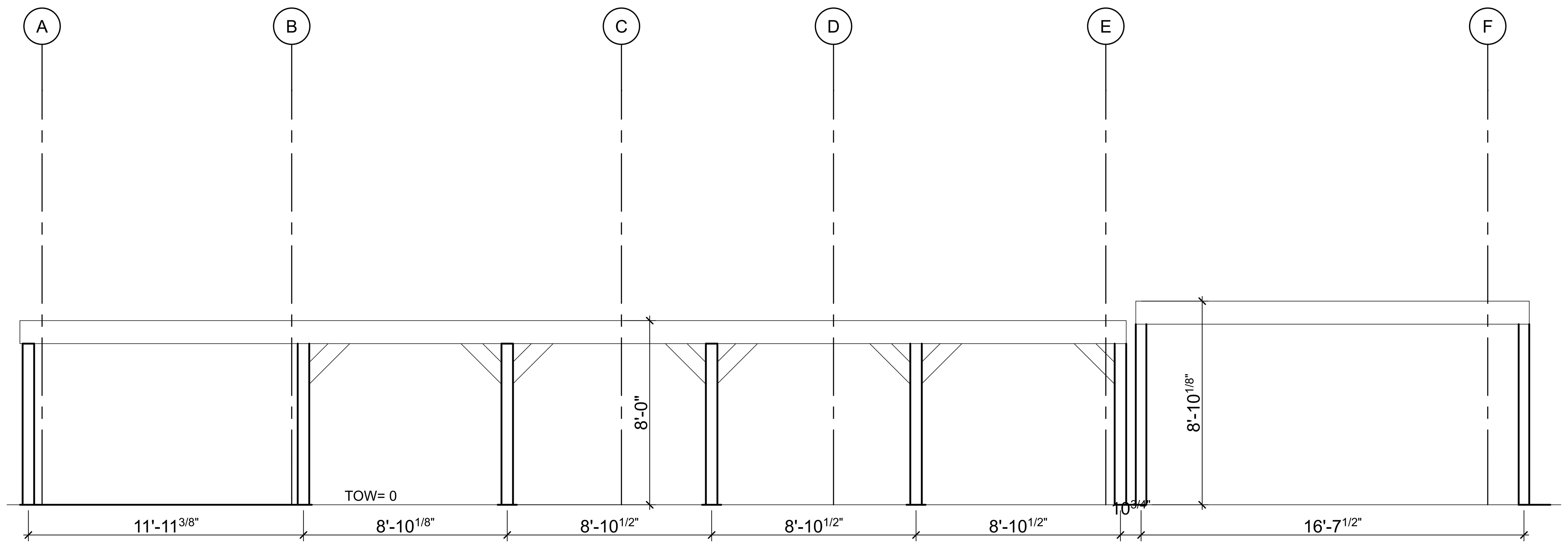
A-11 / 15



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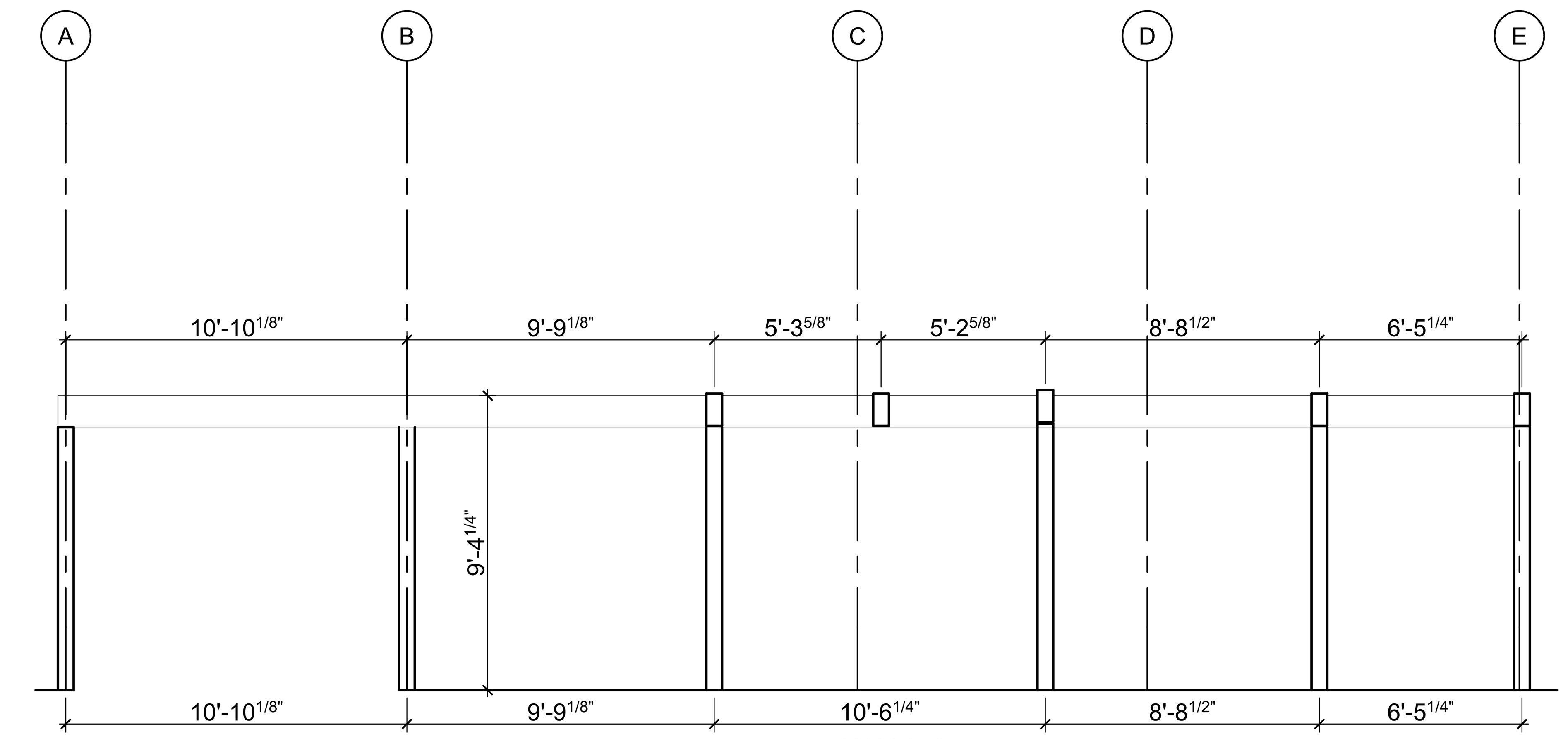

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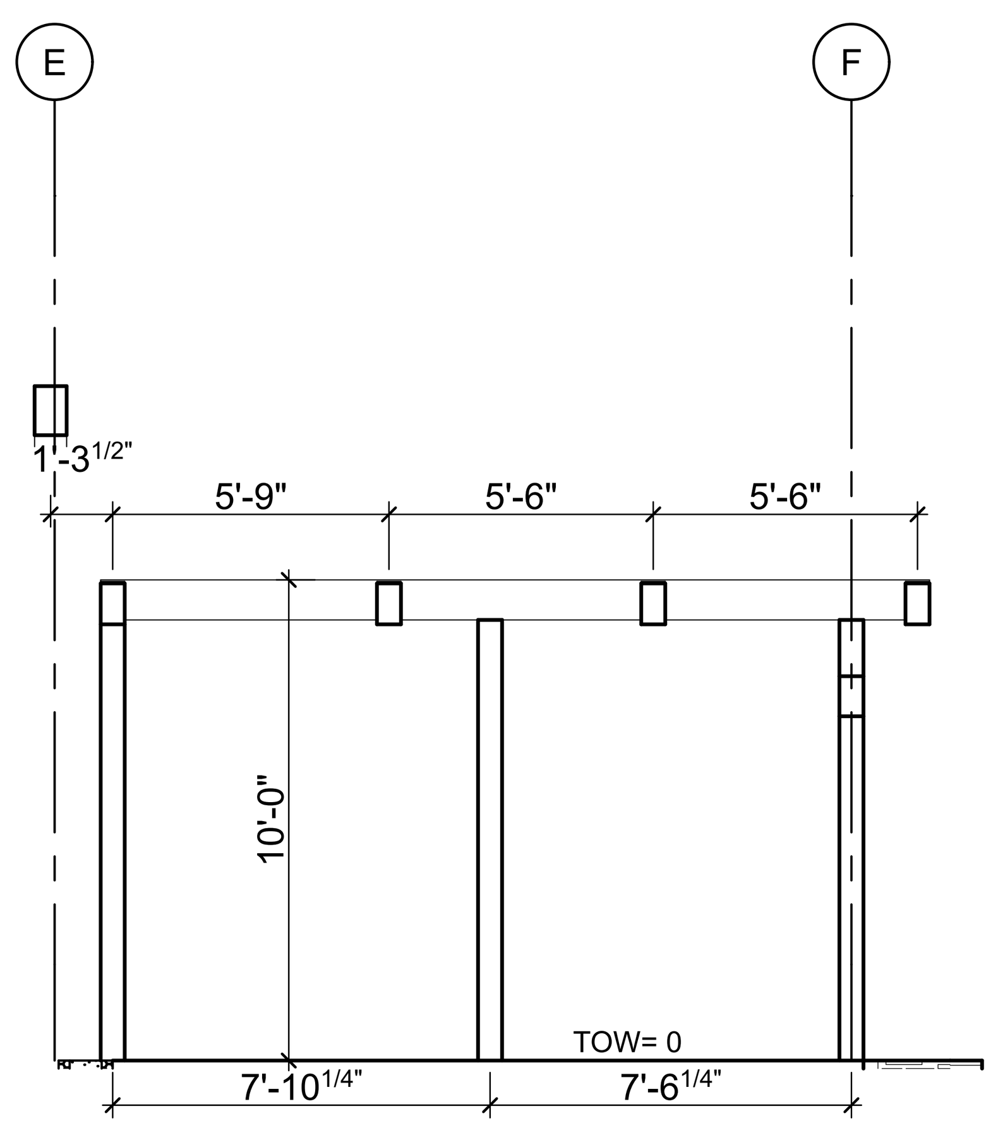

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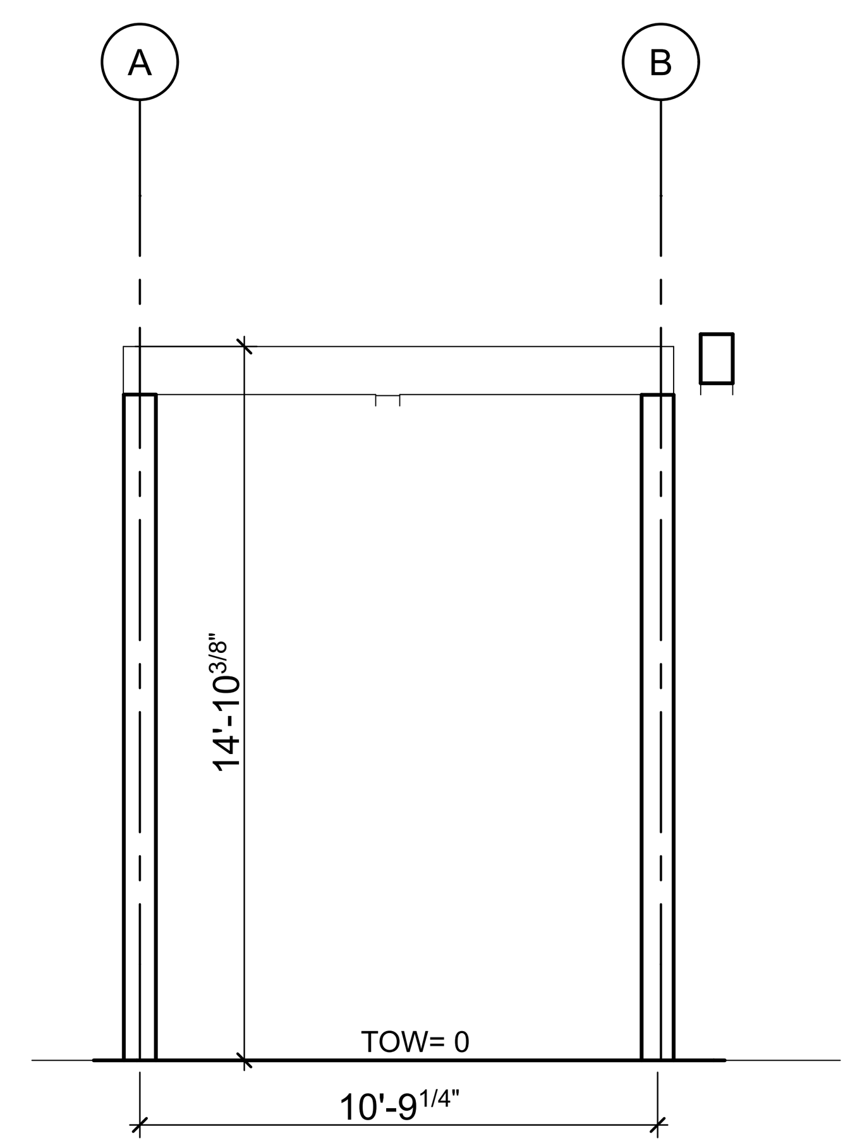

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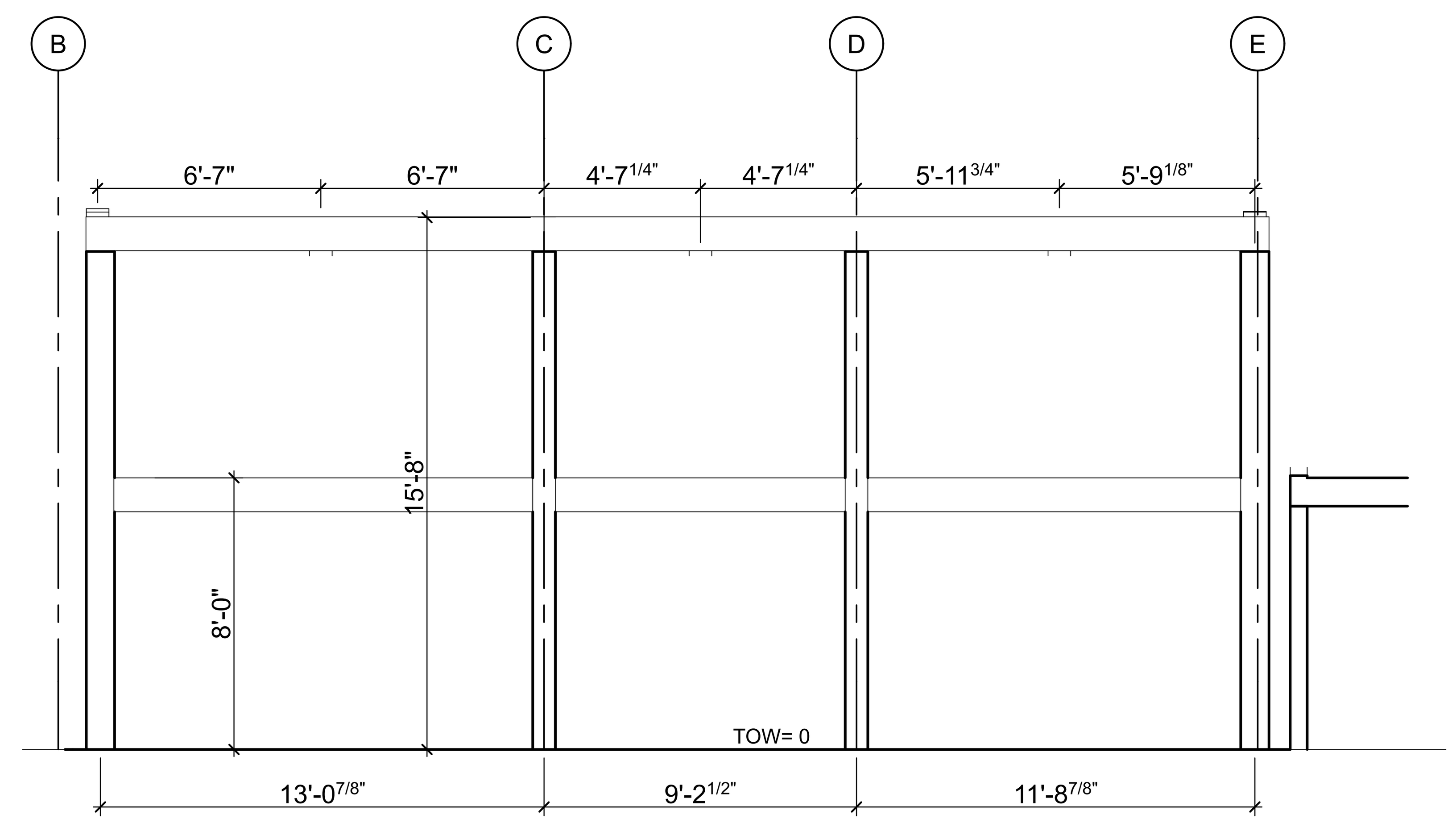

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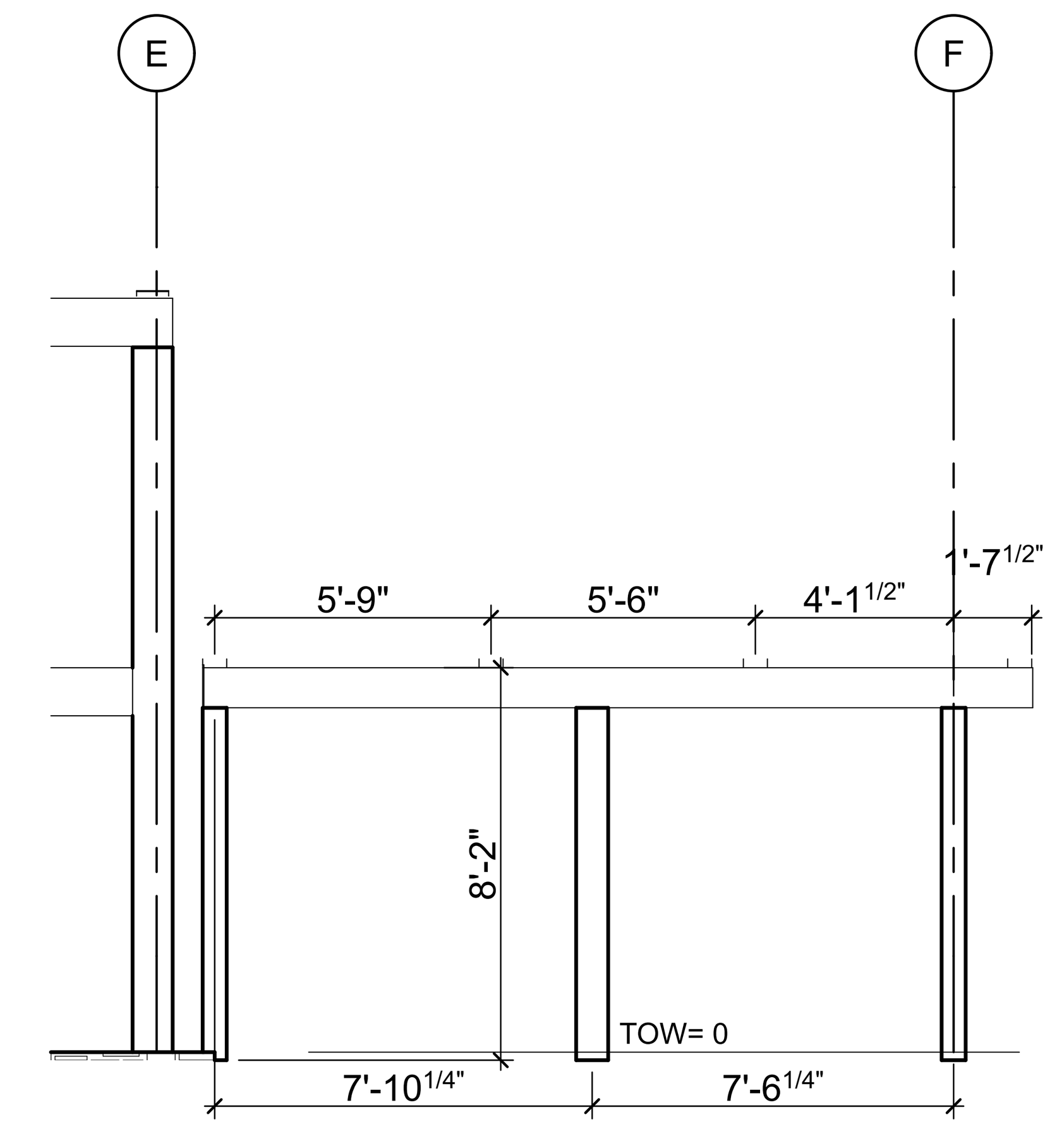

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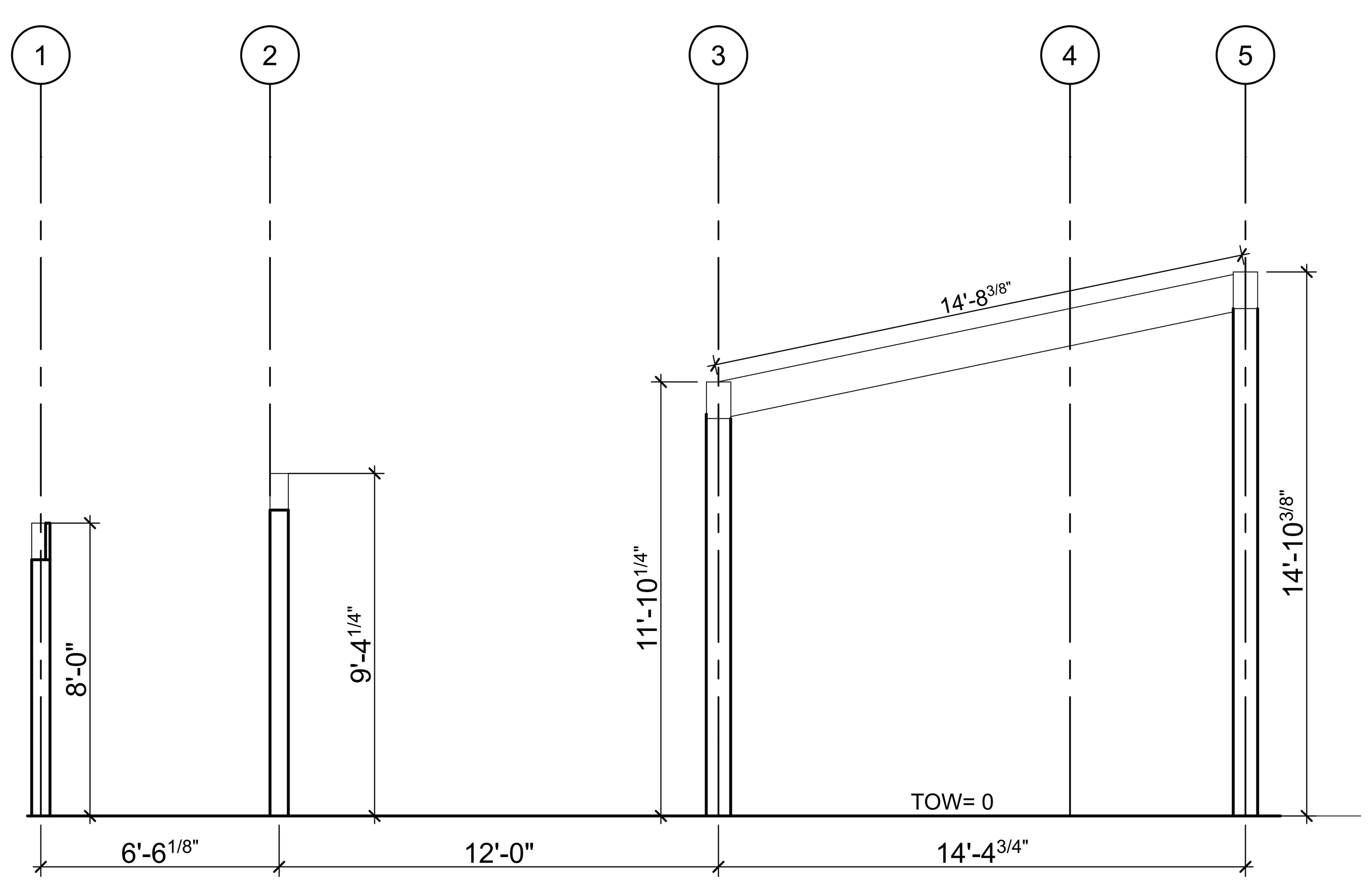

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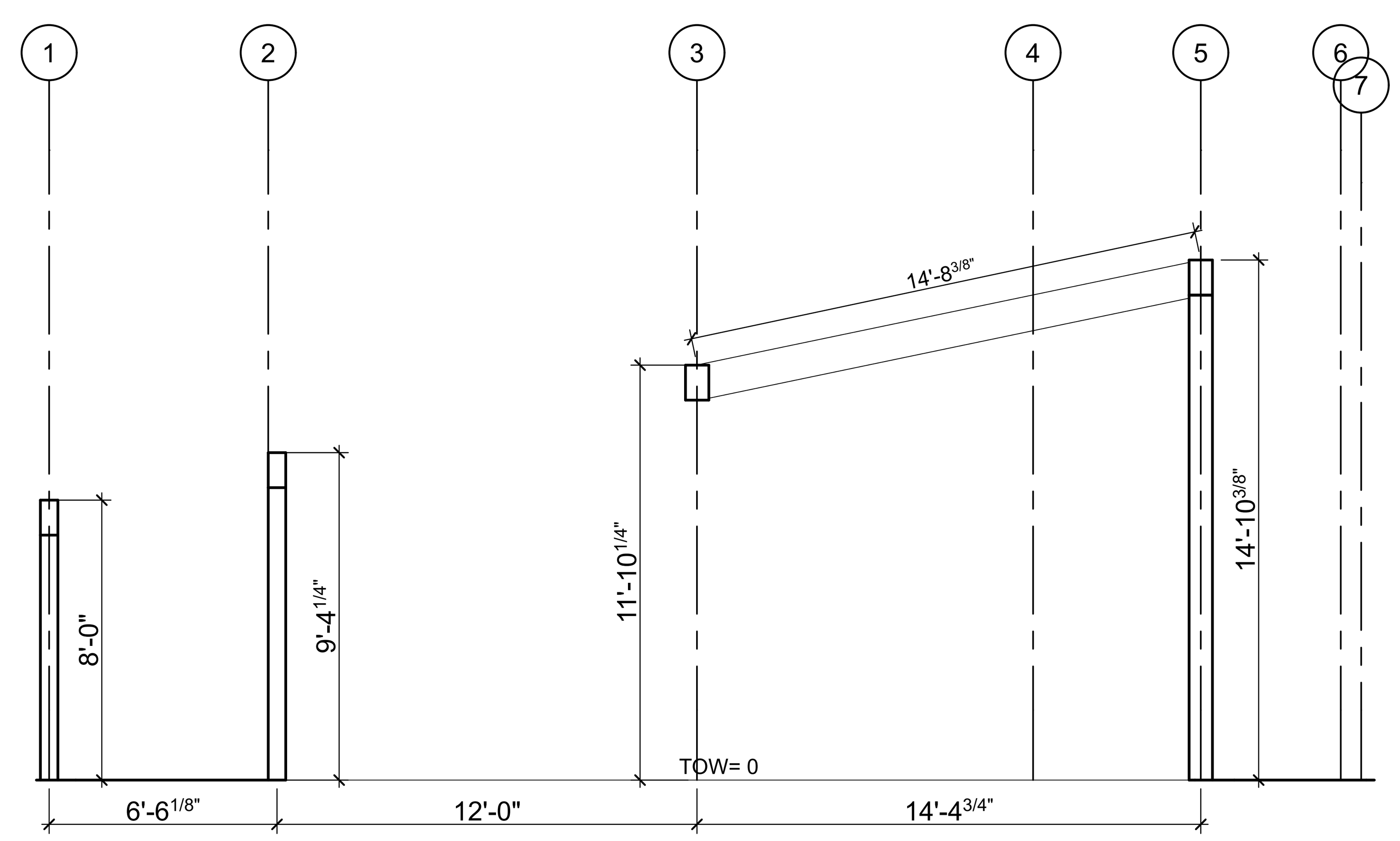

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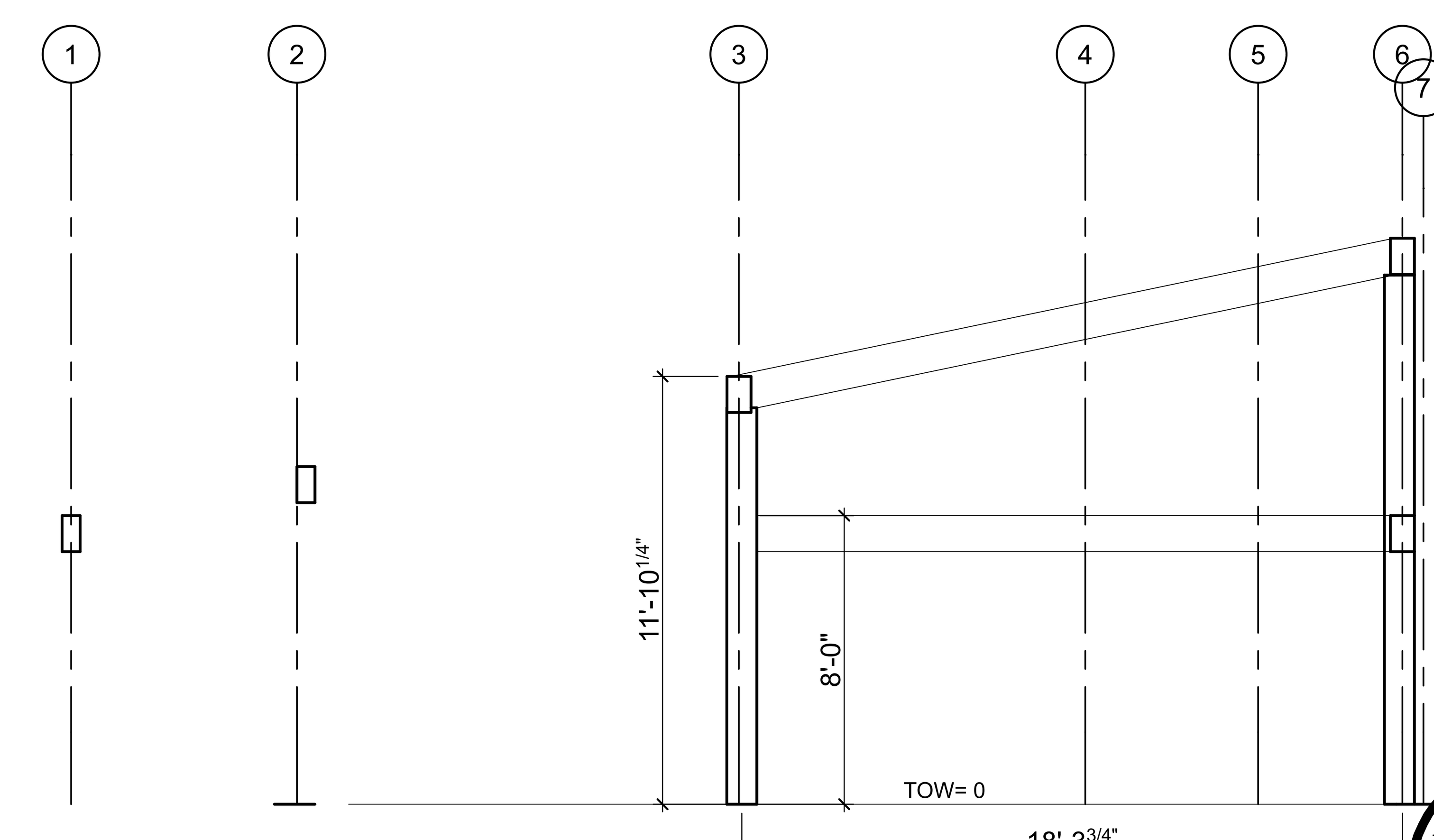
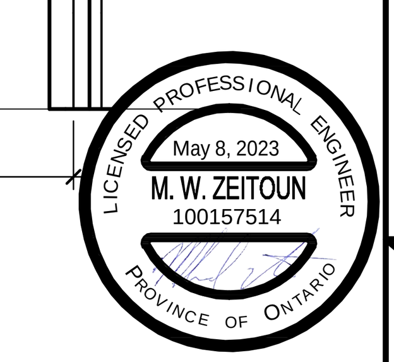


WALL D



"Structural Only"

- ALL DIMENSIONS TO BE VERIFIED ON SITE BY GENERAL CONTRACTOR
- ALL DIMENSIONS ARE CONSTRUCTION TIME DIMENSIONS
- IT IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS & SPECIFICATIONS ON THIS SET OF PLANS BEFORE STARTING CONSTRUCTION
- ALL LOG DIAMETER SIZE TO BE MEASURED AT MID SPAN
- BUILDER IS RESPONSIBLE FOR COMPLYING WITH ALL LOCAL BUILDING CODES AND PRACTICES

I HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN ACTIVITIES WHICH BEAR THIS DECLARATION AND I HAVE MET THE REQUIREMENTS OF THE OBC AS A REGISTERED DESIGNER

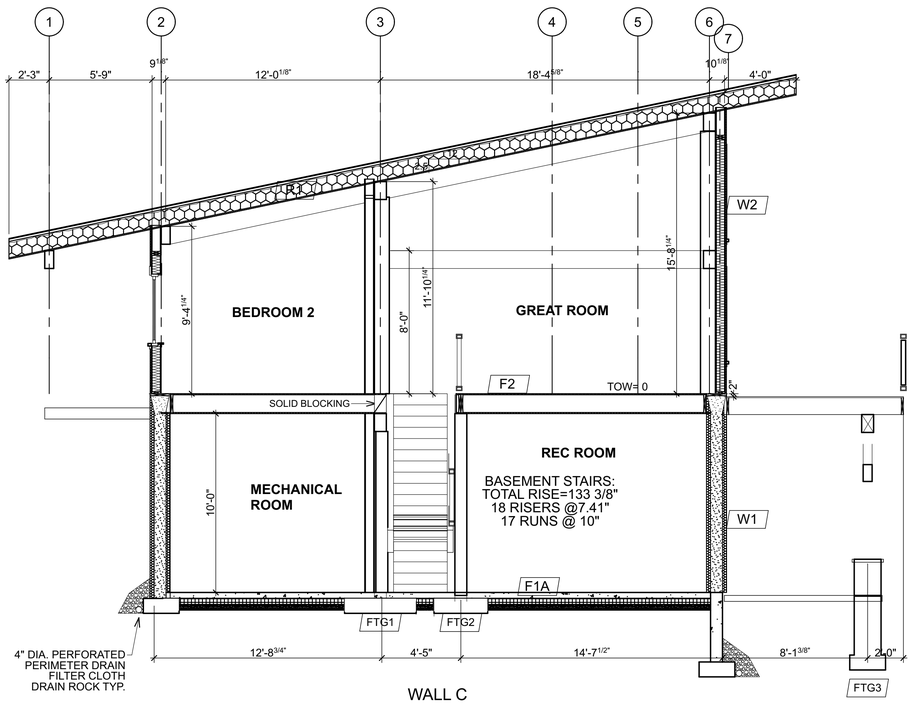
KEALEY & TACKABERRY LOG HOMES

REVISION:	DATE:	DESCRIPTION:
ENG.	MAR. 14/22	
REV. 2		
REV. 3		

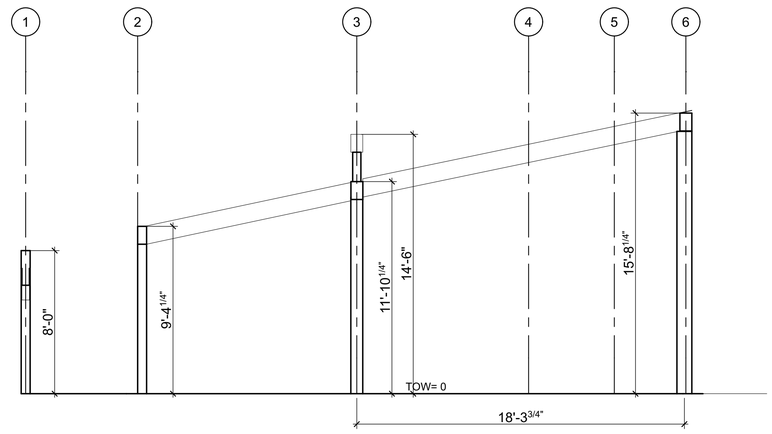
SCALE: 1/4" = 1'-0"
DATE: APR. 10, 2023
DRAWN BY: G.C.
CHECKED BY: C.C.

LOG BUILDER : KEALEY & TACKABERRY LOG HOMES
CLIENT : Eades
TITLE: WALL SECTIONS

A-12
15



WALL C



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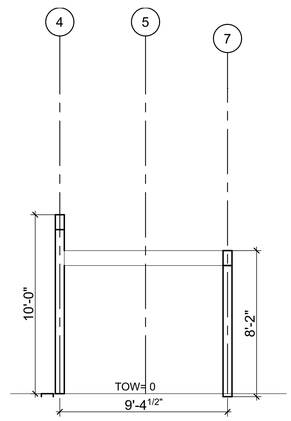
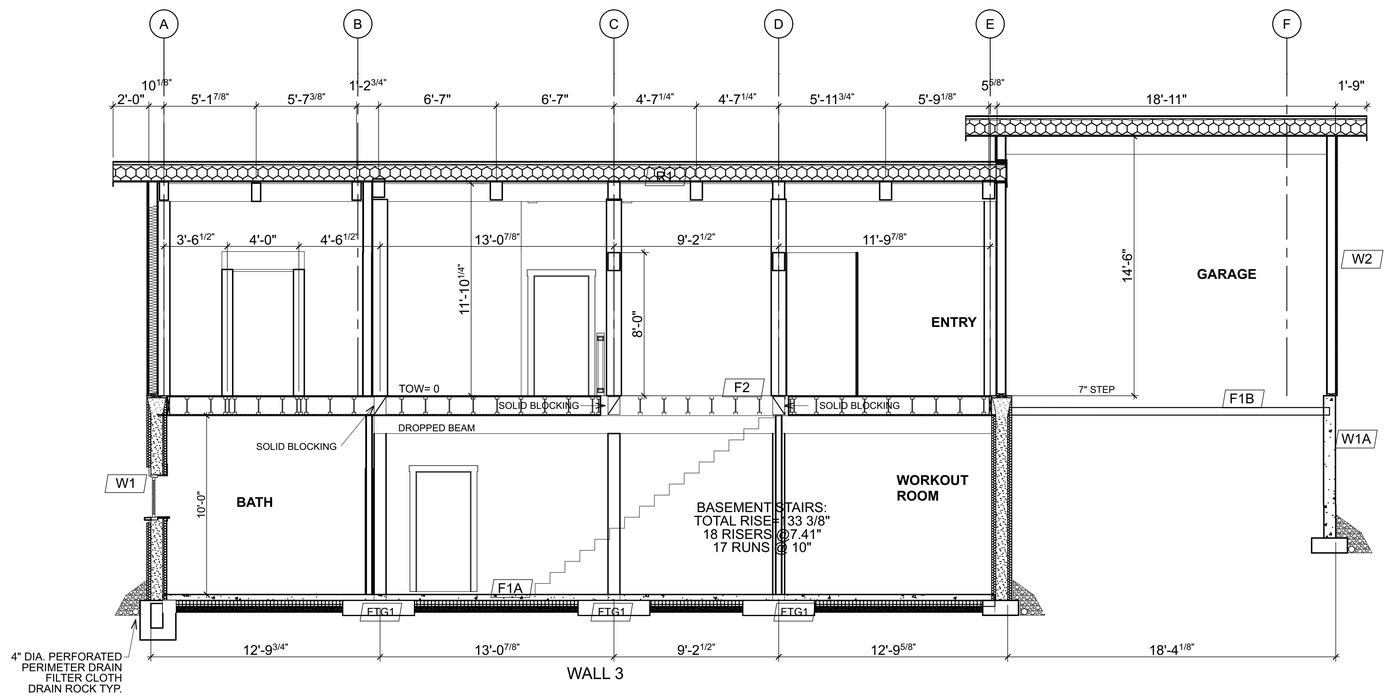


WALL F



WALL 3

- ALL DIMENSIONS TO BE VERIFIED ON SITE BY GENERAL CONTRACTOR
- DIMENSIONS ARE CONSTANTLY UNDER REVISION
- IT IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS & SPECIFICATIONS ON THIS SET OF PLANS BEFORE STARTING CONSTRUCTION
- ALL FLOOR JOISTS SHALL BE DOUBLED AT MID SPAN
- BUILDER IS RESPONSIBLE FOR COMPLYING WITH ALL LOCAL BUILDING CODES AND PRACTICES

I HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN ACTIVITIES IN THESE SECTIONS WHICH I HAVE MET THE REQUIREMENTS OF THE OBC AS A REGISTERED DESIGNER.

KEALEY & TACKABERRY

DESCRIPTION:				
DATE:	MAR. 14/22			
REVISION:	ENG.	REV. 2	REV. 3	
SCALE: 1/4" = 1'-0"	DATE: APR. 10, 2023	DRAWN BY: G.C.	CHECKED BY: C.C.	

LOG BUILDER : KEALEY & TACKABERRY LOG HOMES

CLIENT : Eades

TITLE: WALL SECTIONS

A-13

15

LICENSED PROFESSIONAL ENGINEER
May 8, 2023
M. W. ZEITOUN
100157514
PROVINCE OF ONTARIO
"Structural Only"

LICENSED PROFESSIONAL ENGINEER
May 8, 2023
M. W. ZEITOUN
100157514
PROVINCE OF ONTARIO
"Structural Only"

A-14 / 15	LOG BUILDER : KEALEY & TACKABERRY LOG HOMES	SCALE: N.T.S.	REVISION:	DATE:	DESCRIPTION:	I HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN ACTIVITIES WHICH BEAR THIS DECLARATION AND I HAVE MET THE REQUIREMENTS OF THE OBC AS A REGISTERED DESIGNER	• ALL DIMENSIONS TO BE VERIFIED ON SITE BY GENERAL CONTRACTOR • ALL DIMENSIONS ARE CONSTRUCTION TIME DIMENSIONS • IT IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS & SPECIFICATIONS ON THIS SET OF PLANS BEFORE STARTING CONSTRUCTION • ALL LOG DIAMETER SIZE TO BE MEASURED AT MID SPAN • BUILDER IS RESPONSIBLE FOR COMPLYING WITH ALL LOCAL BUILDING CODES AND PRACTICES
	CLIENT : Eades	DATE: APR. 10, 2023	ENG.	MAR. 14/22		KEALEY & TACKABERRY LOG HOMES	
	TITLE: ISOMETRICS	DRAWN BY: G.C.	REV. 2				
		CHECKED BY: C.C.	REV. 3				

GENERAL DESIGN & DRAFTING NOTES

GENERAL NOTES ARE NOT INTENDED TO APPLY TO EVERY SET OF PLANS, BUT ARE INTENDED TO GIVE OWNER & CONTRACTORS SOME BASIC GENERAL GUIDELINES RELATING TO LOG CONSTRUCTION.
ALL NOTES FOUND ON ATTACHED PLANS TAKE PRECEDENCE OVER THESE GENERAL NOTES.
THIS BUILDING IS DESIGNED IN ACCORDANCE WITH THE **2015 NATIONAL BUILDING CODE** & MAY BE MODIFIED TO SUIT FEDERAL & LOCAL CODE REQUIREMENTS, GEOGRAPHICAL ENVIRONMENTAL DIFFERENCES & MATERIAL AVAILABILITY. ALL COSTS INCURRED TO APPLY THOSE CHANGES, AS WELL AS ENGINEERING, PERMIT, INSPECTION, MATERIAL & LABOUR COSTS ARE THE SOLE RESPONSIBILITY OF THE OWNER.
ALL DIMENSIONS ARE AT CONSTRUCTION TIME DIMENSIONS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS & SPECIFICATIONS ON THIS SET OF PLANS BEFORE STARTING CONSTRUCTION. THIS SET OF WORKING DRAWINGS DOES NOT INCLUDE A BUILDING MATERIAL LIST.
THE OWNER OR PROJECT MANAGER IS TO PROVIDE & COORDINATE PRODUCT SELECTION, ASSEMBLY & INSTALLATION WITH GENERAL CONTRACTOR.
ALL LOGS DIAMETER NOTED SIZE TO BE MEASURED AT MID SPAN.

DESIGN DATA

UNLESS OTHERWISE NOTIFIED BY OWNER & NOTED IN ATTACHED DRAWINGS, MIN. DESIGN LOADS ARE:
-SOILS TESTS TO CONFIRMED A SOIL BEARING PRESSURE OF 1500 POUNDS PER SQUARE FOOT.
FOUNDATION & FOOTING DESIGN MUST BE CHECKED BY ENGINEER OR LOCAL BUILDING DEPARTMENT.
-THE DEAD LOAD IS THE ACCUMULATIVE WEIGHT OF ALL STRUCTURAL MEMBERS, THE FIXTURES AND THE PERMANENTLY ATTACHED EQUIPMENT OF THE LOG BUILDING AND ITS FOUNDATION.
-THE LIVE LOAD IS THE WEIGHT THAT IS SUPERIMPOSED ON THE STRUCTURAL COMPONENTS BY THE USE AND OCCUPANCY OF THE BUILDING, SUCH AS FURNITURE, APPLIANCES AND PEOPLE.
FIRST FLOOR LOADS ARE : **40** PSF LIVE LOAD + 10 PSF DEAD LOAD = **50** PSF TOTAL LOAD
SECOND FLOOR LOADS ARE : **40** PSF LIVE LOAD + 10 PSF DEAD LOAD = **50** PSF TOTAL LOAD
ROOF LOADS ARE: **36** PSF ROOF SNOW LOAD + 15 PSF DEAD LOAD = **51** PSF TOTAL LOAD
DECK LOADS ARE: 10 PSF DEAD LOAD+40 PSF LIVE LOAD+ **36** PSF SNOW LOAD= **86** PSF TOTAL LOAD
HOTTUB LOAD ON DECK IS 95 PSF TO BE ADDED TO DECK LOAD.
DESIGN IS TO BE MODIFIED ACCORDINGLY IF LOCAL CONDITIONS SUCH AS SEIMIC ACTIVITY, WIND SPEED &, OR HEAVY SNOW ACCUMULATION EXCEED THE PRECEDING DESIGN PARAMETERS.
- MAXIMUM ALLOWED DEFLECTION FOR FIRST FLOOR SYSTEM & GYPROC CLADDED CEILINGS IS 1/360 OF THE SPAN DIMENSION. SECOND FLOOR & ATTIC, PURLINS, LINTELS, RAFTERS, NO GYPROC CEILINGS. MUST NOT DEFLECT MORE THAN 1/240 OF THE SPAN DIMENSION.

GENERAL CONSTRUCTION NOTES

SITE PREPARATION

OWNER / CONTRACTOR IS TO CONDUCT SOIL TESTS & DIG TEST HOLES TO DETERMINE SOIL TYPE & DRAINAGE PROPERTIES OF SITE. A SURFACE DRAINAGE PATTERN SHOULD BE ESTABLISHED WHICH WILL DRAIN THE ENTIRE AREA AND DIRECT WATER AWAY FROM THE HOUSE. DRIVEWAYS & WALKWAYS SHOULD BE SET LOW ENOUGH TO AVOID INTERFERENCE WITH THE DRAINAGE PATTERN.
THE FINISHED GRADE WILL BE SLOPED AWAY FROM THE FOUNDATION WALL OF HOUSE. WHERE THE DRAINAGE SLOPE AROUND THE HOUSE MEETS A REVERSE SLOPE, A GENTLY SLOPING DITCH IS USED TO CARRY SURFACE WATER AWAY.
IF A WELL IS USED TO SUPPLY WATER FOR THE HOUSE, ALL SURFACE DRAINAGE MUST BE DIRECTED AWAY FROM WELL TO AVOID CONTAMINATION OF WATER SUPPLY.
PRIVATE WATER WELL SHOULD BE AT LEAST 100' (30m) AWAY FROM SEPTIC TANK AND LEACH FIELD.
SEPTIC FIELD SHOULD BE 100' (30m) TO 500' (150m) AWAY FROM WATER FRONT (STREAM, LAKE, OCEAN) DEPENDING ON SOIL TYPE AND DEPTH.

CONCRETE FOUNDATION

REMOVE ALL LOOSE & ORGANIC MATERIALS & EXCAVATE FOR FOOTINGS & PADS AS PER PLANS.
THE DISTANCE OF THE FOOTING BASE TO THE FINISHED GRADE MUST BE NO LESS THAN THE DEPTH OF LOCAL FROST PENETRATION.
FOOTINGS MUST BE ACCURATELY POSITIONED AND ROUGHLY LEVEL. FOOTING FORMS ARE TYPICALLY MADE OF 2x STOCK. CONCRETE MUST BE PLACED CONTINUOUSLY WITHOUT INTERRUPTION.
POST & COLUMN FOOTINGS ARE TO BE PLACED SO THAT SUPPORTED LOAD IS APPLIED AT CENTER.
FOOTINGS VARY IN SIZE & DEPTH DEPENDING ON THE ALLOWABLE SOIL PRESSURE AND THE LOAD.
- STEPPED FOOTINGS MAY BE REQUIRED ON STEEPLY SLOPING SITES, OR WHERE AN UNSTABLE SOIL IS ENCOUNTERED IN PART OF THE EXCAVATION.
THE VERTICAL PART OF THE STEP SHOULD BE PLACED AT THE SAME TIME AS THE FOOTING.
THE BOTTOM OF THE FOOTING IS ALWAYS PLACED ON UNDISTURBED SOIL OR COMPACTED GRANULAR FILL WITH EACH RUN LEVEL. ON STEEP SLOPES, MORE THAN ONE STEP MAY BE REQUIRED. EXCEPT IN ROCK, THE VERTICAL DISTANCE BETWEEN STEPS SHOULD NOT EXCEED 2' & THE HORIZONTAL DISTANCE BETWEEN STEPS SHOULD BE NOT LESS THAN 2'. FOR VERY STEEP SLOPES, WHERE THESE LIMITATIONS CANNOT BE MAINTAINED, SPECIAL FOOTINGS MAY BE REQUIRED.

- PLACING CONCRETE:
- WHENEVER POSSIBLE, CONCRETE SHOULD BE PLACED INTO FORMS CONTINUOUSLY IN HORIZONTAL LIFTS NOT EXCEEDING 12" TO 18" IN DEPTH. CONCRETE SHOULD NOT BE ALLOWED TO FALL INTO FORMS FROM A HEIGHT OF MORE THAN 5', AS THIS CAUSES THE CONCRETE TO SEGREGATE.
FOR HIGHER DROPS, THE CONCRETE SHOULD BE DEPOSITED THROUGH A SUITABLE VERTICAL PIPE. THE CONCRETE SHOULD NOT BE DEPOSITED IN A PILE BUT SHOULD BE SPREAD OUT AND LEVELLED BY RAKING OR SHOVELLING. VIBRATORS MAY BE USED TO CONSOLIDATE THE CONCRETE BUT SHOULD NOT BE USED TO ASSIST PLACEMENT. CONCRETE CAN ALSO BE PLACED BY PUMPING.
- IF IT IS NECESSARY TO INTERRUPT THE PLACING OPERATIONS, THE SURFACE OF THE CONCRETE PLACED IN THE FORMS SHOULD BE LEVELLED OFF & THE CONCRETE ALLOWED TO SET PARTIALLY. THE SURFACE SHOULD THEN BE ROUGHENED TO PROVIDE A GOOD BONDING SURFACE FOR NEXT LIFT. WHEN WORK RESUMES, THE SURFACE SHOULD BE CLEANED AND SLIGHTLY DAMPENED PRIOR TO PLACING THE CONCRETE. GROUT OF 1 PART CEMENT TO 2 PARTS SAND SHOULD BE SPREAD ABOUT 1/2" THICK OVER THE ROUGHENED SURFACE TO PROVIDE A GOOD JOINT BETWEEN THE TWO LIFT. THE NEW LIFT SHOULD BE PLACED IMMEDIATELY AFTER THE PLACEMENT OF THE GROUT.
WHEN THE AIR TEMPERATURE IS AT OR BELOW 40°F OR WHEN THERE IS A POSSIBILITY OF IT FALLING TO THAT LEVEL WITHIN 24 HOURS, CONCRETE OPERATIONS SHOULD BE SUSPENDED. IF CONCRETE IS CARRIED ON, THE CONCRETE MUST BE KEPT AT A TEMPERATURE OF NOT LESS THAN 50°F OR MORE THAN 77°F WHILE BEING MIXED AND PLACED, AND IT MUST BE MAINTAINED AT A TEMPERATURE OF NOT LESS THAN 50°F FOR A MINIMUM OF 72 HOURS WHILE CURING. THE WATER TO BE MIXED INTO THE CONCRETE MAY HAVE TO BE HEATED. CONCRETE SHOULD NOT BE PLACED AGAINST FROZEN SOIL, AND ANY ICE OR SNOW SHOULD BE REMOVED FROM THE FORMWORK.

- CURING CONCRETE:
CURING INVOLVES KEEPING FRESHLY SET CONCRETE MOIST OR PREVENTING IT FROM DRYING OUT AND SHRINKING FOR SEVERAL DAYS AFTER PLACING. THE CRACKING OF CONCRETE WALLS AND FLOORS CAN OFTEN RESULT FROM IMPROPER ATTENTION TO CURING, RADICALLY LOWERING THE CONCRETE POTENTIAL STRENGTH, WATER TIGHTNESS AND DURABILITY.

CONTROL JOINTS:

IF UNCONTROLLED CRACKING OF CONCRETE SLABS AND WALLS IS TO BE AVOIDED, STEEL REINFORCING RODS OR PROPERLY LOCATED AND FORMED VERTICAL CONTROL JOINTS SHOULD BE USED. WALL JOINTS ARE FORMED BY NAILING WOOD STRIP 3/4" THICK, BEVELLED TO 1/2" IN WIDTH, TO THE INSIDE OF BOTH INTERIOR & EXTERIOR WALL FORMS. THE PURPOSE OF THESE GROOVES IS TO PROVIDE A CONTROLLED PLANE OF WEAKNESS IN THE WALL, THUS PREDETERMINING THE LOCATION OF SHRINKAGE CRACKS.

DAMPPROOFING and EXTERIOR INSULATION:

CONCRETE WALLS BELOW GRADE SHOULD BE DAMPPROOFED WITH A HEAVY COAT OF BITU-MINUS MATERIAL APPLIED ON THE EXTERIOR SURFACE FROM THE FOOTINGS TO THE FINISHED GRADE LINE, TO MAKE THE WALL WATERTIGHT AGAINST ORDINARY SEEPAGE THAT MAY OCCUR AFTER A RAINSTORM.
2" EPS (EXTRUDED POLYSTYRENE) A CLOSED CELL RIGID INSULATION THAT DOES NOT ABSORB MOISTURE, SHOULD BE ATTACHED TO EXTERIOR CONCRETE PERIMETER WALL WITH ADHESIVE OR STEEL FASTENERS. (A MUST FOR HEATED BASEMENT AND CRAWL SPACE)

BEAM POCKETS FOR UNTREATED WOOD BEAMS SHOULD BE BIG ENOUGH TO ALLOW 1/2" AIR SPACE AT THE SIDES & ENDS OF THE BEAM TO PREVENT DECAY. USE 30# FELT UNDER BEAM TO MAKE SURE WOOD BEAM IS NOT IN DIRECT CONTACT WITH CONCRETE.

CONCRETE SLABS:

BASEMENT FLOOR SLAB SHOULD BE AT LEAST 3" THICK AND SLOPED TOWARDS FLOOR DRAIN.
- COMPLETE THE INSTALLATION OF SEWER & WATER LINES... BEFORE THE SLAB IS PLACED. COMPACT BACKFILL IN TRENCHES.
- PUT 5" MIN. OF CRUSHED ROCK OR COARSE GRAVEL UNDER THE FLOOR SLAB TO RESTRICT THE PASSAGE OF MOISTURE BY CAPILLARY ACTION FROM THE GROUND UP TO THE SLAB SUGGEST NOW ADDING 2" RIGID INSULATION, R12 MINIMUM AND 2" OF SAND APPLY A LAYER OF 6 MIL POLYETHYLENE TO DAMPPROOF THE FLOOR. VAPOUR BARRIER TO OVERLAP 4" MINIMUM AT THE JOINTS.
- BASEMENT FLOOR SLAB SHOULD NOT BEAR DIRECTLY ON WALL OR COLUMN FOOTINGS BUT SHOULD BE ISOLATED FROM THEM BY A 1" SAND CUSHION OR OTHER MEANS.
- A PREMOULDED JOINT FILTER OR DOUBLE LAYER OF SHEATHING PAPER BETWEEN FLOOR SLAB AND WALL OR COLUMN SHOULD BE PROVIDED TO ALLOW FOR SLIGHT MOVEMENT OF THE FLOOR SLAB DUE TO SHRINKAGE OF THE SLAB DURING THE DRYING AND SETTLING OF THE SUBBASE.
- AFTER THE CONCRETE HAS BEEN PLACED AND CONSOLIDATED, IT SHOULD BE STRUCK OFF WITH A STRAIGHT EDGE TO THE PROPER ELEVATION.
- AFTER THE WATER SHEEN HAS DISAPPEARED AND THE CONCRETE HAS STIFFENED SLIGHTLY EDGING, JOINTING AND FLOATING OPERATIONS CAN BEGIN.
- CONTROL JOINTING AND GROOVING MAY BE NECESSARY TO AVOID RANDOM CRACKING IN THE SLAB. CONTROL JOINTS SHOULD BE PLACED ON LINE WITH COLUMNS AND WHEN FLOOR SLAB WIDTH CHANGES. THE DEPTH OF JOINTS SHOULD BE 1/4 OF THE SLAB THICKNESS.

FOUNDATION DRAINAGE:

DRAIN TILES SHOULD BE LAID ON SOLID UNDISTURBED SOIL AROUND THE PERIMETER OF THE WALL FOOTINGS WITH TOP OF TILE TO BE BELOW THE LEVEL OF THE BASEMENT FLOOR OR CRAWL SPACE, WITH A SLIGHT SLOPE TO A STORM SEWER OR OTHER ADEQUATE OUTLET.
THE TILE IS THEN COVERED WITH 6" OF GRAVEL OR CRUSHED ROCK.
TO PREVENT CLOGGED DRAIN TILE, LAY A FILTER CLOTHE OVER THE 6" OF GRAVEL OR USE CORRUGATED PIPE WITH FABRIC SOCK COVERING TO PREVENT SOIL PARTICLES FROM ENTERING PIPE.

CONCRETE REINFORCEMENT:

CONCRETE DENSITY IS INCREASED BY ADDING MORE CEMENT TO THE MIX.
FOR LOG HOMES, THE CONCRETE COMPRESSIVE STRENGTH SHOULD BE A MINIMUM OF 3000 PSI AFTER MINIMUM 28 DAYS FIELD CURING PERIOD.
CONCRETE IS NOT AN ELASTIC MATERIAL AND IS FAIRLY WEAK IN SHEAR STRENGTH.
BY PLACING METAL REINFORCING BARS (REBARS) INTO THE FORMS BEFORE THE CONCRETE IS POURED, THE CONCRETE SHEAR STRENGTH CAN BE INCREASED MANY TIMES.
REBAR COMES IN SIZES DESIGNATED BY NUMBERS 2 TO 8. THAT NUMBER x 1/8" EQUALS THE REBAR DIAMETER. #5 REBAR IS 5/8" IN DIAMETER.
#4 OR #5 REBAR IS USUALLY USED IN RESIDENTIAL CONSTRUCTION.
CONCRETE REINFORCEMENT SHALL BE DESIGNED, FABRICATED, & PLACED IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS & / OR ENGINEER SPECIFICATIONS.

BACKFILLING:

BACKFILLING OF FOUNDATION WALLS SHOULD NOT BE CARRIED OUT UNTIL:
- FLOOR JOIST & SUBFLOOR ARE IN PLACE, FULLY NAILED TO BRACE CONCRETE WALLS.
- CONCRETE 28 DAYS CURING PERIOD HAS PASSED.
- 4" PERIPHERAL DRAIN TILES ARE IN PLACE, COVERED WITH 6" GRAVEL.
- ALL DAMPPROOFING MEMBRANE AND EXTERNALLY MOUNTED INSULATION INSTALLED
SUDDEN PRESSURES AGAINST FOUNDATION WALLS BROUGHT ABOUT BY LOADS OF BACKFILL MATERIAL MAY CAUSE THE WALLS TO MOVE, RESULTING IN DAMAGE SUCH AS CRACKING THUS GREATLY LOWERING OVERALL STRENGTH OF FOUNDATION.
THEREFORE, IT IS CRUCIAL THAT BACKFILL MATERIAL BE DEPOSITED GRADUALLY AND UNIFORMLY AROUND THE PERIMETER IN SMALL LIFTS, 6" HIGH MAXIMUM. EACH LIFT BEING COMPACTED TO THE APPROPRIATE DENSITY BEFORE THE NEXT LIFT IS PLACED. CARE SHOULD BE TAKEN TO ENSURE THAT THE DAMPROOFING MEMBRANE & INSULATION IS NOT DAMAGED.
BACKFILL SHOULD CONSIST OF FREE DRAINING GRANULAR MATERIAL.
BOTTOM OF FIRST ROUND OF LOGS SHOULD BE AT LEAST 18" ABOVE FINISHED GRADE & WP TO 48" OR MORE WHERE HEAVY SNOW IS THE NORM. IF GUTTERS TO CHANNEL ROOF WATER AWAY FROM LOG HOME ARE NOT PRACTICAL BECAUSE OF ICE DAM BUILDUP @ ROOF, THEN DIG A SMALL TRENCH RIGHT UNDER ROOF DRIP LINE & FILL WITH SMALL ROUND GRAVEL TO MINIMIZE SPLASHING OF ROOF WATER ON TO BOTTOM LOGS. USE DRIP IRRIGATION INSTEAD OF SPRINKLERS TO WATER PLANTS CLOSE TO LOGHOME PERIMETER.

BUILDING MATERIAL DELIVERY & STORAGE:

PRIOR TO LOG PACKAGE DELIVERY AND SET UP, FOUNDATION AND FIRST FLOOR SYSTEM MUST BE COMPLETED AND READY TO BEAR LOG STRUCTURE. ALL CONCRETE MUST BE CURED AND FIRST FLOOR SYSTEM MUST BE FULLY NAILED AND ANCHOR BOLTED TO CONCRETE WALLS.
ACCESS IN & OUT TO BUILDING SITE BY A 48' TRUCK-TRAILER WITH CRANE MUST BE PROVIDED BY OWNER. ANY ADDITIONAL COSTS TO TRANSPORT MATERIAL TO THE BUILDING SITE NOT DIRECTLY ACCESSIBLE BY TRUCK-TRAILER IS THE FULL RESPONSIBILITY OF OWNER-BUYER.
AS FAR AS POSSIBLE MATERIAL SHOULD BE DELIVERED TO THE SITE JUST BEFORE IT IS TO BE USED.
AS SOON AS LOG STRUCTURE IS ERECTED AND THRU BOLTED, ROOF SYSTEM SHOULD BE COMPLETED.

THE PROTECTION OF BUILDING MATERIALS ON THE SITE & STORAGE BEFORE USE ARE VERY IMPORTANT.
- IN THE NORMAL STAGING OF CONSTRUCTION, THE FRAMING LUMBER AND SHEATHING MATERIALS ARE DELIVERED TO THE SITE AFTER THE FOUNDATION IS COMPLETE. THE LOG PACKAGE IS TRUCKED TO THE SITE ON CONSECUTIVE DAYS SO LOGS MAY BE UNLOADED & PLACED BY CRANE.
TRY TO ARRANGE LOG DELIVERY WHEN LOCAL WEATHER DOES NOT CALL FOR RAIN. TO PROTECT THE NEWLY ERECTED LOG STRUCTURE FROM RAIN AND SUN DAMAGE.
INSTALL A ROOF ON THE HOUSE AS SOON AS POSSIBLE.
FOR EXAMPLE, INSTALLING A STRUCTURAL INSULATED PANEL ROOF (SIP) IS A QUICK WAY TO GET ROOF COVER.
- LOGS AND FRAMING MATERIALS IN PLACE BEFORE THE HOUSE IS ENCLOSED MAY BE SUBJECTED TO RAINSTORM, BUT THE WETTING IS MOSTLY ON THE EXPOSED SURFACES AND WILL DRY OUT QUICKLY IN DRY WEATHER WITHOUT CAUSING DAMAGE.
- LUMBER STORED IN CLOSED PILES, MAY SOAK UP AND RETAIN WATER, AND DRYING OUT WILL BE VERY SLOW. THIS CONDITION SHOULD BE AVOIDED AS IT MAY LEAD TO STAIN AND DECAY.
PILES OF LUMBER SHOULD BE PLACED ON SKIDS RAISED OFF THE GROUND AND COVERED WITH SHEETS OF WATERPROOF MATERIAL TO SHED WATER.
- WINDOW AND DOOR FRAMES ARE USUALLY THE NEXT ITEMS TO BE INSTALLED AFTER THE ROOFING. IF THE FRAMES ARE DELIVERED BEFORE THEY CAN BE INSTALLED, THEY SHOULD BE SHELTERED UNTIL THEY ARE USED. GOOD FRAMES ARE COSTLY ITEMS, AND EXPOSURE TO THE WEATHER WILL NULLIFY THEIR GOOD CONSTRUCTION, ESPECIALLY IF THE FRAMES HAVE THE WINDOW SASH INSTALLED.
- INSULATION, INTERIOR WALL AND CEILING FINISH, WOOD SIDING... CAN EASILY BE STORED INSIDE. HEAVY ITEMS LIKE GYPROC BOARDS SHOULD BE DISTRIBUTED OVER THE FLOOR AREA SO AS NOT TO OVERLOAD THE FLOOR JOISTS. HEAVY LOADS CONCENTRATED ON ONE SPOT MAY CAUSE PERMANENT DEFLECTION IN THE FLOOR SYSTEM.
- HARDWOOD FLOORING, INTERIOR TRIM & MILLWORK SHOULD NOT BE STORED IN THE HOUSE UNTIL AFTER THE BASEMENT CONCRETE SLAB HAS BEEN COMPLETED AND ALLOWED TO DRY, AS THE AIR MOISTURE GIVEN OFF MAY CAUSE THE KILN-DRIED MATERIALS TO SWELL, RESULTING IN EXCESSIVE SHRINKAGE AFTER THE MATERIALS ARE INSTALLED.

FRAMING (ROUGH CARPENTRY):

- PRIOR TO SILL PLATE INSTALLATION, CONTRACTOR MUST INSPECT CONCRETE WORK CONDITION AND COMPARE ALL SITE DIMENSIONS WITH FOUNDATION PLAN DIMENSIONS.
IF FOUNDATION IS UNACCEPTABLE TO THE BUILDING TOLERANCES, CONTRACTOR IS TO STOP ALL WORK AND IMMEDIATELY INFORM THE OWNER.

- SILL ANCHOR

THE SILL PLATE SHOULD BE LEVELLED CAREFULLY. IF THE TOP OF THE FOUNDATION IS LEVEL, THE SILL PLATE MAY BE LAID ON FOUNDATION WITH A CLOSED CELL FOAM GASKET OR OTHER AIR-IMPERMEABLE MATERIAL IN BETWEEN, AND OF SAME WIDTH AS SILL PLATE.
IF THE TOP OF THE FOUNDATION IS UNEVEN OR NOT LEVEL, THE SILL PLATE MAY BE LAID IN A FULL BED OF MORTAR AND ANCHORED TO THE FOUNDATION WALL
SILL IS INSTALLED TAKING CARE TO SQUARE BUILDING IN THE PROCESS. TO VERIFY SQUARENESS OF SILL PLATE INSTALLATION, MEASURE BOTH DIAGONALS FROM CORNER TO CORNER OF PLATES BOTH DIAGONALS SHOULD BE EQUAL WITH A TOLERANCE OF +/- 1/4".
SILL PLATES SHOULD BE PRESSURE TREATED 2x MATERIAL DF #2 OR BETTER
SILL PLATES ARE ANCHORED TO CONCRETE WALL WITH 5/8" ANCHOR BOLTS EMBEDDED 8" MIN. IN CONCRETE & 2" MIN. ABOVE CONCRETE. ANCHOR BOLT SHOULD BE PLACED 4'-0" o.c. MAX. APART, WITH TWO BOLTS MIN. PER SILL PLATE AND LEDGER STRIP, 24" MAX. FROM EACH END.

- BEAMS

I-BEAM IS THE MOST COMMONLY USED SHAPE FOR STEEL BEAM.
ALL STRUCTURAL STEEL MUST BE PAINTED FOR RUST PROTECTION.
WOOD BEAMS ARE OF THREE TYPES: SOLID, BUILT UP & LAMINATED.
A BUILT UP BEAM IS USUALLY MADE OF THREE OR MORE 2x LUMBER SET ON EDGE AND SPIKED TOGETHER FROM EACH SIDE WITH 3 1/2" NAILS. THE FIRST TWO NAILS ARE DRIVEN NEAR THE END OF EACH PIECE OF LUMBER. ADDITIONAL NAILS ARE DRIVEN NOT MORE THAN 12" APART IN EACH ROW. BUTT JOINTS IN EACH MEMBER ARE LOCATED OVER A SUPPORTING POST OR WITHIN ABOUT 6" OF THE QUARTER POINTS IN THE SPAN.
END OF BEAMS SHOULD BEAR 3 1/2" MINIMUM ON CONC WALL OR COLUMNS. IF WOOD BEAM IS UNTREATED IT SHOULD BE SEPARATED FROM CONCRETE BY IMPERMEABLE MEMBRANE.
LAMINATED BEAMS ARE TO BE TO ENGINEER SPECIFICATIONS.

- FLOOR JOISTS

AFTER SILL PLATES HAVE BEEN LEVELLED AND ANCHORED, THE JOISTS ARE INSTALLED, LOCATED AND SPACED ACCORDING TO THE DESIGN. ANY JOISTS HAVING A SLIGHT BOW EDGEWISE SHOULD BE PLACED WITH THE CROWN ON TOP. A CROWNED JOIST WILL TEND TO STRAIGHTEN OUT WHEN THE SUBFLOOR AND FLOOR LOADS ARE APPLIED
ALL JOISTS TO HAVE A MINIMUM OF 2" BEARING AT SUPPORT.
FLUSH FRAMED JOISTS TO BE FASTENED TO BEAM WITH FULLY NAILED JOIST HANGERS.
ALL FLOOR OPENINGS TO BE FRAMED WITH DOUBLE TRIMMER JOIST AND DOUBLE HEADER JOIST.
INSTALL DOUBLE JOIST OR SOLID BLOCKINGS UNDER ALL FRAMED PARTITION WALLS.
INSTALL BLOCKINGS BETWEEN JOISTS TO TRANSFER CONCENTRATED LOADS TO BEARING BELOW.
JOIST MAY BE KEPT FROM TWISTING BY CROSS BRIDGING, BLOCKING, STRAPPING OR BY THE USE OF GLUE IN ADDITION TO NAILING WHEN FASTENING THE PLYWOOD SUBFLOOR TO THE JOISTS.

- SUBFLOOR

UNLESS OTHERWISE NOTED IN ATTACHED PLANS, FIRST FLOOR SUBFLOOR SHOULD BE 3/4" T&G PLYWOOD AND SECOND FLOOR SUBFLOOR SHOULD BE MINIMUM 5/8" T&G PLYWOOD
PLYWOOD PANEL SHOULD BE INSTALLED WITH THE SURFACE GRAIN AT RIGHT ANGLES TO THE FLOOR JOISTS AND WITH THE END JOINTS STAGGERED AND NAILED ALONG THE EDGES AT 6" ON CENTRE AND 12" AT INTERMEDIATE SUPPORTS. FLOOR STIFFNESS CAN BE GREATLY INCREASED AND FLOOR SQUEAKS MINIMIZED, BY APPLYING ELASTOMERIC GLUE BETWEEN THE FLOOR JOISTS AND THE PLYWOOD SUBFLOOR. THUS, THE PLYWOOD AND JOISTS ACT TOGETHER AS A SERIES OF STIFF T-BEAMS THAT HELP PREVENT DIFFERENCIAL DEFLECTION BETWEEN JOISTS. GLUE APPLIED IN THE PLYWOOD TONGUE & GROOVE JOINTS WILL FURTHER STIFFEN THE FLOOR SYSTEM.

- WALL FRAMING

FIRST FLOOR FRAMED PARTITIONS IN A LOG HOME MUST ALLOW FOR SETTLEMENT OF STACKED LOG WALLS WITH MOISTURE CONTENT ABOVE LOCAL MOISTURE EQUILIBRIUM BY HAVING A MINIMUM OF 5" SETTLING SPACE ABOVE.
NEVER NAIL FRAMED WALL TO SHRINKAGE TRIM BOARD AT TOP AS IT NEEDS TO SLIDE DOWN OVER WALL FINISH BECAUSE LOG WALLS SETTLE DOWN WHILE LOOSING MOISTURE CONTENT.
SECURING FRAME WALL STUDS TO LOG WALL CAN BE DONE BY NAILING THE STUD THRU TOP OF A SLOT CUT IN STUD SO TO ALLOW THE NAIL TO TRAVEL DOWN THE SLOT AS LOG WALL SHRINKS IN HEIGHT.
ALL FRAMED WALLS TO HAVE TWO TOP PLATES AND EXTRA TOP PLATE IS ATTACHED TO THE UNDERSIDE SECOND FLOOR SYSTEM OR LOG JOIST, ABOVE SETTLING SPACE SO TO NAIL SHRINKAGE TRIM THAT IS HIDING SETTLING SPACE. UNLESS OTHERWISE NOTED, INTERIOR PARTITION WALLS ARE 2X4 @ 16" O.C TO ALLOW SECOND FLOOR VENTS & DRAINS TO PASS THROUGH.
PARTITION WALLS USED TO CHANNEL PLUMBING DRAINS NEEDS TO BE 2X6 FRAME WALLS.

- ROOF:

LOG HOME ROOF SYSTEMS ARE TO PROTECT LOG BEAMS & LOG WALLS AROUND THE PERIMETER OF THE HOUSE AGAINST WEATHER DAMAGE NAMELY SUN, RAIN AND SNOW.
THIS IS ACHIEVED BY PROVIDING EXTRA WIDE ROOF OVERHANGS BEYOND PITCH LINE (3'-6" MINIMUM) AND RAKES AT GABLES (5' MINIMUM).
COVERED PORCHES ARE IDEAL TO PROTECT LOG WALLS FROM RAIN & SUN.
NO LOG ENDS SHOULD BE EXTENDED BEYOND ROOF LINE, UNLESS LOG ENDS ARE WRAPPED WITH A DURABLE METAL FLASHING.
LOG ROOF BEAMS SHOULD HAVE MINIMUM 6" OF ROOF EXTENSION BEYOND LOG ENDS
A COMMON LOG HOME ROOF SYSTEM INCLUDES RIDGEPOLES, PURLINS AND LOG POSTS, LOG TRUSSES AND/OR LOG RAFTERS.
AS LOG ROOF MEMBERS SHRINK IN DIAMETER WHILE THEY DRY, STEPS MUST BE TAKEN TO SEAL FROM WEATHER & INSECT INFILTRATION WHERE ROOF LOGS INTERSECT GABLE WALLS.
STRUCTURAL ROOF LOGS MUST BE SLIGHTLY NOTCHED TO HOUSE EXTERIOR AND INTERIOR WALL COVER AND EXPANDABLE GASKETS MUST BE APPLIED AT THOSE LOCATIONS.
METAL FLASHING MUST BE INSTALLED WHERE FRAME GABLE WALLS SIT ON TOP OF ALL PLATE LOGS.
ALL FLASHING AROUND CHIMNEYS MUST ACCOMMODATE SETTLING BY INSTALLING HEAVY GAUGE FLASHING AND COUNTER FLASHING WHICH MUST FREELY SLIDE VERTICALLY PAST EACH OTHER TO ALLOW SETTLING.
NO ROOFING COMBUSTIBLE MATERIAL IS TO BE LESS THAN 2" FROM A MASONRY CHIMNEY AND DO NOT ALLOW LOG WORK OR ROOFING SYSTEM TO BE IN CONTACT WITH A FREE STANDING CHIMNEY UNLESS PROVISIONS FOR VERTICAL SETTLING ARE IN EFFECT IN THIS CASE.

FIRE SAFETY:

GARAGES ATTACHED TO LIVING SPACE MUST HAVE A ONE HOUR FIRE SEPARATION, CONSISTING OF 6" MINIMUM LOG THICKNESS OR 5/8" TYPE "X" GYPSUM BOARD ON ALL WALLS & CEILINGS, AND A 20 MINUTES FIRE RATED DOOR ASSEMBLY WITH AUTOMATIC CLOSING DEVICE, AND SMOKE GASKET
A MINIMUM OF ONE BATTERY OPERATED SMOKE ALARM DETECTOR MUST BE INSTALLED IN HOUSE.
ADD SMOKE DETECTOR IN BASEMENT TO BE WIRED WITH OTHER SMOKE DETECTOR IN THE HOUSE.
INSTALL A SMOKE DETECTOR IN EACH BEDROOMS.
IF SMOKE ALARM IS TRIGGERED, IT MUST BE HEARD IN ALL BEDROOMS.
CARBON MONOXIDE ALARM MUST BE INSTALLED AT EACH HOUSE STOREY AT EYE LEVEL ON INTERIOR WALL

ELECTRICAL:

SET OF PLANS SHOULD INCLUDE AN ELECTRICAL PLAN FOR EACH STOREY.
LOCATION & AMOUNT OF ELECTRICAL OUTLETS IS ONLY SUGGESTED.
THE ELECTRICAL CONTRACTOR MUST VERIFY THE ELECTRICAL LAYOUT WITH THE OWNER.
THE ELECTRICAL CONTRACTOR MUST CALCULATE THE ADEQUATE AMP. SERVICE FOR THE HOUSE, SUPPLY AND INSTALL LATERAL SERVICE TO THE BUILDING, PERFORM ALL ELECTRICAL WIRING, BRING REQUIRED POWER TO ALL APPLIANCES, MEET ALL APPLICABLE CODES REQUIREMENTS, WITH ACCOMMODATIONS FOR PRE-WIRING AND WALL SETTLEMENT WHERE NECESSARY.
USUALLY SWITCH AND OUTLET BOXES ARE HIDDEN IN THE MORTISED LOG , WITH THE COVER PLATE FLUSH WITH FLATTEN PORTION OF LOG AT THAT LOCATION. WALL ELECTRICAL OUTLETS ARE USUALLY WIRED DOWN FROM ELECTRICAL BOX, THRU LOG WALL, INTO SUBFLOOR SPACE.
ELECTRICAL SWITCHES BY DOORS ARE WIRED FROM SUBFLOOR SPACE THRU SPACE @ DOOR SPLINE BOARD, TO MORTISED SWITCH BOX. DO NOT USE CONDUITS IN A LOG WALL .
PRE-DRILL VERTICAL HOLES IN A LOG WALL ARE A MIN. 1 1/4" IN DIAMETER TO FISH WIRES THRU.
ALL BATHROOMS WITHOUT OPENABLE WINDOW, MUST HAVE AN ADEQUATE EXHAUST FAN INSTALLED.

PLUMBING:

PLUMBING CONTRACTOR MUST CONSIDER THE NEED FOR SETTLING ALLOWANCES IN ALL PLUMBING RUNS.
PLUMBING RUNS SHOULD BE INSTALLED IN FRAMED WALLS.
DO NOT RUN PLUMBING WASTE, VENT & SUPPLY PIPES THROUGH OR WITHIN LOG WALLS.
ANY FUTURE REPAIR WOULD BE VERY DIFFICULT.
WATER LINES TO SECOND FLOOR SHOULD HAVE A FLEXIBLE LOOP HIDDEN WITHIN SECOND FLOOR FRAMING THAT OPENS AS SECOND FLOOR SETTLES DOWN.
WASTE & VENT PIPES USE A SERIES OF COMPRESSION & EXPANSION FITTINGS TO ACOMMODATE SETTLING, WITH BLOCKINGS TO SUPPORT TOP & BOTTOM COMPRESSION FITTINGS ALLOWING FITTINGS TO COMPRESS.
PLUMBING VENTS MAY BE STRAPPED OR BLOCKED AT LOWER PART, WITH ROOF SETTLING AROUND VENT, AND COUNTERFLASHING SLIDING ALONG FLASHING TO ALLOW SETTLING.

CABINETRY:

CABINET MAKER MUST CHECK ALL DIMENSIONS ON SITE BEFORE STARTING ANY WORK.
CABINETS MUST NOT BE SECURED TO LOG WALL UNLESS SETTLING ACCOMODATIONS ARE APPLIED.
ONE METHOD IS TO RECESS THE CABINETS AND COUNTERS 2" TO 3" IN THE LOG WALL. CABINETS ARE HANGED AT TOP BY SCREWING THEM INTO ONE LOG ONLY, AND THE COUNTERS ARE SCREWED TO FLOOR AND TO LOG WALL WITH SLOT FOR SETTLING. ADD SETTLING SPACE ABOVE SPLASH BOARD.
ANOTHER METHOD IS TO INSTALL OVER LOG WALL INTERIOR FRAME WALL AND PLACE WIRING & PLUMBING IN CAVITY.

INSULATION & THERMAL EFFICIENCY:

ROOFS & EXTERIOR FRAME WALLS ARE USUALLY INSULATED WITH BATT FIBER GLASS, STYROFOAM RIGID PANELS (SIP) OR SPRAY FOAM.
HANDCRAFTED LOG WALLS HAVE LOOSE FIBERGLASS INSULATION WRAP IN PLASTIC OR SHEEP WOOL INSTALLED IN W SHAPE LATERAL GROOVES AND SADDLE NOTCHES.
A BARRIER FOAM SEAL "P" GASKET SHOULD BE STAPLED AT THE FLANGE ON THE INSIDE OF THE LOG CONTACT LINE (BOTH AT EXTERIOR AND INTERIOR CONTACT LINE). THIS 1" DIAMETER WATER PROOF FOAM BACKER ROD IS A SUPERIOR WEATHER SEAL WHEN COMPRESSED AT LOGS LATERAL CONTACT LINE.
THE THERMAL VALUE OF A LOG WALL DEPENDS ON ITS MASS, OR THE DIAMETER SIZE OF THE LOGS.
THE MORE MASS IN A STRUCTURE, THE LESS PRONOUNCED THE TEMPERATURE SWINGS ARE WITHIN THIS STRUCTURE. AS OUTSIDE TEMPERATURE DROPS, THE INSIDE OF THE BUILDING TENDS TO RETAIN ITS WARMTH, AS THE LOGS RELEASE HEAT STORED WITHIN THEIR MASS.
CONVERSELY, IN SUMMER THE INTERIOR OF THE LOG HOME WILL REMAIN COOLER.
AS LOG LOOSES ITS MOISTURE & SHRINK, LATERAL CHECKS IN LOGS AT CROSS CORNERS SHOULD BE CAULKED TO SEAL OFF AIR INFILTRATION. A FINAL SEALING OF THE LOG HOME USING ENERGY SEAL CAULKING OF SAME COLOR AS LOGS TAKES PLACE WHEN LOGS HAVE REACHED EQUILIBRIUM WITH THEIR ENVIRONMENT, IN ABOUT THREE YEARS AFTER CONSTRUCTION TO ENSURE A DRAFT FREE HOME.

LOG HOME MAINTENANCE:

WITH ADEQUATE WOOD CARE AND PREVENTATIVE MAINTENANCE, YOUR LOG HOME WILL LAST CENTURIES.
MOST WOODS CONTAIN NATURALLY OCCURING OILS THAT RESIST WEATHERING AND DECAY.
BUT WITH TIME, THESE OILS ARE LEACHED FROM THE WOOD AND NEED TO BE REPLACED.
REGIONAL CLIMATES WILL DICTATE GENERAL PRESERVATION TECHNIQUES.
THE FIRST GENERAL RULE IS TO PREVENT WATER FROM COMING IN CONTACT WITH THE LOGS.
LOGS MUST BE THOROUGHLY CLEANSED WITH A SOLUTION OF SOAP AND BLEACH, COMPLETELY DRIED BEFORE APPLYING A PRESERVATIVE SOLUTION CONTAINING A WATER REPELLENT & MILDEWCIDE.
REAPPLY THE SOLUTION UNTIL LOGS WILL NO LONGER ACCEPT ANY MORE PRESERVATIVE.
IF SUN DAMAGE ON SOUTH & WEST SIDE OF THE HOUSE IS ANTICIPATED, APPLY A PRESERVATIVE THAT CONTAINS OILS WITH PIGMENTS AS ULTRAVIOLET BLOCKERS.
DO NOT APPLY AN IMPERMEABLE FINISH SUCH AS VARNISH OR PAINT TO THE SURFACE OF LOGS.
FOLLOW APPLICATION INSTRUCTIONS TO THE LETTER, AND NEVER APPLY FINISHES NOT SPECIFICALLY FORMULATED FOR LOGS.

LICENSED PROFESSIONAL ENGINEER
May 8, 2023
M. W. ZEITOUN
100157514
PROVINCE OF ONTARIO
"Structural Only"

- ALL DIMENSIONS TO BE VERIFIED ON SITE BY GENERAL CONTRACTOR
- ALL DIMENSIONS ARE CONSTRUCTION TIME DIMENSIONS
- IT IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS & SPECIFICATIONS ON THIS SET OF PLANS BEFORE STARTING CONSTRUCTION
- ALL LOG DIAMETER SIZE TO BE MEASURED AT MID SPAN
- BUILDER IS RESPONSIBLE FOR COMPLYING WITH ALL LOCAL BUILDING CODES AND PRACTICES

I HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN ACTIVITIES WHICH BEAR THIS DECLARATION AND I HAVE MET THE REQUIREMENTS OF THE OBC AS A REGISTERED DESIGNER

KEALEY & TACKABERRY LOG HOMES

REVISION:	DATE:	DESCRIPTION:
ENG.	MAR. 14/22	
REV. 2		
REV. 3		

SCALE: N.T.S.
DATE: APR. 10, 2023
DRAWN BY: G.C.
CHECKED BY: C.C.

LOG BUILDER : KEALEY & TACKABERRY LOG HOMES
CLIENT : Eades
TITLE: GENERAL NOTES

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