PLAN SET CONTENTS:

30' DIAMETER TEN-SIDED DOME HOME WITH SUNROOM ADDITION

ALL METHODS AND MATERIALS SHALL MEET OR EXCEED LOCAL BUILDING CODE REQUIREMENTS.

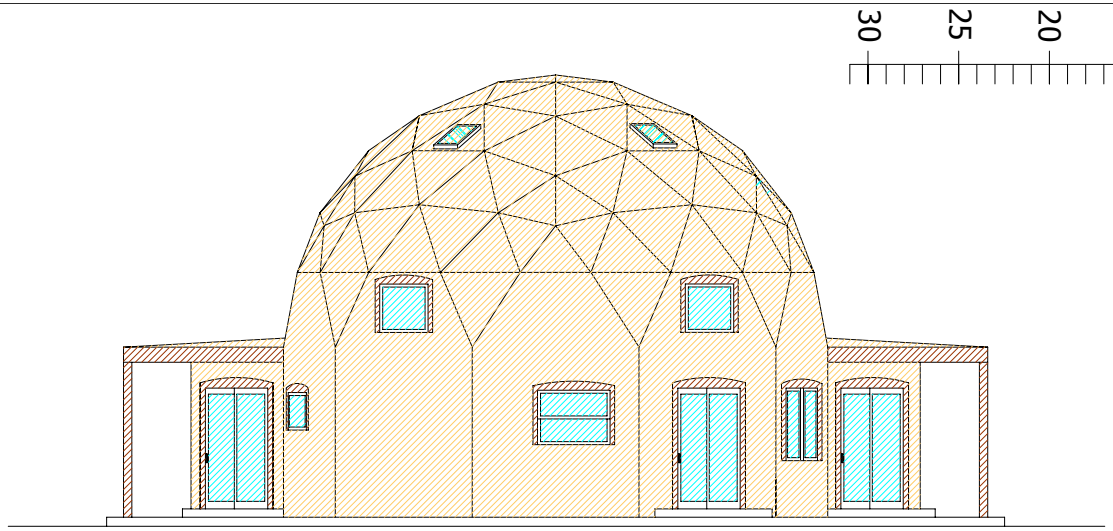
PROJECT NAME:
ECONODOME HOME

PROJECT DESCRIPTION:
30 FT. DIAMETER
TEN SIDED DOME HOME

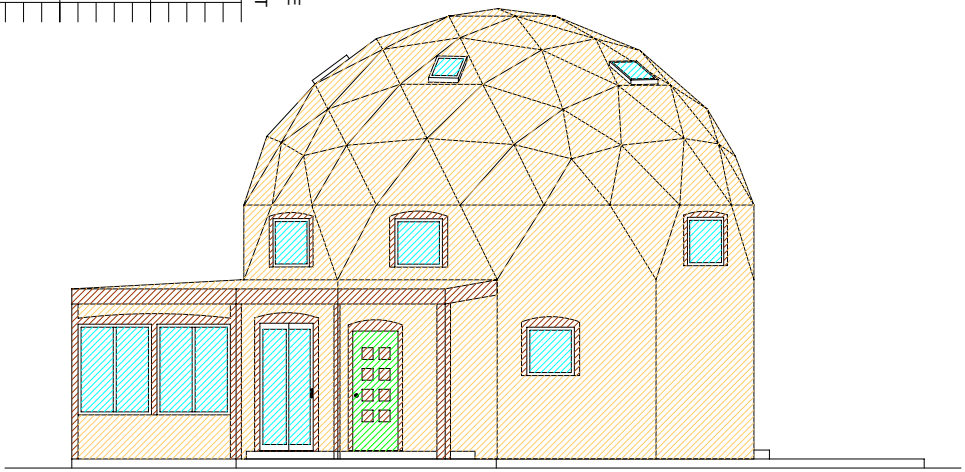
OWNER/BUILDER:
KATHRINE VOGT
1-231-350-2132
PROJECT ADDRESS:
3316 STOVER ROAD
BELLAIRE, MI 49615

PROJECT DESIGNER:
WIL FIDROEFF
FAZE CHANGE PRODUX
1331 CR 1470E
SULLIVAN, IL 61951
PHONE 217-728-2184
WIL@ECONODOME.COM

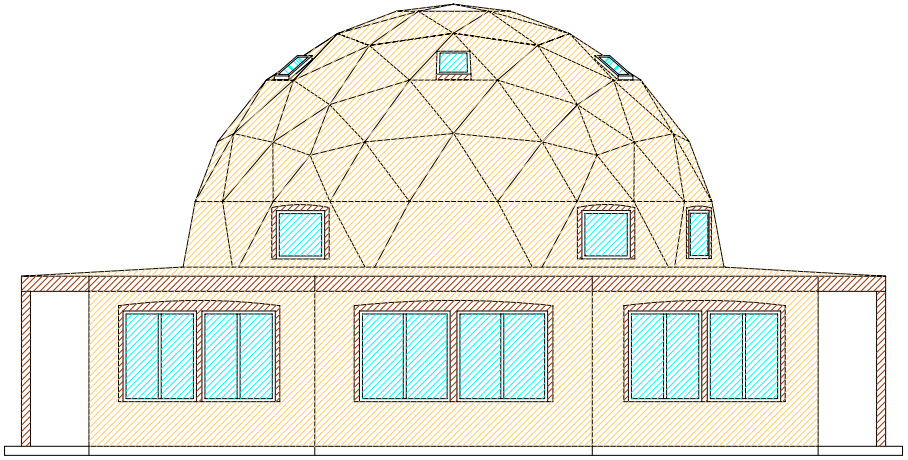
5/26/2015



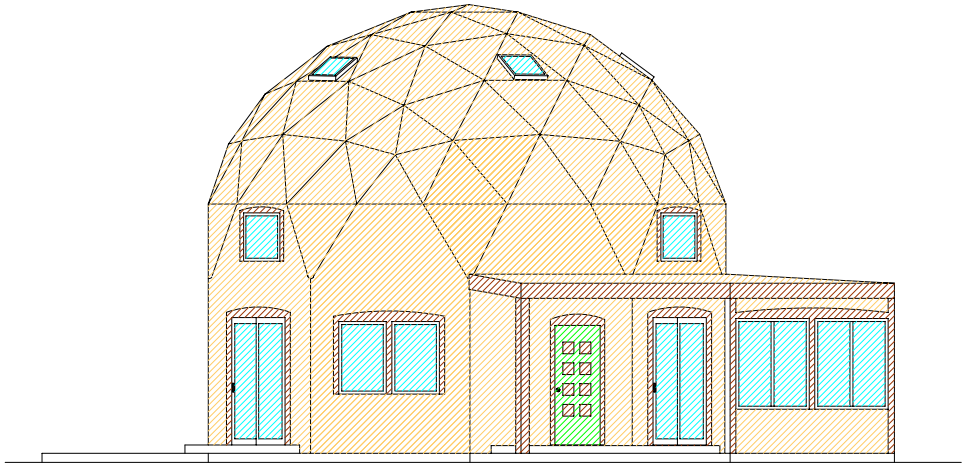
VIEW FROM NORTH



EAST ELEVATION



SOUTH ELEVATION



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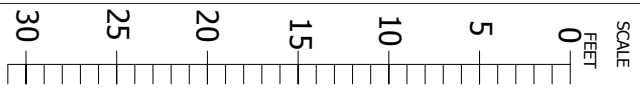
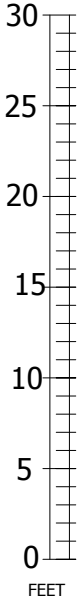
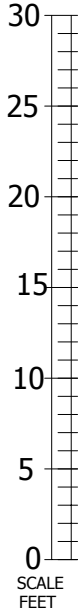






1. CONCRETE PATIO SHALL BE 1" MIN. BELOW FLOOR LEVEL ADJACENT TEN-SIDED BUILDING.
2. CONCRETE PATIO SHALL SLOPE AWAY FROM BUILDING 1/8" PER FOOT.
3. ENCLOSED SUNROOM FLOOR SHALL BE LEVEL AND SAME LEVEL AS TEN-SIDED HOME.
4. CONCRETE PATIO SHALL BE POURED AFTER LIVING SPACE AND PORCH FLOORS ARE COMPLETED.
5. REFER TO SECTION DETAILS FOR MORE INFO ON PERMANENT AND TEMPORARY CONCRETE FORMS.

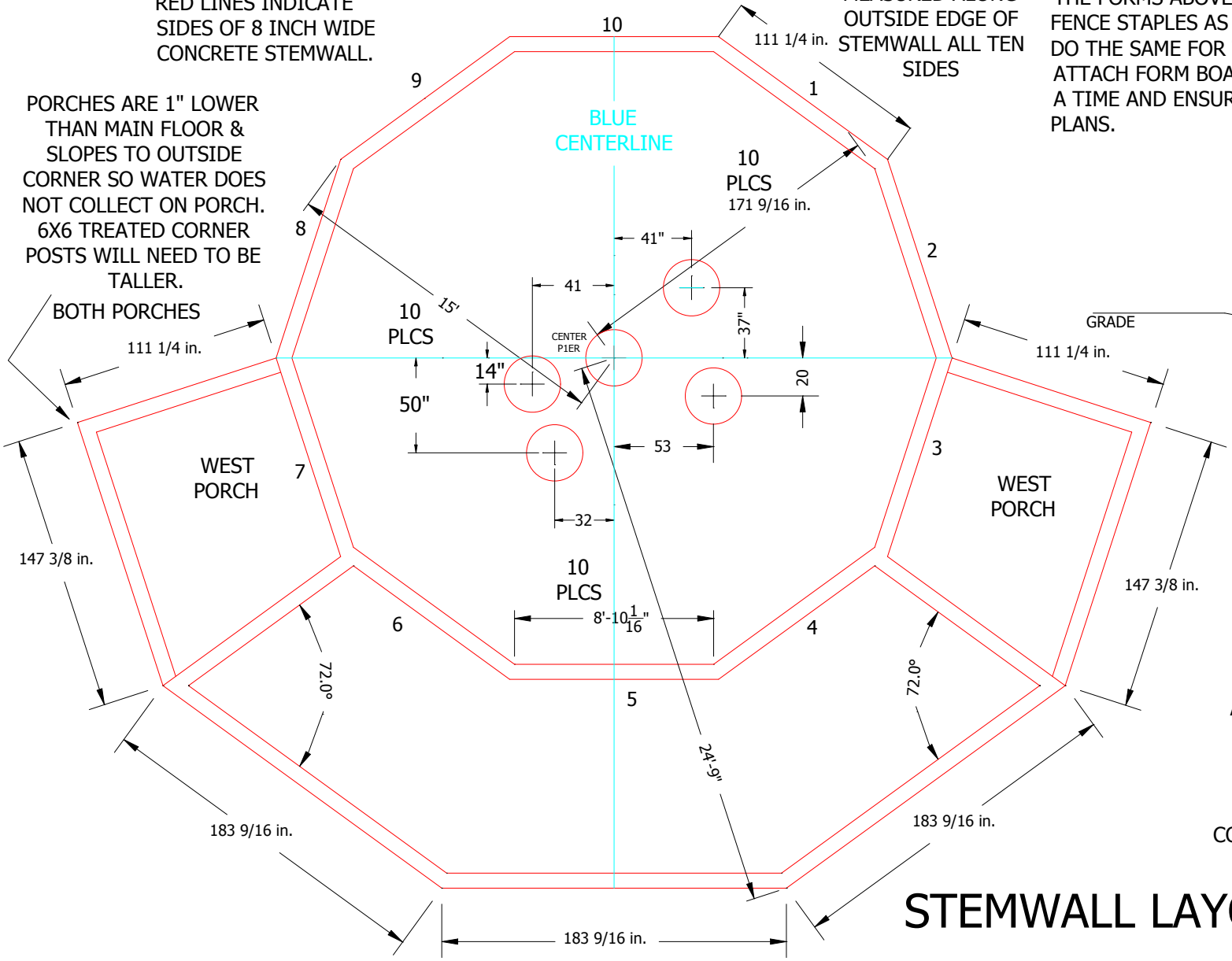
TO MAKE PERIMETER CONCRETE FORMS ATTACH A PRECUT 2X4 TO THE TOP EDGE OF A PRECUT 2X6. THIS WILL STRAIGHTEN BOTH BOARDS. CUT BOARD ENDS WITH ANGLE CUT THAT FLARES 18° AWAY FROM 90° ON BOTH ENDS. THE LENGTH OF EACH OUTSIDE FORM BOARD MEASURED ALONG THE INSIDE SURFACE OF THE OUTSIDE FORM IS 9'3-1/4" (SHORT POINT TO SHORT POINT). REST THE FORMS ABOVE REBAR STAKES AND SECURE WITH 1.5" FENCE STAPLES AS SHOWN.
DO THE SAME FOR THE INSIDE FORM BOARDS.
ATTACH FORM BOARDS TO TOP OF REBAR STAKES ONE AT A TIME AND ENSURE THEY ARE LEVEL AND POSITIONED PER PLANS.

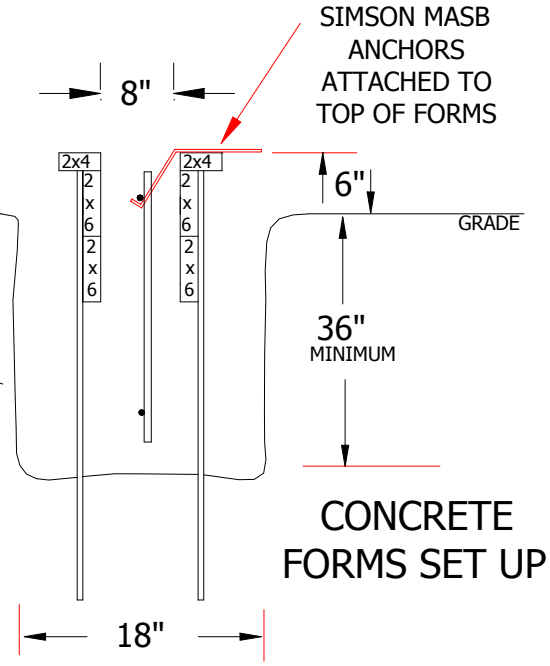
CONCRETE PATIO AREA

RED LINES INDICATE SIDES OF 8 INCH WIDE CONCRETE STEMWALL.

MEASURED ALONG OUTSIDE EDGE OF STEMWALL ALL TEN SIDES

PORCHES ARE 1" LOWER THAN MAIN FLOOR & SLOPES TO OUTSIDE CORNER SO WATER DOES NOT COLLECT ON PORCH. 6X6 TREATED CORNER POSTS WILL NEED TO BE TALLER.





CONCRETE FORMS SET UP

ALL PVC DRAIN LINES FEED TO 3" PVC MAIN LINE. POUR ALL FOOTINGS, STEMWALLS, AND PIERS PRIOR TO SETTING 6X6'S AND THEN PLUMBING. PROVIDE ACCESS THRU PERIMETER CONCRETE FOOTINGS AND STEMWALL AS NECESSARY.

STEMWALL LAYOUT

ALL PVC DRAIN LINES FEED TO 3" PVC MAIN LINE. POUR ALL FOOTINGS, STEMWALLS, AND PIERS PRIOR TO SETTING 6X6'S AND THEN PLUMBING. PROVIDE ACCESS THRU PERIMETER CONCRETE FOOTINGS AND STEMWALL AS NECESSARY.

RED LINES INDICATE SIDES OF 8 INCH WIDE CONCRETE STEMWALL.

GREEN LINES INDICATE EDGES AND ENDS OF TREATED 6X6 PERMANENT FORMS AND EXPANSION STRIPS

MEASURED ALONG OUTSIDE EDGE OF STEMWALL ALL TEN SIDES

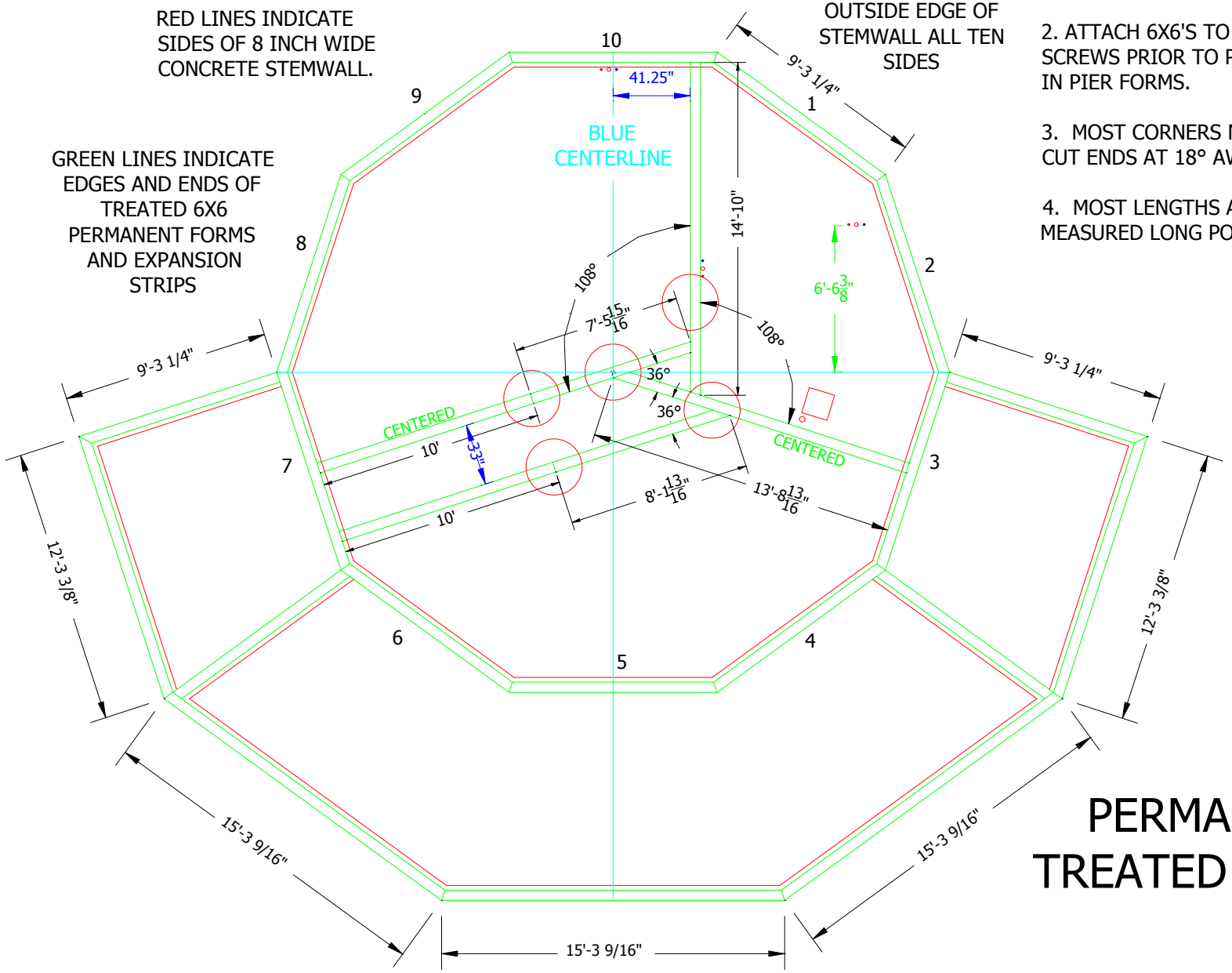
CONSTRUCTION NOTES:

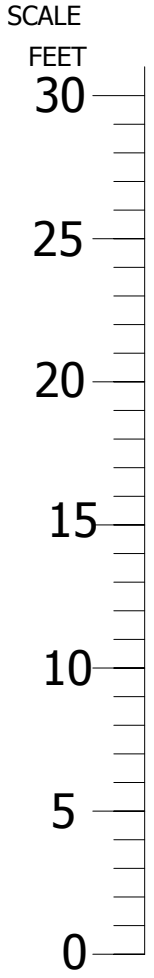
1. TEMPORARILY SUPPORT INTERIOR CUT-TO FIT 6X6'S LEVEL AND ABOVE 24" DIA. CONCRETE PIERS WITH SIMPSON MA6 ANCHORS ATTACHED TO 6X6 WITHIN PIER. AFTER CONCRETE HAS SET, TEMPORARY SUPPORTS MAY BE REMOVED.

2. ATTACH 6X6'S TO EACH OTHER WITH SCREWS PRIOR TO PUTTING WET CONCRETE IN PIER FORMS.

3. MOST CORNERS MAKE 36° TURNS. CUT ENDS AT 18° AWAY FROM 90°.

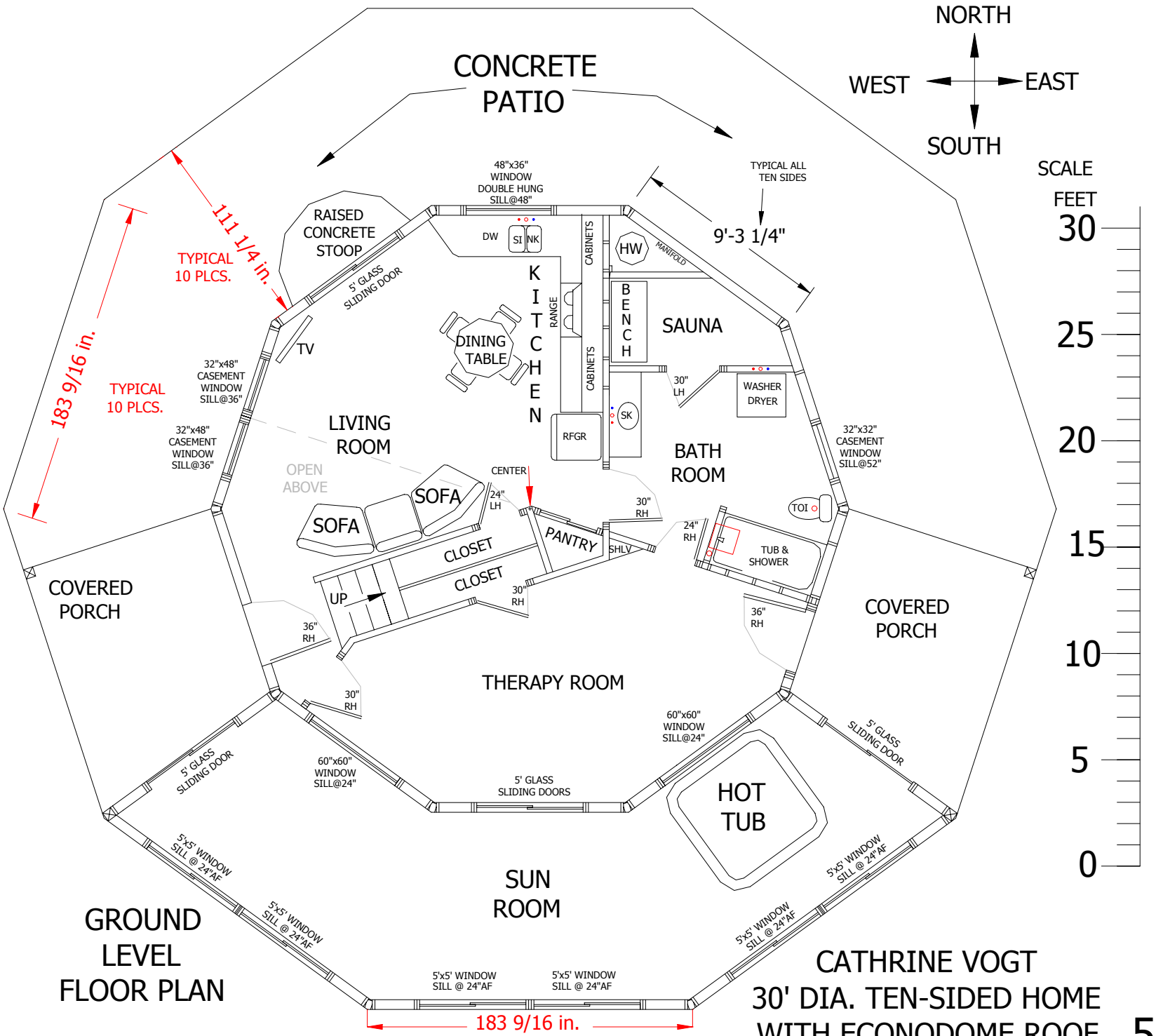
4. MOST LENGTHS ARE GIVEN MEASURED LONG POINT TO LONG POINT.





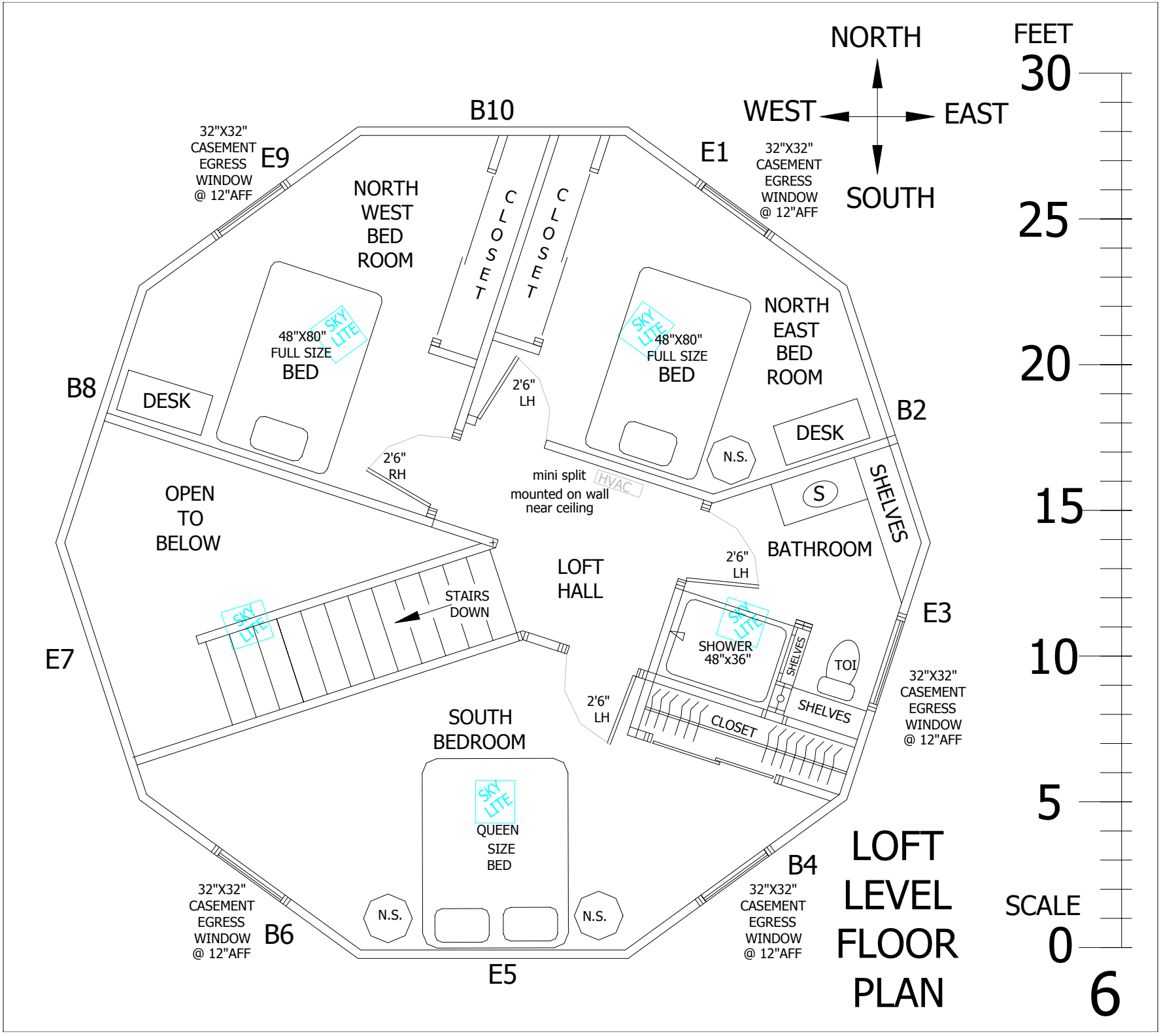
PERMANENT EMBEDDED TREATED 6X6 BEAMS LAYOUT DETAILS

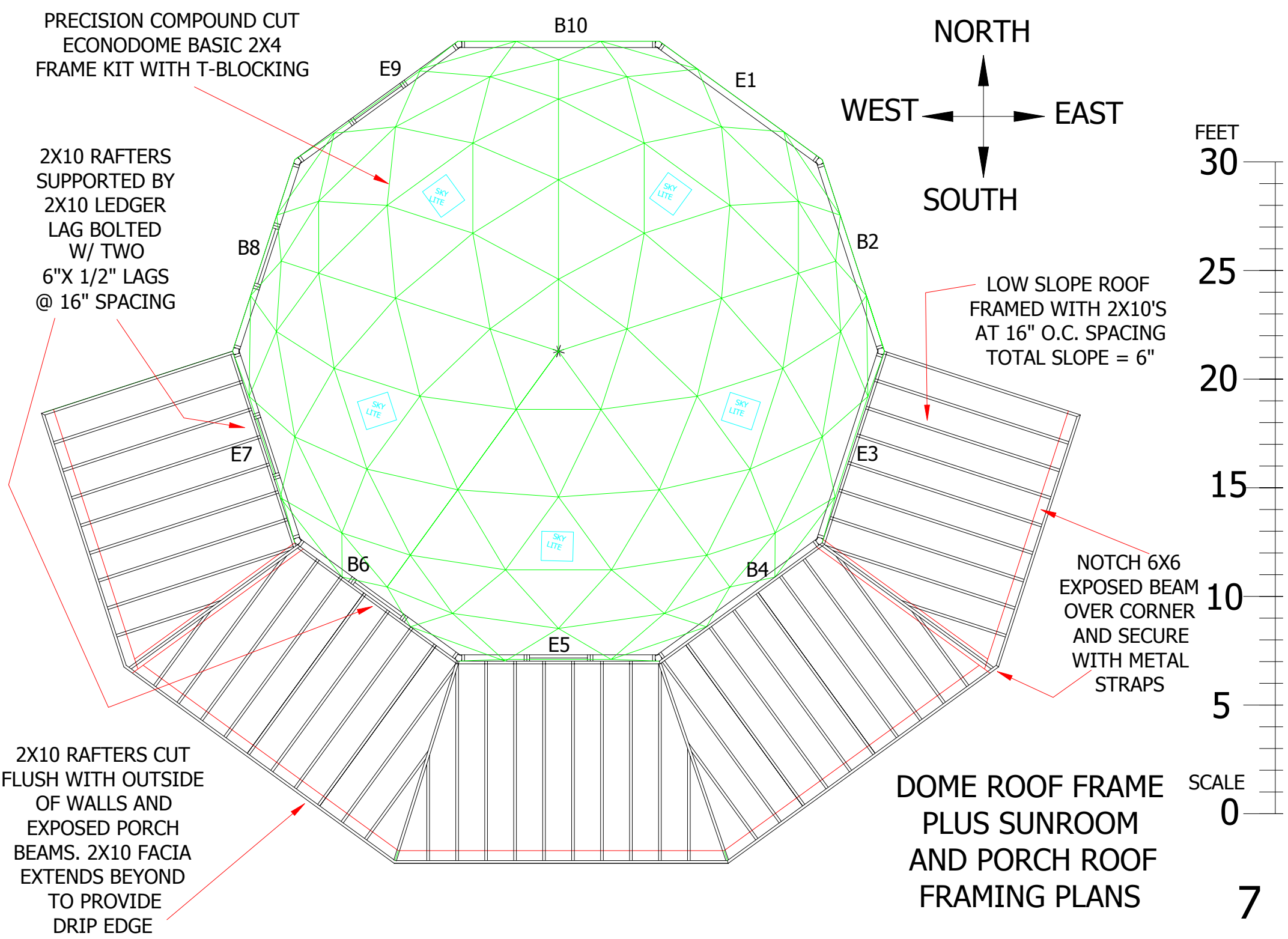
4



GROUND LEVEL FLOOR PLAN

CATHRINE VOGT
30' DIA. TEN-SIDED HOME
WITH ECONODOME ROOF


NORTH
WEST
EAST
SOUTH
FEET
30
25
20
15
10
5
0
SCALE
6
B10
E9
E1
B8
B2
E7
E3
B6
E5
B4
32"X32" CASEMENT EGRESS WINDOW @ 12"AFF
NORTH WEST BED ROOM
CLOSET
CLOSET
48"X80" FULL SIZE BED
SKY LITE
DESK
2'6" LH
2'6" RH
NORTH EAST BED ROOM
48"X80" FULL SIZE BED
SKY LITE
DESK
N.S.
S
SHELVES
mini split mounted on wall near ceiling
HVAC
OPEN TO BELOW
LOFT HALL
BATHROOM
2'6" LH
STAIRS DOWN
SKY LITE
SHOWER 48"x36"
SKY LITE
SHELVES
TOI
SHELVES
CLOSET
2'6" LH
SOUTH BEDROOM
SKY LITE
QUEEN SIZE BED
N.S.
N.S.
LOFT LEVEL FLOOR PLAN



DOME ROOF FRAME PLUS SUNROOM AND PORCH ROOF FRAMING PLANS

ALL PVC DRAIN LINES FEED TO 3" PVC MAIN LINE. POUR ALL FOOTINGS, STEMWALLS, AND PIERS PRIOR TO SETTING 6X6'S AND THEN PLUMBING. PROVIDE ACCESS THRU PERIMETER CONCRETE FOOTINGS AND STEMWALL AS NECESSARY.

RED LINES INDICATE SIDES OF 8 INCH WIDE CONCRETE STEMWALL.

GREEN LINES INDICATE EDGES AND ENDS OF TREATED 6X6 PERMANENT FORMS AND EXPANSION STRIPS

3" MAIN DRAIN TO SEPTIC SYSTEM

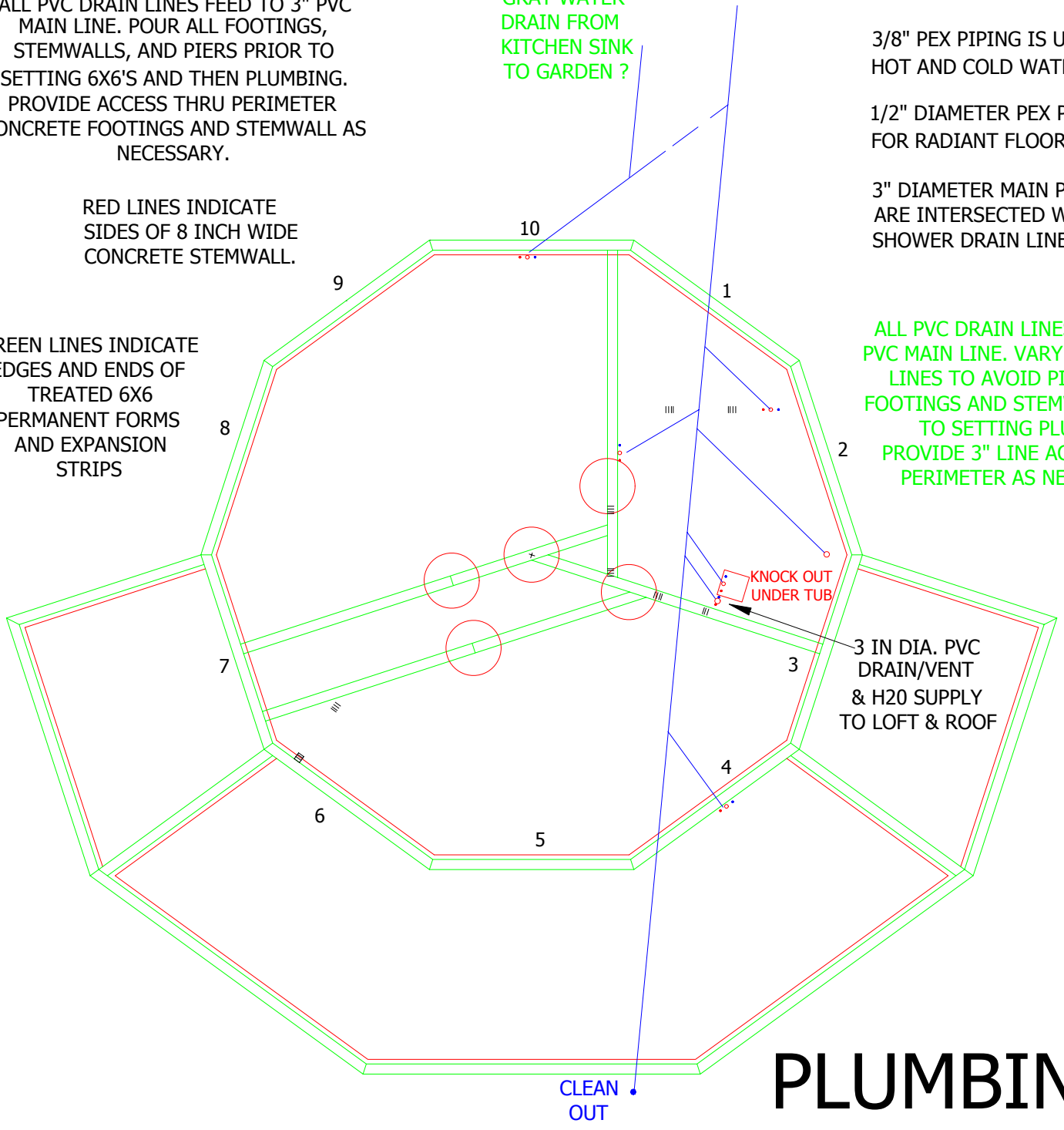
GRAY WATER DRAIN FROM KITCHEN SINK TO GARDEN ?

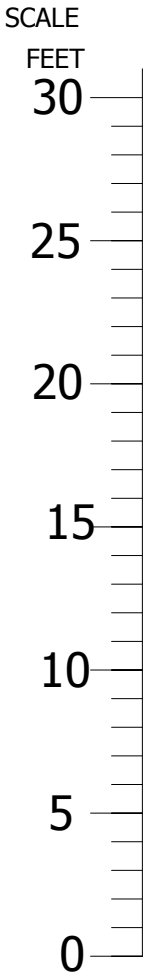
3/8" PEX PIPING IS USED FOR HOT AND COLD WATER SUPPLY LINES.

1/2" DIAMETER PEX PIPING IS USED FOR RADIANT FLOOR HEATING PIPES.

3" DIAMETER MAIN PVC DRAIN LINES ARE INTERSECTED WITH 2" SINK AND SHOWER DRAIN LINES.

ALL PVC DRAIN LINES FEED TO 3" PVC MAIN LINE. VARY POSITION OF LINES TO AVOID PIERS. POUR FOOTINGS AND STEMWALLS PRIOR TO SETTING PLUMBING. PROVIDE 3" LINE ACCESS THRU PERIMETER AS NECESSARY.





PLUMBING PLAN

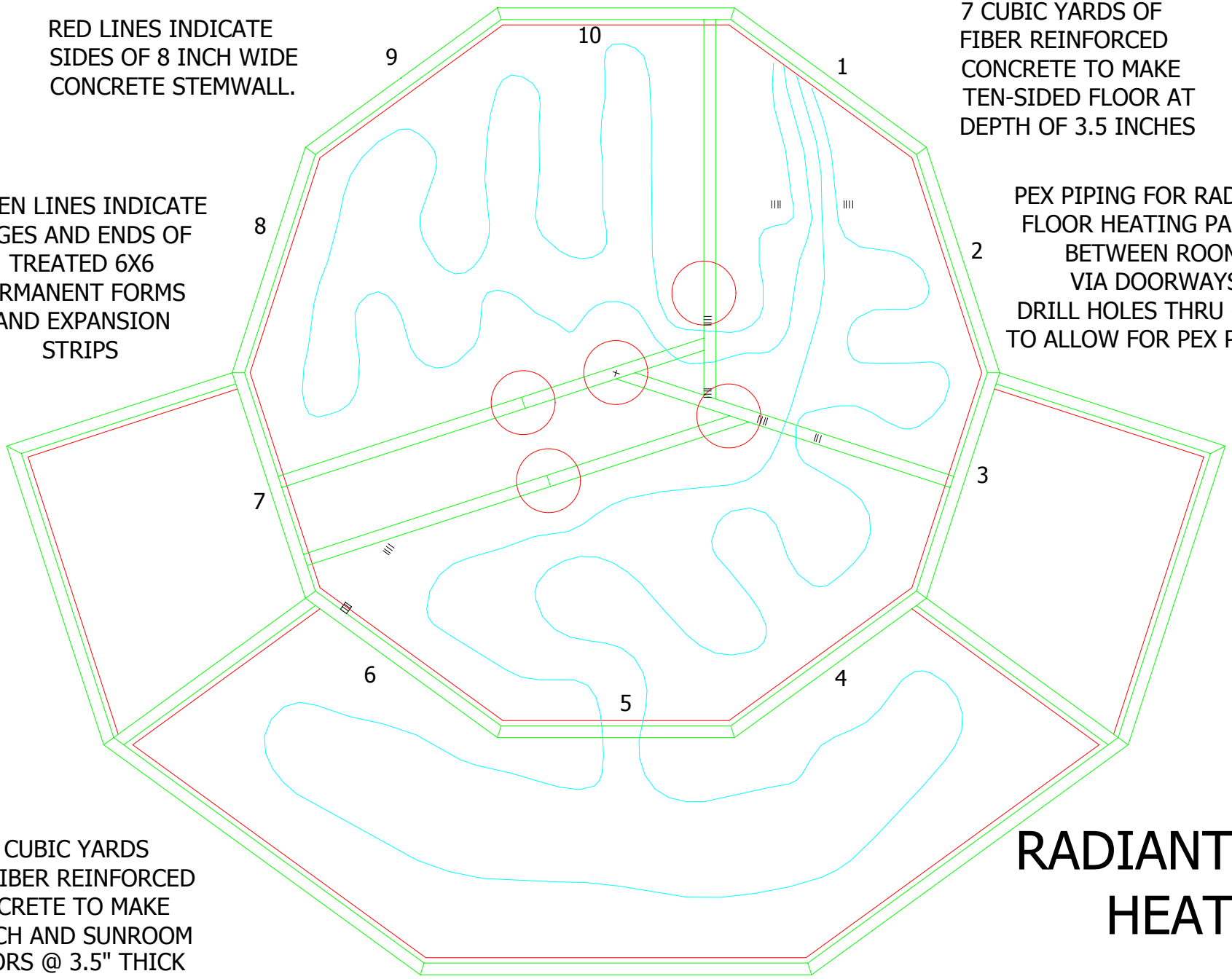
TWO PUMPS, EACH CONTROLED BY A TIMER, MOVE WATER IN TWO CLOSED LOOPS,
SHARE THE USE OF A SINGLE WATER HEATER AND OPERATE AT ALTERNATE TIMED INTERVALS
MOVING WATER FROM THE CONCRETE SLAB TO THE WATER HEATER
CAUSING LOWER IMPELLER TEMPERATURES THUS CREATING
A LOW COST AND DURABLE RADIANT FLOOR HEATING SYSTEM

RED LINES INDICATE SIDES OF 8 INCH WIDE CONCRETE STEMWALL.

7 CUBIC YARDS OF FIBER REINFORCED CONCRETE TO MAKE TEN-SIDED FLOOR AT DEPTH OF 3.5 INCHES

GREEN LINES INDICATE EDGES AND ENDS OF TREATED 6X6 PERMANENT FORMS AND EXPANSION STRIPS

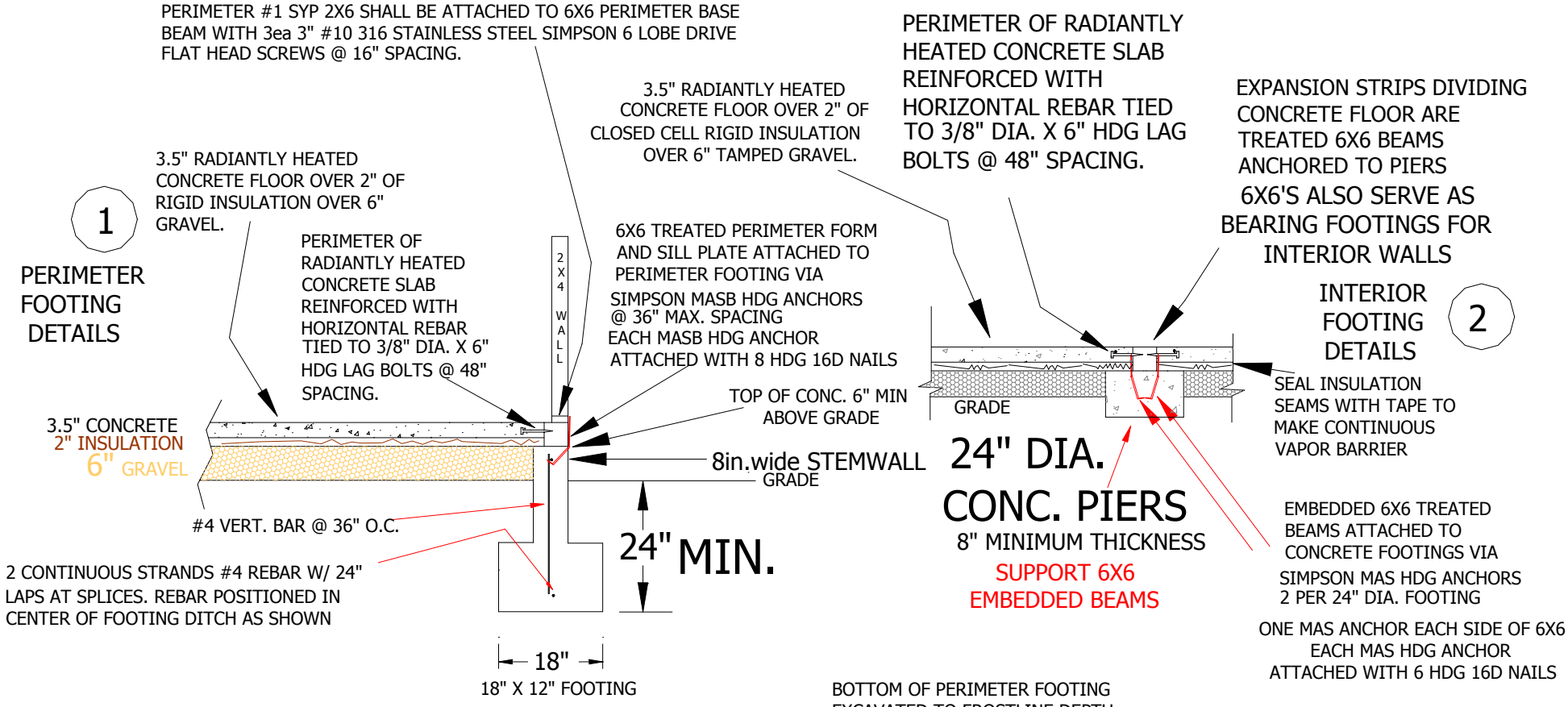
PEX PIPING FOR RADIANT FLOOR HEATING PASSES BETWEEN ROOM VIA DOORWAYS
DRILL HOLES THRU 6X6'S TO ALLOW FOR PEX PIPING.



SCALE
FEET
30
25
20
15
10
5
0

FIVE CUBIC YARDS OF FIBER REINFORCED CONCRETE TO MAKE PORCH AND SUNROOM FLOORS @ 3.5" THICK

RADIANT FLOOR HEATING 9



BOTTOM OF PERIMETER FOOTING DITCH SHALL BE HORIZONTAL/LEVEL. REBAR SHALL BE CONTINUOUS AT STEPS.

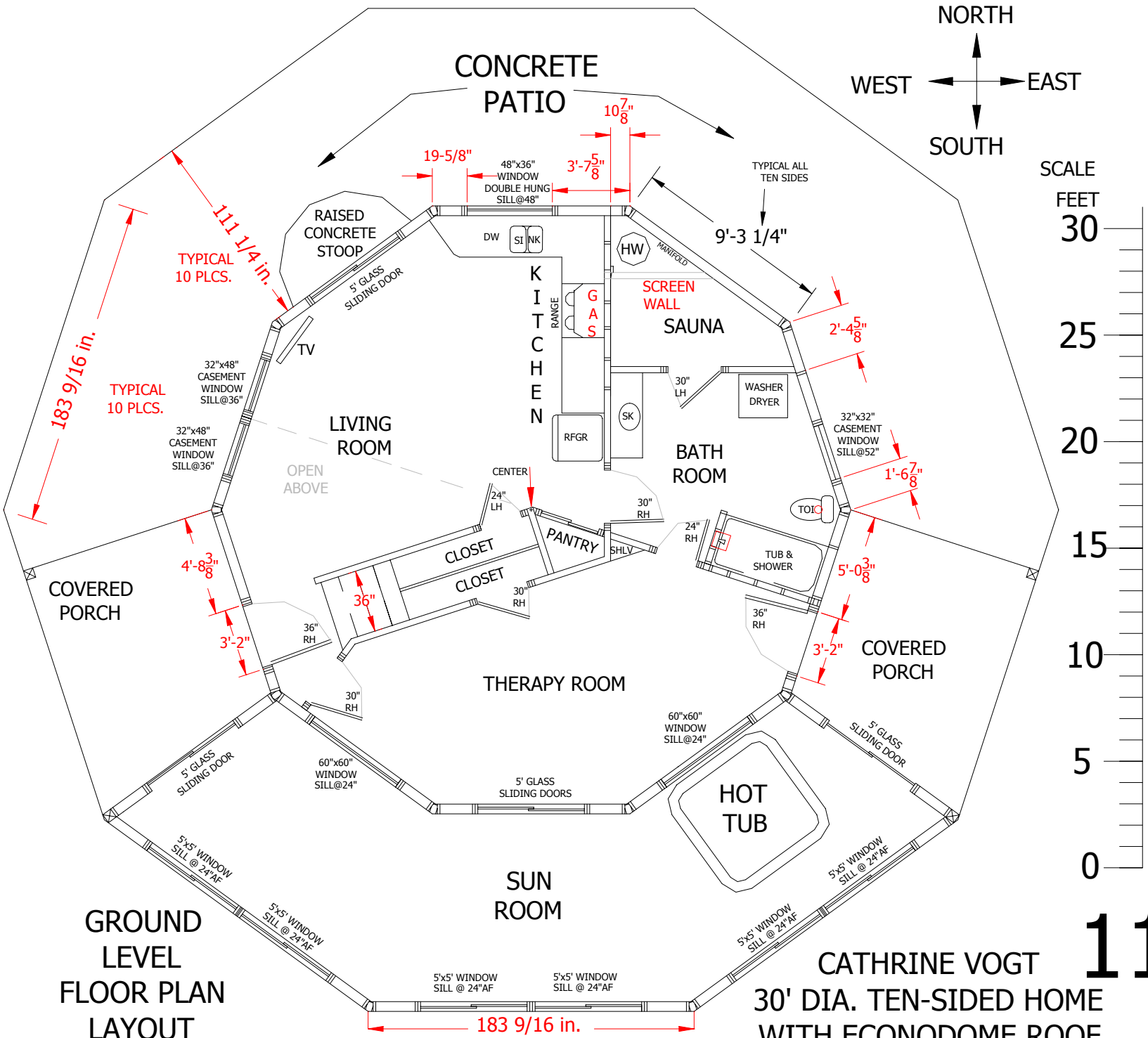
ALL REBAR AND MASB ANCHORS SHALL BE SECURED IN PLACE PRIOR TO FILLING FORMS WITH MIN. 5 BAG MIX CONCRETE.

SCALE: AT RIGHT

FOUNDATION

SECTION DETAILS

SHEET 10



GROUND LEVEL FLOOR PLAN LAYOUT

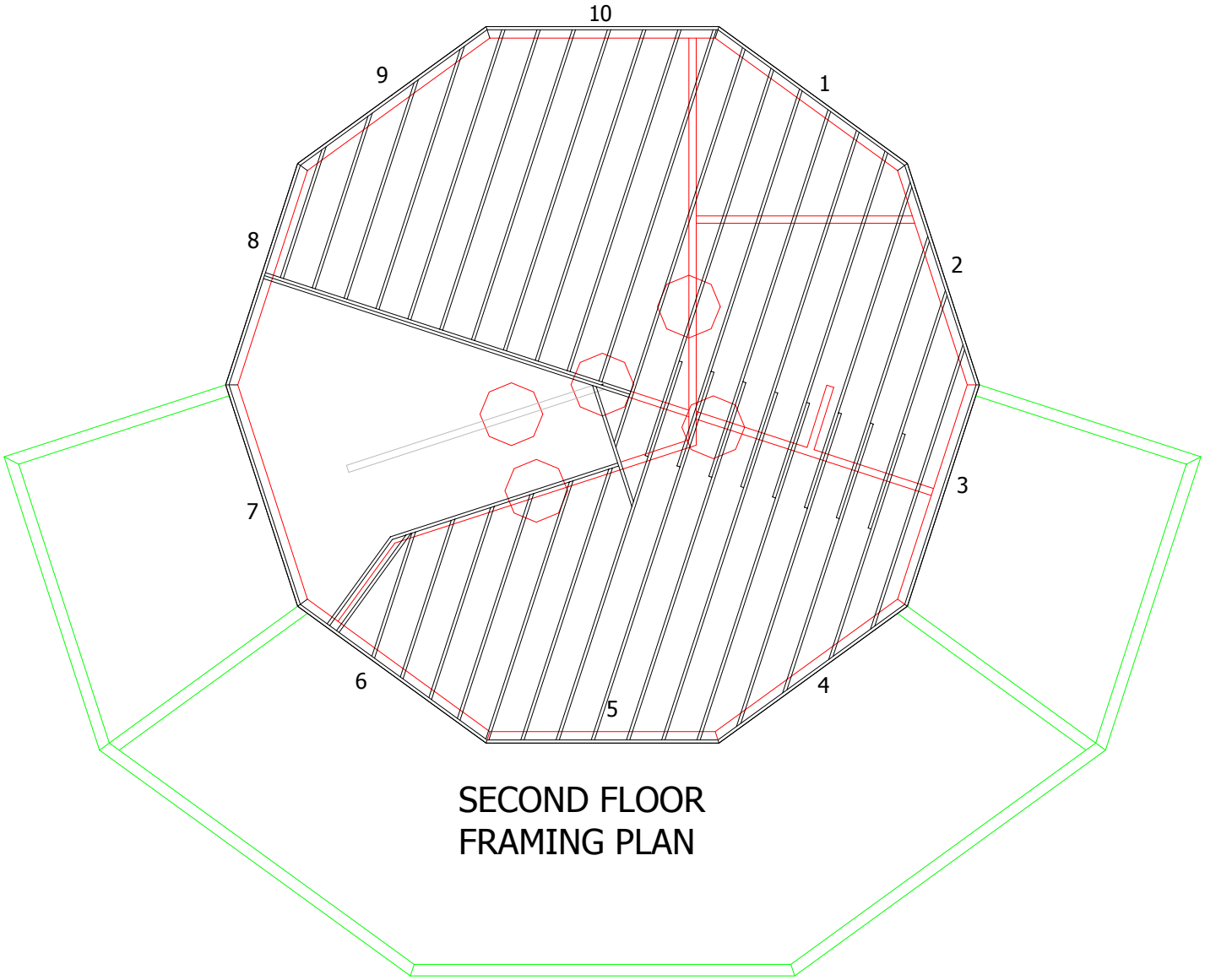
CATHRINE VOGT
30' DIA. TEN-SIDED HOME
WITH ECONODOME ROOF

11

ALL 2X6 FLOOR JOISTS ALIGNED
AT 16 INCH ON-CENTER SPACING.

MATERIALS TO FRAME & SHEET FLOOR:
2x10's #1 yellow pine kd
40ea @ 16'
25 sheets 3/4" advantek
T&G subflooring

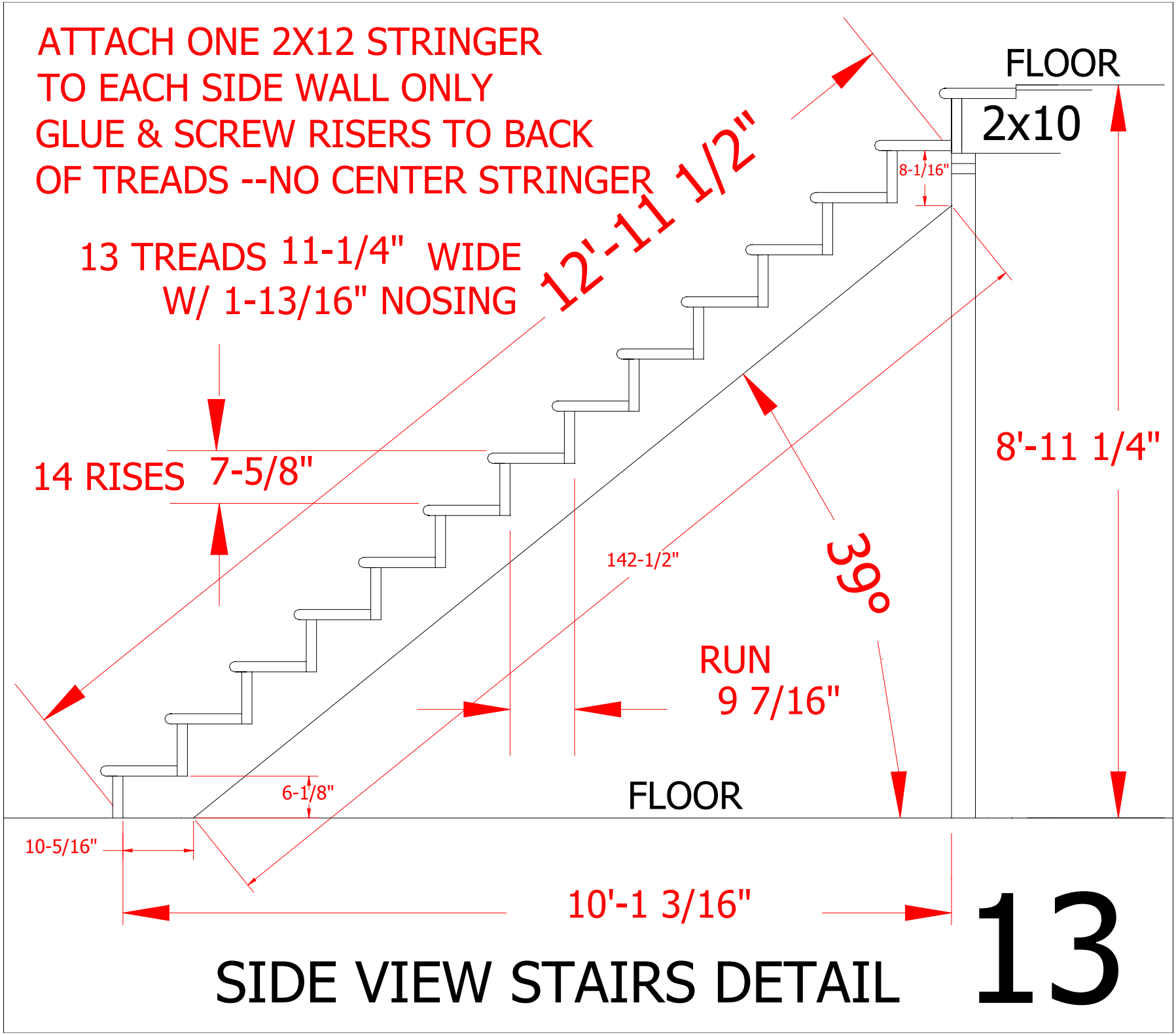
SCALE
FEET
30
25
20
15
10
5
0



SECOND FLOOR
FRAMING PLAN

CONSTRUCTION NOTES:

1. BEARING WALLS AND BEAMS ON MAIN FLOOR LEVEL MUST BE INSTALLED PRIOR TO CONSTRUCTION OF SECOND STORY FLOOR.
2. BEAM OVER KITCHEN ENTRY IS TWO 4X6'S STACKED ON TOP OF EACH OTHER AND SUPPORTED WITH 2 JACK STUDS ON EACH END. TOP OF UPPER BEAM IS TIGHT TO BOTTOM OF FIRST TOP WALL PLATE.
3. BLOCKING SHALL BE POSITIONED BETWEEN CEILING JOISTS AT 8 FEET MAX. SPACING TO PREVENT TWISTING OF CEILING JOISTS. BLOCKING SHOULD ALSO BE INSTALLED AS NECESSARY TO SUPPORT DRYWALL BELOW AND SUBFLOORING ABOVE FRAMED FLOOR.
4. JOISTS SHALL BE 2X10'S POSITIONED AS SHOWN AT 16" ON CENTER SPACING.
5. LAP TOP PLATES AT ALL WALL INTERSECTIONS SHOWN IN RED TO HOLD WALLS PRIOR TO INSTALLING FLOOR JOISTS.



SIDE VIEW STAIRS DETAIL

13

WATERPROOF ROOF SURFACE
WITH
MIAMI-DADE COUNTY APPROVED
LAPPING 60 MIL WHITE COLORED
SURE WELD CARLISLE TPO
TRIANGULAR SHINGLES
LAPS ARE 6 INCHES

DO NOT BLOCK AIR WAY
WITH GAP FILLING FOAM

FILL EXTERIOR PANEL GAPS WITH ENERFOAM
42 FROM WWW.DEMANDPRODUCTS.COM

ATTACH TPO WITH CONTACT GLUE
DO NOT USE GLUE WITHIN 4" OF
PERIMETER OF TRIANGLE PANELS

ATTACH 4-5/16" THICK SIPS W/ 5.5 INCH HDG
MAZE R1595-A 7GA RINGSHANK NAILS
5 PER SIDE ALL PANEL PERIMETERS
MIAMI-DADE FL NOA# 11-0425.09

EXTERIOR
SIPS

TRI-PAN
WITH VENT
SPACE

HEAT WELD TPO OVERLAPS

7/16" OSB SHEATHING

VENTILATION AIR SPACE

7/16" OSB SHEATHING

ICYNENE R-20 FOAM
INSULATION

LAMINATED TO
1.5" RIGID POLYISO INSULATION

LAMINATED TO
1.5" RIGID POLYISO INSULATION

ICYNENE R-20 FOAM
INSULATION

TYPICAL
2X4 STRUT

1/2" SHEETROCK

TOTAL R-VALUE
= 40

SECTION VIEW OF PANEL CONNECTION
ON ECONODOME BASIC
ROOF TRUSS

METAL STRAPS
CRISS CROSS
OVER ALL NODES

ALL ECONODOME LAMINATED 2X4 BASIC AND
T-BEAM STRUTS COMPRISED OF #1 KD
SOUTHERN YELLOW PINE LUMBER

PRE-DRILLED 5/32"
DIAMETER HOLES
FOR 3" SCREWS

TYPICAL
2X4 STRUT

VIEW SHOWING PRE-DRILLED
HOLE PATTERN AND METAL
STRAP CROSSING OVER
CONNECTION NODE.

LINES SHOW LOCATIONS OF
INTERLOCKING FASTAP SCREWS.

FOUR SCREWS ARE LOCATED
AT EACH SET OF LINES.

THREE METAL STRAPS
CRISS-CROSS EVERY
6-WAY NODE.

24 OPTIMALLY LOCATED SCREWS
SECURELY STITCH EACH AND ALL NODES.

THE INTERLACED ARCHES
AND TRIANGLES FORMING
THE HEMISPHERICALLY SHAPED
GEODESIC DOME ROOF TRUSS
ARE SIMULTANEOUSLY
HELD TENSIONALLY
WITH HI-TECH FASTAP SCREWS,
STAINLESS STEEL METAL STRAPS,
AND, A SELF-SUPPORTING,
GEODESIC DOME SHAPED,
FRAME AND SHELL.

USE 5 STRAPS AND BEND
AROUND SIDES ON 5
WAY NODES.

TYPICAL
20 GAUGE, 24 INCH LONG,
STAINLESS STEEL METAL,
TENSION STRAP
ATTACHED WITH
1.5 INCH STAINLESS STEEL NAILS
SEE SIMPSONSTRONGTIE.COM

BEND STRAPS AROUND STRUTS
WHERE NECESSARY.

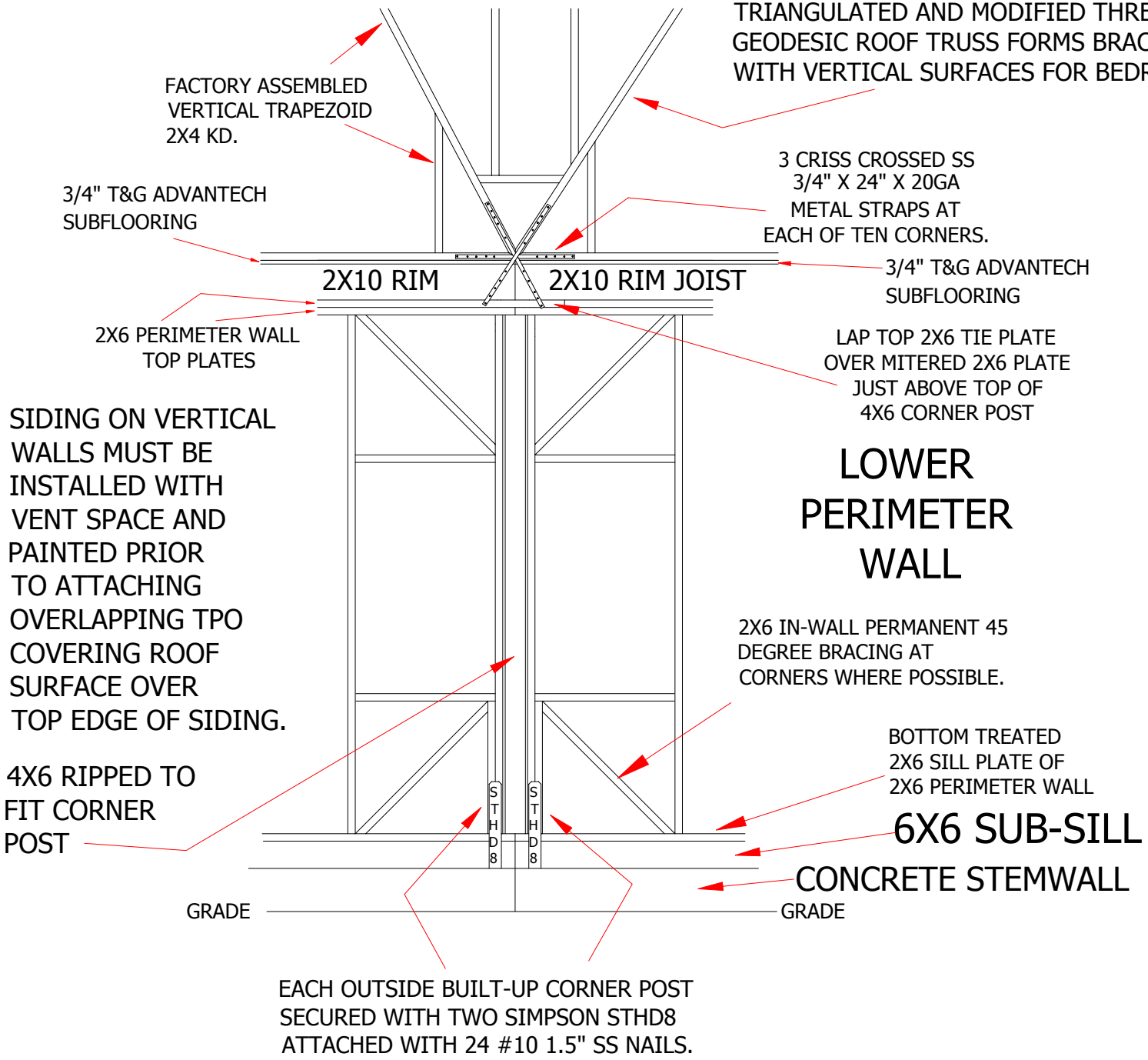
INSTALL STAINLESS STEEL METAL TENSION
STRAPS WITH 1.5"
STAINLESS STEEL TECO NAILS.
SEE SIMPSONSTRONGTIE.COM

OUTSIDE
VIEW

OUTSIDE
VIEW

THIS OCCURS AT LEFT
AND RIGHT AT TOP OF
TRAPEZOIDS IN 20
PLACES.

ECONODOME NODE
CONNECTION DETAIL

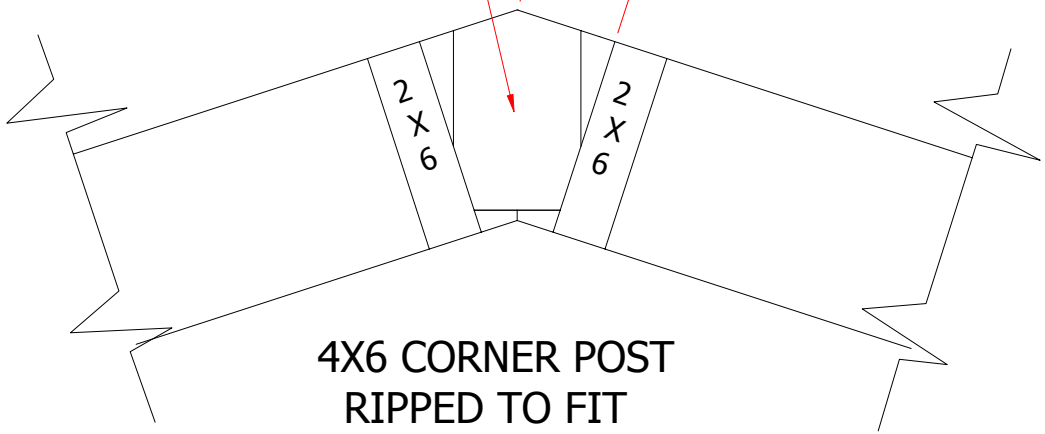


EXTERIOR STRUCTURAL SHEATHING ON VERTICAL FRAMING IS COMPRISED OF ONE LAYER OF 1/2 INCH CDX PLYWOOD GANG NAILED INTO 6X6 SILL WITH 1.5 INCH #10 SS NAILS. ALL OTHER NAILING OF SHEATHING IS AT 8" SPACING WITH 8D HDG NAILS. SHEATHING IS COVERED WITH 2 LAYERS OF 2" XPS INSULATION. FILL ALL GAPS WITH FOAM. COVER WITH SIDING OF CHOICE.
CAULK ALL GAPS WITH PAINTABLE CAULKING BEFORE FINAL PAINT COAT,
OR, USE PRE-FINISHED METAL SIDING.

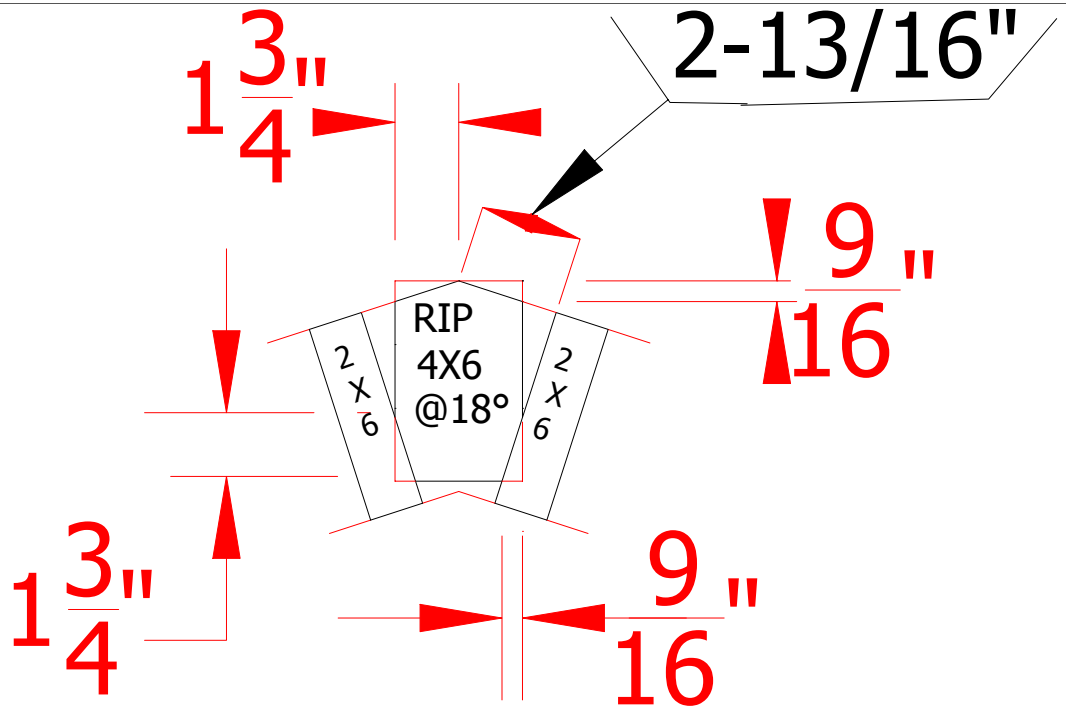
OUTSIDE CORNER CONNECTIONS AND STRAPPING DETAIL

RIPPED TO FIT 4X6 CORNER POST

2-13/16" CORNER TO STUD SETBACK



4X6 CORNER POST RIPPED TO FIT FLUSH AT OUTSIDE CORNERS AND FLUSH TO ADJACENT 2X6 STUDS



TEN STANDARD 8' 2X6 PERIMETER WALLS ARE JOINED WITH RIPPED TO FIT 4x6 CORNER POSTS.

MATERIALS TO FRAME & BRACE & JOIN PERIMETER 2X6 WALLS

10ea 92-5/8" ripped-to-fit 4X6 CORNER POSTS cut from 8' 4x6's

150ea 92-5/8" 2x6 pre cut 8' studs
16ea 10' treated 2x6's for sill plates
40ea 16' 2x6 KD SYP lumber for framed openings and braces

POST DETAIL

Electrical Plan:

1. Exhaust fans may be installed in bathrooms.
2. Light switches and fixtures shall not be connected to GFI circuits.
3. GFI circuits shall be installed above counters in kitchen and baths.
4. GFI circuits shall be installed for outside weatherproof outlets.
5. Breaker box shall be 200 amp service breaker box located under stairs.
6. Electrical supply lines to breaker box shall run underground.
7. Switches shall be located 42 inches above floor, inside room, and about six inches from doorways.
8. Light fixtures shall be located as desired by owners.
9. 220 outlet with #10 copper wire shall be provided for dryer.
10. Outside lights shall be adjacent exterior doors at minimum.
11. Outdoor GFI waterproof outlets positioned as desired by owners.
12. Lighting shall be installed above sinks.
13. There shall be a two-way switch at both ends of staircase.
14. 3 optional 9,000btu mini-split HVAC to be mounted on both floors and therapy room..
15. Primary heating shall be in-floor radiant heating with pump connections located behind removeable panel inside sauna room.
16. Outlets near floor shall be positioned 12 inches above floor level.
17. Outlet wiring shall be done with romex 12-2 with ground except for dryer (10-3)
18. Two 2/0 phase leads and one 1/0 neutral lead from meter to 200 amp breaker box.
19. Maximum distance between outlets will be 12 feet measured along wall.
20. Wiring for lighting shall be done with romex 12-2 w/ ground and romex 12-3 w/ ground.
21. Inside breaker box neutral incoming lead will connect to 3 solid #4 guage copper wires:
    One connects to 8ft. copper grounding rod driven into the earth adjacent the breaker box.
    One lead connects to the neutral buss, normally on the left within the breaker box..
    One lead connects to the grounding bar within the breaker box.

ELECTRICAL PLAN

EXTERIOR PANEL CUTS FOR 30' DIA. ECON-O-DOME KIT
40--4'X8' SHEETS NEEDED TO MAKE ALL TRIANGLE PANELS

SOME PANELS WILL BE CUSTOM CUT TO FIT AROUND SKYLIGHTS, SEE PLANS
SUBTRACT FROM REQUIRED # WHERE SKYLIGHTS WILL BE INSTALLED

TOTAL # OF EXTERIOR TRIANGLE PANELS SUBTRACT FOR SKYLIGHTS

TOTAL=130 PANELS

#1 = 5 PANELS
#2 = 25 PANELS
#3 = 20 PANELS
#4 = 30 PANELS
#5 = 25 PANELS
#6 = 25 PANELS

EDGE LENGTHS OF EXTERIOR TRIANGLE PANELS

A = 39-3/4"
B = 46-1/2"
C = 55-3/8"
D = 56-1/8"
E = 58-1/4"
F = 59-1/8"

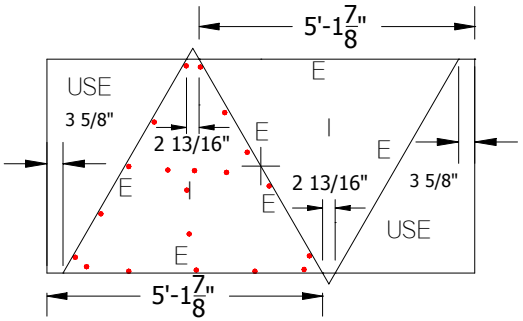
MARK ALL PANEL WITH NUMBERS AND LETTERS AS SHOWN.

INSULATION PANELS MAY BE GLUED UNDER EXTERIOR SHEATHING.

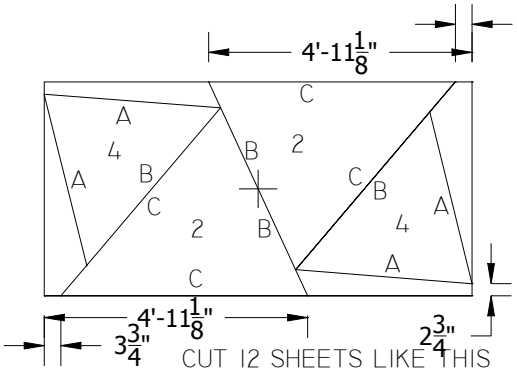
MATERIALS NEEDED

40 PLYWOOD+20
40 INSULATION+20
40 DENSDECK+20

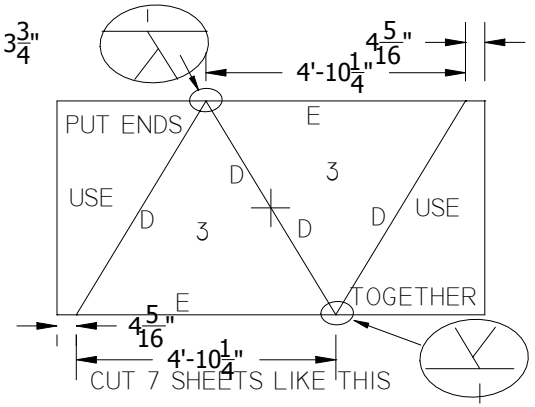
ADDITIONAL SHEETS WILL BE NEEDED
TO COVER VERTICAL SURFACES ON LOWER PERIMETER.



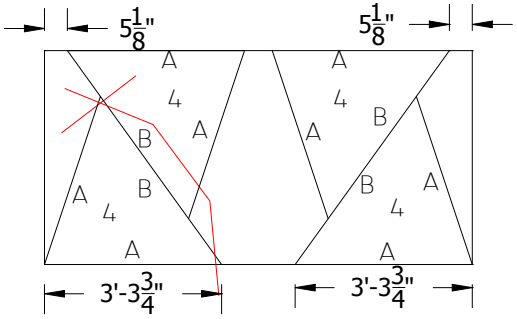
CUT 2 SHEETS LIKE THIS



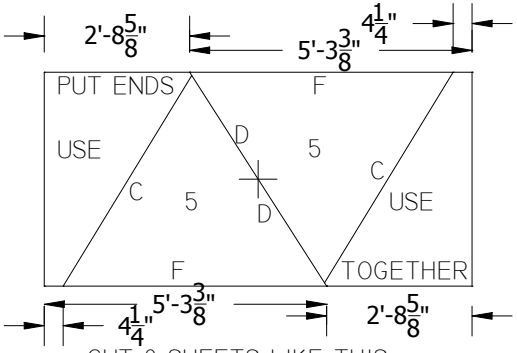
CUT 12 SHEETS LIKE THIS



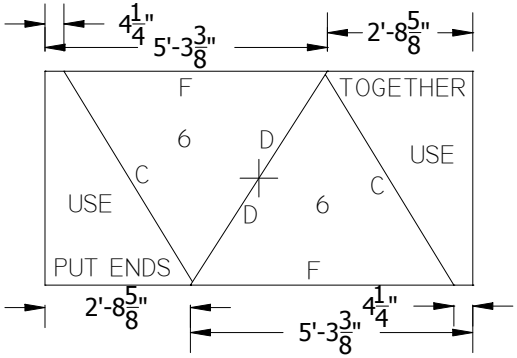
CUT 7 SHEETS LIKE THIS



CUT 1 SHEET LIKE THIS



CUT 8 SHEETS LIKE THIS

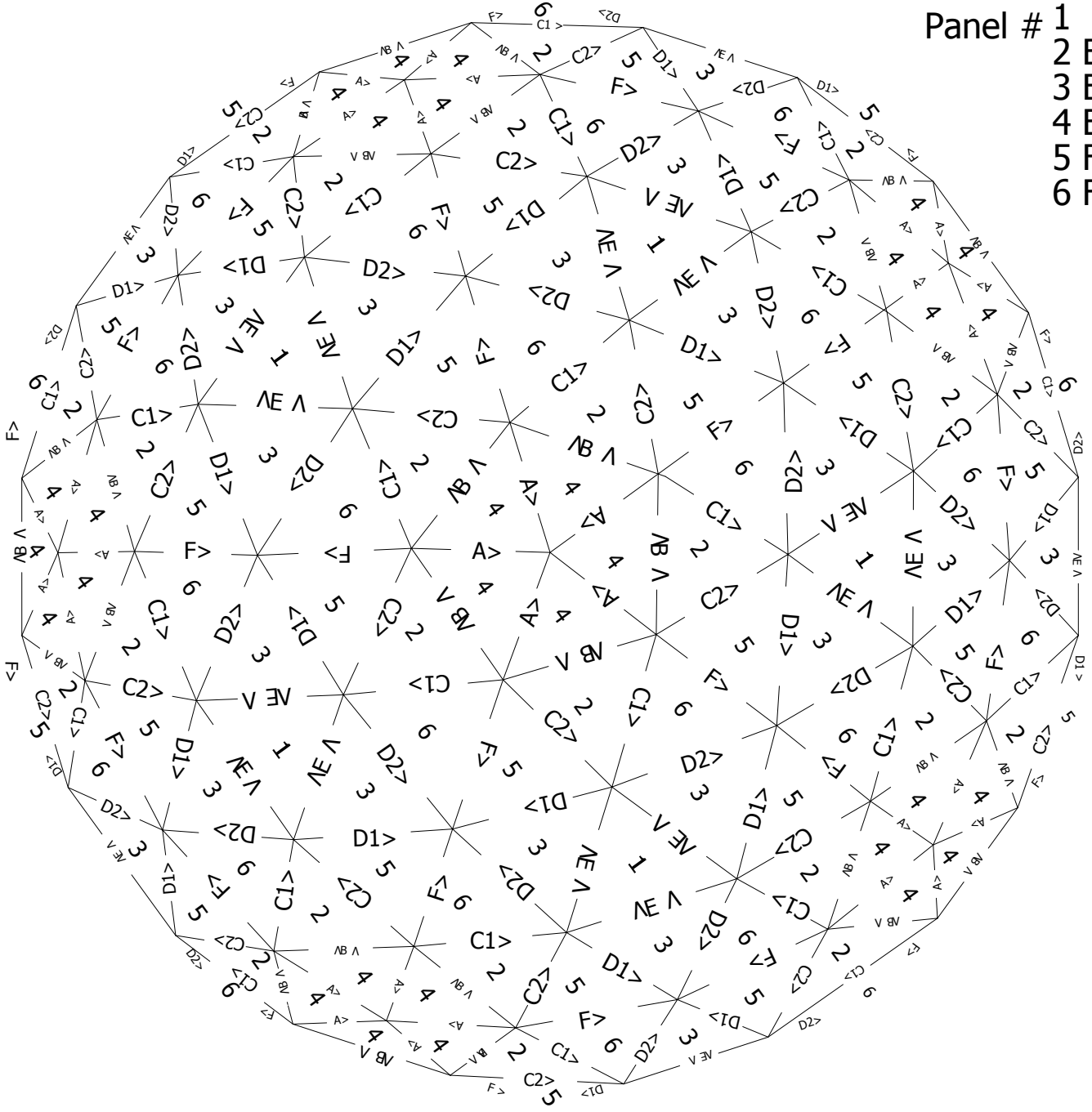


CUT 8 SHEETS LIKE THIS

PROCEDURE NOTES:

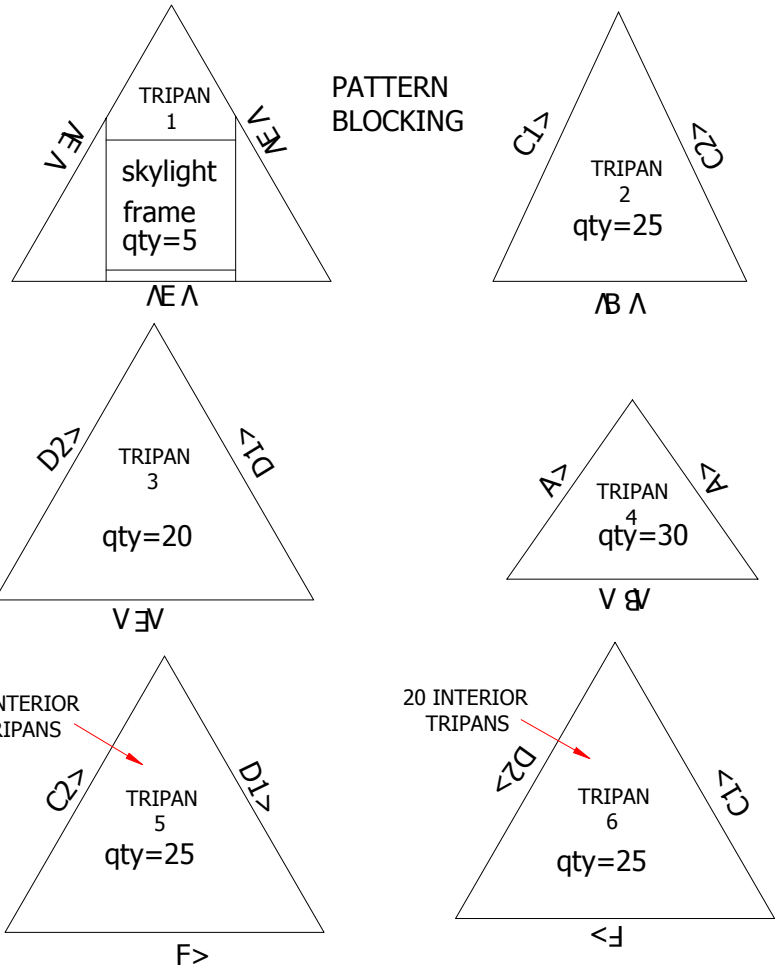
1. PRIOR TO ASSEMBLY OF GEODESIC ROOF TRUSS ASSEMBLE ONE TRIANGLE OF EACH OF THE SIX TYPES (SEE ASSEMBLY DIAGRAM).
ALSO INSTALL BLOCKING COMPONENTS WITHIN EACH TRIANGLE.
2. CUT ONE PATTERN FOR EACH OF THE SIX TRIANGLE TYPES.
3. BEFORE PROCEEDING CHECK FITS ON ASSEMBLED TRIANGLES.
4. LABEL EACH PATTERN AS SHOWN ON THIS PAGE.
5. DRAW A LINE ACROSS THE CENTER OF EACH TRIANGLE THAT MARKS THE CENTER OF THE CENTER BLOCK ACROSS EACH TRIANGLE.
6. ENSURE THAT ALL TRIANGLES ARE LABELED CORRECTLY.

EXTERIOR TRI-PANEL CUTS



Panel # 1 E,E,E QTY=5
2 B,C1,C2 QTY=25
3 E,D2,D1 QTY=20
4 B,A,A QTY=30
5 F,C2,D1 QTY=25 EXT...20 INTERIOR TRIPANS
6 F,D2,C1 QTY=25 EXT...20 INTERIOR TRIPANS

EXT TRIANGULAR PANELS 130 TOTAL
PLUS 10 VERTICAL TRAPEZOIDS AT PERIMETER



DRAWN AS VIEWED FROM OUTSIDE GEODESIC FRAME

TOP VIEW ECONODOME PANEL AND STRUT DIAGRAM

5EA BASE-E

5EA BASE-B

5EA LE>

5EA RE>

5EA RB>

5EA LB>

COMPONENT INVENTORY

A > 30EA

ΛB Λ 30EA

C1 >25EA

C2 > 25EA

D1 > 25EA

D2 > 25EA

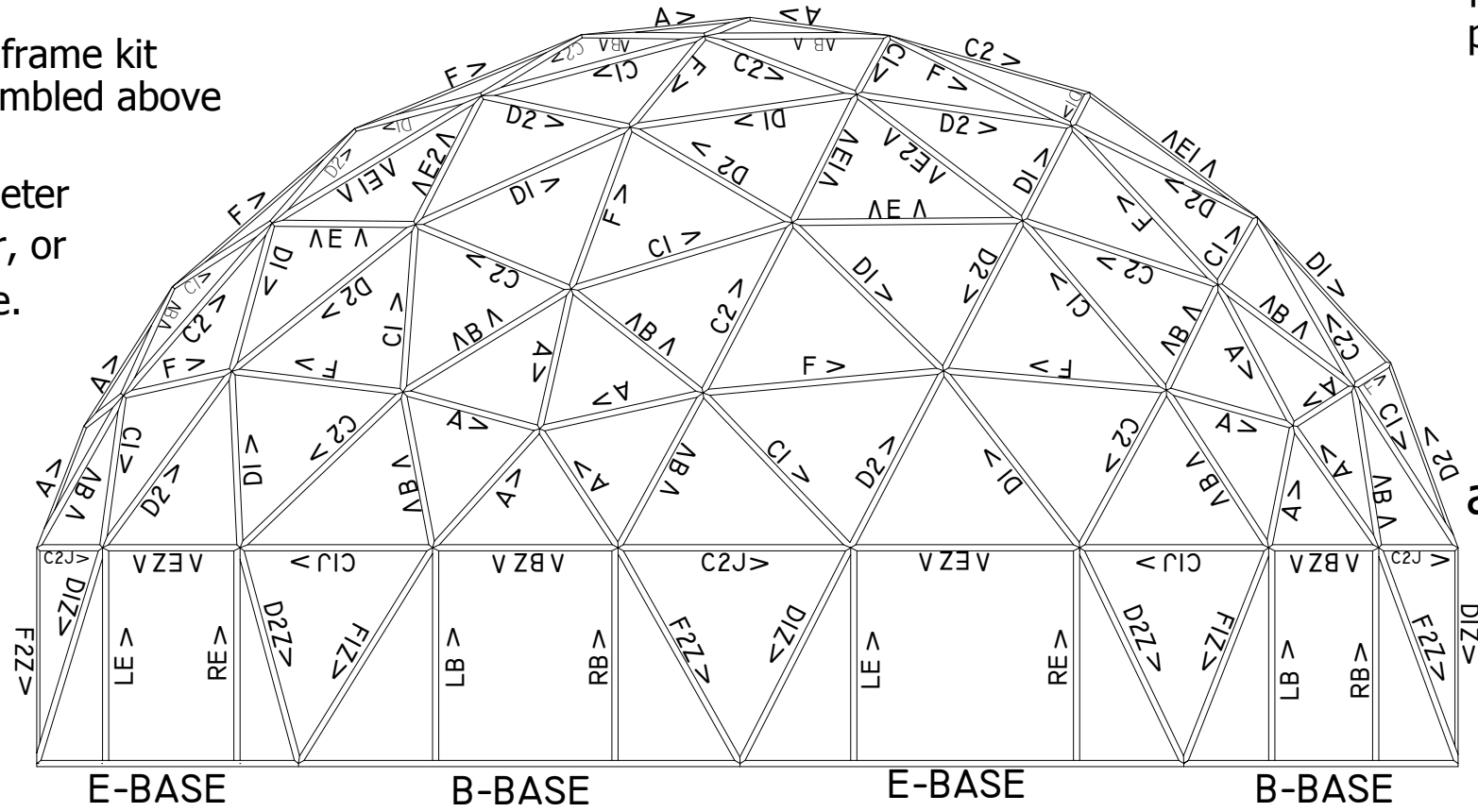
ΛE Λ 20EA

F > 30EA

EconOdome frame kit may be assembled above a ten equal length perimeter walls, a floor, or a flat surface.

Component position pattern repeats five times.

All struts are directional as indicated by arrows.



Assembled as viewed from outside.

All struts marked with letters and direction on outside edges.

ECONODOME FRAME KIT ...ASSEMBLY DIAGRAM...

DRAWN BY	WIL FIDROEFF 0WNER/DESIGNER FAZE CHANGE PRODUX PHONE 1-888-DOME-LUV	TITLE	ECONODOME FRAME KIT ASSEMBLY DIAGRAM FOR TEN SIDED ECONODOME FRAME KITS	DATE	5/27/2015
				PAGE	20

CONSTRUCTION NOTES

1. Vertical 2" diameter pvc plumbing vents shall extend 12 inches above roof surface.
2. a carbon monoxide detector shall be installed in upstairs bathroom.
3. smoke detectors shall be installed near ceiling upstairs and downstairs.
4. Crawl space shall be insulated adjacent the ground and stemwall.
5. Bathroom exhaust fans may be used to move warm air from the top of the dome attic to the living space below.
6. Footings shall extend to frostline per local code.
7. soil under rock and concrete shall remain undisturbed. Remove all disturbed soil that will be under concrete floors.
8. All footings and piers shall be reinforced with
   #4 steel rebar with minimum 24 inch lap at all splices.
9. All partition walls shall have interconnected lapped, double top plates.
10. treated 6X6 are secured to concrete stem walls per plans.
    Slab edge energy loss is greatly reduced as heat within the slab is not conducted away.
11. an insulative vapor barrier provided by taping seams and edges of under slab insulation sheets.
12. back up heating, if desired, is via small wall mounted direct vent gas heater in bathroom.
13. Air conditioning and heating is via wall mounted mini splits.
14. Additional necessary construction information may be found in the EconOdome Planning and Building Manual.
15. If during construction there are any questions please contact:
    Wil Fidroeff--owner/construction consultant at Faze Change Produx
    Phone Toll Free--1-888-DOME-LUV
    Office Phone: 1-217-728-2184
    Cell Phone: 1-217-521-9294
    e-mail: wil@econodome.com
    website: www.econodome.com

MATERIALS LISTS FOR DIY OWNER/BUILDER

COMPLETE LIST OF
ECONODOME PRE-CUT KITS
THAT WILL NEED TO BE ORDERED
FROM FAZE CHANGE PRODUX:

30' DIA. 2X4 BASIC ECONODOME FRAME KIT
INCLUDING:
190 PRE-DRILLED ECONODOME STRUTS
3,500 FASTAP SCREWS
300 STAINLESS STEEL STRAPS
3,000 STAINLESS STEEL NAILS
WINDOW, DOOR, & SKYLIGHT FRAMING
10 PREFABRICATED VERTICAL TRAPEZOIDS
PRE-CUT & PRE-DRILLED 2X4 BLOCKING FOR
TRIANGLES BETWEEN TRAPEZOIDS
+ SKYLIGHT FRAMING PER PLANS.....COST..$ 6,750
EXTERIOR INSULATED R-30 TRIANGLE PANELS...$ 5,000
130 PRE-CUT 60 MIL TPO TRIANGLE SHINGLES...$ 4,000
8' 2X6 PERIMETER RISER WALL FRAME KIT WITH
RIPPED TO FIT 4X6 CORNER POSTS.....$ 2,500
TOTAL COST OF KITS TO BE ORDERED FROM
FAZE CHANGE PRODUX.....$18,250
MINUS $2,500 FOR RISER WALL ORDERED SEPARATELY
= $15,750 FOR KITS MINUS RISER WALL KIT
50% START DEPOSIT = $7,875 FOR KITS
AFTER RISER WALL IS COMPLETED.

PARTIAL LISTS OF MATERIALS TO BE PURCHASED LOCALLY

AND CUT-TO-FIT (IF NECESSARY) ON-SITE

SEE PLANS FOR MORE INFO ON ADDITIONAL NECESSARY CONSTRUCTION MATERIALS
TO BUILD FOUNDATION, FLOORS, AND INTERIOR WALLS.

UNDERGROUND PLUMBING MATERIALS:

5ea 3" dia. 10' lengths of pvc pipes
7ea 2" dia. 10' lengths of pvc pipes
4ea 3"x2" 45° Y pvc fittings
1ea 3"x3" 45° y pvc fittings
5ea 2" pvc couplings
5ea 3" pvc couplings
2ea 2" pvc shower traps

UNDERGROUND ELECTRIC WIRE:
TO METER FROM BREAKER BOX:
2 2/0 COPPER SUPPLY WIRES-16'
1 1/0 COPPER SUPPLY WIRES-16'
ABOVE GROUND ELECTRIC SUPPLIES:
3 LEAD 14 GA ROMEX (FOR LIGHTING) 500 FT.
3 LEAD 10 GA ROMEX (FOR DRYER) 25 FT.
3 LEAD 12 GA ROMEX (FOR OUTLETS) 500 FT.
200 AMP BREAKER BOX
3ea 30A 240V BREAKERs FOR DRYER & HVAC'S
3 GFI 20 AMP BREAKERS FOR KIT, BA, EXT.
4 20A BREAKERS FOR OUTLETS & FIXTURES
2 exterior waterproof outlets boxes
12ea 4x4 fixture mount boxes.
36ea single outlet and switch boxes.
6ea double switch boxes.
light/fan fixtures as required.

1 ea 48"x36" one piece fiberglass shower

80ea 4'x8' sheets of 1/2" sheetrock
6ea 5gal. pails all purpose drywall mud for finishing and texture
3ea-250' rolls paper tape for drywall

5gal primer paint-5gal flat paint-2gal enamel paint
kitchen cabinets and counters per plans

WINDOWS PER PLANS
5ea 2'x2' Velux CURB MOUNT "no-leak" skylights
DOORS PER PLANS
2ea toilets

KITCHEN BASE CABINETS & ABOVE CABINETS AND/OR SHELVES
KITCHEN COUNTERS WITH UNDERMOUNT DOUBLE SINK
PER PLANS
1ea DISHWASHER

3EA 9,000 BTU MINI SPLIT HVAC UNITS + 1 EVAP UNIT.
1EA on demand tankless heaters.
optional finish flooring as desired.

CONSTRUCTION NOTES FOR BUILDING AND ASSSEMBLING MAIN LEVEL PERIMETER WALL :

1. PRE-CUT TOP AND BOTTOM PLATES WITH AN 18° ANGLE ON THE ENDS. THE ANGLES WILL FLARE INWARD ON BOTH ENDS OF THE PLATES. THE TOP-TOP PLATE WILL LAP AT THE CORNERS AND BE CUT IN-PLACE. ALL MEASUREMENTS ARE TAKEN ALONG THE OUTSIDE EDGE OF THE PLATES.

2. RIP CUT 10ea 92-5/8" 4X6 CORNER POSTS PER SHEET 16. CUT COMPONENTS TO LENGTH AND PRE-ASSEMBLE EACH WALL ON A FLAT SURFACE. LABEL EACH WALL.

4. ATTACH 2X6 WALLS FLUSH TO THE OUTSIDE OF THE TREATED 6X6 IMBEDDED FLOOR PERIMETER BEAMS.

5. CONNECT THE WALLS VIA RIPPED TO FIT 4X6 CORNER POSTS. USE TWO 3" SCREWS @ 16" SPACING. CONNECT 2X6 ENDS WITH THREE 3" #10 SS SCREWS (OR 3-16D HDG NAILS) ON EACH END.

6. TO PROVIDE BACKING FOR ATTACHING INTERIOR WALLS: POSITION 2X4 "WALL TIE" BLOCKS WHERE NECESSARY.

7. FRAME SQUARES IN CORNERS OF PERIMETER WALLS AND INSTALL 45° BRACES WHERE POSSIBLE TO SQUARE WALL. DO NOT INSTALL WALL SHEATHING UNTIL ROOF IS COMPLETED SO THAT SHEETING MATERIALS ARE KEPT DRY.

CONSTRUCTION NOTES FOR INTERIOR WALL & FLOOR FRAMING:

1. BEARING WALLS AND BEAMS ON MAIN FLOOR MUST BE INSTALLED PRIOR TO CONSTRUCTION OF SECOND STORY FLOOR.

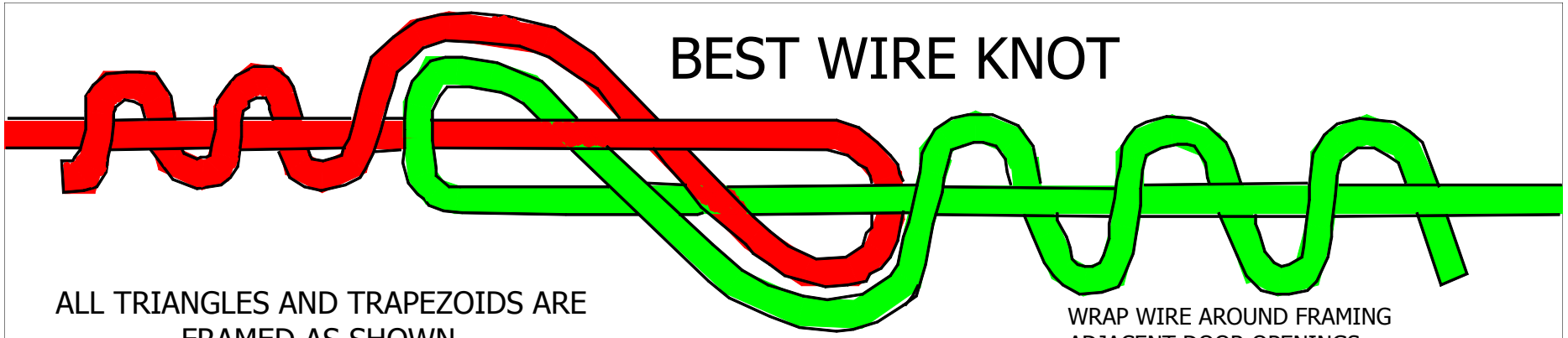
2. BEARING WALLS ARE ATTACHED TO EMBEDDED BEAMS WITH 16D NAILS OR 3" DECK SCREWS AT MAXIMUM SPACING OF 16".

3. BLOCKING SHALL BE POSITIONED BETWEEN 2X10 CEILING JOISTS AT 8 FEET MAX. SPACING (NOT DRAWN) TO PREVENT TWISTING OF CEILING JOISTS. BLOCKING SHOULD ALSO BE INSTALLED AS NECESSARY TO SUPPORT DRYWALL BELOW AND SUBFLOORING ABOVE.

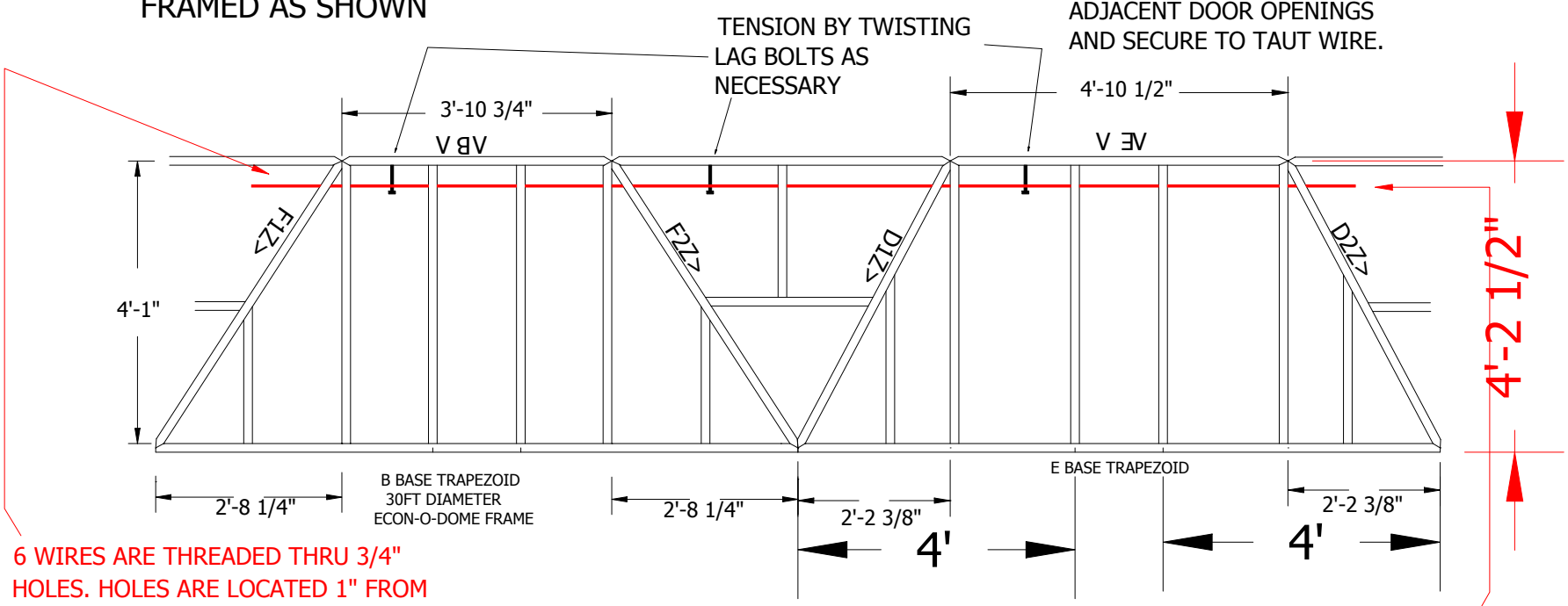
4. JOISTS SHALL BE 2X10'S POSITIONED AS SHOWN AT ON FLOOR FRAME DRAWING @ 16" ON CENTER SPACING.

5. LAP TOP PLATES AT ALL WALL INTERSECTIONS AND SECURE WITH A MIN. OF 4-16D NAILS OR 4-3" #10 DECK SCREWS TO SECURE WALLS PRIOR TO INSTALLATION OF FLOOR JOISTS.

BEST WIRE KNOT



ALL TRIANGLES AND TRAPEZOIDS ARE FRAMED AS SHOWN



6 WIRES ARE THREADED THRU 3/4" HOLES. HOLES ARE LOCATED 1" FROM OUTSIDE EDGE AND 3.5" BELOW HORIZONTAL FRAMING. SPLICE ENDS ONE AT A TIME. WHEN ALL WIRES ARE IN PLACE. INSERT BOLT BETWEEN WIRES AND TWIST LAG BOLTS AT SEVERAL LOCATIONS UNTIL WIRES ARE TAUT. APPLY TENSION BY TWISTING BOLTS. CHECK TENSION BY LISTENING FOR TONE WHILE TAPPING CABLE. STOP WHEN YOU HEAR TONE.
DO NOT OVERTIGHTEN.

FRAMING ASSEMBLY DETAIL FOR TEN TRAPEZOIDS ON LOWER PERIMETER OF ECON-O-DOME FRAME ALSO SHOWN ARE CONNECTING TRIANGLES DRAWN AS VIEWED FROM OUTSIDE FRAME

ONE 1/4 INCH DIAMETER (7X19) GALV. AIRCRAFT CABLE WITH 7,000 POUND BREAKING STREGTH MAY BE USED INSTEAD OF FOUR 12.5 GUAGE HI-TENSION WIRES EACH WITH A BREAKING STRENGTH OF 1540 POUNDS. USE PROPERLY SIZED THIMBLES AND CABLE CLAMPS TO MAKE WIRE OR CABLE CONNECTIONS. USE A RATED TURNBUCKLE TO TENSION A SINGLE CABLE.

4 HI-TENSION 12.5 GA WIRES ENCIRCLE BUILDING HERE.
WIRE ENDS ARE SPLICED USING A FIGURE 8 KNOT.
WIRES ARE TENSIONED BY TWISTING WITH 1/4"X6" LAGS BOLTS.
INSERT LAG BOLT INTO FRAMING TO MAINTAIN PERMANENT TENSION.

20EA ΛE Λ

30EA F >

25EA DI >

25EA D2 >

25EA CI >

25EA C2 >

30EA A >

30EA ΛB Λ

COMPONENT INVENTORY

5EA RE>

5EA LE>

5EA BASE-E

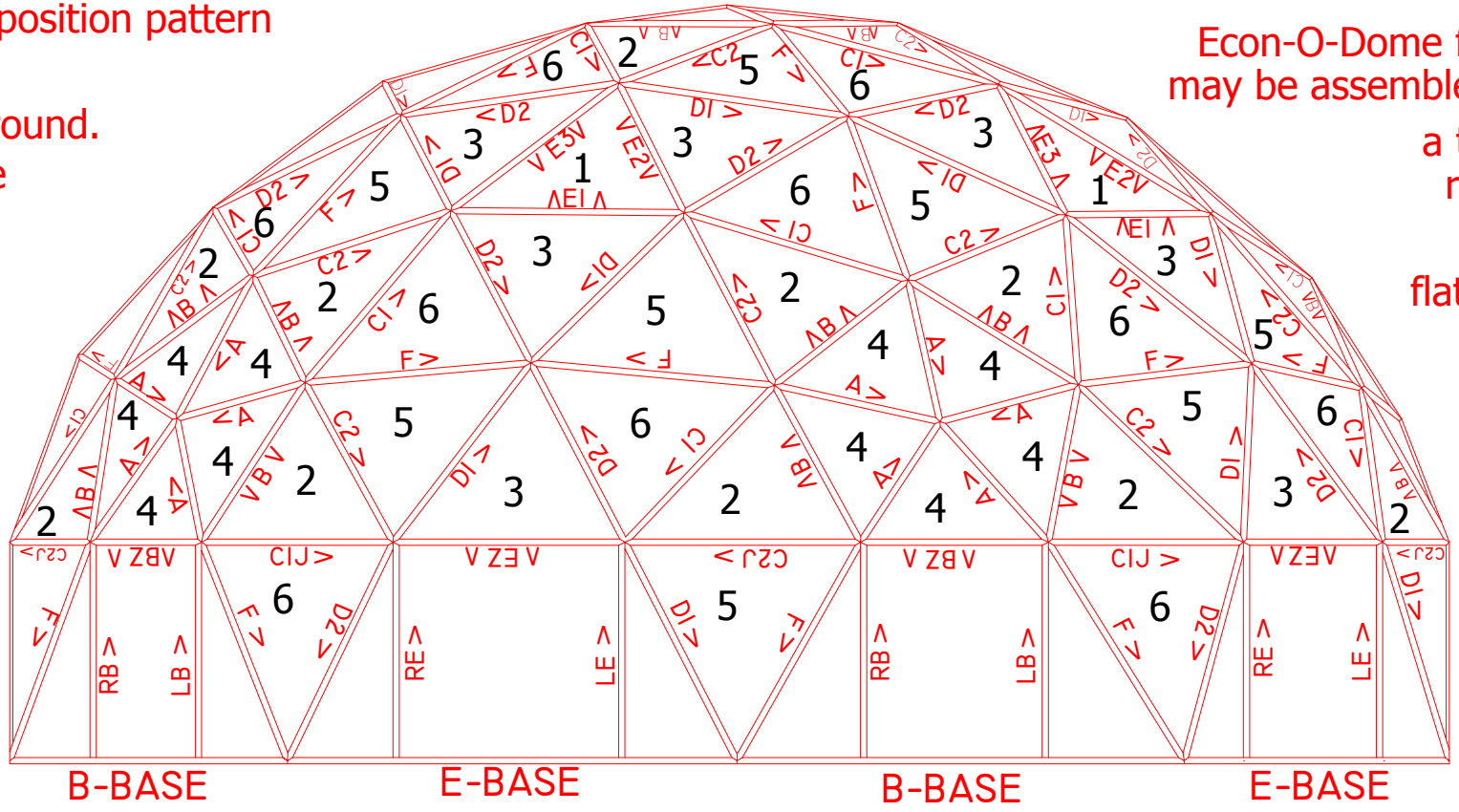
5EA LB>

5EA RB>

5EA BASE-B

Component position pattern repeats five times around. All struts are directional as indicated by arrows.

All struts marked with letters and direction on edges. RED LETTERS ON STRUT EDGES FACE TO THE INSIDE OF THE DOME



Econ-O-Dome frame kit may be assembled above a ten sided riser wall, floor, or flat surface.

BLACK NUMBERS INDICATE TRIANGLE PANEL NUMBERS

Assembled as viewed from INSIDE

REPEATING ECONODOME

SIDE VIEW

RED-INSIDE ASSEMBLY DIAGRAM

25

Panel #	Quantity
1	5
2	25
3	20
4	30
5	25
6	25

TOTAL 130
TRIANGLE PANELS

LOOKING UP VIEW
FROM INSIDE
PANEL AND STRUT
ASSEMBLY DIAGRAM

ASSEMBLE PER
RED DIAGRAM
WHEN VIEWED FROM
INSIDE ECONODOME