

MINIMUM DESIGN LOADS: PER 2018 NC RESIDENTIAL BUILDING CODE / 2015 IRC WITH NC AMENDMENTS

SUNROOM CATEGORY II (PER 2015 IRC R301.2.1.1.1 & AAMA / NPEA / NSA 2100)

NOTE: COMPONENTS HAVE BEEN CHECKED AGAINST DESIGN LOADS SHOWN & FOUND TO BE ACCEPTABLE STRUCTURALLY

DEAD LOADS:

- 1. ROOF: 6 PSF
- 2. WALLS: 6 PSF
- 3. FLOOR: 12 PSF

SNOW LOADS: GROUND SNOW LOAD 10 PSF

ULTIMATE DESIGN WIND SPEED: 118 MPH, 3 SEC. GUSTS

SEISMIC DESIGN CATEGORY: C

LIVE LOADS:

- 1. ROOF: 20 PSF
- 2. FLOOR: 40 PSF

DEFLECTION LIMITS:

- 1. ROOF: L/120 (PER 2015 IRC TABLE R301.7 NOTE C)
- 2. WALLS: L/175
- 3. FLOOR: L/240 (TOTAL LOAD), L/360 (LIVE LOAD)

ALLOWABLE SOIL PRESSURE CONSIDERED (PRESUMPTIVE) = 2000 PSF

THIS THERMALLY ISOLATED SUNROOM IS UNCONDITIONED AND NOT HABITABLE

NOTE: THIS STRUCTURE HAS BEEN EVALUATED FOR VERTICAL AND LATERAL LOADS REQUIRED BY THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.

SQUARE FOOTAGE OF SUNROOM = 144

NOTES:

- 1. ALLVIEW (AAS) SUNROOM; WHITE IN COLOR
- 2. CONSTRUCT SUNROOM ON EXISTING DECK
- 3. ELECTRICAL BY GDI
- 4. CONCRETE
 - A) CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 318 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.
 - B) ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. EXTERIOR FLOORS AND EXPOSED CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI AND 5% TO 7% AIR ENTRAINMENT.
- 5. WOOD
 - A) MATERIALS - FRAMING LUMBER
 - i) WOOD POSTS: NO. 2 GRADE (OR BETTER) SOUTHERN PINE OR DOUGLAS FIR
 - ii) 2x4, 2x6: NO. 2 GRADE (OR BETTER) SOUTHERN PINE OR DOUGLAS FIR
 - iii) 2x8, 2x10, 2x12: NO. 1 GRADE (OR BETTER) SOUTHERN PINE OR DOUGLAS FIR
 - iv) CCA OR CZC PRESSURE-TREATED FOR LUMBER IN CONTACT WITH CONCRETE OR EXPOSED TO MOISTURE AND/OR WEATHER
 - v) FRAMING AND POSTS WITHIN 6" OF GRADE SHALL BE PRESSURE-TREATED FOR GROUND USE
 - B) MATERIALS - LVL BEAMS
 - INSTALL PER MANUFACTURER'S RECOMMENDATIONS. DISTRIBUTED AS MICROLLAM LVL, GANG-LAM LVL, AND TIMBER MAX LVL, AND MEETING THE FOLLOWING DESIGN STRESS VALUES:
 - i) $F_b = 2,925$ PSI BENDING
 - ii) $F_v = 285$ PSI HORIZONTAL SHEAR
 - iii) $F_c^* = 880$ PSI COMPRESSION PERPENDICULAR TO GRAIN
 - iv) $E = 2,000,000$ PSI MODULUS OF ELASTICITY
 - C) FASTENERS
 - ALL FASTENERS AND HARDWARE USED TO CONNECT TO PRESSURE TREATED WOOD MEMBERS SHALL EITHER BE 304 OR 316 STAINLESS STEEL, OR HOT DIPPED GALVANIZED PER ASTM-A653 COATING DESIGNATION G-185 AND ASTM-A153
- 6. STRUCTURAL ALUMINUM
 - A) ALL EXTRUSIONS SHALL BE COMMERCIAL GRADE ALUMINUM SUPPLIED BY GREAT DAY IMPROVEMENTS, LLC.
 - B) ROOF PANELS SHALL BE 3" OR 6" THICK SUPER FOAM ROOF PANELS FACED WITH A 0.024" ALUMINUM SKIN TOP AND BOTTOM.
- 7. THIS SUNROOM IS CONSIDERED AS NON-CONDITIONED SPACE, EXEMPT FROM ENERGY REQUIREMENTS (PER 2015 IRC SECTION N1102.1, NOTE 2)

GREAT DAY IMPROVEMENTS
PATIO ENCLOSURES, RALEIGH
LEE RESIDENCE

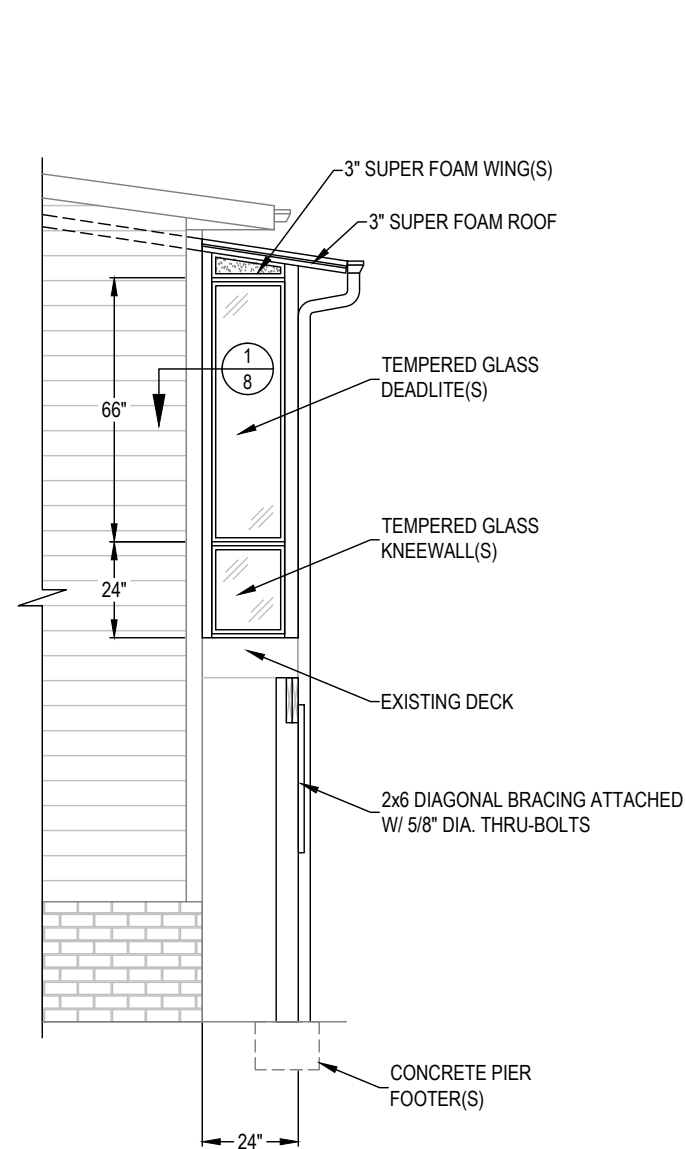
SHEET #	DESCRIPTION
1	COVER
2	ELEVATION "B" WALL
3	ELEVATION "A" & "C" WALL
4	DECK PLAN
5	ELECTRICAL PLAN
6	FLOOR PLAN
7	ROOF PLAN
8	SYSTEM DETAILS
9	SYSTEM DETAILS



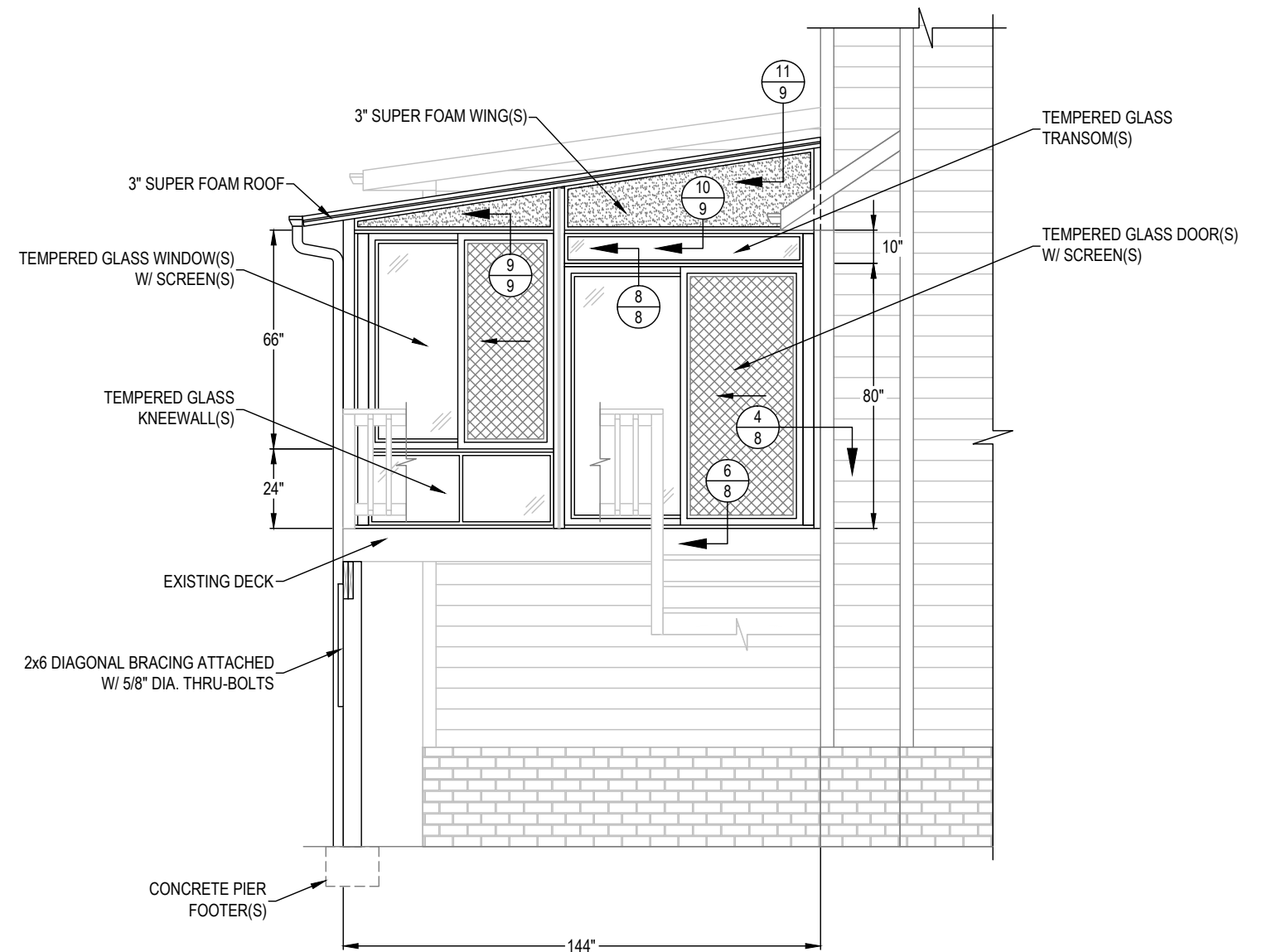
DATE 6/23/25	-	THERESA LEE 121 WESSEX COURT CAMERON, NC 28326 JOB #21458		DESIGN / BUILD CONTRACTOR Great Day Improvements	GREAT DAY IMPROVEMENTS RALEIGH 951 AVIATION PKWY, SUITE 1000 MORRISVILLE, NC 27560 984-212-8850		ERIC OETJEN, P.E., M. ENG. NC. PROFESSIONAL ENGINEER (NC. LIC. #049195) 1220 S. FORT THOMAS AVE. FLR 2 FORT THOMAS, KY. 41075 PH. # 859-393-9049
DRAWN MTS / DH	-						
SCALE NTS	-						
SHEET 1 OF 9	-						



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DRAWN	MTS / DH	-					
SCALE	1/4" = 1'-0"	-					
SHEET	2 OF 9	-					



ELEVATION - "A" WALL



ELEVATION - "C" WALL



DATE	6/23/25	-
DRAWN	MTS / DH	-
SCALE	1/4" = 1'-0"	-
SHEET	3 OF 9	-

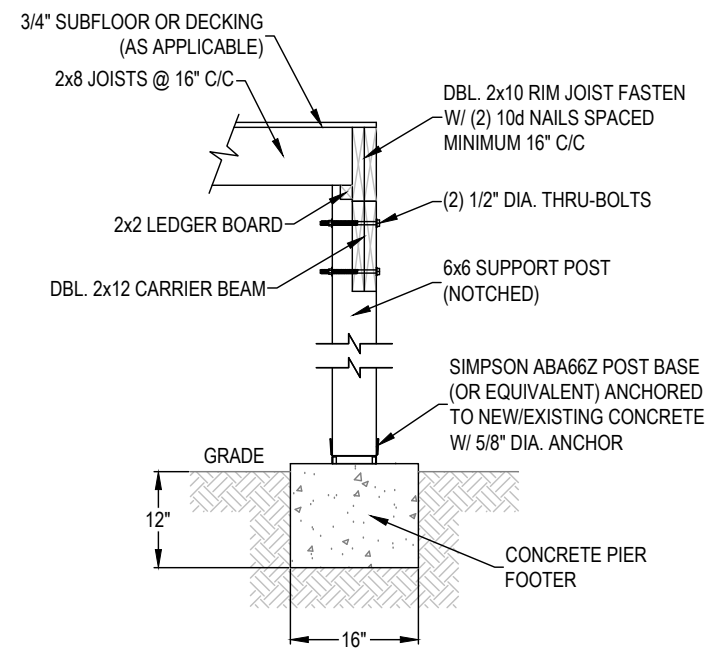
THERESA LEE
121 WESSEX COURT
CAMERON, NC 28326
JOB #21458

DESIGN / BUILD CONTRACTOR
 **Great Day**
Improvements

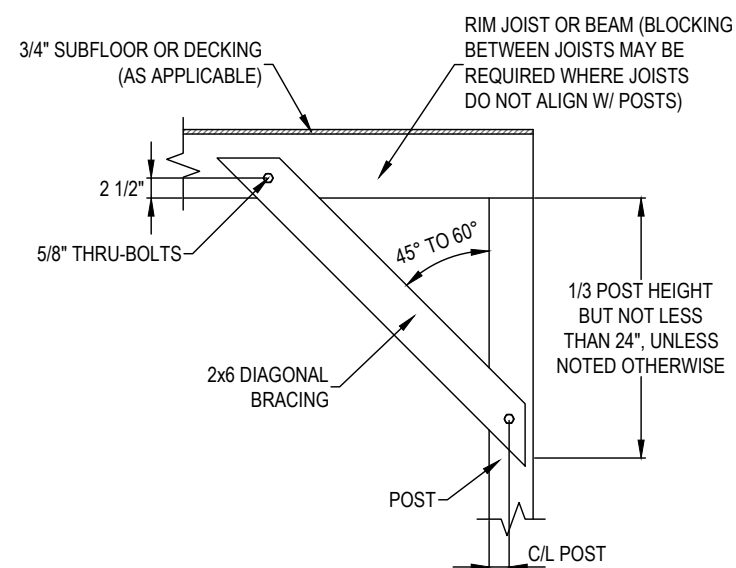
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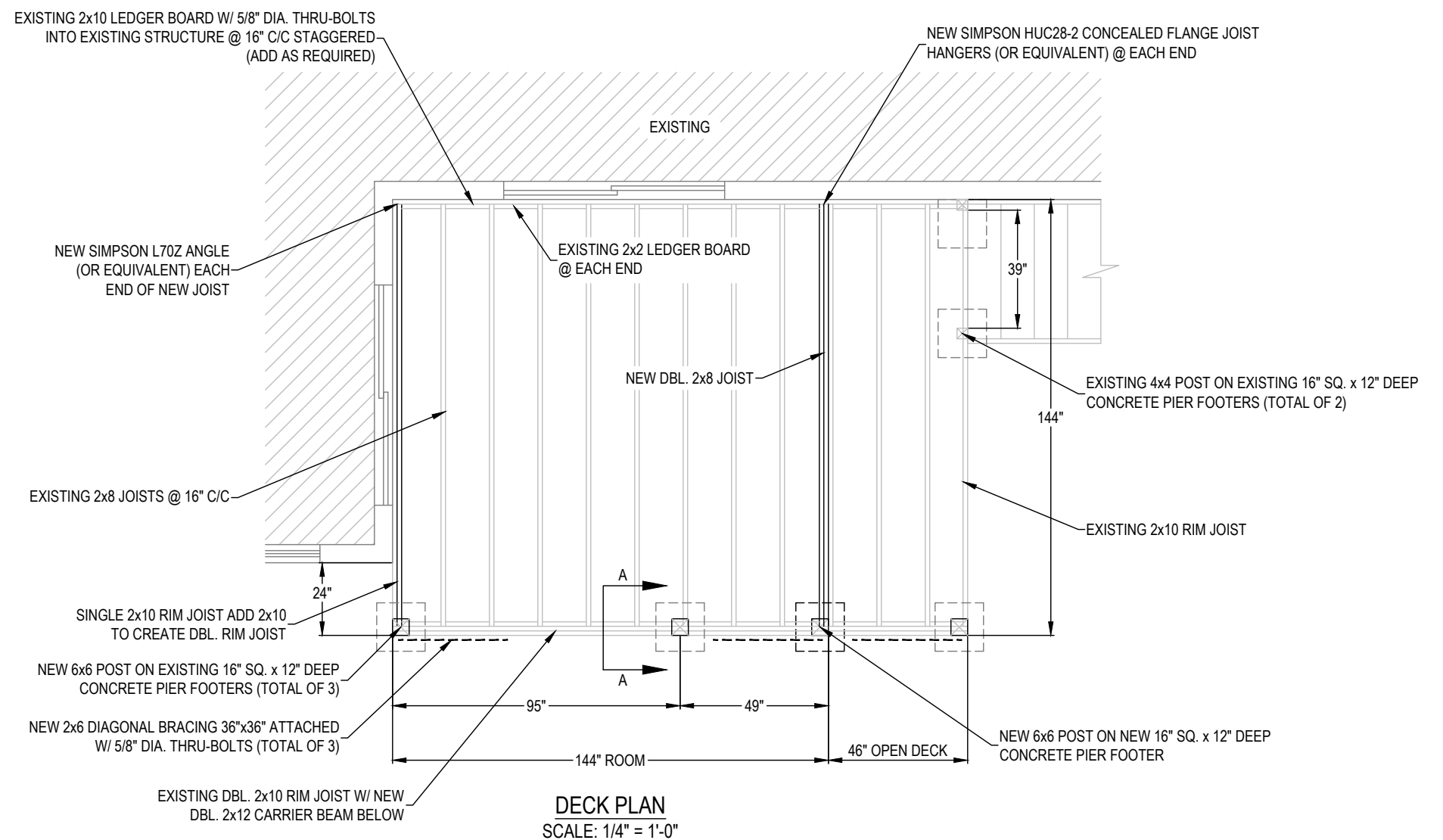
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SECTION A-A
SCALE: 1/2" = 1'-0"



DIAGONAL BRACE DETAIL
SCALE: 1/2" = 1'-0"



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



DATE	6/23/25	-
DRAWN	MTS / DH	-
SCALE	AS NOTED	-
SHEET	4 OF 9	-

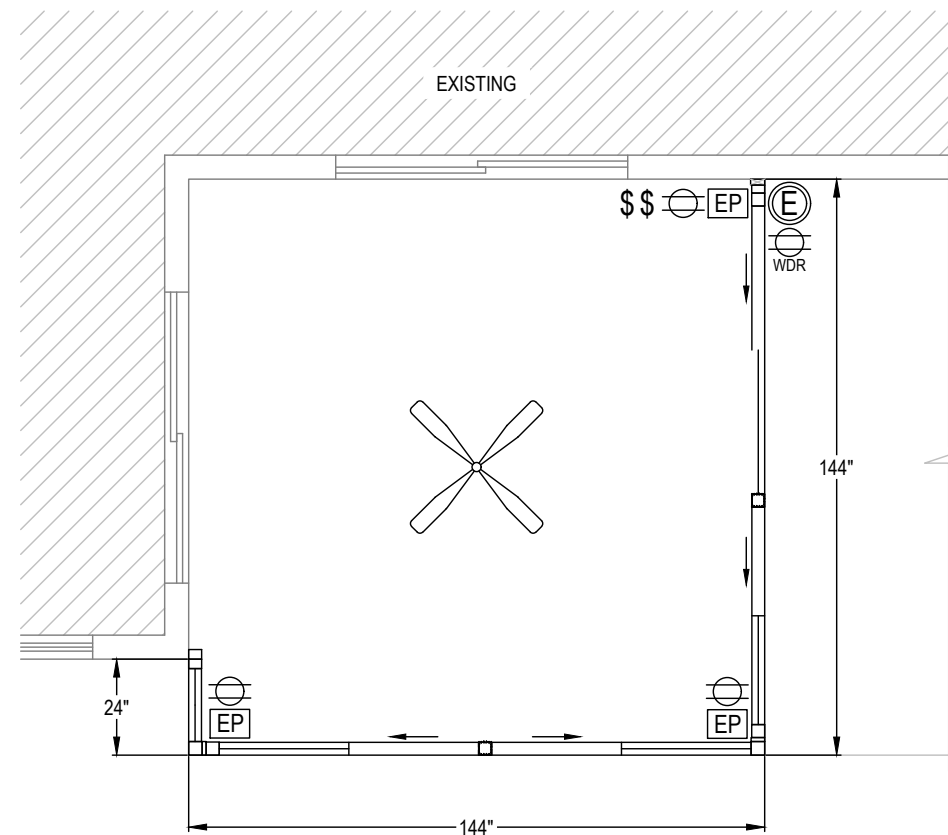
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ELECTRICAL PLAN

GDI ELECTRICAL SYMBOL LEGEND

EP	ELECTRICAL RACEWAY POST
⊕	DUPLEX RECEPTACLE
⊕ WDR	WEATHERPROOF DUPLEX RECEPTACLE (W/ GFCI)
ⓔ	EXIT LIGHT
\$	SWITCH
X	CEILING FAN



ENGINEER'S STAMP APPLIES TO
SUNROOM STRUCTURE ONLY;
ELECTRICAL BY OTHERS

DATE	6/23/25	-
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SCALE	1/4" = 1'-0"	-
SHEET	5 OF 9	-

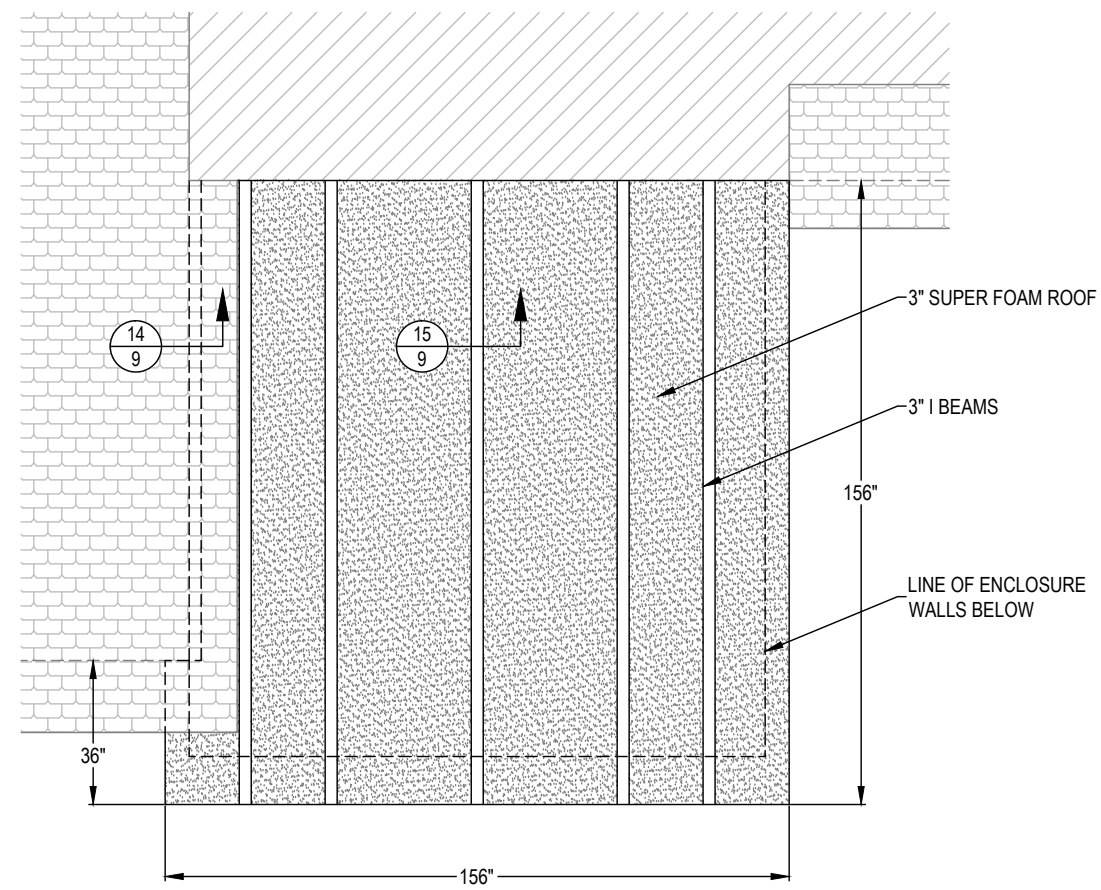
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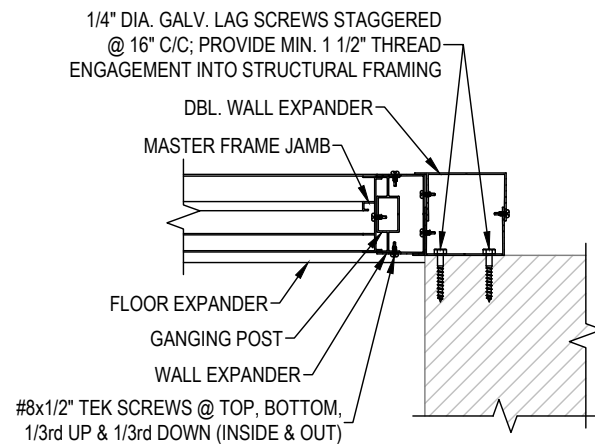
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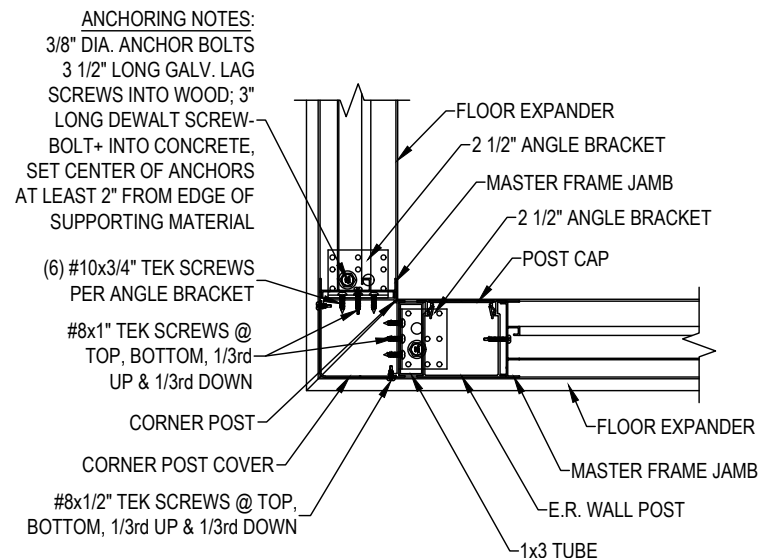
ROOF PLAN



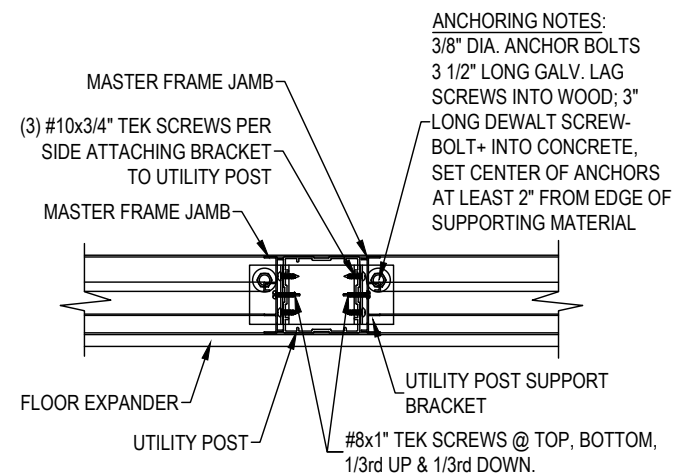
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DRAWN	MTS / DH	-					
SCALE	1/4" = 1'-0"	-					
SHEET	7 OF 9	-					



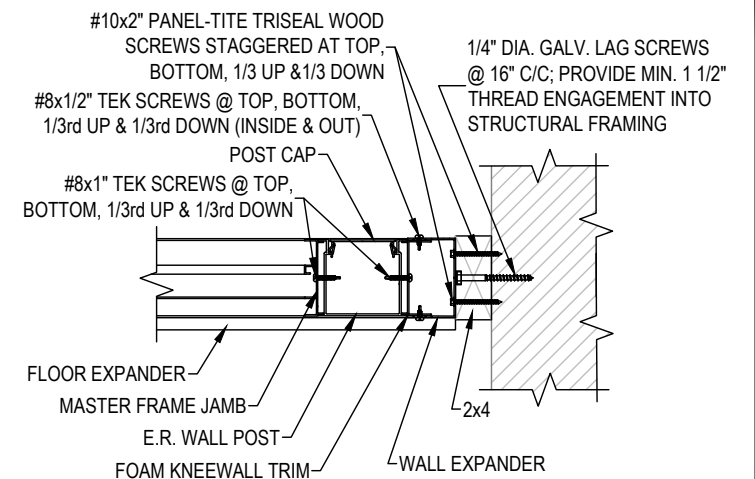
1
8 PLAN VIEW OF MASTER FRAME JAMB
CONNECTION @ EXISTING WALL



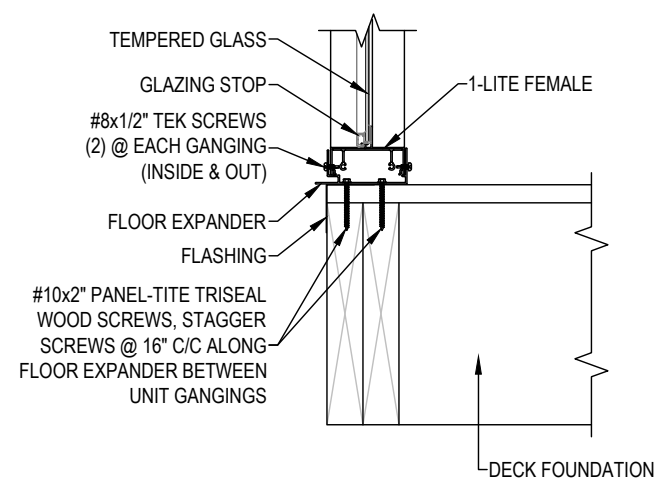
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8 PLAN VIEW OF MASTER FRAME JAMBS & E.R.
WALL POST CONNECTION @ CORNER POST



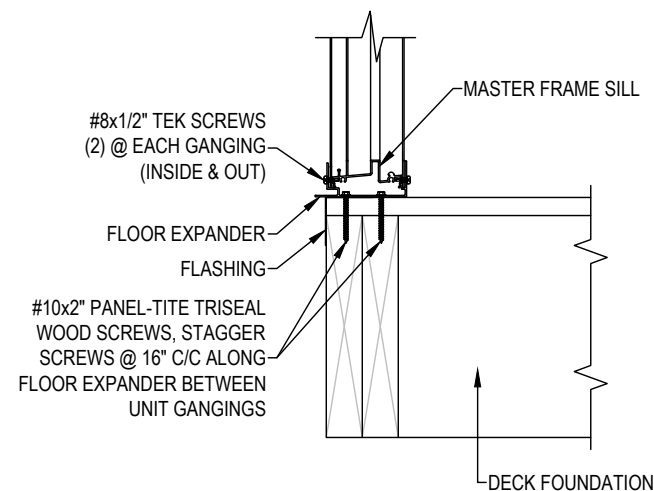
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8 PLAN VIEW OF MASTER FRAME JAMBS
CONNECTION @ UTILITY POST



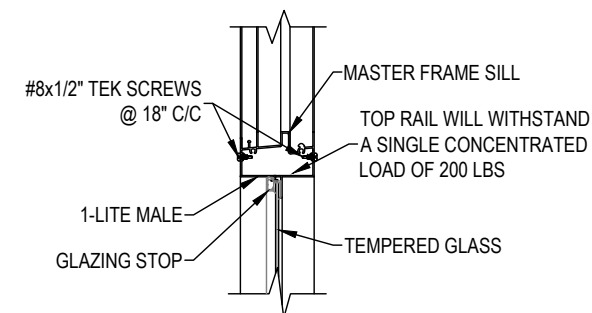
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8 PLAN VIEW OF MASTER FRAME JAMB & E.R.
WALL POST CONNECTION @ EXISTING WALL



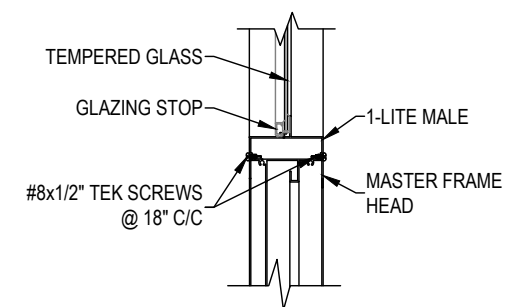
5
8 SECTION THROUGH GLASS KNEEWALL
CONNECTION @ DECK FOUNDATION



6
8 SECTION THROUGH MASTER FRAME SILL
CONNECTION @ DECK FOUNDATION



7
8 SECTION THROUGH MASTER FRAME SILL
CONNECTION @ GLASS KNEEWALL



8
8 SECTION THROUGH MASTER FRAME HEAD
CONNECTION @ GLASS TRANSOM



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SHEET	8 OF 9	-

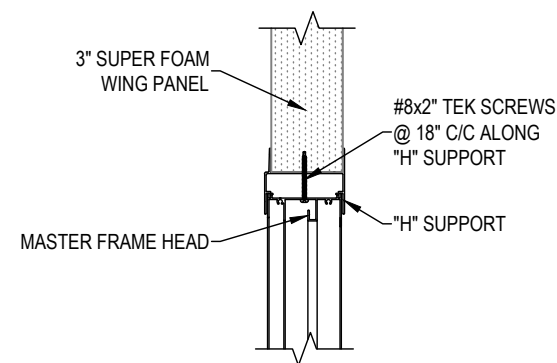
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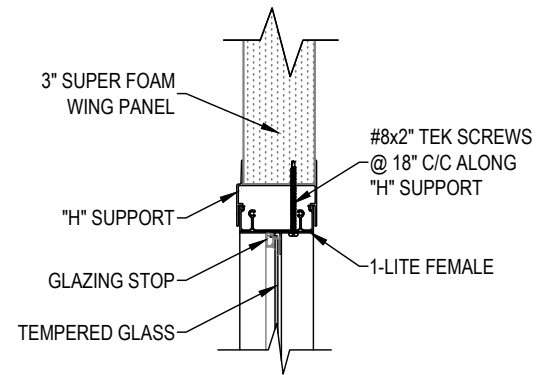
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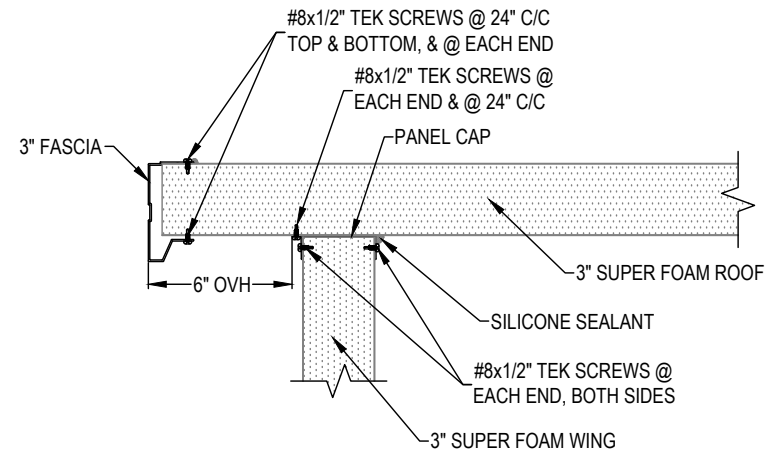
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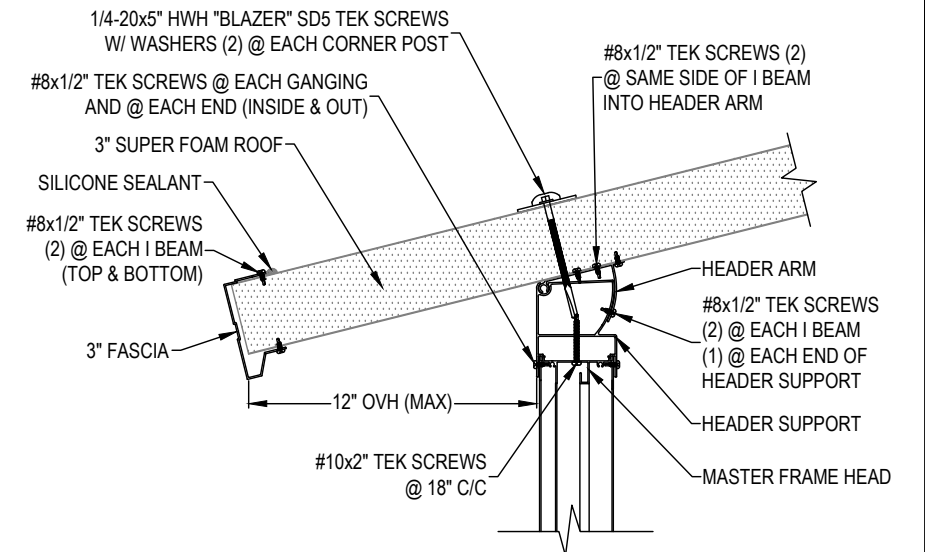
9 SECTION THROUGH MASTER FRAME
9 HEAD CONNECTION @ FOAM WING



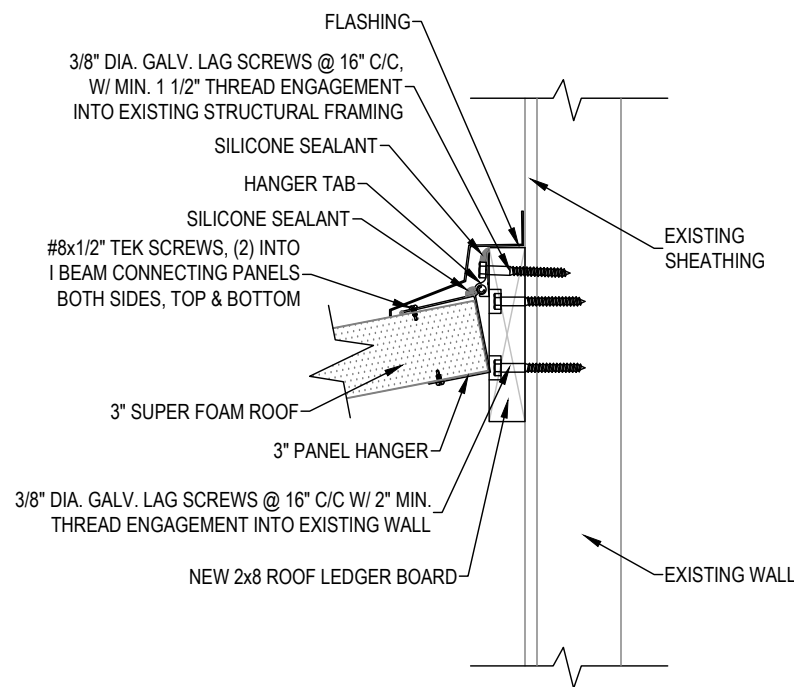
10 SECTION THROUGH "H" & GLASS TRANSOM
9 CONNECTION @ FOAM WING



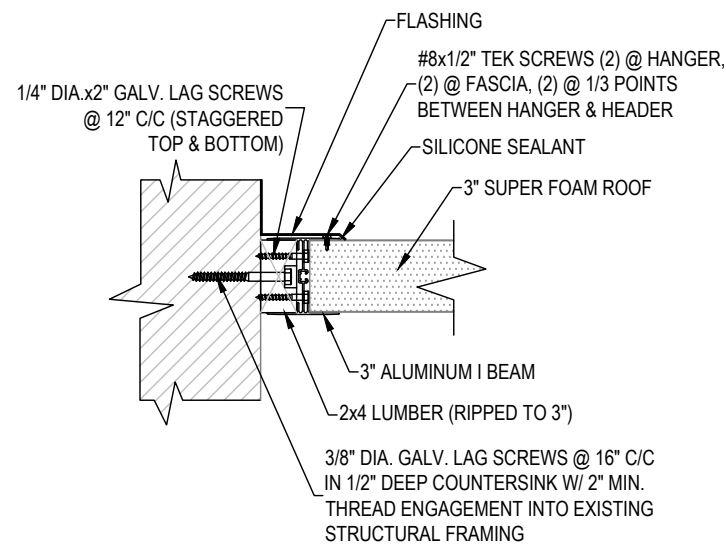
11 SECTION THROUGH 3" SUPER FOAM ROOF PANEL
9 CONNECTION @ 3" SUPER FOAM WING PANEL



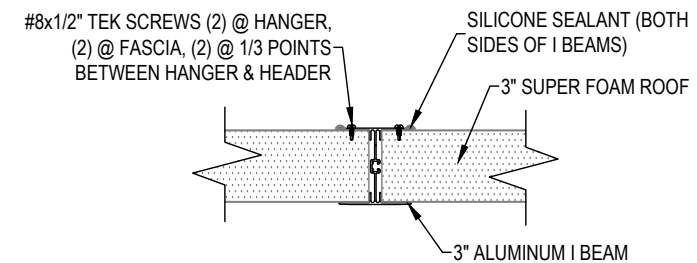
12 SECTION THROUGH MASTER FRAME & HEADER
9 CONNECTION @ 3" SUPER FOAM ROOF



13 SECTION THROUGH 3" SUPER FOAM ROOF & PANEL
9 HANGER ASSEMBLY CONNECTION @ EXISTING WALL



14 3" ROOF PANEL & I BEAM
9 CONNECTION @ EXISTING WALL



15 SECTION THROUGH 3" ROOF
9 CONNECTION @ I BEAM



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