

- NOTES:
- FIELD VERIFY REQ'D. NUMBER OF THREADS AND ALL STAIR DIMENSIONS PRIOR TO POSITIONING EXACT LOCATION OF ROOF DECK.
  - EXISTING CONSTRUCTION (RESIDENCE AND DECK) BY OTHERS AND SHOWN THUS: \_\_\_\_\_
  - CONNECT EXISTING 2"x 4" CEILING JOISTS TO NEW 3-14"x 1 1/2" LVL BEAM WITH GALV. JOIST HANGERS.

**GENERAL NOTES**

ALL THERMAL REQUIREMENTS AND ROOFING, FLASHING AND WATERPROOFING DESIGNED BY OTHERS.

STRUCTURAL WORK SHALL CONFORM TO THE REQUIREMENTS OF "THE COMMONWEALTH OF MASSACHUSETTS STATE BUILDING CODE."

ALL DIMENSIONS SHOWN ON DRAWINGS GOVERN CONSTRUCTION UNLESS NOTED OTHERWISE.

SECTIONS AND DETAILS SHOWN SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.

FOUNDATIONS SHALL BE CARRIED DOWN TO ELEVATIONS INDICATED ON DRAWINGS OR FURTHER, AS REQUIRED, TO UNDISTURBED COMPACTED MATERIAL HAVING A MINIMUM BEARING CAPACITY OF 1.5 TSF OR ON A COMPACTED FILL HAVING A MINIMUM BEARING CAPACITY OF 1.5 TSF.

BOTTOM OF FOOTING EXCAVATION SHALL BE INSPECTED BY THE ENGINEER BEFORE THE FOOTING IS PLACED. FOUNDATION FOOTINGS UNITS SHALL BE CENTERED UNDER SUPPORTED STRUCTURAL MEMBERS, UNLESS NOTED OTHERWISE ON THE DRAWINGS.

STRUCTURAL STAINLESS STEEL (S.S.) FASTENERS SHALL BE NEW STEEL CONFORMING TO THE FOLLOWING:

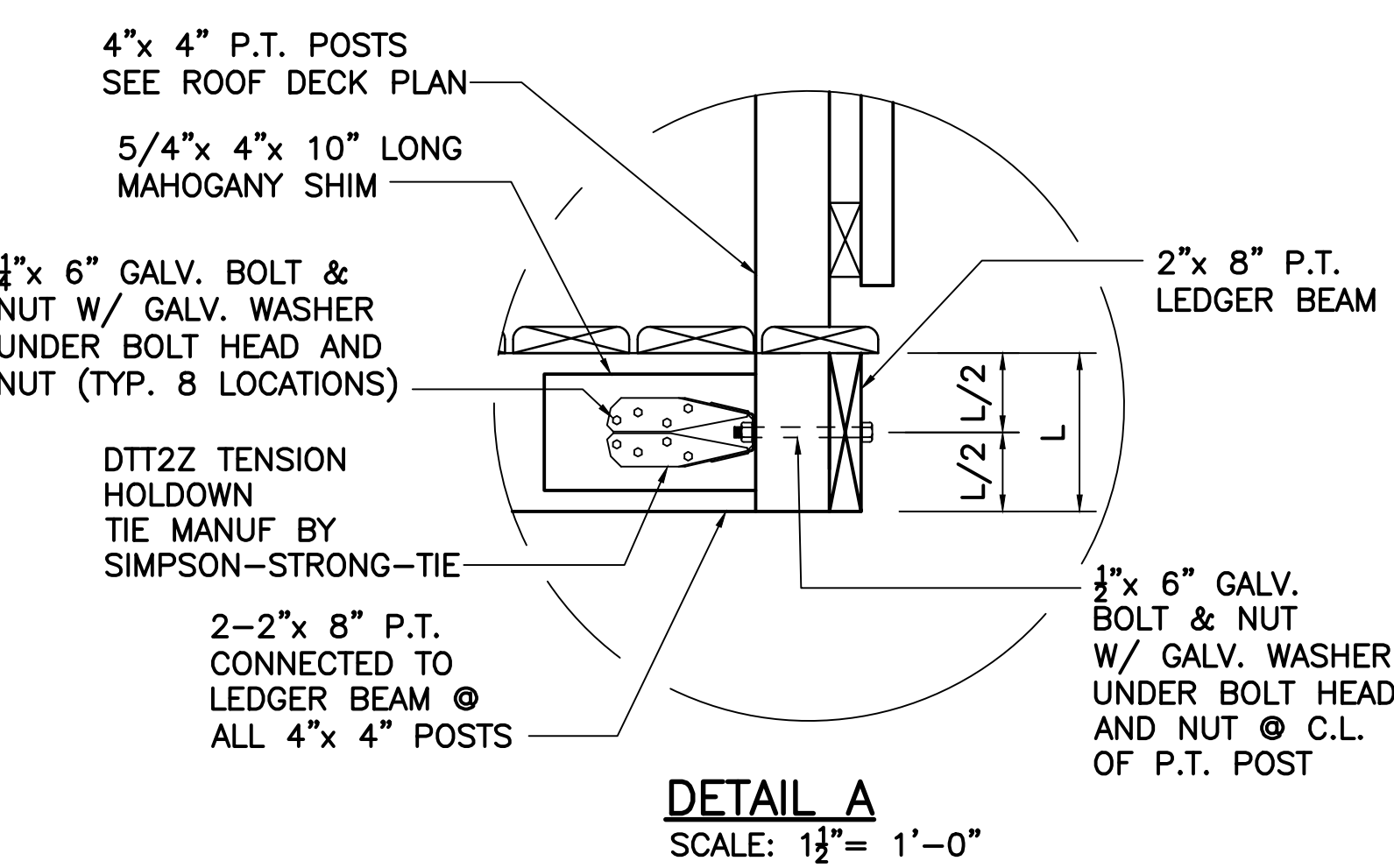
UNLESS NOTED OTHERWISE      ASTM 240 (GRADE 316)

GALVANIZED STRUCTURAL STEEL SHALL BE NEW STEEL CONFORMING TO THE FOLLOWING:

UNLESS NOTED OTHERWISE      ASTM A 36 (FY=36 KSI)  
HIGH STRENGTH BOLTS      ASTM A 307  
HOT-DIPPED GALVANIZED STEEL      ASTM A 123, ASTM A 153, ASTM A 143, ASTM A 385

**FOUNDATIONS**

FOUNDATIONS MAY BE ALTERED AS DIRECTED BY THE ENGINEER. 3/4" TO 1 1/2" GRADED CRUSHED STONE MAY BE USED UNDER FOOTINGS TO ATTAIN A MINIMUM SOIL BEARING CAPACITY OF 1.5 TSF ALONG FOOTINGS INSTALLED LESS THAN 4 FEET FROM FINISH GRADE.



**CARPENTRY**

ALL TIMBER SHALL BE (UNLESS NOTED OTHERWISE) STRUCTURAL GRADE NO. 1 (OR BETTER) LUMBER COMPLYING WITH ASTM C245 AND ASTM D2555 OF THE FOLLOWING WOOD SPECIES: SOUTHERN PINE ACQ PRESSURE TREATED LUMBER.

PRESSURE TREATED LUMBER SHALL BE IMPREGNATED WITH ADVANCED COPPER AND QUAT (ACQ) IN ACCORDANCE WITH AWPA C1, AWPA C2, AWPA C4, AWPA C5, AWPA C9, AWPA C15, AWPA C17, AWPA C22, AWPA P5, AND AASHTO M 133-86.

MAXIMUM MOISTURE CONTENT OF LUMBER AT THE TIME OF USE SHALL NOT EXCEED 19 PERCENT.

INSTALL ALL HORIZONTAL MEMBERS WITH CROWN UP.

NAILING AND CONNECTIONS OF ALL TIMBER MEMBERS SHALL CONFORM TO APPENDIX C AND PROVISIONS OF THE ABOVE CODE, UNLESS SPECIFIED OTHERWISE.

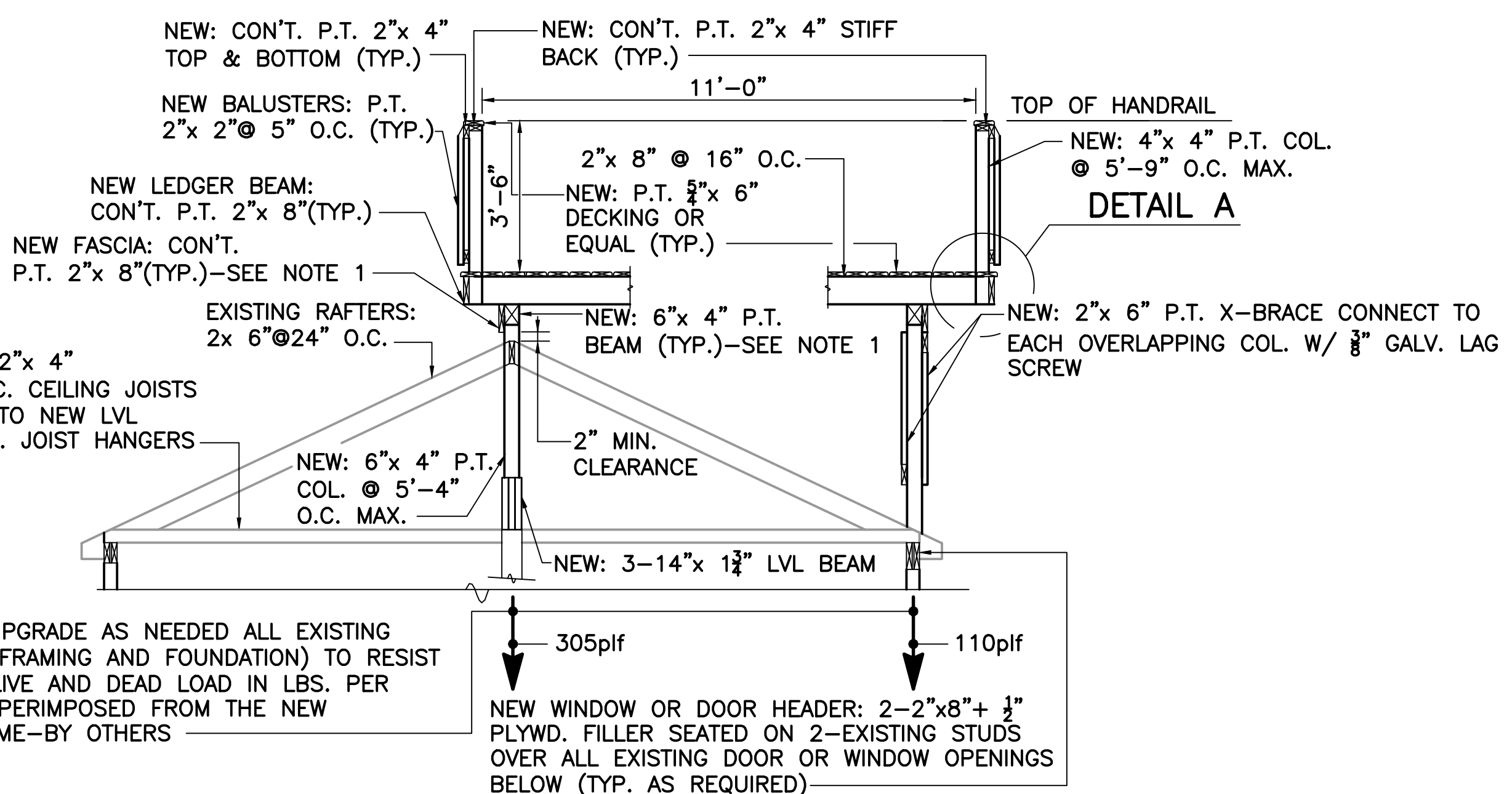
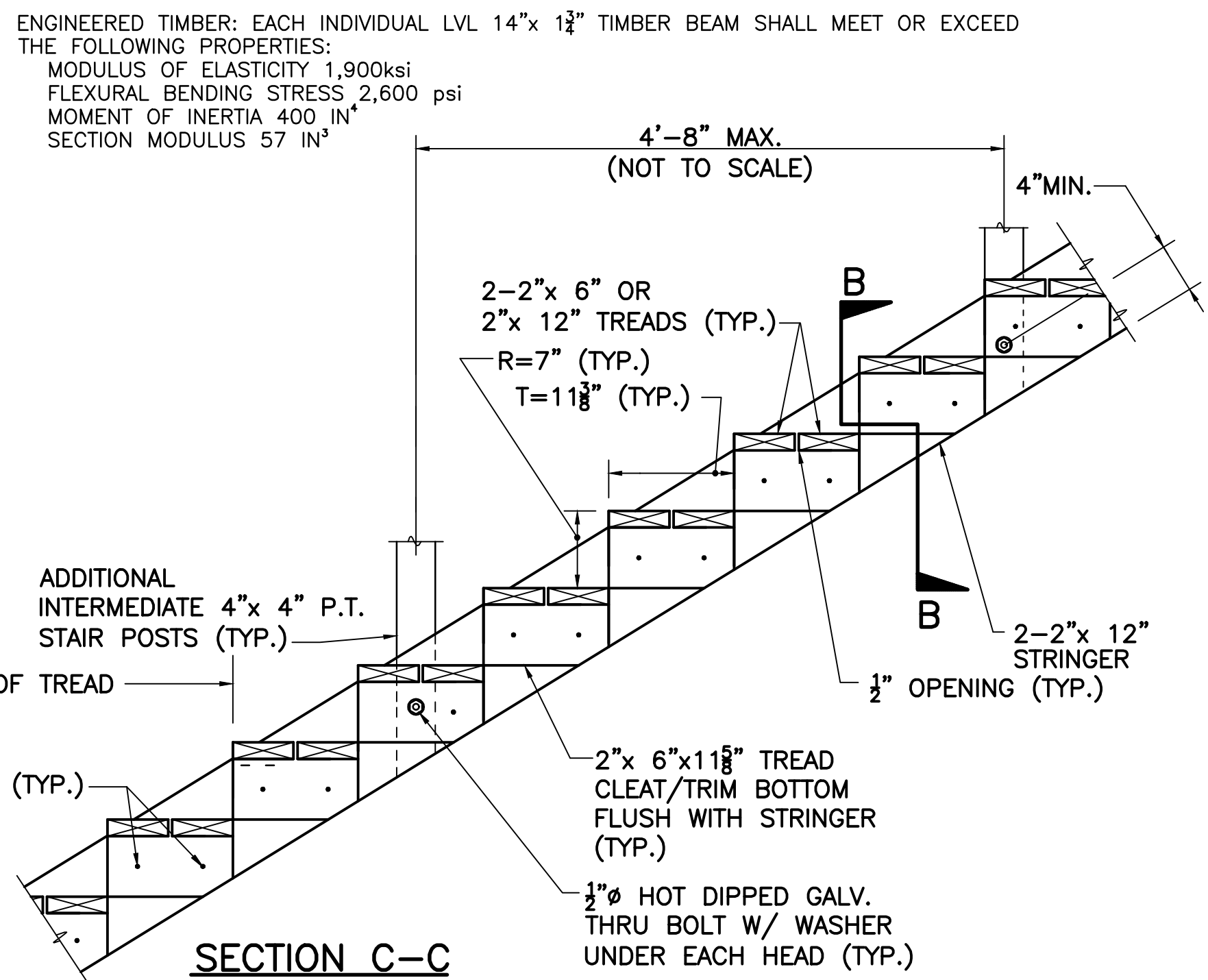
INSTALLATION OF SCREWS AND LAG SCREWS SHALL BE SCREWED INTO DRILLED LEAD HOLES OF: THREADED SHANK EQUAL TO 3/4 OF THE SHANK DIAMETER & UNTHREADED SHANK EQUAL TO ACTUAL DIAMETER OF UNTHREADED SHANK. WAX OR SOAP LAG SCREWS WHEN INSTALLING. PROVIDE WASHERS UNDER ALL BOLT HEADS BEARING ON WOOD. MISALIGNMENT AND OVERSIZED HOLES WHICH PREVENTS PROPER BEARING OR ALIGNMENT OF MEMBERS SHALL NOT BE ALLOWED.

BOLT HOLES SHALL BE DRILLED 1/16 INCH LARGER THAN BOLT DIAMETER. PROVIDE WASHERS UNDER ALL BOLT HEADS AND NUTS BEARING ON WOOD. NUTS SHALL BE SNUG TIGHT. MISALIGNMENT AND OVERSIZED HOLES WHICH PREVENTS PROPER BEARING OR ALIGNMENT OF MEMBERS SHALL NOT BE ALLOWED.

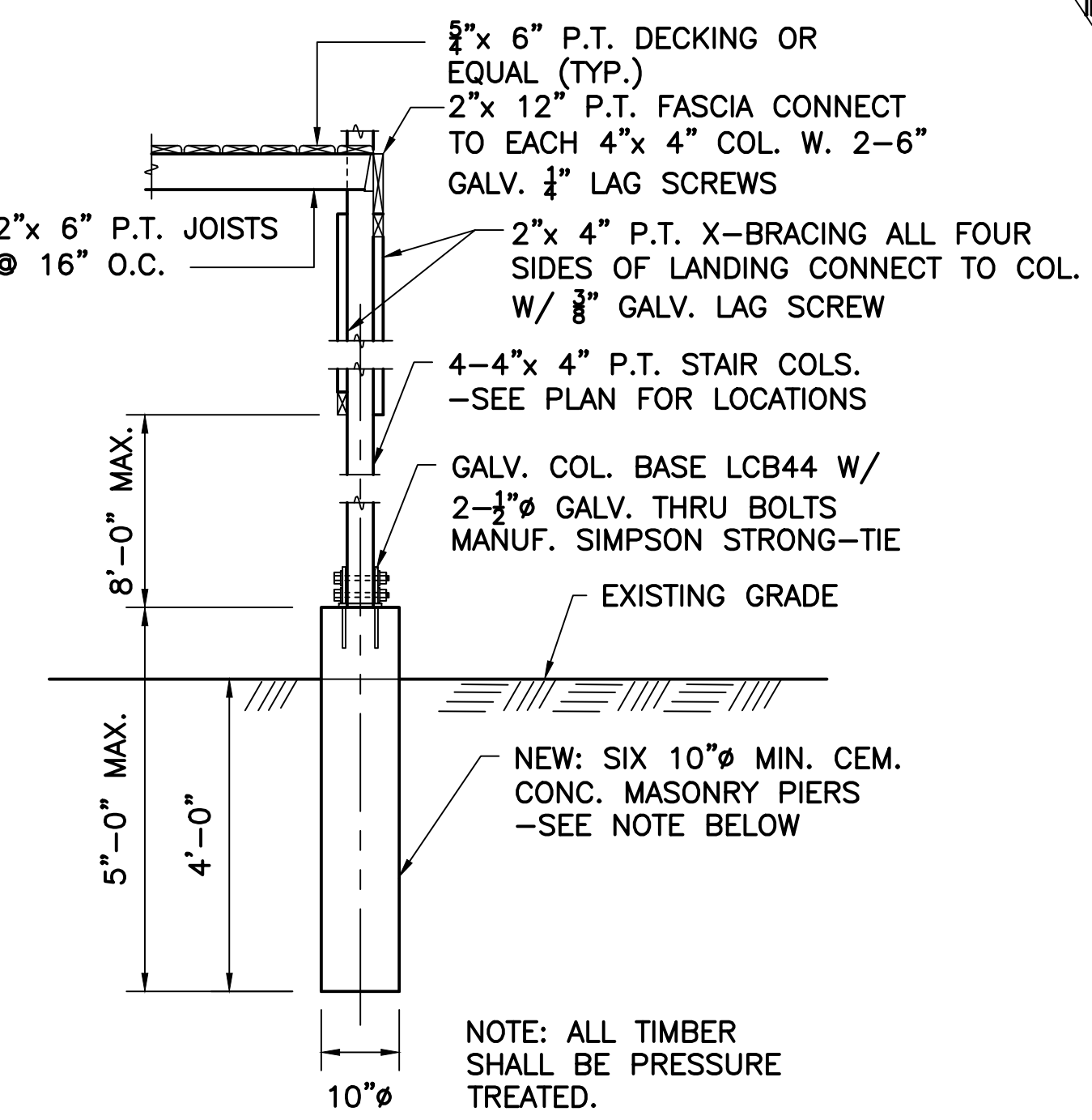
BOLTS SHALL BE ASTM A307 GALVANIZED BOLTS.

COAT ALL PRE DRILLED BOLT HOLE SHAFTS AND CUT ENDS OF ALL ACQ LUMBER WITH TWO COATS OF LINSEED OIL OR APPROVED EQUAL PRIOR TO INSTALLATION.

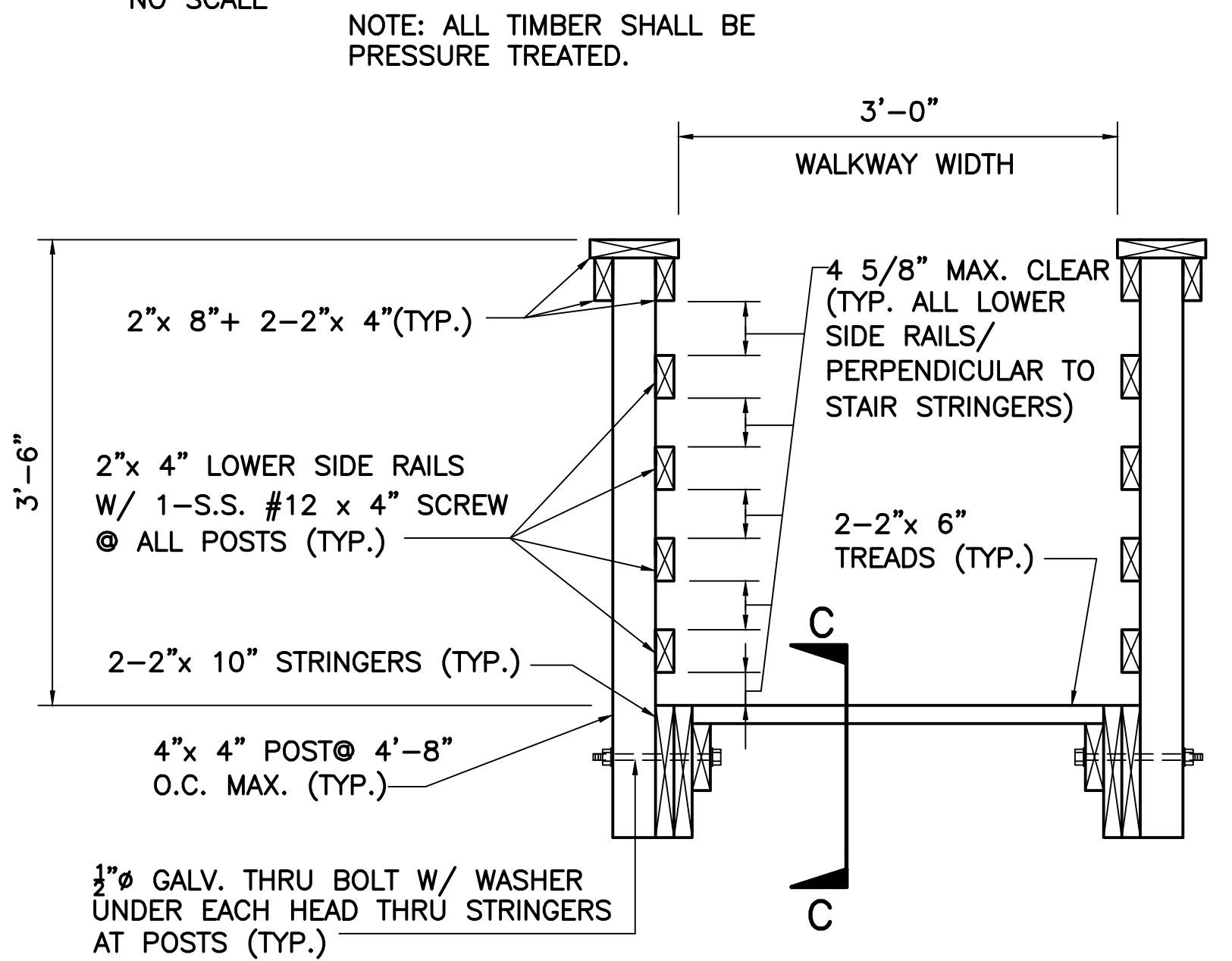
ENGINEERED TIMBER: EACH INDIVIDUAL LVL 14"x 1 1/2" TIMBER BEAM SHALL MEET OR EXCEED THE FOLLOWING PROPERTIES:  
MODULUS OF ELASTICITY 1,900ksi  
FLEXURAL BENDING STRESS 2,600 psi  
MOMENT OF INERTIA 400 IN<sup>4</sup>  
SECTION MODULUS 57 IN<sup>3</sup>



- NOTE:
- CONNECT ALL NEW FASCIA AND 6"x 4" BEAM TO EACH NEW 6"x 4" COLUMNS WITH 2-3/8" GALV. THROUGH BOLTS.

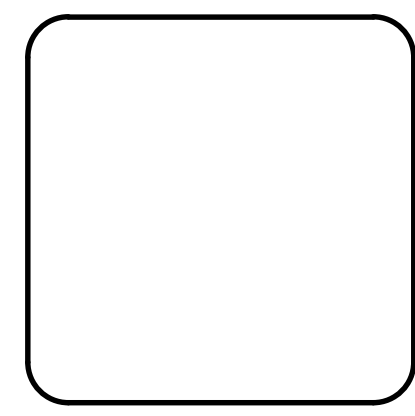


- NOTE:
- RELOCATE EXISTING SHOWER OR MODIFY SIZE OF NEW LANDING AS REQUIRED TO ACCOMMODATE EIGHT CEM. CONC. MASONRY PIERS



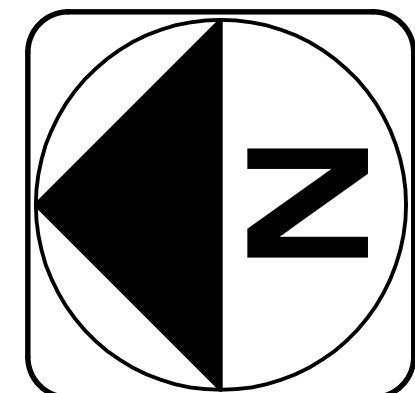
- NOTE: ALL TIMBER SHALL BE PRESSURE TREATED.

NO.	DATE	BY	REVISION DESCRIPTION



**BROSNAHAN RESIDENCE**  
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Eastham, MA

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**Structural Design**  
**Proposed Ocean View Roof Deck**

SCALE: AS NOTED      DRAWN BY: JDB      CHECKED BY:      PROJ. NO. 00232

**S1**