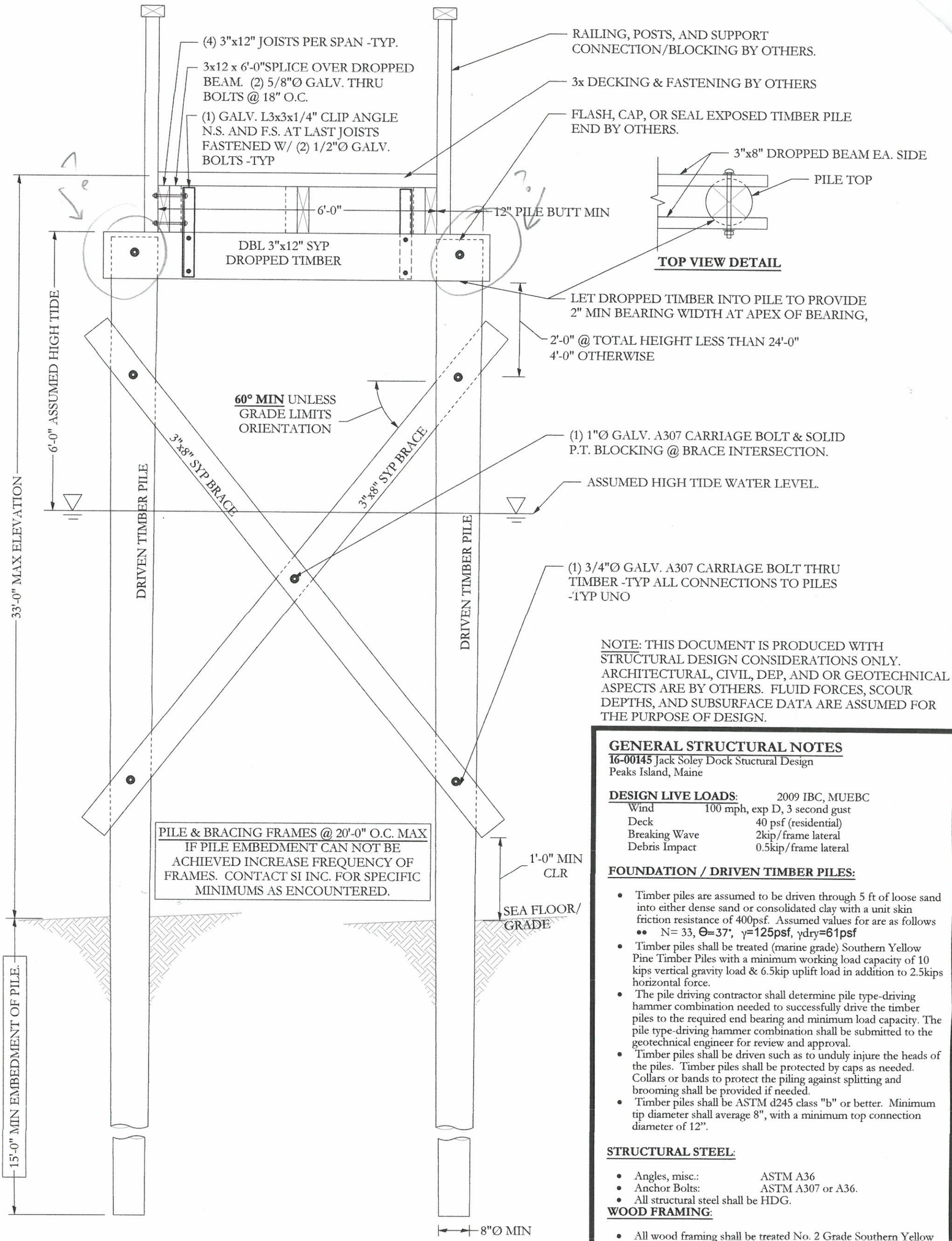

SECTION A/S-1 1/2"=1'-0

NOTE: THIS DOCUMENT IS PRODUCED WITH STRUCTURAL DESIGN CONSIDERATIONS ONLY. ARCHITECTURAL, CIVIL, DEP, AND OR GEOTECHNICAL ASPECTS ARE BY OTHERS. FLUID FORCES, SCOUR DEPTHS, AND SUBSURFACE DATA ARE ASSUMED FOR THE PURPOSE OF DESIGN.

GENERAL STRUCTURAL NOTES

16-00145 Jack Soley Dock Stuctural Design
Peaks Island, Maine

DESIGN LIVE LOADS: 2009 IBC, MUEBC

Wind	100 mph, exp D, 3 second gust
Deck	40 psf (residential)
Breaking Wave	2kip/frame lateral
Debris Impact	0.5kip/frame lateral

FOUNDATION / DRIVEN TIMBER PILES:

- Timber piles are assumed to be driven through 5 ft of loose sand into either dense sand or consolidated clay with a unit skin friction resistance of 400psf. Assumed values for are as follows
  - N= 33, Θ=37°, γ=125psf, γdry=61psf
- Timber piles shall be treated (marine grade) Southern Yellow Pine Timber Piles with a minimum working load capacity of 10 kips vertical gravity load & 6.5kip uplift load in addition to 2.5kips horizontal force.
- The pile driving contractor shall determine pile type-driving hammer combination needed to successfully drive the timber piles to the required end bearing and minimum load capacity. The pile type-driving hammer combination shall be submitted to the geotechnical engineer for review and approval.
- Timber piles shall be driven such as to unduly injure the heads of the piles. Timber piles shall be protected by caps as needed. Collars or bands to protect the piling against splitting and brooming shall be provided if needed.
- Timber piles shall be ASTM d245 class "b" or better. Minimum tip diameter shall average 8", with a minimum top connection diameter of 12".

STRUCTURAL STEEL:

- Angles, misc.: ASTM A36
- Anchor Bolts: ASTM A307 or A36.
- All structural steel shall be HDG.

WOOD FRAMING:

- All wood framing shall be treated No. 2 Grade Southern Yellow Pine
- All joists & beam shall be No.1 grade min.
- Provide diagonal bridge between joists @ 12'-0" o.c. min. not otherwise braced.

Structural Integrity
Consulting Engineers, Inc.
77 Oak Street
Portland, ME, 04101
p. 207-774-4614
f. 866-793-7835
www.structuralinteg.com

BUILD WITH CONFIDENCE

SI# 16-0145

RESIDENTIAL WHARF STRUCTURAL DESIGN

Jack Soley Residence
Peaks Island, ME.

Final plan

Scale: 1/2"=1'
Date: 8/8/2016

S-1