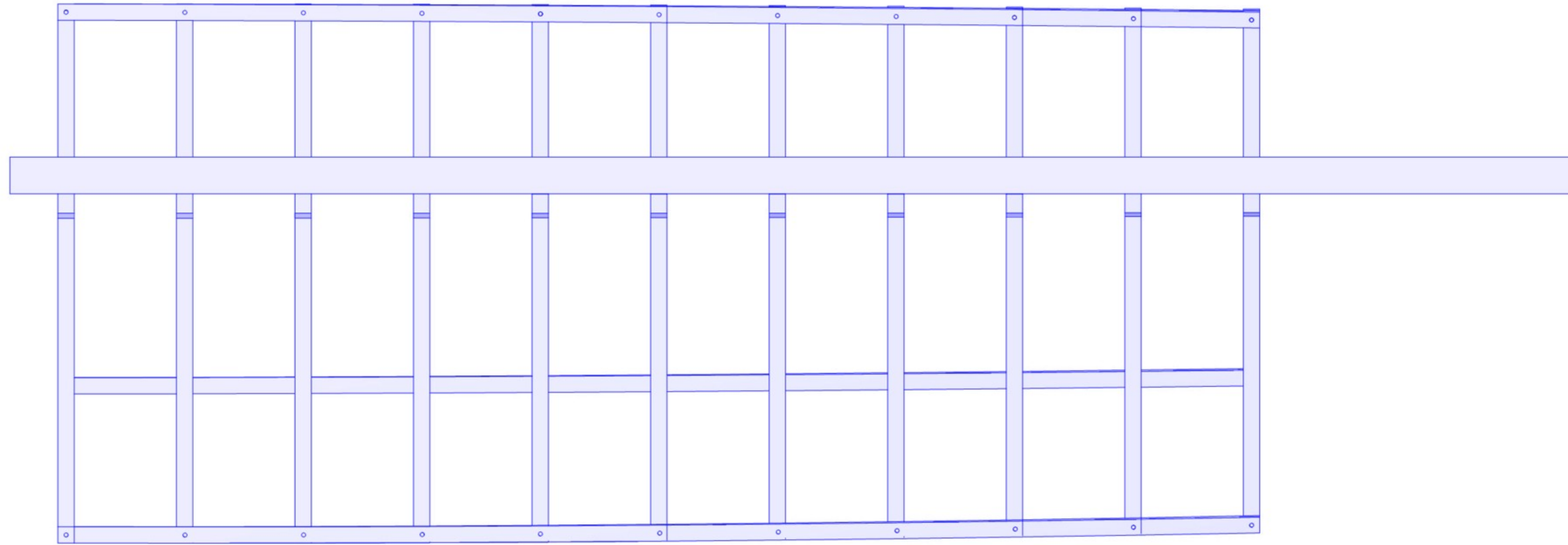


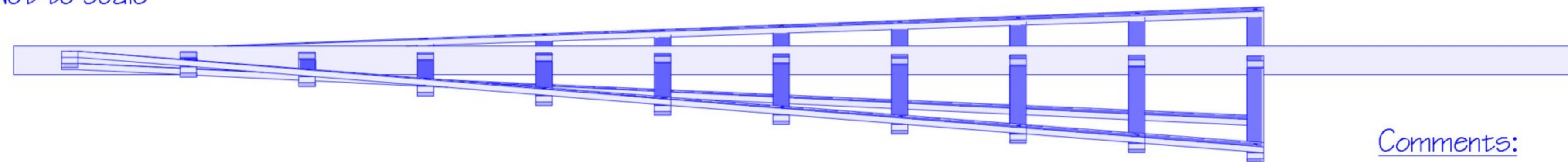
Common Sail



Common Sail

Top View

Not to scale



Common Sail

Side View

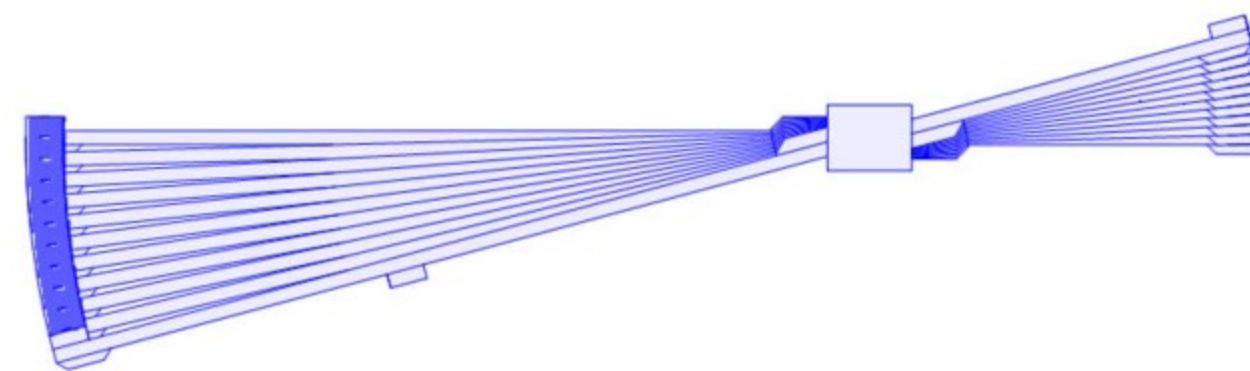
Not to scale

Comments:

The Yorktown Windmill has four common sails that are constructed from white oak. Each sail has a whip, eleven bars, two hemlaths and an uplong.

The sail's bars are set into mortises in the whip that vary in angle from 0 degrees to 15 degrees (by 1.5 degree per bar) to form a smooth and continuous curve.

Individual elements of the sail are detailed on the following page.



Common Sail

End View

Not to scale



Common Sail

Comments:

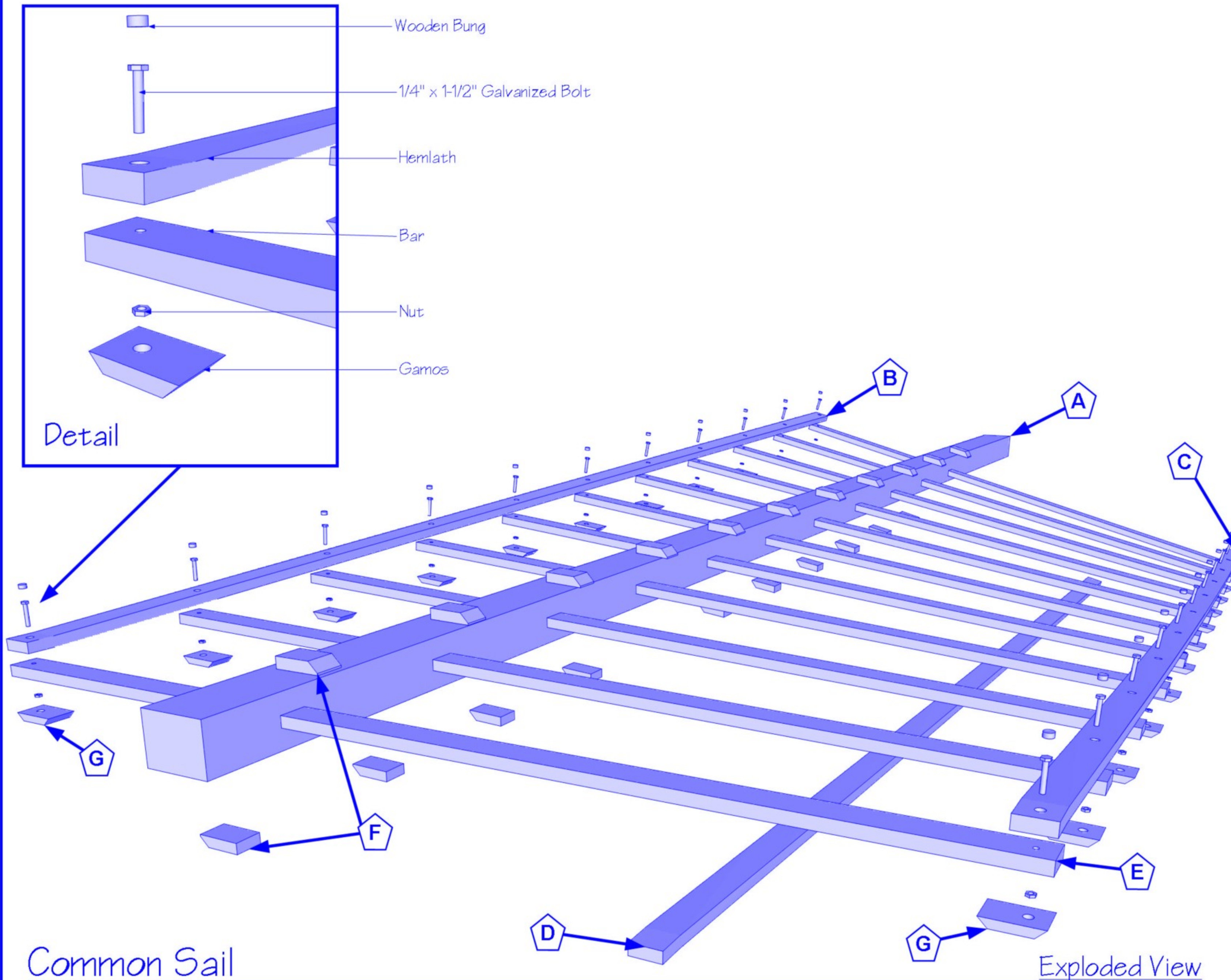
The following is a list of the structural elements that comprise the common sail. As shown in the detail, the leading and driving hemlaths are affixed to the bars with 1-1/2" bolts. The bolts are recessed into the hemlath and the heads are covered with a wooden bung.

On the reverse side, the nut and protruding bolt end are covered with a wooden gamos that has a recess bored into it to accommodate the fastener.

Components:

| | | |
|----|-----------------|-----------------------------|
| A) | Whip | (1 ea. 4.5" x 3.5" Oak) |
| B) | Leading Hemlath | (1 ea. 2" x 3/4" Oak) |
| C) | Driving Hemlath | (1 ea. 2" x 3/4" Oak) |
| D) | Uplong | (1 ea. 2" x 3/4" Oak) |
| E) | Bar | (11 ea. 2" x 3/4" Oak) |
| F) | Bar Brace | (22 ea. 2" x 3" x 3/4" Oak) |
| G) | End Gamos | (22 ea. 2" x 3" x 1/2" Oak) |

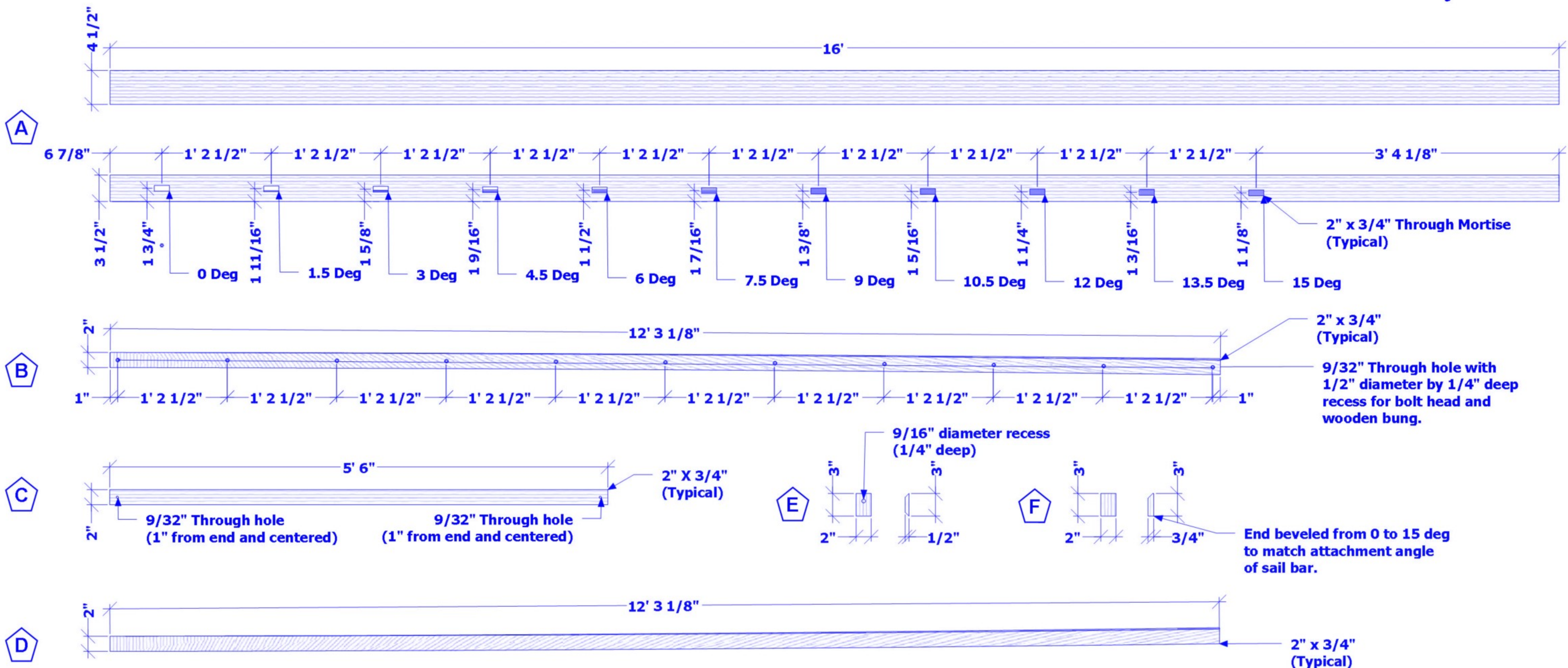
Note: Gamos, a Greek term meaning marriage, describes a decorative element that is used to improve the appearance of a less than perfect union. A term coined at the Twisted Oaks Studio, gamoses have been used to conceal unattractive (albeit practical) joinery since 2001.



Common Sail

Not to scale

Common Sail Components



Comments:

The following is a list of the structural elements that comprise the common sail.

Components:

- A) Whip (1 ea. 4.5" x 3.5" Oak)
- B) Hemlath (2 ea. 2" x 3/4" Oak)
- C) Bar (11 ea. 2" x 3/4" Oak)
- D) Uplong (1 ea. 2" x 3/4" Oak)
- E) End Gamos (22 ea. 2" x 3" x 1/2" Oak)
- F) Bar Brace (22 ea. 2" x 3" x 3/4" Oak)