

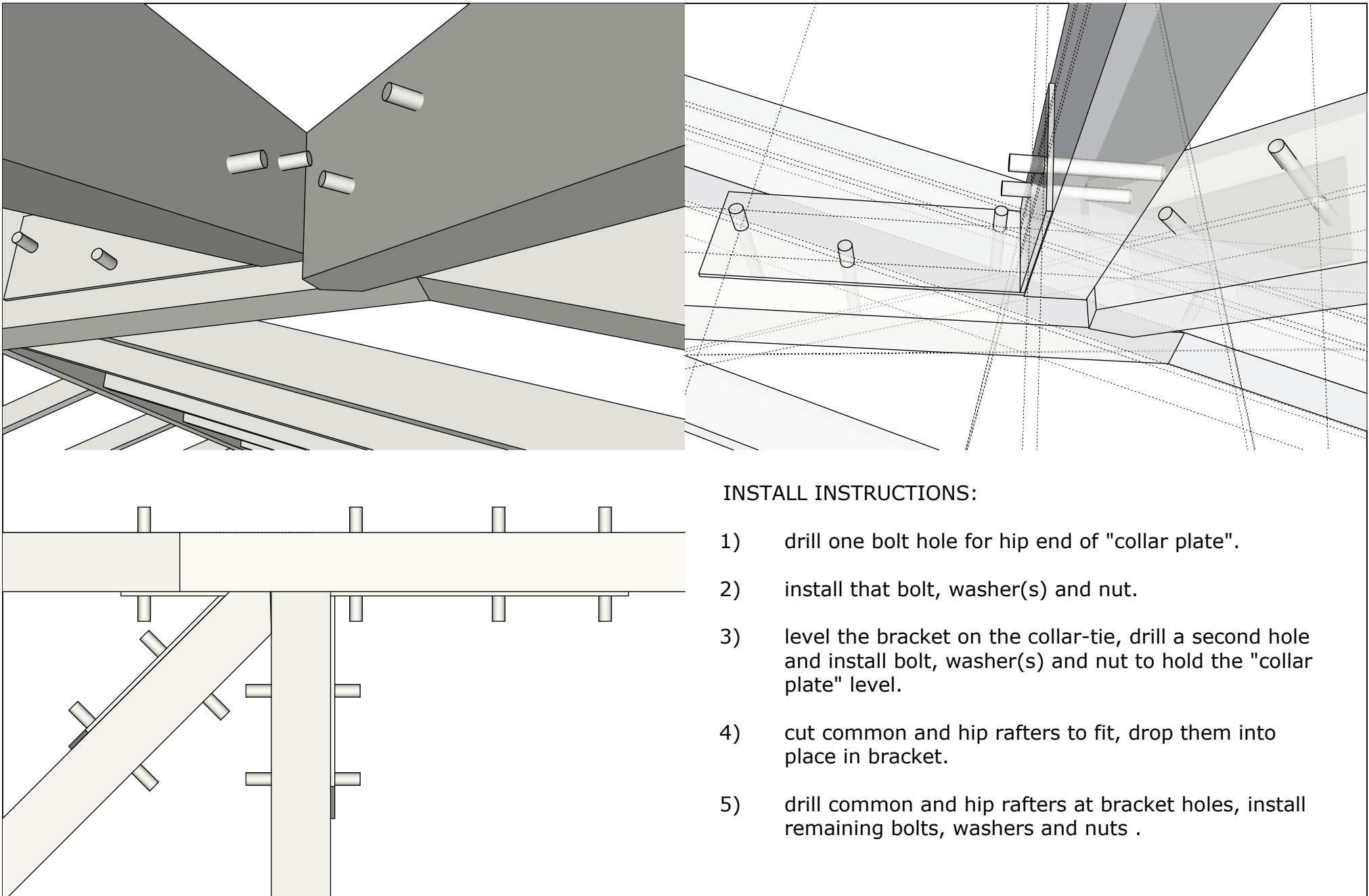
Hip Collar-Tie Bracket for 4:12 pitch roof

by Joseph Oster
www.wingo.com/SketchUp

wingo.com
 web site design

design study for John Morrall
 Wainiha, Kauai, Hawaii

August 12, 2010



INSTALL INSTRUCTIONS:

- 1) drill one bolt hole for hip end of "collar plate".
- 2) install that bolt, washer(s) and nut.
- 3) level the bracket on the collar-tie, drill a second hole and install bolt, washer(s) and nut to hold the "collar plate" level.
- 4) cut common and hip rafters to fit, drop them into place in bracket.
- 5) drill common and hip rafters at bracket holes, install remaining bolts, washers and nuts .

bottom views

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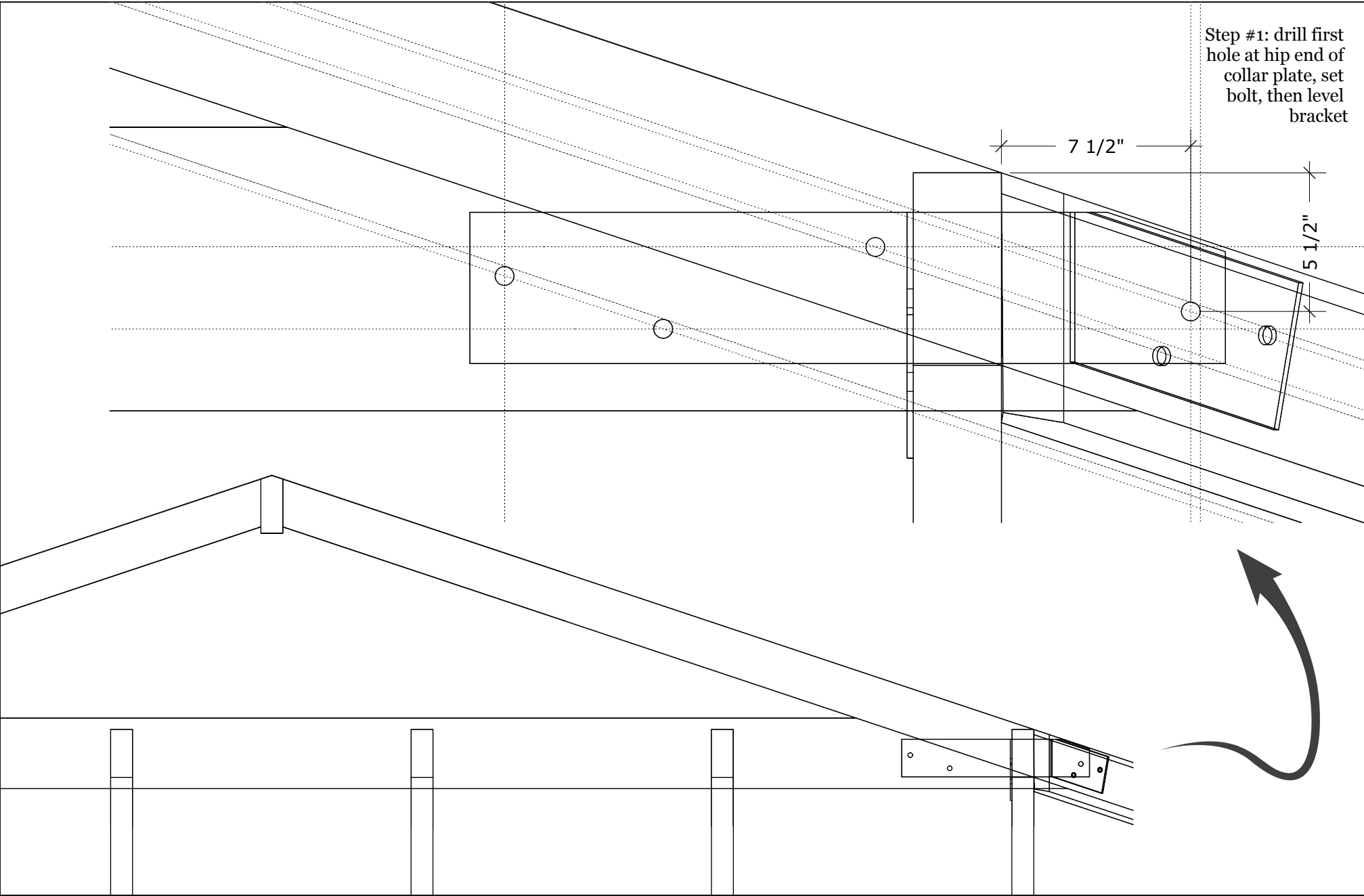
Hip Collar-Tie Bracket, 4:12

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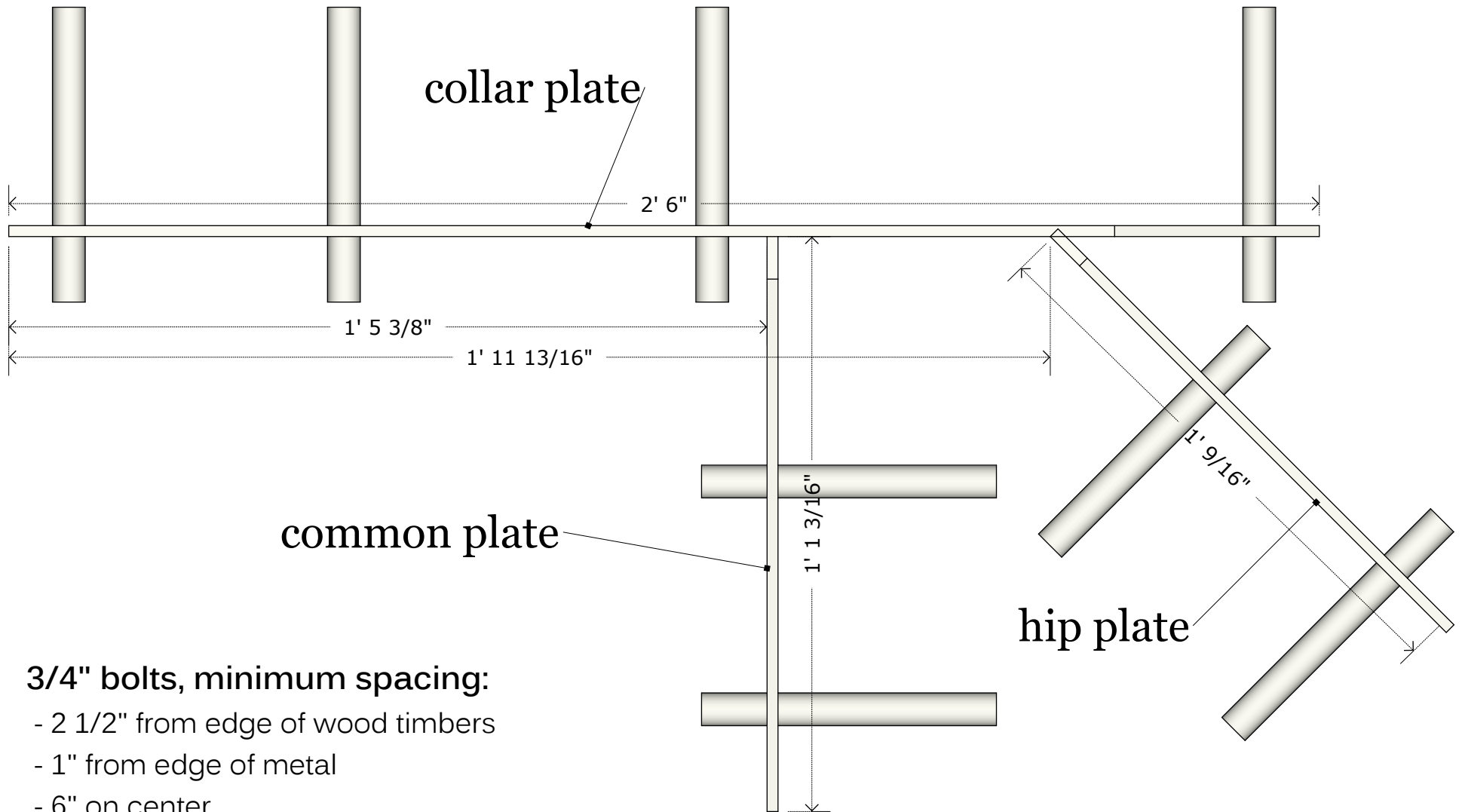
bracket context

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Hip Collar-Tie Bracket, 4:12

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NOTE: need left and right pair of brackets

top view

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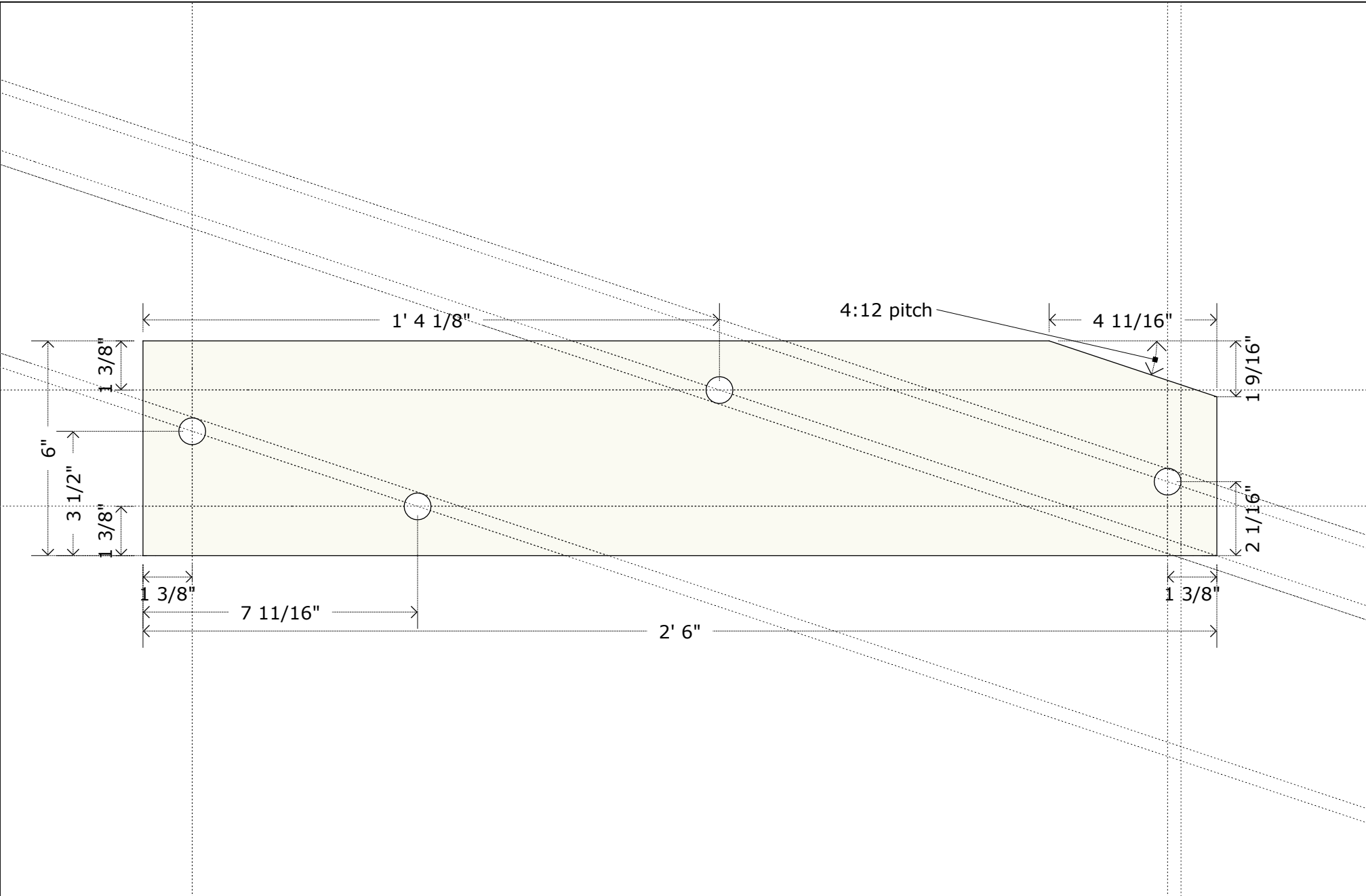
Hip Collar-Tie Bracket, 4:12

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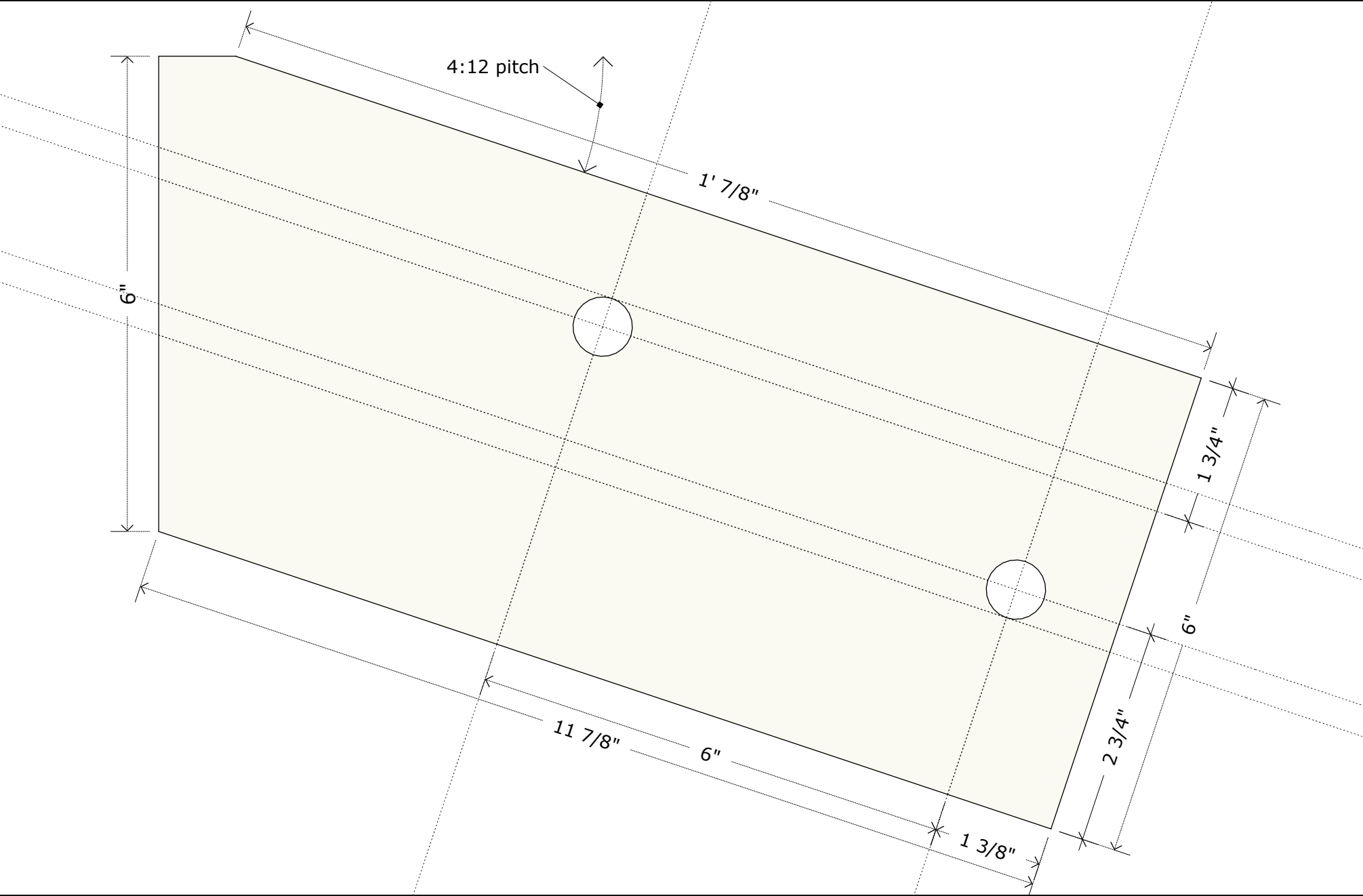
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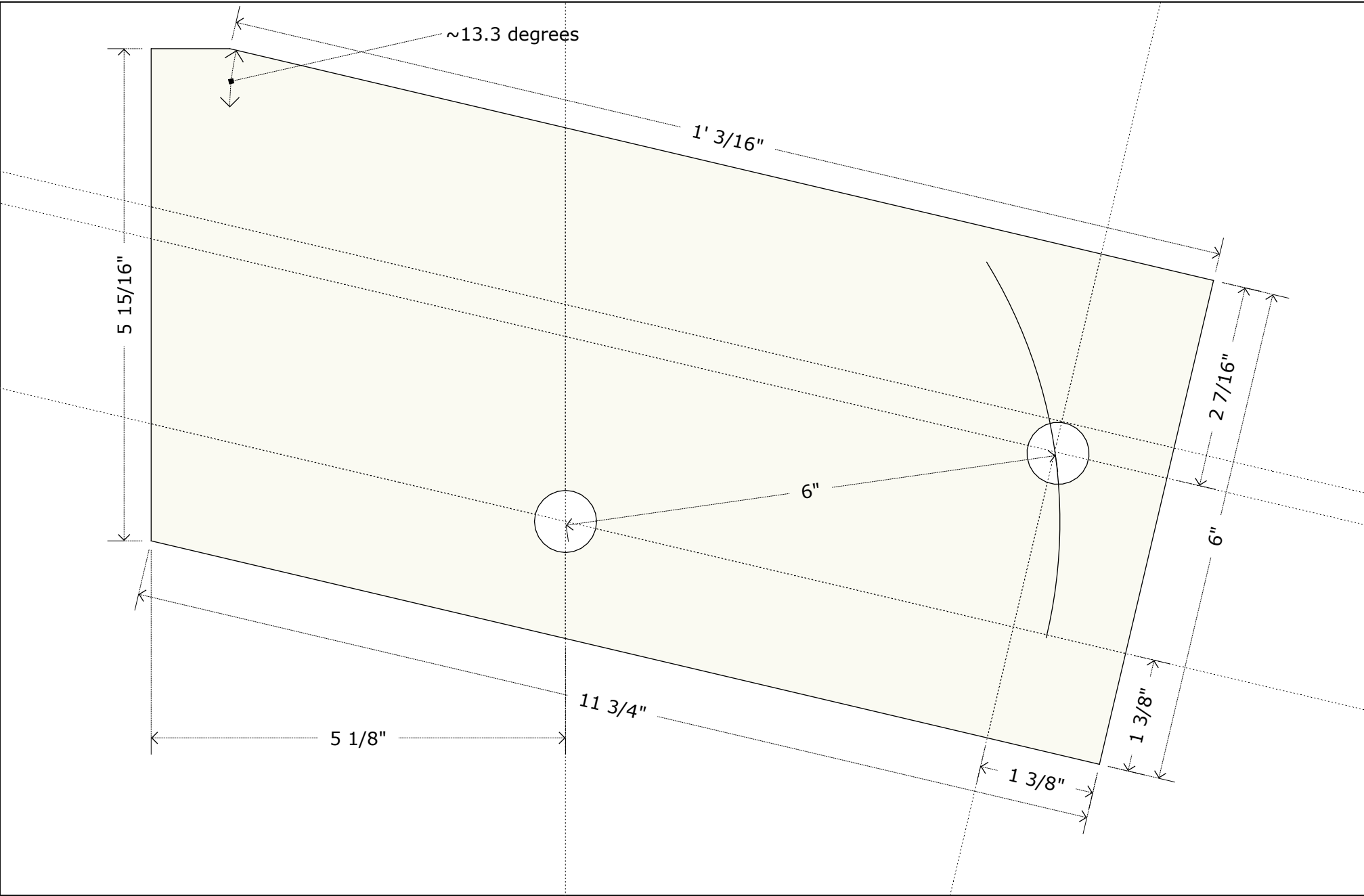
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collar plate	by Joseph Oster www.wingo.com/SketchUp <small>wingo.com web site design</small>	REVISIONS		A 005
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common plate	by Joseph Oster www.wingo.com/SketchUp wingo.com web site design		REVISIONS		006
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hip plate	by Joseph Oster www.wingo.com/SketchUp		REVISIONS		A 007
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