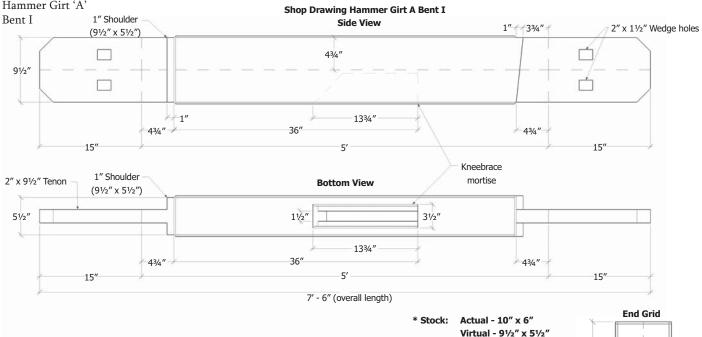
## 3.4 Housed Thru Wedged Tenon

This male end of the hammer girt is jointed to the larger principal post, hence the need for a housing rather than a sloped shoulder. The shop drawing front and side views in Figure 3-4 show the centerline intersection or waypoint of this joint located part way down the tenon,  $4^{3}/4''$  (121 mm) or half the virtual width of the receiving post (9<sup>1</sup>/<sub>2</sub>" or 239 mm), 1" (25 mm) of which will be taken up by the housing. The remaining 15" (381 mm) of tenon shows as an add-on to the centerline dimension. Locating the wedge holes will be addressed later (refer also to Figure 2-4).

Figure 3-4 Shop Drawing of Hammer Girt 'A'



## 3.4 36" Kneebrace Housed Mortise

A 36" kneebrace connects from the principal post to the underside of the hammer girt thereby requiring a receiving mortise. The 36" (914 mm) leg measurement begins at the virtual bottom face of the girt. Refer to the principal post kneebrace procedures for more information. Keep in mind that in joinery the

male comes first, meaning that if you make an error constructing the male, then the female mortise can be adjusted to compensate. Therefore, it is best to wait until actual measurements can be verified from the kneebrace male tenon/housing before laying out its female mortise (refer also to Figure 2-6). 10

43/4

23⁄4″

-6'

## 3.4 Sloped Shouldered Thru Wedged Tenon

When both mating timbers are of the same thickness, a shoulder (rather than a housing) is required. Our hammer girt shop drawing shows exactly 5' (1524 mm) from the last centerline intersection or waypoint, to the waypoint of the 1" (25 mm) slope-shouldered through tenon. The protrusion of the shoulder is on the top face to counter the downward thrust of the hammer post. The thickness of the receiving hammer post has a virtual width of  $9\frac{1}{2}$ " (241 mm). Measuring  $4\frac{3}{4}$ " (121 mm) to center, this places the layout face on our hammer girt at  $4\frac{3}{4}$ " (121 mm) from its centerline waypoint. The 1" (25 mm) sloped-shoulder then takes up part of the tenon (refer also to Figure 2-3).