

joinery and ultimately the shop drawings come from a full-size lofted drawing. Chalking a centerline (gable) elevation of the hammer bent (as shown in this book), or any bent or truss design, is easy to do and is basically just an arrangement of rectangles and triangles. The intersections of these centerlines are the joinery waypoints, from which exact distances and diagonals can be measured. Substituting tim-

bers of different sizes or even logs does not change the centerline or the waypoints. The fleshed out lofted drawing will show actual sizes of (virtualed) timbers and joints from which templates can be made, and will reveal each piece of the puzzle to be measured and scaled into shop drawings. All joinery and components can then proceed independently and be test-fitted using the templates.

### 1.2 Parts and Terminology

This architectural rendering shows three identical hammer bents comprising a 20' x 30' (6096 x 9144 mm) building project design with 8" x 10" (203 x 254 mm) principal posts; 6" x 10" (152 x 254 mm) hammer girts, hammer posts, anchor beam, and principal rafters; 8" x 8" (203 x 203 mm) purlins and connecting girts; and 3 1/2" x 10" (89 x 254 mm) kneebraces. The sizes of the timbers may vary considerably from this example, but the process remains the same. The spacing between the

bents is 15' (4572 mm), measured center to center.

The principal posts will be lengthened to pass through the sub-floor and anchor to the foundation. The roof system can be made either from structural insulated panels (SIP) or conventionally raftered. The wall system can be made from infill or exterior envelope SIP panels, or conventionally framed. For other hamer bent designs, refer to the end of this section.

Figure 1-2  
Parts and Terminology

