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Project Plans  
from*



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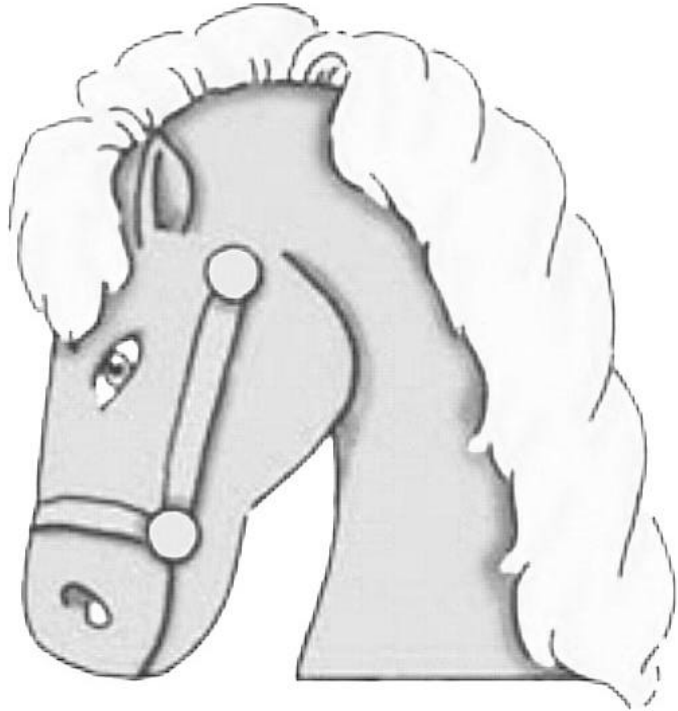
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## **The Head and Mane**

(Consult the head detail drawing while completing this section)

Step 1: Round over all the edges of the head except the base of the neck where it will be joined to the seat.

Step 2: Secure the head vertically in a vise or clamp. Using a pencil, mark a series of fourteen points about 1¼" apart along the edge of the mane area of the head. Using these points as starter guides, drill the holes vertically into the edge of the head using a bit the same diameter as your rope (5/8"). Drill holes about 2½" deep.



Step 3: Remove the head from the vice and lay it on its side. Trace the cut line for the mane installation directly on the head. Carefully cut out this line with a jigsaw or band saw. Don't backtrack or re-cut areas in an attempt to stay on the line. The object here is to have as small a kerf as possible. (A kerf is the area removed by the blade during a cut). After the rope is installed, the mane area will be glued back in place.

Step 4: You will need seven 12" pieces of rope. First wrap the rope with masking tape in the areas to be cut, then cut through both the tape and the rope. This will prevent the ends from unraveling.

Step 5: For each piece of rope, thread both ends through adjacent holes in the mane section from the inside out. Have the rope halves extend equally from the area where the mane exits the wood.

Step 6: Using a sharp knife or chisel, carefully remove the wood from the edge of the head section between the holes. The object is to create a cavity for the loop of rope to fit in so the mane section can be glued back to the head without the rope interfering. Test the fit of the mane section against the head. It should fit tightly back into place and your horse should look like it has a braided mane. If it doesn't quite fit yet, repeat this step until it does.

Step 7: Screw the mane section back to the head using (2) 2½" #10 screws. Later, when the rocking horse is complete, you will unbraided the rope and comb out the silky mane. Then you can trim it with scissors for the desired look. For right now, however, wrap the ropes with masking tape to protect them while you continue with your work.

Step 8: Mark the placement of the hole for the handle. Drill the hole. Later, when the project is complete and ready for the finish, insert a well sanded 8" piece of  $\frac{3}{4}$ " dowel into the hole to serve as the handle.

## **Attaching the Head to the Seat**

Step 1: Round off the edges of the seat and sand it well all over. Then, lightly mark the centerline of the seat. This will help you find and mark the location where the head will join it.

Step 2: Using the centerline for reference, drill a 1-3/8" hole through the top rear of the seat for the tail. Don't drill the hole straight through at a 90 degree angle, slant it a bit so the tail will emerge at a more natural angle.

Step 3: Test fit the head to assure that it sits squarely on the seat. If it doesn't, make any necessary adjustments to the base of the neck with a block plane.

Step 4: Apply glue to the base of the neck where it will join the seat. Attach it with (2) 2½" #10 screws. This will not create an adequate joint, but it will clamp the head in place while you perform the following steps.

Step 5: Drill two 3/8" holes, equally spaced, through the seat and into the neck from beneath. Make the holes about 3" deep.

Step 6: Cut two pieces of 3/8 dowel 2¾" long, and gently round one end of each.

Step 7: Roll the dowels in a small puddle of glue and insert them, rounded end first, into the holes. Drive them all the way into the hole to secure and offer support to the head/seat joint. The dowels should not protrude from the holes. If they do, trim them and sand them flush with the bottom of the seat.

## **Assembling the Rocker Base**

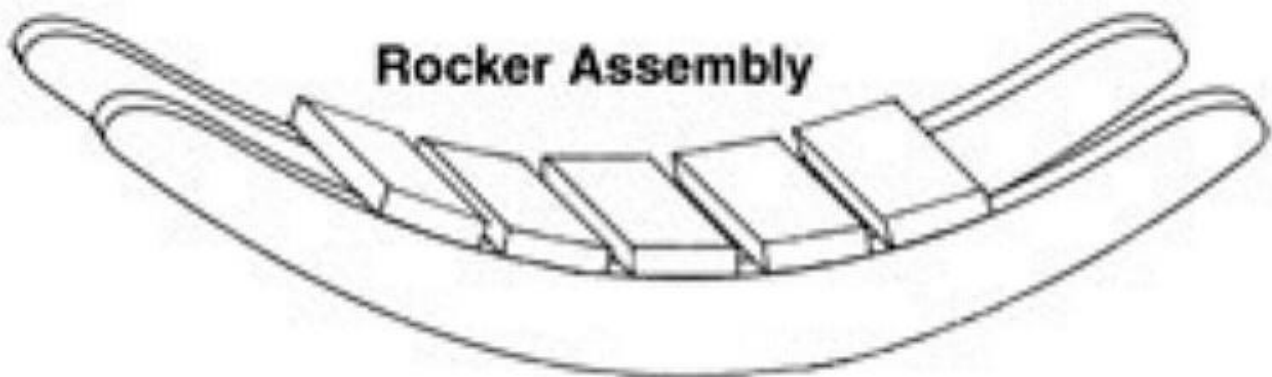
Step 1: After cutting out the rockers, clamp them together. File and sand them to match each other as closely as possible. Round the edges of the bottoms as much as you would like. For the tops of the rockers, gently round the edges so they are not sharp, but allow the rest to remain essentially flat. The rocker reinforcement strips will be attached in this area.

Step 2: You will need five 3" x 5/8" x 12" rocker reinforcement strips. To get them, cut out three 3" x 1 1/2" x 12" pieces from the 2" x 10". Then, rip each of these pieces in half. Gently round the edges of these pieces, and sand them well. Pre-drill a 3/8" countersink hole in the center of the ends of each these boards, about 3/4" from the edge.

Step 3: Mark the top center of the two rockers. Then, place marks 1/2" to both sides of the centerline on each rocker. This defines the area where the first reinforcement strip will be attached.

Step 4: Spread the rockers 12" apart and put the center reinforcement strip in place. Make any adjustments necessary for a good fit, then glue and screw the strip in place on both rockers. Use 1 3/4" #8 screws. Measure between the rockers at the front and back. Make adjustments as necessary until the two measurements are the same.

Step 5: Using a couple of 1/8" thick pieces of scrap as spacers, install another strip 1/8" behind the first. Do the same in front of the center strip. Finally, install the two outer strips in the same manner.



## Assembling the Legs

The legs of this rocking horse are 2" x 1½" x 10¼". They are screwed to mounting blocks which, in turn, are screwed to the seat. On the rocker end, screws pass from underneath through the reinforcing strips just next to the rockers and into the legs.

Step 1: If you haven't already, cut out the wood for your legs. You will need four pieces, 2" x 1½" x 10¼". Also, you will need to cut out the mounting blocks to which the legs will attach (see illustration below). Don't round the edges of the legs yet. You'll do that after they are assembled. Both of the leg assemblies are constructed in the same way.

Step 2: Align the tops of two of the legs with the top of a support block as illustrated (at right). Use glue and (2) 2½ #10 screws to attach each leg. After assembly, cut the excess wood off the top of the legs in a line with the top of the attachment block. Round the edges of the legs and attachment block and sand well.

Step 3: Using a block plane or an angled table saw blade, trim the top of the leg assembly to a slight angle (4 degrees nominal). The exact angle is not critical—you just want to have the front legs extend forward and the rear legs extend rearward a bit so they look more natural

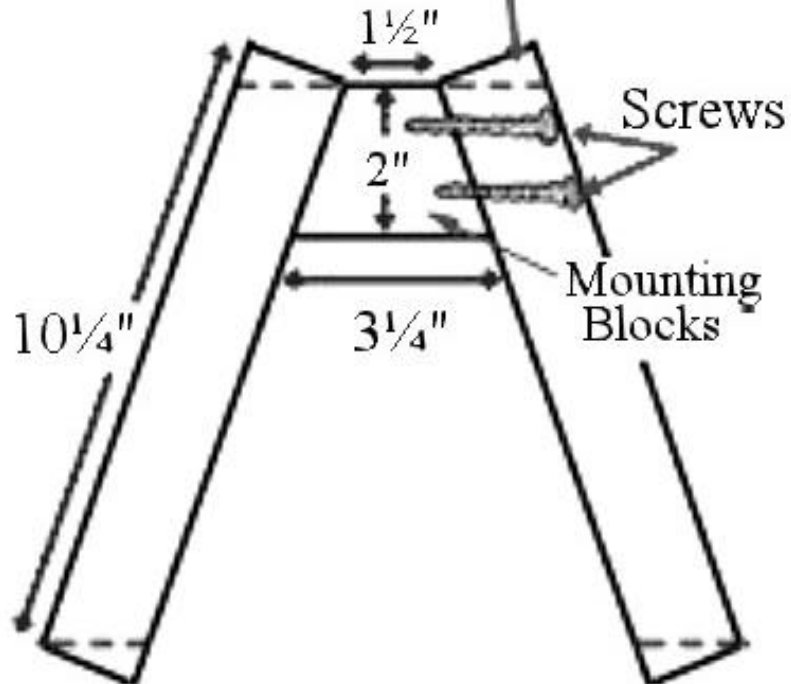
### **Side View**

Angle -  
about 4°



### **Front View**

Cut off excess  
after assembly.



Step 4: Repeat steps 2 and 3 for the other leg assembly.

Step 5: Drill pilot holes through the support block for the (2) 2½" #10 screws which will extend into the seat.

Step 6: Have a friend hold the seat assembly approximately in place over the rocker assembly. Put the legs in place between the seat and rockers so the feet are centered in the outside reinforcement strips of the rocker assembly, fore and aft. After you find the proper placement, pencil an alignment mark under the seat to indicate where the leg assemblies should be attached.

Step 7: Turn the seat over and, using your alignment marks, attach the legs in place with the screws. Don't use glue at this point, just in case you have to make slight adjustments later to make everything line up just right.

Step 8: Place the horse on the rocker assembly. At this point the project will look like a rocking horse except for one thing--the legs won't properly fit against the rocker assembly. To determine the correct angle to cut the legs to fit, it will be necessary to scribe the legs. Do this as follows:

Set a divider or compass so the points are ½" apart.

Put one end of the divider against the reinforcement strip on the rocker assembly and the other against the leg.

Careful mark around the leg at an equal distance from the reinforcement strip (the divider will maintain the distance). You will magically scribe the exact lines necessary to cut the leg to fit.

Repeat the process for each leg.

Step 9: Using the marks you've made around the legs as guides, cut the bottoms off the legs.

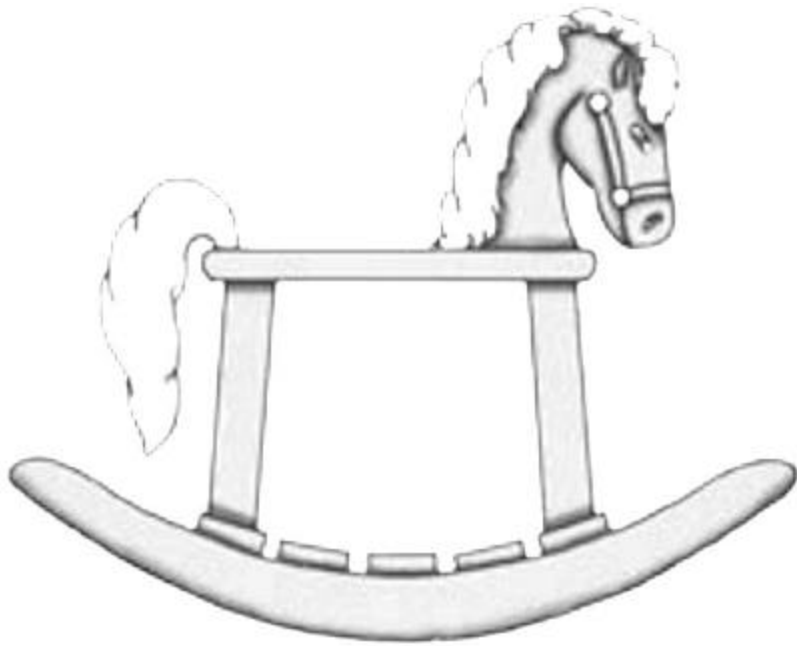
Step 10: Place the horse on the rocker assembly. It should fit fairly well. Make any necessary adjustments until you are satisfied with the fit. Remember, you didn't glue the leg assemblies to the seat bottom, so you can move them a little if necessary to get the correct placement on the rocker assembly. When everything is adjusted, detach, glue and reinstall the leg assemblies to the seat bottom.

Step 11: Put glue on the base of the legs and put the horse in place on the rocker assembly. Install screws from underneath, through the reinforcement strips and into the legs.

## **Tying Up the Loose Ends**

You may choose to paint the horse's jaw line, mouth, eyes and bridle or a nice bridle could be made from imitation leather material. Such a material would also be good to create a set of soft, free-standing ears.

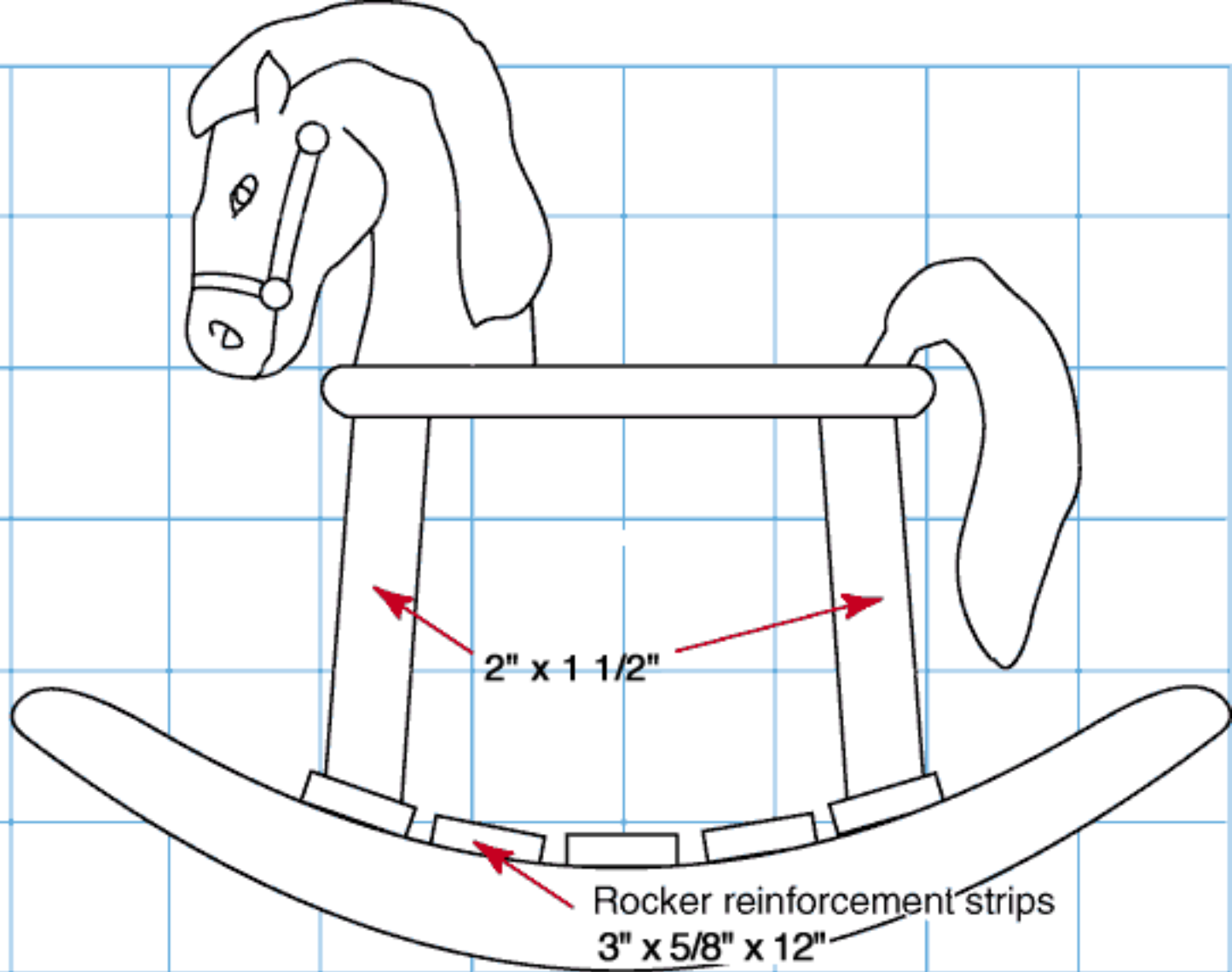
When finishing your rocking horse, keep the mane wrapped in masking tape and use care in the areas where the rope meets the wood. The tail can be added after the finish is applied. To make the tail, glue and tightly bind six 12" pieces of soft nylon rope (5/8" diameter) together at one end using string or yarn. After it has dried, glue the bound end into the hole previously drilled for the tail. Again, allow the glue to dry. Unravel the braids, comb it out and trim as desired.



## **Finishing Hints**

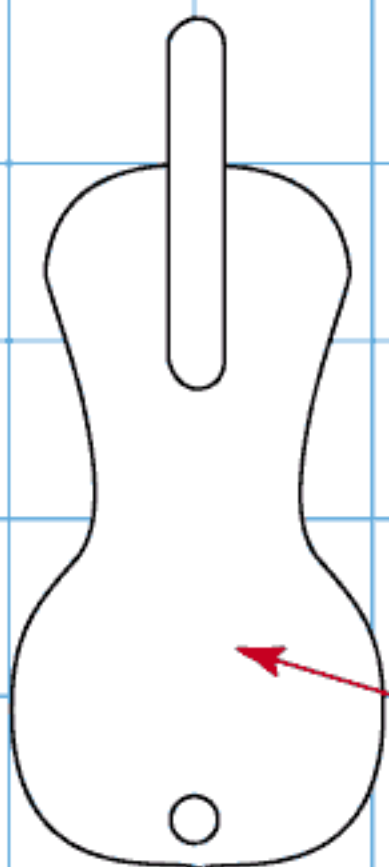
Finish your rocking horse with any non-toxic finish. The horse can be painted, but the natural beauty of wood lends itself to mimicking a horse's coat. Darker finishes contrast well with a stark white main and tail. Before applying the finish, rub down the project with a tack cloth to remove any sawdust.



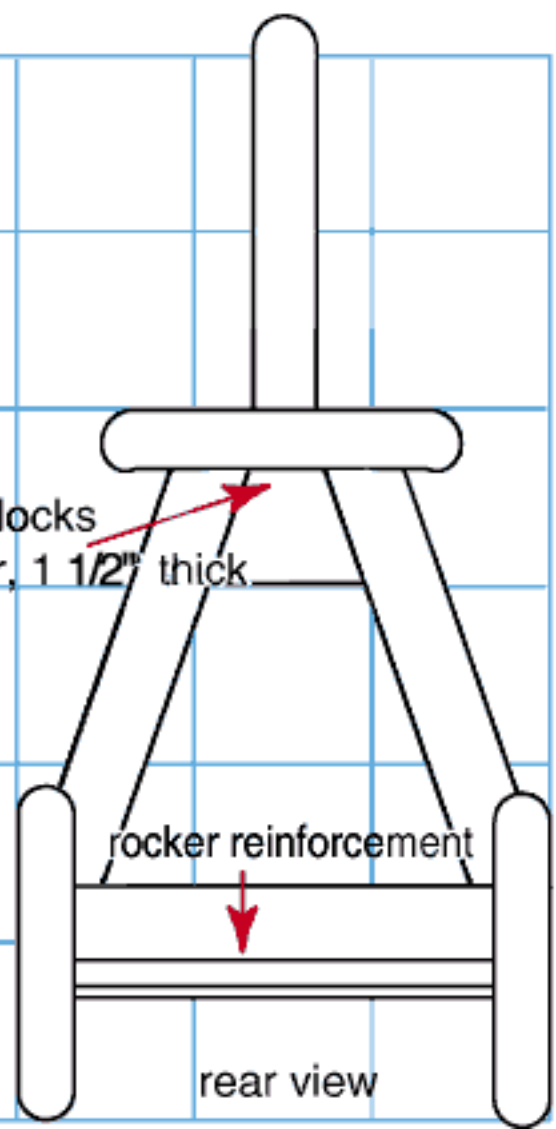


## Basic Layout

Scale: 1 block equals 4"

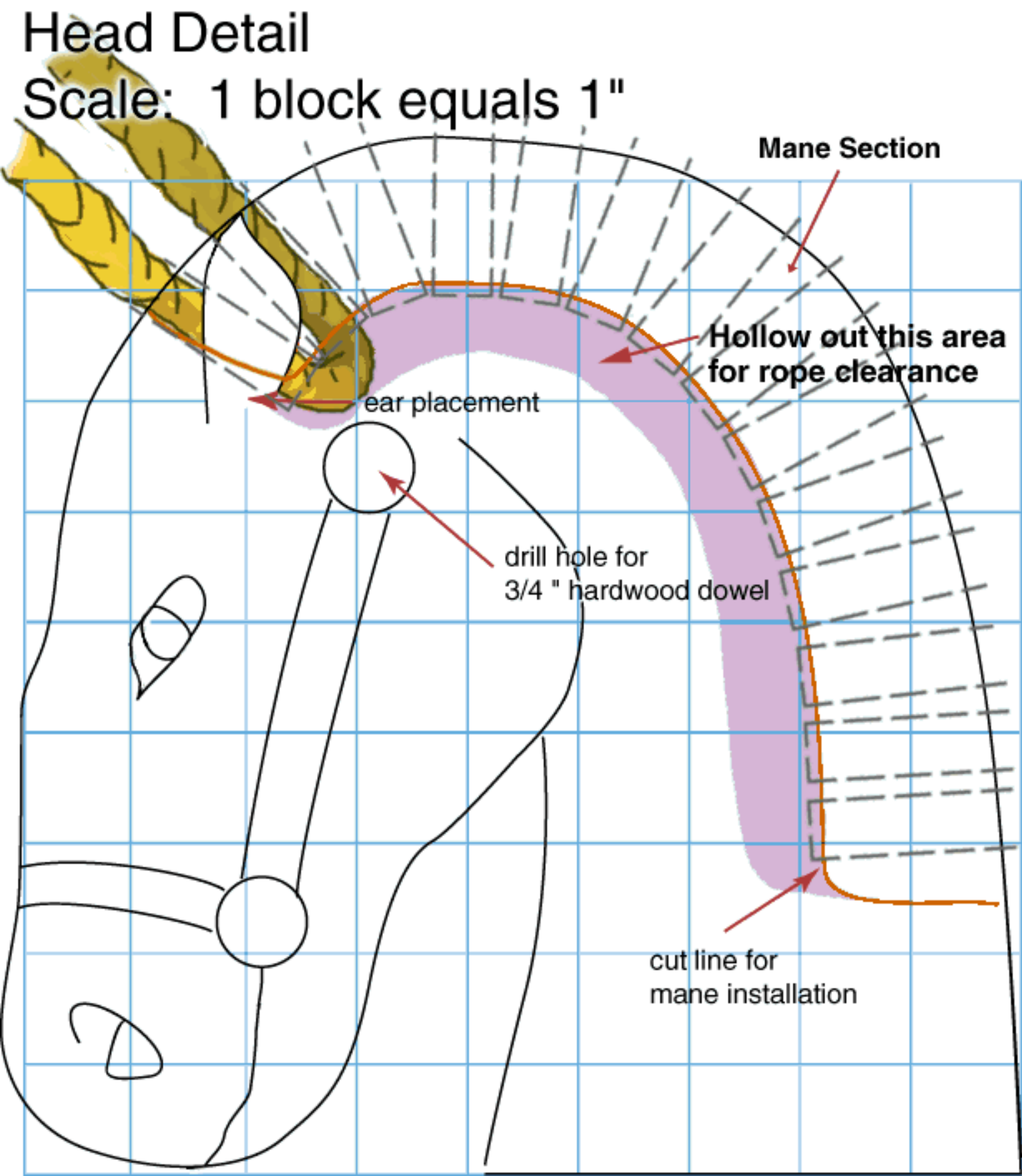


leg support blocks  
front and rear, 1 1/2" thick



# Head Detail

Scale: 1 block equals 1"



Mane Section

Hollow out this area  
for rope clearance

ear placement

drill hole for  
3/4 " hardwood dowel

cut line for  
mane installation