Tomato Trellising System

This system is based upon several foundation dimensions which can be varied according to individual needs but all the parts have to be able to fit together proportionately.

First, I do an immense amount of in-ground composting in the fall using manure, shredded leaves from lawn mowing and grass clippings, tilling it all in. This provides not only the nutriments needed for the next years growth, but also the necessary tilth for creating modified raised beds and early spring soil workability.

In the spring, I till again and using a furrower put in rows. I make them wide and deep enough to reach down to the untilled soil below. I then rake the soil level between the rows. This in effect creates raised beds. This makes it so that I can use the rows not only to irrigate, but also as foot paths to weed and tend without ever stepping on prepared soil. When irrigating, the water fills to the brim and waters laterally.

With the 4 foot wide raised beds constructed, I can begin the trellis system.

In order to get a maximum yield in a minimum of space, I plant the tomatoes 2 feet apart in rows 4 feet apart as follows:

In this illustration you can see the rows (the grey lines), the green boxes (t-posts) and some companion planting in the tomatoes. Notice also that there are cucumbers at the end of the trellis system. Posts are shown here in the rows but will actually go in the beds.
Here are the finished beds, rows and planted tomatoes with cut worm protectors:

The young tomatoes may be allowed to grow and root while you begin to prepare the trellises. Mulching can also begin.
The trellises are made out of 6 foot cedar dog-ear fence boards. I rip them so that the dog-eared sections can be used to construct the verticals and the 6 foot sections can be used for the horizontals using the following plan:

The fence boards are 5 ½ inches wide so I rip 4 strips 1 ¼ wide. I lay the strips out in either a 4 x 6 or 5 x 6 x 1 foot grid, drill the centers where the strips cross, nail with small 2 inch nails, turn the grid over and bend the nail back into the wood. T-posts are the heavy duty type, 7 feet long, with 2 feet pounded into the ground and 5 feet left to stick up. I use garden wire to attach the fence to the posts. Here is what they look like installed:

Now comes the fun part. The tomatoes hit the tops of the racks very fast.
I use concrete reinforcing wire, which comes in 5 x 7 foot sections at Home Depot. I attach them in an arc from row to row, 1 foot down on each side, using plastic ties. Pre-bend them a little before attaching to ease installation. A tie is circled in the photo.
Then just go down the row and install the sections clipping them to each other as you go.

Now you have another 3 to 4 feet of vertical.
And there is over 6 feet of headroom to walk down between the rows to tend and harvest.

Finally, the plants grow 3 feet above the arc to about 9 feet total, over the top and down the other side, and continue to over 14 feet until the frost finally stops them. This system will support a very large crop of hundreds of pounds of tomatoes resisting high crop weights, winds and rain while allowing maximum accessibility and providing some magic in the garden.