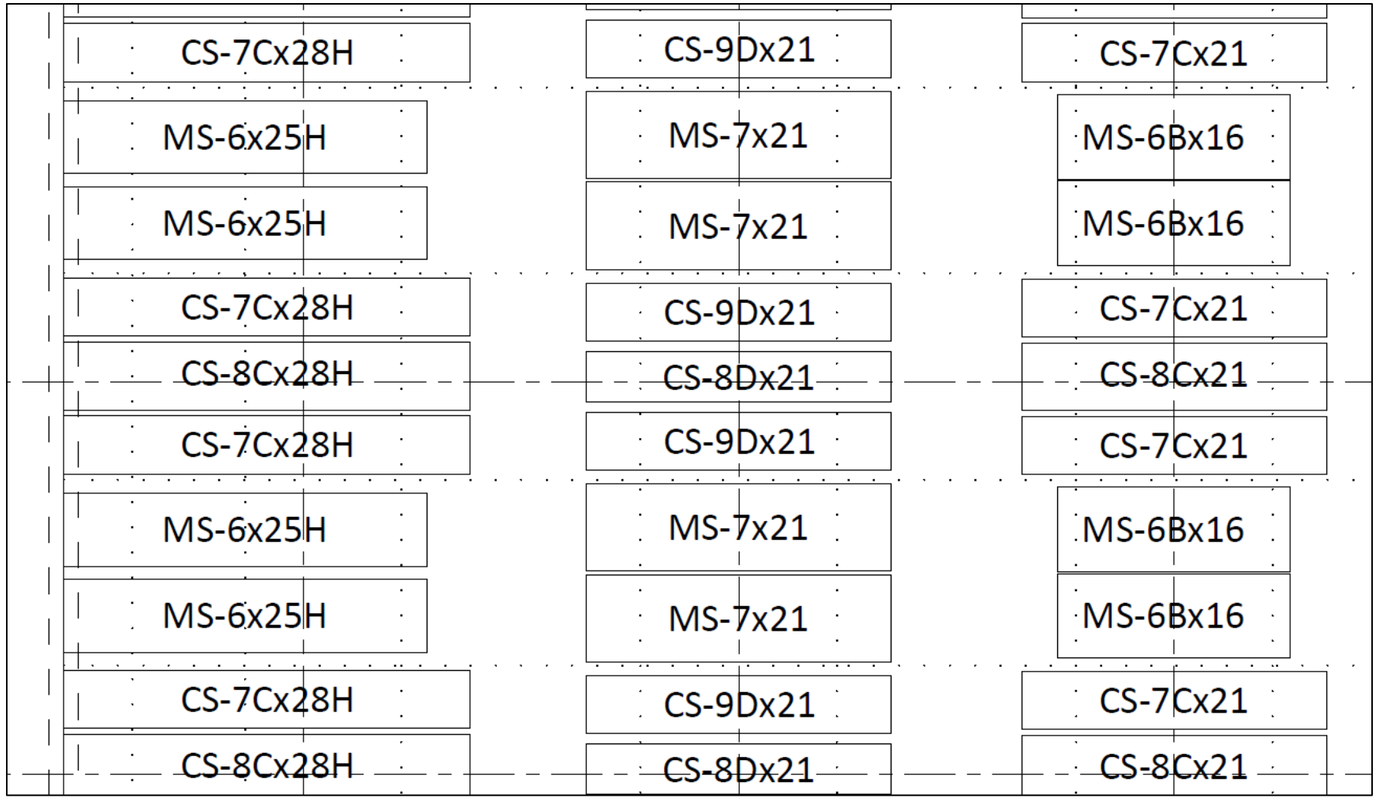
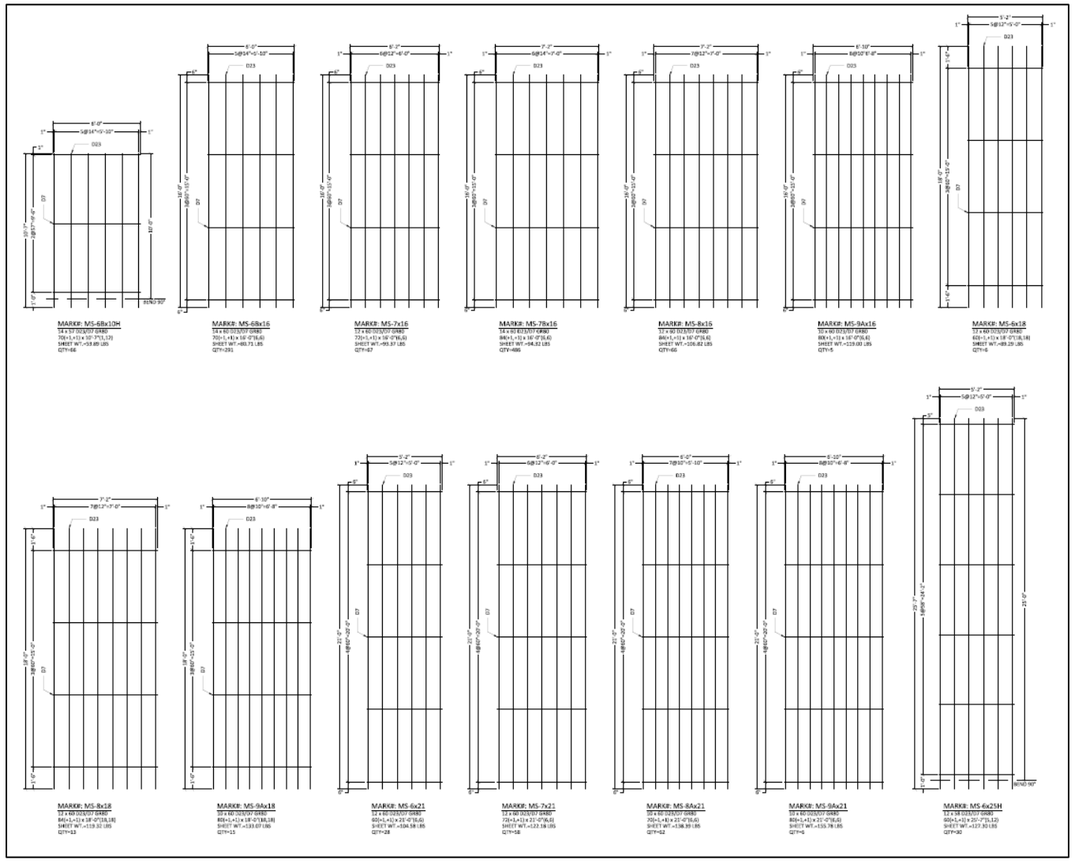
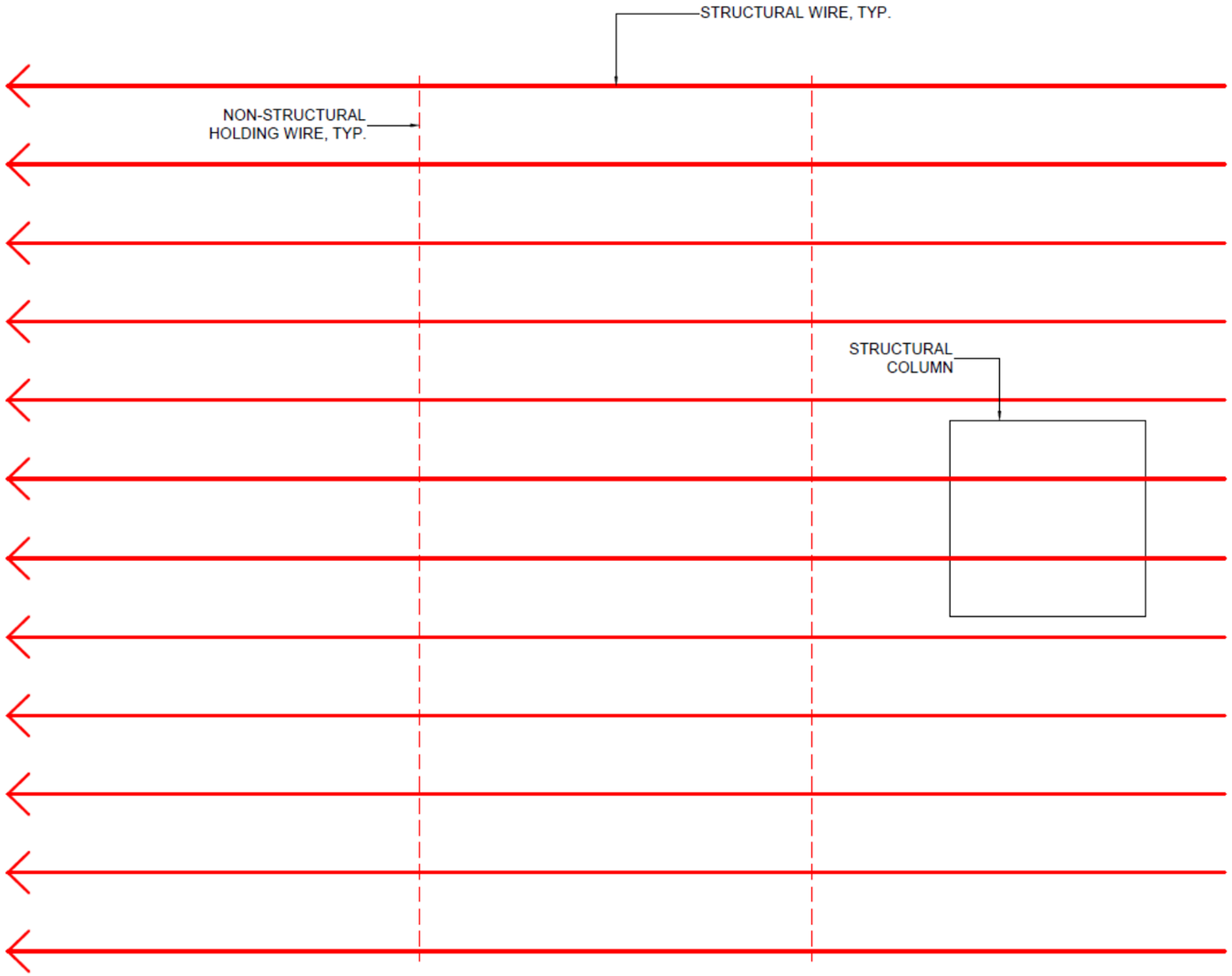
This illustrative guide is intended to provide to the design and construction professional a simplified view of welded deformed wire reinforcement (WWR) mat placement in elevated two-way flat slab structural applications.

The example used here is based on WWR mat placement relative to an interior structural column location.



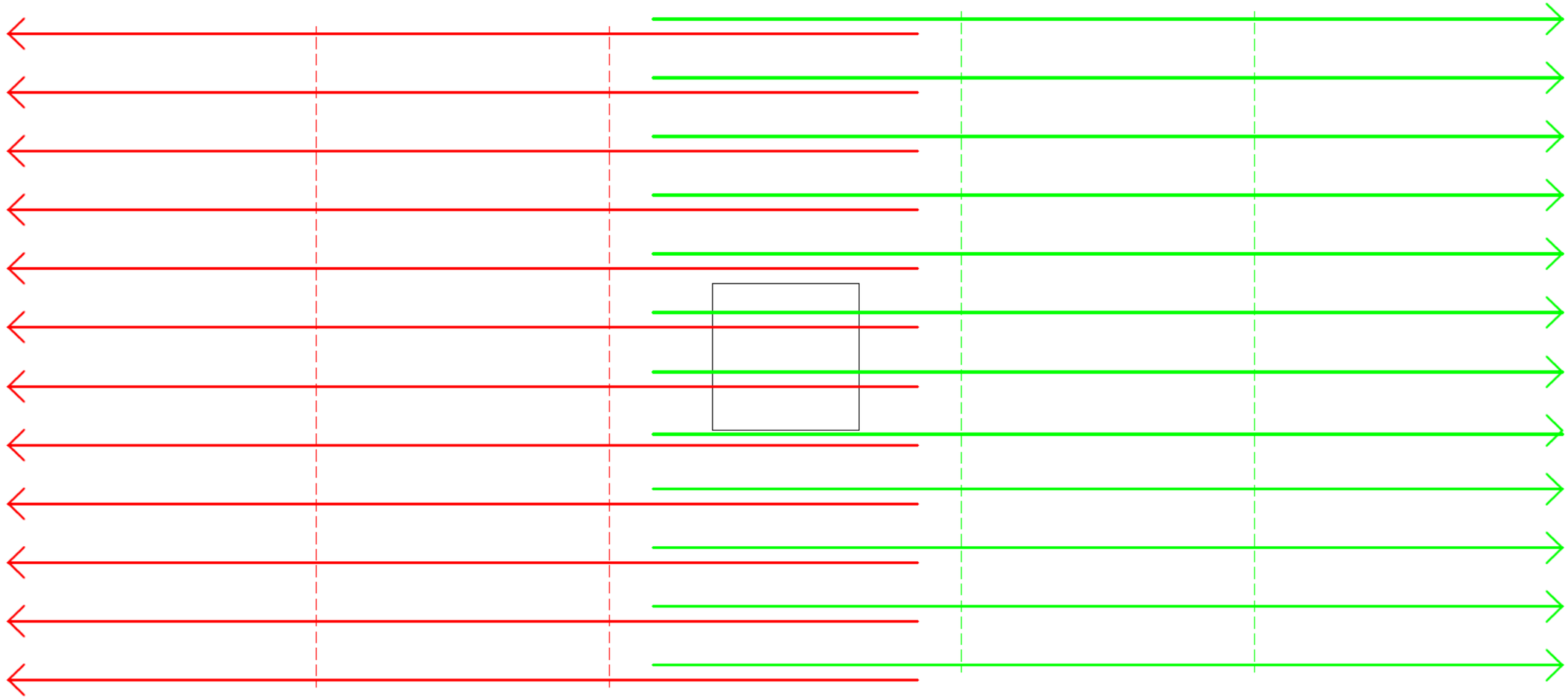


Excerpts from a manufacturer's WWR placement and shop drawing submittal



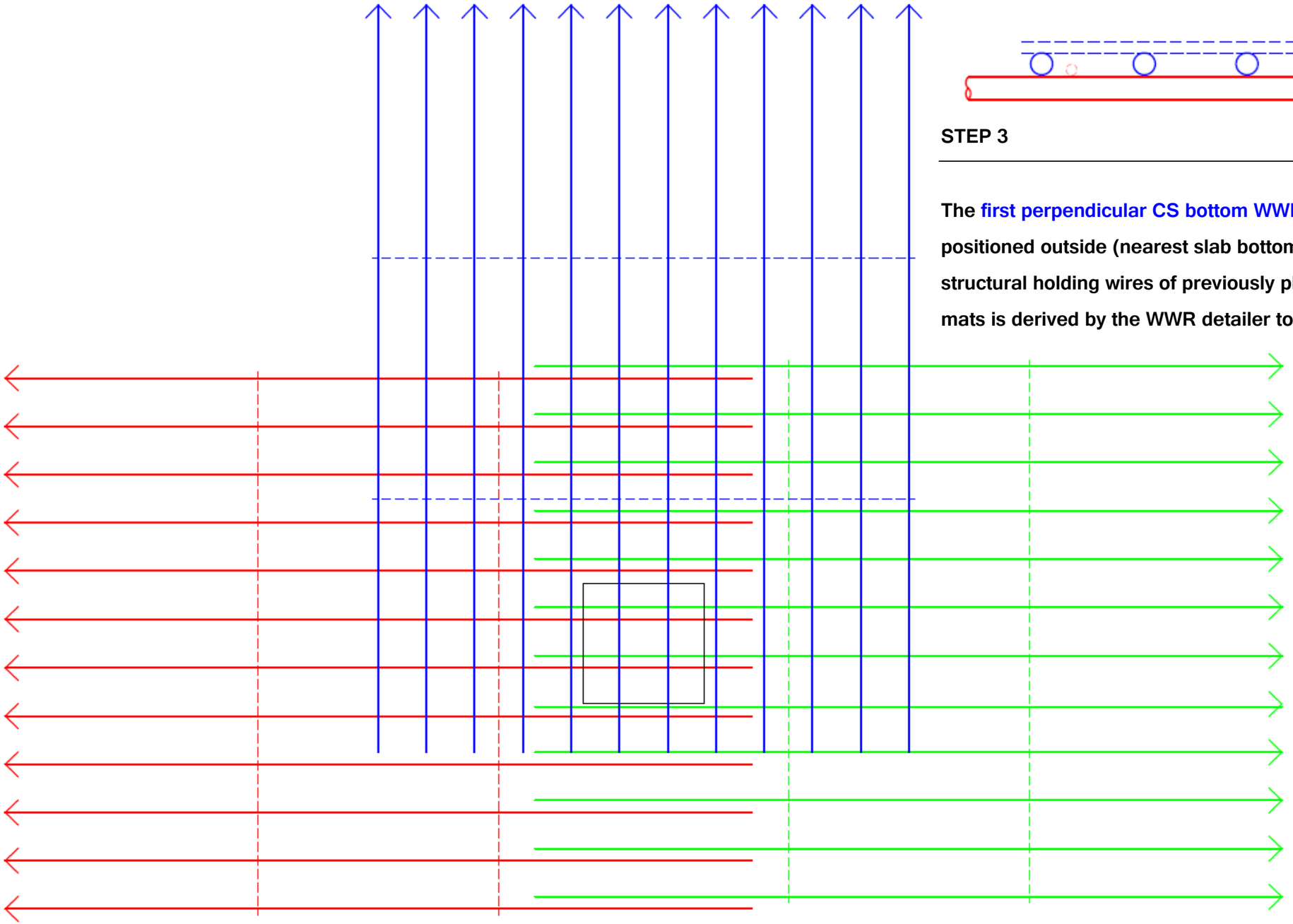
STEP 1

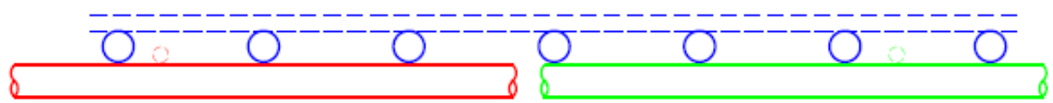
The Column Strip (CS) bottom WWR mat is placed. Structural wires positioned outside (nearest slab bottom form surface). As a result, non-structural holding wires are positioned inside.



STEP 2

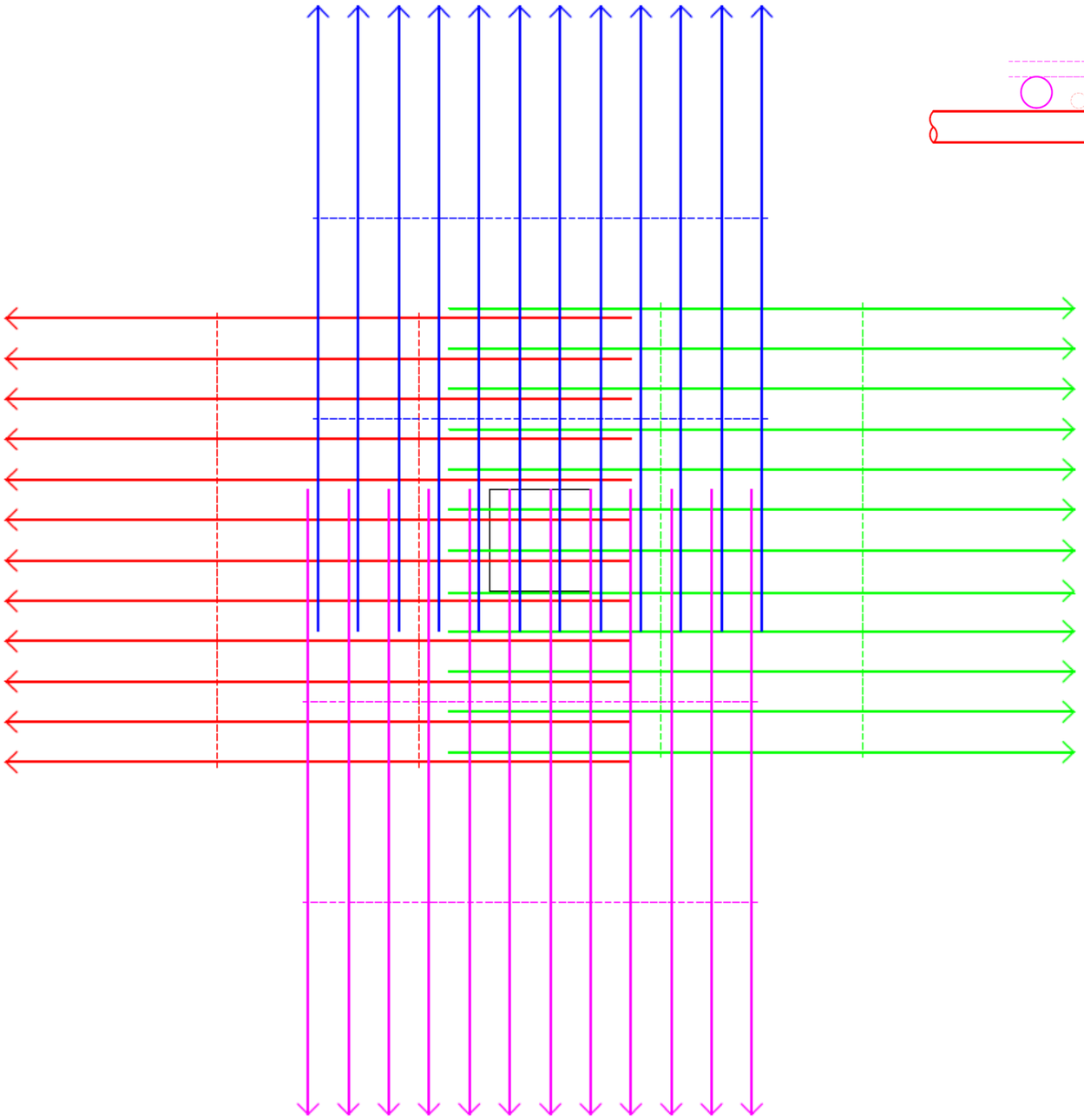
The second CS bottom WWR mat is placed. As with the first mat, the structural wires are positioned outside (nearest slab bottom form surface). As a result, non-structural holding wires are positioned inside. Co-planar lap splice of structural wires is achieved without conflict/collision.

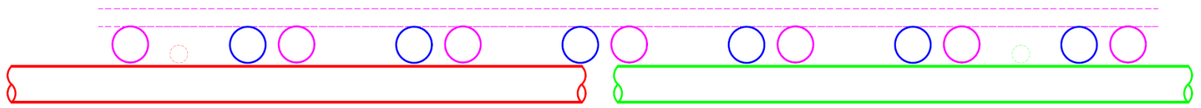




STEP 3

The first perpendicular CS bottom WWR mat is placed. The structural wires are positioned outside (nearest slab bottom form surface), and co-planar with non-structural holding wires of previously placed mats. Holding wire alignment on WWR mats is derived by the WWR detailer to avoid conflict/collision with structural wires.

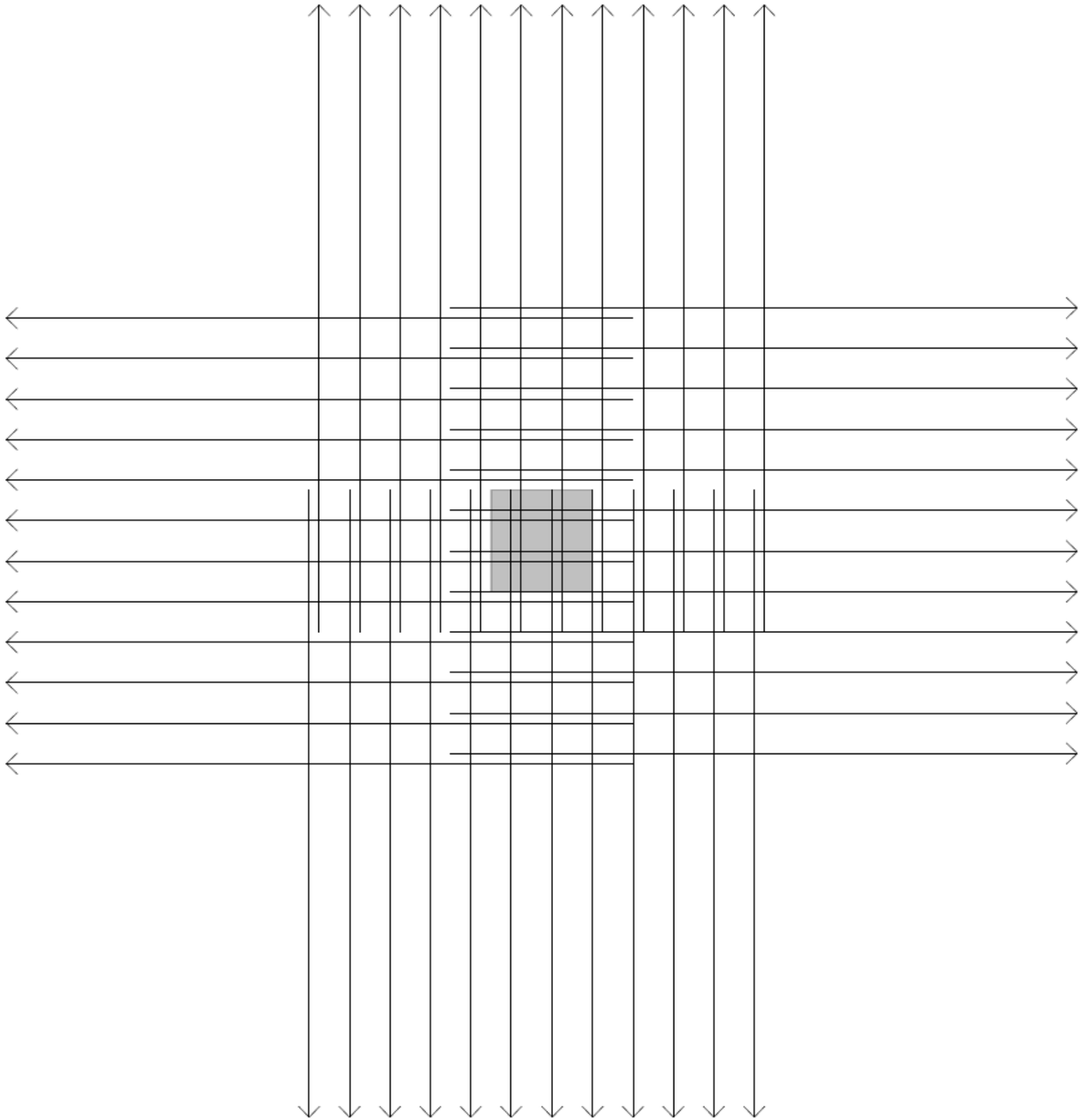




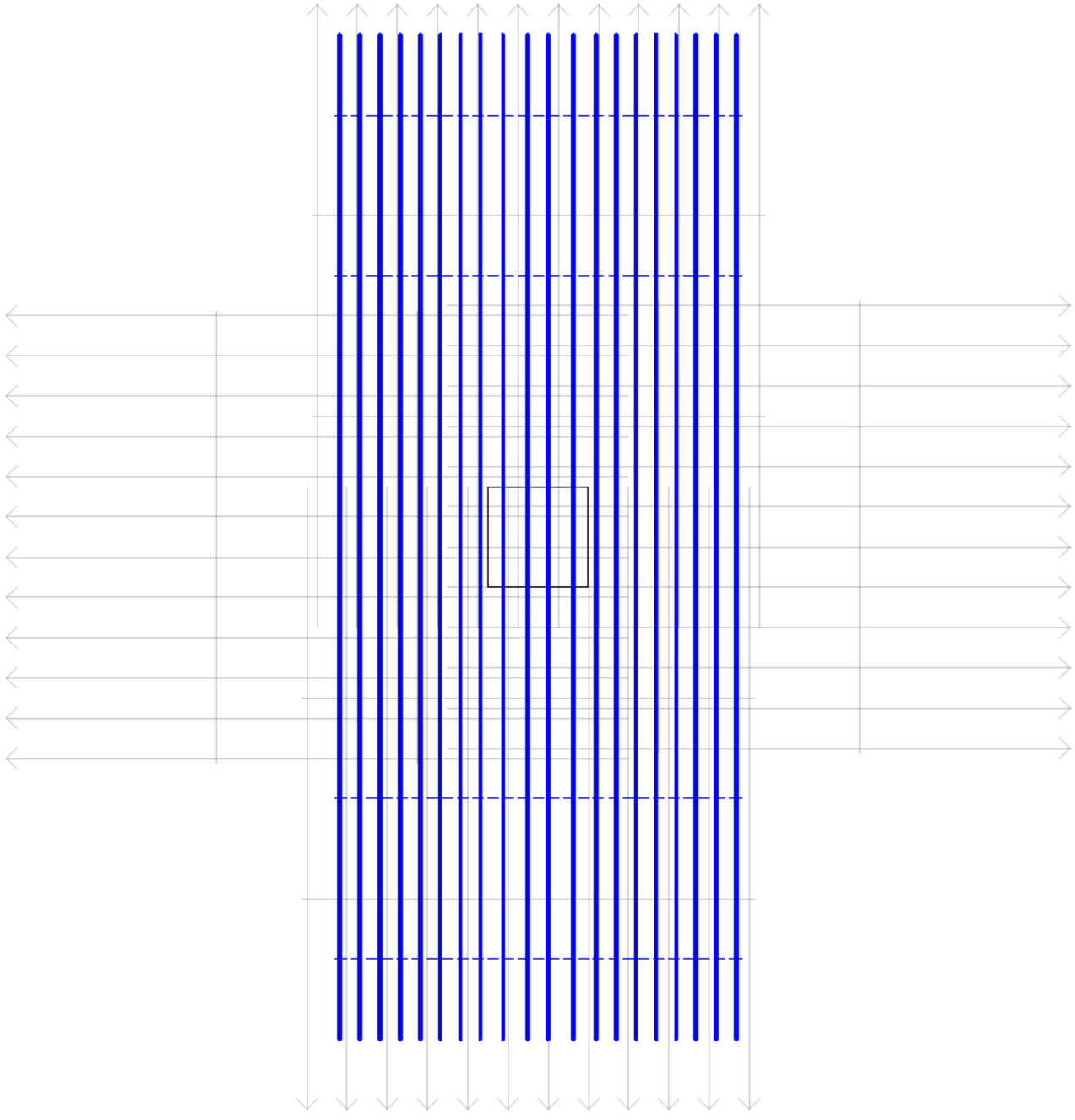
STEP 4

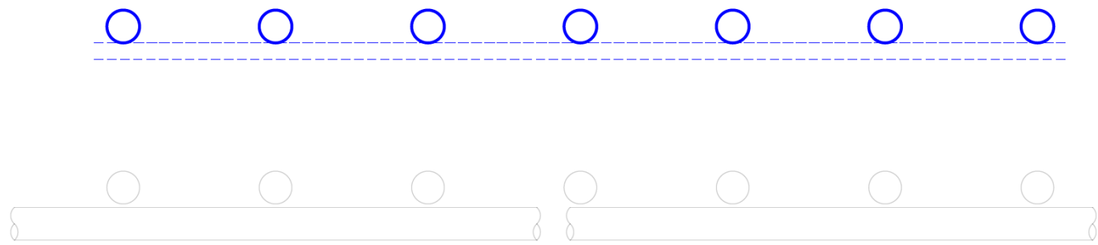
The second perpendicular CS bottom WWR mat is placed. As with the previous mat, the structural wires are positioned outside (nearest slab bottom form surface). As a result, non-structural holding wires are positioned inside. Co-planar lap splice is achieved without conflict/collision.

Notice that, even though holding wires end up co-planar with structural wires in the "finished assembly", the plan alignment of holding wires that is derived by the WWR detailer avoids conflict/collision.



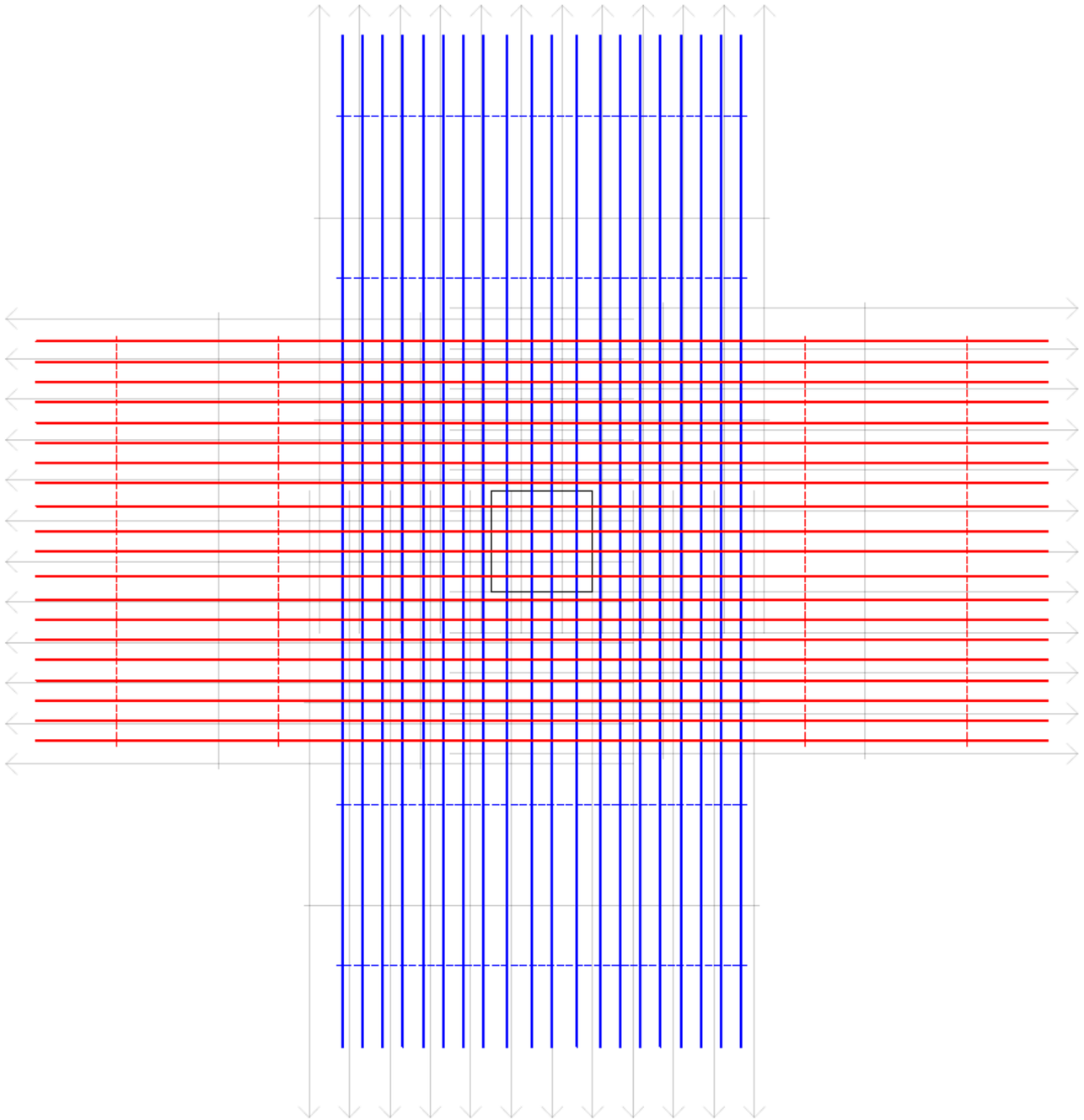
The resulting layout of structural WWR wires is shown here (holding wires illustratively omitted). Identical to installation of individual, loose pieces of reinforcing steel, the configuration consists of two *layers* of structural reinforcement.

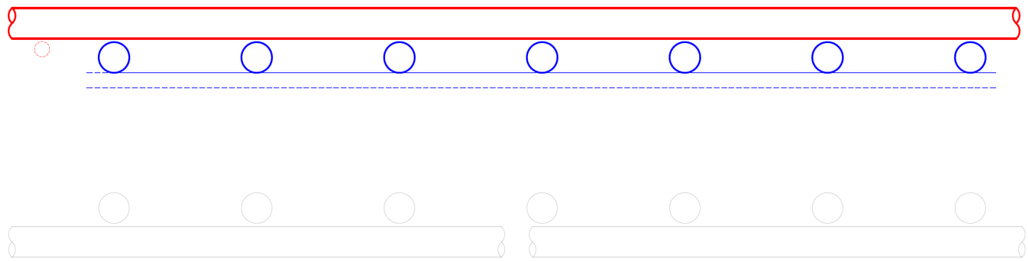




STEP 5

The first CS top WWR mat is placed with the structural wires occupying an outside (nearest to top surface of slab) position. As a result, non-structural holding wires are located at an inside position.





STEP 6

The second CS top WWR mat is placed with the structural wires occupying an outside (nearest to top surface of slab) position. As a result, its non-structural holding wires are located at an inside position that is co-planer with the previously placed structural wires.

Holding wire alignment on WWR mats is derived by the WWR detailer to avoid conflict/collision with structural wires.