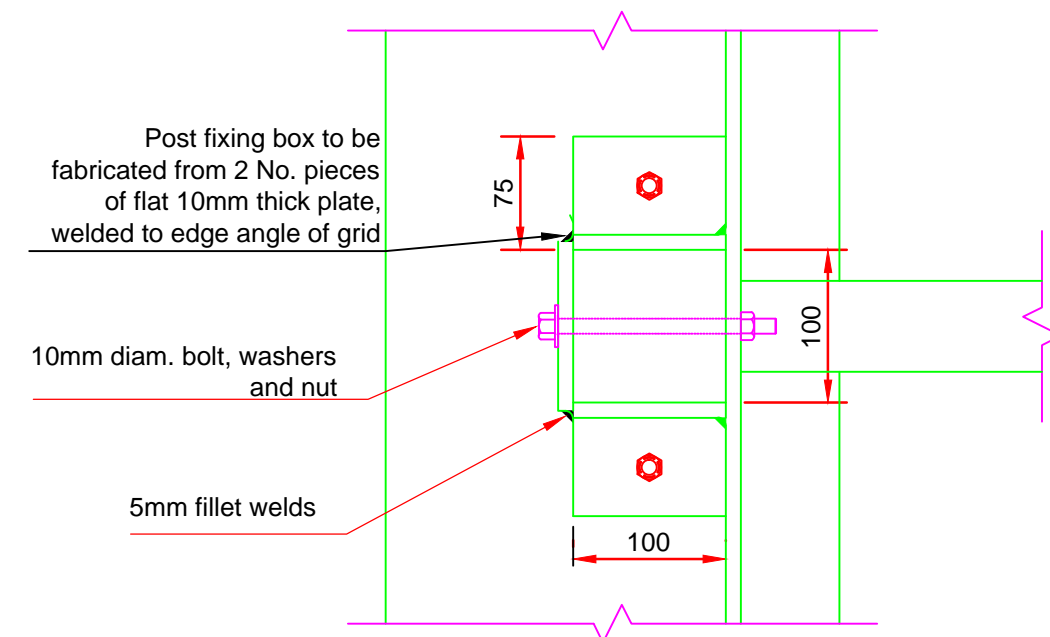


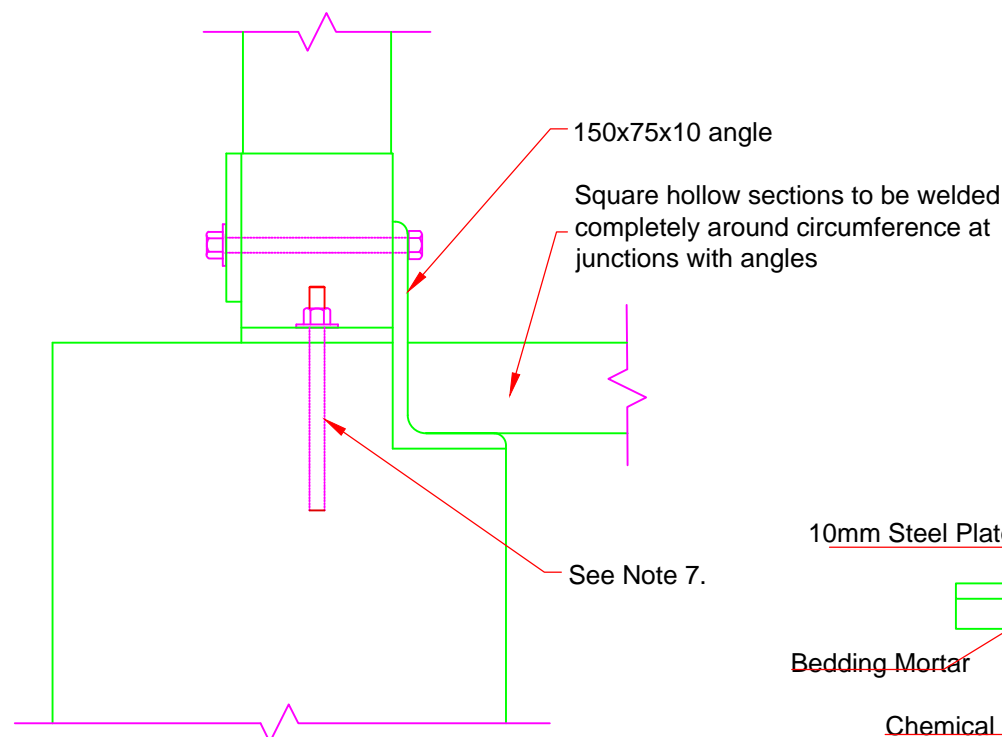
# Notes

- Grids to conform to BS4008:2006.
- All dimensions are in millimetres unless stated otherwise.
- Concrete to be grade C32/40.
- Reinforcement shall be high yield steel reinforcement bars Grade B500B or B500C conforming to BS 4449:2005.
- Cover to reinforcing steel to be a minimum of 50mm unless otherwise stated.
- The cattle grids are to be set longitudinally to the mean carriageway gradients
- Each post support to be fixed to concrete base using 2no. unifix insitu fixing bolts M12 dia x 110mm and tapered washers or similar.
- All steel work except reinforcing steel bars and mesh is to be hot dip galvanised to BS EN ISO 1461:1999 min 100µm. Any galvanised areas damaged by welding are to be treated with an approved galvanising paint.
- M12 'Lieberg' chemical anchor bolts or similar, at centres shown on plan of grid & Section B-B are to be used to secure the fixing straps to the walls. Minimum embedded anchor length - 110mm. Torque of 25Nm to be checked after 24 hours and 7 days to the above torque.
- All hollow sections to be 60mm x 60mm and 8mm thick and of steel Grade S355J2G3 to BS EN 10025.
- Side angles parallel to road are to be 150x75x10mm.
- End angles at right angles to the road are to be 75x75x10mm.
- Web stiffener plates (130x40x10) are to be welded to the hollow sections using fillet welds. (5mm in size)
- Steel fixing strips on grid to be bedded on polyester resin bedding mortar (PY4 & PY5 by Instarmac or similar).
- 12mmØ holes to be drilled in top edge of end angles at 500 c/cs.
- All welds to be 5mm fillet welds unless otherwise stated.
- All fixing bolts to be cut 10mm above 'Nyloc' nuts.
- End walls to be cast in one full height after the grid is anchored to the support walls.
- Drainage outlets to be sleeved through concrete side walls and connected to existing drainage syatems where possible.
- Cattle grid to be selected from the following table -

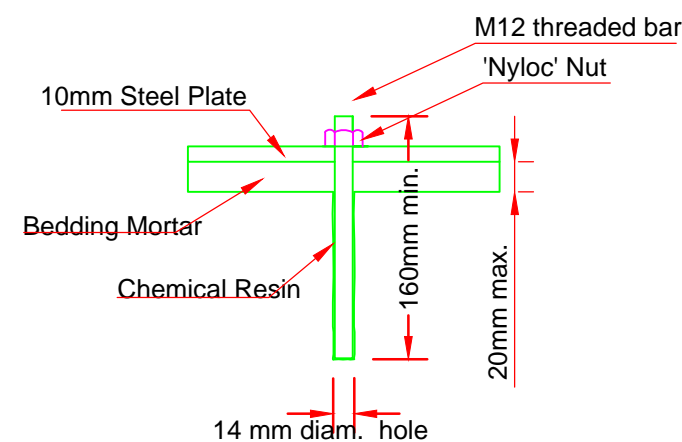
	Single Grid			Double Grid	
Road Width - W1	3.5	4.0	4.5	5.0	5.5
Grid Width - W2	3.6	4.1	4.6	5.1	5.6



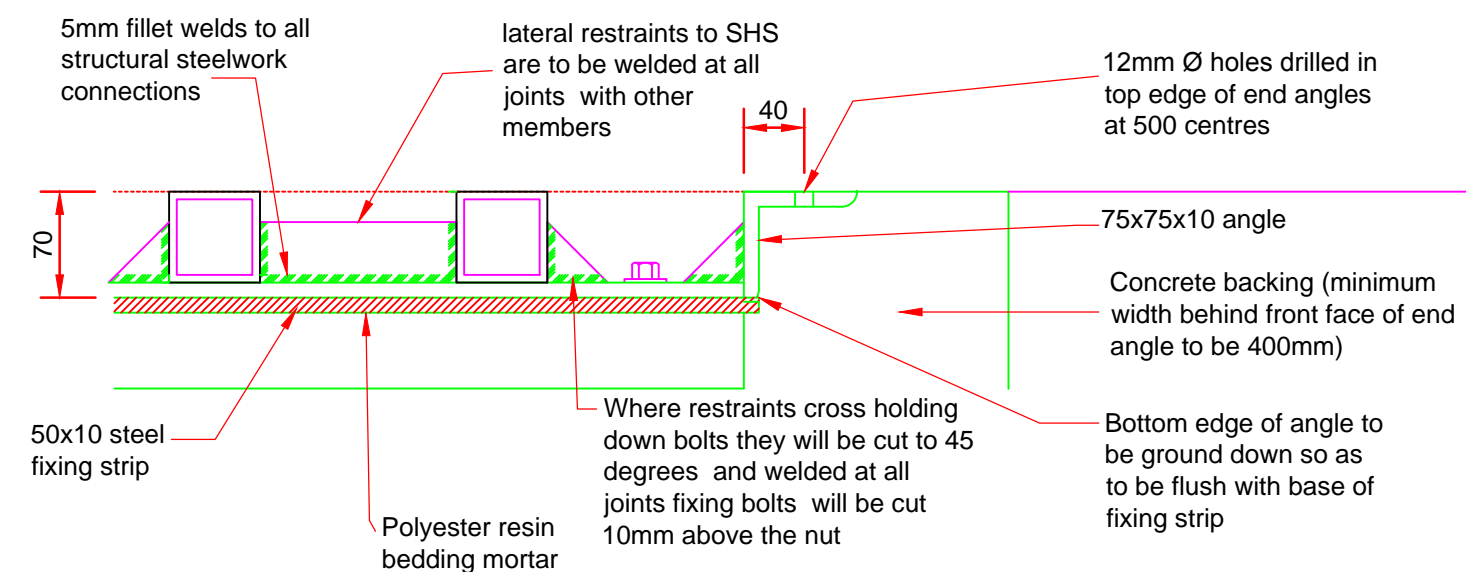
**Detail of Post Fixing Box**  
Scale 1:5



**Detail 'A'**  
Scale 1:5



**Fixing Anchor Bolt Details**  
Scale 1:5



**Detail of Lateral Restraints**  
Scale 1:5



## Standard Detail Cattle grids - Notes and Details

Version	Amendment	Date
Checked By: TRE	Drawing Number: SD-1800-03	Version: -
Date Issued: Oct 16		