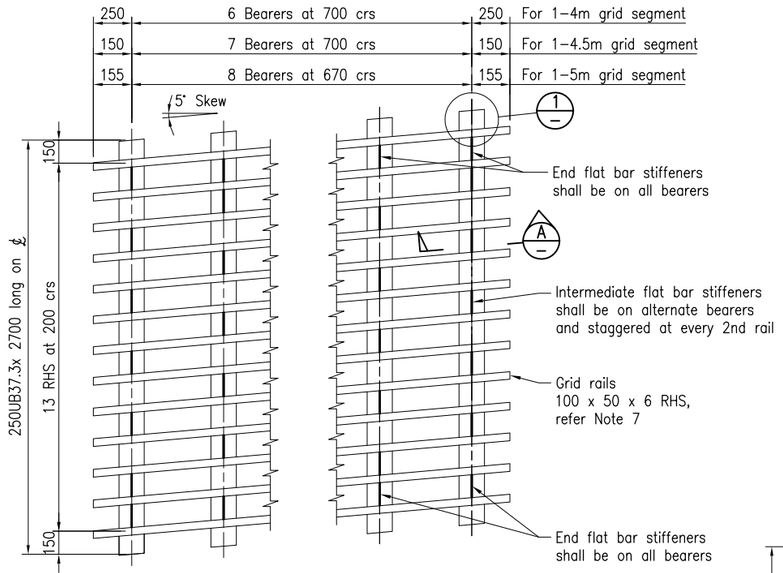
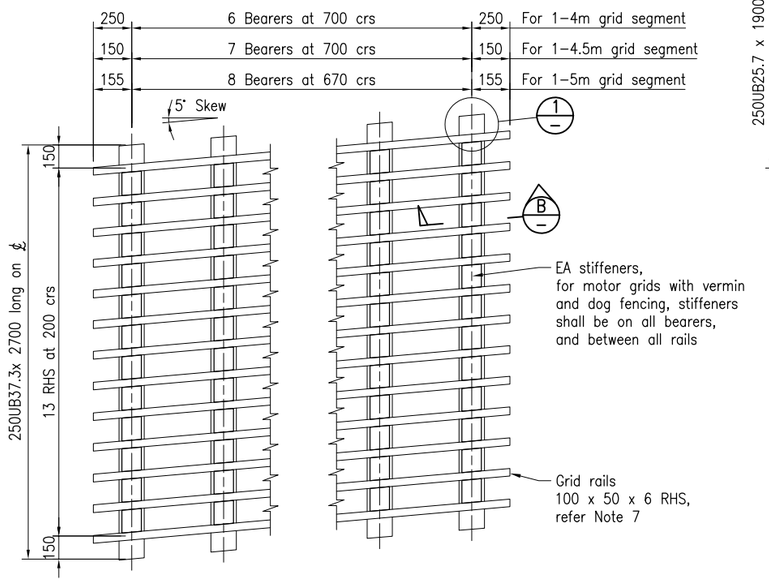


2.7m SPAN – GRID SEGMENT FOR STANDARD MOTOR GRIDS

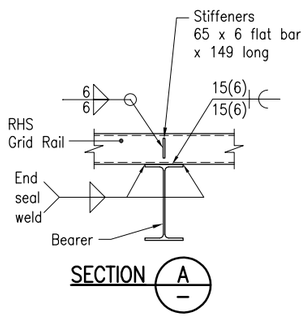
Typically used for larger animals like cattle



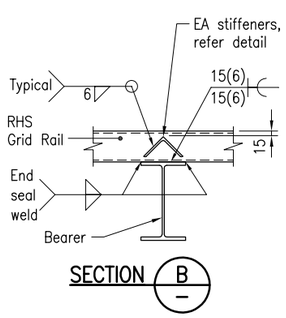
2.7m SPAN – GRID SEGMENT FOR STANDARD MOTOR GRIDS

With Vermin and Dog Fencing

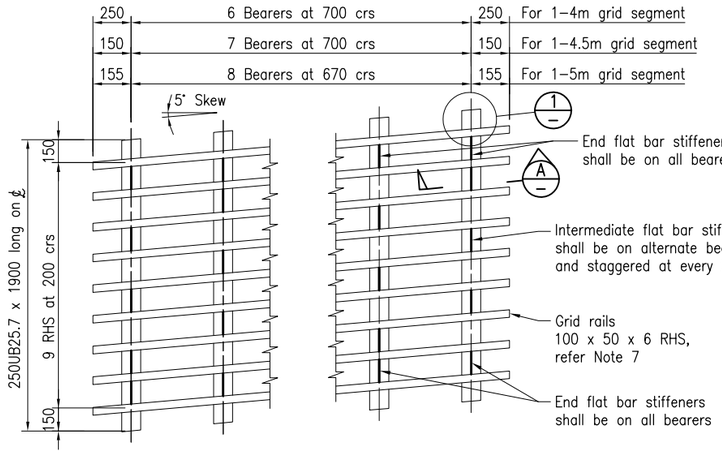
– refer SD 1353 for Vermin and Dog Fencing details



SECTION A

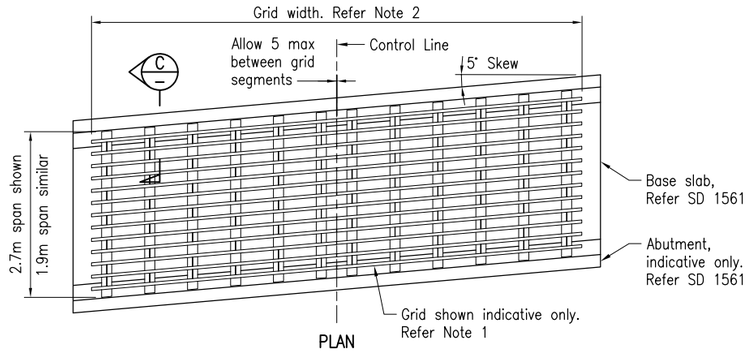


SECTION B

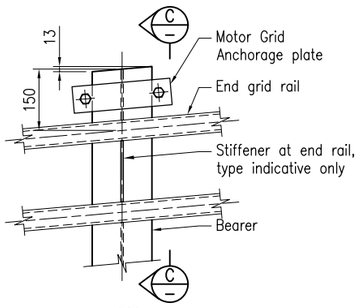


1.9m SPAN – GRID SEGMENT FOR STANDARD MOTOR GRIDS

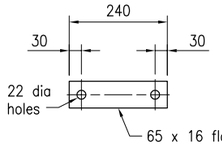
Typically used for smaller animals like sheep



TYPICAL GENERAL ARRANGEMENT – GRID SEGMENTS

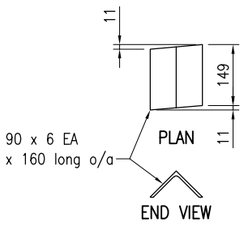


DETAIL 1



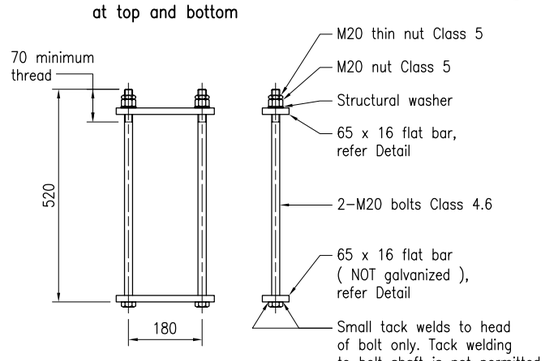
TYPICAL DETAIL ANCHORAGE PLATE

at top and bottom



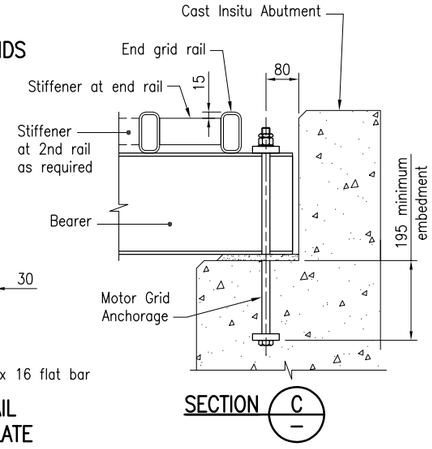
EA STIFFENER DETAIL

FOR GRIDS WITH VERMIN
AND DOG FENCING ONLY



MOTOR GRID ANCHORAGES

One at each end of bearers



SECTION C

NOTES:

1. This Standard Drawing shall be read in conjunction with Standard Drawing 1561 for General Notes, Grid Construction Scenarios, General Arrangements for Motor Grids.
2. STANDARD SIZES OF GRIDS for normal installation are shown below.
   For other widths where specifically approved, the standard width may be varied, provided the bearer spacing does not exceed 700 and the rail overhang does not exceed 250.

STANDARD GRID WIDTHS

Formation width, m	Pavement width, m	Grid width, m	Grid segments to use
7.5, 8.0	3.5, 4.0	8.0	2–4.0m Segments
8.5, 9.0	6.0, 6.5, 7.0	9.0	2–4.5m Segments
greater than 9.0	6.0, 6.5, 7.0	10.0	2–5.0m Segments

STANDARD GRID SPANS for 1.9m or 2.7m only

3. DESIGN TRAFFIC LOADS : W80, A160, SM1600 and HLP400 to AS 5100.
   DESIGN CRITERIA : Technical Note 18 of Design Criteria for Motor Girds.
4. THE SIZE of the motor grid segments is to be as specified in the contract documents.
5. STEELWORK shall be fabricated to the requirements of MRTS78.
   RHS Grade C450LO to AS/NZS 1163.
   All Structural steel hollow section material manufactured to AS/NZS 1163.
   All Steel flat material manufactured to AS/NZS 1594.
   All Steel plate material manufactured to AS/NZS 3678.
   UB, angle and flat bar Grade 300 to AS/NZS 3679.1.
   Holding Down Bolts Class 4.6 to AS 1111.1, nuts Class 5 to AS 1112.1 and thin nuts Class 5 to AS 1112.4.
   All bolts and nuts shall be hot dip galvanised to AS 1214. All other steelwork shall be hot dip galvanised to AS/NZS 4680 unless shown otherwise. Prior to galvanising all weld splatter and welding slag is to be removed.
6. WELDING symbols conform to AS 1101.3 and all welding to AS/NZS 1554.1.
   All welds except location tack welds shall be SP category.
   Welding consumables for RHS shall be G493 to AS/NZS ISO 14341–B or T493 to AS/NZS ISO 17632–B.
   Welding consumables for all other structural steel shall be G49X to AS/NZS ISO 14341–B or T49X to AS/NZS ISO 17632–B unless shown otherwise.
7. HIGHER END of the RHS rail in each segment shall be closed with 4mm steel plate, sized to match, welded to RHS to prevent water entering.
8. DIMENSIONS are in millimetres unless shown otherwise.

ASSOCIATED DOCUMENTS:

Main Roads Standard Drawings Roads Manual
Main Roads Specifications and Technical Standards Manual
Manual of Uniform Traffic Control Devices (MUTCD)
Design Criteria for Motor Grids – Technical Note 18
Design Criteria for Bridges and Other Structures

REFERENCED DOCUMENTS:

Standard Departmental Drawings:

1561 Road Furniture – Motor Grid – General Arrangement
1353 Road Furniture – Vermin and Dog Fencing at Motor Grid

Departmental Specifications:

MRTS78 Fabrication of Structural Steelwork

Department of Transport and Main Roads

ROAD FURNITURE

MOTOR GRID – STEELWORKS

Queensland Government

A3

Not to Scale

Standard Drawing No 1565

Date 7/19

A | B