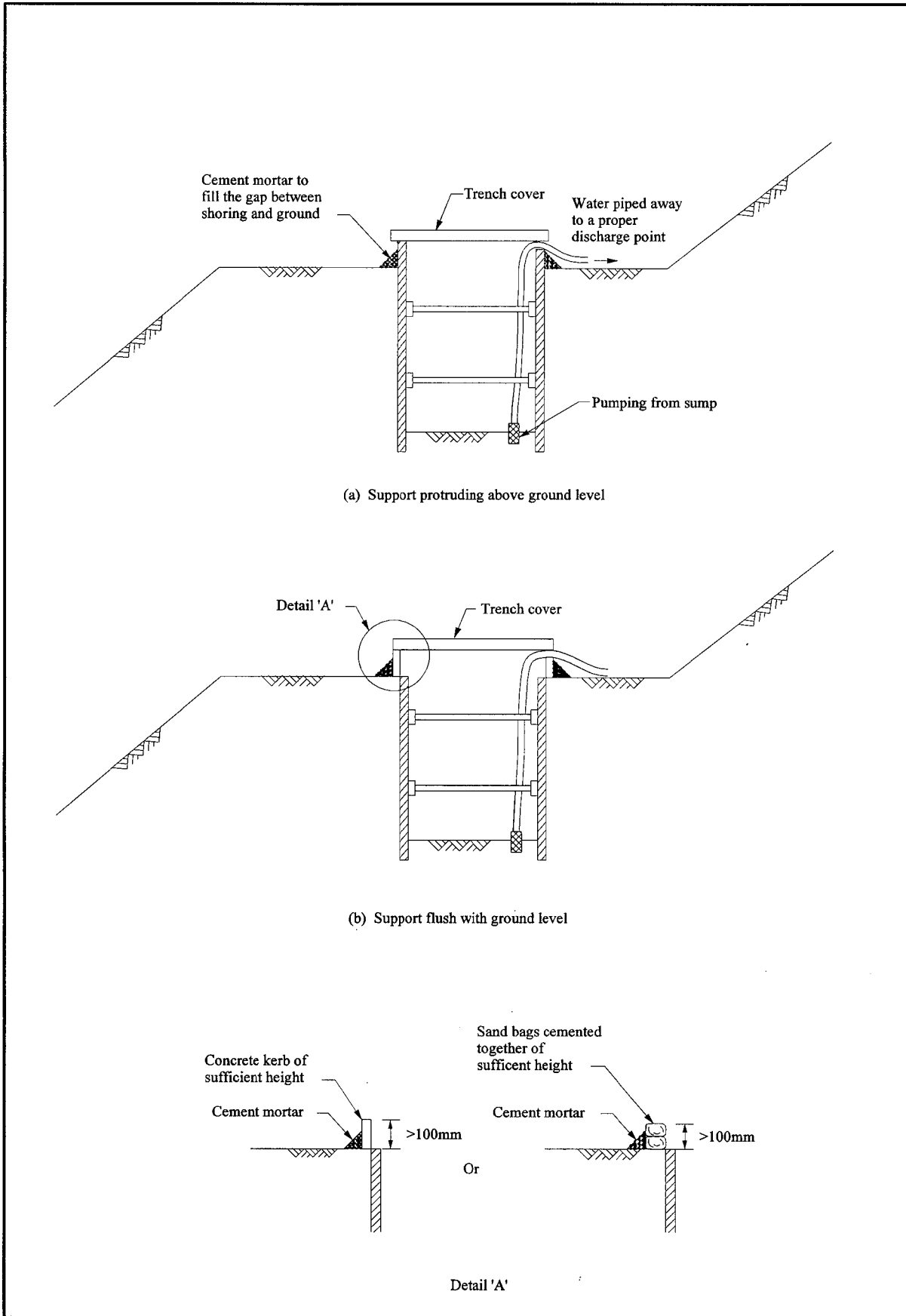


APPENDIX B : RECOMMENDED DRAINAGE MEASURES

	Page No.	
Figure B1	Suggested measures to prevent rainwater and surface runoff entering the trench	35
Figure B2	Typical vehicle crossing over trench opening for flexible pavement (Flush with road surface). (Reproduced from Highways Department Drawing No. H 6135A)	36
Figure B3	Typical vehicle crossing over trench opening for rigid pavement. (Reproduced from Highways Department Drawing No. H 6136A)	37
Figure B4	Typical arrangement of temporary pedestrian crossing over trench not exceeding 2000mm wide. (Reproduced from Highways Department Drawing No. H 1132)	38
Plate B1	Typical vehicle crossing over trench opening which is also effective for preventing surface runoff and infiltration of rainwater	39
Plate B2	Typical pedestrian crossing over trench opening which is also effective for preventing surface runoff and infiltration of rainwater	39
Plate B3	Sandbag upstand with fibre-glass cover to prevent surface runoff and infiltration of rainwater	40
Plate B4	Sheet piles protruding above ground with cement mortar wedge applied to prevent surface runoff	40
Plate B5	Timber support protruding above ground with cement mortar wedge applied to prevent surface runoff	41
Plate B6	Pumping provided	41
Plate B7	Tarpaulin cover secured against wind for wider trenches	42
Plate B8	Tarpaulin cover secured against wind for wider trenches	42



Note: For trenches up to 2m wide, upstands should be used together with rigid covers, e.g. fibre-glass or steel plate. For wider trenches, the use of tarpaulin sheeting properly secured against strong wind is acceptable.

Figure B1 - Suggested measures to prevent rainwater and surface runoff entering the trench

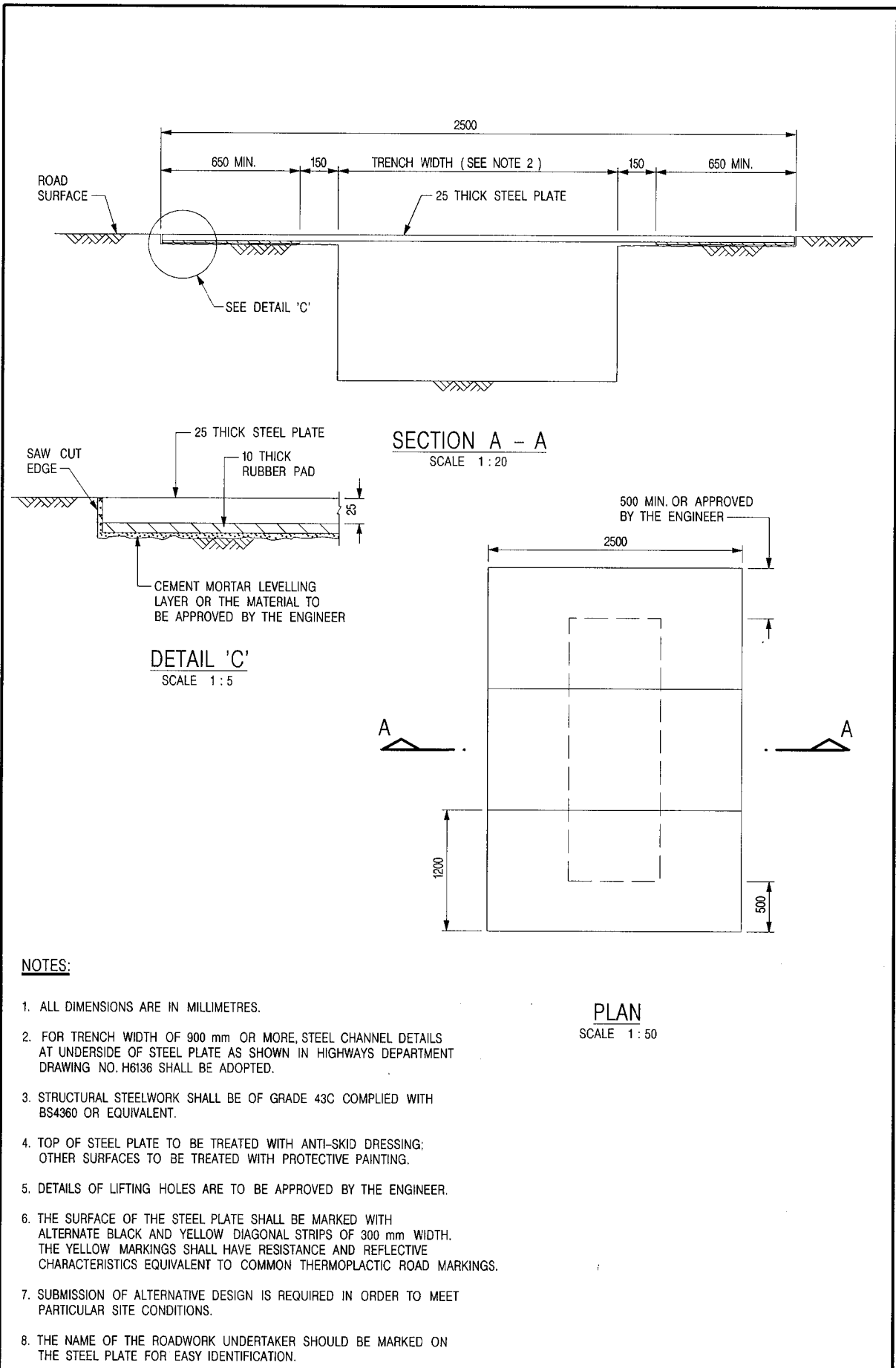
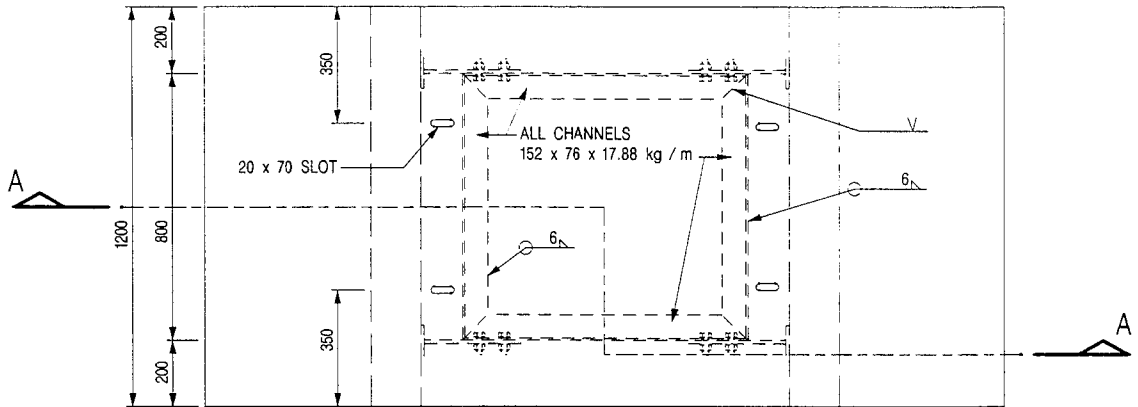
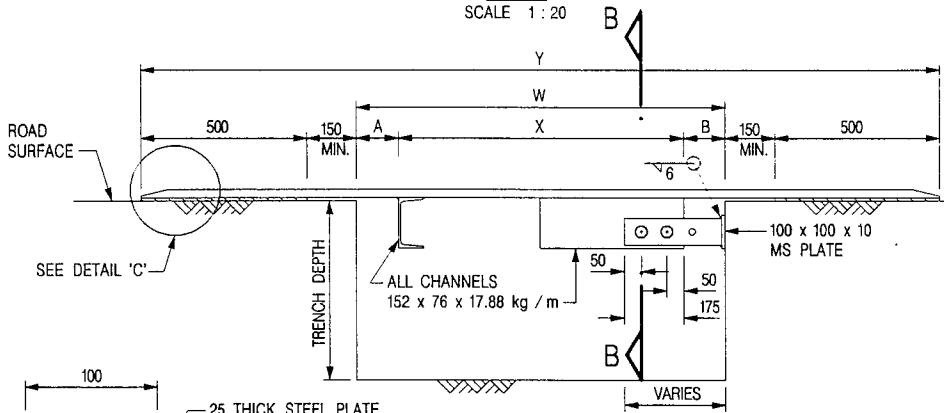


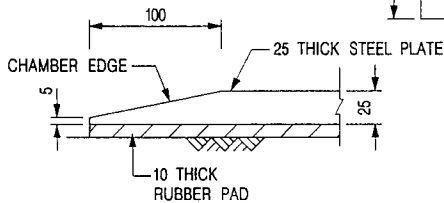
Figure B2 - Typical vehicle crossing over trench opening for flexible pavement (Flush with road surface) (Reproduced from Highways Department Drawing No. H6135A)



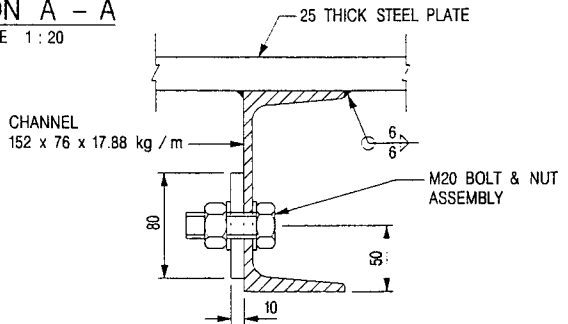
PLAN
SCALE 1 : 20



SECTION A - A
SCALE 1 : 20



DETAIL 'C'
SCALE 1 : 5



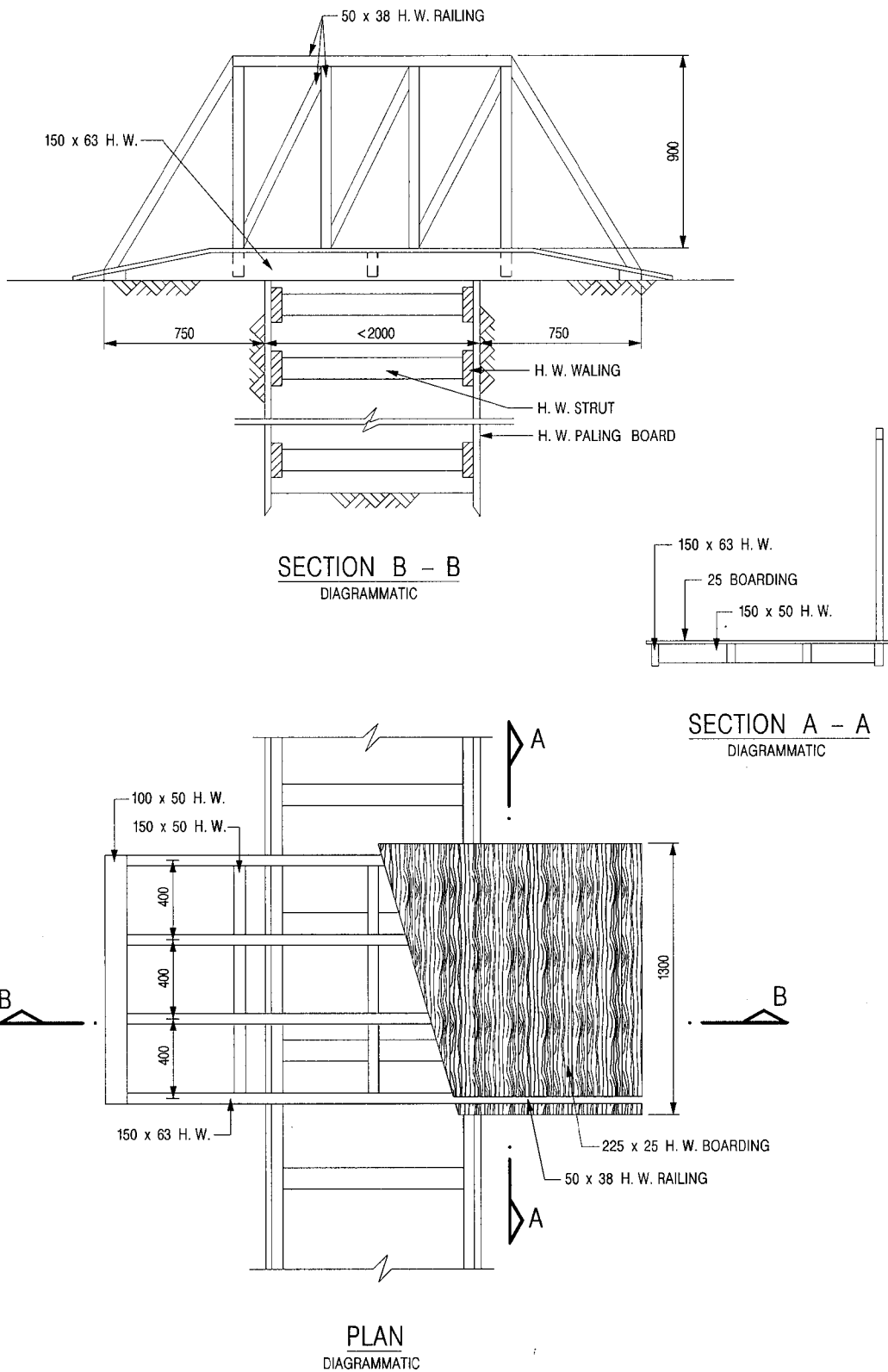
SECTION B - B
SCALE 1 : 5

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. STRUCTURAL STEELWORK SHALL BE OF GRADE 43C COMPLIED WITH BS4360 OR EQUIVALENT.
3. ALL FILLET WELDS TO BE 6 mm UNLESS OTHERWISE SPECIFIED.
4. TOP OF STEEL PLATE TO BE TREATED WITH ANTI-SKID DRESSING; OTHER SURFACES TO BE TREATED WITH PROTECTIVE PAINTING.
5. WELDING BETWEEN CHANNELS TO BE FULL PENETRATION WELD.
6. DESIGN TO BE ACCORDING TO BS5400.
7. OTHER DETAILS OF LIFTING HOLES ARE TO BE APPROVED BY THE ENGINEER.
8. THE SURFACE OF THE STEEL PLATE SHALL BE MARKED WITH ALTERNATE BLACK AND YELLOW DIAGONAL STRIPS OF 300 mm WIDTH. THE YELLOW MARKINGS SHALL HAVE RESISTANCE AND REFLECTIVE CHARACTERISTICS EQUIVALENT TO COMMON THERMOPLASTIC ROAD MARKINGS.
9. SUBMISSION OF ALTERNATIVE DESIGN IS REQUIRED IN ORDER TO MEET PARTICULAR SITE CONDITIONS.
10. THE NAME OF THE ROADWORK UNDERTAKER SHOULD BE MARKED ON THE STEEL PLATE FOR EASY IDENTIFICATION.

TYPE	W (TRENCH WIDTH)	X	Y	A OR B MAX
A	500 TO < 900	450	2200	225
B	900 TO < 1200	850	2500	175
C	1200 TO < 1400	1150	2700	125

Figure B3 - Typical vehicle crossing over trench opening for rigid pavement
(Reproduced from Highways Department Drawing No. H6136A)



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. PORTION OF TRENCH SHOULD BE STRUTTED FOR AT LEAST 900 BOTH SIDES OF BRIDGE CROSSING.

Figure B4 - Typical arrangement of temporary pedestrian crossing over trench not exceeding 2000mm wide (Reproduced from Highways Department Drawing No. H1132)



Plate B1 – Typical vehicle crossing over trench opening which is also effective for preventing surface runoff and infiltration of rainwater



Plate B2 – Typical pedestrian crossing trench opening which is also effective for preventing surface runoff and infiltration of rainwater



Plate B3 – Sandbag upstand with fibre-glass cover to prevent surface runoff and infiltration of rainwater



Plate B4 – Sheet piles protruding above ground with cement mortar wedge applied to prevent surface runoff



Plate B5 – Timber support protruding above ground with cement mortar wedge applied to prevent surface runoff



Plate B6 – Pumping provided



Plate B7 – Tarpaulin cover secured against wind for wider trenches



Plate B8 – Tarpaulin cover secured against wind for wider trenches