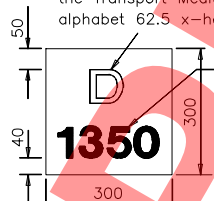


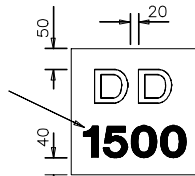
CENTRAL RESERVE (Superelevation)

Letter D to be cast into mix ST5 concrete block to a depth of 10. All letters and figures to comply with the Transport Medium alphabet 62.5 x-height.

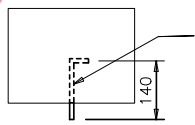
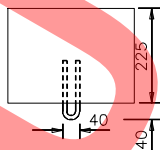


Depth of duct to invert in millimetres cast 5 min deep into blocks.

Mark required for duct where cover depth is 1500 or less below final level



Mark required for duct where cover depth is more than 1500 below final level



5 dia. galv. steel eye for fixing draw rope. Eye may be cast into a recess in block not exceeding 40 deep x 100 x 100

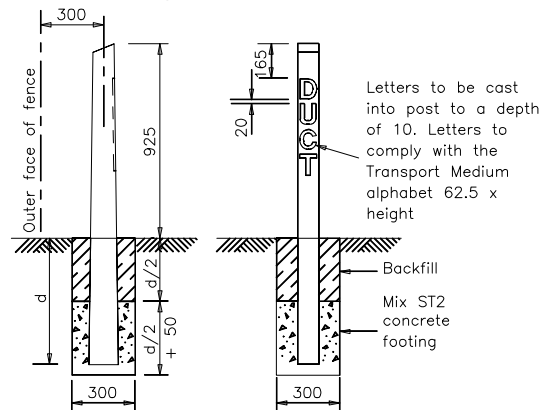
DETAIL OF MARKER BLOCK

To be positioned over duct in verges and on centre line in central reserve. Slack in draw rope (minimum 1m) to be coiled under block

LONGITUDINAL SECTIONS

— Shallow Ducts  
- - - Deep Ducts

Close boarded fence post to comply with BS 1722 Pt.5 Type PCR. 105 or similar without recess, with the addition of cast lettering as detailed below.



DUCT LOCATION POST

To be installed on  $\mathcal{C}$  of duct group

- NOTES
- ALL DIMENSIONS ARE IN MILLIMETRES.
  - Ducts to be a minimum of 90mm nominal diameter.
  - For details of location of ducts see the layout plans.
  - For details of the permitted forms of construction for ducts see Drawing No. I2.
  - Ducts are to be laid straight except when they have to curve around obstacles and at the end of ducts. No change of direction to be greater than 1 in 30. The mandrel shown on Drawing No. I2 shall be drawn through the completed duct.
  - All ducts shall extend a minimum of 300mm beyond the pavement construction and where possible the drainage pipes.
  - Ducts and markers shall not be sited under safety fence posts.
  - Where described in Appendix 5/2, 14/4 or 15/1 marker block terminals shall be replaced with duct chambers.

HIGHWAY CONSTRUCTION DETAILS

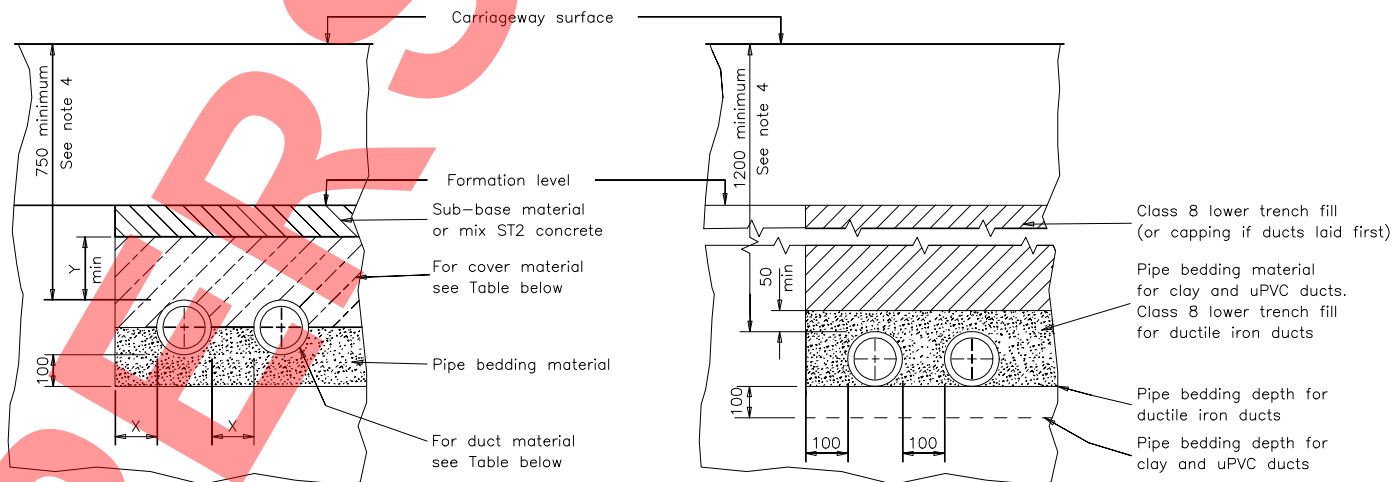
UNDERGROUND CABLE DUCTS

A	DEC 91
Issue	Date

LONGITUDINAL SECTIONS AND DETAILS OF TRANSVERSE DUCTS

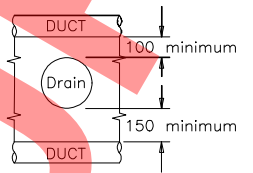
Drawing No.

I1



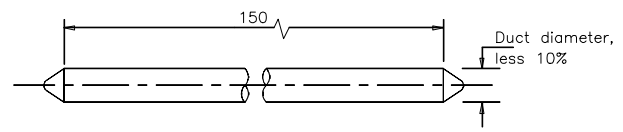
TYPE A  
SHALLOW DUCTS (750 to 1200 cover)

TYPE B  
DEEP DUCTS (over 1200 cover)



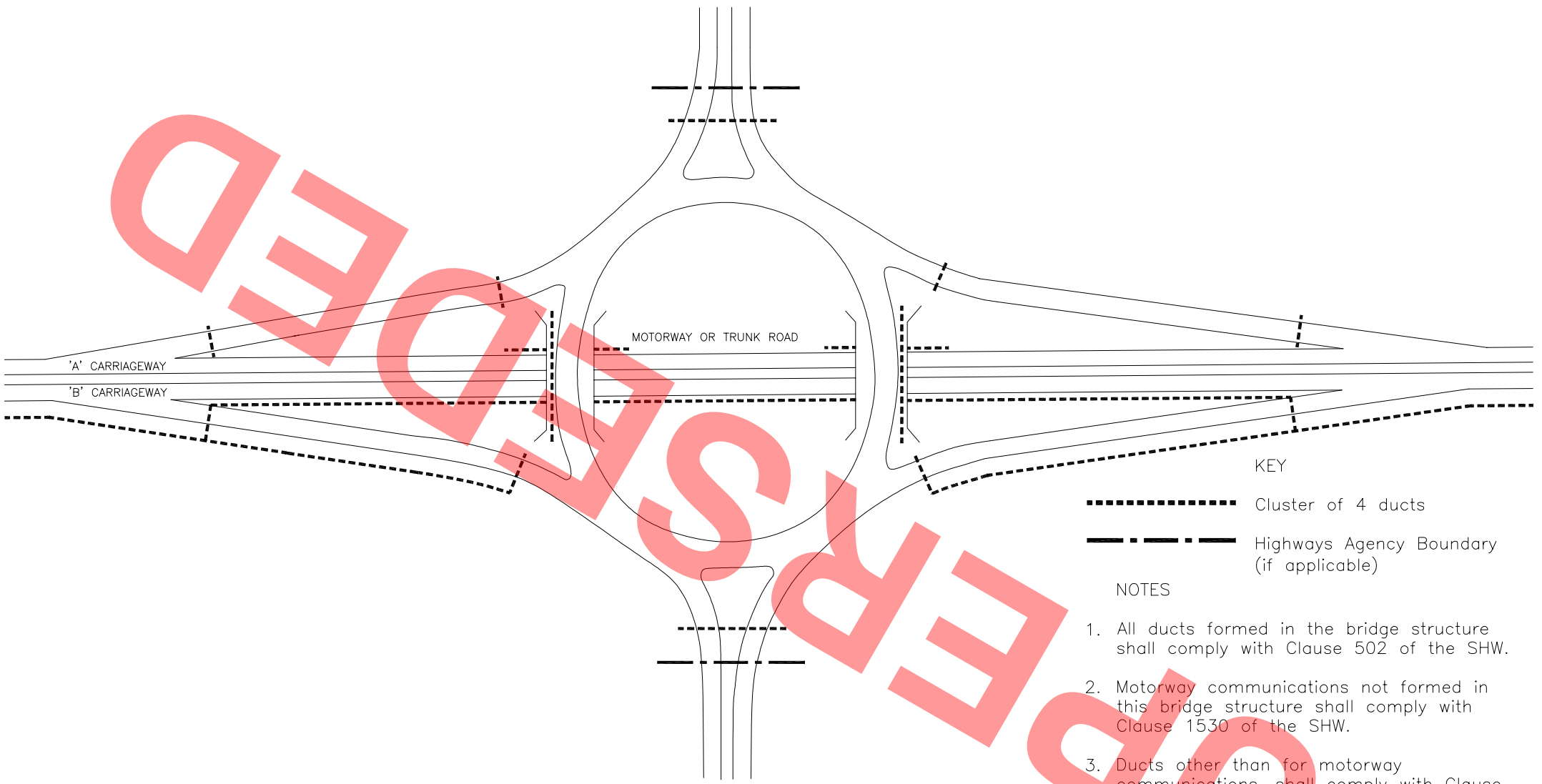
MINIMUM CLEARANCE BETWEEN  
DUCT AND DRAIN

Duct Material	Cover Material	X	Y
Clay	Pipe bedding material	100	50
uPVC	Mix ST2 concrete	75	150
Ductile iron	Either of above materials or sub-base material	as above 150	0



DETAIL OF MANDREL  
(Required to pass through the whole length of completed ducts with curved ends)

- NOTES
1. ALL DIMENSIONS ARE IN MILLIMETRES.
  2. Pipe bedding material shall comply with Clause 503 of the S.H.W.
  3. Class 8 lower trench fill shall comply with Table 6/1 of the S.H.W.
  4. Alternatively ducts shall be laid to limits described in Appendix 5/2, 14/4 or 15/1 or shown on the Drawings.



KEY

- Cluster of 4 ducts
- Highways Agency Boundary (if applicable)

NOTES

1. All ducts formed in the bridge structure shall comply with Clause 502 of the SHW.
2. Motorway communications not formed in this bridge structure shall comply with Clause 1530 of the SHW.
3. Ducts other than for motorway communications, shall comply with Clause 501 of the SHW.
4. Transverse ducts for motorway communications crossing carriageways 'A' and 'B' are not shown on this drawing. See drawing No. MCX 0810.
5. All ducts to be 94mm minimum internal diameter.

HIGHWAY CONSTRUCTION DETAILS

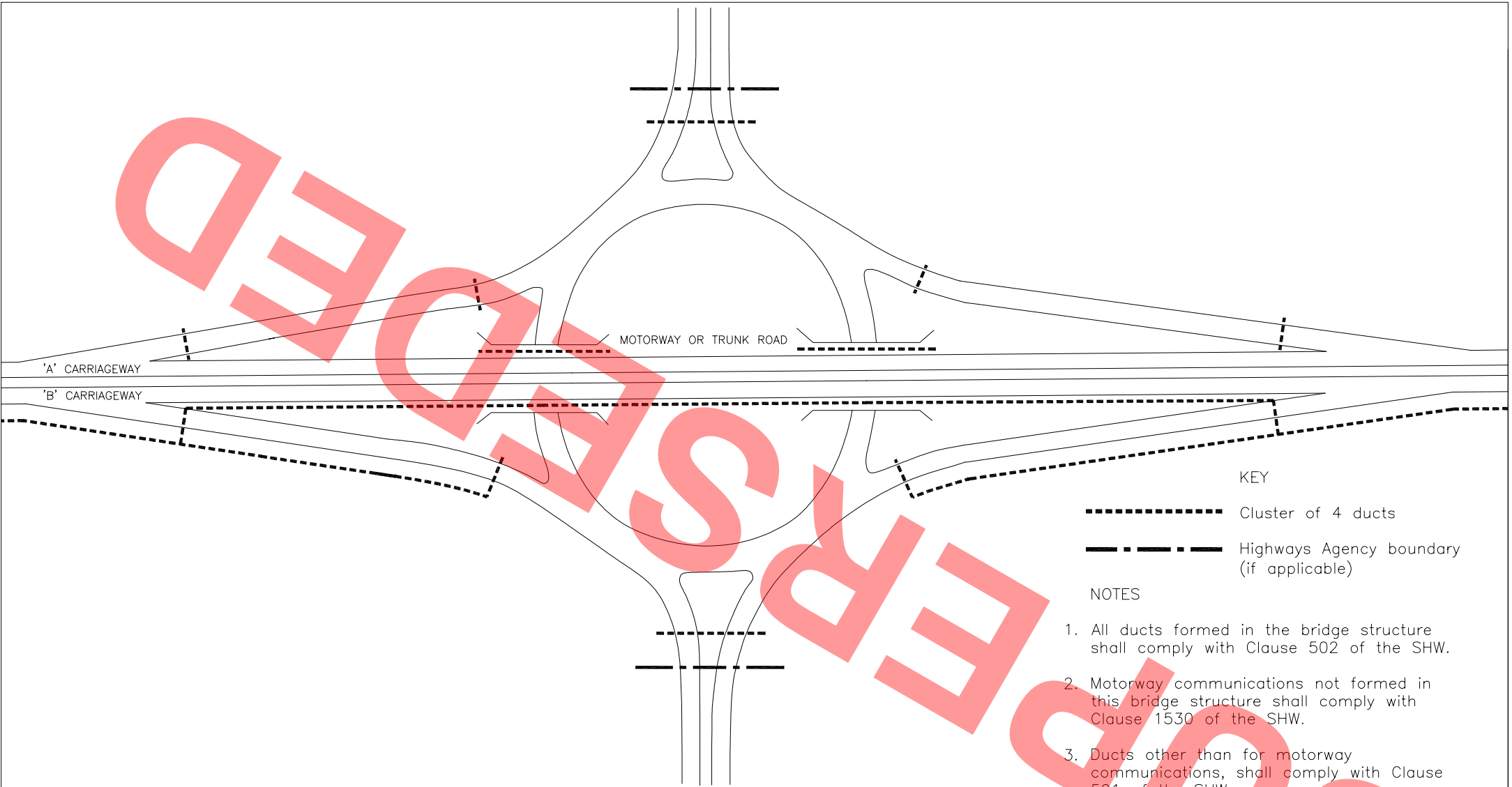
UNDERGROUND  
CABLE DUCTS

A	May 02
Issue	Date

DUCTS FOR MOTORWAY CABLES  
AT INTERCHANGE OVERBRIDGES

Drawing No.

I3



KEY

- Cluster of 4 ducts
- - - - - Highways Agency boundary (if applicable)

NOTES

1. All ducts formed in the bridge structure shall comply with Clause 502 of the SHW.
2. Motorway communications not formed in this bridge structure shall comply with Clause 1530 of the SHW.
3. Ducts other than for motorway communications, shall comply with Clause 501 of the SHW.
4. Transverse ducts for motorway communications crossing carriageways 'A' and 'B' are not shown on this drawing. See drawing No. MCX 0810.
5. All ducts to be 94mm minimum internal diameter.

HIGHWAY CONSTRUCTION DETAILS

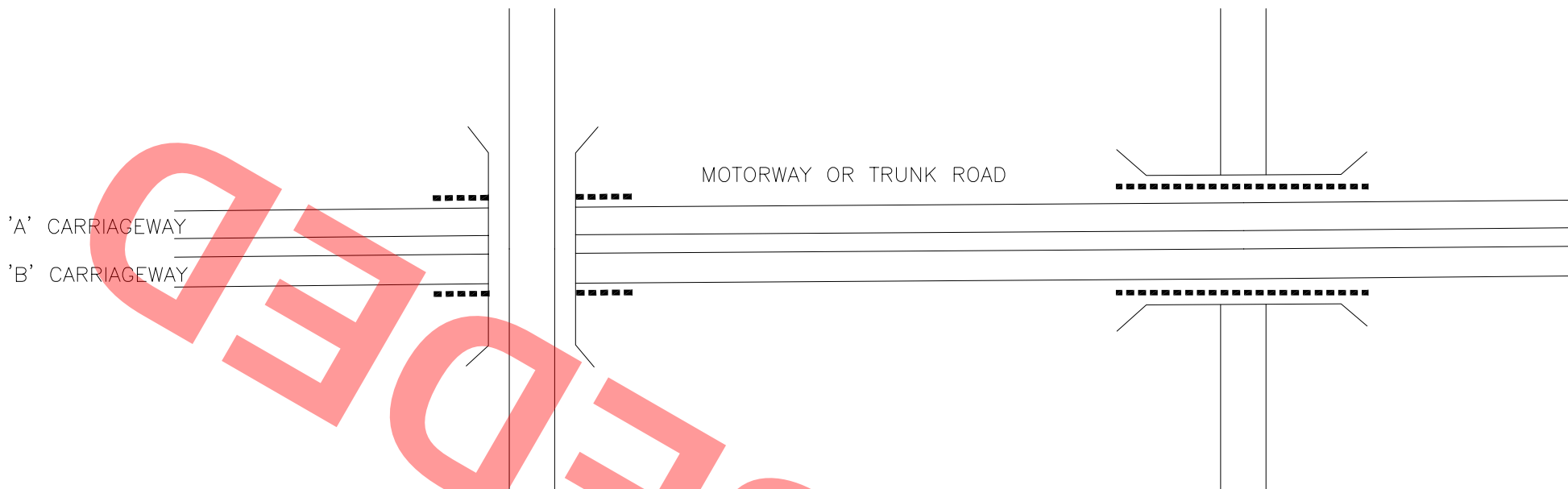
UNDERGROUND  
CABLE DUCTS

A	May 02
Issue	Date

DUCTS FOR MOTORWAY CABLES  
AT INTERCHANGE UNDERBRIDGES

Drawing No.

I4



'A' CARRIAGEWAY

'B' CARRIAGEWAY

MOTORWAY OR TRUNK ROAD

KEY

..... Cluster of 4 ducts

NOTES

1. All ducts formed in the bridge structure shall comply with Clause 502 of the SHW.
2. Motorway communications not formed in this bridge structure shall comply with Clause 1530 of the SHW.
3. Ducts other than for motorway communications, shall comply with Clause 501 of the SHW.
4. Transverse ducts for motorway communications crossing carriageways 'A' and 'B' are not shown on this drawing. See drawing No. MCX 0810.
5. All ducts to be 94mm minimum internal diameter.

HIGHWAY CONSTRUCTION DETAILS

UNDERGROUND  
CABLE DUCTS

A	May 02
Issue	Date

DUCTS FOR MOTORWAY  
CABLES AT SINGLE BRIDGES

Drawing No.

15