



THE HIGHWAYS AGENCY

TA 45/85



THE SCOTTISH OFFICE DEVELOPMENT DEPARTMENT



THE WELSH OFFICE
Y SWYDDFA GYMREIG



THE DEPARTMENT OF THE ENVIRONMENT
FOR NORTHERN IRELAND

Treatment of Gaps in Central Reserve Safety Fences

Summary: This Advice Note updates advice on the location, design and use of gaps in central reserve safety fences

VOLUME 2 HIGHWAY
STRUCTURES:
DESIGN
(SUBSTRUCTURES
AND SPECIAL
STRUCTURES),
MATERIALS

SECTION 2 SPECIAL
STRUCTURES

TA 45/85

**TREATMENT OF GAPS IN CENTRAL
RESERVE SAFETY FENCES**

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Figure 1 Typical Layout of Emergency Crossing Points

1. INTRODUCTION

1.1 This Advice Note updates advice on the location, design and use of Emergency Crossing Points (ECPs) in central reserve safety fences. It also provides advice on the design and use of other openings, for instance, contra flow traffic operation.

1.2 Guidance on emergency crossings in the last Paragraph of Section 3.15 of the Advisory Manual "Layout of Roads in Rural Areas" has been reviewed and hereby superseded. Appendix 7 of Departmental Advice Note TA 26/81 "Withdrawal of Motorway Design Memorandum" is also hereby superseded.

SUPERSEDED

2. SCOPE

2.1 This advice note takes account of changes in the methods used by emergency services accessing emergencies on motorways and other dual carriageway trunk roads. Additionally, the applicability of ECPs for road maintenance is discussed in the light of current practice.

SUPERSEDED

3. USE OF EMERGENCY CROSSING POINTS IN EMERGENCIES

3.1 Emergency procedures do not necessarily rely on the use of ECPs where traffic is heavy and interchanges are frequent. The crossings are often closed by removeable safety fences (see Fig 1a and TRRL 1040.36 series drawings) but even when crossings are of the open type (see Fig 1b), the emergency services usually prefer not to use them and incidents are frequently accessed in other ways. There may be cases where interchanges are infrequent in which case existing crossings have to be kept open, though closed to public use by the installation of traffic cylinders to Diagram 578 of The Traffic Signs Regulations and General Directions (Ref 1) (see Fig 1b).

SUPERSEDED

4. USE OF EMERGENCY CROSSING POINTS FOR WINTER MAINTENANCE

4.1 Use of ECPs for winter maintenance operations is considered hazardous and not recommended. Exceptionally, when conditions are such that there are no moving vehicles on both carriageways, ECPs may be used if urgent action is required to get traffic moving again.

SUPERSEDED

5. CROSSINGS ASSOCIATED WITH STRUCTURAL MAINTENANCE

5.1 These crossings are usually specially constructed as part of the traffic management and temporary works when contraflow traffic operation is intended. They should only be opened when used by contraflow traffic and the original type of safety fence should be reinstated immediately this use has ceased. (See Paragraph 4.5 of Ref 2). The paved section of the central reserve should be prepared to facilitate this. The removable type of safety fence is not suitable for this purpose.

5.2 On derestricted motorways, ie in the absence of mandatory speed limits of 50 mph or less, such crossings should be designed to an 85A kph Design Speed in accordance with TD 9/81 and TA 43/84, "Highway Link Design" (Refs 3 and 4). The detailed design of crossings depends on the existing alignment, superelevation, drainage, temporary works, lighting etc, and the design of crossings should be prepared and approved by the highway authority.

5.3 Similar requirements apply to all purpose dual carriageway trunk roads with central reserve safety fences.

SUPERSEDED

6. DESIGN OF NEW AND REBUILT EMERGENCY CROSSING POINTS

- 6.1 Permanent openings, (ECPs) in the central reserve safety fence should be provided only for emergency use.
- 6.2 The location and frequency of ECPs should relate to the motorway emergency procedures which have been jointly developed by the emergency services and the maintaining authority for each length of motorway. The guiding principle should be to minimise the number of ECPs provided.
- 6.3 The location of ECPs at interchanges should be avoided except where they may be used exceptionally for winter maintenance operations, when they should be positioned as follows:
- (a) between diverge and merge lanes of opposite slip roads;
 - (b) 100 m from terminal single level roundabouts.
- 6.4 ECPs should generally be not more frequent than 3 km apart and where they are not required for the agreed emergency procedures they should be closed by a removable safety fence. Where crossings are to be used by the emergency services, the traffic cylinders (see Paragraph 3.1) should be well maintained to deter unauthorised use.
- 6.5 To enable a crossing to be identified by the emergency services and by the maintaining authority's staff, special verge marker posts and central reserve reflectors shall be erected on each approach at approximately 100m, 200m and 300m from the crossings, (see Department of Transport Standard Drawings RM/E/1 to 4).
- 6.6 ECPs should not exceed 17 metres in length and are not suitable for use by traffic other than emergency vehicles except in emergency situations for vehicles travelling at less than 50 kph and under police direction. Standard length ECPs are not suitable for contraflow traffic schemes. No other gaps in the central reserve should be kept open as permanent provision for traffic diversion purposes. A proposal for an ECP exceeding 17m should be treated as a Departure from Standards.

7. REFERENCES

1. SI 1981 No 859 - The Traffic Signs Regulations and General Directions 1981: HMSO: 1981
2. TD 19/85 - Safety Fences and Barriers: DTp: 1985
3. TD 9/81 - Highway Link Design: DTp: 1981 & Amendment No 1: DTp: 1985
4. TA 43/84 - Highway Link Design: DTp: 1984

SUPERSEDED

8. ENQUIRIES

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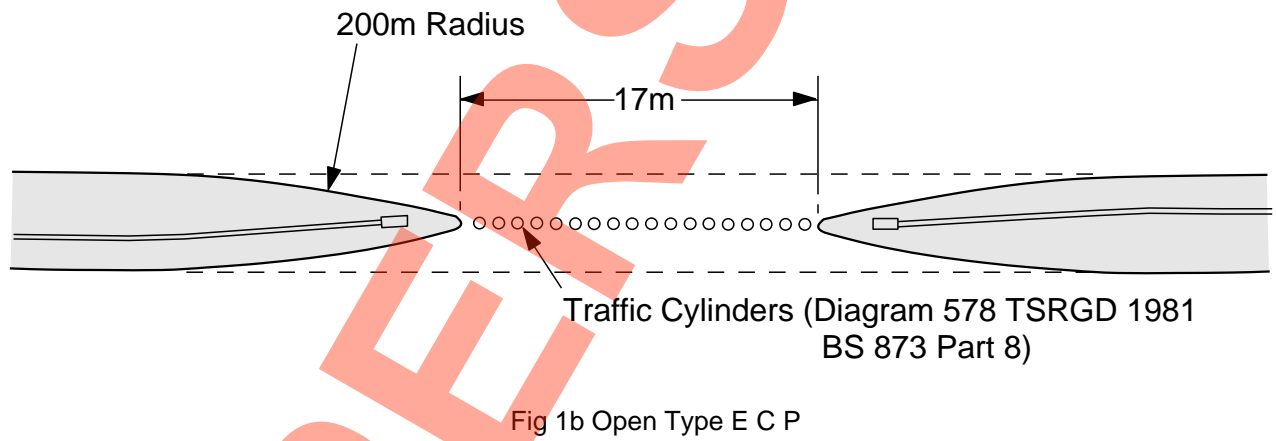
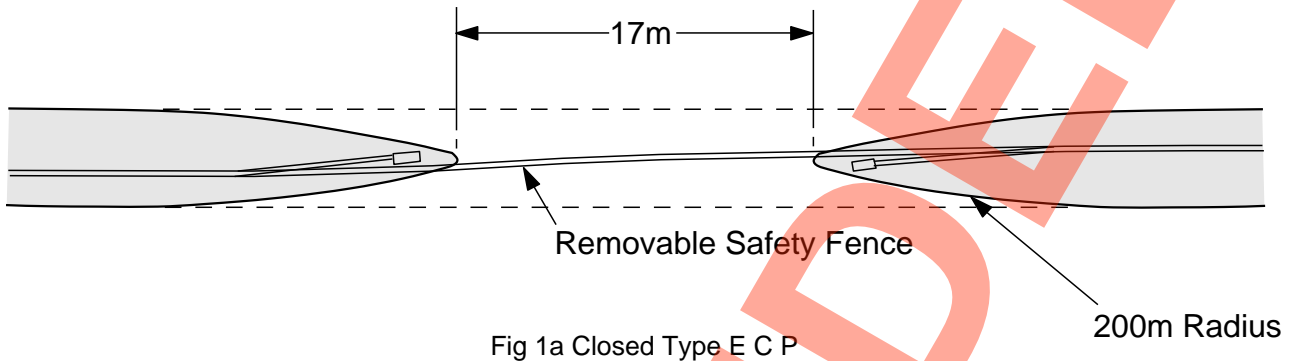
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Typical Layout of Emergency Crossing Points

Figure 1