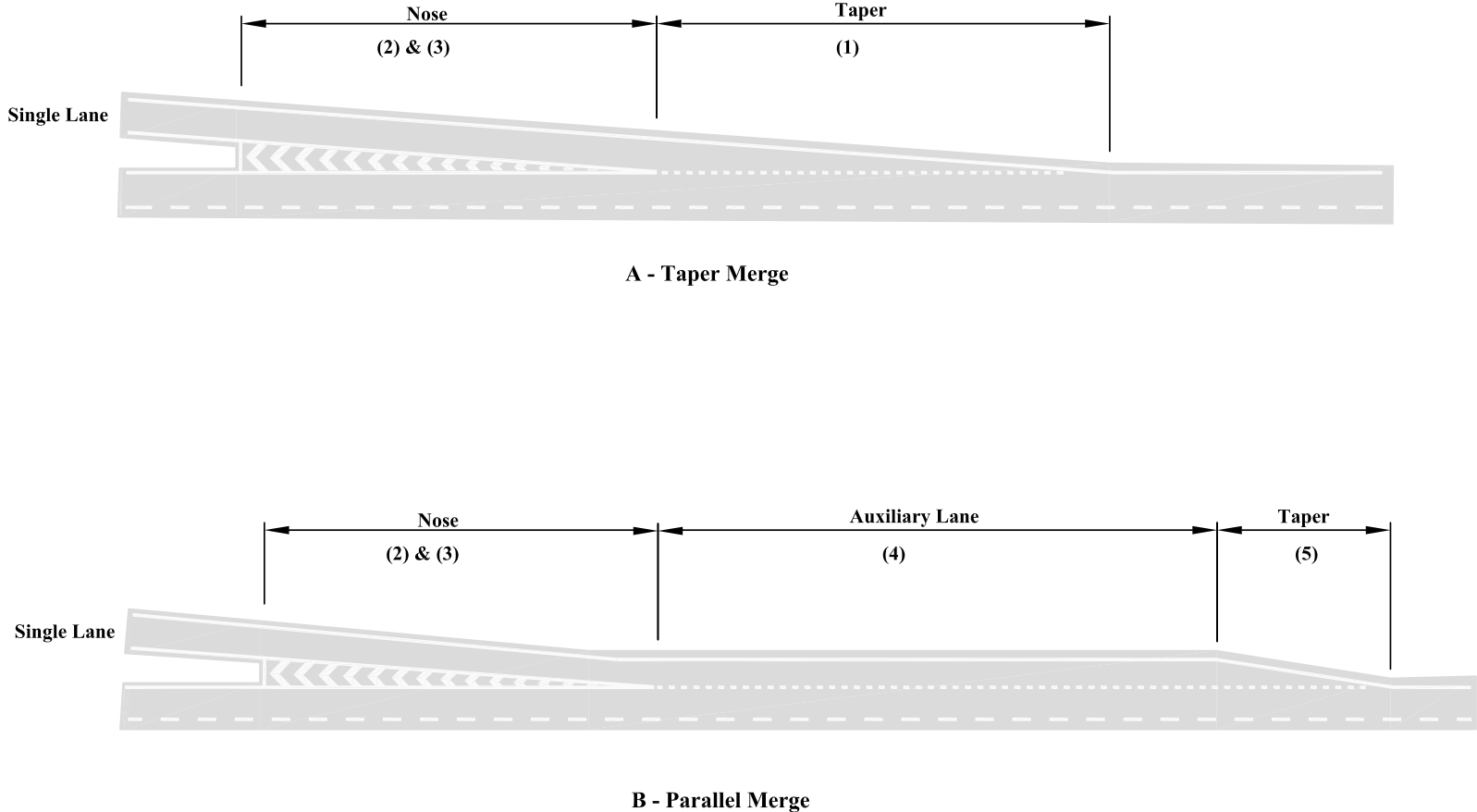


- 1 strike a perpendicular from 4000vph on the horizontal axis
- 2 strike a perpendicular from 2000vph on the vertical axis
- 3 the intersection point gives layout type F which also requires a lane gain (see Downstream Mainline axis above)

- * If Layout F Option 2 is used consider extended Auxiliary Lane (see paragraph 4.23).
- # Area of uncertainty – In this area the choice will depend on the downstream provision. If there is a lane gain then use Layout E or F.

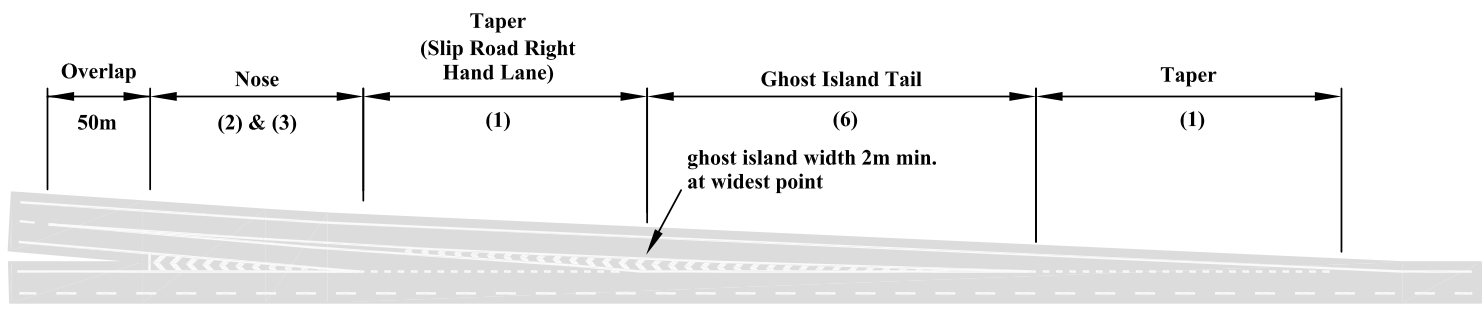
Figure 2/3 MW Motorway Merging Diagram

Merge with
No Lane Gain

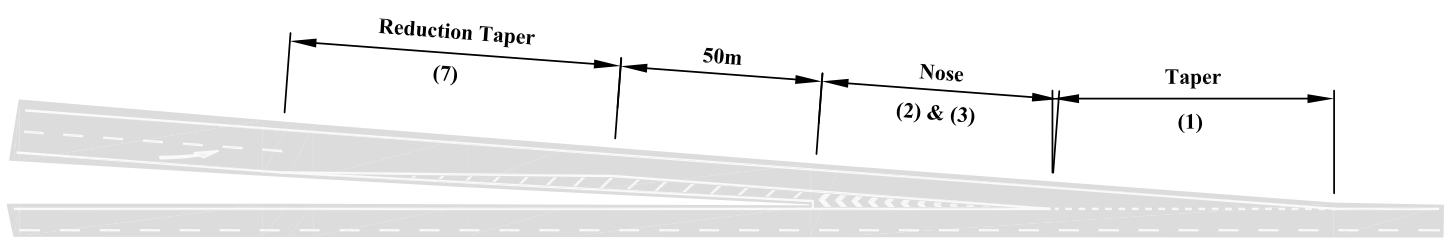


N.B. Figures in brackets refer to columns in Table 4/3
Figure 2/4.1 Merge Lane Layouts for use with Figure 2/3

Merge with
No Lane Gain



C - Ghost Island Merge
(Only used where design flows on mainline are light, there are 3 lanes or more on mainline and merging flow is over one lane capacity, see paragraph 2.30).

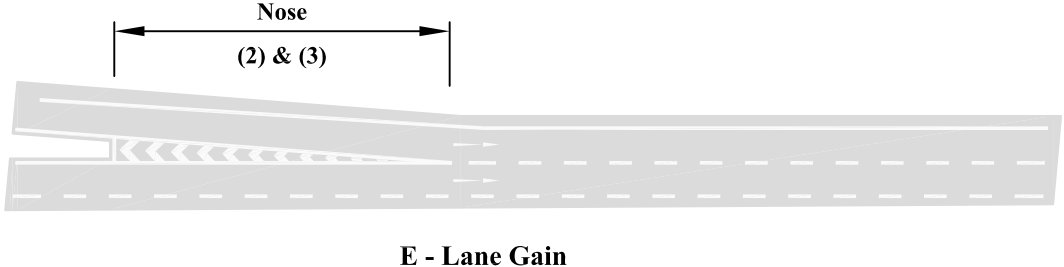


D - 2 Lane Urban Merge

N.B. Figures in brackets refer to columns in Table 4/3

Figure 2/4.2 Merge Lane Layouts for use with Figure 2/3

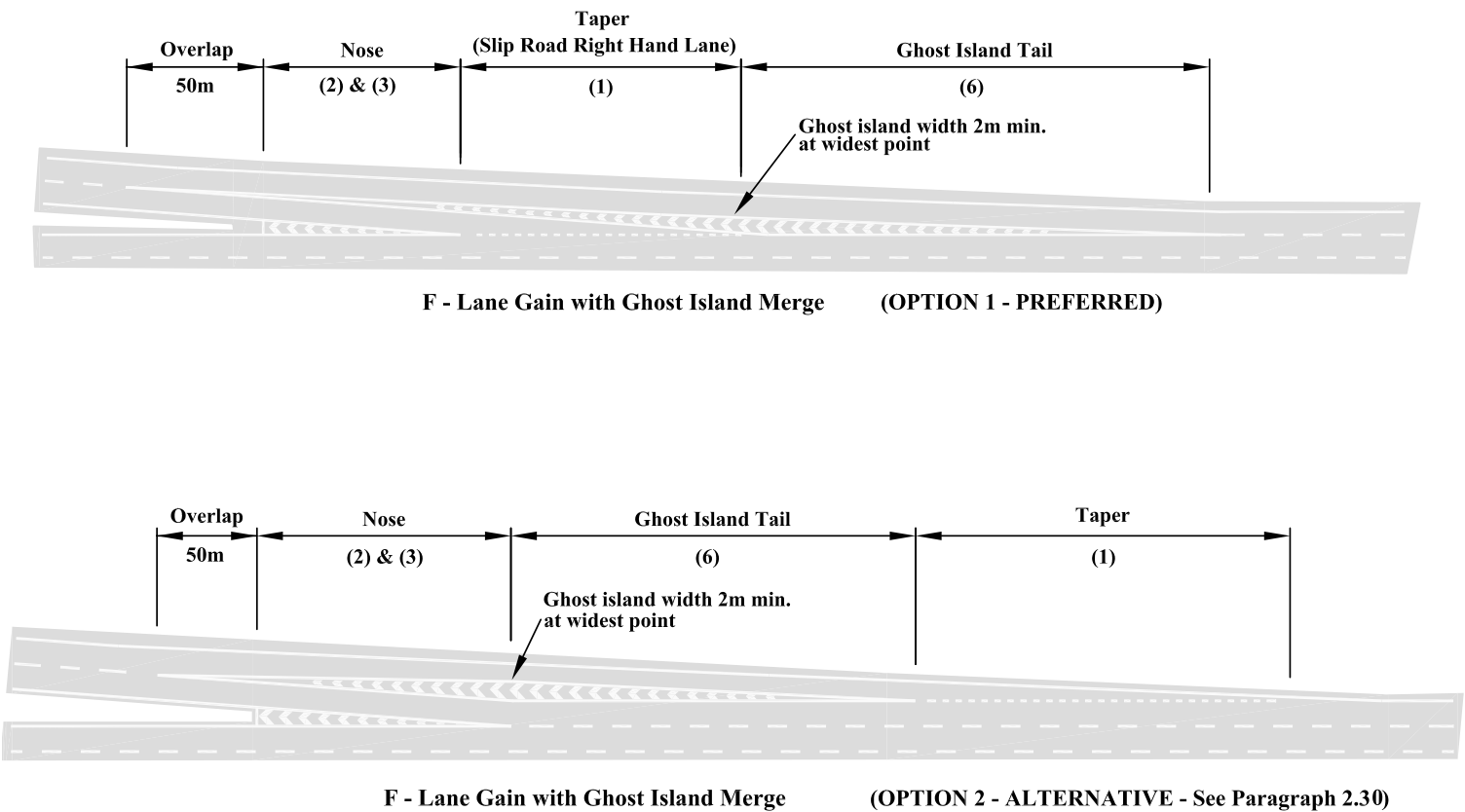
Merge with
Lane Gain



N.B. Figures in brackets refer to columns in Table 4/3

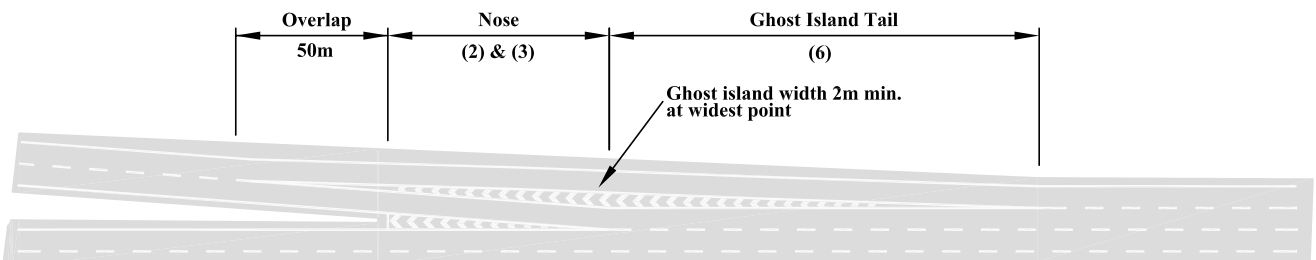
Figure 2/4.3 Merge Lane Layouts for use with Figure 2/3

Merge with
Lane Gain

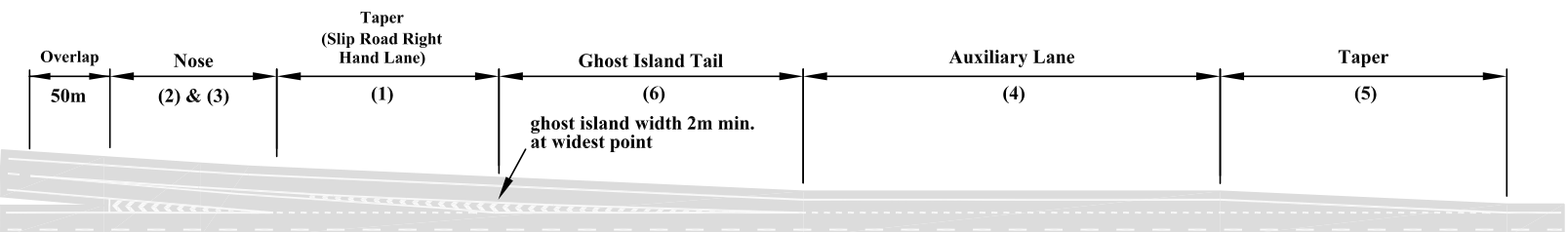


N.B. Figures in brackets refer to columns in Table 4/3

Figure 2/4.4 Merge Lane Layouts for use with Figure 2/3



G - 2 Lane Gain with Ghost Island



H - Alternative Ghost Island Merge with Auxiliary Lane
(This Layout is for use where Layout F would be used but is not possible to implement because of site restraints. Its use requires approval as a departure from standard, see paragraph 2.30)

Merge with
Lane Gain

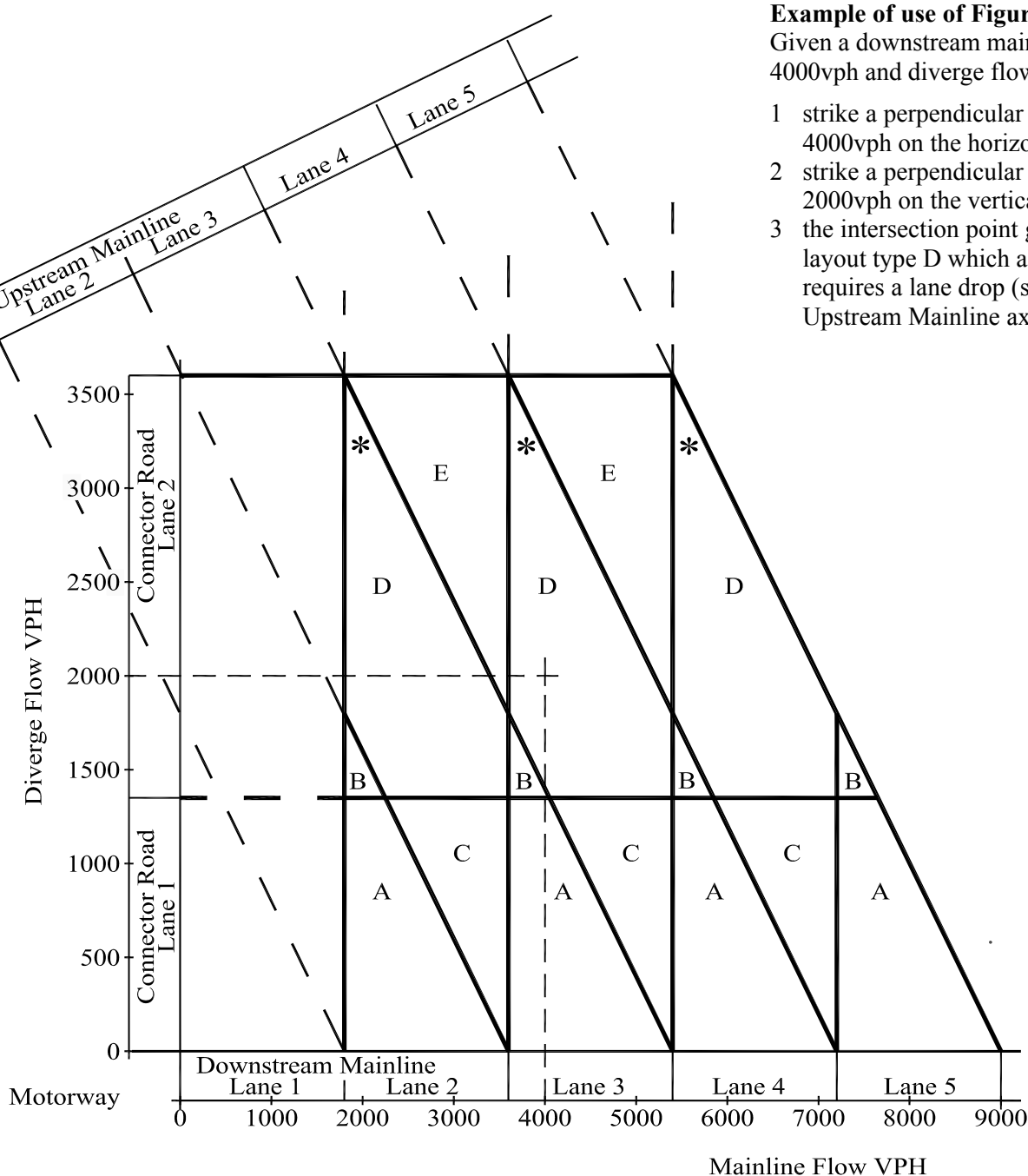
N.B. Figures in brackets refer to columns in Table 4/3

Figure 2/4.5 Merge Lane Layouts for use with Figure 2/3

Example of use of Figure 2/5MW

Given a downstream main line flow 4000vph and diverge flow 2000vph.

- 1 strike a perpendicular from 4000vph on the horizontal axis
- 2 strike a perpendicular from 2000vph on the vertical axis
- 3 the intersection point gives layout type D which also requires a lane drop (see Upstream Mainline axis above)



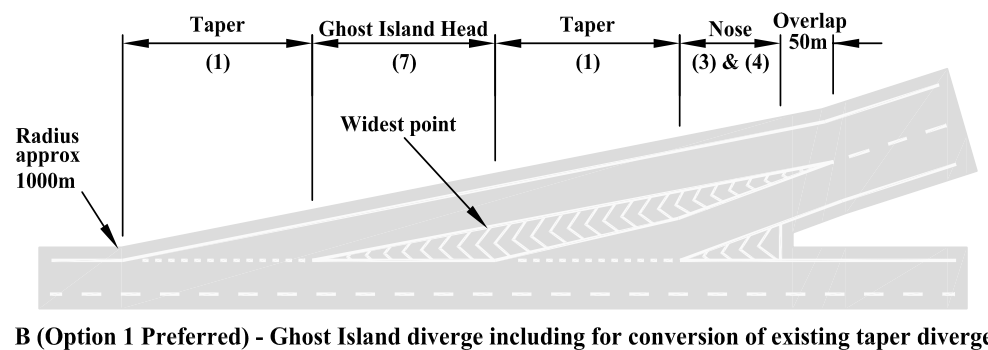
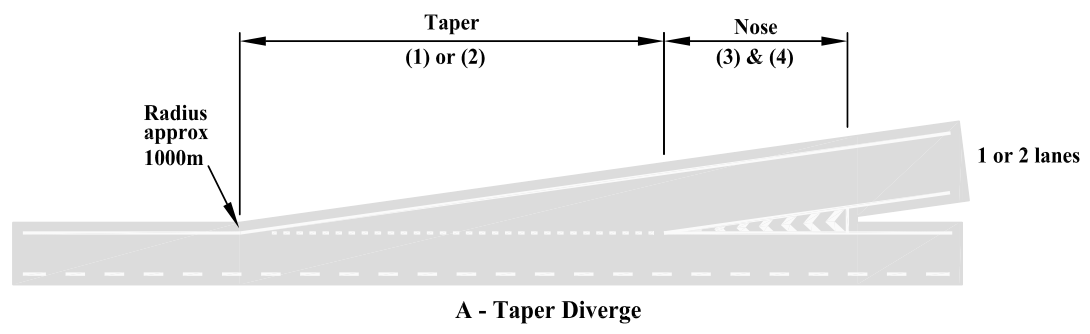
Notes:

- * If Layout D Option 2 is used consider extended Auxiliary Lane (see paragraph 4.24).

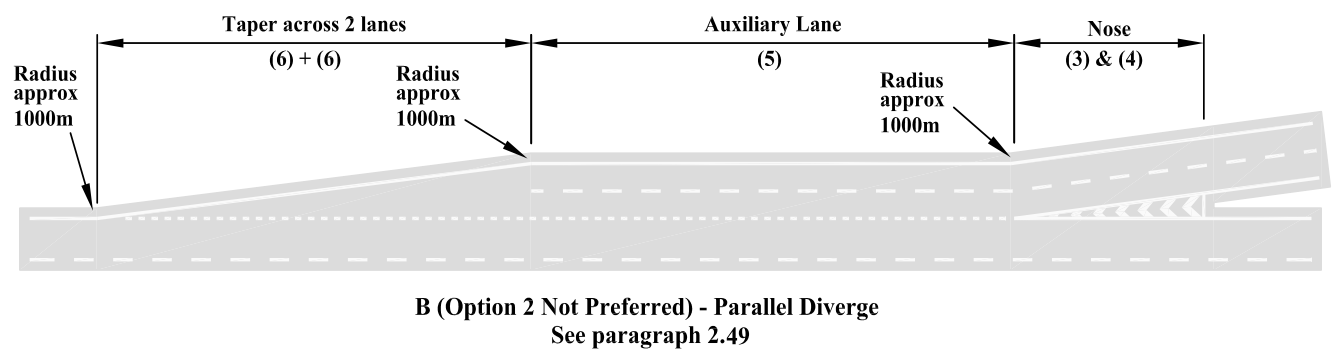
See paragraph 2.43 and the example above, for explanation of the usage of this diagram.

Figure 2/5 MW Motorway Diverging Diagram

Diverge with
No Lane Drop



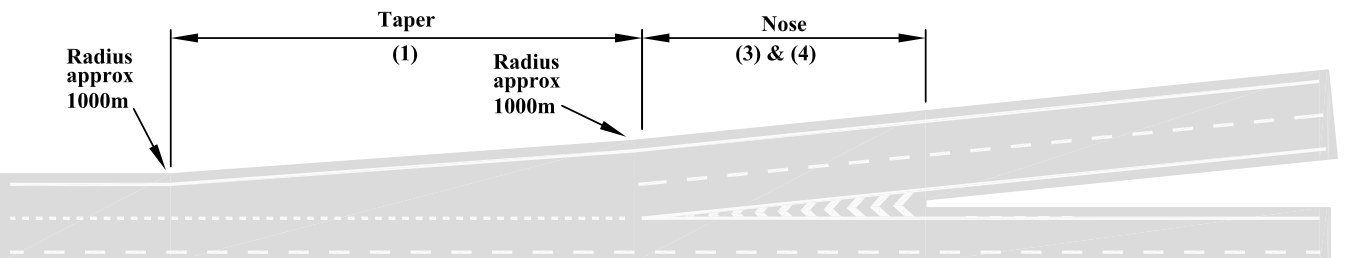
- 1 - Ghost Island and nose markings to Traffic Signs Regulations and General Directions Diagram No. 1042.1 and 1042.
- 2 - Ghost Island width 2m minimum at widest point.
- 3 - The edge line must be laid to the radii indicated.



N.B. Figures in brackets refer to columns in Table 4/4

Figure 2/6.1 Diverge Lane Layouts for use with Figure 2/5

Diverge with
Lane Drop

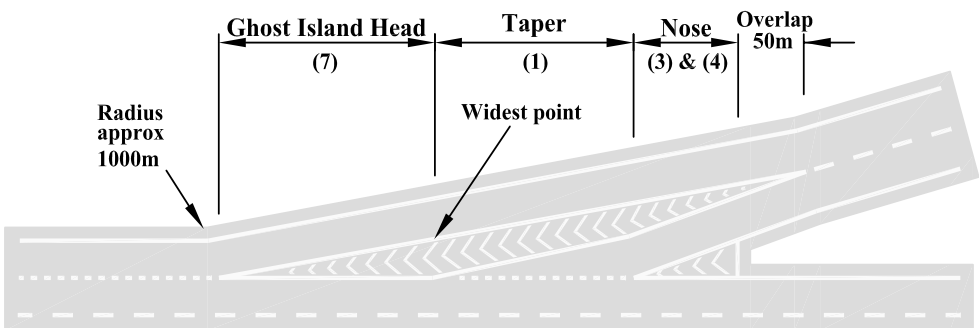


The edge line must be laid to the radii indicated
C - Lane Drop at Taper Diverge

N.B. Figures in brackets refer to columns in Table 4/4

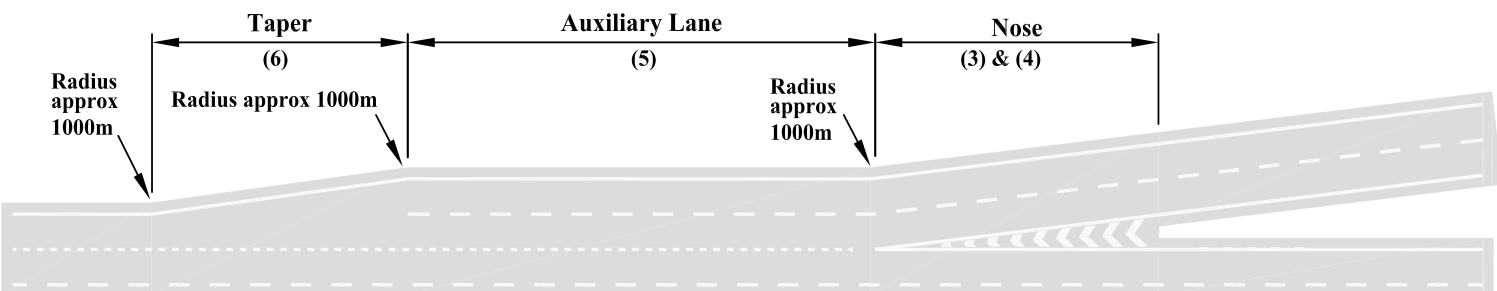
Figure 2/6.2 Diverge Lane Layouts for use with Figure 2/5

Diverge with
Lane Drop



D (Option 1 Preferred) - Ghost Island diverge for Lane Drop including for conversion of existing Lane Drop at Taper Diverge

- 1 - Ghost Island and nose markings to Traffic Signs Regulations and General Directions Diagram No. 1042.1 and 1042.
- 2 - Ghost Island width 2m minimum at widest point.
- 3 - The edge line shall be laid to the radii indicated.

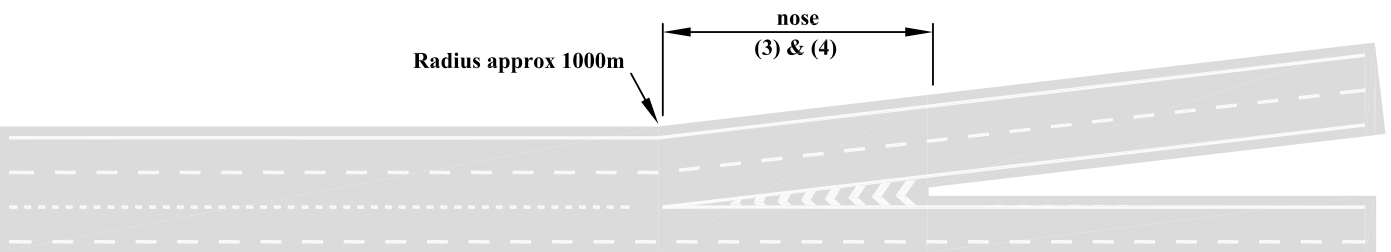


D (Option 2 Not Preferred) - Lane Drop at Parallel Diverge
See paragraph 2.49

N.B. Figures in brackets refer to columns in Table 4/4

Figure 2/6.3 Diverge Lane Layouts for use with Figure 2/5

Diverge with
Lane Drop



The edge line must be laid to the radii indicated

E - 2 Lane Drop

N.B. Figures in brackets refer to columns in Table 4/4

Figure 2/6.4 Diverge Lane Layouts for use with Figure 2/5

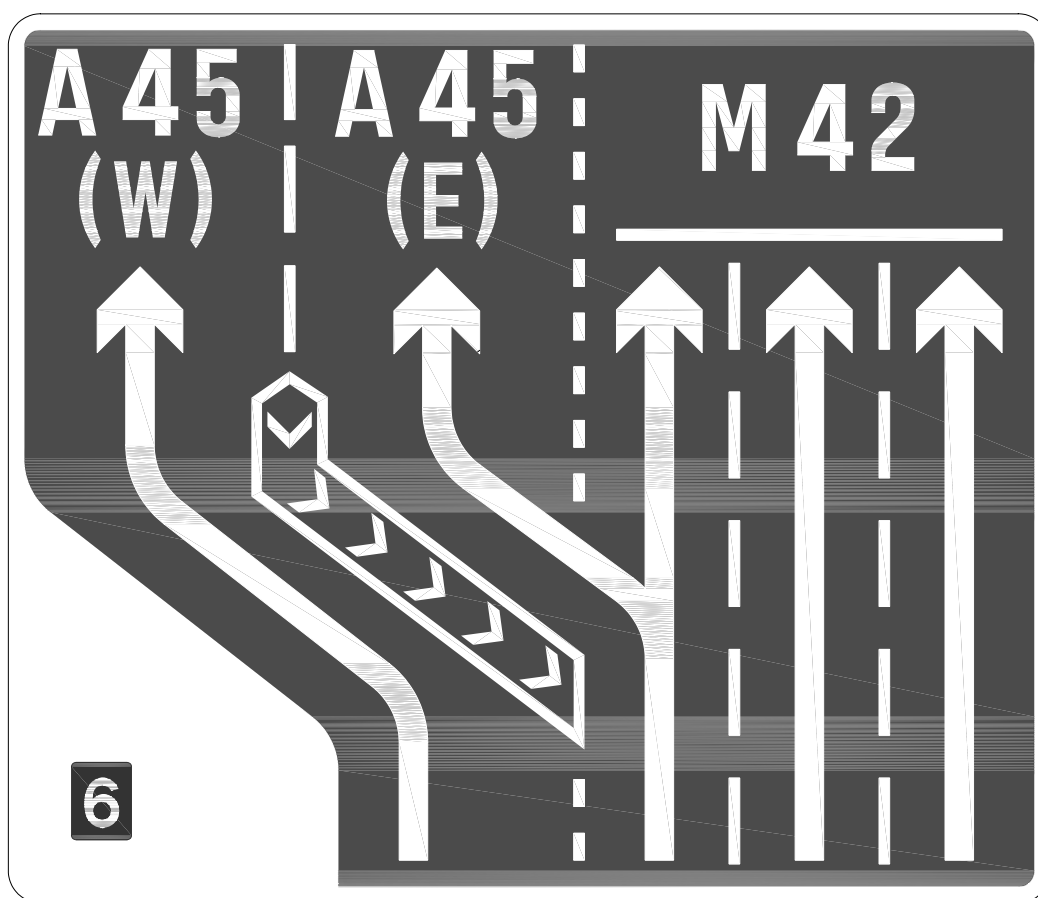


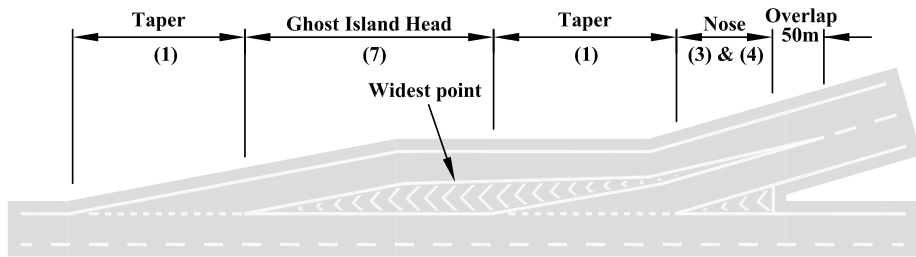
Figure 2/7 Typical Sign for Ghost Island Diverge Layout (“tiger-tail”)

Motorway Service Areas (MSAs)

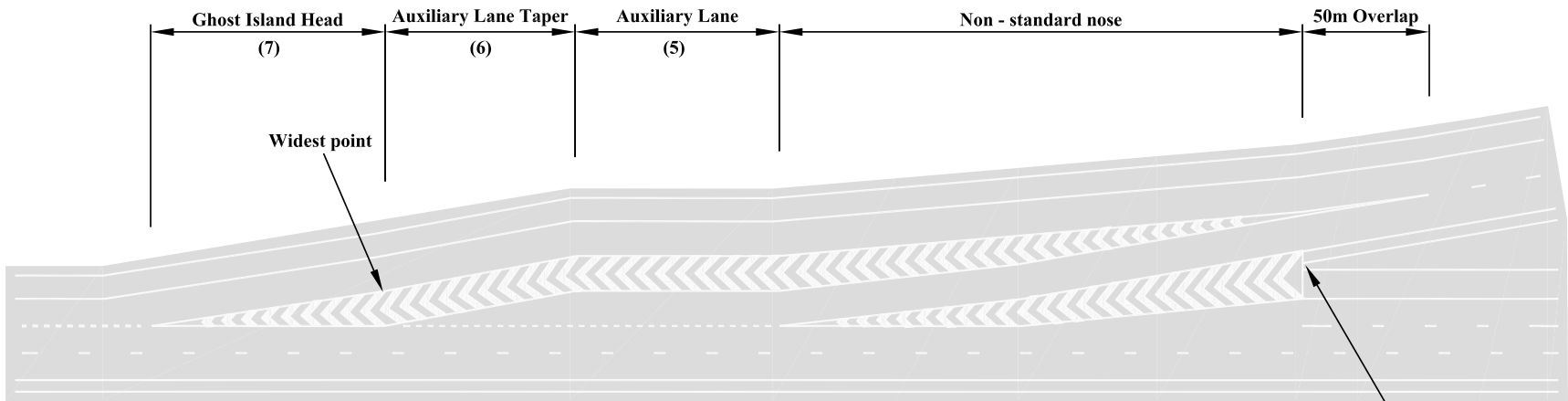
2.54 The merge and diverge layout design and junction spacing parameters in this standard apply to MSAs.

2.55 Generally all vehicle types are permitted to enter an MSA via a connector road directly from the mainline or as an integral part of a grade separated junction.

2.56 Drivers wishing to make a stop at MSAs will have made a choice about their immediate destination and know that they will have to slow down. The provisions set out below should facilitate safe layouts for access to and egress from MSAs.



(i) Ghost Island Diverge



(ii) Ghost Island Diverge with quasi-lane drop

Notes:

- 1 - Ghost Island and nose markings to Traffic Signs Regulations and General Directions Diagram No. 1042.1 and 1042.
- 2 - Ghost Island width 2m minimum at widest point.
- 3 - Where there is inadequate land to provide a full width hard shoulder consideration may be given to reducing the width. See para 2.52

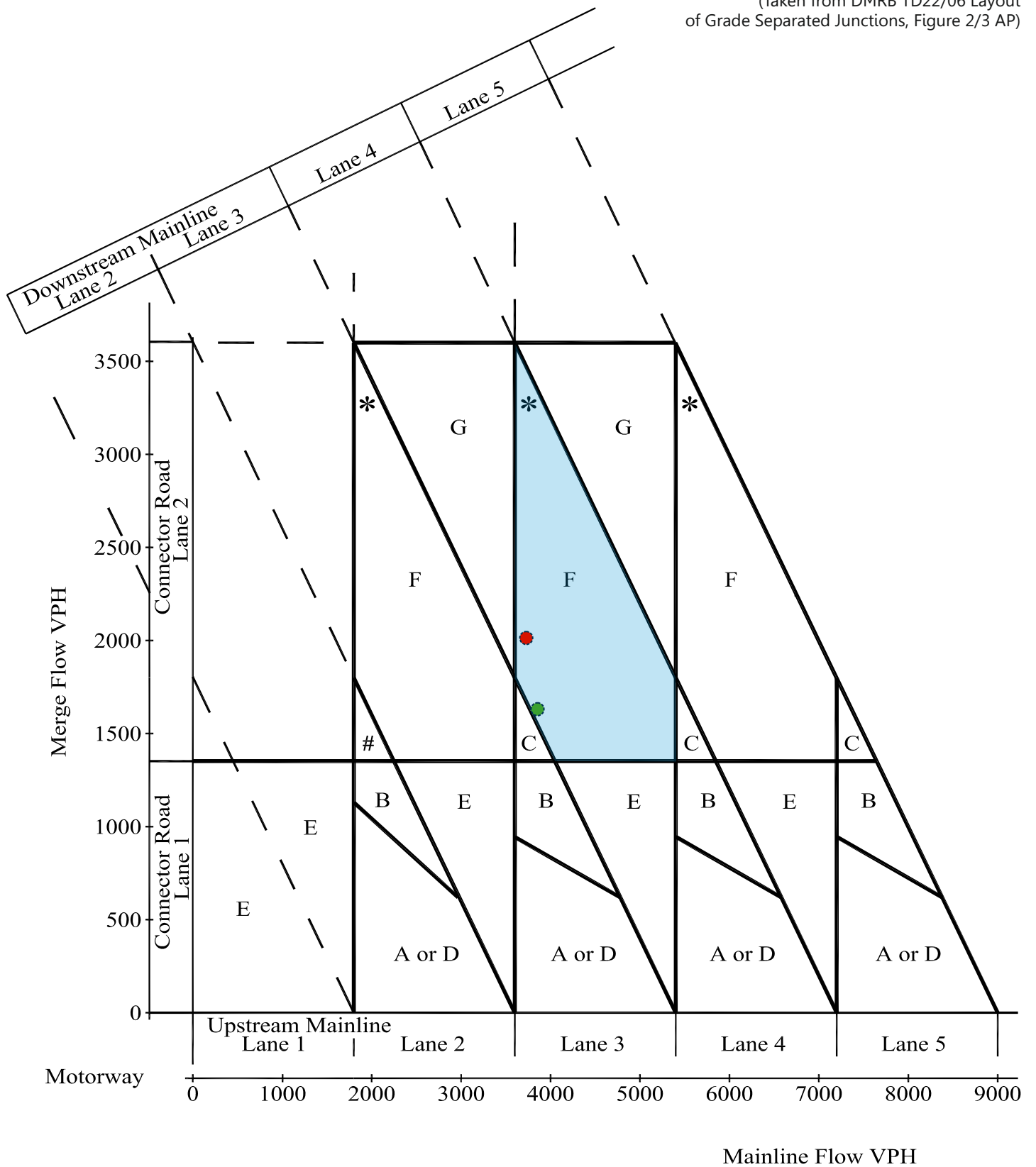
Figure 2/8 Examples of Existing Parallel Diverges Converted to Ghost Island Diverges

Figure 1 - M25 / A12 Grade Separated Junction

Motorway Merging Diagram

A25 Northbound On-slip

(Taken from DMRB TD22/06 Layout of Grade Separated Junctions, Figure 2/3 AP)



Scenarios

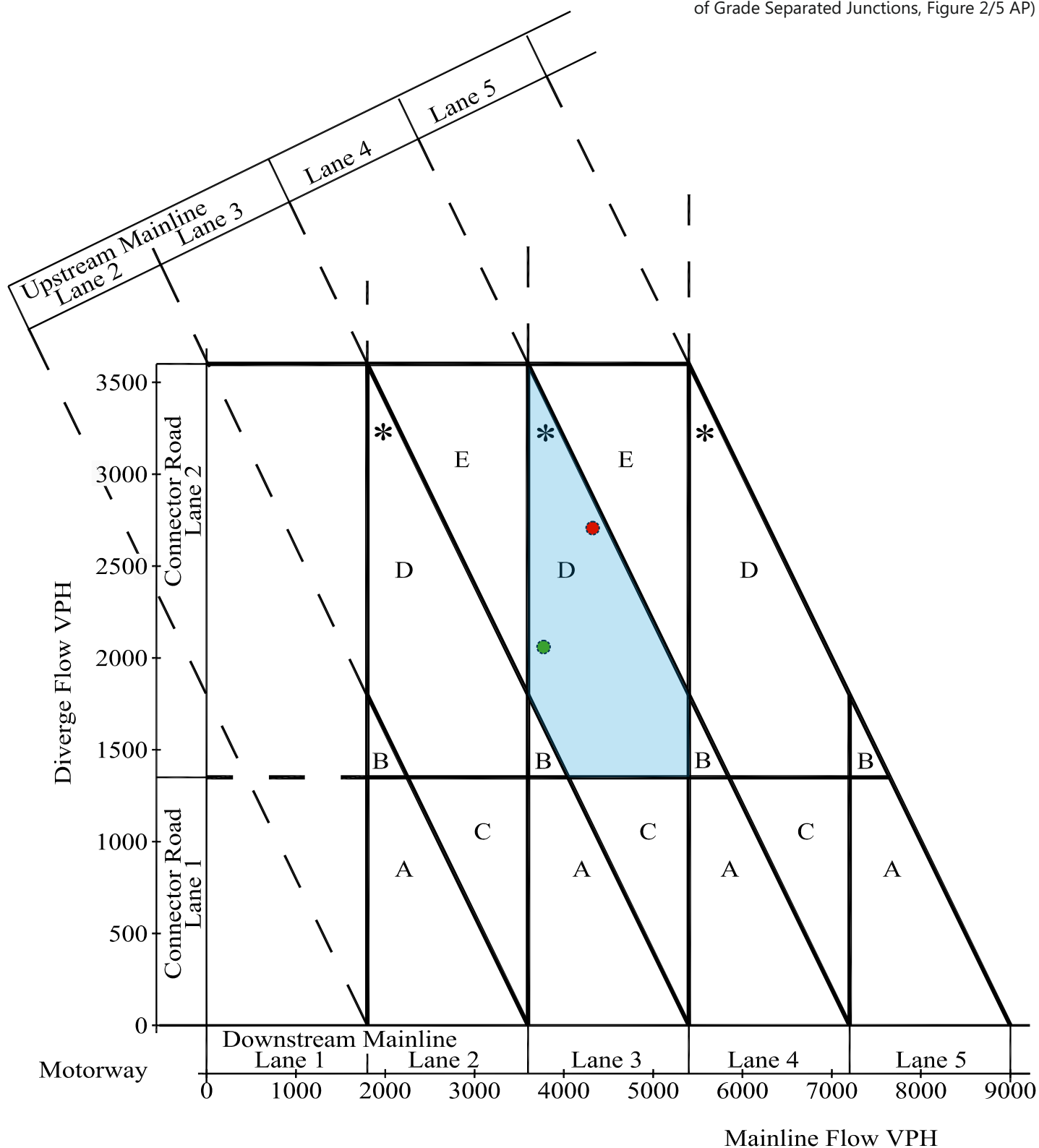
- Existing Merge Layout
- AM Flows
- PM Flows

Figure 2 - M25 / A12 Grade Separated Junction

Motorway Diverging Diagram

M25 Southbound Off-slip

(Taken from DMRB TD22/06 Layout of Grade Separated Junctions, Figure 2/5 AP)



Scenarios

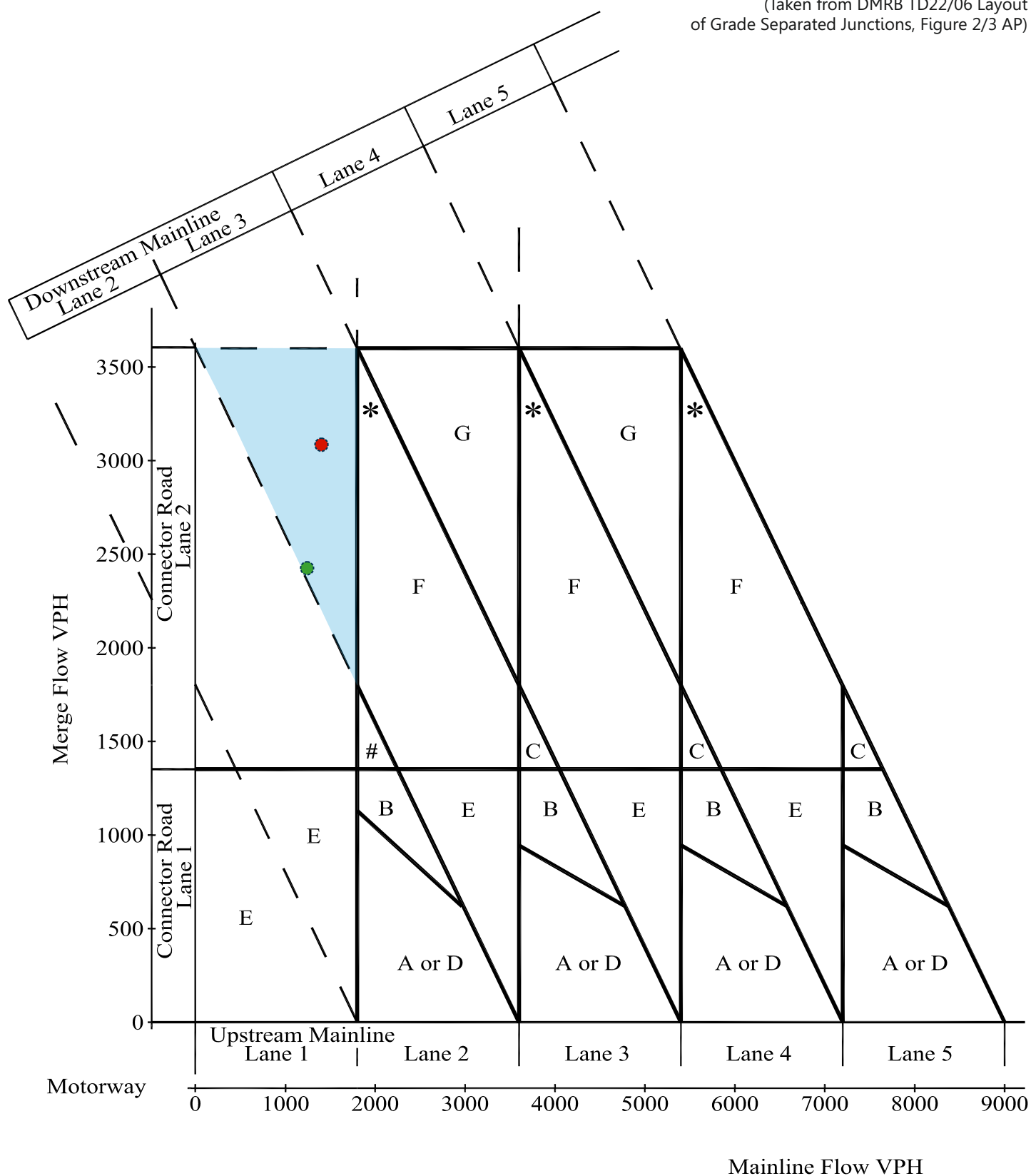
- Existing Diverge Layout
- AM Flows
- PM Flows

Figure 3 - M25 / A12 Grade Separated Junction

Motorway Merging Diagram

A12 Eastbound On-slip

(Taken from DMRB TD22/06 Layout of Grade Separated Junctions, Figure 2/3 AP)



Scenarios

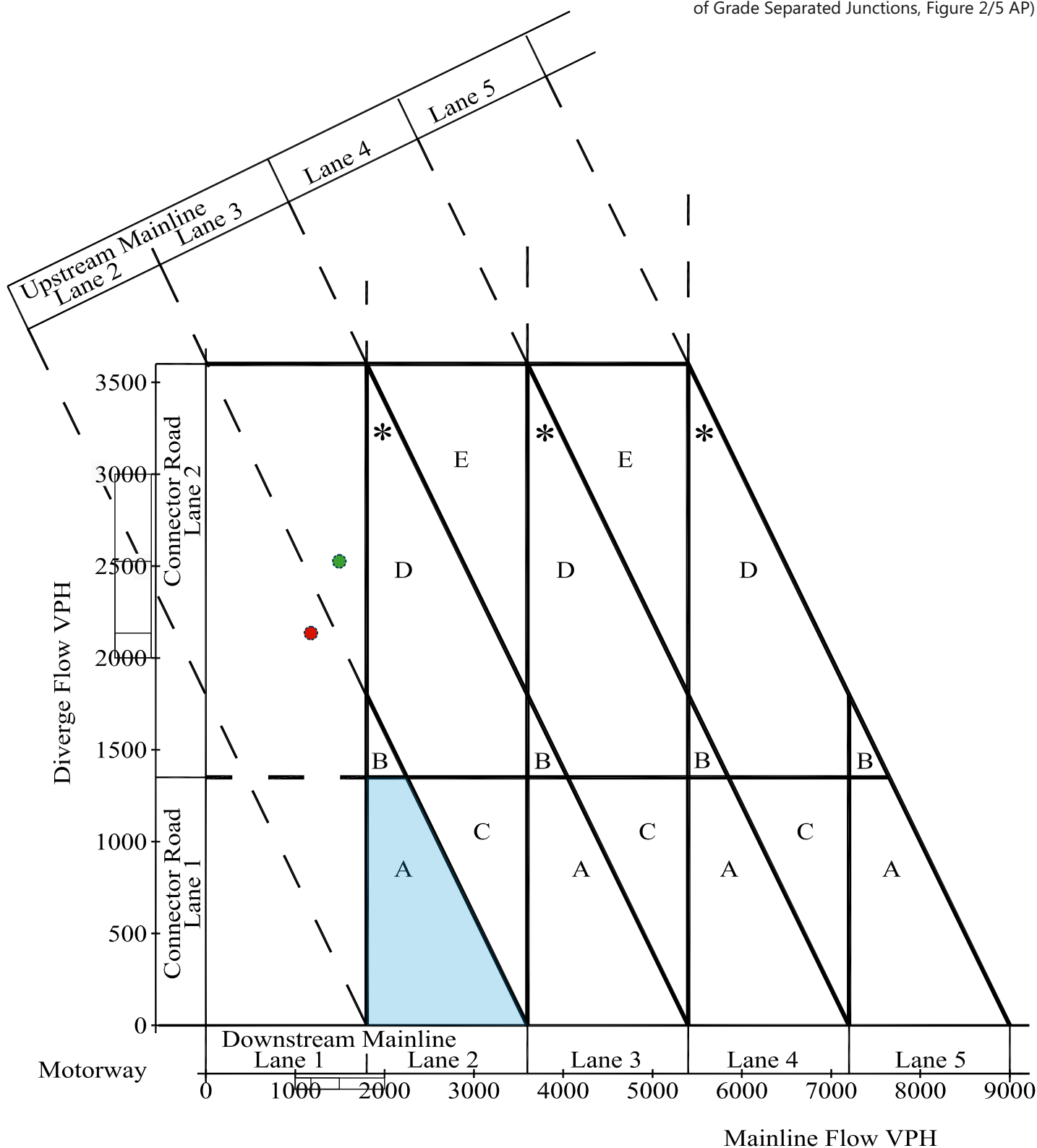
- Existing Merge Layout
- AM Flows
- PM Flows

Figure 4 - M25/ A12 Grade Separated Junction

Motorway Diverging Diagram

A12 Westbound Off-slip

(Taken from DMRB TD22/06 Layout of Grade Separated Junctions, Figure 2/5 AP)



Scenarios

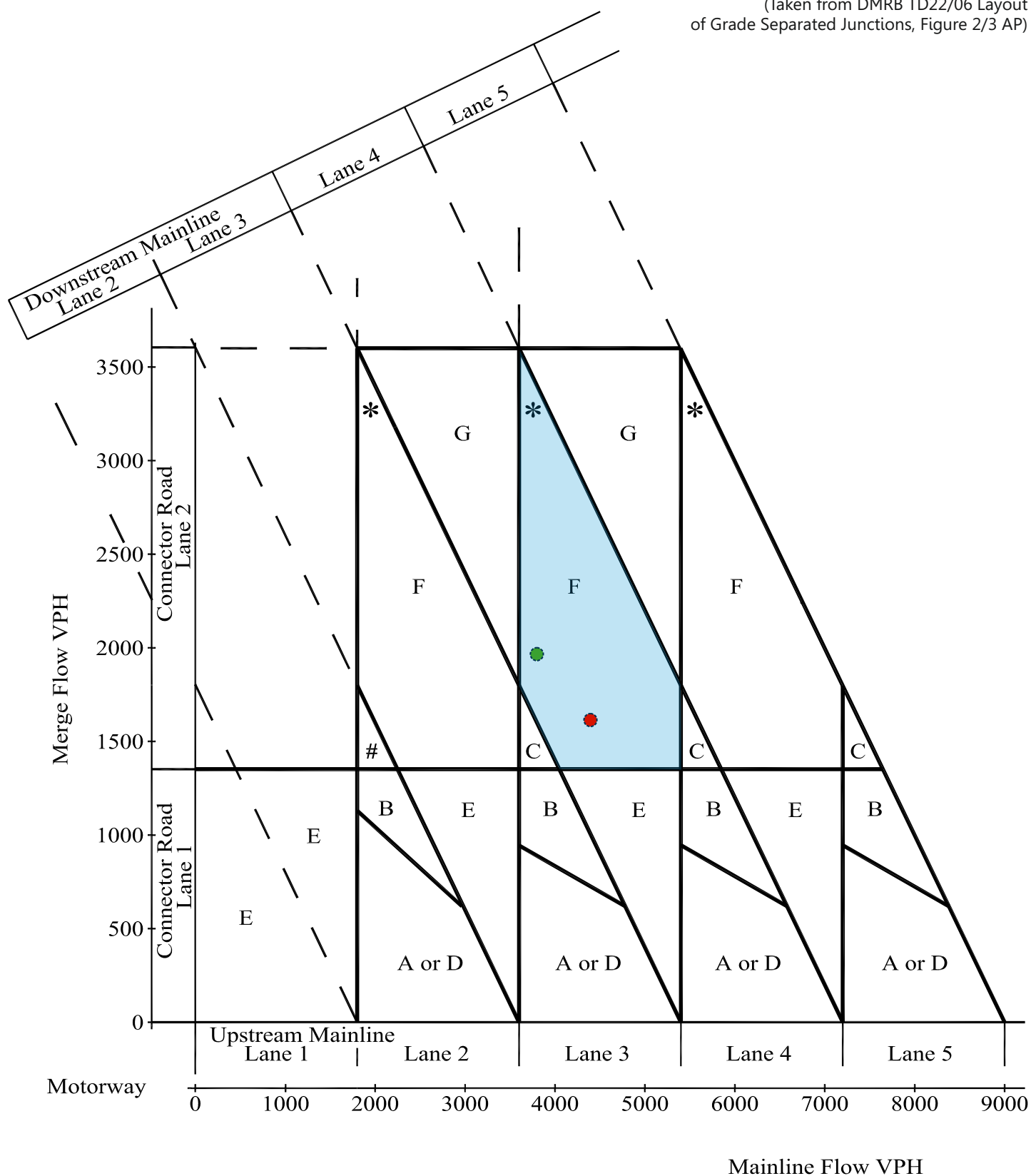
- Existing Diverge Layout
- AM Flows
- PM Flows

Figure 5 - M25 / A12 Grade Separated Junction

Motorway Merging Diagram

M25 Southbound On-slip

(Taken from DMRB TD22/06 Layout of Grade Separated Junctions, Figure 2/3 AP)



Scenarios

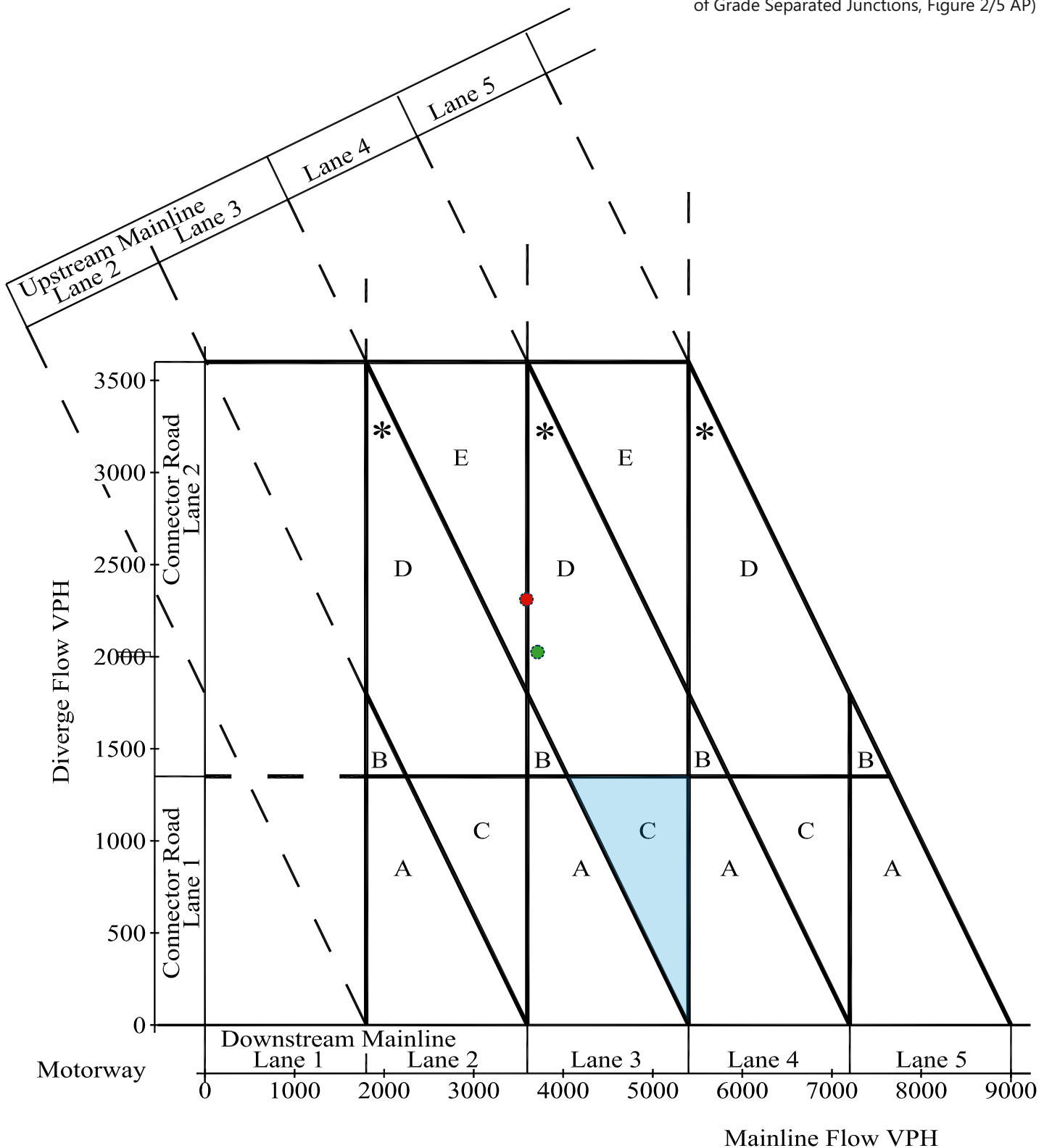
- Existing Merge Layout
- AM Flows
- PM Flows

Figure 6 - M25 / A12 Grade Separated Junction

Motorway Diverging Diagram

M25 Northbound Off-slip

(Taken from DMRB TD22/06 Layout of Grade Separated Junctions, Figure 2/5 AP)



Scenarios

- Existing Diverge Layout
- AM Flows
- PM Flows

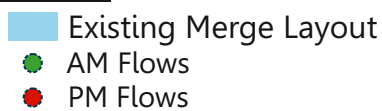


Figure 8 - M25 / A12 Grade Separated Junction

Motorway Diverging Diagram

A12 Eastbound Off-slip

(Taken from DMRB TD22/06 Layout of Grade Separated Junctions, Figure 2/5 AP)

