NOTES

1. A MOTORWAY TO MOTORWAY CONNECTION WILL GENERALLY REQUIRE AN ADDED LANE OR EXTENDED PARALLEL RUNNING LANE AT THE MOTORWAY ENTRANCE.

MOTORWAY ONE

TO MOTORWAY TWO

MOTORWAY TWO ENTRY RAMP

MOTORWAY ONE ENTRY RAMP

ALTERNATIVE STOP LINE LOCATIONS BASED ON TRAFFIC STORAGE AND CONSTRUCTABILITY CONSIDERATIONS. LAYOUT VARIES ACCORDING TO LANE ARRANGEMENT. REFERS TO OTHER DRAWINGS FOR DETAILS.

FROM MOTORWAY TWO

1. A MOTORWAY TO MOTORWAY CONNECTION WILL GENERALLY REQUIRE AN ADDED LANE OR EXTENDED PARALLEL RUNNING LANE AT THE MOTORWAY ENTRANCE.

MOTORWAY TO MOTORWAY CONNECTION
NOTES

1. LENGTHS ARE APPLICABLE FOR ALL MOTORWAY POSTED SPEEDS.

2. LENGTH WILL BE GOVERNED BY APPROACH GEOMETRY (60m - 90m).

3. FOUR SECONDS OF TRAVEL TIME AT THE MOTORWAY POSTED SPEED. PARALLEL RUNNING LANE LENGTH MAY BE INCREASED TO A MAXIMUM OF 200m TO ALLOW FOR VEHICLE ACCELERATION BASED ON GRADE CORRECTION.

4. TAPER LENGTH BASED ON A LATERAL MOVEMENT AT 1.5 M/S AT THE MOTORWAY POSTED SPEED.

5. MINIMUM DISTANCE FROM THE START OF THE RAMP TO THE SOFT NOSE SHALL NOT BE LESS THAN THE ACCELERATION DISTANCE FROM 0m/s TO THE MOTORWAY POSTED SPEED.

FOR DETAIL REFER TO AUSTROADS GUIDE TO ROAD DESIGN PART 4C.
NOTES

1. LENGTHS ARE APPLICABLE FOR ALL MOTORWAY POSTED SPEEDS.

2. LENGTH WILL BE GOVERNED BY APPROACH GEOMETRY (60m - 90m).

3. FOUR SECONDS OF TRAVEL TIME AT THE MOTORWAY POSTED SPEED. PARALLEL RUNNING LANE LENGTH MAY BE INCREASED TO A MAXIMUM OF 200m TO ALLOW FOR VEHICLE ACCELERATION BASED ON GRADE CORRECTION.

4. TAPER LENGTH BASED ON A LATERAL MOVEMENT AT 1.0 M/S AT THE MOTORWAY POSTED SPEED.

5. MINIMUM DISTANCE FROM THE START OF THE RAMP TO THE SOFT NOSE SHALL NOT BE LESS THAN THE ACCELERATION DISTANCE FROM 0km/h TO THE MOTORWAY POSTED SPEED.

SEE NOTE 1

SEE NOTE 2

SEE NOTE 3

SEE NOTE 4

SEE NOTE 5

SECONDS OF TRAVEL TIME AT THE MOTORWAY POSTED SPEED.

LATERAL MOVEMENT AT 1.0 M/S AT THE MOTORWAY POSTED SPEED.

MINIMUM DISTANCE FROM THE START OF THE RAMP TO THE SOFT NOSE SHALL NOT BE LESS THAN THE ACCELERATION DISTANCE FROM 0km/h TO THE MOTORWAY POSTED SPEED.

FOR DETAIL REFER TO AUSTROADS GUIDE TO ROAD DESIGN PART 4C

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN

SEND FEEDBACK ON THIS STANDARD DRAWING TO technologystandards@rms.nsw.gov.au
### Notes

1. Lengths are applicable for all motorway posted speeds.

2. Length will be governed by approach geometry (60km - 90km).

3. Four seconds of travel time at the motorway posted speed. Parallel running lane length may be increased to a maximum of 300m to allow for vehicle acceleration based on grade correction.

4. Taper length based on a lateral movement at 1.0 m/s at the motorway posted speed.

5. Minimum distance from the start of the ramp to the soft nose shall not be less than the acceleration distance from 0 km/h to the motorway posted speed.

### Diagram Details
- **END OF TAPER**
- **START OF RAMP**
- **LOCALISED LANE**
- **STORAGE**
- **TOP LINE**
- **GORE**
- **PARALLEL RUNNING LANE**
- **SOFT NOSE**
- **HAND NOSE**
- **MERGE TAPER**
- **THREE LANES AT STOP LINE**

### Additional Notes
- Distance from 0 km/h to the motorway posted speed.
- Soft nose shall not be less than the acceleration distance from 0 km/h to the motorway posted speed.
- Four seconds of travel time at the motorway posted speed.
- Parallel running lane length may be increased to a maximum of 300m to allow for vehicle acceleration based on grade correction.
- Taper length based on a lateral movement at 1.0 m/s at the motorway posted speed.

### Dimensions

- **GORE**: See Note 2
- **SOFT NOSE**: See Note 3
- **MERGE TAPER**: See Note 4
- **LOCALISED LANE**: See Note 5
- **END OF TAPER**: See Note 6

**For Detail Refer to Austroads Guide to Road Design Part 4C**
NOTES

1. LENGTHS ARE APPLICABLE FOR ALL MOTORWAY POSTED SPEEDS.

2. LENGTH WILL BE GOVERNED BY APPROACH GEOMETRY [80m - 86m].

3. FOUR SECONDS OF TRAVEL TIME AT THE MOTORWAY POSTED SPEED. PARALLEL RUNNING LANE LENGTH MAY BE INCREASED TO A MAXIMUM OF 230m TO ALLOW FOR VEHICLE ACCELERATION BASED ON GRADE CORRECTION.

4. TAPER LENGTH BASED ON A LATENT MOVEMENT AT 1.0 m/s AT THE MOTORWAY POSTED SPEED.

5. MAXIMUM DISTANCE FROM THE START OF THE RAMP TO THE SOFT NOSE SHALL NOT BE LESS THAN THE ACCELERATION DISTANCE FROM 0KM/H TO THE MOTORWAY POSTED SPEED.

For detail refer to Austroads Guide to Road Design Part 4C.
NOTES

1. LENGTHS ARE APPLICABLE FOR ALL MOTORWAY POSTED SPEEDS.

2. LENGTH WILL BE GOVERNED BY APPROACH GEOMETRY (500m - 800m).

3. FOUR SECONDS OF TRAVEL TIME AT THE MOTORWAY POSTED SPEED. PARALLEL RUNNING LANE LENGTH MAY BE INCREASED TO A MAXIMUM OF 250m TO ALLOW FOR VEHICLE ACCELERATION BASED ON GRADE CORRECTION.

4. TAPER LENGTH BASED ON A LATERAL MOVEMENT AT 1.6m/s AT THE MOTORWAY POSTED SPEED.

5. MINIMUM DISTANCE FROM THE START OF THE RAMP TO THE SOFT NOSE SHALL NOT BE LESS THAN THE ACCELERATION DISTANCE FROM 0km/h TO THE MOTORWAY POSTED SPEED.

6. 50% OF THE DISTANCE FROM THE START OF RAMP TO THE STOP LINE.

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

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FOR DETAIL REFER TO AUSTROADS GUIDE TO ROAD DESIGN PART 4C

PROJECT CODE: DS2016_002032

R1010-06

ISSUED

JUNE 2017

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NOTES

1. LENGTHS ARE APPLICABLE FOR ALL MOTORWAY POSTED SPEEDS.

2. LENGTH WILL BE GOVERNED BY APPROACH GEOMETRY (60m - 80m).

3. FOUR SECONDS OF TRAVEL TIME AT THE MOTORWAY POSTED SPEED. PARALLEL RUNNING LANE LENGTH MAY BE INCREASED TO A MAXIMUM OF 320m TO ALLOW FOR VEHICLE ACCELERATION BASED ON GRADE CORRECTION.

4. TAPER LENGTH BASED ON A LATERAL MOVEMENT AT 1.0 m/s AT THE MOTORWAY POSTED SPEED.

5. MINIMUM DISTANCE FROM THE START OF THE RAMP TO THE SOFT NOSE SHALL NOT BE LESS THAN THE ACCELERATION DISTANCE FROM 60km/h TO THE MOTORWAY POSTED SPEED.

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN

FOR DETAIL REFER TO AUSTROADS GUIDE TO ROAD DESIGN PART 4C
NOTES

1. LENGTHS ARE APPLICABLE FOR ALL MOTORWAY POSTED SPEEDS.

2. LENGTH WILL BE GOVERNED BY APPROACH GEOMETRY (50m - 200m).

3. FOUR SECONDS OF TRAVEL TIME AT THE MOTORWAY POSTED SPEED: PARALLEL RUNNING LANE LENGTH MAY BE INCREASED TO A MAXIMUM OF 200m TO ALLOW FOR VEHICLE ACCELERATION BASED ON GRADE CORRECTION.

4. TAPER LENGTH BASED ON A LATERAL MOVEMENT AT 1.5 M/S AT THE MOTORWAY POSTED SPEED.

5. MINIMUM DISTANCE FROM THE START OF THE RAMP TO THE SOFT NOSE SHALL NOT BE LESS THAN THE ACCELERATION DISTANCE FROM 0km/h TO THE MOTORWAY POSTED SPEED.

1. LENGTHS ARE APPLICABLE FOR ALL MOTORWAY POSTED SPEEDS.

2. LENGTH WILL BE GOVERNED BY APPROACH GEOMETRY (50m - 200m).

3. FOUR SECONDS OF TRAVEL TIME AT THE MOTORWAY POSTED SPEED: PARALLEL RUNNING LANE LENGTH MAY BE INCREASED TO A MAXIMUM OF 200m TO ALLOW FOR VEHICLE ACCELERATION BASED ON GRADE CORRECTION.

4. TAPER LENGTH BASED ON A LATERAL MOVEMENT AT 1.5 M/S AT THE MOTORWAY POSTED SPEED.

5. MINIMUM DISTANCE FROM THE START OF THE RAMP TO THE SOFT NOSE SHALL NOT BE LESS THAN THE ACCELERATION DISTANCE FROM 0km/h TO THE MOTORWAY POSTED SPEED.
NOTES

1. LENGTHS ARE APPLICABLE FOR ALL MOTORWAY POSTED SPEEDS.

2. LENGTH WILL BE GOVERNED BY APPROACH GEOMETRY (80m - 90m).

3. FIVE SECONDS OF TRAVEL TIME AT THE MOTORWAY POSTED SPEED. PARALLEL RUNNING LANE LENGTH MAY BE INCREASED TO A MAXIMUM OF 200m TO ALLOW FOR VEHICLE ACCELERATION BASED ON GRADE CORRECTION.

4. TAPER LENGTH BASED ON A LATENT MOVEMENT AT 1.5 MS AT THE MOTORWAY POSTED SPEED.

5. MINIMUM DISTANCE FROM THE START OF THE RAMP TO THE STOP LINE SHALL NOT BE LESS THAN THE ACCELERATION DISTANCE FROM SLOW TO THE MOTORWAY POSTED SPEED.

DETAIL A - FOUR LANES AT STOP LINE (TWO LOCALISED)

DETAIL A - FOUR LANES AT STOP LINE (ONE LOCALISED)

FOR DETAIL REFER TO AUSTROADS GUIDE TO ROAD DESIGN PART 4C.