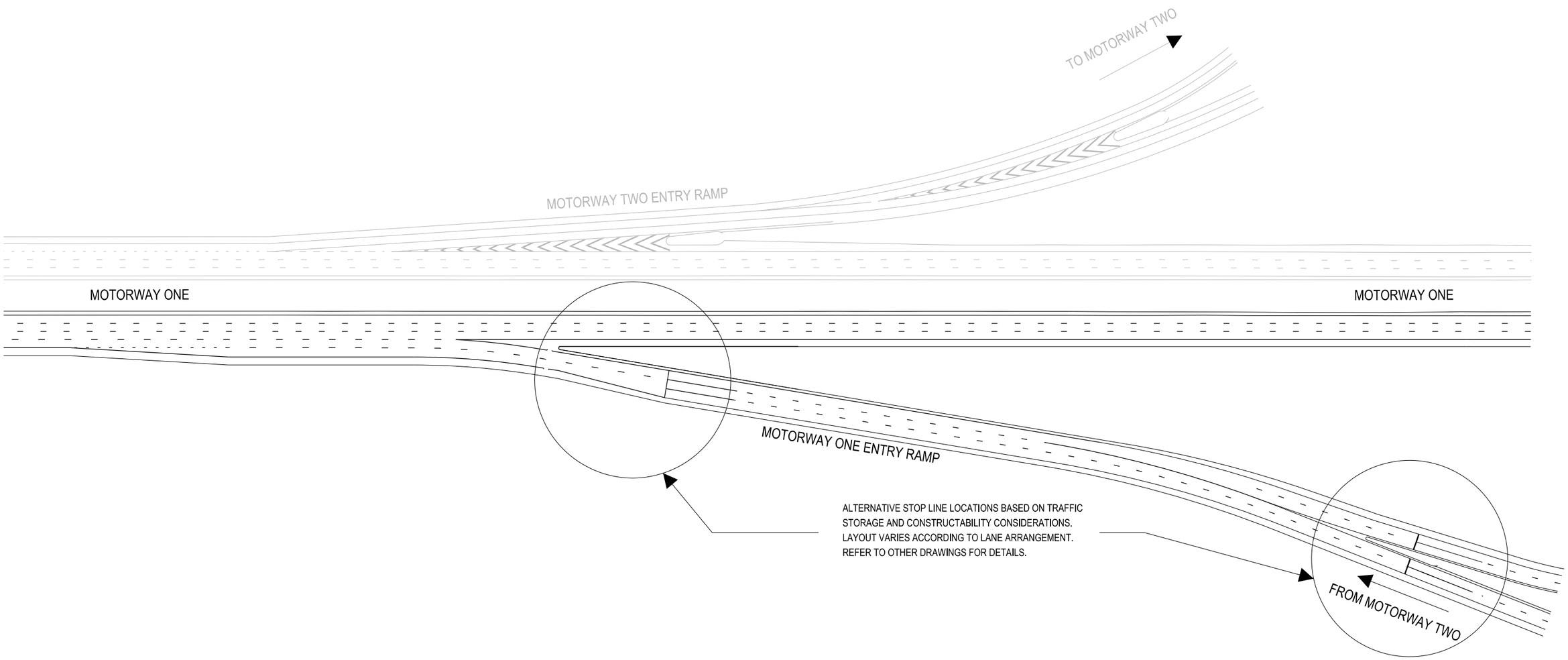
NOTES

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



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50mm ON A3 SIZE ORIGINAL

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REV	DATE	AMENDMENT / REVISION DESCRIPTION	WVR No.	APPROVAL
1	24/11/17	Amended Entry Ramp Details		SFR

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STANDARD DRAWING

A3

ROAD DESIGN ENGINEERING
R1010 RAMP METERING

MOTORWAY TO MOTORWAY CONNECTION

SHEET 1 OF 1

STANDARD DRAWING No. R1010-01

REV. 1

STATUS: ISSUED

EDMS No. DS2016/002027

ORIGINAL ISSUE DATE: JUNE 2017

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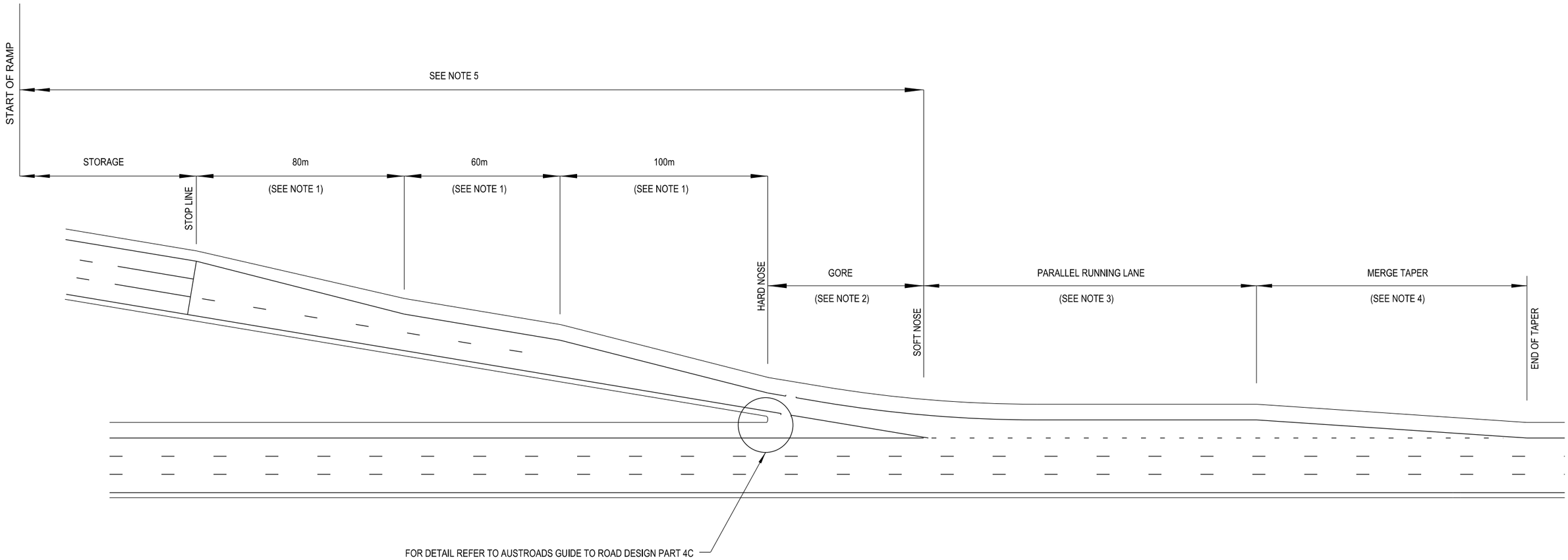
NOTES

1. LENGTHS ARE APPLICABLE FOR ALL MOTORWAY POSTED SPEEDS.
2. LENGTH WILL BE GOVERNED BY APPROACH GEOMETRY (60m - 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.



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STANDARD DRAWING

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ROAD DESIGN ENGINEERING
R1010 RAMP METERING

THREE LANES AT STOP LINE - ONE AT NOSE SHEET 1 OF 1

STANDARD DRAWING No. R1010-02 REV. -

STATUS ISSUED | EDMS No. DS2016/002028 | ORIGINAL ISSUE DATE JUNE 2017

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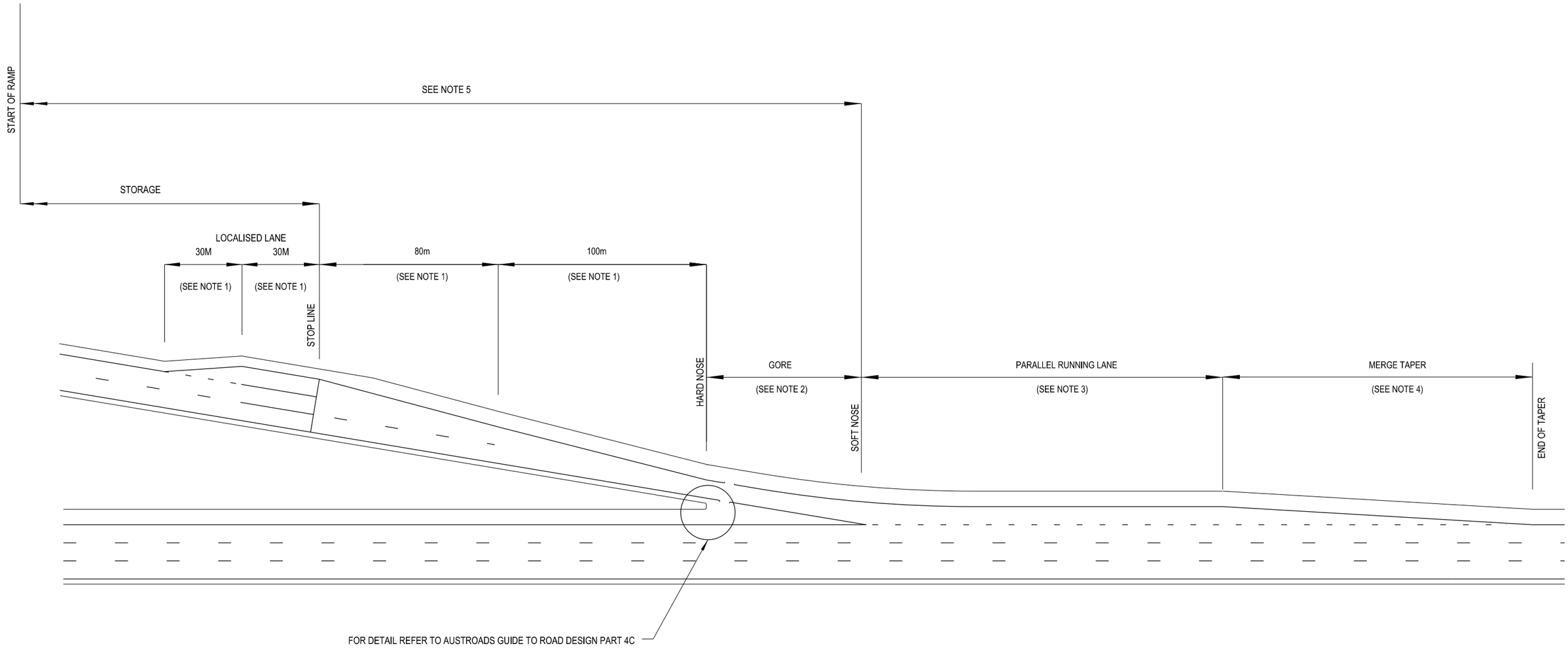
NOTES

1. LENGTHS ARE APPLICABLE FOR ALL MOTORWAY POSTED SPEEDS.
2. LENGTH WILL BE GOVERNED BY APPROACH GEOMETRY (60m - 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.



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STANDARD DRAWING

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ROAD DESIGN ENGINEERING
R1010 RAMP METERING

THREE LANES AT STOP LINE (localised) - ONE AT NOSE

SHEET 1 OF 1

STANDARD DRAWING No. R1010-03

REV. -

STATUS: ISSUED

EDMS No. DS2016/002029

ORIGINAL ISSUE DATE: JUNE 2017

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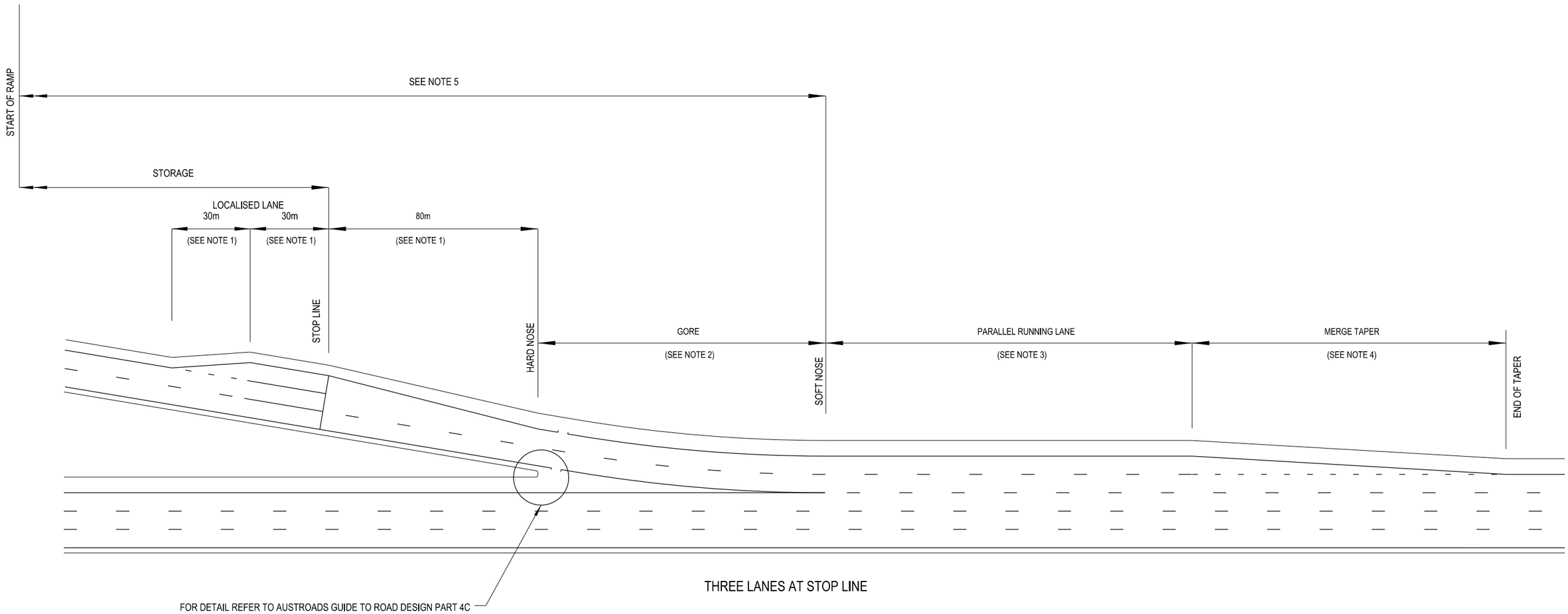
NOTES

1. LENGTHS ARE APPLICABLE FOR ALL MOTORWAY POSTED SPEEDS.
2. LENGTH WILL BE GOVERNED BY APPROACH GEOMETRY (60m - 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.



THREE LANES AT STOP LINE

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STANDARD DRAWING

A3

ROAD DESIGN ENGINEERING
R1010 RAMP METERING

THREE LANES AT STOP LINE (localised) - TWO AT NOSE SHEET 1 OF 1

STANDARD DRAWING No. R1010-04 REV. -

STATUS ISSUED | EDMS No. DS2016/002030 | ORIGINAL ISSUE DATE JUNE 2017

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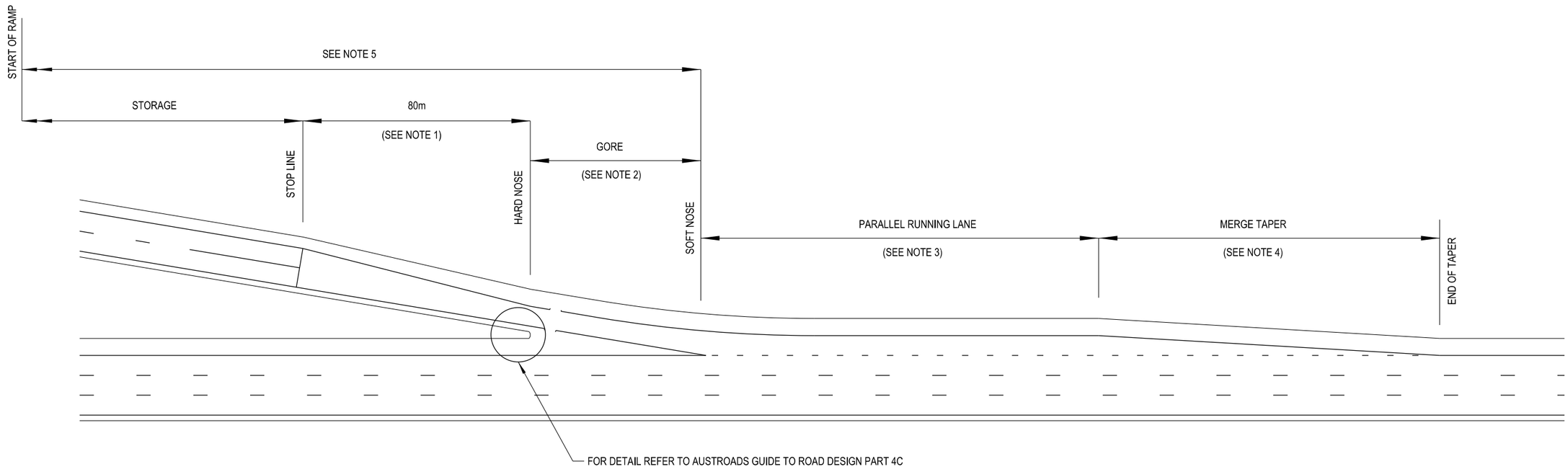
NOTES

1. LENGTHS ARE APPLICABLE FOR ALL MOTORWAY POSTED SPEEDS.
2. LENGTH WILL BE GOVERNED BY APPROACH GEOMETRY (60m - 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.



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ROAD DESIGN ENGINEERING
R1010 RAMP METERING

TWO LANES AT STOP LINE - ONE AT NOSE

SHEET 1 OF 1

STANDARD DRAWING No. R1010-05

REV. -

STATUS ISSUED

EDMS No. DS2016/002031

ORIGINAL ISSUE DATE JUNE 2017

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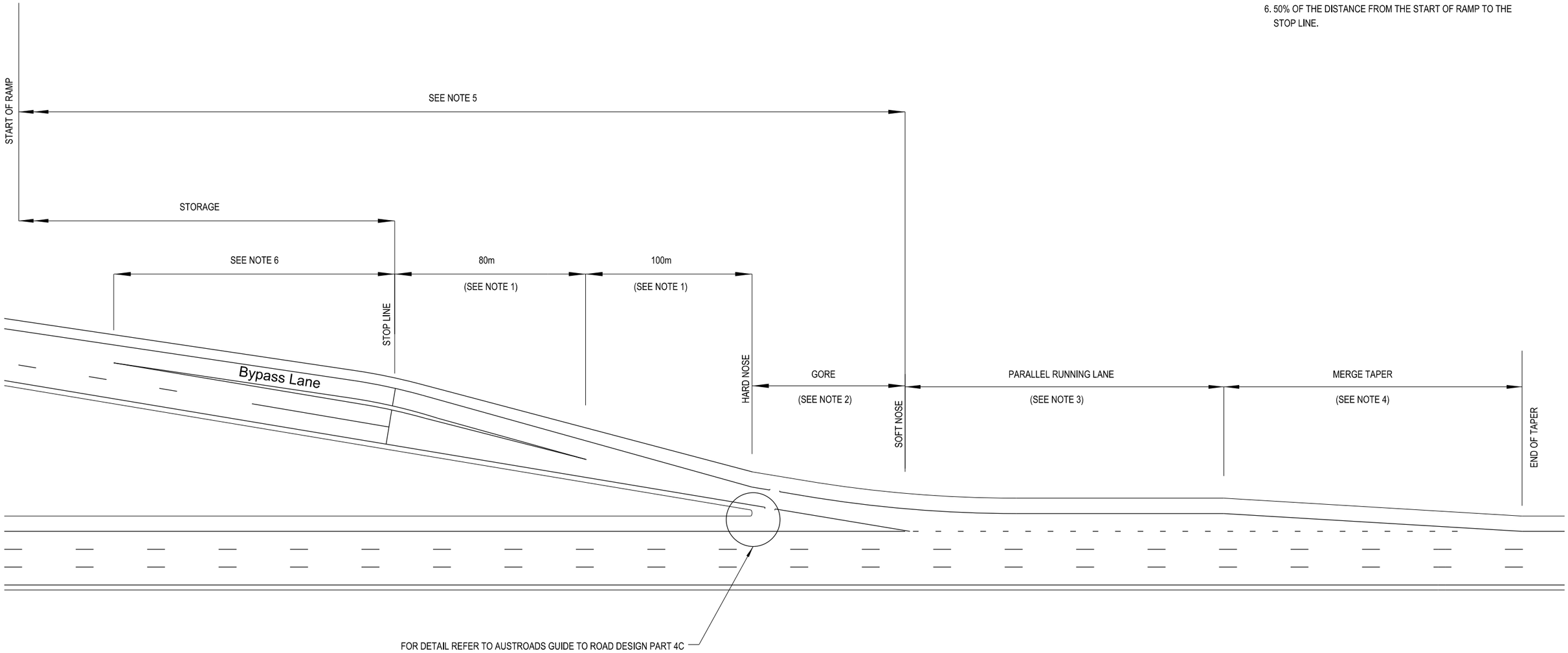
NOTES

1. LENGTHS ARE APPLICABLE FOR ALL MOTORWAY POSTED SPEEDS.
2. LENGTH WILL BE GOVERNED BY APPROACH GEOMETRY (60m - 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.
6. 50% OF THE DISTANCE FROM THE START OF RAMP TO THE STOP LINE.



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	1	01/03/18	Added Note 6		JKH

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A3

ROAD DESIGN ENGINEERING
R1010 RAMP METERING

TWO LANES AT STOP LINE (metered bypass) - ONE AT NOSE SHEET 1 OF 1

STANDARD DRAWING No. R1010-06 REV. 1

STATUS ISSUED | EDMS No. DS2016/002032 | ORIGINAL ISSUE DATE JUNE 2017

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NOTES

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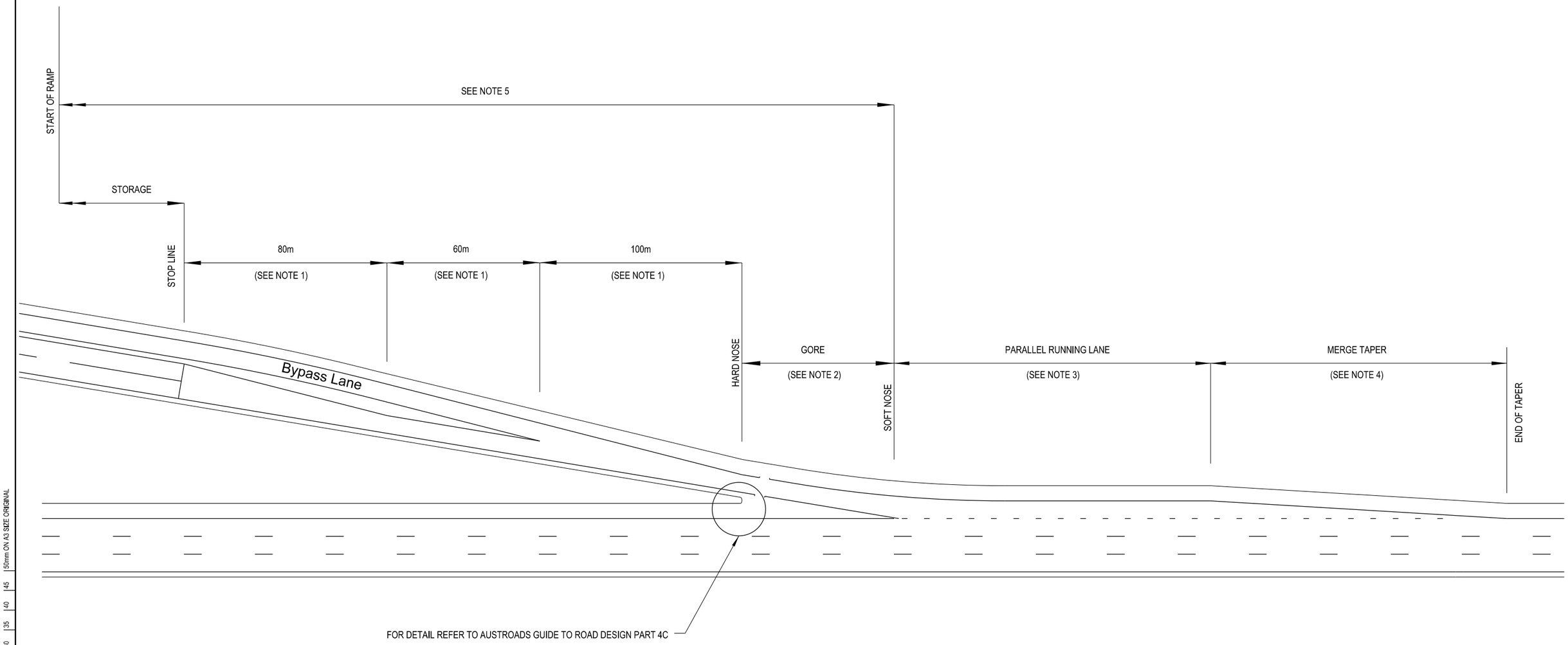

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STANDARD DRAWING

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ROAD DESIGN ENGINEERING
R1010 RAMP METERING

TWO LANES AT STOP LINE (unmeterd bypass) - ONE AT NOSE SHEET 1 OF 1

STANDARD DRAWING No. R1010-07 REV. -

STATUS ISSUED | EDMS No. DS2016/002033 | ORIGINAL ISSUE DATE JUNE 2017

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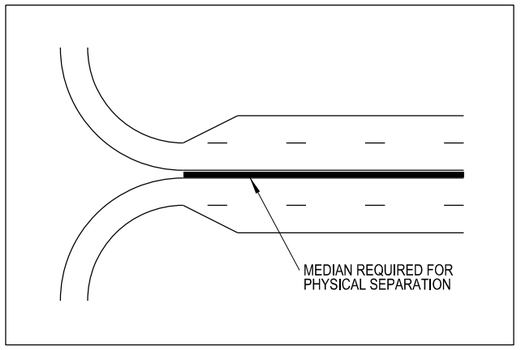
APPROACHES



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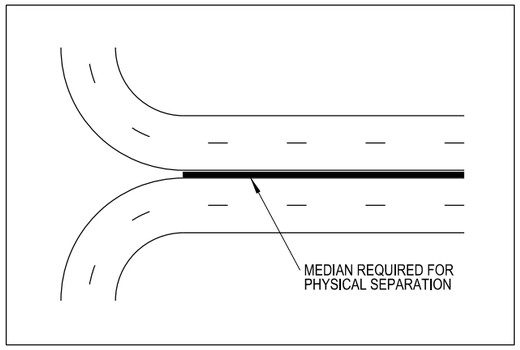

B

NOTES

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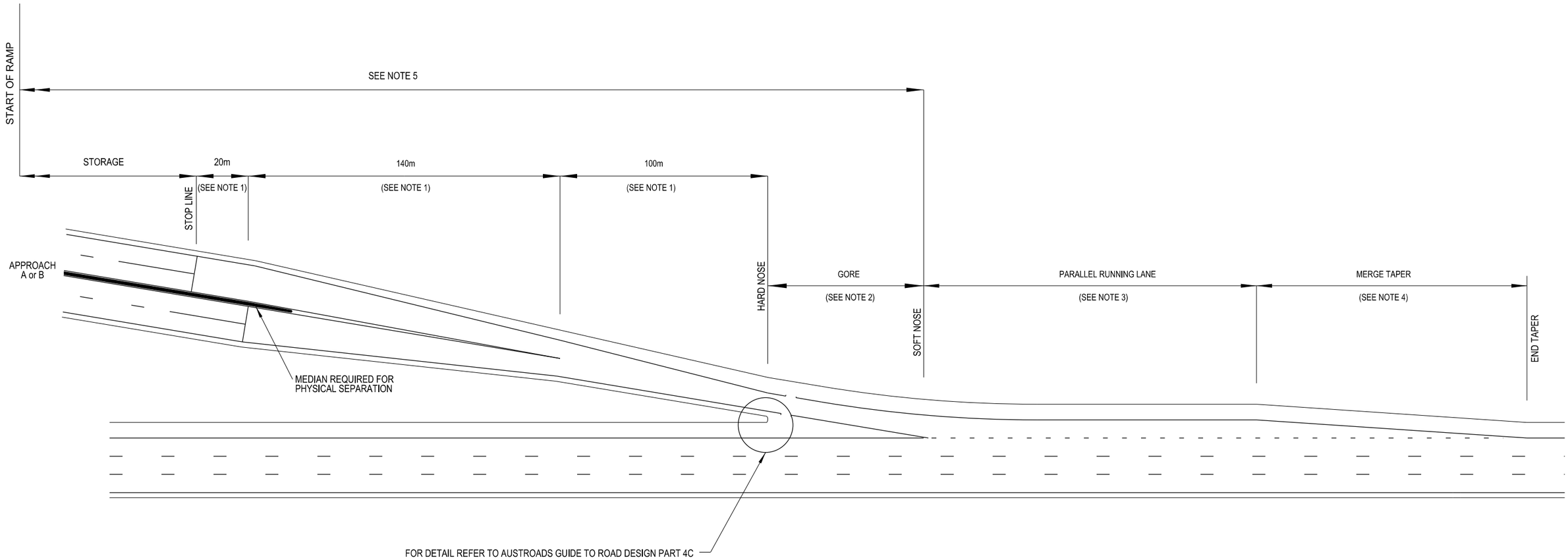

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STANDARD DRAWING

A3

ROAD DESIGN ENGINEERING
R1010 RAMP METERING

SPLIT 4 LANES AT STOP LINE - ONE AT NOSE SHEET 1 OF 1

STANDARD DRAWING No.	REV.	
R1010-08	-	
STATUS	EDMS No.	ORIGINAL ISSUE DATE
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NOTES

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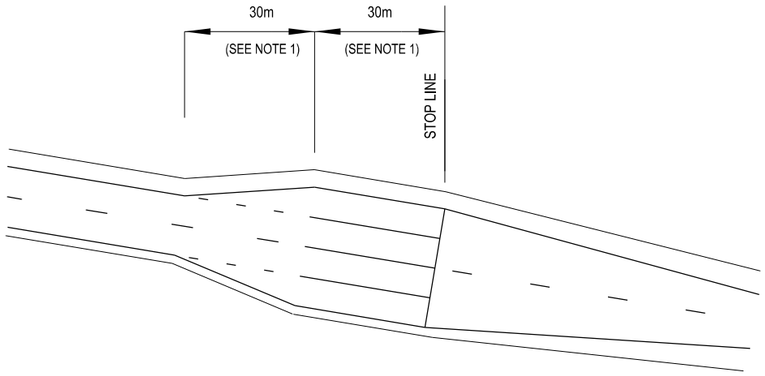
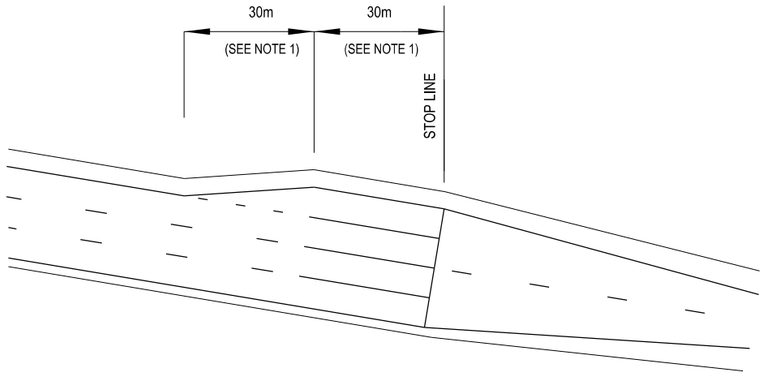
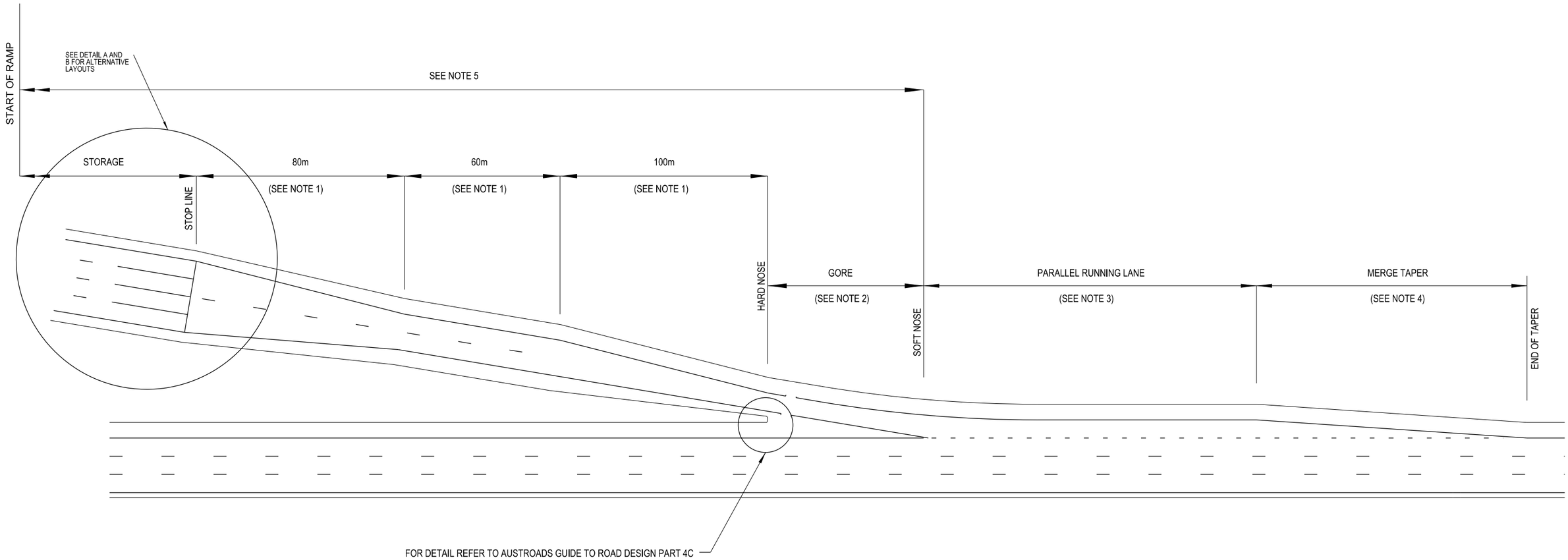


DETAIL A - FOUR LANES AT STOP LINE (TWO LOCALISED)



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



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STANDARD DRAWING

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ROAD DESIGN ENGINEERING
R1010 RAMP METERING

FOUR LANES AT STOP LINE - ONE AT NOSE

SHEET 1 OF 1

STANDARD DRAWING No. R1010-09

REV. -

STATUS: ISSUED

EDMS No. DS2017/002153

ORIGINAL ISSUE DATE: NOVEMBER 2017

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