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REVISION	BY	DATE



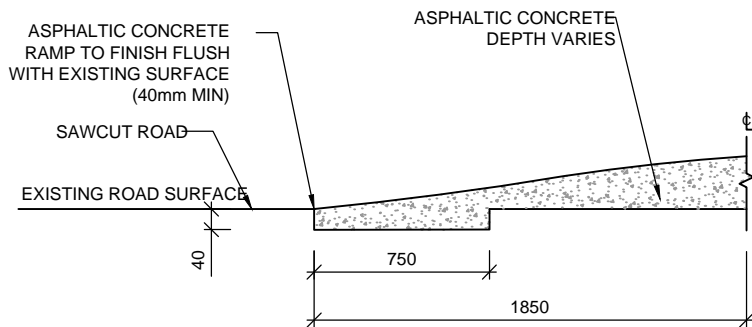
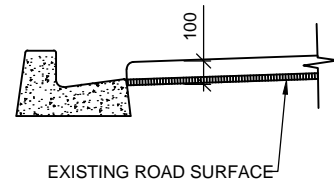
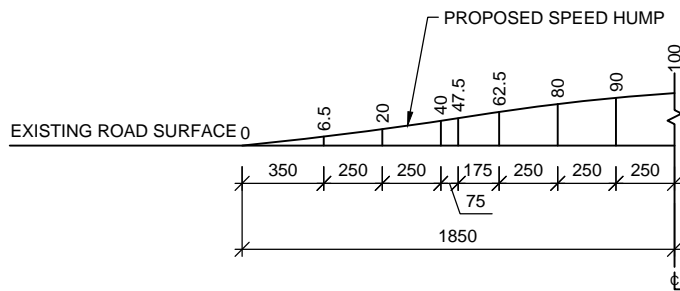
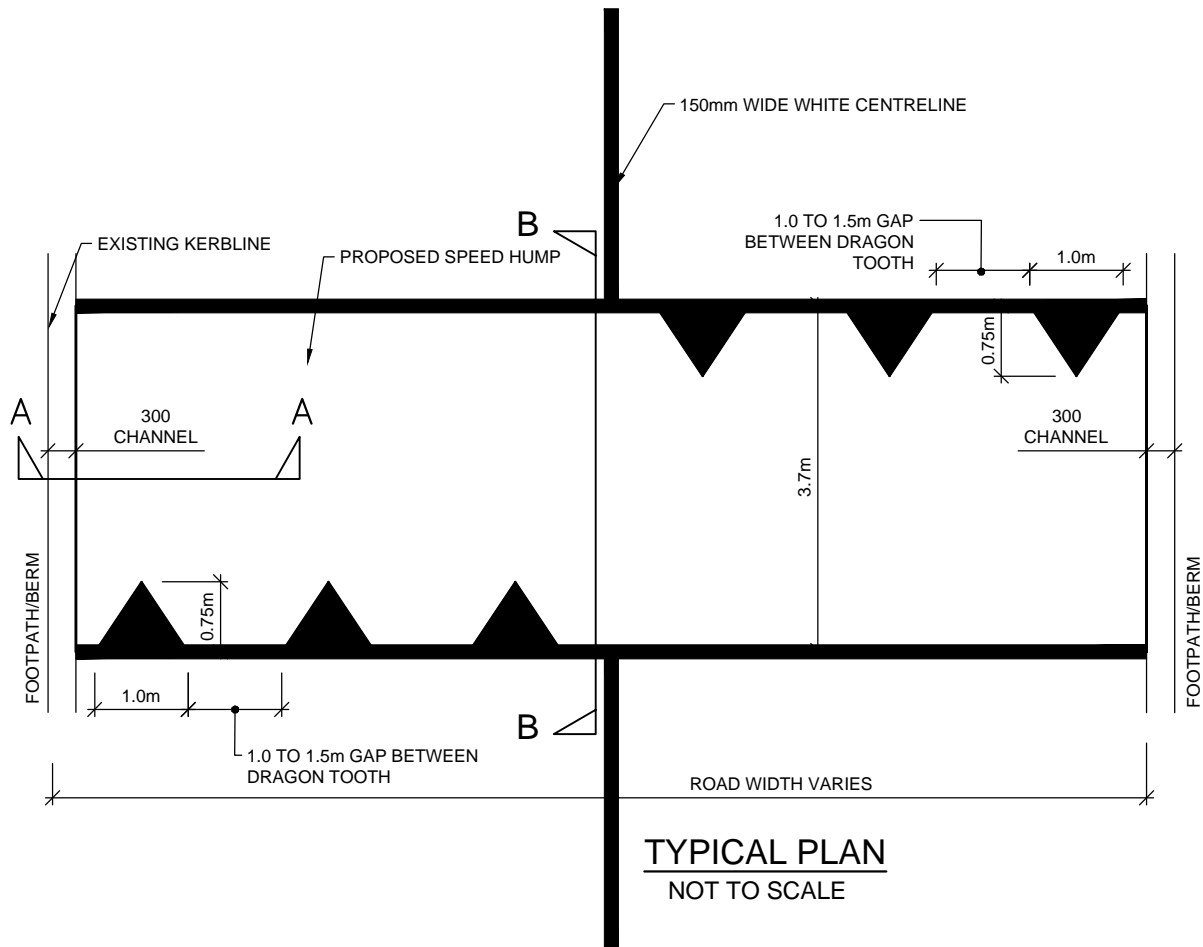
AUCKLAND TRANSPORT
CODE OF PRACTICE

TITLE
**TRAFFIC CALMING
DRAWING SET
INDEX**

SCALE:

DRAWING No.
TC000

VERSION
1.0



NOTES:

1. All dimensions are in millimeters unless otherwise stated.
2. Do not scale from this drawing.
3. Contractor to liaise with local service authorities for location of all underground services before any excavation.
4. All exposed saw cut edges are to be sprayed with a hot bitumin sealer.
5. All works to have a tolerance of $\pm 5\text{mm}$

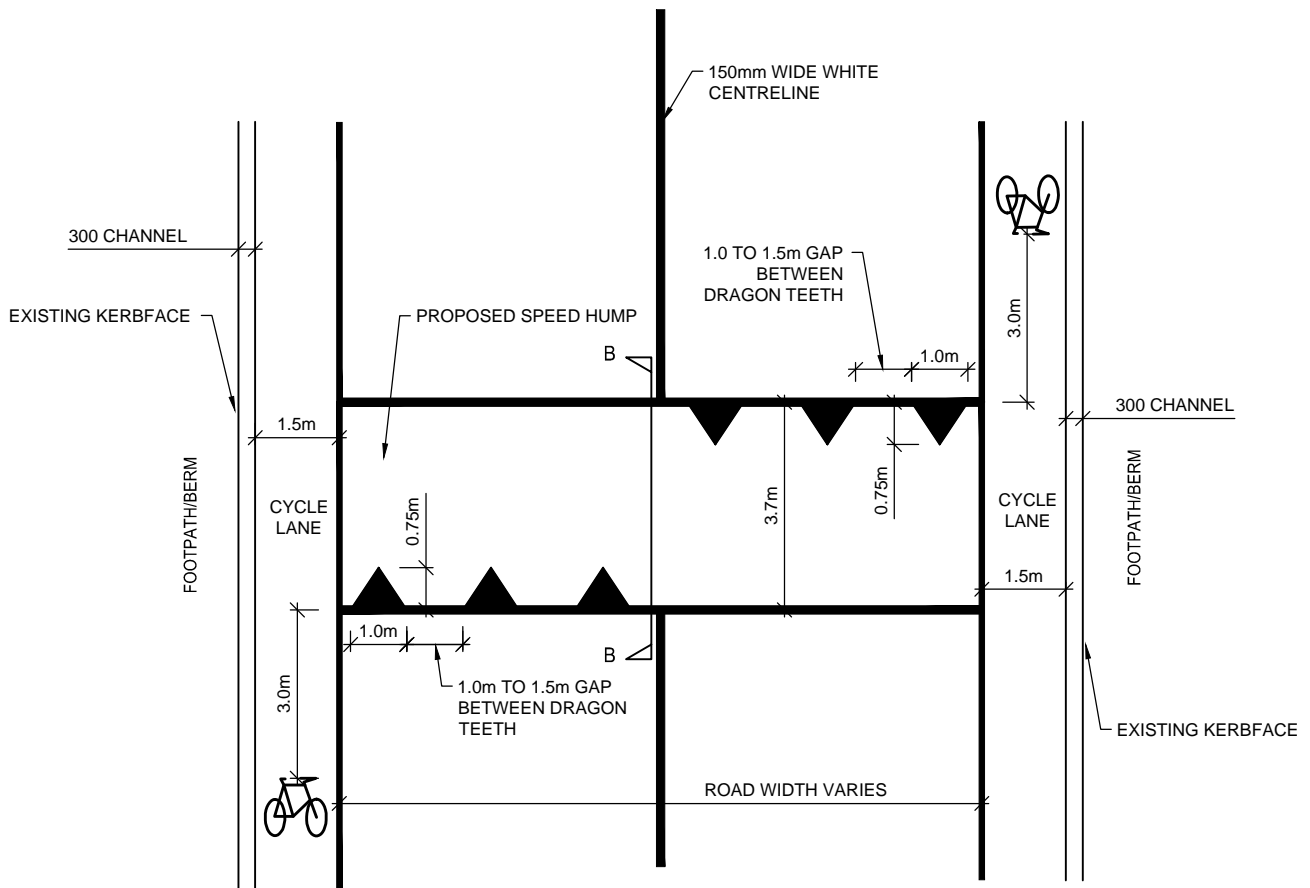
REVISION	BY	DATE



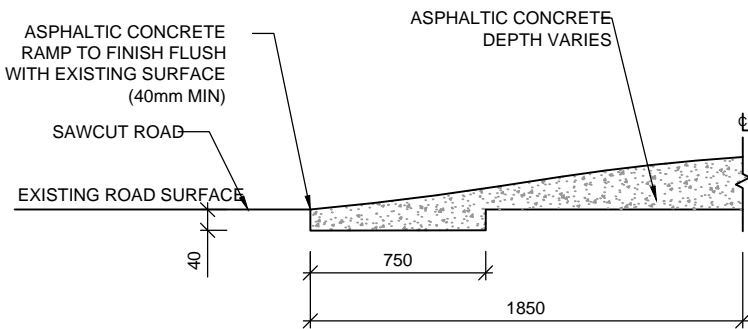
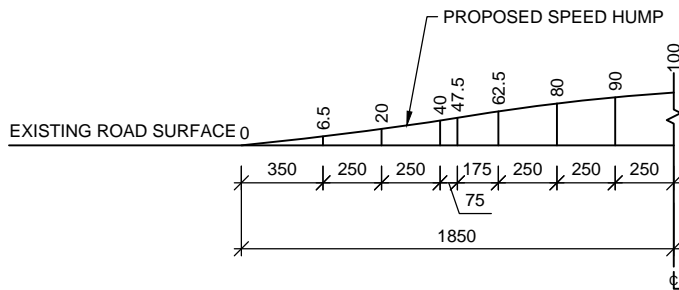
AUCKLAND TRANSPORT
CODE OF PRACTICE

TITLE
**TYPICAL (SINUSOIDAL)
SPEED HUMP**

SCALE:	N.T.S.
DRAWING No.	TC001
VERSION	1.0



TYPICAL PLAN
NOT TO SCALE



SECTION B-B
NOT TO SCALE

NOTES:

1. All dimensions are in millimeters unless otherwise stated.
2. Do not scale from this drawing.
3. Contractor to liaise with local service authorities for location of all underground services before any excavation.
4. All exposed saw cut edges are to be sprayed with a hot bituminous sealer.
5. All works to have a tolerance of $\pm 5\text{mm}$

REVISION	BY	DATE



AUCKLAND TRANSPORT
CODE OF PRACTICE

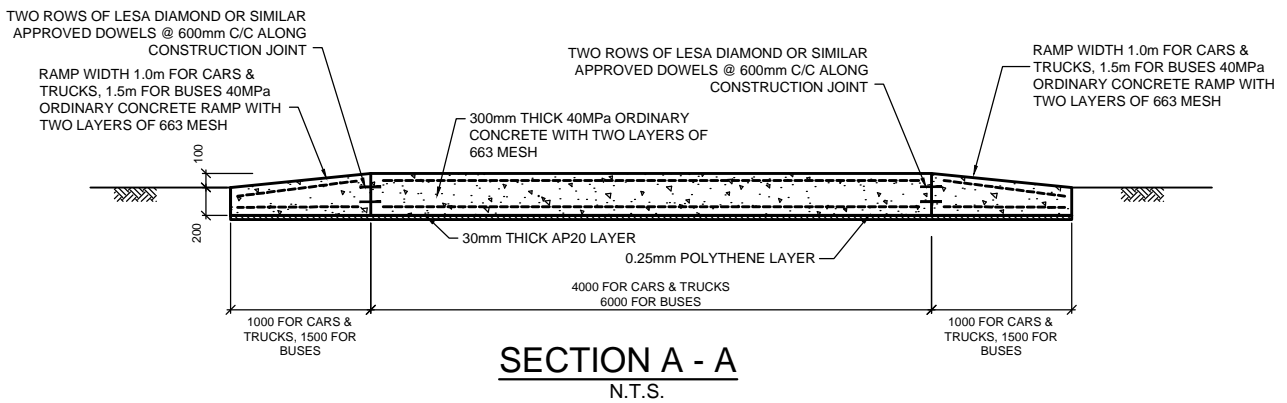
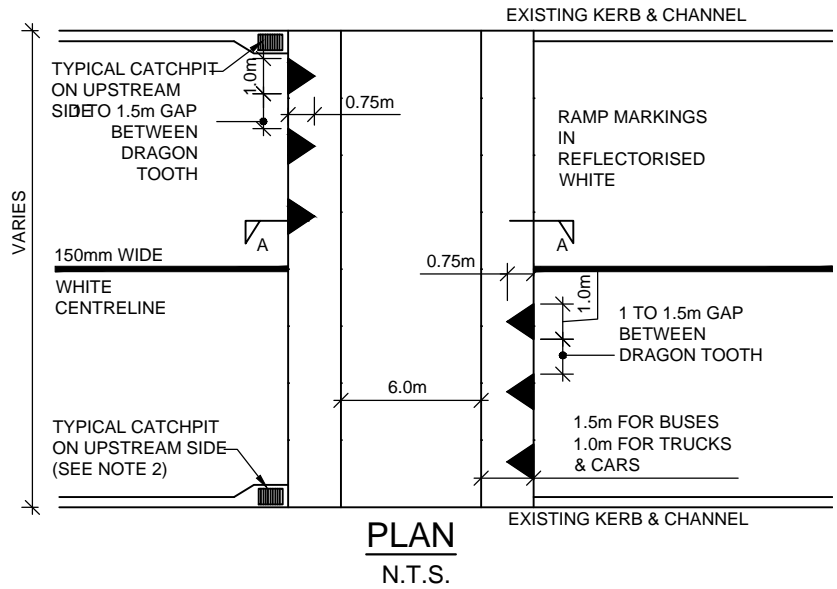
TITLE
**TYPICAL (SINUSOIDAL)
SPEED HUMP
WITH CYCLE BYPASS**

SCALE:	N.T.S.
DRAWING No.	TC002
VERSION	1.0

ADVANCE WARNING SIGNS ON APPROACHING SPEED-TABLE OR HUMPS

NOTE

1. PW-39 sign with supplementary as shown to be erected in advance of treatment on both sides of the carriageway facing approaching traffic



NOTE

1. See drainage chapter for additional catchpit details.
2. All work to have a tolerance of $\pm 5\text{mm}$.
3. Reinforcing to be placed on spacers.

REVISION	BY	DATE



AUCKLAND TRANSPORT
CODE OF PRACTICE

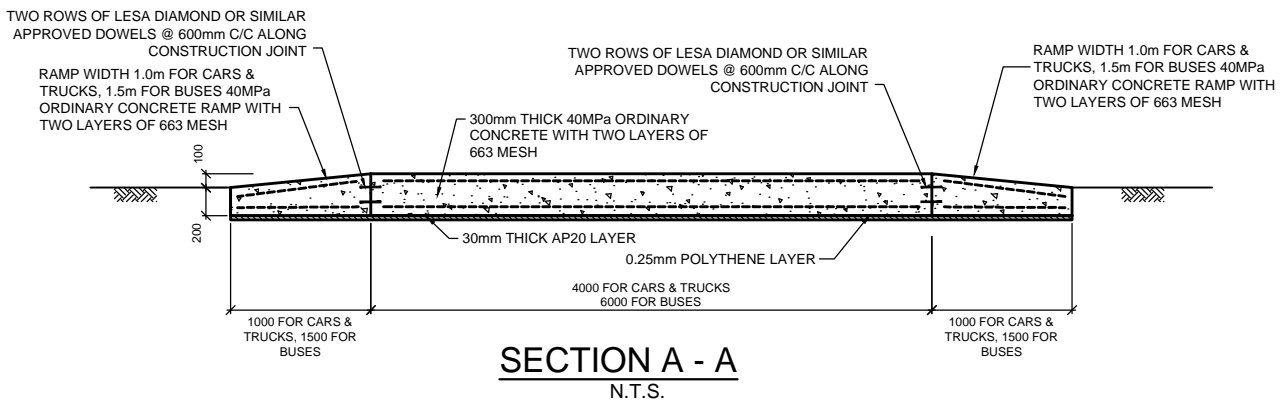
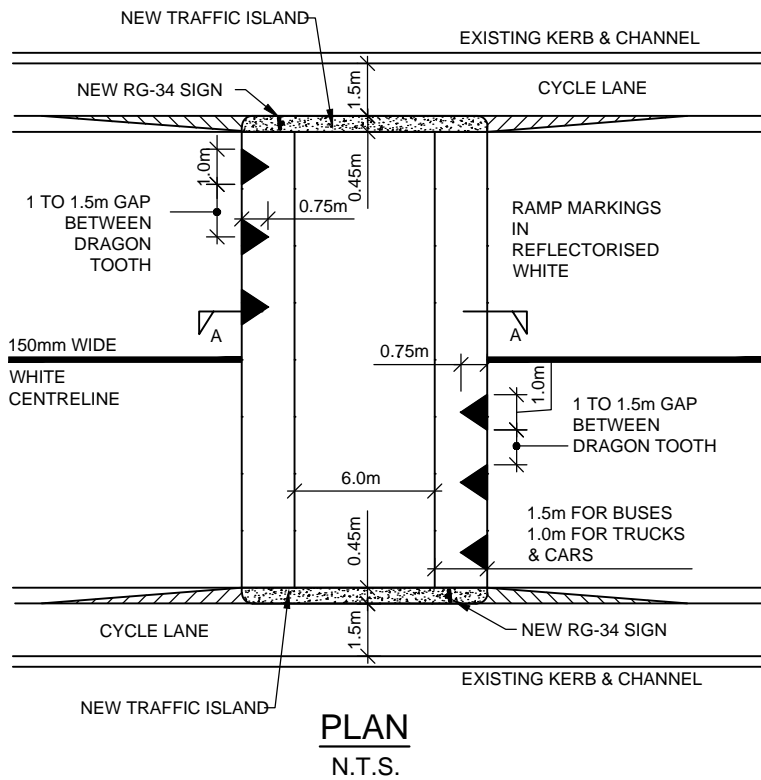
TITLE **SPEED TABLE
(WITH UPSTREAM CATCHPIT)**

SCALE:	N.T.S.
DRAWING No.	TC003
VERSION	1.0

**ADVANCE WARNING SIGNS ON
APPROACHING SPEED-TABLE OR
HUMPS**

NOTE

1. PW-39 sign with supplementary as shown to be erected in advance of treatment on both sides of the carriageway facing approaching traffic



NOTE

1. All work to have a tolerance of $\pm 5\text{mm}$.
2. Reinforcing to be placed on spacers.

REVISION	BY	DATE



AUCKLAND TRANSPORT
CODE OF PRACTICE

TITLE **SPEED TABLE
(WITH CYCLE BYPASS)**

SCALE:	N.T.S.
DRAWING No.	TC004
VERSION	1.0

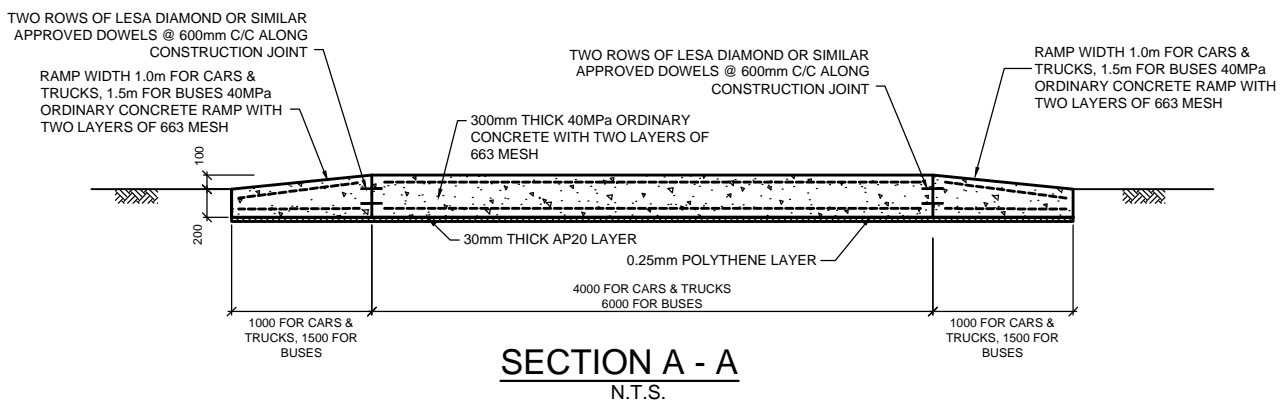
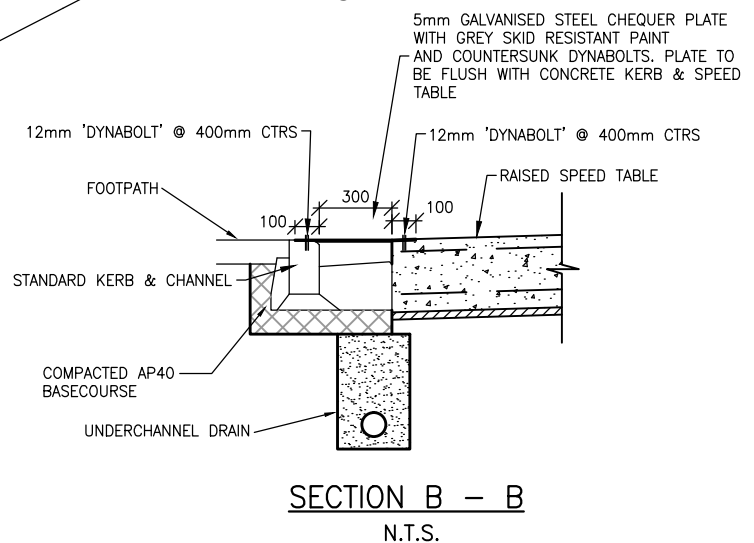
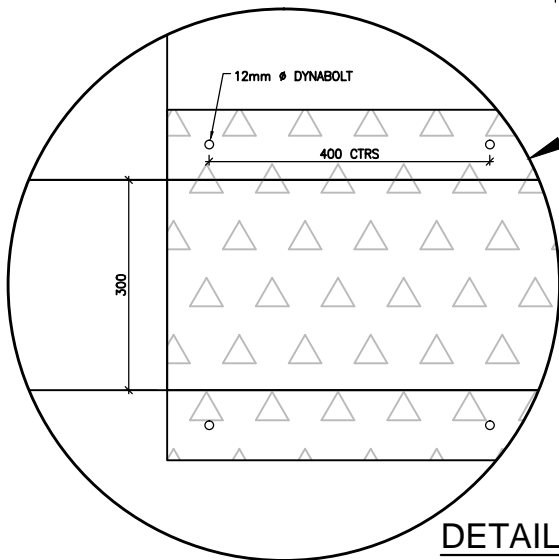
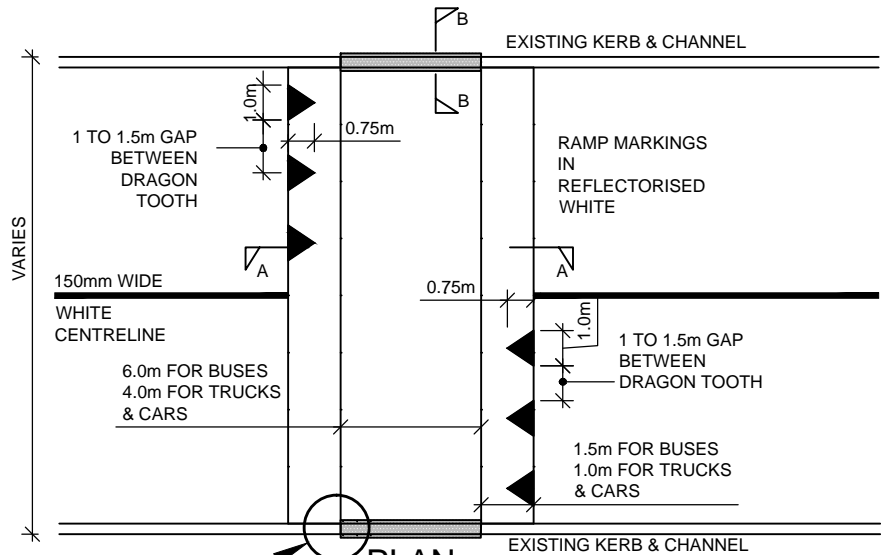
Drawing set for Chapter 8 - Traffic Calming



**ADVANCE WARNING SIGNS ON
APPROACHING SPEED-TABLE OR
HUMPS**

NOTE

1. PW-39 sign with supplementary as shown to be erected in advance of treatment on both sides of the carriageway facing approaching traffic



NOTE:

1. Finished level of raised speed table to be nominally 100mm above existing road level contractor to ensure adequate crossfall to channel drain.
2. Raised speed table to be reinforce with 2 layers 663 mesh.
3. Raised speed table concrete to be wet cured for 7 days prior to traffic loading.
4. Top of galvanised steel plate to be flush with surrounding concrete kerb & speed table.

REVISION	BY	DATE



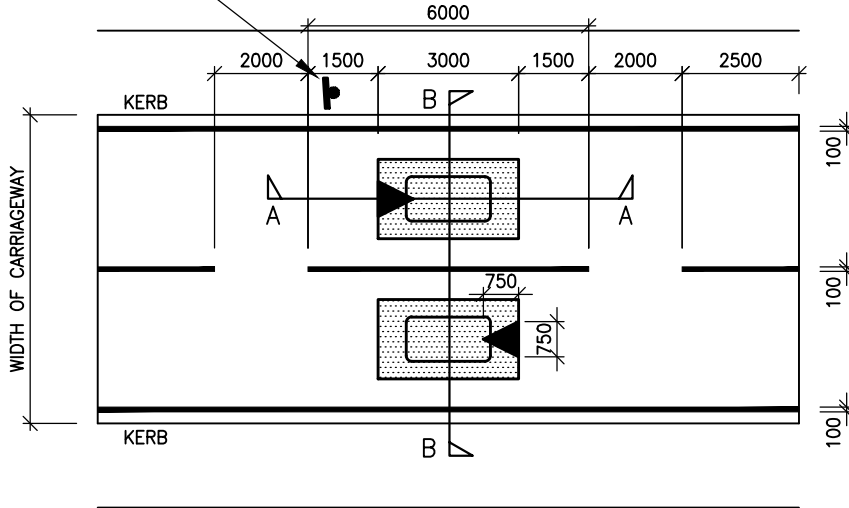
**AUCKLAND TRANSPORT
CODE OF PRACTICE**

TITLE
**SPEED TABLE
WITH CHEQUER PLATE**

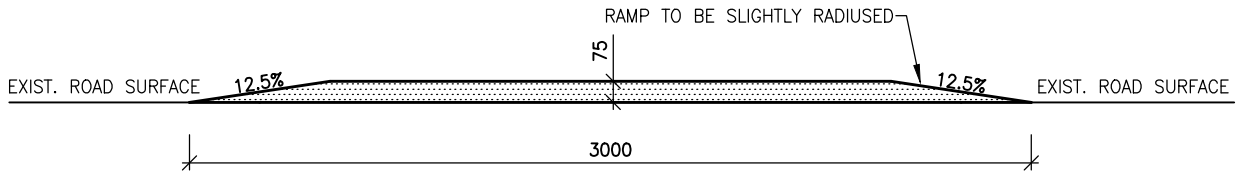
SCALE: NTS
DRAWING No. TC005
VERSION 1.0

Drawing set for Chapter 8 - Traffic Calming

NEW PW39 SIGN
ON APPROACH
TO CUSHION

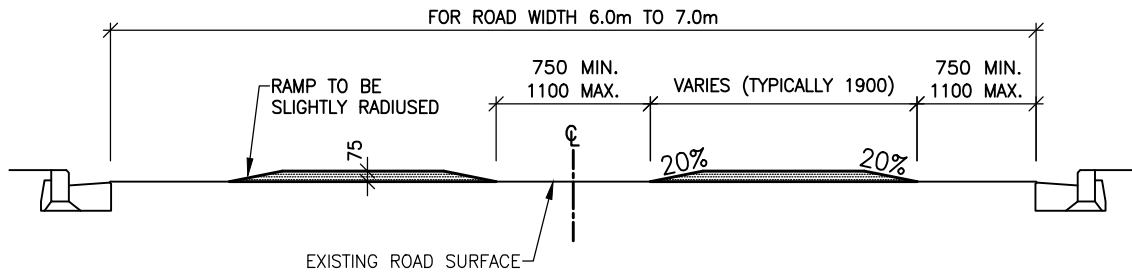


PLAN
N.T.S.



LONG SECTION A-A
NOT TO SCALE

(NOTE: BOTH CUSHIONS HAVE SIMILAR PROFILES)



CROSS SECTION B-B
NOT TO SCALE

Notes

1. All dimensions are in millimetres.
2. This detail applies to cushions in roads of width 6.0m to 7.0m unless otherwise stated by the relevant AT Engineer.
3. Maximum height of cushion to be 75mm above existing road surface within tolerance of ± 5 mm.
4. Lateral gaps between cushions and kerbs to be agreed with Auckland Transport.
5. Cross sectional profile B-B of speed cushion to be same as existing profile of road.
6. All road markings to be in accordance with Manual of Traffic Signs and Markings and TCD Manual updates to MOTSAM and must be white thermoplastic material.

REVISION	BY	DATE

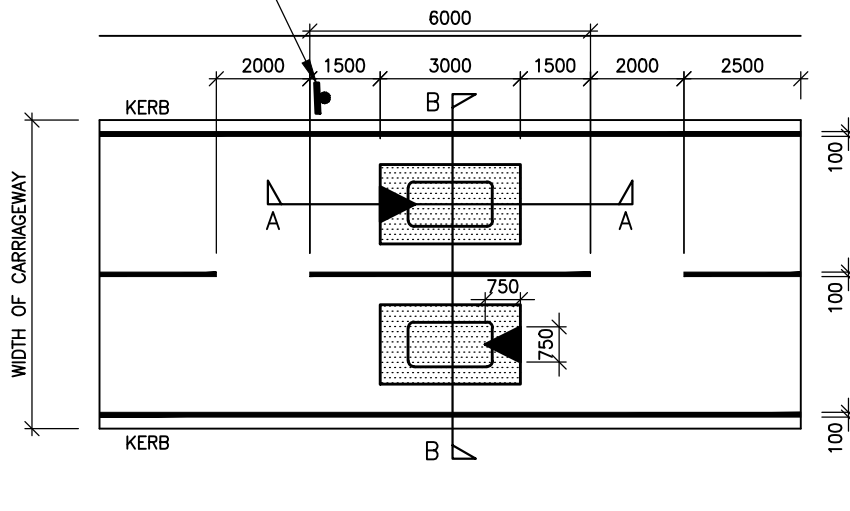


AUCKLAND TRANSPORT CODE OF PRACTICE	
TITLE	RUBBER SPEED CUSHIONS

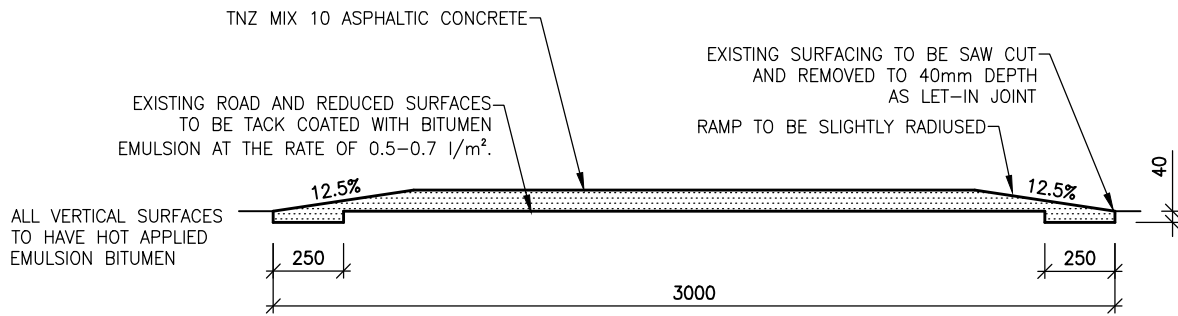
SCALE:	N.T.S.
DRAWING No.	TC006
VERSION	1.0

Drawing set for Chapter 8 - Traffic Calming

NEW PW39 SIGN
ON APPROACH
TO CUSHION



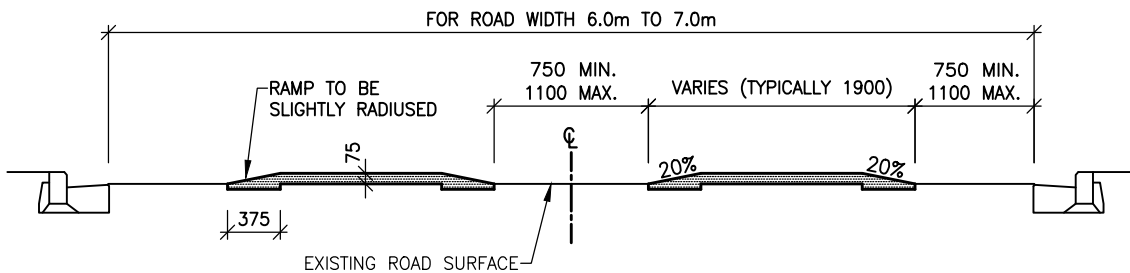
PLAN
N.T.S.



LONG SECTION A-A

NOT TO SCALE

(NOTE: BOTH CUSHIONS HAVE SIMILAR PROFILES)



CROSS SECTION B-B

NOT TO SCALE

Notes

1. All dimensions are in millimetres.
2. This detail applies to cushions in roads of width 6.0m to 7.0m unless otherwise stated by the relevant AT Engineer.
3. Maximum height of cushion to be 75mm above existing road surface within tolerance of ± 5 mm.
4. Lateral gaps between cushions and kerbs to be agreed with Auckland Transport.
5. Cross sectional profile B-B of speed cushion to be same as existing profile of road.
6. All road markings to be in accordance with Manual of Traffic Signs and Markings and TCD Manual updates to MOTSAM and must be white thermoplastic material.

REVISION	BY	DATE

Auckland Transport
An Auckland Council Organisation



AUCKLAND TRANSPORT
CODE OF PRACTICE

TITLE

**ASPHALTIC CONCRETE
SPEED CUSHIONS**

SCALE:

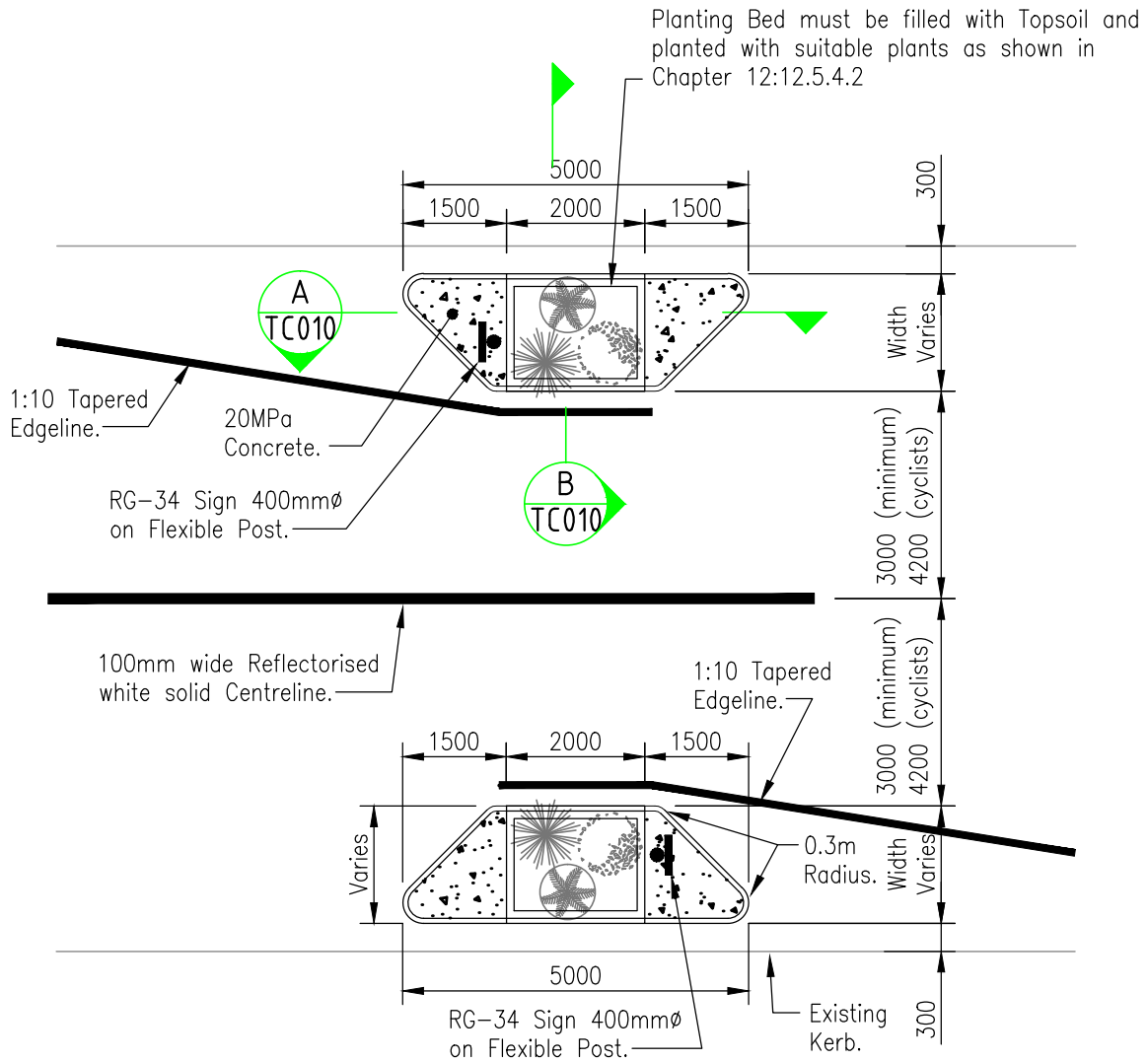
N.T.S.

DRAWING No.

TC007

VERSION

1.0



PLAN FOR THE SIDE ISLANDS

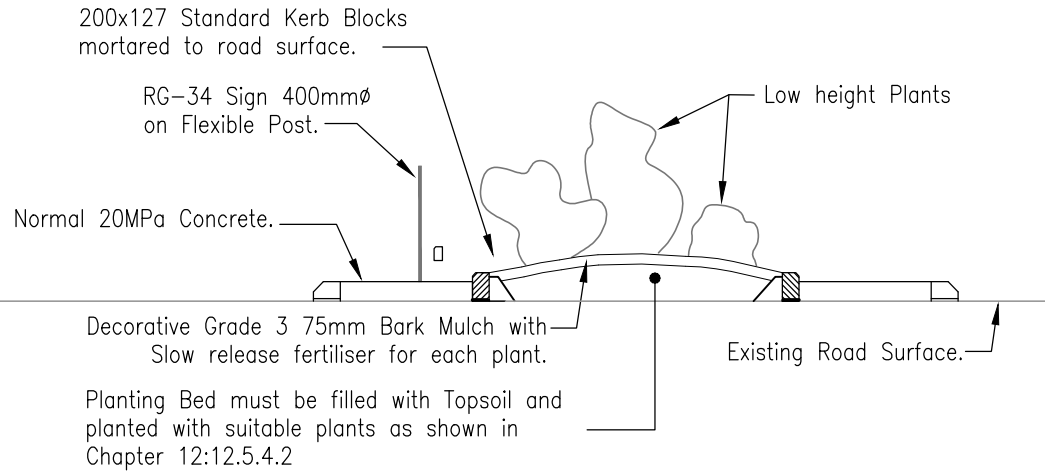
REVISION	BY	DATE



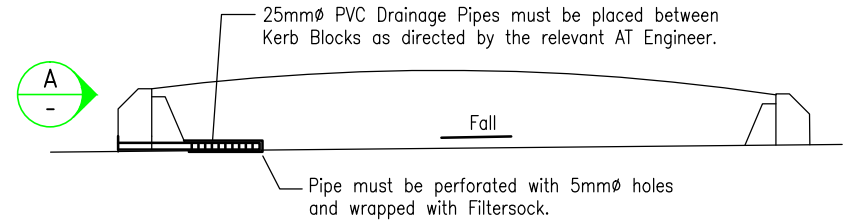
AUCKLAND TRANSPORT CODE OF PRACTICE	
TITLE	TYPICAL LAYOUT OF PLANTED SIDE ISLANDS FOR ROAD NARROWINGS

SCALE:	NTS
DRAWING No.	TC008
VERSION	1.0

Drawing set for Chapter 8 - Traffic Calming



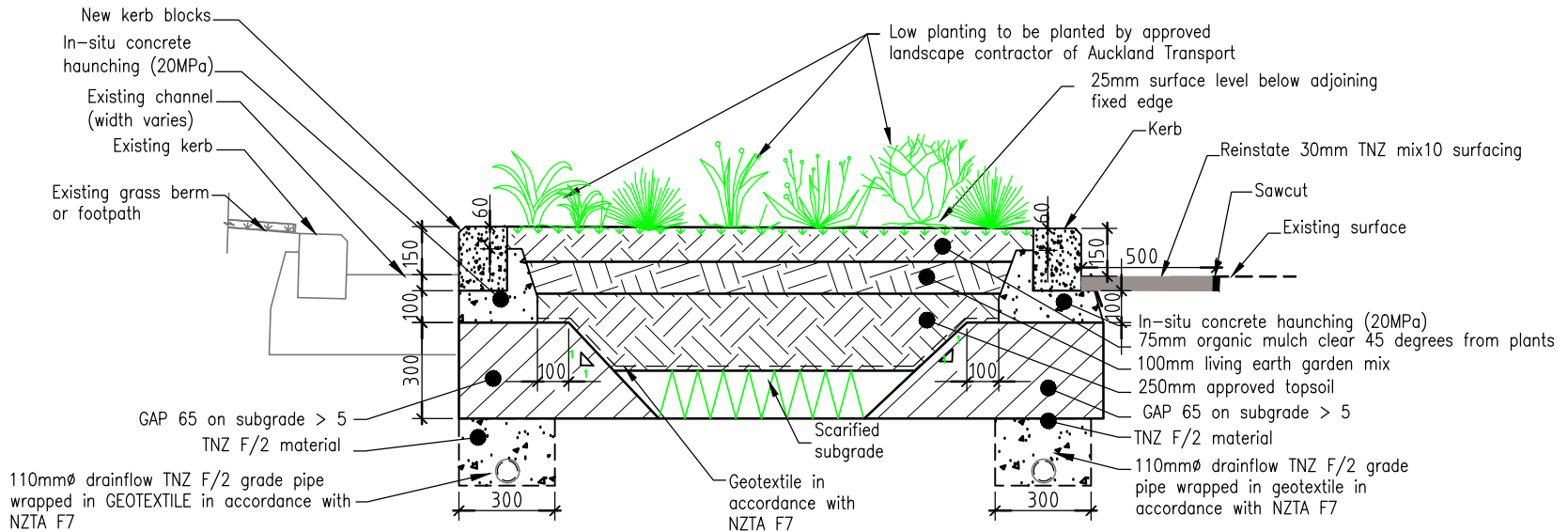
DETAIL CROSS SECTION A-A FOR ISLAND PLANTERS



DRAINAGE DETAILS - TYPICAL SECTION OF SIDE ISLAND

Note:

1. Pipe placement to suit drainage low points specific to island locality, and to be agreed with the relevant AT engineer prior to placing.
2. Where the planting species requires excavation into the road pavement for additional planting depth, specific pavement drainage design is required for the relevant AT Engineers approval.



DETAIL CROSS SECTION B-B FOR ISLAND PLANTERS

REVISION	BY	DATE

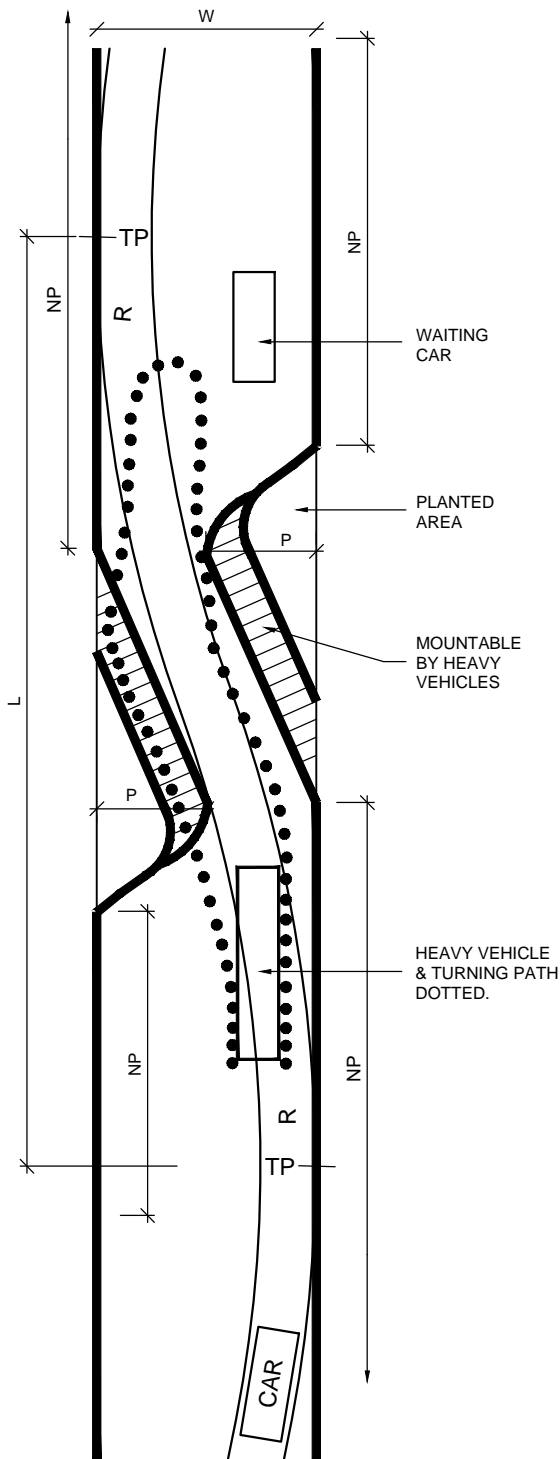


TITLE

TYPICAL DETAILS OF PLANTED SIDE ISLANDS

AUCKLAND TRANSPORT
CODE OF PRACTICE

SCALE:	NTS
DRAWING No.	TC009
VERSION	1.0



PLAN
SCALE 1:250

SINGLE DIRECTION CHICANE

CHICANES CONSIST OF ISLANDS THAT FORCE CARS TO TRAVEL ON REVERSED CIRCULAR ARCS OF RADIUS CHOSEN FOR A SPECIFIC DESIGN SPEED. ON THE DRIVERS LEFT THERE IS A LEADING ISLAND REQUIRING STEERAGE TO THE RIGHT HAND SIDE OF THE ROAD AND A FOLLOWING PROJECTION REQUIRING STEERAGE TO THE LEFT. THE ISLANDS CAN BE ANY SENSIBLE SHAPE BUT THE CRITICAL PROJECTIONS (P) MUST TOUCH A 2m WIDE CONTROL TRACK OF DESIGN RADIUS.

LOW SPEED DESIGNS ARE SUITABLE FOR SINGLE LANE TWO-WAY TRAFFIC WHILE HIGHER SPEED DESIGNS REQUIRE A CENTRAL ISLAND ALLOWING FOR CONTINUOUS FLOW EACH WAY. THE CRITICAL PROJECTIONS MUST BE MOUNTABLE BY THE DESIGN HEAVY VEHICLE (eg. BUS, 8m TRUCK, FIRE ENGINE).

NO PARKING ZONES ARE REQUIRED TO ALLOW FOR EXITING AT DESIGN SPEED AND WAITING TO ENTER ON THE LEFT. DRIVEWAYS, TREES, POLES, etc. DETERMINE THE POSITIONING OF THE ISLANDS.

ABBREVIATION KEY

- TP = Tangent Point
- NP = No Parking/No Stopping
- R = Radius
- L = Length of Radius between Tangent Points
- P = Critical Projection
- W = Carriageway Width

DESIGN SPEED (Km/h)	RADIUS(R) (m)
25	20
30	30
35	40
40	55
45	75
50	100

$$L = \sqrt{[4R(W-2) - (W-2)^2]}$$

NOTE:

Appropriate signs, markings, lighting and planting must be provided.

REVISION	BY	DATE



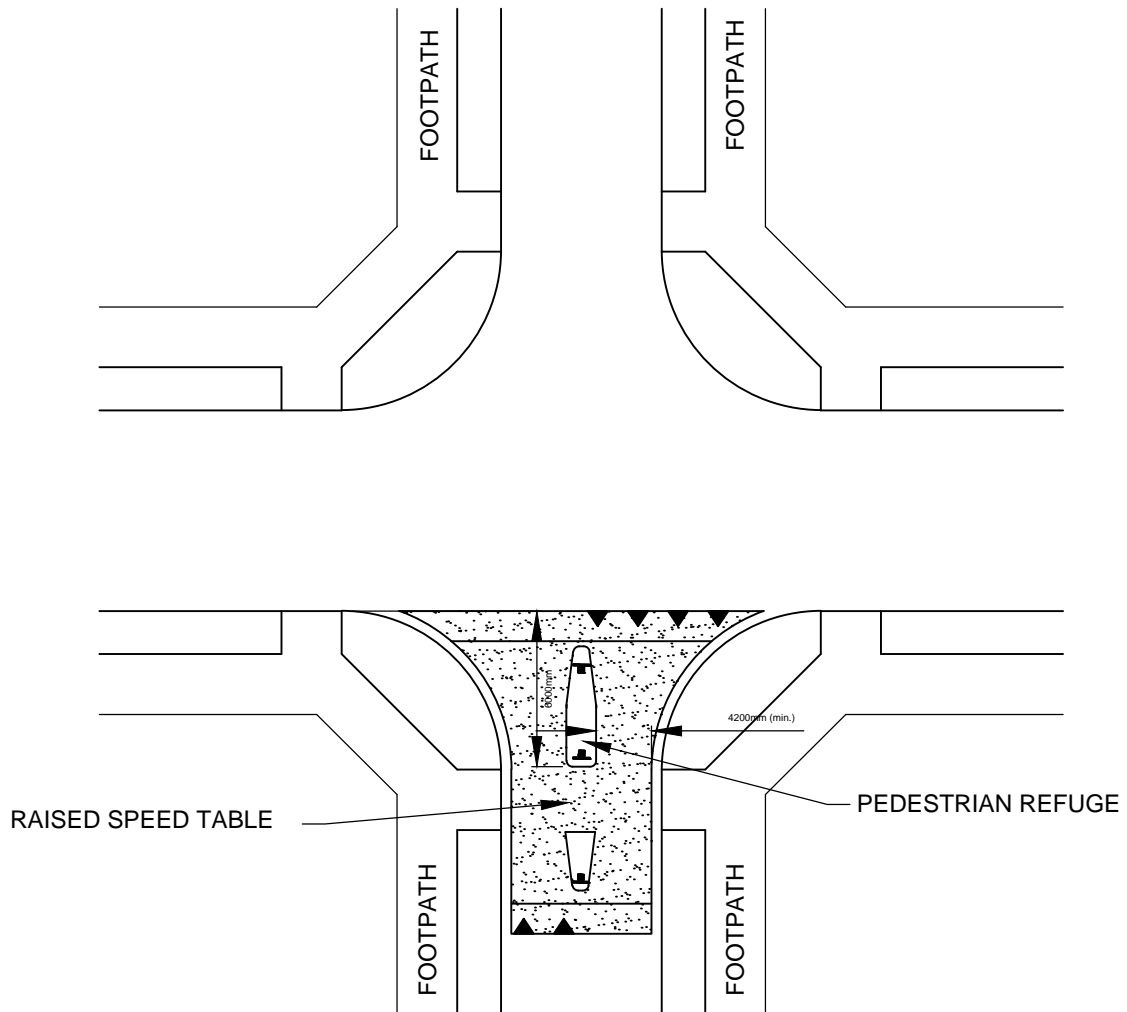
AUCKLAND TRANSPORT
CODE OF PRACTICE

TITLE
SINGLE DIRECTION CHICANES DESIGN PRINCIPLES

SCALE:	1 : 250
DRAWING No.	TC010
VERSION	1.0

Drawing set for Chapter 8 - Traffic Calming

An example of a two lane entry threshold treatment with raised speed table and pedestrian refuge



REVISION	BY	DATE



AUCKLAND TRANSPORT
CODE OF PRACTICE

TITLE
**ENTRY THRESHOLD
(Two Lane)**

SCALE:	N.T.S.
DRAWING No.	TC011
VERSION	1.0