M2PP-121-D-PLNM-0012

Appendix 1: DRAWING SET

Site Specific Management Plan 010 - [sectors 530-540-580]
MacKays to Peka Peka Expressway

06 MARCH 2014 - CERTIFIED VERSION- NGARARA BRIDGE ONLY - REV C

NZ TRANSPORT AGENCY WAKA KOTAHI

MacKays to Peka Peka
Wellington Northern Corridor

FOR NGARARA BRIDGE CERTIFICATION ONLY

Drawing Plotted:

SSMP#	SECTOR	NAME	NOTES
SSMP1	330/320	[RAUMATI SOUTH]	ISSUED IN TWO PARTS: -SSMP01-320 -SSMP01-330
SSMP2	340/350	[RAUMATI NORTH]	
SSMP3	360/370/380	[WHAREMAUKU BASIN]	
SSMP4	410/420	[KAPITI MAZENGARB]	
SSMP5&6	430/440/460	[OTAIHANGA NORTH&SOUTH]	
SSMP7	470	[WAIKANAE RIVER]	
SSMP8	480/510	[TE MOANA]	
SSMP9	520	[NGARARA]	
SSMP10	530/540/550/580	PEKA PEKA SOUTH	ISSUED IN TWO PARTS: -SSMP10-550 -SSMP10-580/540/530
SSMP11	560/570	[[PEKA PEKA NORTH]	

LEGEND

ROAD
SSMP BOUNDARY
SSMP SHEET (ROAD)
CURRENT SSMP SHEET (ROAD)
SSMP SHEET (BRIDGE)
CURRENT SSMP SHEET (BRIDGE)
PARCEL BOUNDARIES
CONSTRUCTION BOUNDARY

FOR NGARARA BRIDGE CERTIFICATION ONLY

DETAIL DESIGN (DET)

A3 REPRODUCTION SCALE
0mm 10 20 30 40 50

No.	Revision	By	Chk	Chk.V	Appd	Date
C	CERTIFIED ISSUE - **NGARARA BRIDGE ONLY**	MP				06.03.15
B	ISSUE FOR CERTIFICATION - **NGARARA BRIDGE ONLY**	MP				27.02.15
A	ISSUE FOR INFORMATION	VB				

Original Scale (A1) 1:25,000	Design	FB	28.11.14	Approved For Construction*
	Drawn	VB	28.11.14	
Reduced Scale (A3) 1:50,000	Dsg Verifier			Date
	Dwg Check			
	* Refer to Revision 1 for Original Signature			

NZ TRANSPORT AGENCY WAKA KOTAHI
MacKays to Peka Peka Wellington Northern Corridor

Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY RP 1012/0.00 TO 1023/5.00

Title: SSMP 10 [530-540-580] - SHEET 1 LOCATION PLAN

Drawing No: M2PP-121-D-DWG-8001

Rev. C

Document No.

Document created for NZTA by M2PP Alliance, Level 2, 17-21 Whitmore St, WELLINGTON

DO NOT SCALE IF IN DOUBT ASK.

Drawing Plotted:

BRIDGE CERTIFICATION ONLY

FOR NGARARA BR

DETAIL DESIGN

General
- Designation Boundary
- Wire Barrier
- W-Barrier
- Barrier Transition
- Concrete Traffic Barrier
- Culvert
- Swale
- Planted Swale
- Flood Storage Area
- Visualisation Viewpoint

Urban Design
- Concrete Bridge Barrier
- Concrete Noise Wall
- Culvert Headwall
- Retaining Wall
- Bridge Deck
- Bridge Abutment
- Bridge Piers
- 2.0m Timber Noise Fence

Landscape
- Individual Retained Trees
- Retained Vegetation
- Grass
- Massed Planting
- with Tree Enrichment
- Wetland / Riparian Planting
- Massed planting low
- Specimen Tree

Ecology
- Retained Valued Terrestrial Vegetation
- Retained Valued Wetland Vegetation
- Planted Indigenous Terrestrial Habitat
- Planted Indigenous Wetland Habitat
- Stream Mitigation / Riparian Habitat
- Existing Water Body
- Batter Slope Tadpole (top / bottom)

CWB
- Loose Chip CWB
- Chip Seal CWB
- Concrete CWB
- Existing Access Track or CWB

KEY CPTED CONSIDERATIONS:

- NO TALL BARRIERS OR ELEMENTS THAT CREATE 'OUTSIDE ROOMS'/PLACES TO HIDE.
- CLEAR LINES OF SIGHT AT INTERSECTIONS.
- ENSURE CLEAR VIEWS TO THE EXITS OF CWB.
- REMOVE TALL VEGETATION FROM CWB INTERSECTIONS.
- THE 'TAGGABITLY' OF MATERIALS AND SURFACES.
- LOW PLANTING AT BRIDGE ABUTMENTS.

SECTOR 530
SECTOR 520 SSMP 9

REFER TO SHEET 9

NGARARA ROAD

AREA FOR CERTIFICATION

FERNBIRD HABITAT

NGARARA WETLAND

NORTH BOUND
SOUTH BOUND

CS1
8501

REFER TO SHEET 10

REFER TO SHEET 13

NGA MANU ACCESS ROAD

WETLAND 11A

A3 REPRODUCTION SCALE
0mm 10 20 30 40 50

No.	Revision	By	Chk	Chk.V	Appd	Date
C	CERTIFIED ISSUE - **NGARARA BRIDGE ONLY**	MP				06.03.15
B	ISSUE FOR CERTIFICATION - **NGARARA BRIDGE ONLY**	MP				27.02.15
A	ISSUE FOR INFORMATION	VB				

Original Scale (A1) 1:1000 Reduced Scale (A3) 1:2000	Design	FB	28.11.14	Approved For Construction* Date
	Drawn	VB	28.11.14	
	Dsg Verifier			
	Dwg Check			

* Refer to Revision 1 for Original Signature

NZ TRANSPORT AGENCY WAKA KOTAHI

MacKays to Peka Peka
Wellington Northern Corridor

Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY RP 1012/0.00 TO 1023/5.00

Title: SSMP 10 [530-540-580] - SHEET 2 MASTER PLAN

Drawing No: M2PP-121-D-DWG-8101

Rev. C

Document No.

Drawing Plotted:

General
- Designation Boundary
- Wire Barrier
- W-Barrier
- Barrier Transition
- Concrete Traffic Barrier
- Culvert
- Swale
- Planted Swale
- Flood Storage Area

Urban Design
- Concrete Bridge Barrier
- Concrete Noise Wall
- Culvert Headwall
- Retaining Wall
- Bridge Deck
- Bridge Abutment
- Bridge Piers
- 2.0m Timber Noise Fence

Landscape
- Individual Retained Trees
- Retained Vegetation
- Grass
- Massed Planting
- with Tree Enrichment
- Wetland / Riparian Planting
- Massed planting low
- Specimen Tree

Ecology
- Retained Valued Terrestrial Vegetation
- Retained Valued Wetland Vegetation
- Planted Indigenous Terrestrial Habitat
- Planted Indigenous Wetland Habitat
- Stream Mitigation / Riparian Habitat
- Existing Water Body
- Batter Slope Tadpole (top / bottom)

CWB
- Loose Chip CWB
- Chip Seal CWB
- Concrete CWB
- Existing Access Track or CWB
- Horse Mounting Block - Locations TBC
- Cycleway painted surface - non slip

BRIDGE CERTIFICATION ONLY

FOR NGARARA BR

DETAIL DESIGN

NGARARA ROAD

AREA FOR CERTIFICATION

3.0M WIDE CWB

TYPE 2 CWB ENTRANCE REFER TO SHEET 17

3.0M WIDE CWB

50 40 30 20 10 0mm

A3 REPRODUCTION SCALE

No.	Revision	By	Chk	Chk.V	Appd	Date
C	CERTIFIED ISSUE - **NGARARA BRIDGE ONLY**	MP				06.03.15
B	ISSUE FOR CERTIFICATION - **NGARARA BRIDGE ONLY**	MP				27.02.15
A	ISSUE FOR INFORMATION	VB				

Original Scale (A1) 1:250 Reduced Scale (A3) 1:500	Design	FB	28.11.14	Approved For Construction*
	Drawn	VB	28.11.14	
	Dsg Verifier			
	Dwg Check			Date
	* Refer to Revision 1 for Original Signature			

NZ TRANSPORT AGENCY WAKA KOTAHI

MacKays to Peka Peka
Wellington Northern Corridor

Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY RP 1012/0.00 TO 1023/5.00

Title: SSMP10 [530-540-580] - SHEET 9 BRIDGE MASTERPLAN

Drawing No: M2PP-121-D-DWG-8301

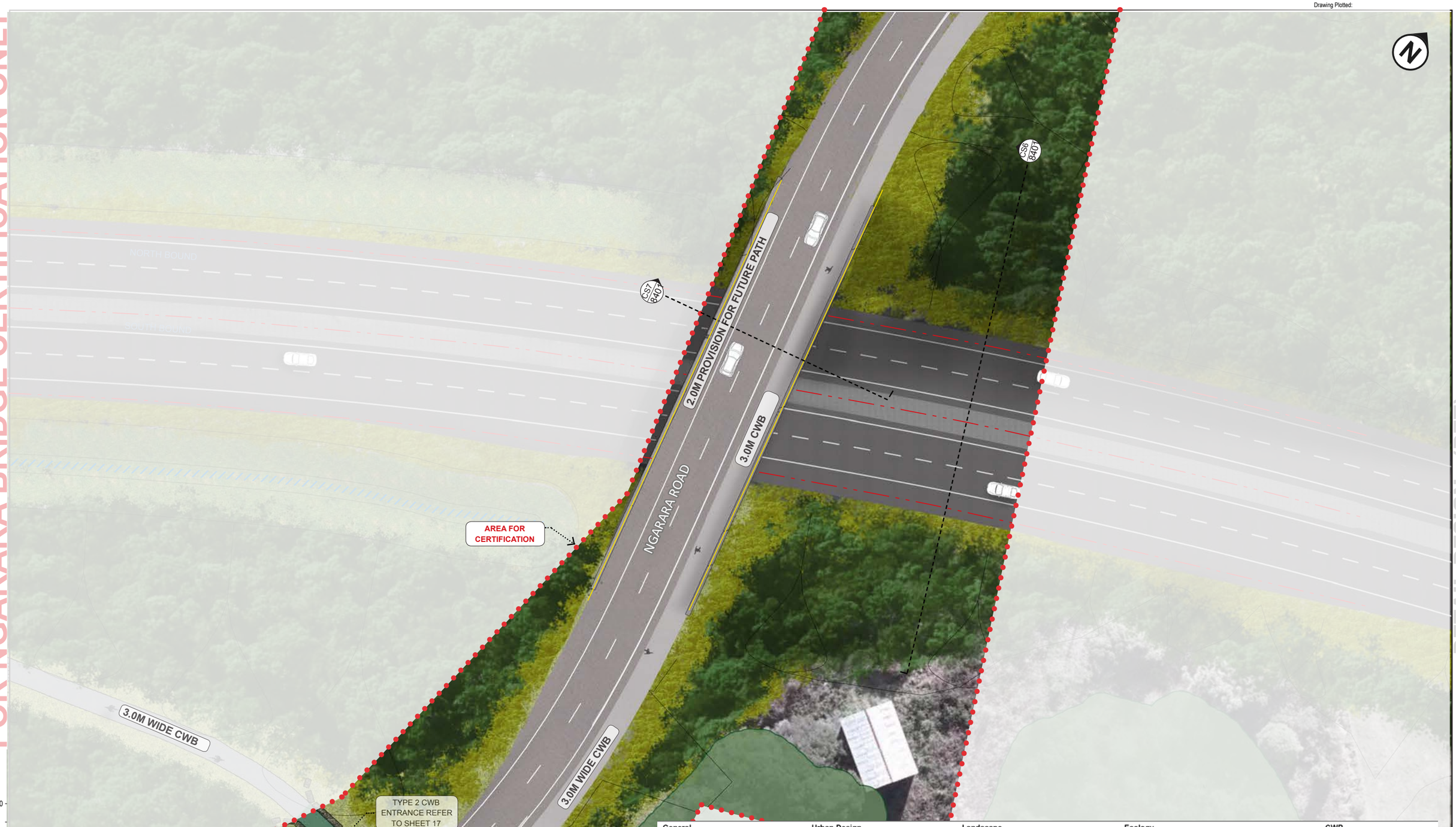
Rev. C

Document No.

Drawing Plotted:

FOR NGARARA BRIDGE CERTIFICATION ONLY

DETAIL DESIGN



General
- Designation Boundary
- Wire Barrier
- W-Barrier
- Barrier Transition
- Concrete Traffic Barrier
- Culvert
- Swale
- Planted Swale
- Flood Storage Area

Urban Design
- Concrete Bridge Barrier
- Concrete Noise Wall
- Culvert Headwall
- Retaining Wall
- Bridge Deck
- Bridge Abutment
- Bridge Piers
- 2.0m Timber Noise Fence

Landscape
- Individual Retained Trees
- Retained Vegetation
- Grass
- Massed Planting
- with Tree Enrichment
- Wetland / Riparian Planting
- Massed planting low
- Specimen Tree

Ecology
- Retained Valued Terrestrial Vegetation
- Retained Valued Wetland Vegetation
- Planted Indigenous Terrestrial Habitat
- Planted Indigenous Wetland Habitat
- Stream Mitigation / Riparian Habitat
- Existing Water Body
- Batter Slope Tadpole (top / bottom)

CWB
- Loose Chip CWB
- Chip Seal CWB
- Concrete CWB
- Existing Access Track or CWB
- Horse Mounting Block - Locations TBC
- Cycleway painted surface - non slip

A3 REPRODUCTION SCALE
50 40 30 20 10 0mm

No.	Revision	By	Chk	Chk.V	Appd	Date
C	CERTIFIED ISSUE - **NGARARA BRIDGE ONLY**	MP				06.03.15
B	ISSUE FOR CERTIFICATION - **NGARARA BRIDGE ONLY**	MP				27.02.15
A	ISSUE FOR INFORMATION	VB				

Original Scale (A1) 1:250	Design	FB	28.11.14	Approved For Construction*
	Drawn	VB	28.11.14	
Reduced Scale (A3) 1:500	Dsg Verifier			Date
	Dwg Check			
	* Refer to Revision 1 for Original Signature			

NZ TRANSPORT AGENCY WAKA KOTAHI

MacKays to Peka Peka
Wellington Northern Corridor

Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY RP 1012/0.00 TO 1023/5.00

Title: SSMP10 [530-540-580] - SHEET 10 BRIDGE MASTERPLAN

Drawing No.: M2PP-121-D-DWG-8302

Rev.: C

Document No.

Drawing Plotted:

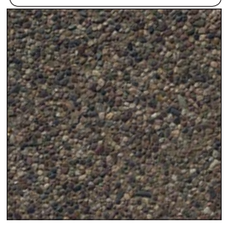
CS6 - CROSS SECTIONAL ELEVATION - NGARARA ROAD BRIDGE

1:250@A3 FACING WEST

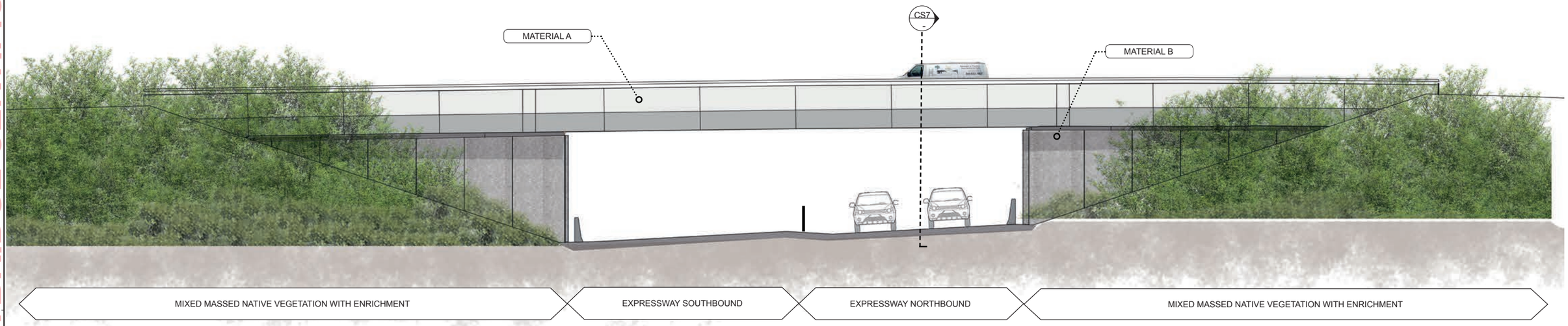
MATERIAL A

BRIDGE BARRIER: PRECAST CONCRETE WITH 2 COATS WHITE KIEM COATING & ANTI GRAFFITI PROTECTION- PENDING SAMPLE PANEL APPROVAL

MATERIAL B

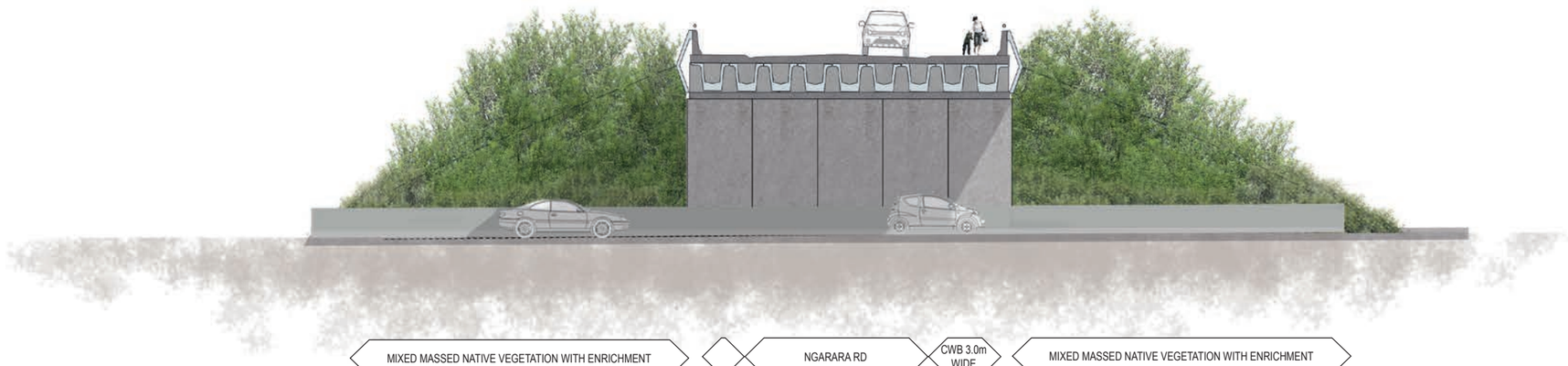


BRIDGE ABUTMENT: PRECAST CONCRETE PANEL WITH EXPOSED AGGREGATE FINISH AND MATT GRAFFITI PROTECTION- PENDING SAMPLE PANEL APPROVAL



CS7- NORTH ABUTMENT - NGARARA ROAD BRIDGE

1:250@A3 FACING NORTH



A3 REPRODUCTION SCALE

50 40 30 20 10 0mm

No.	Revision	By	Chk	Chk.V	Appd	Date
C	CERTIFIED ISSUE - **NGARARA BRIDGE ONLY**	MP				06.03.15
B	ISSUE FOR CERTIFICATION - **NGARARA BRIDGE ONLY**	MP				27.02.15
A	ISSUE FOR INFORMATION	VB				

Original Scale (A1) 2 x SHOWN Reduced Scale (A3) AS SHOWN	Design	FB	28.11.14	Approved For Construction* Date
	Drawn	VB	28.11.14	
	Dsg Verifier			
	Dwg Check			
	* Refer to Revision 1 for Original Signature			

NZ TRANSPORT AGENCY WAKA KOTAHI

MacKays to Peka Peka Wellington Northern Corridor

Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY RP 1012/0.00 TO 1023/5.00

Title: SSMP 10 [530-540-580]- SHEET 11 BRIDGE SECTIONS

Drawing No: M2PP-121-D-DWG-8401

Rev. C

Document No.

DO NOT SCALE IF IN DOUBT ASK.

Drawing Plotted:

50
40
30
20
10
0mm

A3 REPRODUCTION SCALE

PROPOSED VISUALISATION - NGARARA ROAD BRIDGE

No.	Revision	By	Chk	Chk'd	Appd	Date
C	CERTIFIED ISSUE - **NGARARA BRIDGE ONLY**	MP				06.03.15
B	ISSUE FOR CERTIFICATION - **NGARARA BRIDGE ONLY**	MP				27.02.15
A	ISSUE FOR INFORMATION	VB				

Original Scale (A1) 2 x SHOWN Reduced Scale (A3) AS SHOWN	Design	FB	28.11.14	Approved For Construction* Date
	Drawn	VB	28.11.14	
	Dsg Verifier			
	Dwg Check			
	* Refer to Revision 1 for Original Signature			

NZ TRANSPORT AGENCY WAKA KOTAHI

MacKays to Peka Peka
Wellington Northern Corridor

Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
RP 1012/0.00 TO 1023/5.00

Title: SSMP 10 [530-540-580]- SHEET 12
NGARARA BRIDGE

Drawing No: M2PP-121-D-DWG-8801

Rev. C

Document No.

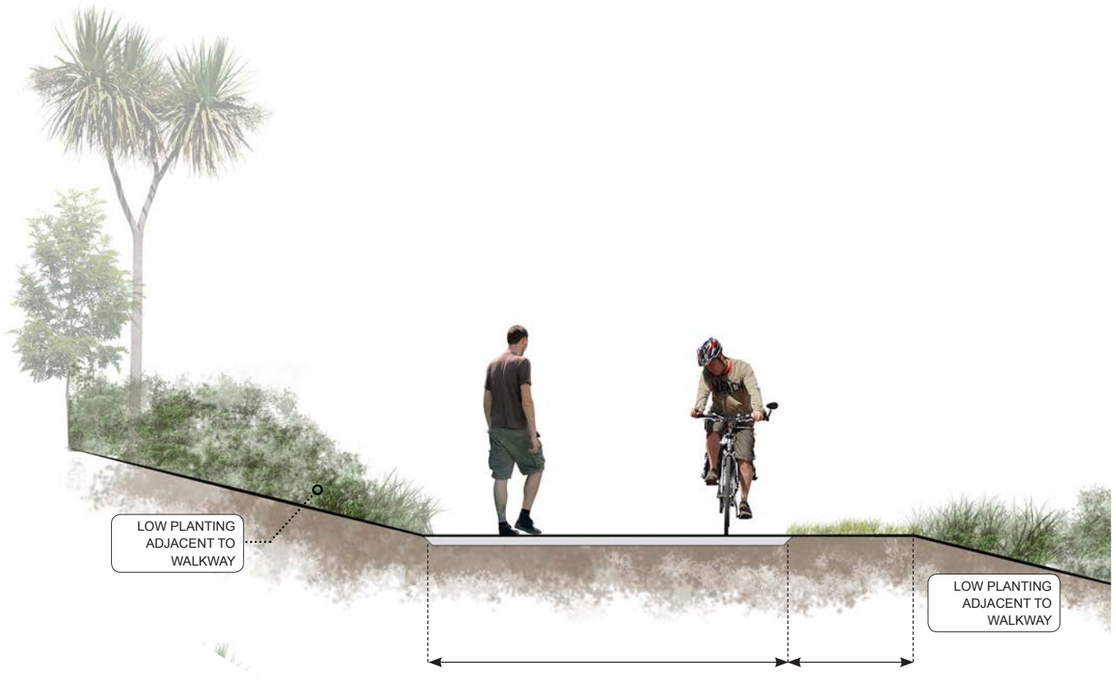
DO NOT SCALE

IF IN DOUBT ASK.

Drawing Plotted:

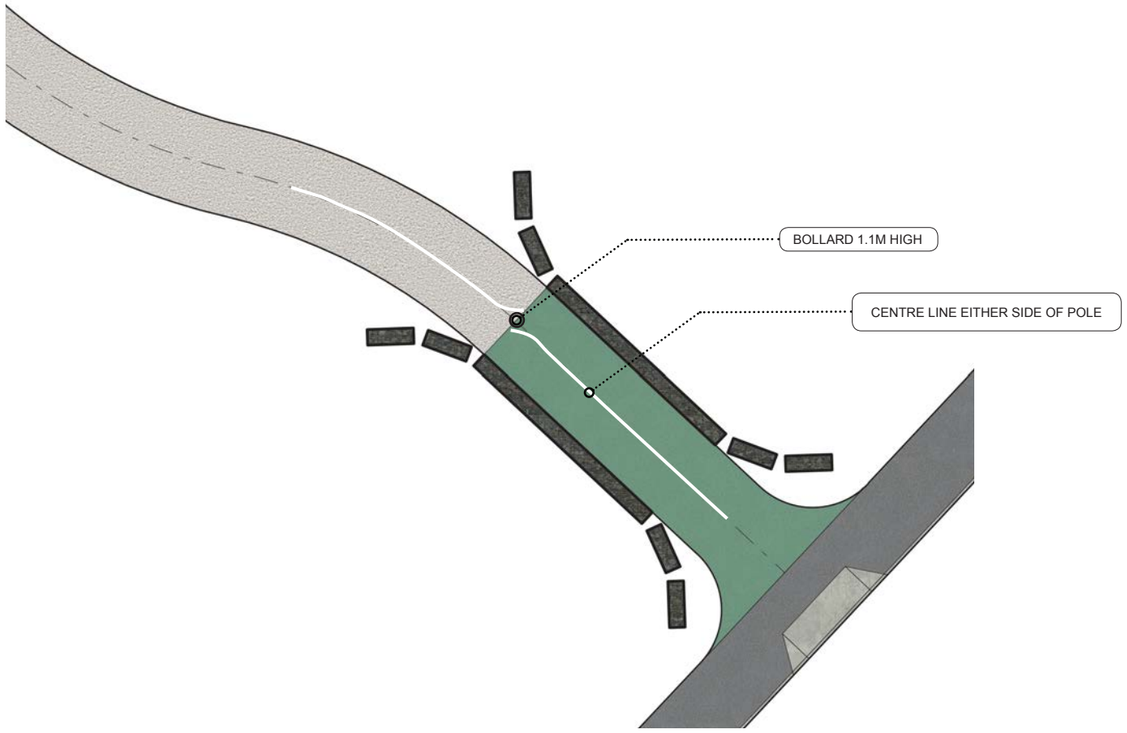
TYPICAL CYCLEWAY SECTION

SCALE - 1:50



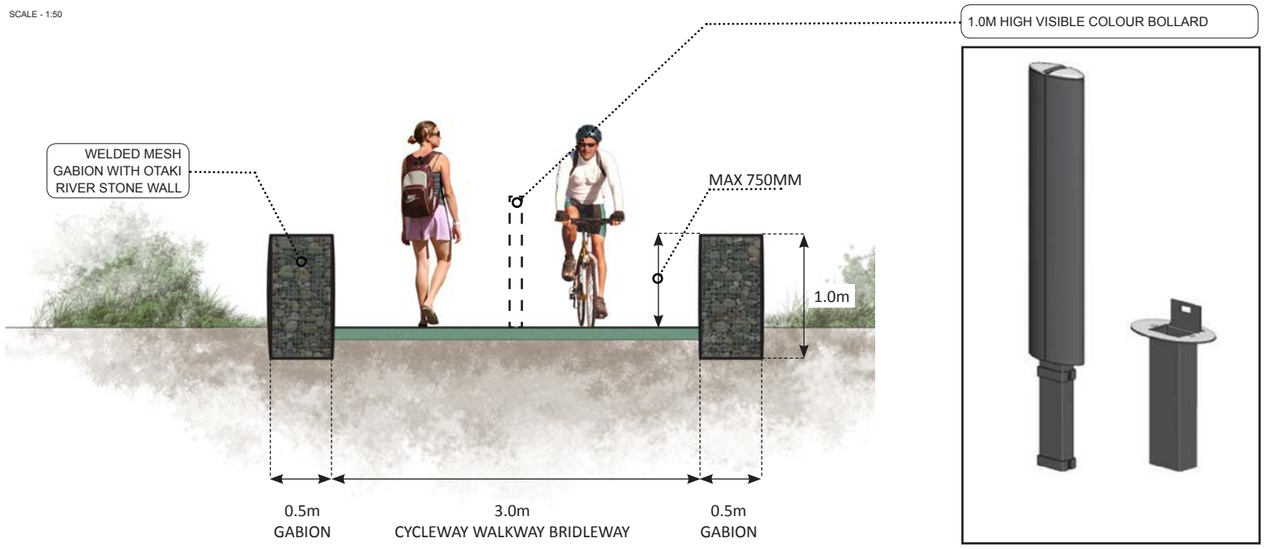
TYPE 2 TYPICAL CWB ENTRANCE - PLAN

SCALE - 1:200@A3



TYPE 2 CYCLEWAY ENTRANCE

SCALE - 1:50



GROUND LEVEL VIEW OF TYPICAL TYPE 2 CYCLEWAY ENTRANCE

NOTE: THIS IS A TYPICAL VISUALISATION. THERE IS NO LIGHTING IN THIS SECTOR

A3 REPRODUCTION SCALE
50 40 30 20 10 0mm

No.	Revision	By	Chk	Chk.V	Appd	Date
C	CERTIFIED ISSUE - **NGARARA BRIDGE ONLY**	MP				06.03.15
B	ISSUE FOR CERTIFICATION - **NGARARA BRIDGE ONLY**	MP				27.02.15
A	ISSUE FOR INFORMATION	VB				

Original Scale (A1) 2 x SHOWN Reduced Scale (A3) AS SHOWN	Design	FB	28.11.14	Approved For Construction* Date
	Drawn	VB	28.11.14	
	Dsg Verifier			
	Dwg Check			
	* Refer to Revision 1 for Original Signature			

NZ TRANSPORT AGENCY WAKA KOTAHI

MacKays to Peka Peka
Wellington Northern Corridor

Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
RP 1012/0.00 TO 1023/5.00

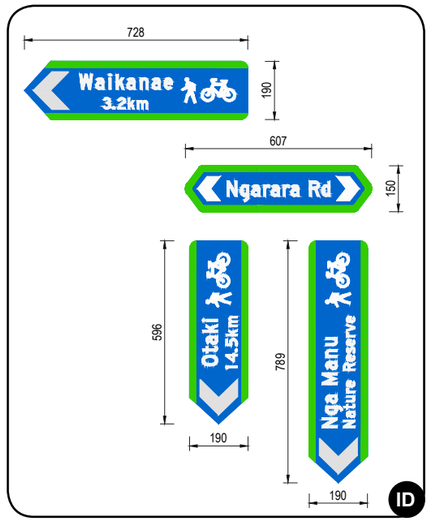
Title: SSMP 10 - SHEET 18
TYPE 2 CWB ENTRANCE

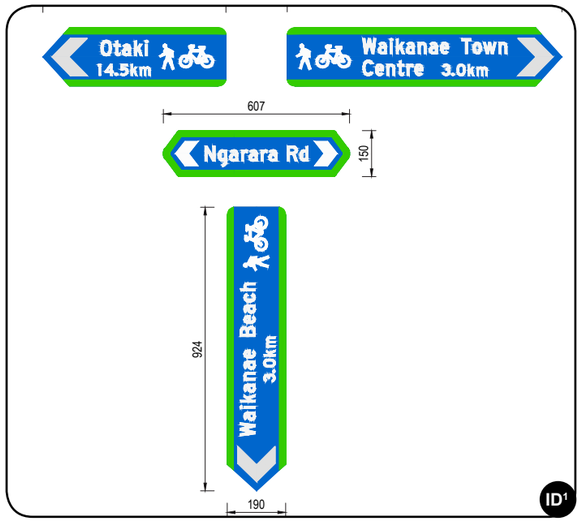
Drawing No: M2PP-121-D-DWG-8801

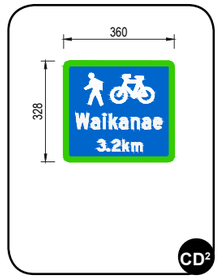
Rev. C

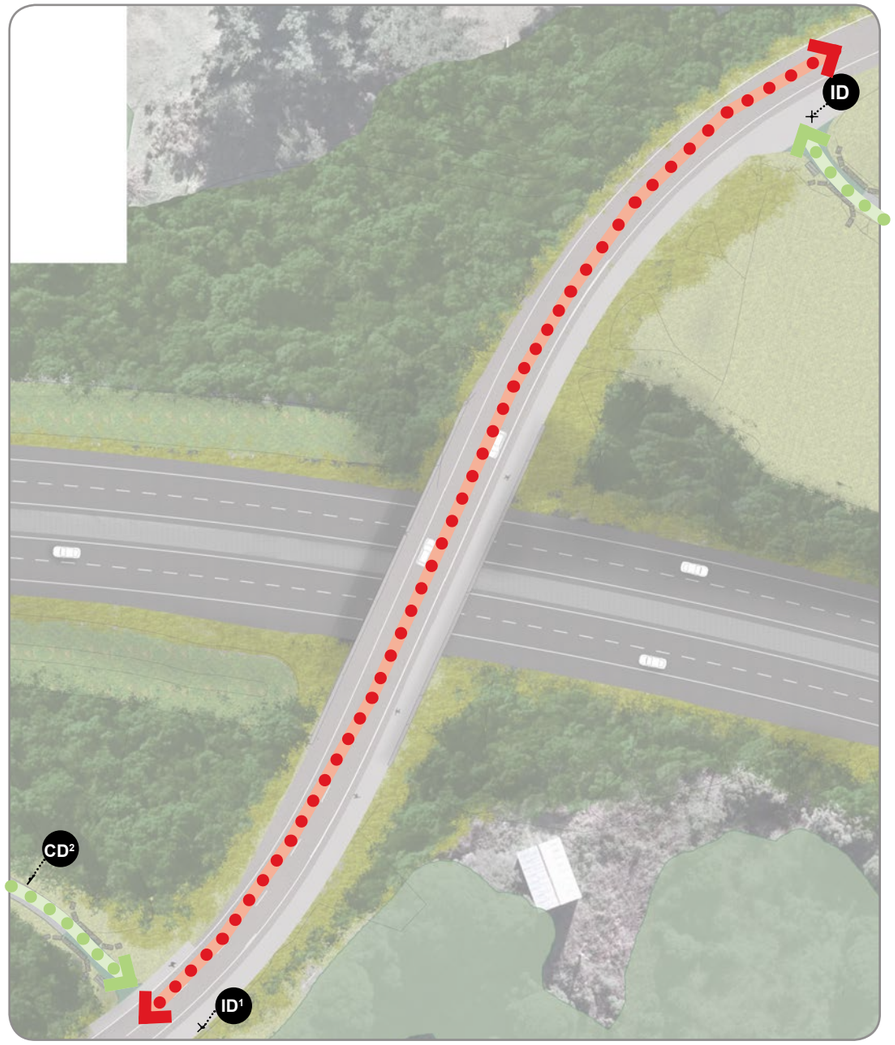
Document No.

DO NOT SCALE IF IN DOUBT ASK.









LEGEND

- CYCLWAY WALKWAY BRIDLEWAY
- EXISTING NETWORK
- LOCAL ROAD
- CROSSING POINT
- SIGNALISED CROSSING

A3 REPRODUCTION SCALE
0mm 10 20 30 40 50

No.	Revision	By	Chk	Chk V	Appd	Date
C	CERTIFIED ISSUE - **NGARARA BRIDGE ONLY**	MP				06.03.15
B	ISSUE FOR CERTIFICATION - **NGARARA BRIDGE ONLY**	MP				27.02.15
A	ISSUE FOR INFORMATION	VB				

Original Scale (A1) 1:500 Reduced Scale (A3) 1:1000	Design	FB	28.11.14	Approved For Construction* Date
	Drawn	VB	28.11.14	
	Dsg Verifier			
	Dwg Check			
	* Refer to Revision 1 for Original Signature			

NZ TRANSPORT AGENCY WAKA KOTAHI
MacKays to Peka Peka Wellington Northern Corridor

Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY RP 1012/0.00 TO 1023/5.00

Title: CWB SIGNAGE

Drawing No: M2PP-121-D-DWG-8902

Rev. C

Document No.

Drawing Plotted: 9:30 AM WEDNESDAY 11 MARCH 2015

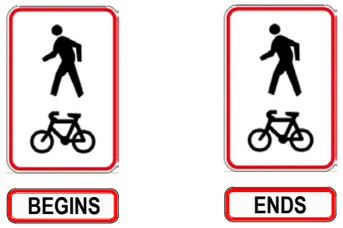
TYPICAL SIGN TYPES:

AI - ADVANCED INFO SIGNS

AT START OF ROUTE.
INCLUDES:
- MAP & INFO
- LENGTH & DURATION OF RIDE / WALK

AI - Advance Information Signs are not an essential requirement for public access tracks or cycle routes, nor are they standardised in terms of their design and layout. These signs may, if desired and appropriate, be installed at or near the start point of the route to provide detailed information, such as a map and information about the length and duration to ride etc. These signs should be clearly visible from the road, allowing cyclists and pedestrians a safe place to stop clear of the roadway or cycleway to read the information.

BE - BEGINNING AND ENDING SIGNS



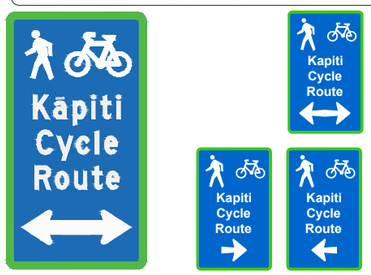
BE - Begins/Ends Signs are used to indicate the start and/or end point of a cycle route. They will include route specific information. Route Begins Signs should be installed on the left hand side of the CWB immediately beyond or adjacent to any advance information sign or at a logical starting point for the cycle route.

ID - INTERSECTION DIRECTION

ID - The Intersection Direction Sign is located at or as near as possible to the actual intersection. Should include both Information about the destination and the distance.

Multiple sighs and destinations to be on one post

AD01 - ADVANCED DIRECTION SIGN - ON LOCAL ROAD APPROACHING CWB



AD - The purpose of the Advance Direction Sign is to give cyclists prior warning, to enable them to make decisions and, if necessary, place themselves in the best position to make any change in direction required before they reach the intersection. These signs should be used in any situation where the cyclist could easily miss making a required turn at an approaching intersection.

To occur 40-60m in advance of an intersection and should only include Information about the destination, not the distance.

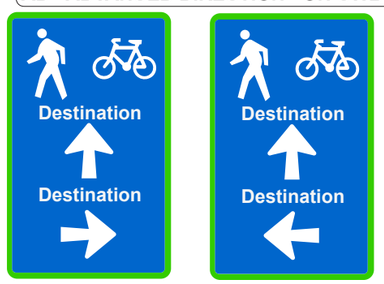
CD - CONFIRMATION DIRECTION

CD - The Confirmation Direction Sign is used to confirm the direction/ destination of travel after an intersection it is intended to provide assurance to cyclists. The CD sign features a straight ahead arrow and should include both Information about the destination and the distance.

As a general rule of thumb, these signs should be installed; between 20-50m beyond an intersection where an Advance Direction Sign has been used and should generally be visible from that intersection;

Cyclists should see a CD sign at least every 15-30 minutes of typical cyclist travel, or every 5-10 km.

AD - ADVANCED DIRECTION - ON CWB



AD - The purpose of the Advance Direction Sign is to give cyclists prior warning, to enable them to make decisions and, if necessary, place themselves in the best position to make any change in direction required before they reach the intersection. These signs should be used in any situation where the cyclist could easily miss making a required turn at an approaching intersection.

To occur 40-60m in advance of an intersection and should only include Information about the destination, not the distance.

LOCAL ROAD INTERSECTION SIGNS

LR + GW - Local road (LR) and Giveway (GW) signs should to be used where the CWB crosses a local road. These are to be located at or as near as possible to the actual intersection. Where possible the LR should be kept to one per intersection and be able to be read by people on either side of the intersection. Both the LR and GW should share the same post and or be incorporateted onto an existing post.

A3 REPRODUCTION SCALE
50
40
30
20
10
0mm

No.	Revision	By	Chk	Chk.V	Appd	Date
C	CERTIFIED ISSUE - **NGARARA BRIDGE ONLY**	MP				06.03.15
B	ISSUE FOR CERTIFICATION - **NGARARA BRIDGE ONLY**	MP				27.02.15
A	ISSUE FOR INFORMATION	VB				

Original Scale (A1) 2 x SHOWN Reduced Scale (A3) AS SHOWN	Design	FB	28.11.14	Approved For Construction* Date
	Drawn	VB	28.11.14	
	Dsg Verifier			
	Dwg Check			
	* Refer to Revision 1 for Original Signature			

NZ TRANSPORT AGENCY WAKA KOTAHI
MacKays to Peka Peka Wellington Northern Corridor

Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
RP 1012/0.00 TO 1023/5.00

Title: SSMP 8 [480-510] - SHEET 20 TYPICAL SIGNAGE

Drawing No: M2PP-121-D-DWG-8901

Rev. C

Document No.

Drawing Plotted: 07 Aug 2014 05:01 p.m.

- **This guidance does not negate the requirement for the landscape architect to sign off these works prior to spreading topsoil.**
- The obligation to round earthwork cuts in the dune country, avoiding a geometric engineered finish, is a requirement of the consent conditions, the UDLF and the LMP (see below).
- Ideally, this shaping should have been incorporated into the earthworks design model, for implementation on site via the Trimble system. However, inclusion of flowing contours proved unworkable in the MX model so it was agreed that 'on site' instruction by the Design Team with the Construction Team was the best approach.
- Earthworks in sector 460 have been completed to a standard that meets the consent design requirements. Consequently, the dune shaping in 460 (depicted at right) is the design standard for 'dune rounding' for the entire M2PP project.

Consent Conditions

Condition DC.57 b) The purpose of each SSLMP shall be to help ensure detailed landscape design of the Project accords with the principles set out in the Urban and Landscape Design Framework (Technical Report 5) in order to achieve the outcomes and standards required under Condition DC.53C, having regard to the local character and context and ecological conditions within each sector or stage of the route. SSLMPs are required for all sectors/stages of the Expressway.

Condition DC.57 f) Each SSLMP shall include details of landscape design, including the following matters:
xi) Consideration of:
A. The landforms and character, including streams;

UDLF(Urban Design and Landscape Framework)

The dunes are the 'signature' landforms encountered along the Expressway corridor. In the first instance the route alignment seeks to avoid significant dunes if possible. However, loss or modification of some dunes will be inevitable in places given the confined corridor available and the scale of the Expressway footprint. Integrating the Expressway linear form into the dune landforms is a key design objective.

Design Concept
The dune forms and other natural landform features have been avoided as best they can in the alignment of the Expressway. However, the Expressway will create change to landforms and the approach will be to 'naturalise' the changes as far as practicable, to integrate those changes with local topographical patterns.

Design Principles
The following principles will apply to the landform design:

3. Design or modify landforms to acknowledge and reflect the local topographical pattern (scale, orientation, profile).

5. Shape (roll off) the tops of cut/ fill faces so the faces integrate with the existing dune profiles as far as practicable and minimise risk of water and wind erosion.

6. Shape visual and noise mitigation bunds to appear as 'natural' landform, avoiding engineered appearances unless these forms are a component of a designed 'land art' formation.

LMP(Landscape Management Plan)

Attachment 2: Principles, Methods and Procedures (pg.6)

Ensure finished earthworks physically and visually relate to adjoining landforms and that they reflect the Design Principles as set out in the Urban and Landscape Design Framework.

-Shape noise and visual mitigation bunds to appear as 'natural' landforms where practicable.

- Avoid unnecessary disturbance to natural landforms.

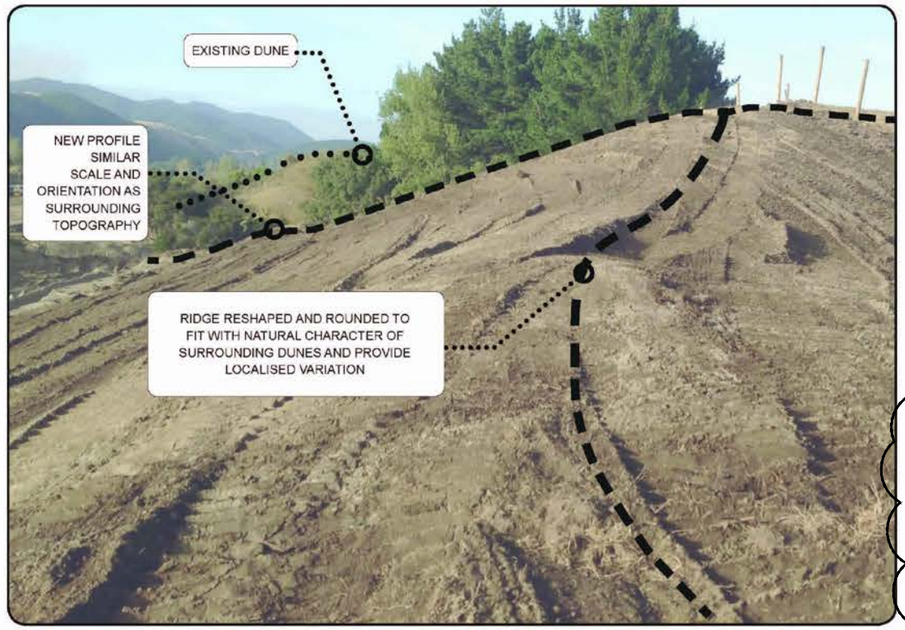
-Re-shaping of dunes to achieve a 'natural' appearance is likely to require extending earthworks into surrounding topography.

Best Practice Examples from Sector 460

Below are examples of successful dune rounding conducted in sector 460 (western side of alignment between approx. chainage 9700-10,000).

-Seamless blending with landforms beyond designation

-Rounding and gradients are a continuation of adjoining landforms



-Dune rounding at edge of boundary fits with existing profile

-Rounding and gradients are at a similar character and scale to surrounding landforms

-Horizontal shaping and undulation with similar character to surrounding dune context

-During dune rounding, form a positive fall across the earthworks and ensure there are no ruts, sags or ground depressions to avoid water collecting and potentially destabilising the slope.

-Natural appearance. Avoid uniform, engineered profiles.

ORIGINAL DRAWING IN COLOUR

FOR CONSTRUCTION

A3 REPRODUCTION SCALE
0mm 10 20 30 40 50

No.	Revision	By	Chk	Chk.V	Appd	Date
2	REVISED BASED ON GEOTECHNICAL INPUT	MP	MP	BF	DS	07.08.14
1	FOR CONSTRUCTION	MP	GFB	DH	DC	07.05.14

Original Scale (A1) NTS	Design	B FAULKNER	24.04.14	Approved For Construction* P BRADSHAW Date 09.05.14
	Drawn	V BILLETT	24.04.14	
Reduced Scale (A3) NTS	Dsg Verifier	B EVANS	05.05.14	
	Dwg Check	G F-B	05.05.14	
* Refer to Revision 1 for Original Signature				

NZ TRANSPORT AGENCY WAKA KOTAHI

MacKays to Peka Peka
Wellington Northern Corridor

Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
RP 1012/0.00 TO 1023/5.00

Title: STANDARD DETAILS
DUNE ROUNDING DETAIL

Drawing No: M2PP-23R-D-DWG-8904

Rev. 2

Document No. M2PP-23R-D-DWG-8904.DWG

Document created for NZTA by M2PP Alliance, 43 Ihakara Street, PO Box 723, Paraparaumu 5254.

DO NOT SCALE IF IN DOUBT ASK.

Drawing Plotted: 26 Feb 2015 10:17 a.m.

NOTES:

1. AREAS OF VEGETATION IDENTIFIED TO BE RETAINED ARE SUBJECT TO MARKING ON SITE BY AN ECOLOGIST OR LANDSCAPE ARCHITECT PRIOR TO TEMPORARY FENCING.
2. REMOVAL OF ANY VEGETATION MARKED FOR RETENTION MUST BE APPROVED BY A LANDSCAPE ARCHITECT OR ECOLOGIST.
3. COMPLIANCE WITH THE ABOVE IS A REQUIREMENT OF THE CONSENT CONDITIONS.

EXPRESSWAY NORTHBOUND

EXPRESSWAY SOUTHBOUND

CYCLEWAY (CWB)

NGARARA ROAD (EXISTING)

520

530

540

AREA FOR CERTIFICATION

RETAIN

ADDITIONAL VEGETATION REMOVED

ADDITIONAL VEGETATION REMOVED FOR ELECTRICAL LINES WITH KCDC APPROVAL

MATCHLINE REFER: M2PP-53R-D-DWG-8702

MATCHLINE REFER: M2PP-54R-D-DWG-8701

13500

13200

VEGETATION TO BE RETAINED

- TERRESTRIAL VALUED VEGETATION (CONSENT CONDITION G.41 c) i))
- WETLAND VALUED VEGETATION (CONSENT CONDITION G.41 c) ii))
- TERRESTRIAL VEGETATION - NATIVE
- TERRESTRIAL VEGETATION - EXOTIC
- WETLAND VEGETATION - NATIVE
- WETLAND VEGETATION - EXOTIC / OPEN WATER
- "EXISTING VEGETATION TO BE RETAINED" AS AT AEE LODGEMENT
- LANDFORM TO BE RETAINED
- DESIGNATION

A3 REPRODUCTION SCALE

50 40 30 20 10 0mm

FOR CERTIFICATION
NOT FOR CONSTRUCTION

530 540 ORIGINAL DRAWING IN COLOUR

FOR CONSTRUCTION

No.	Revision	By	Chk	Chk.V	Appd	Date
2	FOR KCDC CERTIFICATION - REVISED AS NOTED	MP	AJP	DH	SW	30.01.15
1	FOR CONSTRUCTION - ENABLING WORKS - FENCING	MP	GFB	DH	SW	08.05.14

Original Scale (A1) 1:500
Reduced Scale (A3) 1:1000

Design	S DUNN	29.04.14	Approved For Construction* P BRADSHAW
Drawn	M POWELL	29.04.14	
Dsg Verifier	B FAULKNER	05.05.14	
Dwg Check	G F-B	05.05.14	Date 09.05.14

* Refer to Revision 1 for Original Signature

NZ TRANSPORT AGENCY WAKA KOTAHI

MacKays to Peka Peka
Wellington Northern Corridor

Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY RP 1012/0.00 TO 1023/5.00

Title: NGARARA ROAD CROSSING VEGETATION TO BE RETAINED SHEET 1

Drawing No: M2PP-53R-D-DWG-8701

Rev. 2

Document No. M2PP-53R-D-DWG-8701.DWG

DO NOT SCALE IF IN DOUBT ASK.