

M2PP-121-D-PLNM-0009

Appendix 1: DRAWING SET

Site Specific Management Plan 009 - Ngarara [Sector 520 - Te Moana Rd to Ngarara Rd]  
MacKays to Peka Peka Expressway

01 SEPTEMBER 2014 - CERTIFIED ISSUE - REV B

SSMP#	SECTOR	NAME	NOTES
SSMP1	310/320	RAUMATI SOUTH	
SSMP2	330/340/350	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 -SSMP10-530/540/580
SSMP11	560/570	PEKA PEKA NORTH	



**LEGEND**

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

No.	Revision	By	Chk	Chk.V	Appd	Date
B	CERTIFIED ISSUE - REV B	VB		SW		04/08/14

Original Scale (A1)	Design	SD	04/08/14	Approved For Construction
1:25,000	Drawn	MP	04/08/14	Date
Reduced Scale (A3)	Design	Chk	Date	
1:50,000	Chk			

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

Title: SSMP 9 [520] - SHEET 1  
LOCATION PLAN

Drawing No: M2PP-520-D-GPH-8001

Rev: B

DETAIL DESIGN (DET)





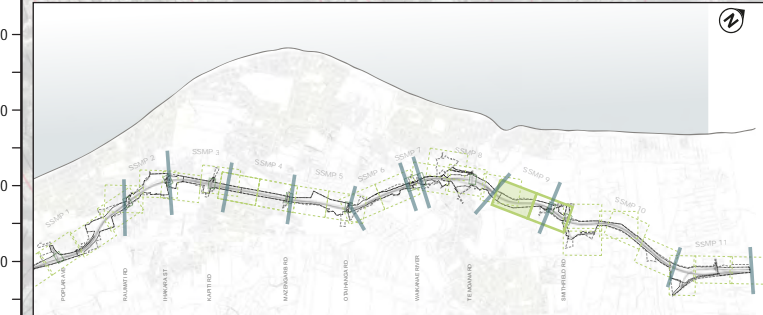
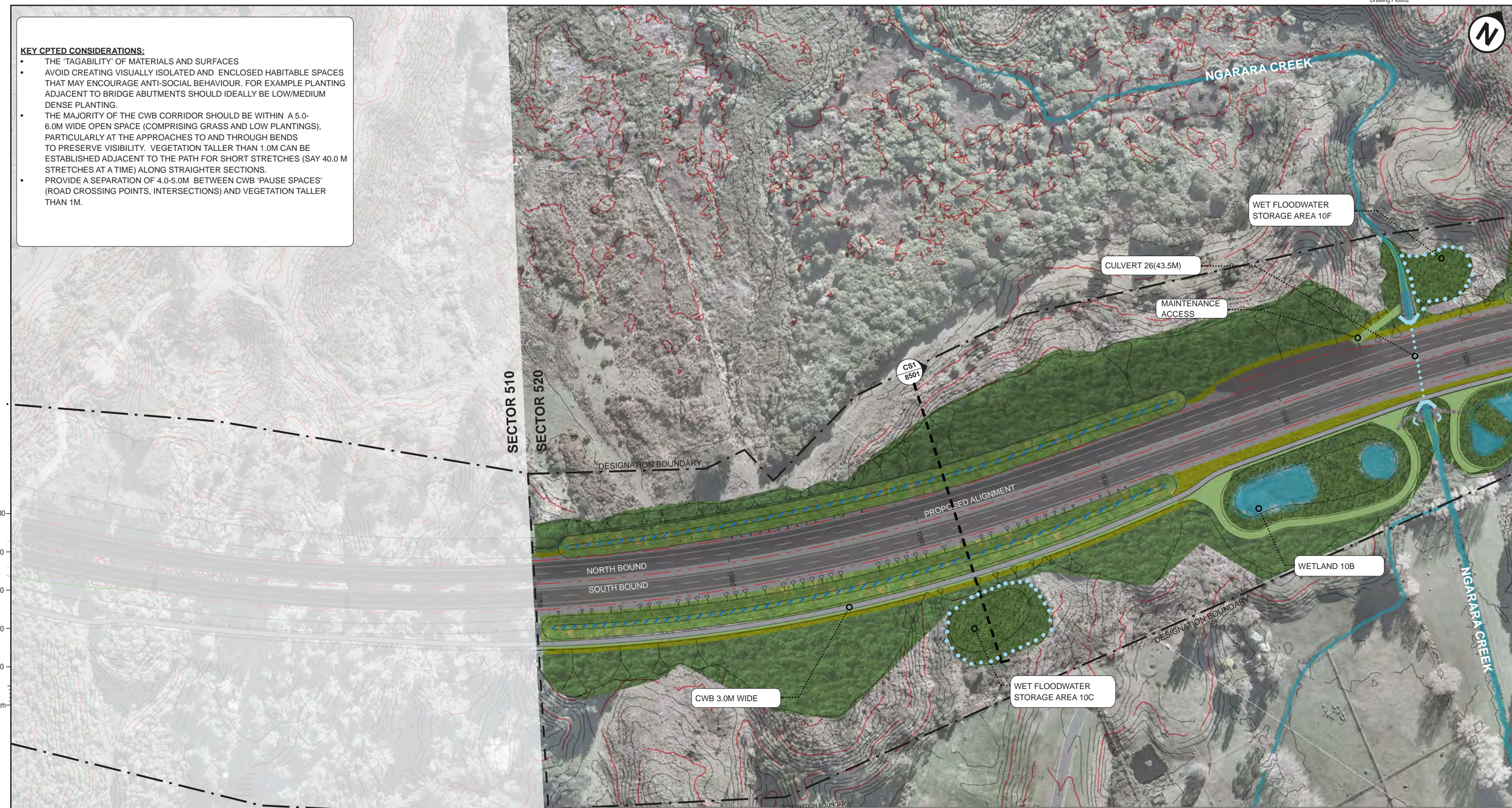
**KEY CPTED CONSIDERATIONS:**

- THE 'TAGABILITY' OF MATERIALS AND SURFACES
- AVOID CREATING VISUALLY ISOLATED AND ENCLOSED HABITABLE SPACES THAT MAY ENCOURAGE ANTI-SOCIAL BEHAVIOUR. FOR EXAMPLE PLANTING ADJACENT TO BRIDGE ABUTMENTS SHOULD IDEALLY BE LOW/MEDIUM DENSE PLANTING.
- THE MAJORITY OF THE CWB CORRIDOR SHOULD BE WITHIN A 5.0-6.0M WIDE OPEN SPACE (COMPRISING GRASS AND LOW PLANTINGS), PARTICULARLY AT THE APPROACHES TO AND THROUGH BENDS TO PRESERVE VISIBILITY. VEGETATION TALLER THAN 1.0M CAN BE ESTABLISHED ADJACENT TO THE PATH FOR SHORT STRETCHES (SAY 40.0 M STRETCHES AT A TIME) ALONG STRAIGHTER SECTIONS.
- PROVIDE A SEPARATION OF 4.0-5.0M BETWEEN CWB 'PAUSE SPACES' (ROAD CROSSING POINTS, INTERSECTIONS) AND VEGETATION TALLER THAN 1M.

A1 REPRODUCTION SCALE  
0mm

A3 REPRODUCTION SCALE  
0mm

SECTOR 510  
SECTOR 520



General	Urban Design	Landscape	Ecology
Designation Boundary	Concrete Bridge Barrier	Individual Retained Trees	Retained Valued Terrestrial Vegetation
Wire Barrier	Concrete Noise Wall	Retained Vegetation	Retained Valued Wetland Vegetation
W-Barrier	Culvert Headwall	Grass	Planted Indigenous Terrestrial Habitat
Barrier Transition	Retaining Wall	Massed Planting	Planted Indigenous Wetland Habitat
Concrete Traffic Barrier	Bridge Deck	with Tree Enrichment	Stream Mitigation / Riparian Habitat
Culvert	Bridge Abutment	Wetland / Riparian Planting	Existing Water Body
Swale	Bridge Piers	Massed planting low	Batter Slope
Planted Swale	2.0M Timber Noise Fence	Specimen Tree	Tadpole
Flood Storage Area			
Visualisation Viewpoint			

No.	Revision	By	Chk	Chk.V	Appd	Date
B	CERTIFIED ISSUE - REV B	VB		SW		04/08/14

Original Scale (A1)	Design	SD	04/08/14	Approved For Construction*
1:1000	Drawn	MP	04/08/14	
Reduced Scale (A3)	Design Verifier			
1:2000	Design Check			

**NZ TRANSPORT AGENCY**  
WAKA KOTAHĀ

**MacKays to Peka Peka**  
Wellington Northern Corridor

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

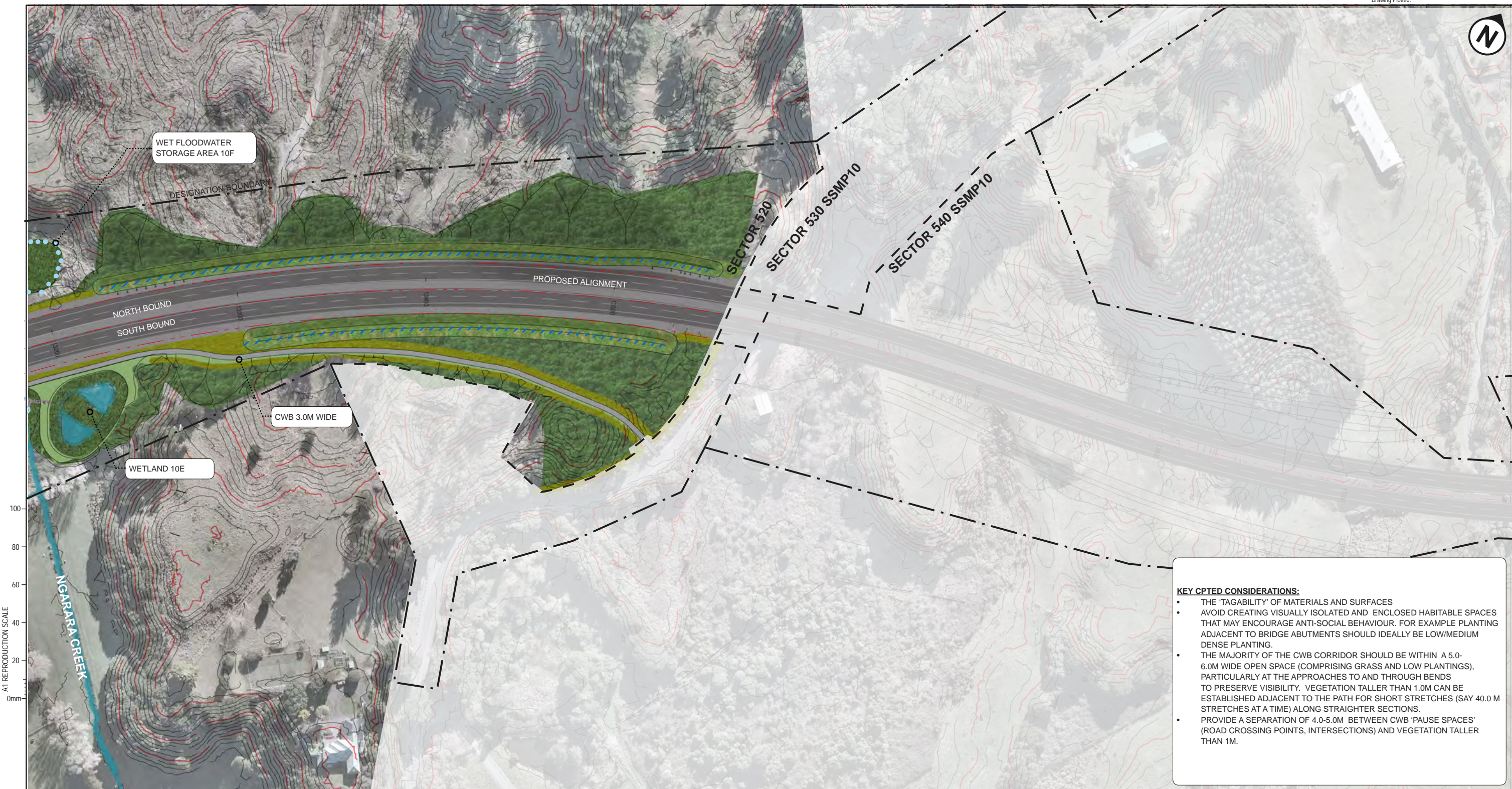
Title: SSMP 9 [520] - SHEET 2  
MASTERPLAN

Drawing No: M2PP-520-D-GPH-8101

Rev: B

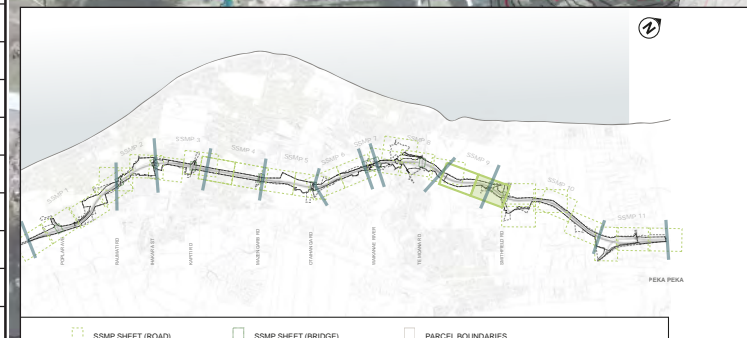
DETAIL DESIGN (DET)





A1 REPRODUCTION SCALE  
0mm  
20  
40  
60  
80  
100

A3 REPRODUCTION SCALE  
0mm  
10  
20  
30  
40  
50



- KEY CPTED CONSIDERATIONS:**
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Swale	Bridge Piers	Massed planting low	Batter Slope
Planted Swale	2.0M Timber Noise Fence	Specimen Tree	Tadpole
Flood Storage Area			
Visualisation Viewpoint			

No.	Revision	By	Chk	Chk.V	Appd	Date
B	CERTIFIED ISSUE - REV B	VB		SW		04/08/14

Original Scale (A1)	Design	SD	04/08/14	Approved For Construction*
1:1000	Drawn	MP	04/08/14	
Reduced Scale (A3)	Design Verifier			
1:2000	Design Check			



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

Title: SSMP 9 [520] - SHEET 3  
MASTERPLAN

Drawing No: M2PP-520-D-GPH-8102  
Rev: B

DETAIL DESIGN (DET)



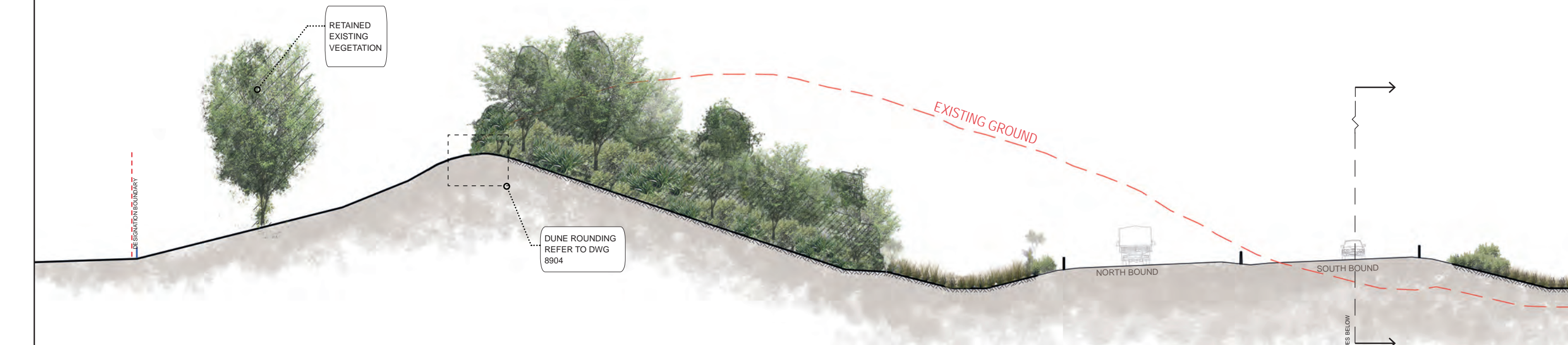
REFER TO-M2PP-520-D-GPH-8101

REFER TO-M2PP-520-D-GPH-8001



**CS1 - CROSS SECTION-THROUGH EXPRESSWAY AND WETLAND**

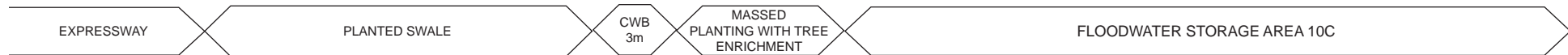
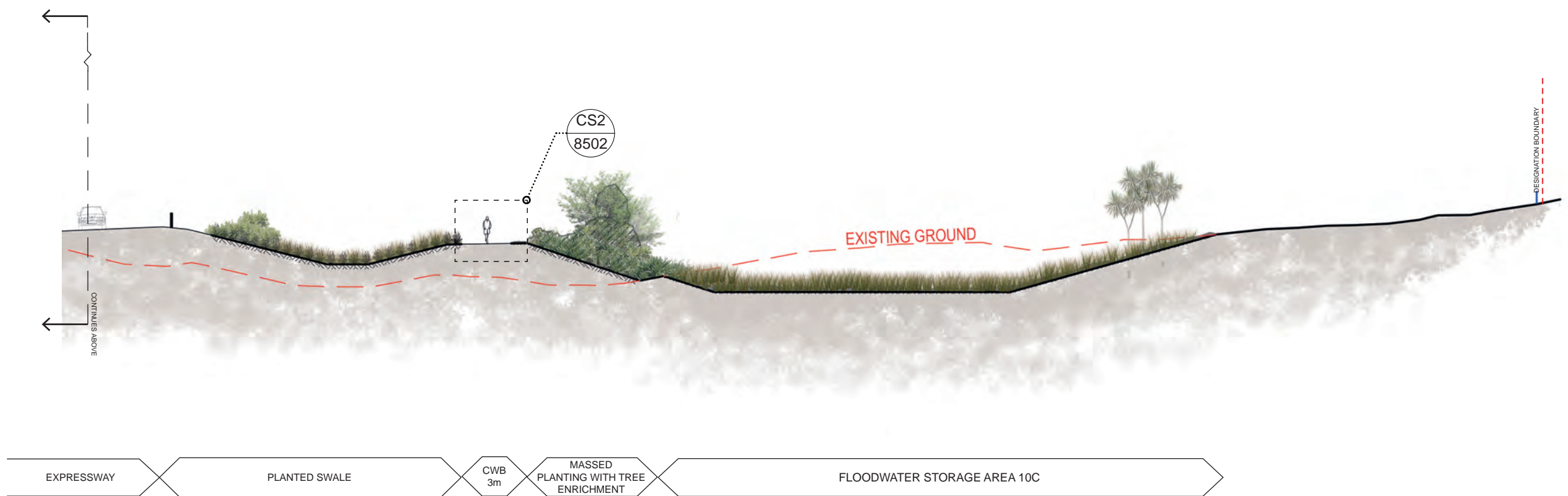
SCALE - 1:125@A1 - 1:250@A3 FACING NORTH



A1 REPRODUCTION SCALE  
0mm 20 40 60 80 100



A3 REPRODUCTION SCALE  
0mm 10 20 30 40 50



DETAIL DESIGN (DET)

No.	Revision	By	Chk	Chk.V	Appd	Date
B	CERTIFIED ISSUE - REV B	VB		SW		04/08/14

Original Scale (A1)	Design	SD	04/08/14	Approved For Construction*
1:1000 <td>Drawn</td> <td>MP</td> <td>04/08/14 <td>Date</td> </td>	Drawn	MP	04/08/14 <td>Date</td>	Date
Reduced Scale (A3) <td>Design Check</td> <td></td> <td></td> <td></td>	Design Check			
1:2000	* Refer to Revision 1 for Original Signature			



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

Title: SSMP 9 [520] - SHEET 4  
ROAD AND WETLAND SECTION

Drawing No: M2PP-520-D-GPH-8501  
Rev: B

**CS2 - TYPICAL CYCLEWAY SECTION**

SCALE - 1:50



A1 REPRODUCTION SCALE

A3 REPRODUCTION SCALE

DETAIL DESIGN (DET)

No.	Revision	By	Chk	Chk.V	Appd	Date
B	CERTIFIED ISSUE - REV B	VB		SW		04/08/14

Original Scale (A1)	Design	SD	04/08/14	Approved For Construction
1:1000	Drawn	MP	04/08/14	
Reduced Scale (A3)	Design Verifier			
1:2000	Design Check			
* Refer to Revision 1 for Original Signature				



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

Title: SSMP 9 [520] - SHEET 5  
TYPICAL CWB SECTION

Drawing No: M2PP-520-D-GPH-8502

Rev. B

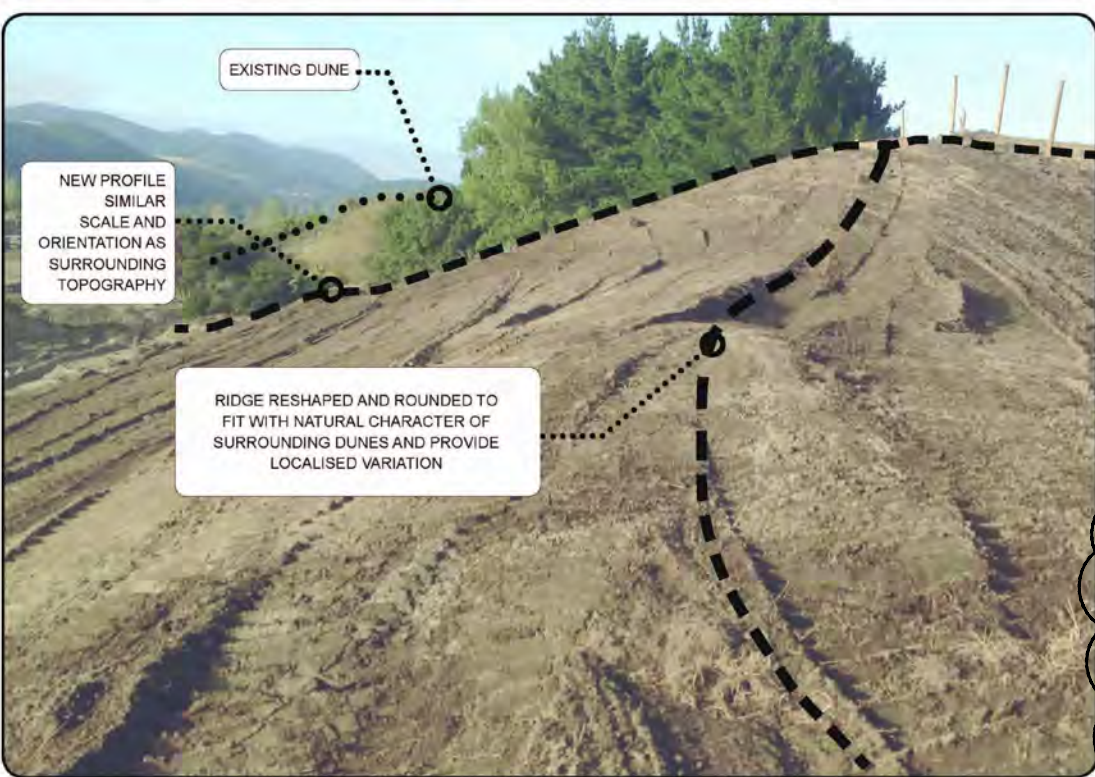


**Best Practice Examples from Sector 460**

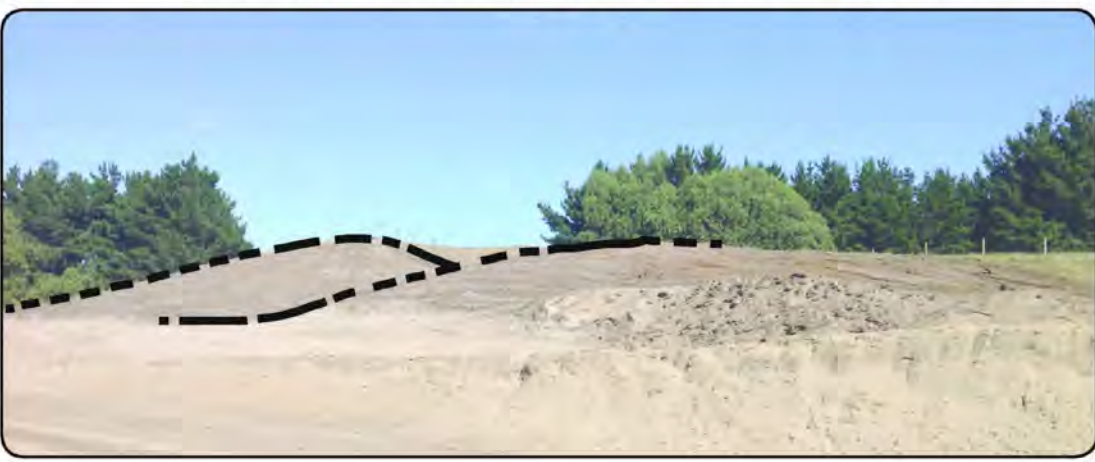
Below are examples of successful dune rounding conducted in sector 460 (western side of alignment between approx. chainage 9700-10,000).



-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**

- **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.

A3 REPRODUCTION SCALE  
0mm  
10  
20  
30  
40  
50  
60  
80  
100

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

Original Scale (A1)	Design	Drawn	Design	Date	Approved For Construction
NTS	B FAULKNER	V BILLETT	B FAULKNER	24.04.14	P BRADSHAW
Reduced Scale (A3)	Dwg Verifier	B EVANS	B EVANS	05.05.14	
NTS	Dwg Check	G F-B	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: STANDARD DETAILS  
DUNE ROUNDING DETAIL









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Rev: 2

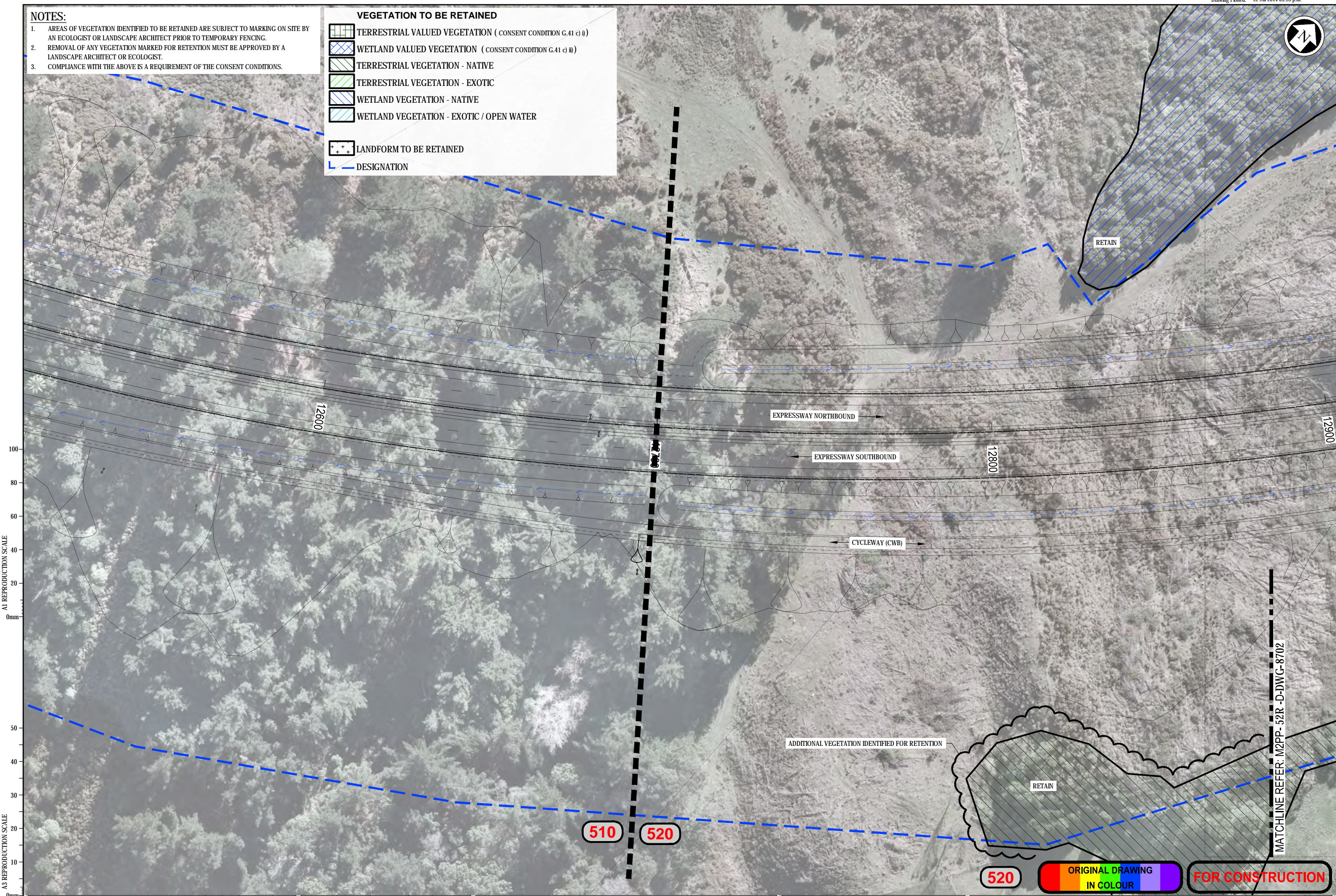


**NOTES:**

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.

**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
-  LANDFORM TO BE RETAINED
-  DESIGNATION



A1 REPRODUCTION SCALE

A3 REPRODUCTION SCALE

No.	Revision	By	Chk	Chk-V	Appd	Date
+	WORKING REVISION- REVISED AS NOTED	MP				
1	FOR CONSTRUCTION - ENABLING WORKS	MP	GFB	DH	SW	21.03.14

Original Scale (A1)	Design	Drawn	Checked	Approved For Construction
1:500	S. DUNN	M. POWELL	B. FAULKNER	P. BRADSHAW
Reduced Scale (A3)				
1:1000				

**NZ TRANSPORT AGENCY**  
WAKA KOTAHĪ

**MacKays to Peka Peka**  
Wellington Northern Corridor

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

Title: TE MOANA TO NGARARA VEGETATION TO BE RETAINED SHEET 1

Drawing No: M2PP-52R-D-DWG-8701

Rev: +

ORIGINAL DRAWING  
IN COLOUR

FOR CONSTRUCTION

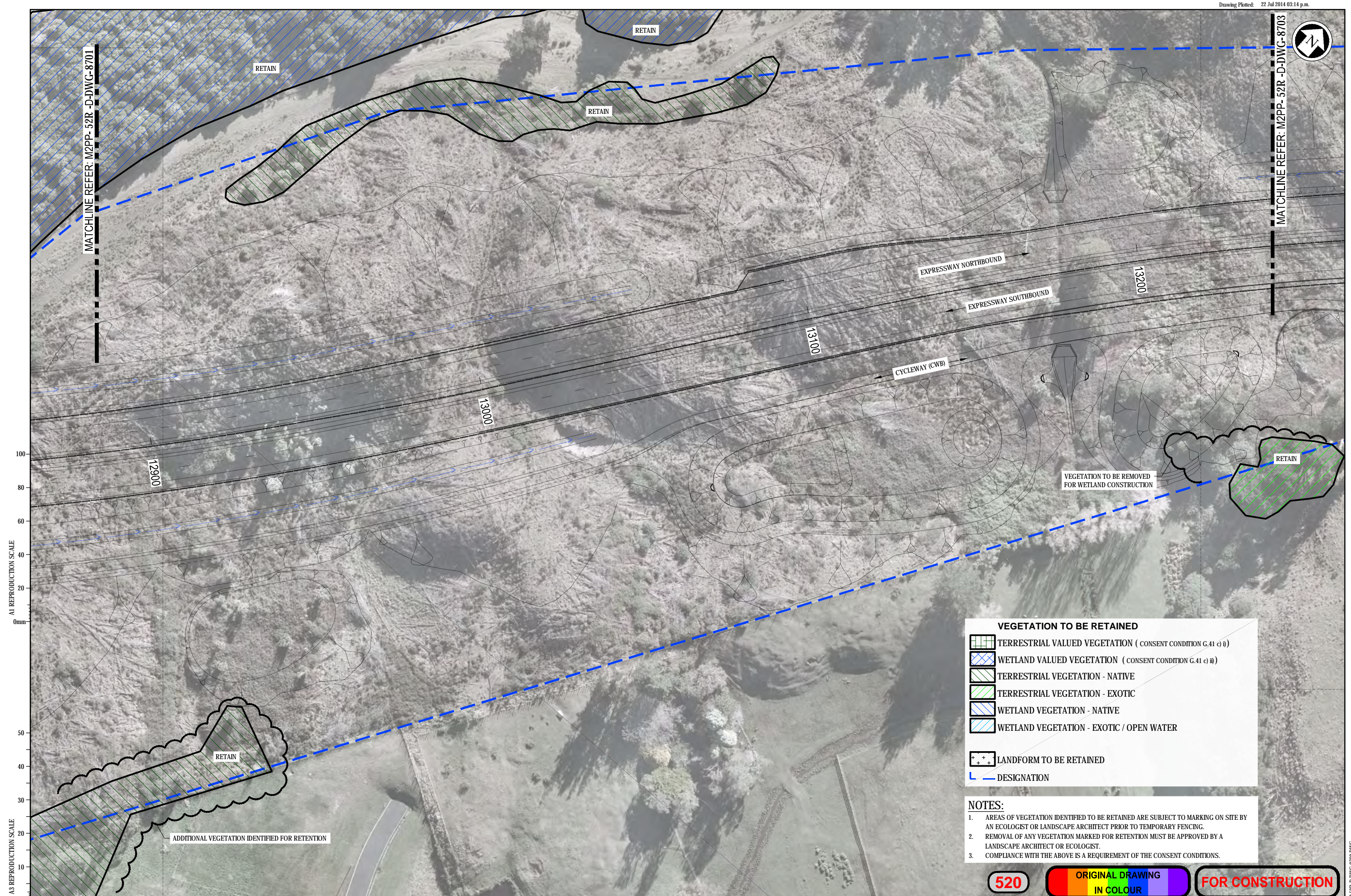
MATCHLINE REFER: M2PP-52R -D-DWG-8702



MATCHLINE REFER: M2PP-52R-D-DWG-8701



MATCHLINE REFER: M2PP-52R-D-DWG-8703



A1 REPRODUCTION SCALE  
0mm 20 40 60 80 100

A3 REPRODUCTION SCALE  
0mm 10 20 30 40 50

**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
- LANDFORM TO BE RETAINED
- DESIGNATION

**NOTES:**

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**520**

**ORIGINAL DRAWING  
IN COLOUR**

**FOR CONSTRUCTION**

No.	Revision	By	Chk	Chk-V	Appd	Date
+	WORKING REVISION - REVISED AS NOTED	MP				
1	FOR CONSTRUCTION - ENABLING WORKS	MP	GFB	DH	SW	21.03.14

Original Scale (A1)	Design	Drawn	Design Date	Approved For Construction
1:500	S. DUNN	M. POWELL	29.01.14	P. BRADSHAW
Reduced Scale (A3)	Dwg Verifier	Dwg Check	Date	
1:1000	B. FAULKNER	C. F. B.	21.03.14	



**MacKays to Peka Peka**  
Wellington Northern Corridor

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

Title: TE MOANA TO NGARARA  
VEGETATION TO BE RETAINED  
SHEET 2

Drawing No: M2PP-52R-D-DWG-8702

Rev: +





**VEGETATION TO BE RETAINED**

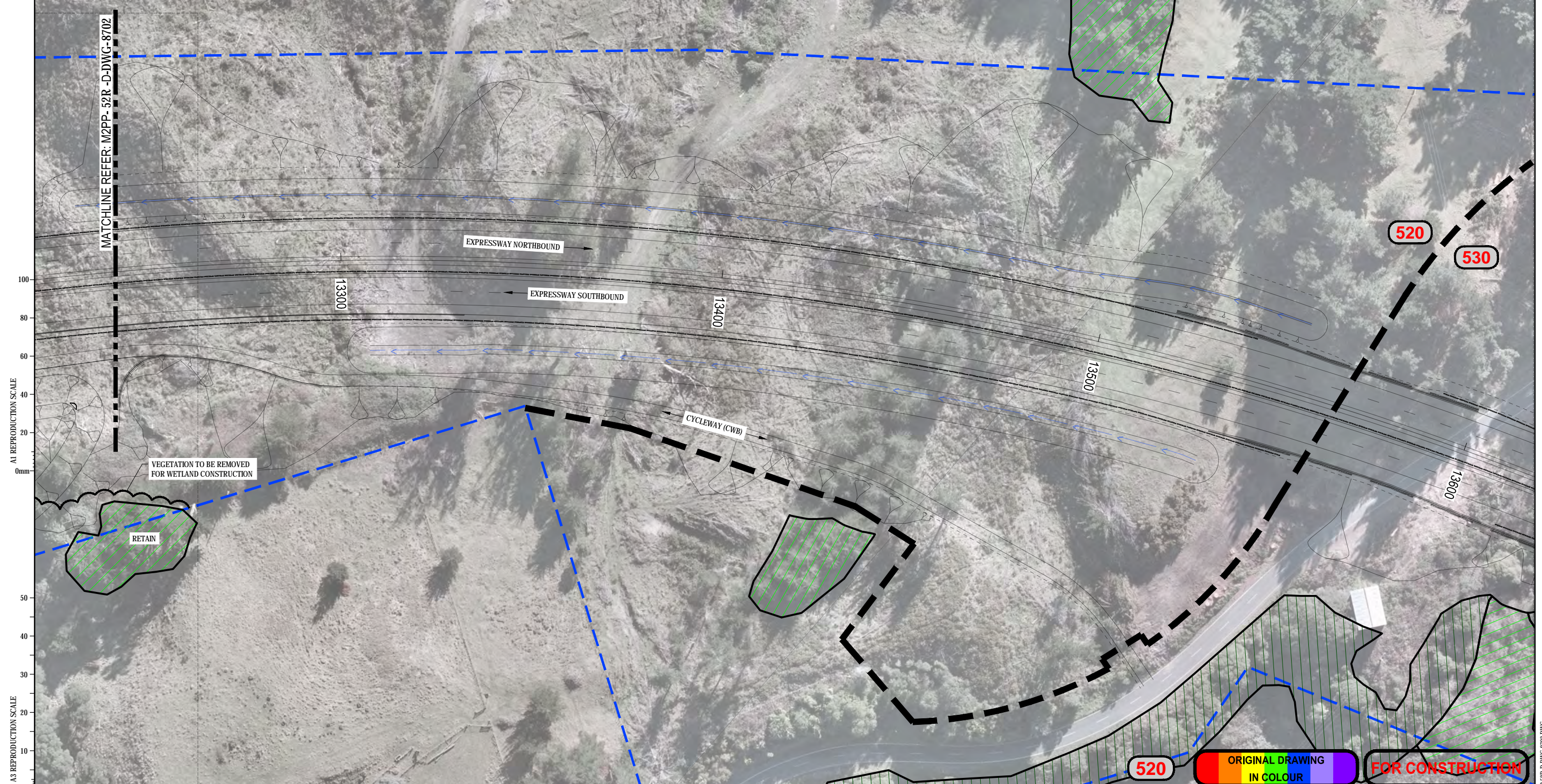
- TERRESTRIAL VALUED VEGETATION ( CONSENT CONDITION G.41 c) i)
- WETLAND VALUED VEGETATION ( CONSENT CONDITION G.41 c) ii)
- TERRESTRIAL VEGETATION - NATIVE
- TERRESTRIAL VEGETATION - EXOTIC
- WETLAND VEGETATION - NATIVE
- WETLAND VEGETATION - EXOTIC / OPEN WATER

LANDFORM TO BE RETAINED

DESIGNATION

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A1 REPRODUCTION SCALE

A3 REPRODUCTION SCALE

No.	Revision	By	Chk	Chk-V	Appd	Date
+	WORKING REVISION - REVISED AS NOTED	MP				
1	FOR CONSTRUCTION - ENABLING WORKS	MP	GFB	DH	SW	21.03.14

Original Scale (A1)	Design	S. DUNN	29.01.14	Approved For Construction
1:500	Drawn	M. POWELL	29.01.14	P. BRADSHAW
Reduced Scale (A3)	Dwg Verifier	B. FAULKNER	21.03.14	
1:1000	Dwg Check	C. F. B.	21.03.14	Date 21.03.14

\* Refer to Revision 1 for Original Signature



**MacKays to Peka Peka**  
Wellington Northern Corridor

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

Title: TE MOANA TO NGARARA VEGETATION TO BE RETAINED  
SHEET 3

Drawing No: M2PP-52R-D-DWG-8703

Rev: +

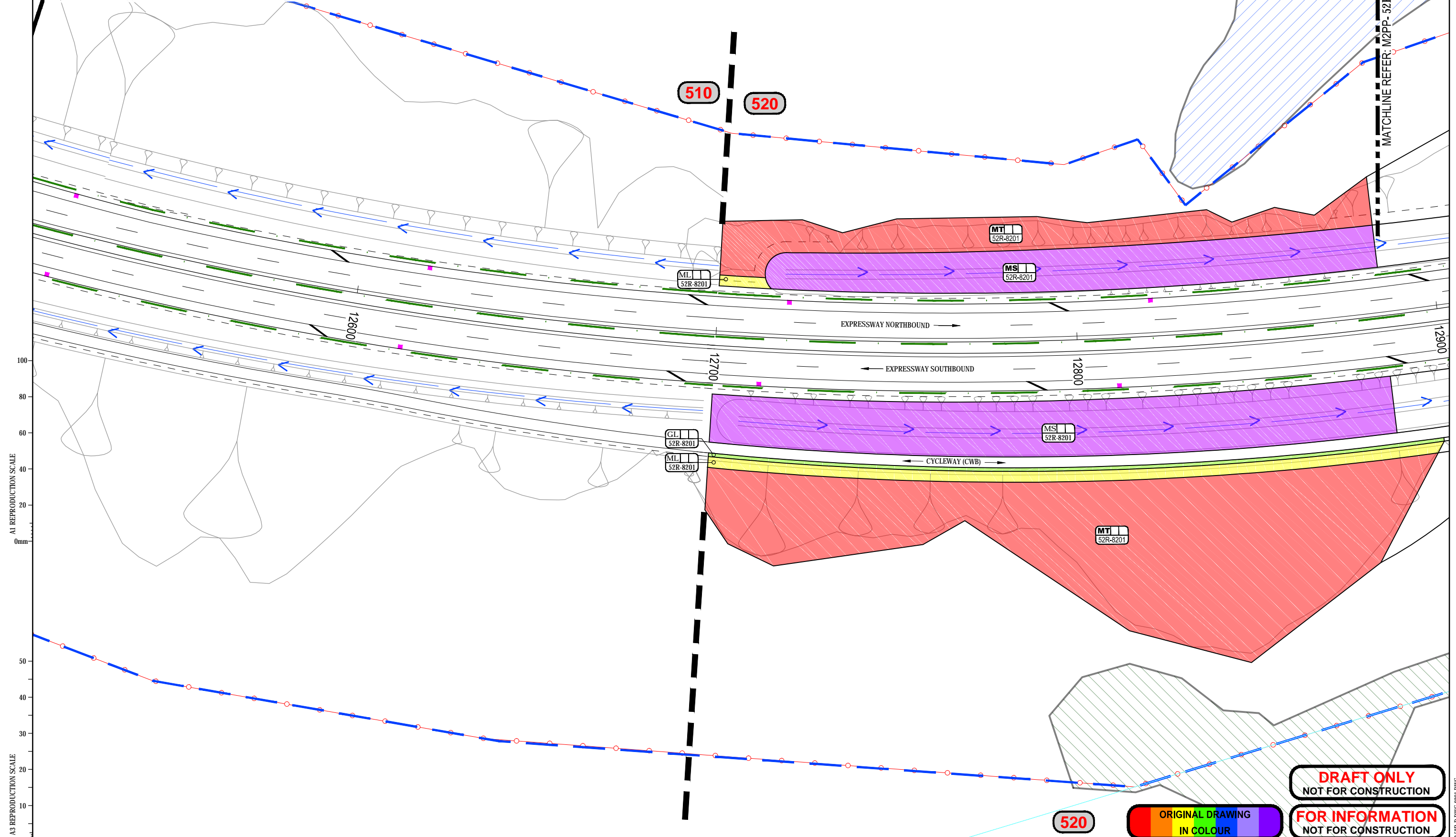


**KEY**

PLANTING TYPE PLANTING MIX AREA CODE	MASSED PLANTING	TREES - FORESTRY GRADE	GRASS - LOW	WETLAND PLANTING
PLANTING BOUNDARY	MASSED PLANTING - LOW	TREES - SPECIMEN GRADE	GRASS - SWALE	RIPARIAN PLANTING
ASSOCIATED SHEET NUMBER	MASSED PLANTING - TREE ENRICHMENT	TREES - POLE GRADE	GRASS - ROUGH	
	MASSED PLANTING - MEDIAN			
	MASSED PLANTING - SWALE			
		EXISTING VEGETATION TO BE RETAINED		DESIGNATION

**NOTES:**

- REFER TO PLANTING SCHEDULES (8211) FOR PLANT MIX DETAILS.
- REFER TO STANDARD PLANTING DETAILS (8900 SERIES) FOR PLANTING DETAIL.
- A 1.5m OFFSET FROM THE VERGE HAS BEEN MADE TO ACCOMMODATE THE EXTENT OF SUBBASE. THE ACTUAL OFFSET IS TO BE CONFIRMED ON SITE.



A1 REPRODUCTION SCALE  
0mm  
20  
40  
60  
80  
100

A3 REPRODUCTION SCALE  
0mm  
10  
20  
30  
40  
50

**DRAFT ONLY**  
NOT FOR CONSTRUCTION

**FOR INFORMATION**  
NOT FOR CONSTRUCTION

ORIGINAL DRAWING  
IN COLOUR

No.	Revision	By	Chk	Chk.V	Appd	Date

Original Scale (A1)	Design	S DUNN	17.06.14	Approved For Construction*
1:500	Drawn	M POWELL	17.06.14	Date
Reduced Scale (A3)	Dwg Verifier			
1:1000	Dwg Check			
	* Refer to Revision 1 for Original Signature			

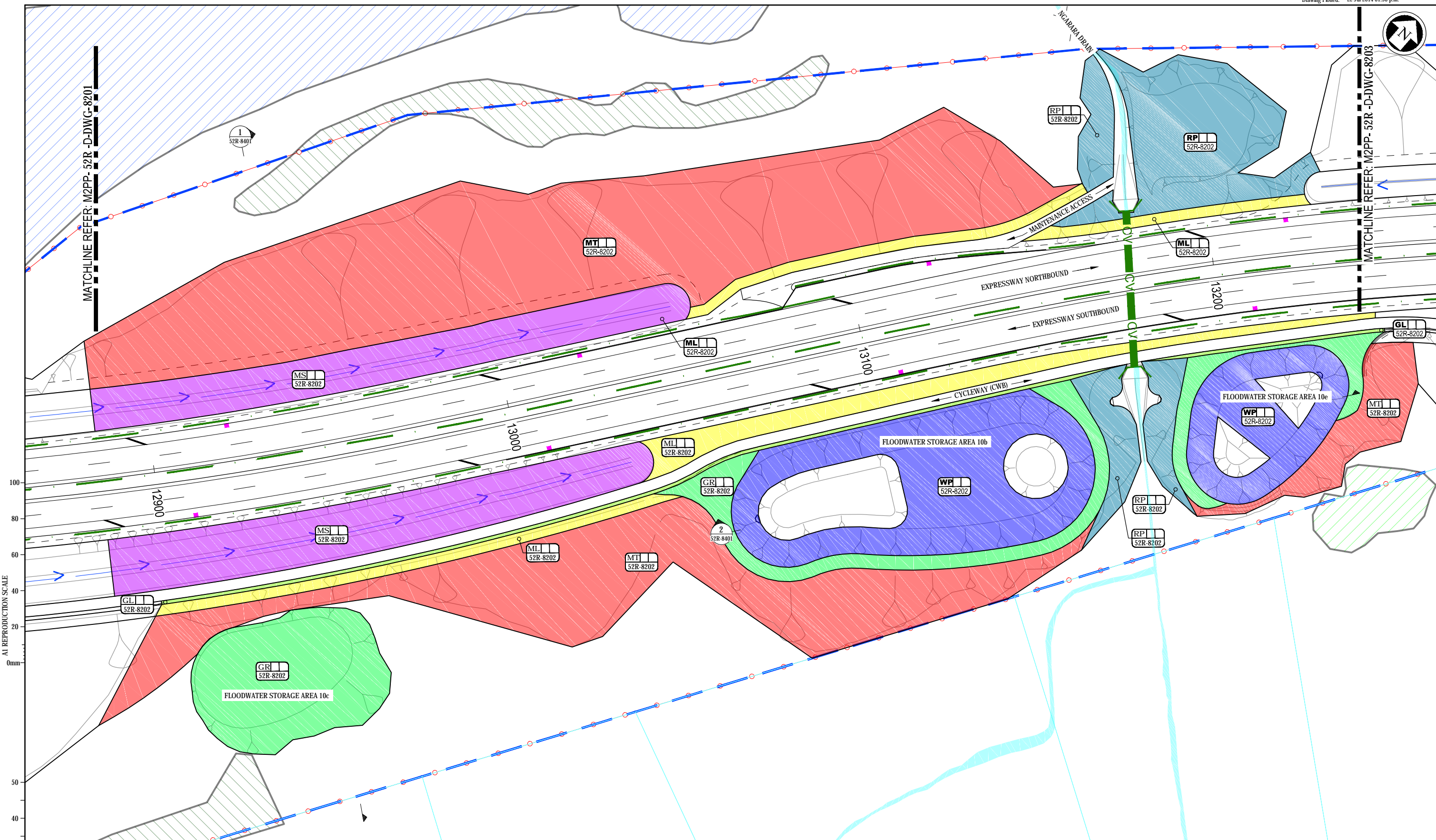
**NZ TRANSPORT AGENCY**  
WAKA KOTAHĪ

**MacKays to Peka Peka**  
Wellington Northern Corridor

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

Title: TE MOANA TO NGARARA PLANTING PLANS SHEET 1	Drawing No: M2PP-52R-D-DWG-8201	Rev: +
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A1 REPRODUCTION SCALE  
0mm  
20  
40  
60  
80  
100

A3 REPRODUCTION SCALE  
0mm  
10  
20  
30

**KEY**

	MASSED PLANTING		TREES - FORESTRY GRADE		GRASS - LOW		WETLAND PLANTING
	MASSED PLANTING - LOW		TREES - SPECIMEN GRADE		GRASS - SWALE		RIPARIAN PLANTING
	MASSED PLANTING - TREE ENRICHMENT		TREES - POLE GRADE		GRASS - ROUGH		
	MASSED PLANTING - MEDIAN		EXISTING VEGETATION TO BE RETAINED				
	MASSED PLANTING - SWALE						

PLANTING TYPE  
PLANTING MIX  
AREA CODE  
PLANTING BOUNDARY  
ASSOCIATED SHEET NUMBER

**NOTES:**

- REFER TO PLANTING SCHEDULES (8211) FOR PLANT MIX DETAILS.
- REFER TO STANDARD PLANTING DETAILS (8900 SERIES) FOR PLANTING DETAIL.
- A 1.5m OFFSET FROM THE VERGE HAS BEEN MADE TO ACCOMMODATE THE EXTENT OF SUBBASE. THE ACTUAL OFFSET IS TO BE CONFIRMED ON SITE.

No.	Revision	By	Chk	Chk.V	Appd	Date

Original Scale (A1)	Design	S DUNN	17.06.14	Approved For Construction
1:500	Drawn	M POWELL	17.06.14	
Reduced Scale (A3)	Dwg Verifier			
1:1000	Dwg Check			

\* Refer to Revision 1 for Original Signature



**MacKays to Peka Peka**  
Wellington Northern Corridor

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

520

ORIGINAL DRAWING  
IN COLOUR

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**FOR INFORMATION**  
NOT FOR CONSTRUCTION

Title: TE MOANA TO NGARARA PLANTING PLANS SHEET 2	Drawing No: M2PP-52R-D-DWG-8202	Rev.:
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**KEY**

<b>MP</b> MASSED PLANTING	<b>GL</b> GRASS - LOW	<b>WP</b> WETLAND PLANTING
<b>ML</b> MASSED PLANTING - LOW	<b>GS</b> GRASS - SWALE	<b>RP</b> RIPARIAN PLANTING
<b>MT</b> MASSED PLANTING - TREE ENRICHMENT	<b>GR</b> GRASS - ROUGH	
<b>MM</b> MASSED PLANTING - MEDIAN		
<b>MS</b> MASSED PLANTING - SWALE		

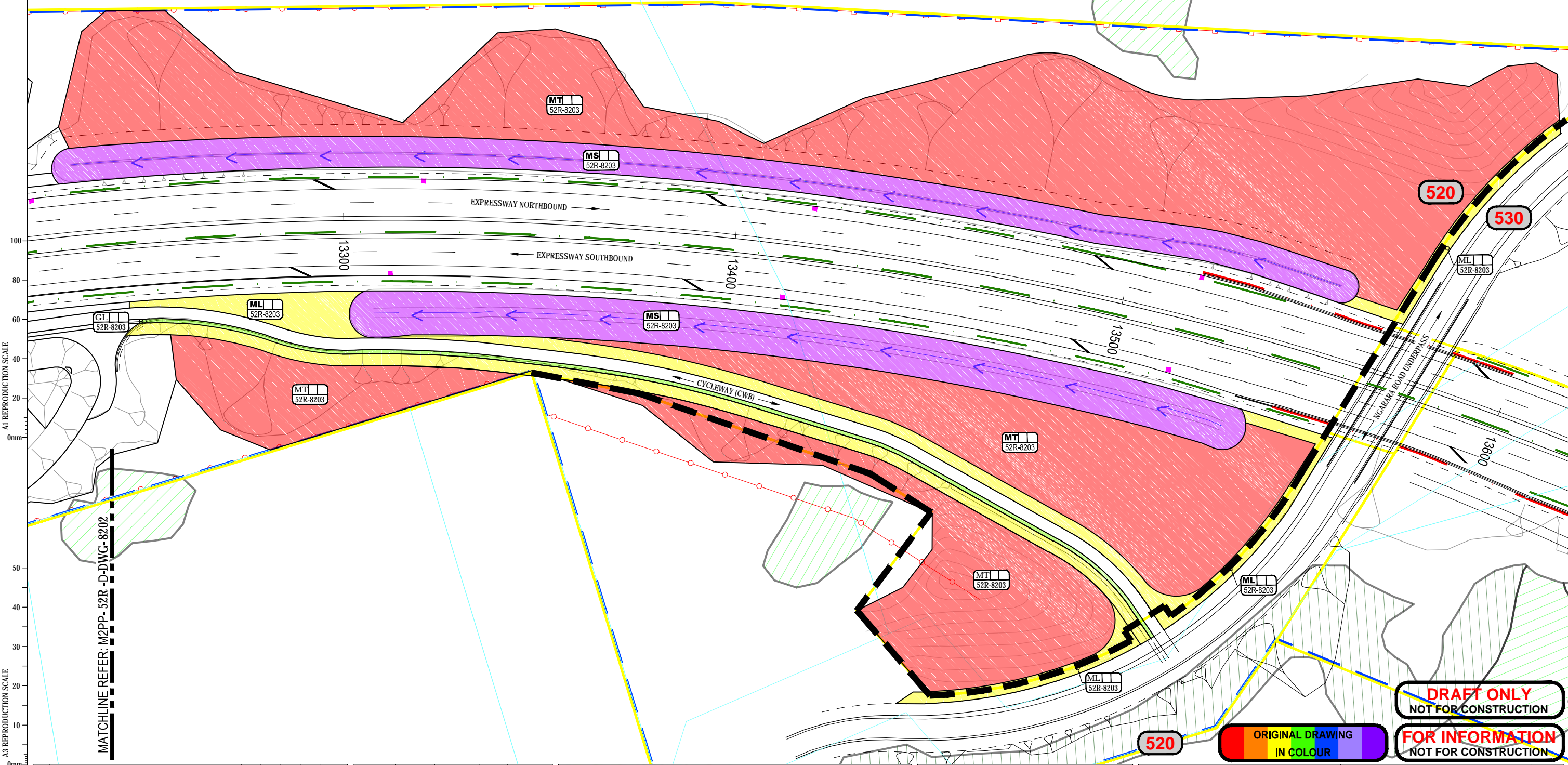
**PLANTING TYPE**  
**PLANTING MIX AREA CODE**  
**PLANTING BOUNDARY**  
**ASSOCIATED SHEET NUMBER**

**Trees:**  
**TF** TREES - FORESTRY GRADE  
**TS** TREES - SPECIMEN GRADE  
**TP** TREES - POLE GRADE

**EXISTING VEGETATION TO BE RETAINED**

**DESIGNATION**

**NOTES:**  
 1. REFER TO PLANTING SCHEDULES (8211) FOR PLANT MIX DETAILS.  
 2. REFER TO STANDARD PLANTING DETAILS (8900 SERIES) FOR PLANTING DETAIL.  
 3. A 1.5m OFFSET FROM THE VERGE HAS BEEN MADE TO ACCOMMODATE THE EXTENT OF SUBBASE. THE ACTUAL OFFSET IS TO BE CONFIRMED ON SITE.



A1 REPRODUCTION SCALE  
0mm

A3 REPRODUCTION SCALE  
0mm

MATCHLINE REFER: M2PP-52R-D-DWG-8202

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No.	Revision	By	Chk	Chk.V	Appd	Date
+	FOR INFORMATION					

Original Scale (A1)	Design	S DUNN	17.06.14	Approved For Construction*
1:500	Drawn	M POWELL	17.06.14	Date
Reduced Scale (A3)	Dwg Verifier			
1:1000	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: TE MOANA TO NGARARA PLANTING PLANS SHEET 3	Drawing No: M2PP-52R-D-DWG-8203	Rev: +
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SECTOR 520 (Te Moana to Ngarara Road) PLANT SCHEDULE

Plant reference	TOTAL
Area	0
Area adjusted for slope	0
plant centres (metres)	0.00
Mulch type OM = Organic mulch, GM = graded gravel mulch, N = No mulch (in riparian / wetland zones)	0

Plant type	Plant mix	Botanical name	Common name	Grade	% mix	Notes	
<b>MASSED PLANTING + TREE ENRICHMENT</b>							
MT	F	Austroderia fulvida	syn Cortaderia, toetoe	1.0 litre	2%		no
MT	F	Carex lessoniana	Cutty grass	1.0 litre	5%		no
MT	F	Carpodetus serratus	Putaputaweta	1.0 litre	5%		no
MT	F	Coprosma areolata	Thin leaved Coprosma	1.0 litre	5%		no
MT	F	Coprosma grandifolia	Kanono	1.0 litre	4%		no
MT	F	Coprosma robusta	Karamu	1.0 litre	5%		no
MT	F	Griselinia lucida	Puka, Broadleaf	1.0 litre	5%		no
MT	F	Hebe stricta	Koromiko	1.0 litre	5%		no
MT	F	Kunzea ericoides	Kanuka	1.0 litre	15%		no
MT	F	Leptospermum scoparium	Manuka	1.0 litre	5%		no
MT	F	Macropiper excelsum	Kawakawa	1.0 litre	5%		no
MT	F	Melicope ternata	Wharangi	1.0 litre	2%		no
MT	F	Melicytus ramiflorus	Mahoe	1.0 litre	5%		no
MT	F	Myoporum laetum	Ngalo	1.0 litre	2%		no
MT	F	Myrsine australis	Mapou, Matipo	1.0 litre	5%		no
MT	F	Phormium tenax	Harakeke, Flax	1.0 litre	15%		no
MT	F	Pittosporum eugenoides	Tarata, lemonwood	1.0 litre	3%		no
MT	F	Pseudopanax arboreus	Whauwhaupaku, Fivefinger	1.0 litre	5%		no
MT	F	Pseudopanax crassifolius	Horoeka, Lancewood	1.0 litre	2%		no
MT	F	Knightia excelsa	Rewarewa	PB18	enrich		no
MT	F	Podocarpus totara	Totara	PB18	enrich		no
MT	F	Prumnopitys taxifolia	Matai	PB18	enrich		no
MT	F	Dacrycarpus dacrydioides	Kahikatea	PB18	enrich		no
MT	F	Rhopalostylis sapida	Nikau	PB18	enrich		no
MT	F	Alectryon excelsus	Titoki	PB18	enrich		no
MT	F	Hedycarya arborea	Porokawhiri, Pigeonwood	PB18	enrich		no
MT	F	Elaeocarpus dentatus	Hinau	PB18	enrich		no
MT	F	Dysoxylum spectabile	Kohekohe	PB18	enrich		no
<b>MASSED LOW EDGE PLANTING, ADJACENT TO CYCLEWAY (430)</b>							
ML	A	Acaena novae-zelandiae	Red bidi bidi	1.0 litre	10%	front edge	no
ML	A	Austroderia fulvida	syn Cortaderia, toetoe	1.0 litre	5%	back	no
ML	A	Carex dipsacna	Treasel sedge	1.0 litre	10%	front edge	no
ML	A	Carex solandri	Forest sedge, Solander's sedge	1.0 litre	10%	front edge	no
ML	A	Carex virgata	Swamp sedge	1.0 litre	5%	mid back	no
ML	A	Coprosma areolata	Thin leaved Coprosma	1.0 litre	5%	back	no
ML	A	Coprosma propinqua	Mingimingi	1.0 litre	5%	mid back	no
ML	A	Coprosma repens	Taupata	1.0 litre	10%	mid back	no
ML	A	Ficinia nodosa	Wiwi, Knobby club rush	1.0 litre	10%	front edge	no
ML	A	Hebe stricta	Koromiko	1.0 litre	10%	back	no
ML	A	Muehlenbeckia complexa	Pohuehue, wire vine	1.0 litre	20%	front edge	no
<b>MASSED SWALE PLANTING</b>							
MS	A	Apodasmia similis	Oioi	0.5 litre	100		no

Plant type	Plant mix	Botanical name	Common name	Grade	% mix	Notes	
<b>RIPARIAN PLANTING - EDGE TO NARARA DRAIN / CULVERT 26</b>							
RP	H	Carex geminata	Cutty grass	0.5 litre		upper edge	no
RP	H	Carex lessoniana	Cutty grass	0.5 litre		lower edge	no
RP	H	Cordyline australis	Ti kouka	1.0 litre			no
<b>WETLAND PLANTING - EMERGENT 0.0 TO 0.3M WATER DEPTH</b>							
WP	F	Carex virgata	Swamp sedge			0 - 0.3m zone	no
WP	F	Cyperus ustulatus	Toetoe upokotangata, Giant umbrella sedge			0 - 0.3m zone	no
WP	F	Machaerina rubiginosa (syn Baumea)				0 - 0.3m zone	no
WP	F	Machaerina teretifolia (syn Baumea)	Common twig rush, pakihī sedge			0 - 0.3m zone	no
WP	F	Phormium tenax	Harakeke, Flax			0 - 0.3m zone	no
<b>WETLAND PLANTING - 0.3 TO 0.6M WATER DEPTH</b>							
WP	G	Bolboschoenus fluviatilis	Kukuraho, Marsh club rush			0.3-0.6m zone	no
WP	G	Carex secta	Pukio, Purei			0 - 0.3-0.6m zone	no
WP	G	Eleocharis acuta	Sharp spiked sedge			0 - 0.3-0.6m zone	no
WP	G	Juncus edgariae (syn J gregifolius)	Wiwi			0 - 0.3-0.6m zone	no
<b>WETLAND PLANTING - 0.6M TO 1.0M WATER DEPTH</b>							
WP	H	Typha orientalis	Raupo	limited use		0.3-0.6-1.1m zone	no
WP	H	Machaerina articulata (syn Baumea)	Jointed baumea or twig rush			0.3-0.6-1.1m zone, wet and seasonal dry	no
<b>GRASS</b>							
GL	A	Grass low grow mix	sown, close mow to 100mm	sow			0 m <sup>2</sup>
GS	A	Grass swale - (low grow mix)	sown, mow 100 - 200	sow			0 m <sup>2</sup>
GR	A	Grass rank - (low grow mix)	sown, allowed to grow rank,	sow			0 m <sup>2</sup>
TOTAL							

A3 REPRODUCTION SCALE

A3 REPRODUCTION SCALE

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No.	Revision	By	Chk	Chk.V	Appd	Date
+	WORKING REVISION	MP				

Original Scale (A1) NTS	Design	S DUNN	21.07.14	Approved For Construction*
Reduced Scale (A3) NTS	Drawn	M POWELL	21.07.14	Date
	Design Checker			
	Drawn Check			
	* Refer to Revision 1 for Original Signature			



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

Title: TE MOANA TO NGARARA PLANTING SCHEDULE  
Drawing No: M2PP-52R-D-DWG-8211  
Rev. +



Appendix 2: CONSULTATION, FEEDBACK AND RESPONSES

Site Specific Management Plan 009 - Ngarara [Sector 520 - Te Moana Rd to Ngarara Rd]  
MacKays to Peka Peka Expressway

01 SEPTEMBER 2014 - CERTIFIED ISSUE - REV B







The following tables set out the responses to comments raised by reviewers and those parties consulted in regard to the preliminary issue of Sector 520 (SSMP 9). The project responses are either reflected in the certification issue to which this Appendix pertains, or have been directed to other processes for action, or have been considered but for the reasons noted not agreed to. The parties consulted are those identified by the consent conditions are:

- KCDC;
- Te Āti Awa ki Whakarongotai;
- Kāpiti Cycling Incorporated; and
- Implementation Group of the Kāpiti Coast District Council Advisory on Cycleways, Walkways and Bridleways (CWB)

<b>COMMENTS ON PRELIMINARY ISSUE SSMP 9 [Sector 520]</b> <b>KCDC REVIEWERS COMMENTS</b> [JW=Julia Williams- Landscape Architect; K=Stu Kilmister-CWB Planner]					
Condition Reference	Condition Detail	Reviewer/ commenter	KCDC Reviewer's comment	Reference in SSMP	Management Plan Author's response
	CWB	SK	No comments to make on SSMP 9		
		JW	Some minor changes to cross-section and graphic required		Noted and changes made to plans
	Consultation	JW	No comment back yet from local iwi.		This has been followed up via Alliance Comms team.
	Consultation	JW	Is there a local resident association such as the Ferndale people? Would it be worth at least running the plans past the Ferndale Trust?		There are no relevant Residents Associations for this SSMP .( Condition DC.57 e) vi))
	CPTED Review	JW	Generic CPTED review undertaken		Sector specific review has also been undertaken see comments Page 9, Urban Design B CWB

<b>COMMENTS ON PRELIMINARY ISSUE SSMP 9 [Sector 520]</b> <b>TE ATIWA KI WHAKARONGATAI</b> [HS=Hemi Sundgren]					
Condition Reference	Condition Detail	Reviewer/ commenter	Comment	Reference in SSMP	Management Plan Authors' response
57 e) i	SSMP to be prepared in consultation with Te Atiawa ki Whakarongatai				SSMP Issued for comment 29/7/14, no formal comments received 20/8/14. despite follow up email reminders requesting feedback on 6/8 and 14/8/14  The Alliance design team are working with Te Atiawa ki Whakarongatai to develop design of some elements along the CWB corridor. This work considers the whole Expressway route. The first stage, currently underway, will identify the particular locations of significance to Te Atiawa. If these locations occur within this SSMP area, landscape elements or features will be designed and incorporated into the CWB corridor, in consultation with Te Atiawa representatives.

<b>COMMENTS ON PRELIMINARY ISSUE SSMP 9: [Sector 520]</b> <b>KAPITI CYCLING INC.</b> [LS] Lynn Sleath <b>IMPLEMENTATION GROUP OF THE KAPITI COAST DISTRICT COUNCIL, advisory on Cycleways, walkways and Bridleways</b> [JN] Jan Nisbet					
Condition Reference	Condition Detail	Reviewer / commenter	Comment	reference in SSMP	Management Plan Author's response



DC59A.f ii and iii and DC59A.g, DC59Ai(xi) and DC.57 c)	CWB	LS , JN	No comments to make on SSMP 9		
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Appendix 3: LANDSCAPE SPECIFICATION

Site Specific Management Plan 009 - Ngarara [Sector 520 - Te Moana Rd to Ngarara Rd]  
MacKays to Peka Peka Expressway

01 SEPTEMBER 2014 - CERTIFIED ISSUE - REV B

SEE SEPARATE A4 BOUND DOCUMENT.



