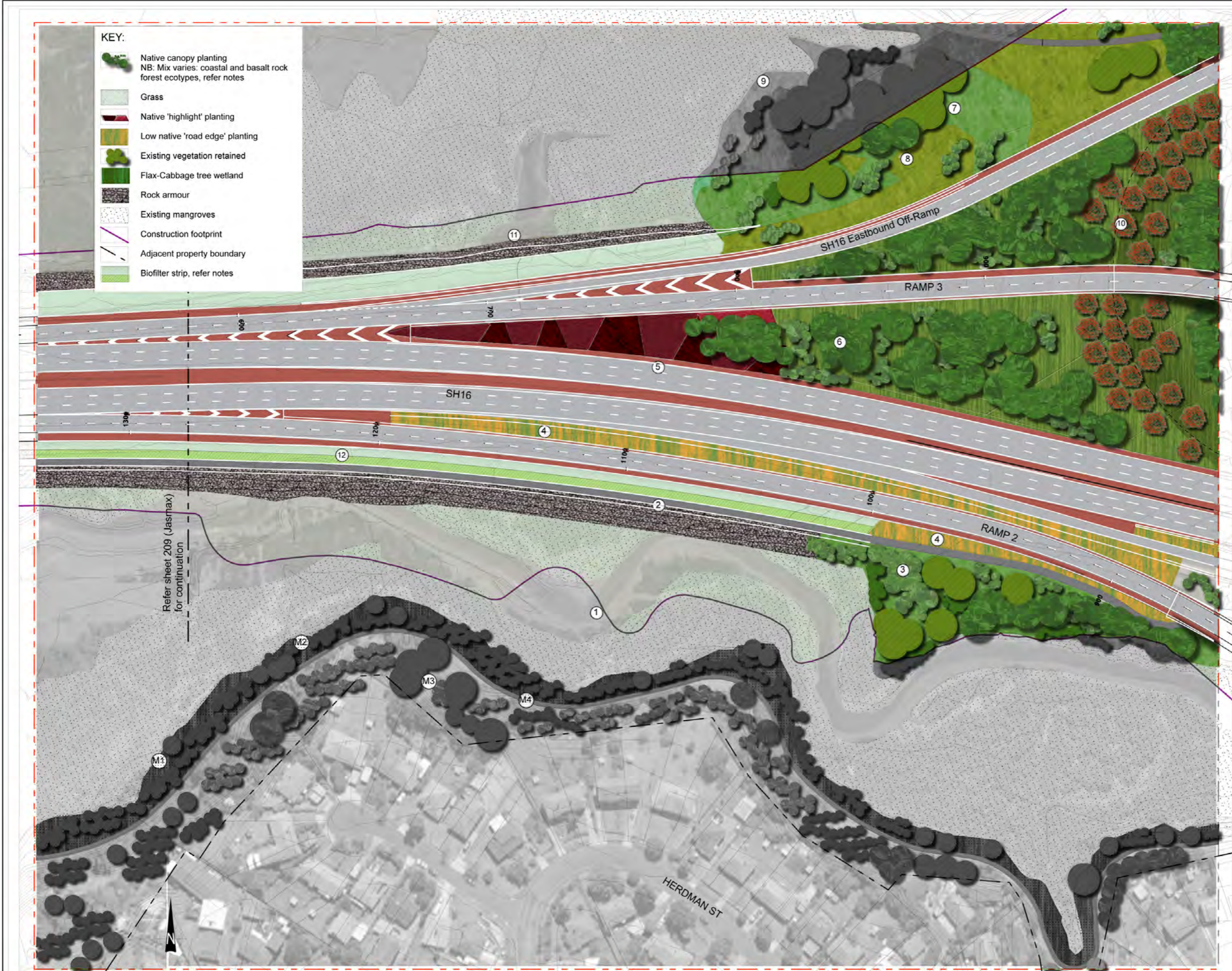


ANNEXURE B – REVISED PLAN NOS. F16:210-213, 218-224 AND 229



KEY:

	Native canopy planting
	Grass
	Native 'highlight' planting
	Low native 'road edge' planting
	Existing vegetation retained
	Flax-Cabbage tree wetland
	Rock armour
	Existing mangroves
	Construction footprint
	Adjacent property boundary
	Biofilter strip, refer notes

GENERAL NOTES:

This plan is for the purposes of lodgement with the EPA only. It is not to be used as a construction drawing, and shall be read in conjunction with the civil, structural, architectural and stormwater drawing packages. These sheets illustrate the landscape concept only, and detailed design may alter the extent or location of proposed built elements.

The notes for these drawings refer to those proposed by NZTA (plan notes) and those to be confirmed through the management plan approach, working with Council and others. Colour denotes proposed work within the designation or consent applications.

PLAN NOTES:

- 1 Oakley Creek mouth channel
- 2 Proposed 3m width pedestrian/cycle way, links the SH20 interchange to the proposed SH16 causeway pedestrian/cycle way alignment.
- 3 Existing bush in this area to be selectively thinned to remove exotic weeds, and interplanted with canopy and underplanting specimens selected from the 'Coastal Forest' ecotype. Refer schedules for further details.
- 4 Low mixed planting between pedestrian/cycle way and SH16, selected from the 'Coastal Forest' ecotype, and also between ramp 2 and SH16
- 5 'Impact planting' at interface with SH20 ramps and SH16 alignment. Planting to be raised to 200mm below top of barrier where impermeable barriers (ie Portland type) are used. Refer planting schedules.
- 6 Exotic weeds in this area removed, and mixed underplanting/canopy specimens installed, selected from the 'Basalt Rock Forest' ecotype.
- 7 Existing bush in this area to be selectively thinned to remove exotic weeds, and interplanted with canopy and underplanting specimens selected from the 'Coastal Forest' ecotype. Refer schedules for further details.
- 8 Flax-cabbage tree wetland ecotone to be created as part of ecological mitigation works.
- 9 Salt marsh ecotone (Olearia dominant with interplanted Plagianthus) to be created along northern shoreline, approximately 5m width as part of ecological mitigation works
- 10 Dotted line denotes slope change for earthworks at the interface of the abutment/pier support junction for ramp 3. Land grades back gently to the west, north and south, tying in with adjacent motorway grades, and grades back more steeply to the east.
- 11 Refer to SH16 works package for detail on the revetment planting amongst the rock armor to the causeway.
- 12 Biofilter strip comprising 50/50 mix of grass and oioi, refer SH16 drawings for further detail.

MANAGEMENT PLAN APPROACH:

NB: These items are conceptual only, shown for reference-for discussion and agreement with Council through the management plan process (including future cost share arrangements).

- M1 Existing native coastal scrub retained wherever possible, exotic weeds removed, and species interplanted as selected from the 'coastal forest' species list. Refer planting schedules for further details.
- M2 Low riparian planting at regular intervals allows views to water's edge. Plant species to be selected from 'coastal forest' ecotype, with lower growing specimens selected as per planting schedules.
- M3 Taller growing and canopy species selected from coastal forest ecotype flank residential property boundaries, to screen views of motorway. Further detailed consultation to be undertaken with property owners to determine extent of planting in this area, as it may affect water views.
- M4 1.8m width all weather footpath, with alignment selected to minimise changes in grade and avoid use of steps, allowing for all forms of access. This will require earth shaping, regrading and minor retaining walls in places, to be investigated during the detailed design phase.

No.	Revision	By	Chk.	Appd.	Date
C	REVISED FOR REBUTTAL EVIDENCE	DLNR			31.01.11
B	ISSUE FOR STATUTORY APPROVAL	JJ			04.08.10
A	ISSUE FOR SRT/NZTA REVIEW	JJ			18.06.10

Drawing Originator:

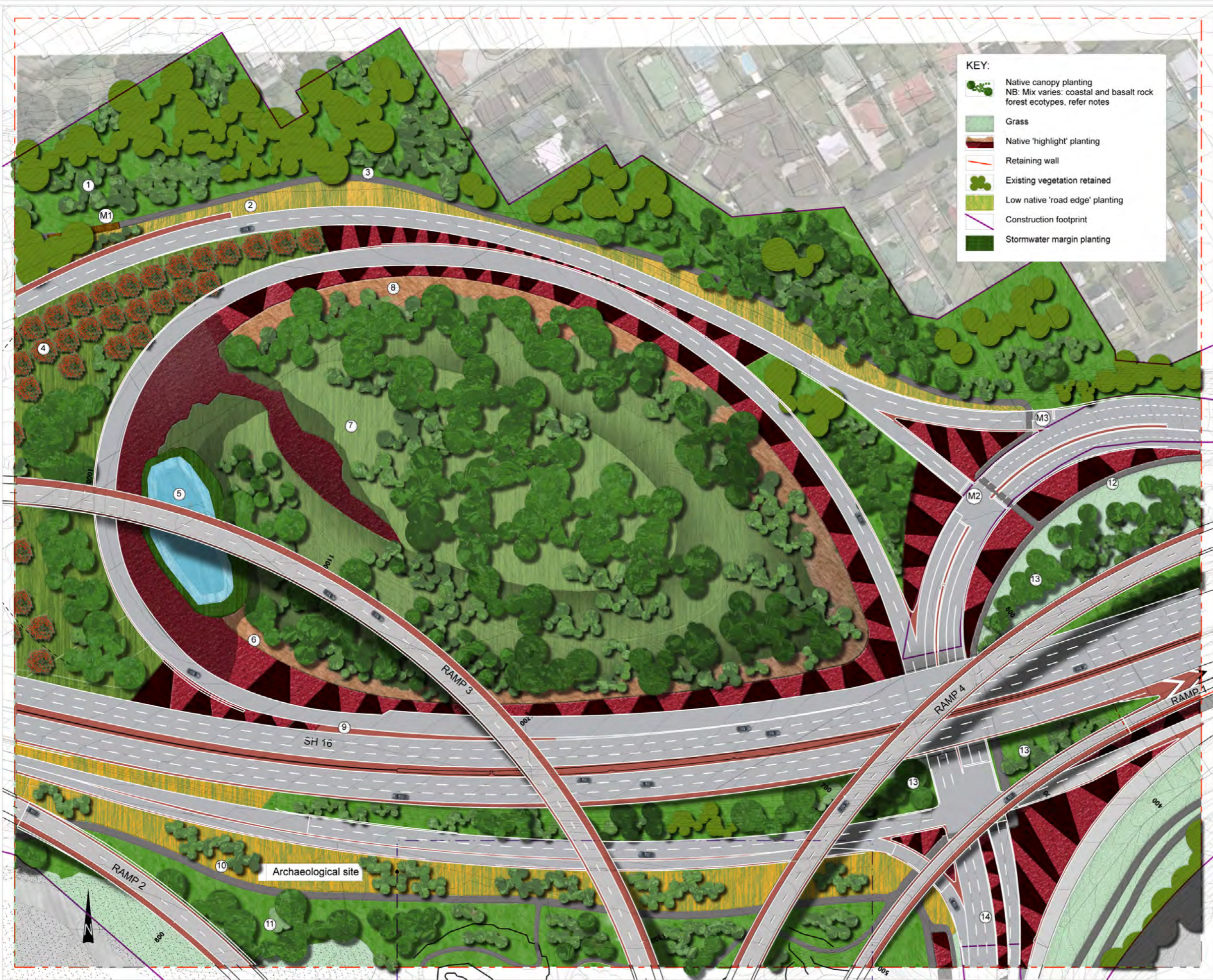
Original Scale (A1)	1:750	Designer	DL
Reduced Scale (A3)	1:1500	Reviewer	DL/NR
		Drafting Checked	
		Consultant Approval	AL

NZ TRANSPORT AGENCY
WAKA KOTAHĪ

Project: WATERVIEW CONNECTION PROJECT
SH16 / SH20

Title: URBAN DESIGN AND LANDSCAPE PLANS
SHEET 210

Base level:	MSLAUCK. VERT. DATUM 1946
Grid Reference:	MT EDEN 2000
Originator No.:	
Project No.:	20.1.11-3-D-L-810-210
Rev.:	C



KEY:

- Native canopy planting
NB: Mix varies: coastal and basalt rock forest ecotypes, refer notes
- Grass
- Native 'highlight' planting
- Retaining wall
- Existing vegetation retained
- Low native 'road edge' planting
- Construction footprint
- Stormwater margin planting

GENERAL NOTES:

This plan is for the purposes of lodgement with the EPA only. It is not to be used as a construction drawing, and shall be read in conjunction with the civil, structural, architectural and stormwater drawing packages. These sheets illustrate the landscape concept only, and detailed design may alter the extent or location of proposed built elements.

The notes for these drawings refer to those proposed by NZTA (plan notes) and those to be confirmed through the management plan approach, working with Council and others. Colour denotes proposed work within the designation or consent applications.

- PLAN NOTES:**
- 1 Low-lying naturally wet area to be cleared of weeds and replanted with coastal saline wetland species, refer schedules.
 - 2 Low-growing mixed native planting between the footpath to Eric Armishaw Park and the SH16 eastbound off-ramp, selected from the 'Coastal Forest' ecotype.
 - 3 Existing vegetation thinned to remove poorly performing species & weeds. New canopy and understorey native species interplanted to gaps. Species to be selected from the 'coastal forest' ecotype. Refer schedules for further details. NB: Mature specimens to be transplanted to this area to screen views to adjacent residential properties.
 - 4 Stand of large-grade Pohutakawa trees at western approach to interchange, underplanted with single/dual species low native underplanting — refer planting schedules for further details.
 - 5 Existing stormwater pond reshaped to suit contours of proposed central mound, in similar location to existing, and reusing existing buried infrastructure.
 - 6 Massed aquatic vegetation to edge of stormwater pond. Species will be low-growing ecosourced aquatic species, local to the area and arranged in strong patterned bands to support the planting concept for the mound. Refer planting schedules for further details.
 - 7 Proposed central mound, built up from fill excavated from tunnel, capped with topsoil won from the project — refer details for subgrade construction to ensure drainage. Mound generally slopes at 1 in 3 to flatter top 'plateau' section. This section grades gently from east to west — further details to be provided on earthworks plans.
 - 8 Central mound to feature low 'impact planting', mixed patterned flax species at base, bordered by a loose arrangement of single species *Lophomyrtus*. Above this is lush 'basalt rock forest' to the sloping sides of the mound. The flatter top plateau features mass planted 'impact species' spilling from the western edge down the slope as shown. Refer planting schedules for details.
 - 9 All new flush medians and shoulders to be constructed from red aggregate chip, to match that installed on the SH20 section.
 - 10 3m width shared footpath/cycleway linking to the SH16 cycle way east and west of the interchange. Discrete, black 1.1m height mesh fencing to be installed between cycleway and motorway as required.
 - 11 Weed removal to be carried out to existing vegetation in this area, and native 'coastal forest' specimens interplanted to gaps as per the planting schedules. Staged removal of weed species is proposed, to allow new native vegetation to establish.
 - 12 Existing section of 3m width cycleway relocated in this area, to allow for new configuration of Ramp 4 to the east.
 - 13 New native 'basalt rock forest' planting to existing sloping motorway edges in this area, refer planting schedules for further details.
 - 14 Native 'impact planting' to frame intersections and road reserve as shown — refer planting schedules.

MANAGEMENT PLAN APPROACH:

NB: These items are conceptual only, shown for reference-for discussion and agreement with Council through the management plan process (including future cost share arrangements).

M1 Low timber boardwalk connects across saline wetland area, joining access path to Eric Armishaw Park to the north. Details of path north of NZTA property to be confirmed with Council, including connection point and access arrangements. Connections from this path to adjacent streets in Pt Chevalier to be investigated during detailed design.

M2 3m width all weather path connection to cross Great North Road at this location, in order to link to Eric Armishaw in the northwest. New signalisation required at existing traffic lights.

M3 New connection required across off ramp, with intersection reconfiguration to be confirmed during detailed design.

No.	Revision	By	Chk	Appd	Date
C	REVISED FOR REBUTTAL EVIDENCE				31.01.11
B	ISSUE FOR STATUTORY APPROVAL	JJ			04.08.10
A	ISSUE FOR SRT/NZTA REVIEW	JJ			18.06.10

Drawing Originator:		Original Scale (A1):	1:750	Designer:	DL
		Reduced Scale (A3):	1:1500	Reviewer:	DLNR
				Drafting Checked:	
				Consultant Approval:	AL

WATERVIEW CONNECTION PROJECT
SH16 / SH20

URBAN DESIGN AND LANDSCAPE PLANS
SHEET 211

Base level:	MSLAUCK, VERT. DATUM 1946
Grid Reference:	MT EDEN 2000
Originator No.	
Project No.	20.1.11-3-D-L-810-211
Rev	C



GENERAL NOTES:

This plan is for the purposes of lodgement with the EPA only. It is not to be used as a construction drawing, and shall be read in conjunction with the civil, structural, architectural and stormwater drawing packages. These sheets illustrate the landscape concept only, and detailed design may alter the extent or location of proposed built elements.
 The notes for these drawings refer to those proposed by NZTA (plan notes) and those to be confirmed through the management plan approach, working with Council and others. Colour denotes proposed work within the designation or consent applications.

PLAN NOTES:

- 1 Existing exotic vegetation in this area (mainly Pine and Poplar) to be protected where possible for the duration of the works, in order to retain vertical scale. These areas shall be underplanted with a mix of native canopy and underplanting specimens from the 'coastal forest' ecotype, with the existing exotic species removed via a succession strategy. Refer planting schedules for details.
- 2 Massed aquatic vegetation to edge of stormwater pond, following natural ground contours. Species will be low-growing ecosourced aquatic species, local to the area and arranged in strong patterned bands.
- 3 Stormwater pond, refer stormwater engineer's details.
- 4 3m width reinforced grass access track for servicing and maintaining the stormwater pond forebay.
- 5 Ecosourced and massed native planting in and around all interchange ramps. Species to be selected from the 'coastal forest' ecotype — refer schedules.
- 6 Native 'impact planting' to frame intersections and road reserve as shown — refer planting schedules.
- 7 Existing Great North Road cycle overbridge retained.
- 8 Cor-ten steel and hardwood pedestrian bridge.

MANAGEMENT PLAN APPROACH:

NB: These items are conceptual only, shown for reference-for discussion and agreement with Council through the management plan process (including future cost share arrangements).

- M1 1.8m width all weather footpath leading around the Waterview Coast, to Oakley Avenue. Alignment selected to minimise changes in grade and avoid use of steps, allowing for all forms of access. This will require earth shaping, regrading and minor retaining walls in places.
- M2 Flat seating area at junction of paths, refer detailed design set for surfacing and location of seating.
- M3 Proposed playground, configuration, play elements and layout to be determined as part of the detailed design package.
- M4 Concrete volleyball court, including fixed support posts and netting.
- M5 Two 'Parklife' basketball half-courts and seating, linked by all-weather footpath.
- M6 Grassed bund, sloping at 1 in 4 to allow for informal seating watching the playground or ball games.
- M7 Full sized football pitch, with a 5m buffer
- M8 Carparks provided, for playing field and wider park. Carpark a mix of hotmix and exposed aggregate concrete bays, draining to road edge rain garden.
- M9 Rain garden treats stormwater runoff from carpark, prior to entering stormwater system. Planting to be massed water-tolerant native sedges as set out on the planting schedules.
- M10 Low grassed mound at 1 in 4 slope reduces incidence of balls travelling onto Herdman St from playing field.
- M11 1.8m width all weather path network provides a circulation network throughout the park as shown.
- M12 Ecosourced and massed native planting to screen proposed interchange ramps from Herdman St and Waterview Primary school to the south. Species to be selected from the 'coastal forest' ecotype — refer planting schedules for further details.
- M13 Sloping bund at 1 in 3 slope (where planted) to around 5m above natural ground level. Bund to screen interchange ramps from proposed open space, and vegetated in a mix of mass planted amenity native species and 'coastal forest' species as shown. Bund reuses fill excavated from tunnel.
- M14 Grassed slope for informal seating while watching the football, at 1 in 4 slope to permit mowing by vehicle.
- M15 Modular toilet facility: Novaloo or similar as approved by Council

KEY:

- Native canopy planting
NB: Mix varies: coastal and basalt rock forest ecotypes, refer notes
- Grass
- Native 'highlight' planting
- Native amenity planting
- Existing vegetation retained
- Riparian planting, refer notes
- Retaining wall
- Existing mangroves
- Construction footprint
- Adjacent property boundary
- Transition from ramp abutment to piers
- Basalt quarry wall (existing)
- Bridge or boardwalk structure
- Modular toilet facility

C	REVISED FOR REBUTTAL EVIDENCE	DLNR		31.01.11
B	ISSUE FOR STATUTORY APPROVAL	JJ		04.08.10
A	ISSUE FOR SRT/NZTA REVIEW	JJ		18.06.10
No.	Revision	By	Crk	Appd

Drawing Originator:

Original Scale (A1)	1:750	Designer	DL
Reduced Scale (A3)	1:1500	Reviewer	DLNR
		Drafting Checked	
		Consultant Approval	AL

Project: WATERVIEW CONNECTION PROJECT SH16 / SH20

Title: URBAN DESIGN AND LANDSCAPE PLANS SHEET 212

Base level:	MSLAUCK. VERT. DATUM 1946
Grid Reference:	MT EDEN 2000
Originator No.:	
Project No.:	20.1.11-3-D-L-810-212
Rev.:	C



GENERAL NOTES:

This plan is for the purposes of lodgement with the EPA only. It is not to be used as a construction drawing, and shall be read in conjunction with the civil, structural, architectural and stormwater drawing packages. These sheets illustrate the landscape concept only, and detailed design may alter the extent or location of proposed built elements.
 The notes for these drawings refer to those proposed by NZTA (plan notes) and those to be confirmed through the management plan approach, working with Council and others. Colour denotes proposed work within the designation or consent applications.

PLAN NOTES:

- 1 Existing native planted in this area to be supplemented by further native planting, selected from the 'coastal lowland forest' species list — refer planting schedules for further details.
- 2 Existing pedestrian/cycle way in this area relocated closer to Gt North Road as shown, to allow for ramp 4. Concrete surface finish to match existing path to the east, with 'impact species' planted between cycleway and Great North Road.
- 3 Potential for existing Pohutakawa specimens in grassed berms south of Great North Road to be relocated via treespade to this location, to reduce visual impact of works from St Francis School.
- 4 'Volcanic' retaining wall to ramp 4 borders cycleway in this location. Refer facade drawing and engineer's details for further information.
- 5 Existing tree planting supplemented by further specimen tree planting, to reduce visual impact of works from key intersection. 'Impact' planting to intersection and ramp/cycleway interface as shown.
- 6 Existing planting to be uplimbed, weeds removed and interplanted with ecosourced native 'coastal forest' specimens in this area.
- 7 Existing planting to be uplimbed and interplanted with ecosourced native 'coastal forest' specimens in this area. Noise walls and earthworks (battering) to be carried out as per noise wall long and cross sections - refer detail drawing set.
- 8 Existing vegetation screening the motorway from Unitec to be retained, as are the existing retaining walls in this location.
- 9 Existing 3m width pedestrian/cycle way to be retained.
- 10 'Impact' planting in relatively narrow planting strips between merge lanes. Planting to be raised to 200mm below top of barrier where impermeable barriers (ie Portland type) are used. Refer planting schedules.
- 11 'Volcanic' retaining wall cladding refer facade drawing
- 12 All new flush medians and shoulders to be constructed from red aggregate chip, to match that installed on the SH20 section.
- 13 Existing cycle way to Carrington Road (shared footpath) and Sutherland Road (on-road).
- 14 Provision of a 2m height boundary fence to be developed in consultation with St Francis School during detailed design phase.

KEY:

- Native canopy planting
NB: Mix varies: coastal and basalt rock forest ecotypes, refer notes
- Grass
- Native 'highlight' planting
- Retaining wall
- Noise wall
- Existing vegetation retained
- Construction footprint
- Adjacent property boundary

No.	Revision	By	Chk.	Appd.	Date
C	REVISED FOR REBUTTAL EVIDENCE	DLNR			31.01.11
B	ISSUE FOR STATUTORY APPROVAL	JJ			04.08.10
A	ISSUE FOR SRT/NZTA REVIEW	JJ			18.06.10

Drawing Originator:

Original Scale (A1)	1:750	Designer	DL
Reduced Scale (A3)	1:1500	Reviewer	DLNR
		Drafting Checked	
		Consultant Approval	AL

NZ TRANSPORT AGENCY
WAKA KOTAHĀ

Project: **WATERVIEW CONNECTION PROJECT**
SH16 / SH20

Title: **URBAN DESIGN AND LANDSCAPE PLANS**
SHEET 213

Base level:	MSLAUCK. VERT. DATUM 1946
Grid Reference:	MT EDEN 2000
Originator No:	
Project No:	20.1.11-3-D-L-810-213
Rev:	C