

# ADDENDUM: Great South Road Intersection

## GREAT SOUTH ROAD INTERSECTION

The Urban and Landscape Design Framework (ULDF) was finalised in November 2016. As a progression of the work to date, the design of the EWL/Great South Road/Sylvia Park Road intersection has been revised from the at grade design originally proposed, to a grade separated design. Grade separation of the east west through movements at this intersection will provide improved reliability and future resilience. While the ULDF continues to be the umbrella document guiding the urban and landscape design outcomes for the Project, this addendum is provided to address sector-specific design drivers and outcomes resulting from the revised intersection design. The following guidance has been developed by the urban and landscape team working with other technical specialists, in the same way as for the previous intersection design, to outline the expected level of amenity and design quality. This addendum specifically relates to Sectors 3 (Anns Creek) and 4 (Sylvia Park Road) of the EWL alignment and replaces the sector specific outcomes sections (Section 5.3 and 5.4 respectively) of the main ULDF for these sectors. Supplementary design drivers and outcomes (ie. for the revised design) are highlighted in a grey box for ease of reference.

Accompanying plans, sections and other drawings illustrate the concepts for this design, not the final detail: they are intended to provide clarity about the required outcomes (what is important and why) with flexibility (how they might be achieved). Where there are future opportunities that are beyond the scope of this project but support the vision and would enhance the outcome (for example for cultural theming by Mana Whenua of special places), these are identified in a separate (blue) box. No changes have been required to Mana Whenua considerations as a result of the revised intersection design.

While the ULDF draws on all the technical assessments for the Project, it has a particularly strong relationship with, and is intended to support, the Landscape and Visual Assessment (LVA) dated November 2016 and supplementary assessment dated December 2016.

### The Karetu Portage Pathway Concept

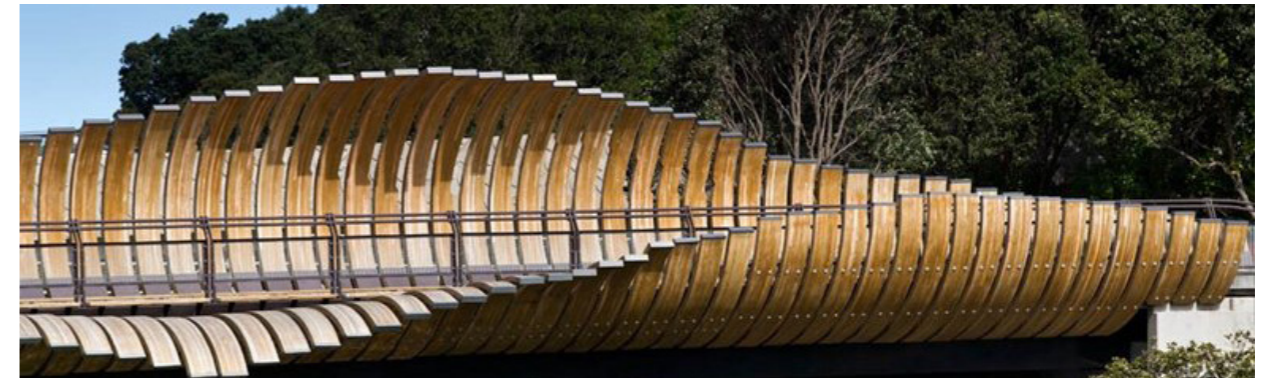
The earlier design option (as contained within Sections 5.3 and 5.4 of the ULDF) acknowledged the underlying cultural landscape through placement of the shared path within a 'linear portage link' / green space, which provided sufficient space for landscape treatment and / or sculptural components (subject to assessment of the commercial viability of remnant land).

The revised intersection design provides the opportunity to fulfil the overarching project objective of improving safety and accessibility for people walking and cycling between Onehunga and Sylvia Park by alternative means. Such an efficient, legible and continuous pedestrian and cycle experience can also acknowledge the heritage and Mana Whenua objectives by giving special design consideration to the former Karetu portage route (an element of the cultural landscape that has been erased by the current urban development of this area).

With the revised intersection design, the design team believes that the best way to achieve a consistent pedestrian and cycle experience whilst highlighting the Karetu portage route is through provision of a clearly delineated shared path where EWL is on structure in both Sectors 3 and 4. The images on this page illustrate relevant design approaches and design quality that are sought for this important linear connection.



Webb Bridge, Melbourne - re-use of materials to create a unique sculptural form and experience



Onepoto Pedestrian Bridge, Northcote - screens the adjacent motorway and directs views towards the tuff crater; at the same time creates a sense of moving through a sculpture, not just along a bridge



Henderson Waves, Singapore - good transition from structure to ground, simple, effective lighting integrated with handrail reinforces the form



Auckland Lightpath - colour and lighting create a feature that highlights the ped/cycle path



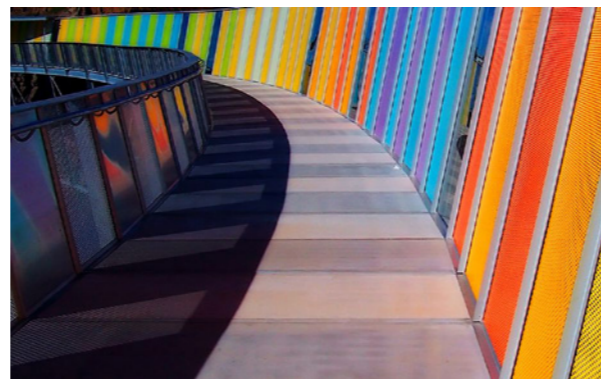
Daldy Street Path, Auckland - raised pathway creates a sense of elevation from and dominance over the road



Hinaki Eel Trap Bridge, Mt Roskill - artistic treatment of structure to signify importance of place



Onehunga Foreshore Bridge - designed in collaboration with iwi to respond to cultural themes; well detailed and elegant



Brickpit Ring Walk, Sydney - bold colour and screening combined to enliven the experience

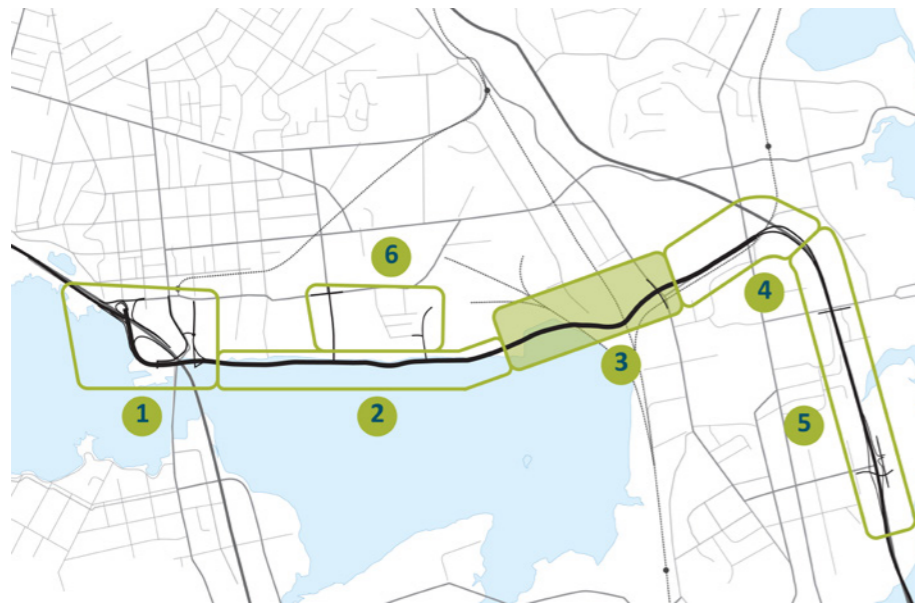


Auckland Lightpath - Maori motif integrated with surface patterning adds vibrancy



Auckland Lightpath - simple, elegant underside of structure with a single column

### 5.3 Anns Creek



#### Design drivers

Anns Creek was formerly part of a much more extensive wetland that flanked the south-east side of Mutukāroa (Hamlins Hill) and that was part of the Karetu portage. Today mangroves wrap around the foreshore edge and provide the foreground for elevated views over the inlet.

The rock features at Anns Creek are different in appearance from the other lava features around the Māngere Inlet, and contain a mix of distinctive and sometimes rare indigenous plants.

This is a particularly sensitive ecological area, where the EWL skirts the edge of the coastal marine area (CMA), with potential effects on habitat (birds, lizards and invertebrates) and plants.

#### Design outcomes sought

- Minimised intrusion into the Coastal Marine Area, for example by reducing the number, size and location of piers and carefully locating them
- Location of piers to minimise footprint in sensitive areas
- Protected terrestrial habitat with retention and extension of areas of mangroves and shrublands
- Visually reconnected landscapes severed by road and rail infrastructure.

#### Design drivers

Walking and cycling access is from the end of Hugo Johnston Drive and via a bridge over the rail corridor offering extensive views over the Māngere Inlet towards the west. There is a choice of routes – a more direct, wide, flat shared path or a meandering walkway closer to the water's edge which is enclosed by mangroves that mostly obscure views of the water.

#### Design outcomes sought

- Continued choice of more direct or more meandering routes towards the water's edge
- Removal / selective pruning of vegetation between the two paths, providing increased visual connection (for casual overlooking and a sense of safety) as well as an area of useable open space for sitting / viewing
- Well-designed connections back to Hugo Johnston Drive, particularly where the shared path crosses under EWL:
  - by creating as much space above and to the side of the path as possible
  - by designing the underside of the viaduct with an uncluttered, open and light appearance to pedestrians and cyclists
- Retaining / replacing street tree planting to the west side of Hugo Johnston Drive to keep the relatively low-key, small-scale character.

#### Design drivers

Mutukāroa is important for culture, recreation and as a landmark. Its steep southern flank edges Sylvia Park Road although this is fenced off and it is not readily apparent that there is pedestrian access (from Great South Road). It has a strong presence both locally and from a distance. EWL ramps rising to cross over and connect with SH1 will interrupt views towards it.

Mutukāroa was formerly occupied as a settlement overlooking the Karetu portage, and both the hill and the portage are very significant to Mana Whenua as well as being archaeological sites. EWL in this sector runs along the approximate route of the Karetu portage.

#### Design outcomes sought

- Provide new, elevated views for users of EWL towards Mutukāroa
- Design the shared path ("Karetu Portage path") in this location to be the dominant visual feature of the streetscape. Matters to consider include:
  - Consistency of design with the Karetu Portage path along Sylvia Park Road, including continuity in structural edge treatment
  - Providing an elevated shared path for pedestrians and cyclists where EWL is elevated on structure in this area (between (approximately) Anns Creek and the existing Stratex site)
  - Retaining a sense of elevation from the road for pedestrians and cyclists even in sections where EWL is no longer on structure (for example the shared path might sit slightly above grade)
  - Utilising lighting, landscape and hardscape treatment as a feature
- Design the shared path and associated landscape treatment to allow for long clear sightlines for shared path users.

#### Mana Whenua considerations

Mana Whenua would like to see the importance of this ecologically diverse location highlighted through:

- Determining what is iconic and endemic in the area and recognising and providing for this through landscape treatment (localised eco-sourcing and optimising biodiversity) to enhance the size and quality of these areas
- Giving consideration to the naming of this area and acknowledging the significance of this location as the former Karetu portage route
- Interpretive signage to help tell the story of this area - how it has survived and thrived despite years of industrial activity
- Promoting opportunities to increase the 'restorative rehabilitation' aspect of the Project (while Mana Whenua acknowledge that the Project can not provide complete remediation to this area, they would like to see the Project promote wider opportunities to 'clean up' the Anns Creek area)



Figure 42. Anns Creek – artist's impression (courtesy ASAP imageNZ)

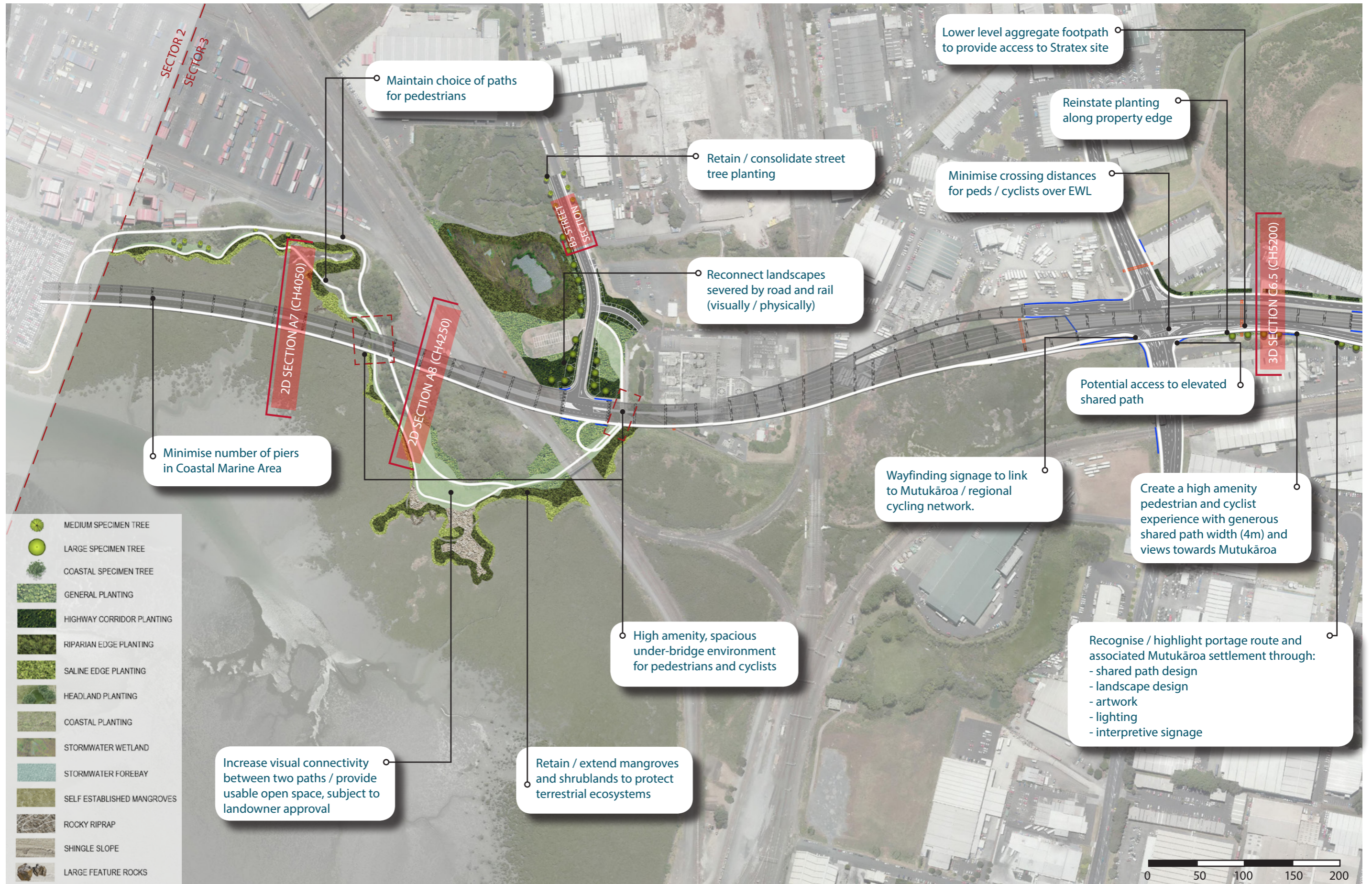
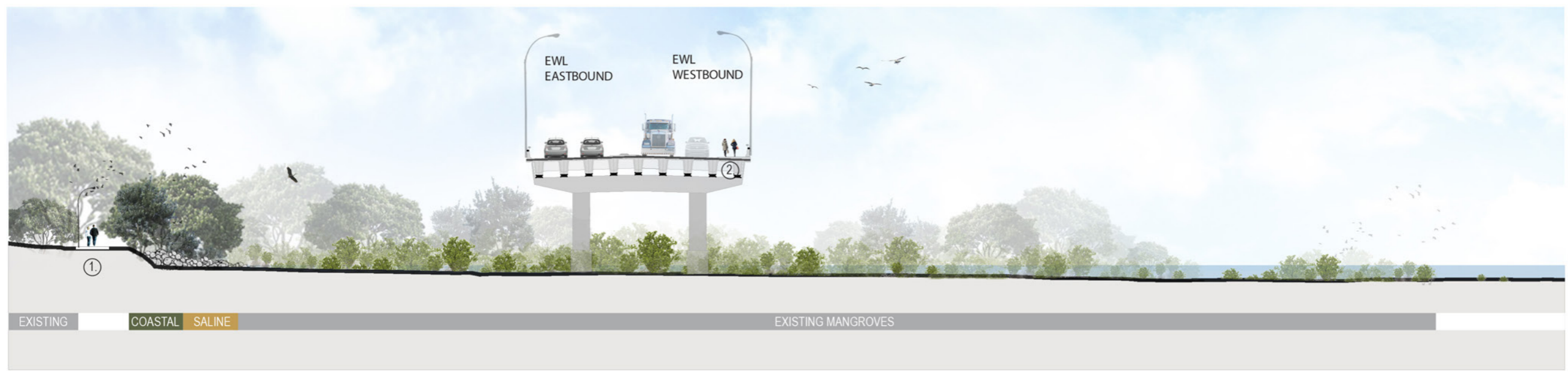


Figure 43 (revised). Sector 3: Anns Creek: plan



- ① Existing path
- ② 3m shared path

ANNS CREEK - 2D SECTION (A7) CH4050  
SCALE 1:500

Figure 44. Sector 3: Anns Creek section at CH4050: 2D section A7



- ① 3m shared path
- ② Existing shared path
- ③ Existing walkway

ANNS CREEK - 2D SECTION (A8) CH4250  
SCALE 1:500

Figure 45. Sector 3: Anns Creek section at CH4250: 2D section A8

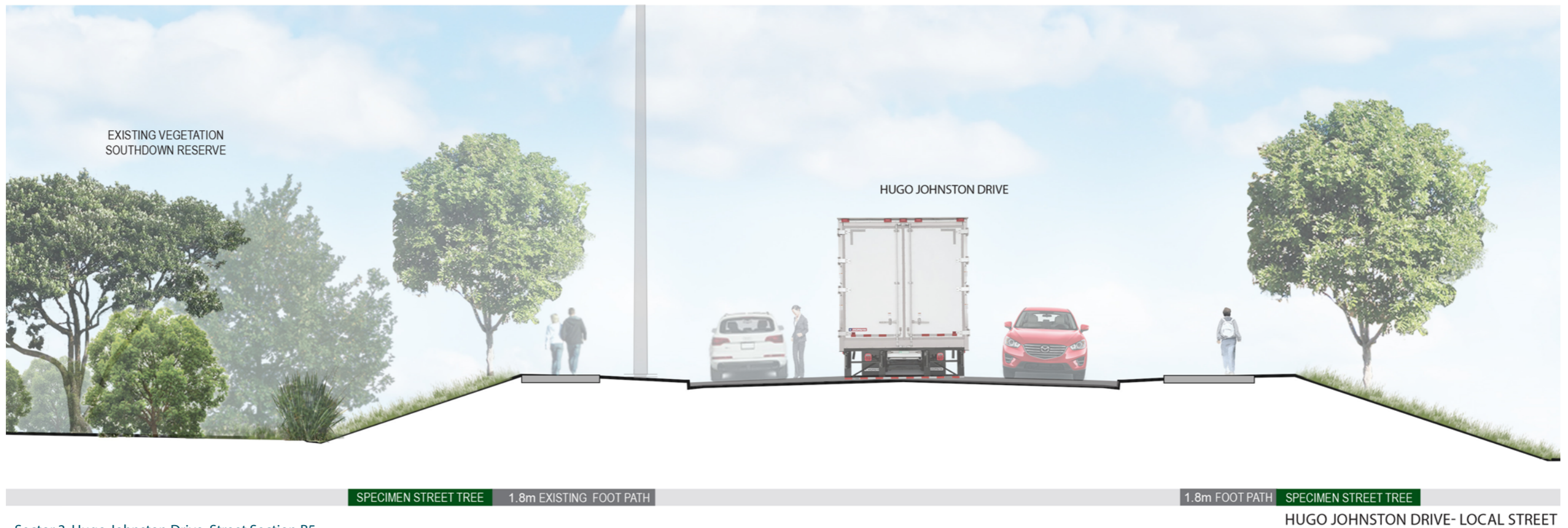
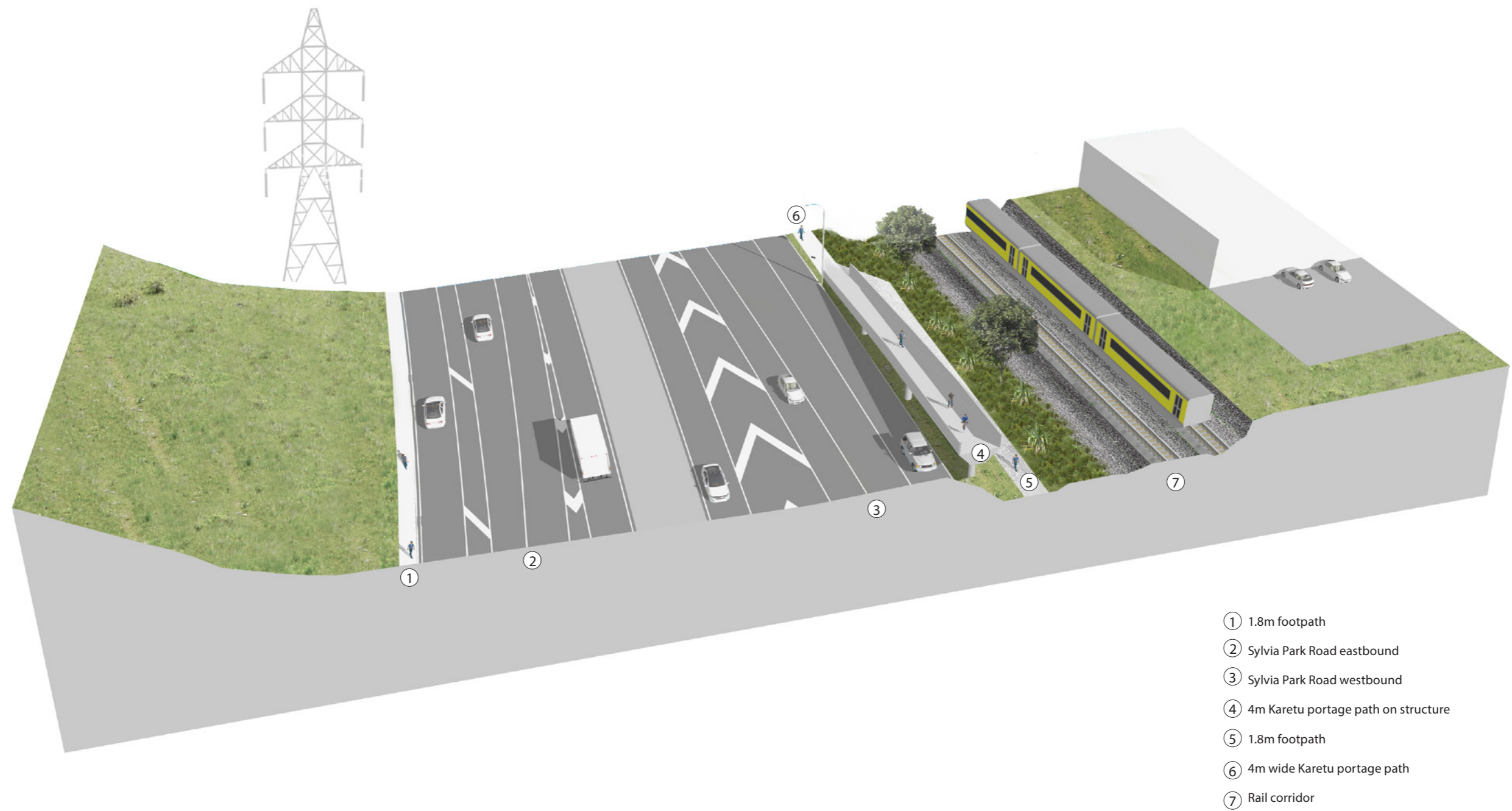


Figure 46. Sector 3: Hugo Johnston Drive: Street Section B5

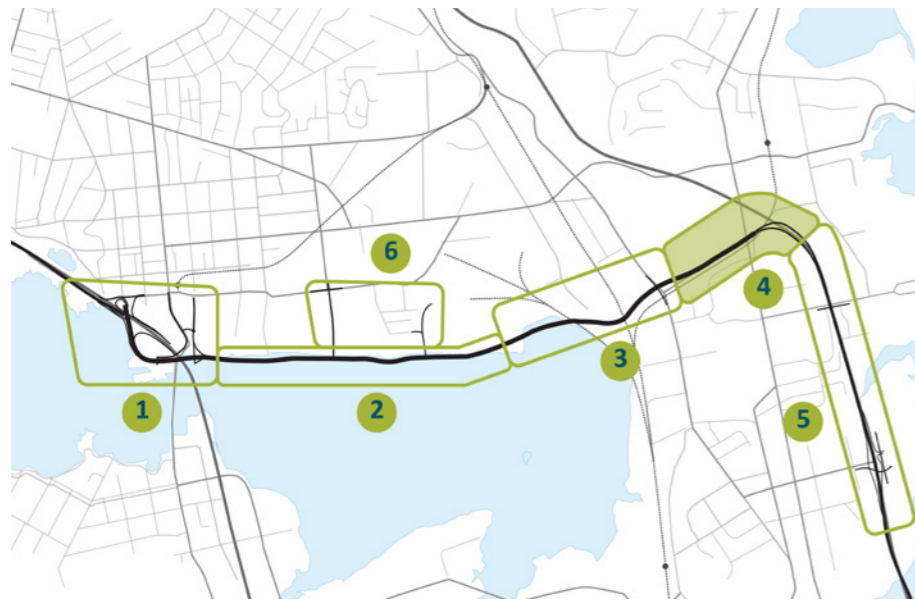


- ① 1.8m footpath
- ② Sylvia Park Road eastbound
- ③ Sylvia Park Road westbound
- ④ 4m Karetu portage path on structure
- ⑤ 1.8m footpath
- ⑥ 4m wide Karetu portage path
- ⑦ Rail corridor

Figure 47A. Sector 4: Sylvia Park section at CH5200: 3D section C6.5



## 5.4 Sylvia Park



### Mana Whenua considerations

Sylvia Park Road: Mana Whenua would like to see the importance of this culturally significant location highlighted through:

- Minimising the visual impact of structures on Mutukāroa.
- Acknowledging the significance of the former Karetu portage which ran through this area through:
  - Mana Whenua involvement in the design and detailing of retaining wall structures
  - Appropriate naming by Mana Whenua of landscape features and structures
  - improving pedestrian / cycle linkages
  - providing appropriate landscape treatment
  - encouraging public enquiry into mana whenua values through design (for example, why are these trees planted here? what are they referencing?)

Te Apunga o Tainui / Tip Top corner: Mana Whenua would like the project to respect the importance of the culturally significant location (Te Apunga o Tainui, waahi tapu site) through:

- Avoiding and minimising disturbance where possible
- Undertaking works in a manner that acknowledges and respects the waahi tapu of this area (establishing management, engagement and monitoring protocols for detailed design and site / construction management)
- Promote the re- use of materials where possible (such as the re-use of basalt if required to be removed from the project).

### Design drivers

The project follows Sylvia Park Road between Great South Road and SH1. On the northern side of the road are industrial buildings and the tall towers of the Ōtāhuhu – Henderson 220kV transmission line, with Mutukāroa (Hamlins Hill) rising up behind them.

There are also industrial land uses on the southern side: car showrooms are interspersed with vehicle servicing, areas of car parking and large 'shed' type buildings. These sites are required for widening Sylvia Park Road to accommodate the project, and removal of the buildings will leave the rail corridor exposed behind a strip of land alongside the road corridor.

Mutukāroa is important for culture, recreation and as a landmark. Its steep southern flank edges Sylvia Park Road although this is fenced off and it is not readily apparent that there is pedestrian access (from Great South Road). It has a strong presence both locally and from a distance. EWL ramps rising to cross over and connect with SH1 will interrupt views towards it.

Mutukāroa was formerly occupied as a settlement overlooking the Kāretu portage, and both the hill and the portage are very significant to Mana Whenua as well as being archaeological sites. EWL in this sector runs along the approximate route of the portage.

### Design outcomes sought

- Recognition and highlighting of the Karetu portage and associated settlement on Mutukāroa.
- Matters to consider include:
  - Designing a new linear 'portage link' / green corridor alongside the shared path at the base of Mutukāroa along the former Karetu portage route
  - Appropriate naming by Mana Whenua of landscape features and structures
  - Visual separation / screening of the rail corridor and a buffer between the shared path and road traffic
  - Wayfinding signage that links the shared path into the wider regional network (including to Mutukāroa Regional Park).

### Design drivers

The walking / cycling environment is poor. There are grassed berms with pockets of low planting and some trees in the front setbacks but footpaths are narrow and discontinuous.

### Design outcomes sought

- High amenity pedestrian and cycle connection to Sylvia Park Rail Station. Consider:
  - creating as much space above and to the side of the shared path as possible, particularly where it crosses under SH1 and the new ramps
  - designing the underside of the ramps with an uncluttered, open and light appearance
  - minimising crossing distances (for example though providing islands between through and turning lanes).
- Landscape treatment that allows for long clear sightlines for shared path users.

### Design drivers

The Project introduces new pedestrian and cycle connections within an already constrained and structured road environment, against the backdrop of Mutukāroa

### Design outcomes sought

- Maximise the space available within the Project footprint for the shared path
- A high level of quality and amenity of the shared path as it continues along the southern side of Sylvia Park Road, through:
  - Generous scale – at minimum, continuation of its 4m width
  - Buffering pedestrians and cyclists from the railway line and the busy road through landscape treatment and / or vertical separation
  - Enabling 'locating' views towards Mutukāroa and the wider landscape
  - Lighting, balustrading and surface materials and details that have an 'urban' rather than a 'motorway' character
- A shared path ("portage path") that is the dominant visual feature of the streetscape. Matters to consider include:
  - Providing an elevated shared path where EWL is elevated on structure (between (approximately) Anns Creek and the existing Stratex site)
  - Where the shared path is no longer on structure, retaining a sense of separation by raising it above the level of the vehicle traffic for the length of Sylvia Park Road.
  - Providing continuity in edge treatment for the length of the shared path, whether elevated or at grade
  - Utilising lighting, landscape and hardscape treatment to highlight the path as a feature.

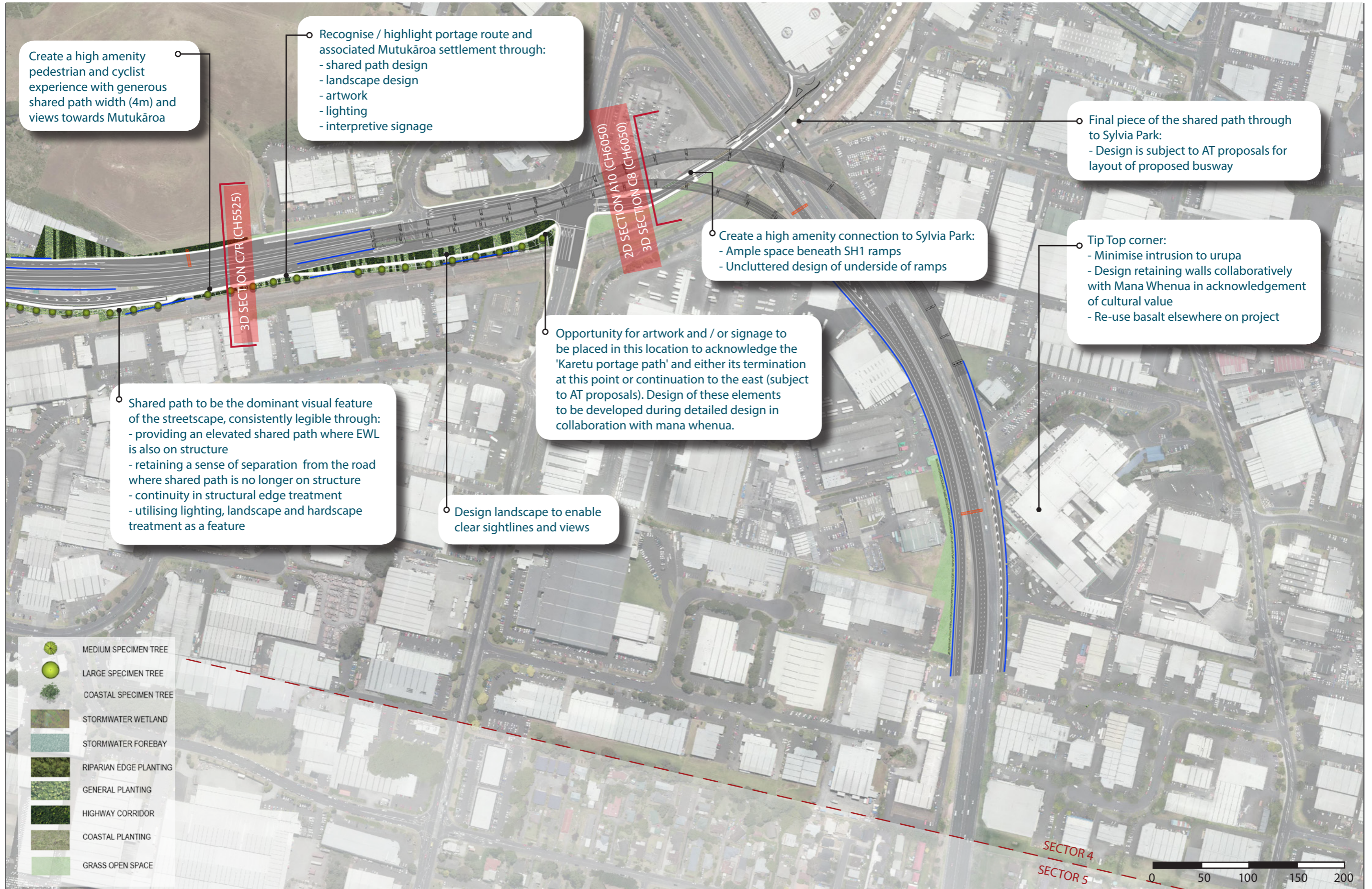
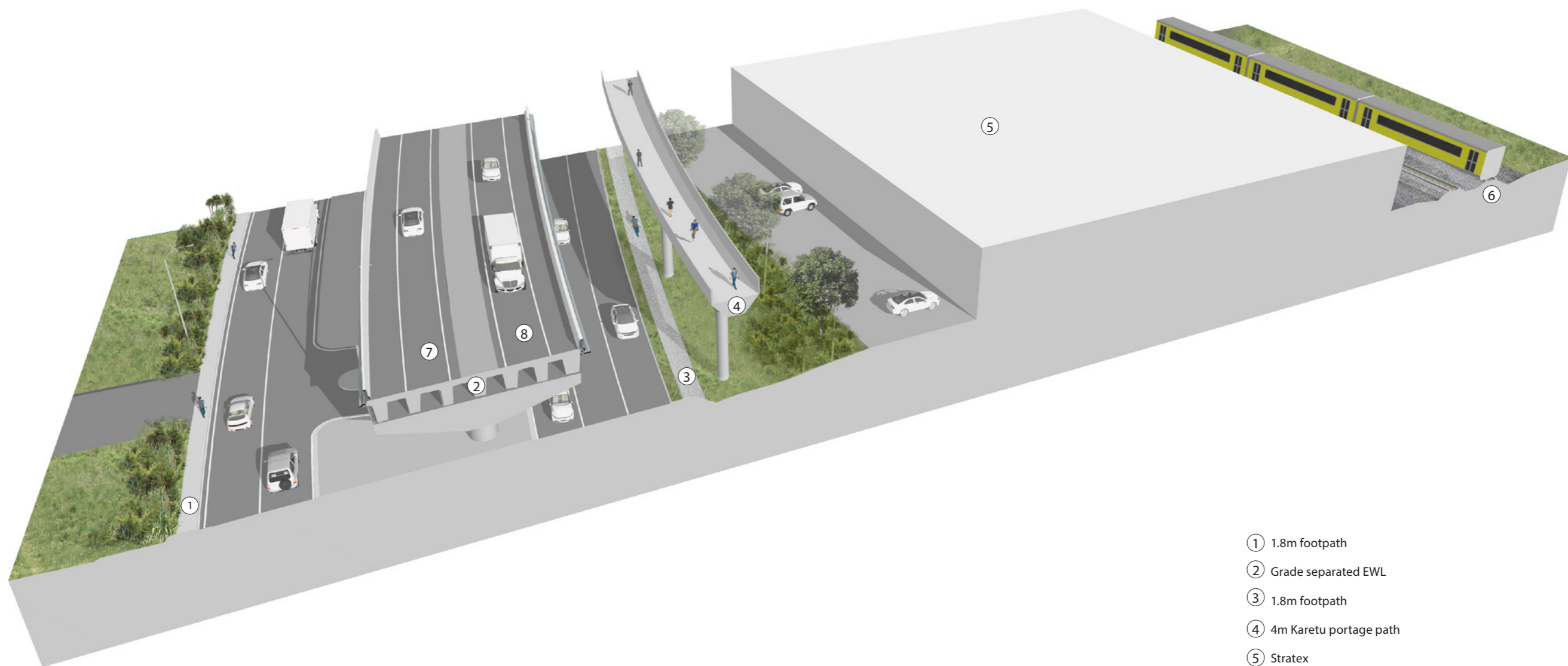
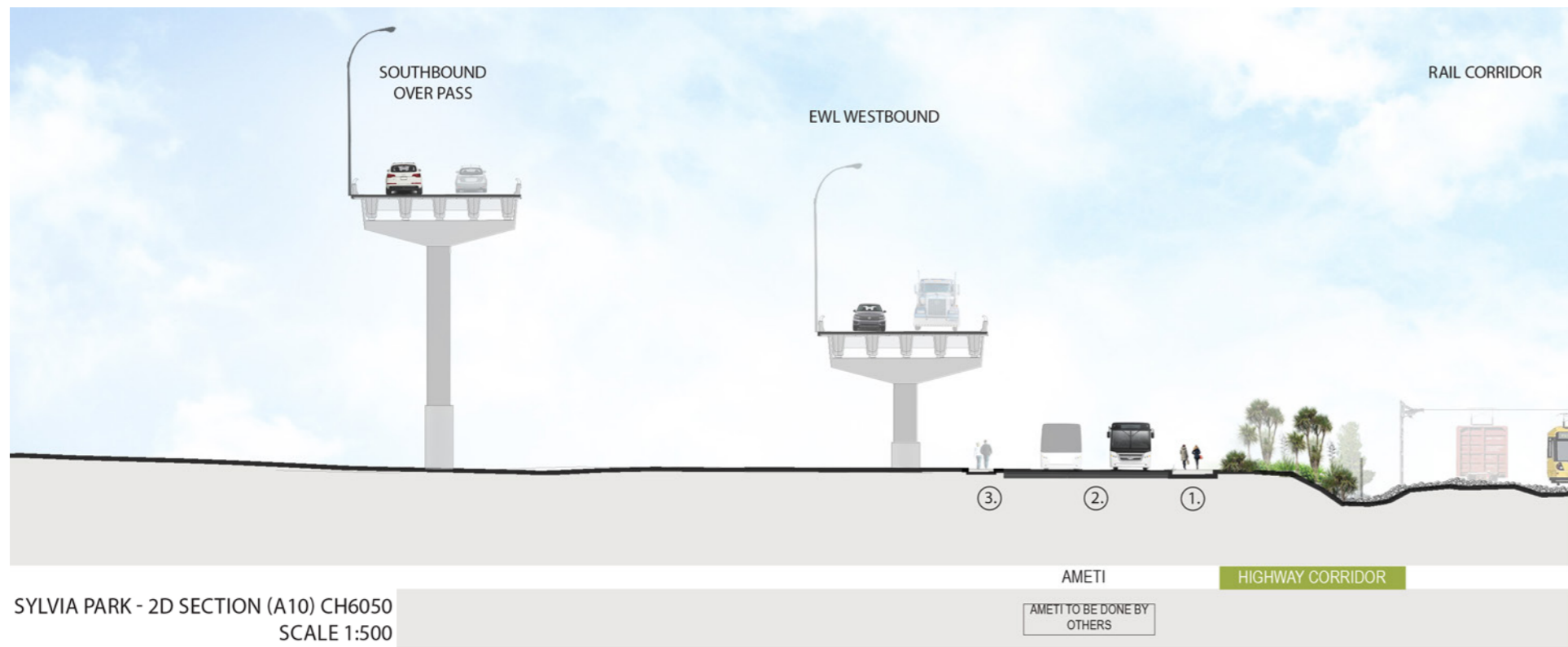


Figure 47 (revised). Sector 4: Sylvia Park plan



- ① 1.8m footpath
- ② Grade separated EWL
- ③ 1.8m footpath
- ④ 4m Karetu portage path
- ⑤ Stratex
- ⑥ Existing rail corridor
- ⑦ Sylvia Park Road eastbound
- ⑧ Sylvia Park Road westbound

Figure 48 (revised). Sector 4: Sylvia Park section at CH5525: 3D section C7R



SYLVIA PARK - 2D SECTION (A10) CH6050  
SCALE 1:500



SYLVIA PARK - 3D SECTION (C8) CH6050

Figure 49. Sector 4: Sylvia Park sections at CH6050: 2D section A10 and 3D section C8

