C7 Sector 7 **Great North Road** Underpass



Existing situation C7.1

Sector 7 refers to the cut and cover section of the project linking the northern end of the deep tunnels (Sector 8) with the northern portal at Waterview Park, crossing beneath Great North Road. For the purposes of urban and landscape design mitigation it includes Waterview Primary School.

C7.1.1 Movement and connectivity

- An existing pathway extends through the Oakley Creek Esplanade (beginning in Sector 5 and terminating at Harbutt Reserve). There are no formed connections to this walkway in the sector
- An existing off road cycleway along the eastern side of Great North Road connects to the SH16 cycleway
- Great North Road provides a hard, traffic dominated edge to the residential area of Waterview and severs it from Oakley Creek to the east
- Pedestrian and cycle amenity along Great North Road is poor. Council has identified a substandard section of the SH16/SH20 cycleway link along Great North Road (between the existing shared path and Phyllis Street Reserve)
- Waterview is severed from the Point Chevalier shops by SH16 and the associated 'urban gap'.

C7.1.2 Landscape, planting, views

- Oakley Creek runs through a deeply incised valley west of the Unitec Campus. The topography and vegetation along the creek contributes to the strong sense of enclosure of the creek corridor itself. Riparian planting forms a green backdrop to the immediate urban context. A 6m high waterfall is an unusual and distinctive feature
- Street trees and planting in front gardens on streets running off Great North Road create a well vegetated 'suburban' neighbourhood character
- Waterview Primary School, between Oakley Avenue and Herdman Street, has views towards the proposed interchange works.

C7.1.3 Urban form

- Waterview is a post-war state housing suburb with single and two storey dwellings. The coastal edge and the North-Western Motorway (SH16) provide strong boundaries to the area to the north. There is a lack of commercial 'heart'
- The existing houses between Great North Raod and Waterview Primary School currently buffer the school and the kindergarten from traffic noise. Their demolition for motorway construction will remove this buffer and also widen the 'urban gap' between the community and the Point Chevalier neighbourhood centre.

C7.1.4 Open space amenity

- Saxon Reserve edged by Saxon Street, Alfred Street and Oakley Avenue is the only other public space asset (than Waterview Park) readily available to the local community. It contains a playground. The Reserve is limited in its usefulness and flexibility by its small size
- Limited crossings over Great North Road to the Oakley Creek network and thence to the facilities in the Unitec campus restrict easy access to open space.







Figure C-7.1: Sector 7 existing plan



Figure C-7.2: Photo 7–1 View from Waterview Primary School north towards proposed interchange



Figure C-7.3: Photo 7–2 Oakley Creek walkway, showing recent revegetation planting and pathway works



Figure C-7.4: Photo 7–3 View from Herdman Street towards Waterview Primary School



Figure C-7.6: Photo 7–5 Saxon Reserve

Figure C-7.5: Photo 7–4 Six metre high waterfall on Oakley Creek





Western Ring Route Waterview Connection

C7.2 Design concept

C7.2.1 Movement and connectivity

- No long-term change is proposed to the functioning of Great North Road nor the adjoining streets, as the cut and cover tunnel runs under this sector
- While there will be impacts on Great North Road and the cycleway during construction, all existing connections will be maintained
- The project does not preclude Auckland City Council from upgrading the substandard section of the cycleway network on Great North Road
- A new pedestrian bridge (Oakley Bridge), while not part of the core project, could support a link between the Waterview Community and the sportsfields and other open spaces wtihin Unitec, and enable an extension of the off-road cycleway.

C7.2.2 Landscape, planting, views

 Landscape treatment will partially screen the ventlation building.

C7.2.3 Urban Form

 Housing along Great North Road will be removed to accommodate the cut and cover section of the tunnel. The proposed single storey ventilation building in Option A (refer Figure C-7.8) is of a similar height and depth to the housing stock, but is a much longer structure, extending across 7 residential lots. The building will screen the school and its grounds from traffic noise along Great North Road.

C7.2.4 Structures

- Ventilation building and stack
 - Options were explored for locating the ventilation building and stack. Option A is the option to be consented and comprises a partially buried ventilation building with an aboveground section running along Great North Road between Herdman Street and Oakley Avenue. The stack is to the west and slightly south of the ventilation building, between it and the school (see photomontages and plans and sections following in Figures C-7.7 – C-7.11). The viewpoint for the 'before' and after' visualisations is shown on the location plan aerial opposite.
 - An alternative option (Option B) locates the ventilation building fully underground and the stack within Oakley Reserve. This option was developed because of its reduced visual impact and because it enables a future treatment of the western Great North Road edge more in keeping with the neighbourhood scale, and more flexible in terms of future uses. Option B is illustrated in Figures C-7.12 - C-713).



Figure C-7.7: Artist's impression of ventilation building and stack – Great North Road option (Concept Option A)



- C7.2.34 Open space amenity
 - Auckland City Council and the community requested the NZTA to investigate a new pedestrian bridge (Oakley Bridge) connecting Waterview and Unitec to enable comunity use of the sporting and open space facilities. While not part of the core project, the bridge could be pursued in future by ACC in partnership with Unitec as part of their campus planning.



Figure C-7.8: Ventilation building – location plan (Concept Option B)











Figure C-7.9: Ventilation building – Great North Road (Concept Option A); basement level







Figure C-7.12: Ventilation building – Oakley Reserve location plan (Concept Option B)





 Oakley Bridge has been proposed by the community and ACC to support pedestrian movement between Waterview and the Unitec campus. Like the Phyllis Bridge, it should be a simple, elegant structure with minimal impact on the sensitive creek environment. The design concept has it bridging Oakley Creek at a high level for flat walking grades and maximum ease of travel / accessibility











3D View 2

Figure C-7.16: Oakley Bridge – 3D views showing possible future form and setting in the landscape







- Saxon Reserve will be extended as part of this project, to provide an area of open space to complement the reconfigured Waterview Park
- The urban design team developed a draft concept design (Figure C-7.18) to illustrate how the park might be extended and upgraded.



Figure C-7.17: Saxon Reserve - existing plan