

Glenvar Road-East Coast Road project

For decision:

For noting:

Te tūhunga / Recommendation

That the Auckland Transport Board (board):

- a) Approves the Glenvar Road-East Coast Road – Single Stage Business Case.
- b) Notes \$500,000 has been allocated in Auckland Transport's (AT's) 2020/21 Capital Plan (pipeline budget) to start pre-implementation phase.
- c) Notes that the total project pre-implementation phase, estimated to cost \$2.75 million and anticipated to be completed in 2021/22, will be subject to approval of the business case by Waka Kotahi New Zealand Transport Agency (Waka Kotahi).
- d) Delegates to the Chief Executive authority to procure contracts for the construction phases of the Glenvar Road – East Coast Road project for up to \$49.45 million (2020\$'s) provided, Waka Kotahi agrees to co-fund; and based on funding availability through the Long Term Plan the project is prioritised in the 2021-2031 Regional Land Transport Plan (RLTP).

Te whakarāpopototanga matua / Executive summary

1. The Glenvar Road-East Coast Road project was prioritised in the early years of the 2018-2028 RLTP, strongly supported by 1,999 public submissions, or 11% of the total number of RLTP submissions.
2. A Single Stage Business Case (SSBC) established that the project corridor currently has several Roads and Streets Framework and Vision Zero deficiencies. Notably the Glamorgan Drive-East Coast Road intersection is a high-risk intersection based on Waka Kotahi's High Risk Intersection Guide, with a Level of Safety Service (LoSS) of IV indicating it is performing worse than 70% of comparable intersections. Active and sustainable mode share on the corridor is very low.
3. With the projected growth of the Long Bay Precinct and without interventions, the corridor's mode share will remain dominated by low occupancy private vehicle use, its safety rating will fall further, and traffic delays will significantly increase.
4. Implementation of the concept design will deliver:

- 10 new raised pedestrian crossings, one raised signalised crossing and two new raised signalised intersections to improve safety.
- 2km of new footpaths, 1.8km of shared path and 2km of segregated bike path to provide healthier travel choices.
- 2km of T2 lanes to promote increased corridor productivity and reduce travel times.
- reduce CO2 emissions per km per person travelled and provide for the expansion of the Public Transport (PT) network.

5. The project P50 cost estimate is \$52.2 million (2020\$'s), its Benefit Cost Ratio is 5.4 and Investment Assessment Framework is 'High'.

Ngā tuhinga ō mua / Previous deliberations

Date	Report Title	Key Outcomes
June 2012	Regional Land Transport Plan	The board approved the RLTP, which included the Glenvar Road-East Coast Road project.
July 2015	Adoption of the Regional Land Transport Plan	The Regional Transport Committee adopted the 2015 RLTP with the Glenvar Ridge Road project but excluded the Glenvar Road-East Coast Road project.
June 2018	Regional Land Transport Plan	The board approved the RLTP, which included the Glenvar Road-East Coast Road project.

Te horopaki me te tīaroaro rautaki / Context and strategic alignment

6. The project corridor includes Glenvar Road and East Coast Road, between Glenvar Road and Oteha Valley Road (see Attachments). Glenvar is an arterial road that has up to 10,000 (weekday) daily vehicle movements. A further 2,400 dwellings in the Long Bay subdivision are anticipated to be added to the catchment by 2026. East Coast Road (those parts within the project corridor) currently has up to 25,000 (weekday) daily vehicle movements. Traffic modelling forecasts this to reach up to 37,100 by 2031.
7. Project designs include walking and cycling infrastructure to remedy Roads and Streets Framework deficiencies, intersection upgrades to meet Vision Zero safety outcomes, and additional vehicle stacking and merging space at key intersections and T2 lanes in East Coast Road. These upgrades will improve corridor productivity and resilience that will provide increased access to economic and social opportunities in nearby Albany and beyond as well as access to the Long Bay Regional Park for all Aucklanders.

Ngā matapakinga me ngā tātaritanga / Discussion and analysis

8. AT's Urban KiwiRAP Risk Mapping Report assessed crash data between 2014 and 2018 and has rated the Glamorgan Drive-East Coast Road intersection with a Medium Collective Risk and Medium-High Personal Risk. Therefore, the intersection has a high-risk rating based on Waka Kotahi's High Risk Intersection Guide. The corresponding LoSS for this intersection is 'IV'. These ratings indicate that the intersection is performing worse than 70% of comparable intersections.
9. Vehicle queuing length, for vehicles turning from Glenvar Road onto East Coast Road, was approximately 200 metres in 2018. Without intervention traffic modelling forecasts the AM peak queue increases to 485 metres, and the PM peak queue increases to 1km for vehicles turning right - to and from - Lonely Track Road and Glenvar Road by 2031.
10. In terms of a Level of Service (LOS) rating (where LOS 'A' represents the best road operating conditions and LOS 'F' the worst), right turns from the East Coast Road intersections of Lonely Track Road, Glenvar Road, and Glamorgan Drive, operated at LOS 'F' in 2018.
11. Bus congestion data shows that the AM peak period on East Coast Road operates at LOS 'F'.
12. Typical daily public transport boarding's and alighting's from within the project corridor (excluding those moving through) are around 900-1,000 - shared equally by Glenvar Road and East Coast Road. Daily active mode trips recorded through the Glenvar Road-East Coast Road intersection, and the Glamorgan Drive intersection, were 180. This represents an active and sustainable mode share for East Coast Road of around 3%. Auckland's total combined active mode and public transport mode share (2014-2018) is 17%. The corridor's private vehicle occupancy rate was approximately 1.3 in 2018 (Auckland average was 1.54 in 2003-2008).
13. With the projected growth of the Long Bay Precinct and without interventions, the corridor's mode share will remain dominated by low occupancy private vehicles use, its safety rating will fall further, and traffic delays will significantly increase.

Ngā tūraru matua / Key risks and mitigations

Key risk	Mitigation
Traffic and property disruption during construction	Well planned and communicated temporary traffic management
Many driveway accesses impacted	Address through Detail Design stage and with good communication
Discovery of geotechnical instability	Cost estimate has 40% contingency & Preliminary Geotechnical Study has been undertaken
Difficulty scheduling Glenvar Road maintenance around construction	Coordination between the project delivery team and the maintenance team

Ngā ritenga-ā-pūtea me ngā rauemi / Financial and resource impacts

14. The proposed phasing of design and construction is shown in the table below.

Inflated dollars	2020/21	2021/22	2022/23	2023/24	2024/25	TOTAL
SSBC proposed phasing (\$ million)	0.5 (design)	2.25 (design)	12.25 (construction)	19.2 (construction)	18.0 (construction)	52.2

15. AT's delivery team have the capability to project manage the detailed design and construction phases of the project.

16. The Benefit Cost Ratio is 5.4 and Investment Assessment Framework is 'High'.

17. \$500,000 has been allocated in AT's 2020/21 Capital Plan to commence detailed design.

18. The project is not currently in the Auckland Transport Alignment Project update base package, although it is in number of options packages. If the 2021-2031 RLTP does not prioritise the project for full funding, then staging is possible by: delivering Sections 1 & 2 (\$15.8 millions), which provide active mode safety benefits and supports Glenvar Road maintenance programme; and with Sections 3 (\$22 million) and 4 (\$14.4 million) delivered together or separately (likely additional construction costs), which provide safety and the majority of travel time benefits.

19. Regional Fuel Tax is expected to fund approximately 30% of the project.

Ngā whaiwhakaaro ō te taiao me te panonitanga o te āhuarangi / Environment and climate change considerations

20. Single occupancy vehicle trips along the corridor are projected to increase over time due to population growth. However, through the incentives created by the T2 lanes and improved active mode facilities it is estimated that carbon emissions will be approximately 1,000 tonnes less per annum than the do-nothing scenario.

Ngā reo o mana whenua rātou ko ngā mema pooti, ko ngā roopu kei raro i te maru o te Kaunihera, ko ngā hāpori katoa / Voice of mana whenua, elected members, Council Controlled Organisations, customer and community

21. Mana whenua were engaged extensively throughout the development of the business case, refer to Attachment 2. Local Boards, the Ward Councillors, and the Local Member of Parliament were also engaged throughout the development of the business case. Engagement also took place with Bike Auckland, Watercare and other utility operators.
22. Public consultation on the draft concept design was carried out in November-December 2019, with greater than 90% of respondents *liking* the proposal. The draft concept design was amended in response to concerns raised, including replacing a raised median with a flush median, making changes to reduce potential weaving to and from the Transit Lanes, and adding a 50 metres shared path at the southern end of Glamorgan Drive.

Ngā whaiwhakaaro haumaruru me ngā whaiwhakaaro hauora / Health, safety and wellbeing considerations

23. The implementation of the concept design will:

- contribute to achieving climate change and road safety targets, healthier travel choices, and community wellbeing;
- lower vehicle speeds through the project corridor and improve safety for turning movements while addressing road safety concerns;
- support access mobility with high standard paths & crossings (including, closing gaps in paths), and better access to public transport; and
- increase active mode share, travel time benefits, public transport patronage, and vehicle occupancy rates.

Ā muri ake nei / Next steps




1. Prepare a funding application to Waka Kotahi by end of 2020, Design & Consenting 2020/21 – 2021/22 and Construction 2022/23 – 2024/25.

Ngā whakapiringa / Attachments

Attachment number	Description
1	Project location and Concept Design

2	Mana whenua engagement summary
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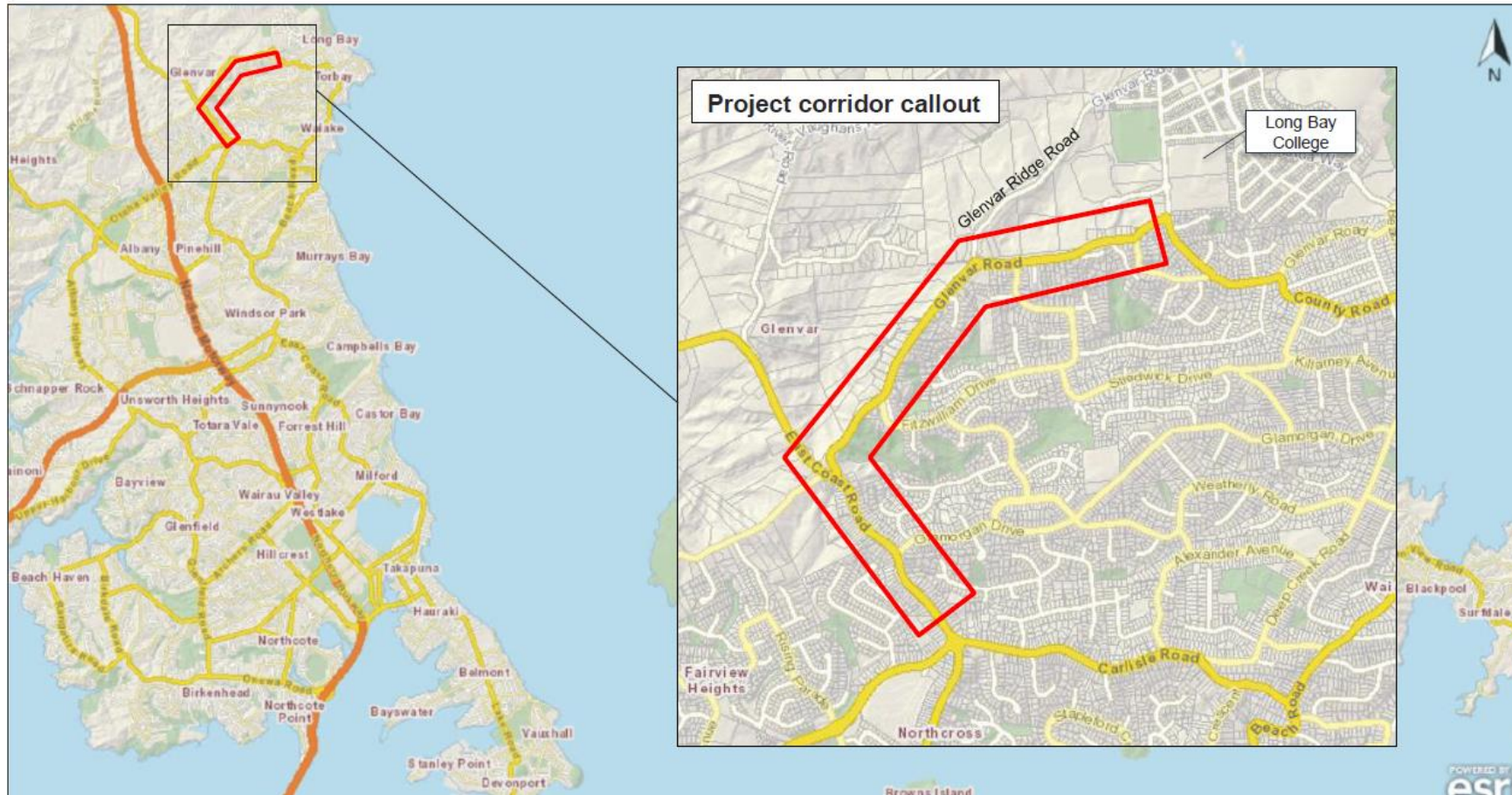
Te pou whenua tuhinga / Document ownership

Submitted by	Chris Morgan Group Manager Strategic Projects	
Recommended by	Jenny Chetwynd Executive General Manager Planning and Investment	
Approved for submission	Shane Ellison Chief Executive	

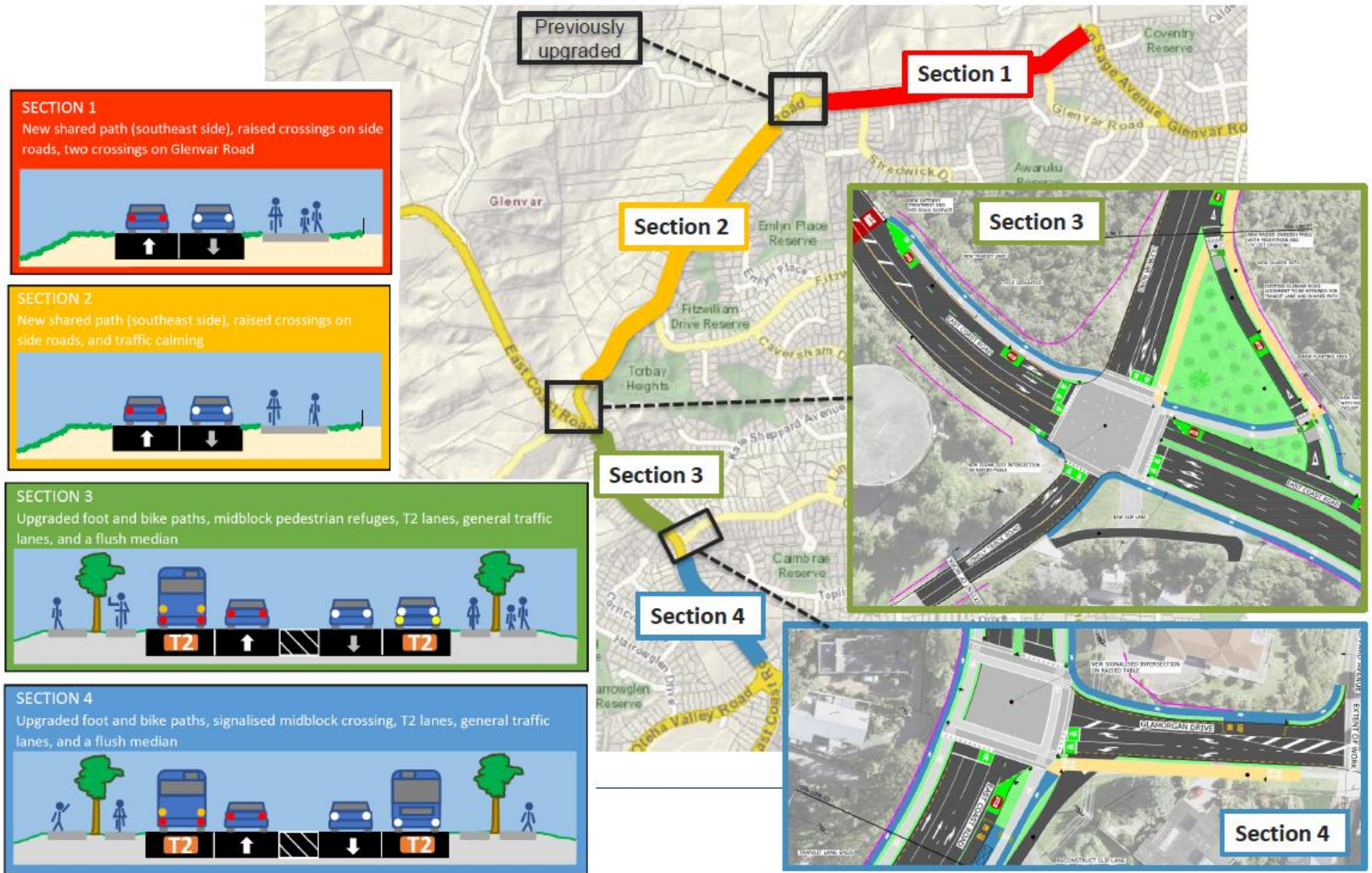
Attachment 1

Project location & corridor

1



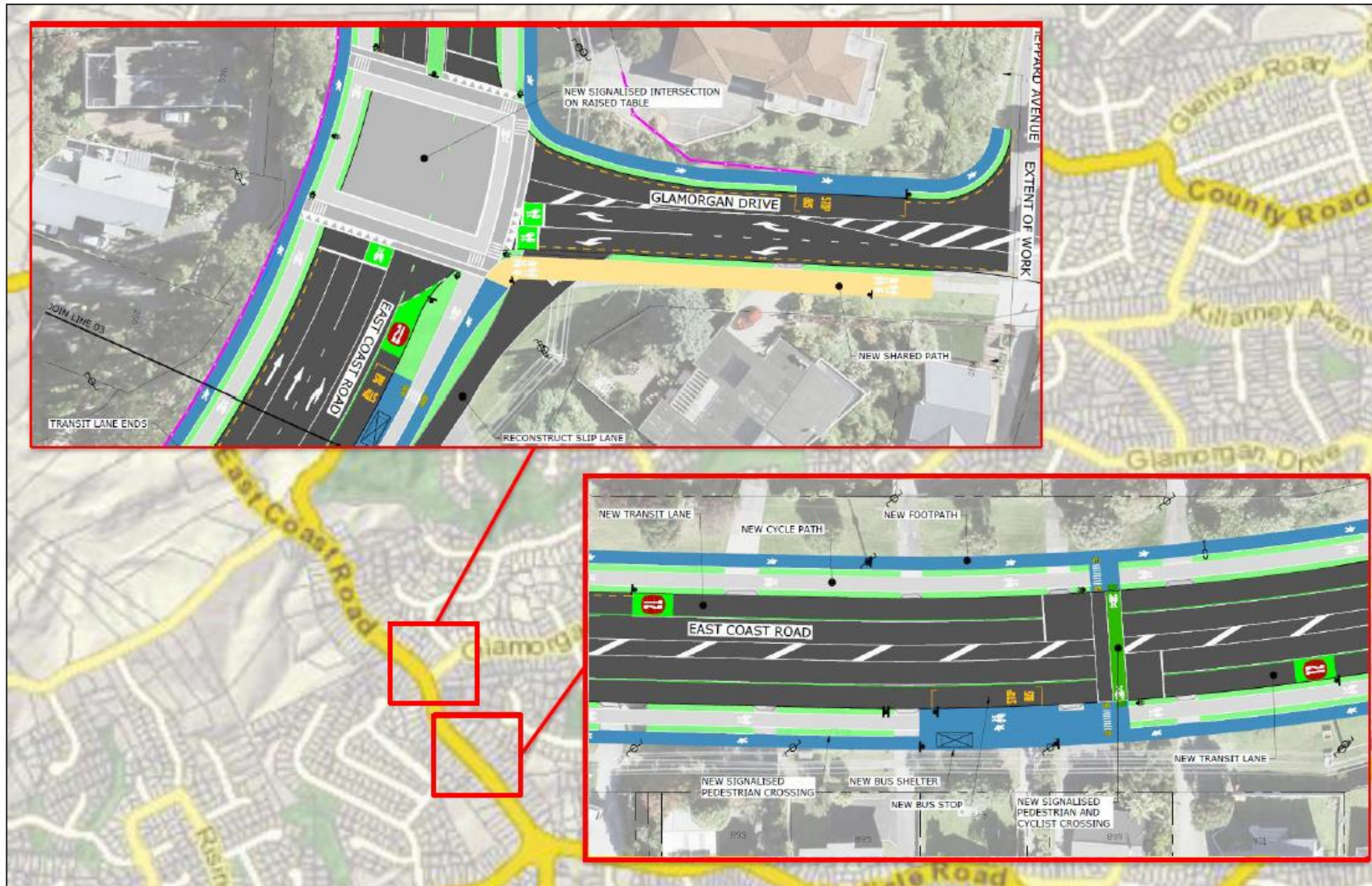
Glenvar Road-East Coast Road – Concept Design



Glenvar Road-East Coast Road intersection – Concept Design ³



Glamorgan Drive-East Coast Road intersection & East Road – Concept Design



Attachment 2

Date	Purpose	Engaged with	Key points raised	Key actions / outcomes
7 November 2018	Introduction, background, programme, invitation to engage	Northern Hui representatives	Support for early engagement	Established mana whenua engagement programme
6 March 2019	Investment Logical Mapping workshop, Problem Definition, and Benefit Mapping	Ngai Tai ki Tamaki, Ngati Maru, Ngati Te Ata Waiohua, Ngati Whanaunga, Te Patukirikiri, Te Akitai Waihua, Te Kawerau a Maki, Nga Maunga Whakahii o Kaipara, Ngati Manuhiri	A broad range of concerns and opportunities were raised	Reviewed draft Longlist of options against concerns and opportunities. Added Longlist workshop to engagement programme.
12 March 2019	Hikoi	Ngati Marun, Nga Maunga Whakahii o Kaipara, T Patukirikiri, Ngati Manuhiri	Walked the project corridor experiencing the deficiencies.	Noted feedback on hikoi
1 May 2019	Longlist workshop	Nga Kaitiaki, Ngai Tai ki Tamaki, Ngati Maru, Ngati Te Ata Waiohua, Ngati Whanaunga, Nga Maunga Whakahii o Kaipara, Nga Kaimahi	Stormwater treatment a must	Introduced Key Performance Indicator that new stormwater discharges are treated
			Multimodal design paramount	Concept Design is mode neutral and includes T2, improved bus stops, and an active mode network throughout
			Concern over vegetation clearance	Vegetation Assessment carried out on 2 June 2019 that concluded: that the project will not unduly affect the adjoining SNA / indigenous vegetation if runoff is managed better, illegal dumping of household and garden waste is a larger treat, and mitigation could include weed control and replanting with locally source kahikatoa.
			Project corridor safety issues need addressing	Vision Zero principles adopted by design. Concept Design includes, for example, 10 raised pedestrian/cyclist crossings, one signalised crossing, three pedestrian refuges,

Date	Purpose	Engaged with	Key points raised	Key actions / outcomes
				raised and signalised intersections (please refer to project webpage for updated Concept Design).
			Separated walking and cycling facilities preferred	The Concept Design includes separated walking and cycling facilities on East Coast Road. A shared path is proposed throughout Glenvar Road as corridor space and topography is more limited / challenging.
			Changing traffic patterns with Glenvar Ridge Road opening	Concept Design included two raised crossings across Glenvar Road (east of Glenvar Ridge Road) to provide better connections and to lower vehicle speed on the lower section of Glenvar Road and Ashley Avenue (Section 1 of the project corridor)
			Design to reflect feedback	Captured by above examples in this summary
4 September 2019	Emerging Recommended Option workshop	Ngai Kaitiaki, Ngati Manuhiri, Ngati Maru, Ngati Te Ata Waiohua, Ngati Whanaunga, Nga Maunga Whakahii o Kaipara, Ngati Paoa Trust Board	Roadside parking removal was flagged	The Concept Design includes a few parking bays on Glenvar Road
			The steep drop from Glenvar Road was noted	The cross-section diagrams were altered to better reflect this
			T2 operation hours were noted	The Economic Case supported 24/7 operation, which are key to funding
			Concern was raised over vehicle speed and traffic calming was discussed	The main intersections will be raised, traffic calming will be implemented throughout