

Tiverton Wolverton Route Improvement

Purpose

The purpose of this paper is to seek the Auckland Transport Board approval to:

- i) include the Tiverton-Wolverton Route improvement project within the Auckland Transport portfolio of projects for completion by October 2012, as the project is not currently within the LTCCP; and
- ii) provide funding for the project from deferrals to cover the local cost share noting the project already has category 1 funding approval by New Zealand Transport Agency (NZTA) subject to the approval of an updated business case.

Executive Summary

The Tiverton Wolverton Route forms an important district arterial route that links the rapidly developing New Lynn Town Centre with State Highway 20 (SH20) and the airport route. Tiverton Wolverton Route upgrade is identified in the Region Arterial Road Plan (2009) as having the highest priority for future upgrade and the investment in New Lynn will not be fully realised without the completion of the Tiverton Wolverton project. The project already has category 1 funding approval by the New Zealand Transport Agency (NZTA) subject to submission of an updated business case and the detailed design could be completed to enable construction tendering by June 2011. However the project was removed from the 10 year LTCCP by an Auckland City Council decision in 2008/09.

This paper seeks to have this project re included in the LTCCP and local share funded through deferral.

Background

The Tiverton Wolverton Route forms an important district arterial route that links New Lynn Town Centre development with SH20 and the airport route. The project route carries over 25,000 Annual Average Daily Traffic at Wolverton and with SH20 linked into SH1 the route is experiencing severe traffic congestion during the day and in the peaks. The congestion issues were raised in the national papers in September 2010 citing severe queuing from New Lynn along Wolverton Street.

The Tiverton Wolverton Route is identified in the NZTA National Land Transport Programme 2009/12 as being a high priority project that is already committed for the 2009/2012 construction period. NZTA have highlighted the route to Auckland Council as one of the routes to be upgraded ahead of the Waterview Connection of State Highway 20 as mitigation for the construction activity by NZTA.

Public transport teams have identified the Tiverton Wolverton Route as a key high frequency high quality public transport corridor to improve the east west linkage for the city.

Stage 1 of the project was completed in 2007. This involved constructing two large retaining walls between the Blockhouse Bay Road and Whitney Street and widening the route for 300m. Only line marking changes were needed on this section to produce a four lanes road.

The project was removed from the 10 year LTCCP by an Auckland City Council decision in 2008/09.

Description of Proposal

The proposed project will create a four lane route linking SH20 with New Lynn. The project starts on Wolverton Street, 100m from the intersection with Portage Road and Clark Street and extends along Wolverton Street, Tiverton Road, and New Windsor Road and links into the Maloro Street and the new interchange with SH20.

Five new signalised intersections are proposed to provide safer linkages across these busy arterials for school children, St Johns Ambulance Station (opposite Taylor Street) and the community. All along the route, flush medians are proposed to improve safety for right turning vehicles. New retaining walls are proposed to accommodate the road widening.

Within the constrained corridor, on road cycling has been provided for in the east west corridor because the land slopes to the west. This allows for the cyclist to ride on road along the route to New Lynn and join the on road cycle lanes near Olympic Park. On the west-east connection the gradient is not severe and on road cycling is allowed. The possible off road cycleway opportunity between Whitney and New Windsor Road is currently being reviewed which would allow cyclist to cycle off road where the gradients are steeper.

The road way has been designed generally with 3.1-3.5m lane width, a 2.5m flush median, 1.8m wide footpaths, some grass berms with trees and the corridor theme taken up side streets by up to 50metres.

Numerous trees are proposed to be removed to allow for the widening of the road corridor but one hundred new street trees will be planted along the corridor as mitigation under the resource consents for the project. Resource consent has been obtained for the pruning of scheduled trees at 4 Wolverton Street.

To allow the road widening, the wing walls of the Wolverton Road culvert (part of the Whau stream) are proposed to be reconstructed. A major telecom chamber is proposed to be relocated at the intersection of Blockhouse Bay Road as part of the road widening. Power and telecom services are being undergrounded along the route and within 20m of the road reserve. New street lighting to be provided will create a high quality environment for the community. Unsafe vehicle crossing alignments are to be rebuilt into the properties to improve the safety along the route.

There are some historical property issues like encroachment into the road reserve that will be addressed to improve the pedestrian safety along the route. Bus shelters along the route are to be upgraded.

Consultation

Following the completion of the feasibility report and scheme assessment report for Tiverton Wolverton Street Route upgrade a series of public open days were held in October and November 2003 to present the feasibility route options to the community and to allow the community to provide comments and feedback.

Following the subsequent completion of the preliminary design two further open days were held in April 2005 seeking feedback from the community on the proposed designs plans for the entire route. Additionally Auckland City Council placed notices in the Avondale Library. The feedback was incorporated into the final design where appropriate.

The general feedback from the community was to retain vegetation along the route were possible and the revised plans show tree planting extending the boulevard look down the side streets. Auckland City Council approved the landscape and urban design themes in 2003 and the general theme was adjusted to meet the consultation and safe sightline requirements.

The consultation with residents extended further and included property purchase negotiations. The consultation was undertaken over a four year period within Auckland Council (formerly

Auckland City Council and Waitakere City Council), NZTA, Vector, Telecom, Watercare, Transpower and the businesses along the route.

Each driveway, alignment, tree location, bend radius and lane configurations has been reviewed against what traffic and pedestrian volumes are expected across the route.

Meetings were held with the community board representatives and detailed presentations were held with the community board for the stage 1 works tree consents to be approved by the community board.

Programme

Following Board endorsement, the construction tender would take place over the period June to August 2011 to allow for full construction by October 2012.

As New Lynn development relies on this route to access State Highway 20 the construction programme will be designed to align with the New Lynn and SH 20 Waterview construction projects being less than 15 months. This would minimise the length of time of the traffic disruptions and reduce the impact on the community along this key route during construction. Critical enabling work will need to start as soon as the detailed design for the route is updated as there are long lead items that need to be procured off shore by Vector and Telecom.

Costs and Benefits

The following table sets out the estimated cost profile for the project noting that funding is generally considered at the P95 level.

	Base	P50	P95
Cost	\$18.8m	\$21.3m	\$25.8m

The road widening proposed will accommodate four lanes of traffic which will provide appropriate capacity from SH20 to New Lynn in line with the growth strategy and will improve bus travel times on the east west corridor.

The project has a benefit cost range of 4.8 at the P50 estimate.

Funding

It is proposed to fund the project through a combination of NZTA subsidy and local contribution.

The Tiverton Wolverton Route improvement project currently has NZTA category 1 funding approval for expenditure in the financial year 2012/13. It attracts a Financial Assistance Rate (FAR) of 53%. However, as the scheme details have changed since the original approval, an updated business case will need to be submitted to NZTA and approved. This carries a limited risk to Auckland Transport as discussions with NZTA have indicated that they would welcome the advancement of this scheme.

To cover the local cost contribution for the Tiverton Wolverton Route the preferred option is through the reallocation of funds derived from deferrals from the LTCCP.

The overall funding profile for this project is detailed below. Note that this is based on the P95 estimate:

Financial Year	2010/11	2011/12	21012/13
NZTA Share (53%)	\$159,000	\$4,505,000	\$9,010,000
Local Contribution	\$141,000	\$3,995,000	\$7,990,000
Total (P95)	\$300,000	\$8,500,000	\$17,000,000

In total over a three year period the local contribution for this scheme is forecast to be \$12,126,000. This figure has to be considered in context with other potential significant funding pressures identified across Auckland Transport and the probable capital funding deferral in 2010/11 and 2011/12 to be required by Auckland Council. There is not yet full transparency in respect of the financial context in which Auckland Transport will be required to operate, but this project is considered to be of such high strategic importance that it should be implemented without further delay.



Recommendation

It is recommended that the Auckland Transport Board approves the:

1. That the Tiverton-Wolverton Route improvement project be included within the Auckland Transport portfolio of projects for completion by October 2012 as it is not included with the LTCCP; and
2. That local cost share is derived from deferrals, noting the project already has category 1 funding approval by New Zealand Transport Agency (NZTA) subject to the approval of an updated business case.

Attachment

Attachment A Overall route and the extents for the project

WRITTEN & RECOMMENDED by	Kevin Doherty Chief Infrastructure Officer	
APPROVED FOR SUBMISSION by	David Warburton Chief Executive	

C-000	COVER SHEET
C-001	DRAWING LIST & OVERVIEW OF PLANS
C-010	PROPOSED DESIGN PLAN - SHEET 1 OF 17
C-011	PROPOSED DESIGN PLAN - SHEET 2 OF 17
C-012	PROPOSED DESIGN PLAN - SHEET 3 OF 17
C-013	PROPOSED DESIGN PLAN - SHEET 4 OF 17
C-014	PROPOSED DESIGN PLAN - SHEET 5 OF 17
C-015	PROPOSED DESIGN PLAN - SHEET 6 OF 17
C-016	PROPOSED DESIGN PLAN - SHEET 7 OF 17
C-017	PROPOSED DESIGN PLAN - SHEET 8 OF 17
C-018	PROPOSED DESIGN PLAN - SHEET 9 OF 17
C-019	PROPOSED DESIGN PLAN - SHEET 10 OF 17
C-020	PROPOSED DESIGN PLAN - SHEET 11 OF 17
C-021	PROPOSED DESIGN PLAN - SHEET 12 OF 17
C-022	PROPOSED DESIGN PLAN - SHEET 13 OF 17
C-023	PROPOSED DESIGN PLAN - SHEET 14 OF 17
C-024	PROPOSED DESIGN PLAN - SHEET 15 OF 17
C-025	PROPOSED DESIGN PLAN - SHEET 16 OF 17
C-026	PROPOSED DESIGN PLAN - SHEET 17 OF 17
C-027	PLAN - BLOCKHOUSE BAY ROAD
C-030	AERIAL PLANS - SHEET 1 OF 16
C-031	AERIAL PLANS - SHEET 2 OF 16
C-032	AERIAL PLANS - SHEET 3 OF 16
C-033	AERIAL PLANS - SHEET 4 OF 16
C-034	AERIAL PLANS - SHEET 5 OF 16
C-035	AERIAL PLANS - SHEET 6 OF 16
C-036	AERIAL PLANS - SHEET 7 OF 16
C-037	AERIAL PLANS - SHEET 8 OF 16
C-038	AERIAL PLANS - SHEET 9 OF 16
C-039	AERIAL PLANS - SHEET 10 OF 16
C-040	AERIAL PLANS - SHEET 11 OF 16
C-041	AERIAL PLANS - SHEET 12 OF 16
C-042	AERIAL PLANS - SHEET 13 OF 16
C-043	AERIAL PLANS - SHEET 14 OF 16
C-044	AERIAL PLANS - SHEET 15 OF 16
C-045	AERIAL PLANS - SHEET 16 OF 16
C-050	TYPICAL CROSS-SECTIONS - SHEET 1 OF 5
C-051	TYPICAL CROSS-SECTIONS - SHEET 2 OF 5
C-052	TYPICAL CROSS-SECTIONS - SHEET 3 OF 5
C-053	TYPICAL CROSS-SECTIONS - SHEET 4 OF 5
C-054	TYPICAL CROSS-SECTIONS - SHEET 5 OF 5
C-055	STANDARD ROADING DETAILS - SHEET 1 OF 2
C-056	STANDARD ROADING DETAILS - SHEET 2 OF 2
C-060	CROSS-SECTIONS - SHEET 1 OF 16
C-061	CROSS-SECTIONS - SHEET 2 OF 16
C-062	CROSS-SECTIONS - SHEET 3 OF 16
C-063	CROSS-SECTIONS - SHEET 4 OF 16
C-064	CROSS-SECTIONS - SHEET 5 OF 16
C-065	CROSS-SECTIONS - SHEET 6 OF 16
C-066	CROSS-SECTIONS - SHEET 7 OF 16
C-067	CROSS-SECTIONS - SHEET 8 OF 16
C-068	CROSS-SECTIONS - SHEET 9 OF 16
C-069	CROSS-SECTIONS - SHEET 10 OF 16
C-070	CROSS-SECTIONS - SHEET 11 OF 16
C-071	CROSS-SECTIONS - SHEET 12 OF 16
C-072	CROSS-SECTIONS - SHEET 13 OF 16
C-073	CROSS-SECTIONS - SHEET 14 OF 16
C-074	CROSS-SECTIONS - SHEET 15 OF 16
C-075	CROSS-SECTIONS - SHEET 16 OF 16

C-080	PAVEMENT LAYOUT PLANS - SHEET 1 OF 8
C-081	PAVEMENT LAYOUT PLANS - SHEET 2 OF 8
C-082	PAVEMENT LAYOUT PLANS - SHEET 3 OF 8
C-083	PAVEMENT LAYOUT PLANS - SHEET 4 OF 8
C-084	PAVEMENT LAYOUT PLANS - SHEET 5 OF 8
C-085	PAVEMENT LAYOUT PLANS - SHEET 6 OF 8
C-086	PAVEMENT LAYOUT PLANS - SHEET 7 OF 8
C-087	PAVEMENT LAYOUT PLANS - SHEET 8 OF 8
C-088	PAVEMENT DETAILS
C-090	SPEED TABLE PLANS - SHEET 1 OF 3
C-091	SPEED TABLE PLANS - SHEET 2 OF 3
C-092	SPEED TABLE PLANS - SHEET 3 OF 3
C-100	EXISTING SERVICE PLANS - SHEET 1 OF 9
C-101	EXISTING SERVICE PLANS - SHEET 2 OF 9
C-102	EXISTING SERVICE PLANS - SHEET 3 OF 9
C-103	EXISTING SERVICE PLANS - SHEET 4 OF 9
C-104	EXISTING SERVICE PLANS - SHEET 5 OF 9
C-105	EXISTING SERVICE PLANS - SHEET 6 OF 9
C-106	EXISTING SERVICE PLANS - SHEET 7 OF 9
C-107	EXISTING SERVICE PLANS - SHEET 8 OF 9
C-108	EXISTING SERVICE PLANS - SHEET 9 OF 9
C-110	SERVICE RELOCATION PLANS - SHEET 1 OF 17
C-111	SERVICE RELOCATION PLANS - SHEET 2 OF 17
C-112	SERVICE RELOCATION PLANS - SHEET 3 OF 17
C-113	SERVICE RELOCATION PLANS - SHEET 4 OF 17
C-114	SERVICE RELOCATION PLANS - SHEET 5 OF 17
C-115	SERVICE RELOCATION PLANS - SHEET 6 OF 17
C-116	SERVICE RELOCATION PLANS - SHEET 7 OF 17
C-117	SERVICE RELOCATION PLANS - SHEET 8 OF 17
C-118	SERVICE RELOCATION PLANS - SHEET 9 OF 17
C-119	SERVICE RELOCATION PLANS - SHEET 10 OF 17
C-120	SERVICE RELOCATION PLANS - SHEET 11 OF 17
C-121	SERVICE RELOCATION PLANS - SHEET 12 OF 17
C-122	SERVICE RELOCATION PLANS - SHEET 13 OF 17
C-123	SERVICE RELOCATION PLANS - SHEET 14 OF 17
C-124	SERVICE RELOCATION PLANS - SHEET 15 OF 17
C-125	SERVICE RELOCATION PLANS - SHEET 16 OF 17
C-126	SERVICE RELOCATION PLANS - SHEET 17 OF 17
C-130	STORMWATER PLANS - SHEET 1 OF 8
C-131	STORMWATER PLANS - SHEET 2 OF 8
C-132	STORMWATER PLANS - SHEET 3 OF 8
C-133	STORMWATER PLANS - SHEET 4 OF 8
C-134	STORMWATER PLANS - SHEET 5 OF 8
C-135	STORMWATER PLANS - SHEET 6 OF 8
C-136	STORMWATER PLANS - SHEET 7 OF 8
C-137	STORMWATER PLANS - SHEET 8 OF 8

C-140	PROPOSED STORMWATER LONGSECTIONS - SHEET 1 OF 2
C-141	PROPOSED STORMWATER LONGSECTIONS - SHEET 2 OF 2
C-151	DRIVEWAY DETAILS FOR 3 WOLVERTON ST & 263 BLOCKHOUSE BAY RD
C-152	DRIVEWAY DETAILS FOR 5 WOLVERTON ST & 260 BLOCKHOUSE BAY ROAD
C-153	DRIVEWAY DETAILS FOR 98/99A TIVERTON ROAD
C-154	DRIVEWAY DETAILS FOR 98/99A TIVERTON ROAD
C-158	BOUNDARY \ FENCE DETAILS - SHEET 1 OF 2
C-159	BOUNDARY \ FENCE DETAILS - SHEET 2 OF 2
C-160	WOLVERTON STREET TIMBER POLE WALL
C-161	NEW WINDSOR ROAD TIMBER POLE WALL
C-163	WOLVERTON ST CULVERT RETAINING WALL LAYOUT
C-164	WOLVERTON ST CULVERT RETAINING WALL DETAILS - SHEET 1
C-165	WOLVERTON ST CULVERT RETAINING WALL DETAILS - SHEET 2
C-166	WOLVERTON ST CULVERT RETAINING WALL DETAILS - SHEET 3
C-167	WOLVERTON ST CULVERT RETAINING WALL DETAILS - SHEET 4
C-170	PROPOSED TREESCARE PLAN - SHEET 1 OF 16
C-171	PROPOSED TREESCARE PLAN - SHEET 2 OF 16
C-172	PROPOSED TREESCARE PLAN - SHEET 3 OF 16
C-173	PROPOSED TREESCARE PLAN - SHEET 4 OF 16
C-174	PROPOSED TREESCARE PLAN - SHEET 5 OF 16
C-175	PROPOSED TREESCARE PLAN - SHEET 6 OF 16
C-176	PROPOSED TREESCARE PLAN - SHEET 7 OF 16
C-177	PROPOSED TREESCARE PLAN - SHEET 8 OF 16
C-178	PROPOSED TREESCARE PLAN - SHEET 9 OF 16
C-179	PROPOSED TREESCARE PLAN - SHEET 10 OF 16
C-180	PROPOSED TREESCARE PLAN - SHEET 11 OF 16
C-181	PROPOSED TREESCARE PLAN - SHEET 12 OF 16
C-182	PROPOSED TREESCARE PLAN - SHEET 13 OF 16
C-183	PROPOSED TREESCARE PLAN - SHEET 14 OF 16
C-184	PROPOSED TREESCARE PLAN - SHEET 15 OF 16
C-185	PROPOSED TREESCARE PLAN - SHEET 16 OF 16

C-190	PAINTMARKING AND SIGN DETAILS - SHEET 1 OF 9
C-191	PAINTMARKING AND SIGN DETAILS - SHEET 2 OF 9
C-192	PAINTMARKING AND SIGN DETAILS - SHEET 3 OF 9
C-193	PAINTMARKING AND SIGN DETAILS - SHEET 4 OF 9
C-194	PAINTMARKING AND SIGN DETAILS - SHEET 5 OF 9
C-195	PAINTMARKING AND SIGN DETAILS - SHEET 6 OF 9
C-196	PAINTMARKING AND SIGN DETAILS - SHEET 7 OF 9
C-197	PAINTMARKING AND SIGN DETAILS - SHEET 8 OF 9
C-198	PAINTMARKING AND SIGN DETAILS - SHEET 9 OF 9
C-200	ST GEORGES ROAD INTERSECTION SIGNALISATION PLAN
C-201	BLOCKHOUSE BAY ROAD INTERSECTION SIGNALISATION PLAN
C-202	WHITNEY STREET INTERSECTION SIGNALISATION PLAN
C-203	NEW WINDSOR ROAD INTERSECTION SIGNALISATION PLAN
C-204	TAYLOR STREET INTERSECTION SIGNALISATION PLAN
C-205	WHITNEY STREET INTERSECTION PERSPECTIVE VIEWS
C-206	BLOCKHOUSE BAY ROAD INTERSECTION PERSPECTIVE VIEWS
C-207	NEW WINDSOR ROAD INTERSECTION PERSPECTIVE VIEWS
S001	STRUCTURAL NOTES
S002	WOLVERTON CULVERT INLET - SHEET 1
S006	WOLVERTON CULVERT INLET - SHEET 2



No.	Rev.	By	Chk.	Appd.	Date
A	FOR REVIEW	DD			

Drawing Originator: **BECC** Engineers ■ Planners ■ Managers

Original Scale (1:1) NTS
 Reduced Scale (A3) NTS

Design Drawn: SSH
 Design Checked: SSH
 Date: 01/03/05

Approved For Construction: SSH
 Date: 01/03/05



Project: TIVERTON WOLVERTON ROUTE IMPROVEMENTS STAGE 2

Title: DRAWING LIST AND OVERVIEW OF PLANS

Discipline: CIVIL

Drawing No: 3120104-C-001

Rev: A

FOR REVIEW
NOT FOR CONSTRUCTION