Dominion Road Corridor Upgrade - Update

Recommendations

That the Board:

- i. Receives the report;
- ii. Acknowledges the integration of the Neighbourhood Bus Interchange and Canopy Trimming PT projects for delivery in conjunction with the Dominion Road Corridor Upgrade Project (Project);
- iii. Supports managements' recommendation to adopt the suggested amenity improvement items with respect to improvements to the three Village Centres;
- Supports managements' recommendation to adopt the suggested amenity improvement items with respect to improvements associated with the Iwi aspirations document;
- v. Supports managements' recommendation to adopt the suggested amenity improvements with respect to power undergrounding and lighting;
- vi. Supports managements' recommendation to adopt the suggested cycle route additional connections; and
- vii. Supports managements' approach to investigate a cycle connection between Burnley Terrace and King Edward Street after the cycle routes are completed.

Executive summary

This document provides and update status prior to final details being provided for Board approval next month.

The Dominion Road options analysis was presented to the AT board in October 2012 at which time the board gave direction towards progression of the detailed design of Option 4A.

The Project Team are close to completing the Detailed Design Phase before issuing documents for tendering. A combination of safety improvements and amenity improvements have been identified during design development and stakeholder feedback. The final configuration of the Project will depend on the level of incorporation of the suggested level of amenity improvements.

Dominion Road has a unique character, it has a large number of retailers (approximately 260) along its 4.5 km length, supports a large number of residents, and carries over 7,000 bus commuters per day. Stakeholder feedback from the local boards and lwi have indicated that a high level of amenity is sought to be delivered with this Project.

Strategic context

The Integrated Transport Programme (ITP) has identified Dominion Road as a key strategic transport corridor vital for the public transport network as a Frequent Transit Network (FTN) link and to reduce conflict between buses and the increased general and commercial traffic serving the growing adjacent land uses signalled by the Auckland Plan.

Dominion Road carries just over 3% of the entire region's public transport trips - that being 2 million passenger trips in the year to May 2013. The strategic transport model predicts a 67% increase in public transport trips along Dominion Road by 2021 as a result of future

land use and other infrastructure improvements in the area. The increase in trips will largely be driven from within the walk-up catchment to Dominion Road.

Bus services on this corridor currently carry an average of 7,000 passenger transport trips per week day and this is predicted to increase to 12,000 passenger transport trips per week day by 2021. Looking specifically at the morning peak hour, observations show buses on Dominion Road already carry more people than cars do. The buses transport an average of 1,500 people (in 35 buses) heading towards the city during the 2 hour morning peak whilst the car lane transport up to 1,200 people (in 1,000 cars) over the same period.

There is no capacity in the road network to accommodate the projected growth of 1,000 trips in the two hour peak and as there are similar constraints on all three parallel roads (Sandringham, Dominion or Mt Eden) a PT efficiency based solution is required. The option is therefore to accommodate this growth on the bus network, which also contributes to the Auckland Plan's target to significantly increase the proportion of trips on public transport into the city centre. The additional 1,000 trips would imply either 25 more buses per hour (to a total 60 buses per hour), or larger buses (potential of double decker) or a combination of both.

The Project currently ranks sixth in Auckland Transport's priority for new and improved infrastructure for local roads and is included in the 2012/2015 RLTP with a HHM rating.

Background

In October 2012 the AT Board approved Option 4A for the Project. Option 4A provides quality public amenity along Dominion Road while delivering improved bus travel times and improved pedestrian safety with cyclists catered for on parallel cycle routes. The Project budget was halved from approximately \$96m to \$47m by removing the requirement to widen Dominion Road north of Mt Albert Road.

Date	Purpose / resolutions from report
June 2011	Board Paper: Connection options for the south west central isthmus. Network, property and designation recommendations.
May 2012	PowerPoint Presentation: Dominion Road Corridor Plan. Identification of proposed corridor improvements.
June 2012	Board Paper: Looking to progress to detailed design of preferred option. Board requested additional work on option analysis.
October 2012	Board Paper: Presentation of option analysis and seeking approval of preferred option. Option 4a selected for detailed design.

A summary of the previous Board Reports is as follows (Attachments 2 - 5):

The cycle route's detailed design is complete and the Dominion Road main corridor design is nearing completion. The cycle route components have been approved for subsidy by NZTA and are currently being tendered for construction, with planned completion by spring 2014. The final design of the main corridor will be completed in April with a view to go to tender in May, once NZTA funding is approved.

Village Design Groups (VDG) were established by the project architects to facilitate design inputs of the two Local Boards (Albert Eden and Puketapapa), Iwi and the two Business Associations. A series of VDG meetings have been held which have almost completed final definition of the streetscape and village centre amenity. While undertaking the detail design, extensive stakeholder consultation was undertaken on the two cycle routes. Consultation with local business associations, two Local Boards and local Iwi has been held at Village Design Group meetings to agree the quality and scale of assets to be delivered in the three

village centres (Eden Valley, Balmoral and Mt Roskill) and through the mid-blocks. Public consultation on the main corridor design is planned for April 2014 with two open days.

Iwi aspirations have been formulated in a cultural plan addressing storm water, art, trees, plantings, and village centre upgrades. The two Local Boards and Iwi have a desire for a high level of amenity, including art, trees and plantings, and quality assets in the Village Centres and along the main corridor. As the existing quality of sidewalk assets is poor, there is a strong desire for a major upgrade of the area.

Stakeholder Engagement and Communications

Engagement of local stakeholders, the public, and Cycle Action Auckland has been carried out at a series of open days held in 2013 to consult on the Cycle Routes and Dominion Road Project. A further series of public open days is planned for early April 2014 when the detailed design will be shown to the public. Discussions with disability groups, police, fire, and ambulance have also been held.

Project background material is displayed on the AT website which carries general overview drawings of Dominion Road and the Cycle Routes. Detail drawings of the cycle routes have also been displayed on the website.

Property Acquisitions and Disposals

The Project has secured 98% (246 out of 252) of the property purchases required for construction at a total value of \$17.9M. Three properties are due to be settled in April/May. The remaining three properties are under negotiation and will be resolved in due course without delay to the project. (Redact passage)

Item	Date
Funding for cycle routes granted by NZTA	11 February 2014
Cycle route tenders issued	04 March 2014
Cycle routes tenders close	31 March 2014
Cycle route construction starts	May 2014
Cycle route construction completed	October 2014
Dominion Road ROI issued	March 2014
Dominion Road tenders issued	May 2014
Dominion Road construction starts	August 2014
Dominion Road construction completed	Mid 2016

Project Timeline

PT Project Integration (Neighbourhood Bus Interchange & Canopy Trimming)

The Project team will integrate two current PT projects into the Dominion Road Upgrade Project to encourage comprehensive consultation with Dominion Road Stakeholders.

The new AT bus network requires a number of bus nodes where in-transit bus passengers may transfer services. Neighbourhood Bus Interchanges (NBI's) are planned at the intersections of Dominion Road and Mt Albert Road and at Dominion Road and Balmoral Road. These interchanges will make it attractive for commuters to use the bus services, and provide an enhanced customer experience. To minimise the impact on Dominion Road Stakeholders the project team plan to deliver the NBI's concurrently so that a seamless transition to a high quality bus network occurs.

The solution for the NBI's are currently being designed with a prototype trial planned before finalisation. The configuration and costs of these structures can only be roughly estimated at present. No budget was previously allocated for the design and construction of these NBI's.



Figure 1: Concept of Neighbourhood Bus Interchange (example only)

The approximate costs of providing NBI's at Mt Albert and Balmoral Roads is estimated at \$5.5m. The work on the NBI's is likely to be extremely complex because of the need to remove and demolish existing verandas, drill and install new piles, and provide replacement canopies to serve as a NBI plus add amenity to shops. An existing Vector transformer will be relocated to provide cycle parking, and the NBI on Mt Albert Road needs land take from the local church.

It has been projected that over the next 10 years, 11 key routes in Auckland will justify the use of double decker buses, of these the Northern Express route is already operating a double decker bus service. AT has identified Dominion Road in the first group of routes as a priority for implementation. The cost of the veranda trimming works along Dominion Road has been estimated as \$4.5M (inclusive of canopy, tree and pole trimming works).

Forecast Costs

The total cost of the Dominion Road Corridor (estimate as at detailed design phase) can be seen in the table below.

Phase	Approved Budget \$000's	Spend to Date \$000's	Forecast \$000's
Investigation	3,041	3,041	3,041
Detailed Design	2,831	1,831	2,831
Land Purchase	8,534	7,719	8,126
Construction	44,100	77	53,700
Total	58,506	12,668	67,698

The forecast above includes suggested safety, cycle route and amenity enhancement items discussed further in this report. The approved budget is based on Option 4A selected in October 2012 of \$47m for detailed design and construction.

The table above does not include the NBI's or Canopy trimming projects (which will be funded from the existing PT capital budget).

Modelling, Congestion and Benefits

Following a review of the Benefit Cost Ratio (BCR) in August 2013 the BCR value of 4.2 provided to the Board in October 2012 was reviewed and found to be in error. The revised BCR of 2.2 was discussed with NZTA in August 2013 with six performance measures agreed covering bus travel time, bus boardings, cyclist numbers, crash statistics, vehicle numbers and people movement numbers. NZTA has indicated the project remains fundable as a HHM project.

	Capital (Construction) cost	Benefits	BCR
Cycle Routes	\$5.9M	\$13.9M	2.5
Cycle Routes plus DR main corridor	\$44.1M	\$85.0M	2.0

Safety Improvements

Following independent safety audits and input from AT walking and cycling specialists and the Traffic Operations teams, additional safety measures are required as listed below:

Phase	Safety Improvements	Approx. Costs \$000's
Cycle Routes	Additional speed humps for traffic calming to slow vehicles to a target speed of 30 km/h	380
	Cycle routes changed from on-road to shared-path on high speed, high volume roads to separate users	59
	Fully signalised intersections at Balmoral and Mt Albert Roads (4 locations) for cycle route crossing	
Cycle Routes		1,657
Dominion Road Jasper and Keystone Street realignment and straightening		169
Main Corridor	Ewington Avenue modification for Countdown delivery trucks	115
	Denbigh Road modification for heavy goods trucks.	300
Dominion Road		584
Total safety Improvements		2,241

Amenity Improvements - Iwi Vision for Dominion Road

Iwi have presented to AT a Maori Values Assessment for the Project. Incorporating suitable ideas from this document into the design allows for a greater recognition of the historical Maori activity that has occurred in the area, and to this end management see merit in increased amenity being provided on the cycle routes as well as the main corridor. The improvements noted also provide general amenity improvements for all stakeholders and are summarised below:

Phase	Amenity Improvements	Approx. Costs \$000's
Cycle Routes	lwi markers and cultural recognition on boardwalks at Mt Roskill School	249
	Art work "eel trap" added to walk and cycle bridge over Oakley Creek.	
Cycle routes		563
Dominion Road Main	Sidewalk upgrades and street furniture improvements to higher quality	516
Corridor	Iwi cultural art work in Village Centres	300
	Additional trees (from 76 to 152). The possibility of providing smaller trees is being investigated.	1,508

Phase	Amenity Improvements	Approx. Costs \$000's
	Provision of LID rain gardens in order to reduce pollutants and reduce peak flows	458
Dominion Road		2,782
Total Amenity Improvements for Iwi Vision		3,345

Amenity Improvements - Village Design Groups

Feedback from the Local Boards, Iwi and local business community indicates that a higher level of amenity is needed in the three Village Centres. The Dominion Road corridor has approximately 260 retailers along its length and carries approximately 7,000 bus commuters per day, therefore there are expectations that improvements will be made to the old and tired infrastructure. Improved place-making functions are likely to lead to shop upgrades, revitalisation of retail operations, and a general upliftment of the area. A high level of amenity on this route will encourage developers to upgrade buildings and provide increased housing densification in alignment with the draft Unitary Plan.

Phase	Amenity Improvements	Approx. Costs \$000's
Dominion Road Main	Sidewalk upgrades and street furniture improvements to higher quality	482
Corridor	Local Board art work in village centres	300
Total amenity improvements for Dominion Road Village Centres		782

Amenity Improvements - Power Undergounding and Lighting

In accordance with the Auckland Transport Code of Practice (ATCOP) it is proposed to upgrade lighting along the entire corridor to new LED type energy efficient lights. Existing lighting is hung off power poles along some of the mid block areas and once these power lines are undergrounded then new poles will be needed. Rather than using standard Oclyte galvanised poles, the project team proposes that the entire corridor including Village Centres be upgraded to new and attractive multi-function pole (MFP). The MFP's permit traffic signals and banners to be hung off poles, thereby reducing clutter along the road sides.

Phase	Amenity Improvements	Approx. Costs \$000's
Dominion Road Main	Undergrounding of the last remaining strip of power lines along whole corridor ¹	1,280
Corridor	Multi-Function light poles in mid-block areas to higher quality specification similar to the AMETI project	1,442
	Catenary lighting in Balmoral Village to enhance evening dining out experience	461
Total amenity improvements for Dominion Road power undergrounding and lighting		3,183

Note 1: a separate action is underway with Vector to reach agreement on cost sharing for this work with Vector using internal funds earmarked for powerline undergrounding in Auckland.

Cycle Route - Additional Connections

Following feedback from the local community it is proposed to deliver a further cycle route connection to Mt Albert Grammar School and cross connections between the east and the west routes. In order for a large increase in school cycle activity to occur, a spring marketing campaign is needed at the end of cycle route construction, to promote the use of cycle routes to schools, families and commuters. An Ecototem marker and cycle counter is to be installed to measure daily and cumulative cycle numbers.

Phase	Additional Cycle Route Connections and Marketing	Approx. Costs \$000's
Cycle Routes	Additional cycle route to Mt Albert Grammar School	108
	Cross links between east and west routes	25
	Wayfinding signage	100
	Ecototem marking and cycle counter	30
	Cycle promotion and marketing	38
Total cycle route connections and marketing		300

Construction Cost Summary

The project costs for construction have increased since the Scheme Assessment Report (SAR) 2012 from \$44.1m to \$53.7m. The key variances are shown in the table below:

Phase	Component	SAR (Opt4A)	Forecast
	Cycle route	\$2.4m	4.2m
	Safety Improvements	-	1.7m
Cycle routes	Amenity Improvements	-	0.6m
	Additional cycle route	-	0.3m
	Sub Total	\$2.4m	6.8m
	Main corridor upgrade	\$41.7m	39.5m
	Safety improvements	-	0.6m
Dominion Road	Amenity improvements	-	3.6m
	Undergrounding and lights	-	3.2m
	Sub Total	\$41.7m	46.9m
Total Project	Project Expected Estimate	\$44.1m	53.7m

Cycle Route - Potential Land Purchase

The current cycle routes are unable to get a direct connection between King Edward Street and Burnley Terrace due to the unusual street layouts. Cyclists are required to detour and ride along a short length of either Dominion Road or Sandringham Road, which increases the cycle journey length by approximately 500 metres, but more importantly places cyclists at increased safety risk on Dominion Road or Sandringham Road due to the traffic volumes and environment.

The Project team proposes an alternative to temporarily remove two houses (subject to any potential Historic Places Trust requirements), shift them apart and create a cycle corridor between them. Once the houses are relocated they can be sold back into the market. This work would be undertaken after project completion if cycle demand warrants the expenditure. The costs for the cycle connection from King Edward to Burnley Terrace are not included in the revised budget. (Redact passage)

Parking - Update on parking statistics

Initial Parking demand surveys on Dominion Road in the three Village Centres can be summarised as follows:

No of Parks	Eden Valley	Balmoral	Mt Roskill
No of Parks	319	197	200
Average Occupancy	34%	38%	41%
Average Peak Occupancy	45%	60%	53%

Based on the supply of parking along Dominion Road shown above and the recently completed AT Parking discussion document the Project Team are investigating the possibility of realising the benefits that dedicated bus lanes would provide. Further surveys and investigation of off street parking options will be undertaken to determine if there is adequate alternative parking available, its costs and potential locations.

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Next Steps

The Detailed Design Phase will be completed in April 2014. An indicative time line is set out below. The final configuration of the Project will depend upon level of incorporation of amenity improvements as noted above.

A funding case for Construction (as part of the NZTA construction funding approval process) is in preparation and will be tabled following NZTA approval.

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Attachments

(Withheld)

Document ownership

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Glossary

Acronym	Description
AT	Auckland Transport
BCR	Benefit Cost Ratio
LTP	Long Term Plan
NBI's	Neighbourhood Bus Interchanges
NZTA	New Zealand Transport Agency
SAR	Scheme Assessment Report