

542/1340



Hills Road Extension Innes to QE2 - NROSS

COSTS (Costs net of thirds-party contributions in brackets)

| Total | Renewal | Backlog | Unallocated | Growth |
|---------------|---------|---------------|-------------|----------------------|
| \$6,016,623 | 0 | \$2,587,148 | 0 | \$3,429,475 |
| (\$2,827,813) | | (\$1,215,960) | | (\$1,611,853) |

COST ALLOCATION

| | |
|-----------------------------|---|
| Primary Driver: | It was determined in deficiency analysis that the 2021 do-minimum road network will not provide sufficient capacity to accommodate the traffic demands for the next 20 years. |
| Secondary Driver: | |
| Capacity discussion: | |
| References: | |

ATTRIBUTES

| | |
|---|---|
| Project Manager: | David Robinson, Stuart Woods |
| Work Planned: | Construction of a new two-lane arterial and intersection upgrades. |
| Location: | Hills Road – Innes Road to QE2 Drive |
| Special features being addressed: | Planning for future network capacity growth and providing a secondary corridor to the north of Christchurch. |
| A statement of the outcomes being addressed (LoS, Community Outcomes): | Increased Level of Service Increased network capacity |
| Options considered: | NROSS investigated many options for increasing capacity in north of Christchurch and developed six strategies for consultation. |
| Implications of not doing the project: | It was determined in deficiency analysis that the 2021 do-minimum road network will not provide sufficient capacity to accommodate the traffic demands for the next 20 years. |
| Linkages with other projects: | Part of NROSS project |

Location of other relevant supporting information:

CCC website page link below summarises the NROSS project and links to the consultant's report considered by the City Council on 26 June 2003 and the City Council decision minutes of 26 June 2003.

<http://www.ccc.govt.nz/northernroadingstudy/>

Project Cost Allocation Summary

Background

| | | | |
|---------------------------------|---|---------------|--|
| Project No | 542/1340 | Activity | Transport and City Streets |
| Project Name | Hills Road Extension – Innes to QE2 – NROSS | | |
| Project Manager | David Robinson, Stuart Woods | | |
| Year first spend on the project | 2008 | Project Scope | Construction of a new two-lane arterial and intersection upgrades. |
| Year of first cost allocation | 2006 | | |
| Year of current cost allocation | 2006 | | |
| Project cost | \$6,016,623 | | |

Level of Service Definitions

| | | | |
|-----------------------|-------|---------------------|---|
| Measure | Ratio | Primary Driver | It was determined in deficiency analysis that the 2021 do-minimum road network will not provide sufficient capacity to accommodate the traffic demands for the next 20 years. |
| Existing Capacity | 100.0 | | |
| Existing Demand | 143.0 | | |
| Total Capacity | 200.0 | Secondary Driver | |
| Design Capacity Year | 2043 | | |
| End of Life Year | 2058 | | |
| Backlog Capacity | 43 | Capacity Discussion | |
| Growth Capacity | 57 | | |
| New Work Capacity | 100 | | |
| % Backlog of New Work | 43 | References | |
| % Growth of New Work | 57 | | |

Localities:

| locality | percentage | comment |
|----------|------------|---------|
| Mairehau | 100 | |

Operations and Maintenance

| | |
|----------------|-----|
| O&M Cost Share | \$0 |
|----------------|-----|

Renewal

| | | | |
|--------------------------|-----|---------------|----------------------|
| Stand Alone Renewal Cost | \$0 | Renewal Scope | No renewal component |
|--------------------------|-----|---------------|----------------------|

New Works

| | | | |
|----------------------------|-------------|-----------------|---|
| Stand Alone New Works Cost | \$5,804,949 | New Works Scope | Standard assumption for new work component of Road Network Improvement. |
| Renewal Cost Share | \$0 | | |
| New Work Cost Share | \$5,804,949 | | |

Preliminary Cost Shares

| | |
|--------------------|-------------|
| Backlog Cost Share | \$2,587,148 |
| Growth Cost Share | \$3,429,475 |

Growth project

| | | | |
|-------------------------|-------------|----------------------|--|
| Stand Alone Growth Cost | \$5,804,949 | Growth Project Scope | Standard assumption for growth component of Road Network Improvements. |
| Growth Cap | \$6,016,623 | | |

Unallocated costs

| | |
|------------------------|-----|
| Unallocated Cost Share | \$0 |
|------------------------|-----|

Project funding

| | |
|------------------|-------------|
| External Funding | \$3,188,810 |
|------------------|-------------|

Summary of Cost Allocation

| | % | Total Cost | Net Cost |
|------------------|------|-------------|-------------|
| O&M | | \$0 | \$0 |
| Renewal | 0% | \$0 | \$0 |
| Backlog | 43% | \$2,587,148 | \$1,215,960 |
| Growth | 57% | \$3,429,475 | \$1,611,853 |
| Unallocated | 0% | \$0 | \$0 |
| External Funding | | | \$3,188,810 |
| Project Total | 100% | \$6,016,623 | \$2,827,813 |

TRANSPORT PROJECT SCOPING BRIEF

| | |
|---|------------------------------------|
| Project Initiator: NROSS Strategy | Date: 23/1/2007 |
| Project Name: Hills Road Extension | WBS if created: 542/1340 |
| <p>Background Data: (include project source – study, strategy, public enquiry, resource consent, etc.) (include/append data needed for prioritisation process)</p> <p>It is proposed to extend Hills Road from Innes Road to connect to QEII Drive as part of the NROSS Strategy and undertake a traffic management upgrade of Hills Road between Aylesford St and Innes Road. Council has resolved to take the project to scheme assessment stage given the completion of the transport study (project feasibility)</p> <p>The project includes a traffic management upgrade of Hills Road between Aylesford St and Akaroa St, probable signalisation of the Akaroa/Hills intersection, a traffic management upgrade of Hills Road between Akaroa St and Innes Road, probable widening of the Innes intersection, a new deviation of Hills Rd across the corner of Walter Park, traffic management upgrade of East Ellington Drive and it's extension to a new roundabout on QEII Drive.</p> <p>The Hills Extension is part of the overall NROSS strategy package, however a formal B/C analysis may/will be required by LTNZ.</p> <p>Funds are programmed in the first 3 year period to secure purchase of land between QEII Drive and the proposed termination point of East Ellington Drive to secure the route.</p> <p>See the developer contributions file http://www.ccc.govt.nz/LTCCP/2007-17/542-1340 Hills Road Extension (Innes-QE2).pdf Note that the costs in the above file have been reworked</p> <p>Date last reviewed: 10/4/2007</p> | |

| |
|---|
| <p>Issue, Problem or Deficiency to be addressed:</p> <p>Transport strategy for northern Christchurch for the next 20-25 years.</p> <p>Date last reviewed: 23/1/2007</p> |
| <p>Possible solutions/suggestions: (attach conceptual sketches¹, if appropriate)</p> <p>Traffic management upgrade and extension of Hills Road.</p> <p>Date last reviewed: 23/1/2007</p> |
| <p>Proposed Budget Category: Road Network Improvements Date last reviewed: 23/1/2007</p> |
| <p>Priority Rating (if relevant): Needed to support urban growth in Belfast. Date last reviewed: 23/1/2007</p> |
| <p>Strategy or Strategic Objective(s) that the project will satisfy:- NROSS Strategy</p> <p>Date last reviewed: 23/1/2007</p> |
| <p>Cost Estimate (include how this was derived and the level of accuracy and year of \$\$): \$7,879,050, Very Rough Order Cost, Oct 2006. See electronic (S:\Budget preparation and monitoring\0708\Road Network Improvements VROCs.xls) Budget or hardcopy(as yet unpacked David Robinson files) developer contributions worksheets.</p> <p>Date last reviewed: 23/1/2007 Note: Costs have been inflated for 2007/08 LTCCP.</p> |
| <p>Proposed Funding Method (for unbudgeted projects):</p> <p>Date last reviewed:</p> |
| <p>Project Received by Capital Programme Team:</p> |

¹ This is not to be a scheme plan drawn up by City Solutions, but more a transport planners pencil sketch that may be used for City Solutions to provide a Very Rough Order Costing if required. Its only purpose is for future reference as to what was the basis of the initial cost estimate. The project team should develop the scheme design.
S:\Transport Planning\Templates\Project Scoping Template\Project Scopes\2007_2008\Road Network Improvements\Project Scope - Hills Rd Extension.doc



File No: Z1296700 Prepared by: B Browne

Date: 11.12.05 Checked by: D Stevens

Estimate for: Hills Rd
QEII to Innes

Updated 25/10/06 David Robinson

New Two Lane Carriageway

Rough Order Capital Costs

| Item | Description | Unit | Length/m | Rate | Amount | Contingency | Total |
|-------|---|--------|----------|------|---------------|--------------|---------------|
| 1 | Preliminary and General | | | | \$ 235,833 | \$ 47,167 | \$ 283,000 |
| 1.1 | Establishment | LS | | | \$ 100,000 | \$ 20,000 | \$ 120,000 |
| 2 | Road Construction | | | | \$ 750,000 | \$ 150,000 | \$ 900,000 |
| 2.1 | QEII/Hills Traffic Signals Or R/bout | LS | | | \$ 2,750,000 | \$ 550,000 | \$ 3,300,000 |
| 2.2 | QEII/Hills Rd link | \$M/km | 1100 | 2.50 | | | |
| 2.2e | Traffic signals Hills/Akenoa | LS | | | 300,000 | 60,000 | 360,000 |
| 3 | Miscellaneous | | | | | | |
| 2.2a | Triangle to East Ellington | \$M/km | 50 | 2.50 | 125,000 | 125,000 | 150,000 |
| 2.2b | Across Walter Park | \$M/km | 140 | 2.50 | 350,000 | 70,000 | 420,000 |
| 2.2c | Changing rooms, Kellys Rd etc | LS | | | 200,000 | 20,000 | 220,000 |
| 2.2d | Traffic management upgrade - Shirley-QEII | \$M/km | 2600 | 0.25 | 650,000 | 130,000 | 780,000 |
| TOTAL | | | | | \$ 3,600,000 | \$ 720,000 | \$ 4,320,000 |
| | | | | | | | \$ 3,113,000 |
| 4 | Land Purchase | | | | \$ 6,000,000 | \$ 1,200,000 | |
| 4.1 | Land costs | LS | | | \$ 600,000 | \$ 120,000 | \$ 720,000 |
| 4.2 | Land legalisation | LS | | | | | |
| TOTAL | | | | | \$ 6,600,000 | \$ 1,320,000 | \$ 7,920,000 |
| 5 | Professional Fees | | | | | | |
| 5.1 | I&R | LS | | | \$ 108,000 | \$ 32,400 | |
| 5.2 | D&PD | LS | | | \$ 180,000 | \$ 36,000 | |
| 5.3 | MS&QA | LS | | | \$ 108,000 | \$ 21,600 | \$ 486,000 |
| TOTAL | | | | | \$ 396,000 | \$ 90,000 | \$ 486,000 |
| TOTAL | | | | | \$ 10,596,000 | \$ 2,130,000 | \$ 12,726,000 |
| | | | | | | | \$ 5,591,953 |

Notes: 1) Land Costs

Land Required 24,000 \$250.00 \$ 6,000,000.00

\$ 8,726,000
i.e. less \$4 land.

| Item | Description | Unit | Length/m | Rate | Amount | Contingency | Total |
|------------------------|--|--------------------|-------------|------|------------------|----------------|------------------|
| 4.1a | Land cost - Triangle to East Ellington | 50m | 525 x 22m | | 215,000 | 55,000 | 330,000 |
| 4.1b | - Walter Park (internal transfer) | 140m | \$150 x 22m | | 462,000 | 92,400 | |
| 4.1c | - QEII signals or R/bout northern side | 2500m ² | \$100 | | 250,000 | 50,000 | |
| | southern side | 2500m ² | \$250 | | 625,000 | 125,000 | 750,000 |
| SUBTOTAL | | | | | 1,612,000 | 322,400 | |
| Land legalisation 05 | | | | | 161,200 | 32,240 | |
| LAND TOTAL - FM | | | | | 1,773,200 | 354,640 | 2,127,840 |

Construction Cost

| Item | Description | Rate | Contingency | Total |
|------|-------------|-------|-------------|--------|
| 5.1 | I&R | 2.50% | 0.75% | 3.25% |
| 5.2 | D&PD | 4.16% | 0.83% | 5.00% |
| 5.3 | MS&QA | 2.50% | 0.50% | 3.00% |
| | | | | 11.25% |

| | | | | |
|-----|-------|------------|-----------|------------|
| 5.1 | I&R | \$ 82,722 | \$ 25,417 | \$ 108,139 |
| 5.2 | D&PD | \$ 136,800 | \$ 27,360 | \$ 164,160 |
| 5.3 | MS&QA | \$ 108,000 | \$ 21,600 | \$ 129,600 |
| | | | | \$ 399,900 |