

Notice of Meeting:

I hereby give notice that an ordinary Meeting of the Council will be held on:

Date: Wednesday 6 December 2017
Time: 9.30am
Meeting Room: Council Chamber
Venue: Municipal Building, Garden Place, Hamilton

Richard Briggs
Chief Executive

Council OPEN AGENDA 3/3 Housing Infrastructure Fund

Membership

Chairperson	Mayor A King
Deputy Chairperson	Deputy Mayor M Gallagher
Members	Cr M Bunting
	Cr J R Casson
	Cr S Henry
	Cr D Macpherson
	Cr G Mallett
	Cr A O'Leary
	Cr R Pascoe
	Cr P Southgate
	Cr G Taylor
	Cr L Tooman
	Vacancy

Quorum: A majority of members (including vacancies)

Meeting Frequency: Monthly – or as required

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Governance Manager

30 November 2017

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Council Report

Item 10

Committee: Council

Date: 06 December 2017

Author: Blair Bowcott

Authoriser: Kelvyn Eglinton

Position: Executive Director Special Projects

Position: General Manager City Growth

Report Name: Housing Infrastructure Fund - Draft Business Cases

Report Status	Open
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Purpose

1. To seek Council approval to submit a non-binding Housing Infrastructure Fund (HIF) proposal to the Ministry for Business Innovation and Employment (MBIE) and the NZ Transport Agency, consisting of a Detailed Business Case (DBC) for the Peacocke growth area.

Staff Recommendation

2. That the Council:
 - a) receives the report;
 - b) approves the submission of a **non-binding** application to the Housing Infrastructure Fund, including approving the detailed business case, to advance lead strategic infrastructure funding for Peacocke;
 - c) notes that the detailed business case will seek Housing Infrastructure Funding (through MBIE and NZ Transport Agency) for Peacocke of \$308.4m (inflation adjusted gross figure), consisting of a 10 year interest free loan of \$189.1m and a New Zealand Transport Agency funding assistance subsidy of \$119.3m;
 - d) delegates to the Mayor and Chief Executive authority to sign all tender documentation associated with the proposal for formal submission to the Ministry of Business Innovation and Employment (MBIE) and NZ Transport Agency;
 - e) delegates to the Chief Executive authority to conduct any necessary **non-binding** commercial negotiations with government representatives consistent with the Housing Infrastructure Fund proposal submitted to MBIE and NZ Transport Agency;
 - f) approves the unbudgeted expenditure for the preparation of the detailed business case and financial analysis of the growth scenarios for the draft 10-Year Plan estimated at \$435,000 and note that this will be recorded in the Risks and Opportunities register;
 - g) delegates to the Chief Executive authority to continue to advocate with the Government for other funding tools and options to provide strategic infrastructure to enable more housing supply to the City.

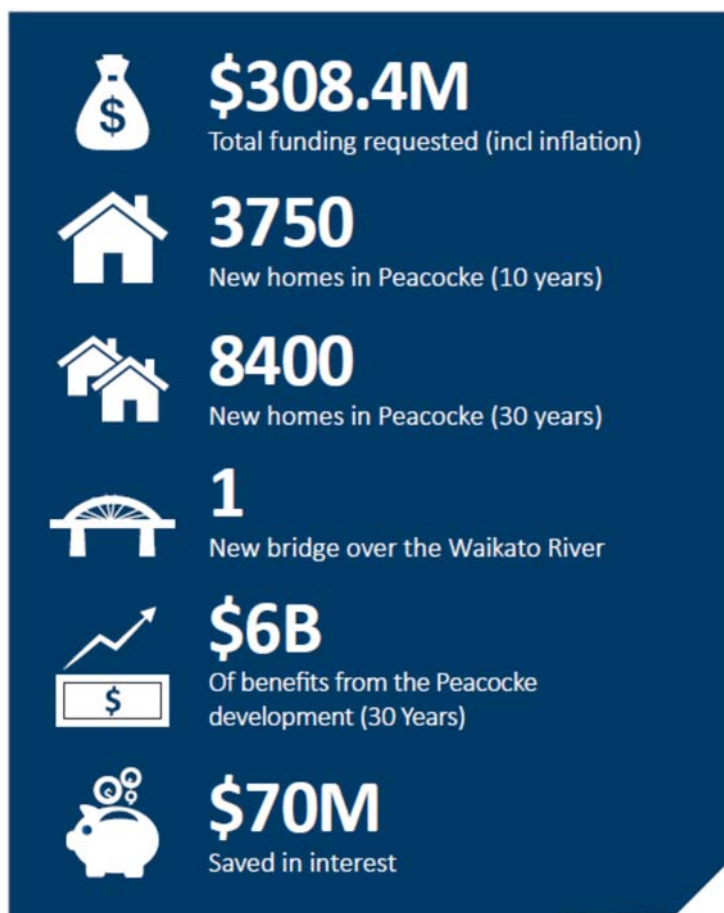
Structure of the Report

3. This report is comprised of three parts.
4. The first part is an executive summary.
5. The second part addresses in detail our participation in one of these initiatives – the HIF. The HIF is a funding tool announced by Government in mid-2016 to accelerate housing delivery in high growth areas and to assist Councils in the funding of the necessary lead strategic infrastructure to enable this housing delivery. While the HIF is an opportunity, it also presents some challenges for Council.
6. The third part provides a brief overview of recent growth and urban development initiatives impacting Council and the future growth of Hamilton.

Part 1 - Executive Summary

7. The HIF Detailed Business Case (DBC) has been prepared by staff with assistance from external consultants in accordance with DBC guidelines established by MBIE and NZTA. The DBC needs to be submitted to MBIE before 20 December 2017. A draft technical version of the DBC has been shared with officials from both MBIE and the NZTA to assist with the preparation and assessment of the final DBC for submission to Government, should Council resolve to do so.
8. The submission of the DBC is the next stage (stage three of five) towards securing the HIF. The next stages are Council acceptance within its 10-Year Plan and consultation process (stage four) and if approved, finalising all funding agreements (stage five).
9. Hamilton has been experiencing very high growth, and projections show Hamilton is well on the way to being a city with more than 200,000 residents.
10. As the population grows so does the need for more homes, and land available to build new homes. In addition, the National Policy Statement on Urban Development Capacity (NPS-UDC) sets a requirement for the city to have additional land available for housing.
11. To meet the demands of forecast population and housing growth, a new greenfield area needs to be opened soon to provide land for the next 30 years. This places a heavy burden on the city to fund the infrastructure needed (main roads, water, stormwater and wastewater pipes).
12. Based on the non-binding nature of the application to the Housing Infrastructure Fund, staff have assessed the recommendations in the report have medium significance. The Housing Infrastructure Fund will be consulted on as part of the 2018-2028 10-Year Plan consultation from 29 March 2018 to 30 April 2018.

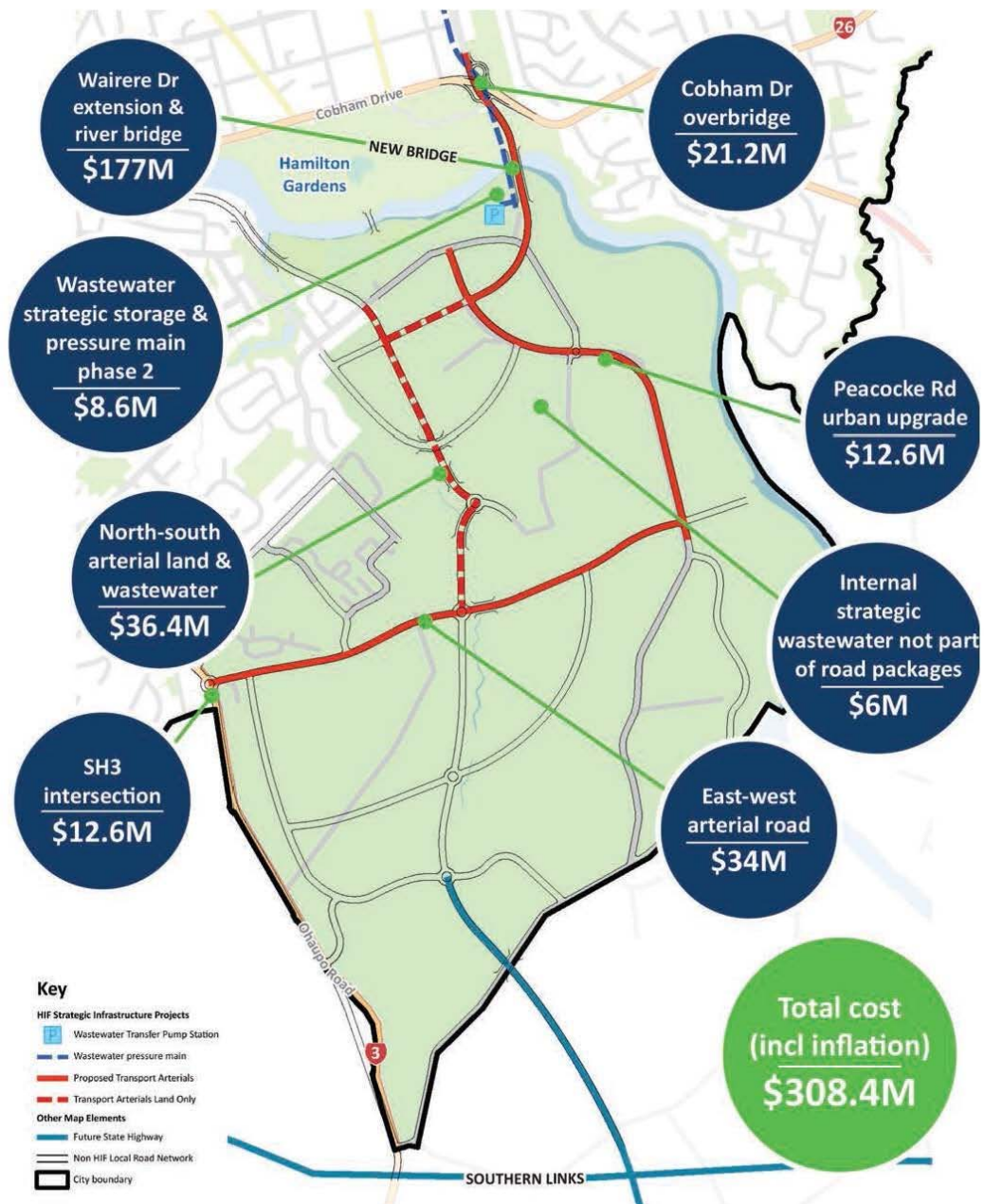
13. A summary of the key elements of the DBC is as follows:



14. **The Peacocke Development**

15. The best opportunity for Hamilton's future is to unlock the Peacocke development (south Hamilton) with the support of a Housing Infrastructure Fund (HIF).
16. Hamilton City Council is requesting \$308.4m from the HIF for the development of the Peacocke greenfield residential area. The \$308.4m of funding (\$189.1m of 10-year interest free loan and \$119.3m of NZ Transport Agency subsidy) will accelerate development timing and bring projects in the Council's 2018-28 10-Year Plan and 30-Year Infrastructure Strategy forward.
17. Within the 10 years of receiving the HIF funding, the accelerated development of 3750 homes will occur in Peacocke with a total of 8400 homes developed in the area across the next 30 years. The HIF funding will enable the Peacocke development to provide more than 30% of the additional demand needed over the next 10 years, and 25% over 30 years, while retaining a strong Council balance sheet.
18. In contrast the "status quo" option in the DBC, which focusses investment and development in Rotokauri, meets less than 21% of additional demand over 10 years and 18% over 30 years.
19. Furthermore, the "status quo" option has limited capacity and will be critically insufficient to meet the projected demand for land and housing over the 30 year horizon. The opportunity to apply for HIF funding during the same period as the 10YP has allowed the Council to robustly consider any eligible greenfield areas in the city that best align with the Government's vision, and provide the best results and is affordable for the Council and Hamiltonians. The option for Peacocke, outlined in this detailed business case, is the most suitable solution.

20. The Peacocke development can be, for most intents and purposes, described as 'ready to go'. It is part of the draft 2018-28 10-Year Plan, and the broader capital programme therein. When reading the draft 2018-28 10-Year Plan (in a separate report on this meeting agenda), the DBC proposal is incorporated in to the growth proposal prepared by staff and is a core element of the recommended Peacocke scenario 4 growth proposal. The "status quo" referred to in the DBC is the growth proposal outlined in the draft 2018-2028 10YP as Rotokauri Scenario 5.
21. The bridge that is part of the Peacocke development further improves the returns on existing investments in Southern Links and adjacent transport networks. The Peacocke development assists Hamilton to further contribute to the sub-region with improved access to the south and west, along with associated community and business offerings.



22. **The Financials**

23. The very high upfront costs of strategic infrastructure for a bridge across the Waikato River, arterial roads, wastewater, stormwater and water supply exceeds the funding capacity of the community and the Council, and constrains development. The Council's balance sheet is unable to commit to funding the infrastructure necessary to quickly open a sufficiently large growth cell given prudent debt-to-revenue constraints (230%), as well as Local Government Funding Agency (LGFA) criteria.

24. Below are two tables with a breakdown of the \$308.4m requested.

25. Table 1 Summary of HIF Funding Request

Funding Information (\$M)	
NZTA Funding Assistance	119.3
HIF Transport drawdowns	114.6
Total roading infrastructure	233.9
HIF Water drawdowns	74.5
Total water infrastructure	74.5
TOTAL FUNDING REQUESTED (incl inflation)	308.4

26. Table 2. Summary of costs and funding

	Cobham Drive overbridge	SH3 Intersection and East-West Arterial Stage 1b Section	East-West Arterial (Excluding SH3 intersection and Stage 1B section)	North-south arterial land and North-South strategic wastewater and land	Peacocke Road Urban Upgrade	Wairere Drive extension and river bridge	Wastewater Strategic Storage and Pressure Main Phase 2	Internal Strategic Wastewater not part of road packages	Total Costs Post-inflation	Total Costs Uninflated 2017\$
Summary totals (\$M rounded)										
Transport Infrastructure	21.2	9.4	23.2	2.6	9.2	117.5	-	-	183.1	159.8
Wastewater Infrastructure	-	-	0.6	10.9	-	39.6	8.6	5.9	65.7	57.4
Water Infrastructure	-	0.9	2.7	-	1.2	1.7	-	-	6.5	5.7
Transport property	-	2.3	7.5	22.7	2.2	16.1	-	-	50.9	46.7
Wastewater property	-	-	-	0.2	-	2.1	-	0.0	2.3	2.2
Water property	-	-	-	-	-	-	-	-	-	-
Total Cost including inflation	21.2	12.6	34.0	36.4	12.6	177.0	8.6	6.0	308.4	-
Total Costs 2017\$ as in IBC (uninflated)	20.0	11.5	28.5	33.1	10.8	155.7	6.8	5.4		271.8
FUNDING										
NZTA Funding Assistance 51% rate	10.8	6.0	15.7	12.9	5.8	68.1	-	-	119.3	
HIF Transport Funding	10.4	5.8	15.1	12.4	5.6	65.5	-	-	114.6	
HIF Water and Waste Funding	-	0.9	3.2	11.1	1.2	43.4	8.6	6.0	74.5	
Total HIF Drawdown (Post-Inflation)	10.4	6.6	18.3	23.5	6.8	108.9	8.6	6.0	189.1	

27. Below is a summary table of the dwelling yield cost for the development of Peacocke and the status quo.

Dividend, yield and spend (Peacocke)	Unit	1 July 2018 to 30 June 2023 (5-year period)	1 July 2018 to 30 June 2028 (10-year LTP)	1 July 2018 to 30 June 2033 (30-year period)
No. of dwellings to be constructed	number	1,573	3,751	8,393
No. of lower cost dwellings to be constructed (incl. in above)	number	236	563	1,679
Projected demand (cumulative)	number	6,167	12,477	31,932
No. of dwellings/projected demand	%	25.5	30.1	26.3

Dividend, yield and spend (Status quo)	Unit	1 July 2018 to 30 June 2023 (5-year period)	1 July 2018 to 30 June 2028 (10-year LTP)	1 July 2018 to 30 June 2033 (30-year period)
No. of dwellings to be constructed	number	891	2,584	5,627
Projected demand (cumulative)	number	6,167	12,477	31,932
No. of dwellings/projected demand	%	14.4	20.7	17.6

Part 2 – the Housing Infrastructure Fund

28. Background

29. On 3 July 2016 the Government announced a new \$1B HIF for local government. The fund is available to areas that are classified as “high-growth” under the National Policy Statement on Urban Development Capacity (NPS-UDC), which includes Hamilton.
30. The outcome sought by the government via the fund is to increase the pace at which housing supply is made available and to increase housing yield beyond what is otherwise planned.
31. The HIF is a one-off contestable interim fund to bring forward the transportation, water and other strategic infrastructure required for new housing.
32. The previous Council resolved on 25 August 2016 to prepare and submit an indicative proposal to the HIF based on advancing the Peacocke and Rotokauri growth cells.
33. Council submitted its indicative proposal to the Ministry of Business Innovation and Employment (MBIE) on 2 December 2016. A copy of the indicative proposal was tabled at the Growth and Infrastructure Committee meeting held on 14 February 2017.
34. The Peacocke and Rotokauri areas were selected as they have been identified as strategic growth areas under the Hamilton Urban Growth Strategy and are structure planned and zoned and have, in some instances, infrastructure corridors or features consented and / or designated.
35. Further, these areas provided the best opportunity to unlock significant housing development to satisfy the key criteria associated with the HIF assessment framework, and were also areas of the City where key landowners and developers were able to provide written support to actually construct new housing should HIF funding be secured.
36. Council approved the indicative business case application on [28 March 2017](#), and Council formally submitted its indicative business case application to MBIE on 31 March 2017 for Peacocke, Rotokauri and combined Peacocke/Rotokauri.
37. In June 2017 Council staff were advised by MBIE that the Peacocke HIF application had been approved by the government to progress to the next phase of the HIF application process.

38. On 4 July 2017, in a public excluded agenda (subsequently moved to a public agenda) Council resolved to progress the Peacocke HIF application and prepare a detailed business case application as follows (noting a copy of the report is in Attachment 5):

- a) *receives the report;*
- b) *approves a **non-binding** Heads of Agreement to develop the Housing Infrastructure Fund (HIF) detailed business case and associated funding agreements for the Peacockes growth area with the Ministry of Business Innovation and Employment (MBIE), New Zealand Transport agency (NZTA) and Council;*
- c) *delegates to the Chief Executive authority to work with MBIE and NZTA to refine, then finalise and execute the **non-binding** Heads of Agreement;*
- d) *notes that the **non-binding** Heads of Agreement will reflect the parameters of the HIF application submitted to MBIE on 31 March 2017 for the Peacockes growth area;*
- e) *notes that the Chief Executive will prepare as part of the next stage of the HIF application a detailed business case, negotiate funding agreements and prepare any necessary public consultation material for the consideration and approval of Council;*
- f) *delegates to the Chief Executive authority to conduct any **non-binding** commercial negotiations with Government representatives and private developers in this next phase, consistent with the HIF application submitted to MBIE for the Peacockes growth area;*
- g) *notes that the growth assumptions in the 2018-28 Long Term Plan will incorporate the HIF funding arrangements for the Peacocke growth area;*
- h) *requests the Chief Executive report to the 27 July 2017 Council meeting on the opportunities to advance work associated with the Peacocke growth cell ahead of the HIF detailed business case and associated funding agreements being finalised (including proactive land purchase, investigations and design of capital works) subject to any works advanced being retrospectively included in the HIF funding arrangements;*
- i) *notes that Council will have further opportunities to consider information on the HIF application and its implications for the 2018-28 Long Term Plan; and*
- j) *makes this report and the Council decisions public following the government HIF announcements on 11 July 2017.*

39. **What problem is HIF is trying to solve?**

- 40. The HIF was established to accelerate housing supply in growth Councils over and above business as usual settings under existing 10-Year Plan funding arrangements.
- 41. Previous investigations by the Productivity Commission in to land and housing markets have indicated that supply side zoning measures on their own may not be sufficient to ensure houses can be delivered in a timely way, and that adequate and timely funding for new growth infrastructure is a key issue that growth council's need assistance.
- 42. The creation of the HIF is a tacit acknowledgement by Government that a partnership is required to assist local authorities in the urban development process to ensure housing markets function efficiently and timely as possible. Specifically the HIF was developed to mitigate the financial barriers for councils to fund lead strategic infrastructure development necessary for urban growth.
- 43. The HIF is only one tool to assist with addressing the growth issues facing Council.

Impact of the change of Government

44. The recent change in Government has not impacted the HIF program. While the new Government is exploring a range of new initiatives to fund infrastructure and to boost housing supply, the HIF program is being maintained. Other funding and housing supply initiatives include Special Housing Areas and initiatives including Special Purpose Vehicles, Kiwi Build, infrastructure bonds and fuel tax.
45. HCC staff have been liaising with senior officials from both MBIE and NZTA and have received confirmation that there has been no change or alteration from Government in terms of HIF in its current form. In addition the Mayor and Chief Executive Officer have met with the Minister of Housing Phil Twyford who provided a similar verbal assurance.

Overview of the HIF process

46. The HIF process has been structured by MBIE as a standard commercial tender.
47. All tender timeframes, requirements and conditions have been issued by MBIE and these tender parameters have defined the deliverables that Council staff has been working towards completing and are the subject of this report.
48. The tender requirements stipulate that each participating Council must submit detailed business cases in accordance with the NZTA business case model, along with a summary table, before the final tender submission date of December 2017.
49. Council has complied with these tender requirements, and the findings of the business case is documented in this report.

Benefits of the Housing Infrastructure Fund

50. The HIF process represents a unique opportunity for Council to obtain one off advance funding for growth related infrastructure when compared to existing 10YP funding arrangements.
51. Direct financial benefits for Council that occur only under a HIF enabled scenario include interest savings of \$70m, and receiving advanced NZTA funding of \$119m.
52. The benefits of this advance funding largely accrue to Hamilton and the sub-region as a whole from additional housing and new urban growth.
53. The direct costs of any funding allocation would be carried primarily by Council, with the biggest cost being a potential breach in our Financial Strategy, depending on any financial mitigation that could be deployed throughout the development of the next 10-Year Plan.
54. From a purely financial perspective the HIF is an interest free loan to Council over a 10-year period.
55. The interest free component of the HIF will to generate significant interest savings when compared to normal banking/financial arrangements for a similar amount of money that would be allocated under normal 10-Year Plan settings. Our financial modelling indicates this interest saving is \$70m across the draft 10-Year Plan.
56. The funding received under the HIF would create the potential for Council to:
 - stimulate new greenfield housing development,
 - facilitate more housing choice in terms of greenfield options,
 - enable future economic and population growth, and
 - bring forward the economic benefits of infrastructure investment where those benefits could be realized over a longer time period.

57. Further, any HIF allocation would assist Council satisfying its NPS-UDC obligations relating to residential land supply.
58. The Government acknowledges there is problem with growth funding and is interested in working in partnership with local government in resolving ongoing infrastructure funding issues in New Zealand. Staying involved in the HIF process enables Council to continue to be at the forefront of working to solve these issues.

Overview of the final proposal document

59. The final proposal being submitted to MBIE (in accordance with their tender requirements) consists of one detailed business case and summary table for funding infrastructure in Peacocke.
60. A copy of the detailed business case is included as Attachments 1-4 of this report comprising summary documents, the full detailed business case and appendices.
61. Our business case has been prepared in accordance with the NZTA standard business case approach.
62. A business case is a standard appraisal methodology established by Government to assist decision making for large scale procurement and funding projects that have a value greater than \$10m. It is typically used by a number of agencies (such as NZTA, MBIE, DHB's, Defence) for significant projects to understand not only accounting and financial costs but the wider economic costs and benefits arising from investment.
63. HCC also has its own business case methodology to understand investment and procurement value prior to committing funding of large capital projects, which is similar to the NZTA approach.
64. The detailed business case prepared as part of our tender submission address five distinct elements of decision making. These include strategic, economic, financial, commercial and management aspects. Each business case looks at the potential impacts of the HIF allocation when compared to the status quo (that is, current 10-Year Plan settings) to understand if the potential investment and financial allocation made by Government represents value for money. Broadly, each element of the business cases prepared for our HIF submission address the following areas:
 - The strategic case examines if the investment is optimised against the strategic business needs and existing arrangements of Council;
 - The economic elements examine the investment options from a purely wider economic benefits perspective beyond the investment needs of the organisation;
 - Financial and commercial elements help to determine the feasibility of the investment and the Management case outlines how the project will be delivered and managed in a practical sense.
65. **The strategic case for investing in Peacocke**
66. Hamilton has been experiencing high population growth, and this, along with the mandatory requirements under the National Policy Statement for Urban Development Capacity, places a burden on the City to fund infrastructure to meet housing demand.

67. Population projections indicate that Hamilton is well on the way to being a city of 200,000 residents. The NIDEA household and population projection adopted by Hamilton City Council sees this mark being reached in 2034. Further, in line with the age profile of the population, a reduction in average household sizes sees even greater demand for new houses.
68. The City must open up another greenfield area within the next 10-years to meet this demand. In planning for the 2018-28 10-Year Plan Hamilton City Council has therefore considered a number of scenarios and undertaken modelling to determine how best to meet this demand, and the financial implications of this growth. The opportunity to apply for funding from the Housing Infrastructure Fund over the same period has also allowed Council to consider greenfield areas that may be eligible for funding, and therefore more affordable for Council and Hamiltonians.
69. Development of Peacocke is consistent with, and gives effect to, the existing strategic planning framework for the City and the sub-region, including the Waikato Regional Policy Statement, the Future Proof sub-regional growth strategy and Hamilton's District Plan. The Peacocke area has an operative Structure Plan and designation for arterial roads to connect to the Hamilton Southern Links Network. This transport corridor is recognised as being regionally significant in the Regional Land Transport Plan.
70. These documents confirm that the development of Peacocke as a residential area has a high strategic fit with the objectives of Hamilton City Council. Advancing development in Peacocke also has a high strategic fit with NZ Transport Agency and New Zealand Government objectives.
71. The 2018-28 10-Year Plan scenarios and modelling consider the staged development of Peacocke and Rotokauri over a 30-year period. All of the scenarios, despite assuming significant revenue increases through rates, present a significant funding challenge within the first 10-years and are beyond the Council's ability to fund.
72. It is important to note the financial section of the DBC was prepared while the draft 10-Year Plan was still being developed, and the financial implications outlined for debt and rates are more accurately represented in the separate report on the draft 10-Year Plan.
73. The DBC prepared as part of the HIF submission confirms that the preferred option that emerged from the DBC analysis is the development of Stages 1 and 2 of Peacocke, and capital expenditure only on projects that the Council must do.
74. The benefits of the staged development of Peacocke include:
 - The development of 3,750 dwellings over 10-years and approximately 8,400 over 30 years
 - The ability to use the HIF funding to fund water, wastewater and transport infrastructure and the associated interest saving benefits of approximately \$70m.
 - The ability to apply for a Funding Assistance Rate (FAR) of 51% from the NZ Transport Agency for transport projects with Peacocke of approximately \$119m.
 - The opening of the Southern Links Network, a regionally significant transport corridor.
75. However, there are financial risks associated with this option and the development of Peacocke needs to be subject to consultation with the community. This consultation will discuss the priority of advancing other capital projects in the 2018-28 10-Year Plan, including consulting on any consequential impact on debt and rates. This is critical as the size of the HIF funding sought by Council, and the scale of the change to the current 10-Year Plan, easily triggers the scale and significance tests for engagement under the Local Government Act.
76. **Benefit cost ratio results**
77. The combined output of the business cases is what is referred to as Benefit Cost Ratio (BCR).

78. A BCR is a proxy that enables investment decision makers to determine whether an investment represents value for money across broad economic measures and enables a standard way to assess tenders by MBIE.
79. The higher the BCR, the better the investment from a wider societal and economic perspective. Our analysis indicate that the benefits of any HIF investment accrue to Hamilton as a whole but the costs are born by Council in terms of debt impacts. In summary, the BCR results indicate a BCR for Peacocke is 4.95
80. The BCR reveals that large one-off capital investments represent the bulk of the costs (e.g., the bridge for Peacocke). The benefits are largely derived from the economic activity generated by housing construction and subsequent household expenditure. There are also transport benefits network wide.
81. These transport benefits have been noted by NZTA during the formation of our final HIF proposal where NZTA have confirmed Point of Entry status for Peacocke transport elements. This is significant and indicates clearly that our projects are strongly endorsed by the NZTA as being projects worthy of NZTA funding assistance.
82. Despite the above, the benefits that would accrue to Council in terms of rates revenue and development contributions are less substantive.
83. The BCR numbers indicate that for every \$1 invested an economic return of approximately \$5 could be anticipated over a 30-year period. Anything over a BCR of 1 indicates that an investment can be considered on an economic basis.
84. **Housing delivery results**
85. For Peacocke the HIF single proposal programme of works will accelerate growth which will yield 3,751 dwellings within 10-years (which represents approximately 30% of forecast housing demand during this time period) and 8,393 dwellings within 30-years. This will provide approximately 26% of projected future housing demand in Hamilton by 2048.
86. A status quo scenario under existing 10-Year Plan settings for Peacocke would deliver 2,884 dwellings over 10-years which is approximately 20% of projected future demand for dwellings over this time scale, or 5,627 dwellings over a 30-year period (representing approximately 17% of all future demand over a 30-year period).

Risks

87. In preparing the DBC, Council partnered with PwC to fully analyse and mitigate risks identified with the HIF process and its implementation. A full risk register and risk assurance plan outlining the documentation and management of risk is included as Appendices I and J of the DBC (part of Attachment 4 to this report).
88. For the purposes of this report, key non-financial and financial risks have been summarized below.

RISK TYPE AND DESCRIPTION	RISK MANAGEMENT RESPONSE
Reputation: Lack of or loss of public support for HIF projects following approval of DBC	Communications planning and implementation in combination with 10 Year Plan processes
Reputation: Conflict of interests are not managed resulting in a heightened risk of fraud/collusion, lowering HCC reputation	Conflict management plan and implementation Three levels of assurance HCC Procurement Policy and Procedures
People risks: Inadequate people (internal and consultants) resources / structure and competing priorities impact on delivery of growth projects, leading to delays.	Dedicated Peacocke Housing Infrastructure team

RISK TYPE AND DESCRIPTION	RISK MANAGEMENT RESPONSE
People risks: Failure to create and maintain a safe environment resulting in a serious harm or fatal incident	HCC Health and Safety Policy and Procedures Dedicated safety representative in PHIT team
Project risk: Failure to secure PDAs to take up the capacity of HIF under terms that meet the DBC results in lack of certainty over: <ul style="list-style-type: none"> Development take up and timing Contributions amount (\$ and infrastructure) 	Financial incentives to encourage development Early engagement
Project risk: HIF Cost / Benefits poorly defined leading to under delivery of outcomes	DBC
Project risk: HIF project is exposed to uncertain economic /growth circumstances that delays or stops project delivery	Monitoring and review processes
Project risk: Development in other areas reduces HIF ability to fulfil planned developer yield to repay HIF loan	Monitoring and review processes. Discourage out of sequence development with RMA and LGA tools
Project risk: Contractor capacity affects project delivery timeframe and cost	Early engagement with industry. Timing of construction to match Expressway resources being released. Secure key resources and people early
Project risk: Not all of the necessary land is controlled to deliver the infrastructure included in the HIF bid The PWA may be required to secure land at additional costs and significant delays	Early acquisition Early PWA processes Early designation for pump station
Project risk: HCC does not commit to the HIF through the 10YP process	10YP processes
Project risk: NZTA / MBIE don't approve of DBC and/or Government does not approve of the funding agreement	DBC process and engagement/communications
Project risk: HIF financial implications inconsistent or breach HCC financial strategy as determined by the 10YP	DBC process, engagement/communications Contingency management Options to slow delivery of phases after gateway infrastructure
Project risk: Lack of quality information impacts on decisions	DBC and pre-implementation
Project risk: Uncertainty in costs assumptions may lead to budget over spend	Contingency management. Options to slow delivery of phases after gateway infrastructure. DBC peer reviews
Project risk: DC revenue leakage (consent applied period end 30/6/18) results in not enough revenue to cover HIF repayments	10YP processes Financial planning to allow for it
Project risk: HIF assumes developers will take financial responsibility to provide infrastructure to support their development and the HIF proposal	Developer engagement and PDAs.
Project risk: NZTA FAR alters from the assumptions made in the DBC leading to a shortfall in funding	NZTA Funding application at same time as HIF
Project risk: HCC financially exposed by Government funding agreement.	10YP processes Financial management and reserves
Strategic Risk: Tainui strategic relationship + First Right of Refusal (land)	Multi-level engagement
Strategic Risk: Matters of cultural significance	Master planning Multi-level engagement
Strategic risk: Wildlife authorities (e.g. bat habitat, gully systems)	Early engagement underway Data collection for EMMP (Southern Links) underway

RISK TYPE AND DESCRIPTION	RISK MANAGEMENT RESPONSE
	Whole of Government communications Master planning processes
Strategic risk: Archaeological authorities	Early engagement under way Whole of Government communication Master planning processes
Operational Risk: Other Waikato Council decisions /relationships impact on delivery	Engagement through Future Proof, 10YP processes, Regional Transport Committee
Operational Risk: No Masterplan in place in a timely manner to enable land development	Consenting strategy Facilitated, coordinated approach
Compliance and Regulatory Risk: Environmental issues negatively affect Business case/ delivery of projects (native animals, snails, bats, cat free 'areas') by consents/permits not being granted	Early consent applications Early applications for authorities Data collection Master planning processes
Compliance and Regulatory Risk: Changes in government legislation or regulation may impact on HIF	Monitoring and review
Operational Risk: Liaison with other utility providers	Communications and engagement plan.
Operational risk: Corrosion and odour (wastewater)	Detailed design review
Operational risk: Poor contract documentation	Independent review by construction practitioners prior to tendering.
Operational Risk: Contract team performance.	Review lessons learned from similar projects (e.g. NZTA St Lukes)
Operational risk: Materials supply	As for supplier capacity – early engagement with market

Costs of the Growth Scenario Analysis and HIF Detailed Business Case to date

89. As at the end of 31 October 2017, \$220,000 had been incurred on the preparation of the detailed business case and financial analysis of the Growth Scenarios for the draft 10-Year Plan. These costs consist of inputs from consultants BERL for the technical inputs and economic analysis for the DBC, inputs from PwC (for financial and risk analysis), technical external consultant peer reviewers, document production, engineering inputs for costing three waters infrastructure, and for legal advice on for Private Development Agreement matters.
90. Total costs for the completion of the DBC and the financial analysis of the growth scenarios of the draft 10-Year Plan are forecast to be approximately \$435,000, with costs for work for November and December to be registered in our financial system. The total forecast cost excludes internal staff time and any transport engineering inputs (totalling approximately \$100,000) which have been incurred against the existing budget for the Southern Links Capital Programme (CE15088 and CE15089) in the 2017/18 financial year.
91. It should be noted that with the exception of transport, the costs associated with the HIF DBC are unbudgeted but have been reported through Risks and Opportunities register at the last Finance Committee meeting.
92. The cost for the preparation of the three Indicative Business Cases submitted in March 2017 was \$90,000 (covered within existing budgets).

Legal issues

93. Preliminary legal advice indicates that the Local Government Act (LGA) requires local authorities to manage their “revenues, expenses, assets, liabilities, investments, and general financial dealings prudently and in a manner that promotes the current and future interests of the community.” (Section 101 LGA).

94. Local authorities are free to decide what this means. However, the Local Government (Financial Reporting and Prudence) Regulations 2014 (the 2014 Regulations) require reporting against various benchmarks; and failure to achieve these measures indicates to central government that the local authority may not be financially prudent. As a result, central government may exercise its powers of intervention contained in Part 10 of the LGA.
95. However, these regulations only require disclosure of Council's performance against these benchmarks - there are no direct (legal) consequences for breaching the benchmarks.
96. The Resource Management Act 1991 requires that district plans give effect to any national policy statement, in this case the NPS-UDC.
97. However, for the purposes of the HIF, there is no link between the NPS-UDC/District Plan and Council's operations. Therefore, Council's district plan could give effect to the NPS-UDC but not enable the growth to be carried out by not building infrastructure to those growth cells. While this leaves Council open to criticism, there does not appear to be a clear legal link between the two.
98. This is consistent with Council's current practice not to commit to expand its infrastructure network simply at the request of developers.
99. Accordingly, there is no conflict between the two pieces of legislation, and neither will be breached by HCC whether HCC chooses to participate in the HIF, or whether it does not.
100. However, there is a greater risk that the Crown will exercise its Part 10 rights if participation in the HIF causes breaches of the financial prudence benchmarks in the 2014 Regulations.

Proposed caveats/bid acceptance conditions

101. The terms and conditions included in the MBIE tender documentation do not prevent councils from withdrawing their proposals at any time up to the point that legally binding funding or loan agreements have been signed.
102. Accordingly, while Council should take the process seriously, the Council will not be bound until formal legal agreements are signed.
103. While this is an important safeguard for Council, staff recommend that the HIF DBC be submitted on the basis that final Council approval can only occur after the conclusion of 10-Year Plan community consultation where our HIF proposal forms an integral part of the 2018-28 10-Year Plan.

Next steps in the HIF process

104. The HIF proposals will be evaluated from December 2017 and a final decision on funding is likely to be made by Government in March 2018.
105. Officials and consultants will evaluate the DBC and the NZTA will assess transport components against National Land Transport Fund (NLTF) investment criteria. The NZTA Board approved, in principle, the Peacocke Indicative Business case submitted in March 2017 as being eligible for NLTF investment. Where a business case meets NLTF funding requirements, they will be considered by the HIF assessment panel. The HIF assessment panel then makes a recommendation to the Ministers of Transport, Finance and Housing.
106. Final funding will only be released to Council once this work is completed and final agreements entered into, and would not be received until after the adoption of the 2018 10YP.

107. Council is at step 3 of a 5 step process. Step 4 is public consultation on HIF as part of 10-Year Plan consultation should Council resolve to submit a DBC to MBIE while Step 5 is actually signing up to the HIF loan funding agreement. Final execution of any funding agreements and loan documents would occur after 30 June 2018 when 10-Year Plan is approved.

Progressing the Delivery of the Peacocke HIF Projects

108. MBIE have agreed with Council staff that any works outlined in the DBC can commence immediately and be retrospectively funded under the HIF arrangements, if expenditure occurs prior to the funding agreements and loan documents being signed. This is important if Council wish to accelerate the delivery of the Peacocke cell and start advanced planning for the projects in 2017/18.
109. Once the draft 10-Year Plan has been determined, staff propose to report to Council in February 2018 on potential enabling or accelerating projects to manage the timing risks associated with the delivery of the Peacocke DBC. Candidate projects could include preparatory work for preliminary design of water, wastewater and transport projects, and land acquisition. Expenditure is unlikely to be significant, but will allow work to commence in February/March 2018 rather than from July 2018.

Conclusion

110. Considering and prioritising the costs to Council and the community associated with opening new growth cells and providing lead strategic infrastructure is a significant decision.
111. The submission of the HIF DBC for Peacocke does not bind Council to any future commitments, and irrespective of the HIF framework the challenge of funding growth related infrastructure remains. As a consequence there is merit in staying involved in the process until its conclusion and continue discussions with the government on new partnership models to fund growth infrastructure.
112. Ultimately, any decision made by Council will need to balance and evaluate the differing financial parameters associated with funding growth, with or without the HIF. That is, understanding that receiving a HIF allocation is a short term, interest free loan, to be repaid by Council, after a 10-year period where wider benefits for an investment into growth infrastructure accrue to Hamilton as a whole over a longer time scale.

Part 3 – Recent growth challenges and initiatives impacting Council

Introduction

113. Many New Zealand cities and regions have recently experienced accelerated rates of urban growth and house price rises.
114. This growth has put pressure on infrastructure delivery to ensure there is an adequate supply of serviced land to moderate the rate of house price inflation.
115. Addressing these issues has been a focus of central government policy initiatives since 2012. In summary, the range of policy interventions enacted by Central Government include:
- The Housing Accord and Special Housing Areas Act (allowing for the creation of Special Housing Areas);
 - Reforms to the Resource Management Act to streamline plan making and consenting functions;
 - Investigations by the Productivity Commission into how housing and urban development markets function to better understand the dynamics of housing affordability;

- The creation of the National Policy Statement on Urban Development Capacity to require Councils in high growth areas to always ensure there is enough feasible, zoned and serviced land for residential and employment uses;
 - The creation of the Housing Infrastructure Fund;
 - Investigating the formation of Urban Development Authorities.
116. Throughout these reforms, the local government sector has been in close dialogue with central government around infrastructure affordability and the extent to which the current regulatory frameworks assist in expediting growth.
117. The creation of the HIF is one policy initiative by Central Government that acknowledges it needs to do more to work in partnership with local government by assisting in the financing of growth infrastructure to accelerate housing delivery.

Why is funding infrastructure important?

118. One of the largest challenges facing local government is the timely funding and delivery of infrastructure needed to support urban development.
119. This challenge applies to Hamilton where we have zoned and structured planned most of the urban areas of the City, but under current 10YP settings, are unable to fund all of these areas to unlock their full growth potential.
120. The challenge of ensuring that an adequate land supply is maintained has been re-enforced by the release of the National Policy Statement on Urban Development Capacity (NPS-UDC) by Government requiring Council to ensure there is enough feasible, zoned and serviced land for residential and employment uses.
121. The NPS UDC is requiring Council to have a sufficient supply of development capacity to meet the demand in the short (1-3 years), medium (10-years) and long term (30-years).
122. A comprehensive report outlining Council's residential supply and related growth challenges under the new NPS UDC was tabled on [30 August 2016](#).
123. In that report it was outlined how Council has invested sufficiently in zoning and strategic infrastructure to enable developer ready land to be brought to the market in the short and medium term to meet the growth requirements for new dwellings.
124. For the short to medium term (10-year period) this means that the Hamilton Urban Area must have development capacity of 20% over the Statistics NZ medium projections to take account of the likelihood of higher than anticipated growth and that not all capacity will be developed in to sections.
125. The scale of the growth challenge has been comprehensively reported in the Growth proposal as part of the draft 10YP report that is being reported at the same meeting as this item. The HIF DBC is reflected in the Peacocke scenario 4 which is recommended as the preferred growth option for the draft 2018-28 10-Year Plan.
126. Council investment to date meant at the time of that report there was 4 years of greenfield development capacity remaining. Council has approved budget investments in the 2015-25 10-Year Plan to add a further 7 years of developer ready land in greenfield areas by 2025. Given the recent revision in growth projections, the remaining development capacity will be less than these numbers (in terms of years).
127. In addition, the August 2016 report found that there is also 16 years of developer ready land in infill areas (supported by the capital investments approved in the existing 2015-25 10-Year Plan).

128. Council has invested in the priority growth cells (Rototuna, Peacocke Stage 1, Rotokauri Stage 1 Industrial) taking a just in time investment approach to make efficient use of previous infrastructure investments. Further, Council has invested in land use (zoning) and infrastructure planning for the next priority growth cells (Rotokauri Stage 1 residential, Peacocke Stage 2) and worked with developers wishing to develop in advance of Councils infrastructure timing.
129. The demands of the NPS-UDC mean that significant lead strategic infrastructure funding decisions are likely to be required for Rotokauri stage 1 and Peacocke Stage 2 during the preparation of the draft 2018-28 10-Year Plan to ensure enough residential land can continue to be brought on line to accommodate anticipated future growth in Hamilton.
130. These funding decisions will need to be made, irrespective of whether or not Council participates in the HIF process.
131. Funding infrastructure to enable the development of future growth cells is a core business for Council.
132. Past funding decisions by previous Council administrations enabled the opening of and development of new growth cells across the City, including Rototuna, Western Heights and parts of Ruakura and Peacocke.
133. Accordingly, any future decision to fund undeveloped areas of Hamilton is consistent with the City building function and responsibilities that sit with Council.
134. The risks of not funding new growth cells that have been identified in the Hamilton Urban Growth Strategy, and structure planned and zoned through the Partly Operative District Plan, in a timely and strategic way, include:
 - potential increases in house prices through limited supply of dwellings to meet demand;
 - reduced economic growth resulting from a potential erosion of Hamilton's competitive advantages in the availability and affordability of residential land for dwellings;
 - the loss of control around the pace and scale of urban growth resulting from having to address unforeseen plan changes and any consequential litigation arising from these processes;
 - private developer provided infrastructure that does not provide capacity beyond that of the individual development, subsequently vested in Council and potentially costing more to the city in the longer term to operate and maintain.
 - Reliance on existing network capacity (both waters and transport) that without further investment will see a reduced level of service

Significance & Engagement Policy

Significance

135. Staff considered the following factors under the Significance and Engagement Policy:
136. The level of financial consequences of the application, the public interest in the impact of the application, and the non-binding nature of the application to the Housing Infrastructure Fund. Staff have assessed that the recommendations in this report have medium significance.

Engagement

137. The financial impacts of the Housing Infrastructure Fund and the impact on the delivery of infrastructure will be consulted on as part of the 2018-2028 10-Year Plan consultation from 29 March 2018 to 30 April 2018.

Attachments

Attachment 1 - Housing Infrastructure Fund - Summary

Attachment 2 - Housing Infrastructure Fund - Executive Summary

Attachment 3 - Housing Infrastructure Fund - Peacocke Detailed Business Case

Attachment 4 - Housing Infrastructure Fund - Peacocke Detailed Business Case Appendices (*Under Separate Cover*)

Attachment 5 - Growth Update to Council 4 July 2017 .

Hamilton - Peacocke

HOUSING INFRASTRUCTURE FUND PROPOSAL



\$308.4M

Total funding requested (incl inflation)



3750

New homes in Peacocke (10 years)



8400

New homes in Peacocke (30 years)



1

New bridge over the Waikato River



\$6B

Of benefits from the Peacocke development (30 Years)



\$70M

Saved in interest fees

What's the current situation?

Hamilton is experiencing very high growth and projections show the city is well on its way to having more than 200,000 people living there.

Hamilton needs enough land for an extra 12,500 homes by 2028 and 31,900 by 2038.

High growth, lack of available/serviced land and a challenging balance sheet make a unique and significant challenge for Hamilton.

This places a heavy burden on the city to fund the infrastructure (main roads, water, stormwater and wastewater pipes) needed.

Hamilton City Council's current infrastructure strategy does not support access to the amount of land needed. To meet the demand, a new greenfield area needs to be open soon to provide enough land for housing.

What's the proposal?

\$308.4M from the Housing Infrastructure Fund (10-year interest free loan) is being sought by Hamilton City Council for the development of the Peacocke greenfield residential area.

If Hamilton builds a new bridge over the Waikato River, new roads and installs main pipes – there will be land ready for developers to build homes.

Peacocke has the space needed, is close to the central city, and can provide broader transport benefits by working in conjunction with other projects including the Southern Links road network.

How will Hamilton deliver?

Hamilton City Council will deliver results by having the right governance in place, expertise working on the project and working closely with the Government, NZ Transport Agency and developers.



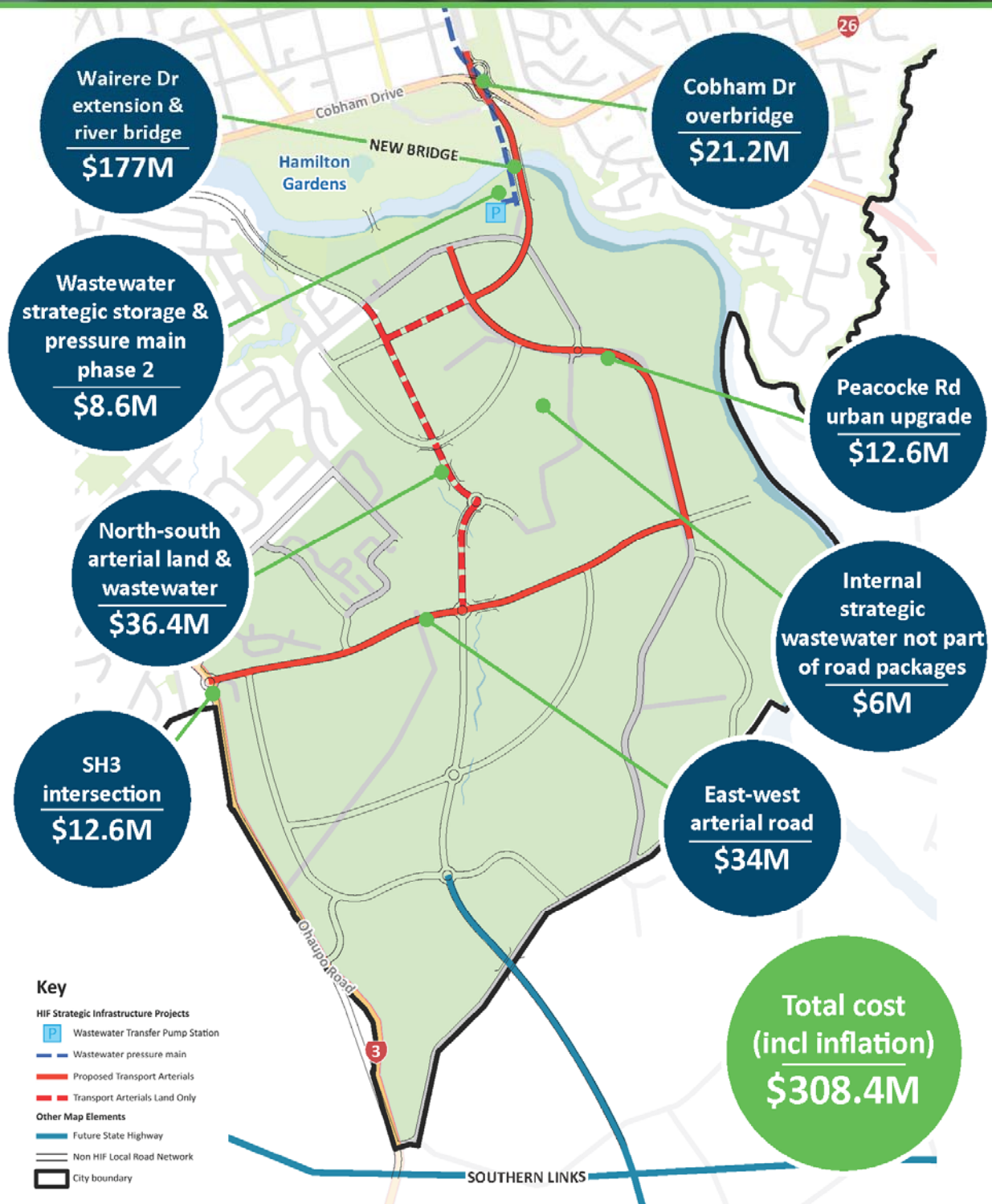
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Hamilton City Council
Te kaunihera o Kirikiriroa

Hamilton - Peacocke

HOUSING INFRASTRUCTURE FUND PROPOSAL



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2017133



Hamilton Peacocke Executive Summary

Housing Infrastructure Fund

Detailed Business Case - November 2017

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 **Hamilton City Council**
Te kaunihera o Kirikiriroa



Where are we now?

Hamilton has been experiencing very high growth, and projections show Hamilton is well on the way to being a city with more than 200,000 residents.

As the population grows so does the need for more homes, and land available to build new homes. In addition, the National Policy Statement on Urban Development Capacity (NPS-UDC) sets a requirement for the city to have additional land available for housing. This equates to Hamilton needing enough land for an extra 12,500 homes by 2028 and 31,900 by 2048.

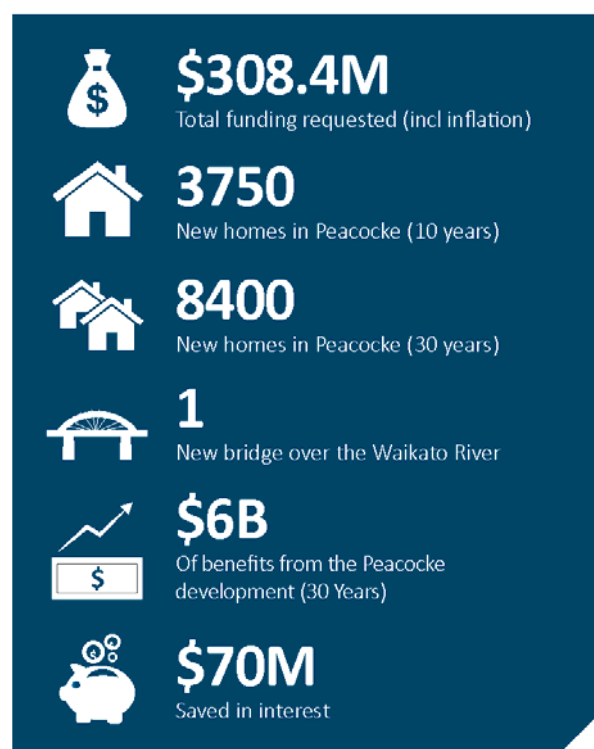
Hamilton City Council's current infrastructure strategy does not support access to the amount of land needed. To meet the demand, a new greenfield area needs to be opened soon to provide land for the next 30 years. This places a heavy burden on the city to fund the infrastructure needed (main roads, water, stormwater and wastewater pipes).

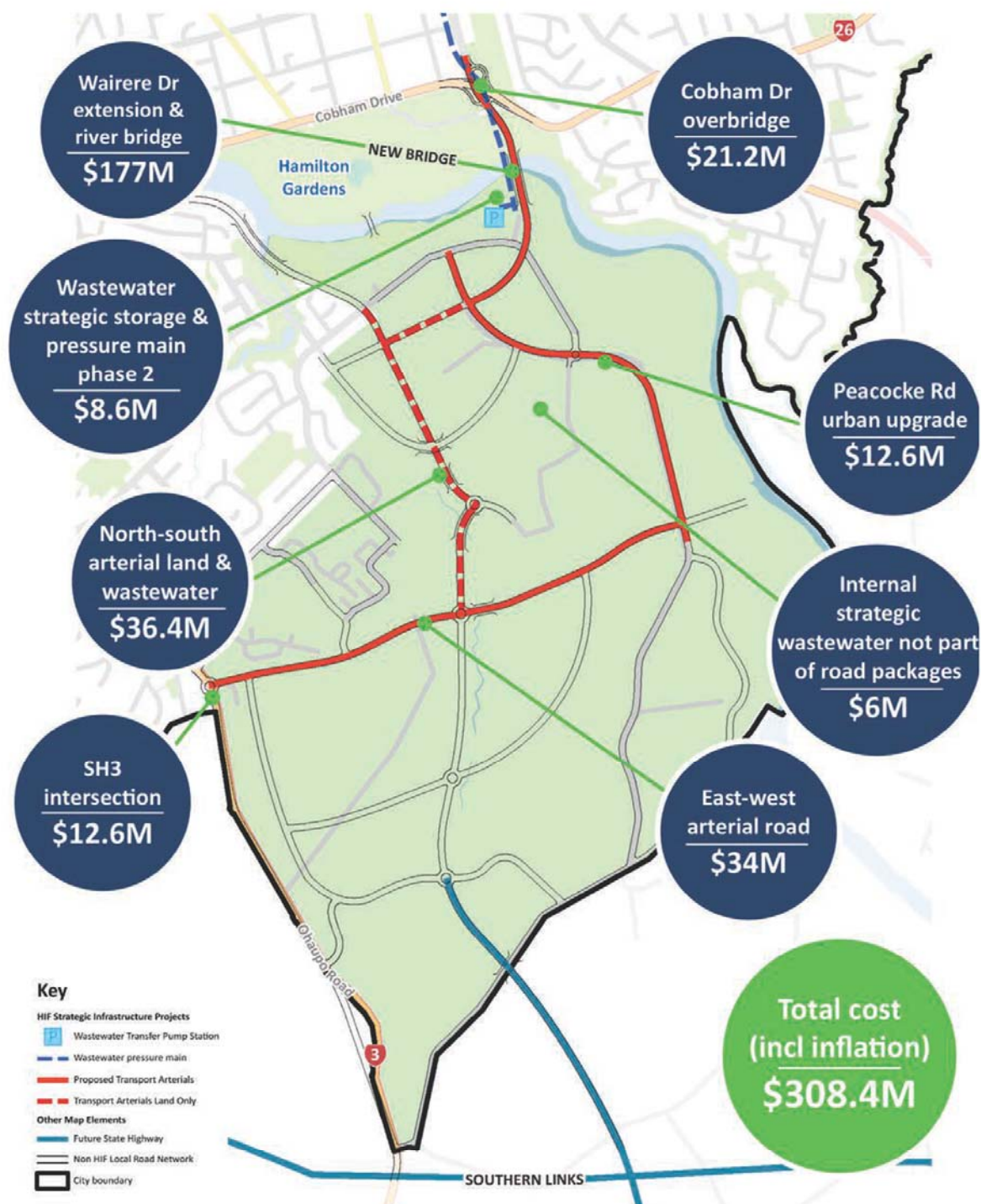
The Peacocke development

The best opportunity for Hamilton's future is to unlock the Peacocke development (south Hamilton) with the support of a Housing Infrastructure Fund (HIF). Hamilton City Council is requesting \$308.4 million from the HIF for the development of the Peacocke greenfield residential area. The \$308.4M of funding (\$189.1M of 10-year interest free loan and \$119.3M of NZ Transport Agency subsidy) will accelerate development timing and bring projects in the Council's 2018-2028 10-Year Plan (10YP) and 30-Year Infrastructure Strategy forward.

Within the 10 years of receiving the HIF funding, the accelerated development of 3750 homes will occur in Peacocke with a total of 8400 homes developed in the area across the next 30 years. The HIF funding will enable the Peacocke development to provide more than 30% of the additional demand needed over the next 10 years, and 25% over 30 years, while retaining a strong Council balance sheet. In contrast the status quo option, which focusses investment and development in Rotokauri, meets less than 21% of additional demand over 10 years and 18% over 30 years. Furthermore, the status quo option has limited capacity and will be critically insufficient to

meet the projected demand for land and housing over the 30 year horizon. The opportunity to apply for HIF funding during the same period as the 10YP has allowed the Council to robustly consider any eligible greenfield areas in the city that best align with the Government's vision, and provide the best results and is affordable for the Council and Hamiltonians. The option for Peacocke, outlined in the detailed business case, is the most suitable solution.





The Peacocke development can be, for most intents and purposes, described as 'ready to go'. It is part of the proposed 2018-2028 10YP, and the broader capital programme therein.

The bridge that is part of the Peacocke development further improves the returns on existing investments in Southern Links and adjacent transport networks. The Peacocke development assists Hamilton to further contribute to the sub-region with improved access to the south and west, along with associated community and business offerings.

The financials

The very high upfront costs of strategic infrastructure for a bridge across the Waikato River, arterial roads, wastewater, stormwater and water supply exceeds the funding capacity of the community and the Council, and constrains development. The Council's balance sheet is unable to commit to funding the infrastructure necessary to quickly open a sufficiently large growth cell given prudent debt-to-revenue constraints (230%), as well as LGFA (Local Government Funding Association) criteria.

Below are two tables with a breakdown of the \$308.4M requested

Table 1: Summary of HIF funding request

Funding Information (\$M)	
NZTA Funding Assistance	119.3
HIF Transport drawdowns	114.6
Total roading infrastructure	233.9
HIF Water drawdowns	74.5
Total water infrastructure	74.5
TOTAL FUNDING REQUESTED (incl inflation)	308.4

Table 2: Summary of costs and funding

	Cobham Drive overbridge	SH3 Intersection and East-West Arterial Stage 1b Section	East-West Arterial (Excluding SH3 Intersection and Stage 1B section)	North-south arterial land and North-South strategic wastewater and land	Peacocke Road Urban Upgrade	Wairere Drive extension and river bridge	Wastewater Strategic Storage and Pressure Main Phase 2	Internal Strategic Wastewater not part of road packages	Total Costs Post-inflation	Total Costs Uninflated 2017\$
Summary totals (\$M rounded)										
Transport Infrastructure	21.2	9.4	23.2	2.6	9.2	117.5	-	-	183.1	159.8
Wastewater Infrastructure	-	-	0.6	10.9	-	39.6	8.6	5.9	65.7	57.4
Water Infrastructure	-	0.9	2.7	-	1.2	1.7	-	-	6.5	5.7
Transport property	-	2.3	7.5	22.7	2.2	16.1	-	-	50.9	46.7
Wastewater property	-	-	-	0.2	-	2.1	-	0.0	2.3	2.2
Water property	-	-	-	-	-	-	-	-	-	-
Total Cost including inflation	21.2	12.6	34.0	36.4	12.6	177.0	8.6	6.0	308.4	-
Total Costs 2017\$ as in IBC (uninflated)	20.0	11.5	28.5	33.1	10.8	155.7	6.8	5.4		271.8
FUNDING										
NZTA Funding Assistance 51% rate	10.8	6.0	15.7	12.9	5.8	68.1	-	-	119.3	
HIF Transport Funding	10.4	5.8	15.1	12.4	5.6	65.5	-	-	114.6	
HIF Water and Waste Funding	-	0.9	3.2	11.1	1.2	43.4	8.6	6.0	74.5	
Total HIF Drawdown (Post-Inflation)	10.4	6.6	18.3	23.5	6.8	108.9	8.6	6.0	189.1	

Below is a summary table of the dwelling yield cost for the development of Peacocke and the status quo.

Table 3: Dwelling yield and cost

Dividend, yield and spend (Peacocke)	Unit	1 July 2018 to 30 June 2023 (5-year period)	1 July 2018 to 30 June 2028 (10-year LTP)	1 July 2018 to 30 June 2033 (30-year period)
No. of dwellings to be constructed	number	1,573	3,751	8,393
No. of lower cost dwellings to be constructed (incl. in above)	number	236	563	1,679
Projected demand (cumulative)	number	6,167	12,477	31,932
No. of dwellings/projected demand	%	25.5	30.1	26.3

Dividend, yield and spend (Status quo)	Unit	1 July 2018 to 30 June 2023 (5-year period)	1 July 2018 to 30 June 2028 (10-year LTP)	1 July 2018 to 30 June 2033 (30-year period)
No. of dwellings to be constructed	number	891	2,584	5,627
Projected demand (cumulative)	number	6,167	12,477	31,932
No. of dwellings/projected demand	%	14.4	20.7	17.6

The graph below illustrates the increase in gross debt and projected impact on the Council's debt-to-revenue ratios inclusive and exclusive of the HIF.

Table 4: Closing debt and debt-to-revenue ratio





Making the HIF affordable

The Council has had to make a number of compromises to achieve a debt-to-revenue level that doesn't breach the LFGA prudent limit of 230%, despite the benefit of the HIF funding (based on current modelling, with the capex schedule subject to approval).

These compromises include the growth capital expenditure programme being stripped of all non-essential expenditure. This includes significant funding increases through rates in year one of the new 10YP and subsequent yearly increases in excess of inflation. It is important to note a large portion of the year one rates increase is to satisfy all non-growth transport and community initiatives which are considered to be minimal spending for these areas.

The core assumptions needed to complete this business case, including rates increases, are subject to the draft 10YP being finalised for Council consideration and community feedback. Council are scheduled to meet from 6 December 2017 to discuss and agree on the draft 10YP, including underlying assumptions.

Key assumptions

- That the HIF transport projects receive the normal 51% NZ Transport Agency Funding Assistance Rate subsidy.
- Inflation adjustment factors are taken from SOLGM cost adjusters for Local Government Capital Expenditure, as prepared by BERL. These cost adjusters are expected nationwide average inflation rates for capital expenditure. In light of the concentration of near-term infrastructure investment and construction sector activity, it is clear that capital expenditure inflation rates in the upper North Island area will be higher than the nationwide average.
- Consequently, capital expenditure inflation in the Waikato area is considered to be double the nationwide average for the first three years, and thereafter reverts to the nationwide average.

IMPORTANT NOTE:

At the time this Detailed Business Case was submitted, the draft 10YP was still being developed.

Further information

Hamilton City Council

Housing Infrastructure Fund
Garden Place, Private Bag 3010, Hamilton

Phone: 07 838 6699

Email: info@hcc.govt.nz



hamilton.govt.nz/hif



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[@CouncilHamilton](https://twitter.com/CouncilHamilton)

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Governance and reporting arrangements

Hamilton City Council proposes to establish a Peacocke Housing Infrastructure Team, and the project management and governance structure will follow Hamilton City Council's standard practice. This approach has been successful when applied to large infrastructure projects, particularly those working with the NZ Transport Agency and advance funding.

Three levels of management will operate in the delivery of infrastructure in Peacocke. These levels broadly include governance, project management, and independent regulatory and peer review as noted:

- Level 1: Project management oversight, capability and experience including project steering and peer reviews
- Level 2: Project/programme governance particularly Council committees
- Level 3: Independent and objective assurance including third party oversight provided by the NZ Transport Agency, and external and internal audits to check the controls are working.

At a governance and steering group level, Hamilton City Council proposes to work in collaboration with the Ministry of Business, Innovation and Employment (MBIE) and the NZ Transport Agency.

The Peacocke Housing Infrastructure Team and associated work programme will have a project sponsor and various project managers. This team will prepare a detailed project plan that will set out the project roles and responsibilities for each major project, and use the PRINCE2 or PMI project management methodology or equivalent to do this. This project management structure will continue to the completion of project implementation and the programme review.

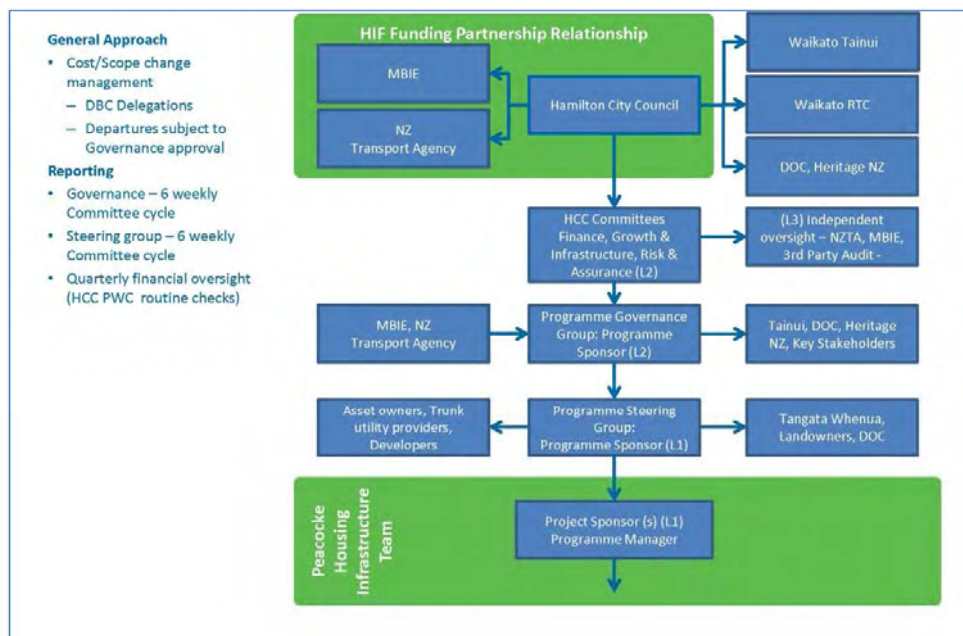


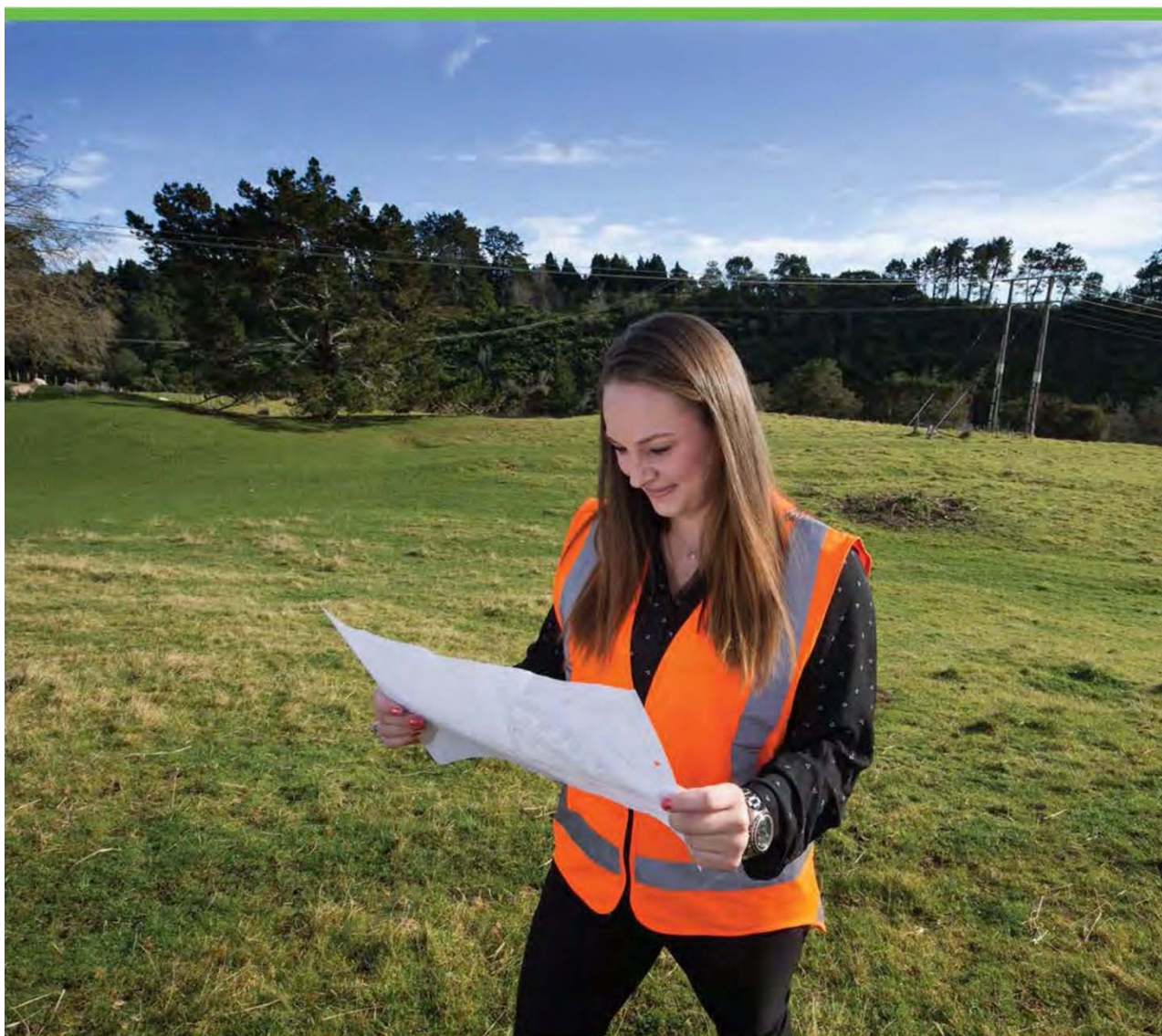
Figure 51 Project management structure

Hamilton - Peacocke

Detailed Business Case

Housing Infrastructure Fund

November 2017



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 **Hamilton City Council**
Te kaunihera o Kirikiriroa

Authors: Hamilton City Council

Executive Summary

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HIF Transport Funding	10.4	5.8	15.1	12.4	5.6	65.5	-	-	114.6	
HIF Water and Waste Funding	-	0.9	3.2	11.1	1.2	43.4	8.6	6.0	74.5	
Total HIF Drawdown (Post-Inflation)	10.4	6.6	18.3	23.5	6.8	108.9	8.6	6.0	189.1	

Below is a summary table of the dwelling yield cost for the development of Peacocke and the status quo.

Table 3 Dwelling yield and cost

Dividend, Yield and spend (Peacocke)	Unit	1 July 2018 to 30 Jun 2023	1 July 2018 to 30 Jun 2028	1 July 2018 to 30 Jun 2048
		5-year period	10-year (LTP)	30-year period
No. of dwellings to be constructed	number	1,573	3,751	8,393
No. of lower cost dwellings to be constructed (incl in above)	number	236	563	1,679
Project demand (cumulative)	number	6,167	12,477	31,932
No. of dwellings/projected demand	%	25.5	30.1	26.3

Dividend, Yield and spend (Status Quo)	Unit	1 July 2018 to 30 Jun 2023	1 July 2018 to 30 Jun 2028	1 July 2018 to 30 Jun 2048
		5-year period	10-year (LTP)	30-year period
No. of dwellings to be constructed	number	891	2,584	5,627
Project demand (cumulative)	number	6,167	12,477	31,932
No. of dwellings/projected demand	%	14.4	20.7	17.6

The graph below illustrates the increase in gross debt and projected impact on the Council's debt-to-revenue ratios inclusive and exclusive of the HIF.

Closing Debt and Debt to Revenue Ratio

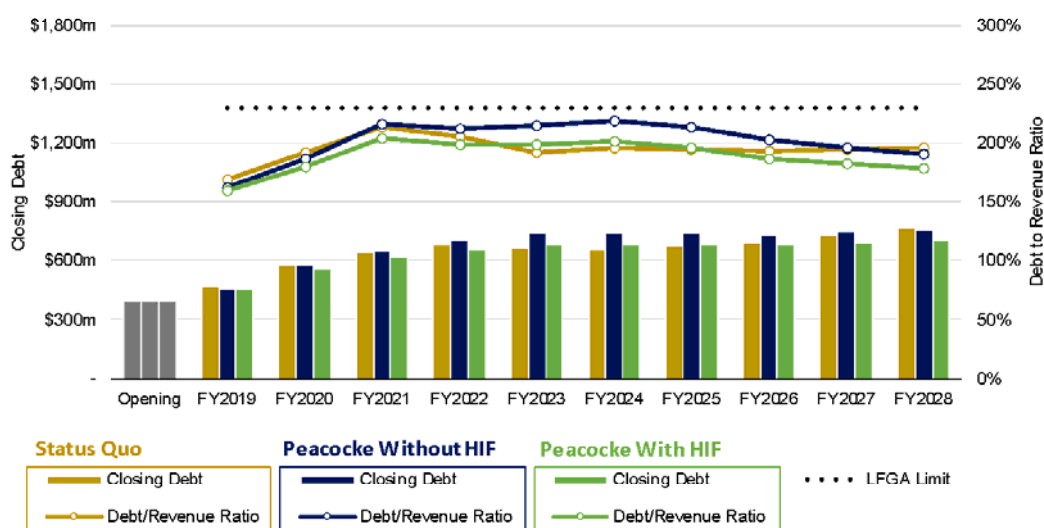


Figure 1 Closing Debt and Debt to Revenue Ratio

The Council has had to make a number of compromises to achieve a debt-to-revenue level that doesn't breach the LFGA prudent limit of 230%, despite the benefit of the HIF funding (based on current modelling, with the capex schedule subject to approval).

These compromises include the growth capital expenditure programme being stripped of all non-essential expenditure. This includes significant funding increases through rates in year one of the new 10YP and subsequent yearly increases in excess of inflation. It is important to note a large

portion of the year one rates increase is to satisfy all non-growth transport and community initiatives which are considered to be minimal spending for these areas.

The core assumptions needed to complete this business case, including rates increases, are subject to the draft 10YP being finalised for Council consideration and community feedback. Council are scheduled to meet from 6 December 2017 to discuss and agree on the draft 10YP, including underlying assumptions.

Key Assumptions

- That the HIF transport projects receive the normal 51% NZ Transport Agency Funding Assistance Rate subsidy.
- Inflation adjustment factors are taken from SOLGM cost adjustors for Local Government Capital Expenditure, as prepared by BERL. These cost adjustors are expected nationwide average inflation rates for capital expenditure. In light of the concentration of near-term infrastructure investment and construction sector activity, it is clear that capital expenditure inflation rates in the upper North Island area will be higher than the nationwide average. Consequently, capital expenditure inflation in the Waikato area is considered to be double the nationwide average for the first three years, and thereafter reverts to the nationwide average.

IMPORTANT NOTE: At the time this Detailed Business Case was submitted, the draft 10YP was still being developed.

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1. Introduction

Hamilton City Council is applying for funding of \$308.4 million from the Housing Infrastructure Fund (HIF).¹ This funding for strategic infrastructure will accelerate residential development in Peacocke, an area of approximately 747 hectares five kilometres south of the CBD. This funding is for the following new strategic infrastructure:

- A bridge at Wairere Drive/Cobham Drive, which is additional to the current advance fund agreement in the Southern Links network
- An extension of Wairere Drive to connect with the Hamilton Garden bridge which will go over the Waikato River to Peacocke
- An upgrade of the existing Peacocke Road from a rural to an urban road
- An intersection at SH3/Dixon Road and arterial roading to connect Peacocke Road to east-west arterial roads
- Land to build arterial north-south roading within Peacocke
- A transfer pump station and pressure main.

The opportunity to apply for funding from HIF over the same period as the 2018-2028 10 Year Plan (2018-28 10 Year Plan) allows the Council to bring forward the development of 3,750 dwellings in the Peacocke area over the course of this 10 Year Plan. These dwellings will meet 30% of the projected demand for housing in Hamilton City over this period. In addition, approximately 8,400 dwellings will be developed in the Peacocke area over the next 30 years.

Background

The economy of Hamilton City has grown strongly over the last 15 years. The Hamilton Plan is therefore the vision that Hamilton City Council has to maintain this momentum, to build a stronger economy, and to be a more attractive city for families. This plan outlines 10 priorities that indicate where Hamilton wants to be in 2025:

- Our books are balanced
- The third city economy in New Zealand
- Providing outstanding infrastructure
- Strongly connected to the river
- Best garden in the world
- An active, strong commercial central city with distinctive suburban villages
- An urban garden
- Access to affordable housing
- Celebrated for our arts and culture
- Waikato is the capital of high performance sport.

¹ \$271.8 million in constant 2017\$.

Strategic assessment – outlining the need for investment

The problems are:

- Hamilton City Council's current infrastructure investment strategy does not service or access enough residential land for the approximately 12,500 additional homes the City will need over the 2018-2028 10 Year Plan period; or the 31,900 homes the City will need over the 30-years to 2048.
- The very high upfront costs to the Council of strategic infrastructure for wastewater, stormwater, water supply, arterial roads, and bridges necessary to enable development exceeds the funding capacity of the Community and the Council and constrains development.

To meet some of the demand for dwellings caused by projected population growth, Hamilton City Council needs to bring forward the greenfield area of Peacocke. The Peacocke area is zoned residential, has designations in place for transport and utility corridors, and is ready to go.

The infrastructure needed to service development in Peacocke includes:

- Hamilton City Council strategic infrastructure
- Arterial roads, strategic water and wastewater external connections and internal networks
- Trunk utility service connections such as for power, gas and telecommunications
- Local and collector roads, generally incorporating the utility services noted above, as well as Hamilton City Council water and wastewater services.

Although some of the infrastructure is not part of the HIF, local infrastructure connections are required to service the development. These are mainly internal networks rather than the strategic external connections, and these will be necessary to access the development, and to achieve construction efficiencies and cost savings.

In addition, there is likely to be significant earthworks and infrastructure construction as part of subdivision development. This can provide opportunities for cost saving through scale or coordination.

The funding of \$308.4 million will service the following infrastructure:

- A bridge at Wairere Drive/Cobham Drive, which is additional to the current advance fund agreement in the Southern Links network
- An extension of Wairere Drive to connect with the Hamilton Garden bridge which will go over the Waikato River to Peacocke
- An upgrade of the existing Peacocke Road from a rural to an urban road
- An intersection at SH3/Dixon Road and arterial roading to connect Peacocke Road to east-west arterial roads
- Land to build arterial north-south roading within Peacocke
- A transfer pump station and pressure main.

This investment will meet the objectives of Hamilton City Council to:

- Be the third city economy in New Zealand by 2025
- Increase the amount of developer ready land to meet NPS-UDC requirements
- Support the provision of affordable housing

- Build a vibrant community that integrates with Hamilton
- Enable coordinated land use and strategic infrastructure
- Ensure financial sustainability for Hamilton City Council and the Community.

The primary risk of this investment is a fall in the demand for new dwellings due to population growth being lower than projected. While present, this risk remains mild as the accelerated development of Peacocke will at best provide 30% of the projected increase in the required dwellings over the 10 Year Plan horizon.

Consequently, even if population growth and household formation is significantly below that projected, it remains likely that there will be additional demand for new houses above and beyond that supplied by the Peacocke development. In addition, once an infrastructure project is committed it must be completed. This may mean that infrastructure is available prior to it being needed. However, growth moves in cycles and the infrastructure would then be available for the next growth cycle. Further, because the HIF funding is interest free for 10 years, the overall holding costs of building strategic infrastructure earlier than is needed is reduced.

The Economic Case found that there is a sound economic case for investment. The benefits of this investment are access to homes and a wide range of economic benefits from development and growth. Benefit-cost analysis also indicates this programme of works has a favourable benefit-cost outcome.

However, the market in which the projects are likely to be procured and delivered in Peacocke is likely to be constrained, and one where the construction industry resources are stretched for professional services and construction. This constraint on supply means that there is a risk of costs increasing and direct price competition being less likely to provide value for money.

Hamilton City Council has aligned its procurement strategy to the Five Principles for Government Procurement issued by MBIE. The associated procurement manual discusses in detail health and safety requirements, and the need to consider health and safety issues throughout the procurement process.

When a contract is subject to a New Zealand Transport Authority subsidy, the financial limits and procedures prescribed in the NZTA Procurement Manual will apply if the standards are higher than those set by Hamilton City Council.

Hamilton City Council has a number of Authorised Supplier arrangements for the supply of goods, services or works. These are arrangements that have been put in place for the supply of a category of goods, services or works for a period of time. These arrangements may also assist in providing funding certainty.

Advancing development in Peacocke has a high strategic fit with HCC, NZ Transport Agency and NZ Government objectives. Development of Peacocke is consistent with the Regional Policy Statement, sub-regional growth strategies and Hamilton's District Plan. The Peacocke area has an operative structure plan and a designation for arterial roads contributing to the Hamilton Southern Links network, recognised as regionally significant in the Regional Land Transport Plan.

Without the use of the HIF funding, the financial constraints on Council would potentially stymie or even stall the development of Hamilton. The consequences of such an outcome would be felt across the broader Waikato region and beyond.

However, any decision made by the Council will need to ultimately balance and evaluate the differing financial parameters associated with funding growth in Peacocke, with or without the HIF funding. As such, a final decision by Hamilton City Council to accept any or all HIF funding allocations can only be made as part of the wider 10 Year planning process, and after receiving and considering public submissions.

National, regional and local benefits of the investment to advance the development of 3,750 dwellings in Peacocke by around 10 years include direct and indirect economic benefits from infrastructure, housing development and expenditure, and intangible strategic benefits from compact growth close to Hamilton's city centre.

The development of Hamilton as a vibrant second-tier City attracting people and businesses is essential for the balanced development of the broader New Zealand economy. Hamilton plays a central role in the upper North Island as a strategic transport hub, as well as vital research centres and related business opportunities. Should Hamilton stumble in its growth aspirations, there would be ripple effects across the Region, as well as potentially heightened population and infrastructure pressures in other growth centres.

2. Revisiting the strategic case to develop Peacocke and deliver more houses faster

Hamilton City has been experiencing very high population growth, and this, along with the mandatory requirements under the National Policy Statement for Urban Development Capacity, places a heavy burden on the City to fund infrastructure to meet housing demand.

Population projections indicate that Hamilton is well on the way to being a city of 200,000 residents. The NIDEA household and population projection adopted by Hamilton City Council sees this mark being reached in 2034. Further, in line with the age profile of the population, a reduction in average household sizes sees even greater demand for new houses.

The City must open up another greenfield area within the next 10 years to meet this demand. In planning for the 2018-2028 10 Year Plan Hamilton City Council has therefore considered a number of scenarios and undertaken modelling to determine how best to meet this demand, and the financial implications of this growth. The opportunity to apply for funding from the Housing Infrastructure Fund over the same period has also allowed Council to consider greenfield areas that may be eligible for funding, and therefore more affordable for Council and Hamiltonians.

The 2018-28 10 Year Plan scenarios and modelling consider the staged development of Peacocke and Rotokauri over a 30 year period. All of the scenarios, despite assuming significant revenue increases through rates, present a significant funding challenge within the first 10 years and are beyond the Council's ability to fund. As such, Hamilton City Council has considered two scenarios where key capital projects are deferred to create more affordable options over the first 10 years.

The preferred option that emerged from this modelling is the development of Stages 1 and 2 of Peacocke, and capital expenditure only on projects that the Council must do. The development of other greenfield areas throughout the City would also be deferred outside of the 10 year period.

The benefits of the staged development of Peacocke include:

- The development of 3,750 dwellings over 10 years and approximately 8,400 over 30 years
- The ability to use the HIF funding to fund wastewater and transport infrastructure and the associated interest saving benefits of approximately \$70 million.
- The ability to apply for a Funding Assistance Rate (FAR) of 51% from the NZ Transport Agency for transport projects with Peacocke and that connect to the subdivision.
- The opening of the Southern Links Network, a regionally significant transport corridor.

However, there are significant financial risks associated with this option and the development of Peacocke needs to be subject to consultation with the community. This consultation will discuss the priority of advancing other capital projects in the 2018-28 10 Year Plan, including consulting on any consequential impact on debt and rates. This is critical as the size of the HIF funding sought by Council, and the scale of the change to the current 10 Year Plan, easily triggers the scale and significance tests for engagement under the Local Government Act.

Revisiting the case for change

The HIF funding of \$308.4 million sought by Hamilton City Council is a fundamental funding tool of the 2018-28 10 Year Plan. The HIF funding is interest free for 10 years and provides the Council with an opportunity to address two key problems that the City faces. These problems are:

- Hamilton City Council's current infrastructure investment strategy does not support access to enough residential land for the 12,500 homes the City will need by 2028, or the 31,900 homes needed by 2048.
- The very high upfront costs of strategic infrastructure for wastewater, stormwater, water supply, arterial roads and bridges exceeds the funding capacity of the Community and the Council, and constrains development.

Hamilton City Council cannot adopt a status quo approach in the 2018-28 10 Year Plan. There is a need for investment because:

- Hamilton's current investment plans will not meet the demands from faster than expected population growth.
- Without dealing with the gateway infrastructure challenges, ad-hoc and dispersed development is likely to take place around Hamilton City, compromising the efficiency of servicing and utilisation.

The indicative and detailed business cases that have been prepared by Hamilton City Council to apply for the HIF funding are key companion documents to the 2018-28 10 Year Plan. Together these documents present the case that the HIF funding should be used to build the strategic infrastructure required to open up a residential area five kilometres south of Hamilton's city centre. This area is called Peacocke.

Peacocke is a staged development. There are already 111 dwellings in the area known as Stage 2 of Peacocke. However, if the HIF funding is approved, there is the potential for 3,750 dwellings to be built in this area between 2018 and 2028, and an additional 4,650 dwellings to be built over the period to 2048. This means approximately 8,400 dwellings could be built in Peacocke over the next 30 years.

Population growth is a challenge and an opportunity

Population growth is a challenge and an opportunity for Hamilton City. Hamilton is the smallest metropolitan area by land area, and one of the smallest local government areas by land size in New Zealand. The Council therefore needs to manage population growth and associated greenfield residential developments because of boundary considerations.

This management has become particularly prudent in planning for the 2018-28 10 Year Plan. This is due to the high growth the City has been experiencing, and the mandatory requirements that have now been set under the National Policy Statement for Urban Development Capacity (NPS-UDC).

To date, Hamilton City Council has adopted a strategic approach to the spatial development and growth of Hamilton City. This approach is documented in the *Hamilton Urban Growth Strategy: A Compact and Sustainable City* and in the projections prepared by the National Institute of Demographic and Economic Analysis (NIDEA). The NIDEA household and population projections adopted by Hamilton City Council are used in infrastructure and long-term planning.

The latest projections indicate that the City must open up another greenfield residential area within the 10-year timeframe of the next 10 Year Plan to meet projected population growth. These projections indicate an additional 12,500 dwellings will be required in Hamilton City in the 10 years to 2028. The Council has therefore considered several areas for greenfield residential development as part of developing the 10 Year Plan 2018-28. These areas are Peacocke, Rotokauri, Rototuna, and Ruakura.

Peacocke and Rotokauri are greenfield areas while Rototuna and Ruakura are existing residential developments that have capacity for further housing. The opening up and further development of these areas is in line with the strategic approach to spatial development and growth of Hamilton City discussed in the *Hamilton Urban Growth Strategy*. The *Hamilton Urban Growth Strategy* also identifies the Hamilton CBD as a key area for infill housing and further residential density.

Hamilton City Council has used scenarios and modelling to determine which staged developments best meet the projected demand for residential dwellings in Hamilton over the next 10 and 30 year horizon. The scenarios and modelling also consider the financial implications of these developments on the debt capacity available to fund the strategic infrastructure required to meet this growth. These financial implications illustrate the significant funding challenges presented by the 10 Year Plan 2018-28.

These financial implications are important because of the core principles that all debt capacity is made available to fund growth-related infrastructure in Hamilton, and all community-based infrastructure and level of service improvements are funded by revenue in the form of rates increases. The funding implications are also important because the HIF funding is a funding tool of the 2018-28 10 Year Plan, but public submissions have not yet been received on this 10 Year Plan. This means Hamilton City Council is applying for the HIF funding, but a final decision to accept any or all of the HIF funding allocated to the Council will only be made after receiving and considering public submissions.

Growth scenarios and the 2018-2028 10 Year Plan

Hamilton City Council has modelled five growth scenarios over a 10 and 30-year time horizon as part of the 2018-28 10 Year Plan process.

All of these scenarios result in the staged development of Peacocke and Rotokauri within a 30 year period. The key differences are the number of dwellings delivered; the capital expenditure on strategic infrastructure; the timing of the staged developments; and the eligibility of strategic infrastructure projects to qualify for the HIF funding and/or a Funding Assistance Rate (FAR) from the NZ Transport Agency.

The first three scenarios, despite assuming significant revenue increases, present a significant funding challenge to Hamilton City Council over the next 10 years and are beyond the Council's funding ability. The fourth and fifth scenario defer key capital projects that are present in the first three scenarios until after 2028.

Table 4 Hamilton City Council 10 Year Plan 2018-28 growth scenarios

SCENARIO	DESCRIPTION	GROWTH SPEND	
		10 YRS	30 YRS
Develop Stage 1 and Stage 2 of Peacocke	Complete all of the lead infrastructure to open up the residential development of Peacocke. Delay residential development and investment in other greenfield areas throughout Hamilton City, and prioritise development in Peacocke over the development of Rotokauri. The areas of Rototuna and Ruakura continue to provide capacity for new dwellings, along with infill housing and the CBD.	\$1,189m	\$3,282m
Maintain the status quo with just in time development in Peacocke	Stage 1 of Rotokauri is developed ahead of Stage 2 of Peacocke, taking a just in time approach to delivering strategic infrastructure in Peacocke. Stage 1 of Peacocke, Rototuna and Ruakura continue to provide capacity for new dwellings, along with infill and the CBD.	\$1,151m	\$3,362m
Develop Stages 1 and 2 of Rotokauri, and delay Stage 2 of Peacocke	Develop Rotokauri Stages 1 and 2 over the next 10 years and delay Stage 2 of Peacocke until 2029. The areas of Rototuna and Ruakura continue to provide capacity for new dwellings, along with infill housing and the CBD.	\$965m	\$3,415m
Develop Stages 1 and 2 of Peacocke, with capital expenditure only on projects that the Council must do	More limited release of land in Stage 2 of Peacocke over the 10 year period. Other new greenfield developments are deferred outside of the 10 year period. Capital expenditure only on projects that the Council must do over the 10 year period. This scenario has the potential to deliver 3,750 dwellings over the 10 year period.	\$958m	\$2,849m
Stage 1 of Rotokauri brought forward	Stage 1 of Rotokauri is developed over the 10 year period. Other new greenfield developments are deferred outside of the 10 year period including Stage 2 of Rotokauri and Stage 2 of Peacocke. Limited infrastructure is provided for the beginning of Stage 2 of Peacocke in the 10 year period.	\$880m	\$3,430m

* All numbers include inflation

Two key differences between the bringing forward of developments in Peacocke and Rotokauri is that Peacocke is eligible for the HIF funding for strategic infrastructure, and more transport projects are eligible to be subsidised by a NZ Transport Agency FAR of 51%. This is because the strategic infrastructure required to open up Rotokauri is predominantly wastewater, stormwater, and water supply, while in Peacocke it is wastewater, arterial roads and road upgrades, and a bridge.

The strategic infrastructure eligible for the HIF funding in Peacocke includes a wastewater pump station and pressure main; a Waikato River crossing that will carry people, transport and services; and arterial roads that will join Peacocke with Southern Links, a major transport project in the Waikato. This infrastructure has the potential to meet the following investment objectives of Hamilton City Council:

- Support Hamilton to be the third city economy in New Zealand
- Increase the amount of developer ready land to meet NPS-UDC requirements
- Support the provision of affordable housing
- Build a vibrant community that integrates with Hamilton
- Enabled coordinated land use and strategic infrastructure
- Ensure financial sustainability for Hamilton City Council and the Community.

Peacocke aligns with existing plans, strategies and policy statements

Development of Peacocke is consistent with the Waikato Regional Policy Statement, sub-regional growth strategies and Hamilton's District Plan. The Peacocke area has an operative Structure Plan and designation for arterial roads to connect to the Hamilton Southern Links Network. This transport corridor is recognised as being regionally significant in the Regional Land Transport Plan.

These documents confirm that the development of Peacocke as a residential area has a high strategic fit with the objectives of Hamilton City Council. Advancing development in Peacocke also has a high strategic fit with NZ Transport Agency and New Zealand Government objectives.

As discussed earlier, Hamilton City Council has adopted a strategic approach to the spatial development and growth of Hamilton City. This approach is documented in the *Hamilton Urban Growth Strategy: A Compact and Sustainable City*. The *Hamilton Urban Growth Strategy* articulates areas suitable for accommodating future residential growth while ensuring that the social well-being of the community is enhanced and the local environment is protected. The *Hamilton Urban Growth Strategy* also identifies where to develop first, why and when; and what other land uses are required for business or industrial purposes.

Areas such as Peacocke, Rotokauri, Rototuna and the Hamilton CBD are identified in the *Hamilton Urban Growth Strategy*, along with a discussion on infill housing. The growth approaches from the *Hamilton Urban Growth Strategy* that are important to residential development in Peacocke are:

- Growth Approach 1: Over the next 10-20 years, approximately 50% of Hamilton's new dwellings will be increasingly provided through regeneration of existing parts of the City. It is recognised that this will not be appropriate for all areas. Therefore this regeneration will focus in and around key nodes including the CBD, transport hubs, suburban centres, and areas of high public amenity such as parks and the Waikato River.
- Growth Approach 2: The commitments to developing the remainder of Rototuna and Stage 1 of both Peacocke and Rotokauri remain. The development of Rototuna and Stage 1 of both Peacocke and Rotokauri will include greater choice in living environments, for instance, more compact type developments in key areas such as town centres, or around parks and open spaces.
- Growth Approach 3: To prioritise the residential growth area of Peacocke in the longer term.

Land use and transport

High population growth in Hamilton City is accelerating problems on the transport network. These problems can be seen in:

- Congestion, safety and conflict on State Highway 1 (SH1) between Hillcrest and Kahikatea Drive
- Congestion affecting freight to Hamilton's Western Corridor to and from the South, and the increasing use of urban state highways by freight traffic
- Capacity and safety alignment on State Highway 3 (SH3) and State Highway 21 (SH21)
- Access for growth in the Hamilton Airport business park areas.

The majority of traffic approaching Hamilton from the south travel along SH1 and SH3, and have a destination within Hamilton City. During peak periods, there are congestion issues when entering Hamilton City along these highways.

Access Hamilton: the transport strategy for Hamilton, the Regional Policy Statement, the Waikato Regional Land Transport Plan 2015-2045, and the Future Proof Strategy all recognise the need to align land use and infrastructure planning. Land use and transport integration is also reflected in the Peacocke Structure Plan.

Access Hamilton, the transport strategy for Hamilton, guides relevant land-use planning and the management, development and protection of the transport network necessary to support Hamilton's economic development, urban design and growth strategies. *Access Hamilton* identifies the Southern Links as a key transport project for Hamilton and the Waikato, and the Peacocke area as a key land use change.

This business case builds on the Network Action Plan contained within *Access Hamilton* and the outcomes it is delivering for Hamilton City. For this reason, the purpose of the Network Action Plan is listed below:

- Evaluates desirable land use and structure planning principles that minimise the need to travel and support a multi-modal transport system
- Identifies the key nodes and connections and expected movements, including rail, passenger transport, and national and regional road links
- Establishes a road hierarchy that identifies the strategic network (state highways and city roads), major and minor arterials, collectors and local access roads, and defines the role and treatment of each component of the road network
- Assesses the transport consequences of growth in line with integrated sub-regional and local growth strategies and identifies areas of concern
- Identifies a hierarchy of land use and transport interventions, activities and infrastructure necessary to sustain a network that supports an affordable, integrated, safe, responsive and sustainable transport system
- Provides an implementation framework for the prioritisation, coordination and implementation of activities.

The Regional Policy Statement (Section 6, Implementation Method 6.3.2) states that territorial authorities should, in association with Waikato Regional Council, the NZ Transport Agency and other infrastructure providers, ensure infrastructure planning and land use planning initiatives are aligned,

and should coordinate the provision of appropriate infrastructure and services for new development prior to development occurring.

The Waikato Regional Land Transport Plan 2015-2045 (Section 3, Policy 1) aims to ensure that the land transport system is developed and managed within the context of collaborative and integrated land use and transport planning at sub-regional, regional and wider spatial scales. Measure 2 in the *Waikato Regional Land Transport Plan* states that transport partners are to implement integrated land use and transport measures as directed by the *Regional Policy Statement*.

The planned development of Peacocke is consistent with the *Regional Policy Statement* and the *Waikato Regional Land Transport Plan 2015-2045*. This consistency is also evident in the number of projects within this area that can qualify for a FAR. These projects are discussed below.

The Southern Growth Corridor

The Southern Growth Corridor is one of four growth corridors recognised in the *Future Proof Growth Strategy*. These growth corridors have been identified to assist with infrastructure and land use planning, and form part of a wider sub-regional settlement pattern. The Southern Growth Corridor is made up of six areas connected by State Highways 3 and 21. These areas have different land uses and infrastructure needs and include Peacocke.

Hamilton City Council and the NZ Transport Agency are working in collaboration as joint clients in the Southern Growth Corridor to better understand and manage land use and strategic infrastructure. This collaboration has resulted in a *Strategic Land Use and Infrastructure Plan*, and a Memorandum of Understanding that outlines agreed outcomes and actions.

In developing the *Strategic Land Use and Infrastructure Plan*, key land use and infrastructure challenges were identified for each area within the Southern Growth Corridor. Key findings in the form of options, approaches and solutions were also identified. The challenges and findings were identified through a series of workshops with relevant parties, subsequent feedback and supporting documents.

The *Strategic Land Use and Infrastructure Plan* found a key challenge of the Waikato transport network is increasing traffic volumes on SH3 and SH21. The proposed solution was to regularly monitor land use uptake rates, rural-residential and rural development, and traffic growth and safety performance within the Southern Growth Corridor ahead of delivery of the full Southern Links Network.

This monitoring is because journey travel time and reliability, and safety are priorities for both SH3 and SH21. SH3 is a regional road that runs from Hamilton City and connects the Waikato with the Taranaki region. SH21 is an arterial road that provides a key link between SH1 and SH3, and access to Hamilton Airport. Both highways have been identified by KiwiRAP (the New Zealand Road Assessment Programme) as having medium to high collective risk that may be exacerbated as a result of growth in the area.

The Hamilton section of the Waikato Expressway will also impact on SH21. Vehicle numbers on SH21 are expected to increase, and traffic flows will change, post the completion of this section of the Expressway.

The Southern Links Transportation Network

When constructed the Southern Links Transportation Network will reduce congestion within the greater Southern Hamilton area, improve safety on SH1 and SH3 in the Hillcrest and Melville suburbs

of Hamilton, improve freight flows, and be a key part of Hamilton City's urban arterial network. It will also complement the Waikato Expressway by providing the main southern access linking Hamilton.² The project has been developed with the projected growth in the Peacocke, Ruakura, Tamahere and Hamilton Airport areas in mind.

Southern Links is considered by the NZ Transport Agency and Hamilton City Council as the optimum long-term solution to accommodate growth and manage existing traffic issues in the corridor. It is a joint NZ Transport Agency and Hamilton City Council initiative. This project involves the construction of 21 kilometres of state highway, three new bridges and 11 kilometres of urban arterial roads within Peacocke.

The transport components of Peacocke are significant elements of the Southern Links Transportation Network. These include the bridge over the Waikato River and the associated arterial roads that come off the bridge and go through to the east-west arterial road. This links SH3 to the middle of Peacocke near a proposed suburban centre.

The preferred option going forward

Overall, the modelling undertaken by Hamilton City Council as part of planning for the 10 Year Plan 2018-28 indicates that the staged development of Peacocke, with capital expenditure only on projects that the Council must do, best meets the business needs of Hamilton City Council. These business needs are focused on resident population growth, economic growth, and the coordinated management of land and strategic infrastructure that ensures a resilient, long-term settlement pattern for Hamilton City.

The staged development of Peacocke delivers 3,750 dwellings in the 10 years to 2028 and an additional 4,650 dwellings over the period to 2048. This means approximately 8,400 dwellings could be built in Peacocke over the next 30 years. This development will deliver almost a third of Hamilton's medium-term housing needs over the next 10 years. In the long-term, Peacocke will deliver almost 26% of Hamilton's housing needs, with economic benefits totalling over \$6 billion in present value terms. As discussed in the Economic Case, a proportion of these dwellings are expected to be at a lower cost, and there is a sound economic case for investment in the staged development of Peacocke.

In addition, the HIF funding to develop strategic infrastructure to open up Peacocke provides a financial benefit to Hamilton City Council of \$70 million through interest savings. However, despite this funding, significant rate increases will be required for Hamilton City Council to operate within the prudent LGFA debt to revenue limit of 230%. Consultation with the community is essential before Hamilton City Council advances the development of Peacocke and the associated rate increases, and accepts any or all of the HIF funding allocation.

² The Southern Links project allows for a future connection to, but it is not part of, the Waikato Expressway project. The Waikato Expressway is a four-lane highway from the Bombay Hills to south of Cambridge. The Expressway project aims to improve safety and reliability, and reduce travel times and congestion on SH1.



Figure 2 – Dwelling yield by area, Hamilton City

3. An assessment of the infrastructure required to develop Peacocke

Citywide strategic planning of infrastructure to deliver water, wastewater and transport is the foundation from which to deliver more houses in Peacocke.

There is no need to consider strategic alternatives or options for water. Hamilton City Council has recently increased potable water storage and distribution capacity in the south of the City. This is in accordance with Hamilton City Council's potable water master plan, which is matched to projected population growth. Water is a pressure system, and there is capacity in this system, so the distribution network can be extended as needed.

There can be no significant development in Peacocke without wastewater capacity. Earlier investigations for Peacocke and the Waipa area around the Hamilton Airport considered alternative treatment plant arrangements. However, the only treatment plant alternative that meets the Peacocke programme is the existing treatment plant at Pukete. This requires storage and a pump station in Peacocke, with a pressure main to connect to the existing eastern interceptor near Crosby Road. The topography within Peacocke means that a combination of gravity collection and pumped systems is needed. Further refinement of the options will continue in the detailed design stage, as the timing and location of development becomes more certain.

The transport infrastructure is based on the Hamilton Southern Links Network. The Hamilton Southern Links infrastructure is designated and accepted as at pre-implementation so the alignments are fixed. Alternative modes have been considered in the *Access Hamilton Strategy 2010- 2040*, and in the *2017 Access Hamilton Programme*. Walking, cycling and passenger transport infrastructure is allowed for in the designation. The options relate to which Southern Links corridor best connects Peacocke to the rest of Hamilton, and the bridge design and intersection options. There is some scope to accept short-term transport congestion in the early stages of the development.

The wastewater and transport options have been assessed against a set of criteria, including how readily these options can deliver more houses within 10 years. The best solutions for the wastewater and transport options were then combined to provide the preferred option for implementation. The main factors in selecting the preferred option are:


- The Southern Links Network corridors are designated and the river crossings consented
- A wastewater connection across the Waikato River is needed
- The Hamilton Gardens Bridge can carry the wastewater connection, and link to the Hamilton Ring Road
- The alternative transport link to Cobham Drive connects to Hamilton's most congested network sections, and does not help the wastewater problem.

Alternatives and options analysed

The infrastructure required to enable development in Peacocke has been assessed and considered as part of Hamilton's wider infrastructure planning. This includes citywide strategic planning for water, wastewater, stormwater and transport. This planning is set out in a range of strategic investigations and master planning documents. These mainly precede this business case but have been part of the 10 Year Plan process and 30 year Infrastructure Strategy for a number of years.

Previous investigations

A significant amount of investigation into transport infrastructure in Peacocke was completed as part of the investigation phase of the Southern Links project. Wastewater investigations commenced with a joint study with Waipa District Council and Waikato District Council, termed the Southern Area Wastewater Study. The development of options from these earlier investigations, was confirmed through the Peacocke IBC process and assessed further as part of this Detailed Business Case (DBC). This series of steps is summarised below:



Phase	Wastewater	Transport
Previous investigations	<ul style="list-style-type: none"> Southern Area Wastewater Study 	<ul style="list-style-type: none"> Southern Links ACRE (Area, Corridor, Route, Easement)
IBC	<ul style="list-style-type: none"> Southern Area Wastewater Study MWH Supplementary Opus detailed design MWH Supplementary 	<ul style="list-style-type: none"> Southern Links SAR IBC long-list check
DBC	<ul style="list-style-type: none"> IBC outcome Stakeholder assessment 	<ul style="list-style-type: none"> IBC outcome Stakeholder assessment
	<p style="text-align: center;">Preferred Option – Hamilton Gardens Bridge, wastewater pump station and pressure main</p>	
Implementation decisions	<ul style="list-style-type: none"> pipe/storage optimisation pump station location (subject to developer master planning) 	<ul style="list-style-type: none"> form selection junction intersections

Figure 3 Previous investigations and progression to DBC

Indicative Business Case options

The Peacocke IBC considered previous investigations, developed a long-list of alternatives, evaluated these according to a set of criteria, and provided a short-list of infrastructure and recommended a preferred way forward. The short-list of infrastructure and associated key activities in Peacocke, as discussed in the IBC, are shown in the figure below. IBC Alternatives and Options Summary Tables are included in the appendix.

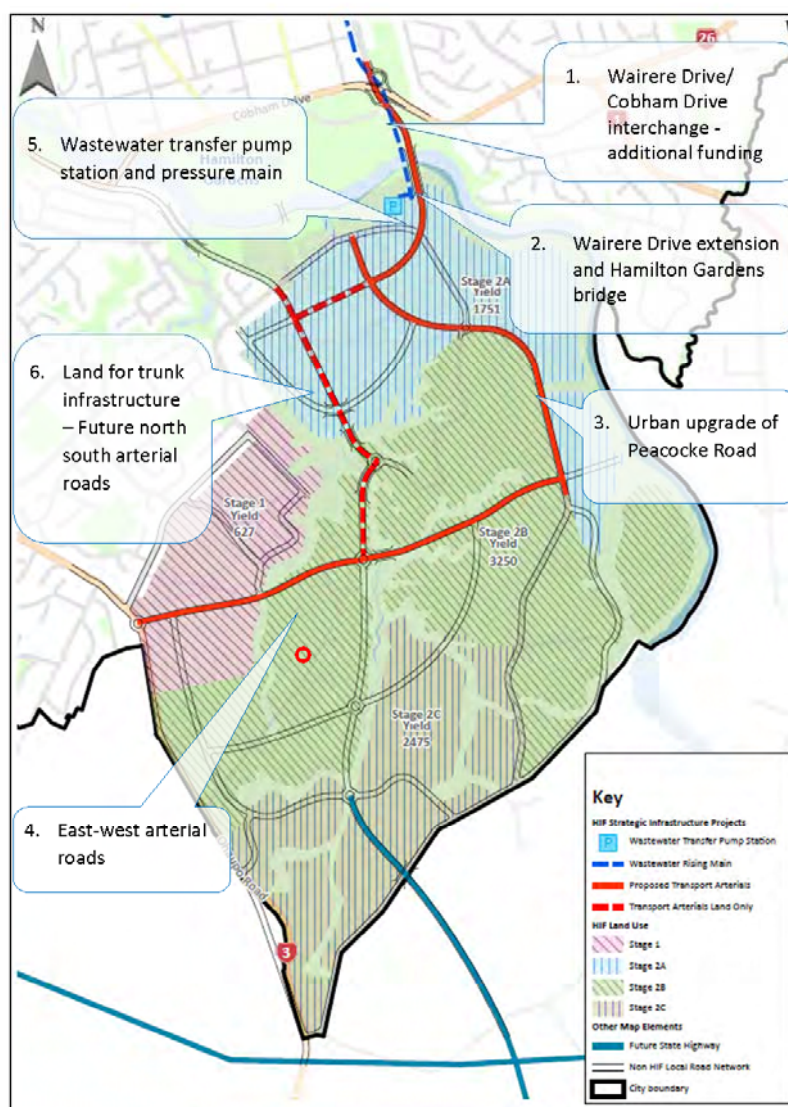


Figure 4 Peacocke infrastructure, including utility and arterial transport network

As noted in the Peacocke IBC, two major gateway projects are part of the preferred way forward. These are the bridge over the Waikato River and associated new transport link, and the proposed wastewater transfer pump station and pressure main. This DBC has assessed and refined the options developed from the IBC to confirm a preferred combined option for water, wastewater and transport for implementation.

This information was used in the 10 Year Plan 2018-28 scenarios and modelling to determine whether a staged development of Peacocke or Rotokauri was the best option for the Council to put forward. As discussed in the strategic case, the staged development of Peacocke is the preferred option and the following analysis focuses on what the preferred options are in regards to strategic infrastructure to enable development in Peacocke, and deliver more houses faster.

Table 5 Description of DBC options for wastewater

OPTION	DESCRIPTION
<ul style="list-style-type: none"> Do nothing 	<ul style="list-style-type: none"> N/A
<ul style="list-style-type: none"> Full capacity, bridge, no Cambridge option 	<ul style="list-style-type: none"> Construct all infrastructure required to accommodate the needs of all planned housing, without any wastewater links to Cambridge
<ul style="list-style-type: none"> Full capacity, bridge, Future Proof Cambridge options 	<ul style="list-style-type: none"> Construct all infrastructure required to accommodate the needs of all planned housing, allowing for future wastewater connections to Cambridge
<ul style="list-style-type: none"> Stage 1 capacity initially, bridge 	<ul style="list-style-type: none"> Construct infrastructure required to meet the needs of Stage 1 housing development in Peacocke
<ul style="list-style-type: none"> Developer led interim solution(s), full capacity later 	<ul style="list-style-type: none"> Require developers to independently provide wastewater solutions for each area / stage of development, then connect to permanent infrastructure later

DBC Transport Options

The outcome of the IBC process was a recommendation that the solution for transport infrastructure was consistent with the staging plans for Southern Links. This solution should comprise:

- Grade separation of the planned Hamilton Ring Road Cambridge to Cobham Drive intersection (incremental Peacocke cost)
- A four lane regional arterial link across the Hamilton Gardens Bridge
- Internal road and footpath/cycleway connections and intersections consistent with the Peacocke Structure Plan. This includes an urban upgrade of Peacocke Road, arterial roads east-west in Peacocke, and a roundabout at the intersection of SH3 with Ohaupo Road.



Figure 6 DBC options for transport

The table below describes the options for transport infrastructure that have been evaluated in this DBC.

Table 6 Description of DBC options for transport

OPTION	DESCRIPTION
• Do nothing	• N/A
• Hamilton Gardens Bridge four lane, and Structure Plan intersections	• Construct a new four lane bridge by the Hamilton Gardens. Intersections consistent with the existing Structure Plans
• Hamilton Gardens Bridge four lane, and alternative intersection options	• Construct a new four lane bridge by the Hamilton Gardens. Consider alternative locations for intersections

Multi criteria assessment

The Peacocke IBC evaluated alternatives and options using a list of success criteria. The success criteria have been reviewed following feedback on the Peacocke IBC, and refined in discussion with stakeholders in order to more effectively guide the assessment of options and the selection of a preferred option that focusses on the objectives.

Table 7 Investment objectives and key performance indicators

INVESTMENT OBJECTIVE	REF TO IBC CRITERIA	KEY PERFORMANCE INDICATORS
Support Hamilton to be the third city economy in New Zealand by 2025	(1, 5)	Contribution to economic growth as a result of development Measured as capacity for dwellings
Increase the amount of developer ready land to meet NPS-UDC requirements	(2, 3)	Amount of developer ready land Measured as capacity for dwellings
Support provision of affordable housing	(4, 8)	Develop land consistent with Structure Plan Measured as size of land area and more households per hectare around nodes
Build a 'vibrant' community that integrates with Hamilton	(1, 4, 5, 9)	Develop land consistent with Structure Plan Measured as transport infrastructure that supports all modes
Enable coordinated land use and strategic infrastructure	(5, 6, 7, 10)	Completion of strategic infrastructure in time to support development while maintaining minimum levels of customer service (water supply, wastewater connections, reliable transport performance) Measured as Levels of Service (LoS)
Ensure financial sustainability for Council and Community	(6, 8, 9, 10)	Whole of Life Cost compared to IBC estimates Measured as Benefit Cost ratio

In the early stages of the development, compromises can be made. For example, Stage 1 of Peacocke near Dixon Road can use the transport capacity that Dixon Road provides, and the existing wastewater capacity on the western interceptor. The SH3/east-west link roundabout resolves the local transport constraint for the south-western side of Peacocke, but the existing Bader Street connection is not adequate. An additional transport connection will be needed to meet the demand from Peacocke. In addition, there is only enough wastewater capacity in Hamilton's western

wastewater collection system for 350 new households. An alternative wastewater connection will be needed to support development beyond 350 lots.

Providing the transport, water and wastewater connections allows development to take place. If Hamilton City Council has certainty that full connections will be in place within a short timeframe, there could be opportunities to accept short-term increases in risk or reduced levels of service such as transport delays, or water supplies that do not “loop”. When the infrastructure is in place, actions common to all options, such as development agreements, will encourage subdivision and building, and the resulting benefits.

The relative performance of the options relates to:

- How many dwellings can be built:
 - This determines the economic benefits and the extent to which the NPS-UDC requirements can be met within the necessary timeframes.
- Whether the proposed infrastructure matches the layout in the Peacocke Structure Plan:
 - The opportunities for affordable housing and the extent to which the infrastructure proposal (transport in particular) integrates and supports a vibrant community.
 - The accommodation of all modes of transport and the extent to which this infrastructure supports integration and community connectivity.
 - The consequences of departure from the designations in the Southern Links Network and the potential delays to constructing infrastructure, due to alterations and the need to obtain consents, and the potential compromise to the outcomes of the Peacocke Structure Plan.
- The estimated whole of life costs:
 - These, in conjunction with benefits, determine the benefit cost ratio
 - Costs in combination with higher rates revenue influences whether the proposal is likely to remain within Hamilton’s debt to revenue ratio targets.

Multi-criteria assessment of the options assists in the selection of the final preferred option for implementation. The approach that is preferred by the NZ Transport Agency³ and the assessment is included in Appendix A. The criteria, weightings and considerations are presented in Table 8 below.

³ <https://www.nzta.govt.nz/about-us/consultations/multi-criteria-analysis-for-transport-business-cases-guidance/>

Table 8 Assessment Criteria and Weightings

CRITERIA	WEIGHTING	BASIS OF ASSESSMENT	RATING
Objectives (33.3% overall)			
Economic contribution	16.7%	Proportion of total quantifiable benefits available (number of houses)	100% of benefits = 3 0% of benefits = 0
Serviced land meets NPS-UDC requirements at minimum levels of customer service	16.7%	3,750 dwellings in 10 years 8,400 dwellings in 30 years	100% dwellings in time = 3 0% of dwellings = 0
Support affordable housing	16.7%	Consistency with Structure Plan Minor changes/consents Full Structure Plan review	Consistent = 3 Minor change/ alteration = 0, Inconsistent/ designation = -3
Build a vibrant community integrated with Hamilton City	16.7%	Consistency with Structure Plan Connections (all modes) to rest of city	Consistent = 3 Minor change/alteration = 0 New designations = -3
Coordinated land use and strategic infrastructure	16.7%	Consistency with trunk infrastructure and strategic plans	Consistent with Structure Plan, Access Hamilton and Master Plans = 3 Contrary = -3
Financial sustainability for Council and Community	16.7%	Whole of life cost Benefit cost ratio	Costs = IBC or less = 0 to 3 Higher costs = -3
Implementability (33.3% overall)			
Technical	16.7%	Certainty/confidence in solution	Established techniques = 3 High risk of failure = -3
Consents	16.7%	Consents needed/ risks/ time	No extra consents needed = 3 Major designations = -3
Safety and design	16.7%	Certainty/confidence in solution	Established techniques = 3 High risk of failure = -3
Affordability - Operational/ Maintenance	16.7%	Operational costs	Costs = IBC or less = 0 to 3 Higher costs = -3
Affordability - Financial	16.7%	Implementation costs	Costs = IBC or less = 0 to 3 Higher costs = -3
Stakeholders, Customers	16.7%	Tangata whenua, developers, 10 YP support	As for Structure Plan
Assessment of Effects (33.3% overall)			
Safety	11%	Relief of traffic from less suitable routes. E.g. Link west (SH3) across river to east, relieves SH3 and Cobham access to CBD	River crossing = 3 No connections = -3
Cultural	11%	Water impact, river impact, cultural recognition	High risk to river or sensitive sites = -3 Enhance = 3
Built environment	11%	Impacts beyond consented, e.g. Southern Links	Significant adverse impacts relative to Southern Links = -3
Natural environment	11%	Impacts beyond consented, e.g. Southern Links	Significant adverse impacts relative to Southern Links = -3
Community - social	11%	Access to jobs, services, shops, etc.	As for Structure Plan
Community - health	11%	Risks/opportunities for impacts	As for Structure Plan
Community - property	11%	Impacts, risks, Māori land, other infrastructure	As for Structure Plan
System integration	11%	Environmental screen, waters and transport needs met	Consistent with Master Plan = 3
Economics	11%	Support economic growth, enhance potential of land	Full capacity consistent with Structure Plan = 3 Adverse impacts, e.g. congestion at Cobham Drive = -3

Short listed options

The evaluation is included in Appendix A. The evaluation considered wastewater and transport options separately, and the preferred solutions from each fed into the preferred option.

A comprehensive list of the IBC options and how they developed into the DBC short-list is provided in the Appendix A and illustrated in the figure below.

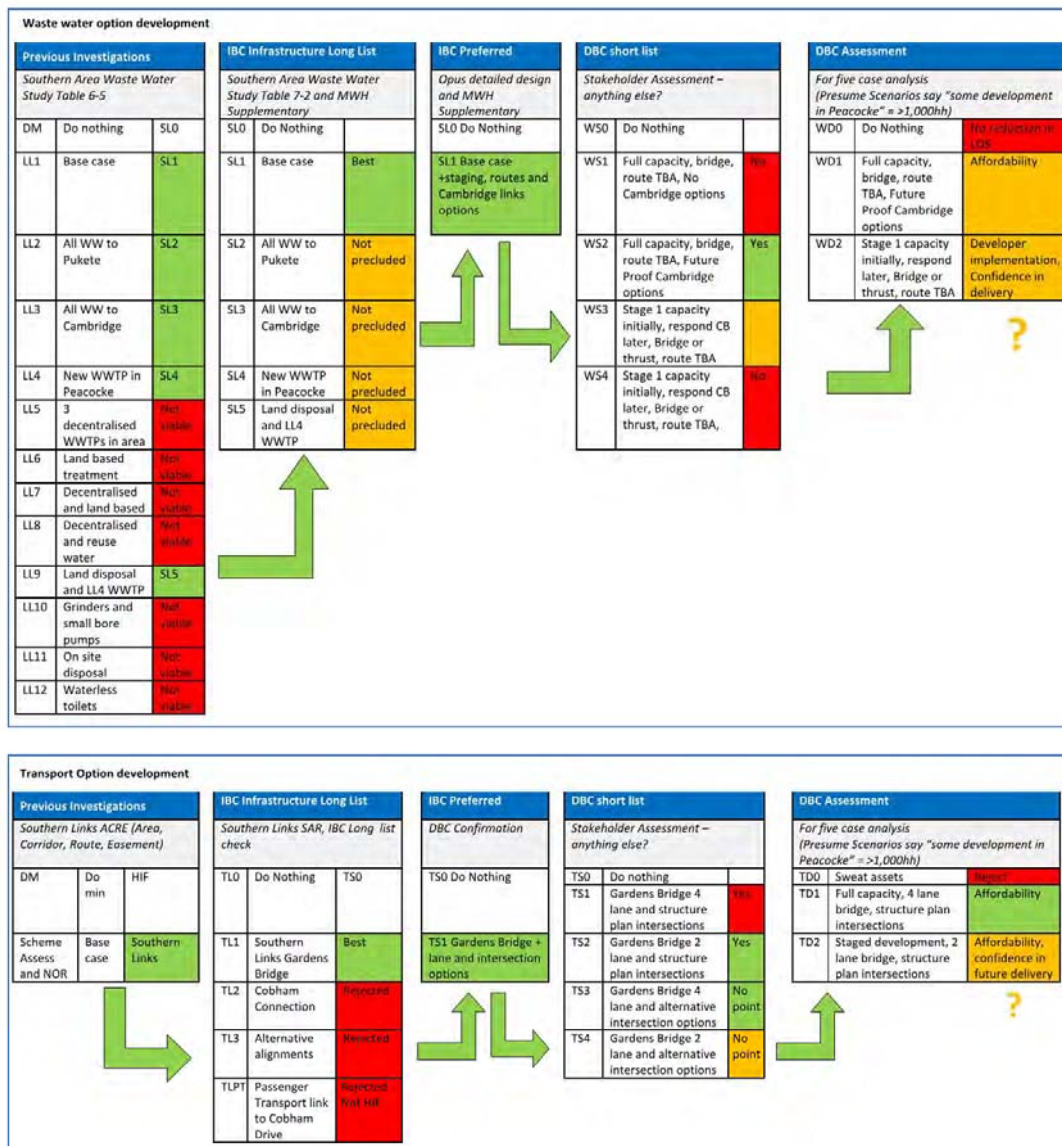


Figure 7 Development of DBC short-list

Figure 8 and Figure 9 show the evaluation summary tables.

WASTEWATER OPTIONS

Assessment Area	Criteria	Weighting % of Area	Considerations	Ratings	Reason for Rating	Alternative and Ratings	Reason for Rating	Alternative and Ratings	Reason for Rating	Alternative and Ratings	Reason for Rating	Alternative and Ratings	Reason for Rating
					S1.1: Base Case – Peacocke to HCC Pukekohe Treatment Plant, Airport and Cambridge to upgraded Cambridge Wastewater Treatment Plant.		S1.2: All Peacocke, Airport and Cambridge wastewater conveyed to HCC Pukekohe Treatment Plant, two alternative routes and lining have been identified and investigated, coded as S1.2A1, S1.2A2 and S1.2B.		S1.3: All Peacocke, Airport and Cambridge wastewater conveyed to upgraded Cambridge WWTP.		S1.4: All Peacocke, Airport and Cambridge wastewater conveyed to a new WWTP in Mystery Creek / Peacocke area with discharge to the Waikato River, 2 alternative discharge routes have been identified, upstream and downstream of the HCC Water Supply Intake, denoted A upstream and B downstream.		Preferred option – Combination of S1.1 and S1.2 – Pump station and pressure systems designed with manholes and land a to allow for future Cambridge connections if required in future.
					\$100 – 110M Cap, \$5-6M Opex/year		\$110 – 130M Cap, \$5-7M Opex/year (\$1.1 plus \$20M)		\$90 – 110M Cap, \$6-8M Opex/year (\$1.1 plus \$28M)		\$100 – 125M Cap, \$7-9M Opex/year (\$1.1 plus \$20M)		\$100 – 110M Cap, \$5-6M Opex/year
Investment Objectives 33.3% of total overall	Economic contribution	10.7%	Proportion of total quantifiable benefits available	3	All benefits available	3	As it can be delivered in time – risk of lower	-1	Benefits delayed	-2	Benefits delayed	3	All benefits available
	Serviced land meets NPS-LDC targets	10.7%	3,153 dwellings in 10 years 3,103 dwellings in 30 years At least desirable Customer Levels of Service	3	Full development capacity available from start	1	Full development capacity available from start as long as agreements reached	-2	No consent or capacity at Cambridge	-2	No new plant available	3	Full development capacity available from start
	Support affordable housing	10.7%	Consistency with structure plan	3	Fully consistent	3	Fully consistent	3	Fully consistent	3	Fully consistent	3	Fully consistent
	Build a vibrant community integrated with Hamilton	10.7%	Consistency with structure plan	3	Fully consistent	3	Fully consistent	3	Fully consistent	3	Fully consistent	3	Fully consistent
	Coordinated land use and strategic infrastructure	10.7%	Consistency with structure plan	3	Fully consistent with HCC plans	-1	Higher cost – no support from Waipa DC, airport or Titanium Park	-1	Higher cost – no agreement with Waipa DC, airport or Titanium Park	-2	Higher cost – not consistent with HCC plans	3	Fully consistent with HCC plans
	Financial sustainability for Council and Community	10.7%	Whole of life cost (HCC component) Benefit cost ratio	3	\$60.5M As for IBC	1	\$60.5M plus part of \$20M As for IBC	2	\$60.5M plus part of \$28M As for IBC	3	\$60.5M plus part of \$20M As for IBC	3	\$60.5M plus part of \$20M As for IBC
Subtotal (out of 33%)				100%		34%		27%		31%		34%	
Implementability 33.3% of total overall	Technical	10.7%	certainty/confidence in solution	3	Simple	3	Simple	3	Simple	3	Simple	3	Simple
	Consistency	10.7%	Consistency needed/timeline	1	Pump station designation and pipeline consent to north needed. Pressure Sinks consent	0	Pump station designation and pipeline consent to north needed. Pressure Sinks consent	-1	Pump station designation and pipeline consent needed	-2	Pump station designation and pipeline consent needed	1	Pump station designation and pipeline consent north needed. Pressure Sinks consent
	Safety and design	10.7%	certainty/confidence in solution	3	Simple	1	Simple	-1	Simple	-2	Simple	3	Simple
	Affordability – Operational Maintenance	10.7%	Operational costs	2	Typical operational costs for pump station	1	Very slightly higher operational costs for pumped solution	0	Higher inlet/open costs	-1	Higher inlet/open costs	2	Typical operational costs for pump station
	Affordability – Financial	10.7%	Implementation costs (and cost of funding?)	3	As for IBC	3	As for IBC	3	As for IBC but higher risk of extras	1	As for IBC but significantly higher risk	2	Minor increase to allow for future changes
	Stakeholders/Customer	10.7%	Tangata Whenua, Developer, LTP support	1	In 30 year infrastructure plan and Peacocke Structure Plan consultation. May concern Waipa.	1	In 30 year infrastructure plan and Peacocke Structure Plan consultation. May concern Waipa.	0	Not in 30 year infrastructure plan and Peacocke Structure Plan consultation. May concern Waipa and Waikato	1	Not in 30 year infrastructure plan and Peacocke Structure Plan consultation. May concern Waipa and Waikato	2	Future proof simple option with space for pump capacity, manholes, etc.
Subtotal (out of 33%)				72%		50%		28%		6%		72%	
Assessment of Effects 33.3% of total overall	Safety	11.1%	Relief of traffic from less suitable routes	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
	Cultural	11.1%	Water impact, land impact, cultural recognition	0	Standard treatment approach	1	Standard treatment approach	0	Standard treatment approach	0	Standard treatment approach	0	Standard treatment approach
	Built Environment	11.1%	Impacts (beyond consented – e.g. Sinks)	0	Neutral	1	Less urban impact	1	Less urban impact	1	Less urban impact	-2	Neutral
	Natural environment	11.1%	Impacts (beyond consented – e.g. Sinks)	2	Neutral	2	Neutral	3	Neutral	3	Neutral	2	Neutral
	Community – social	11.1%	Access to jobs, services, shops, etc.	3	n/a	1	n/a	1	n/a	0	n/a	1	n/a
	Community – human health	11.1%	Risk/opportunity for impacts	0	Neutral	1	Neutral	1	Neutral	1	Neutral	0	Neutral
	Community – property	11.1%	Impacts / risks, noise, land, other infrastructure	3	Land for pump station may be residual from Sinks	3	Land for pump station may be residual from Sinks	0	0	0	Land for pump station may be residual from Sinks	3	Land for pump station may be residual from Sinks
	System integration	11.1%	Environmental, current, water needs and transport, ongoing debt w/ty, risk management	1	Risk of future changes being compromised	3	Risk of delays from decisions/approvals/ agreement	1	Risk of delays from decisions/approvals/ agreement	1	High risk of delays, opposition, etc.	1	Risk of future changes being compromised
	Economics	11.1%	Support economic growth, enhance potential of adjacent land (new and existing corridors)	3	As for IBC	3	As for IBC	3	As for IBC	3	As for IBC	3	As for IBC
Subtotal (out of 33%)				27%		67%		27%		20%		57%	
Weighted Rating (and Ranking)				70%	2	52%	3	29%	4	15%	5	73%	1
				REJECT – DELAY				REJECT – DELAY, RISK				REJECT – DELAY, RISK	

Rating	Definition	Score
Significantly positive	Significant positive impact, likely resulting in long term improvements	3
Moderately positive	Moderate positive impact, which may provide improvements and opportunities	2
Minor positive/neutral	Minor positive/neutral	1
Slightly adverse	Similar impact to the minimum	0
Neutral	Minor adverse impact, which can be mitigated or managed	-1
Slightly adverse	Moderate adverse impact, which may be managed or mitigated	-2
Moderately adverse	Significant adverse impact with serious long term effects	-3

Alternative/Option	Score	Ranking
S1.1: Base Case – Peacocke to HCC Pukekohe Tre	70%	2
S1.2: All Peacocke, Airport and Cambridge are	57%	3
S1.3: All Peacocke, Airport and Cambridge are	29%	4
S1.4: All Peacocke, Airport and Cambridge are	15%	5
Preferred option – Combination of S1.1 and S1.2	73%	1

Figure 8 Evaluation Summary Tables – wastewater options (refer appendix A)

TRANSPORT OPTIONS													
Assessment Area	Criteria	Weighting % of Area	Considerations	Rating	Reason for Rating	Rating	Reason for Rating	Rating	Reason for Rating	Rating	Reason for Rating	Rating	Reason for Rating
					T1: Gardens Bridge connection 4 lane (IRC Proposal)		T2: Colham Drive connection - Mangakohurangi Gully crossing, four lane Colham bridge		T3: Different to Southern links alignments		T4: Passenger Transport Options		T5: Gardens Bridge connection 2 lane
Investment Opportunity 33.3% of total overall	Economic contribution	10.7%	Proportion of total quantifiable benefits available	1	All benefits available	1	Colham and existing network constraints restrict to around 1000 lots - reduced early benefits, remainder delayed, reduced external transport benefits	1	Colham and existing network constraints restrict to around 1000 lots - reduced early benefits, remainder delayed, reduced external transport benefits	1	Colham and existing network constraints restrict to around 1000 lots - reduced early benefits, remainder delayed, reduced external transport benefits	2	Most benefits available as long as staged correctly available
	Serviced land meets NPS/UDC targets	10.7%	3,153 dwellings in 10 years 8,103 dwellings in 20 years At this variable Customer Levels of Service	1	Full development capacity available from start	1	1000 lots in 10 years	1	1000 lots in 10 years	1	1000 lots in 10 years	1	Most development capacity available from start
	Support affordable housing	10.7%	Consistency with structure plan	1	Fully consistent	1	Would catch up by 30 years	1	Would catch up by 30 years	1	Would catch up by 30 years	1	Fully consistent
	Build a vibrant community integrated with Mainland	10.7%	Consistency with structure plan Connections (at road) to rest of city	1	Fully consistent	1	Just connection to centre - no link	1	Changes to structure plan	1	Changes to structure plan	1	Fully consistent
	Coordinated land use and strategic infrastructure	10.7%	Consistency with local infrastructure strategic (plan and Southern Link)	1	Fully consistent with MCC plans	1	Falls to complete ring road	1	Falls to complete ring road	1	Falls to complete ring road	1	Fully consistent with MCC plans
	Physical sustainability for Central and Community	10.7%	Fit with the line (PHC components) Benefit cost ratio	1	51/70M 130 (As for IRC)	1	52/50M (est) around 2	1	Not Available - probably similar around 2	1	Not Available - probably similar around 2	1	53/50M on risk if 2 stage approach 130
Implementability 33.3% of total overall	Technical	10.7%	Confident/confidence in location	1	Simple	1	Not sure what alternatives would make sense	1	Not sure what alternatives would make sense	1	Not sure what alternatives would make sense	1	Risk if cable stay or symmetrical arch
	Consentability	10.7%	Consentability/permissions	1	Minor consents only	1	Minor consents only	1	Minor consents only	1	Minor consents only	1	Risk of dual river crossing, activities being undesirable (long, slow)
	Utility and design	10.7%	Confident/confidence in location	1	Simple	1	Simple	1	May not end up being an advantage	1	May not end up being an advantage	1	Risk - should be manageable but at cost risk
	Viability - Operational Maintenance	10.7%	Operational costs	1	Similar	1	Similar	1	Similar	1	Similar	1	Similar
	Viability - Financial	10.7%	Implementation costs (and cost of funding)	1	As for IRC	1	As for IRC	1	As for IRC	1	As for IRC	1	As for IRC
	Stakeholders/Customers	10.7%	Tangata Whenua, Developer, LTP support	1	Supports proposal	1	Not consistent with Access Strategy	1	Not consistent with Access Strategy, HUGS, SH network, structure Plan, etc.	1	Not consistent with Access Strategy, HUGS, SH network, structure Plan, etc.	1	Politically sensitive, UDC and Tangata Whenua risks
Assessment of Effects 33.3% of total overall	Safety	11.1%	Relief of traffic from key arterial routes	1	Relieves SH3 and Hospital	1	Partly relieves SH3 and Hospital	1	Probably relieves SH3 and Hospital	1	Probably relieves SH3 and Hospital	1	Relieves SH3 and Hospital (significant portion)
	Cultural	11.1%	Water impact, river impact, cultural recognition	1	Consistent	1	Consistent - risk for Mangakohurangi Gully being early?	1	Not consistent	1	Consistent with Slacks	1	Not consistent in relation to two stages
	Built Environment	11.1%	Residential development - e.g. 10 years	1	Neutral	1	Neutral	1	Neutral	1	Neutral	1	Neutral
	Natural Environment	11.1%	Residential development - e.g. 10 years	1	Neutral	1	Neutral	1	Neutral	1	Neutral	1	Neutral
	Community - social	11.1%	Access to park, services, shops, etc.	1	Access to Link, Rukia and Main St	1	Access to centre	1	Not known	1	Not known	1	Access to Link, Rukia and Main St, not as much as 4 lane
	Community - transport health	11.1%	Walking/cycling opportunities for people	1	Neutral	1	Neutral	1	Community stress	1	Community stress	1	Neutral
	Community - property	11.1%	Impacts, noise, road, bus, other infrastructure	1	Designated - conditions for engagement under way	1	Designated - conditions for engagement under way	1	Not designated	1	Not designated	1	Designated - conditions for engagement under way
	System integration	11.1%	Environmental screen, water needs and transport demand, dual use, risk management	1	Consistent with link strategy	1	Sequence change from link strategy	1	Major change	1	Future proof	1	Consistent with link strategy
	Economics	11.1%	Support economic growth, enhance productivity of adjacent land (and power and existing conditions)	1	As for IRC	1	As for IRC	1	Similar	1	Similar	1	As for IRC
			Subtotal out of 33%	45%		45%		45%		45%		45%	
Weighted Rating (see formula)				80%	Preferred	80%	Subject	34%	Subject	87%	NOT 4th, NOT Preferred	80%	NOT Preferred

Figure 9 Evaluation summary tables – transport options (refer Appendix A)

The following sections summarise the outcome, showing which DBC options are preferred, and commenting on any risks or information gaps.

- Red options are not taken forward as they do not meet the investment objectives
- Orange options are options that may be included in another project but are not acceptable as a stand alone solution
- Green options are considered feasible and are taken forward for further analysis

Table 9 Short-list options and preferences

DETAILED BUSINESS CASE SHORT LIST OPTION	PREFERENCE	COMMENTS
Wastewater		
Do nothing	No	Not acceptable
Full capacity, bridge, route TBA, No Cambridge options	No	Precludes Cambridge option
Full capacity, bridge, route TBA, Future Proof Cambridge options	WD1 Yes – long term answer	Take forward as single option – variations in staging/procurement to be refined in commercial and management case but do not affect preferred option.
Stage 1 capacity initially, respond CB later, Bridge or thrust, route TBA	WD2 Staging option	
Developer led interim solution(s), full capacity later	No – Risk not acceptable	Environmental risk unacceptable – may procure via/in conjunction with development
Transport		
Do nothing	Reject	Maybe able to tolerate lower level of service for transport assets in interim
Hamilton Gardens Bridge 4 lane (Wairere Drive Extension) and Structure Plan road alignments and intersections	Preferred	Low risk, consistent with Southern Links
Hamilton Gardens Bridge 4 lane (Wairere Drive Extension) and alternative intersection options	Reject	Structure Plan and designation inconsistencies, no significant savings or additional benefits

Selection of preferred option

Evaluation of the short-list options above shows that the preferred option is a combination of

- Wastewater: Peacocke to Pukete pumped wastewater pressure main and options to protect future Cambridge links; staging for capacity/demand and pressure main with routes to be selected in detailed design.
- Transport: Four lane Hamilton Gardens bridge (Wairere Drive Extension), and Peacocke Structure Plan road alignments and intersections.

4. The preferred infrastructure option to deliver more houses faster in Peacocke

Two infrastructure projects that will enable the development of Peacocke are:

- The construction of a transfer pump station and pressure main to pump wastewater north from Peacocke to the Pukete treatment plant. This wastewater system should also allow for future connections to Cambridge.
- The extension of Wairere Drive and the construction of the Hamilton Gardens bridge over the Waikato River. This bridge is designed and designated as part of the Southern Links Network, and is consistent with the Peacocke Structure Plan. This bridge will accommodate walking, cycling and passenger transport, and provide a corridor for utilities including the wastewater pressure main.

Two projects that will enable the early development of Peacocke include:

- A bridge at Wairere Drive/Cobham Drive
- An intersection at SH3 and Ohaupo Road.

The progressive servicing that can occur as urban development takes place include:

- Internal transport corridors consistent with the existing Structure Plan.
- Internal wastewater, with detailed design dependant on the timing, location and staging of the development.
- Internal potable water distribution networks in conjunction with the strategic infrastructure.

The detailed design and specifications of this infrastructure will be in accordance with the Waikato Infrastructure Technical Specification or equivalent, and NZ Transport Agency standards and guidelines.

Hamilton City Council is applying for \$308.4 million of funding (\$189.1M of 10-year interest free loan and \$119.3M of NZ Transport Agency subsidy) for this strategic infrastructure. This funding comprises \$233.9 million for transport infrastructure, and \$74.5 million for wastewater and water infrastructure.

Description and scope of the preferred infrastructure option

The preferred option for implementation is to:

- Construct a transfer pump station and pressure main to pump wastewater north from Peacocke to the Pukete treatment plant. This wastewater system should also allow for future connections to Cambridge.
- The extension of Wairere Drive and the construction of the Hamilton Gardens bridge over the Waikato River. This bridge is designed and designated as part of the Southern Links Network, and is consistent with the Peacocke Structure Plan. This bridge will accommodate walking, cycling and passenger transport, and provide a corridor for utilities including the wastewater pressure main.
- Construct potable water distribution networks in conjunction with strategic infrastructure.

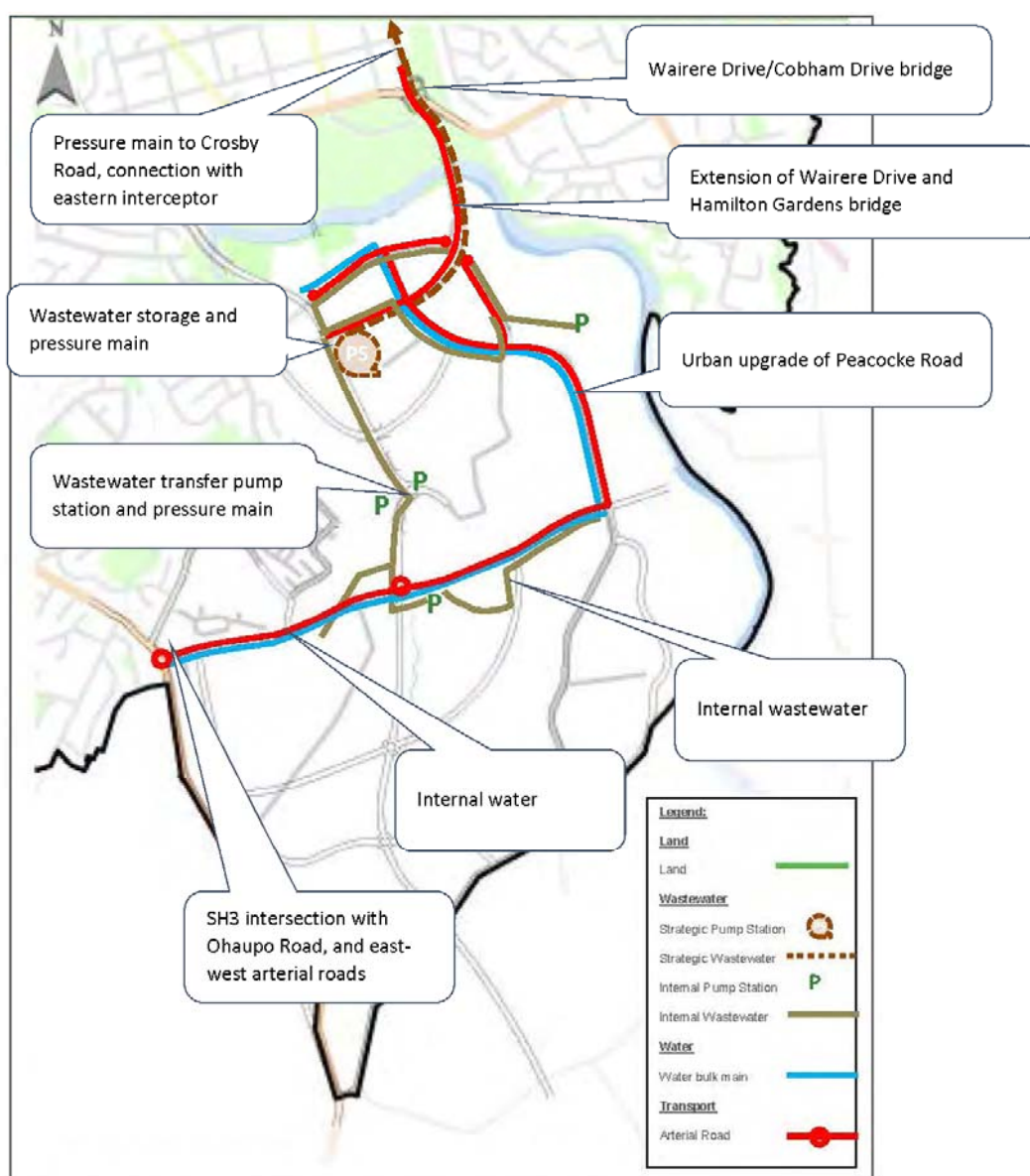


Figure 10 Overview of preferred infrastructure option

The appendix includes preliminary design drawings outlining the proposed water, wastewater and transport infrastructure, along with estimates. The key infrastructure elements are shown in the figure above.

Table 10 Summary of Infrastructure Projects – Expected Costs

STRATEGIC INFRASTRUCTURE ELEMENT	EXPECTED COST (50%ILE)		
	LAND (\$M, 2017) (COST OF CORRIDORS - NETT)	TOTAL (IBC) (\$M, 2017)	TOTAL WITH INFLATION (\$M) (ROUNDED)
1. Wairere Drive/Cobham Drive bridge	Included in Wairere Drive project	\$20.0M	\$21.2M
2. Extension of Wairere Drive and Hamilton Gardens bridge	\$17.1M	\$116.8M	\$133.6M
3. Urban upgrade of Peacocke Road	\$2.0M	\$9.7M	\$11.4M
4. SH3/Ohaupo Road intersection and east-west arterial roads	\$8.5M	\$36.5M	\$42.5M
5. Wastewater storage and pressure main	\$2.1M	\$44.2M	\$50.3M
6. North-south arterial road land	\$21.1M	\$23.5	\$25.3M
7. Internal wastewater network	\$0.2M	\$15.4M	\$17.7M
8. Internal water network	\$0M	\$5.6M	\$6.6M
9. Total		\$271.8M	\$308.4M

Details cost information is included in the bibliography and has been provided to Bond CM for their review of estimates.

Minimum infrastructure requirements for any urban development in Peacocke

The infrastructure that must be delivered to open up development in Peacocke, and the associated costs, is summarised in the table below. To reiterate:

- The intersection of SH3 with Ohaupo Road provides access to the final area of Stage 1 of Peacocke. This intersection has the potential to release approximately 350 dwellings.
- The Wairere Drive/ Cobham Drive bridge provides a link between Peacocke and the rest of Hamilton, via the Wairere Drive Ring Road, and provides construction access to the Hamilton Gardens bridge.
- The wastewater storage and pressure main connects Peacocke to Hamilton's eastern wastewater interceptor and the Pukete treatment plant. This wastewater storage and pressure main is essential for any development to occur in Stage 2 of Peacocke. The Hamilton Gardens bridge also carries the wastewater pressure main. . There will be a funding contribution towards bridge costs from services using the bridge, such as wastewater, in accordance with NZTA's utility cost share calculation based on in-service weight and bridge superstructure weight.

Table 11 Minimum requirements for urban development in Peacocke

MINIMUM REQUIREMENT	EXPECTED OUTCOME
1. Wairere Drive/ Cobham Drive bridge (\$21.2M)	<ul style="list-style-type: none"> • Grade separated interchange with four lane north-south arterial road • Future-proofed for bus priority (it would be desirable to include 3m shoulders to provide for four lanes and bus lanes in shoulders) • Includes shared paths and crossing facilities for pedestrians and cyclists • Wastewater pressure main crossing of Cobham Drive • Funding top up for existing project (completion of Wairere Drive Hamilton Ring Road – Cambridge Road to Cobham Drive)
2. Extension of Wairere Drive and Hamilton Gardens bridge (\$133.6M)	<ul style="list-style-type: none"> • Four lane connection from Wairere Drive/ Cobham Drive bridge. (it would be desirable to include 3m shoulders to provide for four lanes and bus lanes in shoulders) • Four lane river bridge – no piers in river – consistent with Southern Links bridge consent and designation – gateway structure • Flood plain bridge approaches and four lane connection to Peacocke Road • Local road connections and severances resulting from new road • Wastewater pressure main from pump station to crossing of Cobham Drive.
3. SH3/Ohaupo Road intersection (\$11.7M of \$42.5M E-W Arterial)	<ul style="list-style-type: none"> • Dual lane roundabout • Shared pedestrian and cycle facilities • East- west leg completion to eastern edge of Northview block at Shaw wetlands
4. Wastewater storage and pressure main (\$41.7M of \$50.3M in Stage 1)	<ul style="list-style-type: none"> • Pressure main components included in 1 and 2 above • Storage and pump station with sufficient capacity for 3,753 households: <ul style="list-style-type: none"> ○ Storage range – optimise as part of detailed design ○ Pump range – optimise as part of detailed design ○ N plus 1 redundancy ○ Plant and telemetry to match existing equipment • Pressure main connection from Wairere Drive/ Cobham Drive bridge to Crosby Road connection with eastern interceptor
5. Internal wastewater network	<ul style="list-style-type: none"> • Where required as part of transport network implementation above
6. Internal water network	<ul style="list-style-type: none"> • Where required as part of transport network implementation above
7. General	<ul style="list-style-type: none"> • Associated land, consents, designations, approvals, engagement with trunk utility providers, community and tangata whenua

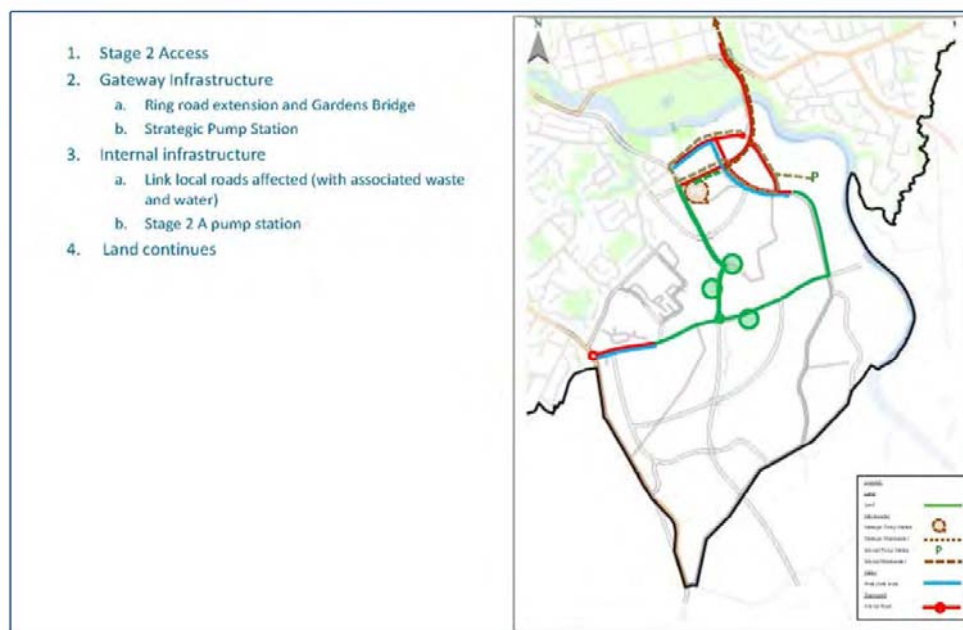


Figure 11 Minimum requirements to access urban development in Peacocke

Minimum infrastructure requirements to progress urban development in Peacocke

The infrastructure required to develop the remainder of Peacocke and achieve the full investment objectives are tabulated below.

These mainly comprise stages subsequent to the gateway access infrastructure. For example, the north-south arterial land will ultimately accommodate a regional arterial road connection for Hamilton's town centre south to the airport and state highway network. Acquiring the land early allows the wastewater connection needed to support extension around Stage 1b to be implemented. Road access for that area can continue via SH3 until the east-west arterial is completed.

Optional requirements

Optional requirements that might be delivered if sufficient budget were available include Hamilton City Council 10 Year Plan infrastructure not part of the HIF funding application, bus transfer facilities, and park and ride connections.

Excluded from project scope

Excluded from the HIF funding application are local roads and development servicing. Additional Hamilton City Council or development infrastructure that may be delivered in conjunction with, or parallel to, infrastructure that forms part of the HIF funding agreement will be clearly identified and accounted.

Table 12 Minimum requirements for ongoing development

MINIMUM REQUIREMENT	EXPECTED OUTCOME
<ul style="list-style-type: none"> North-south arterial land (\$25.3M) 	<ul style="list-style-type: none"> Land north south arterial road used to provide early for wastewater connection to south
<ul style="list-style-type: none"> Urban upgrade of Peacocke Road (\$12.6M) 	<ul style="list-style-type: none"> Two lane urban upgrade in accordance with Hamilton City Council Development Manual and Southern Links designation Shared path facilities Passenger transport (bus) infrastructure
<ul style="list-style-type: none"> East-west arterial roads, Shaw wetland to Peacocke Road (remaining \$30.8M of \$42.5M) 	<ul style="list-style-type: none"> Two lane arterial in accordance with Hamilton City Council Development Manual and Southern Links Designation. Roundabout connection at north-south arterial location
<ul style="list-style-type: none"> Wastewater storage and pressure main (\$8.6M) 	<ul style="list-style-type: none"> Phase 2 – Additional pump capacity for additional population
<ul style="list-style-type: none"> Internal wastewater network 	<ul style="list-style-type: none"> Upsizing connections through development areas where future demand from other areas exceeds minimum local sizing requirements
<ul style="list-style-type: none"> Internal water network 	<ul style="list-style-type: none"> Upsizing connections through development areas where future demand from other areas exceeds minimum local sizing requirements

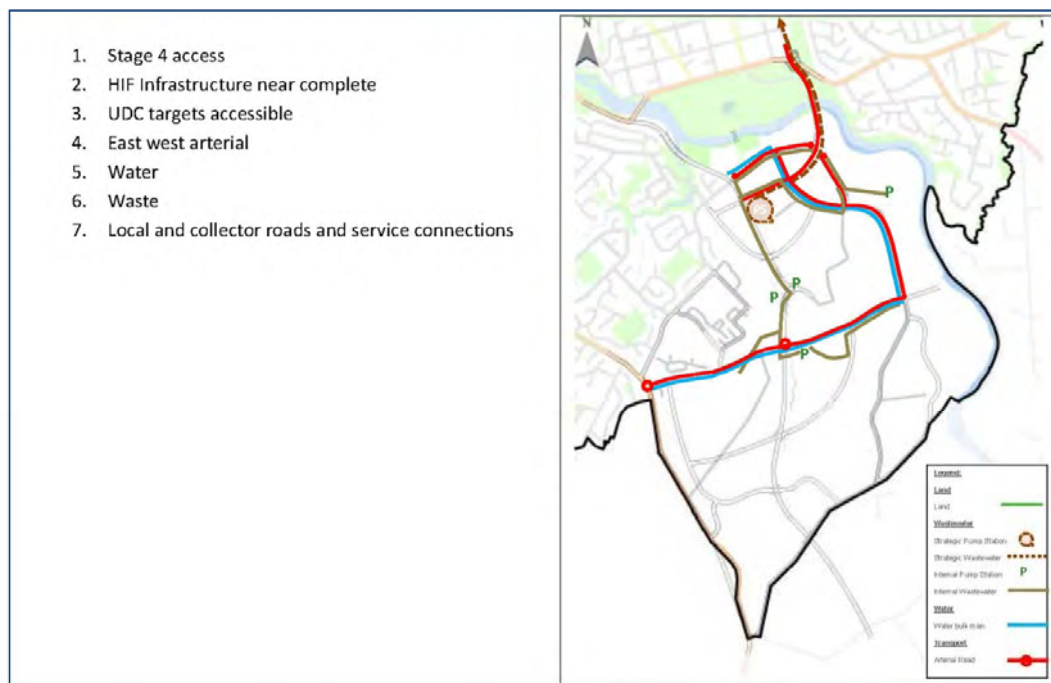


Figure 12 Minimum requirements to progress to full urban development

Details of wastewater network in Peacocke

The wastewater network in Peacocke will be a combination of gravity and pumped systems including 10 internal pump stations. The concept designs and estimates include:

- Connection from Peacocke to the eastern interceptor at Crosby Road, including a transfer pump station and pressure mains.
- Strategic network components to deliver flow to the transfer pump station.
- Trunk wastewater network components within the Peacocke area, including non-gravity reticulation where necessary, and delivery of concept plans and cost estimates.

The concept design for Peacocke wastewater is set out in the report *Peacocke Wastewater Solution* (Opus, 2017). This design provides workable concept designs and reliable cost estimate ranges for the strategic and trunk wastewater infrastructure needed to service the Peacocke area. Figure 4.4 shows the wastewater for Peacocke including HIF and non-HIF funding infrastructure.

The concept designs undertaken by Opus are based on the feasibility designs previously undertaken by GHD (*Peacockes Development Area Wastewater Pressure Trunk Main Feasibility Report*, December 2015). Detailed design for the sub-catchments depends on development master planning and staging, and will form part of the implementation phase of the project.

The position and number of pump stations in the catchment has been determined by the ground profile to keep the pipe depths above four metres where possible. In addition, some collector mains have been included in the concept design provided by Opus to indicate how flow in areas of undulating topography can be conveyed to the trunk mains and pump stations. It is unlikely that additional pump stations will be required in these areas unless there is significant alteration to the ground profile.

The Peacocke development is expected to progress in stages. Stage 1 is an area currently under development. In the wastewater concept designs, indicative reticulation that directs flow out of the Peacocke catchment is included. The indicative reticulation follows the land contour that naturally drains these areas. This wastewater exits the catchment, is combined with flows from adjacent neighbourhoods, and is pumped back into the Peacocke development to the new transfer pump station.

The pipes will generally be located within the road corridor where the ground is evenly graded and the cover is consistent. The preferred location for the pipes - within the carriageway, footpath or berm - will be confirmed as part of detailed design. Hamilton City Council proposes to build two pump stations to facilitate the crossing of two deep gully crossings in the western part of the catchment. Crossing via gravity beneath the road bridges will also be checked at the detailed design stage. Suspending pipes beneath the road bridges – at 1.5 to 3 metres below the road surface – would be less expensive to build and operate than pump stations, but are sensitive to levels.

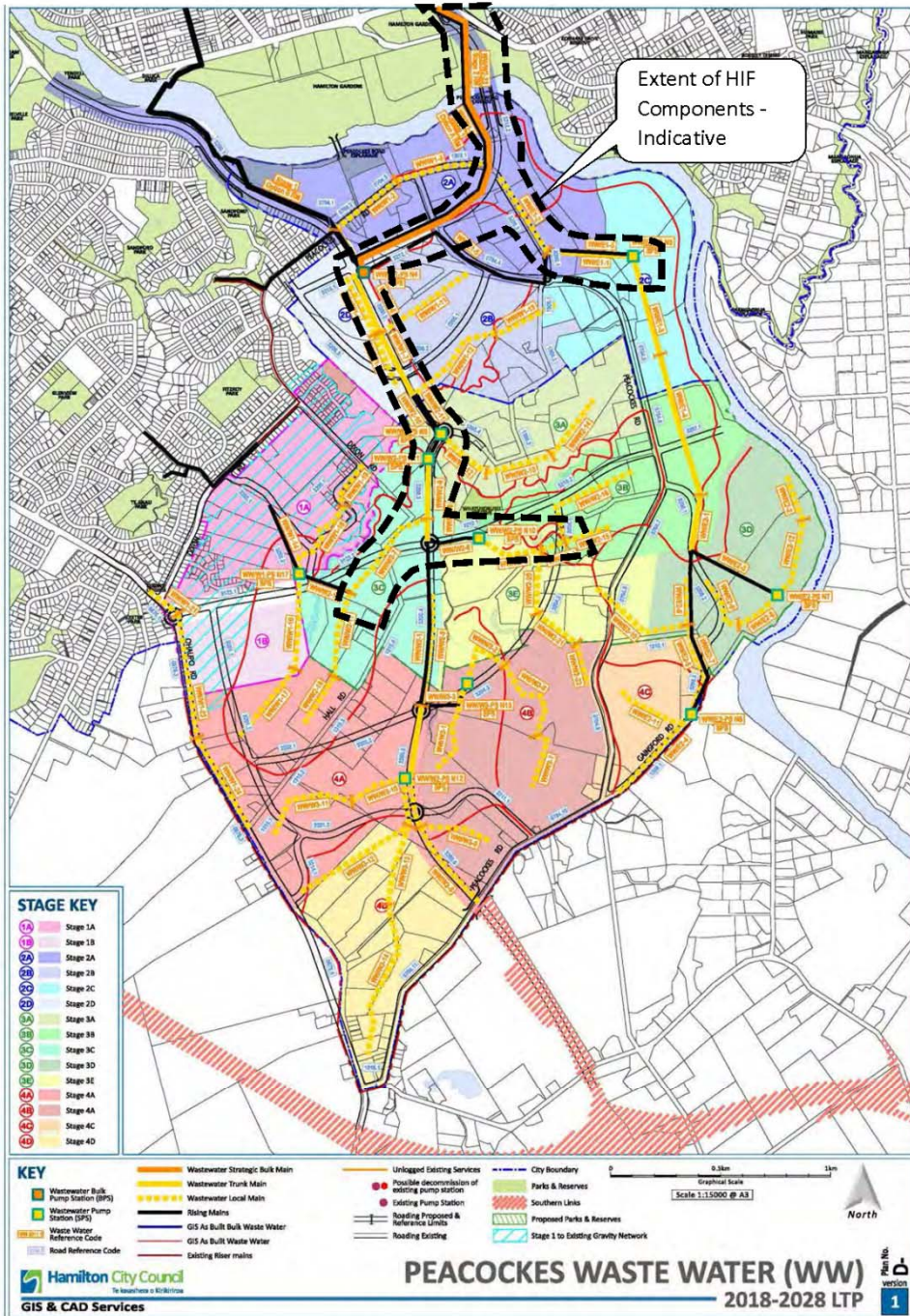


Figure 13 Peacocke wastewater programme (including local infrastructure excluded from HIF funding)

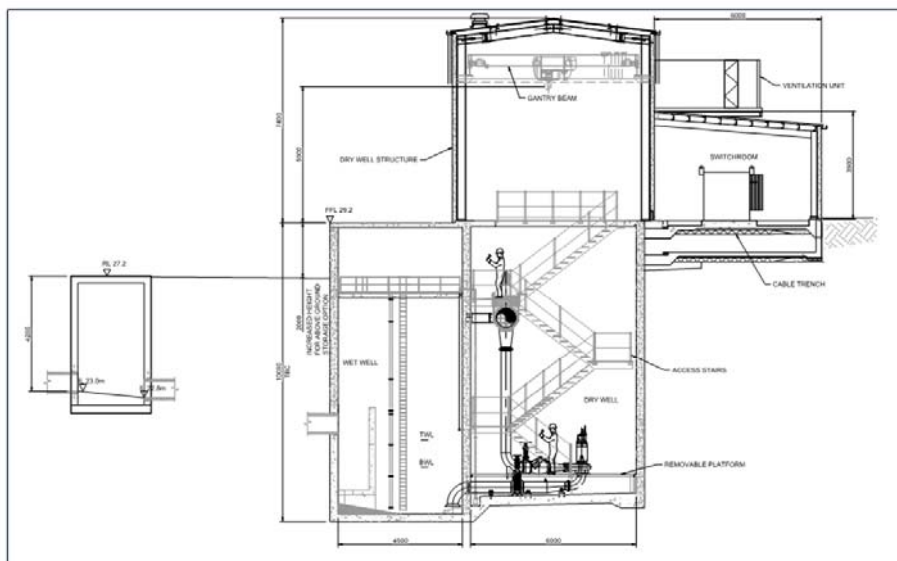


Figure 14 Cross section of pump station, Opus concept design

Figure 14 shows a concept design of the layout of the transfer pump station. The concept design of the network and pump systems is generally in accordance with the Hamilton City Council Development Manual, the Hamilton City Council Infrastructure Technical Specifications, and population density data. The concept design pump station capacity is proposed as:

- Stage 1: 60l/s
- Stage 2: 250l/s
- Stage 1 and 2 total: 310l/s
- Storage: 1,500m³ in 15 GRP (Glass Reinforced Plastic) tanks.

Since the concept is based on the Waikato Regional Infrastructure Technical Specifications, the concept capacity may be conservative for larger sub-catchment sizes, and the standards will be revisited and refined during detailed design.

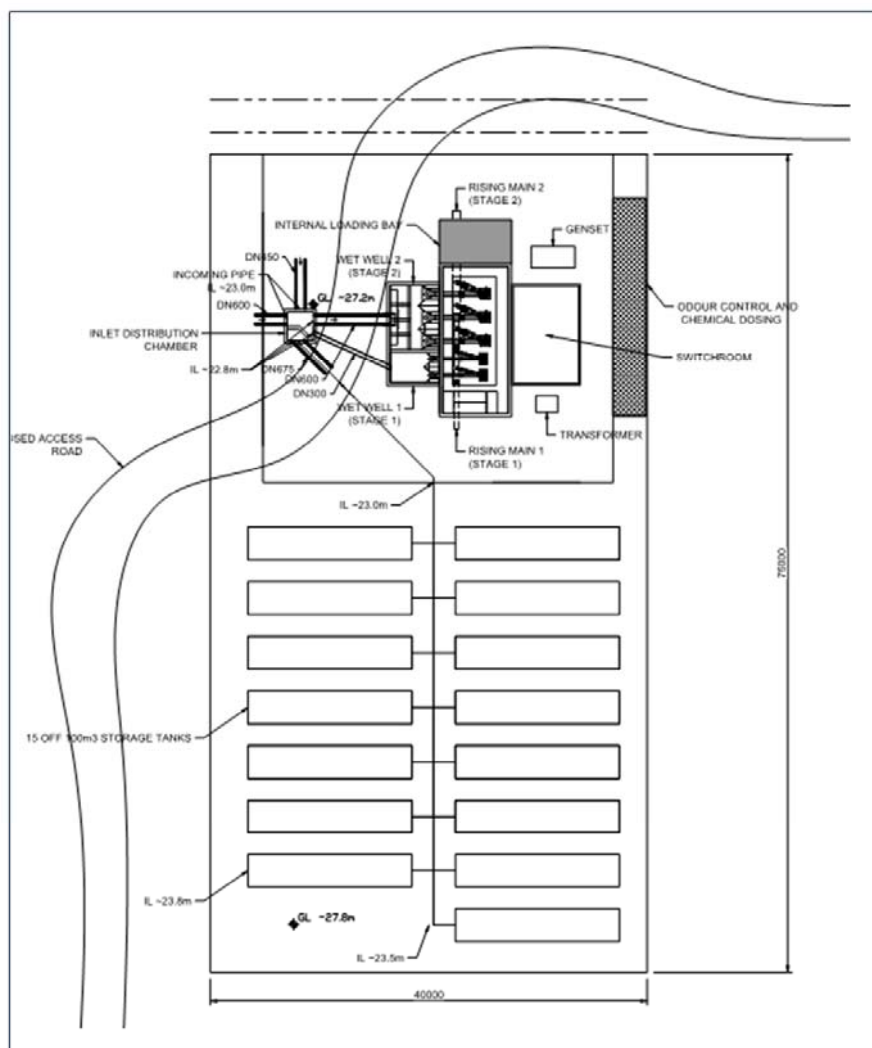


Figure 15 Layout of transfer pump station

Figure 15 shows the preliminary pressure main route from Peacocke to the eastern wastewater interceptor at Crosby Road.

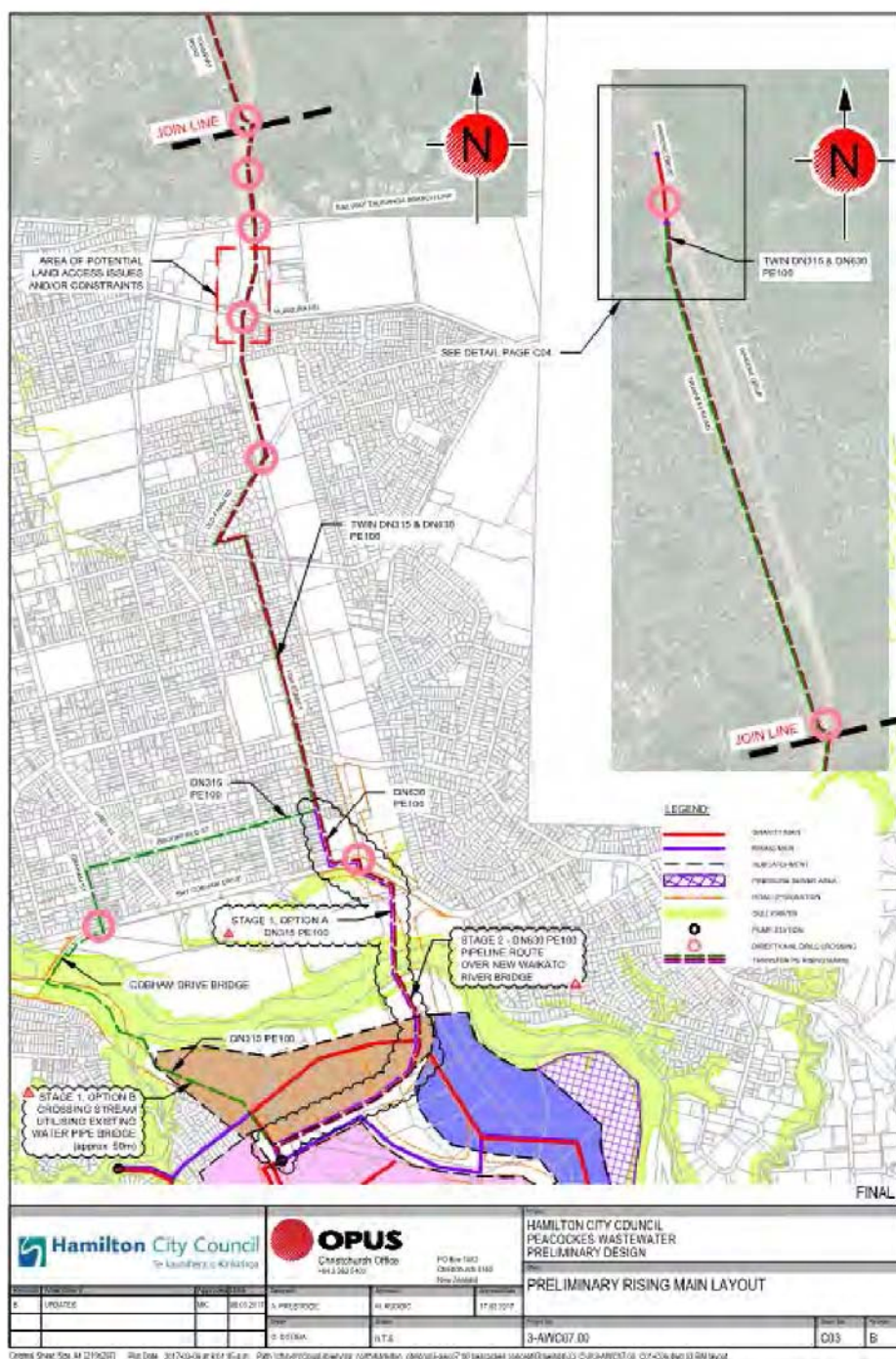


Figure 16 Preliminary pressure main route from Peacocke to eastern wastewater interceptor at Crosby Road

Details of potable water network in Peacocke

The potable water distribution network will be implemented in conjunction with road infrastructure. These will link in to the new 750mm bulk main at the west of the catchment. Figure 17 shows the potable water for Peacocke including HIF and non-HIF funding infrastructure.

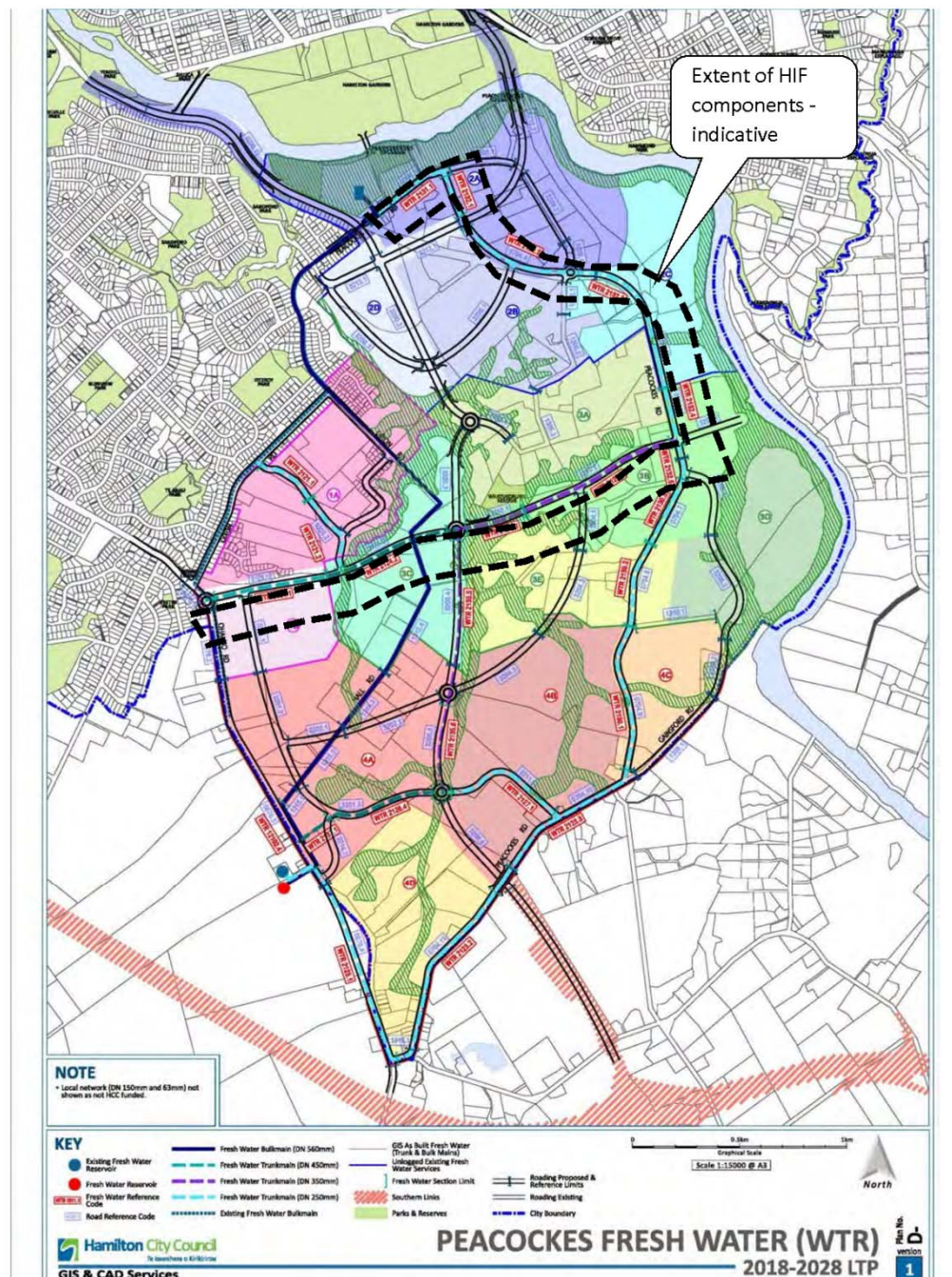


Figure 17 Peacocke potable water programme

Details of transport infrastructure

The transport infrastructure is in accordance with the Southern Links Network preliminary design (Aecom, *Scheme Assessment Report*, 2011). The road layout is shown below.

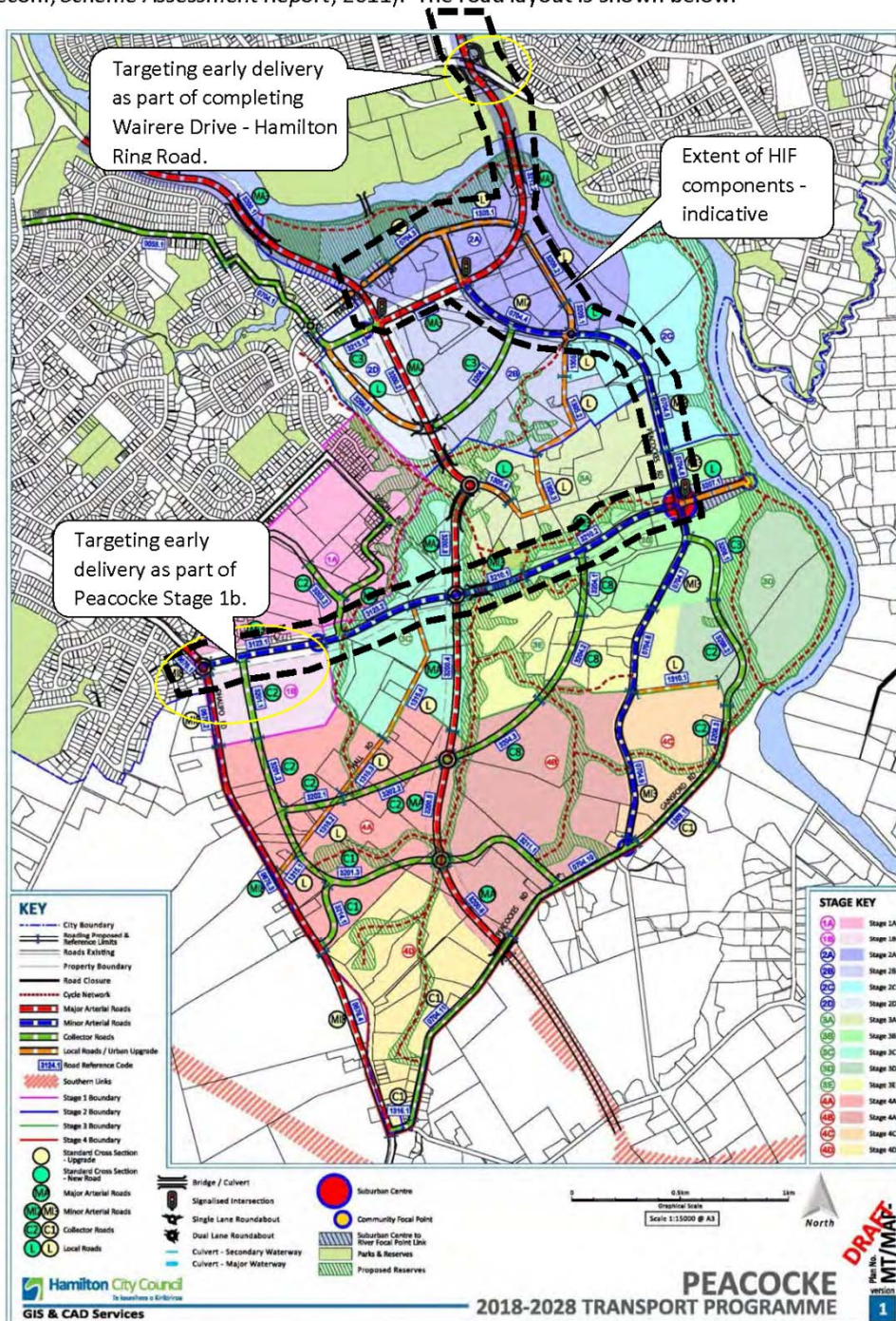


Figure 18 Peacocke transport programme

Typical cross sections and conceptual bridge elevations are shown in the figures below.

All of the corridors will include footpaths and shared cycle paths. The Ring Road extension has four lanes to allow for passenger transport priority or transit lanes as an option. Walking and cycling connections to local networks and bus stops will be finalised as part of detailed design, and in conjunction with master planning and subdivision.

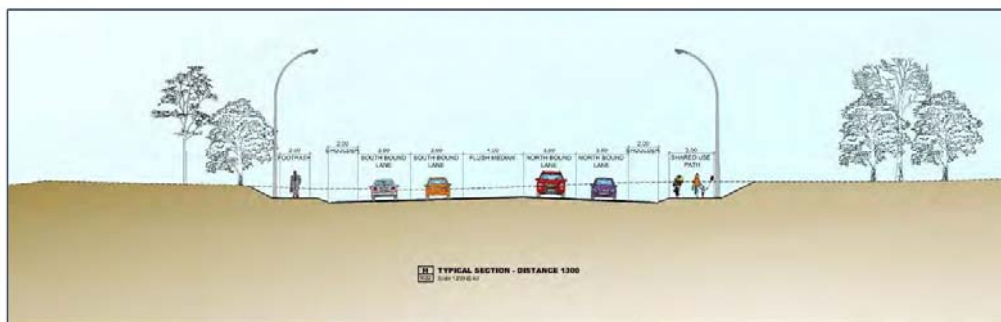


Figure 19 Typical cross section, Ring Road extension

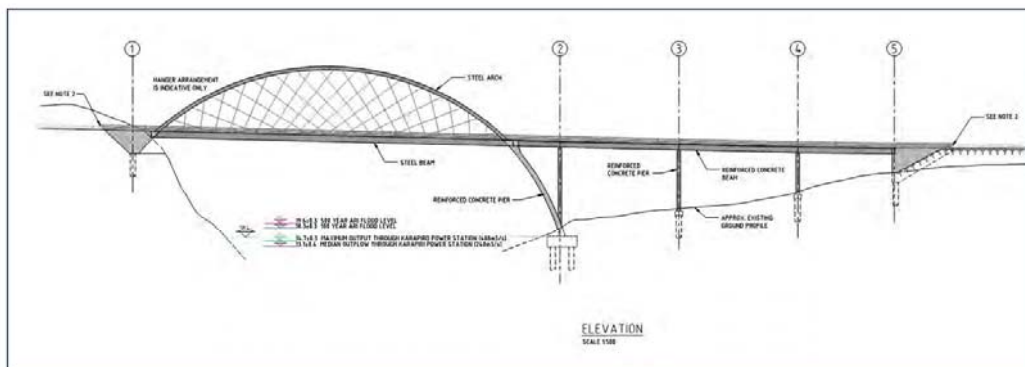


Figure 20 Conceptual elevation, Hamilton Gardens bridge (Tied arch shown – final form subject to detailed design)

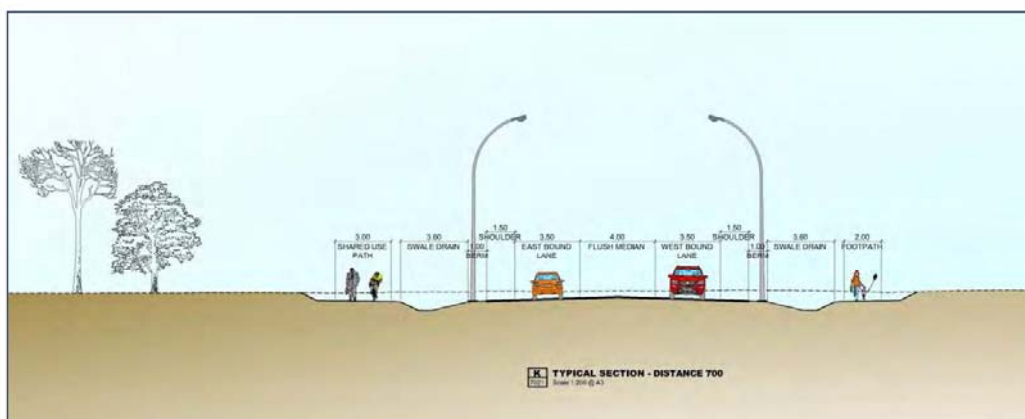


Figure 21 Typical cross section – East-West arterial roads and urban upgrade of Peacocke Road

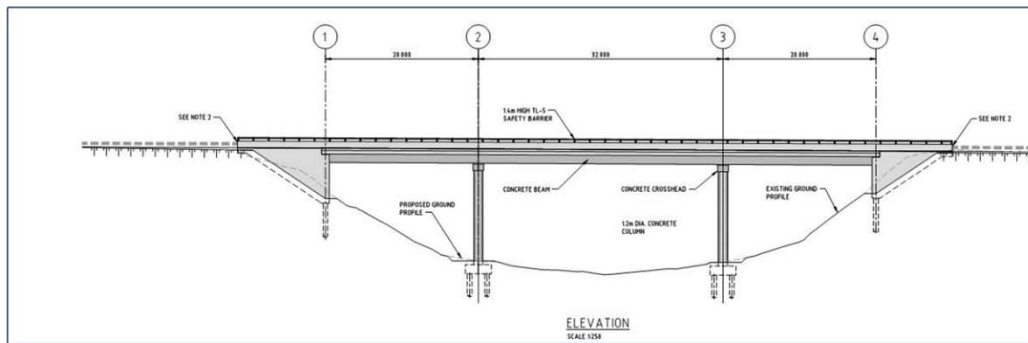


Figure 22 Conceptual elevation- East-West Gully crossing (Hollow core deck shown – final form subject to detailed design)

Water and wastewater infrastructure extents shown on road alignments

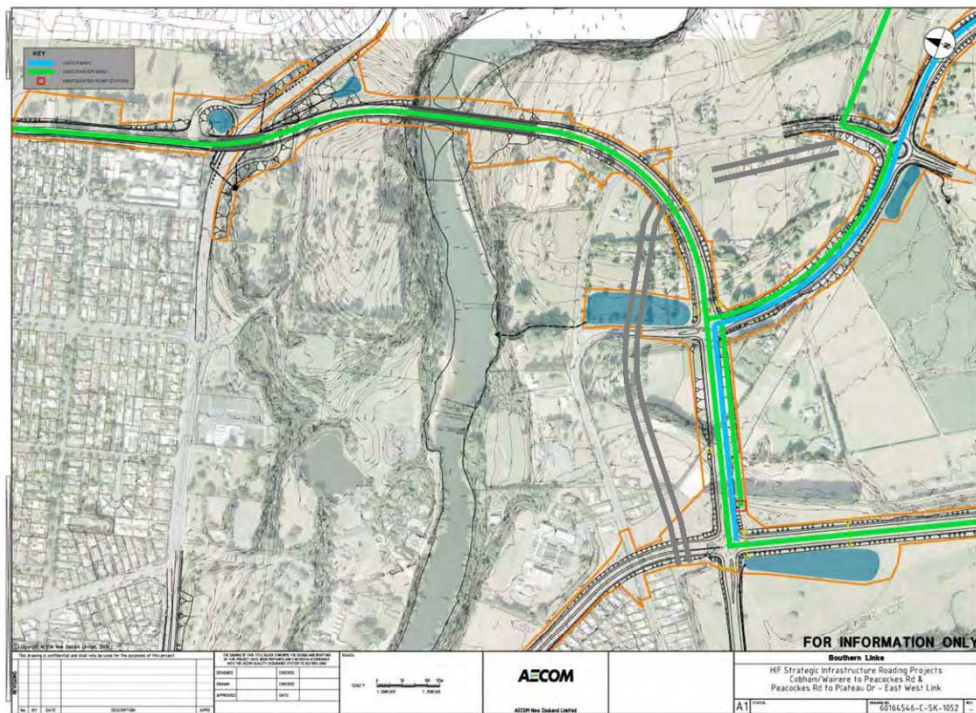


Figure 23 Cobham interchange, Hamilton Gardens bridge and road connections

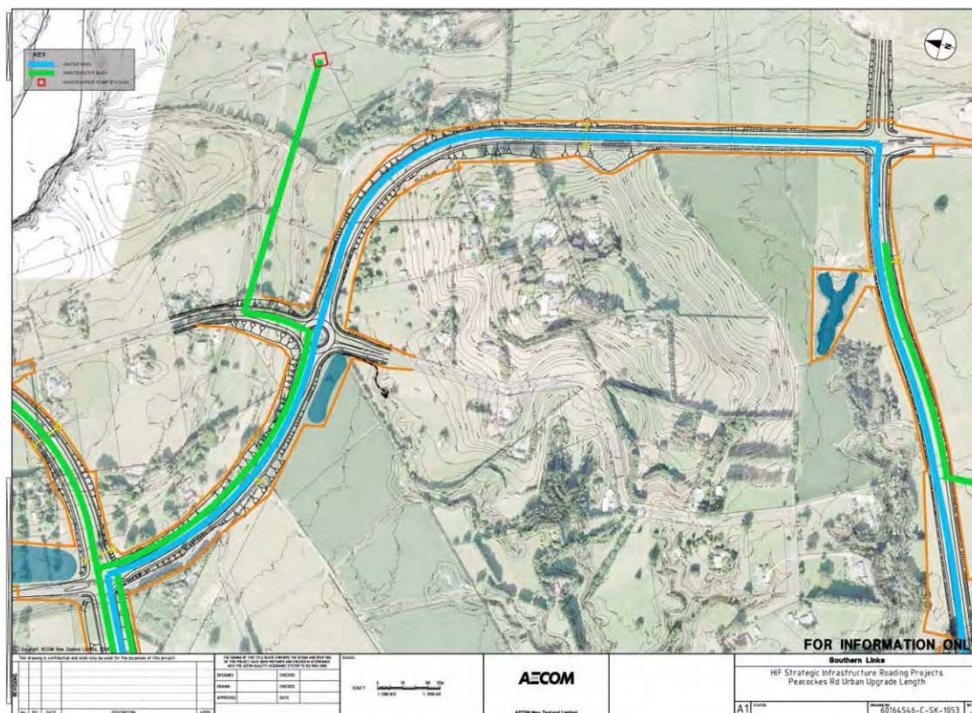


Figure 24 Urban upgrade of Peacocke Road, water and wastewater

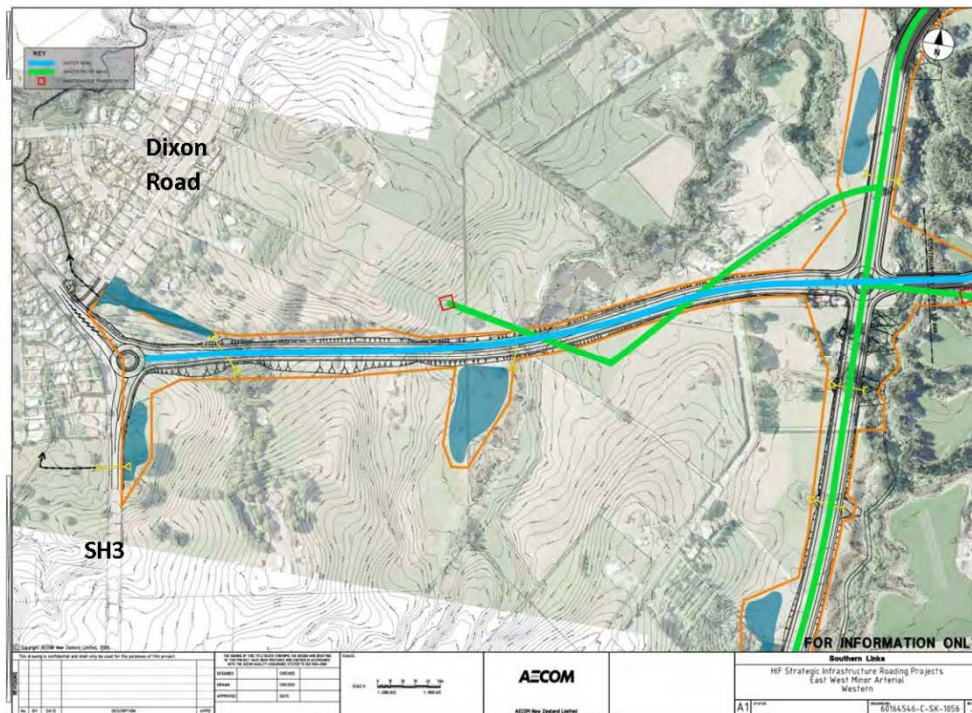


Figure 25 East-West arterial roads and SH3 roundabout Connection, water and wastewater

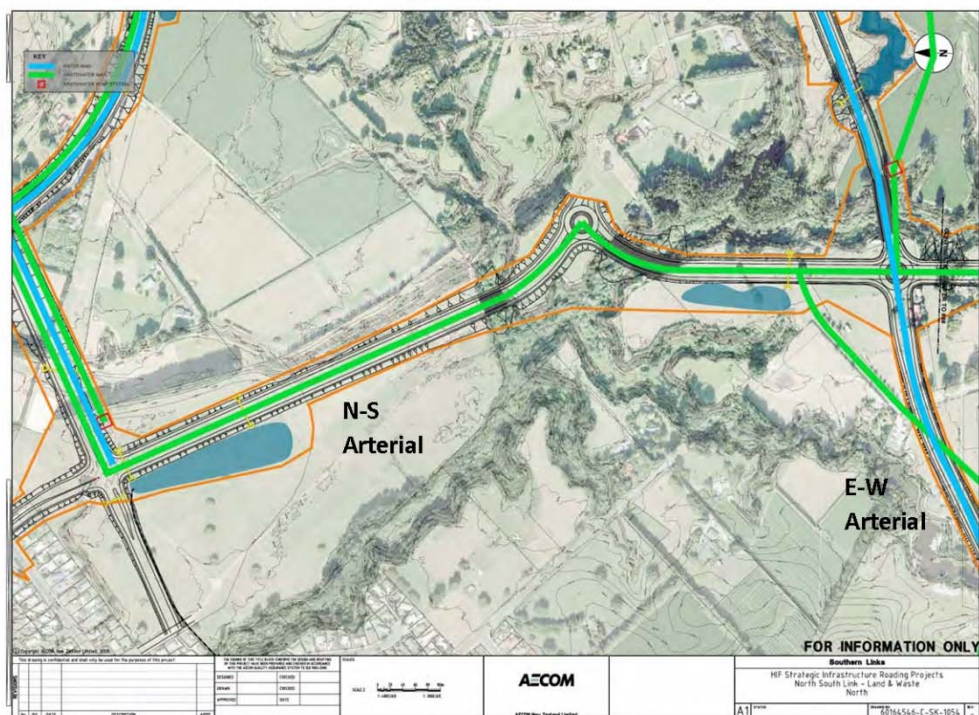


Figure 26 North-South arterial wastewater to allow additional development near Stage 1 of Peacocke

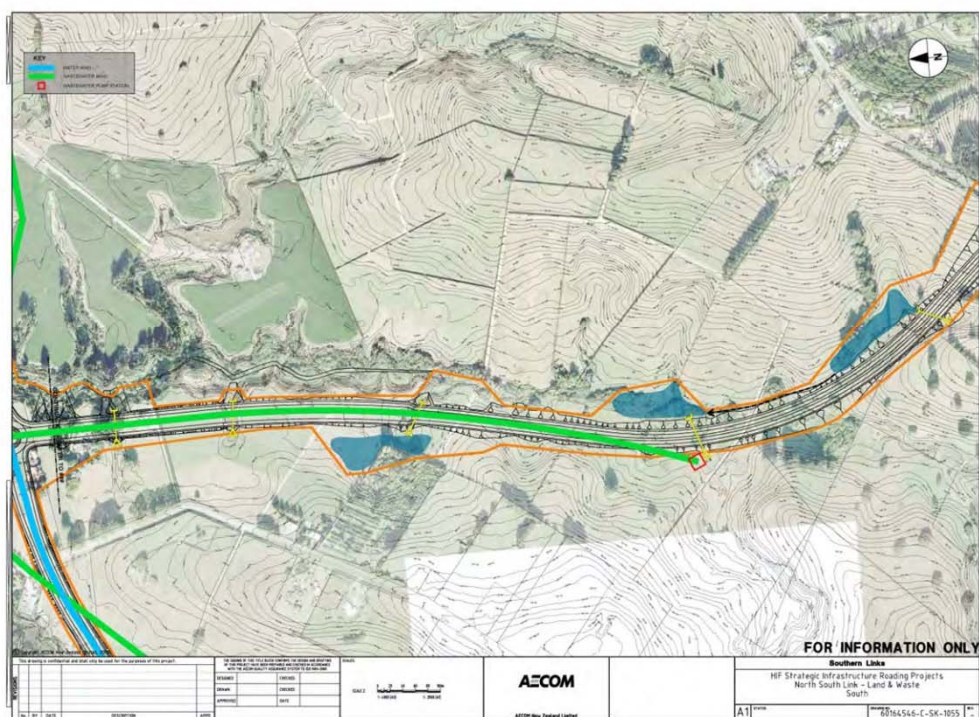


Figure 27 North-South wastewater extension to service the final stages of development in Peacocke

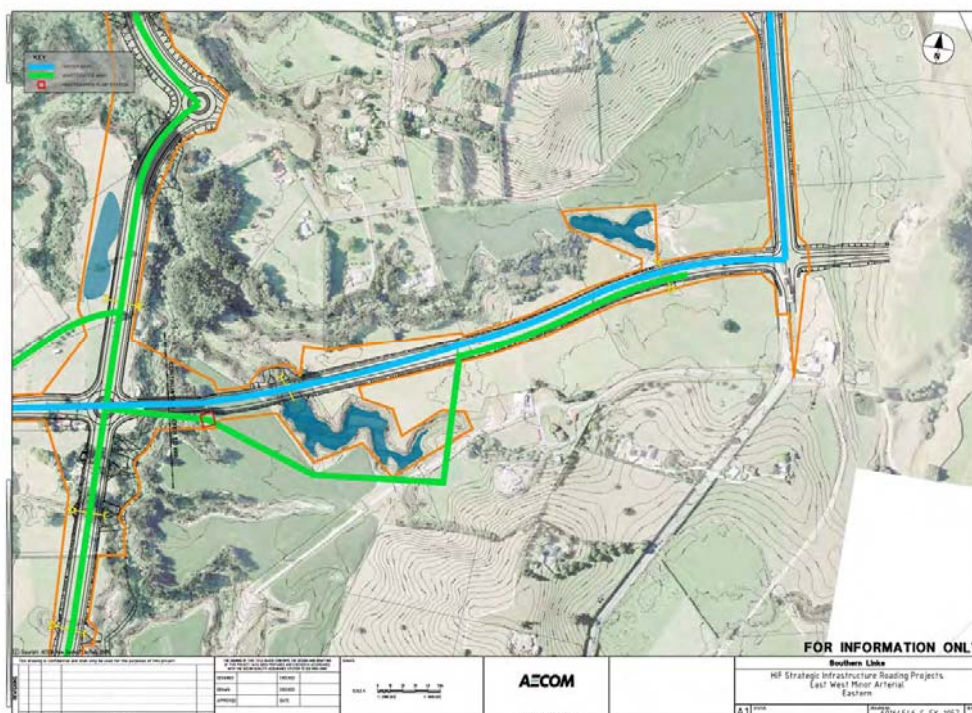


Figure 28 East-West arterial and eastern section from North-South arterial to Peacocke Road

Technical peer reviews of the wastewater system

Stantec undertook a technical peer review of the wastewater system. Stantec has previously completed the following reports in relation to Peacocke for the Hamilton City Council:

- *Southern Area Wastewater Study*, Prepared for Hamilton City Council and Waipa District Council, 2011
- *Southern Area Wastewater Options Study: Phase 2 – Decision Making Inputs Project*, Prepared for Waipa District Council, 2012
- *Review of Short Listed Wastewater Servicing of Option of the Southern Area Reports in the Context of the Peacocke HIF*, Prepared for Hamilton City Council, 2017
- *“Fatal Flaw” Review of Opus Peacocke Concept Design Report*, Prepared for Hamilton City Council, 2017.

The Opus report was reviewed by Stantec for conformance with Hamilton City Council wastewater strategy and sub-regional options as reported in *Review of Short Listed Wastewater Servicing of Option of the Southern Area Reports in the Context of the Peacocke HIF*, Prepared for Hamilton City Council, 2017.

Stantec confirmed that the proposed wastewater infrastructure for servicing Peacocke Stage 2 - to convey flow from Peacocke to Crosby Road via a pumped transfer main - is the preferred option from a HIF perspective.

This conclusion is based on:

- The wastewater solution being deliverable in the timeframes proposed in the Housing Infrastructure Fund
- The implementation of the wastewater solution allows for flexibility and engineering modifications in the design, particularly of the main pumping station.

Stantec found no fatal flaws in the concept design presented by Opus, and found that the solutions presented in the concept design appear to be reasonable. Technically it was found that the concept design generally met Section 5 of the Hamilton City Council's Infrastructure Technical Specifications. The cost estimates were also found to be conservative but generally reasonable, as would be expected at concept design stage.

Stantec also confirmed that due to existing topographical and network capacity constraints it is not feasible to adopt a "do nothing/status quo" approach to servicing the Peacocke area in regards to water and wastewater.

Technical peer reviews of the transport system

The Southern Links Network has been subject to a number of technical peer reviews, including safety audit and design reviews, economics, estimates and effects assessments, as part of the statutory processes associated with the Notice of Requirement.

Bond Construction Management have recently completed an update of the parallel estimate for Southern Links. This was extended to include the Wairere Drive/Cobham Drive interchange.

Preferred wastewater and transport infrastructure options

The tables below assess the preferred infrastructure options to develop Peacocke based on their wastewater and transport components.


Potable water

There is no detailed assessment of the potable water infrastructure required for Peacocke as there is only one option. Potable water is necessary to support development in Peacocke.


Wastewater

Item 10

Attachment 3

1 Preferred wastewater option						
Option description:	<ul style="list-style-type: none">Combination of gravity and pumped local collection to storage/transfer pump station.Pressure main crossing the Waikato River via the Hamilton Gardens bridgePressure main route via Ring Road or parallel road corridors to link to extension of eastern interceptor at Crosby RoadBasis for transfer pump station and storage – full capacity development of Stage 2 of PeacockeNo change/ independent of Hamilton Airport and Cambridge proposals.					
Estimated total public sector funding requirement:		Lower	Upper			
	Capital cost (\$m) (whole sector):	\$100M	\$110M			
	Net property cost (\$m):	\$1M (nominal)	\$1M (nominal)			
	Opex (\$m/yr):	\$5M	\$7M			
	Maintenance (\$m/yr):	Similar all options	Similar all options			
	Present value of cost (HCC). (\$m):	\$55.9M	\$65.9M			
Estimated BCR range:		>5	~18			
Timing of need:	Optimal programme:	5 years	Likely:		5 years	
IAF profile	Strategic fit:	H (2015) VH (2018)	Effective:	M	Efficient:	>5 =H
2 Outcome objectives preferred wastewater option						
Objective:			Performance against objectives		Rating	
Economic contribution	Proportion of total benefits available		100% of benefits		3	
Serviced land meets NPS- UDC requirements at minimum level of service	3,750 dwellings in 10 years 8,400 dwellings in 30 years		100% of 10 year targets 100% of 30 year targets		3	
Support affordable housing	Consistency with Structure Plan		100% consistent		3	
Build a vibrant community integrated with Hamilton	Consistency with Structure Plan Connections (all modes) to rest of the City		100% consistent Mode connections not applicable		3	
Coordinated land use and strategic infrastructure	Consistency with trunk infrastructure strategic plans and Southern Links		100% consistent Stage 2 can be adapted to meet Cambridge needs		3	
Financial sustainability	Whole of life cost Benefit cost ratio		Optimum option to meet specifications Detailed design will challenge specifications		3	
Rationale for selection or rejection of option:			Meets all objectives (but could be improved to protect options for Hamilton Airport and Cambridge treatment plant)			

Transport

3 Preferred transport option						
Option description:	<ul style="list-style-type: none">IBC preferred optionConsistent with Southern Links stagingRegional arterial link across Hamilton Gardens Bridge4 lane deckGateway structure					
Estimated total public sector funding requirement:			Lower		Upper	
	Capital cost (\$m) incl. property:		\$179M		\$250M	
	Net property cost (\$m):		tbc		Tbc	
	Opex (\$m/30yr):		Not significant		Not significant	
	Maintenance (\$m/30yr):		Not significant		Not significant	
	Present value of cost (HCC). (\$m):		\$179M		\$250M	
Estimated BCR range:			2.9		>18	
Timing of need:	Optimal programme:	5 years	Likely:		10 years	
IAF profile:	Strategic fit:	H (2015) VH (2018)	Effective:	H	Efficient:	>5 =H
4 Outcome Objectives Preferred Option						
Objective:		Performance against objectives				
Economic contribution	Proportion of total benefits available	100% of benefits			3	
Serviced land meets NPS-UDC requirements at minimum level of service	3,750 dwellings in 10 years 8,400 dwellings in 30 years	Full NPS UDC targets delivered			3	
Support affordable housing	Consistency with Structure Plan	100% consistent			3	
Build a vibrant community integrated with Hamilton	Consistency with Structure Plan Connections (all modes) to rest of city	Connections to Ruakura, University, ring road, Ham E			3	
Coordinated land use and strategic infrastructure	Consistency with trunk infrastructure strategic plans and Southern Links	100% consistent			3	
Financial sustainability	Whole of life cost Benefit cost ratio	2.9 as for IBC (transport benefits alone)			3	
Rationale for selection or rejection of option:		Designated, agreed, consistent with Structure Plan				

Implementability

Implementation of the preferred option is presented in the Management Case, with risk management also covered in the Commercial Case. Implementation of the preferred option can be relied upon with few significant risks. The preferred option is consistent with Hamilton City Council infrastructure strategies and has few unusual factors other than scale and urgency. It has:

- No untried technology
- Opportunities for staging or operational optimisation
- The pipes are generally in the road reserve
- No unusual hazards
- Staged pump capacity to avoid the Waipa District Council and Hamilton Airport options being compromised.

The main risk is time to get through non-RMA statutory processes, such as wildlife permits. A designation is needed for the pump station but the pump station is not on the critical path.

5. The economic case to deliver more houses faster

As discussed in the Strategic Case, Hamilton City will need an additional 12,500 homes by 2028. Further, this growth is not expected to recede over the longer term, with the NIDEA projections indicating that household numbers will rise by more than 31,900 over the 30-year period, or approximately 1,060 new homes per annum

There is a sound economic case for Hamilton City Council to apply for HIF funding of \$308.4 million, or \$271.8 million in constant 2017\$, to invest in strategic infrastructure to develop Peacocke. This economic case has high efficiency with the overall benefit-cost ratio (BCR) for the Peacocke development being comfortably above 1.0.

In addition, the BCR for the Peacocke development is comparably higher than that of adopting a Status Quo position due to the greater transport benefits, as well as greater number of dwellings that will be constructed contributing to greater housing construction and expenditure benefits.

The key economic benefit that the HIF funding for strategic infrastructure will deliver is the bringing forward of residential development in Peacocke. The opening up of this area will:

- Assist Hamilton City in its capacity to provide a balanced supply of housing options to meet resident population growth
- Meet the criteria for a long-term settlement pattern for Hamilton City
- Ensure the management of land use and strategic infrastructure
- Enable Hamilton City to manage resident population growth through infill and greenfield residential housing developments.

The BCR for the Status Quo is also comfortably above one, and may seem to be attractive. However, this situation has lower overall benefits and the majority of the dwellings constructed under the Status Quo are beyond the 10-year horizon. Of the approximately 5,630 dwellings that are constructed under the Status Quo, only 2,580 are built in the 10-year period to 2028. This figure meets just 21% of the projected 12,500 dwellings that will be required over this period and would leave Hamilton City Council facing difficulties in meeting its NPS-UDC requirements.

In contrast, the bringing forward of developments in Peacocke due to funding for strategic infrastructure has the potential to deliver just under a third of Hamilton's medium-term housing needs over the coming 10 years. In the long-term (30-year horizon) this development has the potential to deliver close to 26% of Hamilton's housing needs, and economic benefits totalling over \$6 billion in present value terms.

Population projections and the demand for housing

As discussed in the Strategic Case, Hamilton City Council has adopted the NIDEA population and household projections for the 10 Year Plan 2018-28. These projections provide the foundation for the Economic Case as they provide data on population growth, the subsequent demand for households and projected household size based on population composition.

Table 13 Population and household projections

	2016	2018	2028	2038	2048
NIDEA low (AMPs)					
Population	161,210	165,746	187,479	206,663	221,351
Households	54,259	56,481	68,958	80,007	88,413
Household size	2.97	2.93	2.72	2.58	2.50
SNZ high					
Population	161,210	169,137	201,637	232,337	na
Households	58,661	61,300	73,800	87,100	na
Household size	2.75	2.76	2.73	2.67	na

The NIDEA projections expect the resident population of Hamilton City to grow at a slower pace than the Statistics New Zealand 'high' projections. A critical difference between these projections is the number of households. Consistent with the age demographic of Hamilton, the NIDEA projections expect the average household size to fall considerably faster.⁴

Table 14 NIDEA projections

	2018-2028		2018-2048	
	change	annual change	change	annual change
NIDEA low (AMPs)				
Population	21,733	2,173	55,605	1,854
Households	12,477	1,248	31,932	1,064
SNZ high				
Population	32,500	3,250	na	na
Households	12,500	1,250	na	na

Under both projections, Hamilton City will need an additional 12,500 homes by 2028. Further, this growth is not expected to recede over the longer term, with the NIDEA projections indicating that household numbers will rise by more than 31,900 over the 30-year period, or approximately 1,060 new homes per annum.

⁴ Note the different starting base in each of the projections for the household numbers. Further, Statistics New Zealand sub-national population projections extend to 2038 only, so we are unable to provide a comparison number for the 30-year period.

The development of Peacocke to meet the demand for housing

The bringing forward of the development of Peacocke could result in the construction of 3,750 new dwellings over the 10-year period to 2028. This represents 30% of the additional housing needed over that 10 Year Plan period.

Over the 30-year horizon, there is the potential for an additional 8,400 dwellings to be constructed in Peacocke. As noted in the Financial Case, this development incurs a total growth spend of \$2,966 million over the 30-year horizon. These dwellings will meet the demand for approximately 26% of the additional housing required.

However, these numbers confirm that even with the Peacocke development, additional demand for housing in Hamilton City will need to be met over the medium to long-term.

Status Quo

If the Status Quo is maintained approximately 2,580 new dwellings could be constructed in the Peacocke area over the 10-year period to 2028. This represents 21% of the additional housing needed in Hamilton over this 10 Year Plan period.

Over the 30-year horizon if the Status Quo is maintained, approximately 5,630 new dwellings could be constructed. These dwellings would meet just over 17% of the additional housing required in the City. As noted in the Financial Case, continuing development as Status Quo incurs a total growth spend to Council of \$3,574 million over the 30-year horizon.

The Status Quo is not a viable option. It does not deliver enough housing to meet NPS-UDC requirements or the needs of the growing population of Hamilton. A growing demand for housing and a large shortfall could potentially result in house price increases, impacting on the affordability of living in Hamilton. This could have a further knock-on effect whereby new and existing residents are discouraged from living and working in Hamilton and leave.

Benefit-Cost ratio

The economic benefit-cost ratios (BCR) have been assessed in accordance with the following requirement set out on p18 of the "HIF Call for Final Proposals":

The benefit-cost ratio for HIF activities which provide access to housing development in high growth areas is to be calculated assuming that the level of housing development that cannot occur without the investment is advanced; the costs and benefits generated by the infrastructure work are brought forward in the benefit-cost ratio calculation.

In contrast to the Finance Case, these benefits and costs are expressed in terms of *real* 2017\$\$. This ensures comparability between the valuation of benefits and costs, and provides a robust indication of *real* (i.e. resource use and gains) economic outcomes.

The main quantifiable costs for Hamilton City Council are infrastructure capital and maintenance costs.

The main quantifiable economic benefits provided are:

- transport benefits to the Waikato Region
- rates revenue to Hamilton City Council
- developer contributions to Hamilton City Council
- wealth created for households due to appreciation in the capital value of the dwelling
- economic contributions to Hamilton City arising from the economic activity associated with infrastructure and housing construction, and household expenditure (less rates payable whose economic benefit is already accounted for above).

The indicative benefits and costs and the overall benefit-cost ratio of these are presented in Table 15 below. The marginal benefit-cost ratios for the contributing benefits are presented in Table 16 below. Further details of the calculations are provided as an Appendix.

Table 15 Costs and benefits and overall benefit-cost ratio, in constant 2017\$

	Status Quo	Peacocke
<i>Number of dwellings</i>	<i>5,627</i>	<i>8,393</i>
BCR components (\$000s in constant 2017\$)		
Costs		
Infrastructure capital	1,335,223	1,235,766
Infrastructure maintenance	1,660	5,381
Total Cost	1,336,883	1,241,147
Benefits		
Transport benefits	0	378,231
Rates revenue	97,613	137,660
Developer contribution revenue	0	55,280
Improvements value appreciation	69,671	98,511
Infrastructure construction - economic impact	1,328,023	1,229,101
Housing construction - economic impact	981,097	1,410,238
Household expenditure - economic impact	2,003,359	2,831,916
Total Benefits	4,479,763	6,140,938
Benefit Cost Ratio	3.35	4.95

The overall benefit-cost ratios for the development of Peacocke and the Status Quo are comfortably above 1.0. The BCR for Peacocke is comparably higher than the Status Quo as a result of greater transport benefits and a greater number of dwellings contributing to greater housing construction and expenditure benefits.

The BCR for the Status Quo may seem attractive but this situation has lower overall benefits. Further, of the approximately 5,630 houses that could be constructed under the Status Quo, only 2,580 could potentially be built in the 10-year period to 2028. These dwellings would meet approximately 21% of the expected demand for housing over this period and make it difficult for Hamilton City Council to meet its NPS-UDC requirements.

Table 16 Marginal benefit-cost ratios of contributing benefits

BCR components (\$000s in constant 2017\$s)	Status Quo	Peacocke
Costs	1,336,883	1,241,147
Transport benefits	0	378,231
Benefit Cost Ratio	0.00	0.30
Rates revenue	97,613	137,660
Benefit Cost Ratio	0.07	0.11
Developer contribution revenue	0	55,280
Benefit Cost Ratio	0.00	0.04
Improvements value appreciation	69,671	98,511
Benefit Cost Ratio	0.05	0.08
Infrastructure construction - economic impact	1,328,023	1,229,101
Benefit Cost Ratio	0.99	0.99
Housing construction - economic impact	981,097	1,410,238
Benefit Cost Ratio	0.73	1.14
Household expenditure - economic impact	2,003,359	2,831,916
Benefit Cost Ratio	1.50	2.28

Infrastructure, housing construction and household expenditure all have marginal benefit-cost contributions equal to or greater than one. Consequently, each of these options alone generally provides a favourable benefit-cost outcome. This is important since the quantum of benefits outweighs the investment cost for mutually exclusive beneficiaries who are diverse across location, time, private sector, public sector and households.

Housing affordability

Most councils do not currently report on specific housing affordability indicators. The exception is councils who are party to a Housing Accord. Auckland Council, Wellington City Council and Tauranga City Council use, or make reference to, the median multiple indicator.

The most commonly used measure of housing affordability is the 'median multiple'; a ratio of the median house price over the median household income for a given area. The median multiple is an aggregate approach to gauging housing affordability and can be used to make comparisons between cities.

The median multiple is the most referenced measure of affordable housing in New Zealand; the Ministry for Business, Innovation and Employment (MBIE) use it to determine the councils participating in the Housing Accords, and it is directly referenced by the Minister for Housing.

One of the key limitations to the median multiple approach is that it does not illustrate the experiences of different groups, such as first home buyers who may be struggling to access the housing market for the first time. Furthermore it does not consider other factors such other household expenses or interest rates, which will have a major impact on the household's ability to purchase a home.

Both the Environment Court and the High Court have concluded that affordable housing policies and rules fall within the scope of the Resource Management Act 1991 (RMA) and can be legitimately addressed through District Plans.

Despite provision for this in the legislation only two territorial authorities have inclusionary housing policies in their current or proposed RMA plans: Auckland and Queenstown-Lakes.

HIF low-cost housing measure

The HIF outcome measure on affordable housing is: “New lower-cost houses are built in HIF-funded areas”. In particular, success looks like, “Developments ... include dwellings with a price point that is 65% of the mean dwelling price of the city or district in which they are located”.

Hamilton City Council has therefore considered a measure of success related to the “Number of new houses with a rateable value (RV) that is 65% of the mean dwelling price of the city or district in which they are located” compared to a benchmark of the “Number of houses in 2016 that had a RV that is 65% of the mean dwelling price of the district or city in which they are located”.

Consequently:

The mean dwelling price in Hamilton City for the year to June 2016 was approximately \$492,000

- 65% of this figure is \$320,000.

As at June 2016, 25% of all Hamilton City Council residential rateable properties had an RV below \$320,000.

- These properties had an average size of 91.5 square metres, or 92.2 square metres for new builds.
- The remaining properties had an average size of 185.3 square metres, or 205 square metres for new builds.

Given the 25% proportion is likely to be driven by infill as opposed to greenfield developments, a proportion of 20% is considered more robust and relevant to the Peacocke development.

Using the size of a dwelling as a proxy for the amount of low-cost housing being provided, an assumption is made that 20% of the new builds in Peacocke average 95 square metres, and the remaining 80% of the dwellings average 205 square metres. However, it should be noted that the final outcome over the 30-year period in terms of the proportion of dwellings across a range of sizes will be determined by master planning processes, developer decisions and broader market influences.

Table 17 Assumed building costs derived from QV Cost-builder, 2017

House, One Storey	Unit	Waik \$
House, 90-130m ² . Concrete slab or particle board floor. Kitchen, bathroom, WC. Fibre-cement weather boards, galvanised steel roof. Standard quality fittings	m ²	1,475-1,675
House, 90-130m ² . Rental or Investment Type. Concrete floor slab, kitchen, bathroom, WC. Brick cladding. Standard quality fittings	m ²	1,550-1,750
House, 100-250m ² . Concrete floor slab, kitchen, bathroom, WC, ensuite. Colorsteel ® roof. Medium quality fittings		
Weatherboard cladding, LineaTM	m ²	1,725-1,925
Weatherboard cladding, cedar or pine	m ²	1,750-1,950
Fibre cement cladding, Titan or Exotec, painted	m ²	1,800-2,000
Brick veneer, concrete tile roof	m ²	1,750-1,950

Assumed building costs are derived from QV Cost-builder (formerly Rawlinsons) for the first quarter of 2017 with an inflation adjustment of 1.4% to bring these figures through to the third quarter of 2017 (i.e. effective October 2017).

- $\$1,700 + 1.4\% = \$1,724$ per square metre for a dwelling between 90 and 130 square metres.
- $\$1,950 + 1.4\% = \$1,977$ per square metre for a dwelling between 100 and 250 square metres.

Given the assumed the 20:80 split between dwelling sizes, this implies an overall average cost of \$1,927 per square metre for an overall average dwelling size of 183 square metres. This results in an overall average building cost of \$352,570 per house.

Assumptions

The following are data sources and assumptions used by BERL in determining these estimates of costs and benefits.

Transport benefits

The net present value of the benefits (refer Annexes) accruing from the transport infrastructure in terms of time savings for road users. These benefits were provided by Gray Matter.

Rates and developer contributions

Average annual rates and developer contributions per new dwelling were provided by Hamilton City Council. BERL have deflated both rates and developer contributions by the projected CPI rates to ensure they reflect valuation at real 2017 prices.

Improvement value appreciation to households

BERL have assumed that the initial capital value of a new home is the same as the average new build cost of \$352,570.

BERL have assumed that each new house will appreciate in value by 3% per annum once the house has been built.

BERL has then applied an annual deflator to the annual appreciation to remove the inflation component of the price change in housing, and allowed the appreciation in capital value of housing to reflect the real growth in the value of the house.

The forecast CPI series to 2048 was developed by BERL combining current inflation growth and the long run target of 2% inflation per annum (the current RBNZ inflation target).

Infrastructure costs

All infrastructure costs were provided by Hamilton City Council for transport infrastructure and three waters infrastructure.

To reflect real changes in infrastructure costs going forward, BERL have taken the difference between the projected capital cost adjustor and the projected annual change in inflation (as represented by CPI).

Using such an adjustment means that *real* infrastructure costs (i.e. when expressed in \$2017) in 2048 are 21 percent higher than in 2017 when expressed in \$2017.

Housing construction

As described above, data from QV CostBuilder, previously Rawlinsons New Zealand Construction Handbook, were used to derive an overall average construction cost of \$1,927 per square metre for an overall average dwelling size of 183 square metres.

Household expenditure

Average weekly household expenditure is from the Statistics New Zealand Household Expenditure Survey 2013. This is a survey of New Zealand residents who own their own dwelling.

The overall household expenditure data was adjusted by 88% to reflect the difference between the New Zealand average spend and the average spend in the Waikato / Rest of North Island region. BERL also removed property rates, savings, donations, fines and overseas expenditure from the household expenditure.

The average weekly spend was then adjusted to an annual spend. This resulted in an estimate of average household expenditure in the Waikato of \$51,371.25 per year, which was rounded to \$51,300 for BERL calculations.

The household expenditures output to GDP co-efficient was constructed by assigning household expenditure to 21 industries (including retail, education, recreation, food and beverages services, etc.) and using the spending weight the Gross Output to GDP co-efficient of each of the 21 industries to construct an overall co-efficient. This co-efficient is 0.6.

The total GDP multiplier for household expenditure was constructed using the same weights as the Gross Output to GDP co-efficient. This co-efficient is calculated to be 1.86.

Multipliers

For this analysis, BERL has used 2013 input-output multipliers tables for New Zealand. These are calculated from the 2013 New Zealand input-output tables produced by Statistics New Zealand in 2016.

- For Local Authority rates and developer contributions, BERL used the multiplier for Local Government.
- For infrastructure construction, BERL used the multiplier for Heavy and Civil Engineering Construction.
- For residential housing construction, BERL used the multiplier for Residential Building Construction.

For each of the Local Authority rates, developer contributions, infrastructure construction, residential building construction and household expenditure, BERL transformed the gross output to GDP and then multiplied the direct GDP for each category to determine the total annual GDP contribution to the New Zealand economy.

6. The financial case to deliver infrastructure projects and more houses faster

In adopting the NIDEA projections, Hamilton City Council is tasked with delivering an infrastructure solution capable of servicing the approximately 12,500 additional dwellings forecast in the 10 years to 30 June 2028.

The HIF application and HIF loan has been analysed and considered in conjunction with the significant funding challenge presented by the 10 Year Plan 2018-28 encompassing the growth infrastructure solution, the costs and revenues associated with growth and the cost to operate and maintain existing Council functions and assets.

Assuming the HIF application is successful the preferred growth scenario is that of Peacocke, subject to Council approval through adoption of the 2018-28 10 Year Plan.

The cost of infrastructure, including Peacocke, represents an unprecedented level of capital expenditure over the 10-year period and as a result Council has undertaken significant moderation of their entire capital program to deliver the lowest cost solution for ratepayers.

The total cost of Peacocke is compared to the Status Quo alternative below (using inflation adjusted numbers):

Table 18 Total cost of Peacocke compared to the Status Quo

DESCRIPTION		GROWTH SPEND			
		10 Years		30 Years	
		Peacocke	Total	Peacocke	Total
Peacocke	Includes the essential infrastructure required to deliver the 10-year dwelling yield. A significant amount of land for parks and open spaces and for future infrastructure beyond the 10 year yield is designated but not acquired	\$412m	\$958m	\$798m	\$2,849m
Status Quo	Rotokauri Stage 1 in the 10 year period. Other new growth cell stage deferred outside of the 10 year period	\$114m	\$880m	\$949m	\$3,430m
Funding (Before NZTA Subsidies)					
HIF Loans	Gross value of HIF projects including inflation but before NZTA FAR subsidies and any contingency allocation adjustments	\$308m	\$308m	\$308m	\$308m
Council Loans	Forecast cost including inflation and before NZTA FAR subsidies	\$104m	\$650m	\$481m	\$2,541m

Cumulative Growth Capital Expenditure

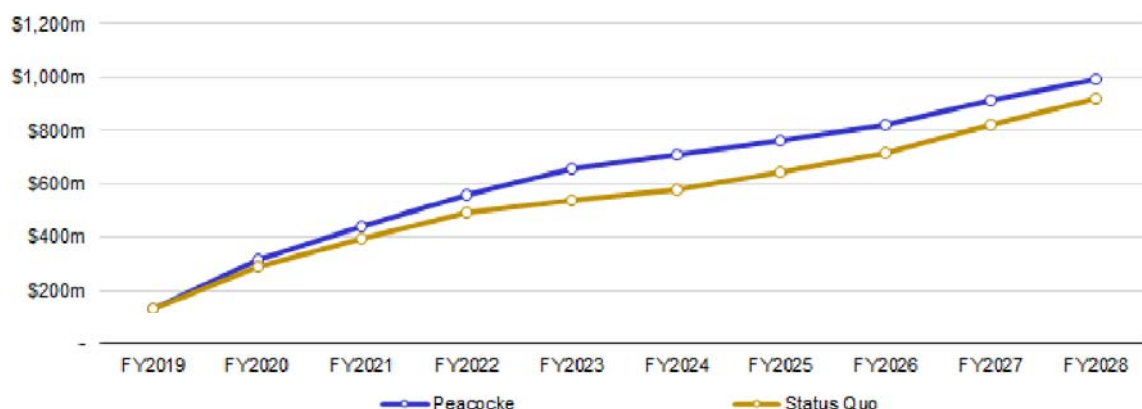


Figure 29 Cumulative Growth Capital Expenditure

It should be noted that both Peacocke and the Status Quo solutions are not without risk of other growth related infrastructure expenditure being forced upon the Council by developers throughout the City where land is zoned residential.

Funding Challenge

The total funding challenge of Council across the LTP period is \$1,513 million (reflecting total capital expenditure plus debt-funded interest). Growth infrastructure is \$958 million or 63% of this funding challenge, and the HIF projects are \$308.4 million or 20% of the total to be funded.

The HIF loan provides a financial benefit of \$70m to Council through interest savings.

Financial modelling indicates that despite the HIF related interest savings significant rates increases are still required for Council to operate within the prudent LGFA debt to revenue limit of 230%.

The following rates increases have been assumed in the financial case:

Table 19 10 Year Plan 2018-28 assumed rates increases

INCREASE TYPE	YEAR 1 (FY2019)	YEAR 2-10 (FY2028)
General Increase	17.5%	1.5%
Inflationary Increase	2.0%	2.3%
Total	19.5%	3.8%

Increases of this level are unprecedented for Hamilton City Council ratepayers, and have not yet been approved by Council.

Despite the benefit of the HIF, the cost of funding growth related infrastructure is significant, and a cost largely borne by existing ratepayers.

Should significant rates increases not be approved by Council or the HIF application is unsuccessful, the affordability of Peacocke would have to be reconsidered against the Status Quo scenario or the Council not meeting the NIDEA growth projections and associated NPS-UDC requirements.

Project delivery costs

Project construction cost estimates are attached in the appendices. These are the 50% percentile expected costs in \$2017 and include a contingency allowance of 20% to 30% to allow for known or unknown risks that are likely to occur during implementation. As at October 2017, there is emerging evidence of cost pressure in relation to land valuations. Best practice estimating would normally consider funding risk management considering a 5% percentile and 95% percentile cost (lowest and highest probable costs). Hamilton City Council proposes to manage the contingency across all transport and waters projects to reduce the funding risk since the HIF funding amount is capped.

Detailed breakdowns used for the Peacocke infrastructure and the HCC long term plan are available as referenced in the bibliography and have been provided to Bond CM for their estimate review.

All property costs are for the land required for the project, nett of surplus areas than can be sold on/disposed of.

The table below presents the key infrastructure elements before and after an allowance for inflation. The expected \$2017 costs are used in economic evaluation. The post-inflation costs reflect the likely drawdown amounts.

Table 20 Expected delivery costs (pre- and post-inflation)

\$ in millions	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	TOTAL
Pre-Inflation Capex Breakdown											
Roading											
Roading - Peacocks stage 1B	2.4	4.8	3.5	0.1	-	-	-	-	-	-	10.8
Roading - Peacocks stage 2	17.3	31.8	17.2	46.9	48.6	9.5	4.4	0.1	-	-	175.8
Ring Road Cobham Int	12.0	8.0	-	-	-	-	-	-	-	-	20.0
Subtotal	31.7	44.5	20.8	46.9	48.6	9.5	4.4	0.1	-	-	206.5
Water											
Watermains - Peacocks stage 2	0.9	0.7	0.3	0.8	1.3	0.2	0.7	0.0	-	-	4.9
Distribution mains - Peacocks stage	0.1	0.1	0.6	0.0	-	-	-	-	-	-	0.8
Transfer PS & RM - Peacocks stage 1	3.1	12.6	15.6	5.0	0.9	0.2	-	-	-	-	37.4
Transfer PS - Peacocks stage 2	0.1	0.1	0.2	-	-	0.9	0.1	2.6	2.6	0.1	6.8
Wastewater - Peacocks stage 1	0.7	1.7	5.5	2.9	2.9	1.6	0.1	-	-	-	15.4
Subtotal	4.9	15.2	22.3	8.7	5.0	3.0	0.9	2.7	2.6	0.1	65.3
Total Pre Inflation	36.6	59.7	43.0	55.6	53.6	12.4	5.4	2.7	2.6	0.1	271.8
Pre-Inflation											
NZTA 51% Subsidies	16.2	22.7	10.6	23.9	24.8	4.8	2.3	0.0	-	-	105.3
HIF Transport Drawdowns	15.5	21.8	10.2	23.0	23.8	4.6	2.2	0.0	-	-	101.2
HIF Water Drawdowns	4.9	15.2	22.3	8.7	5.0	3.0	0.9	2.7	2.6	0.1	65.3
Total HIF Drawdowns (Pre-inflation)	20.4	37.0	32.4	31.7	28.8	7.6	3.1	2.7	2.6	0.1	166.5
Inflation Rate	4.0%	4.4%	4.4%	2.2%	2.3%	2.4%	2.4%	2.5%	2.6%	2.7%	
Inflation Rate (Cumulative)	4.0%	8.6%	13.4%	15.8%	18.5%	21.4%	24.3%	27.4%	30.7%	34.2%	
Inflation	1.5	5.1	5.7	8.8	9.9	2.7	1.3	0.7	0.8	0.0	36.6
Total Post Inflation	21.9	42.1	38.2	40.5	38.7	10.2	4.4	3.4	3.5	0.2	203.1
Post-Inflation Capex Breakdown											
Roading											
Roading - Peacocks stage 1B	2.5	5.2	4.0	0.1	-	-	-	-	-	-	11.7
Roading - Peacocks stage 2	18.0	34.5	19.5	54.3	57.6	11.5	5.5	0.1	-	-	201.0
Ring Road Cobham Int	12.5	8.7	-	-	-	-	-	-	-	-	21.2
Subtotal	32.9	48.4	23.5	54.4	57.6	11.5	5.5	0.1	-	-	233.9
Water											
Watermains - Peacocks stage 2	0.9	0.8	0.3	0.9	1.5	0.2	0.9	0.0	-	-	5.6
Distribution mains - Peacocks stage	0.1	0.1	0.7	0.0	-	-	-	-	-	-	0.9
Transfer PS & RM - Peacocks stage 1	3.2	13.7	17.7	5.8	1.0	0.3	-	-	-	-	41.7
Transfer PS - Peacocks stage 2	0.1	0.1	0.3	-	-	1.1	0.1	3.4	3.5	0.2	8.6
Wastewater - Peacocks stage 1	0.8	1.9	6.2	3.4	3.4	2.0	0.1	-	-	-	17.7
Subtotal	5.1	16.5	25.2	10.1	5.9	3.6	1.1	3.4	3.5	0.2	74.5
Total Post Inflation	38.0	64.9	48.8	64.5	63.5	15.1	6.7	3.5	3.5	0.2	308.4
Post-Inflation											
NZTA 51% Subsidies	16.8	24.7	12.0	27.7	29.4	5.9	2.8	0.0	-	-	119.3
HIF Transport Drawdowns	16.1	23.7	11.5	26.6	28.2	5.6	2.7	0.0	-	-	114.6
HIF Water Drawdowns	5.1	16.5	25.2	10.1	5.9	3.6	1.1	3.4	3.5	0.2	74.5
Total HIF Drawdowns (Post-inflation)	21.2	40.2	36.8	36.7	34.1	9.2	3.8	3.4	3.5	0.2	189.1

Inflation adjustment factors are taken from SolGGM cost adjustors for Local Government Capital Expenditure, as prepared by BERL. These cost adjustors are expected nationwide average inflation rates for capital expenditure. In light of the concentration of near-term infrastructure investment and construction sector activity, it is clear that capital expenditure inflation rates in the upper North Island area will be higher than the nationwide average. Consequently, capital expenditure inflation in the Waikato area is considered to be double the nationwide average for the first three years of the program, and thereafter reverts to the nationwide average.

Spend profile by activity

Delivery of the infrastructure associated with the HIF funding results in a construction spend starting at \$12 million in Year 1. This is the funding required to grade-separate the Cambridge-Cobham interchange previously planned as at-grade. This spend rises to around \$50 million to \$60 million per annum in Years 3 to 5. Most construction is complete by Year 6. The last expenditure, Years 7-10, is in the second stage of the wastewater transfer station, increasing pump capacity to be sufficient for the increasing population in the area.

Professional services start at around \$18 million in Year 1, and reduce steadily to leave around \$1 million per annum or less in construction observation and management from Years 5 to 9.

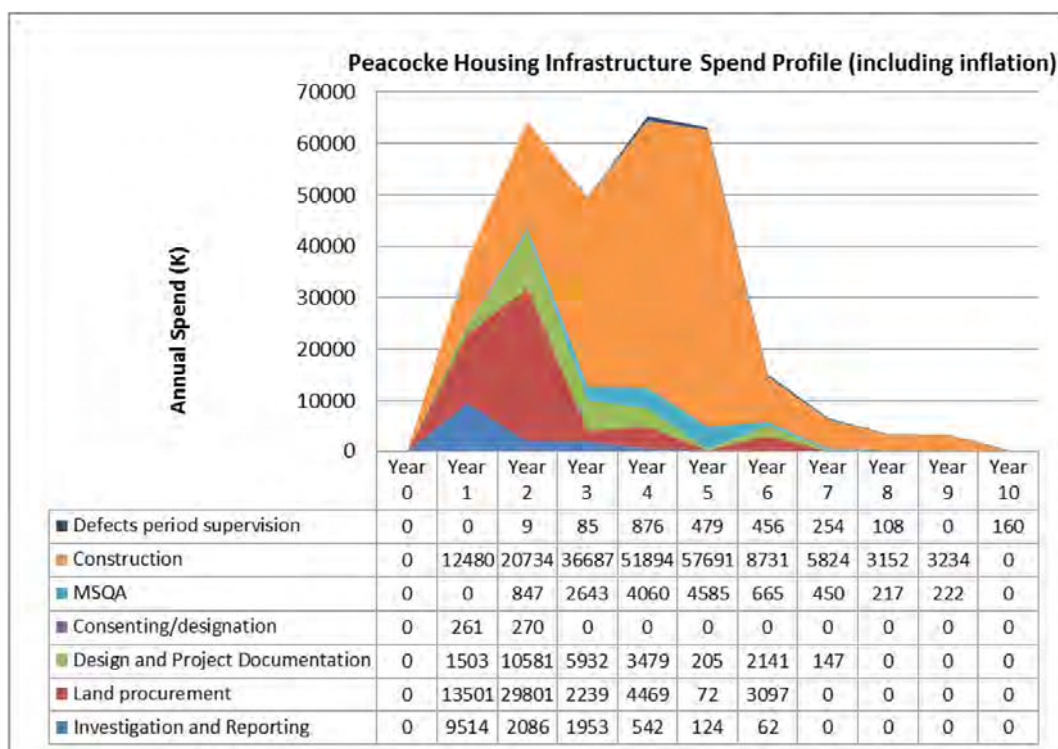


Figure 30 Peacocke infrastructure spend, 10 years, including inflation

Project delivery costs for the HIF funded components peak at around \$65m per annum. In addition, there will be additional capital costs necessary, such as for stormwater and upsizing and upgrade costs not included in the HIF funding.

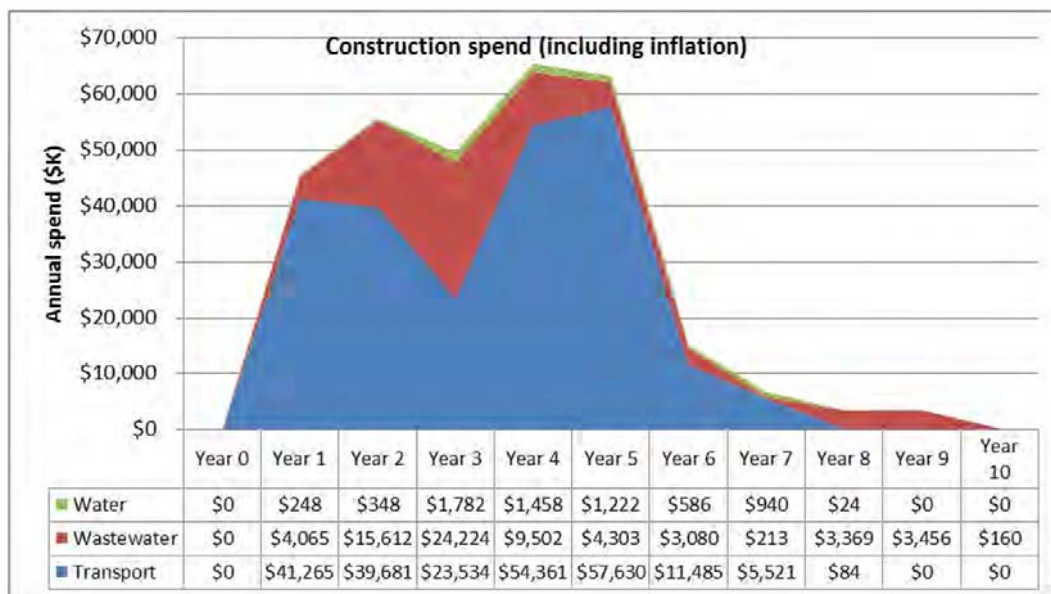


Figure 31 Construction Spend Profiles

Transport infrastructure is the dominant investment area. The initial spend is mainly in the Cobham Drive interchange, and the large Year 4 and 5 spend is the Hamilton Gardens bridge and pump station.

Proposed costs relative to current capital expenditure

By comparison, the typical capital expenditure expected in the first three years of the 10 Year Plan 2018-28 ranges from \$21 million per annum to \$36 million per annum. The proposed rate of expenditure will be challenging and require changes to Hamilton City Council's capital programme delivery arrangements, as explained in the Management Case.

Ongoing maintenance and operations costs

Table 21 Maintenance and operations costs

EXPECTED MAINTENANCE AND OPERATIONS COSTS	10 YEAR TOTAL	30 YEAR TOTAL
Accelerated program stages 1 & 2 transport activities	\$999m	\$8,102m
Accelerated program stages 1 & 2 water and wastewater activities	\$167m	\$1,313m
Total	\$1,166m	\$9,415m

The annual maintenance and operations costs over the 10 year plan period and the 30 year infrastructure strategy period total approximately \$1.2 million and \$9.4 million respectively. Annually, the costs increase from approximately \$250,000 once the works are complete, to approximately \$574,000 at the end of 30 years, with an average annual cost of around \$315,000.

Proposed costs relative to current maintenance and operational expenditure

Hamilton City Council currently spends around \$42 million annually on maintenance and operations (excluding finance costs). The expected \$315,000 annual maintenance and operations cost is less

than 1% of current activities and will require no changes to Hamilton City Council's maintenance and operations systems.

Financial implications

The financial modelling assumes that the operating costs are met by the operating revenues. Surpluses created through the Year 1 rates increases are applied to Access Hamilton and community projects. However, the revenue increases provide leverage to increase debt capacity under the LGFA's maximum debt to revenue limit of 250%. Despite this, Hamilton City Council financial modelling assumes 230% as the debt limit. This is because the LGFA encourage a "prudent limit" of 230% to allow headroom for emergencies requiring debt funding.

Gross Debt

Hamilton City Council is currently modelling a gross debt position of \$755m by FY2028 without the HIF loan, an increase of \$363m from the forecast opening position for FY2019. The addition of the HIF loan decreases the gross debt at FY2028 by approximately 7% to \$703m.

The following graph illustrates the increase in gross debt and projected impact on Council's debt to revenue ratios for Peacocke, inclusive and exclusive of the HIF loan compared to the Status Quo.

Closing Debt and Debt to Revenue Ratio

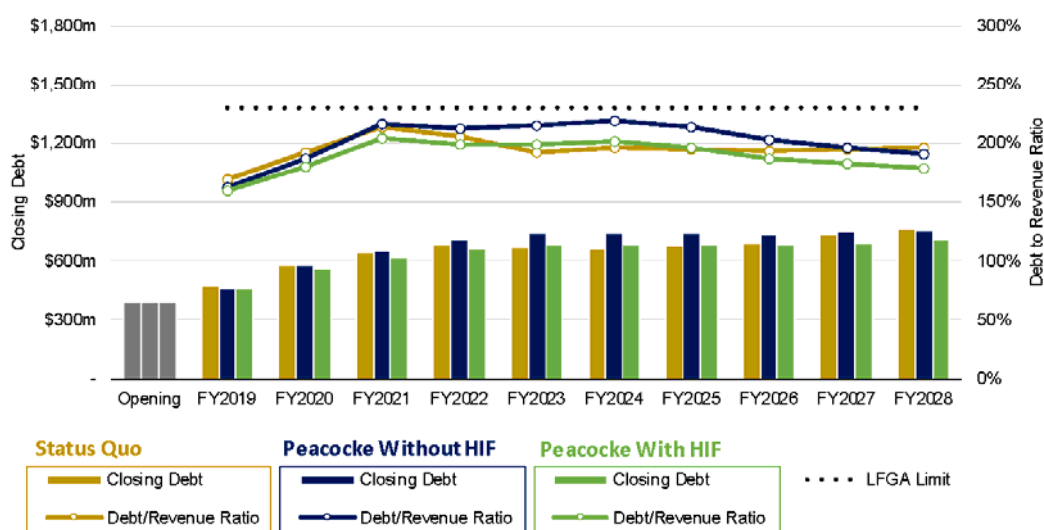


Figure 32 Closing debt and debt to revenue ratio

The HIF loans are on balance sheet at present value.

The affordability of future capital expenditure will be assessed against current and projected debt and any proposed future rates increases. Therefore at this point in time Council cannot illustrate an accurate debt to revenue position beyond FY2028.

The table below illustrates the debt surplus (or shortfall) implied by the LGFA prudent debt limit, as well as the revenue surplus (or shortfall) indicated by the same measure.

Table 22 LGFA Debt limit and revenue surplus

\$ in millions	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Without HIF										
Debt Capacity (230% of revenue)	652	712	698	767	792	774	797	835	876	908
Closing Debt	459	579	654	708	740	738	739	735	748	755
Debt Surplus/(Shortfall)	193	133	43	59	53	36	58	100	128	153
Revenue Surplus/(Shortfall)	84	58	19	26	23	16	25	43	56	67
With HIF										
Debt Capacity (230% of revenue)	652	712	698	767	792	774	797	835	876	908
Closing Debt	453	558	621	662	682	680	681	679	693	703
Debt Surplus/(Shortfall)	199	154	77	105	110	94	116	156	183	205
Revenue Surplus/(Shortfall)	87	67	33	46	48	41	50	68	80	89

The capital expenditure program reflects the bare minimum, and any debt capacity will likely be consumed by unfunded projects that escalate in importance.

Rates Increases

The financial modelling and 10 Year Plan 2018-28 assume the following rates increases. This represents a total rates increase from FY2018 to FY2028 of 67% (on a compounding basis).

Table 23 10 Year Plan 2018-28 assumed rates increases

INCREASE TYPE	YEAR 1 (FY2019)	SUBSEQUENT YEARS
General rates increase	5.2%	1.5%
General rates increase to fund community and Access Hamilton initiatives	12.3%	-
Inflationary increases (average)	2.0%	2.3%*
Total forecast increases	19.5%	3.8%

*Average annual inflation assumed (range 2.0%-2.6%)

Summary

Hamilton City Council made a number of compromises to achieve a debt to revenue level that does not breach the LGFA prudent limit of 230%. This is despite the interest-free benefit of the HIF loans. These compromises, based on current modelling with the capex schedule subject to approval, include:

- The growth capital expenditure program is heavily constrained, having gone through a number of iterations to strip out non-essential expenditure
- Ratepayers will absorb a year 1 rates increase of 19.5%, and subsequent increases of 3.8%
- A portion of the year 1 rates increase (12.3%) is to satisfy all non-growth Transport and community initiatives, which is considered to be minimal spending for these areas

The core assumptions, including rates increases, are subject to approval. Hamilton City Council is scheduled to meet on 6 December 2017 to approve the draft 10-year plan, including these underlying assumptions.

Funding/revenue sources and profile

The following tables summarises the assumed funding sources and uses for the next 10 years (including inflation).

Table 24 Assumed funding sources and uses for next 10 years (including inflation)

FUNDING USES	COMMENTS / ASSUMPTIONS	10 YR TOTAL (\$millions)
Growth Capital Expenditure	<i>Includes all growth projects designated "Must" for the Peacocke growth scenario (excluding Access Hamilton and Community capex)</i>	958
Access Hamilton Capital Expenditure	<i>A minimum estimate of gross expenditure including NZTA FAR subsidies</i>	227
Community Capital Expenditure	<i>A minimum estimate of expenditure required</i>	102
Other Non-Discretionary Capital Expenditure	<i>Assumed at \$10m per year (inflated). This captures several known projects currently not captured in the Growth profile but considered essential</i>	115
Interest Cost	<i>Interest cost that is assumed to be debt funded (35% of total interest). Interest rates are assumed at 5.0% for FY2019, declining to 4.7% for FY2025 and subsequent years. Source: BERL projections</i>	111
TOTAL TO BE FUNDED		1,513

FUNDING SOURCES	COMMENTS / ASSUMPTIONS	10 YR TOTAL (\$million)
Depreciation	<i>Assumed that total depreciation for Council less Renewal Capex is to be made available to fund growth.</i>	282
Developer Contributions	<i>Assumed at modelled DC rates. Peacocke Stage 2 is assumed at \$34,000, whilst all other catchments are approximately \$3,000 higher than current rates</i>	298
Rates increases above 'balance the books'	<i>Rates increases are assumed to generate cash surplus' to fund Access Hamilton and community projects not captured within the core growth infrastructure. The additional debt capacity created by the rates increases is made available to fund growth capital expenditure</i>	238
Developer Ready Land Targeted Rate	<i>Assumed at \$1.7m per annum (inflated). This is intended to encourage developers to develop their land quickly</i>	19
Asset Sales and Other One-Off Receipts	<i>Primarily relates to sale of pensioner housing, and property in the Endowment Fund</i>	35
NZTA 51% FAR Subsidy (On Infrastructure Profile)	<i>51% of spending on eligible roading projects</i>	155
NZTA 51% FAR Subsidy (On Access Hamilton Capex)	<i>Assumed that approximately 80% of estimated Access Hamilton capex will be eligible for NZTA funding</i>	91
HIF Interest Benefit	<i>The interest savings from having the 10 year interest free HIF loan totals \$70 million; however, only 35% of interest is assumed to be debt funded. The interest saving from the HIF loan for debt is therefore lower at \$22 million</i>	22
Net HIF Drawdowns	<i>The net of drawdowns of the HIF loan (\$189 million) and repayments (\$24 million)</i>	165
Net Contribution from Operating Surplus	<i>An assumed small net operating surplus over the 10 year period is assumed to repay debt</i>	38
Council Debt Funding	<i>Increase in Council borrowings</i>	226
TOTAL OF FUNDING SOURCES		1,513

Note: All figures are including inflation and excluding GST

The graph below provides a breakdown of funding uses and sources by year for the next 10 years.

Note: Rates increases are applied to operating costs, community infrastructure and Access Hamilton contribute to debt capacity by way of the 230% debt to revenue prudent limit set by the LGFA.

Funding - 10 Year Sources and Uses

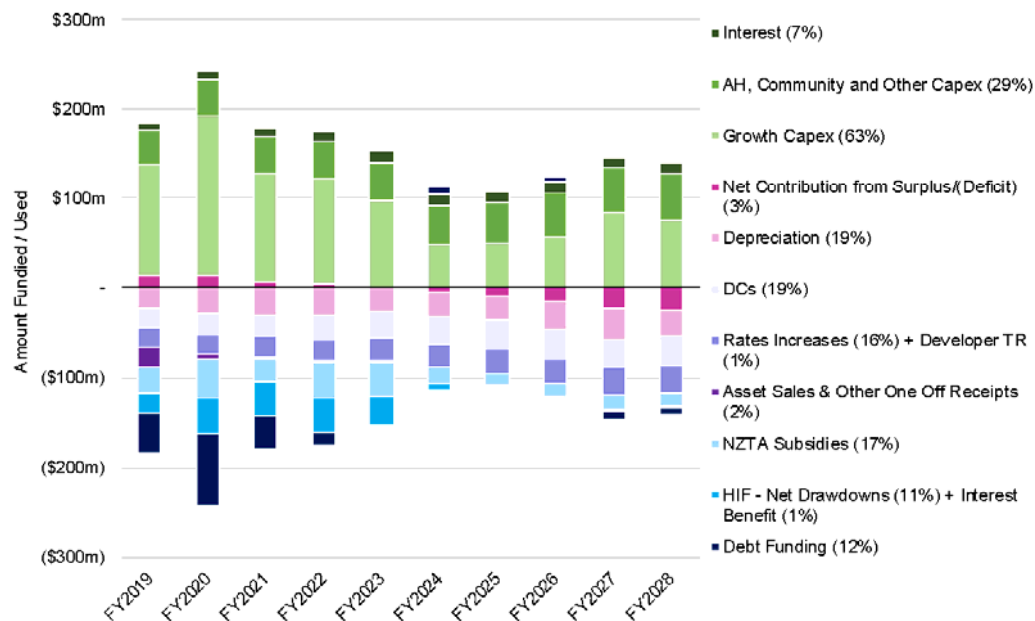


Figure 33 Funding – 10 year sources and uses

Expenditure to date not included in Peacocke HIF as part of Southern Links pre-implementation is subject to separate discussions with NZTA.

HIF loan drawdown profile

The IBC expressed the Peacocke Capital Expenditure profile in 2017 dollars. Detailed below is the annual capital expenditure profile for both the transport and waters projects with and without inflation.

Table 25 Annual expenditure profile for transport and waters projects with and without inflation

\$ in millions	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	TOTAL
HIF - Transport											
Capital Expenditure	31.7	44.5	20.8	46.9	48.6	9.5	4.4	0.1	-	-	206.5
Inflation	1.3	3.8	2.8	7.4	9.0	2.0	1.1	0.0	0.0	0.0	27.4
Total (Inflated)	32.9	48.4	23.5	54.4	57.6	11.5	5.5	0.1	-	-	233.9
Less: NZTA Subsidy	(16.8)	(24.7)	(12.0)	(27.7)	(29.4)	(5.9)	(2.8)	(0.0)	-	-	(119.3)
Total Net (Inflated)	16.1	23.7	11.5	26.6	28.2	5.6	2.7	0.0	-	-	114.6
HIF - Water											
Capital Expenditure	4.9	15.2	22.3	8.7	5.0	3.0	0.9	2.7	2.6	0.1	65.3
Inflation	0.2	1.3	3.0	1.4	0.9	0.6	0.2	0.7	0.8	0.0	9.2
Total (Inflated)	5.1	16.5	25.2	10.1	5.9	3.6	1.1	3.4	3.5	0.2	74.5
Total											
Capital Expenditure	36.6	59.7	43.0	55.6	53.6	12.4	5.4	2.7	2.6	0.1	271.8
Inflation	1.5	5.1	5.7	8.8	9.9	2.7	1.3	0.7	0.8	0.0	36.6
Total (Inflated)	38.0	64.9	48.8	64.5	63.5	15.1	6.7	3.5	3.5	0.2	308.4
Less: NZTA Subsidy	(16.8)	(24.7)	(12.0)	(27.7)	(29.4)	(5.9)	(2.8)	(0.0)	-	-	(119.3)
Total Net (Inflated)	21.2	40.2	36.8	36.7	34.1	9.2	3.8	3.4	3.5	0.2	189.1

Key assumptions

- That the HIF transport projects receive a 51% NZTA FAR subsidy.
- The inflation figures are from BERL, we note that the level of inflation has been doubled in the first three years to reflect the unprecedented level of infrastructure construction likely to occur, both within the region and nationally, and the impact on contractor competition and pricing.

The majority of the funding is required in the first five years, commencing FY2019 as illustrated below.

HIF - Drawdown Profile

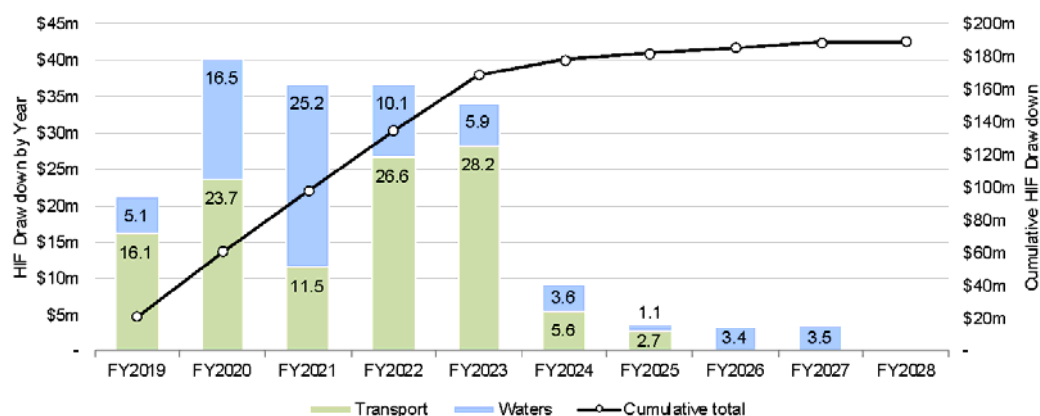


Figure 34 HIF loan drawdown spend profile

HIF loan repayments

It is the preference of Hamilton City Council that both the waters and transport components of the HIF loan are treated the same and funded by MBIE (Water) and the Ministry of Transport (MOT) respectively.

Offset FAR subsidy

Hamilton City Council does not wish to proceed with the offset FAR subsidy arrangement proposed due to the impact on:

- Ratepayers - The arrangement reduces operating subsidies received from NZTA to maintain existing roads, effectively increasing operating costs to be funded by the ratepayer and applying the subsidies to growth related capital expenditure.
- Development Contributions – The application of NZTA operating subsidies to growth related capital projects may inhibit the ability to recover development contributions on this portion of capital expenditure.

In effect the Council would simply have to debt fund the reallocated subsidy with no benefit gained.

Both the transport and water loans are on balance sheet at present value.

Repayments from Development Contributions

Development Contributions (DC) consist of a citywide component and a catchment specific component.

Using Council's DC modelling software, the indicative estimate for the Peacocke Stage 2 DC charge is \$34,000 including the citywide charge. The HIF loan projects represent 65% of eligible Peacocke expenditure in the first 10 years, net of NZTA FAR subsidies. This implies that \$10,100 of the DC charge relates to HIF projects (which is intended to repay the HIF loan within the 10 year period) as detailed below.

Table 26 Estimated DC charges

Estimated DC Charge		
\$ in millions		Total
Citywide		18.5
Peacocke		15.5
Total Excl. GST		34.0
Consisting of:		
HIF Projects	65%	10.1
Non HIF Projects	35%	5.4
Total Peacocke Specific Charge		15.5

Based on the Peacocke dwelling yield profile over the 10 year period to FY2028, the capital repayment to MBIE for HIF specific projects is detailed in the table below (note this is indicative – not detailed modelling).

Table 27 Estimated DC Repayment Schedule (post inflation)

<i>Estimated DC Repayment Schedule (post inflation)</i>											
\$ in millions	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Peacocke 2 dwelling yield	135	137	161	197	357	473	500	496	490	368	325
DC - HIF portion of Peacocke Capex		1.4	1.7	2.2	4.0	5.5	5.9	6.0	6.1	4.7	4.2
Pre 1 July 2018 leakage		(1.4)	(1.7)	(2.2)	(4.0)	(0.2)	-	-	-	-	-
Subtotal		-	-	-	-	5.3	5.9	6.0	6.1	4.7	4.2
Leakage Allowance		-	-	-	-	(1.2)	(1.4)	(1.4)	(1.4)	(1.1)	(1.0)
Annual Repayment		-	-	-	-	4.1	4.6	4.6	4.7	3.6	3.3
Cumulative Total		-	-	-	-	4.1	8.6	13.3	17.9	21.5	24.8

- “DC – HIF Portion of Peacocke Capex” has been calculated at \$10,400 per Peacocke 2 dwelling developed.
- “Pre 1 July Leakage” relates to a 1,000 lot consent which we have been informed the largest developer will apply for prior to the adoption of the new 10 Year Plan on 1 July 2018. As a result there will be very little recovery on any HIF related project (if any). We have therefore excluded repayment on the first 1,000 lots. Council will look to mitigate this leakage through the Private Developer Agreement (PDA) process.
- “Leakage allowance” reflects a general leakage rate for DC charges of 23% that is assumed for a multitude of reasons and is consistent with historic and forward looking modelling. Every effort will be made to reduce leakage, however it is inevitable that some revenue will be lost.
- It is assumed that drawdowns are made quarterly and that repayments will be applied to the oldest loan first.

Basis of repayments

- The Council is charged with delivering infrastructure to facilitate the delivery of houses by the private development sector. The HIF loan assists Council to expedite the opening of Peacocke through the construction of the Hamilton Gardens bridge and wastewater infrastructure.
- The Council proposes that repayments are made based on actual DCs collected, therefore Council and MBIE both share the risk of demand or growth.
- Should other capital recovery mechanisms eventuate through PDAs or agreements with developers, the Council would intend to make further capital repayments on a basis consistent with the proportion of the HIF loan project spend, relative to the total capital expenditure within the Peacocke development.

Accounting treatment

- Our modelling treats the transport loan (net of NZTA subsidy) and waters loan the same. They are recognised at present value on the balance sheet on day one, with the present value discount recognised as non-operating income that is effectively released annually across the life of the loan.
- The present value factor applied is the annual forecast cost of debt.
- The present value calculation incorporates the projected Development Contribution repayments, which are to be confirmed with MBIE.

Final repayment

- The balances of each drawdown or tranche will be repaid at expiry of the loan term, being 10 years from drawdown, as illustrated in the graphs below. A summary of numbers is provided on the following page.
- It is assumed that the loans are refinanced with the LGFA or other financial institution within the Council's maximum debt capacity limits.

Transport & Water HIF - Drawdowns/(Repayments)

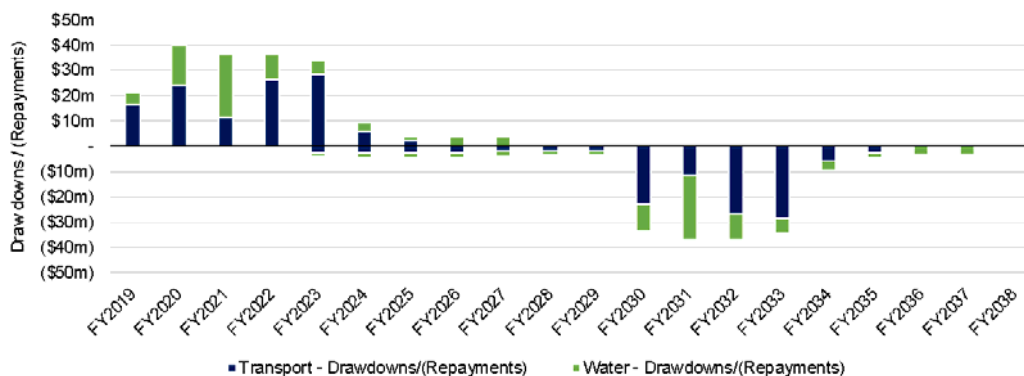


Figure 35 Transport and Water HIF loan drawdown and repayments

\$ in millions	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	FY2037	FY2038	TOTAL
TRANSPORT SCHEDULE																					
Opening Balance	-	16.1	39.8	51.4	78.0	103.8	106.6	106.5	103.7	101.6	99.6	97.8	74.8	63.2	36.6	8.4	2.7	0.0	{0.0}	{0.0}	-
Drawdowns	16.1	23.7	11.5	26.6	28.2	5.6	2.7	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Repayments	-	-	-	-	{2.5}	{2.8}	{2.8}	{2.8}	{2.2}	{2.0}	{1.8}	{2.1}	{2.0}	{2.1}	{2.0}	{2.0}	{2.3}	{0.0}	{0.0}	{0.0}	114.6
Repayments - DCs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	{29.4}
Repayments - Balloon	-	-	-	-	{2.5}	{2.8}	{2.8}	{2.8}	{2.2}	{2.0}	{1.8}	{2.0}	{1.9}	{2.1}	{2.0}	{2.0}	{2.3}	{0.0}	{0.0}	{0.0}	{85.2}
Total Repayments	-	-	-	-	{2.5}	{2.8}	{2.8}	{2.8}	{2.2}	{2.0}	{1.8}	{2.0}	{1.9}	{2.1}	{2.0}	{2.0}	{2.3}	{0.0}	{0.0}	{0.0}	{114.6}
Closing Balance - Transport	16.1	39.8	51.4	78.0	103.8	106.6	106.5	103.7	101.6	99.6	97.8	74.8	63.2	36.6	8.4	2.7	0.0	{0.0}	{0.0}	{0.0}	-
Transport Debt Balance (at PV)	11.7	25.9	35.3	53.4	73.9	75.0	77.5	78.4	75.9	81.7	82.8	85.3	87.1	83.7	7.7	2.6	0.0	{0.0}	{0.0}	{0.0}	-
WATER SCHEDULE																					
Opening Balance	-	5.1	21.6	46.8	56.9	61.2	62.9	62.3	63.8	65.8	64.7	63.5	52.9	27.7	17.6	11.7	8.1	5.7	3.6	0.2	-
Drawdowns	5.1	16.5	25.2	10.1	5.9	3.6	1.1	3.4	3.5	0.2	-	-	-	-	-	-	-	-	-	-	74.5
Repayments	-	-	-	-	{1.6}	{1.8}	{1.8}	{1.8}	{1.4}	{1.3}	{1.2}	{1.4}	{1.3}	{1.3}	{1.3}	{1.3}	{1.5}	{1.4}	{1.7}	{0.2}	{22.4}
Repayments - DCs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	{52.1}
Repayments - Balloon	-	-	-	-	{1.6}	{1.8}	{1.8}	{1.8}	{1.4}	{1.3}	{1.2}	{1.4}	{1.3}	{1.3}	{1.3}	{1.3}	{1.5}	{1.4}	{1.7}	{0.2}	{74.5}
Total Repayments	-	-	-	-	{1.6}	{1.8}	{1.8}	{1.8}	{1.4}	{1.3}	{1.2}	{1.4}	{1.3}	{1.3}	{1.3}	{1.3}	{1.5}	{1.4}	{1.7}	{0.2}	{74.5}
Closing Balance - Water	5.1	21.6	46.8	56.9	61.2	62.9	62.3	62.3	65.8	64.7	63.5	52.9	27.7	17.6	11.7	8.1	5.7	3.6	0.2	0.0	-
Water Debt Balance (at PV)	3.9	14.8	31.1	39.8	43.6	45.1	46.1	48.6	51.6	52.9	54.2	46.4	24.0	15.2	10.2	7.2	5.1	3.4	0.1	-	-
TOTAL																					
Opening Balance	-	21.2	61.4	98.2	134.9	164.9	166.6	168.8	167.6	167.4	164.3	161.3	127.7	91.0	54.2	20.1	10.9	6.7	3.6	0.2	-
Drawdowns	21.2	40.2	36.8	36.7	34.1	9.2	3.8	3.4	3.5	0.2	-	-	-	-	-	-	-	-	-	-	189.1
Repayments	-	-	-	-	{4.1}	{4.6}	{4.6}	{4.6}	{3.6}	{3.3}	{3.0}	{3.5}	{3.3}	{3.4}	{3.3}	{3.3}	{3.7}	{1.5}	{1.7}	{0.2}	{51.8}
Repayments - DCs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	{137.3}
Repayments - Balloon	-	-	-	-	{4.1}	{4.6}	{4.6}	{4.6}	{3.6}	{3.3}	{3.0}	{3.5}	{3.3}	{3.4}	{3.3}	{3.3}	{3.7}	{1.5}	{1.7}	{0.2}	{189.1}
Total Repayments	-	-	-	-	{4.1}	{4.6}	{4.6}	{4.6}	{3.6}	{3.3}	{3.0}	{3.5}	{3.3}	{3.4}	{3.3}	{3.3}	{3.7}	{1.5}	{1.7}	{0.2}	{189.1}
Closing Balance - Transport	21.2	61.4	98.2	134.9	164.9	169.6	168.8	167.6	167.4	164.3	161.3	127.7	91.0	54.2	20.1	10.9	6.7	3.6	0.2	-	-
Water Debt Balance (at PV)	15.6	41.7	66.3	92.1	112.5	120.1	123.5	127.0	131.6	134.6	138.0	111.7	81.0	48.9	17.9	9.7	5.1	3.4	0.1	-	-

Table 28 Transport and water HIF loan drawdown and repayment

Illustrative financial impact sensitivity analysis, and changes to assumptions

All HIF loan debt is modelled on balance sheet at present value, discounted for the cost of debt. The ability to repay or refinance the HIF loans will be considered in the ordinary course of the Council's 10 Year Planning process.

The 10 Year Plan process occurs every three years and changes in the growth trajectory and the implications on capital expenditure programs and funding are addressed as required.

The sensitivity analysis and tables presented below are illustrative in that they adjust either one or two assumptions in isolation with all other assumptions held constant. In practice, significant changes to key funding and cost assumptions would result in changes to revenue and capital expenditure assumptions (both timing and quantum).

Impact of reduced Year 1 rates increase

Table 29 Impact of reduced Year 1 rates Increase

ASSUMED RATES INCREASES		Peak funding surplus / (shortfall)	DEBT TO REVENUE RATIO	
Total	Subsequent Years		Peak Timing	Peak Ratio
19.5%	3.8%	\$76.8m	FY2021	205%
15.0%	3.8%	\$47.1m	FY2024	215%
10.0%	3.8%	(\$29.7m)	FY2024	239%
3.8%	3.8%	(\$134.2m)	FY2025	269%

Note, Year 1 rates increases are for a number of reasons, as detailed below:

- Balancing the books – achieve a breakeven surplus position
- Access Hamilton projects to be funded by surplus'
- Community projects to also be funded by surplus'.

However, all debt capacity created from the increased revenue is available to fund growth capital expenditure.

Increase of variable Year 1 rates increases and variable cost escalation

The sensitivity analysis tables below indicate the effect of increasing infrastructure cost and having various levels of Year 1 rates increase on the peak debt funding surplus/(shortfall) and peak debt to revenue ratio. The top right cell indicates the proposed position all else equal.

Table 30 Peak Debt Funding

Peak Debt Funding Surplus/(Shortfall)

	Year 1 Rates Increases				
	0.0%	5.0%	10.0%	15.0%	19.5%
0%	(\$1m)	\$19m	\$39m	\$59m	\$77m
5%	\$5m	\$25m	\$45m	\$64m	\$82m
10%	\$10m	\$30m	\$50m	\$70m	\$88m
15%	\$16m	\$36m	\$56m	\$76m	\$94m
20%	\$21m	\$41m	\$61m	\$81m	\$99m

Peak Debt to Revenue Ratio

	Year 1 Rates Increases				
	0.0%	5.0%	10.0%	15.0%	19.5%
0%	230%	223%	216%	210%	205%
5%	228%	221%	215%	208%	203%
10%	226%	219%	213%	206%	201%
15%	224%	217%	211%	205%	199%
20%	222%	215%	209%	203%	198%

Impact of reduced growth

The assumed growth of 12,500 dwellings over the 10 year period provides increased revenue to Council in terms of rates income and Development Contributions.

The increased revenue provides a mix of the direct cash benefit to repay debt and also the debt capacity created under the 230% debt to revenue covenant. The implications of each revenue stream is summarised below.

Table 31 Revenue stream implications

Revenue Source	Cash Impact	Debt Capacity Impact
Rates income	Minimal impact as the 10 Year Plan largely assumes a breakeven surplus position or surplus spent on Access Hamilton and community projects	This can be significant with all new rates income providing 230% debt capacity
Development Contributions	Reduced cash receipts to be applied to HIF loan repayments	Excluded from the LGFA debt to revenue calculation so no impact

Illustrated below is the impact of the lost debt capacity assuming a linear decrease in dwelling growth (which then impacts on rates growth), illustrated as a percentage below.

Table 32 Loss in Debt Capacity from Reduced Growth in Rating Base

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
(5%)	(\$0.3m)	(\$0.6m)	(\$1.0m)	(\$1.3m)	(\$1.7m)	(\$2.1m)	(\$2.5m)	(\$2.9m)	(\$3.3m)	(\$3.8m)
(10%)	(\$0.6m)	(\$1.2m)	(\$1.8m)	(\$2.5m)	(\$3.2m)	(\$3.9m)	(\$4.7m)	(\$5.5m)	(\$6.3m)	(\$7.2m)
(15%)	(\$0.8m)	(\$1.7m)	(\$2.6m)	(\$3.5m)	(\$4.5m)	(\$5.5m)	(\$6.6m)	(\$7.8m)	(\$9.0m)	(\$10.2m)
(20%)	(\$1.0m)	(\$2.1m)	(\$3.2m)	(\$4.4m)	(\$5.6m)	(\$6.9m)	(\$8.3m)	(\$9.8m)	(\$11.2m)	(\$12.7m)
(25%)	(\$1.2m)	(\$2.5m)	(\$3.8m)	(\$5.1m)	(\$6.6m)	(\$8.1m)	(\$9.7m)	(\$11.4m)	(\$13.2m)	(\$14.9m)
(30%)	(\$1.3m)	(\$2.8m)	(\$4.3m)	(\$5.8m)	(\$7.4m)	(\$9.1m)	(\$10.9m)	(\$12.8m)	(\$14.8m)	(\$16.7m)

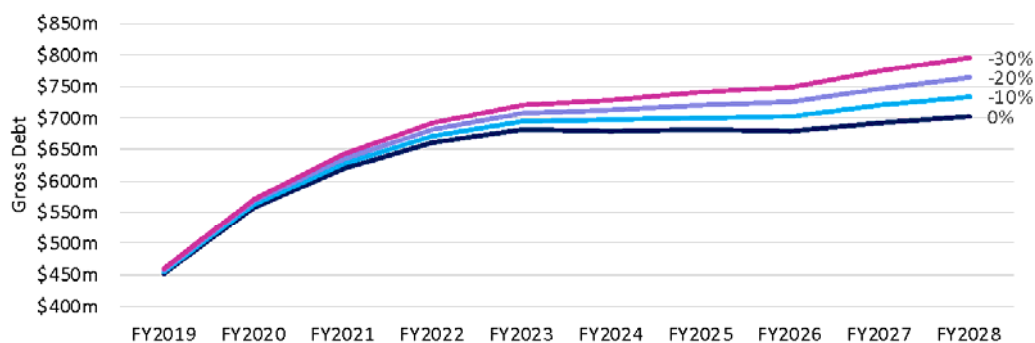
Illustrated below is the cumulative impact of reduced DC revenue by year assuming a linear decrease in dwelling growth (which then impacts on rates growth).

Table 33 Cumulative loss in DC Revenue from reduced growth in rating base

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
(5%)	(\$2.0m)	(\$4.1m)	(\$6.3m)	(\$8.7m)	(\$11.4m)	(\$14.1m)	(\$17.0m)	(\$20.0m)	(\$22.9m)	(\$25.8m)
(10%)	(\$3.0m)	(\$6.3m)	(\$9.8m)	(\$13.5m)	(\$17.7m)	(\$22.0m)	(\$26.4m)	(\$31.1m)	(\$35.6m)	(\$40.1m)
(15%)	(\$4.1m)	(\$8.6m)	(\$13.3m)	(\$18.4m)	(\$24.0m)	(\$29.8m)	(\$35.8m)	(\$42.2m)	(\$48.3m)	(\$54.4m)
(20%)	(\$5.2m)	(\$10.9m)	(\$16.8m)	(\$23.2m)	(\$30.3m)	(\$37.7m)	(\$45.3m)	(\$53.3m)	(\$61.0m)	(\$68.8m)
(25%)	(\$6.3m)	(\$13.2m)	(\$20.3m)	(\$28.0m)	(\$36.6m)	(\$45.6m)	(\$54.7m)	(\$64.4m)	(\$73.8m)	(\$83.1m)
(30%)	(\$7.4m)	(\$15.4m)	(\$23.8m)	(\$32.9m)	(\$42.9m)	(\$53.4m)	(\$64.1m)	(\$75.4m)	(\$86.5m)	(\$97.4m)

The effect of a linear decrease in dwelling growth can be further illustrated through assessing changes to gross debt and the debt to revenue ratio, as provided in the charts below.

Effect of a Linear Decrease in Dwelling Growth on Gross Debt



Effect of a Linear Decrease in Dwelling Growth on Debt to Revenue Ratio

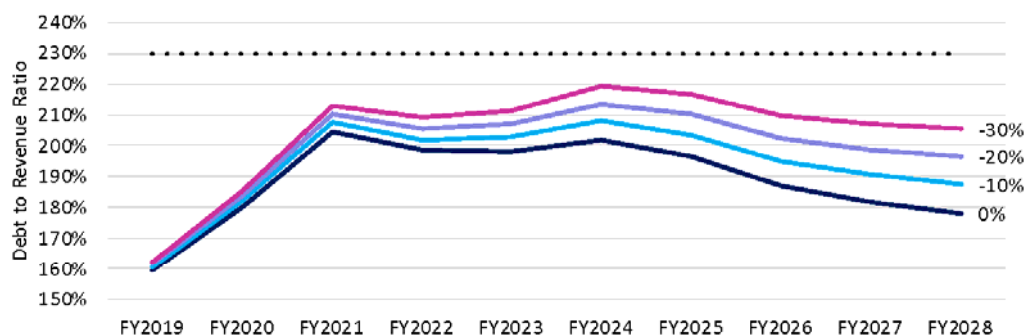


Figure 36 Effect of linear decrease

Summary

- The 10 Year Plan debate for Council will involve discussions on all of the factors considered in this section.
- There is a delicate trade-off between:
 - Rates increases
 - Balancing the books timing and level of services (opex)
 - Timing and quantum of the investment in Access Hamilton, community and growth capex.
- Further there is a key trade-off between debt funding (and consequently having a high level of debt) and maintaining a manageable debt to revenue ratio not at the upper end of the maximum acceptable level.

Allocation of financial risks to other parties and their ability to manage risks

A series of risk workshops were held with Hamilton City Council staff. These were led by PwC as an external advisor / facilitator. Many of the risks identified are applicable to the HIF loan projects and the overall delivery of the 10 Year Plan program of work, which poses a significant funding challenge.

Summarised below are the key financial risks identified during these workshops, along with the mitigation controls and assurance procedures identified.

Table 34 Financial risks

FINANCIAL RISKS		
Risks Identified	Key Controls	Assurance
<p>1. Cost escalation</p> <p>Varying degree of design planning may result in budget overspend</p>	<p>Detailed Business Case</p> <ul style="list-style-type: none"> All cost assumptions subject to peer review through DBC process Cost contingency allowance in place Transparency of key assumptions so that decision-makers are informed <p>Project Management</p> <ul style="list-style-type: none"> Stagegate review process for design phase Project reporting and monitoring of performance vs. budget and reforecasting if appropriate Project critical path analysis <p>Procurement</p> <ul style="list-style-type: none"> Engineer estimates / project budgets used to assess tender submissions and price estimates Use of contingency allowance to reduce uncertainty when pricing assumptions <p>Contract Management</p> <ul style="list-style-type: none"> Financial monitoring of key contracts 	<p>Level 1: Project Management Oversight, Capability and Experience</p> <p>Detailed Business Case</p> <ul style="list-style-type: none"> Detailed financial modelling lists all assumptions and sensitivity analysis <p>Project Management</p> <ul style="list-style-type: none"> Stage gate approvals Budget vs. actual monitoring by management <p>Level 2: Project Governance</p> <ul style="list-style-type: none"> PCG project financial reporting Review of project status, including financials, by Finance department, Council Committees and Council as part of the normal operating structure <p>Level 3: Independent and Objective Assurance</p> <p>Third Party Independent Quality Assessments (IQA) of project</p> <ul style="list-style-type: none"> Verification of the project reporting accuracy and current state of the project, including governance functions Peer review of costs / assumptions Audit NZ financial audit
<p>2. Development Contribution leakage</p> <p>Existing consents in Peacocke Stage 1 and consents applied for prior to 30 June 2018 for Peacocke Stage 2.</p>	<p>Development Contribution Policy</p> <ul style="list-style-type: none"> Accelerate the review of the DC policy <p>Developer Agreements</p> <ul style="list-style-type: none"> Achieve PDAs with key developers 	<p>Level 1: Project Management Oversight, Capability and Experience</p> <ul style="list-style-type: none"> Ensure PDAs reflect the actual growth costs of Peacocke and the HIF projects Implement an interim update of DC policy <p>Level 2: Project Governance</p> <ul style="list-style-type: none"> Approval of updated DC policy in line with the appropriate Council process <p>Level 3: Independent and Objective Assurance</p> <ul style="list-style-type: none"> Legal review of development contribution policy / process Peer review of DC policy

<p>3. Peacocke, which includes the HIF loan, is deemed unaffordable by elected members</p> <p>The financial modelling assumes a 19.5% rates increase in Year 1 with 3.8% per annum thereafter.</p> <p>Gross debt is forecast to increase from approximately \$392m in FY18 to \$703m by FY2028</p>	<p>Detailed Business Case</p> <ul style="list-style-type: none"> Financial modelling of scenarios and funding payback including sensitivity analysis <p>Stakeholder Management and Communication Plan</p> <ul style="list-style-type: none"> Rates increases are one aspect to balancing a budget. Other options that are usual practice within 10 Year Plan deliberations include to stage rates increases over time; decrease expenditure in other areas; design other revenue streams i.e. DC increases or targeted rates The impact of rates increases to fund business as usual activities and provide for greater debt capacity have been ongoing subjects within briefing workshops and formal reports to Council 	<p>Level 1: Project Management Oversight, Capability and Experience</p> <ul style="list-style-type: none"> Management review of the DBC <p>Level 2: Project Governance</p> <ul style="list-style-type: none"> Council approves the DBC subsequent to the 2018-28 10 Year Plan <p>Level 3: Independent and Objective Assurance</p> <ul style="list-style-type: none"> Independent review of the DBC
<p>4. Contractual risk created by the terms of the HIF loan agreements</p>	<p>Project Management</p> <ul style="list-style-type: none"> Legal and commercial review of the potential risks to HCC from the contract HCC approval of the contract based upon financial delegations Ensuring the terms of the contract align repayments to actual demand 	<p>Level 1: Project Management Oversight, Capability and Experience</p> <ul style="list-style-type: none"> Project team review contract in conjunction with Auckland Council, Tauranga Council and Waikato District Council <p>Level 2: Project Governance</p> <ul style="list-style-type: none"> Briefing to SLT, Project Team and Elected Representatives Council approval of DBC and contract by appropriate Delegated Authority process <p>Level 3: Independent and Objective Assurance</p> <ul style="list-style-type: none"> Independent legal review

7. The commercial case to deliver infrastructure and more houses faster

There is a demonstrable need for more housing in Hamilton. NIDEA projections and economic data indicates that housing demand in Hamilton is strong, and is likely to continue over the short to medium term.

As noted in earlier sections, population growth is robust, and the City is going to need to develop an additional 1,200 to 1,400 houses each year to cater for this growth. Data gathered by Hamilton City Council indicates that the City is currently delivering close to this number of houses, with 50% of new housing being developed in existing urban areas.

Looking ahead, the planning framework for Hamilton City and Peacocke provides housing choice in terms of households, preferences, densities and typologies.

Hamilton City Council has a robust implementation strategy to enable development, stimulated by the HIF funding. Hamilton City Council has developed a detailed construction and phasing sequence that provides for early project gains before the gradual roll out of infrastructure across Peacocke. In addition, the procurement strategy of Hamilton City Council will leverage existing, proven Hamilton City Council and NZ Transport Agency procurement processes.

Hamilton City Council has partnered with the Adare group as part of their developer strategy. A Memorandum of Understanding is currently being completed. This will lead to a detailed Private Developer Agreement to enable the early development of up to 350 houses from 2018, and up to a total of 1,000 houses over a five to seven year period.

Many consents, designation, land purchases and other related statutory approvals are already in place, meaning projects are ready to go. Hamilton City Council will form a Peacocke Housing Infrastructure Team with the sole purpose of ensuring all activities necessary to deliver HIF-funded infrastructure, and the houses enabled by the investment, can occur as quickly as possible.

Hamilton City Council will also look to actively master plan in partnership with other land owners, and to work collaboratively and proactively with other regulatory agencies.

Implementation strategy

The HIF funding is applied to only part of the investment required to develop Peacocke. The figures below show the proposed infrastructure separately for wastewater, water and transport, with HIF funding components highlighted. These figures illustrate all of the projects that Hamilton City Council are responsible for.

Two projects are more advanced than the others, with design and construction planning underway. These projects and their implementation are discussed further in the Management Case. However, early development may be possible without the Hamilton Gardens bridge if lower levels of service are tolerable for transport and an interim wastewater solution is acceptable. These options would be developer-led, and would rely on a design for permanent solutions being available to avoid risks and high future costs.

Early engagement is needed to coordinate development with utility providers for trunk connections. Stormwater management infrastructure and consents will also be significant influences on design and implementation for subdivision development.

Coordination of Integrated Catchment Management Plans, Catchment Management Plans, master planning and consenting is dealt with separately in the Consenting Strategy to manage time and potential cost risks for delivery.

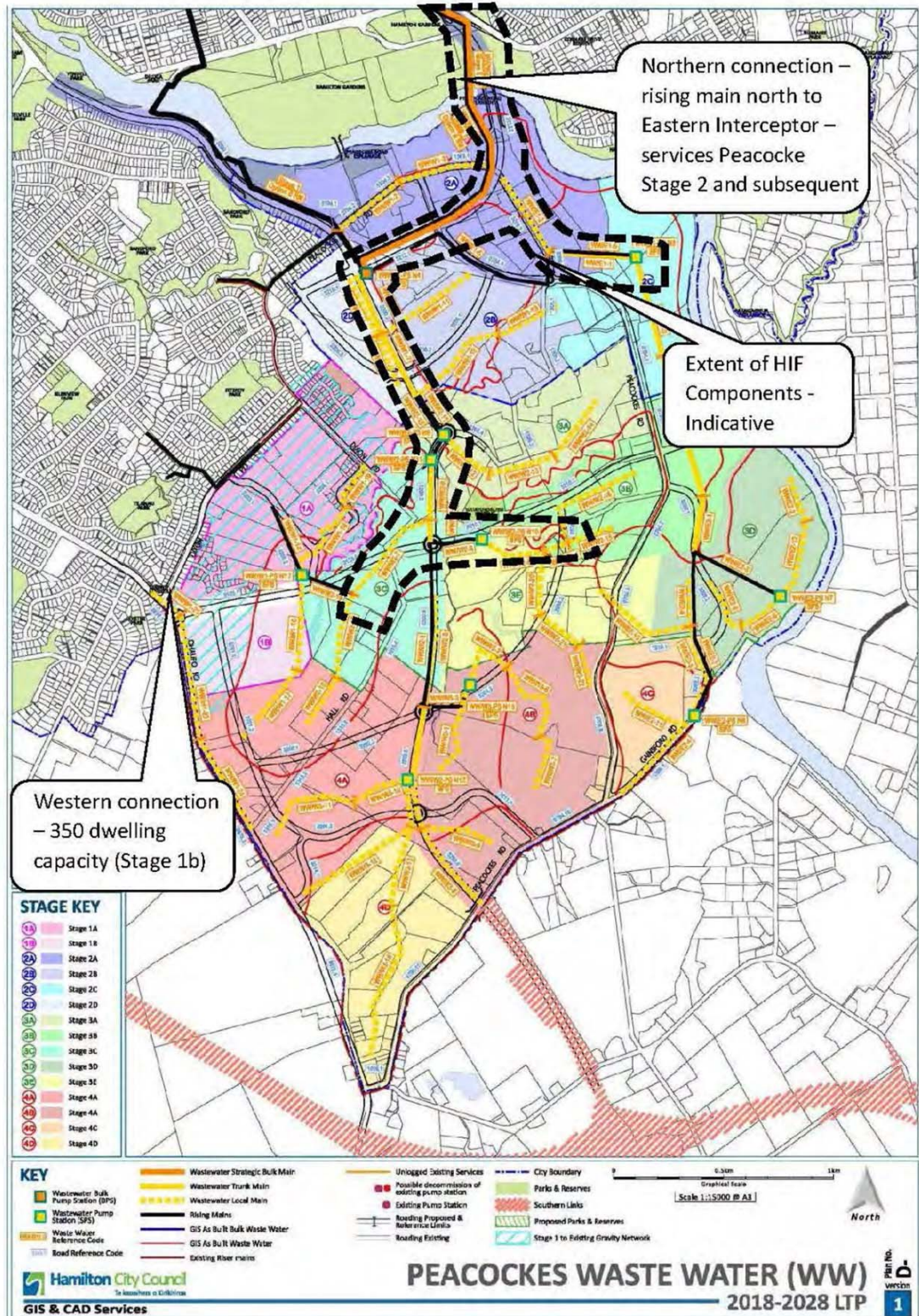


Figure 37 Peacocke 2018 – 2028 Wastewater program (\$M)

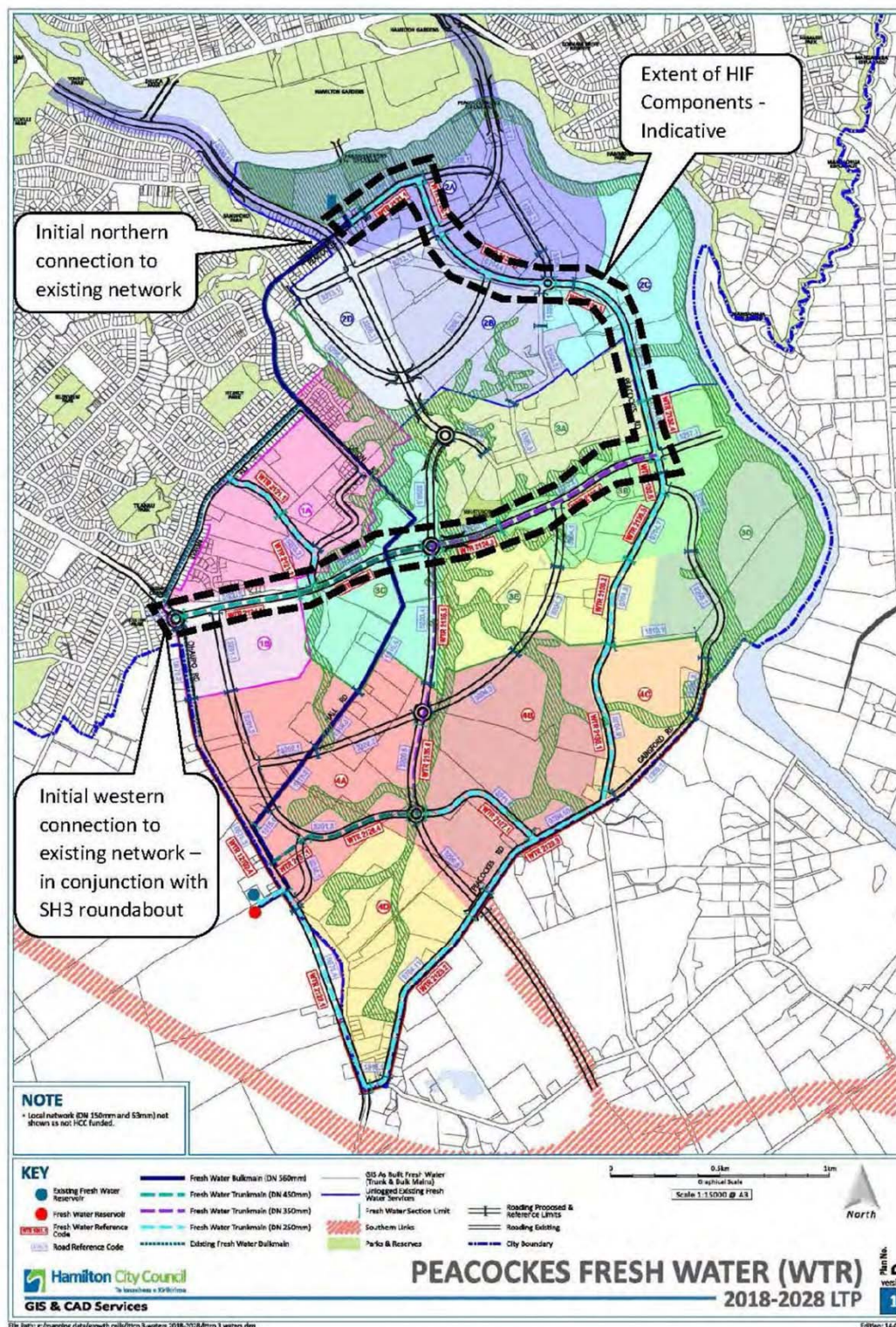


Figure 38 Peacocke 2018 – 2028 water program (\$M)

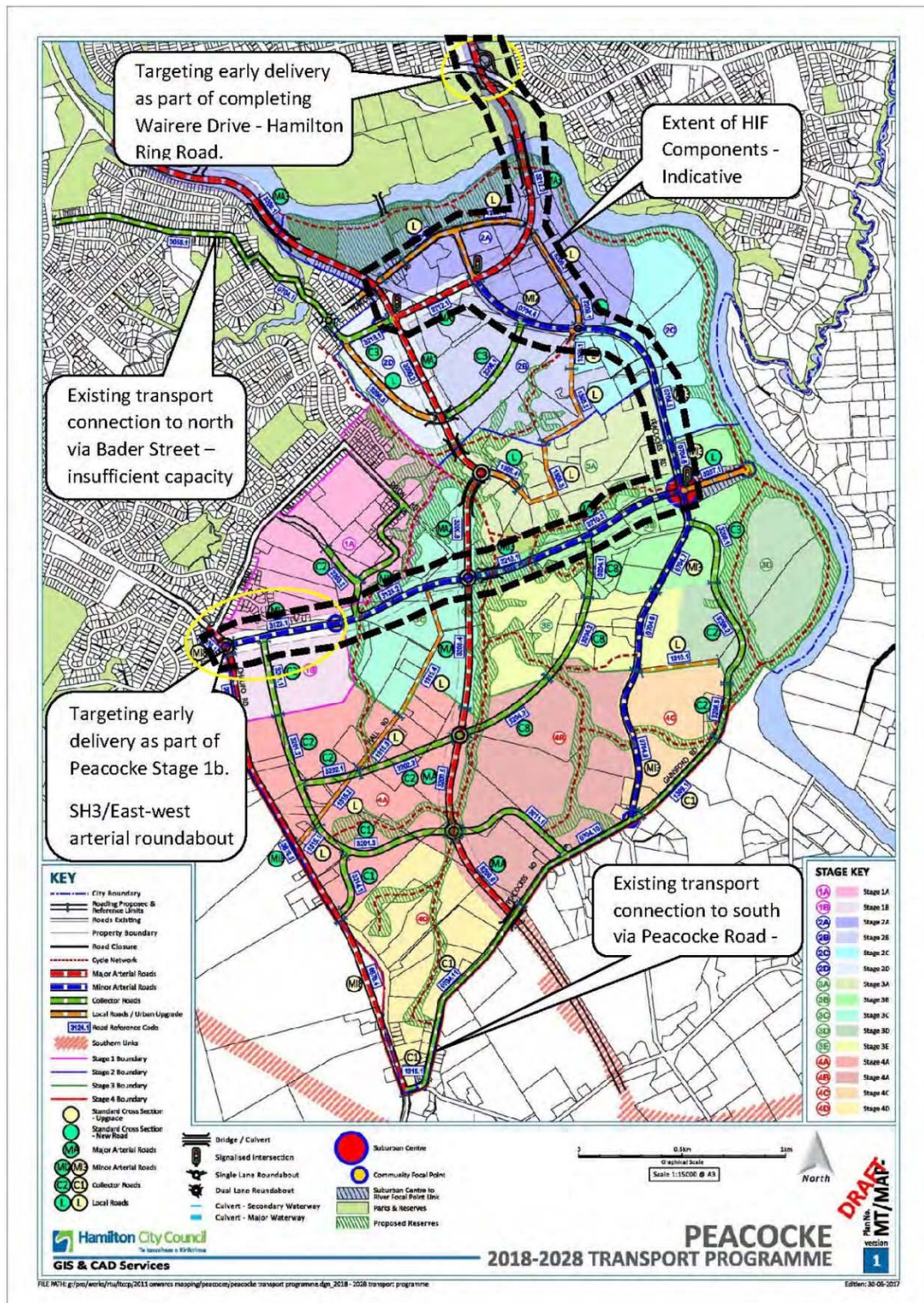


Figure 39 Peacocke 2018 – 2028 transport program (\$M)

Construction sequence/phasing

The figures below illustrate the progressive implementation of the infrastructure in Peacocke. Although shown as distinct phases, the scale of the Hamilton Gardens bridge, and transfer pump station and pressure main projects means that they will be complete by Year 5. Implementation of the smaller scale internal projects can start later and progress in parallel with completion of the gateway structures. Master planning, subdivision and development can be timed for completion of dwellings at the same time as the gateway infrastructure.

In Phase 1, land and consents are critical, along with the early delivery of the current Wairere Drive/Cobham Interchange and SH3/Ohaupo Road roundabout projects. Hamilton City Council will seek to accelerate these where resources permit.

The first step is to secure access, complete detailed investigations and acquire land.



Figure 40 Phase 1 - land and early projects – Peacocke Stage 1b access and grade separation for access from Cobham Drive

Early delivery of the SH3/East-west link roundabout projects provides water supply and transport access in the Peacocke Stage 1b area, which has wastewater capacity for 350 dwellings. This is also in an area with a single developer ready to progress.

The wastewater pressure main to the north, including crossing Cobham Drive, is critical for further development in the Peacocke area. The Cambridge/Cobham interchange provides for the main transport link to the north via Cobham Drive and the Wairere Drive Ring Road. It also provides for construction access for Stage 2 of Peacocke.

Pre-implementation for Stage 2 will continue in parallel with Stage 1, in order to deliver the infrastructure needed for significant development – the bridge and wastewater connections to the north. Peacocke development staging is broadly expected to take place in a north to south direction with the Stage 1b development in the west independent of this. There is a single developer progressing master planning to release around 1,000 dwellings in the river terraces area alongside the Waikato River.

Developers have an opportunity to further accelerate development by implementing a planned internal strategic wastewater pump station and interim wastewater connection beneath the river while the main bridge and pressure main are being constructed.

Completion of the wastewater transfer pump station and pressure main, and its connection to the eastern interceptor at Crosby Road removes the main barrier to development. The bridge over the Waikato River will support the wastewater connection and provide transport access. The bridge approaches several local roads, which will be reconnected and urbanised, with strategic water distribution mains laid at the same time.

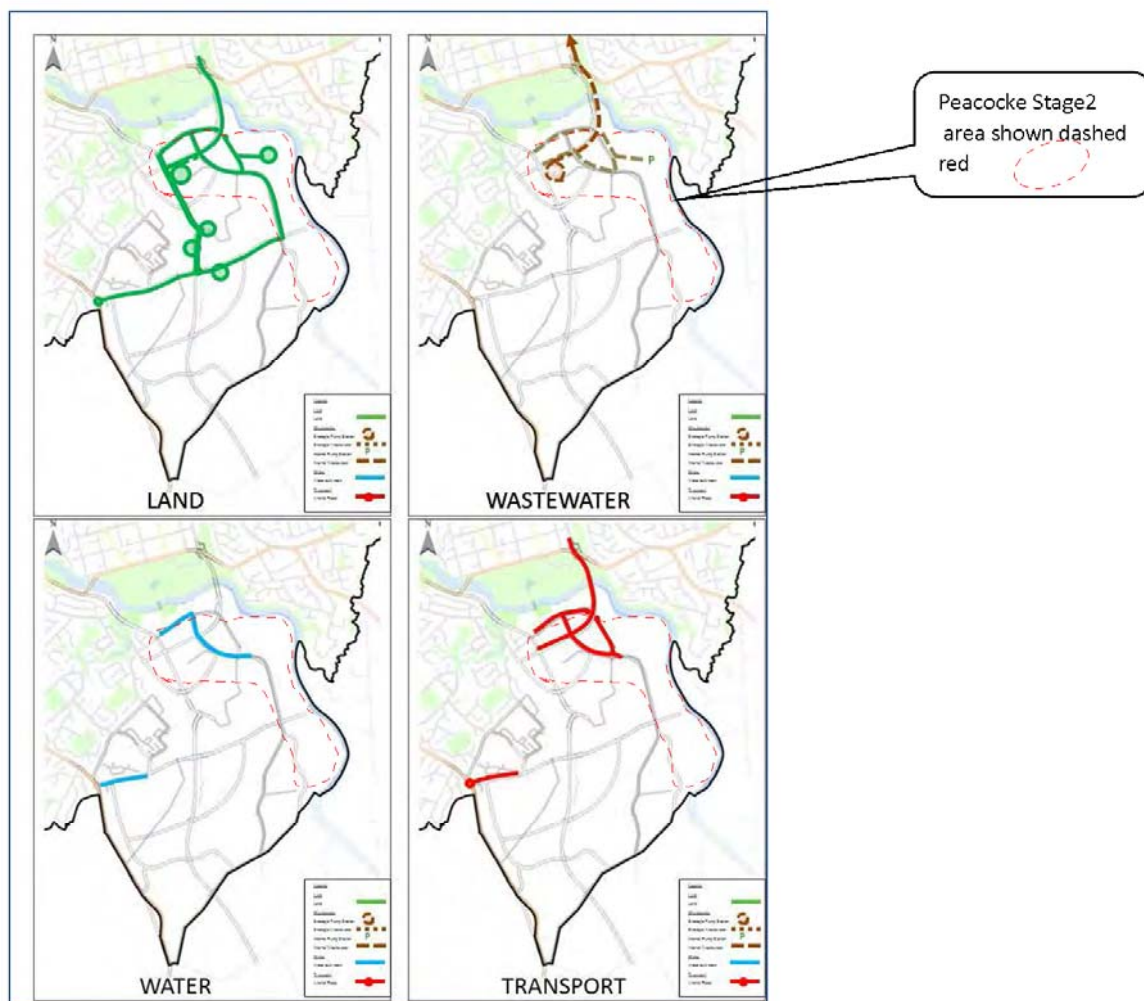


Figure 41 Gateway projects – Stage 2 servicing

Stage 3 of the development extends access along the west, and wastewater to the south to service likely extensions of the Peacocke Stage 1b area.

The key infrastructure needed to facilitate further development in this area is the wastewater connection to the north, using the land required for the north-south transport arterial.

Water and transport connections can be extended as development takes place.

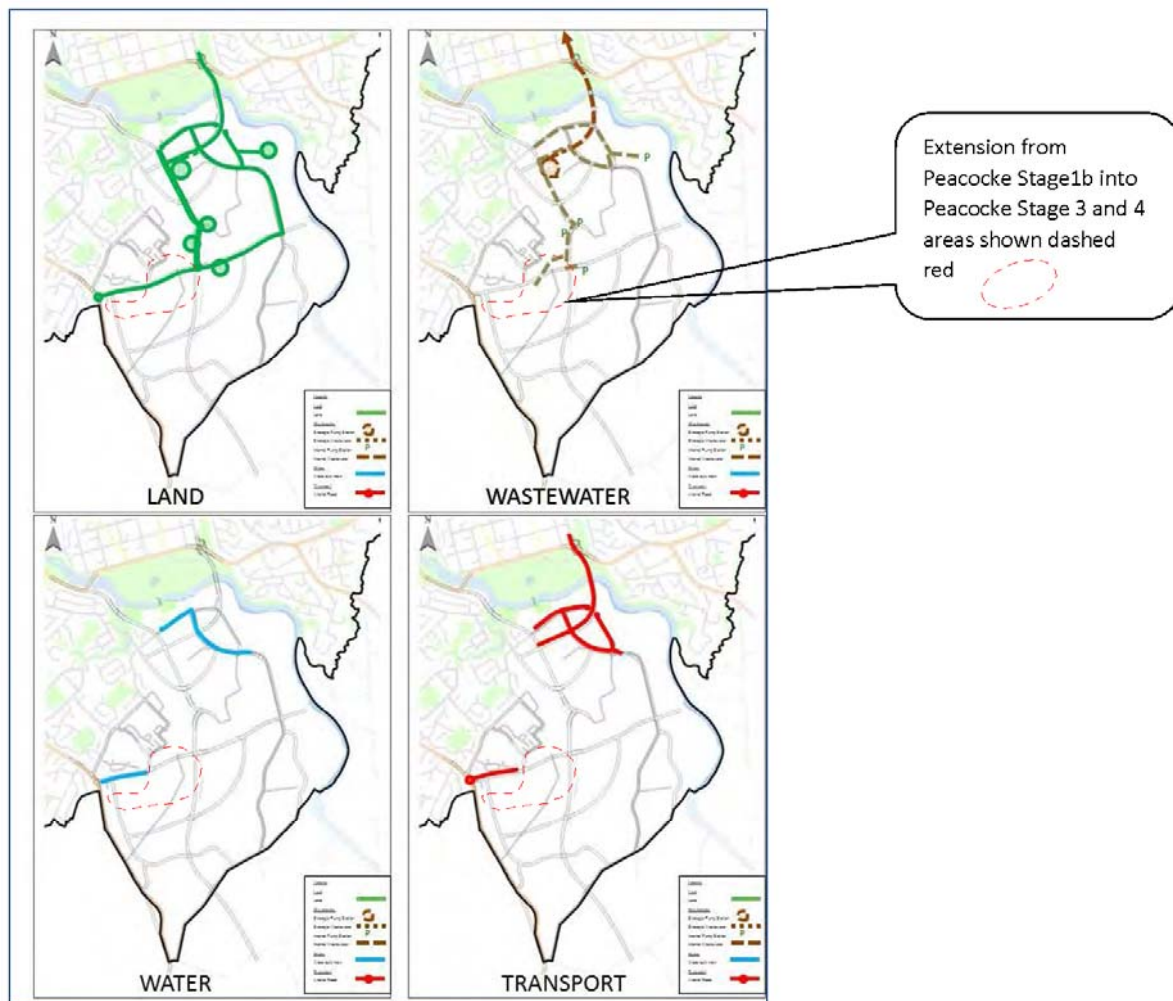


Figure 42 .Internal strategic infrastructure - Stage 3 servicing

Stage 4 completes the strategic servicing for the area, leaving local and collector connections, upgrades and upsizing to progress with development. It also includes the second stage of the strategic pump station, including an increase in pumping capacity to deal with the rising population. Completion of this stage means that there is sufficient infrastructure capacity to accommodate the full development of Peacocke over 30 years.

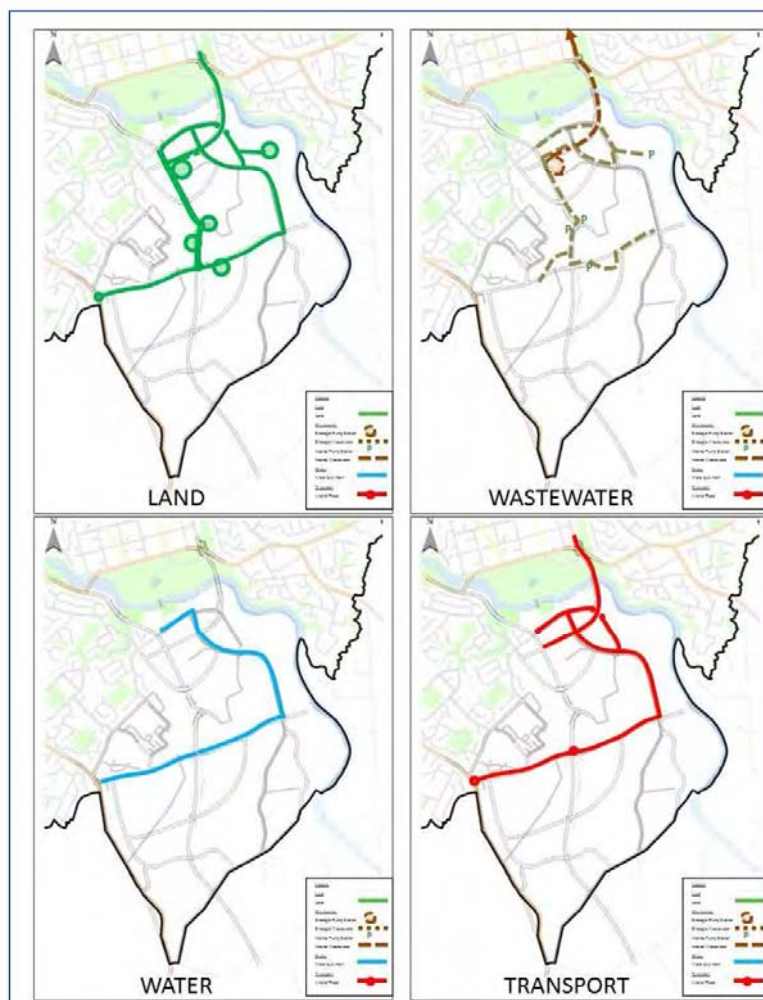


Figure 43 Internal strategic infrastructure – Stage 4 servicing

Stakeholder engagement and the development of Peacocke

The 1989 re-organisation of local government saw the Peacocke area come under the administration of Hamilton City Council. The purpose of Peacocke is to provide for the long-term residential growth in Hamilton. Since that time, Hamilton City Council has led numerous detailed stakeholder engagement events to plan for the long-term development of Peacocke.

The table below indicates the key planning investigations undertaken between 1991 and 2007, where community and stakeholder engagement was undertaken for each of planning processes relevant to Peacocke.

Table 35 Key planning investigations 1991 - 2012

Timing	Key Planning Investigation
1991	Hamilton Urban Growth Strategy (HUGS) provided planning framework for staged development of three growth areas taking into account the attractiveness of the respective growth cells vis-à-vis, their location and the infrastructure development needed for their development
1997	Peacocke Area Study Preliminary Report, dated 3 September 1997
2002	Peacocke Area Scoping Study – identified strategic directions for the growth cell. Identified issues, opportunities and constraints that may affect future development Study confirmed that Peacocke should be developed as a residential growth cell, that sporadic and interim development needed to be managed to avoid expensive retrofitting of infrastructure
2005 March	Council confirms revised Hamilton Urban Growth Strategy (HUGS). The strategy identified Peacocke as a medium term growth cell following the development of the Rototuna and Rotokauri growth cells
2005 April	NZTA release the Southern Links Strategy Study Report
2005 October	Public open day to present proposals and seek feedback on Southern Links
2005 August	Environment Court Memorandum on appeals to the decisions on the 2001 District plan sets out an agreed timetable for the preparation of a proposed Structure Plan for Peacocke
2006 March	Draft Structure Plan prepared. Public open day to present proposals and seek feedback
2006 June	10 Year Plan adopted. Identified 40 hectares as first stage residential development in Peacocke beginning in 2008/9 providing approximately 500 residential dwellings
2007 February	Further information released for Southern Links project
2007 June	Redrafted Peacocke Structure Plan reviewed by Southern Links Group
2007 September	Public open day and public notification on the Draft Structure Plan
2008	Structure Plan for Peacocke formally notified as a Variation to the District Plan
2008-2012	Appeals on decisions to the Structure Plan resolved and Structure Plan resolved through Court assisted mediation in 2012

Stakeholder engagement for the review of the HCC District Plan 2017

Stakeholders had multiple opportunities throughout all phases of the District Plan review project to make contributions to its development.

The Council initiated and executed a deliberate and well-resourced program of meaningful, participatory stakeholder engagement to ensure the District Plan not only reflected the views of the community, but that it was shaped and owned by residents, investors and visitors to the City.

Because of the scope and scale of reviewing Councils planning framework, the District Plan project was broken up into key stages:

- Identification of significant resource management issues for Hamilton through the publication of the Fast Forward Discussion Document, February 2010
- Development of issues and options through the Big Picture Outcomes and Options Discussion Document, August 2010
- Preparation of a Draft District Plan for feedback, April 2012
- Notification of Proposed District Plan, December 2012.

Details on each stage are provided below.

Stage 1: Identification of significant resource management issues for Hamilton

The Council's initial phase was to publicise the significant resource management issues facing Hamilton in a document called Fast Forward. The significant resource management issues outlined by Council within Fast Forward included:

- Residential intensification
- City heart vitality
- Economic development
- Character and heritage
- Social well-being
- Transportation and accessibility
- Environmental sustainability
- The River

This first stage included early engagement with the community on some of the key resource management issues facing Hamilton. Here the Council sought direct feedback on whether the Council had identified the right issues and to identify any issues that stakeholders felt were important.

Residents were invited to drop into public open days held in three locations throughout the City, and eight strategy forums were held on topics such as environmental sustainability, active communities, social well-being, economic development, and urban growth.

Meetings were also held with a range of stakeholders including:

- the NZ Transport Agency
- local authorities
- Waikato District Health Board
- Department of Conservation
- New Zealand Police
- Housing New Zealand.

Fact sheets and flyers were available online during this phase.

Stage 2: Development of Issues and Options Papers

The feedback received from stage one led to the development of a set of issues and options papers. These papers confirmed the significant resource management issues facing the community and the options available to the Council in order to address these issues through the publication of the *Big Picture Outcomes and Options Discussion Document*.

The community engagement and response to the Big Picture document affirmed the direction the Council should take for a number of resource management issues, and raised other issues for consideration.

Stage 3: Preparation of a Draft District Plan

The response and feedback received from the Big Picture document ultimately resulted in the Council preparing a Draft District Plan for consultation. The preparation of a Draft District Plan provided the community the opportunity to see how a new Plan could operate in practice, and allowed for the identification of any issues not previously raised that required earlier attention.

The preparation of a Draft District Plan involved a number of workstreams and meetings with key stakeholders within the City. Stakeholders included:

- Tangata whenua
- NZ Transport Agency
- Waikato Regional Council
- Waipa District Council
- Waikato District Council
- Property Council
- Youth Council
- Council of Elders
- Industry professionals.

Stakeholders were invited to half-day facilitated workshops to assist with the preparation of the Draft District Plan, which was made public in April 2012. In addition, 11 public open days were held with the community to work through key issues within the Draft District Plan and to encourage feedback and engagement with the process.

Council received written feedback on the Draft District Plan from 285 submitters who identified approximately 750 issues, with the majority requiring amendments rather than a critical rethink in direction.

The feedback process on the Draft District Plan generated substantial interest in flooding, planning for the Central City, and the Ruakura Structure Plan. The feedback received at this draft stage allowed Council to further refine the approach of the development of a Notified Version of the Proposed District Plan.

Council resolved on 13 November 2012, pursuant to Section 73 of the Resource Management Act and Clause 5 of Part 1 of the First Schedule of the Resource Management Act 1991, to commence notification of the PDP on 10 December 2012.

Tangata whenua consultation

Targeted consultation with tangata whenua began in early 2010, with a series of meetings and presentations with the Nga Mana Toopu O Kirikiriroa Trust (NaMTOK), with whom Hamilton City Council had an existing relationship.

In mid-2010, discussions began with Waikato-Tainui to establish a Joint Management Agreement (JMA) to identify arrangements under the Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010, which included consultation on the District Plan review. The JMA was signed in February 2012.

Waikato-Tainui confirmed their involvement at a governance level in the development of the proposed Plan through participation in District Plan Review Steering Group meetings and workshops.

In July 2012, discussions began between Hamilton City Council and Waikato-Tainui regarding the convening of the Joint Working Party (JWP), and the first formal meeting of the JWP was held later that month. A further meeting was held in September, and the JWP made further recommendations on the Proposed District Plan in March 2013.

Statutory consultation for the notified version of the Proposed District Plan

The Proposed District Plan was notified for public consultation on 10 December 2012 until 29 March 2013, a period of time well beyond the minimum statutory timeframes for notification.

The Council's decision with regard to the timeframes was made in good faith. It was also made in recognition that the PDP is a step change in the way that the City addresses planning issues, and that submitters may require longer than the RMA consultation timeframes to consider the implications of the PDP.

In addition to extending the timeframes, Council staff also held a number of workshops and targeted consultation events during the notification period to further clarify and explain the content and policy settings in the PDP.

At the cessation of the submissions period, the Council had received a total of 1,242 primary submissions raising over 5,000 independent submission points. Council then notified the submissions and its summary of submissions between 31 May and 2 July, which was also beyond the minimum statutory notification period. An addendum summary of submissions was notified on 27 July 2013, and the further submission period for those submission points identified in the addendum closed on 12 August 2013.

Approximately 287 further submissions were received during this period, with all submissions addressing a total of 8,879 individual submission points.

Additionally, Council staff also held a series of post notification discussions with a range of submitters between April and September 2013.

Specific consultation on water related infrastructure for HIF

While there is no substantial three waters infrastructure currently in place for the Peacocke growth cell, it is important to note that HCC does not normally undertake stakeholder engagement for reticulated water and wastewater surfaces that are located under the ground.

For any future consents necessary to secure these infrastructure items, Council may engage in some public engagement if deemed necessary at the time of preparing resource consent or designation.

Developer strategy

Hamilton City Council is in ongoing and productive discussions with a number of major land owners within the Peacocke area to align their aspirations and program for delivering sections and housing in a way that matches the planned investment through any HIF allocation to Council.

While Council is negotiating with more than one land owners and developer, the principal negotiations to secure housing supply once any HIF allocation has been confirmed, has been with the Adare Group to advance the delivery of approximately 1,000 houses in Peacocke.

Our developer strategy consists of the following elements at this time:

- MoU discussions with Adare
- Discussions with other land owners
- Exploring additional funding options
- Joint Private Developer Agreement (PDA) work with other HIF Councils

MoU discussions with Adare

The Adare Group are the largest land owner in the Peacocke area and Council is actively working with them in partnership to develop a masterplan to enable the development of up to 1000 houses across their land holdings in Peacocke Stage 2 running from near the Gardens Bridge alongside Peacocke Road and the Waikato Rive, as outlined in the diagram below.



Figure 44 Adare Land Holdings

The masterplan would be staged with at least 350 dwellings being delivered in the first tranche of development at the northern end of the site. Densities across the site would vary, but most development would be conventional residential lots greater than 400m² in area, with increasing densities for apartments and duplexes as development is staged and delivered.

While discussions between Council and Adare have been productive, they are still mid-stream and commercially sensitive at this time.

Discussions to date have resulted in a Memorandum of Understanding (MoU) being developed between the parties outlining broad heads of agreement and key issues that would inform the development of a detailed PDA. This PDA will assist in the funding of the infrastructure necessary to urbanise Peacocke.

Discussions with other land owners

While the focus of our discussions has been principally with Adare, Council has also commenced discussions with other large land owners to create investment alignment and to boost housing supply enabled by the HIF allocation. Those discussions are commercially sensitive at this time, but once they are sufficiently advanced Council will update MBIE and NZTA accordingly on progress and detail.

Exploring other funding options

In addition to the MoU / PDA stream with a select group of land owners, Council is also investigating alternative revenue streams to incentivise housing delivery. One of these options being considered as part of our LTP preparations is the introduction of other targeted rates, or a new rating mechanism that would apply to vacant parcels of land that are zoned for urban / residential purposes where Council has made significant infrastructure investments to enable growth.

Wider PDA stream

Council has been actively working with other HIF Council's on developing leading edge PDAs that will incentivise land owners that will actually deliver more housing through HIF.

This work stream continues, and the results of this collaboration will be implemented where possible in our own PDA negotiations with Adare and other land owners.

Hamilton City Council will continue to work on finalising this PDA with Adare post the submission of our detailed business case with the intent that it would be completed prior to the first draw down of any HIF allocation received by Hamilton City Council.

Procurement Strategy

Hamilton City Council procurement policy and procedures are consistent with the Government rules of Procurement. However, for activities which the Council receives financial assistance from, the National Land Transport Fund and the NZ Transport Agency policy and manual are applicable.

Procurement Framework and Selection of Methods

Hamilton City Council operates a Professional Services Panel (PSP) Framework for contracts. These are for a wide range of services, such as the strategic infrastructure in Peacocke. For large scale construction projects with a transport component, procurement is generally managed to satisfy the requirements of the NZ Transport Agency Procurement Manual.

In some circumstances, such as road earthworks during subdivision earthworks, Hamilton City Council can achieve substantial savings by coordinating works with developers as part of private developer agreements or other contract arrangements. These types of agreements may be considered in Peacocke for works other than the gateway infrastructure.

Hamilton City Council selects preferred delivery models by assessing them against procurement objectives for each construction package. These models consider complexity and uncertainty, scale, design control, flexibility to change scope, opportunity for innovation, value for money to Hamilton City Council, budget certainty, supplier market (Contractor/ Consultant availability and interest), timing and urgency/ delivery, effective risk management and performance/ quality/ durability.

Urgency and the need for quality for the gateway bridge and wastewater components means that the traditional model is best suited, for those projects.

The preferred approach is to use the established procedures as follows:

- Council Panel (or LASS PSP Panel) for Professional Services
- NZTA Procurement Policy for Physical Works (adapted as necessary to suit wastewater and water activities) – traditional measure and value likely to be preferred in most cases.
- Private Development Agreements for physical works where there are clear advantages.

Procurement Approach – Professional Services

Panel approach preferred – Price/Quality

Professional services are required for a wide range of services, consistent with Council's typical service requirements and available through the PSP frameworks. In broad terms, the technical disciplines are considered as "waters" (wastewater and fresh water) and transport. Stormwater is likely to be across both but unlikely to be a significant design driver away from key gully areas.

The proposed approach is to use the PSP framework to select an initial advisor for transport and an initial advisor for water and wastewater to prepare project documentation (background, scope, instructions for tendering and bases for payment). The initial advice is likely to be direct award based on existing engagements and previous knowledge. The subsequent professional services are likely to be a price/quality tender based on team and methodology as the non-price attributes.

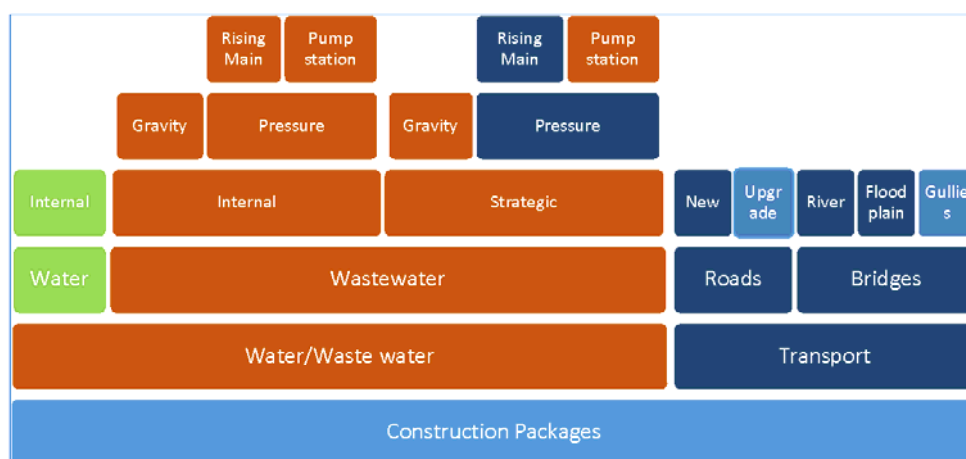


Figure 45 Design Components (key gateway interactions dark blue)

Design Interaction/Coordination

There will be critical interactions between designs relating in particular to the strategic wastewater rising main and its crossing of Wairere Drive and the Waikato River bridge and approaches. For example, fast-tracking elements of road mean that stormwater consents or water design will need to be completed for roads. It will be necessary either to require early completion of critical tasks (e.g. void/pipe sizes/loadings/fixings/expansion limits, etc.) or novate wastewater design services for incorporation in the bridge design processes.

Cross-project specialist skills are necessary such as survey, geotechnical, property, ecological, heritage/ archaeological, consents and assessments of environmental effects. There are likely to be significant efficiencies available from sourcing these on an area wide basis similar to construction packages, or for the Peacocke area as a whole. Some may be available by collaborating with developers in master-planning.

The PSP framework provides an excellent opportunity to avoid duplication in specialist inputs because it provides for novation within all engagements, so for example, an ecological specialist can be instructed to complete investigation or monitoring to support a range of projects in an area, for different consultants.

Procurement Approach – Physical Works

Having selected a traditional approach based on design and project documentation being prepared prior to tendering, options for traditional tendering, early contractor involvement and alliancing remain for the implementation phase. Although it would be desirable for early contractor involvement for pipeline and bridge work, the risk to value for money and design control mean that some form of lump sum/price quality combination is likely. There may be options for cost plus aesthetic/performance enhancements to be incorporated as an option for the river bridge and pump station. More refined physical works procurement decisions will follow once professional services advisors are engaged.

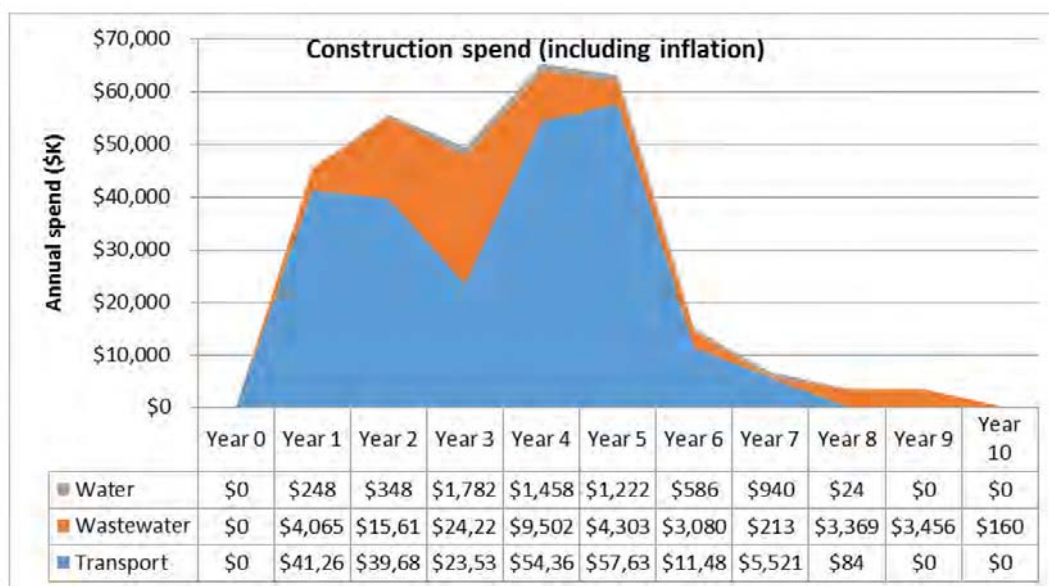


Figure 46 Construction Spend Profiles

The initial spend is mainly in the Cobham Drive interchange, and the large year 3 to 5 spend is the river bridge and pump station. Transport is the dominant spend area. There are a number of small – medium size contractors in the area that suit contracts less than \$10M. Roading contractors are generally capable of taking on wastewater with max pipe size 300mm, shallower than 4m deep, without difficulty and can subcontract local pump stations.

Providing for flexibility to overlap with subdivision development scale should maximise the supply market for other works. There is likely to be an advantage in terms of phasing flexibility, supply and price competition for the smaller, simpler components.

Consenting strategy

Formation of the Peacocke Housing Infrastructure Team

To deliver the infrastructure enabled through the Peacocke HIF allocation, Council will establish a dedicated Peacocke Housing Infrastructure Team (PHIT), as outlined in the indicative structure below.

The proposed PHIT will be formed with the sole purpose of ensuring that all activities necessary to ensure the delivery of HIF funded infrastructure, and subsequent houses enabled by that investment, can occur as quickly as possible.

A core component of the work that the PHIT will deliver will be all land use, subdivision, and regional council consents, as well as any other necessary concurrent approvals required from partner agencies (such as securing wildlife permits from the Department of Conservation, or Archaeological Authorities from Heritage New Zealand).

Further, this team will also be responsible for all monitoring and implementation of conditions of consent, and for the preparation and execution of all construction and environmental management plans associated with the development of HIF enabled infrastructure.

The PHIT will also undertake all necessary public and stakeholder engagement related to these statutory approval processes

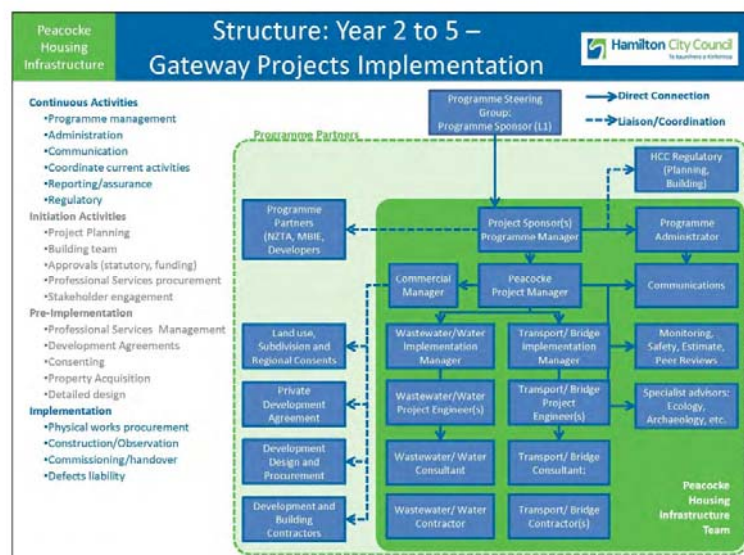


Figure 47 Peacocke Housing Infrastructure Team

Consenting and delivery strategy to deliver Council infrastructure

Because of the significant work already undertaken by Council as part of the Southern Links Transport Network Project, the majority of consents needed to enable the transport related infrastructure associated with this business case have already been secured. This includes designations protecting the entire Southern Links Transport Network, and most regional council consents, including consents for the bridge over the Waikato River.

The appendix to this part of the business case includes a full schedule of all consents and approvals secured to date for transport infrastructure in Peacocke, as well as a list of future consents already identified by Hamilton City Council.

Notwithstanding the above, one of the first tasks post submission of our detailed business case will be to develop a consenting and approvals strategy that will cover the following:

- Identification of early implementation works, and any necessary consents or amendments to existing consents necessary
- Commencement of concurrent engagement processes
- Undertaking a comprehensive review of existing conditions of consent, including any necessary works / actions arising from construction management plans or similar environmental management plans
- Early development of engagement plan and monitoring of key environmental attributes (such as those relating to endangered wildlife).
- Confirmation of priority consents to match construction and delivery program
- Confirm consenting parameters – this will identify the project description or project design process, based on input from engineering (design and mitigation), environmental (scope of surveys), legal, planning (policy framework) and the project management team.
- Early engagement – for the consent strategy to be successful, individual consents may need to be refined in light of the views of key stakeholders.

What consents and approvals are needed and how will they be delivered?

While many consents for the transport infrastructure elements of the HIF are already in place, the following consents have also been identified and form the basis for the development of the specific items informing the development of our consenting strategy

- New designation and potential pipeline consents for water and wastewater infrastructure.
- Completion of Catchment Management Plans and new storm-water consents associated these
- Additional archaeological authorities.

Council regulatory role to partner with private landowners on other land use, subdivision and master plan consents

Council also has an important enabling regulatory function as an enabler when working with the PHIT teams and private sector land owners to develop new infrastructure and urban development in the Peacocke area.

While it is important to maintain Council's regulatory independence, Council is committed to prioritising, where possible, HIF related projects. For HIF enabled infrastructure and urban development projects, Council will implement the following:

- The development of a consenting alliance framework
- Continue to offer premium pre-design and pre application meetings to proactively identify consenting issues and workable solutions and mitigation strategies
- Greater involvement in collaborative master planning for areas enabled through the HIF allocation.

Development of a consenting alliance

Given the scale and urgency of the infrastructure delivery challenge associated with the urbanisation of Peacocke, HCC will look to establish a consenting alliance for all HIF related projects in Peacocke for both infrastructure and urban development projects.

The consenting alliance would include HCC, Waikato Regional Council, DoC, NZTA, Heritage New Zealand, Iwi and other relevant statutory authorities that would be focused on working collaboratively, and in concurrence, on securing timely and robust resource consent and related approvals to develop the Peacocke area.

HCC would look to establish a heads of agreement that would identify and establish the following:

- Agreement on the importance of Peacocke and its development to the sub-region
- Agreement on single points of contact and dedicated resources on projects, and a commitment to collaboration
- Focus on innovative project solutions
- Act in good faith and with integrity;
- Open and honest communication; and
- Best for project decisions

Collaborative master planning

Some land in the Peacocke area is in fragmented ownership. This makes it difficult for some developers to get the necessary scale required to master-plan effectively. To overcome this, where possible, HCC will work in partnership with land owners to play a lead and / or co-ordinating role to pro-actively masterplan new areas for development within Peacocke.

Pre application meetings

Pre-application meetings enable us to efficiently process your resource consent application. These take the form of pre-design meetings and pre-application meetings.

Pre-design meetings are held to give applicants the opportunity to meet with Council staff, prior to a pre-application meeting to discuss a development proposal in the "pre-design" phase.

This "design- scoping" phase for a development proposal may include arranging for potential applicants to attend a Council Urban Design Panel Meeting where advice is given on the ways that the design elements of a proposal might be improved.

Pre-application Meetings are held so that Council Officers can discuss a development proposal and the reasons why resource consent is required, prior to lodgement. The effects of the proposal can also be discussed, in addition to the potential parties considered to be affected, and the expected process that will occur once an application for consent is lodged.

Property acquisition strategy

Context

In total approximately 25 properties are required for stage one of the project comprising a mix of predominantly small to medium sized rural holdings and lifestyle blocks. Recent sales and discussions suggest that there is a high risk of land cost increases. The acquisition strategy proposed in this report caters for all required properties within stage one to be acquired by mid-2019 and will require implementation of an aggressive approach to ensure this timeframe can be achieved.

From a property acquisition perspective, this is a medium scale project with inflexible linear land requirements, has a short lead-in time to construction, a strong relative level of certainty, contains some reasonably complex properties and is subject to some public and political pressures.

The Project is well suited to an acquisition programme incorporating the Public Works Act 1981 (PWA) and its compulsory acquisition provisions. The use of compulsory acquisition should not be considered just a negotiating tactic but more a reluctant but necessary step to ensure that the Project successfully proceeds from inception through to completion.

HCC's preferred acquisition method is therefore based around good faith negotiations, commencing as soon as possible right through to construction, but running alongside a comprehensive compulsory acquisition programme.

Priorities

Council's initial priority is to secure all of the land from the proposed road that runs east to west from the Dixon Road/State Highway 3 intersection through to Peacocks Road, north to the Cobham Drive/Wairere Drive intersection (stage one).

Some private interests have been purchased in advance in terms of Council's Property Acquisition and Management Engagement Practice (PAMEP) process (Southern Links designation requirement). The remaining land interests within stage required within 12 months of funding being secured, or circa mid-2019. There is a particular emphasis on urgently securing access to the land on either side of the Waikato River between Cobham Drive and Peacockes Road to accommodate the proposed new bridge and the land earmarked for the proposed pump station, which will be severed on the acquisition of the required land from the owner.

Strategic Approach

The main approaches to manage property acquisition are summarised below and detailed in the Property Strategy.

- Purchase
 - Most of the required land is designated so the grounds for appeal to the compulsory purchase process are limited -Designate the pump station site
 - Make clear that Council will seek a costs award from the Environment Court to recover costs If an objection is received and of a spurious nature
 - Focus resources into resolving the matter or come to some acceptable compromise if an objection appears valid or may proceed to a hearing
 - Request urgent Environment Court hearings
 - Commence the compulsory acquisition process as soon as possible, preferably no later than January 2018
 - Initiate purchase of the pump station site and properties required for the footings of the bridge now.
- Funding
 - Delay the settlement of any agreements reached with owners in the first 6 months until after 1 July 2018
 - Consider whether funding can be brought forward for strategic purchases, smaller settlements or where owners are unwilling to delay settlement
 - Ensure that Council has sufficient funding available to accommodate purchases outside of the designation where reasonably requested
 - Proactively dispose of land not required for the Project where it is prudent to do so and can easily be achieved. Note that all estimated property costs included in estimates are nett costs, being the costs of property required for the infrastructure after disposal of surplus land.
- Betterment
 - Obtain legal advice from a planning/property legal practitioner to provide a basis for instructing valuers
 - Ensure Council's commitment to claim betterment from owners for the Project under the LGA is robust and well-communicated

- Update the property compensation estimates
- Consult with owners early to ensure their expectations are aligned and to reconfirm the benefits of the Project on the value of the balance of their properties.
- General
 - Right of first refusal – HCC is engaged with NZTA and Waikato Tainui
 - Reputational risk – Communications planning
 - Rogue professional advisors – clear PWA and valuation directions

Risk allocation and transfer / mitigation

The strategy, framework and plan for dealing with change, contract management and risk will be founded on Hamilton City Council's established quality, risk, contract and cost management policies and procedures. These are in accordance with the NZ Transport Agency's quality, risk and procurement requirements and the Government Rules of Sourcing.

The Council has demonstrated their effectiveness working closely with the NZ Transport Agency on large projects through the successful delivery of the \$88 million Wairere Drive/Hamilton Ring Road project. The \$25 million P2 Pukete wastewater treatment plant upgrade also demonstrates the Council's ability to procure and deliver technically challenging wastewater solutions.

Hamilton City Council engaged PWC to review the Peacocke Housing Infrastructure risks from an organisational and infrastructure perspective, and the following risk management response is based on that review (refer to the appendix for the PWC Risk Review).

Three Levels of Assurance

Governance will be in accordance with Hamilton City Council's Governance Structure⁵. The Council will extend their successful Southern Links investigation collaboration with the NZ Transport Agency throughout the implementation of this programme of works. The multi-party funding agreement will be updated, which covers risk, funding, communications, governance, scope and project management. MBIE will be invited to join this governance.

The project management and governance will follow Hamilton City Council's existing practice for large infrastructure projects as shown below. Three levels of assurance will operate to ensure effective delivery:

- Level 1: Project management oversight, capability and experience –project steering and peer reviews (L1);
- Level 2: Project/programme governance – generally Council Committees (L2); and,
- Level 3: Independent and objective assurance – generally third party oversight by NZ Transport Agency, and external and internal audits to check controls are working (L3).

⁵ <http://www.hamilton.govt.nz/our-council/councilcommittees/Documents/Governance%20Structure%20Terms%20of%20Reference%20and%20Delegations%202016-2019.pdf>

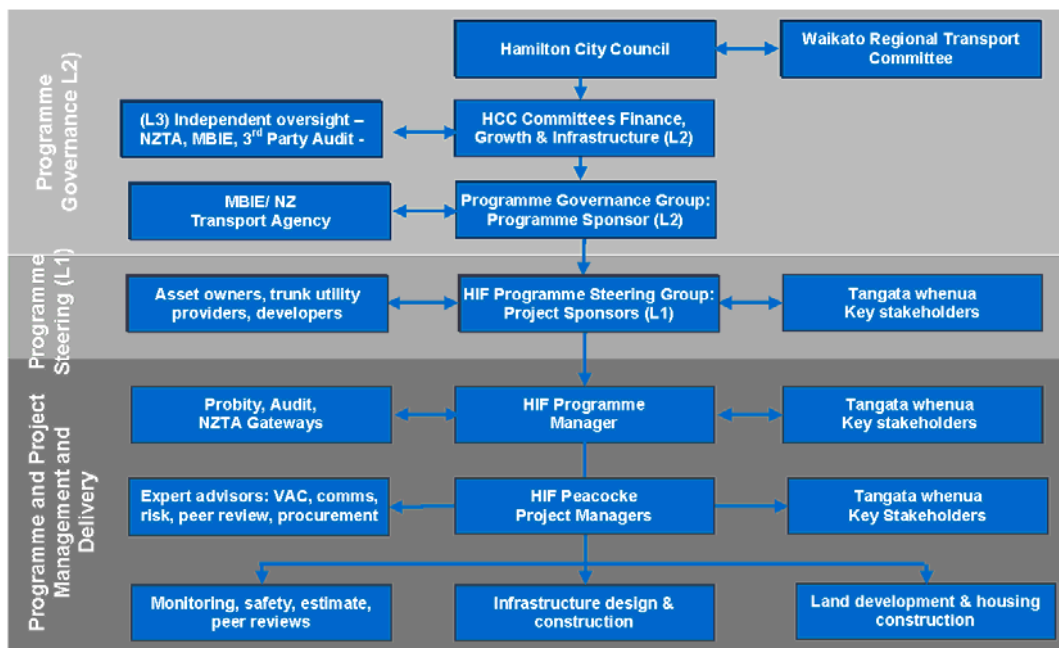


Figure 48 Peacocke trunk utility and arterial transport network project organisation chart

Key risks and management

Hamilton City Council operates a risk management system across the whole organisation. Recognising the significance of the Peacocke Housing Infrastructure project, Hamilton City Council arranged for a risk and assurance review to identify key risks and risk management methods. These are presented in the Risk Review (PWC, October 2017) attached in the Appendix.

The base risk register, which will be reviewed on formation of the Peacocke Housing Infrastructure team and maintained throughout the process, is also attached in the Appendix. This relies on the likelihood/consequence risk categorisation matrix below, with the delegation levels for risk tolerance/acceptance for each risk level.

		CONSEQUENCE						
		Minor	Moderate	Serious	Major	Catastrophic		
LIKELIHOOD	Certain	H	H	VH	E	E	E	Extreme Risk – Immediate action required: Risk escalated as appropriate. Action plans and management responsibility specified with close scrutiny required. Only the Chief Executive and/or Council can accept this level of risk.
	Almost certain	M	H	VH	VH	E	VH	Very High Risk – Senior Leadership Team attention advised. Action plans and management responsibility specified with periodic scrutiny required. The relevant GM, sponsor, risk manager and programme manager can accept this level of risk.
	Likely	L	M	H	VH	VH	H	High Risk – Senior Leadership Team attention advised. Action plans and management responsibility specified with periodic scrutiny required. The relevant GM, sponsor, risk manager and programme manager can accept this level of risk.
	Unlikely	L	M	M	H	VH	M	Medium Risk – Management responsibility specified. Managed by specific monitoring and procedures. The relevant programme, unit manager or risk manager can accept this level of risk.
	Highly unlikely	L	L	L	M	H	L	Low Risk – Manage by routine procedures. Unlikely to require specific application of resources. The relevant activity manager can accept this level of risk.

Figure 49 Risk matrix and action required table

The risk review includes a risk, control and assurance map showing the key controls and three levels of assurance (refer Figure 49). The key risks are noted in the table below:

Table 36 Key risks and management responses

RISK TYPE AND DESCRIPTION	RISK MANAGEMENT RESPONSE
Reputation: Lack of or loss of public support for HIF projects following approval of DBC	Communications planning and implementation in combination with 10 Year Plan processes
Reputation: Conflict of interests are not managed resulting in a heightened risk of fraud/collusion, lowering HCC reputation	Conflict management plan and implementation Three levels of assurance HCC Procurement Policy and Procedures
People risks: Inadequate people (internal and consultants) resources / structure and competing priorities impact on delivery of growth projects, leading to delays.	Dedicated Peacocke Housing Infrastructure team
People risks: Failure to create and maintain a safe environment resulting in a serious harm or fatal incident	HCC Health and Safety Policy and Procedures Dedicated safety representative in PHIT team
Project risk: Failure to secure PDAs to take up the capacity of HIF under terms that meet the DBC results in lack of certainty over: <ul style="list-style-type: none"> Development take up and timing Contributions amount (\$ and infrastructure) 	Financial incentives to encourage development Early engagement
Project risk: HIF Cost / Benefits poorly defined leading to under delivery of outcomes	DBC
Project risk: HIF project is exposed to uncertain economic /growth circumstances that delays or stops project delivery	Monitoring and review processes
Project risk: Development in other areas reduces HIF ability to fulfil planned developer yield to repay HIF loan	Monitoring and review processes. Discourage out of sequence development with RMA and LGA tools
Project risk: Contractor capacity affects project delivery timeframe and cost	Early engagement with industry. Timing of construction to match Expressway resources being released. Secure key resources and people early
Project risk: Not all of the necessary land is controlled to deliver the infrastructure included in the HIF bid The PWA may be required to secure land at additional costs and significant delays	Early acquisition Early PWA processes Early designation for pump station
Project risk: HCC does not commit to the HIF through the 10YP process	10YP processes
Project risk: NZTA / MBIE don't approve of DBC and/or Government does not approve of the funding agreement	DBC process and engagement/communications
Project risk: HIF financial implications inconsistent or breach HCC financial strategy as determined by the 10YP	DBC process, engagement/communications Contingency management Options to slow delivery of phases after gateway infrastructure
Project risk: Lack of quality information impacts on decisions	DBC and pre-implementation
Project risk: Uncertainty in costs assumptions may lead to budget over spend	Contingency management. Options to slow delivery of phases after gateway infrastructure. DBC peer reviews
Project risk: DC revenue leakage (consent applied period end 30/6/18) results in not enough revenue to cover HIF repayments	10YP processes Financial planning to allow for it
Project risk: HIF assumes developers will take financial responsibility to provide infrastructure to support their development and the HIF proposal	Developer engagement and PDAs.

RISK TYPE AND DESCRIPTION	RISK MANAGEMENT RESPONSE
Project risk: NZTA FAR alters from the assumptions made in the DBC leading to a shortfall in funding	NZTA Funding application at same time as HIF
Project risk: HCC financially exposed by Government funding agreement.	10YP processes Financial management and reserves
Strategic Risk: Tainui strategic relationship + First Right of Refusal (land)	Multi-level engagement
Strategic Risk: Matters of cultural significance	Master planning Multi-level engagement
Strategic risk: Wildlife authorities (e.g. bat habitat, gully systems)	Early engagement underway Data collection for EMMP (Southern Links) underway Whole of Government communications Master planning processes
Strategic risk: Archaeological authorities	Early engagement under way Whole of Government communication Master planning processes
Operational Risk: Other Waikato Council decisions /relationships impact on delivery	Engagement through Future Proof, 10YP processes, Regional Transport Committee
Operational Risk: No Masterplan in place in a timely manner to enable land development	Consenting strategy Facilitated, coordinated approach
Compliance and Regulatory Risk: Environmental issues negatively affect Business case/ delivery of projects (native animals, snails, bats, cat free 'areas') by consents/permits not being granted	Early consent applications Early applications for authorities Data collection Master planning processes
Compliance and Regulatory Risk: Changes in government legislation or regulation may impact on HIF	Monitoring and review
Operational Risk: Liaison with other utility providers	Communications and engagement plan.
Operational risk: Corrosion and odour (wastewater)	Detailed design review
Operational risk: Poor contract documentation	Independent review by construction practitioners prior to tendering.
Operational Risk: Contract team performance.	Review lessons learned from similar projects (e.g. NZTA St Lukes)
Operational risk: Materials supply	As for supplier capacity – early engagement with market

The risk management responses and controls include existing controls such as Hamilton City Council's audit regime, conflict of interest management, health and safety processes, procurement policy and delegations policy, and additional controls such as peer reviews, formation of a dedicated project team, and project-specific communications and planning.

Contract management

The proposed approach is to focus on the physical works implementation, and phase the works in a way that delivers value for money, manages risks and accelerates access for development.

To avoid conflict during construction, the works will be grouped in packages based on location, rather than by infrastructure type. The proposed construction packages are shown in the figure below.

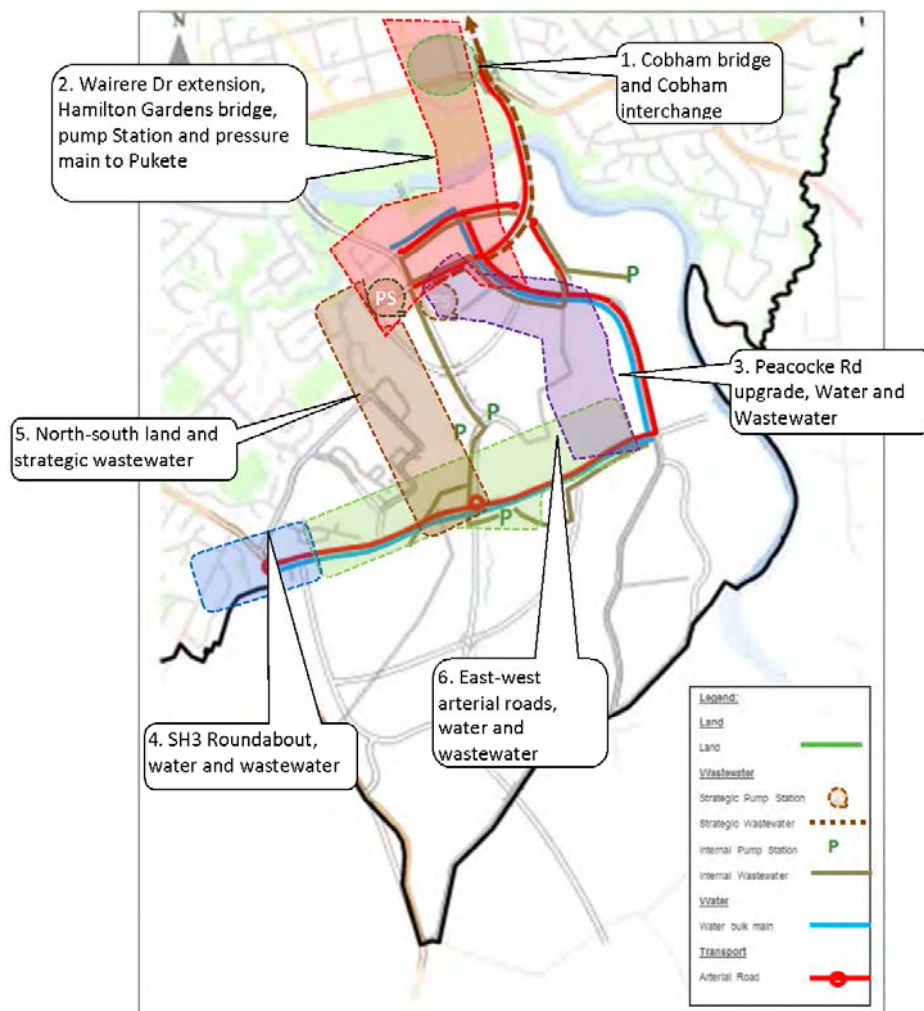


Figure 50 Proposed construction packages (Single or multiple contracts or PDAs)

Individual contracts

The package comprising the Wairere Drive Extension, strategic wastewater pump station, storage and pressure main to Pukete, is likely to be split into separate contracts for delivery. Collector upsizes/upgrades and internal water and wastewater networks will be assessed on a case-by-case basis and dealt with through developer agreements.

8. Management Case to deliver more houses faster

Hamilton City Council has an excellent track record in delivering large infrastructure items, such as the Hamilton Ring Road and the Pukete wastewater treatment plant upgrade. Joint investment between the Council and the NZ Transport Agency for the Southern Links Network, and with Tainui on Ruakura illustrates how the Council can collaborate effectively to deliver the best outcomes for project partners.

Effective delivery requires effective governance and steering. This DBC forms the basis of a project plan and approvals, and a steering group with MBIE and NZTA will be established as project partners. This Steering Group will guide decisions and ensure implementation goes to plan, and will fit within Hamilton City Council's governance and assurance systems, including elected representatives and independent audits and verification.

Effective communication and engagement will be planned and delivered with the public, developers, tangata whenua, consultants and contractors and landowners in the Peacocke area. This engagement will include consultation on the 10YP. A regulatory stakeholder group will be established to share information and ensure resources are in place for consents, authorities needed for construction, and in some cases, investigation. A dedicated Peacocke Housing Infrastructure Team will also be established.

Risk management and assurance plans have been prepared and will actively manage extreme and very high risks. The Council will work in three phases – initiation, pre-implementation and implementation of gateway infrastructure, with the Peacocke Housing Infrastructure Team adjusting to the timeframe to meet changing demands. Once the gateway infrastructure is in place, the team will transition back to progressive development and infrastructure delivery, as part of Hamilton City Council's normal business.

Each major project will maintain a risk register, issues register, and change register, and update the project management plan following governance approval of any changes. Hamilton City Council will complete a post-implementation review within six months of project completion (Level 3 assurance).

Management structure – General approach

Hamilton City Council's proposed management structure is based on collaboration with MBIE and the NZ Transport Agency at a governance and steering group level as shown in the organisational chart below. A fundamental component is the dedicated Peacocke Infrastructure team, including service level or equivalent commitments from independent regulatory and financial functions. Hamilton City Council anticipates a coordinator operating within the team to facilitate regulatory and peer review functions to optimise efficiency and manage potential delays.

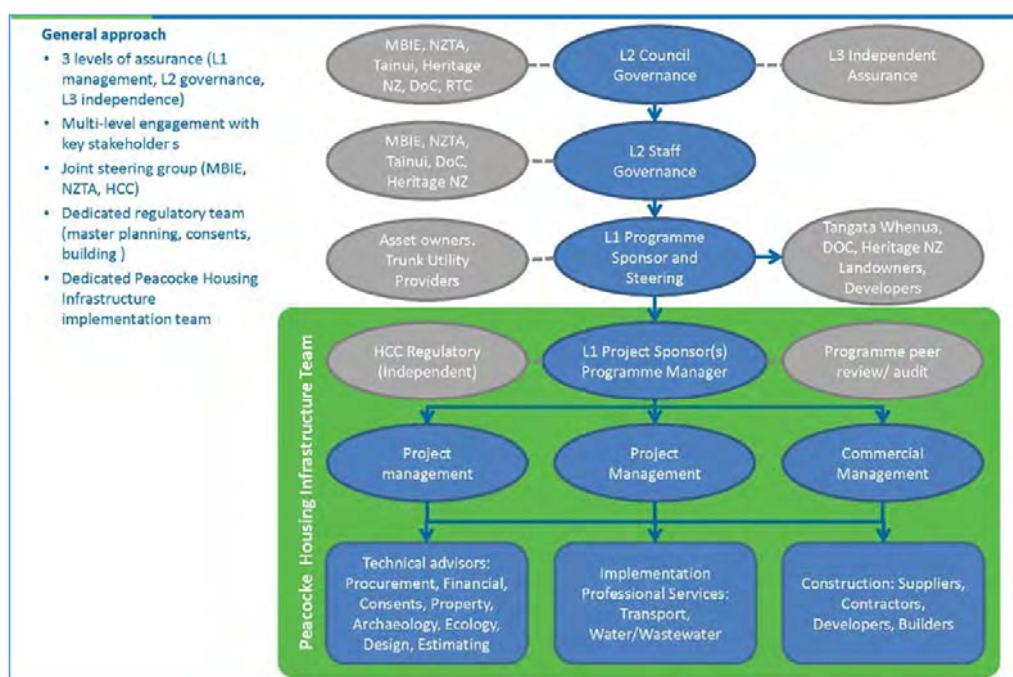


Figure 52 Management structure – Organisational concept

Management structure – Delivery of capacity for residential development

The structure charts in the figures below illustrate the evolution from initiation to gateway structure implementation.

- Year 0-1: Initiation – subject to finance and resourcing
- Year 0-2: Pre-implementation (but with implementation of current projects)
- Year 2 – 5: Gateway projects implementation – major project management demands

Beyond Year 5, the HIF projects transition to Business as Usual development implementation, with little need for active support from Hamilton City Council.

A key risk to address is continuity and consistency over significant project duration and phasing. This applies to the Hamilton City Council team, consultant personnel and contractor personnel.

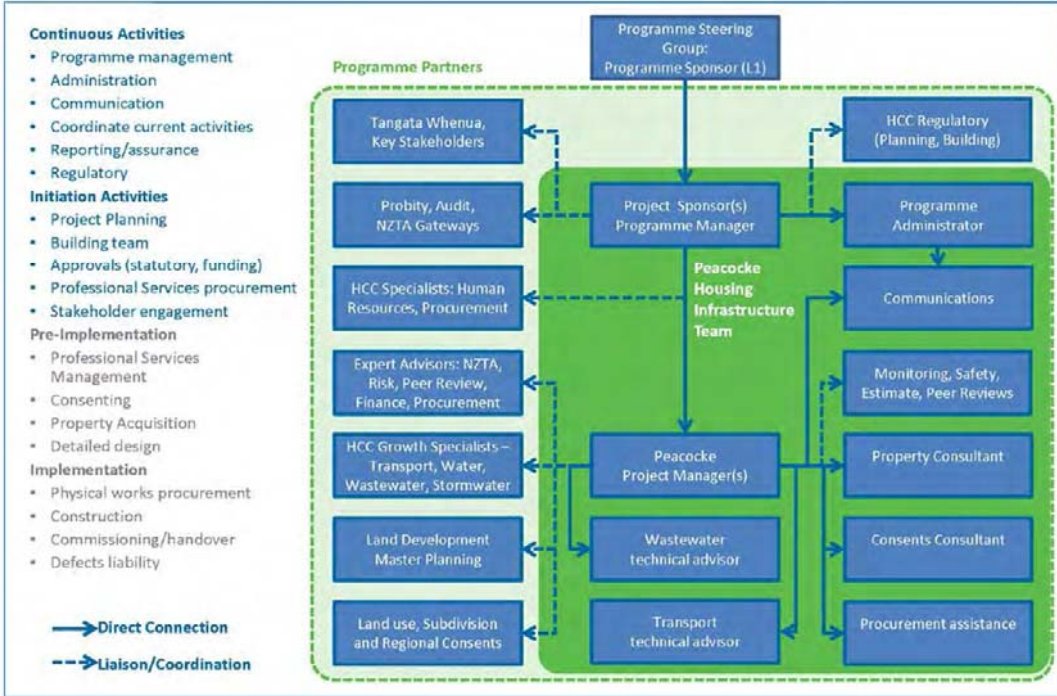


Figure 53 Management structure –Initiation, professional services procurement and commencement

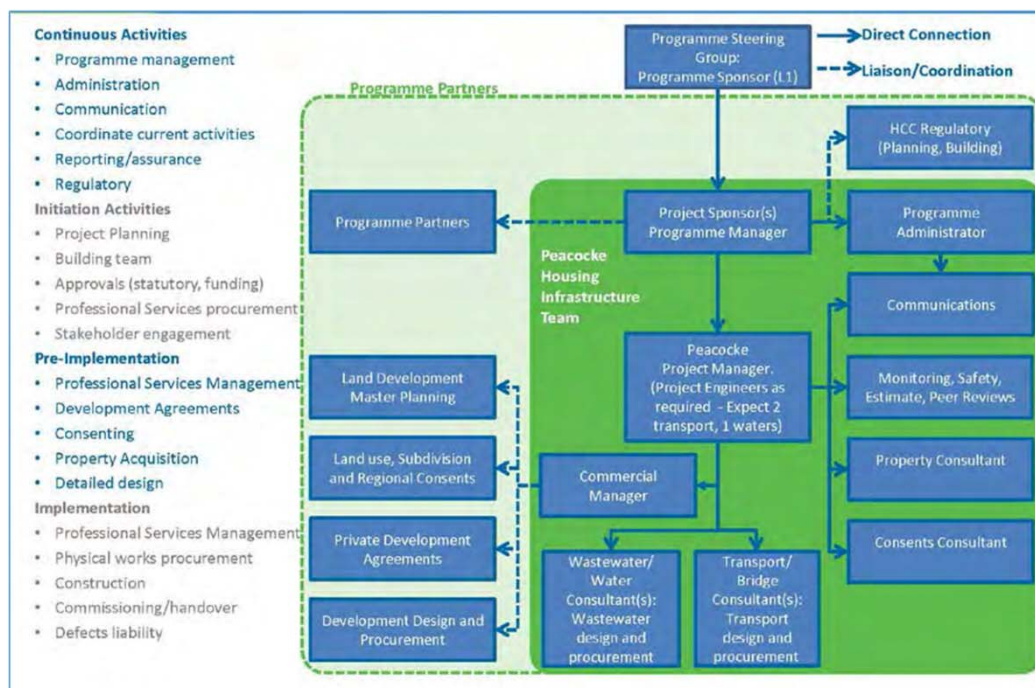


Figure 54 Management structure – Pre-implementation – Property, design, consents

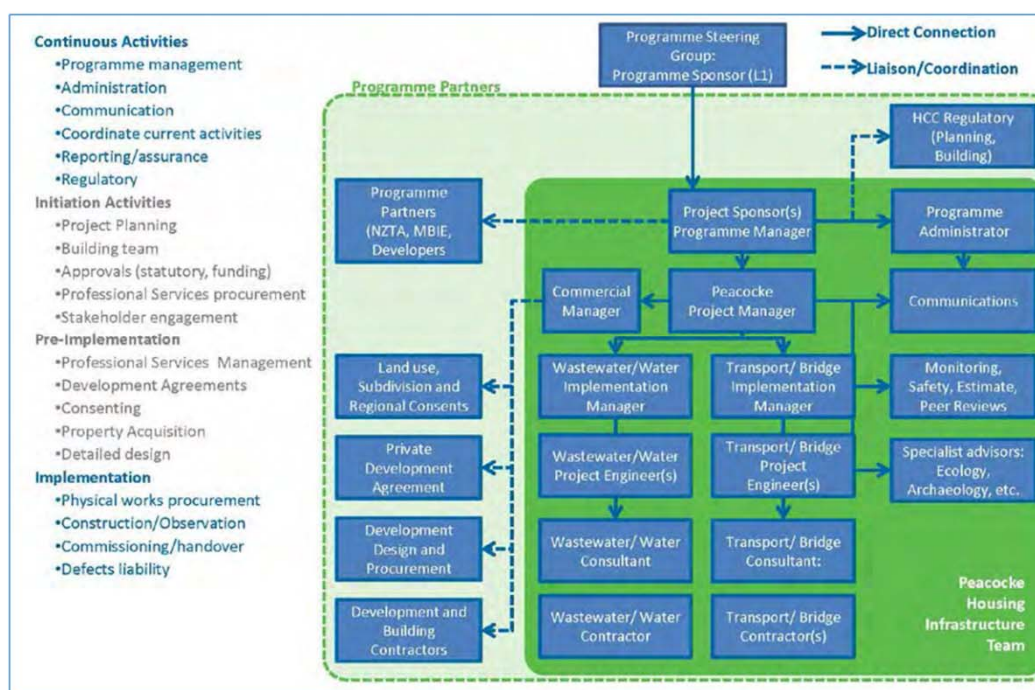


Figure 55 Management structure – Gateway projects Years 2 – 5

Financial controls, value assurance and risk management

Hamilton City Council will continue to apply their comprehensive system of controls, management reporting, audit and assurance processes for Peacocke infrastructure as for everything they do. This includes:

- Hamilton City Council delegations policy
- Strategic planning, programme and project development following the business case philosophy
- Hamilton City Council Programme Management Office oversight
- Key project reporting to the Growth and Infrastructure Committee
- Budget allocations and financial monitoring
- Management reporting
- Internal audits
- Committee and Council reporting of financials
- External audits (NZTA, LG Funding Authority).

In addition to the internal audit systems, Hamilton City Council's transport expenditure is subject to NZ Transport Agency auditing and assurance requirements. These operate effectively for Hamilton City Council's \$10-\$15 million annual expenditure on transport, which is mainly FAR-assisted.

Transport investment makes up over 80% of the project costs. Any extraordinary residual risk associated with financial management for the wastewater and water investments therefore relates to less than 20% of the HIF loan.

Hamilton City Council's proposals for financial risk management are set out in the Financial Case. These are consistent with or exceed NZ Transport Agency's financial reporting, assurance and audit requirements.

As a loan, the fundamental risk for non-transport elements beyond the 10 year loan period sits with Hamilton City Council. Additional reporting and auditing requirements such as quantity surveyor progress reporting and drawdown presents a disproportionate cost and undermines value for money.

Hamilton City Council's proposed assurance and audit requirements for drawdown of the HIF loan for all infrastructure are consistent with that currently operating for transport investment.

Hamilton City Council's programme relies on no further approvals being necessary for HIF funding drawdown, beyond the following standard requirements.

- Project costs being within expected costs or manageable within HIF contingencies or alternative confirmed third party funding.
- Independent road safety audit, safety in design review, safety in maintenance review.
- Project scope remaining as set out in 4 (Preferred Option) – equivalent to NZTA Macroscopic approval.
- NZTA and MBIE may audit multi-party projects at any time to confirm that all accounting and reporting requirements are being met.

It is envisaged that the costs of individual projects may change as the Peacocke infrastructure develops. The distribution or allocation of costs described in this DBC is not intended to affect the

NZTA financial assistance for the local roads component. Each party, as it may affect them, will make requests for changes to the project funding arrangements as and when necessary.

Changes in funding will be made in accordance with the loan agreement for HIF funding.

NZTA and MBIE may require Hamilton City Council to confirm the estimates and review and update the economic evaluation in accordance with the NZTA Economic Evaluation Manual prior to committing to physical works contracts.

Any additional services or costs arising from changes in scope will be paid by the party requesting the change, and with regard to who benefits from the change. Administration costs lie with the responsible party, other than external costs for project management and administration, which will be expected to be Hamilton City Council's unless there is an additional agreement.

Any services, including administration assistance, aerial photography, property advice, etc. procured by one party for the benefit of the project for use by another party (parties) will be agreed on beforehand and taken into account in any allocation of costs and shared between the parties in accordance with the agreed cost share.

Project risk sits with Hamilton City Council unless there is an additional agreement.

Disputes

Any departures from scope, performance expectations or disputes not resolved at project management or steering group level will be escalated to governance level for consideration. Any remaining disputes shall be resolved in accordance with the relevant, signed agreements.

Integration with other programmes

The HIF programme of works will link with other infrastructure programmes. The Peacocke trunk utility and arterial transport network activities form part of the Southern Links project. This is an established project developed jointly by Hamilton City Council and the NZ Transport Agency and an integral part of the draft Access Hamilton Programme. Access Hamilton comprises a portfolio of key projects for the delivery of improvements to Hamilton's transport over the next 10 years. The key projects are set out in the Access Hamilton Programme Business Case. The relevant programme management arrangements will remain as follows:

- Activity development in accordance with NZTA's Business Case approach
- Optimisation and prioritisation as part of the Regional Land Transport Programme (RLTP) and Hamilton 10 Year Plan processes
- Procurement and implementation in accordance with Hamilton City Council's procurement procedures (NZTA Approved)
- Monitoring in accordance with One Network Road Classification and Road Efficiency Group requirements
- Benefit monitoring and reporting in accordance with approved business case requirements.

In addition Peacocke is part of:

- Hamilton City Council's 10YP, which provides an opportunity for integration as well as funding discussions.
- The RLTP and National Land Transport Programme.

These provide informal and formal engagement opportunities at a range of levels.

Issues management

Hamilton City Council will agree the basis for issues management with NZTA and MBIE as part of funding approval and the funding agreement. This DBC will satisfy NZTA's minimum requirements for multi-party project funding agreements, including at least the following:

- Confirmation of the lead organisation (HCC in this case), who is responsible for the overall project management and recovering costs from other parties.
- The total project cost, the total cost of each phase and the agreed division of these costs between each party, and whether a financial summary report is required (refer Financial Case and estimates)
- The organisation responsible for reporting to the NZTA on project changes (HCC)
- The organisation responsible for preparing and updating the economic analysis at key points (No further milestones required, subject to construction costs being consistent with DBC).
- How the parties' separate interests are protected within the contractual arrangement (refer communications plan, Financial, and PDA expectations).
- A risk-sharing and approvals procedure for any variations, contractual disputes, etc. (Escalation to governance group for resolution).
- the basis for accounting for the respective parties' costs associated with the project (Consistent with TIO and NZTA's audit procedures).

Implementation program

Program development and overview

Hamilton City Council will prepare a detailed project plan to set out the project roles and responsibilities for each major project. PRINCE2 or PMI project management methodology will be used where appropriate. The start time for the programme is dependent on funding commitments. Funding commitments will not be available until 1 July 2018 after:

- Confirmation of the 10 Year Plan 2018-28
- NZ Transport Agency's National Land Transport Programme
- Completion of the agreement for HIF funding.

Two projects (funded by the HIF) are more advanced than the others, with design and construction planning under way. Hamilton City Council is pursuing early delivery of the following projects:

- the Wairere Drive/Cobham Drive bridge (funding top-up for grade-separation)
- the SH3/Ohaupo Road roundabout and leg into the East-West arterial.

Two major gateway projects form part of the business case infrastructure, without which there will be significant constraints on the development or increased costs and risks from interim solutions. These are:

- the bridge over the Waikato River and associated new transport link

- the strategic wastewater transfer pump station, storage and pressure main.

In practice, the HIF arrangement is simply an advanced funding mechanism. The Peacocke housing infrastructure needs to be considered in conjunction with Hamilton City Council's 10YP to pick up local road and water components, and maximise value for money.

Programme approvals

Delays to the bridge design could happen if the bridge aesthetics cannot be agreed on by Council. Finalising and confirming the bridge aesthetic considerations should be completed early in the programme.

Early development may be possible without the bridge if lower levels of service are tolerable for transport and an interim wastewater solution is acceptable. Options would be developer led and will rely on design for permanent solutions being available to avoid risks and high future costs. Early engagement is needed to coordinate development with utility providers for trunk connections.

Land procurement is a high risk to the programme and land procurement should be advanced wherever possible. So should design affecting consents and wildlife permits.

Public engagement and communications

Council-managed HIF programme engagement, rather than separate project arrangements, would be desirable. The Council therefore proposes joint messaging and an integrated communications team.

Hamilton City Council is already collaborating on public engagement with the NZ Transport Agency for Hamilton Southern Links as part of a comprehensive Pre-Construction Consultation and Engagement Plan and Property Acquisition and Management Engagement Practice.⁶

Communications and engagement planning will be coordinated with 10YP engagement to manage the risks of adverse responses and disruption.

Developer engagement will be critical to success. This should ensure working towards PDA's with sufficient certainty in time to support Hamilton City Council's commitment to construction phases.

Opportunities and risks

Hamilton City Council engaged PWC to review risks and develop a strategy, framework and plan for dealing with the management of risk. These are generally in accordance with NZTA's risk management minimum standard Z/44 and the Agency's Risk Management Process Manual. The risk register and preliminary management plan is described in Section 7 above.

Detailed program

A detailed program and spend breakdown by time is attached in the Appendix, and a simplified program is shown below.

⁶ <http://www.hamilton.govt.nz/our-city/regional-alliances/southernlinks/Documents/Management%20Plans/Southern%20Links%20-%20Property%20Acquisition%20and%20Management%20Engagement%20Practice%20-%20FINAL%2020160812.pdf>

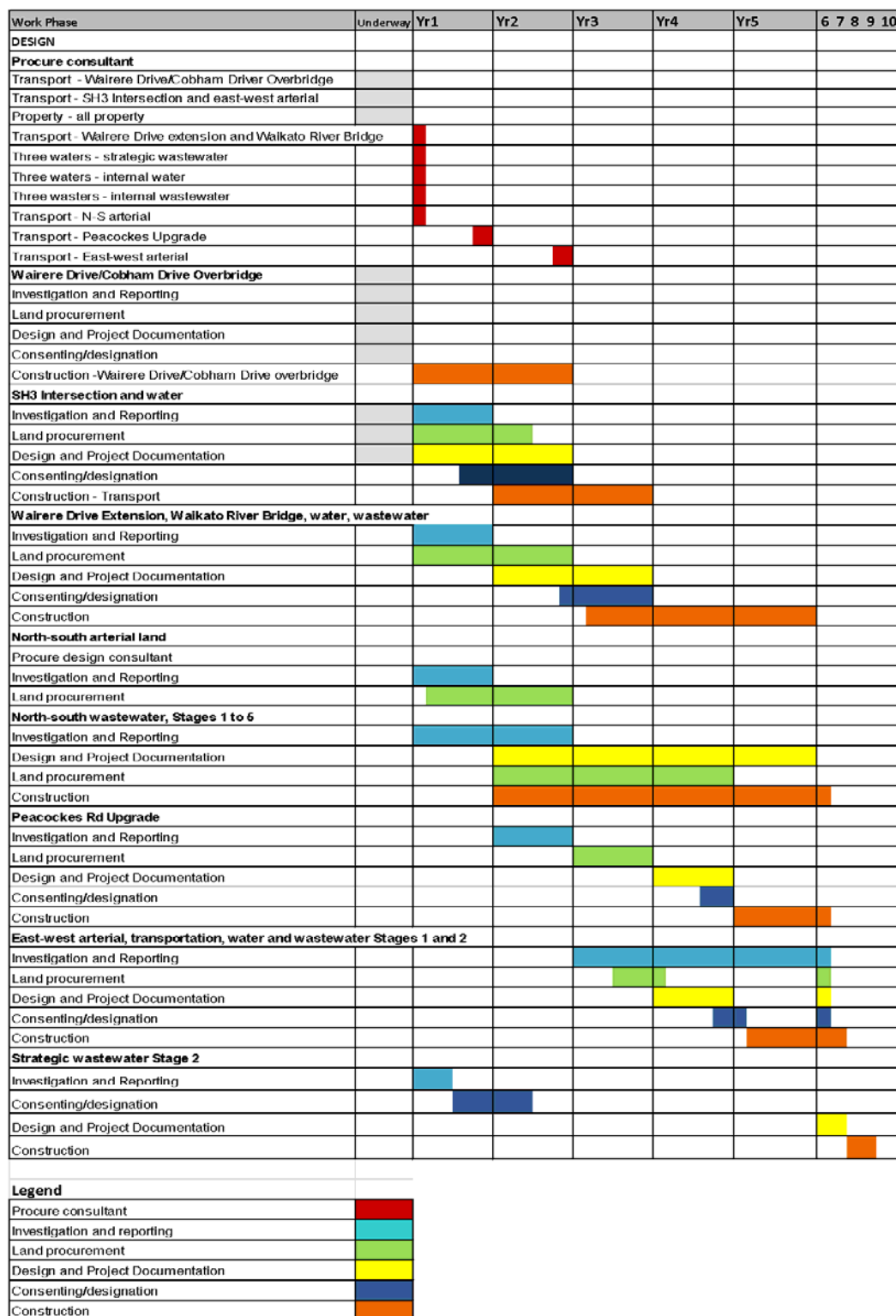


Figure 56 Summary Programme – Refer Appendix for details

Implementation Actions

100 day plan – HIF team formed, professional services and land acquisition

Activities desirable within the first 100 days include approval for the HIF approach/ funding agreement; land acquisition preparation; consents and authorities applications; transfer pump station consent/designation; professional services tender documentation; industry liaison; and developer liaison.

Hamilton City Council's program targets include:

- Appoint HIF project team
- Appoint main professional services
- Complete detailed procurement plans
- Finalise consents
- Gain approvals for construction procurement approaches
- Finalise bridge aesthetic considerations
- Commence land acquisition
- Complete consents and authorities engagement/hearing.

If there are no opportunities for acceleration and an early start, slippage of six to 12 months is likely.

1000 day plan – Interim development and gateway infrastructure construction

Within approximately three years, Hamilton City Council will deliver:

- Hamilton Gardens bridge, pump station, rising pressure main - tendered, awarded, and commenced
- Private development agreements in place
- Interim development under way
- Main development agreed and funded.

The delivery of this infrastructure will ensure Hamilton City Council is on track to meet the projected demand for housing and NPS-UDC requirements.

First Steps

The steps are as follows:

- Confirm approvals to proceed (desirably with advance opportunities), delegations and restrictions.
- Appoint key roles and form HIF team.
- Appoint land, transport and waters professional services advisors.
- Require land.
- Prepare RFT's for main professional services contracts.
- Prepare communications and engagement plan and engage with construction market, developers and utilities.
- Establish governance coordination group.

9. Consultation with stakeholders

Hamilton City Council submitted its indicative business case for Peacocke on the basis that this business case was subject to consultation with the community. This consultation will discuss the priority of advancing other capital projects in the 10YP, including consulting on any consequential impact on debt and rates. This is critical as the size of the HIF funding sought by Council, and the scale of the change to the current 10 Year Plan, easily triggers the scale and significance tests for engagement under the Local Government Act.

Hamilton City Council is committed to timely and meaningful engagement, consultation and communication with the community and key stakeholders impacted by any development that will occur as a result of the HIF funding and subsequent private sector urban development.

The principal consultation and communication approach will include:

- Consultation undertaken to date on some aspects of the HIF funding and infrastructure package
- Engagement on the development of Peacocke and the HIF funding through the 10 Year Plan 2018-28 process
- Ongoing consultation throughout the implementation phase.

The 10 Year Plan 2018-28 is currently being finalised and will be reported to Council for adoption as a draft for consultation on 6 December 2017. Following this, formal community consultation will occur between 23 March and 23 April 2018. A stand-alone draft 10 Year Plan consultation document will be developed as a companion document to the draft 10 Year Plan 2018-28 and will focus on the big issues/challenges, and Council's response to these. The HIF funding application will form a core component of this.

Consultation undertaken to date

The Southern Links Transportation Network has been through a detailed Notice of Requirement for Designation process under the Resource Management Act. The project received approval from independent commissioners after a public hearing process in 2014. Extensive community and stakeholder engagement was undertaken by Hamilton City Council and the NZ Transport Agency prior to formal RMA processes commencing, and as part of the statutory obligations requiring consultation under the RMA.⁷ This consultation was developed and executed in accordance with established IAP2 principles.

The aim of the consultation was to ensure that all factors relevant to the development and refinement of the Southern Links network were taken into account, and that stakeholder concerns could be easily identified and factored in as part of the project planning for the Southern Links Network. The consultation processes for Southern Links also served to progressively increase certainty for landowners, the community and other stakeholders around the location of the Southern Links Network, and that all parties consulted understood the rationale for the evolving network refinement, and the effect of the network on their interests.

⁷ Consultation for the Southern Links project was undertaken in accordance with a detailed Southern Links Consultation Plan. A copy of that Consultation Plan is included in the Appendix.

In summary, key stakeholder views identified through that process include, but are not limited to, the following:

- Understanding and mitigating the impacts on those directly impacted, and adjoining land owners, during both the construction and operational phase of the Southern Links project. These impacts include all environmental effects associated with the proposed roading infrastructure as well as any property and land use impacts.
- Cultural and archaeological impacts on areas of significance for tangata whenua, as well as issues relating to stormwater quality and quantity.
- Ecological impacts, including habitat connectivity, as outlined by the Department of Conservation.

The consultation that has taken place in relation to the transportation elements of the Peacocke HIF funding application, and that are also part of the Southern Links project, include:

- In excess of 100 meetings were held between Hamilton City Council and NZ Transport Agency staff and directly affected land owners. These meetings were held throughout the project development phase of Southern Links. These individual and small group meetings allowed the project team to understand the concerns of landowners.
- Three rounds of Public Information Days were held in May 2011, November/December 2011, and May 2012. Information Days involved separate but identical events held at the Glenview Club, Tamahere Community Centre and Rukuhia Community Hall. The Information Days also provided the opportunity for informal one-on-one meetings with landowners to occur. A number of public meetings were also held about the project.
- Stakeholder briefings were held with primary stakeholders to inform them of the progress of the project investigation and seek feedback on relevant issues.
- Since the inception of the project a dedicated project email address and phone number was made available and advertised on all project publications. The email address and phone number are monitored by project planning and consultation staff, and prompt responses have been maintained.
- Other collateral was developed including a project website with up-to-date project plans and information. Also, project newsletters, media releases and feedback forms are loaded onto the website as they become available, and the website address is published on all project material.

A Community Liaison Group has been formed to ensure regular communication between Hamilton City Council and directly affected land owners occurs in a timely manner. Hamilton City Council staff have regular project update sessions for owners and occupiers of land directly affected (within) or in close proximity to (up to 200m beyond) the designation boundary of the Southern Links Network. All information presented by the Council at these sessions is made publicly available. The most recent meeting of this group occurred on 27 April 2017.

In regards to consultation on land use and zoning, the District Plan and Peacocke Structure Plan consultation has taken place over a number of years leading up to the Hamilton District Plan becoming operative. This followed statutory consultation processes so the community has had various opportunities to participate. Active consultation included landowners, utilities, tangata whenua, neighbouring authorities and the NZ Transport Agency.

Further, Hamilton City Council has engaged closely with major land owners in the Peacocke area, including the Adare Group. Adare and Hamilton City Council are working collaboratively to develop a detailed master plan to deliver 1,000 dwellings that will leverage any HIF funding allocation. The outcome of this engagement is reflected in the funding heads of agreement outlined in the Commercial Case.

Ongoing consultation through the implementation phase

Hamilton City Council will continue to engage widely once final confirmation of the HIF funding to support the Peacocke detailed business case is received. A detailed communications and engagement plan will also be developed to keep the public, key stakeholders and directly impacted land owners informed of progress, as development takes place.

Formal consultation in accordance with any statutory processes under the RMA will also take place for all alterations to designation, resource consents, or master-planning or plan change processes required to enable new urban development as a result of receiving any HIF allocation. These processes will provide for full participation in formal resource management processes.

Hamilton City Council is committed to ongoing consultation with directly affected landowners and other stakeholders throughout the implementation phase of the Peacocke development. This will be assisted by the following existing documents:

- Pre-Construction Communication and Consultation Plan (PCCCP)
- Property Acquisition and Management Engagement Practice (PAMEPP)
- Ecological Management and Monitoring Plan
- Concept Landscape Management Plan

A copy of each of these documents is included as part of the Appendix.

The PCCCP establishes a framework to inform the community of project progress and the likely commencement of construction works. It discusses staging of works and provides general updates on property acquisition and management.

The PCCCP also establishes a framework for Hamilton City Council's communication strategies; the accountabilities and timeframes for responding to inquiries and complaints; frequency of communications and consultation; and the range of communication and consultation methods to be used (particularly with regards to communicating and consulting with tangata whenua). Importantly, the plan identifies directly affected or affected in proximity parties and key stakeholders who will need to be consulted and communicated with, along with measures to receive, record and respond to feedback.

The PAMEPP focuses on property acquisition and management. It describes the process that Hamilton City Council will follow to respond to specific requests from landowners to purchase properties, and how Hamilton City Council will deal with requests from landowners to use land that is within the designation footprint but is not yet acquired by the Council. This document also assists with risk mitigation.

GLOSSARY

HIF	Housing Infrastructure Fund
HIF Scenario	Urban development scenario based on funding from HIF
HIF (NZ Transport Agency Subsidy) Scenario	Urban development scenario based on funding from HIF and NZ Transport Agency funding 50% of the transport infrastructure
SQ	Status Quo
Status Quo Scenario	Urban development scenario based on Hamilton City Council 10 Year Plan
BCR	Benefit Cost Ratio
NPS-UDC	National Policy Statement on Urban Development Capacity
MBIE	Ministry of Business, Innovation & Employment
NZ Transport Agency	New Zealand Transport Agency
NIDEA	National Institute of Demographic and Economic Analysis, this is a University of Waikato institution
HCC	Hamilton City Council
BERL	Business and Economic Research Limited
SOLGM	New Zealand Society of Local Government Managers
SOLGM Cost Adjustors	Forecast price level change adjustors for Local Authorities
CPI	Consumers Price Index produced by Statistics New Zealand
PRINCE2	Projects IN Controlled Environments is a structured project management method
10 Year Plan	Councils Long Term Plan, or 10 Year Plan
MoU	Memorandum of Understanding
PDA	Private Developer Agreement

BIBLIOGRAPHY

	Reference	Section/Relevance	Summary/Purpose
	Wastewater		
1	Bradley, J. & Shortt, S. (2017). <i>Review of Short Listed Wastewater Servicing of Option of the Southern Area Reports in the Context of the Peacocke HIF</i> . MWH now part of Stantec.	3 Alternatives and Options	Review (2) below to ensure assumptions and conclusions remain valid.
2	Bradley, J., Maguire, C. & Shortt, S. (2011). <i>Southern Area Wastewater Study</i> . MWH.	3 Alternatives and Options	Wider investigation assessing treatment options including Cambridge, Pukete and new plants.
3	Cantrell, C.J. (2015). <i>Peacockes Development – Wastewater Pressure Trunk Servicing Feasibility Report Peer Review</i> . MWH.	3 Alternatives and Options	Peer review confirming suitability of (6)
4	Colliar, J. (2017). <i>Summary of Technical Investigations completed to confirm Peacockes Wastewater Solution for HIF bid</i> . Hamilton City Council.	3 Alternatives and Options	Summary and selection/option development process. References and key conclusions.
5	Colliar, J. (2017). <i>Wastewater Conveyance Options Assessment: Peacockes & Ruakura Development Areas to Far Eastern Interceptor (FEI)</i> . Hamilton City Council.	3 Alternatives and Options	Comparison of options to convey wastewater from Peacocke and Ruakura to Far Eastern Interceptor and treatment plant.
6	GHD. (2015). <i>Peacockes Development Area Wastewater Pressure Trunk Main Feasibility Report</i> .	3 Alternatives and Options	Option development and assessment for collection and transfer of wastewater within Peacocke. Provided basis for Opus report (9)
7	GHD. (2017). <i>Wastewater Masterplan V2 Masterplan Investigations Report</i> .	3 Alternatives and Options	Background support for city-wide strategic direction to inform 10 Year Plan and 30 year infrastructure plan.
8	Hardy, C., Cantrell, C., & Phillips, A. (2015). <i>Infrastructure Master Plan – Wastewater</i> . AECOM.	3 Alternatives and Options	Wastewater Master Plan – city-wide strategic framework.
9	Prestidge, A. & Jeram, A. (2017). <i>Peacockes Wastewater Solution Concept Design Report</i> . Opus International Consultants Ltd 2017. Reference: 3-AWC07.00	3. Alternatives and Options. 4. Preferred Option	Detailed assessment for internal collection and transfer of wastewater within Peacocke.
	Transport		
10	Black, A. & Prakash, V. (2017). <i>SH3 and Peacockes East-West Arterial Intersection – Intersection Options</i> . Gray Matter.	3. Alternatives and Options. 4. Preferred Option	Option review and confirmation for SH3 East-West Link Roundabout
11	Burford, A. Burton, D., & Ballantyne, C. (2012). <i>Hamilton Southern Links – Hamilton CBD to Peacocke and Airport: Rail Opportunities</i> . AECOM. Reference: 60164546	3. Alternatives and Options.	Evidence of consideration of alternatives

	Reference	Section/Relevance	Summary/Purpose
12	Cable, N. (2013). <i>Southern Links Notice of Requirement: Archaeological Assessment</i> . Opus International Consultants Limited.	3. Alternatives and Options.	Assessment of effects
13	Eccles, G. & Ryan, N. (2012). <i>Hamilton Southern Links Investigation</i> . AECOM. Reference: 60164546	3 Option development 4. Preferred option	Review of options and selection of preferred Southern Links option
14	Eccles, G. (2013). <i>Southern Links – Notices of Requirement</i> . AECOM. Reference: 60164546	4. Preferred option	Background to protection for preferred Southern Links option
15	Gray, A. (2017). <i>Hamilton Ring Road – Cambridge to Cobham – Incremental Economics</i> . Gray Matter.	5. Economics	Economics and evidence of option development and assessment
16	Gray, A. (2017). <i>Point of Entry Assessment Form – South Hamilton</i> . Gray Matter for Hamilton City Council. Reference: 14_158	4. Preferred option	Point of entry confirming roads approved by NZTA as pre-implementation phase.
17	Gray, A. (2017). <i>Southern Hamilton Area Transport Infrastructure Business Case Status Summary</i> . Gray Matter.	4. Preferred option	Status summary as evidence base for (16) above
18	Hamilton City Council. (2017). <i>Access Hamilton Programme 2017: Delivering a Balanced Transport System For Approval</i> .	3 Option development 4. Preferred option	Programme business case demonstrating consideration of alternatives and options for city-wide transport.
19	Keehan, A. (2017). <i>Scheme Approval Wairere Drive/Cobham Drive – Hamilton Ring Road connection</i> . NZ Transport Agency.	4. Preferred option	Grade separated interchange option approval
20	MacDonald International. (2013). <i>Southern Links Parallel Estimate</i> .	4. Preferred option 7. Risks	Southern Links cost review
21	McDean, C. (2013). <i>Hamilton Southern Links – Resource Consent Applications – Bridge Structures</i> . AECOM. Reference: 60164546	4. Preferred option	Bridge information
22	Morton, A. (2013). <i>Southern Links Network Urban and Landscape Design Framework</i> . Opus International Consultants Limited.	3 Option development 4. Preferred option	Evidence of Assessment of Effects
23	O'Halloran, M et al. (2013). <i>NZ Transport Agency and Hamilton City Council Hamilton Southern Links Investigation Scheme Assessment Report</i> . AECOM. Reference: 60164546	3 Option development 4. Preferred option	Review of options and selection of preferred Southern Links option
24	Turner, J. (2013). <i>Appendix L: Southern Links NOR Ecology Assessment</i> . Opus International Consultants Limited. Reference: 2-31653.10	3 Option development	Evidence of Assessment of Effects
25	Van Der Wel, E. (2017). <i>Wairere/Cobham Intersection Scheme Options Assessment</i> . Bloxam Burnett & Olliver Ltd. Reference: 142800.13	3 Option development 4. Preferred option	Review of options and selection of preferred grade separation solution for Cobham interchange
26	Van Der Wel, E. (2017). <i>Wairere/Cobham Intersection Procurement Options Assessment and Concept Review</i> . Bloxam Burnett & Olliver Ltd. Reference: 142800.09	3 Option development 4. Preferred option	Review of options and selection of preferred grade separation solution for Cobham interchange

	Reference	Section/Relevance	Summary/Purpose
27	AEE Link Options Analysis which included: Van Staden, D. & Tsatsas, G. (2012). <i>Southern Links Easement Stage - Option Assessment</i> . Robins, N. (2012). <i>Southern Links/Waikato Expressway Connection Options</i> . AECOM. Reference: 60164546	3 Option development	High level consideration of connectivity and options for road links
28	Van Staden, D. (2012). <i>Hamilton Southern Links Local Road Options</i> . AECOM. Reference: 60164546	3 Option development 4. Preferred Option	Evidence of option development and assessment for local roads
29	Vroegop, J. Reddish, S., & Weale, K. (2012). <i>HAMILTON SOUTHERN LINKS ROAD SAFETY AUDIT Stage 2 Scheme Assessment</i> . Traffic Planning Consultants LTD. Reference: 12205	4. Preferred Option	Evidence of safety/design review for preferred option
30	AEE Extract (2013). <i>AEE Appendix B – Project Objectives Analysis Table</i> .	3 Option development	Southern Links transport objectives
	Water		
32	Tomasi, N. & Plessis, J. (2016). <i>Hamilton City Water Supply – City Wide Strategic Master Plan</i> . Mott MacDonald.	3 Option development 4. Preferred Option	City wide Strategic context for water distribution
	Land Use Planning		
33	Hamilton City Council. <i>Peacocke Structure Plan</i> . http://www.hamilton.govt.nz	1 Strategic Context 3 Option development 4. Preferred Option	Land use context for

APPENDICES

Schedule of Appendices

Appendix	Document
3. Assessment of Infrastructure required to deliver more house faster	
A	Multi-criteria analysis background, evaluation, IBC Alternatives and Options Summary Tables and IBC Options development
4. Preferred Option	
B	Preliminary design drawings
C	Preliminary design estimates
D	Project Construction Cost Estimates
5. Economic Case	
E	Transport Benefits
F	BCR Summary Calculations
6. Financial Case	
G	10 Year Plan Financial Modelling Assumptions
7. Commercial Case	
H	Schedule of Consents
I	Risk and Assurance Plan
J	Risk Register
K	Peacocke Growth Cell Acquisition Strategy
L	Adare Land Holding Map
M	Procurement Strategy
8. Management Case	
N	Programme
O	Management Structure Chart



Committee: Council **Date:** 04 July 2017
Report Name: Government's Housing Infrastructure Fund **Author:** Blair Bowcott

Report Status	<i>This report is taken as a publicly excluded item to enable Council to carry out commercial activities without disadvantage; AND to enable Council to carry out negotiations.</i>
Strategy, Policy or Plan context	<i>Council Financial Strategy Hamilton Urban Growth Strategy Future Proof Growth Strategy Hamilton Plan Partly Operative District Plan Growth Funding Policy 2015-2025 Long Term Plan 30 Year Infrastructure Strategy</i>
Financial status	<i>There is budget to continue participating in the Housing Infrastructure Fund (HIF) process. If Council is successful in its HIF application (the next stage), and accepts an allocation, there will be impacts on Council's current Long Term Plan (LTP) and Financial Strategy, and consultation will be required before any commitments can be agreed.</i>
Assessment of significance	<i>Having regard to the decision making provisions in the LGA 2002 and Council's Significance Policy, a decision in accordance with the recommendations is not considered to have a high degree of significance</i>

1. Purpose of the Report

- To seek Council approval to finalise and execute a **non-binding** Heads of Agreement to develop the Housing Infrastructure Fund (HIF) detailed business case and associated funding agreements for the Peacockes growth area with the Ministry of Business Innovation and Employment (MBIE), New Zealand Transport agency (NZTA) and Council.

3. Executive Summary

4. Council submitted three **non-binding** HIF funding proposals in the form of indicative business cases to MBIE on 30 March 2017.
5. The HIF evaluation panel assessed all three Hamilton City Council proposals and has decided to select the Peacocke business case to proceed to the next stage of the HIF process. The Peacocke application is for indicative funding of \$182m net (comprising gross spend \$272m, less assumed NZTA subsidy \$90m).
6. The decision by the HIF evaluation panel to select Peacocke was based on the fact that it was a more transformational project for the city and sub-region that would lead to greater housing delivery outcomes.
7. A public announcement on all successful HIF applications across New Zealand will be made by the Prime Minister and senior Cabinet Ministers in Hamilton on 11 July 2017. This report and the outcome of the HIF applications **need to remain confidential until that date**.
8. Council will be required to finalise and execute a **non-binding** Heads of Agreement (HOA) with MBIE and NZTA. The HOA outlines how Council, MBIE and NZTA will work together over the next phase of the HIF application process. The HOA does **not bind** Council to any funding arrangements. **The HOA is not a HIF agreement.**
9. The purpose of the HOA is to outline what is required to complete a HIF agreement (being a detailed business case focusing primarily on the financial and commercial elements of the funding proposal), along with the milestones and timeframes for the next phase. It will outline the form of any HIF loan agreement and NZTA funding agreement. This is in line with previous reports to Council on the process.
10. It is recommended that delegation be given to the Chief Executive to negotiate and execute the final non-binding Heads of Agreement with MBIE and NZTA, to complete all necessary work in relation the final business case and to negotiate funding agreements with private developers and NZTA.
11. The indicative funding proposal for Peacocke needs to be incorporated into the 2018-28 Long Term Plan.
12. Staff will continue to liaise with Elected Members throughout the HIF process and the detailed business case and funding agreements will come to Council for consideration and approval.

Recommendations from Management

That Council:

- a) receives the report;
- b) approves a **non-binding** Heads of Agreement to develop the Housing Infrastructure Fund (HIF) detailed business case and associated funding agreements for the Peacockes growth area with the Ministry of Business Innovation and Employment (MBIE), New Zealand Transport agency (NZTA) and Council;
- c) delegates to the Chief Executive authority to work with MBIE and NZTA to refine, then finalise and execute the **non-binding** Heads of Agreement;
- d) notes that the **non-binding** Heads of Agreement will reflect the parameters of the HIF application submitted to MBIE on 31 March 2017 for the Peacockes growth area;

- e) notes that the Chief Executive will prepare as part of the next stage of the HIF application a detailed business case, negotiate funding agreements and prepare any necessary public consultation material for the consideration and approval of Council;
- f) delegates to the Chief Executive authority to conduct any **non-binding** commercial negotiations with Government representatives and private developers in this next phase, consistent with the HIF application submitted to MBIE for the Peacockes growth area;
- g) notes that the growth assumptions in the 2018-28 Long Term Plan will incorporate the HIF funding arrangements for the Peacocke growth area;
- h) requests the Chief Executive report to the 27 July 2017 Council meeting on the opportunities to advance work associated with the Peacocke growth cell ahead of the HIF detailed business case and associated funding agreements being finalised (including proactive land purchase, investigations and design of capital works) subject to any works advanced being retrospectively included in the HIF funding arrangements;
- i) notes that Council will have further opportunities to consider information on the HIF application and its implications for the 2018-28 Long Term Plan; and
- j) makes this report and the Council decisions public following the government HIF announcements on 11 July 2017.

13. Attachments

- 14. Attachment 1 - HIF Report to Council 28 March 2017
- 15. Attachment 2 - Draft Heads of Agreement Housing Infrastructure Fund

16. Background

- 17. On 28 March 2017 Council approved the submission of applications to the Housing Infrastructure Fund (HIF). The report is [linked here](#) (and attachments 6-8) and the application consisted of three business cases as follows:
 - i. Rotokauri application \$91m net HIF funding (Comprising gross spend \$154m, less existing 2015-25 Long Term plan budget \$30m and assumed NZTA subsidy \$33m)
 - ii. Peacocke application \$182m net HIF funding (Comprising gross spend \$272m, less assumed NZTA subsidy \$90m)
 - iii. Combined Rotokauri and Peacocke application \$273m net HIF funding (Comprising gross spend \$426m, less existing 2015-25 Long Term Plan budget \$30m and assumed NZTA subsidy \$123m)
 - iv. Note all amounts are in 2017 dollars
- 18. For ease of reference and to avoid repeating content, the report to 28 March 2017 Council (excluding appendix) is included in Attachment 1.
- 19. The applications were submitted to the Ministry of Business Innovation and Employment (MBIE) on 31 March 2017.
- 20. Subsequent to this date MBIE sought additional information on the applications, and then met with staff to discuss the HIF applications and conduct a site visit to both growth cells.
- 21. The HIF applications have been evaluated by an independent panel and a recommendation made to the appropriate government ministers.

22. We have been advised by MBIE that the Peacocke HIF application has been selected to proceed to the next stage of the HIF process, while the Rotokauri and Combined Rotokauri/Peacocke HIF applications have been declined.
23. A public announcement on all successful HIF applications across New Zealand will be made by the Prime Minister and senior Cabinet Ministers in Hamilton on 11 July 2017. This report and the outcome of the HIF applications **need to remain confidential until that date**.
24. MBIE have complimented Hamilton on the quality of its HIF bids, citing that all three were compelling and made strong cases to be supported.
25. MBIE have explained the reasons why the Peacocke HIF application was chosen ahead of the Rotokauri and Combined Rotokauri/Peacocke applications were:
 - The opening of the Peacocke cell is a transformational project for the city
 - To open up the Peacocke growth cell requires a substantial amount of lead infrastructure, especially the bridge/roading network, and the HIF funding arrangement is designed exactly for this scenario
 - Peacocke provides a longer term yield of houses
 - Peacocke provides wider sub-regional benefits and advances strategic relationships with regions south of Hamilton (i.e. to a wider area than just to Hamilton, especially once the major transport connections are in place)
 - Growth in the Peacocke area balances the city in terms of growth areas relative distance to the CBD
 - NZTA have indicated that they will advance the timing of the Southern Links transport network by five years (from 2030 to 2025), if the Peacocke growth cell is accelerated under the HIF agreement.
 - MBIE and NZTA staff have indicated that in terms of the transportation elements of the Peacocke proposal it is unlikely that significant amounts of new analysis is needed for the final business case phase.

26. Heads of Agreement

27. The initial draft of the **non-binding** Heads of Agreement (HOA) is included at Attachment 2.
28. The HOA outlines how Council, MBIE and NZTA will work together over the next phase of the HIF application process. The HOA does **not bind** Council to any funding arrangements. **The HOA is not a HIF agreement.**
29. The purpose of the HOA is to outline what is required to complete a HIF agreement (being a detailed business case focusing primarily on the financial and commercial elements of the funding proposal), along with the milestones and timeframes for the next phase. It will outline the form of any HIF loan agreement and NZTA funding agreement. This is in line with previous reports to Council on the process.
30. The HOA attached is an early draft document (it was provided on 28 June 2017) and MBIE have indicated they want to work with all Councils that have been selected for the next phase of HIF to refine the document prior to it being executed. The HOA will be **non-binding** on Council and execution of this document does not mean that Council has agreed to finalise a HIF. Council will be required at a later date to consider and approve the final business case and any funding agreements with MBIE and NZTA.

31. It is proposed that the Chief Executive work with MBIE/NZTA and the other councils selected to progress their HIF applications to refine and finalise the MOU. This process may include obtaining the appropriate legal and financial advice.

32. Options for further advancement

33. The intention of the HIF application was to accelerate the delivery of housing land and dwellings in the city to meet the growth projected in the coming years.
34. The time to complete the HIF detailed business case, funding agreements, private developer agreements, any public consultation and ultimately Council and government approval will extend into 2018. There is an opportunity to advance work associated with the Peacocke growth cell in 2017/2018 ahead of the HIF being finalised to ensure that Council will reduce any critical path timeframes in this complicated growth project. This advance work could include proactive land acquisition associated with the critical gateway infrastructure (this is a significant risk to timeframes as it may trigger first rights obligations with Tainui, and there are multiple land owners), investigations such as geotechnical work and detailed design of projects.
35. The areas of work that could be advanced will be identified in a report to the 27 July 2017 Council meeting, along with an estimated financial cost to advance these projects. It will be important to get the approval of MBIE and NZTA that any advanced works related to the HIF application can be retrospectively included in the HIF funding arrangements.

36. Financial and Resourcing Implications

37. The financial treatment of the HIF was described in the report to Council on 28 March 2017. In summary the HIF represents a 10 year interest free loan, with the water related debt being “on balance sheet” as a sub-ordinated loan, while the transport related debt is initially “off balance sheet” but progressively is recognised as debt by council over the course of the 10 year period through a transport subsidies funding offset agreement. The 10 year payback period does not commence from the finalisation of the agreement, but is staggered over the phasing and payment for the infrastructure works.
38. The accounting treatment for transport projects has been clarified since the 28 March 2017 report and the financial impact on debt is now more favourable than that modelled in the HIF application, due to the transport debt being initially “off balance sheet.”
39. The HIF application and the previous report to Council both identified a substantial amount of work is required to firm up the financial arrangements of the HIF, and the risks and implications for Council. This includes negotiations with developers over their commitment to a partnership and contribution to growth costs, calculation of development contributions, implications on the 2018-28 Long Term Plan and Financial Strategy, and how Council can mitigate its risks.
40. The next stage of the HIF process (comprising the detailed business case and funding agreements), which the HOA will outline, will specifically focus on:
- The financial terms of the HIF,
 - Financial implications for Council (especially debt, repayment profile, development contributions, debt ratios and any impact on rates),
 - Private developer negotiations, and
 - How Council will mitigate its risks.

41. Extensive conversations will be required with MBIE and NZTA representatives on the terms of the HIF and content of the detailed business case. Both organisations have requested regular attendance at Council project meetings on the HIF.
42. At the same time as the detailed business case is being developed, commercial negotiations will occur with private developers to achieve a level of financial and new dwelling commitment that meet the requirements sought by the government and Council. This is to ensure that Council's financial risk is mitigated, and that new houses are delivered at an accelerated rate in accordance with the intention of the HIF.
43. The HIF discussions over the next six months align well with the 2018-28 Long Term Plan process and will enable an informed discussion on the HIF and the growth scenarios for Council to consider alongside the other considerations of the Long Term Plan.

44. Timeframe for Next Stage

45. It is our intention to progress the detailed business case, private developer negotiations, private developer agreements and consequential funding agreements with MBIE and NZTA as quickly as possible. Our current target is to have these finalised for consideration by Council in October 2017.
46. Factors that will influence the timeframe include the outcome of the central government elections (and consequential impact on Ministers for HIF), the engagement and agreement with private developers and the financial modelling of the HIF in parallel with the 2018-28 Long Term plan deliberations.
47. The extent and requirements of any public consultation are still to be finalised. The timing of this consultation may depend on the links to the 2018-28 Long Term Plan and to what extent any consultation is reliant on decisions and information from the draft Long Term Plan.

48. Risk

49. The report to Council on 28 March 2017 (paragraphs 154-162) described the non-financial and financial risks associated with the HIF.
50. These risks are unchanged, and it was always the intention of the HIF application process to address and mitigate each of these risks in this next stage. That is the purpose of the detailed business case, developer negotiations and discussion on the funding agreements.

Signatory

Authoriser	Kelvyn Eglinton, General Manager City Growth
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