

Hamilton Southern Links Executive Summary

The NZ Transport Agency (“the Transport Agency”) and Hamilton City Council (“HCC”) have issued Notices of Requirement for designation of land necessary for the Hamilton Southern Links roading project in and to the south of Hamilton.

Five separate Notices of Requirement pursuant to the Resource Management Act 1991 (“the RMA”) have been issued as follows:

- (i) One Notice of Requirement by the HCC pursuant to s168A of the RMA to designate arterial transportation routes to and through the Peacocke Growth Area of Hamilton generally as provided for in the Peacocke Structure Plan
- (ii) Three Notices of Requirement by the Transport Agency under s168 of the RMA to designate new state highway routes from Kahikatea Drive in the west to the Waikato Expressway at Tamahere in the east, and from the existing State Highway 3 (Ohaupo Road) and State Highway 21 (Airport Road) intersection north to the Hamilton City boundary to meet HCC’s arterial transport network. There are three Notices of Requirement required by the Transport Agency because the Transport Agency works extend across three local authority jurisdictions: Hamilton City, Waipa District and Waikato District
- (iii) One Notice of Requirement by the Transport Agency for an alteration under s181 of the RMA to the existing State Highway 1 (Cobham Drive) designation on the approaches to the Cobham Bridge.

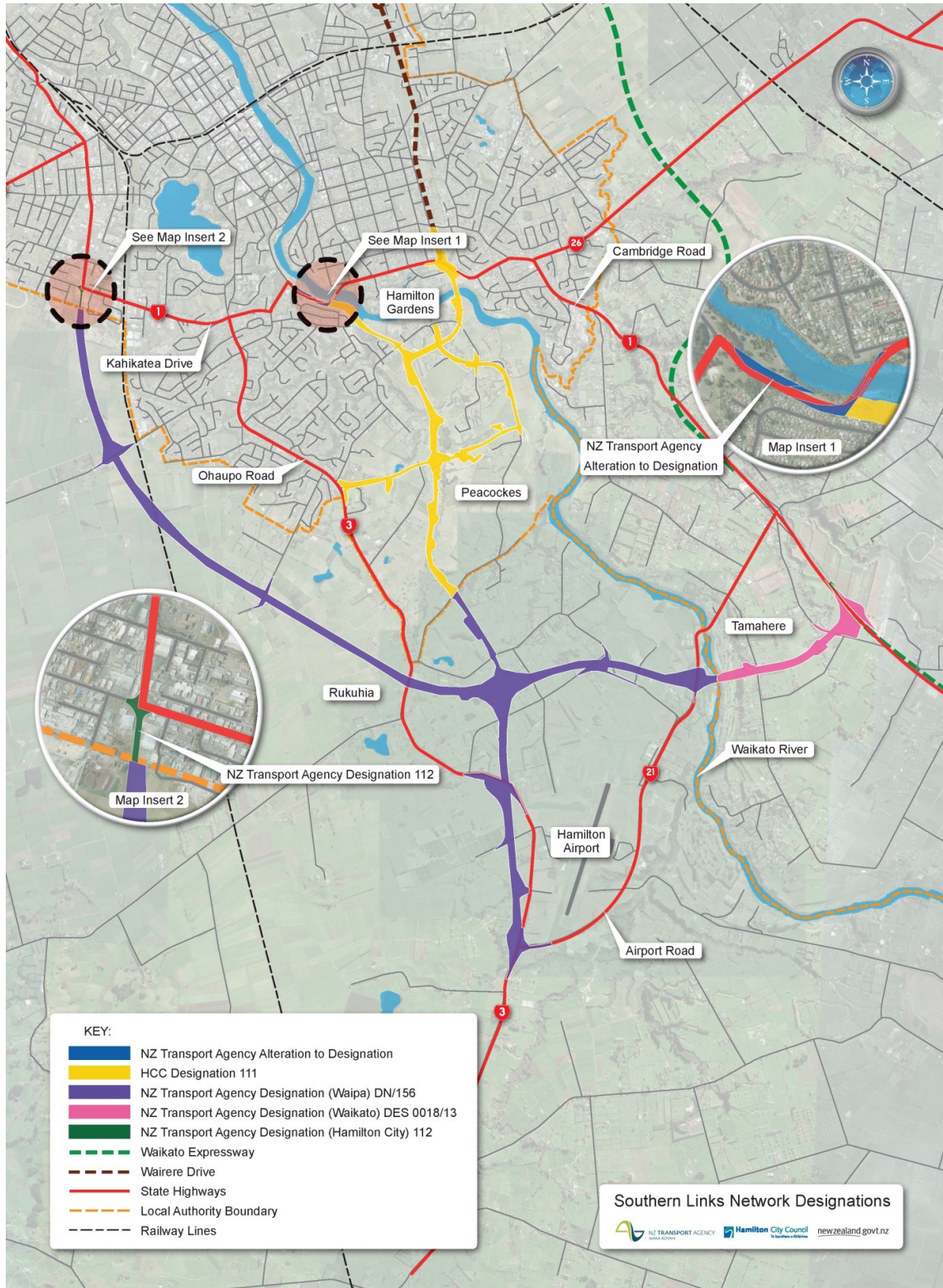
These requirements cumulatively seek to designate an integrated transportation network in and to the south of Hamilton known as “Southern Links”. The general location and arrangement of the network is shown in Figure 1 on the following page.

As noted on Figure 1, each Notice of Requirement can be identified by the following reference:

- **HCC s168A Notice of Requirement in Hamilton City: 111** (to be included in the Operative Hamilton City District Plan and the Proposed Hamilton City District Plan (if applicable) at the time of confirmation of the Notice of Requirement)
- **NZ Transport Agency s168 Notice of Requirement in the Waipa District: DN/156** (to be included in the Operative Waipa District Plan and the Proposed Waipa District Plan (if applicable) at the time of confirmation of the Notice of Requirement)
- **NZ Transport Agency s168 Notice of Requirement in the Waikato District: DES0018/13** (to be included in the Operative Waikato District Plan at the time of confirmation of the Notice of Requirement)
- **NZ Transport Agency s168 Notice of Requirement in Hamilton City: 112** (to be included in the Operative Hamilton City District Plan and the Proposed Hamilton City District Plan (if applicable) at the time of confirmation of the Notice of Requirement)
- **NZ Transport Agency s181 Notice of Requirement in Hamilton City: 81/E81** (to be included in the Operative Hamilton City District Plan and the Proposed Hamilton City District Plan (if applicable) at the time of confirmation of the Notice of Requirement)

A 20 year lapse period is sought by the **Transport Agency** and HCC for each Notice of Requirement.

Figure 1 Southern Links Network Designations



Project Objectives

The objectives for the project derive from the issues that the Southern Links network is designed to address. Those issues are highlighted in strategic planning documents such as:

- Hamilton Urban Growth Strategy (HUGS) – identifies the need for the urban development of the Peacocke Growth Area and appropriate transport access to that area.
- Access Hamilton 2010-2040 – in part aims to deliver the transportation outcomes required to support HUGS and HCC's strategic planning framework.
- Waikato Regional Land Transport Strategy 2011-2041 – identifies the need for an integrated multi-modal transport system to support economic activity and access to markets, a transport system that provides for safety and security for all transport modes, and for protection of significant future transport corridors.
- Waikato Expressway Network Plan – highlights the need to optimise the connectivity of the Waikato Expressway with commercial and residential development in Peacocke and around the airport, highlights congestion on the existing SH1 urban route through Hamilton as a detrimental effect, and states the importance of connecting the Hamilton Western Corridor to the Waikato Expressway.

The **Transport Agency's objectives** for the Southern Links project are as follows:

- Contribute to the objectives of the New Zealand Transport Strategy, the Land Transport Management Act 2003 and the Waikato Regional Land Transport Strategy;
- Contribute to the Transport Agency, HCC, Waikato District Council, Waipa District Council and Waikato Regional Council's strategic objectives for integrated land use planning, urban growth and economic development including Future Proof;
- Contribute to and support the HCC strategies, in particular Access Hamilton and Hamilton's Urban Growth Strategy;
- Support economic development for the Hamilton and southern/south-western Waikato sub-region, including appropriate provision for accommodating utilities and services within the road corridor;
- Contribute to the objectives of the Waikato Expressway (improve journey time and reliability, ease congestion, improve transport connections for economic growth, access to markets, transport efficiency and road safety);
- Develop an appropriate road hierarchy in the sub-region;
- Improve options for public transport, walking/cycling and demand management, both within Hamilton City and Waikato and Waipa District Council areas adjoining Hamilton City;
- Improve amenity and safety through reduced conflict and crash potential along the existing SH1, SH3, SH21, existing key arterial and collector routes within Hamilton City and key local roads;
- Minimise and mitigate adverse environmental, cultural and social effects;
- Protect the long-term function of the State Highway and the key arterial or collector road networks.

The **Hamilton City Council's objectives** for the Southern Links project are as follows:

- Facilitate the achievement of HCC's strategic objectives for integrated land use planning, urban growth, infrastructure provision and economic development;
- Protect the Southern Links transport corridor to facilitate the provision of an integrated transport network which supports the future urban development of the Peacocke Structure Plan Area;
- Protect the Southern Links transport corridor in the Peacocke Structure Plan Area in light of the risk of build-out along the preferred route;
- Provide for growth needs in the south of Hamilton City through the protection of the long-term function of state highway and key arterial, collector and local road networks;
- Provide connectivity between the Peacocke Structure Plan Area and the existing Hamilton City infrastructure network, hospital, airport and state highway network;
- Improve the amenity and safety of key arterial, collector and local road networks in Hamilton City;

- Provide new transport routes to redistribute freight and regional trips to Hamilton on to appropriate corridors that will relieve congestion and make existing networks operate more efficiently;
- Provide opportunities for passenger transport and alternative transport modes which will not preclude the potential development of rail transport in the long term;
- Improve residential, industrial and retail environments in Hamilton City, in particular in Hillcrest, Melville and Hamilton East through the provision of an integrated transport network which will, in turn, reduce travel trips and demand on existing transport networks; and
- Provide an appropriate road corridor to accommodate network utilities and services to provide for growth in the south of Hamilton City.

The Southern Links network will achieve the project objectives of both the Transport Agency and HCC.

Previous Investigations

The origins of the current Southern Links project derive from a series of historical investigations and studies as follows:

- 1962 Ministerial Requirement for Motorway
- 1969 Hamilton Transportation Study
- 1982 Hamilton Transportation Study Review
- 1990 Hamilton Arterial Roading Study
- 2004 Southern Hamilton Arterial Network Strategy Study
- 2007 Hamilton Southern Links Technical Working Party

The concept of a ring road to the south and south-west of Hamilton has thus been identified for several decades. The Hamilton Arterial Roading Study of the late 1980's considered the future state highway and associated local authority arterial roading needs in the south west of Hamilton City.

More recent work in the period 2004-2007 identified a broad preferred network corridor, intersection and staging options for a state highway and urban arterial network in the area. Since the last work on the Southern Links concept in 2007 there have been a number of relevant developments in the fields of strategic planning, transport planning and land development that affect the Southern Links project area.

Problem Description

The majority of traffic approaching Hamilton from the south travels along SH1 and SH3 and has a destination within Hamilton City. Much of this traffic stops in the Central Business District (CBD) or along the western corridor. The western corridor provides access to key commercial and industrial areas including established industrial areas along Kahikatea Drive and Greenwood/Lincoln Street, the Crawford Street inland port and future industrial growth areas in Te Rapa.

The existing transport network in the south of Hamilton experiences congestion at peak times. The current route for SH1, between Kahikatea Drive and the SH26 roundabout at Hillcrest, does not adequately cater for the mix of heavy vehicles bound for the west of the city and local commuter trips. SH3 between Airport Road and Lorne Street also experiences congestion and conflict between freight and local journeys. This reduces network efficiency and creates road safety issues. These issues limit the ability of Hamilton-based industry and business to connect with domestic and export markets and have negative impacts for local, commuter and inter-regional journeys. Reliable and safe private and public transport access to Hamilton International Airport and its associated industrial/commercial land uses is also a key consideration.

The Hamilton Western Corridor is an important connection to existing and future commercial and industrial areas¹. While the northern access to the western corridor has and is being improved by the Te Rapa Bypass and the Waikato Expressway, the southern access to the western corridor is predicted to become progressively worse with sections of SH1 and SH3 experiencing very poor Levels of Service² ("LOS") by 2020. This would result in

¹ NZ Transport Agency Board Paper 09/12/0307, dated 18 December 2009, endorsing Southern Links investigation funding

² Level of Service (LOS) is a measure of the efficiency and capacity of a roading network. LOS A is the best ranking, when a network is operating at near to maximum efficiency with minimal delays. LOS F is the worst ranking, when a network is operating at or exceeding its capacity with long delays.

significant negative economic impacts for Hamilton through delays experienced by commercial traffic seeking access to markets.

The Future Proof Growth Strategy 2009 (“Future Proof”) has identified as a key issue the management of growth and the integration of land use planning. Future Proof projects an increase in Hamilton City’s population to nearly 280,000 by 2061. Part of this growth is expected to be accommodated by the Peacocke growth cell. The prioritised development of the Peacocke growth cell provides the opportunity to plan the upgrade of the state highway and local transport networks to:

- (i) resolve current and predicted efficiency and capacity issues: and
- (ii) integrate land use and transport infrastructure planning to ensure that opportunities to manage demand are maximised through improved passenger transport, provision for walking and cycling and implementing travel demand management measures (TDM).

Finally, the mooted road improvements required to address these issues have not been protected from the impacts of intensification of land use in the relevant areas. Designation of the Southern Links network will provide the necessary protection.

The Purpose and Assessment of a Designation

A designation is a special purpose provision in a district plan that enables a requiring authority to carry out an activity or activities that are in accordance with the purpose of the designation without the normal restrictions of the district plan needing to be met (zoning, standards etc).

Sections 168, 171 and 181 of the RMA apply to the Notices of Requirement lodged by the Transport Agency. Section 168A applies to the Notice of Requirement lodged by HCC.

The key considerations in the assessment of the Notices of Requirement under the RMA include the effects on the environment of the work, whether alternatives have been adequately considered, and whether the work and designation are reasonably necessary to achieve the Transport Agency’s and HCC’s objectives for the project.

The Reasons why the Designation is reasonably necessary

Without having designations for the network in place:

- (i) the requiring authorities will have extremely limited ability to protect the land required for the network from ongoing growth and development in the project area; and
- (ii) land use or subdivision may occur in the meantime that create sufficient constraints to result in sub-optimal network alignments having to be adopted in the future with attendant adverse effects on the co-ordinated growth and development of the southern Hamilton/Airport area; and
- (iii) a large number of landowners will be left with no certainty as to the location and timing of the future network.

Section 176 of the RMA prevents any person, without gaining prior written consent of the requiring authority, from doing anything in relation to the land that is subject to a designation that would prevent or hinder a public work or project or work to which the designation relates, including:

- (i) Undertaking any use of land; and
- (ii) Subdividing the land; and
- (iii) Changing the character, intensity, or scale of the use of the land

Designation of the routes that form the Southern Links network is thus necessary to achieve interim and long term protection for the land that will accommodate the future transport network, and in turn to meet the project objectives of both the Transport Agency and HCC.

The Reasons why the work is reasonably necessary

There are clear strategic, transportation and economic development needs for the Southern Links network to be established in the future.

Levels of Service at key points on the existing transport network in the area are predicted to be very poor by 2020. Significant residential, commercial and industrial growth is planned in the Peacocke area and to the south of Hamilton. With regards to transportation, a ‘whole of network’ approach is required to ensure that this planned growth does not compromise access to commercial and industrial areas within Hamilton (particularly along the

Hamilton Western Corridor), thus constraining Hamilton's economic development and restricting access to markets.

Identifying and protecting the future Southern Links transport network will enable sound long-term planning to be carried out for Hamilton and the adjoining areas to the south, and will protect the long-term function of the state highway and key arterial and collector road networks and provide certainty for residents and developers.

Specifically with regards to the Peacocke area, there is considerable pressure from land owners and developers to enable development to occur. However, sporadic interim development can make further conversion to full urban development uneconomic, particularly if the development pre-empts the effective and efficient location of roads, services and other land use activities. Urban development within the Peacocke Growth Area is restricted until the necessary infrastructure and road transport networks have been established to connect Peacocke to the city's existing infrastructure networks. The Southern Links arterials that the HCC Notice of Requirement seeks to designate are a critical component of this infrastructure network. This is because the existing transport network is not adequate to safely and efficiently accommodate the multi-modal transportation requirements of the urban development planned for the area.

The Southern Links network is necessary to generate the following benefits:

- improvements in journey time reliability and easing of severe congestion by reducing delays and improving the level of service on the existing state highway and arterial road network in the project area.
- More efficient freight supply chains will be achieved by protecting and improving connections to important commercial and industrial areas within Hamilton (particularly in the western corridor), the Hamilton Ring Road from the Waikato Expressway; also to Ruakura in the east, the Hamilton International Airport and nearby proposed development of industrial land, and from SH3.
- better access to markets, employment and areas that contribute to economic growth by providing direct connections from the Peacocke growth cell and other towns such as Te Awamutu;
- opportunities for improved amenity for active modes and public transport;
- improvements in road safety by providing new high standard, access controlled arterial corridors for the movement of freight and people and reducing conflict in existing corridors.
- redistribution of freight movements away from heavily congested existing routes through suburbs such as Hillcrest and Melville with attendant future travel time savings for interregional freight.
- A road hierarchy will be established where local and inter-regional traffic is able to travel on appropriate routes better suited for its travel purpose. This improves amenity and safety through reduced conflict between different vehicle types, particularly in the residential areas through which SH1, SH3 and SH21 currently pass.

All of the above benefits accord with central government investment priorities around economic growth and productivity. They are also consistent with local authority objectives for community wellbeing and transport.

Description of Project Area

Beginning at the Kahikatea Drive/Greenwood Street junction in Hamilton the western sector of the Southern Links network predominantly traverses dairy farming properties on low lying peat soils adjacent to the south-western extent of the city. Some smaller residential and rural-residential properties are affected by the network in the vicinity of Collins Road and Houchens Road. The western sector of the network follows a ridge extending into the peat land to cross the existing SH3 (Ohaupo Road) slightly to the south of the SH3/Raynes Road intersection (through a large existing orchard and refrigerated packhouse operation).

Running eastward the network traverses an area of predominantly lifestyle and smaller rural block development in the Raynes/Middle/Narrows Road area that contains a number of covenanted stands of kahikatea and other native vegetation. At this point the western sector of the network terminates at the central interchange with the north-south state highway route that feeds into the Peacocke Growth Area of Hamilton City.

Running eastward from the central interchange the eastern sector of the network crosses Raynes Road adjacent to the Raynes/Narrows Road intersection before continuing toward SH21 and the Waikato River.

The large site traversed to the north of Raynes Road owned by Meridian 37 Ltd is currently the subject of Environment Court proceedings seeking to have it rezoned for mixed commercial and industrial development, and is also subject to a Notice of Requirement for airport (high intensity aviation lighting) purposes. Currently the site is used for crop production and grazing however it also houses an aviation training accommodation centre.

The network crosses SH21 and the Waikato River in an area of rural-residential development, along with commercial activities such as The Narrows Landing function centre and a community/recreational facility at The Narrows Park Camp. A dwelling³ listed with the New Zealand Historic Places Trust and in the Operative and Proposed Waipa District Plan as a Category B historic building is within the designation at this point.

East of the Waikato River the network traverses the Narrows Golf Club course on the lower river terrace. The network then climbs to cut through the eastern bank of the river terrace to join flat ground typical of the Tamahere area, north of Day Road. The network crosses Tamahere Drive and joins the Waikato Expressway at a point approximately 1km to the north of the existing SH1/Pickering Road intersection.

The southern sector of the network begins at the SH3/SH21 intersection with a grade separated interchange. Running north a new state highway route runs to the west of the existing SH3 alignment traversing rolling agricultural land. The network crosses the existing SH3 approximately 1km east of the SH3/Narrows Road intersection, before running north across small rural blocks fronting Middle and Narrows Road to meet the central interchange.

The northern sector of the network begins at the central interchange and heads north across two dairy farms, crossing through the ridges upon which Raynes and Peacockes Roads are located (the local roads to be bridged over Southern Links). Once north of Peacockes Road the northern sector comprises a central major arterial route following the western side of the Mangakotukutuku gully through the rolling and predominantly rural-residential and small rural block development in the Peacocke Growth Area.

An east-west arterial route through the Peacocke Growth Area crosses the major arterial to the east of the current eastern end of the Dixon Road formation. The east-west arterial joins the existing SH3 approximately 100m to the south of the existing SH3/Dixon Road intersection. At its eastern end the east-west arterial joins the existing Peacockes Road approximately 1.5kms to the north of the Peacockes Road/Faiping Road intersection. The east-west arterial traverses undulating predominantly pasture covered land, and skirts the edges of existing gullies and watercourses.

At its northernmost extent the northern sector of the network diverges to connect to the existing city road network at two different points. One arterial connection runs north-east and parallels Peacockes Road to cross the Waikato River in the vicinity of Echobank Place to connect to Cobham Drive (SH1) to the east of the river. The Cobham connection point is dictated by the designated location of the Hamilton Ring Road (E1) connection to Cobham Drive.

The other arterial connection runs north-west to cross the Mangakotukutuku Stream gully adjacent to its confluence with the Waikato River. Once north of the stream gully the network traverses land adjoining the Waikato River and existing residential development to meet the existing Cobham Drive on the southern side of its deviation over the Cobham Bridge.

Proposed Physical Works

The key components of the network upon which the Notices of Requirement are predicated are described as follows:

The Proposed Works in the Notices of Requirement by the Transport Agency are:

Cobham Bridge approaches and associated intersection

- From Normandy Avenue, the existing curve on the western approach to Cobham Bridge is replaced with a signalised intersection and associated widening of approaches. Cobham Bridge will be widened to four lanes and will have shared paths.
- On the eastern side of the river a minor widening of the northern side of the existing Cobham Drive approach is required to accommodate the bridge widening.

Greenwood/Kahikatea Intersection to Central Interchange (State Highway)

- A new at-grade roundabout at Greenwood / Kahikatea / Southern Links intersection.
- Collins Road is bridged over the Southern Links alignment with north facing on/off ramps included to allow for connections between Collins Road, the Hamilton CBD and western industrial areas.

³ Glenhope Homestead – 433 Airport Road (Lot 1 DPS 61196)

- At the NIMT crossing the main alignment is bridged over the railway line with sufficient clearance to allow for future electrification and track duplication.
- Houchens Road is bridged over the main Southern Links alignment with no connection to Houchens Road.
- The main Southern Links alignment crosses under Ohaupo Road (SH3) at the Sunfruit orchard and packhouse site, with no connection to Ohaupo Road. A cut up to 9 metres deep at its highest point is required to allow the main Southern Links alignment to cross under Ohaupo Road.

Central Interchange (State Highway)

- The Southern Links east-west alignment goes over the Southern Links north-south alignment with a bridge. Raynes Road remains at existing levels.
- The ramp intersections with the new north-south alignment are controlled with at grade dual lane roundabouts for all but the west-bound onramp which is a free flow ramp from SH3.
- Middle Road and Narrows Road are severed at the interchange.

Central Interchange to Airport Road Interchange (State Highway)

- The main alignment passes underneath Raynes Road, with Raynes Road bridged over.
- The main alignment runs to the east of Raynes Road and traverses rolling land that is the subject of a Notice of Requirement from Waikato Regional Airport Ltd (“WRAL”) for high intensity aviation lighting and is also subject to Runway End Safety Area planning provisions in the Waipa District Plan. The alignment stays in a deep cutting along this length.

Airport Road Interchange (State Highway)

- The new east-west route goes over the existing Airport Road (SH21) with a bridge. Airport Road stays on its existing alignment and level.
- The east-west route through the interchange will be one lane in each direction, meaning a “lane gain” and “lane drop” for both sets of ramps. This is proposed to reduce the width required of the river bridge although the designation allows for extra lanes if required.

Airport Road Interchange to Waikato Expressway Interchange (State Highway)

- From the Airport Road overbridge the alignment requires fill embankments as it crosses an undulating riverside terrace.
- The river crossing is via a single span bridge approximately 55m long and will include a shared path facility on the northern side of the bridge to tie into the riverside track. The riverside track will be able to pass under the bridge on either side of the river.
- The route crosses under Pencarrow Road with a new bridge provided for Pencarrow Road. No connection to Pencarrow Road is allowed for. A cut approximately 9 metres deep will be required for the route to cross under Pencarrow Road.
- The Waikato Expressway Eastern Interchange is grade-separated over SH1 with ramps for all movements. The ramps are controlled with roundabouts, the western roundabout is located on the existing Tamahere Drive.
- The south facing ramps at the existing Tamahere interchange will need to be closed to accommodate the new north facing ramps due to the proximity of the interchanges.

Central Interchange to SH3/21 Interchange (State Highway)

- From the central interchange the highway continues south almost parallel to the existing Ohaupo Road. Ohaupo Road is maintained to the SH3/21 interchange. Narrows Road is severed.
- The new interchange is proposed slightly north and west of the existing SH3/21 intersection. SH21 is taken under SH3. All movements are accommodated at the interchange.

Hamilton City/Waipā District Boundary (on southern edge of Peacockes Road road reserve) to Central Interchange (State Highway)

- Continuing south from the city boundary (the demarcation point between the Transport Agency Notice of Requirement in the Waipā District and the HCC Notice of Requirement) the alignment cuts under Raynes Road with a new bridge and then ties into the northern roundabout of the central interchange.

The Proposed works in the Notice of Requirement by Hamilton City Council are:

Cobham Bridge Intersection to Hamilton Ring Road Extension (HRRE) Arterial intersection

- Running south from the Cobham Bridge intersection the major arterial crosses the Mangakotukutuku Gully with a new bridge that is approximately 200m long. The route makes allowance for a shared path on the river side along this entire length, with the path continuing across the bridge and connecting to the existing paths around Bader Street/Peacockes Road with a pathway under the gully bridge.
- South of the Mangakotukutuku Gully the alignment utilises the existing “green strip” (historic road reserve) adjacent to the water treatment plant. The alignment severs the existing Peacockes Road, closing it on both sides with cul-de-sacs.

HRRE Arterial intersection to Hamilton City/Waipā District Boundary (on southern edge of Peacockes Road road reserve)

- The alignment crosses the Mangakotukutuku Gully and a major tributary with bridges. Between the bridges allowance has been made for a new three legged two lane roundabout that will allow connection in the future to a collector road serving urban development of the Peacockes Lane area. The alignment then runs parallel to the Mangakotukutuku Gully on the western side of the gully.
- The alignment stays close to the gully as it continues south, through a four legged, two lane roundabout with the new east-west minor arterial.
- The alignment crosses under the existing Peacockes Road with a new bridge, with no connection proposed with Peacockes Road.

Cambridge Road to HRRE Arterial

- A grade-separated interchange is proposed at Cobham Drive, with the Ring Road Extension going over Cobham. All movements are catered for and ramp intersections are signalised.
- The bridge over the Waikato River will be over 30m above the water level with a 120m river span and a 135m “land span” over the terrace to the south.
- The alignment to the south of the bridge severs Weston Lea Drive, which will be closed on both sides leaving cul-de-sacs with access maintained to other parts of the network.

A signalised intersection is proposed on the existing Peacockes Road, which will become a minor arterial to the south and a local road to the north.

HRRE Arterial to Peacocke Town Centre (as shown on Peacocke Structure Plan)

- The new minor arterial largely follows the existing Peacockes Road with minor realignment and significant widening to accommodate urban lane widths, a central median, shoulders, footpath and shared path.
- The designation allows for a new roundabout at Peacockes Lane and at the proposed connection to Weston Lea Drive.
- The intersection within the town centre will be a cross signalised intersection with the minor arterial to the west and collector roads to the south and east.

Ohaupo Road to Peacocke Town Centre (as shown on Peacocke Structure Plan)

- Ohaupo Road is realigned to the south of Dixon Road into a new three legged roundabout, with the new Peacocke east-west minor arterial to the east. Dixon Road will be limited to left-in and left-out movements.
- The Peacocke east-west minor arterial follows the undulating contours over the ridge, crosses Hall Road and continues towards the roundabout with the north-south Arterial.

- East of the roundabout the alignment crosses the Mangakotukutuku Gully with a bridge and the smaller tributary with a box culvert.

Consideration of Alternatives

Both requiring authorities have considered a range of route options and other methods for achieving the project objectives.

The Transport Agency and HCC actively considered methods other than designation for achieving the desired protection for the Southern Links network. A workshop was held on 21 November 2012 to assess other route protection options. The route protection options considered were⁴:

- Do Nothing
- Insert route recognition (indicative network alignments) into District Plans by way of plan change

A strategic “whole of network” and a specific link by link analysis was undertaken in terms of these options.

In summary, designation of the entire network now is the most effective and rational option for protection of the network route in the long term for the following reasons:

- Designating provides route protection for key infrastructure required to serve the planned urban growth of the Peacocke area
- Travel demand management including walking, cycling and passenger transport options have been provided for within the project. Reduced demand may defer the need for construction slightly but will not achieve the project objectives.
- Not designating would result in repeat investigation costs in the future that could reach 50% of the short-term land costs for the proposed Southern Links network, and would result in higher future process and construction costs and/or potentially lower and/or deferred benefits.
- Not designating produces no additional benefit and retains the risk of the project becoming compromised (potentially completely) as a result of loss of optimum network locations (e.g. for river crossings and Waikato Expressway connection locations/configuration) through interim land use and subdivision development.
- Not designating leaves uncertainty for landowners.

A “Do-Minimum” package of works was developed by the requiring authorities early in the investigation phase of the project to provide a baseline against which to compare network options and economics. The Do-Minimum network was the minimum package of works that would be required to maintain an acceptable level of service on existing routes in the project area. It included the development of existing roading capacity and the construction of some new transport linkages. The Do-Minimum network comprised the following works:

- Intersection improvements at the Greenwood Street/Kahikatea Drive intersection and at the Kahikatea Drive/Quentin Street/Gallagher Drive intersection;
- Cobham Drive/Peacocke Road intersection improvements including a southbound grade separated slip lane;
- A roundabout at the junction of Cobham Drive and the Hamilton Ring Road intersection;
- Peacocke North-South Major Arterial constructed with two lanes (i.e. one each way) for a 3.6km length;
- Peacocke Minor Arterials (as per Southern Links network).

A comparison was made between the ability of the Do-Minimum network and the Proposed Network to achieve the project objectives, as embodied within seven “problem” issues. The proposed Southern Links network positively addresses the problems the project objectives address while the Do-Minimum network did not satisfactorily address the problems. On that basis the Do-Minimum network was not preferred as an option.

⁴ The workshop also considered various options with regards to timing of designation of the network. Because these options all involved designating the network they are not considered alternative methods.

Evaluation of Route Options

The Transport Agency and HCC considered alternative route options for the construction of the proposed Southern Links network. The requiring authorities responsible for the Southern Links network adopted a systematic and best practice approach to identifying a suitable network alignment.

The route option development and assessment was undertaken using Area/Corridor/Route/Easement (ACRE) methodology.

At the Area stage, an area of interest for a possible future route was identified and information on constraints in collected and analysed. Corridors were then identified within which feasible routes could be developed to connect the points required to produce an effective network.

Within the identified Corridors, Route options were identified avoiding any major constraints as far as practicable. Considerable information was obtained and analysed for the area. The analysis of the range of Route options involved multi-criteria analysis methodology with key decisions made on the basis of decision conferencing techniques, where a range of experts contribute to agreed scoring of aspects and the weighting of different aspects prior to combining the findings to identify the preferred option.

Once the Preferred Route had been selected, the final stage of the ACRE process was to refine the route to the point of easement. For RMA purposes the term 'easement' is equivalent to defining the extent of the designation footprint. Options for each link in the network were considered within the confines of the preferred route. This link by link analysis informed the development of the easement/designation. The analysis was based on the following criteria (all weighted equally):

- Cost
- Capacity
- Environmental Effects
- Social
- Cultural

The Transport Agency and HCC have undertaken a comprehensive and thorough consideration of alternative routes and have not acted in a cursory or arbitrary manner in seeking to designate the network sought. The systematic ACRE process followed to identify the network route avoided any route "pre-determination". This was important in light of the significant historical investigations and designations that have occurred in the project area with regards to a Southern Links network.

The network identification and development process adopted satisfies the statutory requirements of evaluation of alternatives as set out in sections 171(1)(c) and 168A(3)(b) of the RMA.

Environmental Effects

The establishment of the Southern Links network will generate a number of positive transportation and traffic effects, common to both the HCC and the Transport Agency designations, as follows:

- Improvements in journey time reliability and easing of severe congestion by reducing delays and improving the level of service.
- More efficient freight supply chains will be achieved by protecting and improving connections to important commercial and industrial areas within Hamilton (particularly in the western corridor), the Hamilton Ring Road from the Waikato Expressway; also to Ruakura in the east, the Hamilton International Airport and nearby proposed development of industrial land, and from SH3.
- Better access to markets, employment and areas that contribute to economic growth by providing direct connections from the Peacocke growth cell and other towns such as Te Awamutu;
- Opportunities for improved amenity for active transport modes (such as walking and cycling) and public transport;
- Improvements in road safety by providing new high standard, access controlled arterial corridors for the movement of freight and people and reducing conflict in existing corridors.
- Redistribution of freight movements away from heavily congested existing routes through suburbs such as Hillcrest and Melville with attendant future travel time savings for interregional freight.
- A road hierarchy will be established where local and inter-regional traffic is able to travel on appropriate routes better suited for its travel purpose. This improves amenity and safety through reduced conflict and potential crashes between different vehicle types, particularly in the residential areas through which SH1, SH3 and SH21 currently pass.

The development of the Southern Links network has the potential to generate a range of adverse effects on the environment, some of which are unavoidable. These include landscape and ecological effects as well as effects on culturally and historically sensitive areas and sites. Particularly in the northern parts of the Peacocke Structure Plan area the potential adverse effects are largely produced by the defined points on the existing road transport network to which the Southern Links network must connect (for example, the designated junction of the Hamilton Ring Road with Cobham Drive). Some of the potential effects are restricted in their extent to only certain parts of the network (e.g. aviation safety effects around Hamilton International Airport) while others are relevant throughout the network e.g. operational road noise. Comprehensive sets of conditions are proposed by HCC and the Transport Agency to avoid, remedy or mitigate the potential adverse effects of the Southern Links network.

All of the positive traffic and transportation effects/benefits, along with those positive effects identified in the assessments of other effects generated by the project (e.g. air quality) must be taken into account and balanced against the adverse effects of the project in the broad discretionary judgement required as to whether confirmation of the designation would achieve the Purpose of the RMA.

Relationship to Planning Documents

The majority of the strategic, transport and more localised planning strategies and plans relevant to the Southern Links project that have been produced in the last 4-5 years identify and reinforce the need for the Southern Links network to occur to assist in reducing congestion, facilitating coordinated urban growth, and ensuring efficient freight and public transport provision. Likewise the influential Private Plan Changes that have been promulgated in the project area in the last 4-5 years have to varying degrees recognised and allowed for the future existence of the Southern Links network. The need for Southern Links and recognition of that by policy makers and developers is thus well recognised and embedded in the strategic planning environment.

Designation Lapse Period

All designations have a "lapse" period associated with them. The lapse period is the time within which the designation must have been given effect to (ie the work for which the designation is held has been constructed). The standard lapse period for a designation under the RMA is 5 years, unless a longer lapse period is sought and confirmed as part of the Notice of Requirement process. In this case both HCC and the Transport Agency **seek a lapse period of 20 years** for their respective designations that comprise the overall Southern Links network.