

Notice of Meeting:

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

Date: Wednesday 23 October 2024

Time: 11:30 am

Meeting Room: Council Chamber and Audio Visual Lilnk
Venue: Municipal Building, Garden Place, Hamilton

Lance Vervoort Chief Executive

Council *Kaunihera* OPEN AGENDA

Membership

Chairperson

Mayor Paula Southgate

Heamana

Deputy Chairperson Heamana Tuarua Deputy Mayor Angela O'Leary

Members

Cr Maxine van Oosten
Cr Moko Tauariki
Cr Sarah Thomson
Cr Ewan Wilson
Cr Mark Donovan
Cr Louise Hutt
Cr Andrew Bydder
Cr Geoff Taylor
Cr Sarah Thomson
Cr Emma Pike
Cr Maria Huata
Cr Anna Casey-Cox
Cr Kesh Naidoo-Rauf

Cr Tim Macindoe

Quorum: A majority of members (including vacancies)

Meeting Frequency: Monthly - or as required

Amy Viggers Mana Whakahaere Governance Lead

15 October 2024

Telephone: 07 838 6699 Amy.Viggers@hcc.govt.nz www.hamilton.govt.nz

Purpose

The Council is responsible for:

- 1. Providing leadership to, and advocacy on behalf of, the people of Hamilton.
- 2. Ensuring that all functions and powers required of a local authority under legislation, and all decisions required by legislation to be made by local authority resolution, are carried out effectively and efficiently, either by the Council or through delegation.

Terms of Reference

- 1. To exercise those powers and responsibilities which cannot legally be delegated by Council¹:
 - a) The power to make a rate.
 - b) The power to make a bylaw.
 - c) The power to borrow money, or purchase or dispose of assets, other than in accordance with the Long Term Plan.
 - d) The power to adopt a Long Term Plan or Annual Plan, or Annual Report.
 - e) The power to appoint a Chief Executive.
 - f) The power to adopt policies required to be adopted and consulted on under the Local Government Act 2002 in association with the Long Term Plan or developed for the purpose of the Council's Governance Statement.
 - g) The power to adopt a remuneration and employment policy.
 - h) The power to approve or change the District Plan, or any part of that Plan, in accordance with the Resource Management Act 1991.
 - i) The power to approve or amend the Council's Standing Orders.
 - The power to approve or amend the Code of Conduct for Elected Members.
 - k) The power to appoint and discharge members of committees.
 - The power to establish a joint committee with another local authority or other public body.
 - m) The power to make the final decision on a recommendation from the Parliamentary Ombudsman, where it is proposed that Council does not accept the recommendation.
 - n) The power to amend or replace the delegations in Council's *Delegations to Positions Policy*.
- 2. To exercise the following powers and responsibilities of Council, which the Council chooses to retain:
 - a) Resolutions required to be made by a local authority under the Local Electoral Act 2001, including the appointment of an electoral officer and reviewing representation arrangements.
 - b) Approval of any changes to Council's vision, and oversight of that vision by providing direction on strategic priorities and receiving regular reports on its overall achievement.
 - c) Approval of any changes to city boundaries under the Resource Management Act 1991.
 - d) Adoption of governance level strategies plans and policies which advance Council's vision and strategic goals.

¹ Clause 32, Schedule7, Local Government Act 2002

- e) Approval of the Triennial Agreement.
- f) Approval of the local governance statement required under the Local Government Act 2002.
- g) Approval of a proposal to the Remuneration Authority for the remuneration of Elected Members.
- h) Approval of any changes to the nature and delegations of the Committees.
- i) Approval or otherwise of any proposal to establish, wind-up or dispose of any holding in, a CCO, CCTO or CO.
- j) Approval of city boundary changes, including in respect of Strategic Boundary Land Use Agreements.
- k) Approval of Activity Management Plans.
- I) Sister City relationships.

Oversight of Strategies, Plans and Reports:

- Long Term Plan
- Annual Plan
- Annual Report
- Shaping Hamilton Kirikiriroa Together
- Our Climate Future
- He Pou Manawa Ora

Oversight of Policies and Bylaws:

- Corporate Hospitality and Entertainment Policy
- Delegations to officers specific to the Resource Management Act 1991
- Delegations to Positions Policy
- Elected Members Support Policy
- Significance and Engagement Policy
- Climate Change Policy
- Any Community Engagement Policies

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1 Apologies – Tono aroha

2 Confirmation of Agenda – Whakatau raarangi take

The Council to confirm the agenda.

3 Declaration of Interest – Tauaakii whaipaanga

Members are reminded of the need to be vigilant to stand aside from decision making when a conflict arises between their role as an elected representative and any private or other external interest they might have.

4 Public Forum – Aatea koorero

As per Hamilton City Council's Standing Orders, a period of up to 30 minutes has been set aside for a public forum. Each speaker during the public forum section of this meeting may speak for five minutes or longer at the discretion of the Mayor.

Please note that the public forum is to be confined to those items falling within the terms of the reference of this meeting.

Speakers will be put on a Public Forum speaking list on a first come first served basis in the Council Chamber prior to the start of the Meeting. A member of the Governance Team will be available to co-ordinate this. As many speakers as possible will be heard within the allocated time.

If you have any questions regarding Public Forum please contact Governance by telephoning 07 838 6699.

Item 5

Council Report

Committee: Council Date: 23 October 2024

Author: Amy Viggers **Authoriser:** Michelle Hawthorne

Position: Governance Lead **Position:** Governance and Assurance

Manager

Report Name: Recommendation from the Strategic Risk and Assurance Committee

Report Status	Open

Purpose - Take

1. To seek the Council's approval of the recommendations from the 23 October 2024 Strategic Risk and Assurance Committee meeting (Agenda) concerning:

- i. Approval of 'Our Climate Statement 2023/24' Council's first climate change disclosure report
- ii. Final Approval of the 2023/24 Annual Report, 2023/24 Summary Annual Report and Representation Letters

Recommendation – Tuutohu

To be circulated following the conclusion of the 23 October 2024 Strategic Risk and Assurance Committee meeting.

Attachments - Ngaa taapirihanga

There are no attachments for this report.

Council Report

Committee: Council Date: 23 October 2024

Author: Martin Parkes **Authoriser:** Andrew Parsons

Position: Urban Transport Manager **Position:** General Manager

Infrastructure and Assets

Report Name: Macroscope Approval - Heaphy Terrace pedestrian facility

Report Status	Open

Purpose - *Take*

1. To seek approval from the Council for the macroscope design approval of pedestrian crossing improvements on Heaphy Terrace outside the Hamilton Jamia Mosque.

Staff Recommendation - Tuutohu-aa-kaimahi

- That the Council:
 - a) receives the report; and
 - b) approves the upgrade of pedestrian crossing facilities in Heaphy Terrace outside the Hamilton Jamia Mosque by implementing a paired zebra crossing that gives priority to pedestrians and cyclists combined with a raised safety platform, refuge island and a kerb extension using funding available from the CERF Transport Choices Programme with a 90% subsidy from the NZ Transport Agency and the work to be completed by 30 June 2025.

Executive Summary - Whakaraapopototanga matua

- 3. A new pedestrian crossing on Heaphy Terrace in the vicinity of the Hamilton Jamia Mosque was included as part of the Minor Transport Improvements Programme in 2023/24. However, an opportunity to deliver the project via the CERF Transport Choices Programme, which attracts 90% funding assistance from NZ Transport Agency, was provided in 2023.
- 4. On 26 September 2024 the Infrastructure and Transport Committee discussed the provision of improved pedestrian facilities in the vicinity of the Hamilton Jamia Mosque on Heaphy Terrace. The report from this meeting, along with supporting documentation associated with this matter, can be found here Infrastructure and Transport Committee (item 7 page 19).
- 5. At the meeting on 26 September 2024 the Infrastructure and Transport Committee resolved the following (*minutes unconfirmed at the time of writing this report*):
 - a) Refers the decision concerning the upgrade of the pedestrian crossing facilities in Heaphy Terrace outside the Hamilton Jamia Mosque to an Extraordinary meeting as soon as practicable so that NZTA (Waka Kotahi) can be in attendance and respond to questions from Members.

b) Notes that the Committee is in support of a solution for this location of pedestrian crossing facilities in Heaphy Terrace outside the Hamilton Jamia Mosque.

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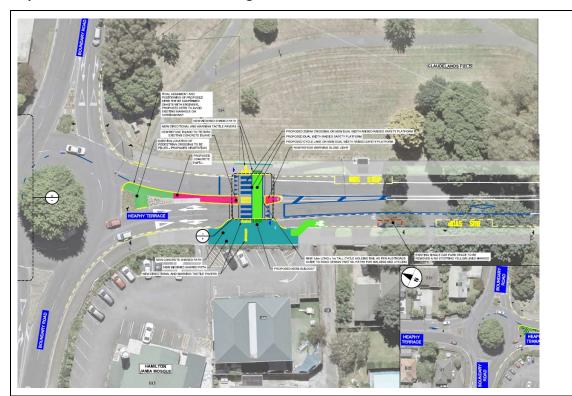
- 6. At the public forum of the 26 September meeting, there was clear support to improve safety for people crossing Heaphy Terrace in the vicinity of the Hamilton Jamia Mosque.
- 7. This report will consider the resolution from the 26 September meeting, as well as feedback and discussion points raised by elected members at that meeting.
- 8. NZTA staff will attend this meeting to speak about the project, the options discussed in this report, and the funding stipulations associated with the CERF Transport Choices Programme Funding Agreement.
- 9. Staff consider the matters and decisions in this report have low significance and that the recommendations comply with the Council's legal requirements.

Discussion – Matapaki

- 10. At the Infrastructure and Transport Committee meeting on 26 September 2024 there was clear support from elected members to find a suitable solution to improve safety for people attempting to cross Heaphy Terrace in the vicinity of the Mosque. This was reflected in the resolution on this item.
- 11. Staff believe the recommended option achieves the best and safest outcome for people walking and biking in this area. However, taking note of discussions with elected members on 26 September, another option is to be examined in this report.

Options for Heaphy Terrace Pedestrian Improvements

12. Option 1: Paired Raised Zebra Crossing.



Proposed Paired Zebra Crossing on RSP with Kerb Buildout – Staff Recommendation

- 13. This is the preferred option for the following reasons:
 - a) Raised platform reduces speed to survivable outcomes for any crashes which do occur and improves crossing accessibility for visually/mobility impaired users.
 - b) The kerb extension will narrow the road thereby reducing the traffic to single lanes and reducing the crossing distance.
 - c) Provides for a safer right turn movement of vehicles into the mosque which has been a community concern by reducing the centre island length.
 - d) Reduces community severance currently being experienced by pedestrians and cyclists not comfortable or able to cross at this location.
 - e) The distance back from the roundabout is sufficient to provide room for vehicles exiting the roundabout to see the pedestrians and cyclists waiting or crossing the road.
 - f) It is close to the primary destination for a large percentage of people using the crossing i.e. the Mosque and early childhood education centre.
 - g) The crossing will complement the recently completed Heaphy Terrace separated cycle path that runs along the edge of Claudelands Park between Boundary Road to Brooklyn Road.
 - h) This option has a design approved by an NZTA technical review team and been subject to a safe system audit.
- 14. **Option 2: Signalised Shared At Grade Crossing** At the Infrastructure and Transport Committee meeting on 26 September 2024, some elected members suggested a crossing be provided further south along Heaphy Terrace towards the intersection with Stanley Street. The area of interest is shown in the aerial photograph below.



- 15. A potential location for Option 2 has been considered by staff. However, due to the number of site constraints south of the Jamia Mosque, the nearest potential alternative location for a crossing is south of the Heaphy Terrace/Stanley Street intersection. Whilst it is possible to locate a crossing in this area it will not deliver the best outcome for the specific group of users most in need of a crossing facility on Heaphy Terrace.
- 16. The main reasons for this are:
 - a) The location is too far away from the 'desire line'* and people will not divert approximately 125 metres to use a crossing in this location unless they are specifically walking along Heaphy Terrace and need to cross the road. Data provided in the 26 September Infrastructure and Transport Committee report shows a strong pedestrian desire line close to the Heaphy Terrace/Boundary Road intersection.
 - *The desire line is the preferred route a person will take to travel from A-to-B. This is, in the main, the quickest and straightest route.
 - b) Pedestrian crossing facilities should be located and designed such that there is a clear view between approaching drivers and pedestrians on the crossing or waiting to cross the roadway. If the crossing at this location is not to be raised the forward sight distance for approaching drivers becomes even greater. At this location there are several trees close to the road edge which, when in full leaf, have the potential to reduce the conspicuity of a crossing and pedestrians waiting to cross. Cutting back or remove a tree is unlikely to be an option as most of the trees in this area are protected. This is highlighted in the GIS map below.

Council's Parks team have indicated that if a protected tree is involved and the matter is required to be publicly notified it could take up to 9 months to resolve, which would mean the project falls outside the delivery timeframes stipulated in the CERF Transport Choices Programme Funding Agreement.



17. Staff are therefore not recommending any further investigation into this type of crossing facility.

Other Relevant Information

Traffic Modelling

- 18. In September 2023, a traffic modelling assessment was undertaken for the Boundary Road/Heaphy Terrace intersection. The purpose of the assessment is to understand the impact of the propose pedestrian crossing at the Jamia Mosque and associated road marking and lane configuration changes needed. The modelling assessment considered the following changes:
 - a) Left turn only for the left lane on the north approach (Heaphy Terrace)
 - b) New spiral marking, reducing to a singular circulating movement on the east side of the
 - c) roundabout
 - d) Reducing to a single exit south on Heaphy Terrace
 - e) Two priority crossings: 30 m south on Heaphy Terrace (Jamia Mosque) and 70 m north on Heaphy Terrace.
- 19. The assessment compared the existing conditions at the intersection during peak hours to the potential future conditions with the proposed design. The assessment concluded the proposed layout changes will allow the Heaphy Terrace/Boundary Road intersection to operate relatively similar to the existing layout, and any impacts on traffic performance will likely be negligible. A copy of the assessment is attached as Attachment 1 to this report.
- 20. At the time of writing this report, the assessment is being independently peer reviewed. The results of the peer review will be verbally reported at the meeting, if required.

Heaphy Terrace/Boundary Road Intersection

- 21. A report to the <u>26 May 2020</u> Infrastructure Operations Committee considered a report for Transport Improvement Projects including options for the Heaphy Terrace/Boundary Road intersection. The meeting resolved:
 - f) notes that consideration will be given to bringing forward the current funding in 2025/26 2027/28 of \$4.875M for installation of traffic signals at the intersection of Boundary Road and Heaphy Terrace as part of the development of the 2021-31 Long Term Plan.
- 22. Funding was included in the 2021-24 Long Term Plan with a total of \$6.4M being included to cover land purchase, design and construction.
- 23. Co-investment by NZTA was not received for this project due to uncertainty on future form and function of the Cross City Connector. The <u>7 December 2021</u> Infrastructure Operations Committee reallocated \$1m of budgeted funding (\$490k HCC share) over the 2021-24 period from the planned Boundary Road/Heaphy Terrace intersection upgrade to progress investigation and planning of the cross-city connector.
- 24. The corridor study has recently been completed but has not yet been presented to elected members. The study confirms that the likely intervention for this intersection will be the removal of the roundabout to be replaced by a traffic signal-controlled intersection, which will include pedestrian and cycling facilities.
- 25. At this present time, the timing for the delivery of this project is unknown as there is no funding in the 2024-34 Long Term Plan for any major intersection improvements such as this.

Feedback from Fire & Emergency NZ

26. This site is not on an agreed key route used by FENZ for emergency responses. Generally, FENZ can negotiate over RSP's with a 1:15 approach and 1:20 departure ramp gradient with minimal impact. The following written feedback has been received from FENZ about the staff recommended crossing at Heaphy Terrace:

"FENZ's stance is to ensure we can respond as quickly and efficiently as we can to emergencies, with seconds making a difference. This is always balanced with our own personal acknowledgement to ensure public safety so consultation with us is very much well appreciated to ensure we can balance both as best we can.

The location of the project is at the beginning and end of a roundabout intersection so fire appliance speeds will be at a minimum anyway during the entry and exit of the intersection. We do however stress the importance of the raised platforms and their impact on our appliances so as discussed can considerations be discussed with that in mind to ensure we can minimise the impacts on the appliances".

Financial Considerations - Whaiwhakaaro Puutea

27. Funding for **Option 1**, the paired raised zebra crossing, is available from the CERF Transport Choices Programme fund with 90% being from NZTA. A carryover of the approved local CERF funds (10%) from 2023/24 is available for this work.

Legal and Policy Considerations - Whaiwhakaaro-aa-ture

28. Staff confirm the recommendations in this report comply with the Council's legal and policy requirements.

Climate Change Impact Statement

- 29. Staff have assessed the recommended option in this report against the Climate Change Policy for both emissions and climate change adaptation. Staff have determined no adaptation or emissions assessment is required at this stage.
- 30. The Transport team have worked with the Sustainable Communities team and determined that it is not possible to complete a technical assessment for emissions reduction for these projects.
- 31. We can however identify that there will be the following benefits for the environment (including emissions reductions in many cases) from the provision of a safe connection for people in the adjacent communities to have access to schools, churches, shops, libraries without the need to use a vehicle.
- 32. For the delivery of the project, we are also looking at opportunities such as:
 - i. Understanding the embodied carbon in the materials we are using and seeing if there are lower impact options.
 - ii. Looking for contractors who have good environmental practices including recycling of materials etc.

Wellbeing Considerations - Whaiwhakaaro-aa-oranga tonutanga

- 33. The purpose of Local Government changed on the 14 May 2019 to include promotion of the social, economic, environmental, and cultural wellbeing of communities in the present and for the future ('the 4 wellbeings').
- 34. The subject matter of this report has been evaluated in terms of the 4 wellbeings during the process of developing this report as outlined below.

35. The recommendations set out in this report are consistent with that purpose.

Social

- 36. Social wellbeing is defined as the capacity of individuals, their families, whanau, iwi, hapuu and a range of communities to set goals and achieve the.
- 37. The proposed improvements will improve accessibility for those who choose or need to walk and cycle to access key facilities including places of worship and education.

Economic

- 38. Economic wellbeing is defined as the capacity of the economy to generate employment and wealth necessary for present and future financial security.
- 39. The proposed facilities will assist people with having safe access to jobs in the area via walking and cycling.

Environmental

- 40. Environmental wellbeing is defined as the capacity of the natural environment to support, in a sustainable way, the activities that constitute community life.
- 41. Improvements will enable people to safely walk and cycle to their destinations and reduce our community's negative impact on the environment.

Cultural

- 42. Cultural wellbeing is defined as the capacity of communities to retain, interpret and express their shared beliefs, values, customs, behaviours, and identities.
- 43. Council is committed to honouring the principles of Te Tirirti o Waitangi/The Treaty of Waitangi through its relationship with Kiingitanga, Waikato-Tainui, mana whenua and maataawaka within Kirikiriroa/Hamilton.
- 44. The approach for the development and delivery of CERF projects is to partner and work alongside lwi and Mana Whenua, and our wider community to reflect and recognise Hamilton Kirikiriroa is culturally diverse.
- 45. Through the development of the overall CERF programme, staff have met with Iwi and Mana Whenua to discuss cultural opportunities or specific interest areas across the programme of projects.

Risks - Tuuraru

46. There is a risk that if approval is not given for improvements to be completed at the site there ongoing safety issues for pedestrian and cyclist trying to cross the road. There is also a risk of losing funding and potentially impacting our financial strategy.

Significance & Engagement Policy - Kaupapa here whakahira/anganui

- 47. Staff have considered the key considerations under the Significance and Engagement Policy and have assessed that the recommendation(s) in this report has/have a low level of significance.
- 48. Community views and preferences are already known to the Council through the initial stakeholder engagement that has been undertaken and is outlined in this report.
- 49. Following a decision from this committee, further consultation and engagement will be undertaken as part of the design and construction process and a communication plan will be developed for this work.

50. It is understood that there will be representatives from the Mosque in attendance at the committee meeting.

Item 6

51. Given the low level of significance determined, the engagement level is low. No engagement is required for the decisions in this report.

Attachments - Ngaa taapirihanga

Attachment 1 - Traffic Modelling Report for the Boundary Road/Heaphy Terrace Intersection

Attachment 1

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06 September 2023

Andrea Timings Hamilton City Council Hamilton, 3240

Boundary Road Heaphy Terrace Modelling Results

Introduction

Hamilton City Council (HCC) has appointed AECOM to carry out the detailed design for the Boundary Road and Heaphy Terrace intersection. As part of this, traffic modelling has been undertaken using SIDRA Intersection software to assess any potential impacts on traffic performance with the proposed design.

The existing layout of the Boundary Road / Heaphy Terrace intersection is shown in Figure 1.



Boundary Road / Heaphy Terrace Existing Layout

The proposed design includes the following changes:

- Left turn only for the left lane on the north approach (Heaphy Terrace)
- New spiral marking, reducing to a singular circulating movement on the east side of the
- Reducing to a single exit south on Heaphy Terrace
- Two priority crossings: 30 m south on Heaphy Terrace and 70 m north on Heaphy Terrace.

An assessment was undertaken for the purpose of comparing the existing conditions at the intersection during peak hours to the potential future conditions with the proposed design.

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2.0 Modelling Assumptions

SIDRA Intersection software (V9) has been used to model the existing and proposed intersections.

The models utilised traffic count data including pedestrian count collected on the 27^{th} of July 2023 in AM (7:15 - 8:15) and PM (15:45 - 16:45) peak periods. The traffic count data is included in Appendix A

To measure performance at the intersection, the average delay per vehicle, maximum queue length (95th percentile), and level of service (LoS) for each lane movement has been taken into consideration.

A network model was created with proposed roundabout design and two pedestrian priority crossings to assess the network performance.

There is an additional priority crossing proposed east of the roundabout on Boundary Road (approx. 200m) that is included in the detailed design. Due to the distance of this crossing, it is assumed any impact on traffic performance at the roundabout will likely be negligible and therefore, it has been excluded from the modelling of the proposed design.

3.0 Modelling Results

3.1 Existing Intersection

The SIDRA model layout of the existing intersection is presented in Figure 2 with the results included in Table 1. The full assessment results are included in Appendix B.

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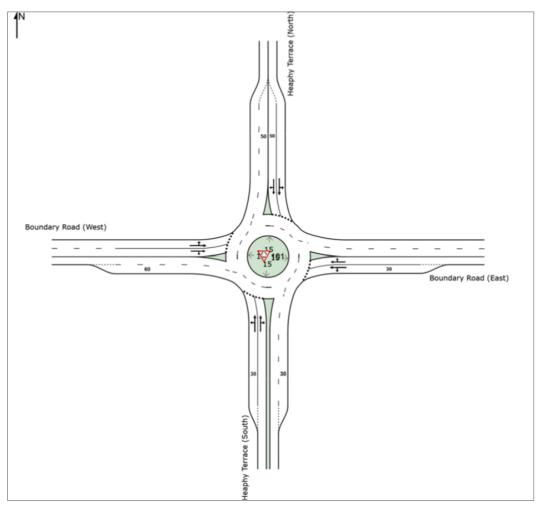


Figure 2 Existing Boundary Road / Heaphy Terrace Intersection

Table 1 Existing Intersection Results

Approach	Heaphy (south)	Геггасе	Boundar (east)	y Road	Heaphy (north)	Геггасе	Boundar (west)	y Road	Overall
Арргоасп	Left / Through	Through / Right							
				AM (7:15	to 8:15)				
LoS	В	В	В	В	А	В	А	А	В
Average Delay (seconds)	11.2	15.1	13.0	18.1	9.3	17.4	3.8	4.7	11.8
95 th Percentile Queue (m)	27.1	6.9	14.1	73.8	8.9	85.7	22.3	21.9	85.7
PM (15:45 to 16:45)									
LoS	В	В	В	В	В	В	В	В	В

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Approach	Heaphy 1 (south)	Terrace	Boundar (east)	y Road	Heaphy (north)	Terrace	Boundar (west)	Overall	
Арргоасп	Left / Through	Through / Right	Left / Through	Through / Right	Left / Through	Through / Right	Left / Through	Through / Right	
Average Delay (seconds)	16.3	14.8	10.3	12.2	10.5	15.9	12.8	14.7	14.0
95 th Percentile Queue (m)	59.7	10.6	12.6	59.4	8.4	52.1	89.0	86.6	89.0

The result of the assessment shows that the existing intersection operates at a LoS A / B in the AM peak and a LoS B in the PM peak with little delay for vehicles.

3.2 Proposed Intersection

The SIDRA model layout of the existing intersection is presented in Figure 3 with the results included in Table 2. The full assessment results are included in Appendix B.

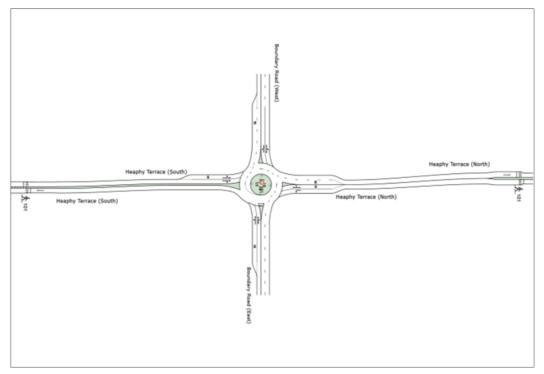


Figure 3 Proposed Boundary Road / Heaphy Terrace Intersection (rotated clockwise)

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Table 2 Proposed Intersection Results

Approach	Heaphy (south)	Terrace	Boundar (east)	y Road	Heaphy [*] (north)	Terrace	Boundar (west)	y Road	Overall
Арргоасп	Left / Through	Through / Right	Left / Through	Through / Right	Left	Through / Right	Left / Through	Through / Right	
				AM (7:15	to 8:15)				
LoS	Α	В	В	С	А	С	Α	Α	В
Average Delay (seconds)	9.7	13.4	11.7	22.0	9.0	20.3	4.2	4.9	13.1
95 th Percentile Queue (m)	26.7	6.7	16.9	87.0	6.6	103.3	22.8	22.4	103.3
				PM (15:45	to 16:45)				
LoS	В	В	А	В	В	В	В	В	В
Average Delay (seconds)	15.3	13.4	9.0	10.1	10.6	16.0	15.0	16.6	14.3
95 th Percentile Queue (m)	60.2	10.4	12.5	50.9	8.4	52.6	98.2	96.2	98.2

The traffic operation result of the assessment shows that the proposed design operates relatively similar to the existing intersection. LoS has reduced slightly in the morning peak for the through/right lanes from Boundary Road (east) and Heaphy Terrace (north) from a rating of B to a rating of C. This is expected to only increase delay by a few seconds at most and will likely not have a significant impact on traffic performance.

LoS has increased slightly for the left / through lane from Boundary Road (east) in the afternoon peak, expecting to reduce delay by two seconds per vehicle. This is likely because vehicles no longer have to give way to traffic in the left on Heaphy Terrace (north) that has changed to left turn only.

The maximum queue length could reach 103 m on Heaphy Terrace north approach during the morning peak (an increase from 85 m during the morning peak at the existing intersection). This will queue past the proposed crossing (as will the existing intersection) to the intersection with Claude Street. This will likely cause negligible impact given that Claude Street is a low volume residential street.

4.0 Summary

The results of the modelling have shown that the proposed Boundary Road / Heaphy Terrace intersection will operate relatively similar to the existing intersection layout. Any impacts on traffic performance from the changes proposed to the Boundary Road / Heaphy Terrace intersection will likely be of negligible impact.

AECOM

Yours sincerely

Lile

Kirsten File Graduate Transport Planner kirsten.file@aecom.com

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SITE LAYOUT

♥ Site: 101 [Boundary Heaphy Existing AM Peak (Site Folder:

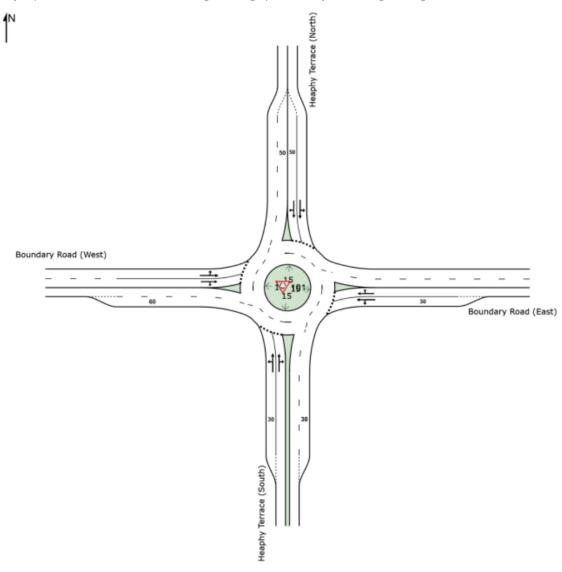
General)]

Boundary Road Heaphy Terrace Existing Roundabout - AM Peak

Site Category: Existing Design

Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Heaphy Model.sip9

LANE SUMMARY

♥ Site: 101 [Boundary Heaphy Existing AM Peak (Site Folder:

Boundary Road Heaphy Terrace Existing Roundabout - AM Peak

Site Category: Existing Design

Roundabout

Lane Use	and Per	forman	ice										
	DEM FLO [Total	WS	Сар.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BA(QUE	UE	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	veh/h	HV] %	veh/h	v/c		sec		[Veh	Dist] m				
South: Hea	phy Terra	ice (Sou	th)										
Lane 1 ^d	322	3.2	659	0.488	100	11.2	LOS B	3.8	27.1	Short	30	0.0	NA
Lane 2	70	3.4	364	0.191	39 ⁶	15.1	LOS B	1.0	6.9	Full	100	0.0	0.0
Approach	392	3.2		0.488		11.9	LOS B	3.8	27.1				
East: Boun	dary Roa	d (East)											
Lane 1	121	2.9	351	0.345	44 ⁶	13.0	LOS B	2.0	14.1	Short	30	0.0	NA
Lane 2 ^d	495	3.8	626	0.790	100	18.1	LOS B	10.2	73.8	Full	500	0.0	0.0
Approach	616	3.6		0.790		17.1	LOS B	10.2	73.8				
North: Heap	phy Terra	ce (Nort	h)										
Lane 1	109	4.1	417	0.262	31 ⁶	9.3	LOSA	1.2	8.9	Full	110	0.0	0.0
Lane 2 ^d	670	1.8	783	0.855	100	17.4	LOS B	12.0	85.7	Short	50	0.0	NA
Approach	779	2.2		0.855		16.3	LOS B	12.0	85.7				
West: Bour	dary Roa	d (West)										
Lane 1 ^d	464	3.1	1037	0.447	100	3.8	LOS A	3.1	22.3	Full	180	0.0	0.0
Lane 2	439	2.2	982	0.447	100	4.7	LOS A	3.1	21.9	Full	180	0.0	0.0
Approach	903	2.7		0.447		4.3	LOSA	3.1	22.3				
Intersectio n	2689	2.8		0.855		11.8	LOS B	12.0	85.7				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

- 6 Lane under-utilisation due to downstream effects
- d Dominant lane on roundabout approach

Approach L	ane Flo	ows (v	eh/h)								
South: Heaph	ny Terrac	ce (Sou	th)								
Mov. From S To Exit:	L2 W	T1 N	R2 E	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1 Lane 2 Approach	134 - 134	188 15 203	- 55 55	322 70 392	3.2 3.4 3.2		0.488 0.191 0.488	100 39 ⁶	<mark>2.1</mark> NA	2 NA	
East: Bounda	iry Road L2	(East)	R2	Total	%HV	_	Deg.	Lane	Prob.	Ov.	
From E To Exit:	S	W	N			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	

								6			
Lane 1	87	34	-	121	2.9	351	0.345	44 ⁶	0.0	2	
Lane 2	-	445	49	495	3.8	626	0.790	100	NA	NA	
Approach	87	479	49	616	3.6		0.790				
North: Heaph	y Terrac	ce (Nort	:h)								
Mov.	L2	T1	R2	Total	%HV		Deg.	Lane	Prob.	Ov.	
From N						Cap.	Satn		SL Ov.	Lane	
To Exit:			W			veh/h				No.	
Lane 1	81	28	-	109	4.1	417	0.262	31 ⁶	NA	NA	
Lane 2	-	364	305	670	1.8	783	0.855	100	<mark>24.3</mark>	1	
Approach	81	393	305	779	2.2		0.855				
West: Bound	ary Roa	d (Wes	t)								
Mov.	L2	T1	R2	Total	%HV		Deg.	Lane		Ov.	
From W						Cap.	Satn		SL Ov.	Lane	
To Exit:	N					veh/h				No.	
Lane 1	227	236	-	464	3.1	1037	0.447	100	NA	NA	
Lane 2	-	334	105	439	2.2	982	0.447	100	NA	NA	
Approach	227	571	105	903	2.7		0.447				
- 1		0/10									
	Total	%HV E	eg.Satı	n (v/c)							
Intersection	2689	2.8		0.855							

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

6 Lane under-utilisation due to downstream effects

Merge Analysis												
E La Numb		Short Lane Length m	Percent Opng in Lane %	Flow		Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn I v/c	Min. Delay sec	Merge Delay sec
South Exit: Heaphy Terra Merge Type: Priority	ace ((South)										
Exit Short Lane	1	30	0.0	470	472	3.03	2.02	116	1294	0.089	8.0	1.0
Merge Lane	2	-	100.0	Me	rge La	ne is not O	pposed	470	1800	0.261	0.0	0.0
East Exit: Boundary Roa Merge Type: Not Applie		ast)										
Full Length Lane	1	Merge	Analysis	not ap	plied.							
Full Length Lane	2	Merge	Analysis	not ap	plied.							
North Exit: Heaphy Terra Merge Type: Priority	ice (North)										
Exit Short Lane	2	50	0.0	416	421	3.01	2.00	64	1365	0.047	0.7	8.0
Merge Lane	1	-	100.0	Me	rge La	ne is not O	pposed	416	1800	0.231	0.0	0.0
West Exit: Boundary Roa Merge Type: Priority	ad (\	Vest)										
Exit Short Lane	1	60	0.0	750	764	3.08	2.05	168	951	0.176	1.7	2.2
Merge Lane	2	-	100.0	Me	rge La	ne is not O	pposed	750	1800	0.417	0.0	0.0

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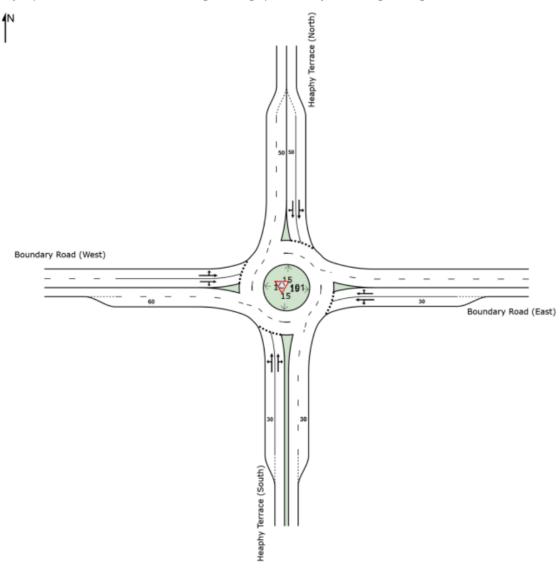
SITE LAYOUT

♥ Site: 101 [Boundary Heaphy Existing PM Peak (Site Folder:

Boundary Road Heaphy Terrace Existing Roundabout - PM Peak Site Category: Existing Design

Roundabout

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LANE SUMMARY

Site: 101 [Boundary Heaphy Existing PM Peak (Site Folder:

General)]

Boundary Road Heaphy Terrace Existing Roundabout - PM Peak

Site Category: Existing Design

Roundabout

Lane Use	and Per	forman	ice										
	DEM/ FLO¹ [Total		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BA QUE [Veh		Lane Config	Lane Length	Cap. F Adj. E	Prob. Block.
	veh/h	% -	veh/h	v/c	%	sec			m [*]		m	%	%
South: Hea	phy Terra	ce (Sou	th)										
Lane 1 ^d	507	0.6	681	0.744	100	16.3	LOS B	8.5	59.7	Short	30	0.0	NA
Lane 2	110	0.2	378	0.292	39 ⁶	14.8	LOS B	1.5	10.6	Full	100	0.0	0.0
Approach	617	0.5		0.744		16.0	LOS B	8.5	59.7				
East: Bound	dary Road	d (East)											
Lane 1	138	0.5	451	0.305	44 ⁶	10.3	LOS B	1.8	12.6	Short	30	0.0	NA
Lane 2 ^d	538	8.0	771	0.698	100	12.2	LOS B	8.4	59.4	Full	500	0.0	0.0
Approach	676	8.0		0.698		11.8	LOS B	8.4	59.4				
North: Hear	ohy Terra	ce (Nort	h)										
Lane 1	79	0.0	327	0.242	33 ⁵	10.5	LOS B	1.2	8.4	Full	110	0.0	0.0
Lane 2 ^d	434	2.2	588	0.738	100	15.9	LOS B	7.3	52.1	Short	50	0.0	NA
Approach	513	1.8		0.738		15.1	LOS B	7.3	52.1				
West: Boun	dary Roa	d (West)										
Lane 1 ^d	742	0.8	878	0.846	100	12.8	LOS B	12.6	89.0	Full	180	0.0	0.0
Lane 2	674	8.0	797	0.846	100	14.7	LOS B	12.3	86.6	Full	180	0.0	0.0
Approach	1416	8.0		0.846		13.7	LOS B	12.6	89.0				
Intersectio n	3221	0.9		0.846		14.0	LOS B	12.6	89.0				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

 $\label{loss} \mbox{Roundabout LOS Method: SIDRA Roundabout LOS.}$

Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

- 5 Lane under-utilisation found by the program
- 6 Lane under-utilisation due to downstream effects
- d Dominant lane on roundabout approach

Approach L	ane Flo	ows (v	eh/h)								
South: Heaph	ny Terrac	ce (Sou	th)								
Mov.	L2	T1	R2	Total	%HV		Deg.		Prob.	Ov.	
From S To Exit:	W	N	Е			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	162	345	-	507	0.6	681	0.744	100	32.1	2	
Lane 2	-	48	62	110	0.2	378	0.292	39 ⁶	NA	NA	
Approach	162	393	62	617	0.5		0.744				
East: Bounda	ry Road	(East)									
Mov.	L2	T1	R2	Total	%HV		Deg.	Lane		Ov.	
From E						Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	

To Exit:	S	W	N								
Lane 1	68	69	-	138	0.5	451	0.305	44 ⁶	0.0	2	
Lane 2	-	459	79	538	0.8	771	0.698	100	NA	NA	
Approach	68	528	79	676	8.0		0.698				
North: Heaph	y Terra	ce (Nort	h)								
Mov. From N To Exit:	L2 E	T1 S	R2 W	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	79	-	-	79	0.0	327	0.242	33 ⁵	NA	NA	
Lane 2	-	195	239	434	2.2		0.738	100	6.2	1	
Approach	79	195	239	513	1.8		0.738				
West: Bound	ary Roa	d (West	t)								
Mov.	L2	T1	R2	Total	%HV		Deg.	Lane	Prob.	Ov.	
From W To Exit:	N	Е	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	498	244	-	742	0.8	878	0.846	100	NA	NA	
Lane 2	-	507	166	674	8.0	797	0.846	100	NA	NA	
Approach	498	752	166	1416	8.0		0.846				
	Total	%HVD	eg.Sat	n (v/c)							
Intersection	3221	0.9		0.846							

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

- 5 Lane under-utilisation found by the program
- 6 Lane under-utilisation due to downstream effects

Merge Analysis												
	Exit Lane mber	Short Lane Length m	Percent Opng in Lane %	Flow		Critical Gap sec	Follow-up Headway sec	Lane (Flow Rate veh/h	Capacity veh/h		Min. Delay sec	Merge Delay sec
South Exit: Heaphy Te Merge Type: Priority	errace (South)										
Exit Short Lane Merge Lane	1 2	30	0.0 100.0	361 Me	363 rge Lai	3.00 ne is not O	2.00 pposed	68 361		0.048 0.201	0.6 0.0	0.7 0.0
East Exit: Boundary R Merge Type: Not App		ast)										
Full Length Lane Full Length Lane	1 2		Analysis Analysis		•							
North Exit: Heaphy Te Merge Type: Priority	errace (North)										
Exit Short Lane Merge Lane	2 1	50 -	0.0 100.0	842 Me	845 rge Lar	3.00 ne is not O	2.00 pposed	127 842		0.139 0.468	1.9 0.0	2.4 0.0
West Exit: Boundary F Merge Type: Priority	Road (V	Vest)										
Exit Short Lane Merge Lane	1 2	60 -	0.0 100.0	698 Me	704 rge Laı	3.01 ne is not O	2.01 pposed	231 698		0.218 0.388	1.4 0.0	1.9 0.0

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NETWORK LAYOUT

■■ Network: N101 [Boundary Heaphy Proposed AM v2 (Network

Folder: General)]

Boundary Heaphy Proposed AM Network Category: Proposed Design 1

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.





SITES IN I	NETWORK	
Site ID	CCG ID	Site Name
₩ 101	NA	Boundary Heaphy Proposed AM Peak
₫.101	NA	Heaphy Terrace (South) Proposed Crossing AM Peak
. ∱ .101	NA	Heaphy Terrace (North) Proposed Crossing AM Peak

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LANE SUMMARY

■ Network: N101 [Boundary Heaphy Proposed AM v2 (Network Folder: General)]

Boundary Road Heaphy Terrace Proposed Roundabout Layout - AM Peak Site Category: Proposed Design 1 Roundabout

Lane Use	and P	erforr	nance												
	DEM. FLO [Total	WS	ARR FLO [Total	WS	Сар.	Deg. Satn	Lane Util.		Level of Service	95% BA QUE [Veh		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	veh/h	% -	veh/h	% -	veh/h	v/c	%	sec		•	m ¹		m	%	%
South: Hea	phy Ter	race (South)												
Lane 1 ^d	323	3.2	323	3.2	666	0.485	100	9.7	LOS A	3.7	26.7	Short	25	0.0	NA
Lane 2	68	3.4	68	3.4	369	0.186	38 ⁶	13.4	LOS B	0.9	6.7	Full	30	0.0	1.7 ⁸
Approach	392	3.2	392	3.2		0.485		10.4	LOS B	3.7	26.7				
East: Boun	dary Ro	oad (Ea	ast)												
Lane 1	132	3.0	132	3.0	399	0.332	43 ⁶	11.7	LOS B	2.3	16.9	Short	30	0.0	NA
Lane 2 ^d	483	3.7	483	3.7	627	0.771	100	22.0	LOS C	12.0	87.0	Full	200	0.0	0.0
Approach	616	3.6	616	3.6		0.771		19.8	LOS B	12.0	87.0				
North: Hea	phy Ter	race (N	North)												
Lane 1	81	5.2	81	5.2	413	0.196	100	9.0	LOS A	0.9	6.6	Full	75	0.0	15.4 ⁸
Lane 2 ^d	698	1.8	698	1.8	785	0.889	100	20.3	LOS C	14.5	103.3	Short	50	0.0	NA
Approach	779	2.2	779	2.2		0.889		19.1	LOS B	14.5	103.3				
West: Bour	ndary R	oad (V	/est)												
Lane 1 ^d	460	3.1	460	3.1	1010	0.455	100	4.2	LOS A	3.2	22.8	Full	180	0.0	0.0
Lane 2	443	2.2	443	2.2	974	0.455	100	4.9	LOS A	3.1	22.4	Full	180	0.0	0.0
Approach	903	2.7	903	2.7		0.455		4.6	LOSA	3.2	22.8				
Intersectio n	2689	2.8	2689	2.8		0.889		13.1	LOS B	14.5	103.3				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Roundabout LOS Method: SIDRA Roundabout LOS.

Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

- 6 Lane under-utilisation due to downstream effects
- 8 Probability of Blockage has been set on the basis of a queue that overflows from a short lane.
- d Dominant lane on roundabout approach

Approach I	Lane Flo	ows (v	eh/h)							
South: Heapl	hy Terrac	e (Sou	th)							
Mov. From S To Exit:	L2 W	T1 N	R2 E	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.
Lane 1	134	189	-	323	3.2	666	0.485	100	<mark>7.0</mark>	2
Lane 2	-	14	55	68	3.4	369	0.186	38 ⁶	NA	NA
Approach	134	203	55	392	3.2		0.485			
East: Bounda	ary Road	(East)								
Mov. From E	L2	T1	R2	Total	%HV	Сар.	Deg. Satn		Prob. SL Ov.	Ov. Lane

To Exit:	S	W	Ν			veh/h	v/c	%	%	No.	
Lane 1	87	45	-	132	3.0	399	0.332	43 ⁶	0.0	2	
Lane 2	-	434	49	483	3.7	627	0.771	100	NA	NA	
Approach	87	479	49	616	3.6		0.771				
North: Heaph	y Terrac	ce (Nort	h)								
Mov. From N To Exit:	L2 E	T1 S	R2 W	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	81	-	-	81	5.2	413	0.196	100	NA	NA	
Lane 2	-	393	305	698	1.8	785	0.889	100	34.3	1	
Approach	81	393	305	779	2.2		0.889				
West: Bound	ary Roa	d (West	t)								
Mov.	L2	T1	R2	Total	%HV		Deg.	Lane		Ov.	
From W To Exit:	N	Е	s			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	227	232	-	460	3.1	1010	0.455	100	NA	NA	
Lane 2	-	338	105	443	2.2	974	0.455	100	NA	NA	
Approach	227	571	105	903	2.7		0.455				
	Total	%HV [eg.Sati	n (v/c)							
Intersection	2689	2.8		0.889							

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

6 Lane under-utilisation due to downstream effects

Merge Analysis											
Exit Lane Number		Percent Opng in Lane %		Rate	Critical Gap sec	Follow-up Headway sec		Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Heaphy Terrace Merge Type: Not Applied	(South)										
Full Length Lane 1	Merge	Analysis	not ap	plied.							
East Exit: Boundary Road (I Merge Type: Not Applied	East)										
Full Length Lane 1	Merge	Analysis	not ap	plied.							
Full Length Lane 2	Merge	Analysis	not ap	plied.							
North Exit: Heaphy Terrace Merge Type: Priority	(North)										
Exit Short Lane 2	50	0.0	417	422	3.00	2.00	63	1368	0.046	0.7	8.0
Merge Lane 1	-	100.0	Me	rge Lan	e is not O	pposed	417	1800	0.232	0.0	0.0
West Exit: Boundary Road (Merge Type: Priority	(West)										
Exit Short Lane 1	60	0.0	739	752	3.00	2.00	179	1019	0.175	1.5	2.0
Merge Lane 2	-	100.0	Me	rge Lan	e is not O	pposed	739	1800	0.411	0.0	0.0

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NETWORK LAYOUT

■■ Network: N101 [Boundary Heaphy Proposed PM v2 (Network

Folder: General)]

Boundary Heaphy Proposed PM Network Category: Proposed Design 1

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SITES IN I	NETWORK	
Site ID	CCG ID	Site Name
₩ 101	NA	Boundary Heaphy Proposed PM Peak
₫.101	NA	Heaphy Terrace (North) Proposed Crossing PM Peak
. ∱.101	NA	Heaphy Terrace (South) Proposed Crossing PM Peak

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LANE SUMMARY

♥ Site: 101 [Boundary Heaphy Proposed PM Peak (Site Folder: General)]

■ Network: N101 [Boundary Heaphy Proposed PM v2 (Network Folder: General)]

Boundary Road Heaphy Terrace Proposed Roundabout Layout - PM Peak Site Category: Proposed Design 1 Roundabout

Lane Use	and P	erforr	nance												
	DEM. FLO [Total	WS	ARRI FLO [Total	WS	Сар.	Deg. Satn	Lane Util.		Level of Service	95% BA QUE [Veh		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	veh/h	%	veh/h	%	veh/h	v/c	%	sec		,	m		m	%	%
South: Hea	phy Ter	race (South)												
Lane 1 ^d	509	0.6	509	0.6	681	0.747	100	15.3	LOS B	8.6	60.2	Short	25	0.0	NA
Lane 2	108	0.2	108	0.2	378	0.286	38 ⁶	13.4	LOS B	1.5	10.4	Full	30	0.0	<mark>32.6</mark> 8
Approach	617	0.5	617	0.5		0.747		14.9	LOS B	8.6	60.2				
East: Boun	dary Ro	oad (Ea	ast)												
Lane 1	146	0.5	146	0.5	549	0.265	43 ⁶	9.0	LOSA	1.8	12.5	Short	30	0.0	NA
Lane 2 ^d	530	1.0	530	1.0	860	0.616	100	10.1	LOS B	7.2	50.9	Full	200	0.0	0.0
Approach	676	0.9	676	0.9		0.616		9.9	LOSA	7.2	50.9				
North: Hea	phy Ter	race (N	North)												
Lane 1	79	0.0	79	0.0	325	0.243	100	10.6	LOS B	1.2	8.4	Full	75	0.0	0.0
Lane 2 ^d	434	2.2	434	2.2	587	0.739	100	16.0	LOS B	7.4	52.6	Short	50	0.0	NA
Approach	513	1.8	513	1.8		0.739		15.1	LOS B	7.4	52.6				
West: Bour	ndary R	oad (V	Vest)												
Lane 1 ^d	734	0.8	734	0.8	848	0.866	100	15.0	LOS B	13.9	98.2	Full	180	0.0	0.0
Lane 2	681	0.8	681	0.8	787	0.866	100	16.6	LOS B	13.6	96.2	Full	180	0.0	0.0
Approach	1416	8.0	1416	8.0		0.866		15.8	LOS B	13.9	98.2				
Intersectio n	3221	0.9	3221	0.9		0.866		14.3	LOS B	13.9	98.2				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Roundabout LOS Method: SIDRA Roundabout LOS.

Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

- 6 Lane under-utilisation due to downstream effects
- 8 Probability of Blockage has been set on the basis of a queue that overflows from a short lane.
- d Dominant lane on roundabout approach

Approach I	_ane Flo	ows (v	eh/h)							
South: Heapl	hy Terrac	e (Sou	th)							
Mov. From S To Exit:	L2 W	T1 N	R2 E	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.
Lane 1	162	347	-	509	0.6	681	0.747	100	<mark>46.5</mark>	2
Lane 2	-	46	62	108	0.2	378	0.286	38 ⁶	NA	NA
Approach	162	393	62	617	0.5		0.747			
East: Bounda	ary Road	(East)								
Mov. From E	L2	T1	R2	Total	%HV	Сар.	Deg. Satn		Prob. SL Ov.	Ov. Lane

To Exit:	S	W	Ν			veh/h	v/c	%	%	No.	
Lane 1	68	77	-	146	0.5	549	0.265	43 ⁶	0.0	2	
Lane 2	-	451	79	530	1.0	860	0.616	100	NA	NA	
Approach	68	528	79	676	0.9		0.616				
North: Heaph	y Terrac	ce (Nort	h)								
Mov. From N To Exit:	L2 E	T1 S	R2 W	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	79	-	-	79	0.0	325	0.243	100	NA	NA	
Lane 2	-	195	239	434	2.2	587	0.739	100	<mark>6.5</mark>	1	
Approach	79	195	239	513	1.8		0.739				
West: Bounda	ary Roa	d (West	t)								
Mov.	L2	T1	R2	Total	%HV		Deg.	Lane	Prob.	Ov.	
From W To Exit:	N	Е	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	498	237	-	734	8.0	848	0.866	100	NA	NA	
Lane 2	-	515	166	681	8.0	787	0.866	100	NA	NA	
Approach	498	752	166	1416	8.0		0.866				
	Total	%HV D	eg.Sat	n (v/c)							
Intersection	3221	0.9		0.866							

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

6 Lane under-utilisation due to downstream effects

Merge Analysis											
Exi Lane Numbe	Lane	Percent Opng in Lane %	Flow		Critical Gap sec	Follow-up Headway sec		Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Heaphy Terrac Merge Type: Not Applied	e (South)										
Full Length Lane	Merge	Analysis	not ap	plied.							
East Exit: Boundary Road Merge Type: Not Applied	(East)										
Full Length Lane	Merge	Analysis	not ap	plied.							
Full Length Lane 2	Merge	Analysis	not ap	plied.							
North Exit: Heaphy Terrace Merge Type: Priority	(North)										
Exit Short Lane	50	0.0	844	848	3.00	2.00	125	917	0.136	1.9	2.4
Merge Lane	-	100.0	Me	rge Lar	ne is not O	pposed	844	1800	0.469	0.0	0.0
West Exit: Boundary Road Merge Type: Priority	(West)										
Exit Short Lane	60	0.0	690	696	3.00	2.00	239	1079	0.222	1.4	1.9
Merge Lane 2	: -	100.0	Me	rge Lar	ne is not O	pposed	690	1800	0.383	0.0	0.0

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Council Report

Committee: Council Date: 23 October 2024

Author: Robyn Denton **Authoriser:** Andrew Parsons

Position: Network and Systems **Position:** General Manager

Operations Manager Infrastructure and Assets

Report Name: Temporary Road Closures

Report Status	Open

Purpose - Take

1. To seek approval from the Council for temporary road closure associated with the Diwali Festival in Innes Common on Saturday 2 November 2024.

Staff Recommendation - Tuutohu-aa-kaimahi

- 2. That the Council:
 - a) receives the report;
 - b) approves the closure of Lake Domain Drive between Killarney Road and Gilbass Avenue between 4pm and 10pm on Saturday 2 November 2024 (with a backup date of Sunday 3 November 2024) to accommodate the Diwali Festival at Innes Common.
 - c) Approves the issue of a Notice of Decision stating Council's decision to close Lake Domain Drive between Killarney Road and Gilbass Avenue between 4pm and 10pm on Saturday 2 November 2024 (with a backup date of Sunday 3 November 2024) to accommodate the Diwali Festival at Innes Common.

Executive Summary - Whakaraapopototanga matua

- 3. An application has been received for temporary road closures to accommodate the various activities planned for celebrating Diwali in Innes Common on 2 November 2024.
- 4. The road closure application was not completed within the 42-working day timeframe required for processing under the Transport (Vehicular Traffic Road Closures) Regulations 1965. Council approval under the Local Government Act 1974 is being sought to enable the road closures to proceed in conjunction with the event.
- 5. Similar closures of this road have been undertaken in the past eg Waikato Balloon Festival.
- 6. Consultation with NZ Police and NZ Transport Agency Waka Kotahi (NZTA) has been completed.
- 7. Notifications for adjacent residents and the wider community will be undertaken prior to the event via letter drops and a VMS board advertising the proposed road closure and event.
- 8. Staff consider the decision in this report has low significance and that the recommendations comply with the Council's legal requirements.

Background - Koorero whaimaarama

- 9. Hamilton City has a large number of events held each year and often there are temporary road closures associated with the events which are put into place to ensure the safety of the event participants and the general public.
- 10. Applications for temporary road closures associated with events are normally processed under the Transport (Vehicular Traffic Road Closures) Regulations 1965 which requires 42 working days public notice.
- 11. Occasionally there are situations where the 42 days public notice was not achieved. In these situations, approval of a temporary road closure for an event can be granted under the Local Government Act 1974 No 66, Schedule 10, Clause 11(e) (LGA 1974.
- 12. The LGA 1974 process requires public notices be issued prior to the Council meeting to notify the Intention to Consider the temporary road closures and then again following the Council meeting in a Notice of Decision.

Discussion - Matapaki

- 13. A Diwali event is being organized by the Indian Cultural Society (Waikato) Inc in Innes Common which will include diverse cultural performances, ceremonial lighting of the 'Diya', regional dances, and a fireworks display.
- 14. There will be various participants, organizers, sponsors and visitors attending the event for which closure of Lake Domain Drive is proposed between Killarney Road and Gilbass Avenue as shown in the plan below:



Proposed road closure extents in yellow for Diwali Festival

- 15. The event is planned for Saturday 2 November 2024 with the road closure in place between 4pm and 10pm. Sunday 3 November 2024 has been nominated as a backup day in case of adverse weather and the need to postpone the event on Saturday.
- 16. Consultation with NZ Police and the NZTA has been completed and they are in support of the closures.
- 17. Physical notification will go up prior to the event on the VMS signs on those streets and letters will be delivered to all affected residents.

Financial Considerations - Whaiwhakaaro Puutea

18. All costs associated with the two public notices required by the Local Government Act and temporary traffic management are met by the applicant.

Legal and Policy Considerations - Whaiwhakaaro-aa-ture

19. Staff confirm that proposed approval complies with the Council's legal and policy requirements and those of the Local Government Act 1974.

Climate Change Impact Statement

- 20. Staff have assessed this option against the Climate Change Policy for both emissions and climate change adaptation.
- 21. Staff have also considered the key considerations under the Climate Change Policy and have determined that an adaptation assessment and emissions assessment is not required for the matters in this report.

Wellbeing Considerations - Whaiwhakaaro-aa-oranga tonutanga

- 22. The purpose of Local Government changed on the 14 May 2019 to include promotion of the social, economic, environmental and cultural wellbeing of communities in the present and for the future ('the 4 wellbeings').
- 23. The subject matter of this report has been evaluated in terms of the 4 wellbeings during the process of developing this report as outlined below.
- 24. The recommendations set out in this report are consistent with that purpose.

Social

25. The recommendations included in this report helps the community achieve their goals by ensuring their safety and ability to access Innes Common.

Economic

26. The recommendations included in this report enables the event to operate efficiently by ensuring safe access operation.

Environmental

27. No specific environmental considerations were identified in the development of this report. Wasted minimisation options are a requirement of the event approval process.

Cultural

28. The Diwali Festival provides an opportunity for the Indian community to express their shared beliefs, values and customs.

Risks - Tuuraru

29. There are safety and accessibility risks associated with not approving the recommendations in this report.

Significance & Engagement Policy - Kaupapa here whakahira/anganui

- 30. Staff considered the following factors under the Significance and Engagement Policy: i. The form of engagement used in the past for similar proposals and decisions.
- 31. Based on these factors, staff have assessed that the matters in this report have low significance.
- 32. In accordance with the Local Government Act provisions, public notification was given of the intention to consider the temporary road closures application at this meeting.
- 33. Staff have undertaken consultation with the NZ Police and NZTA and they are supportive of the temporary road closure for the event.
- 34. In addition, the applicant has undertaken consultation with all properties in the section of road closures.
- 35. If the closures are approved by this committee, a public notice of the decision to temporarily close the road will be issued.

Attachments - Ngaa taapirihanga

There are no attachments for this report.

Resolution to Exclude the Public

Section 48, Local Government Official Information and Meetings Act 1987

The following motion is submitted for consideration:

That the public be excluded from the following parts of the proceedings of this meeting, namely consideration of the public excluded agenda.

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution follows.

General subject of each matter to be considered	Reasons for passing this resolution in relation to each matter	Ground(s) under section 48(1) for the passing of this resolution
C1. City Honours Recommendations October 2024) Good reason to withhold) information exists under) Section 7 Local Government) Official Information and) Meetings Act 1987 	Section 48(1)(a)

This resolution is made in reliance on section 48(1)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by Section 6 or Section 7 of that Act which would be prejudiced by the holding of the whole or relevant part of the proceedings of the meeting in public, as follows:

Item C1. to protect the privacy of natural persons Section 7 (2) (a)