MEETING
AGENDA
Ngā Take

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Western Bay of Plenty
District Council

OPERATIONS AND MONITORING COMMITTEE

Komiti Whakahaere

OP17
Thursday, 28 February 2019
Council Chambers
Barkes Corner, Tauranga
9.30am

Te Kaunihera a rohe mai i nga Kuri-a-Wharei ki Otamarakau ki te Uru

Notice of Meeting No. OP17
Te Karere

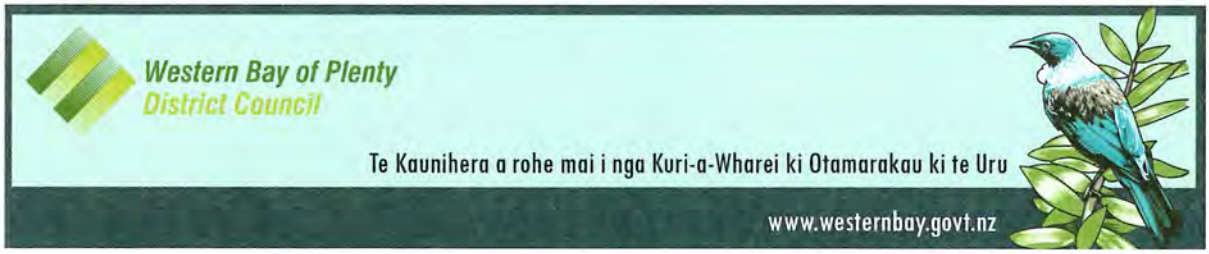
Operations and Monitoring Committee
Komiti Whakahaere

Thursday, 28 February 2019
Council Chambers
Barkes Corner
9.30am

His Worship the Mayor	G J Webber
Councillors:	D Thwaites (Chairperson) J Palmer (Deputy Chairperson) G Dally M Dean M Lally P Mackay K Marsh D Marshall M Murray-Benge J Scrimgeour M Williams

Media
Staff

Miriam Taris
Chief Executive Officer
Western Bay of Plenty District Council



Operations and Monitoring Committee Delegations
Mangai o Te Kaunihera

Quorum:

The quorum for this meeting is six members.

Role:

Subject to compliance with Council strategies, policies, plans and legislation:

- To monitor performance and outcomes over all of Council's service functions including the following:

  - Regulatory Operations
  - Roading Operations
  - Utilities Operations
  - Parks, Reserves, Cemeteries and other council property
  - Customer services, libraries
  - Corporate Property Operations and development
  - Sub Regional Parks
  - Operational service contracts (e.g. swimming pools, community halls)
  - Emergency Management
  - Rural Fire

General Delegations:

- To make decisions to enable and enhance service delivery performance.
- To approve operational policy including resolving operational policy matters defined as the implementation of policy.
- To resolve all operational matters as referred by Community Boards.
- To make decisions in regard to assets to implement Council's plans, policies and projects as contained in the Long Term Plan and Annual Plans.
- To monitor assets and resources required for the delivery of services.
- To monitor the implementation of Council's strategies, plans, policies and projects contained in Council's Long Term Plan and Annual Plans.
- To receive and resolve on or recommend to Council or its Committees as appropriate the reports, recommendations and minutes of the Joint Road Safety Committee and any other Joint Committee, working group or forum as directed by Council.
- To undertake on behalf of Council all processes and actions (including consultation) for the amendment of bylaw schedules relating to operational services precedent to the recommendation to Council for adoption of the amendments.

Financial Delegations:

Pursuant to Section 4(1) of the Public Bodies Contracts Act 1959, the Committee shall have the power to enter into contracts in respect of the Committee's functions to a maximum value of $5,000,000 for any one contract, provided that the exercise of this power shall be subject to, and within the allocation of funds set aside for that purpose in the Long Term Plan, the Annual Plan and Budget or as otherwise specifically approved by Council.

To report to Council financial outcomes and recommend any changes or variations to allocated budgets.

Other:

The Committee may without confirmation by Council exercise or perform any function, power or duty relating to those matters delegated by Council in like manner, and with the same effect, as the Council could itself have exercised or performed them.

The Committee may delegate any of its functions, duties or powers to a subcommittee subject to the restrictions on its delegations and provided that any sub-delegation to subcommittees includes a statement of purpose and specification of task.

The Committee may make recommendations to Council or its Committees on any matters to achieve the outcomes required in the role of the Committee but outside its delegated authorities.

Agenda for Meeting No. OP17

Pages

Present
In Attendance
Apologies

Public Excluded Items

The Council may by resolution require any item of business contained in the public excluded section of the agenda to be dealt with while the public are present.

Public Forum

A period of up to 30 minutes is set aside for a public forum. Members of the public may attend to address the Committee for up to three minutes on items that fall within the delegations of the Committee provided the matters are not subject to legal proceedings, or to a process providing for the hearing of submissions. Speakers may be questioned through the Chairperson by members, but questions must be confined to obtaining information or clarification on matters raised by the speaker. The Chairperson has discretion in regard to time extensions.

Such presentations do not form part of the formal business of the meeting, a brief record will be kept of matters raised during any public forum section of the meeting with matters for action to be referred through the customer contact centre request system, while those requiring further investigation will be referred to the Chief Executive.

OP17.1 **Proposed Walkway/Cycleway from Yeoman Walkway to Park Road Reserve** 9-28
- Petition
- Status Update 22 January 2019

Attached is a report from the Reserves and Facilities Manager dated 31 January 2019.

OP17.2 **Petition Supporting Development of Highfields Pond Katikati** 29-47

Attached is a report from the Deputy Chief Executive Officer dated 18 February 2019.

OP17.11 **Infrastructure Services Report – February 2019** 188-198

Attached is a report from the Deputy Chief Executive dated 12 February 2019.

The open section of the Operations and Monitoring Committee Information Pack No. OP17 has been circulated separately with the agenda.

Local Government Official Information and Meetings Act

Exclusion of the Public

Schedule 2A

Recommendation

THAT the public be excluded from the following part of this meeting namely:

- *Information Pack*
- *Maketu Wastewater Legal & Process for Non Connected Properties*
- *Kayelene Place Land Exchange*
- *Infrastructure Services Briefing – February 2019*

The general subject to 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 are as follows:

General subject of each matter to be considered	***Reason for passing this resolution in relation to each matter***	***Ground(s) under Section 48(1) for the passing of this resolution***
Information Pack *(In Confidence)* *- Minute Action Sheets Completed – February 2019* *- Minute Action Sheets Not Complete or Under Action – February 2019*	*THAT the public conduct of the relevant part of the proceedings of the meeting would likely result in the disclosure of information for which good reason for withholding would exist.*	*To enable the Council to carry on without prejudice or disadvantage, negotiations (including commercial and industrial negotiations).*

General subject of each matter to be considered	***Reason for passing this resolution in relation to each matter***	***Ground(s) under Section 48(1) for the passing of this resolution***
Maketu Outstanding Wastewater Connections *(In Confidence)*	*THAT the public conduct of the relevant part of the proceedings of the meeting would likely result in the disclosure of information for which good reason for withholding would exist.*	*To enable the Council to carry on without prejudice or disadvantage, negotiations (including commercial and industrial negotiations).* *To avoid prejudice to measures protecting the health or safety of members of the public.* *Protect the privacy of natural persons, including that of deceased natural persons.*
Land Exchange – 75 Kayelene Place *(In Confidence)*	*THAT the public conduct of the relevant part of the proceedings of the meeting would likely result in the disclosure of information for which good reason for withholding would exist.*	*To enable the Council to carry on without prejudice or disadvantage, negotiations (including commercial and industrial negotiations).*
Infrastructure Services Report – February 2019 *(In Confidence)* *- Property Negotiations* *- Contract and Project Updates*	*THAT the public conduct of the relevant part of the proceedings of the meeting would likely result in the disclosure of information for which good reason for withholding would exist.*	*To enable the Council to carry on without prejudice or disadvantage, negotiations (including commercial and industrial negotiations)*

Western Bay of Plenty District Council

Operations & Monitoring Committee

Petition – Walkway/Cycleway - Yeoman Walkway to Park Road Reserve

Purpose

To table a petition received by Council about the proposed walkway/cycleway between Yeoman Walkway and Park Road Reserve in Katikati.

The petition is presented to the Committee in accordance with Council's Standing Orders.

Recommendation

1. ***THAT the Reserves & Facilities Manager's report dated 31 January 2019 and titled Petition –Walkway/Cycleway - Yeoman Walkway to Parkway Reserve be received.***

2. ***THAT the petition in Attachment A be received.***

3. ***THAT the Committee notes that the Status Update report in Attachment B has been provided to the petition organiser and the Katikati Community Board, the Katikati Advertiser, the Katikati Trails Development Group and is available on Council's website.***

4. ***THAT a copy of the petition be taken into consideration in any consultation process on the proposed Yeoman Walkway/Cycleway project.***

5. ***THAT the report relates to an issue that is considered to be of low significance in terms of Council's Significance and Engagement Policy.***

Peter Watson
Reserves & Facilities Manager

Approved

Gary Allis
Deputy Chief Executive

1. Background

On 7 January 2019, Council received a letter with an attached petition from a Mr Graeme A Mackay. **Attachment A**

Council subsequently received a number of other letters relating to the petition.

Given the community interest and the number of concerns raised in the letters Council had received, a Status Update Report on the proposed walkway/cycleway was prepared as opposed to responding to each specific point raised in each letter.

A generic covering letter, along with a copy of the Status Update Report dated 22 January 2019 have been sent to all correspondence received.

A copy of the Status Update report dated 22 January 2019 is attached and provides the background to the subject. **Attachment B**

At this point in time, the feasibility report has yet to be finalised and analysed before the Status Update report is updated and circulated to interested parties.

2. Significance and Engagement

The Local Government Act 2002 requires a formal assessment of the significance of matters and decisions in this report against Council's Significance and Engagement Policy. In making this formal assessment there is no intention to assess the importance of this item to individuals, groups, or agencies within the community and it is acknowledged that all reports have a high degree of importance to those affected by Council decisions.

The Policy requires Council and its communities to identify the degree of significance attached to particular issues, proposals, assets, decisions, and activities.

In terms of the Significance and Engagement Policy this decision is considered to be of low significance because the presentation of a petition does not trigger the thresholds of Council Significance and Engagement Policy.

3. Engagement, Consultation and Communication

Interested/Affected Parties	Completed/Planned Engagement/Consultation/Communication
Name of interested parties/groups	The organiser of the petition has been written to and provided with a copy of the attached status update report. All other correspondents have received the same status update report. The status update report has been provided to all elected members, the Katikati Community Board, the Katikati Advertiser, the Katikati Trails Development Group and is available on Council's website.
Tangata Whenua	The Katikati/Waihi Beach Ward review process was presented to the Tauranga Moana Partnership Forum.
General Public	The subject matter was included in the 2009 Walking and

	Cycleway Strategy and more recently public consultation was undertaken during the review of the Katikati/Waihi Beach Ward Reserve Management Plan which was adopted by Council on 13 December 2018.

4. Issues and Options Assessment

There is effectively only one option, which is to receive the petition.

Option A ***1. THAT the Reserves & Facilities Manager's report dated 31 January 2019 and titled Petition –Walkway/Cycleway - Yeoman Walkway to Parkway Reserve be received.***	
Assessment of option for advantages and disadvantages taking a sustainable approach	5. The petition is presented for receipt by the Committee. A feasibility study is currently being undertaken and the petition will be taken into consideration in any consultation process on the proposed Yeoman Walkway/Cycleway project.
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	N/A

5. Statutory Compliance

Council must follow its Standing Orders in particular section 16. Petitions, in that receipt of the petition is acknowledged. The petition organiser is allocated 5 minutes to present the petition. The petition, meets all other requirements of Council's Standing Orders.

6. Funding/Budget Implications

Budget Funding Information	Relevant Detail
	N/A

ATTACHMENT 4

27, FRANCIS DRIVE

KATIKATI 3129.

7-9750508 juliemackay68@gmail.com

Mr Garry Webber

Mayor,

Western Bay of Plenty District Council, 7th January, 2019

Dear Mr Webber,

PROPOSED CONCRETE PATHWAY BETWEEN PARK ROAD AND BIRD WALK ON THE RESERVE AREA OF KATIKATI, BORDERING ON THE URETARA ESTUARY.

[" The Proposal "].

Objection

1. **Profound objection is taken to the proposal. There has been no proper consultation with the homeowners adjacent to the concrete pathway. They are united in opposition. It is unsightly, and destroys a beautiful visual amenity. It is well outside the principles of the Resource Management Act[RMA]. It is unnecessary as there already exists a walkway/cycleway which has been in use for over 30 years. It is a staggering waste of money. The proposal must be put on hold until there has been proper consultation and/or the council proceeds reasonably with the Reserves Management Plan.**

2. **The Petition.** The proposal was mooted some years ago and is referred to generally in the Reserve Management Plan [" RMP"]. The majority of home owners bordering the area of the proposal soon after that , signed a petition objecting to it. The petition was not submitted in the mistaken belief that the proposal would not proceed.

3. Since then the majority of homeowners and a large number of users of the reserve have signed it. It will be submitted on Monday, by hand, with the hard copy of this letter. The petition is now submitted and backed by the extended reasons which follow.

Consultation

11.31am

WESTERN BOP DISTRICT COUNCIL
07 JAN 2019
RECEIVED

manually receipted for Mr Mackay

4. Thus, as far as any home-owner knows, the Council may be unaware of the high level of objection and public disgust over the proposal. No home owner has ever been consulted. If there was any public consultation, then it was minimal and inadequate. An intrusion of this magnitude must surely be canvassed specifically with owners affected by it. If the proposal proceeds, then it seems that the Council is in breach of its various statutory duties. The extent of consultation is secondary, as the proposal is wrong in principle.

5. We note that the proposal is being pursued and largely funded by the Council " " **with routes developed and prioritised with Katikati Trails group.** We are not clear which sector of the community this group represents. The proposal concerns land within the control of the council, it is highly inappropriate for the wishes and financial influence of one group to prevail. This is particularly so, given the principles of the RMA.

6. The information on the Council website and recent events lead us to believe that the proposal will now be advanced, which causes considerable dismay.

7. The Western Bay of Plenty District Council [" The Council "] manages the reserve. It has a duty to do so, not only for residents, but all users of the reserve as a scenic walkway and with duties and powers under The Reserves Act 1977 and The Local Government Act 2002. The registered Reserve Management Plan must follow the principles of the RMA. Reference is made to this below.

8. The council have a legal duty to act reasonably in the exercising such powers, taking account the impact upon homeowners, walkers and all members of the community. This is bearing in mind that the reserve has a wide prospect of an area of outstanding natural beauty an is itself a garden area of great beauty. It flows naturally into well kept gardens, and as many thousands of users would no doubt testify, gives great pleasure and delight.

9. A concrete pathway destroys this. Further and fundamentally, it is not even necessary The existing pathway/cycleway is well grassed, generally level apart from two large dips, safe and hard. People have been using it for walking and cycling for over 30 years. It is wholly unreasonable that considerable resources are diverted to further this proposal.

<u>Our immediate interest.</u>

10. We live at 27, Francis Drive. We have done so for over 3 years. The reserve area to either side is Lot 67. 23146. The reserve here is at its

narrowest at this point here and a concrete roadway of 2.4 metres would take up most of the strip in front of our garden. The reserve on either side is hard and flat as far as the eye can see. Photos are attached. Other home owners and users[about 30] would be exposed to a similar swathe of unsightly concrete in front of their homes. .

11. **Maintenance and enhancement.**

The council contractors come about once a month and cut the reserve grass. That is all they do. The majority of home owners voluntarily cur the same area more frequently and over the years have planted flowers and shrubs on the edge of the bank. The result is an extended garden area which flows, as a green river, the length of the reserve. While the owners have a vested interest in their own view, it is none the less an area enjoyed every day by walkers and cyclists. It is wholly unreasonable that all these efforts are to be despoiled by the proposed concrete.

12. **Environment.**

Along the reserve is a series of Pohutakawa Trees, one of which is directly opposite our house. It is difficult to see how the foundations for the roadway proposed can be laid without damaging the root systems and the trees.

13.. There are several well established access alleys to the reserve. Thus the whole route system has integrity. It is commonsense, that users of the reserve enjoy walking on grass. It is an immediate and natural amenity and is central to the visual and aesthetic qualities which lead the public to this delight. To push a wide concrete strip through and probably across it is utterly tasteless and insensitive and effectively destroys it . People would feel obliged to walk on the concrete. It is also unnccessary, as the present route is hardened by constant use.

14. We do not know if councillors have seen the route for themselves. It is easy to examine a map or diagram or Google aerial photo, of the type shown in the RMP, and then embrace the concept of continuity. There is a world of difference between a view from a satellite or drone and the view and texture of the ground as enjoyed by all users. Any policy to improve accessibility and enhance the enjoyment of the reserve, must be pragmatic and take account of the reality and necessity for the proposal. A full and proper examination will show this to be unreasonable.

15. There is an existing gravel section of the reserve on the eastern side near Park Road, which is steep and will require upgrading to ensure that it is reasonably safe. That is a wholly different matter, which comes under reasonable care and maintenance.

ATTACHMENT A

16. We do not know the details of the proposal. None of us whose homes abut the reserve have received any notice . Apart from the general interests of the users and the community, the home owners have an immediate and direct interest. The proposal involves the laying of swathes of concrete in front of their property. The Council must pay heed to the RMA, when considering such an intrusion into the walkway. It is incorporated with effect into the RMP. This affects the visual pleasure and aesthetics of the land; an important factor in considering the environmental impact.

17. **Health and Safety**

The Council have a primary duty to ensure that the reserve is safe for users, which comes under the general provision for care and maintenance. The proposal will in fact have a negative impact upon health and safety.

(i)A concrete walkway will invite cycle users to go faster.

(ii) It would encourage high speed e bikes and motor cycles, to a greater extent than at present, who use it illegally in any event.

(iii) Many existing walkers will use the road, or feel obliged to use it and the elderly and the deaf, will by at risk from cyclists, skateboarders and other wheeled vehicles.

18. We do not know the accident rate from the use of the reserve, over the past 30 years. We suspect it to be low. With the possible exception to the steep gravel path at the eastern end of the reserve, the proposal does nothing to advance any health and safety issue.

19. The scenic and recreational nature of the reserve, imports a leisurely use. They are designated as " **walkways** ". While the reserve is not a cemetery, there is a parallel in the level of quiet enjoyment, which users and homeowners can reasonably expect. Adherence to such a general policy of the RMP [6.82.5] need not be absolute in its detail and must be implemented reasonably; that is taking account of the " **environment** " as defined in the RMA

Legal Provisions.

20. Although we do not know the details of the proposal , the precise route or whether it is to be concreted in whole or in part.. However we set out briefly what we perceive to be the Council's duties in law.

Once we know what has been done so far, we can consider and deal with all relevant compliance issues.

21. **The Reserves Act 1977.**
For present purposes we have assumed that the management of the reserve is properly vested in the Council under the Act(S.26(1), and operates under the principles in Ss.3(1) (c), 40(1) and S. 53(1) (j)

....and fostering and promoting the preservation of the natural character of the coastal environment and of the margins of lakes and rivers.....".

We also believe the reserve to be classified as a recreation reserve under S.17(1). With the aim under S.17(2) " **of protecting flora and fauna" (17(2) (a) and " those qualities of the reserve which contribute to the pleasantness, harmony, and cohesion of the natural environment and to the better use and enjoyment of the reserve shall be considered (S 17(2) c).**

22. **The Local Government Act 2002.**

There is much detailed provision here, for consultation, especially under Ss. 77 and 82 (1). The absence or inadequacy of the consultation is mirrored in the need for a letter such as this. As outlined above, until we know what The Council claims to have done so far, we are not in a position to deal with submissions, the consultation process or available appeals.

23. **The Resource Management Act 1991.**
Is designed to prevent any activities from having an adverse impact on adjacent land, the wider community and the environment

S.2 " environment includes-
(a) ecosystems and their constituent parts, including people and communities.
(b) all natural resources and
(c) amenity values, and
(d) the social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) or which are affected by those matters. "

" S.3 promoting the protection of the natural character of the coastal environment and the margins of lakes and rivers.

ATTACHMENT A

S.5(2) provides for **" the managing and development of physical and natural resources in a way which enables people and communities to provide for their social, economic and cultural well being and for their health and safety. "**

" Structure " is not confined to house, but is
" any facility made by people which is applied to the land "

24. Although the Council administers Resource Consents, it is not itself exempted from resource consent requirements and must therefore be doubly sure in matters where its own activities would normally require such an application, that it conforms to the above principles. The RMP The proposal is a major intrusion into a natural resource. Homeowners as well as walkers, cyclists and other members of the community, are affected, to the extent that there must be some assessment of the environmental impact. The Council have also a duty under S.17(1) to mitigate and minimise such an intrusion.

25. The adherence to such principles needs direct consultation with homeowners whose property abuts the reserve or who are visually affected by the proposal as well as an Assessment of Environmental Effects[AEE]. We have seen no evidence of this. If these procedures have not been followed adequately or at all then, then the proposal could trigger the issue of an Abatement Notice under **S.322(1) (a) and (b) of the |Act.**

26. The reserve is a sustainable resource. The proposed walkway/cycleway, is a **" structure "** within the meaning of the Act. And is subject to its principles. The changes proposed are major. This seems to trigger notice requirements to all householders who are visually affected.[around 30]

27. We need more information about the progress of the proposal, its intended route and time scale. In any event we maintain our objections. To advance the proposal as we understand it, is an abuse of Council power, and there is a failure in the quality of its consultative duties. It imports the substantial destruction of a popular and valuable amenity. It is ecologically indifferent and is an astounding misuse of a large sum of ratepayers' money. The Council seems to be proceeding in the face of a high level of community resentment and disgust. As matters stand, the council may not be aware of the latter. Any decision to proceed would prima facie be judicially reviewable.

ATTACHMENT

28. We look forward to hearing from you about what has happened so far and your intentions, in order that you may be fully informed about the level of objection and we can consider what legal steps open to us.

29. We respectfully suggest that at whatever stage the proposal has reached, it be put on hold until our concerns those of all the petitioners and the general public have been addressed .

30. I have discussed the terms of this letter with several other affected homeowners, who may write to you with their concerns.

31. We respectfully point out, that this unjustifiable expense, which one engineer homeowner puts at over 1 million dollars, is a classic example of inefficiency, which upon your terms of election, you had avowed to root out.

32. You may consider it proper to convene a meeting with them in due course, so that we can fully understand what is going on.

Yours sincerely

Graeme A Mackay

20-18-19

ATTACHMENT 4

We do not want a paved cycle-way of any description on the Uretara Walkway from where it joins the Yeoman Bird Walk to the end of Park Road.		
Name	**Address**	**Signature**
Marg Thomson	Coleman Pl K/K	[signature]
Ian Hoggard	44 Levley Lane K/K	[signature]
Bob Willetts	11 Coleman Pl	[signature]
~~Roger Gregson~~	~~77/181 Park Rd~~	[signature]
Bob Hoggard	44 LEVLEY LANE K K.	[signature]
[illegible]	[illegible]	[signature]
Roslyn Cooke	46 Levley Lane	[signature]
Terry Cooke	46 Levley Lane	[signature]
[illegible] Griffiths	18B Pulley Cres	[signature]
Craig Lucas	48 LEVLEY LANE	[signature]
Kathleen Lucas	48 LEVLEY LANE	[signature]
Marilyn Leggett	3 Rosemary Place	[signature]
Pauline Hopkinson	4 Donegal Pl	[signature]
Jackie Firth	14a Francis Dr	[signature]
Sue Wigglesworth	7 Irwin Cl.	[signature]
Roger Wills	23 Levley Lane	[signature]
Becky Venter	23 Levley Lane	[signature]
COLLIN SINGLEHURST	4A GROSVENOR PLACE	[signature]
Sally Barlow	6A Grosvenor place	[signature]
Errol Waite	9 Riverleigh Mews	[signature]
Lynda Smyth	21A Walcanoi Place	[signature]
Ken Firth	24/181 Park Road.	[signature]
Pauline Tribe	58 Levley Lane	[signature]
Raewyn Tunnicliff	60 Levley Lane	[signature]
STANLEY TUNNICLIFF	60 LEVLEY LANE	[signature]
Walter Letford	49 LEVLEY LANE	[signature]
Margaret Letford	47 Levley Lane	[signature]
Basil Mills	56 levley lane	[signature]
Kirsty Mills	56 Levley lane	[signature]
Carl Smith	114B Park Road	[signature]

30

ATTACHMENT 2

2018-19

We do not want a paved cycle-way of any description on the Uretara Walkway from where it joins the Yeoman Bird Walk to the end of Park Road.		
Name	**Address**	**Signature**
Kayleen Moore	29 Francis Dr Kati	K Moore
ADRIAN Edwards	29 Francis Dr Kati	
Lisa Tawhiti	31 Francis Drive, Kati	
Kimi Tawhiti	31 Francis Drive Kati	
Mary Coles	33 Francis Drive	
Warwick Coles	33 Francis Drive	
A. VAN ROTTERDAM	43 FRANCIS Dr	
[illegible]	[illegible]	
Michael Brooks	62 James St	
Linda Mauschitz	45 Mallin Cres	
MANFRED MAUSCHITZ	45 MALIN CRESC	
Kevin Penwarden	22a PARK RD	
Amy Penwarden	22a Park Road	
Walter Leopard	49 Hendley Lane	
Bob Willetts	11 Coleman Pl	
Paul Wormington	8 Belmont Rise KK	
Pam Todd	14 Gordet Drive	
Bill Todd	14 Gordet Drive	
Cheryl Jones	1 Riverlea Dr KK	
Heather Street	12B Riverlea Drive, KK	
Hiram Wallace	12B Riverlea Drive KK	
Zayden Wallace	12B Riverlea Drive KK	
~~[illegible]~~	~~27 Francis Dr KK~~	~~[illegible]~~

ATTACHMENT A 3

We do not want a paved cycle-way of any description on the Uretara Walkway from where it joins the Yeoman Bird Walk to the end of Park Road. 2017-18		
Name	**Address**	**Signature**
Marcia Cosgrave	88/181 Park Rd Katikati	
Marilyn Greenfield	Park Rd Katikati	
Angela Cossey	21 Kenny St Waihi	
Ellesse Casson	21 Kenny St Waihi	
Dicie Beadle	14 Grosvenor Place	
Kevin Whitworth	14 Grosvenor Place	
GARETH COOKE	46 LEVELY LANE	
GRAEME - JULIE MACKAY	27, FRANCIS DRIVE.	
Ngaire Castle	174 Park Rd.	
[illegible]	36 Fraser Drive	
Kay Rabbage	195 Mulgan Street	
Pete Rabbage	195 Mulgan Street	
JEAN HOUGHTON 2018 – 2019	184A PRESTIDGE ROAD	
M T Taylor	112. PARK LANE	
Trish Fouteray	Belmont Rise	
DAVID LOCKTON	TANNERS POINT	
Dayna Froggatt	100a Park Road	
Hannah Pratt	100a Park Road	
Ruth Watson	12 Riverside Place	
Barb Smith	424 Waiau St Rd	
RICHARD SAYER	258 Athenree Rd	
JANE SAYER	258 Athenree Rd. RD1	
Robert WESTENBROEK	8 Pine Ridge Ln RD4	
Toos Westenbroek	8 " " Ln RD4	
Sylvie Ots	8 Glamorgan St, Wellington	
Vicki Townson	" " "	
Florence CORNWALL	16 Gray St Katikati	
Isabelle McKissock	6 Brookby Pl Katikati	
MAURICE RESCH	186, PARK RD "	

ATTACHMENT 4

4

We do not want a paved cycle-way of any description on the Uretara Walkway from where it joins the Yeoman Bird Walk to the end of Park Road.

2017-18

Name	Address	Signature
RUTH SPARLING	5 RIVERSIDE PLACE	Ruth Sparling
ROSALIE SMITH	15 FRANCIS DRIVE	Rosalie Smith
Leander Kane	15A Francis Drive	L Kane
Jan Shelton	122 Wills Rd	J Shelton
Edith Hoseason	41 PARK RD	E Hoseason
Penelope Fisher	184 Lockington Rd	[illegible]
MERIEL RENYARD	184 LOCKINGTON RD RD 4.	M R Renyard
I. T. Shelton	122 WILLS RD	I T Shelton
2018-19		
Colin WIMPRESS	11 FRANCIS RD	[illegible]
Murray Burt	4 Francis Dr.	M Burt
Jan Burt	4 Francis DR	J Burt
WARMINGTON	8 BELMONT RISE	[illegible]
D Patten	9 Irwin Court	D Patten
C. Bishop	9 Irwin Court	C Bishop
Kathleen Archer	9 Irwin Court	[illegible]
[illegible]	[illegible]	[illegible]
Michele Leggett	3 Rosemary Place	[illegible]
Margaret Cameron	19 Francis Drive	MC Cameron
Robyn Claxton	39 Lenley lane	[illegible]
[illegible]	34A Park Rd	[illegible]
Bev Brittain	22 Cresta Drive	B Brittain
~~R.S. [illegible]~~	~~[illegible]~~	
Trish Green	70 Lenley Lane	[illegible]
Paul Green	70 Lenley Lane	[illegible]
Cath WILDBORE	45 FRANCIS DRIVE	Cath Wildbore
Ian Beatty	7 ROSEMARY PL	[illegible]
JAN STILES	6 Belmont Rise	[illegible]

26/30

ATTACHMENT A

5.

We do not want a paved cycle-way of any description on the Urętara Walkway from where it joins the Yeoman Bird Walk to the end of Park Road.		
2017-18		
Name	**Address**	**Signature**
Judith Noble	53 Lesley Lane	[signature]
Robert Noble	53 Lesley Lane.	
Michael Hare	66 Lesley Lane	[signature]
Naomi Kingsland	55 Lovely Lane	[signature]
[illegible]	55 [illegible] Lane	[signature]
Shannon Kingsland	10 Tranmere Street Hamilton	[signature]
June Gould	62B Lovely Lane	[signature]
Hamish MacPherson	17 Rivelea Drive	[signature]
2018-19		
Pat Watson	105 Woodland Rd	[signature]
Yolanda Adlam	8 Naera Rd Rotorua	[signature]
Kyle Smith	261 High Town Road Luton, UK	[signature]
JEFF DOUGAL	17 LANDLWAIHI	[signature]
Tianna Macdonald	34 Preston drive Bem KK	[signature]
[illegible] Walker	Somerset UK	[signature]
Kemble Johnson	6A Malta Cresc	[signature]
Pam Turnbull	36 Francis Drive	[signature]
Mary Thompson	9 Coleman Place	[signature]
Sue Wigglesworth	7 Irvin Ct	[signature]
Cath Fraser	523 Ohauiti Rd, Tga	[signature]
Sue Fisher	25 Francis Drive Katikati	[signature]
Geoff Fisher	25 FRANCIS DRIVE	[signature]
Bronte Steens	5 A Atlanta Court	[signature]
BETTY SELTH	31 LONGMYND DRIVE	[signature]
STUART SELTH	31 LONGMYND DRIVE	[signature]
Deborah Ingley	14 COLEMAN PLACE	[signature]
CHARLES INGLEY	14 COLEMAN PLACE	[signature]

ATTACHMENT A

6

We do not want a paved cycle-way of any description on the Uretara Walkway from where it joins the Yeoman Bird Walk to the end of Park Road.		
2017-18		
Name	**Address**	**Signature**
Nancy Kati	114B Park Rd.	[signature]
Duncan Martin	14 Riverlea Rd	D Martin
Phil King	5 The Meadows	[signature]
Bill Gamio	89 B. Park Rd	W.J. Gamio
Alan Dickinson	10 Francis Dr	[signature]
Roger Stikes	6 Belmont Dr.	[signature]
Rebecca Elliott	8a Jackson St WB	[signature]
Sara Elliott	Park Rd Kati	Sara Elliott
2018-19 2019		
Christof D'Aubert	Park Rd Kati	[signature]
Sofia d'Aubert	Park Rd Kati	Sofia
Richard Hooker.	28 D Tui Place	[signature]
Mari... Gerhard Haarmann	89 Highfields Dve	U. Haarmann
Rose Houghton	Villa 29 Summerset	M R Houghton
Gillian L Schwarz...	131 Park Road	[signature]
D Erskine	Summerset	[signature]
Neal Constable	Rotu Road.	[signature]
Cherie Baunton	Kauri Pt	Cherie P Baunton
Tony Lammert	9 Kea Street.	[signature]
Donna Curtis	3 Grosvenor Pl KK	D Curtis
Carol Piercy	38 Macmillan Street	C Piercy
Jill Laidlaw	181 Park Rd	[signature]
Edith Hoseason	167 " "	E Hoseason
J. Goldholt	12 Gledstane KK	[signature]
John Logan	3 Stewart St, KK	J Logan
Dawn Redman	181 Park Road Katikati	D Redman
Pat McKenzie	181 Park Road	P.M. McKenzie
Errol Wade	9 Riverlea Drive	E Wade

2017-18 KEEN WALKERS AND ANY OTHERS — PLEASE SIGN

ATTACHMENT A 7

We do not want a paved cycle-way of any description on the Uretara Walkway from where it joins the Yeoman Bird Walk to the end of Park Road.

Name	Address	Signature
Shelagh Glynan	77/181 Park Rd.	
Roger Glynan	77/181 Park Rd.	
Helen Walker	70/181 Park Rd	
Patricia Welch	8/181 Park Rd	PM Welch
Jennifer Arscott	H8/181 PARK RD	
Graham Allison	14/181 PARK ROAD	
Ruth Cowan	6/181 Park Rd	
John Walker	73/181 Park Rd	
Bev Walker	73/181 " "	
Owen Young	66/181 " "	
KEL MURDOCH	83/181 " "	
Gay Murdoch	83/181 " "	
Jennifer SAGE	23/181 " "	
Bob Sage	" " " "	
Yong Rawlins	63/181 " "	
Tony Dodunski	74/181 " "	
Heather Dodunski	74/181 " "	
Bruce Rawlins	63/181 " "	
PETER BOWICK	67/181 " "	
Shirley Bowick	Villa 30	
John Bowick	Vill 30 " "	
Helen Bowick	Villa 67 " "	
L A Pott.	VILLA 154	
Patricia Watson	VILLA 50	
Colleen McHardy	58/181 Park Rd	
JOHN GRAHAM	VILLA 81/181 PARK RD	
Paddy Graham	" " " "	
Gail Martin	Villa 80, 181 Park Rd	

ATTACHMENT 8

2017-18

We do not want a paved cycle-way of any description on the Uretara Walkway from where it joins the Yeoman Bird Walk to the end of Park Road.		
Name	**Address**	**Signature**
Kevin O'Connell	13 Francis Drive.	K O'Connell.
Julie O'Connell	13 FRANCIS DRIVE	J O'Connell
S. Williams	21 FRANCES Drive	S. Williams
E C Williams	21 FRANCES DRIVE	E C Williams
D TREGOWETH	111b PARK RD	
Jack Ripley	190 Park Rd	
J McKissock	6 Brooksby Pl.	J McKissock
R J Ripley	190 PARK RD	R J Ripley
H @ D Patten	9 IRWIN COURT.	Hatten D Patten P.P.
Bethany Maclean	16 Riverside place	B Maclean.
Jill Walker	22 Riverside Place	M. J. Walker.
S M Gastrell	8 Friis Drive.	S M Gastrell
R N C Gastrell	" "	R N C Gastrell
M E Cameron	19 " "	M E Cameron
[illegible]	28 FRANCIS DRIVE	
Barbara Rackham	23 Francis Drive	B Rackham
Peter Jenkins	34C Park Road	
Marion MacIntosh	34C Park Road	M MacIntosh
Julie MacKay	29 Francis Drive	Julie MacKay
Michael Kessell	33 Francis Dr.	
Karen Kessell	33 Francis Dr	K. Kessell
John Kennelly	41 Francis Dr	
PAUL REYNOLDS	35 FRANCIS DR	
Rachel Reynolds	" "	R. Reynolds
Lynette	75 Park Rd	
Jason Money	4 IRWIN	
C Money	4 IRWIN CT	C M
Hollie Prater	260 Willoughby Road	
G M Clarke	181 PARK RD.	G M Clarke

Proposed Walkway/Cycleway from Yeoman Walkway to Park Road Reserve Status Update 22 January 2019

This provides the current status of investigations into forming the walkway/cycleway along the Esplanade Reserve between The Yeoman Walkway and Park Road Reserve, Katikati. This section of reserve currently has a grassed surface, which is mown and maintained by both Council and adjoining owners, and has wet areas that are unsatisfactory in winter.

Background

In 2009, Council adopted its Walking & Cycling Strategy for the Western Bay of Plenty District. The strategy outlines the need to develop sustainable travel options within the District and Council's commitment to developing public walking and cycling opportunities. The maps in the strategy identify this area as a walking and cycling connection.

During the publically consulted Katikati/Waihi Beach Ward Reserve Management Plan review, undertaken in 2018, Council identified a number of walkway/cycleway initiatives within the Reserve Management Plan linked to its Walking and Cycling Strategy.

Copied below are the relevant objectives/policies from the Katikati/Waihi Beach Ward Reserve Management plan adopted in December 2018 that relate to the proposed cycleway/walkway along the esplanade reserve between The Yeoman Walkway and Park Road Reserve, Katikati.

> ***Reserve Management Policy:***
> *6.82.1 Continue to secure remaining areas of esplanade reserve around the Katikati Peninsula (as identified in the District Plan) to achieve continuous pedestrian access and harbour protection.*
>
> *6.82.2 Where existing access over private land facilitates the coastal walkway/cycleway connection, seek to secure some form of legal formalisation of this access including access to Tutaetaka.*
>
> *6.82.3 Manage the coastal esplanade for the protection of the natural character and wildlife values of the Tauranga Harbour.*
>
> *6.82.4 Consistent with the protection of the above values provide for continuous pedestrian/cycleway linkage around the Katikati Peninsula.*
>
> *6.82.5 Develop a walkway/cycleway between the Yeoman Walkway, Riverlea Drive Reserve, Levley Lane Reserve, Francis Drive Reserve and Park Road Reserve next to the retirement village.*
>
> Source: Page 248 of the Katikati/Waihi Beach Reserve Management Plan – 13 December 2018

In December 2018, Council commissioned a scoping report on the feasibility of creating or forming the section of pathway identified in section 6.82.5 (above) of the Katikati/Waihi Beach Reserve Management Plan.

Council has also been working with the Katikati Trails Development Group for a number of years on developing a walkway/cycleway network in and around Katikati. This collaboration has resulted in a number of new trails being created that are well used by the community e.g. the trail between the end of Beach Road and Tamawhariua Reserve.

Current situation

At this point in time, Council has commissioned a scoping/feasibility report to identify the work required to form the walkway/cycleway, including: feasibility; environmental considerations; consenting requirements; assessment of construction material and methodology; and an estimate of costs for the project including the options of concrete or gravel surfacing.

In early January, Council received a number of letters and a petition requesting the proposal be placed on hold in order to allow further community input to the proposal.

Council intends to analyse the final scoping report to determine whether the proposal is financially feasible. This analysis will consider the options available, the required funding and the need for further consultation with adjoining residents.

While appreciating that public consultation took place during the review of the Katikati/Waihi Beach Ward Reserve Management Plan, and the feasibility study is consistent with the objectives of the Walking and Cycling Strategy, Council concedes that further consultation with adjoining property owners will be required to address the current feedback being received.

In summary, Council has a process to work through to determine whether the walkway/cycleway is feasible and, if so, what level of further consultation should be undertaken with adjoining residents and other interested parties.

We will be in contact with you once the scoping report has been analysed to advise of Council's course of action.

For further enquiries please contact Peter Watson – Reserves and Facilities Manager on Ph. (07) 571 8008

Figure 1: Indicative route along esplanade reserve(s) – Not to scale

Western Bay of Plenty District Council

Operations and Monitoring Committee

Petition Supporting Development of Highfields Pond Katikati

Purpose

Council has received a petition in relation to the proposed raising of the water level in the Highfields Pond. **Attachment A**

The petition is presented to the Committee in accordance with Council's Standing Orders.

The Highfields Pond water level raising is the subject of a separate report in the agenda.

It is recommended that the petition will be referred to the Annual Plan submission process.

Recommendation

1. ***THAT the Deputy Chief Executive's Report dated 18 February 2019 and titled Petition Supporting Development of Highfields Pond Katikati be received.***
2. ***THAT the petition regarding the allocation of funding to raising the water level in the Highfields Pond Katikati be received and be referred to the 2019/20 Annual Plan submission process.***
3. ***THAT the report relates to an issue that is considered to be of low significance in terms of Council's Significance and Engagement Policy.***

Gary Allis
Deputy Chief Executive

ATTACHMENT A

12 February 2019

Lake 2019 Petition

Mr Garry Webber
Mayor
Western Bay of Plenty District Council
Private Bag 12803
Tauranga 3143

Dear Garry

Submissions re. the Allocation of Funding

Please find enclosed a list of people who support the allocation of funds for the 2019/20 Annual Plan so as to continue the exploratory work the Council is undertaking to convert the Highfield Detention Pond into a wet area in the form of a lake.

These signatures were collected over the period from 6 February to the 10 of February mainly by myself and David Hemsley. In my case, only four people refused to sign. These included one person who was quite vocal about you not "being on his Christmas card list", two people that wanted the lake but not to be used for human recreation and one person who considered that the $100,000 be better spent making the banks of the Uretara Stream more conducive for copulating Whitebait.

The 99.5% 'in favour response' of the conversion and is a reflection of the ticket response at an open forum held in the Hall in May 2017. Of the 126 responses at that forum, the proposed lake received:

82% in support for the lake

8% in support for a wetland

10% were against the lake for other reasons

Katikati wants this conversion to happen.

I hope that these signatures along with the results of the May 2017 forum will assist the Council to confirm the expenditure.

Yours sincerely

Jim Davison

ATTACHMENT A

Mr Garry Webber
Mayor
Western Bay of Plenty District Council
Tauranga

Dear Sir

Highfield Detention Pond

We, the undersigned, hereby support the allocation of funds to the Annual Plan so as to continue the exploratory work of converting the Highfield Detention Pond into a wet area in the form of a lake.

Name	Address	Signature
J.A. DAVISON	29 URETARA DR. KATIKATI	
JR Dawson	29 Uretara Dr Katikati	JR Dawson
C.S. Boyd	27 Uretara Dr Katikati	
L.J. Boyd	27 Uretara Dr. Katikati	L.J. Boyd
S.H. Boyd	27 Uretara Dr. Katikati	
S.J. Boyd	27 Uretara Dr. Katikati	
Shannon Boyd	27 Uretara Dr KATIKATI	
[illegible] Grant	33 Park Road Katikati	
P.H Chirnside	45 Uretara Drive Katikati	P. Chirnside
W. CHIRNSIDE	45 URETARA DRIVE KATIKATI	W. Chirnside
Alison Noble	33 Uretara Drive K.K	
L BARR	8 Miriang St	
I SOWDEN	8 TWICKENHAM CLOSE KK	
Carol Sowden	8 Twickenham Close Katikati	C.D Sowden
KEN HOBSON	6 TWICKENHAM CLOSE KATIKATI	K. Hobson
PAULINE ASHTON	4 Vesey DR KATIKATI	
Henry Ashton	4 Vesey Dr Katikati	
Elke Keiser	27 Thomas Rd, RD2 Katikati	E Keiser
NEIL KEISER	27 Thomas Rd "	
Paul England	13 Blundell Pl. Katikati	
Peter Hayward	28 Uretara Dr Katikati	P.E. Hayward.
Shayne Hayward	28 Uretara Dr. Katikati	S.J. Hayward.
Jocelyn Stuart	41 Uretara Dr, Katikati	J Stuart
Wayne Alderman	30 Uretara Dr, Katikati	
Denise Alderman	30 Uretara Dr Katikati	
Carol Mason	35 Uretara Dr Katikati	
PAUL MASON	35 URETARA DR KATIKATI	
Wan. Flaszynski	40 URETARA DR. KATIKATI	
Eddie Flaszynski	40 URETARA DR. KATIKATI	
ROBERT POOLE	12 MIDDLEBROOK DR KATIKATI	
Jean Poole	47 Uretara Dr. "	J. Poole

ATTACHMENT A

Mr Garry Webber
Mayor
Western Bay of Plenty District Council
Tauranga

Dear Sir

Highfield Detention Pond

We, the undersigned, hereby support the allocation of funds to the Annual Plan so as to continue the exploratory work of converting the Highfield Detention Pond into a wet area in the form of a lake.

Name	Address	Signature
W.A. Poole	47 Uretara Drive Katikati	[signature]
D.M. Poole	12 Middlebrook Drive Katikati	D.M. Poole
C. Bendrey	50 Uretara Drive Katikati	[signature]
L Bendey	50 Uretara Dr.	[signature]
J.K. Stott	53 Uretara Dr	[signature]
M. Savageau	72 Rea Road, Katikati	[signature]
B. Gorringe	49 Uretara Drive Katikati	[signature]
B McKinnell	19 Uretara Drive Katikati	[signature]
J Galloway	17 Riverside Pl. KK	J Galloway
B Woodham	RD4 Katikati	[signature]
E Kuzenas	Tanners Point	[signature]
A. Cunningham	68 Highfields Drive	A. Cunningham
Ray Skinner	2/7 Tui Place	R Skinner
David Lockton	215 Tanners Pt Rd Tanners Point	[signature]
J M Carter	28 Manuaroa Drive K.K.	J M Carter
B K McDonald	20/32 Park Rd. K.K.	B K Macdonald
P. Burton	41 Carisbrook St K.K.	P.K.M Burton
Dale Cunningham	5 Highfields Drive	[signature]
Julie Webster	40 Preston Drive KK	J Webster
Christine Donehue	14 Church St KK	C Donehue
Phil Christophersen	22 Uretara Drive	[signature]
Barbara McGillivray	16 Stokes Rd RD3 KK	BEM Gillivray
Keith Hawke	408 Seaforth Rd RD1 KK	[signature]
Nicki Mattingley	71 Highfields Drive KK	[signature]
Laraine Hughes	40B Snodgrass Road, Te Puna	Laraine Hughes
Christine Moore	30 Preston Dr	C Moore
Malcolm Twist	19 Alexander St	[signature]
Graeme Fowler	50 Turntable Hill Rd	[signature]
George Griffin	47 Hamurana Rd. Omok	[signature]
Jen Moleta	55 Links View Omokoroa	[signature]
Rose Cook	252 Kauri Pt Rd Kati	R A Cook

ATTACHMENT A

Mr Garry Webber
Mayor
Western Bay of Plenty District Council
Tauranga

Dear Sir

Highfield Detention Pond

We, the undersigned, hereby support the allocation of funds to the Annual Plan so as to continue the exploratory work of converting the Highfield Detention Pond into a wet area in the form of a lake.

Name	Address	Signature
Jan Flynn	Tanners Pt Rd RD1 Katikati	
Sally Moor	2 Johnston St KK	
Malcolm Moore	" "	
ALAN M'LAUGHLIN	41E URETARA DRIVE	
Vange Walker	122 Woodlands Rd RD3 Katikati	
Sheila M GRIFFITHS	18B POLLEY CRES KATI	
Carolyn Robertson	1A Stokes Rd KK.	
Gerry Kells	50 Highfields Drive	
Denise Ward	15 Boyd St.	
ADRIAN CONWAY	18 HASCOMBE AVE LONDON W13 9UJ UK	
Jon Ward	" " "	
Steve Ward	15 Boyd St.	
Jon Christophersen	22 Uretara Drive	
Sherie Hayes	22 Uretara Drive, Katikati	
Terry Cole	20 Uretara Katikati	
CLIVE TAYLOR	100E PARK RD KATIKATI	
LAIS BOYACK	11B. GRNY ST "	
HEATHER TAYLOR	100E PARK RD "	
Heather Morton	9 Tui Place	
Anne Henry	149 Henry Road KK	
Marie Wyatt	25 Chelmsford St, R D 3. KK	
Yvonne Cole	20 Uretara Drive Katikati	
Shirley Bagod	13 Bloodall Pl, Katikati	

ATTACHMENT A

Mr Garry Webber
Mayor
Western Bay of Plenty District Council
Tauranga

Dear Sir

Highfield Detention Pond

We, the undersigned, hereby support the allocation of funds to the Annual Plan so as to continue the exploratory work of converting the Highfield Detention Pond into a wet area in the form of a lake.

Name / Signature	Address
R. HAMPTON	13 TOWERS STR PAEROA
R. WARD	38 PARRY PALM AVENUE WAIHI
JOHN NELSON	113 HILTON DRIVE WHANGAMATA
DAVE UTTING	24 MORAY PL, WHIRITOA
Trevor Lane	2 Turnberry Cl Katikati 6/2/2019
DAVID HEMSLEY	13 WILLS RD KATIKATI 6.2.2019
GRANT SMITH	35B MALTA CRES - KATIKATI 6.2.19
BARRY RAYNER	7A MANGATOETOE, WAIHI
IAN LANGLEY.	140 FAIRVIEW ROAD KATIKATI
MURRAY WARD	511 BEACH RD, WHANGAMATA
GRAHAM ROBERTS	38 Pembrove Drive, Bethlehem, Tauranga
John Field	24 Wills Road, Katikati
NORM. MAYO	57 MALTA CRESCENT—KK
PATRICK DUNN	30 MACMILLAN ST KATIKATI
John Walker	73/181 Park Road Katikati
Bev Walker	73/181 Park Road Katikati
Barbara Pierce	75A Wills Road Katikati
Steve Walters	535 Ridge Rd. RD2 Pahoia
Kate Pfenning	3 Mulga St Katikati
Ginny Stanwell	19 Mairoa Drive Katikati
Noelin Smith	6 Heron Cres Katikati

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Mr Garry Webber
Mayor
Western Bay of Plenty District Council
Tauranga

ATTACHMENT A

Dear Sir

Highfield Detention Pond

We, the undersigned, hereby support the allocation of funds to the Annual Plan so as to continue the exploratory work of converting the Highfield Detention Pond into a wet area in the form of a lake.

Name Signature	Address
L B McNeilly	1436B CAMERON RD TGA.
	12 Meander Dr. Tga.
	155 CONDOR DR, PYES PA
	63 Landing Drive Tauranga
	85A 14th Ave Tauranga
	162 Bellevue Road Tga
	12 Meander Drive Tga
	16B EMMETT ST TAURANGA.
	13 SUNRISE ESTATE RD5 TAURANGA
	7 Rainbrook Place Katikati
	123 [illegible] ROAD TAUPO
	6 Blundell Place

12

Mr Garry Webber
Mayor
Western Bay of Plenty District Council
Tauranga

ATTACHMENT A

Dear Sir

Highfield Detention Pond

We, the undersigned, hereby support the allocation of funds to the Annual Plan so as to continue the exploratory work of converting the Highfield Detention Pond into a wet area in the form of a lake.

Name	Address	Signature
Carol Fleet	8 Turnberry Close KK	
Roger Fleet	" "	
Viv Proffitt	313 Woodland Rd, KK	
Jodie Langley	Fairview Rd	
Alan Dodwell	205 Walker Road East Mt.	
Aileen Davey	Accumulus	
Jemma Boyd	6 Athenree Road	
Karl Ward	56c Park Road	
Sheryl Sutton	914 Work Road	
[illegible]	[illegible]	
Steve Austin	"	
Dorgan Grayling	247 Matahui Rd	
Don Grayling	" " "	
THYNE + MICHAEL HELLOWELL	146 BUSBY ROAD KATI KATI	
MICHAEL HELLOWELL	" " "	
Jennifer Heade	34/46 Sharp Rd Katikati	
Rebecca Buck	28/46 Sharp Rd Katikati	
Bronwyn Webster-Hawke	12 Troon Place	
MARTIN HAWKE	12, TROON PLACE	
EINZIG Gruber	4 Turnberry Cl	
Ruth Gruber	" "	

ATTACHMENT A

Mr Garry Webber
Mayor
Western Bay of Plenty District Council
Tauranga

Dear Sir

Highfield Detention Pond

We, the undersigned, hereby support the allocation of funds to the Annual Plan so as to continue the exploratory work of converting the Highfield Detention Pond into a wet area in the form of a lake.

Name	Address	Signature
Diane Gray	24 Turnberry Close. RD2.	Diane E Gray.
Gay Howard	32 Woodleigh Pl Papamoa	
2A MICK MURRAY & MIKE SOMERVILLE	4 CHELMSFORD ST TE KAMRI POINT	
JOHN CAKER	John Laker 21 Riverside Place Katikati	
John Kilpatrick 28 Belmont Ave.	Sarah Munn.	
COLIN & BEV JOHNSTON	19 BALLANTYNE WAY	
Rev + Col CHEYNE	1 TROON PLACE	
Maree + Nelson Knight	38/46 Sharp Rd.	
BARRY + LYN CAMPBELL	3/46 Sharp Rd	
Heather + Graeme Thompson	9 TROON Place	
Heather Hunter	17 Turnberry close	
TREVOR GILBERT	8 CARNOUSTIE PLACE	
TERRY FITZGERALD	10 MUIRFIELD CRES	
FRANCES "	" " "	
D J Gilbert	8 Carnoustie Pl	D J Gilbert
M J Grant	9 Muirfield Cres	M J Grant
Peter Armstrong	4 Muirfield Cres	

PTO

ATTACHMENT A

[signature]	7/46 SHARP RD	M.E. Peel.
[signature]		C J PALMER
[signature]		I.F. Palmer.
[signature]		P.E. Mathers
[signature]		A.B Mathers
[signature]		DAVID JOHNSTON
[signature]	22 Gleneagles Dve Kati Kati	Wendy Rigg
[signature]	22 Gleneagles Dve Kati Kati	
[signature]		MAUREEN M'ALLISTER 30/46 SHARP RD
[signature]	24 Gleneagles Drive	
[signature]	"	
[signature]	3 Tree Pl Katikati	
[signature]	37 THE DRIVE "	
[signature]	22 TURNBERRY CL KATIKATI	
[signature]	4/46 Sharp Road.	
[signature]	22 Turnberry Cl Katikati	
[signature]	20 " " "	
[signature]	11/46 SHARP RD. K.K.	
[signature]	18 Ballantyne Place kk	
[signature]	8/46 Sharp Rd Katikati,	
[signature]	3 Tree Place Katikati	

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(H)

ATTACHMENT A

Mr Garry Webber
Mayor
Western Bay of Plenty District Council
Tauranga

Dear Sir

Highfield Detention Pond

We, the undersigned, hereby support the allocation of funds to the Annual Plan so as to continue the exploratory work of converting the Highfield Detention Pond into a wet area in the form of a lake.

Name	Address	Signature
Kristin Crockett	15 Bluebell Place K.K.	
Jacqui Knight	175 Seaforth Rd W.B.	
Nicola Auston	128 Willoughby Rd, K.K.	
Lynne Davies	26/32 Park Rd, KKt	
Julie Walker	38 Maniaroa Drive	
Penny Childehouse	10 Riverside pl.	
Joan Baggiss	10 Belmont Rise. Katikati.	
Virginia Gordon	222 State Highway 2.	
Elaine Henderson	20 Tui Place KK	
Jan Barton	110 Main Rd	
Kay Stanbury	16 Leadowen Rd KK	
Joanne Knight	469 S.H 2 R.D3 Katikati	
Keri Paterson	264 Walker Road East Katikati	
Chris Boyack	11B GRAY STREET KK	
CHRIS TAYNER	100E PARK RD KK	

ATTACHMENT A

Mr Garry Webber
Mayor
Western Bay of Plenty District Council
Tauranga

Dear Sir

Highfield Detention Pond

We, the undersigned, hereby support the allocation of funds to the Annual Plan so as to continue the exploratory work of converting the Highfield Detention Pond into a wet area in the form of a lake.

Name	Address	Signature
Alexander Stone aged 11	23 Uretara Drive Katikati	
Rosemary Stone	23 Uretara Drive Katikati	
Isobel Stone (aged 9)	23 Uretara Drive Katikati	
Richard Stone	23 Uretara Drive	
Maureen Lyon	25 Uretara Drive	
Griffin & Fraser	4 the meadows Katikati	
Daniel Stone	23 uretara drive	

(3)

ATTACHMENT A

Mr Garry Webber
Mayor
Western Bay of Plenty District Council
Tauranga

Dear Sir

Highfield Detention Pond

We, the undersigned, hereby support the allocation of funds to the Annual Plan so as to continue the exploratory work of converting the Highfield Detention Pond into a wet area in the form of a lake.

Name	Address	Signature
Diane Logan	3 Stewart St	D.J. Logan.
Francis Young	17 Francis Dr. KK	F.P. Young
DERREL BUSH	2102. SH 2. K. K	Derk Bush.
Jeanette Shepherd	26 Highfield Drive	[illegible]
Edith Hoseason	167 Park Rd.	[illegible]
Isobel Jackson	9B Gledstane Rd.	I Jackson
LINDA McMURRAY	27 CROSSLEY STREET K.K	[illegible]
Wendy Morgan	1/13 Heron Cres 3129	[illegible]
Paula Cook	93 Shaw Rd Waihi Beach	[illegible]

'With environmental consciousness!

9

Teenagers having fun in the detention pond when it's flooded.

Winter 2017. Rosemary Stone

Kayak fun when pond is in flood.
Winter 2017.
Rosemary Stone

Lake gets solid approval

May 2017

The Highfield's lake maybe a step closer to reality after "comment" stickers were counted resulting from the public forum that was held on the 7 May at the Memorial Hall. In total 126 people commented on the proposed lake and every opinion was recorded by Jenny Hobbs, Chairman of the Katikati Community Board Committee. These were divided into three categories.

	(Total Respondents = 126)
For the Lake	82%
For a Wetland	8%
Other reasons against Lake	10%
	100%

"This is a resounding approval for the lake" says Jim Davison who has been working on this project for four years. "Our Mayor insists that a town project has to have the backing of the local residents before it is considered by Council. I'm sure that he will take note of these results"

To date, a feasibility study has been conducted by engineers Tonkin & Taylor and topographical data on the existing pond has been collected by Council along with toxicity testing and some top line construction costs.

Highfields Stormwater Pond conversion

- Great idea, a project that will be used by hundreds of people, not only local
- Get the lake started ASAP
- Good idea x 4
- Wonderful idea for lake, sooner the better so we can enjoy it.
- Great idea to benefit Katikati 2
- Good idea, go for it x 2
- It won't get any cheaper, just do it x 3
- Support strongly, can be made into a worthwhile asset at minimal cost x 2
- All for it, add a bit of beauty to the area
- Needs to be done asap for children
- Fabulous idea, go ahead now
- A great idea, look at Waihi's Gilmour Lake, boats, walks ....I endorse this view
- An asset that will be invaluable to Katikati x 4
- Will bring $000's into Katikati
- This development is more important than a library
- There needs to be a safe place for children to learn water activities. This absolutely a perfect place. We need the lake.
- Best bang for buck project on offer
- Be great for recreational activities and an extra activity for youth. Utilising the space well. Options for keeping active.
- The pond development will be a great asset for the town and a natural extension to the Haiku Walkway and new swing bridge. Afterall, those who bought sections there were promised a recreational pond. If left to be a wildlife pond, that's OK too but must be protected from dogs off lead.
- Do it or something similar
- The lake is a no-brainer
- I would use it for kayaking and maybe even swimming (age 14)
- Excellent idea, a good place to take my mokupuna
- Lake ... yes please x 18
- Good idea ... should have been done already x 2
- Great idea, especially for young people. Keep them in the community!
- Marvelous for youth
- I want it, please start digging
- Fantastic, great idea, can't wait
- Will keep our homestay busier with visiting sailors!
- Must do it and now x 2
- Great!!
- Go for it but needs bridge from behind Cheery Court car park x 2
- Promotion of sailing and other water sports in a protected environment
- Not convinced water will flow from river to pond. River is well over metre below current pond level, otherwise all for it.
- 100% support
- fabulous idea, will give teens something to do, paddleboards, remote control yachts, kayaks, raft races etc
- love it, lets make the most of what we've got
- excellent idea, will be great not to have the awful smell in summer
- it would be a local, regional, national addition to radio yachting in New Zealand
- in favour, do it, do it, do it.
- In favour, but at little or no ongoing cost to ratepayers

- Turning a liability into and asset
- This project is a must, just do it. X 2
- Would look better cleaned up, but will need maintenance (so does the park)
- I support the Highfield's Lake (Uretara) a low cost high impact investment with also immediate benefits
- Our kids would definitely use the lake for paddle-boarding and kayaking, it's a great idea
- We need a lake, but funded jointly by user and council
- All for it, it's a mess at the moment
- Lake is a great idea. What is realistic time that it would be completed. Good idea, good for visitors and people living in the area
- This idea of a lake seems good to me, it provides a constructive leisure place without destroying any natural or existing bush/wetland area. However is the cost very great? Please don't ask us to pay higher rates.
- Get it underway ASAP but keep refuge for the birds
- Can this be combined with the jetty project for more efficiency and cost saving?
- The lake is a priority for me
- 100% behind forming a lake, Katikati can only benefit and draw people from surrounding towns to have lake activities. Will also be visually attractive. If nothing done, its likely to be stagnant
- congratulations, such great ideas for this amazing town
- clean up this mess, overgrown and smelly in summer. Put it to use, see what they have done at Waihi and the Lakes in Tga.
- Yes please, fill the lake so we can sail in it
- For me this is a must do. There is nothing more pleasant than a nice looking lake.
- Tauranga Radio Sailing Club letter of support
- I would like to use the lake for paddle-boarding
- Boating lake ✓✓✓✓
- Swamp area to be beautiful i.e like glade of trees on Katikati Kaiway

- think about: pond must be used as a settling pond to protect river, dig out sediment to create a bird island, consider farreway to pond to allow sediment to settle, a wetland to polish stormwater before going into river, open water plus wetland to attract different types of birds. Think about stormwater flows.
- Totally agree as long as ecologically sound
- Could combine this concept with a very attractive wetland. Don't need such a large deep area for model boats (according to local model boatie)
- Don't really think kids will use it, they don't seem to use Gilmour Lake in Waihi
- Totally disagree on Lake unless all is paid by individuals involved
- What about the whitebait spawning?
- Please leave, the wildlife will die out (bugs)
- What is the realistic cost $250K estimate was Aug 2016
- Too grandiose!!! Is it realistic to think that people will be paddle boarding and yachting?
- We enjoy the ever changing tranquility of the wetland, it certainly doesn't smell
- Concerned about flooding on Uretara Drive properties in a weather event. Wetland level rises quite high – will lake make it worse?
- Figure out what its for before you design it
- Horrendous cost for limited recreation opportunity. Ex TCC engineer thinks $50,000 average for storm water pond need to revisit costs/process
- Disturbance or removal of existing sediment may require disposal to a managed fill site
- Whats wrong with the river?

- Yes, do it properly but leave some weed for the birds
- Remove weed plants and leave for the birds, not the expensive proposed 'boating' lake few people will use
- This area is a wetland area. A small part of the last 51 left in New Zealand. Return it to wetland status.
- This area is in an environmentally significant part of the river, meters away is a whitebait spawning site.
- Lake – an area for native plants would be good
- Ken and Julia Blackler would like a wildlife pond instead of a recreational pond but has to be 'dogs on a leash' area
- Have you consulted with the Haiku committee? Does this fit with the Haiku theme
- Leave the pond for the wildlife but clean it up
- Should be a wetland for encouraging birds. This would be more in keeping with Haiku purpose.
- For less than half the cost, get a local contractor to dig it out. Put spoils on the banks. Get volunteers to plant for bird life around edges. Leave the area for quiet contemplation.
- Hopefully the wildlife will be considered and the trees that are already growing round the lake will be left alone.
- Suggest to combine this with the jetty project and improve the pond as a wetland
- Concerned about flooding of Uretara Drive properties 15 – 21 if lake level is held high. Wetland water level rise lots in weather events.
- I don't think that enough people would benefit from this. Its for a minority.
- Current situation helps to clean storm water discharge before it enters waterways. Too much of our storm water goes into harbor untreated. I like the wetland ecosystem, it rarely dries up – what offensive odour?
- Do something rather than nothing
- Crazy to build 60 houses on a swamp

Western Bay of Plenty District Council

Operations & Monitoring Committee

Highfields Pond

Purpose

Council approved the funding of a trial ($30,000 2019/2020, $70,000 2020/2021 subject to Annual Plan approval) to convert the Highfields stormwater pond (located between Uretara Drive and the Uretara Stream in Katikati) from a semi-dry pond to a permanent wet pond during the 2019/20 annual plan workshop.

Staff engaged Tonkin and Taylor (T&T) to review the impact to the surrounding groundwater if the pond permanent water level was raised. The *study is complete and concluded that there is some risk of groundwater ingress to dwellings if the pond level is raised. ***ATTACHMENT A**

The pond conversion trial will begin in October 2019 with close monitoring of the groundwater to be undertaken throughout the trial.

Recommendation

1. ***THAT the Asset & Capital Manager's report dated 5 February 2019 and titled Highfields Pond be received.***

2. ***THAT the Committee note the recommendations within the Tonkin and Taylor Report dated 7 November 2018 – Highfields Groundwater Study Attachment A.***

3. ***THAT the Committee approve/disapprove the raising of the Highfields Pond water level to a Reduced Level (RL) of 2.55m for the first stage of the Highfields Pond trial.***

4. ***THAT the report relates to an issue that is considered to be of medium significance in terms of Council's Significance and Engagement Policy.***

Coral-Lee Ertel
Asset & Capital Manager

Approved

Gary Allis
Deputy Chief Executive

1. Background

The Highfields stormwater pond was constructed as part of the stormwater management for the Highfields subdivision in 2007 and later was vested in Council. The pond provides stormwater treatment and erosion mitigation prior to discharge to the Uretara Stream via two inlets and a floodgate.

The Highfields stormwater pond was initially designed as a detention (dry) pond however, this design was modified during construction and it resulted in a wetland-like environment with permanent shallow water, plant species and bird life.

In 2013 the Katikati Community Board requested the Highfields stormwater pond be converted to a permanent wet pond for recreational use. The pond conversion would enhance the aesthetics of the area as well as enable it to be utilised for recreational use such as model boats.

Monitoring of the surrounding groundwater has been undertaken to assess what impact, if any, raising the pond water level will have on the surrounding properties. This review was undertaken by T&T. A copy of the report is attached. The groundwater monitoring looked at two scenarios.

Scenario 1 – Raise pond level to 2.0m – T&T have recommended the pond level could likely be raised to 2.0 m RL without the potential for adverse effect from moisture ingress from elevated groundwater levels on buildings. This will result in a pond depth of 0.25m – 0.75m. This water depth will have no impact on the overall aesthetics of the pond and therefore will not meet the objectives of raising the water level.

Scenario 2 – Raise pond level to 2.55m RL. T&T have recommended based on the potential for adverse effects as a result of groundwater that the pond level is not raised to this level. This will result in a pond depth of 0.8 -1.3m. This will potentially improve the overall aesthetics of the pond however close monitoring of the groundwater will need to be undertaken to ensure risk to private property is managed.

2. Next Steps

The trial will be begin in late October 2019 and will raise the water level to RL 2.55m as per scenario 2. Staff will continue to monitor the groundwater profiles over this time to verify information held within the T&T report.

Early in the 2020 Financial Year and prior to starting the trial, staff will undertake a final review of the pond design and assess any impacts raising the water level will have on;

- the geotech of the pond embankments,
- the stormwater function of the pond,
- water quality and treatment capacity of the pond
- the surrounding groundwater (based on a further 6mths of groundwater monitoring).

Throughout the trail groundwater will be closely monitored to ensure no impact on private property. The improvements to the aesthetics of the pond will be monitored by the community throughout the trail period.

The information contained in this report will be presented to the Katikati Community Board at the 27 March Community Board Meeting.

3. Significance and Engagement

The Local Government Act 2002 requires a formal assessment of the significance of matters and decisions in this report against Council's Significance and Engagement Policy. In making this formal assessment there is no intention to assess the importance of this item to individuals, groups, or agencies within the community and it is acknowledged that all reports have a high degree of importance to those affected by Council decisions.

The Policy requires Council and its communities to identify the degree of significance attached to particular issues, proposals, assets, decisions, and activities.

In terms of the Significance and Engagement Policy this decision is considered to be of medium significance because of there is a high level of community interest in the proposal. The adjoining land owners will be consulted prior to the trial commencing.

4. Engagement, Consultation and Communication

Interested/Affected Parties	Completed/Planned Engagement/Consultation/Communication
Name of interested parties/groups	The adjoining land owners will be consulted prior to the trial commencing. Katikati Community Board
Tangata Whenua	N/A
General Public	Surrounding Landowners

5. Statutory Compliance

This report complies with Councils legislative requirements, bylaws and policies.

Tonkin+Taylor

Job No: 1004614
07 November 2018

Western Bay of Plenty District Council
Private Bag 12803
Tauranga Mail Centre
Tauranga 3143

Attention: Coral-Lee Ertel

Dear Coral-Lee

Highfields Pond Groundwater Study

1 Introduction

Highfields Pond is a stormwater treatment pond constructed as part of the Highfields residential subdivision in Katikati to detain and treat stormwater from the roads and other impervious surfaces from the development prior to being discharged into the Uretara Stream. Tonkin & Taylor Ltd (T+T) was previously engaged by Western Bay of Plenty District Council (WBOPDC) to undertake a high-level feasibility study[1] for the Katikati Community Board's proposal to increase the depth of the stormwater detention pond to increase recreational and visual amenity. The previous report identified two options for modification of the existing stormwater pond: (1) raise the water level by amending the outlet structure and (2) increase the water depth by excavation of the base of the pond.

WBOPDC have engaged T+T to further investigate the viability of raising the water level of the pond by undertaking a study on the potential effects on local groundwater levels and whether there is the potential for changes to have an effect the houses on nearby Uretara Drive. This report summaries the study and its findings.

2 Background

2.1 Datum

All reduced levels are relative to Moturiki Vertical Datum (MVD-53).

2.2 Site description

Highfields Pond is located on Uretara Drive, a residential area in Katikati. The pond has a surface area of approximately 1.5 hectares and discharges to the Uretara Stream to the east (refer Figure 2.1). The pond is surrounded by grassed banks with public walkways on the northern and eastern bunds. Residential dwellings are located at the top of the bank to the west of the pond. The ground

[1] Tonkin & Taylor Ltd (2015), Highfields Subdivision Stormwater Pond Conversion – Feasibility Report, report prepared on behalf of Western Bay of Plenty District Council, June 2015.

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levels and foundation levels for the 11 properties on the eastern side of the Uretara adjacent to the pond (15-35 Uretara Drive) are summarised in Table 2.1 below. These 11 properties could be potentially affected if groundwater levels are changed as a result of modifying Highfields Pond.

Figure 2.1: Site layout

Table 2.1: House foundation and ground levels

Address	Finished floor level (m RL)[1]	Approximate ground level (m RL)[2]
15 Uretara Drive	3.9	3.7
17 Uretara Drive	4.0	3.8
19 Uretara Drive	Unknown	3.9
21 Uretara Drive	4.0	3.9
23 Uretara Drive	4.3	4.0
25 Uretara Drive	4.5	4.2
27 Uretara Drive	Unknown	4.3
29 Uretara Drive	4.50	4.4
31 Uretara Drive	5.19	4.8
33 Uretara Drive	5.25	4.8
35 Uretara Drive	Unknown	5.2

[1] Finished floor level provided by WBOPDC from building consents
[2] Ground level taken from BOPLASS LiDAR

2.3 Pond function

The Highfields pond was originally consented in March 2007 (Consent number 63674) with changes to the consent occurring in December 2012 when the northern extent of the pond was increased. It is understood that the original function of the pond was to provide detention and water quality treatment of runoff from the nearby subdivision. Survey of the pond undertaken by Stratum Consultants in March 2017 show that the pond invert level varies between 1.3 m RL and 1.7 m RL (refer Appendix A). As-built drawings prepared by Downey Survey Consultants Ltd after the modifications completed in December 2012 show that the pond drains via two manhole risers with scruffy domes located in the north-east corner of the pond (refer Figure 2.2). The rim of the northern manhole outlet (referred to as Manhole Riser 1) is set at 2.54 m RL while the rim of the southern manhole outlet is set at 2.55 m RL. The manhole risers are both fitted with three T-bar decants at various levels with the lowest set at 1.4 m RL. This controls the minimum water level and therefore the amount of "dead storage" in the pond. Comparing the survey of the pond undertaken in 2017 with recent aerial photographs seem to corroborate that the pond water level gets as low as 1.4-1.5 m RL. The outlet levels for the manhole risers are summarised in Table 2.2 below.

Table 2.2: Pond outlet levels

	Manhole riser 1	Manhole riser 2
Rim level (m RL)	2.54	2.55
Decant 1 level (m RL)	1.47	2.18
Decant 2 level (m RL)	1.47	1.79
Decant 3 level (m RL)	1.47	1.39

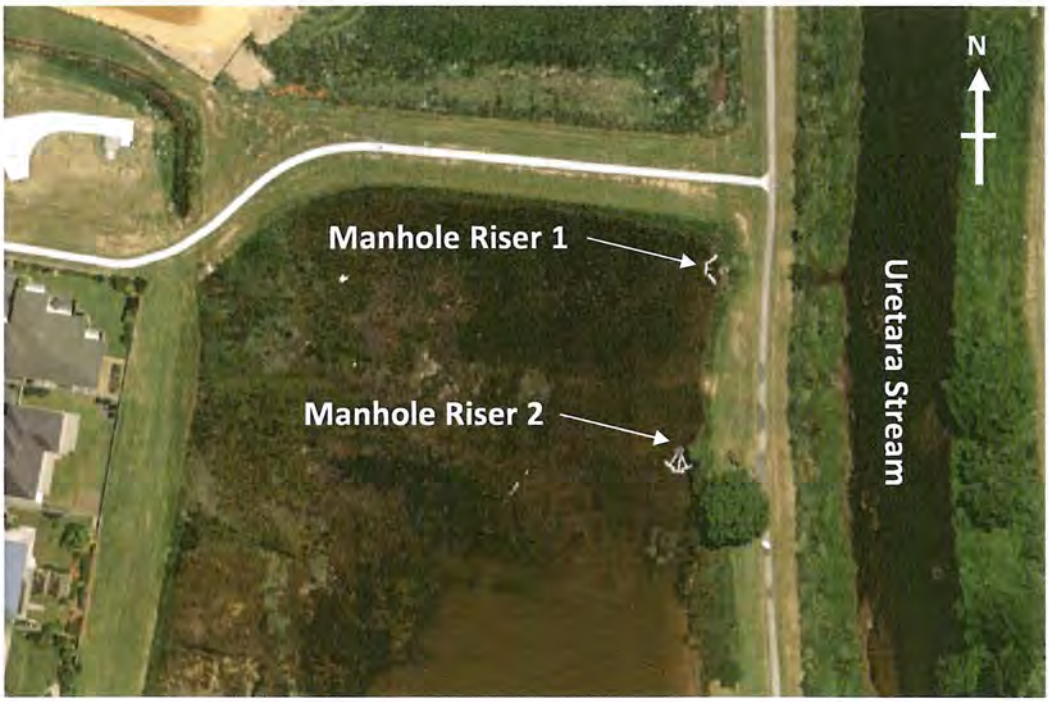

Figure 2.2: Pond outlet locations

3 Groundwater monitoring

3.1 Methodology

In order to assess potential effects of a change in pond water level, groundwater levels in the vicinity of Highfields pond were monitored in four different locations. Figure 3.1 below shows the selected monitoring locations which were identified in a desktop assessment and verified for accessibility and constructability with a site visit. The surveyed coordinates of the monitoring locations are included in Appendix B. At each location groundwater levels were monitored using level loggers in boreholes consisting of a perforated 32 mm PVC pipe sealed at ground level with a toby box and cement casing. Level loggers were set to record absolute pressure at 1 hour increments and a barometric pressure logger was placed in one of the toby boxes to allow for corrections to be made for changes in air pressure. Monitoring took place from December 2017 until October 2018 (10 months) with data downloads occurring every 3-4 months due to limits in the level logger's memory.

Figure 3.1: Groundwater monitoring locations

The raw pressure results were post-processed with the air pressure readings and surveyed ground levels to convert them to groundwater level timeseries. Statistical analysis was undertaken on the timeseries of groundwater level to determine the 5th percentile, median (50th percentile) and 95th percentile groundwater levels for each monitoring location over the period of monitoring. The results of this analysis is presented in Section 3.2.

3.2 Results

The timeseries of recorded groundwater at each of the four monitoring locations is shown in Figure 3.2 below. All four timeseries show coinciding peaks and receding limbs in response to rainfall events and the timeseries for P4 (the location next to the Uretara Stream) shows a tidal response. Other than the short term peaks in the records the groundwater level remained fairly constant at

each location with no overall upwards or downwards trend evident over the monitoring period. The timeseries are included in more detail in Appendix C.

Figure 3.2: Groundwater level time series

A longsection showing the post-processed groundwater statistics in relation to ground level and pond levels is shown in Figure 3.3 below. This graph shows the 5th percentile, median (i.e. 50th percentile) and 95th percentile ground level at each monitoring location with a line of inferred groundwater profile drawn between each. The approximate location of the houses on the eastern side of Uretara Drive are also indicated. This longsection is taken along the dashed line shown in Figure 3.1 with ground level taken from BOPLASS LiDAR and pond bathymetry taken from the 2017 Stratum Survey. The longsection shows that the groundwater profile slopes to the east towards the Uretara Stream with a median depth to groundwater that varies between 1.3 and 1.8 m in the vicinity of the houses at the northern end Uretara Drive (based on the lowest ground level of 3.7 m RL). Taking the average of the median groundwater levels of P3 and P4, which are located on the upstream and downstream sides of the pond, gives a level of 1.45 m RL which corresponds well with the level of the lowest T-bar decants in the outlet manhole risers.

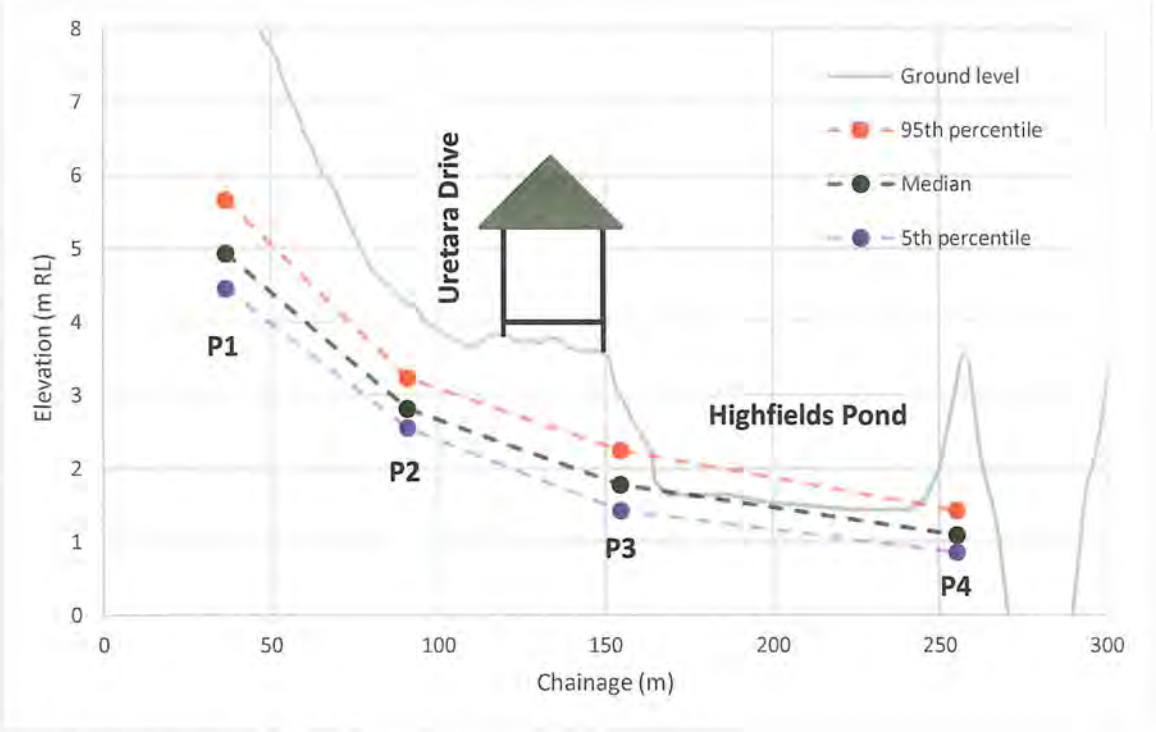

Figure 3.3: Long section of groundwater level

4 Assessment of potential effects of raising the pond level

It is understood that achieving a permanent water depth of approximately 1 metre has been identified as the desired outcome of modifying Highfields pond although no conceptual design has been undertaken that proposes what the permanent water level should be. Currently the existing permanent pond water level is approximately 1.45 m RL. Therefore to assess the potential effects of raising the permanent pond level two scenarios have been considered:

- Scenario 1 - raising the pond permanent water level to 2.0 m RL by reducing the height of the manhole riser and removing the T-bar decants; and
- Scenario 2 – raising the pond permanent water level to 2.55 m RL by removing the T-bar decants and leaving the manhole risers at their current level.

Although there is not much definitive evidence about what groundwater depth would pose a problem to the habitability of buildings, the NZ Ministry of Business, Innovation and Employment has stated that damp proof membranes (DPM) under concrete slabs may not be an effective vapour barrier when the water table is within 0.5 m below the DPM. This has been used as the metric in this study to assess potential effects of raised groundwater levels on nearby residential properties.[2]

4.1 Scenario 1 – Pond level raised to 2.0 m RL

Scenario 1 involves raising the pond permanent water level to 2.0 m RL resulting in a pond depth between 0.25 m and 0.75 m based on current bathymetry. This would likely be achieved by replacing the T-bar decants with a large sized orifice at 2 m RL in the manhole riser outlets. In the absence of a groundwater model with which to quantify effects of this change it has assumed that the effect of raising the water level in the pond would be a matching increase in the upstream groundwater profile to at least monitoring location P2. Therefore raising the water level from the current level of

[2] Ministry of Business, Innovation and Employment – NZ Building Code. Canterbury Rebuild – Updates and clarifications to the residential guidance (Issue 8 – February 2015).

approximately 1.45 m RL to 2.0 m RL is likely to result in an increase in groundwater profile of approximately 0.55 m. This is likely to reduce the median depth to groundwater below the houses at the northern end of Uretara Drive (i.e. the worst case) to 0.75-1.25 m below ground level. The 95th percentile groundwater level in the vicinity of the houses on Uretara Drive is also likely to increase however this will likely be to a lesser degree than the changes in median groundwater level. Under existing conditions the 95th percentile groundwater level was approximately 0.4 m higher than the median groundwater level. Therefore it isn't likely under this scenario that the 95th percentile groundwater depth would be less than 0.5 m below ground level.

4.2 Scenario 2 – Pond level raised to 2.55 m RL

Scenario 2 involves raising the pond permanent water level to 2.55 m RL resulting in a pond depth of 0.8 m and 1.3 m. 2.55 m is the rim level of the existing manhole riser outlets and would likely be achieved just by removing the T-bar decants from the risers. In the absence of a groundwater model with which to quantify effects of this change it has assumed that the effect of raising the water level in the pond would be a matching increase in the upstream groundwater profile to at least monitoring location P2. Therefore raising the water level from the current level of approximately 1.45 m RL to 2.55 m RL is likely to result in an increase in groundwater profile of approximately 1.1 m. This is likely to reduce the median depth to groundwater below the houses at the northern end of Uretara Drive (i.e. the worst case) to 0.2-0.7 m below ground level. At this level the slab on ground foundations above may start to be affected by moisture ingress. The 95th percentile groundwater level in the vicinity of the houses on Uretara Drive is also likely to increase however this will likely be to a lesser degree than the changes in median groundwater level. Under existing conditions the 95th percentile groundwater level was approximately 0.4 m higher than the median groundwater level. Even with less of a rise in the 95th percentile level than that assumed for the median groundwater level this could still potentially result in the groundwater level being near or at ground level for a couple of weeks a year.

5 Conclusions and recommendations

Groundwater monitoring has revealed that the current median groundwater profile is approximately 1.3-1.8 m below the existing houses to the northern end of Uretara Drive. Two scenarios for raising the water level in the Highfields Pond have been in considered with respect to potential effects on groundwater levels beneath the houses.

Scenario 1 involves raising the pond level to 2.0 m RL. This could potentially raise the groundwater profile by 0.55 m reducing the median depth to groundwater underneath the houses to 0.75-1.2 m below ground level. However the rise in the 95th percentile groundwater level is likely to be less prominent and therefore the 95th percentile depth is likely to be at least 0.5 m below ground level which would not be expected to have a noticeable effect on the buildings from moisture ingress as a result of elevated groundwater levels. This, combined with the fact that the ground level for the majority of the houses is higher than that considered in this analysis, means that the pond level could likely be raised to 2.0 m RL without the potential for adverse effect from moisture ingress from elevated groundwater levels on buildings.

Scenario 2 involves raising the pond level to 2.55 m RL. This could potentially raise the groundwater profile by 1.1 m reducing the median depth to groundwater underneath the houses to 0.2-0.7 m below ground level. Even with less of a rise in the 95th percentile level than that assumed for the median groundwater level this could still potentially result in the groundwater level being near or at ground level for a couple of weeks a year at the northern end of Uretara Drive. Therefore based on the potential for adverse effects as a result of groundwater rise we do not recommend that the pond level is raised to this level.

While this report is only focussed on the effects of raising the pond water level on local groundwater levels, it is noted there are a number of other effects that need to be given consideration in if WBOPDC wish to proceed with the proposal to modify Highfields Pond. These include:

- Stormwater management function - if increasing the pond permanent water level results in a reduction in live storage this may affect the detention function of the pond. Increased pond depth also has the potential to affect the water quality treatment function of the pond.
- Compliance with existing consent conditions – any proposed modifications to the wetland outlet structures will need to meet the conditions of the existing consent (Consent number 63674), specifically Condition 6 which states that "the maximum rate of discharge...shall not exceed 300 litres per second except where the design event of a 10-minute 2% AEP storm is exceeded". Otherwise additional consenting work may need to be undertaken.
- Effect on the upstream stormwater network – raising the water level in the pond will potentially inundate the pipe network upstream of the pond and will result in a higher tailwater condition at the pond inlets. This will need to be considered as part of the design of any modifications.
- Public safety - deepening the pond potentially poses an increased health and safety risk as the pond is located in a public park and close to residential dwellings. Mitigation of this risk should be considered in any proposed pond modifications.
- Geotechnical considerations – it is not clear whether the bund on the eastern side of the pond was designed to withstand a permanent water pressure higher than what it is currently exposed to. This should be addressed before proceeding with pond modifications to prevent potential piping failures of the bund.

6 Limitations

The following limitations of this study have been noted:

- Groundwater levels in the vicinity of the pond have only been monitored for 10 months. This means the results obtained may not necessarily cover the entire range of likely groundwater levels that would be observable over the long term, especially for high water levels associated with storm events. However given the analysis is primarily based on median groundwater level we consider the amount of data used is appropriate to support the conclusions made in this case.
- Groundwater behaviour for the site has not been assessed with the use of a model. Therefore to make conclusions about potential effects some simple conservative assumptions have been made in terms of how the groundwater profile might respond to changes in pond water level.

7 Applicability

This report has been prepared for the exclusive use of our client Western Bay of Plenty District Council, with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

Tonkin & Taylor Ltd

Environmental and Engineering Consultants

Report prepared by:	Authorised for Tonkin & Taylor Ltd by:
Joshua Hodson	Peter Cochrane
Water Resources Engineer	Project Director

jtih
t:\tauranga\projects\1004614\issueddocuments\20181107 highfields pond groundwater study final\20181107 highfields pond groundwater study final.docx

Appendix A: Pond survey

DRAWN: JT		DESIGNED: -	
CHECKED: -		SURVEYED BY: JT/DR	
OFFICE OF ORIGIN - TE PUKE Ph 07 573 7717			
No.	Date	By	Issue/Revision
A	27/03/17	JT	-
B	-	-	-
C	-	-	-

NOTES/KEY:

1. LEVELS ARE IN TERMS OF AUCKLAND DATUM
2. CONTOUR INTERVAL = 0.1m
3. POND VOLUMES FOUND IN THE SUMMARY DOCUMENT SUPPLIED

LEGEND:

- Top of Pond banks
- Maximum water level (0.3m freeboard applied)
- Water level at time of survey (22/03/2017)

WBOPDC
URETARA DRIVE
KATIKATI

TOPOGRAPHIC SURVEY OF STORMWATER POND

Stratum CONSULTANTS
Experience. Knowledge. Better Outcomes.
Planners | Engineers | Surveyors

SCALE: 1:1000 ORIGINAL DWG. SIZE A3

DRAWING No. 415366-T-S-D001 SHEET No. 01 ISSUE A

Appendix B: Groundwater monitoring locations

DRAWN	SM	DESIGNED	-
CHECKED	-	SURVEYED BY	SM

OFFICE OF ORIGIN - TE PUKE Ph 07 573 7717

No	Date	By	Issue/Revision
A	15.3.18	SM	ISSUED
B	-	-	-
C	-	-	-

NOTES/KEY:

1. GENERAL

1.1 Boundaries have been obtained from LINZ Data Service and have not been verified.

2. SURVEY

2.1 Survey date: 9/3/2018

2.2 Datum

2.1.1 Horizontal datum: Bay of Plenty 2000

2.1.2 Vertical datum: Moturiki 1953

2.1.3 Origin of levels is AP 45A [ABUL] RL = 3.70m (Converted from LINZ coordinates).

GEOTECHNICS
URETARA DRIVE
KATIKATI

MONITORING MARKS SURVEY

Stratum CONSULTANTS
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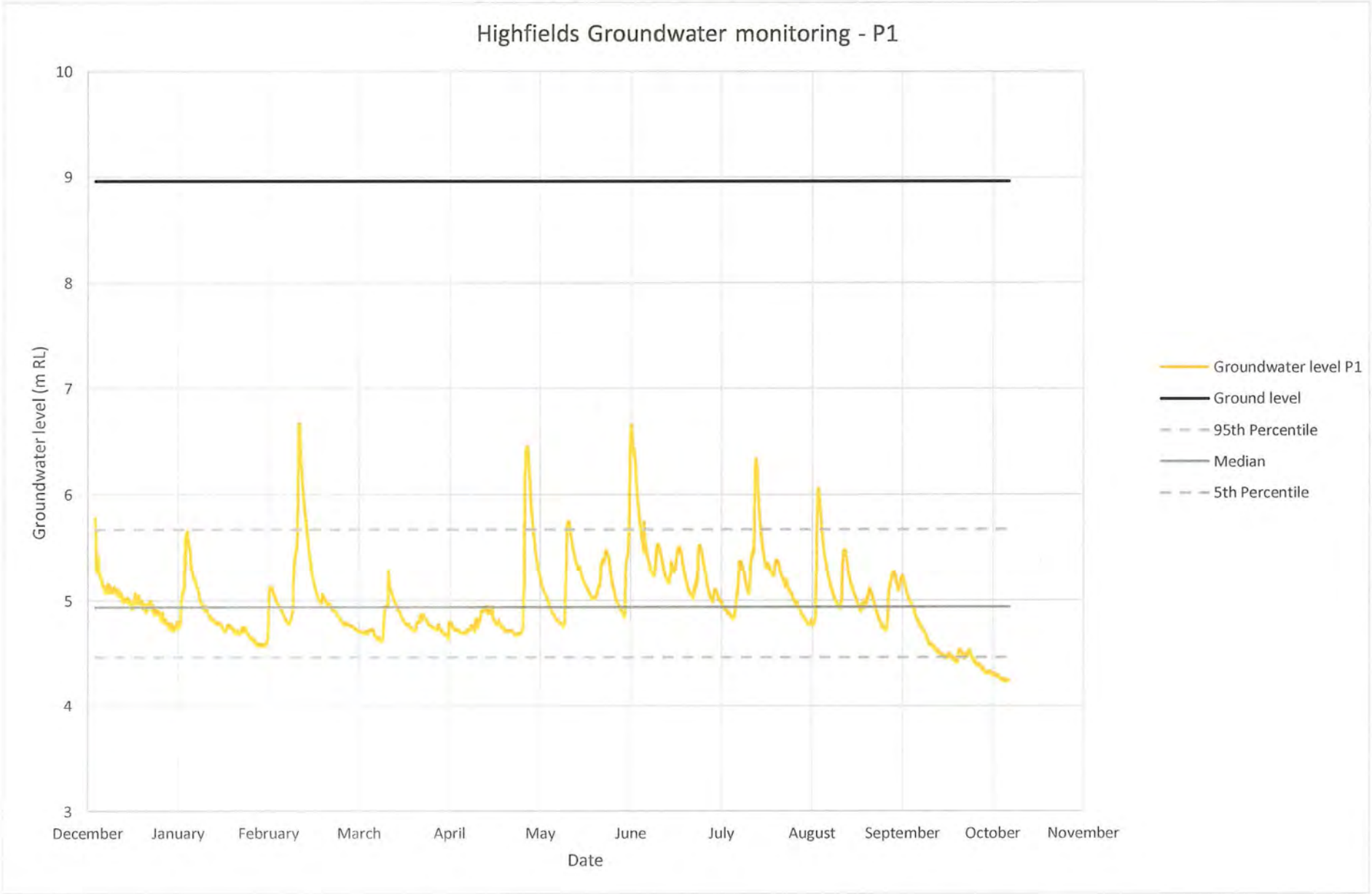
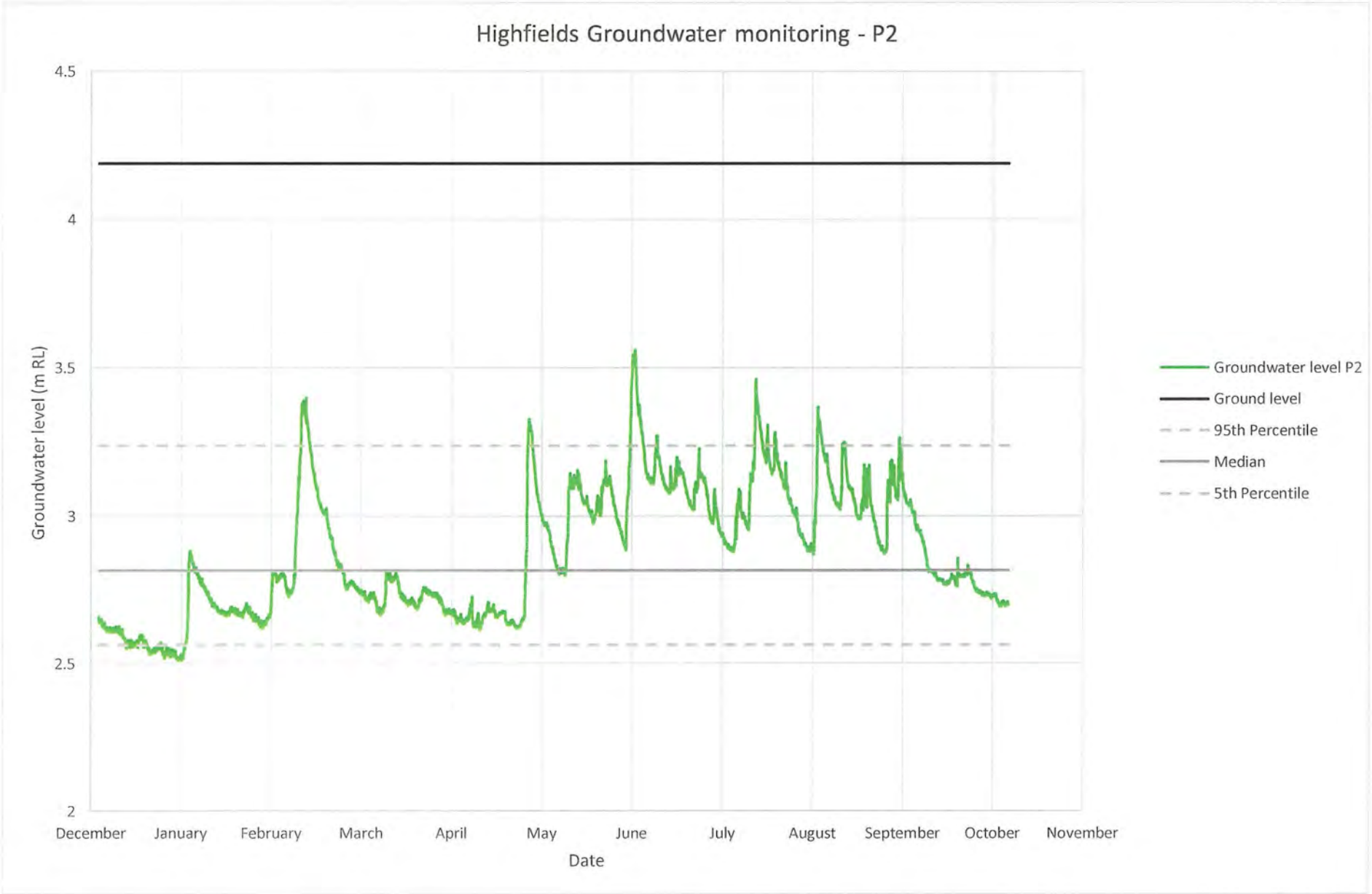
Planners | Engineers | Surveyors

SCALE: 1:750 ORIGINAL DWG SIZE A3

DRAWING No: 471808-T-S-D001 SHEET No: 01 ISSUE: A

Appendix C: Groundwater timeseries


Highfields Groundwater monitoring - P1
Groundwater level (m RL)
10
9
8
7
6
5
4
3
December
January
February
March
April
May
June
July
August
September
October
November
Date
Groundwater level P1
Ground level
95th Percentile
Median
5th Percentile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Groundwater level (m RL)
4.5
4
3.5
3
2.5
2
December
January
February
March
April
May
June
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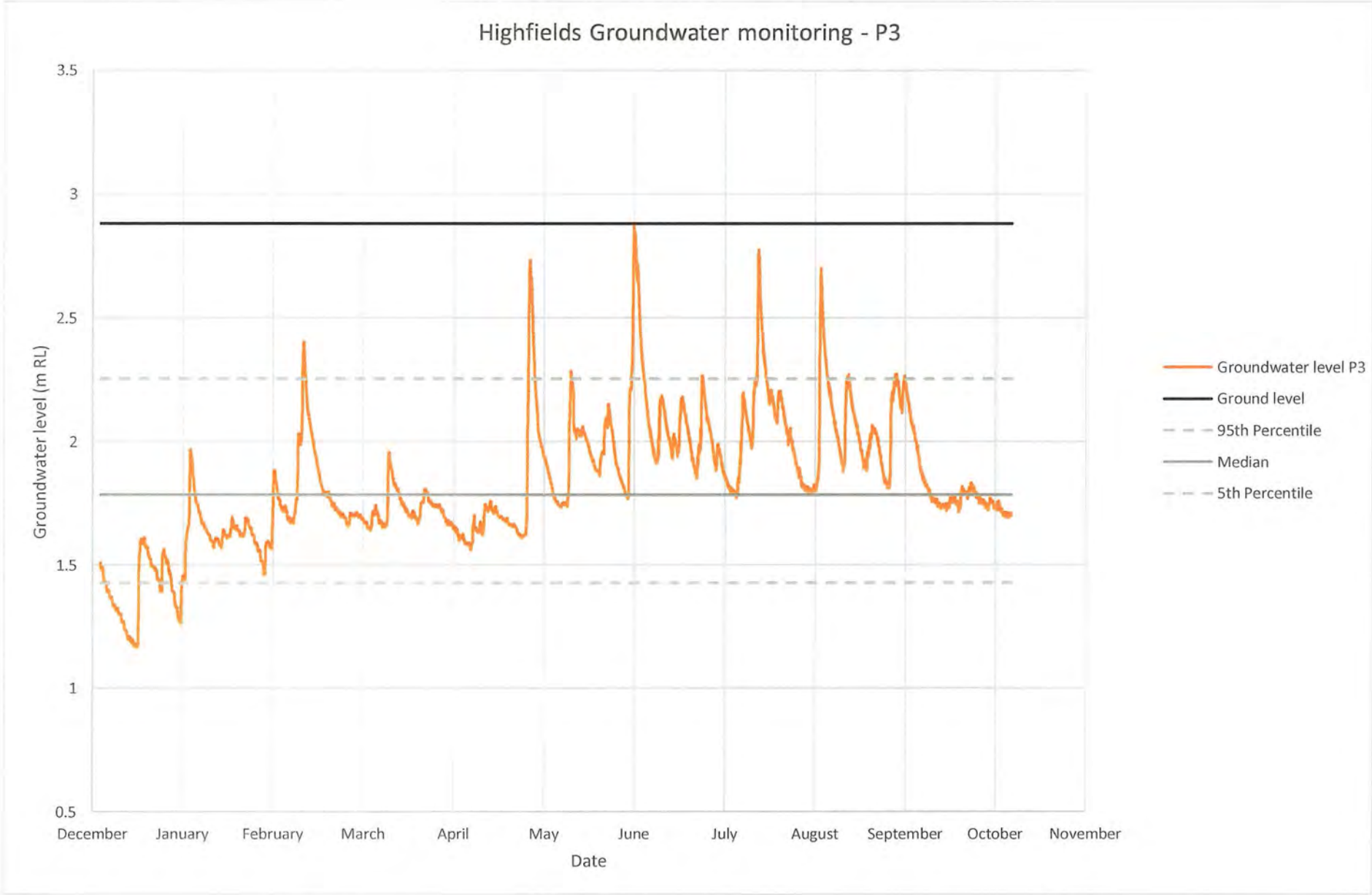
September
October
November
Date
Groundwater level P2
Ground level
95th Percentile
Median
5th Percentile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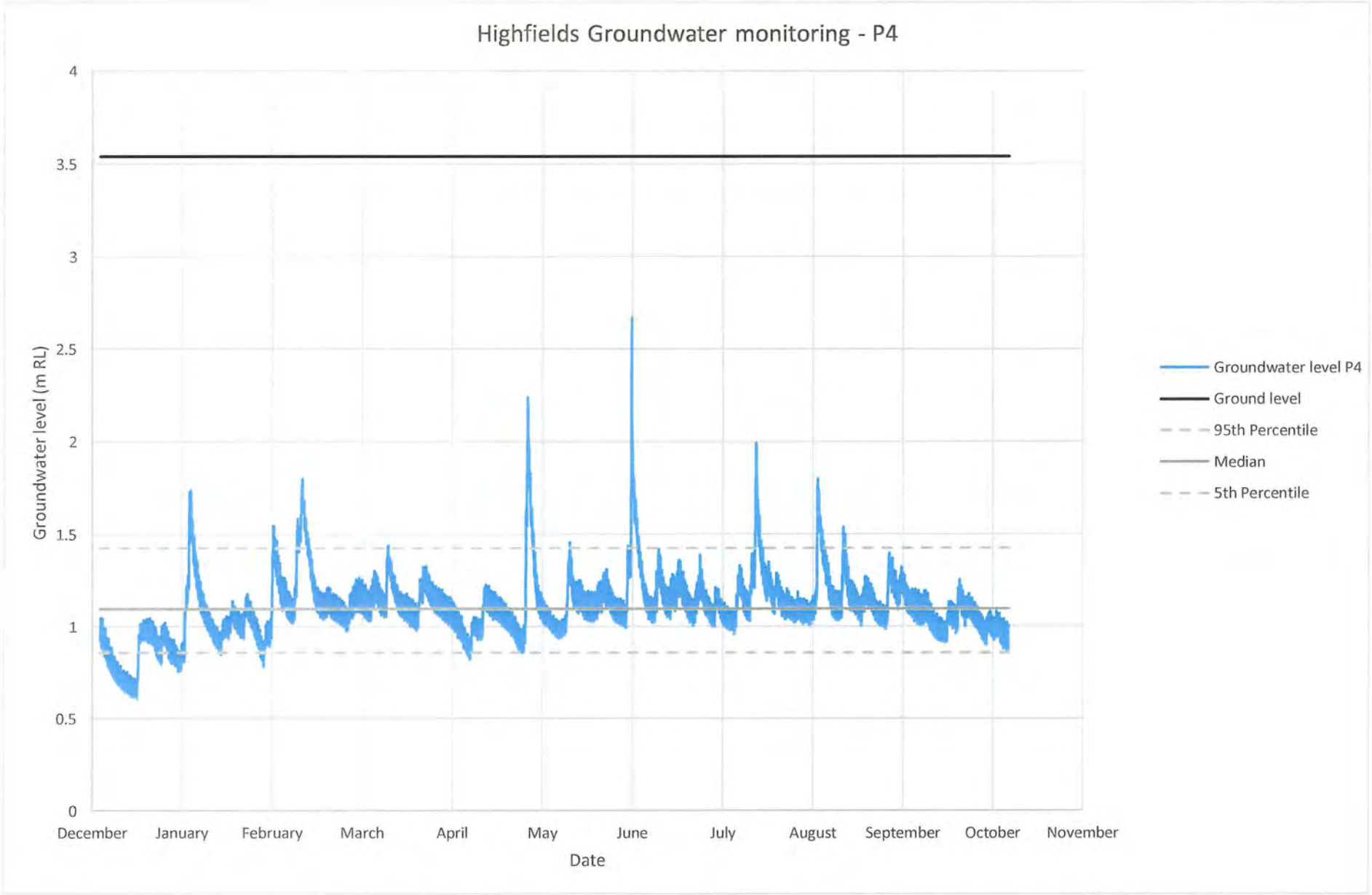
2.5
2
1.5
1
0.5
December
January
February
March
April
May
June
July
August
September
October
November
Date
Groundwater level P3
Ground level
95th Percentile
Median
5th Percentile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3
2.5
2
1.5
1
0.5
0
December
January
February
March
April
May
June
July
August
September
October
November
Date
Groundwater level P4
Ground level
95th Percentile
Median
5th Percentile

Western Bay of Plenty District Council

Operations and Monitoring Committee

Recommendatory Report from Katikati Community Board - Uretara Stream Restoration

The Operations and Monitoring Committee is required to consider the recommendations and resolve accordingly. The following options are available to the Operations and Monitoring Committee and where appropriate the preferred option has been recommended.

Please note the following is a recommendation only.

The Operations and Monitoring Committee to resolve to:

a. adopt as recommended
b. to modify
c. refer to another Committee
d. to decline (giving reasons) and refer back to the Katikati Community Board

Recommendation from the Katikati Community Board Committee – Meeting K18 13 February 2019

K18.3.6 **Uretara Stream Restoration – The Weed War**

The Chairperson provided a summary report outlining concerns relating to the poor state of water quality and weed infestation of the Uretara Stream in close proximity to the Town Centre and along the Haiku Walkway.

At this point in the meeting the Chairperson introduced Kate Loman-Smith and Andrew Jenks who gave a presentation to the Board titled Goals of the Uretara Stream Bank Restoration. The presentation covered:

- Planting of native plants to replace weed species
- Development of a range of ecosystem services
- Ongoing stream bank erosion minimization
- Improvement to the aquatic and terrestrial biodiversity of the area
- Overall beautification of the area.

The presenters spoke of the value of a partnership management process involving local environmental management groups, community volunteers and local Council staff. A stream restoration plan developed with the Uretara Estuary Managers and Haiku Focus groups outlined:

- The current state of the stream
- Objective of a staged improvement project

In terms of the Significance and Engagement Policy this decision is considered to be of low significance because the requested funding for $1,500.00 towards the cost of a Vegetation Management Strategy can be funded from within existing the Tauranga Harbour Esplanade Reserves Management Project budget.

Recommendation

1. ***THAT the Operations and Monitoring Committee approve the recommendation from the Katikati Community Board for funding of $1,500.00 towards the cost of a Vegetation Management Strategy allocated from the Tauranga Harbour Esplanade Reserves Management Project budget.***

2. ***THAT the report relates to an issue that is considered to be of low significance in terms of Council's Significance and Engagement Policy.***

Aileen Alty
Democracy Advisor

Western Bay of Plenty District Council

Operations & Monitoring Committee

Maketu Surf Club Car Park Erosion Protection

Purpose

To seek direction on whether or not the Committee wishes to proceed to a Regional Council Resource Consent hearing process in response to several objections against the proposed erosion mitigation / protection works in front of the Maketu Surf Club carpark.

The intention of this report is not to relitigate the pros and cons of the erosion protection works or its design, the intention is to seek direction on whether or not Council wishes to invest financially into a hearing process.

Recommendation

1. ***THAT the Reserves and Facilities Projects & Assets Manager report dated 12 February 2019 and titled Maketu Surf Club Car Park Erosion Protection be received.***
2. ***THAT Council withdraws the Resource Consent application for a coastal protection structure and continues to monitor the asset until it deteriorates to a point that erosion damage to the car-park is reconstructed under an emergency works provision.***

   Or
3. ***THAT regarding the resource consent application for an erosion protection structure at the Maketu Surf Club car-park, Council as the applicant, proceeds to a Regional Council hearing with costs estimated at up to $50,000 allocated from the Structures Coastal Renewal budget, but should the decision be appealed to the Environment Court that staff will refer this back to Council for direction.***
4. ***THAT the report relates to an issue that is considered to be of low significance in terms of Council's Significance and Engagement Policy.***

Scott Parker
Reserves and Facilities Projects & Assets Manager

Approved

Gary Allis
Deputy Chief Executive

1. Background

In 2003, gabion protection and concrete steps were installed in front of the Maketu Surf Club carpark, extending to the south side of the Maketu Surf Club building.

Sand pillows were also installed to protect a stormwater outlet. Both the sand pillows and the buried gabion seawall are consented structures.

The newly constructed concrete steps (formed on top of the gabions) onto the beach provided good access onto a reasonably high beach profile:

Coastal Mtce Maketu Seawall 29 Aug 2003 file:55031006

General View of Completed Gabion Protection Works

By 2014, beach levels had dropped, enabling erosion/undermining to the gabions that support the steps / car-park frontage and a specific note of this was made during the 2014 annual coastal structures inspection survey:

Car-park undermining & erosion processes – 2014.

Car-park undermining & erosion processes – 18 February 2019.

Design work to mitigate further risk of erosion / undermining began in 2015, with stakeholder consultation (local iwi, Surf Club, Community Board) working through various design options and combinations such as rock-groyne structures (to encourage sand build-up), rock revetment, channel dredging/beach nourishment, geotextile sand containers. Given the site is on the open coast in a high energy environment, the rock revetment design was the preferred engineered solution but strong community feelings about what it would look like, resulted in a design change.

Under the existing permit for the sand pillows and gabion seawall, Council is able to undertake repairs to maintain both assets. Repairs to the gabion seawall involve demolition of the concrete steps and rebuilding the gabions and steps. It is now clear that the existing design has not been successful in mitigating coast erosion at this location.

A Resource Consent application was lodged with the Bay of Plenty Regional Council (BoPRC) in 2017 with a *revised design that included additional concrete steps along the front of the car-park built down into the beach to accommodate changing beach levels with channel dredging to provide a local supply of sand to re-nourish the beach. There was general support for the steps but not the dredging (sand for beach nourishment would have to come from elsewhere). ***Attachment A**

Tangata whenua objections to the application resulted in the Maketu Community Board resolution MC8.5.7 – 17 October 2017:

> *The Board was advised that the required Resource Consent was currently on hold due to objections to the proposed channel dredging associated with beach nourishment and improving navigable access from the boat ramp at Park Road.*
>
> *Further consideration was required to understand the concerns from Tangata Whenua.*
>
> *The Board requested that the option to remove the channel dredging component from the Resource Consent application so that it (future channel dredging) may be considered as a separate matter in the future.*
>
> *It was also noted that repairs and safety improvements to the rock revetment needed to be undertaken as soon as possible as there were now some hazardous areas of the structure that presented specific health and safety risk issues.*

A revised consent application was submitted in April 2018, which included the same concrete steps but without the dredging component. A favourable response was received from Ngati Whakaue but not Ngati Pikiao or Ngati Makino.

Given the nonunanimous feedback from Tangata Whenua and much deliberation between staff and consultants striving to find a way forward, the Bay of Plenty Regional Council decided to process the application as a "limited notification" to the following:

- Ngāti Pikiao
- Te Ure o Uenukukōpako/Ngāti Whakaue
- Ngāti Rangitihi
- Waitaha
- Tapuika
- Ngāti Mākino
- Ngāti Pūkenga

Only three responses were received during the Bay of Plenty Regional Council's limited notice period. Ngāti Whakaue supports the application and requests a hearing.

Ngāti Pikiao opposes the application and requests a hearing. Ngai Te Rangi (also requests a hearing) was not invited to submit but they did anyway and this was accepted by BOPRC (the author of the Ngai Te Rangi response; Pia Bennett previously represented Ngāti Mākino now represents Ngai Te Rangi).

The Bay of Plenty Regional Council has agreed to place the hearing on hold until WBOPDC can provide direction on whether it wishes to participate or withdraw the application. Significant unbudgeted expenditure (estimated between $30,000 and $50,000) will be required if the application continues to a hearing. These costs are primarily made up of hearing costs and providing expert evidence to support Council's case and to counter the issues raised by the two objections. There is also a strong possibility that a decision in favour of WBOPDC would be appealed to the Environment Court by the opposing submitters, with further cost and risk to Council.

Response to Coastal Erosion Policy
The Coastal Erosion Responses Policy, adopted by Council in 2017, provides criteria on how to determine the level of erosion mitigation investment on public land. In this particular case, affected public assets include the car-park, Town-Point Road and underground utility services. The Maketu Surf Club boundary is also at risk in the event of a significant erosion event. Coastal protection of this infrastructure is required and therefore the process undertaken to date and the design proposed, is consistent with policy.

2. Significance and Engagement

The Local Government Act 2002 requires a formal assessment of the significance of matters and decisions in this report against Council's Significance and Engagement Policy. In making this formal assessment there is no intention to assess the importance of this item to individuals, groups, or agencies within the community and it is acknowledged that all reports have a high degree of importance to those affected by Council decisions.

The Policy requires Council and its communities to identify the degree of significance attached to particular issues, proposals, assets, decisions, and activities.

In terms of the Significance and Engagement Policy this decision is considered to be of low significance because it does not meet the thresholds of Council's significance policy and any decision made is reversible until physical works occur.

If the decision is to proceed with the consent, the interested parties will be involved in the hearing.

3. Engagement, Consultation and Communication

3a. No engagement plan is required and communications have been undertaken with the parties identified below.

Interested/Affected Parties	Completed/Planned Engagement/Consultation/Communication
Name of interested parties/groups	Maketu Community Board, Maketu Surf Club, Tangata whenua
Tangata Whenua	BOPRC resource consent application process: • Ngāti Pikiao • Te Ure o Uenukukōpako/Ngāti Whakaue • Ngāti Rangitihi • Waitaha • Tapuika • Ngāti Mākino • Ngāti Pūkenga
General Public	Initial community consultation was undertaken at the Maketu Surf Club

4. Issues and Options Assessment

Option A ***THAT Council withdraws the Resource Consent application for a coastal protection structure and continues to monitor the asset until it deteriorates to a point that erosion damage to the car-park is reconstructed under an emergency works provision.***	
Assessment of option for advantages and disadvantages taking a sustainable approach	**Advantages:** • Satisfies 2 out of 3 consent application respondents **Disadvantages:** • Unsustainable in the long term or if erosion accelerated at any time from a major storm event. • Upsets 1 out of 3 consent application objections • Upsets local community and other stakeholder groups who want the proposed design. • Creates community uncertainty
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	**Advantages:** • No further costs to Council in the short term. Any minor repairs can be absorbed within existing budget. **Disadvantages:** • None identified

Option B ***THAT regarding the resource consent application for an erosion protection structure at the Maketu Surf Club car-park, Council as the applicant, proceeds to a Regional Council hearing with costs estimated at up to $50,000 allocated from Coastal Structures Renewal Budget but should the decision be appealed to the Environment Court that staff will refer this back to Council for direction.***	
Assessment of option for advantages and disadvantages taking a sustainable approach	**Advantages:** • Addresses the request by respondents for a hearing **Disadvantages:** • Staff time and resources required • Hearing outcome may be in Council's favour in which case it is likely that this will be appealed to the Environment Court. • Community uncertainty asset risk
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	**Advantages:** • None identified **Disadvantages:** • Ongoing significant unbudgeted costs

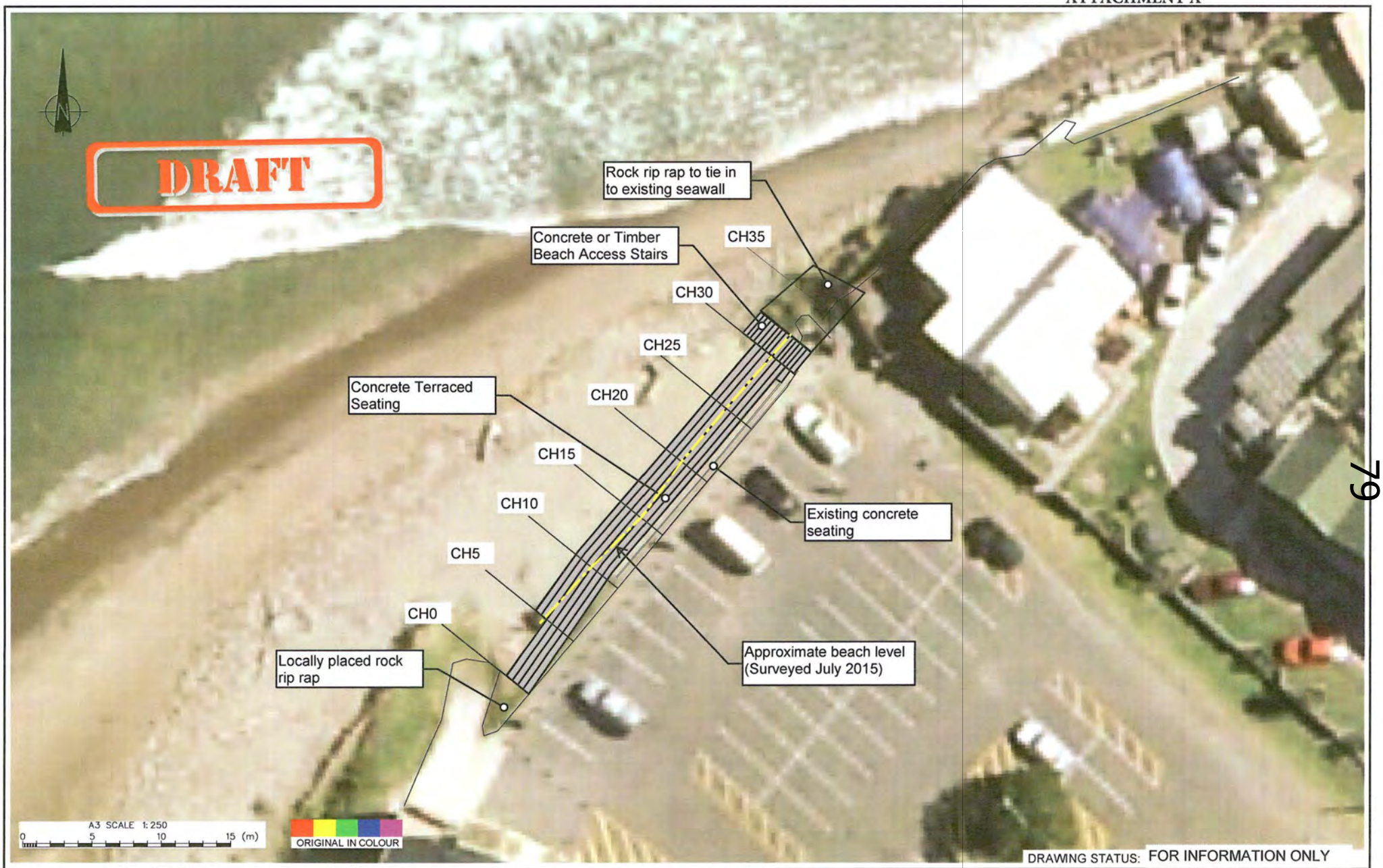
5. Statutory Compliance

All recommendation options meet statutory compliance and is consistent with Council's Response to Coastal Erosion Policy.

Under the provisions of Section 330 – emergency works and power to take preventative or remedial actins, Council has the ability to undertake remedial action to protect serious damage to property as a result of any sudden event, in this instance a significant storm event that could cause serious damage to the carpark Surf Club building or underground infrastructure.

6. Funding/Budget Implications

Budget Funding Information	Relevant Detail
Coastal Marine Structures Renewal Project 321101	If resource consent is obtained, implementation of the proposed concrete steps design will proceed when renewal funding is available, prioritised on a risk basis against other coastal structure assets renewal. • Seawall steps estimated construction cost $350k • Renewal timing was programmed for 2016 but is currently deferred until the Resource Consent process and decision are concluded. • Budget allocation in 2016 was $25k (only for sand pillows) – well short of the design estimate and for the renewal a second project is described as part Maketu Surf Club Gabion Seawall ($140k programmed for renewal for 2023) • The existing steps are in effect, a concrete cap on top of the previously buried but now exposed gabion seawall. • The Coastal Structures Renewal project does not yet reflect the $350k construction price estimate and this will be adjusted in future budgets. • Funding will be via the Coastal Structures Renewal project as soon as a decision is made • Emergency works, if required, would also be funded from the Coastal Structures Renewal budget.
Unbudgeted funding for BOPRC Resource consent application hearing	



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DESIGNED :	SACB	Oct. 15
DRAWN :	DWM	Oct. 15
DESIGN CHECKED :		
DRAFTING CHECKED :		

CADFILE : \\851735.2090-03.dwg

APPROVED : NOT FOR CONSTRUCTION

This drawing is not to be used for construction purposes unless signed as approved

NOTES :
1. All dimensions are in millimetres unless noted otherwise.
2. Aerial photo Copyright 2002–2005 Terralink International Limited and its licensors.

REFERENCE :

Tonkin+Taylor
Level 1, 525 Cameron Road, Tauranga
Tel. (07) 571 7360 Fax. (09) 307 0265
www.tonkintaylor.co.nz

CLIENT, PROJECT: WESTERN BAY OF PLENTY DISTRICT COUNCIL
MAKETU SURF CLUB CONCRETE TERRACED SEATING

TITLE: CONCRETE TERRACED SEATING CONCEPT
Layout Plan

SCALES (AT A3 SIZE)	DWG. No.	REV.
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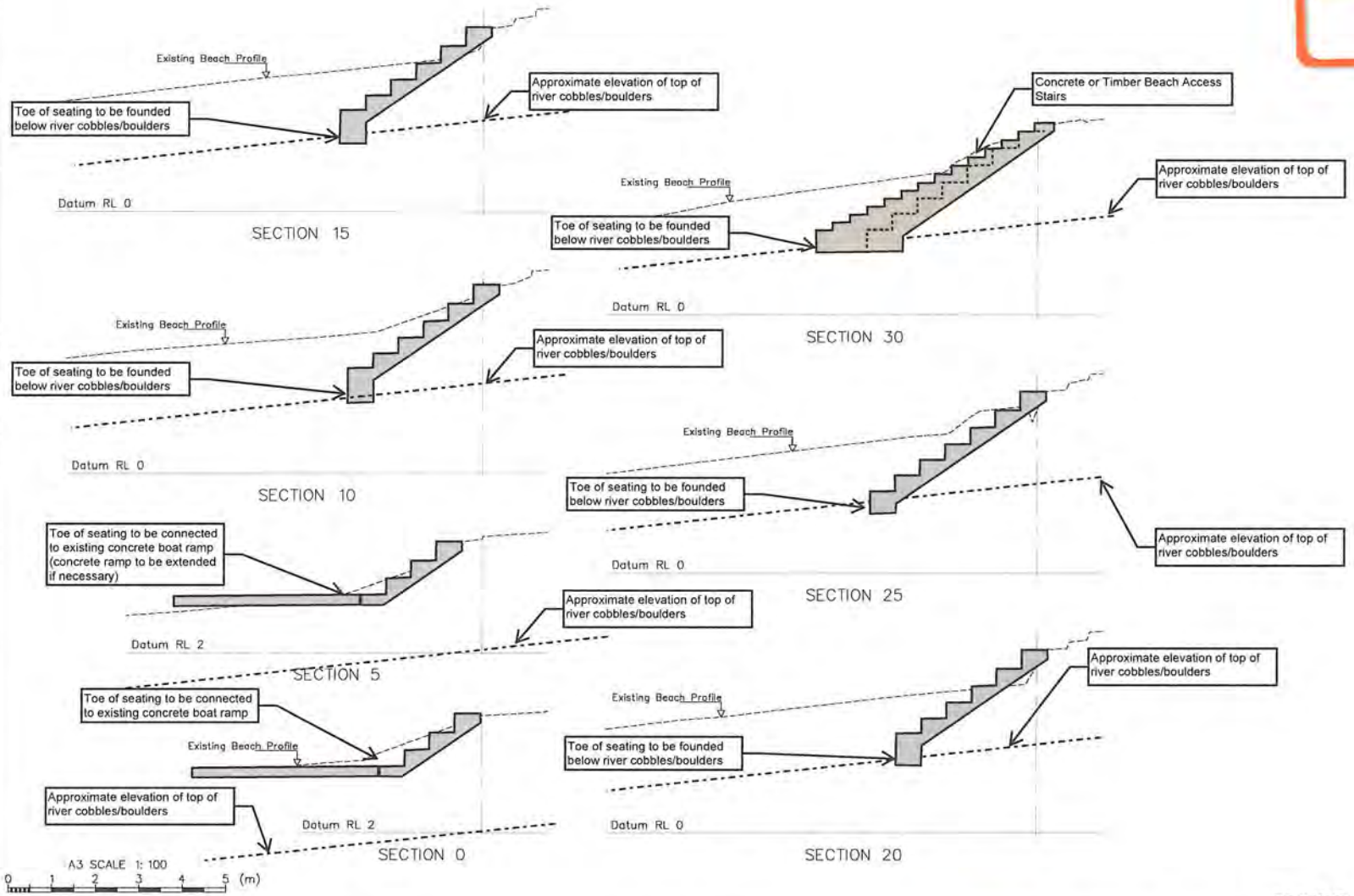

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DRAWN : DWM Oct. 16
DESIGN CHECKED :
DRAFTING CHECKED :
CADFILE : \\851735.2090-04.dwg
APPROVED :
NOT FOR CONSTRUCTION
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NOTES :
1. All dimensions are in millimetres unless noted otherwise.

REFERENCE :

Tonkin+Taylor
Level 1, 525 Cameron Road, Tauranga
Tel. (07) 571 7360 Fax. (09) 307 0265
www.tonkintaylor.co.nz

CLIENT, PROJECT
WESTERN BAY OF PLENTY DISTRICT COUNCIL
MAKETU SURF CLUB CONCRETE STAIRS CONCEPT

TITLE:
CONCRETE TERRACED SEATING CONCEPT
Sections

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Western Bay of Plenty District Council

Operations & Monitoring Committee

Te Puke Town Centre Parking Review

Purpose

As per the minutes of OP9 Operations & Monitoring Committee, held on 15 February 2018, staff were requested to monitor the parking situation within the Te Puke town centre over 2018 and report back the Committee during the first quarter of 2019 (this report).

Recommendation

1. ***THAT the Senior Policy Analyst Built Environment and Urban Design's report dated 13/02/2019 and titled Te Puke Town Centre Parking Review be received.***
2. ***THAT the report relates to an issue that is considered to be of low significance in terms of Council's Significance and Engagement Policy.***
3. ***THAT it be noted that:***
   - ***There are currently 520 public carparks in the Te Puke town centre, compared to 488 public carparks that existed prior to the town centre upgrade project.***
   - ***There are sufficient carparks within the Te Puke town centre.***
4. ***THAT it be recommended to the Policy Committee that the 10 carparks in Commerce Lane have a P120 parking restriction.***

Andries Cloete
Senior Policy Analyst Built Environment and Urban Design

Approved

Gary Allis
Deputy Chief Executive

1. Background and Purpose of the Study

In 2016 some of the shop owners in the Te Puke town centre expressed their concerns about the availability of public carparks in the town centre, especially along Jellicoe Street. This was mainly as a result of works undertaken along Jellicoe Street in 2016. A report on the parking situation in the Te Puke town centre was submitted to the Operations and Monitoring Committee in April 2017. This was followed by various discussions between Council staff, elected members and some of the business owners. On 15 February 2018 the Operations Committee and Monitoring Committee resolved that the parking situation be monitored throughout 2018 (especially during the kiwifruit season and the period before Christmas) and that staff report their findings back to the Committee during the first quarter of 2019 (this report).

The study area is shown in Photo 1.

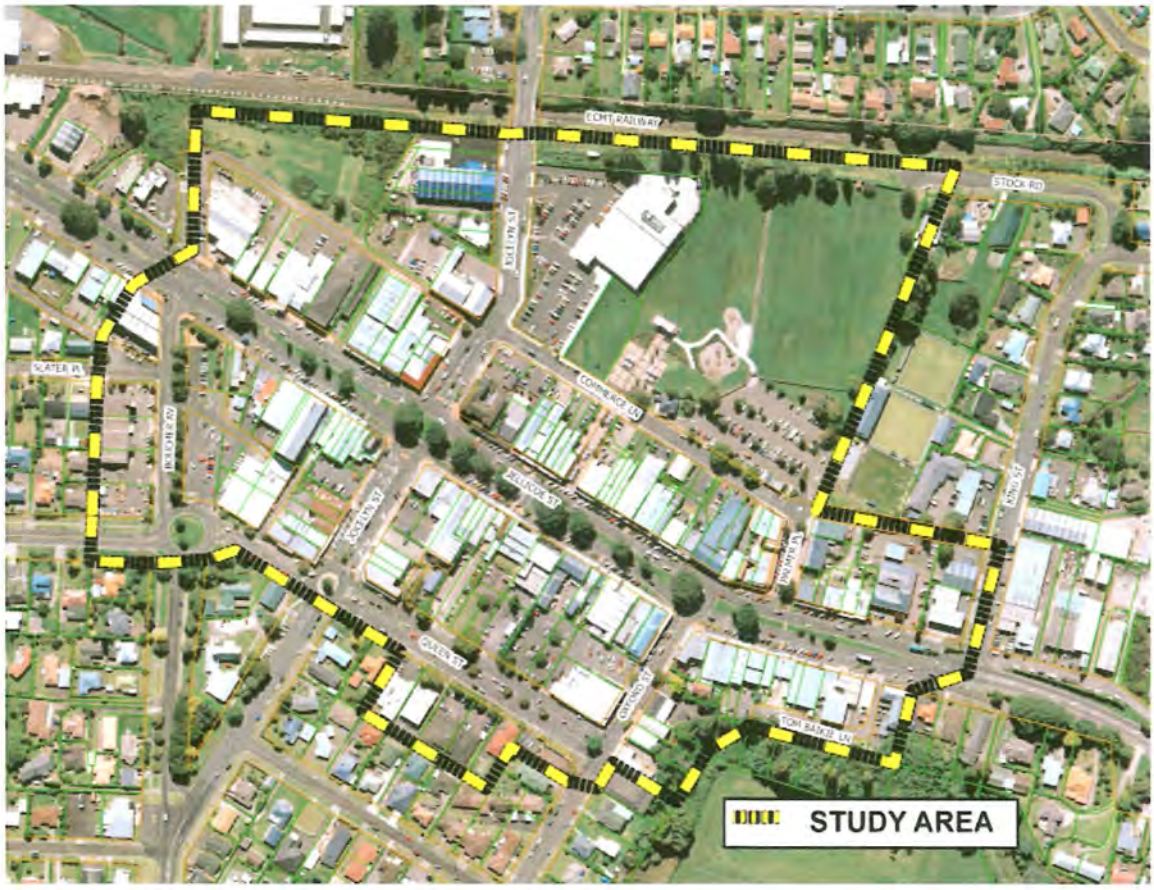

Photo 1: Study area

A detailed discussion regarding on-site parking was included in the April 2017 report and is therefore not repeated in this report.

2. Parking Supply: On-street parking and public carparks

The numbers of public carparks and mobility carparks within the study area are included in Table 1. This is the combination of carparks on the street and those in public carparks e.g. the Commerce Lane carpark.

Table 1: Number of carparks (on-street and within public carparks) in the study area.

Areas available for public parking	Number of parks		Mobility carparks	
	As on 25/01/19	Prior June 2016	As on 25/01/19	Prior June 2016
On-street parking in the study area				
Jellicoe St – Whakatane bound				
Boucher Ave/Jocelyn St	24	26	2	1
Jocelyn St/Main pedestrian crossing	6	7	0	0
Main pedestrian crossing/Palmer Pl	20	26	2	2
Palmer Pl/King St	13	14	0	0
Jellicoe St – Tauranga bound				
Tom Baikie Ln/Oxford St	19	21	1	0
Oxford St/Main pedestrian crossing	19	19	2	2
Main pedestrian crossing/Jocelyn St	6	7	0	0
Boucher Ave/Jocelyn St	26	28	2	1
Queen Street - East bound				
Boucher Ave/Jocelyn St	7	7	1	1
Jocelyn St/Oxford St	41	41	1	1
Queen Street - West bound				
Oxford St/Jocelyn St	38	38	1	1
Jocelyn St/Boucher Ave	5	5	0	0
Commerce Lane	10	10	0	0
Jocelyn St				
Queen St/Jellicoe St	18	18	2	2
Jellicoe St/Commerce Ln	11	11	0	0
Oxford St (demarcated)	16	16	0	0
Palmer Place	11	11	1	1
On-street parking sub-total	**290**	**305**	**15**	**12**
Parking in Public carparks				
Boucher Ave	28	28	0	0
Commerce Lane	143	143	0	0
New World**	30	0	0	0
86 Jellicoe Street***	12	0	2	0
Public carpark sub-total	**213**	**171**	**2**	**0**
Total number of public carparks	**503**	**476**	**17**	**12**

Notes:

** The public carparks in the New World carpark demarcated in 2018

*** Council has finalised a lease with the owner of 86 Jellicoe Street (the property directly east of the Heritage walkway) to develop 12 carparks and 2 mobility carparks. These carparks should be operational by the end of February 2019

Summary of Parking Supply

	On-street carparks	Public carparks	Mobility carparks	**TOTAL**
Pre Jellicoe Street upgrade	305	171	12	**488**
Current	290	213	17	**520**

There are currently 27 more public carparks and five more mobility carparks in the study area than prior to the Jellicoe Street upgrades of 2016/17.

3. Parking Uptake

3.1 Methodology

The parking uptake was surveyed on the dates included in Table 2 and the actions undertaken for each site visit are included in Table 3. As requested by some business owners, surveys have been undertaken during kiwifruit season and pre–Christmas period as it is the busiest time of the year.

Table 2: Site visit dates

Date	Time of the year
Tuesday 17 April 2019	School holiday
Thursday 17 May 2018	Kiwifruit season
Friday 1 June 2018	Kiwifruit season
Wednesday 12 December 2018	Pre-Christmas
Thursday 20 December 2018	Pre-Christmas

Table 3: Actions undertaken during each site visit

Time	Action
8 - 8.30am	Count freedom campers in Commerce Lane carpark
9-10am	Count vacant carparks and mark all cars parked in "all day"* carparks.
11am-12pm	Count vacant carparks
2-3pm	Count vacant carparks
3-3.30pm	Count vacant carparks. Count all cars parked in the "all-day"* carparks from 10am to 3.30pm.

Note:

* *"All day carparks" are carparks with no time restriction and include 143 carparks in Commerce Lane carpark, 11 carparks along Commerce Lane and 14 carparks in Boucher Ave carpark.*

3.2 Uptake of carparks

Table 4, which follows, illustrates the average number of carparks and mobility carparks available in the study area within three time slots. A complete set of the survey results is attached. **Attachment A**

Table 4: Average number of vacant carparks in the study area during site visits

Areas available for public parking	Average vacant carparks/Total number of carparks					
	9-10am		11am-12pm		2-3pm	
	All day	Time restricted	All day	Time restricted	All day	Time restricted
On-street parking in the study area						
Jellicoe St – Whakatane bound						
Boucher Ave/Jocelyn St	-	14/24		7/24		13/24
Jocelyn St/Main pedestrian crossing	-	2/6		1/6		0/6
Main pedestrian crossing/Palmer Pl	-	7/20		4/20		5/20
Palmer Pl/King St	-	5/13		5/13		6/13
Jellicoe St – Tauranga bound						
Tom Baikie Ln/Oxford St	-	5/19		5/19		6/19
Oxford St/Main pedestrian crossing	-	2/19		3/19		2/19
Main pedestrian crossing/Jocelyn St	-	0/6		0/6		1/6
Boucher Ave/Jocelyn St	-	11/26		8/26		11/26
Queen Street – East bound						
Boucher Ave/Jocelyn St	-	4/7		2/7		5/7
Jocelyn St/Oxford	-	19/41		16/41		21/41
Queen Street - West bound						
Oxford/Jocelyn St	-	17/38		15/38		13/38
Jocelyn St/Boucher Ave	-	3/5		2/5		3/5
Commerce Lane	1/10	-	1/10		2/10	
Jocelyn St						
Queen St/Jellicoe St	-	4/18		3/18		3/18
Jellicoe St/Commerce Ln	-	7/11		6/11		5/11
Oxford St (demarcated)	-	5/16		6/16		6/16
Palmer Place	-	2/11		3/11		2/11
Parking in Public carparks						
Boucher Ave	4/14	7/14	1/14	7/14	2/14	9/14
Commerce Lane	62/143	-	50/143		54/143	
New World**		12/30		10/30		13/30

a) Jellicoe Street

Vacant carparks between Jocelyn Street and Oxford Street (on both sides of Jellicoe Street) are limited throughout the day because of their central location and convenience.

The portion of Jellicoe Street between Jocelyn Street and Boucher Avenue has an average vacancy of 43%. The portion of Jellicoe Street to the east of Oxford Street has an average vacancy of 34%.

b) Other Streets Within the Study Area

Most of the carparks along the portion of Jocelyn Street between Queen Street and Jellicoe Street, are utilised from the early morning. These carparks are very convenient for people residing on the southern side of Jellicoe Street and are also used by customers of Te Puke Box Gym.

In contrast, the Jocelyn Street carparks on the northern side of Jellicoe Street have a 50% vacancy.

Queen Street is underutilised with a high vacancy rate of 43%.

Commerce Lane has 10 all-day carparks. At least 6 of the 10 carparks are utilised by employees and as a result are occupied for most of the day.

Due to its proximity to the retail area, the Heritage Walkway and Jubilee Park, the use of the Commerce Lane carparks for all day parking seems to be inappropriate. The carparks would be better used for time restricted parking and accordingly it is recommended they become P120s.

Palmer Place is well utilised (with a 20% vacancy rate) even though it's only a one-way street and only accessible from Jellicoe Street.

c) Public carparks

The all-day carparks in Boucher Ave carpark are well utilised. As per discussions with some of the occupants, these carparks are popular because they are in the shade during the afternoon. In contrast, the 14 time restricted carparks (which have no shade) are more than 50% vacant.

The Commerce Lane carpark has a high vacancy rate (40%). Between 8 and 23 of these carparks are utilised by self-contained vehicles, e.g. campervans and motorhomes. Some of the self-contained vehicles may leave after 9am, while an average of nine will utilise the carpark throughout the day.

The 30 public carparks in the New World carpark are also under-utilised with an average vacancy of 38%.

Council has finalised a lease with the owner of 86 Jellicoe Street (the property directly east of the Heritage Walkway) to provide an additional 12 carparks and two mobility parks. These carparks will become available to the public in February 2019.

d) Mobility carparks

There are 15 mobility carparks within the study area. These carparks are well spread and strategically located throughout the town centre, e.g. outside doctor consulting rooms, library and other medical facilities. As shown in Table 4, the mobility carparks are under-utilised. However, it is important to keep in mind that, within the Te Puke town centre, the mobility parking holders are the only people that pays for a parking permit.

4. Conclusion

The surveys have shown that the only time restricted carparks that have a vacancy of less than 10%, are the carparks along Jellicoe Street, between Jocelyn and Oxford Streets. The reason being that they are in the middle of the town centre and therefore very convenient. Most of the other time restricted carparks have a vacancy above 30%.

Research have shown that most successful town centres have:

- A parking vacancy of less than 5%.
- The majority carparks on the outer fringe of the town centre and within a 5 minute walk to the middle of the town centre.
- A quality urban environment that encourage people to spend more time within it than anticipated.

Professor Roelof Uytenbogaardt, a world renowned urban planner and architect used to say the following: "The question should not be whether there are enough parking for town centre customers? We should rather focus on what should be done to keep the carparks occupied" (1998-1999, personal communication).

I am also of the opinion that the newly leased parking area along the Heritage Walkway should only be temporary and should not replace the vision the community had for the urban space connecting Jellicoe Street with Jubilee Park.

ATTACHMENT A

Te Puke Parking Survey - 17 April 2018

Demarketed Parking Areas	Vacant carparks in area between 9 - 10am					Vacant carparks in area between 11am -12pm					Vacant carparks in area between 2 - 3pm				
	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability
Jellicoe St (Whakatane bound)															
Boucher Ave - Jocelyn St	-	-	13/24	-	1/2	-	-	11/24	-	2/2	-	-	15/24	-	2/2
Jocelyn St - main pedestrian crossing	-	-	1/6	-	-	-	-	1/6	-	-	-	-	1/6	-	-
Main pedestrian crossing - Palmer Pl	-	-	2/15	0/3	2/2	-	-	7/15	0/3	2/2	-	-	0/15	0/3	2/2
Palmer Pl - King St	-	-	4/13	-	-	-	-	8/13	-	-	-	-	9/15	-	-
Jellicoe St (Tauranga bound)															
Tom Baikie Ln - Oxford St	-	-	02/19	-	1/1	-	-	7/19	-	1/1	-	-	6/19	-	1/1
Oxford St - main pedestrian crossing	-	-	1/15	0/3	2/2	-	-	2/15	1/3	1/2	-	-	3/15	0/3	0/2
Main pedestrian crossing - Jocelyn St	-	-	0/6	-	-	-	-	0/6	-	-	-	-	1/6	-	-
Jocelyn St - Boucher Ave	-	3/5	8/14	0/7	2/2	-	0/5	7/14	1/7	0/2	-	2/5	7/14	1/7	2/2
Boucher Ave carpark	0	1/14	-	-	-	3/14	5/14	-	-	-	2/14	4/14	-	-	-
											-				
Jocelyn St															
Jellicoe - Queen St	-	5/17	-	1/1	2/2	-	1/17	-	1/1	1/2	-	3/17	-	1/1	2/2
Jellicoe - Commerce Ln	-	-	9/10	-	-	-	-	7/10	-	-	-		3/10	-	-
Oxford St	-	-	5/16	-	-	-	-	7/16	-	-	-	-	12/16	-	-
Queen St (east bound)															
Boucher Ave - Jocelyn St	-	2/7	-	-	1/1	-	2/7	-	-	1/1	-	6/7	-	-	1/1
Jocelyn St - Oxford St	-	21/43	-	-	1/1	-	16/43	-	-	1/1	-	22/43	-	-	0/1
Queen St (west bound)															
Oxford St - Jocelyn St	-	21/38	-	-	1/1	-	18/38	-	-	1/1	-	17/38	-	-	1/1
Jocelyn St - Boucher Ave	-	2/5	-	-	-	-	2/5	-	-	-	-	3/5	-	-	-
Commerce Lane															
Commerce Ln (Jocelyn St - Palmer Pl)	1/11	-	-	-	-	1/11	-	-	-	-	2/11	-	-	-	-
Commerce Carpark	45/142	-	-	-	-	69/142	-	-	-	-	63/142	-	-	-	-
New World carpark	-	4/30	-	-	-	-	4/30	-	-	-	-	8/30	-	-	-
Palmer Pl	-	-	1/11	-	0/1	-	-	2/11	-	1/1	-	-	2/11	-	1/1

Te Puke Parking Survey - 17 May 2018

Demarketed Parking Areas	Vacant car parks in area between 9 - 10am					Vacant car parks in area between 11am -12pm					Vacant car parks in area between 2 - 3pm				
	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability
Jellicoe St (Whakatane bound)															
Boucher Ave - Jocelyn St	-	-	15/24	-	2/2	-	-	5/24	-	2/2	-	-	18/24	-	2/2
Jocelyn St - main pedestrian crossing	-	-	2/6	-	-	-	-	1/6	-	-	-	-	0/6	-	-
Main pedestrian crossing - Palmer Pl	-	-	8/17	1/3	2/2	-	-	3/17	0/3	1/2	-	-	4/17	2/3	2/2
Palmer Pl - King St	-	-	0/13	-	-	-	-	5/13	-	-	-	-	6/13	-	-
Jellicoe St (Tauranga bound)															
Tom Baikie Ln - Oxford St	-	-	01/19	-	1/1	-	-	6/19	-	1/1	-	-	5/19	-	1/1
Oxford St - main pedestrian crossing	-	-	3/15	0/3	2/2	-	-	0/15	1/3	1/2	-	-	0/15	0/3	0/2
Main pedestrian crossing - Jocelyn St	-	-	1/6	-	-	-	-	2/6	-	-	-	-	2/6	-	-
Jocelyn St - Boucher Ave	-	3/5	6/14	2/7	2/2	-	0/5	10/14	0/7	0/2	-	0/5	5/14	0/7	2/2
Boucher Ave carpark	4/14	7/14	-	-	-	4/14	6/14	-	-	-	5/14	6/14	-	-	-
Jocelyn St															
Jellicoe - Queen St	-	3/17	-	1/1	2/2	-	1/17	-	0/1	2/2	-	2/17	-	1/1	1/2
Jellicoe - Commerce Ln	-	-	9/10	-	-	-	-	7/10	-	-	-	-	3/10	-	-
Oxford St	-	-	5/16	-	-	-	-	7/16	-	-	-	-	7/16	-	-
Queen St (east bound)															
Boucher Ave - Jocelyn St	-	4/7	-	-	1/1	-	3/7	-	-	0/1	-	4/7	-	-	1/1
Jocelyn St - Oxford St	-	22/43	-	-	1/1	-	19/43	-	-	1/1	-	9/43	-	-	0/1
Queen St (west bound)															
Oxford St - Jocelyn St	-	19/38	-	-	1/1	-	18/38	-	-	1/1	-	13/38	-	-	1/1
Jocelyn St - Boucher Ave	-	4/5	-	-	-	-	2/5	-	-	-	-	2/5	-	-	-
Commerce Lane															
Commerce Ln (Jocelyn St - Palmer Pl)	1/11	-	-	-	-	2/11	-	-	-	-	2/11	-	-	-	-
Commerce Carpark	62/142	-	-	-	-	41/142	-	-	-	-	52/142	-	-	-	-
New World carpark	-	12/30	-	-	-	-	11/30	-	-	-	-	10/30	-	-	-
Palmer Pl	-	-	4/11	-	1/1	-	-	2/11	-	1/1	-	-	3/11	-	1/1

Te Puke Parking Survey - 1 June 2018

Demarketed Parking Areas	Vacant car parks in area between 9 - 10am					Vacant car parks in area between 11am -12pm					Vacant car parks in area between 2 - 3pm				
	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability
Jellicoe St (Whakatane bound)															
Boucher Ave - Jocelyn St	-	-	17/24	-	2/2	-	-	16/24	-	2/2	-	-	18/24	-	2/2
Jocelyn St - main pedestrian crossing	-	-	1/6	-	-	-	-	0/6	-	-	-	-	1/6	-	-
Main pedestrian crossing - Palmer Pl	-	-	7/17	0/3	2/2	-	-	9/17	0/3	2/2	-	-	5/17	3/3	2/2
Palmer Pl - King St	-	-	8/13	-	-	-	-	6/13	-	-	-	-	8/13	-	-
Jellicoe St (Tauranga bound)															
Tom Balkie Ln - Oxford St	-	-	8/19	-	1/1	-	-	0/19	-	1/1	-	-	5/19	-	1/1
Oxford St - main pedestrian crossing	-	-	4/15	2/4	1/2	-	-	4/15	1/3	0/2	-	-	2/15	0/3	2/2
Main pedestrian crossing - Jocelyn St	-	-	0/6	-	-	-	-	0/6	-	-	-	-	0/6	-	-
Jocelyn St - Boucher Ave	-	2/5	10/14	5/7	2/2	-	1/5	9/14	0/7	1/2	-	3/5	11/14	2/7	2/2
Boucher Ave carpark	1/14	12/14	-	-	-	0/14	12/14	-	-	-	3/14	11/14	-	-	-
Jocelyn St															
Jellicoe - Queen St	-	5/17	-	1/1	1/2	-	4/17	-	1/1	2/2	-	5/17	-	0/1	2/2
Jellicoe - Commerce Ln	-	-	3/10	1/1	-	-	-	9/10	0/1	-	-	-	5/10	1/1	-
Oxford St	-	-	6/16	-	-	-	-	5/16	-	-	-	-	2/16	-	-
Queen St (east bound)															
Boucher Ave - Jocelyn St	-	3/7	-	-	1/1	-	3/7	-	-	1/1	-	4/7	-	-	1/1
Jocelyn St - Oxford St	-	19/43	-	-	1/1	-	20/43	-	-	1/1	-	22/43	-	-	0/1
Queen St (west bound)															
Oxford St - Jocelyn St	-	19/38	-	-	1/1	-	19/38	-	-	0/1	-	15/38	-	-	1/1
Jocelyn St - Boucher Ave	-	2/5	-	-	-	-	2/5	-	-	-	-	4/5	-	-	-
Commerce Lane															
Commerce Ln (Jocelyn St - Palmer Pl)	3/11	-	-	-	-	1/11	-	-	-	-	4/11	-	-	-	-
Commerce Carpark	65/142	-	-	-	-	64/142	-	-	-	-	59/142	-	-	-	-
New World carpark	-	12/30	-	-	-	-	11/30	-	-	-	-	12/30	-	-	-
Palmer Pl	-	-	2/11	-	0/1	-	-	3/11	-	1/1	-	-	3/11	-	0/1

Te Puke Parking Survey -12th December 2018

Demarketed Parking Areas	Vacant carparks in area between 9 - 10am					Vacant carparks in area between 11am -12pm					Vacant carparks in area between 2 - 3pm				
	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability
Jellicoe St (Whakatane bound)															
Boucher Ave - Jocelyn St	-	-	13/24	-	2/2	-	-	2/24	-	2/2	-	-	10/24	-	1/2
Jocelyn St - main pedestrian crossing	-	-	3/6	-	-	-	-	0/6	-	-	-	-	0/6	-	-
Main pedestrian crossing - Palmer Pl	-	-	11/17	0/3	2/2	-	-	3/17	1/3	0/2	-	-	2/17	2/3	1/2
Palmer Pl - King St	-	-	10/13	-	-	-	-	3/13	-	-	-	-	1/13	-	-
Jellicoe St (Tauranga bound)															
Tom Baikie Ln - Oxford St	-	-	4/19	-	1/1	-	-	3/19	-	1/1	-	-	8/19	-	1/1
Oxford St - main pedestrian crossing	-	-	2/15	0/4	0/2	-	-	4/15	0/4	1/2	-	-	3/15	0/4	0/2
Main pedestrian crossing - Jocelyn St	-	-	0/6	-	-	-	-	0/6	-	-	-	-	0/6	-	-
Jocelyn St - Boucher Ave	-	0/5	5/14	0/7	2/2	-	0/5	7/14	4/7	1/2	-	4/5	9/14	4/7	1/2
Boucher Ave carpark	1/14	13/14	-	-	-	1/14	7/14	-	-	-	0/14	10/14	-	-	-
Jocelyn St															
Jellicoe - Queen St	-	4/17	-	0/1	2/2	-	3/17	-	1/1	2/2	-	1/17	-	0/1	1/2
Jellicoe - Commerce Ln	-	-	7/10	1/1	-	-	-	6/10	1/1	-	-	-	6/10	1/1	-
Oxford St	-	-	4/16	-	-	-	-	3/16	-	-	-	-	5/16	-	-
Queen St (east bound)															
Boucher Ave - Jocelyn St	-	7/7	-	-	1/1	-	1/7	-	-	1/1	-	6/7	-	-	1/1
Jocelyn St - Oxford St	-	16/43	-	-	0/1	-	12/43	-	-	1/1	-	20/43	-	-	1/1
Queen St (west bound)															
Oxford St - Jocelyn St	-	15/38	-	-	1/1	-	8/38	-	-	1/1	-	10/38	-	-	1/1
Jocelyn St - Boucher Ave	-	5/5	-	-	-	-	2/5	-	-	-	-	2/5	-	-	-
Commerce Lane															
Commerce Ln (Jocelyn St - Palmer Pl)	2/11	-	-	-	-	2/11	-	-	-	-	4/11	-	-	-	-
Commerce Carpark	46/142	-	-	-	1/1	41/142	-	-	-	1/1	64/142	-	-	-	-
New World carpark	-	17/30	-	-	-	-	14/30	-	-	-	-	20/30	-	-	-
Palmer Pl	-	-	4/11	-	1/1	-	-	5/11	-	1/1	-	-	3/11	-	1/1

Te Puke Parking Survey - 20th December 2018

Demarketed Parking Areas	Vacant carparks in area between 9 - 10am					Vacant carparks in area between 11am -12pm					Vacant carparks in area between 2 - 3pm				
	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability	All day	>60min	60	< 60min	Disability
Jellicoe St (Whakatane bound)															
Boucher Ave - Jocelyn St	-	-	11/24	-	2/2	-	-	0/24	-	2/2	-	-	3/24	-	0/2
Jocelyn St - main pedestrian crossing	-	-	1/6	-	-	-	-	0/6	-	-	-	-	0/6	-	-
Main pedestrian crossing - Palmer Pl	-	-	3/17	2/3	1/2	-	-	0/17	0/3	2/2	-	-	2/17	0/3	0/2
Palmer Pl - King St	-	-	2/13	-	-	-	-	5/13	-	-	-	-	7/13	-	-
Jellicoe St (Tauranga bound)															
Tom Baikie Ln - Oxford St	-	-	10/19	-	1/1	-	-	2/19	-	0/1	-	-	7/19	-	0/1
Oxford St - main pedestrian crossing	-	-	0/15	1/4	1/2	-	-	1/15	0/4	0/2	-	-	0/15	0/4	0/2
Main pedestrian crossing - Jocelyn St	-	-	0/6	-	-	-	-	0/6	-	-	-	-	0/6	-	-
Jocelyn St - Boucher Ave	-	4/5	4/14	2/7	2/2	-	1/5	0/14	0/7	0/2	-	3/5	3/14	0/7	2/2
Boucher Ave carpark	0/14	0/14	-	-	-	1/14	10/14	-	-	-	0/14	12/14	-	-	-
Jocelyn St															
Jellicoe - Queen St	-	0/17	-	1/1	1/2	-	2/17	-	0/1	0/2	-	2/17	-	1/1	2/2
Jellicoe - Commerce Ln	-	-	/10	1/1	-	-	-	1/10	1/1	-	-	-	3/10	1/1	-
Oxford St	-	-	/16	-	-	-	-	7/16	-	-	-	-	7/16	-	-
Queen St (east bound)															
Boucher Ave - Jocelyn St	-	3/7	-	-	1/1	-	3/7	-	-	1/1	-	4/7	-	-	1/1
Jocelyn St - Oxford St	-	18/43	-	-	0/1	-	14/43	-	-	1/1	-	12/43	-	-	1/1
Queen St (west bound)															
Oxford St - Jocelyn St	-	12/38	-	-	1/1	-	13/38	-	-	1/1	-	11/38	-	-	1/1
Jocelyn St - Boucher Ave	-	2/5	-	-	-	-	3/5	-	-	-	-	3/5	-	-	-
Commerce Lane															
Commerce Ln (Jocelyn St - Palmer Pl)	0/11	-	-	-	-	1/11	-	-	-	-	1/11	-	-	-	-
Commerce Carpark	56/142	-	-	-	1/1	35/142	-	-	-	1/1	32/142	-	-	-	1/1
New World carpark	-	21/30	-	-	-	-	13/30	-	-	-	-	13/30	-	-	-
Palmer Pl	-	-	0/11	-	1/1	-	-	4/11	-	1/1	-	-	0/11	-	0/1

Western Bay of Plenty District Council
Operations & Monitoring Committee
Review of Te Puke Main Street Project

Purpose

As per the minutes of the OP9, held on 15 February 2018, staff were requested to monitor and report back on the Te Puke Main Street Project; specifically the 4 items below:

1. Landscaping and vegetation on Main Street
2. Te Puke Main Street Plaza between the Heritage Walkway and the pedestrian crossing
3. Traffic Impact Assessment
4. Parking (refer to separate report).

Note: this report is being presented to the Committee, it has not been referred to the Te Puke Community Board. The Committee could receive the report and then refer it to the Community Board for comment prior to decision making.

Recommendation

1. ***THAT the Engineering and Special Projects Manager's report dated 13 February 2019 and titled "Review of Te Puke Main Street Project" be received.***
2. ***THAT the report relates to issues that is considered to be of low significance in terms of Council's Significance and Engagement Policy.***
3. ***THAT the committee notes that there will be replacement of vegetation at intersections to increase visibility for motorists and pedestrians.***
4. ***THAT either***
   Option 4.1 - The Te Puke Main Street Plaza remains as constructed.

   OR

   Option 4.2 - Te Puke Main Street Plaza area be reduced by 80m² with the construction of two or three additional carparks at an estimated costs of $90,000.

   OR

   Option 4.3 – A level platform be constructed on the eastern section (150m²) of the plaza in either pavers or timber decking, at an indicative cost of $70-$100,000.
5. ***THAT the Committee notes the traffic data for Te Puke Highway, that there is only minor congestion within Te Puke and requests an update on traffic volumes and associated issues in the first quarter 2020.***

Raj Sumeran
Engineering and Special Projects Manager

Approved

Gary Allis
Deputy Chief Executive

1. Background

The Te Puke Main Street upgrade works were constructed over a two-year period from 2015-2018. The works included public consultation on the design, refinement and endorsement through the Project Control Group (PCG) and the Te Puke Community Board with final approval by the Operations Committee.

The outcome has both been supported and criticised. There have been public meetings, presentations to the Operations and Monitoring Committee, independent research by Key Research and other researchers arranged by the Te Puke business owners.

The former PCG group continued through the construction and post construction stages in providing an operations link to the business community.

There were a number of issues raised in regards to the Te Puke Main Street upgrade which included loss of carparks, the new landscaping and vegetation through the main centre, the new Te Puke Main Street Plaza between the Heritage Walkway and the impact of traffic through Te Puke following the opening of the Tauranga Eastern Link motorway. This report does not deal with parking (separate report) but deals with the landscape and vegetation, the Heritage Plaza and the traffic flows through the Te Puke CBD area and the entrances to the township.

At the Operations and Monitoring Committee meeting (OP9) on 15 February 2018 staff were requested to monitor on the performance of the Te Puke main street upgrade over a 12 month period and report back to the committee on their findings on the first quarter of 2019 (this report).

2. Main Street Landscaping and Vegetation

Council staff in conjunction with WestLink obtained the number of contact centre requests (CCR's) data pertaining to Jellicoe Street (Te Puke CBD) and both entranceways to the town between the periods of 5 June 2017 – 31 January 2019. The CCR's were mainly on the new landscape and vegetation plantings and public feedback. There were 43 CCR's received and recorded in the CCR database.

We analysed the 43 CCR's and identified the following information:

Subcategory	No of CCRs	Comment
Maintenance	2	Asking for trimming of vegetation for existing plantings
Plant Species etc.	3	Commenting on species choice e.g. thinking Jasmine is pest plant
Safety/Visibility	34	Complaints about excessive growth blocking paths, obscuring vision at roundabouts, intersections, pedestrian crossings.
Furniture	2	Metal studs coming out of pedestrian crossing, seat replacement, wooden fence too high.
Vandalism	2	Plants pulled out of ground
TOTAL	**43**	

The stand out complaint (yellow highlight) relates to overgrown vegetation obscuring sightlines at roundabouts, some intersections and pedestrian crossings and pathways.

Location of the complaints are shown on an aerial photograph attached.

Attachment A

Most common issues and suggestions are around the following:

- Dunlop Rd/Jellicoe intersection – these two intersections have the most complaints and are considered dangerous from a path user and a vehicles perspective. Require removal of larger plants at intersection and sides of pathways. These could be replaced with some low growing plants.
- Atuaroa Ave /Jellicoe intersection – as for Dunlop and is worse.
- Pedestrian Crossings in CBD – wholesale removal of lomandra in the median island and replaced with low growing plants or put back in grass. Annual beds are also difficult and expensive to maintain.
- Oxford St, Jocelyn St, Boucher Ave roundabouts (RABs) – there are only isolated pockets of problem vegetation at roundabouts so small amounts of removal. Some drivers expect to be able to see through roundabouts, this is not the design intention but sight lines need to be kept clear.
- General CBD – some flaxes and coprosma, jasmine are now needing occasional trimming – may be 2x per year to keep them back off kerbs and footpaths.
- Isolated areas e.g. outside Hospice Shop (opposite Dunlop St) and RT bay into Our Place will need larger plants removed.
- 6 intersections if allowed to mature. Should be transplanted in winter.

Based on the findings from the CCR's the Council staff consider that these items are not significant and mainly relate to maintenance and operational matters and can be dealt with by maintenance works and by appropriate plantings and remedial measures.

The alterations to vegetation to improve sight lines will occur in autumn. They will mainly focus on the 2 or 3m lead into the intersection. Note the vegetation also assists in reducing vehicle speeds.

There has also been positive feedback around the vegetation and how good it is looking. There is no suggestion to undertake major changes.

3. Te Puke Main Street Plaza

The Puke Main Street Plaza between the Heritage Walkway and the pedestrian crossing were modified after the initial upgrading work as follows:

- Hardwood bench (2.0m X 2.0m) with staggered 200mm X 200mm slats in the middle of the plaza at the cost of $9,000 installed.
- Two additional "L" shaped seats 2.8m long along the plaza area at the cost of $13,876 installed.

- Upright timber bollards cut by 200mm at the pedestrian crossing ends and tapered to reach horizontal with the fence height. These were done to improve sightlines at the middle pedestrian crossing.

- In addition to the above, three other options were presented to the Operations & Monitoring Committee meeting on the 15 February 2018 to modify the plaza area.

The three options were:

1. The Te Puke Main Street Plaza remains status quo. **Attachment B1**

2. Reduce the length of the plaza area, rearrange the seating and plantings and introduce three additional carparks on Jellicoe St. Cost - $90,000. **Attachment B2**

3. Retain the plaza, create a flat seating area (either paved or timber), construct steps, and rearrange the seating and plantings at an estimated cost of $70-$100,000. **Attachment B3**

The options were debated by the Operations & Monitoring Committee on 15 February 2018 and the resolution was made to retain the plaza area and to review in the first quarter of 2019 after one year's operation.

From our search in the CCR, we have not identified any feedback (positive or negative) from the Te Puke community on the existing plaza area. We also have no records on the utilisation of the plaza area for public events etc.

A suggestion has been by the Te Puke Economic Development Group (TPEDG) to overlay the existing plaza with a timber platform so the community can use for holding events and displays. We have not fully investigated this option, however, the cost of this could be in the order of $70-$100,000. **Attachment B3**

A sculpture in the plaza area has also been discussed but the details has not been investigated or costed for this report.

4. Traffic Impact Assessment

For this report, we identified five traffic counting sites on the Te Puke Highway to assess the average daily traffic flows (ADT) through the Te Puke Main Street and both sides of the CBD area. The main reason for the counts were to assess what the traffic volumes were prior to the opening of the TEL, the current traffic volumes and time projection to determine when the current traffic volumes are likely to reach the traffic volumes prior to the opening of the TEL.

The five traffic counting sites are shown on the google map as sites 38, 39, 40, 41 and 42. **Attachment C**

Traffic Count Summary (*Recommendation 5*)

Count Station	Location	Pre TEL 2014	Current 2018/19
40.	Te Puke Highway (East No 3 Road)	18714 (Dec 14)	13819
39.	Te Puke Highway Eastbound (Near Jocelyn Street)	9384 (Dec 11)	8024
41.	Te Puke Highway Westbound (Near Jocelyn Street)	9384 (Dec 11)	8930
38.	Te Puke Highway (West of No 1 Road)	19748 (Dec 14)	15887
42.	Te Puke Highway (East No 1 Road)	16743 (Dec 14)	14105

For example, at site 38, the traffic volumes through Te Puke prior to the opening of the TEL was approximately 19,748 vpd (1.7% growth) and currently at 15,887 vpd. It is forecasted to reach similar traffic volumes as prior to the opening of the TEL by 2024.

The data between 2005 to Jan 2019 was previously managed by NZTA and handed to the WBOPDC after the Te Puke Highway revocation. Trend lines for sites 39, 40, 41, and 42 are all subjected to seasonal variation as less than three counts were gathered (i.e. a full year of 3 monthly cycles have not been completed yet).

Our traffic assessment did not concentrate on any particular intersection or the CBD area for any detailed traffic movements, queues or delays etc.

We have not focussed on the pedestrian counts or changes to the existing pedestrian crossings in Te Puke town. Our assessment is predominantly focused on traffic volumes rather than traffic densities as we consider that apart from the morning and afternoon peaks, the average traffic volumes are below the levels prior to the opening of the TEL.

With the new counting stations, we do not have sufficient and accurate data at this stage to analyse the traffic flows and congestion in Te Puke.

We have only made some traffic growth assumptions based on the estimated traffic data and the limited actual counts so the accuracy of the growth projections can only be confirmed once we have more data.

The graphs in attachment C also shows the 7 day count plots, 24 hour traffic flows and linear trend lines for traffic growth for each counting sites.

Community Feedback on Congestion

- Mid afternoon peak, No 1 Road area westbound. The data shows that this peak occurs but is lower than morning peak.
- No 3 Road morning peak at roundabout.
- Minor delays on Jellicoe Street at the intersections.
- Minor congestion occurring when pack house shifts change and the normal morning and evening commuter traffic.

From this analysis, we consider that doing a detail study of traffic flows through Te Puke is not warranted at this stage but can be undertaken in another year's time when we have collected more data to do a detail analysis.

Overall, it is considered that the traffic flows in Te Puke are reasonable, there is limited congestion and delays for short periods.

5. Significance and Engagement

The Local Government Act 2002 requires a formal assessment of the significance of matters and decisions in this report against Council's Significance and Engagement Policy. In making this formal assessment there is no intention to assess the importance of this item to individuals, groups, or agencies within the community and it is acknowledged that all reports have a high degree of importance to those affected by Council decisions.

The Policy requires Council and its communities to identify the degree of significance attached to particular issues, proposals, assets, decisions, and activities.

6. Engagement, Consultation and Communication

Interested/Affected Parties	Completed/Planned Engagement/Consultation/Communication
Name of interested parties/groups	Te Puke Project Control Group Te Puke Community Board
Tangata Whenua	
General Public	Te Puke Community

This report is being presented to the Committee without feedback from the Te Puke Community Board. The Committee may wish to refer it to the Community Board for comment.

7. Issues and Options Assessment

Option 4.1 - Te Puke Main Street Plaza **The Te Puke Main Street Plaza remains as constructed**	
Assessment of option for advantages and disadvantages taking a sustainable approach	This option to leave the Main Street Plaza as it is will not disrupt the community and no costs involved.
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	Nil cost
Option 4.2 – Te Puke Main Street Plaza **Te Puke Main Street Plaza be reduced by 80m² with the construction of two or three additional carparks at an estimated cost of $90,000.**	
Assessment of option for advantages and disadvantages taking a sustainable approach	This option will increase the number of carparks. There will be financial implications and disruption to the Te Puke community.
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	$90,000
Option 4.3 – Te Puke Main Street Plaza **A level platform be constructed on the eastern side of the plaza in either pavers or timber decking at an estimated cost of $70-100,000.**	
Assessment of option for advantages and disadvantages taking a sustainable approach	This option will change the character and look of the Main Street Plaza and there are costs associated with the project and cause disruption to the community.
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	$70-100,000

8. Statutory Compliance

This report meets:

- Legislative requirements/legal requirements
- Current council plans/policies/bylaws
- Regional/national policies/plans.

9. Funding/Budget Implications

Budget Funding Information	Relevant Detail
Te Puke Main Street Upgrade	Any significant changes to the scheme will have to be sourced from any remaining budget of the Te Puke Main Street/TEL revocation budget.

LEGEND - AS BUILT

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- NEW STORMWATER PIPE
- NEW UNDERGROUND POWER DUCT
- NEW TIMBER FENCE / SCREEN
- NEW IRRIGATION PIPES
- EXISTING KERB AND CHANNEL
- DEMOLISHED KERB AND CHANNEL
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- BENCH SEAT
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NOTES

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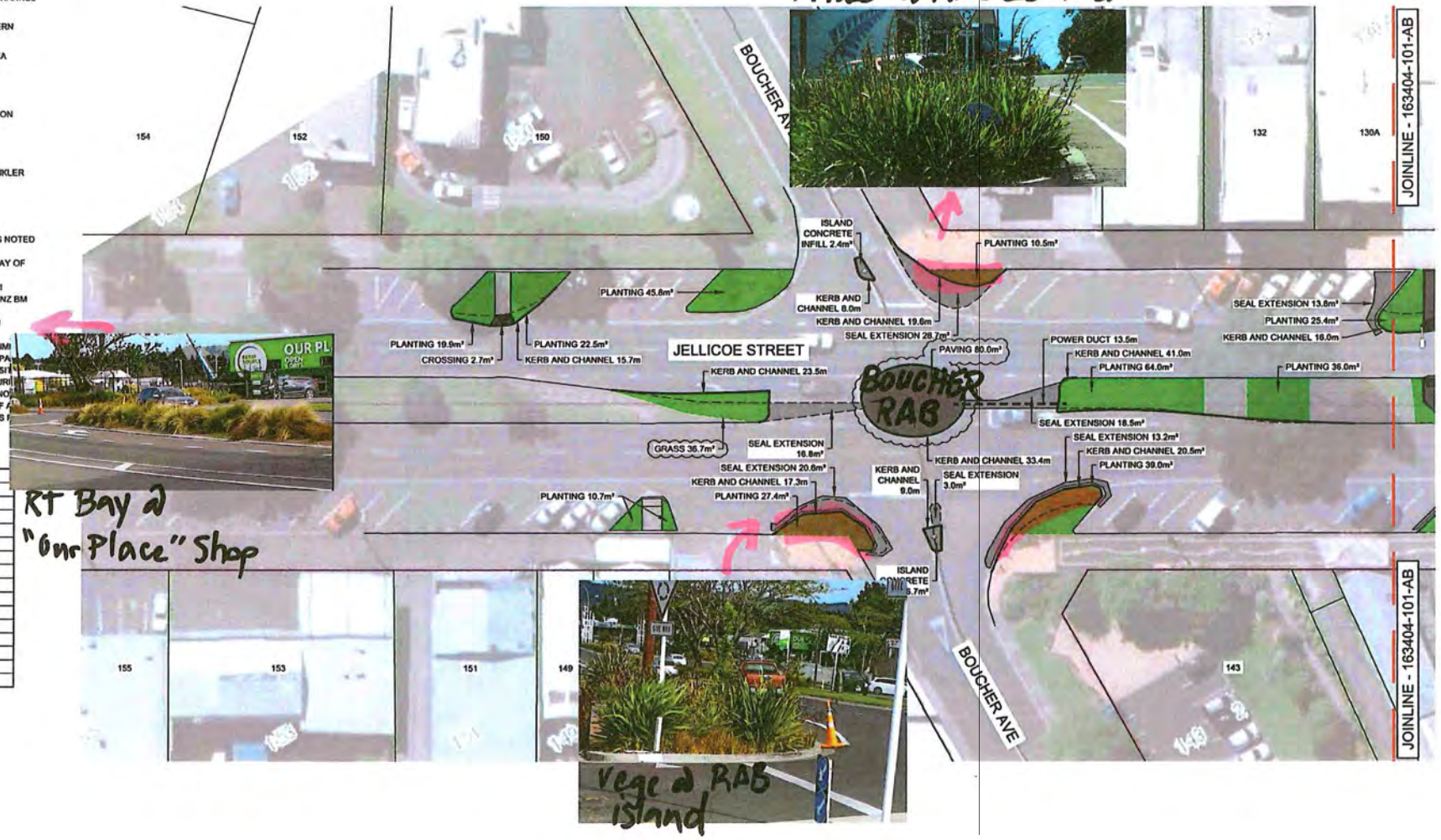
4. BOUNDARIES NOT FOR BUILDING DESIGN PURPOSES.
5. EXISTING SERVICE POSITIONS AND ALIGNM MAY HAVE BEEN OBTAINED FROM THIRD PA RECORDS AND SHOULD BE VERIFIED ON SI PRIOR TO COMMENCEMENT OF ANY FUTURI WORKS. LYSAGHT CONSULTANTS DOES NO ANY WAY GUARANTEE THE ACCURACY OF A UNDERGROUND SERVICE SHOWN ON THIS

As Built Quantities		
Feature	Quantity	Units
Paving (Internal)	1403.5	m²
Paving (Border)	166.5	m²
Footpath seal	21.1	m²
Fence (Timber)	89.2	m
Kerb & Channel	714.1	m
Island conc. infill	14.3	m³
Seal extension	255.3	m²
Conc. crossings	57.1	m³
Benchseats	9	ea
Rubbish bins	12	ea
Street lights	6	ea
Bike Racks	3	ea
Irrigation pipes	1576	m
Pop up sprinkler	8	ea



AS BUILT

No.	Date	Revision Details	By
C	23/05/17	MINOR AMENDMENTS	JC
B	17/05/17	PLANTING AREAS AND IRRIGATION LINES ADDED	JC
A	09/05/17	AS BUILT	JC

Drawn: JC | Signed | Date: 09/05/17
Designed | Signed | Date
Approved | Signed | Date

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19 Totara St, Mount Maunganui 3116 Ph 07 578 8798 www.lysaght.net.nz

Project: WESTERN BAY OF PLENTY
TE PUKE TOWN CENTRE REDEVELOPMENT
TE PUKE

Drawing Title: AS BUILT PLAN
SHEET 1 OF 4

Project No. 163404
Scale (A3) 1:500
Drawing No. 163404-100-AB
Rev. C

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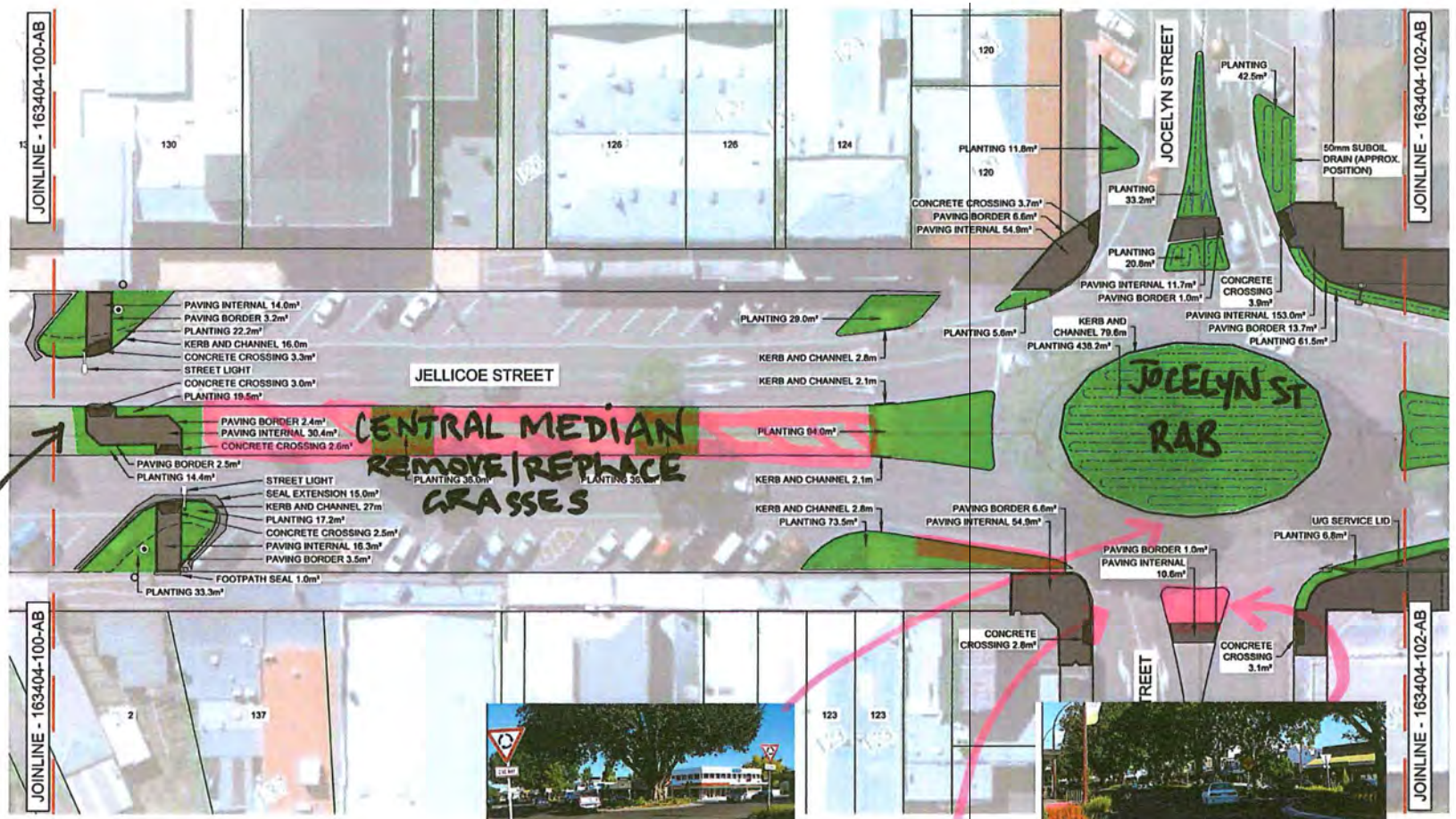

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Sheet 2 of 4

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Drawing Title: AS BUILT PLAN SHEET 3 OF 4

Project No. 163404
Scale (A3) 1:500
Drawing No. 163404-102-AB
Rev. C

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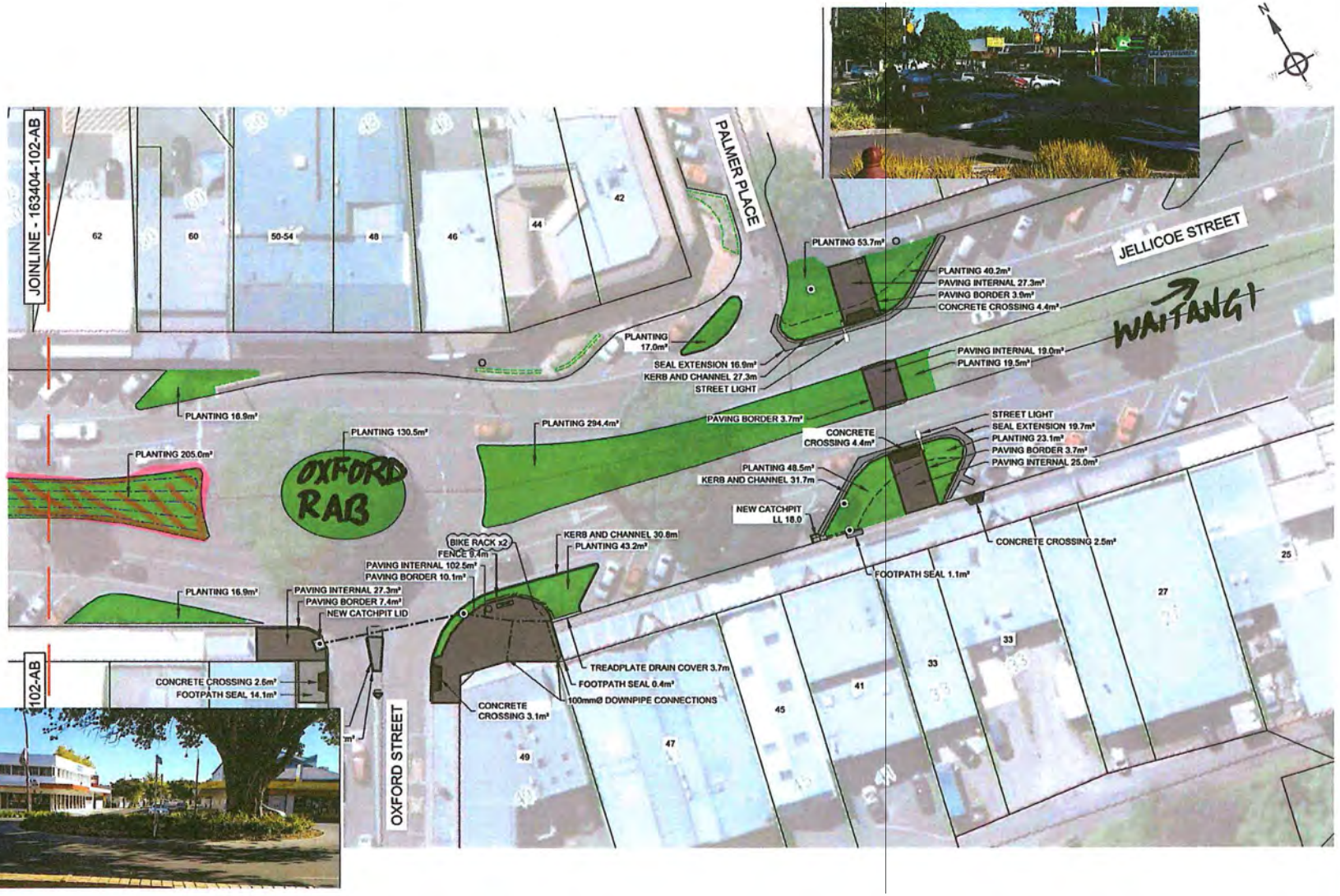

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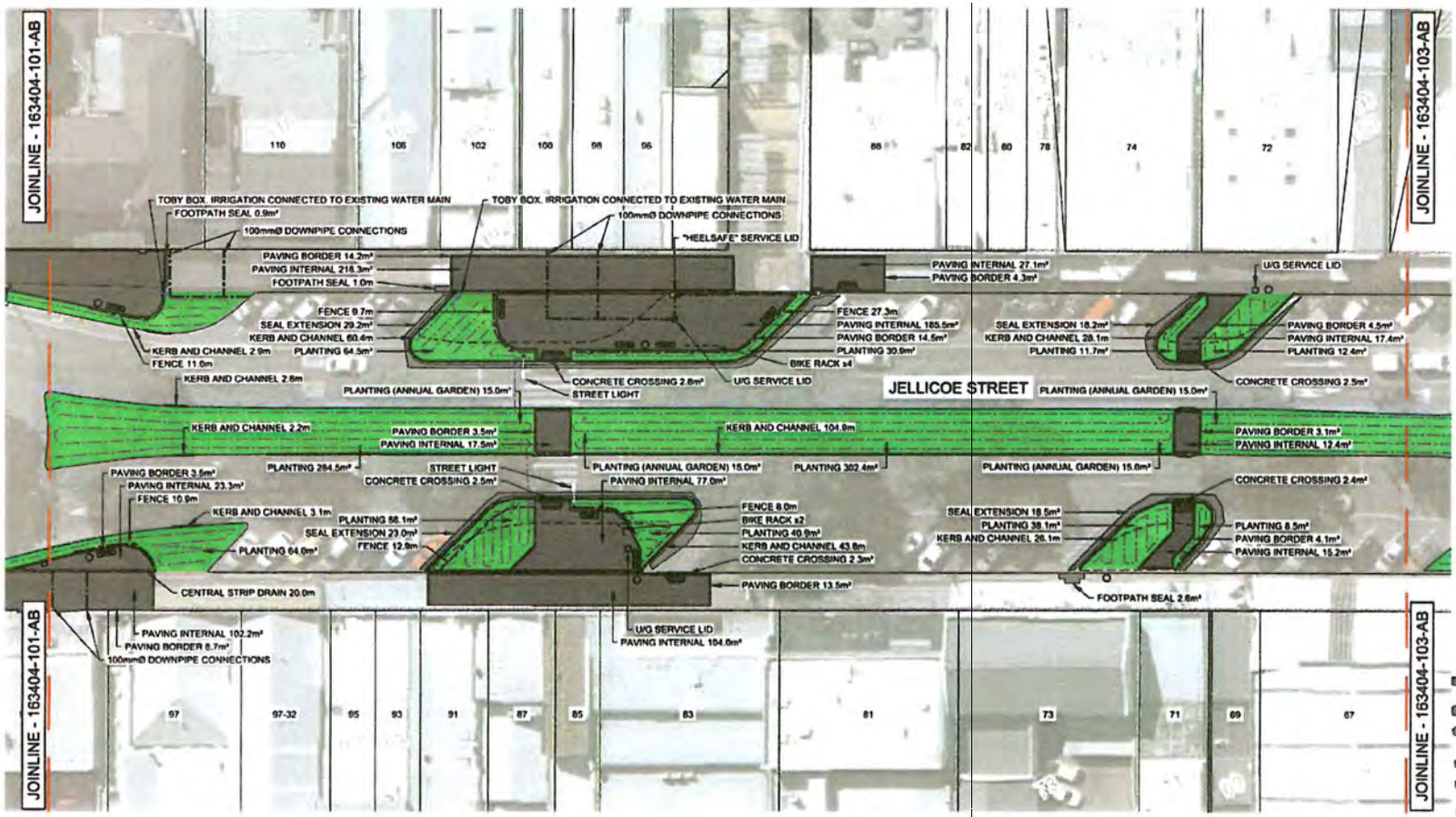

No	Date	Revision Details	By
D	16/06/17	ADDITIONAL IRRIGATION LINES ADDED	JC
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B	17/05/17	PLANTING AREAS AND IRRIGATION LINES ADDED	JC
A	09/05/17	AS BUILT	JC

	Signed	Date
Drawn: JC		09/05/17
Designed		
Approved		

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SHEET 3 OF 4

AS BUILT

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Rev D

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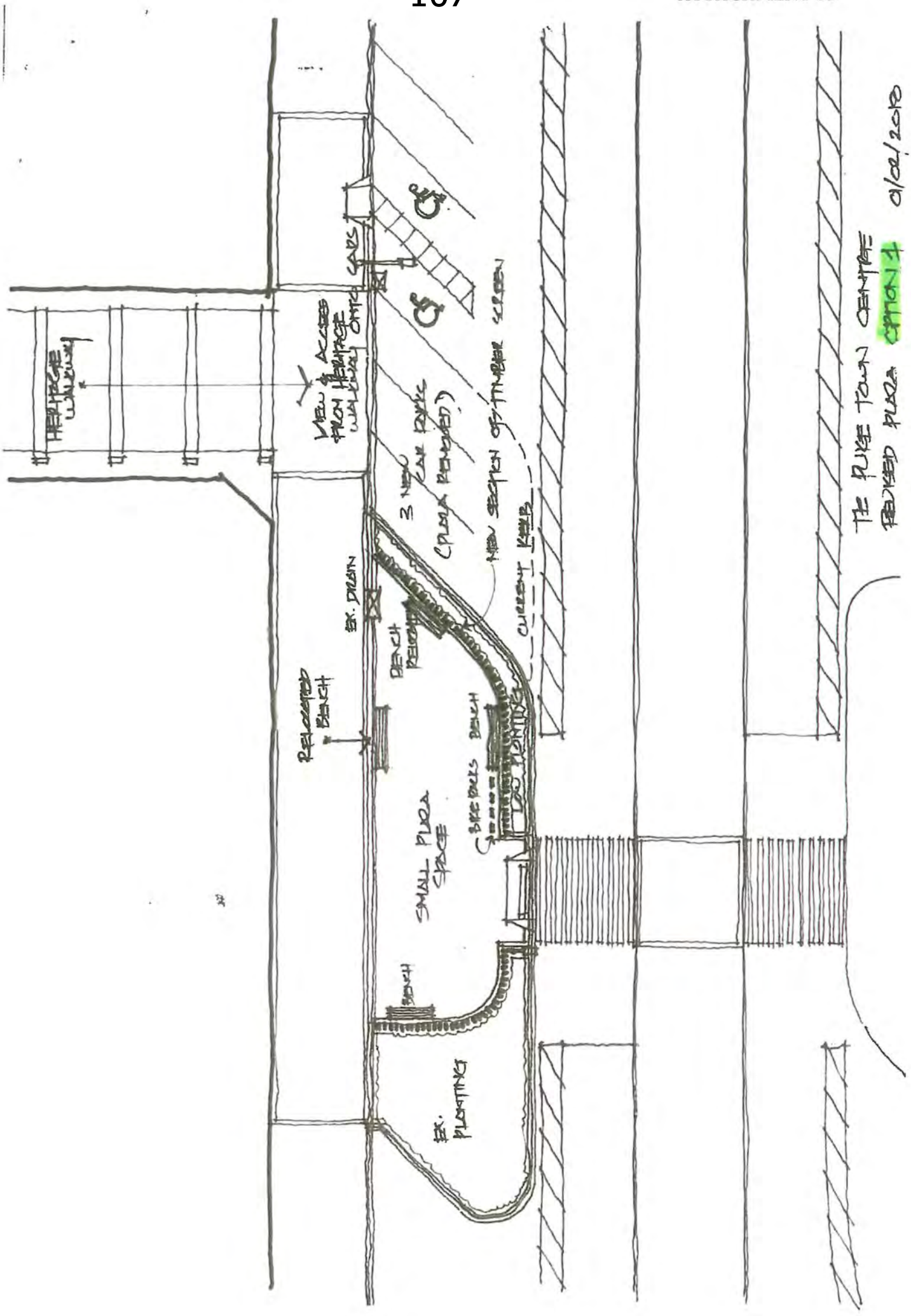
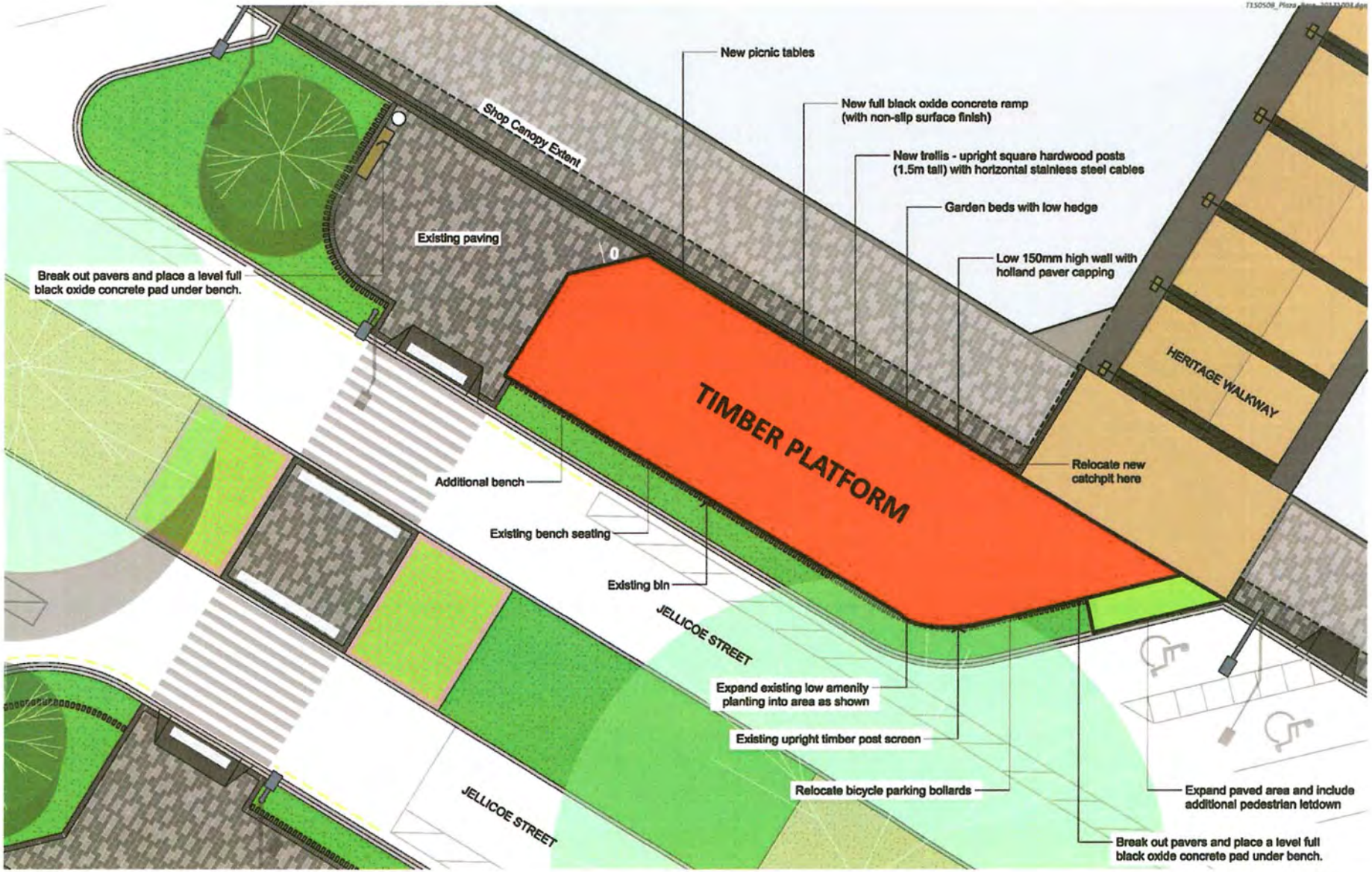
ATTACHMENT B


THE RUKE TOWN CENTRE
REVISED PLAZA OPTION 4
9/04/2018
NEW SECTION OF TIMBER SCREEN
CURRENT KERB
RELOCATED BENCH
SMALL PLAZA SPACE
BENCH
PLANTING



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Scale: 1:125 @ A3

TE PUKE TOWN CENTRE UPGRADE

Central Crossing Plaza Space - Alternative Design

Date: 09 October 2017 | Revision: 0 |

Plan prepared for Western Bay of Plenty District Council by Boffa Miskell Limited

Project Manager: bryan.samson@boffamiskell.co.nz | Drawn: BSa | Checked: MHu

Te Puke Highway

Traffic Count Analysis

Te Puke CBD Area (NO 3 ROAD to NO 1 ROAD)

Prepared by: Chris Cummings 14/02/2019

TE PUKE HIGHWAY – BACKGROUND

- Traffic Estimate and Count data sourced from RAMM
- Traffic Counting Sites:
  - Details of the road and location are shown on each graph
  - The Counting sites are counted as part of a 3monthly cycle
    - Nov-Dec-Jan, Feb-Mar-Apr, May-Jun-Jul, Aug-Sep-Oct
    - Count Site 38 was always part of 3monthly cycle since start of contract Nov 2014, however there were inconsistent counts up to 2017. Since 2017 it has been counted every 3months (Jan 18, Apr 18, Jun 18, Sep 18, Dec 18)
    - Further to this, count site 39, 40, 41, 42 were only added to the 3 monthly count cycle since the period Aug-Sep-Oct 2018. So their first recordings were end of September 2018.
  - The below table shows when they were last counted and for what period.(i.e the latest datapoint on each graph)

Site	Counter Install Date	Counter Removal End Date	7day count period	Direction
38	Thurs 6/12/2018	Fri 14/12/2018	Fri 07/12/2018 00:00 to Fri 14/12/2018 00:00	Both Directions (Eastbound towards Paengaroa, and Westbound towards Tauranga)
39	Wed 12/12/2018	Sat 22/12/2018	Thurs 13/12/2018 00:00 to Thurs 20/12/2018 00:00	Eastbound only towards Paengaroa
40	Sat 22/12/2018	Tue 08/01/2019	Sun 23/12/2018 00:00 to Sun 30/12/2018 00:00	Both Directions (Eastbound towards Paengaroa, and Westbound towards Tauranga)
41	Wed 12/12/2018	Sat 22/12/2018	Thurs 13/12/2018 00:00 to Thurs 20/12/2018 00:00	Westbound only towards Tauranga
42	Thurs 6/12/2018	Fri 14/12/2018	Fri 07/12/2018 00:00 to Fri 14/12/2018 00:00	Both Directions (Eastbound towards Paengaroa, and Westbound towards Tauranga)

- Assumed 31/10/2015 as TEL Bypass implementation date
  - to allow initial embedding in of traffic and to coincide with gap in count and estimate data

TE PUKE HIGHWAY – METHODOLOGY 1 of 2

- Map locations of Control Sites on Google maps basemap
- Extract Estimate and Count data from RAMM (Jan 2005 to Jan 2019)
  - Only had estimate data (no counts) between 2005 and 2016, as Te Puke Highway was previously managed by NZTA. WestLink nor WBOPDC have access to any further historical estimates or counts other than what I have extracted and reported from RAMM.
  - For Count Site 39 (eastbound carriageway), there were no estimates in RAMM between 2005 and 2016. A decision was made to use the same count data as count site 41 (westbound carriageway) so that an estimate could be used to determine the pre bypass ADT for this site. This is noted on the site 39 graphs.
- Determine linear trend linear using a simple regression method for both pre and post bypass.
  - $Y(t) = \alpha + \beta t$, where t is the time index. The parameters alpha and beta (the "intercept" and "slope" of the trend line). In this case t = count date which is plotted on x axis.
  - Trendlines for sites 39, 40, 41, 42 are all subjected to seasonal variation, as less than 3 counts were gathered (i.e a full year of 3 monthly cycles has not been completed). Only count site 38 had more than 3 data points to provide any meaningful forecasting. Ideally, there would be at least 2 years worth of data (i.e each site counted for each season at least twice)

TE PUKE HIGHWAY – METHODOLOGY 2 of 2

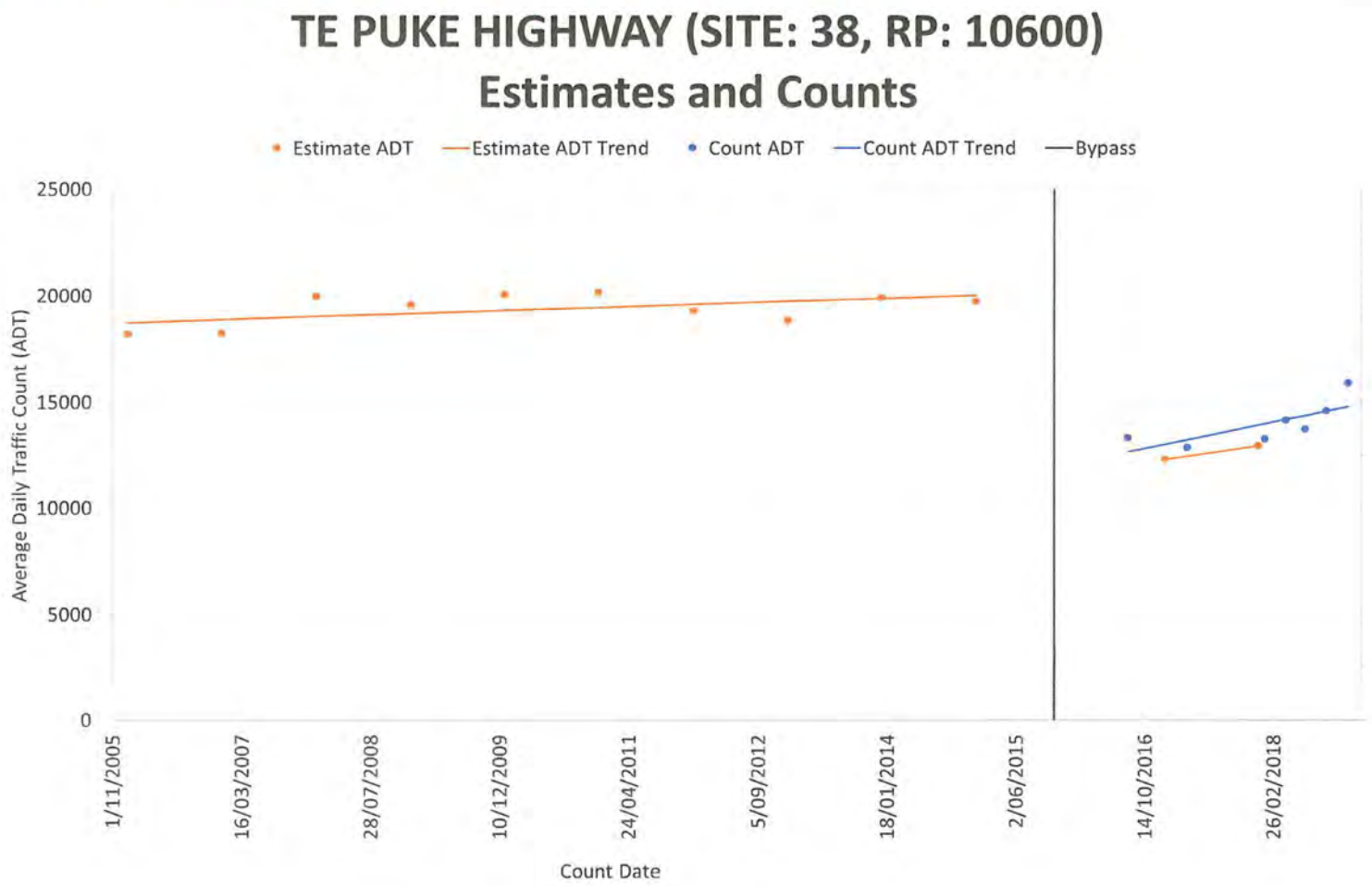
- For Estimate and Count graphs;
  - Plot both estimates and counts, and include line for bypass implementation date
  - Plot calculated trend line for pre and post bypass
- For forecast graph;
  - Using the calculated linear trend line, extrapolate until the increase in post bypass traffic is greater than the pre bypass estimate.
  - Count site 38 was chosen for this forecasting as it is the only count site which had more than 3 data points post bypass. All other sites did not have enough data points to provide a meaningful forecast as they were still subjected to seasonal variation.
- For weekly and hourly graphs
  - Source 7 Day hourly data by direction (eastbound and westbound) from each count site for most recent count period (Nov 2018 to Jan 2019).
  - Plot each direction hourly counts by day
  - Plot each direction hourly counts by 7 day average
  - Plot each direction

TE PUKE HIGHWAY – TRAFFIC CONTROL SITES MAP

ATTACHMENT C

Prepared by: Chris Cummings 14/02/2019

TE PUKE HIGHWAY – TRAFFIC ESTIMATES AND COUNTS



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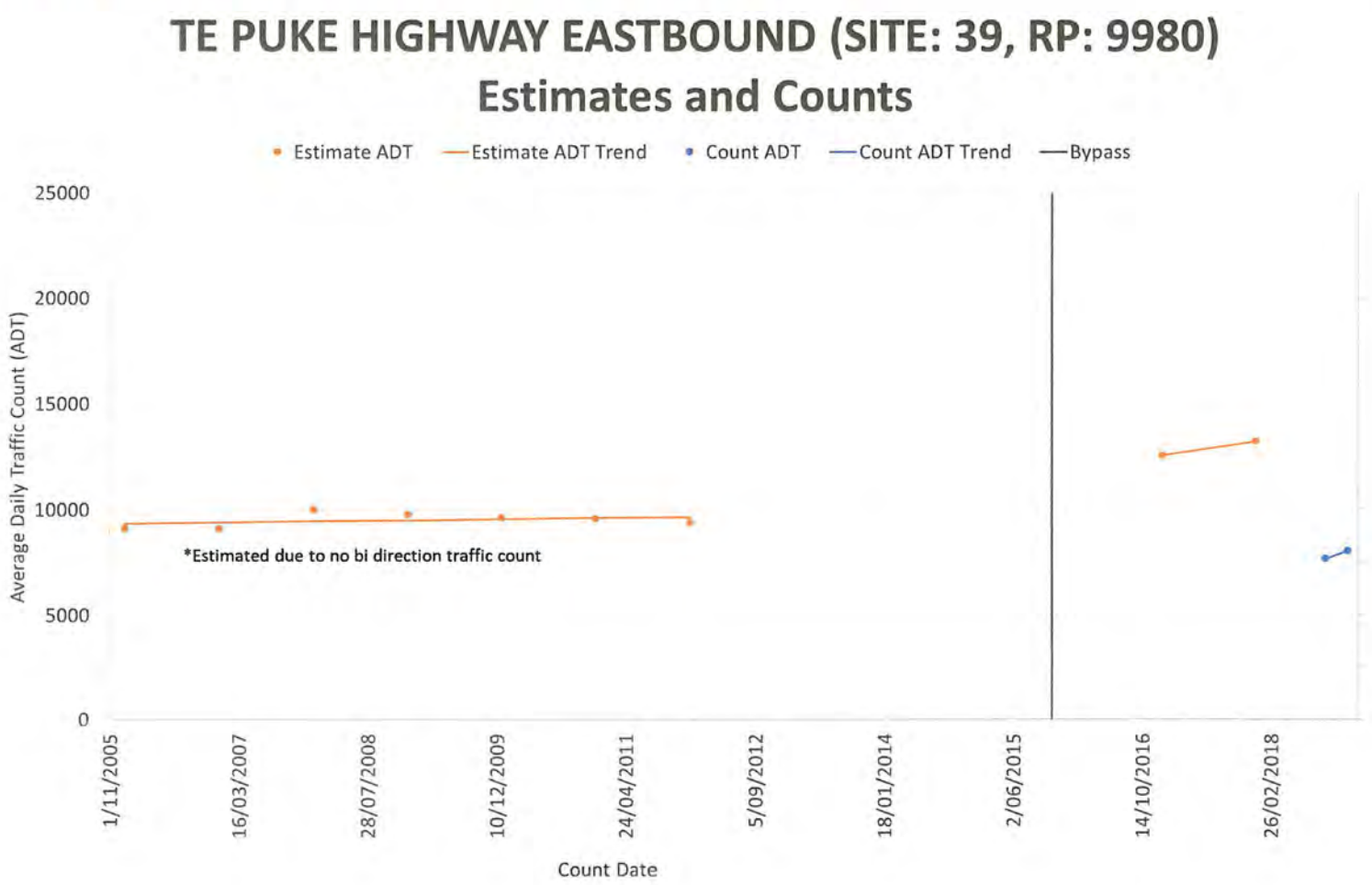

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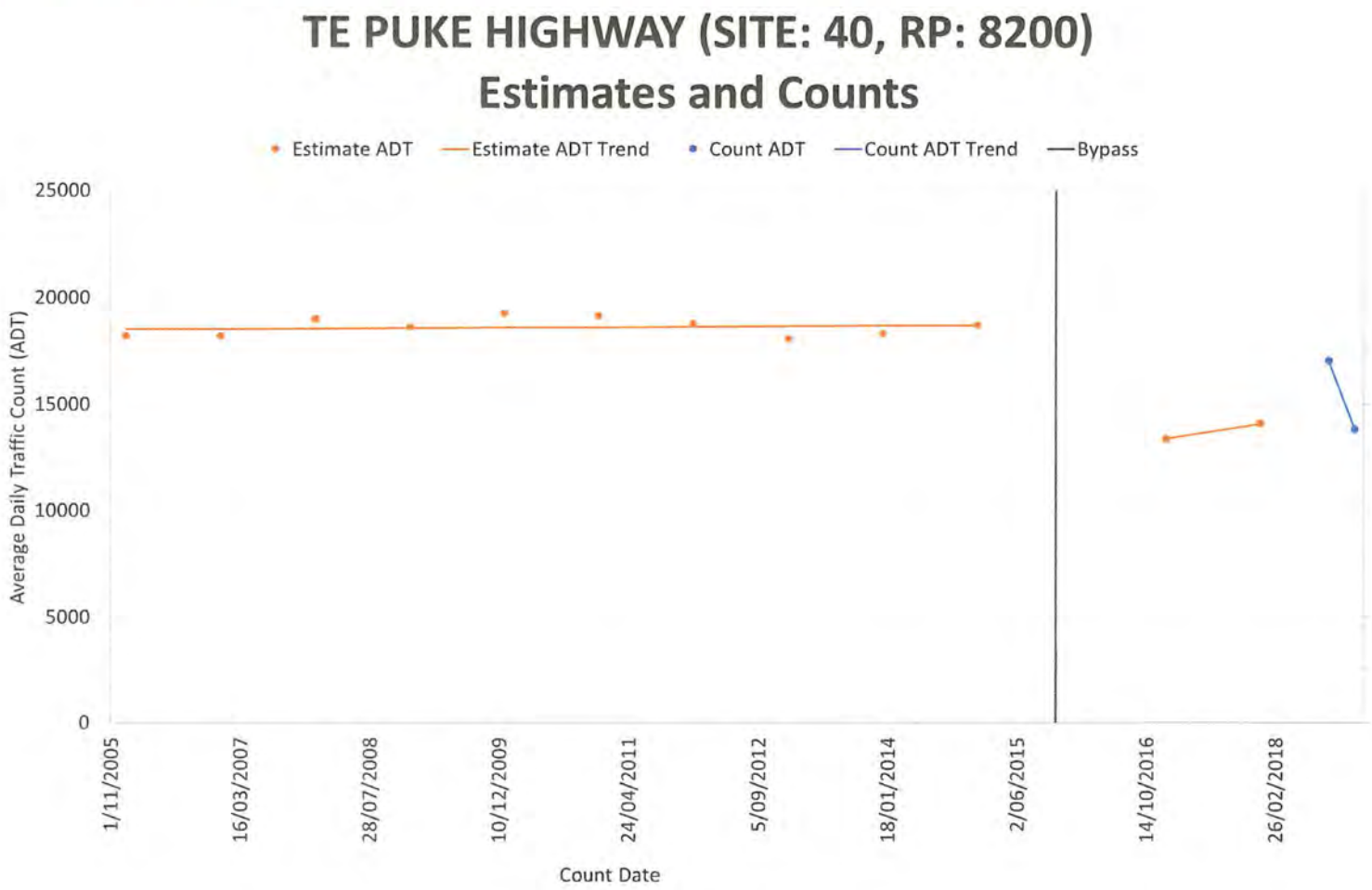

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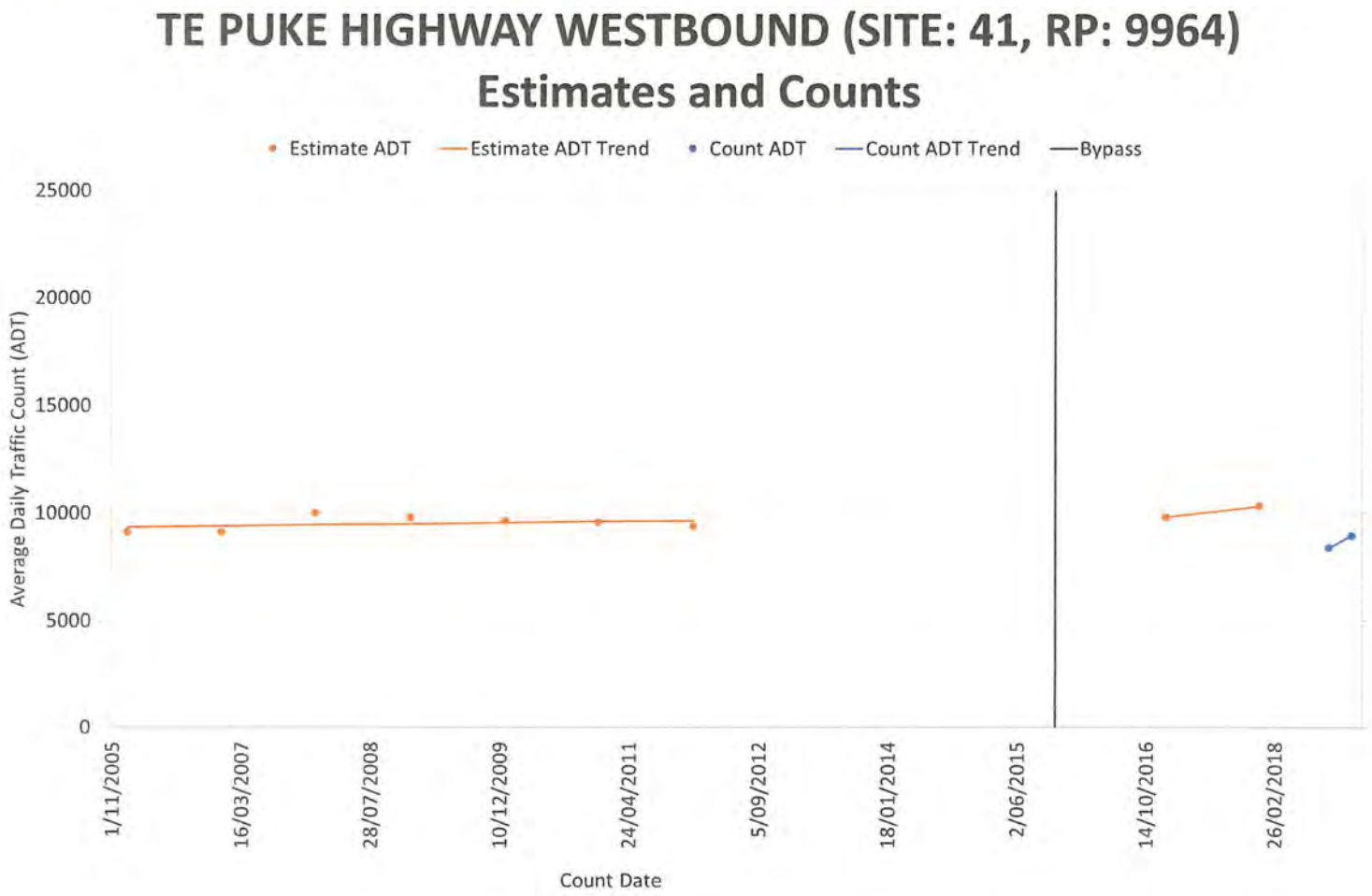
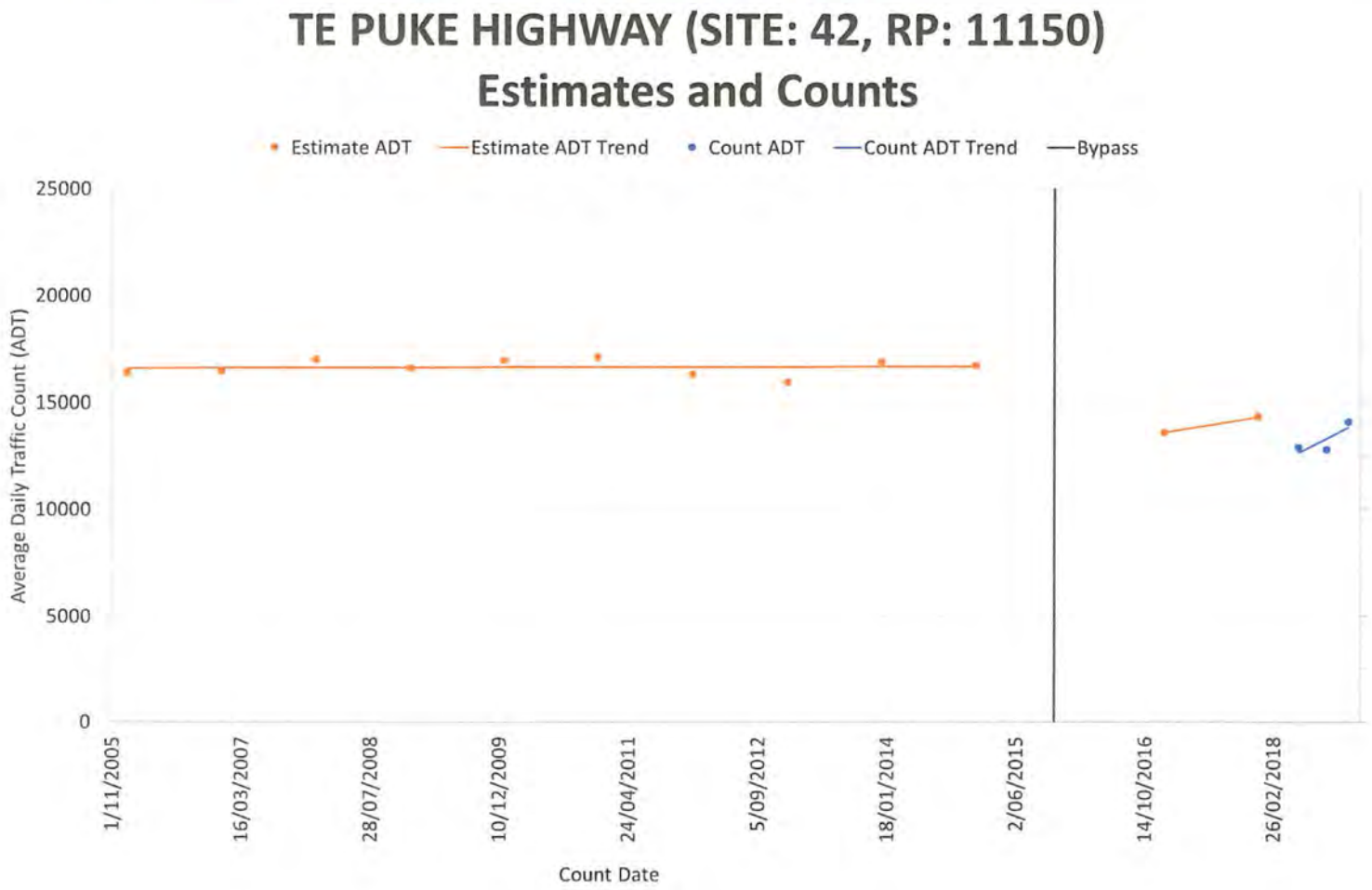
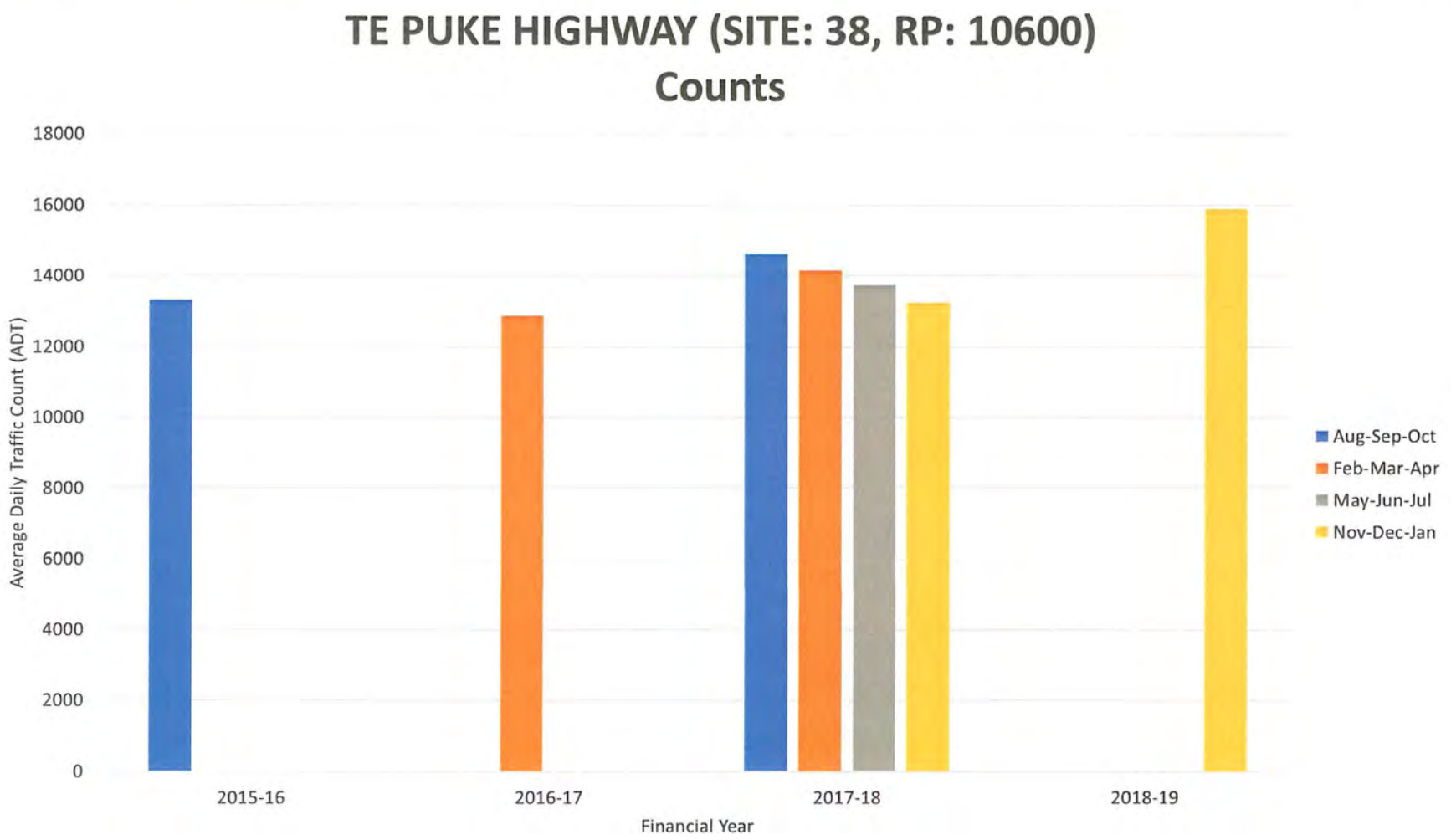


TE PUKE HIGHWAY – TRAFFIC ESTIMATES AND COUNTS

ATTACHMENT C

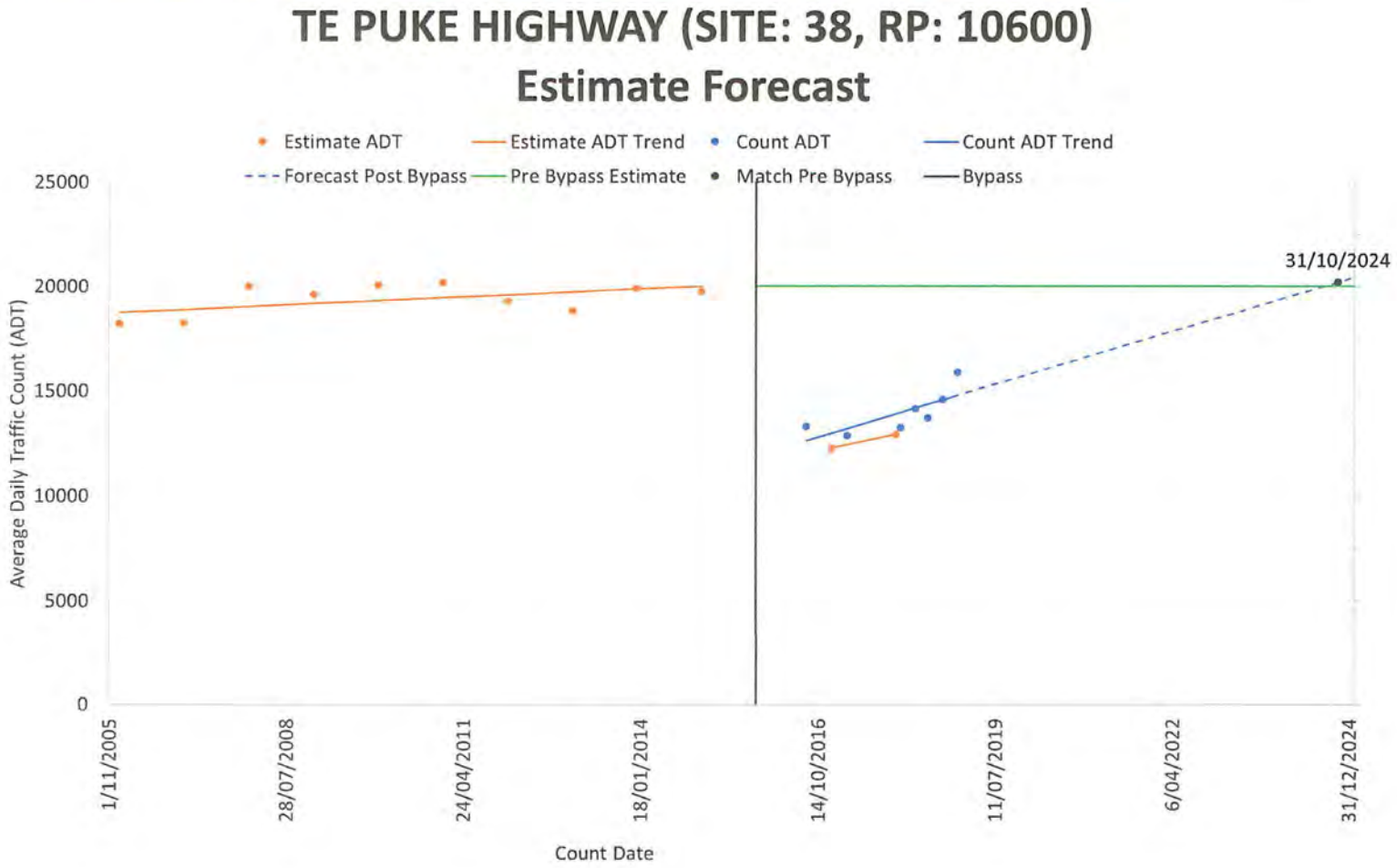


TE PUKE HIGHWAY – SEASONAL TRAFFIC COUNTS



TE PUKE HIGHWAY – FORECAST TO MEET PRE BYPASS COUNT (#38)

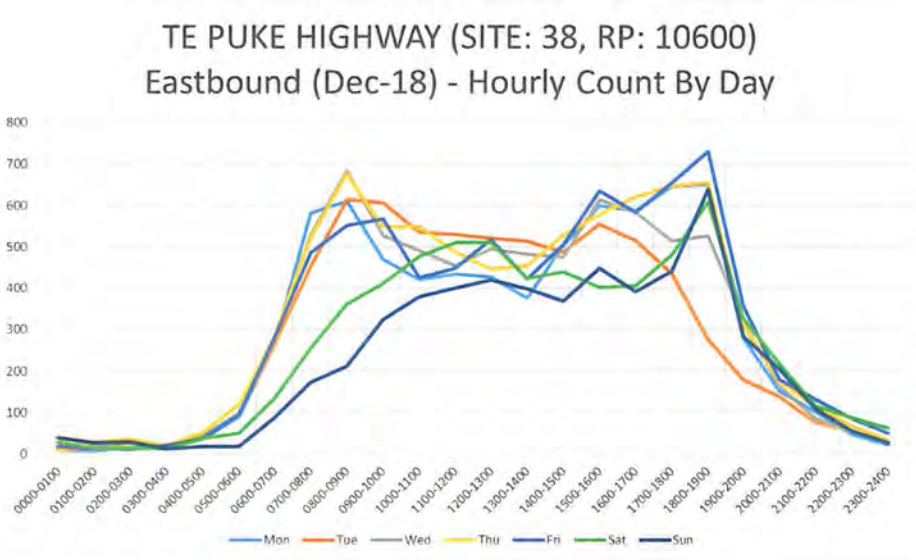
ATTACHMENT C

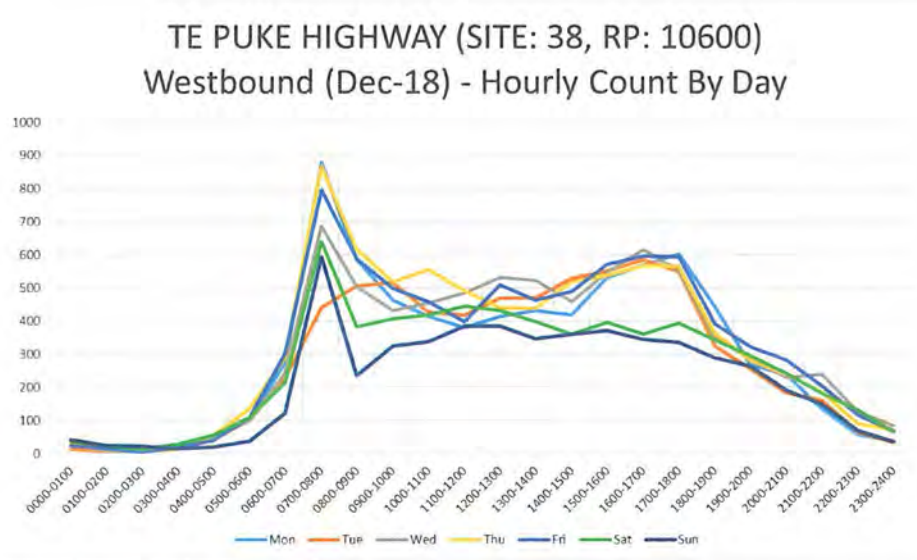


Prepared by: Chris Cummings 14/02/2019

TE PUKE HIGHWAY – HOURLY TRAFFIC COUNTS BY DAY (Near NO 1 ROAD) #38

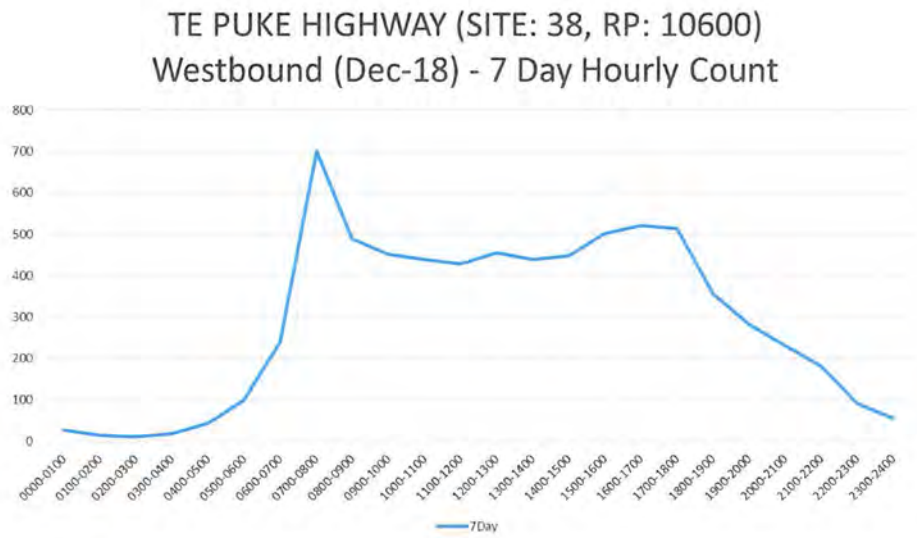
ATTACHMENT C





TE PUKE HIGHWAY – 7 DAY HOURLY TRAFFIC COUNTS (Near NO 1 ROAD) #38

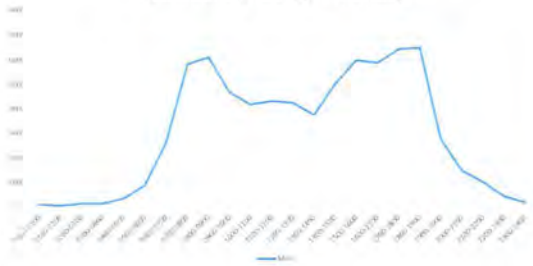
ATTACHMENT C



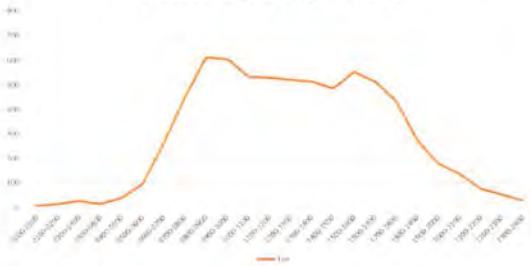
TE PUKE HIGHWAY – DAILY TRAFFIC COUNTS EASTBOUND (Near NO 1 ROAD) #38

ATTACHMENT C

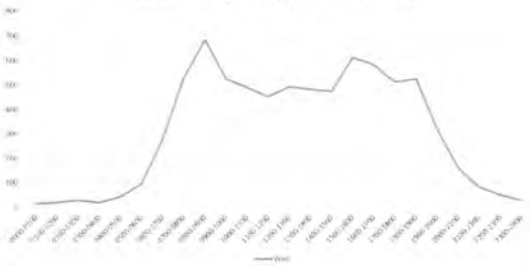
TE PUKE HIGHWAY (SITE: 38, RP: 10600)
Eastbound (Dec-18) - Monday



TE PUKE HIGHWAY (SITE: 38, RP: 10600)
Eastbound (Dec-18) - Tuesday

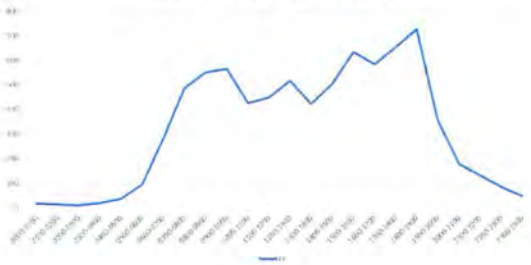


TE PUKE HIGHWAY (SITE: 38, RP: 10600)
Eastbound (Dec-18) - Wednesday

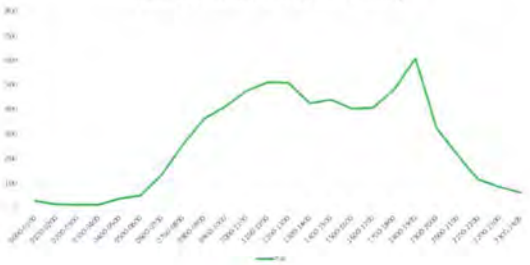


TE PUKE HIGHWAY (SITE: 38, RP: 10600)
Eastbound (Dec-18) - Thursday

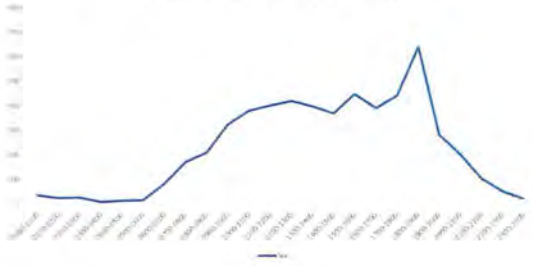
TE PUKE HIGHWAY (SITE: 38, RP: 10600)
Eastbound (Dec-18) - Friday



TE PUKE HIGHWAY (SITE: 38, RP: 10600)
Eastbound (Dec-18) - Saturday

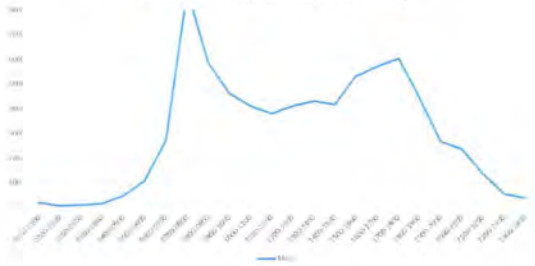


TE PUKE HIGHWAY (SITE: 38, RP: 10600)
Eastbound (Dec-18) - Sunday

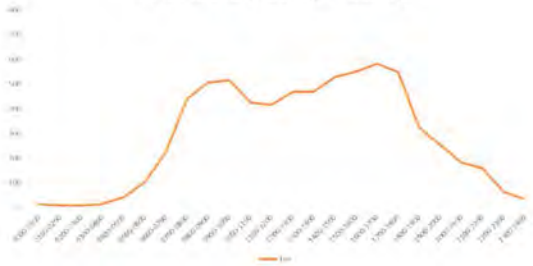


TE PUKE HIGHWAY – DAILY TRAFFIC COUNTS WESTBOUND (Near NO 1 ROAD) #38

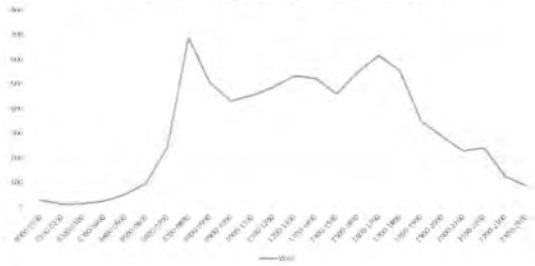
TE PUKE HIGHWAY (SITE: 38, RP: 10600)
Westbound (Dec-18) - Monday



TE PUKE HIGHWAY (SITE: 38, RP: 10600)
Westbound (Dec-18) - Tuesday

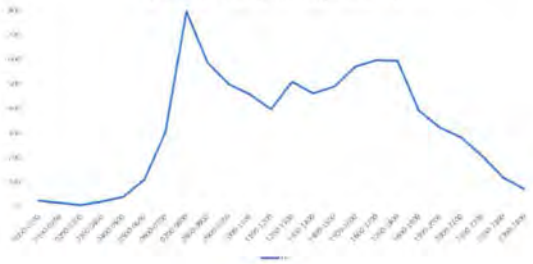


TE PUKE HIGHWAY (SITE: 38, RP: 10600)
Westbound (Dec-18) - Wednesday



TE PUKE HIGHWAY (SITE: 38, RP: 10600)
Westbound (Dec-18) - Thursday

TE PUKE HIGHWAY (SITE: 38, RP: 10600)
Westbound (Dec-18) - Friday

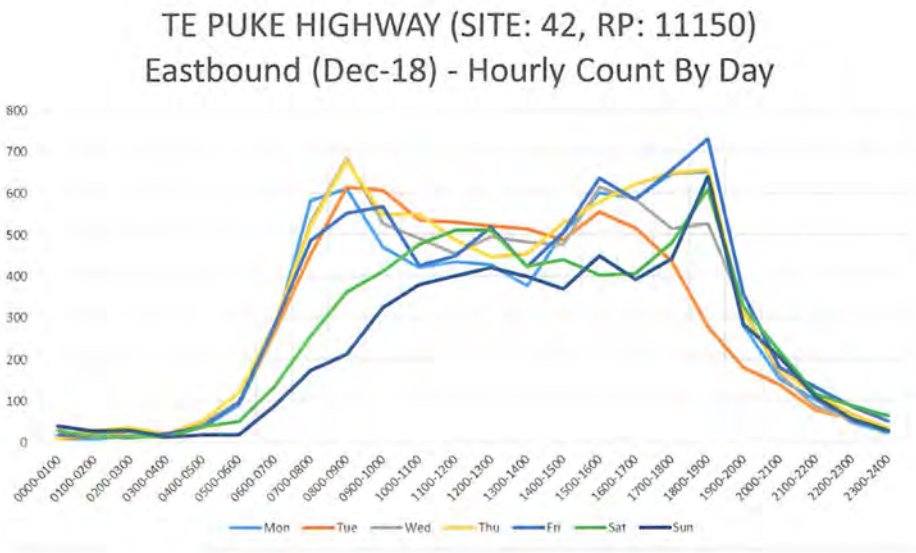


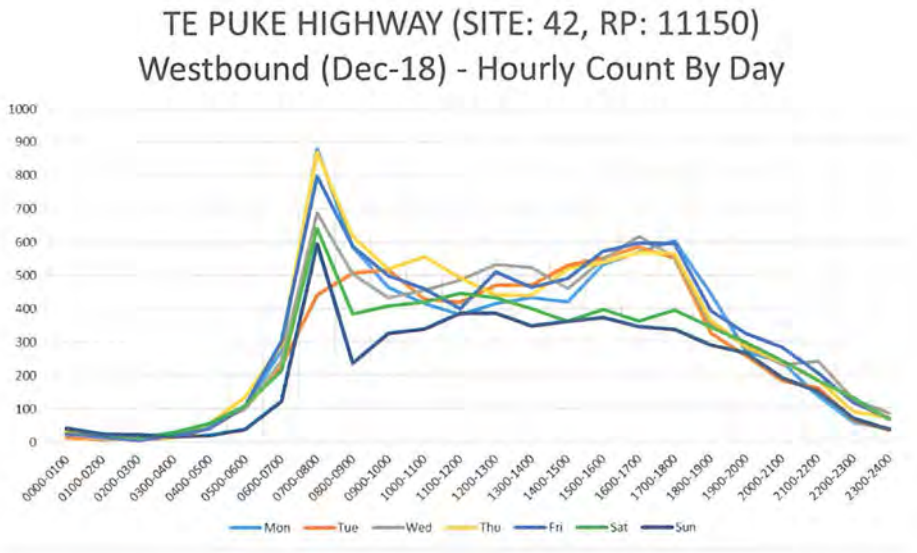
TE PUKE HIGHWAY (SITE: 38, RP: 10600)
Westbound (Dec-18) - Saturday

TE PUKE HIGHWAY (SITE: 38, RP: 10600)
Westbound (Dec-18) - Sunday

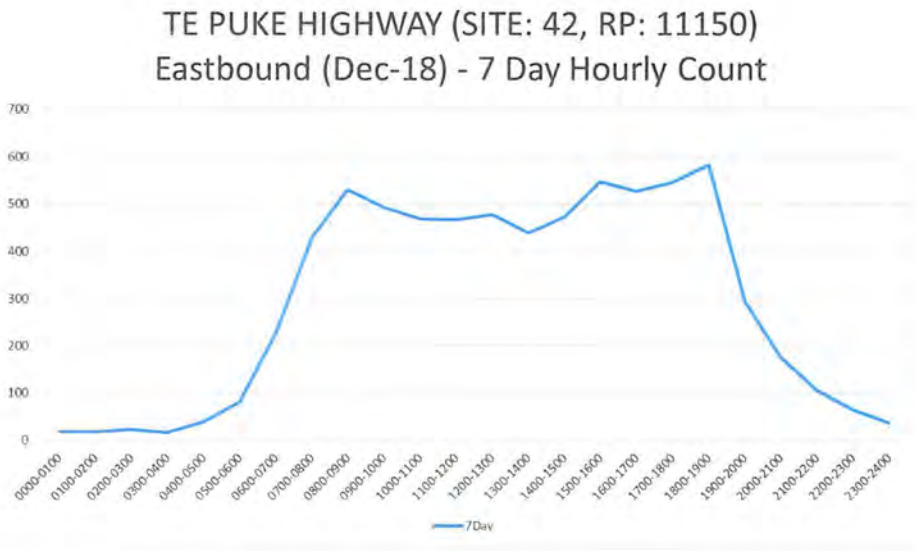
TE PUKE HIGHWAY – HOURLY TRAFFIC COUNTS BY DAY (Near NO 1 ROAD) #42

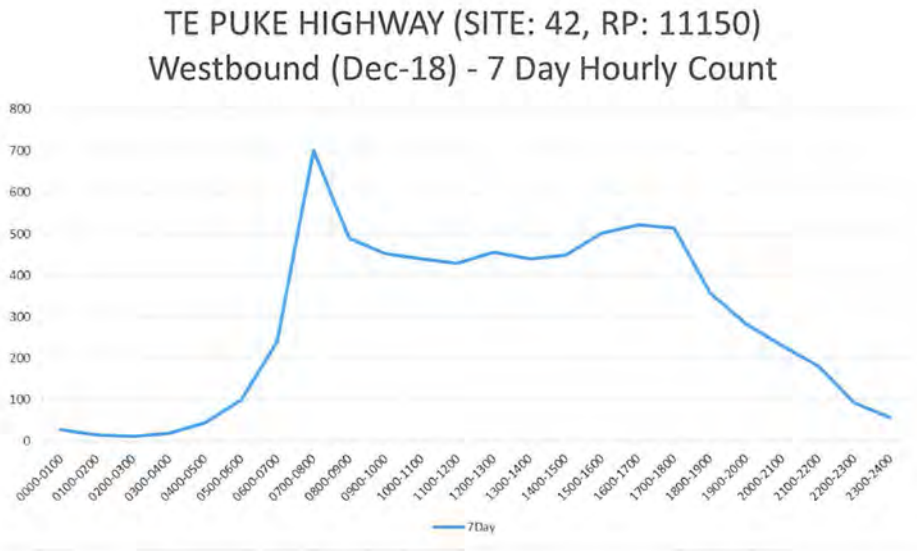
ATTACHMENT C





TE PUKE HIGHWAY – 7 DAY HOURLY TRAFFIC COUNTS (Near NO 1 ROAD) #42

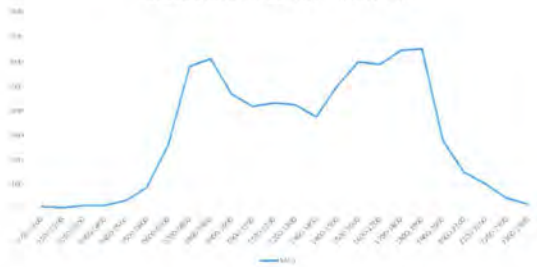




TE PUKE HIGHWAY – DAILY TRAFFIC COUNTS EASTBOUND (Near NO 1 ROAD) #42

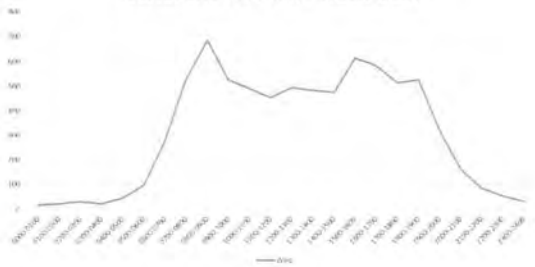
ATTACHMENT C

TE PUKE HIGHWAY (SITE: 42, RP: 11150)
Eastbound (Dec-18) - Monday



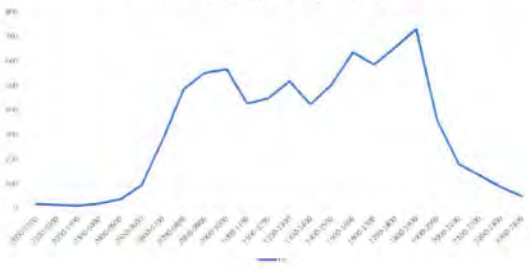
TE PUKE HIGHWAY (SITE: 42, RP: 11150)
Eastbound (Dec-18) - Tuesday

TE PUKE HIGHWAY (SITE: 42, RP: 11150)
Eastbound (Dec-18) - Wednesday

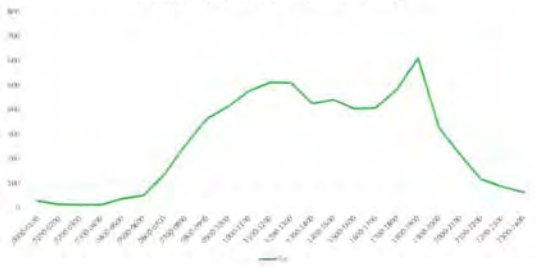


TE PUKE HIGHWAY (SITE: 42, RP: 11150)
Eastbound (Dec-18) - Thursday

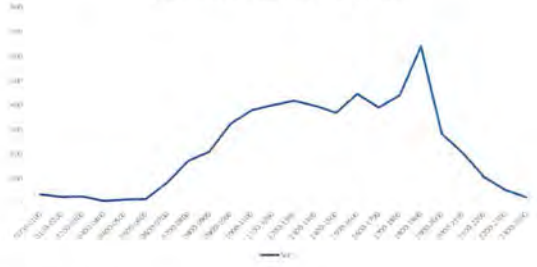
TE PUKE HIGHWAY (SITE: 42, RP: 11150)
Eastbound (Dec-18) - Friday



TE PUKE HIGHWAY (SITE: 42, RP: 11150)
Eastbound (Dec-18) - Saturday

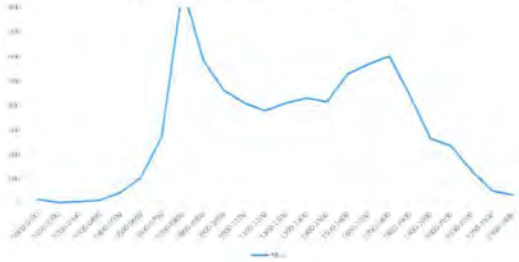


TE PUKE HIGHWAY (SITE: 42, RP: 11150)
Eastbound (Dec-18) - Sunday



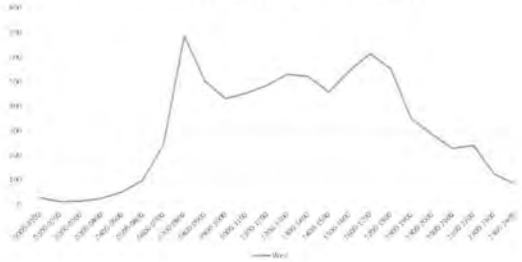
TE PUKE HIGHWAY – DAILY TRAFFIC COUNTS WESTBOUND (Near NO 1 ROAD) #42

TE PUKE HIGHWAY (SITE: 42, RP: 11150)
Westbound (Dec-18) - Monday



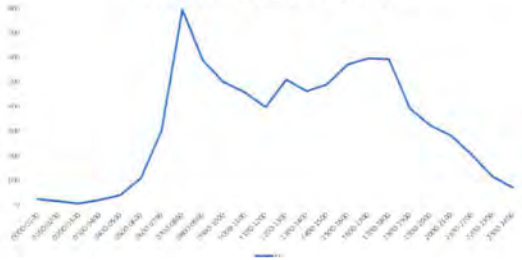
TE PUKE HIGHWAY (SITE: 42, RP: 11150)
Westbound (Dec-18) - Tuesday

TE PUKE HIGHWAY (SITE: 42, RP: 11150)
Westbound (Dec-18) - Wednesday

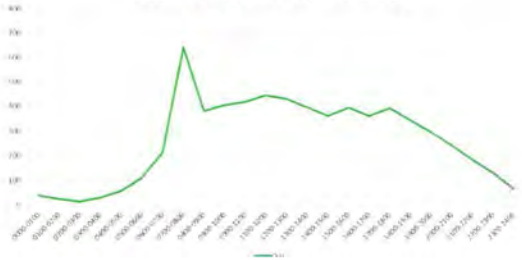


TE PUKE HIGHWAY (SITE: 42, RP: 11150)
Westbound (Dec-18) - Thursday

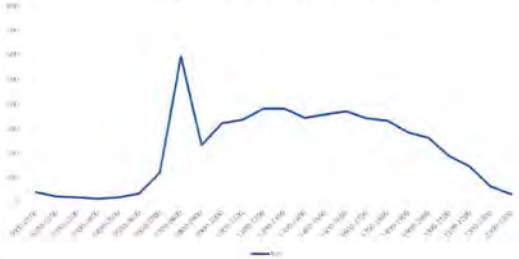
TE PUKE HIGHWAY (SITE: 42, RP: 11150)
Westbound (Dec-18) - Friday



TE PUKE HIGHWAY (SITE: 42, RP: 11150)
Westbound (Dec-18) - Saturday

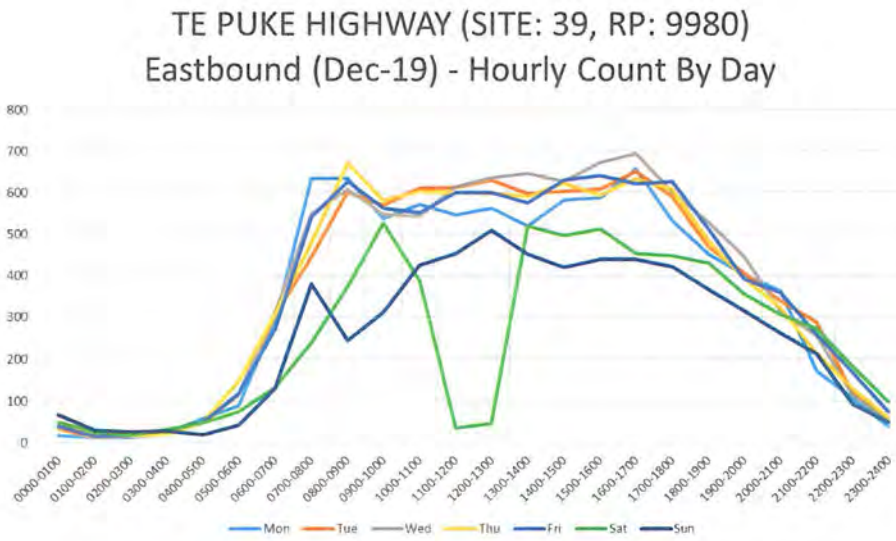


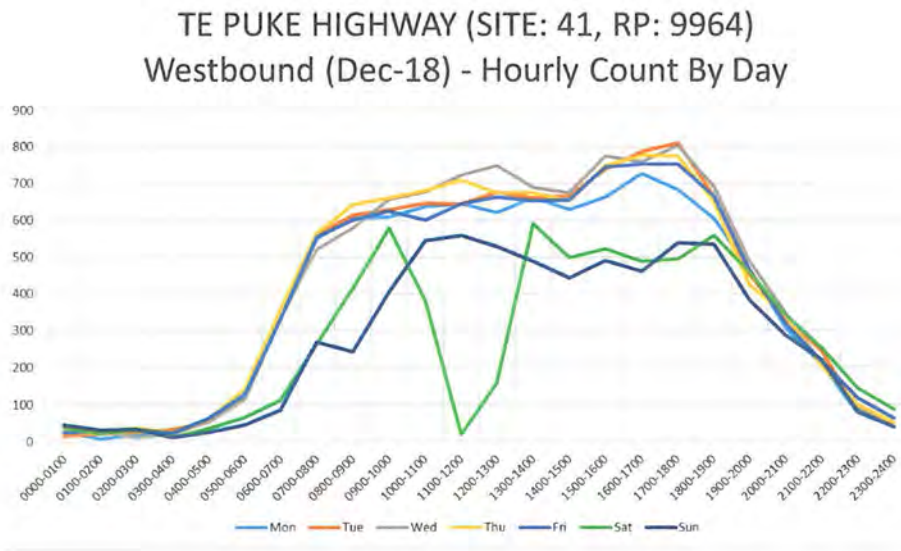
TE PUKE HIGHWAY (SITE: 42, RP: 11150)
Westbound (Dec-18) - Sunday



TE PUKE HIGHWAY – HOURLY TRAFFIC COUNTS BY DAY (Near JOCELYN STREET) #39,#41

ATTACHMENT C

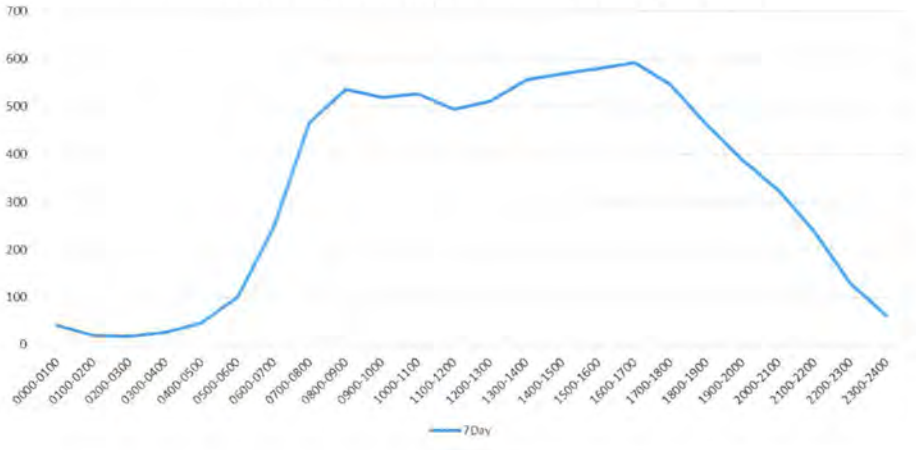




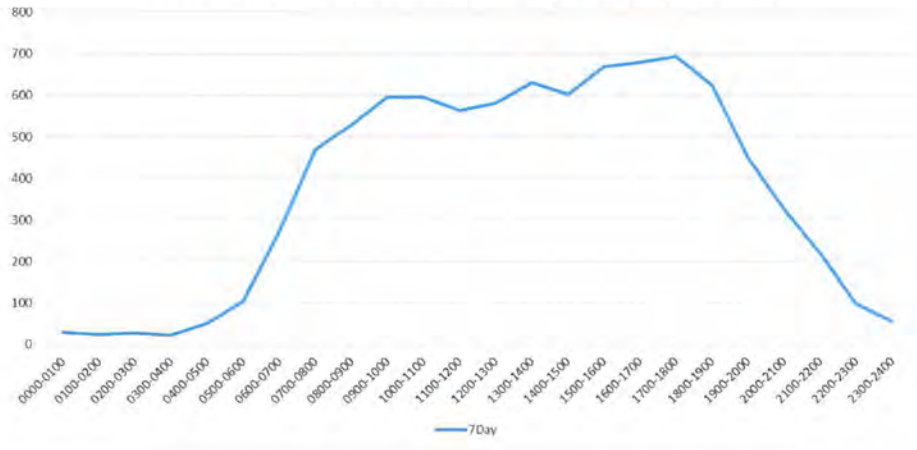
TE PUKE HIGHWAY – 7 DAY HOURLY TRAFFIC COUNTS (Near JOCELYN STREET) #39,#41

ATTACHMENT C

TE PUKE HIGHWAY (SITE: 39, RP: 9980)
Eastbound (Dec-19) - 7 Day Hourly Count



TE PUKE HIGHWAY (SITE: 41, RP: 9964)
Westbound (Dec-18) - 7 Day Hourly Count

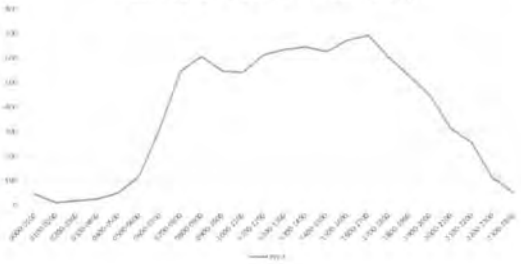


TE PUKE HIGHWAY – DAILY TRAFFIC COUNTS EASTBOUND (Near JOCELYN STREET) #39

TE PUKE HIGHWAY (SITE: 39, RP: 9980)
Eastbound (Dec-19) - Monday

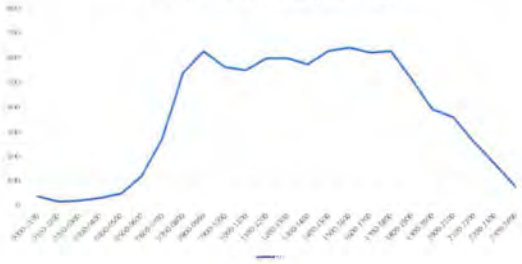
TE PUKE HIGHWAY (SITE: 39, RP: 9980)
Eastbound (Dec-19) - Tuesday

TE PUKE HIGHWAY (SITE: 39, RP: 9980)
Eastbound (Dec-19) - Wednesday

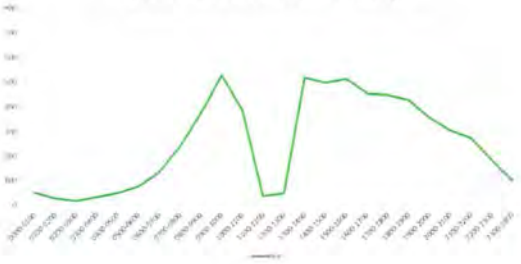


TE PUKE HIGHWAY (SITE: 39, RP: 9980)
Eastbound (Dec-19) - Thursday

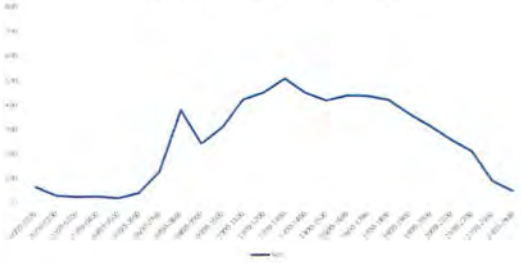
TE PUKE HIGHWAY (SITE: 39, RP: 9980)
Eastbound (Dec-19) - Friday



TE PUKE HIGHWAY (SITE: 39, RP: 9980)
Eastbound (Dec-19) - Saturday



TE PUKE HIGHWAY (SITE: 39, RP: 9980)
Eastbound (Dec-19) - Sunday



ATTACHMENT C

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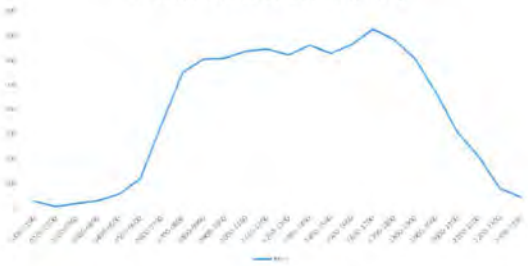
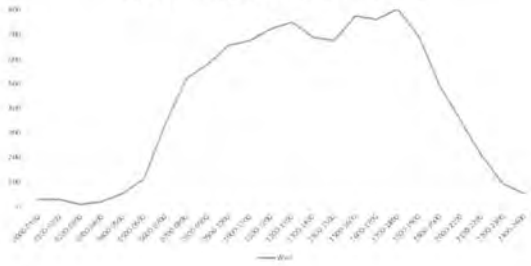
TE PUKE HIGHWAY – DAILY TRAFFIC COUNTS WESTBOUND (Near JOCELYN STREET) #41

TE PUKE HIGHWAY (SITE: 41, RP: 9964)
Westbound (Dec-18) - Monday



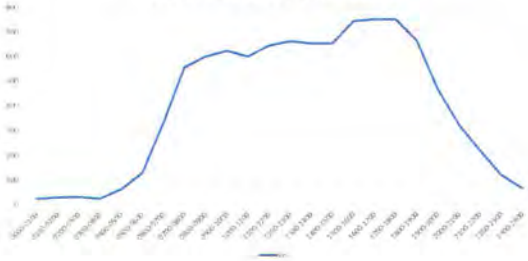
TE PUKE HIGHWAY (SITE: 41, RP: 9964)
Westbound (Dec-18) - Tuesday

TE PUKE HIGHWAY (SITE: 41, RP: 9964)
Westbound (Dec-18) - Wednesday



TE PUKE HIGHWAY (SITE: 41, RP: 9964)
Westbound (Dec-18) - Thursday

TE PUKE HIGHWAY (SITE: 41, RP: 9964)
Westbound (Dec-18) - Friday



TE PUKE HIGHWAY (SITE: 41, RP: 9964)
Westbound (Dec-18) - Saturday

TE PUKE HIGHWAY (SITE: 41, RP: 9964)
Westbound (Dec-18) - Sunday

Western Bay of Plenty District Council

Operations & Monitoring Committee

Street Light LED Upgrade

Purpose

Council road staff request approval to create a cost variation to the Road Maintenance Contract to upgrade the existing street light HPS luminaires to LED luminaires.

Recommendation

1. ***THAT the Roading Engineer's (East) report dated 8 February 2019 titled Street Light LED Upgrade be received.***

2. ***THAT the Operations and Monitoring Committee approve the utilisation of a 3000K luminaire LED for the installation within the District as replacement for the existing HPS (High Pressure Sodium Lights).***

3. ***THAT a variation to the WestLink One Network Maintenance Contract for the supply and installation of the LED replacement street lights be approved and that the Deputy CEO be authorised to negotiate the details.***

4. ***THAT the report relates to an issue that is considered to be of MEDIUM significance in terms of Council's Significance and Engagement Policy.***

Stuart Harvey
Roading Engineer (East)

Approved

Gary Allis
Deputy Chief Executive

1. Background

Western Bay of Plenty District Council has an aging street light network which is predominantly made up of High Pressure Sodium (HPS) luminaires approaching the end of their asset life. This will result in an increasing maintenance cost. Light Emitting Diodes (LED) luminaires have become an attractive alternative to street lighting and offer a wide range of financial and social benefits.

To support local road authorities, New Zealand Transport Agency (NZTA) has introduced an additional funding stream to allow Councils to investigate and retrofit their street lighting network at 85% subsidy rate.

Council has budgeted $3.1 Million for the Project at 85% subsidy with installation of the LED luminaires to occur over the next 2 years.

The total cost of installation is dependant on the Luminaire supply, installation, upgrading required to the cross arms due to the additional weight of the fittings and the number of poles that need replacing.

The work will be undertaken in two phases:

1. The urban network - where a standard approach is being taken.
2. The rural network - where a lighting assessment and design is required for each location.

2. Luminaire Type

There has been considerable national and international assessment on the benefits, characteristics and effects of LED luminaires in street lighting.

ATTACHMENTS A & B

For several years, The University of Southern California has carried out extensive research on this subject and established some important criteria including:

1. Light Direction – The existing HPS lighting creates extensive light spill in a wide direction. The LED luminaires include light spill shields to control the direction light and keep it primarily focused on the ground. The Luminaires also offer an adjustable head to alter the angle of light.

2. Light Spectrum – It has been established that the sharper or brighter white/blue lighting tends to have more adverse effect on surrounding insect, bird and wild life. Therefore, we have selected the softest, warmest light option with the lowest power level lighting of 3000K, also selected by Tauranga City Council.

3. Light intensity – The luminaires will be fitted with a central management system (CMS) for future use, making the light dimmable by remote control. This allows the lighting levels to be reduced to a safe, but reduced level at any given time of night. The result allows cost savings to be made through improved energy efficiency and reduces the environmental impact of the LED.

Picture 1 - Techlight Itron 3000K Luminaire

Picture 2 – High Pressure Sodium Luminaires and LED Luminaires

3. Significance and Engagement

The Local Government Act 2002 requires a formal assessment of the significance of matters and decisions in this report against Council's Significance and Engagement Policy. In making this formal assessment there is no intention to assess the importance of this item to individuals, groups, or agencies within the community and it is acknowledged that all reports have a high degree of importance to those affected by Council decisions.

The Policy requires Council and its communities to identify the degree of significance attached to particular issues, proposals, assets, decisions, and activities.

In terms of the Significance and Engagement Policy this decision is considered to be of Medium significance because the project has an initial, significant financial impact on Council and street lights affect a large percentage of the residents in the district. However, the proposed change in light quality may be noticeable to many residents but is unlikely to create a district wide adverse effect of any kind.

The LED upgrade project is not related to Maori Cultural values in any significant way and is not considered to be of community interest. It was included as a project in the 2017/18 Annual Plan and the only change is the timing of the project.

3. Engagement, Consultation and Communication

Interested/Affected Parties	Completed/Planned Engagement/Consultation/Communication
Name of interested parties/groups	Power Company
Tangata Whenua	N/A
General Public	Local residents in urban areas

4. Issues and Options Assessment

1. ***THAT the Operations and Monitoring Committee approve the utilisation of a 3000K luminaire LED for the installation within the District as replacement for the existing HPS (High Pressure Sodium Lights).***
The A Options assessment was not required. The use of warm colour LEDs is the technical recommendation and is supported by research and by the decision of our neighbours Tauranga City Council.

Option A ***2. THAT a variation to the WestLink One Network Maintenance Contract for the supply and installation of the LED replacement street lights be approved and that the Deputy CEO be authorised to negotiate the details.***	
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	Procurement of Luminaires Storage Costs Design review with Power Companies Installation Cost (incl TM) Future Maintenance Cost This is considered the most cost effective option and integrates with the street light operations, management and power supply that are part of the WestLink Contract. Risk is appropriately shared.
Option B ***Tender the Project on the open market.***	
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	Creation of tender documents Tender review and selection process Procurement of Luminaires Storage Costs Design review with Power Companies Installation Cost (incl TM) Future Maintenance Cost This option will take longer and potentially be more complex.

5. Statutory Compliance

The recommendation meets:

- Legislative requirements/legal requirements
- Current council plans/policies/bylaws
- Regional/national policies/plans.

6. Funding/Budget Implications

Budget Funding Information	Relevant Detail
Project 342601	The Project is budgeted at $3,105,000 at 85% subsidy and programmed over 2019 – 2021. WestLink under the One Network Road Maintenance Contract is responsible for the operation and maintenance of the street light network. West Link's subcontractors will undertake the work. Utilising the WestLink Contract enables control of the network and integration with the RAMM database and the energy supplier.

How exposure to LED lights harms animals as well as humans

by Peter Griffin (/authors/peter-griffin/) / 06 December, 2018

Light pollution in Dunedin. Photo/Ian Griffin

A major new report says exposure to LED lights raises the risk of depression, obesity and cancer – and it's not only humans that are affected.

It was 3.30am on a Monday in July 2016 and astronomer Ian Griffin was looking down at Dunedin from the Nasa research plane Sofia. The Boeing 747 was returning to its base at Christchurch Airport after spending the night taking infrared images of distant star formations from 12km above the Southern Ocean.

Griffin, director of Otago Museum and the man responsible for installing its planetarium, asked the pilots to fly directly over his hometown. He wanted to see just how much light the sleeping city gave off.

"The place was ablaze with it," he says.

"You could see Port Chalmers, the city centre, but also small centres such as Portobello and Waitaki. You don't need to see them. The burghers of Dunedin are paying an enormous amount of money to light the underside of planes flying over at night."

Famed for the photos he posts to Twitter of the Aurora Australis taken from around Otago, Griffin has been on a mission to reduce the light pollution emanating from Dunedin, which, like every other city in the country, is upgrading its high-pressure sodium street lights to newer LEDs.

The technology behind the blue-light-emitting diode in 2014 won its Japanese inventors the Nobel Prize in physics. It is more power-efficient, longer-lived and easier to maintain than incandescent and fluorescent bulbs.

Lighting consumes a quarter of the world's electricity, so LEDs stand to play a major role in reducing emissions from fossil fuel-burning power plants. But they also emit blue-enriched white light, which can appear more like daylight than the yellow-orange sodium street lights they will have largely replaced here by the middle of the 2020s.

"The reason the sky is blue is because sunlight is scattered by particles in the atmosphere," says Griffin.

"The bluer your lights, the more scattering you get and the easier it is to see. The lights at night will appear brighter to your eyes. But your visibility to the stars will decrease."

Ian Griffin. Photo/Supplied

In 2015, astronauts on the International Space Station took a night-time photo of Italy's fashion capital, Milan, and compared it with a photo taken in 2012. The difference was stark. In the intervening years, the city had installed LED streetlights. Milan's centre went from having a soft orange glow to a spider's web of harsh white lines.

Griffin and his colleagues on the Dunedin City Council's dark skies advisory panel want a different fate for their city. They recommended the council install LEDs with a warmer colour temperature (2600-3000 kelvin) than city planners typically favoured for optimum night-time visibility.

The council listened and settled on 3000k lamps with shielding to prevent light being cast upwards and smart controls to adjust their intensity remotely. Griffin is confident that the measures will, over the next decade, reduce light pollution and the glow on the horizon that pervades his astronomy photos.

More than half the country experiences a pristine night sky, but only 3% of us live under it. Most of us can't see the Milky Way in all its glory.

"You are not going to be richer or poorer as a result of not seeing the Milky Way," says Griffin. "But I would argue that going out of your house and looking up and seeing the stars has an impact on your life."

The same LED technology powering those new street lights also illuminates our homes and lights up the smartphones, tablets, laptops and televisions that we gaze at for hours every day. Our exposure to the blue light they emit can have effects far greater than spoiling our star gazing.

The report "Blue Light Aotearoa", released last month by the Royal Society Te Apārangi, confirms international concerns that exposure to blue light outside normal daylight hours can disrupt sleep and our circadian body clock, leading to a slew of negative health effects from depressive disorders and obesity to increased risk of cancers.

"Over the past hundred years, we've tried to control the light-dark environment and separate it from the natural environment," says Lora Wu, a clinical psychologist and senior researcher at Massey University's Wellington-based Sleep/Wake Centre.

"Doing so has messed with our body clocks. Every cell in your body has a clock, your organs have clocks and then we have this massive clock, and they can all get mixed up."

Our bodies have evolved to expect to be exposed to light during the day and darkness at night. Blue light, strongest

at about noon, is good for us. But our 24-7 lifestyles, and immersion in a digital world that exposes us to overhead lighting and digital screens long after the sun has gone down, have a range of consequences.

The influence on biology of the circadian clock is well established in scientific literature. So-called photosensitive retinal ganglion cells in our eyes are constantly signalling the hypothalamus, where our body clock is located. The signals affect our circadian rhythms and neuroendocrine regulation – how our nervous system and endocrine hormones interact.

Lora Wu. Photo/David Wiltshire

The complex processes can help explain everything from jet lag after passing through time zones to the poorer sleep of shift workers.

Then there's melatonin, the hormone in our body that regulates wakefulness. It, too, is controlled by the circadian body clock and is influenced by light. Studies show that blue light exposure can suppress the night-time production of melatonin. Some people take melatonin pills to help get to sleep.

Wu treats patients suffering mood and sleep disorders and considers light exposure a major factor in many of her clinical cases.

"Light exposure is the biggest one. But for people, especially those with depression, you also see a fallout of social rhythms and normal daily behavioural rhythms as well."

Photo/Getty Images

Cancer connection

The Royal Society describes the research into blue-light exposure and elevated risk of cancer as "preliminary". When breast-cancer-prone mice were exposed to light/dark cycles that simulated shift work, they were found to have a higher rate of tumour development. There was enough evidence in human studies completed in Sweden for the World Health Organisation to classify shift work as a "probable carcinogen" due to circadian disruption.

"The physiological link might be through melatonin disruption," Wu says.

The same can go for other activity that disrupts the body clock.

"If you eat in the middle of the night when your gut is not active and you activate it, that disrupts the link between your body clock and your gut clock.

"If that happens on a large scale, over and over, you may see increased rates of cancer."

The more common effect of blue-light exposure is the sluggishness and inability to concentrate associated with working late into the night or lying in bed scrolling through your smartphone's Facebook feed.

"We hold cellphones up to our face," says Wu. "With young people, it is more about TV and video games. They are not as bad because you are sitting across the room. It is not as bright."

She advises avoiding late night-time use of devices that emit blue light, but admits that such behaviour is hard to change.

Tech companies such as Google, which makes the Android operating system that powers most of the world's smartphones, and Apple have introduced modes that reduce blue light from phone screens in the evening. Wu describes them as "band-aid" solutions, but better than nothing.

"It would be more ideal to just not use the screens at night. You need to think about the amount of time you are using it, how bright it is and how far away you are from it."

She sees research into exposure to light as a neglected area when it comes to discussion of mental-health issues. "It is baffling to me not to look at sleep and circadian rhythms when we know there are such strong links between mental and physical health and social well-being. To completely ignore it is stunning."

Also overlooked in the move to LED lighting is the impact on flora and fauna, from insects and seabirds to plants and trees.

Animals and plants are also subject to circadian rhythms and in many cases are more sensitive to the light/dark cycle than we are.

"The timing of day length and the lunar cycle are things that animals can use to navigate and do certain activities," says Margaret Stanley, a terrestrial ecologist at the University of Auckland and a co-author of the Royal Society report. "Under light pollution, that can be masked entirely."

Margaret Stanley: conscious of light effects on humans and animals.

Anecdotal evidence suggests blue lights from LED lamps are confusing some animals into thinking it is daylight. Overseas, there are reports of turtle hatchlings emerging from their sandy burrows and heading towards the lights of town rather than running their usual gauntlet to the ocean. Fledgling seabirds have been drawn to the bright lights of cruise liners heading along the coast to and from Auckland's port.

A New Zealand study found that flying insects, such as moths and flies, were more attracted to white LED lights than high-pressure sodium street lights. The effects vary by species, though the research is still patchy.

Stanley is starting a project looking at the effects of light on nocturnal pollination by moths, beetles and other insects. Her concern is that when councils switch to LED lights, they do so with little understanding of the full effects on the natural world.

"How does that then flow on to the ecosystem in terms of insects being prey to bats and birds? What are the consequences for pollination? It is a bit of a worry."

Ellery McNaughton, a PhD student supervised by Stanley, has studied the behaviour of birds before and after the introduction of LED lights on certain Auckland streets. Early results suggest there hasn't been much change.

"The animals already surviving in urban areas are a bit more adaptable and flexible," says Stanley. "It could also be due to the LED lighting we are putting up and how we are mitigating it with shielding and dimming."

Part of McNaughton's work has involved surveying light pollution across Auckland, which she found extends into the Waitakere Ranges and the Hauraki Gulf.

"We've focused on street lights," says Stanley, "but there are massive commercial centres and industrial zones that are not shielding lights and spilling out these LED security lights."

She believes tighter regulation of lighting on commercial buildings and even residential homes is needed to reduce the effects of night-time lighting on the environment.

Hamilton opted for LEDs that have minimal effects on bats. Photo/NZTA

Going batty

Bats were on the mind of city planners in Hamilton as the city switched its 16,000 street lights to LEDs. "The effect on nocturnal creatures was quite a big thing for us," says John Kinghorn, who leads Hamilton's Smart City initiative. "We have quite a big bat population, especially in south-west Hamilton. We wanted to make sure the effect on them was minimised."

The $7.2 million project was largely paid for by the New Zealand Transport Agency, which has made funding available to upgrade street lights all over the country. Hamilton was the first city to opt for warmer 3000k lights on all of its streets and arterial routes, rather than the cooler blue-tinged 4000k LEDs used elsewhere, including main roads of Auckland.

"There wasn't any evidence we found to suggest that going from a 3000k to 4000k LED was anywhere near the difference to going from a sodium light to that LED colour. It was a logical choice for us to go with a warmer light," says Kinghorn.

LED light levels and colour tones haven't elicited a single complaint from Hamilton's 160,000 residents. The lighting has also received the tick of approval of the Hamilton Astronomical Society.

When the project kicked off, the transport agency's list of approved luminaires included LEDs around the 4000k mark. Bluer-toned lights are considered good for street illumination and helping driver reaction speeds.

But Hamilton was able to negotiate a roll-out of warmer-tone LEDs, supplied by lighting company Signify, and the agency now approves use of warm-white light, which suggests that with the right lighting design, shading and dimming, the worst effects of shifting to LEDs can be avoided.

Dunedin is on the same path, says Griffin.

"We are at an important juncture. Hopefully, with a bit of foresight, New Zealand can have safe streets at night but really nice dark skies."

Imagine if you could look up from the centre of our biggest cities and see the Milky Way.

Reducing the night-time blues

1. Be exposed to daylight in the morning and darkness at night for better circadian health and well-being.
2. Limit blue-light exposure from digital screens including smartphones, televisions and computers at night by reducing screen brightness, using night-time apps that lower blue-light output or turning devices off.
3. Replace cooler/brighter blueish-white light bulbs with warmer-coloured yellowish-white light bulbs.

This article was first published in the November 24, 2018 (https://www.noted.co.nz/the-listener/november-24-2018/) issue of the New Zealand Listener.

ATTACHMENT B

Hazard or Hope? LEDs and Wildlife. LED Professional Review

Article · November 2018

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Hazard or Hope? LEDs and Wildlife

The introduction and widespread uptake of LEDs as outdoor lighting has caused no small amount of concern amongst conservation biologists. The prevailing impression that LEDs are always blue-white is well founded as adoption of LEDs for streetlights were invariably high color temperatures and with the deterioration of phosphors the blue wavelengths penetrated even more. But LEDs do have characteristics that differentiate them from other light sources and may allow for the reduction of environmental effects of lighting on species and habitats: direction, duration, intensity, and spectrum. Travis Longcore, Assistant Professor at the University of Southern California's School of Architecture, sheds light on all these aspects.

Outdoor lighting sources that have been in use for the better part of a century or more are rapidly being phased out in favor of LEDs. The industry has delivered consistent improvements in efficiency extending across a wide spectral range and with control capabilities unimaginable to previous generations of lighting designers. Yet, the introduction and widespread uptake of LEDs as outdoor lighting has caused no small amount of concern amongst conservation biologists. Leading bat researchers wondered if LEDs were "conserving energy at the cost of biodiversity" [1]. Another group investigating insects declared "LED lighting increases the ecological impact of light pollution" [2]. A horizon scan of threats to urban ecosystems listed LEDs and the associated profusion of bright white light [3]. Most of these concerns, however, are based on the experience of the general public that LEDs used in outdoor lighting can only be blue-white - or on studies of instances where the switch to LEDs is in fact to high color temperature whites [4,5].

The prevailing impression that LEDs are always blue-white is well-founded. Early adoption of LEDs for streetlights was invariably high color temperatures as a result of their higher efficiency during that phase of technological development. As these products aged and the phosphors deteriorated, the blue wavelengths penetrated even more. It is no surprise that the public, and wildlife researchers included, perceived high color temperatures to be an inherent attribute of LEDs. This misconception continues today, even though a wider range of spectral configurations of LEDs are competitive and installed across the world.

It seems possible, as well, that LED professionals are unfamiliar with the concerns about the effects of outdoor lighting that motivate conservation biologists to regard LEDs with suspicion. The purpose of this essay is to reconcile these two realms by addressing the question of whether LEDs pose a risk or opportunity to wildlife conservation. LEDs do have characteristics that differentiate them from other light sources. The influence of these characteristics fall into the four major attributes that have been identified as important to reducing environmental effects of lighting on species and habitats: direction, duration, intensity, and spectrum [6].

Direction

LEDs as currently deployed in street lighting tend to be quite directional, casting most light on the ground and little light at the horizontal or higher. In this regard they can be an improvement over other lamp types that have drop lenses resulting in more light scattering to locations where it is not useful. With the use of microlens arrays, the focus of LED streetlights on the street and adjacent pedestrian zones could be nearly perfect [7]. So long as lights are not pointing downward into a sensitive habitat (e.g., a wetland [8]), the directionality of LED streetlights can be an improvement in terms of wildlife impacts. Bulb-type LED lamps, however, offer no such benefit and their deployment in unshielded fixtures presents the same challenges as previous technologies.

Duration

One of the most effective ways to reduce the unintended adverse effects of lighting is to turn lights off when they are not needed. For most lamp types previously used for municipal outdoor lighting, turning the lamp on and off comes with an energetic penalty or warmup period. In contrast, LEDs can easily be extinguished and illuminated without delay. Consequently, LEDs are suited to the use of controls that use either timing or motion/heat detection to extinguish lights when they are not needed.

Intensity

Intensity of light is easily controlled in LEDs, they are dimmable without difficulty. So from the perspective of reducing lighting levels to the minimum needed for required tasks, they are ideal. Yet, the tendency is for designers and end users to use more light with LEDs because they are so energy efficient [9]. This phenomenon is well-known in environmental economics, known as the "rebound effect" [10]. It seems that users find that it is preferable to use a brighter bulb when the energy savings are great. LEDs represent an era of cheap light and when a product is inexpensive, the tendency is to overconsume. Just as cheap (fast) food has resulted in an obesity epidemic in the United States and elsewhere [11], cheap light has the potential to result in unnecessarily bright nights.

Spectrum

The flexibility of LEDs when it comes to spectrum, contrasts dramatically with the perception that LEDs used for outdoor lighting are intrinsically bluish white. Rather, the rapid development of a range of spectral combinations offers many possible options that could be exploited to reduce impacts on wildlife and the environment.

Insect attraction to LEDs is lower across the board when compared with lamps that emit ultraviolet light. Both "warm" and "cold" LEDs have been compared with metal halide and mercury vapor lamps and found to attract less than a tenth of the number of insects, a finding that is attributable to the difference in ultraviolet emissions [12]. Conversely, most broad spectrum LEDs used in outdoor lighting do have a potential to adversely impact the perception of daylength (and thus seasonality)

Figure 1:
A hatchling loggerhead sea turtle crawls toward a high-pressure sodium luminaire on the Florida coast (Photo Credits: Blair Witherington)

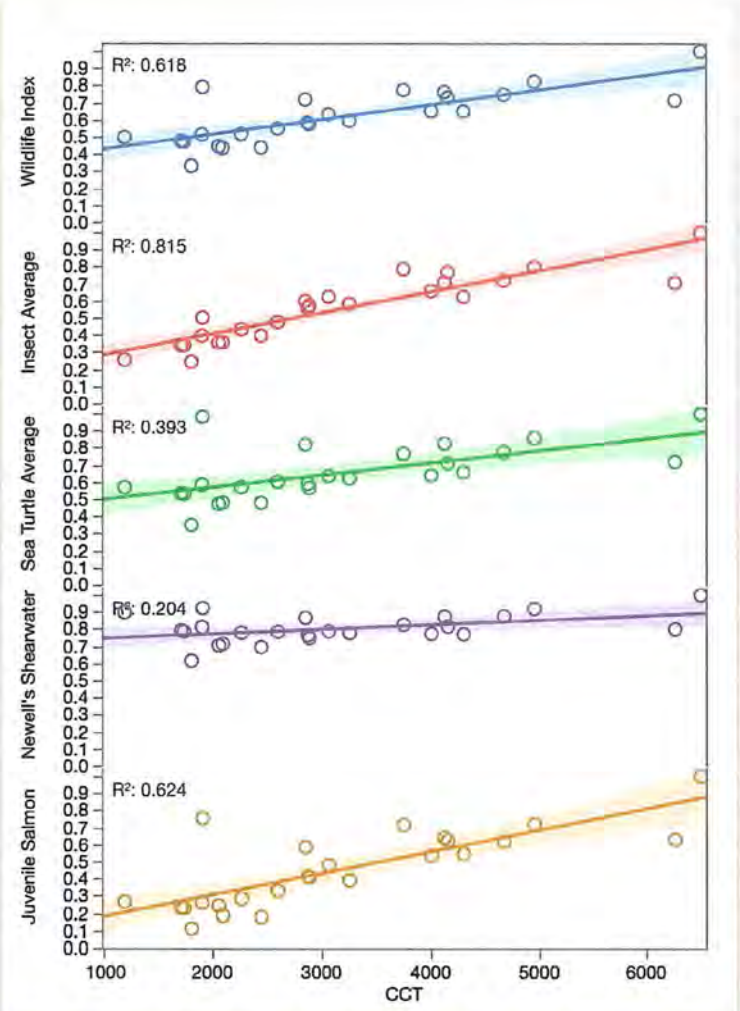


Figure 2:
Relationship of modeled effect of lamps on different wildlife species or groups (juvenile salmon, Newell's shearwater, sea turtles, insects, and their average) with Correlated Color Temperature (CCT) of the lamps. Data from [14]

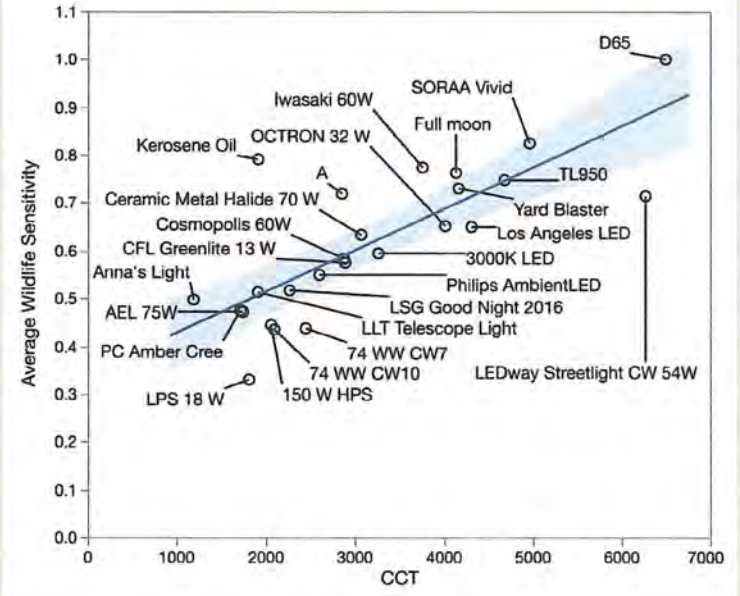


Figure 3:
Relationship of correlated color temperature to average wildlife sensitivity with lamps and illuminants labelled. Data from [14]

in plants, because the peak sensitivity of the phytochromes that detect daylength are in range of LED peak emissions for most full-spectrum LEDs.

Beyond these two examples, the combination of tunable LEDs, filters combined with LEDs, and colored LEDs such as PC Amber offer unique opportunities. Spectrum can be controlled by combining different colored diodes in many configurations (red, blue, green, and perhaps also white, amber with white). The number of combinations far outstrips previous technologies, where the spectral output of high pressure sodium, low pressure sodium, metal halide, xenon, fluorescent, and incandescent lamps were well-known and inflexible.

Choosing Spectrum to Reduce Wildlife Disruption

To take advantage of the range of possibilities from LEDs, the quantal flux at different wavelengths can be compared with the behavioral responses of wildlife across those wavelengths. A generalized response curve for all insects was just published [13] and curves exist for other species [14]. The intersection of the response curves with the spectral power distribution of the lamps (converted to photons) can be compared with the same calculations for an equal lux of a standard illuminant to provide a comparison of the effects of different light sources [14]. Response curves for insects (averaging three curves in the literature), sea turtle (averaging three curves in the literature), juvenile salmon, and a visual response curve for the endangered seabird Newell's Shearwater were used to construct a composite metric of wildlife impacts and compared with a range of lamp types and standard illuminants. Plotting the results relative to Correlated Color Temperature (CCT) reveals two characteristics of the impacts of lights (Figure 2). First, on average and for each species or group, lower CCTs had lower predicted effects. Second, the slope of the relationship between CCT and wildlife influence was greater for some groups than others, indicating that spectrum could be a more effective tool to reduce impacts on insects and juvenile salmon than on Newell's Shearwater.

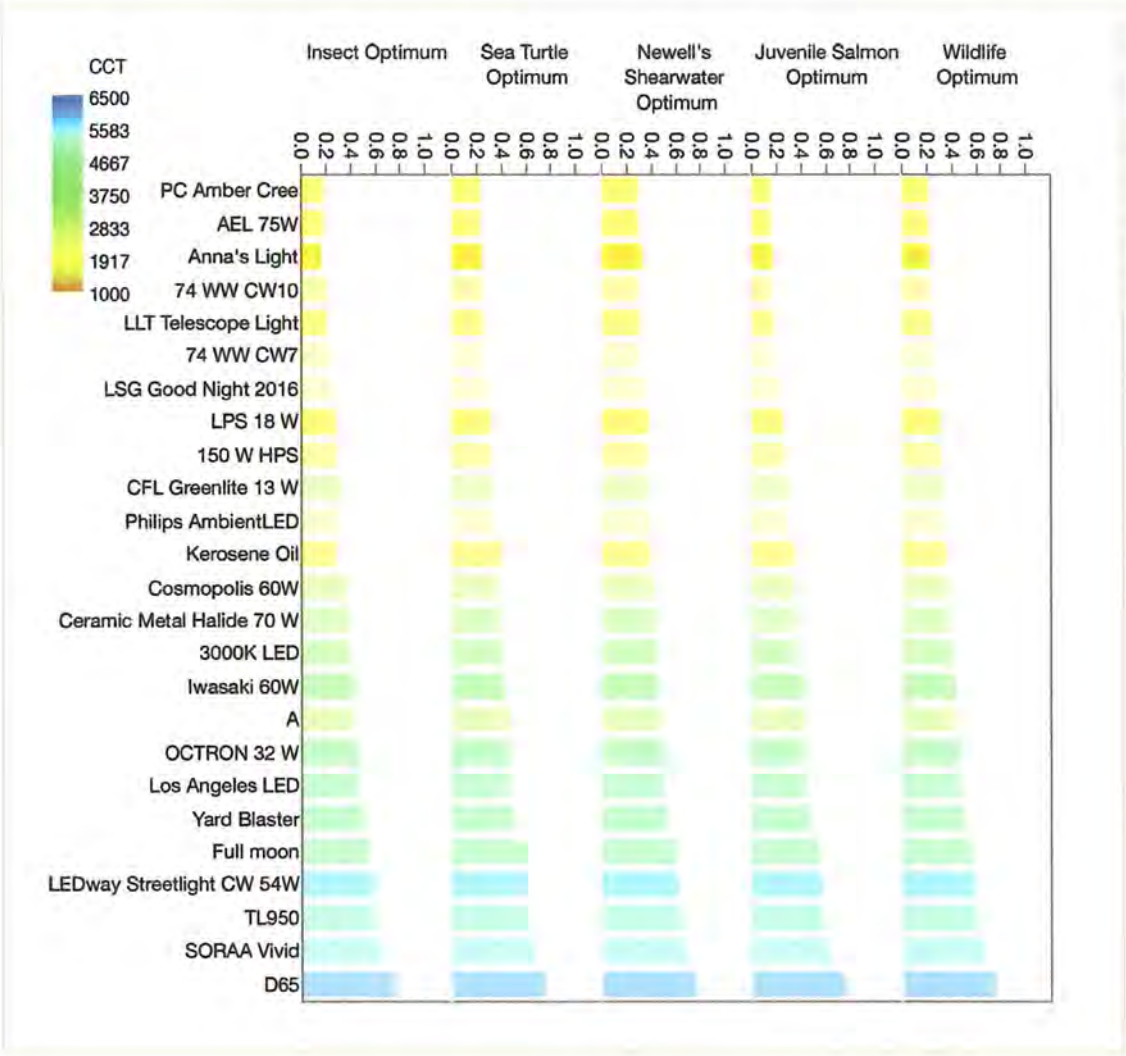


Figure 4:
Ranking of lighting sources that equally weighs wildlife response, melanopic response, astronomical light pollution (Star Light Index [15]), and Color Rendering Index. Reprinted from [14]. Shorter bars represent a combination of lower wildlife responses and higher CRI

CCT is not a perfect predictor of effects on wildlife, but it is a reasonable rule of thumb that lower CCT will be less disruptive to wildlife (and we already know that it will be less disruptive for circadian rhythms and astronomical observation [15]). The lamps with the lowest projected influence on wildlife overall were low-pressure sodium (which is being phased out), high-pressure sodium, PC amber LEDs, and filtered LEDs (Figure 3).

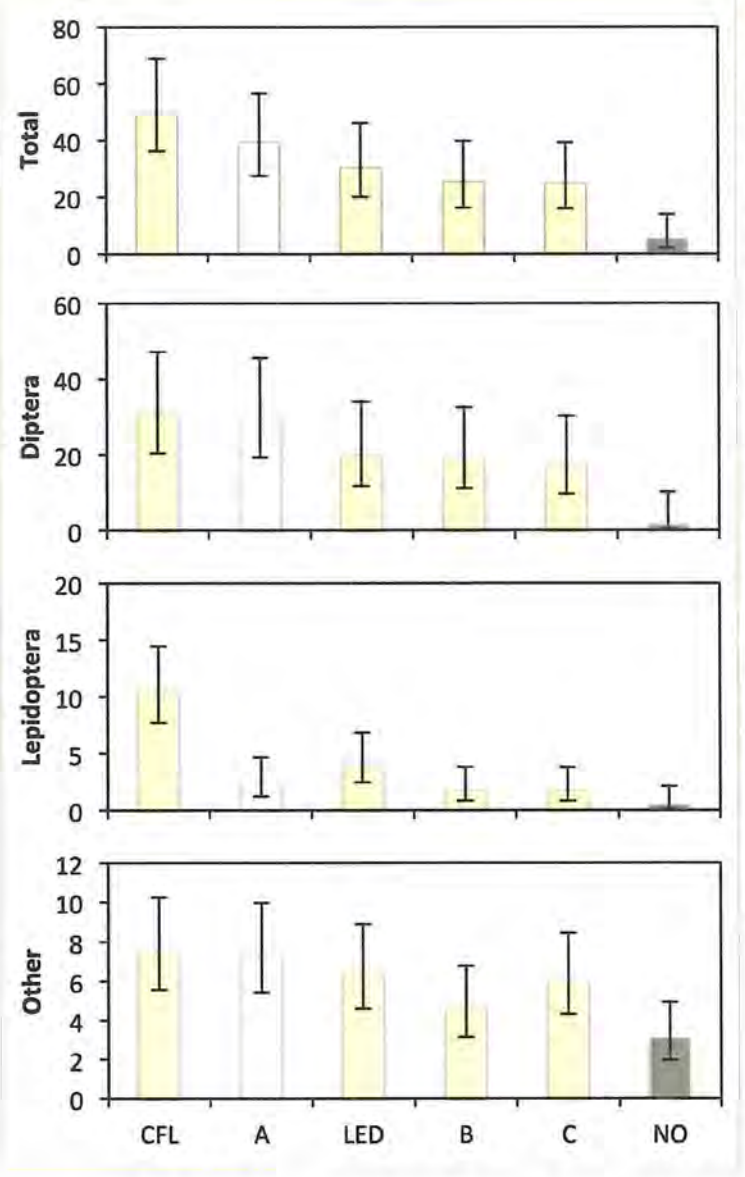
Figure 3: Thus far, the results represent the predicted effects of the lamps on wildlife. To account for preferences in outdoor lighting, another ranking was created that incorporated a penalty for low color rendering index (CRI). Any lamp with a CRI over 75 was assumed to have adequate color rendering, while those with lower CRI were penalized in the overall index. The resulting ranking of lamps is notable in that low pressure sodium ranks lower because of its extremely low CRI, while PC Amber and filtered LEDs rank the highest, balancing both lower wildlife impacts with reasonable if not high CRIs (Figure 4).

As a rule of thumb, CCT can be used as an indicator of wildlife effects, but this may not hold true across all applications. Migrating birds cannot orient under red light and therefore solid red lights are to be avoided on communication towers [16]. Green light has support for minimizing attraction of nocturnal migrant birds [17]. Other special cases exist and would require consultation with experts on a particular taxonomic group or species at risk.

Tuning Within the Same CCT

An additional useful feature of LED lamps is that they can be configured to produce the same CCT with different spectral outputs. To demonstrate this approach to minimize insect attraction, the spectral response curves for bees and moths were used to choose between configurations of two 2700 K LEDs (produced with a prototype tunable lamp with RGB diodes) and one 3000 K LED in a manner predicted to reduce insect attraction. The custom configurations were then compared in a field study with an off-the-shelf 2700 K LED and 2700 K fluorescent lamp [18].

The results of this field experiment showed that a tunable LED attracted 20-21% fewer insects than a similar LED not designed with minimizing



Figures 5:
Comparison of attraction of insects, and subsets of flies (Diptera), moths (Lepidoptera), and other insects to 2700 K compact fluorescent (CFL), custom 3000 K LED (A), off-the-shelf 2700K LED, two custom 2700 K LEDs (B and C), and a control (NO). Average catch per night with 95% confidence intervals (see [18] for details)

insect attraction as an objective (Figure 5). This effect was large for moths, similar to the findings when comparing different CCT lamps. These results are especially important for the choice of indoor lighting in the tropics, where glass and screens on windows is not common. Using indoor light that provides adequate color rendering for work while reducing insect attraction would reduce the probability of exposure to phototactic insect vectors of disease [18]. LEDs offer this possibility because of the spectral flexibility in their design.

Certainly, conservation scientists have more work to do on spectral responses. The number of species response curves available needs to be increased, which requires experts across taxonomic groups to engage the topic. The relationship between light intensity and spectral responses is largely unknown and needs research across nearly all wildlife groups. Even the perception of light by different groups of wildlife species is not fully described and taxonomic-specific metrics of both radiance and irradiance are needed. Nevertheless, a "no regrets" approach can be taken to guide the choice of spectrum that LEDs make possible, which is to reduce blue content. With amber and filtered products on the market, low color temperatures ≤2200 K are feasible and desirable to minimize adverse impacts.

Conclusions

The efficiency benefits of LEDs and the resulting economic incentives will drive further conversion of outdoor and indoor lighting to the technology. If the tendency to light more when light is cheaper can be overcome, the other attributes of LEDs hold significant promise for reducing environmental effects. Realizing that promise requires designers and manufacturers to learn about and embrace the guidance that wildlife scientists can provide. In some instances it will be challenging - resisting the desire to up-light, using no more light than necessary, and educating clients on the benefits of spectral choices that do not look like daylight. In other contexts, environmental regulations are likely to dictate lighting choices and offer an opportunity if the industry is prepared to seize it. On each of the mitigation approaches - duration, direction, intensity, and spectrum - LEDs will inherently or can be designed to perform well. Whether they do in practice will be up to the LED professional. ■

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Western Bay of Plenty District Council

Operations and Monitoring Committee

Omokoroa Road Urbanisation Project (Western Avenue to Tralee Street Intersection)

Purpose

To determine if the undergrounding of the high voltage power lines should be included in the Omokoroa Road upgrading project at an estimated additional cost of $550,000.

To determine the level of planting along Omokoroa Road, either full planting estimated at $720,000 or bank planting, specimen trees and grass estimated at $120,000.

To determine if the Tralee Street roundabout upgrading should be included in the project or deferred to a future date.

Recommendation

1. THAT the Engineering and Special Projects Manager's report dated 15 February 2019 and titled "Omokoroa Road Urbanisation Project (Western Avenue to Tralee Street)" be received.

2. THAT the report relates to an issue that is considered to be of low significance in terms of Council's Significance and Engagement Policy.

3a. THAT the project includes undergrounding of the high transmission overhead power lines on Omokoroa Road between Western Avenue and Tralee Street at an additional estimated cost of $550k above the relocation of overhead power lines, funded within the structure plan funding model.

OR

3b. THAT the undergrounding of the overhead power lines on Omokoroa Road between Western Avenue and Tralee St not be included in the project but only the cost of the relocation of the power lines be included in the project cost.

4a. THAT the vegetation on the Omokoroa Urbanisation Project include grass and specimen trees on the level surfaces and grass and lower level landscape planting on the banks at an estimated cost of $120k and an annual maintenance cost $20k.

OR

4b. THAT the Omokoroa Urbanisation Project be fully landscaped and planted at an estimated cost of $720k and annual maintenance cost of $100k noting that the landscape planting may not be eligible for NZTA funding.

5a. THAT the Tralee Street/Omokoroa Road roundabout reconstruction be included in the Omokoroa Road Urbanisation Project subject to NZTA subsidy being approved for the project.

OR

5b. THAT the Tralee Street/Omokoroa Road roundabout not be included in the Omokoroa Road Urbanisation Project.

Raj Sumeran
Engineering and Special Projects Manager

Approved

Gary Allis
Deputy Chief Executive

1.0 Background

The Omokoroa Road Urbanisation Project from Western Avenue to Tralee Street intersection is approved in the current structure plan and the LTP 2018-2018 for completion in the 2019-2020 financial years.

The Omokoroa Urbanisation Project consists of approximately 1.0km of road upgrade, several intersection upgrades, construction of right turning bays at intersections, 2.5m shared off-road cycle and pedestrian path on the northern side of Omokoroa Road, several bus bays, urban street lighting, various service relocations (underground and overheads) and urban landscaping and plantings.

The Tralee Street roundabout and its approaches are not included in the current LTP 2018-2018. However, due to the intensity of the commercial and residential development and the high use of the Tralee Street intersection, it is recommended to include the upgrading of the Tralee Street roundabout in the Omokoroa Urbanisation Project. There are also cost benefits and less disruption to the community if both projects were constructed at the same time.

Currently, no budget provision has been made for the undergrounding of the high voltage power lines in the structure plan and LTP. The relocation of the power poles to allow for the road widening has been included in the project cost. For safety reasons, amenity value and maintenance cost savings, it is suggested that overhead power lines be undergrounded so they are free of traffic hazards and makes the road corridor safer. The cost difference between the power undergrounding and relocation is in the order of $550k.

A high level of landscaping and plantings has been included in the Omokoroa Urbanisation Project to enhance the amenity and the natural beauty of Omokoroa. The Omokoroa community has expressed a strong view on the need for specimen avenue trees and screening plants on the Omokoroa Urbanisation Project. The cost of planting is $720k compared to a lower level of landscaping and plantings estimated at $120k. Both options include the specimen trees.

2.0 Budget Estimate and Funding Source Summary

Project Activities	Structure Plan Budget $M	Project Estimate $M	Funding Source		Structure Plan Timing
			WBOPDC	NZTA Subsidy (51%)	
Western Avenue to Margaret Drive (0-11-1)	1.56	2.78	1.36	1.42	2020/2021
Margaret Drive to Tralee (0-11-2)	2.85	3.26	1.6	1.66	2019/2020
Tralee St Roundabout		1.65	0.81	0.84	2020/2020
Power UG		0.55	0.55	0.00	2019/2020
Grass/plants		0.12	0.07	0.05	
Additional Landscape plantings		0.60	0.60	0.00	2020/2021
Pavement Rehabilitation	0.28	0.28	0.14	0.14	2020/2021
Services		0.52	0.25	0.27	2020/2021
Design, Tendering, MSQA		0.33	0.16	0.17	2019/2021
Total Project Cost		**$10.09**	**$5.54**	**$4.55**	
Total Budget (SP)	**$4.69**				
Shortfall			**$0.85**		
Less Additional Planting			**$0.60**		
Revised Shortfall			**$0.25**		

3.0 Power Line Relocation or Undergrounding

In order to urbanise this project, a number of existing power lines within the road corridor will conflict with the roading improvements and will require either relocation or undergrounding constructions.

North Power has provided prices to fully relocate the existing pole lines and alternatively, a price to underground the full project length.

The sum of $550k above the relocation cost has been allowed for the undergrounding. The undergrounding is expected to be funded on the same basis as the road upgrading however, is subject to confirmation from NZTA.

Currently, the power undergrounding is not included in the structure plan budget or in the current LTP. Council's direction and funding approval is required to include the undergrounding of the overhead power lines in the Omokoroa Urbanisation Project. Developers have been very supportive of undergrounding the power as it eliminates visual clutter and improves the outlook from the sections. Undergrounding is consistent with Council's Development Code, which requires underground services in subdivisions. Undergrounding high voltage power lines makes the road corridor safer from loss of control crashes and reduces maintenance costs. The Omokoroa Community Board has previously advocated for the undergrounding of the power from Western Avenue to Tralee Street section.

The undergrounding of the Prole to railway lines section of Omokoroa Road was approved by Council and funded as a structure plan project.

4.0 Landscape and Tree Plantings

A considerable amount of costs have been included in the landscaping and tree plantings for this project. A high level of plantings if implemented will enhance the amenity and the natural look of Omokoroa. The Omokoroa community has expressed strong views on the need for enhancing the amenity through the inclusion of specimen trees in this project to create a boulevard and screening effect. The planting and landscape costs is estimated at $720k and amounts to 7.4% of the total project cost. The alternative to landscape and plantings is to reinstate the berms with grass and specimen trees and the cut/fill batter slopes with topsoil and lower level planting at a reduced cost of $120k. A savings in the order of 83 % of the landscape and tree plantings cost could be achieved by planting grass plus the specimen trees instead of full landscape and trees. The maintenance cost of maintaining grass over the landscape and trees could be in the order of $20k per annum verses $100k per annum for landscape and plantings.

Currently, the high level landscape and tree planting is not included in the project budget. Council's direction and resolution is required for funding the landscape and tree plantings on the Omokoroa Urbanisation Project. Both options include the specimen trees. The lower cost option will be similar in appearance to the area right hand side of railway line – Western Avenue.

Attachment A shows the full landscape planting. **Attachment A**

5.0 Significance and Engagement

The Policy requires Council and its communities to identify the degree of significance attached to particular issues, proposals, assets, decisions, and activities.

In terms of the Significance and Engagement Policy this decision is considered to be of low significance because it is concerning a contract variation for planned work.

6.0 Engagement, Consultation and Communication

Interested/Affected Parties	Engagement/Consultation/Communication
Name of interested parties/groups	Omokoroa Community Board and Omokoroa communities Bay of Plenty Regional Council Heritage New Zealand Land developers Neighbouring property owners Northpower Spark
Tangata Whenua	Consultation with Pirirakau representatives for earthworks and historic site protections.
General Public	LTP and annual plan process Omokoroa Community Board Meetings

7.0 Issues and Options

Option 3a	
3a. THAT the project includes undergrounding of the high transmission overhead power lines on Omokoroa Road between Western Avenue and Tralee Street at an additional estimated cost of $550k above the relocation of overhead power lines be funded within the structure plan funding model.	
Assessment of option for advantages and disadvantages taking a sustainable approach	Advantages are: • Opportunity to remove overhead power lines servicing the community. • Opportunity for structure plan developer funded investment. • Will support an urban streetscape environment and meet the Omokoroa Community's desire for an enhanced amenity and free from visual effects of high voltage power lines. This will also reduce vehicular crashes and associated maintenance costs. • It will meet the requirements of the Infrastructure Development Code. The disadvantage is the $550k will have to be funded from the structure plan if it does not qualify for a subsidy from NZTA.

Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	Increased short term project cost and may impact financial contribution charges in Omokoroa.
Option 3b ***3b. THAT the undergrounding of the overhead power lines on Omokoroa Road between Western Avenue and Tralee Street not be included in the project but only the cost of the relocation of the power lines be included in the project costs.***	
Assessment of option for advantages and disadvantages taking a sustainable approach	Advantage of this is reduced cost to the project. Disadvantages are: • Lost opportunity to remove over head power lines servicing the community. • Will not support an urban street environment and will still have the visual effects of power poles in the corridor. • Potential remains for vehicular crashes and ongoing maintenance costs to repair the damaged poles. • Does not fit within the Infrastructure Development Code requirements.
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	Capital cost $424k
Option 4a ***4a. THAT the vegetation on the Omokoroa Urbanisation Project include grass and specimen trees on the level surfaces and grass and lower level landscape planting on the banks at an estimated cost of $120k and an annual maintenance cost $20k.***	

Assessment of option for advantages and disadvantages taking a sustainable approach	Advantages of this are: • This option is a low cost option and can be funded within the project. • The Omokoroa community will get some degree of urban feel and look with the urbanisation project. Disadvantage is: • The community will not get the enhancement to the amenity and look of Omokoroa. • Will not get a gateway boulevard and screening effect.
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	Capital costs $120k and is included in the project. Annual maintenance costs expected to be $20k.
Other implications	The public perception might be negative.
Option 4b ***4b. THAT Omokoroa Urbanisation Project be fully landscaped and planted at an estimated cost of $720k and annual maintenance cost of $100k noting that the landscape planting may not be eligible for NZTA funding.***	
Assessment of option for advantages and disadvantages taking a sustainable approach	Advantages are: • The Omokoroa community will get what they ask for. • It will create a gateway of boulevard and screening effect. • Will improve the urban character of Omokoroa Road Disadvantages are: • The cost of the project will be increased and will require Council funding. • It will increase annual maintenance costs.
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	Estimated cost of $720k and annual maintenance cost of $100k. Requires $600k extra Council funding.

Other implications	The public perception is expected to be less positive.
Option 5a ***5a. THAT the Tralee Street/Omokoroa Road roundabout reconstruction be included in the Omokoroa Road Urbanisation Project subject to NZTA subsidy being approved for the project.***	
Assessment of option for advantages and disadvantages taking a sustainable approach	Reduces disruption to the community through all the work being completed in one project.
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	Inclusion in the project reduces procurement, design and construction costs. Project B subject to NZTA approval for subsidy.
Option 5b ***5b. THAT the Tralee Street/Omokoroa Road roundabout not be included in the Omokoroa Road Urbanisation Project.***	
Assessment of option for advantages and disadvantages taking a sustainable approach	The roundabout upgrading can be undertaken as a future separate project.
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	Undertaking the project in the future will potentially be at a higher price as a stand alone project.

8.0 Statutory Compliance

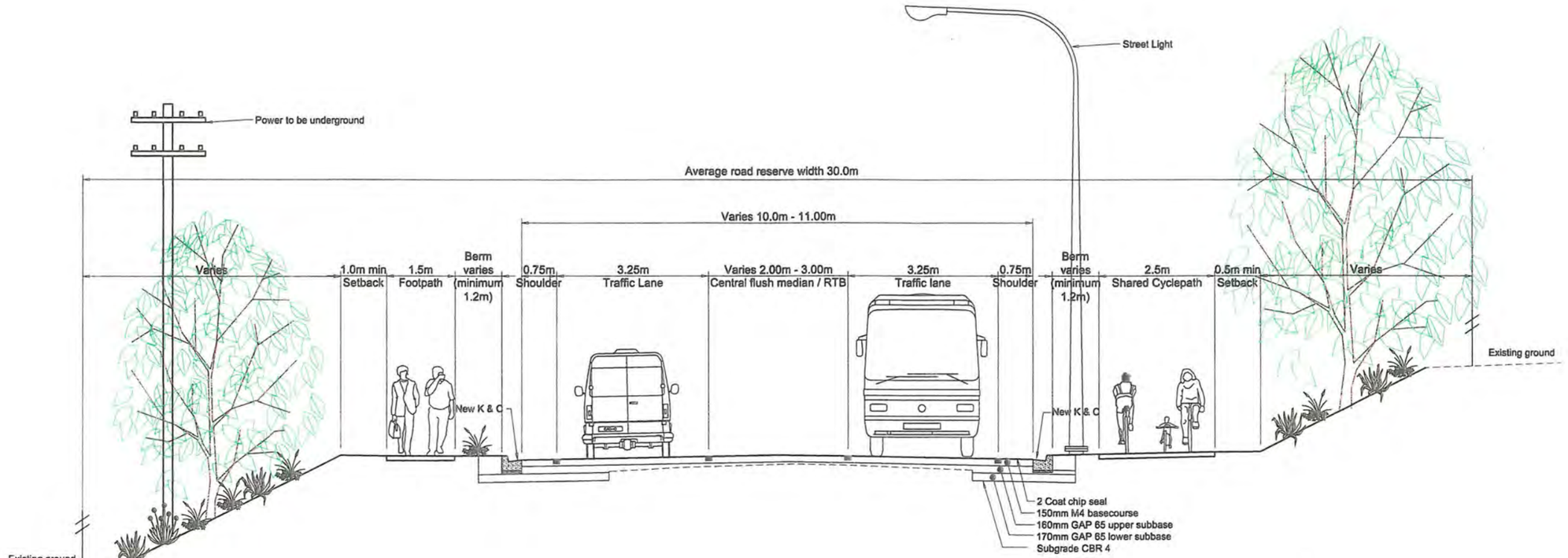
The recommendation meets the current council plans and the direction provide to staff by the elected members.

9.0 Funding/Budget Implications

Budget Funding Information	Relevant Detail
	The project has been budgeted from a number of funding sources e.g. structure plan and NZTA subsidies, and the budget for the structure plan can be amended during the annual plan process. The Operations Committee has delegation to approve contracts up to $5M for any one contract within budgets approved by Council in the LTP and AP budget processes. The Council retains the delegation for projects costing greater than $5M and for variations to the annual budget. The decision in resolutions 3(a) and 4(b) increase budgets and requires adjustment to the current structure plan.

ATTACHMENT

ATTACHMENT



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PLOTTED ON 2018-11-14 AT 2:26 PM

FOR DISCUSSION

Revision	Amendment	Approved	Revision Date
A	Issued for discussion	D.C.	11/2018

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Designed	Approved	Approved Date
N.TURVEY	R.HARDING	10/2018
Drawn	Scales	
N.TURVEY	1:50 (A1) 1:100 (A3)	

Project: WESTERN BAY OF PLENTY DISTRICT COUNCIL
OMOKOROA URBANISATION

Sheet: TYPICAL CROSS-SECTION

Project No	Sheet No	Revision
2-9C111.00	C31	1

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1:100 @ A3
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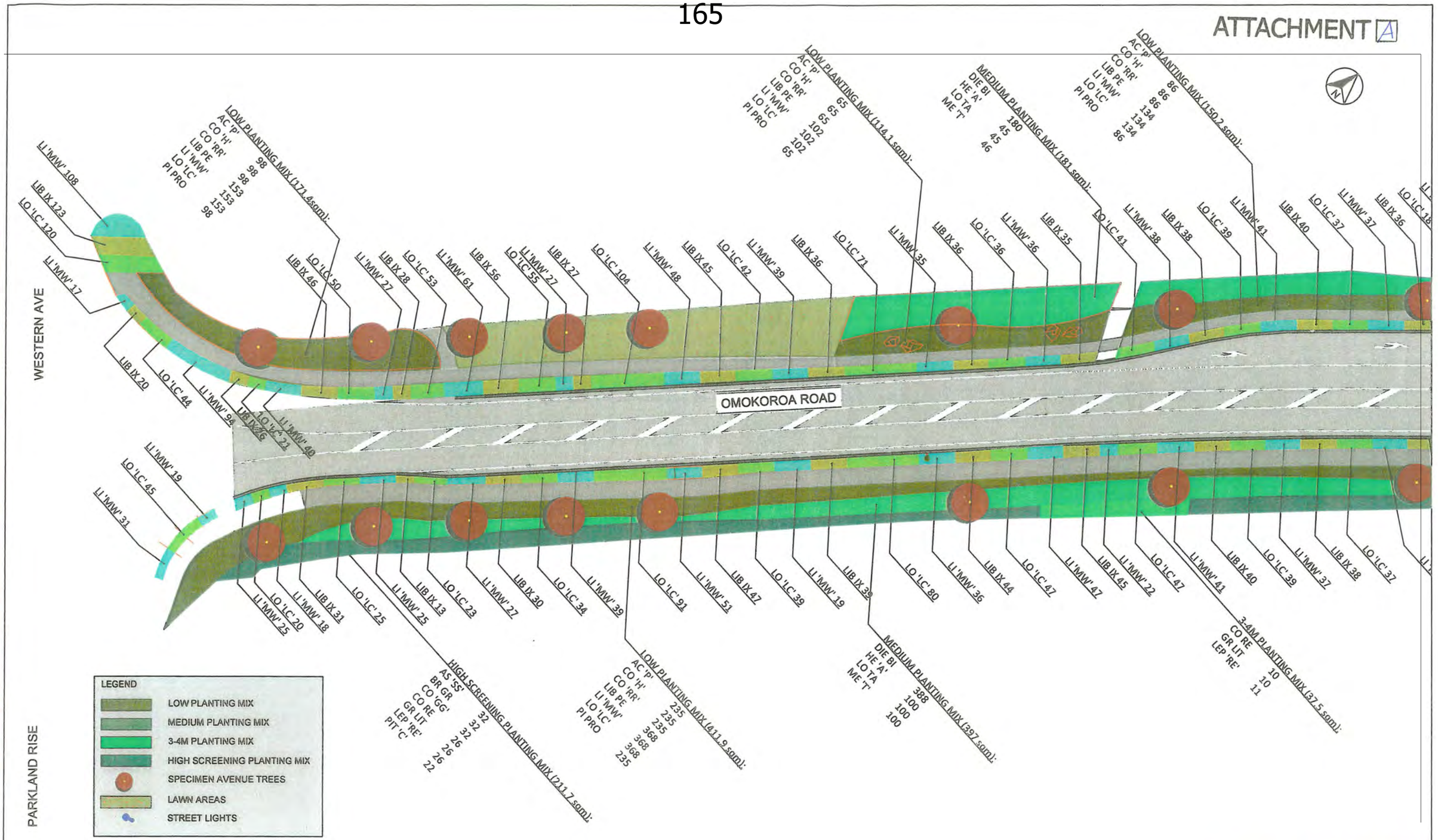
ATTACHMENT A

ATTACHMENT A



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Revision	Amendment	Approved	Issued Date

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Designed	Drawn	Approved	Approved Date
L ASHMORE	A LIANG	D.CROLL	JAN 2019

Scales: 1:250 (A1) 1:500 (A3)

Project: WESTERN BAY OF PLENTY DISTRICT COUNCIL
OMOKOROA URBANISATION

Sheet: LANDSCAPE PLANTING PLAN
SHEET 1 OF 14

Project No.	Sheet No.	Revision
2-9C111.00	L900	0

1:100@ A1
1:200@ A3
0 1 2 3 4 5 6 7 8 9 10 m

ATTACHMENT

ATTACHMENT

INTERSECTION IS INDICATIVE

250-258 PROPOSED INTERSECTION

OMOKOROA ROAD

LOW PLANTING MIX (199.3 sqm):
AC 'P' 114
CO 'H' 114
CO 'RR' 114
LIB PE 178
LI 'MW' 178
LO 'LC' 178
PI PRO 114

MEDIUM PLANTING MIX (320.9 sqm):
DIE BI 324
HE 'A' 80
LO TA 80
ME 'T' 80

MEDIUM PLANTING MIX (67.8 sqm):
DIE BI 68
HE 'A' 17
LO TA 17
ME 'T' 17

LOW PLANTING MIX (58.1 sqm):
AC 'P' 33
CO 'H' 33
CO 'RR' 33
LIB PE 52
LI 'MW' 52
LO 'LC' 52
PI PRO 33

HIGH SCREENING PLANTING MIX (136.4 sqm):
AS 'SS' 20
CO 'GG' 20
CO RE 17
GR LIT 17
LEP 'RE' 17
OLE 'C' 17
PIT 'C' 15

LOW PLANTING MIX (218.3 sqm):
AC 'P' 125
CO 'H' 125
CO 'RR' 125
LIB PE 195
LI 'MW' 195
LO 'LC' 195
PI PRO 125

MEDIUM PLANTING MIX (209.4 sqm):
DIE BI 214
HE 'A' 52
LO TA 52
ME 'T' 52

HIGH SCREENING PLANTING MIX (163.6 sqm):
AS 'SS' 25
BR GR 25
CO 'GG' 25
CO RE 20
GR LIT 20
LEP 'RE' 20
PIT 'C' 16

HIGH SCREENING PLANTING MIX (58.1 sqm):
AS 'SS' 26
BR GR 26
CO 'GG' 26
CO RE 22
GR LIT 22
LEP 'RE' 22
PIT 'C' 20

LEGEND
- LOW PLANTING MIX
- MEDIUM PLANTING MIX
- 3-4M PLANTING MIX
- HIGH SCREENING PLANTING MIX
- SPECIMEN AVENUE TREES
- LAWN AREAS
- STREET LIGHTS

DRAWING IN PROGRESS
PLOTTED ON 2019-1-18 AT 3:11 PM

FOR DISCUSSION

1:100@ A1
1:200@ A3
0 1 2 3 4 5 6 7 8 9 10 m

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L ASHMORE	D CROLL	JAN 2019
Drawn	Scales	
A LIANG	1:250 (A1) 1:500 (A3)	

Project: WESTERN BAY OF PLENTY DISTRICT COUNCIL
OMOKOROA URBANISATION

Sheet: LANDSCAPE PLANTING PLAN
SHEET 3 OF 14

Project No.	Sheet No.	Revision
2-9C111.00	L901	0

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ATTACHMENT

ATTACHMENT

OMOKOROA ROAD

MARGARET DRIVE

INTERSECTION IS INDICATIVE

LEGEND

- LOW PLANTING MIX
- MEDIUM PLANTING MIX
- 3-4M PLANTING MIX
- HIGH SCREENING PLANTING MIX
- SPECIMEN AVENUE TREES
- LAWN AREAS
- STREET LIGHTS

DRAWING IN PROGRESS

PLOTTED ON 2019-1-18 AT 3:11 PM

FOR DISCUSSION

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1:200@ A3
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Revision	Amendment	Approved	Initials	Date

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Designed	Reviewed	Authorised	Date
L ASHMORE	D CROLL		JAN 2019
Drawn	Scale		
A LIANG	1:250 (A1) 1:500 (A3)		

Project
WESTERN BAY OF PLENTY DISTRICT COUNCIL
OMOKOROA URBANISATION

Sheet
LANDSCAPE PLANTING PLAN
SHEET 5 OF 14

Project No.	Drawing No.	Revision
2-9C111.00	L902	0

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ATTACHMENT

ATTACHMENT

RETIREMENT VILLAGE

LOW PLANTING MIX (200.7 sqm):
AC 'P' 115
CO 'H' 115
CO 'RR' 115
LIB PE 179
LI 'MW' 179
LO 'LC' 179
PI PRO 115

MEDIUM PLANTING MIX (178 sqm):
DIE BI 172
HE 'A' 45
LO TA 45
ME 'T' 45

LOW PLANTING MIX (59.9 sqm):
AC 'P' 34
CO 'H' 34
CO 'RR' 34
LIB PE 54
LI 'MW' 54
LO 'LC' 54
PI PRO 34

LOW PLANTING MIX (87.6 sqm):
AC 'P' 50
CO 'H' 50
CO 'RR' 50
LIB PE 78
LI 'MW' 78
LO 'LC' 78
PI PRO 50

HIGH SCREENING PLANTING MIX (232.8 sqm):
AS 'SS' 35
BR GR 35
CO 'GG' 29
CO RE 29
GR LIT 29
LEP 'RE' 23
PIT 'C'

HIGH SCREENING PLANTING MIX (134 sqm):
AS 'SS' 20
BR GR 20
CO 'GG' 17
CO RE 17
GR LIT 17
LEP 'RE' 13
OLE 'C'

MEDIUM PLANTING MIX (266.7 sqm):
DIE BI 275
HE 'A' 66
LO TA 66
ME 'T' 66

LEGEND

- LOW PLANTING MIX
- MEDIUM PLANTING MIX
- 3-4M PLANTING MIX
- HIGH SCREENING PLANTING MIX
- SPECIMEN AVENUE TREES
- LAWN AREAS
- STREET LIGHTS

DRAWING IN PROGRESS

PLOTTED ON 2019-1-18 AT 3:11 PM

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Designed	Reviewed	Approved Date
L ASHMORE	D CROLL	JAN 2019
Drawn	Scale	Original Size
C RAJU	1:250 (A1) 1:500 (A3)	A1

Project: WESTERN BAY OF PLENTY DISTRICT COUNCIL
OMOKOROA URBANISATION

Sheet: LANDSCAPE PLANTING PLAN
SHEET 7 OF 14

Drawing No	Sheet No	Revision
2-9C111.00	L903	0

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ATTACHMENT

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ANDERLEY AVENUE

OMOKOROA ROAD

INTERSECTION IS INDICATIVE

LOW PLANTING MIX (34.9 sqm):
AC 'P' 20
CO 'H' 20
CO 'RR' 20
LIB PE 31
LI 'MW' 31
LO 'LC' 31
PI PRO 20

LOW PLANTING MIX (88.5 sqm):
AC 'P' 51
CO 'H' 51
CO 'RR' 51
LIB PE 79
LI 'MW' 79
LO 'LC' 79
PI PRO 51

MEDIUM PLANTING MIX (200.2 sqm):
DIE BI 200
HE 'A' 50
LO TA 50
ME 'T' 50

LOW PLANTING MIX (307.9 sqm):
AC 'P' 176
CO 'H' 176
CO 'RR' 176
LIB PE 275
LI 'MW' 275
LO 'LC' 275
PI PRO 176

MEDIUM PLANTING MIX (250.2 sqm):
DIE BI 60
HE 'A' 60
LO TA 60
ME 'T' 60

MEDIUM PLANTING MIX (186.5 sqm):
DIE BI 194
HE 'A' 46
LO TA 46
ME 'T' 46

LOW PLANTING MIX (69.4 sqm):
AC 'P' 40
CO 'H' 40
CO 'RR' 40
LIB PE 62
LI 'MW' 62
LO 'LC' 62
PI PRO 40

MEDIUM PLANTING MIX (25.4 sqm):
DIE BI 30
HE 'A' 6
LO TA 6
ME 'T' 6

LOW PLANTING MIX (22.1 sqm):
AC 'P' 13
CO 'H' 13
CO 'RR' 13
LIB PE 20
LI 'MW' 20
LO 'LC' 20
PI PRO 13

HIGH SCREENING PLANTING MIX (34.6 sqm):
AS 'SS' 5
BR 'GR' 5
CO 'GG' 4
CO 'RE' 4
GR 'LIT' 4
LEP 'RE' 5
OLE 'C' 4

LEGEND

- LOW PLANTING MIX
- MEDIUM PLANTING MIX
- 3-4M PLANTING MIX
- HIGH SCREENING PLANTING MIX
- SPECIMEN AVENUE TREES
- LAWN AREAS
- STREET LIGHTS

DRAWING IN PROGRESS

PLOTTED ON 2019-1-18 AT 3:11 PM

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Revision	Amendment	Approved	Revision Date

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Designed	Drawn	Approved Date
L ASHMORE	D CROLL	JAN 2019
Plotted	Scale	Project No. / Revision
A LIANG	1:250 (A1) 1:500 (A3)	2-9C111.00 L904 0

Project: WESTERN BAY OF PLENTY DISTRICT COUNCIL
OMOKOROA URBANISATION

Sheet: LANDSCAPE PLANTING PLAN
SHEET 9 OF 14

Original Sheet Size A1 [841x594] Plot Date 2019-01-18 at 3:11:38 PM Path T:\5project\9C111.00_OmokoroaUrbanisation\3 Design\Working\Drawings\Working\2-9C111.00 Landscaping L900 - L907.dwg L904

ATTACHMENT

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Designed: L ASHMORE	Drawn: D CROLL	Approved:	Project: WESTERN BAY OF PLENTY DISTRICT COUNCIL OMOKOROA URBANISATION
Plotted: A LIANG	Scale: 1:250 (A1) 1:500(A3)		Sheet: LANDSCAPE PLANTING PLAN SHEET 11 OF 14
			Project No: 2-9C111.00 Sheet No: L905 Revision: 0

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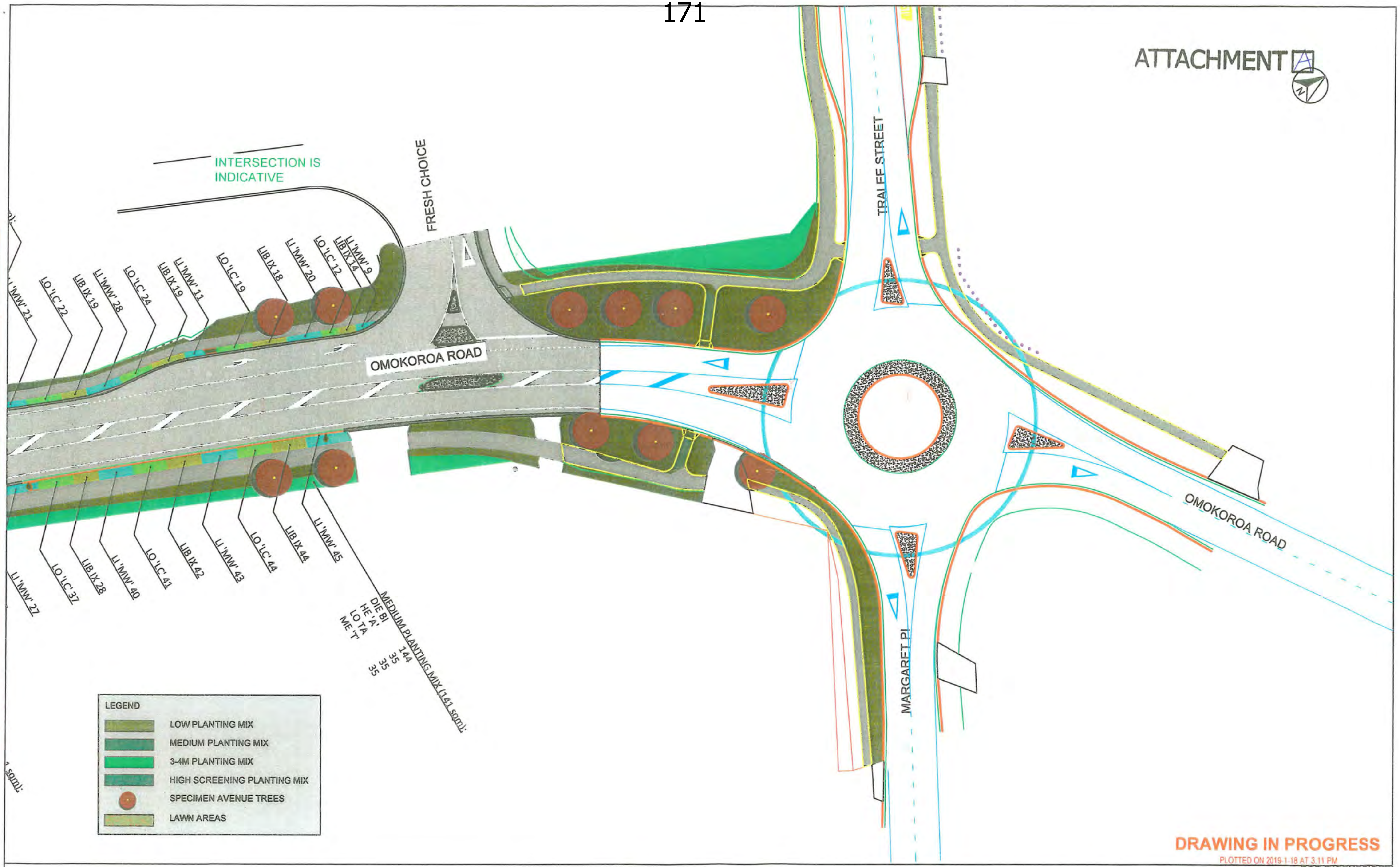
ATTACHMENT A
INTERSECTION IS INDICATIVE
FRESH CHOICE
TRALEE STREET
OMOKOROA ROAD
OMOKOROA ROAD
MARGARET PL
LO 'LC' 22
LIB IX 19
LI 'MW' 28
LO 'LC' 24
LIB IX 19
LI 'MW' 11
LO 'LC' 19
LIB IX 18
LI 'MW' 20
LO 'LC' 12
LIB IX 14
LI 'MW' 9
LI 'MW' 21
LI 'MW' 27
LO 'LC' 37
LIB IX 28
LI 'MW' 40
LO 'LC' 41
LIB IX 42
LI 'MW' 43
LO 'LC' 44
LIB IX 44
LI 'MW' 45
MEDIUM PLANTING MIX (141 sqm):
DIE BI 144
HE 'A' 35
LO TA 35
ME 'T' 35
LEGEND
LOW PLANTING MIX
MEDIUM PLANTING MIX
3-4M PLANTING MIX
HIGH SCREENING PLANTING MIX
SPECIMEN AVENUE TREES
LAWN AREAS
DRAWING IN PROGRESS
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WESTERN BAY OF PLENTY DISTRICT COUNCIL
OMOKOROA URBANISATION

LANDSCAPE PLANTING PLAN
SHEET 13 OF 14

2-9C111.00 | L906 | 0

1:100@ A1
1:200@ A3 0 1 2 3 4 5 6 7 8 9 10 m

Original Sheet Size A1 [841x594] Plot Date 2019-01-18 at 3:11:57 PM

Low planting

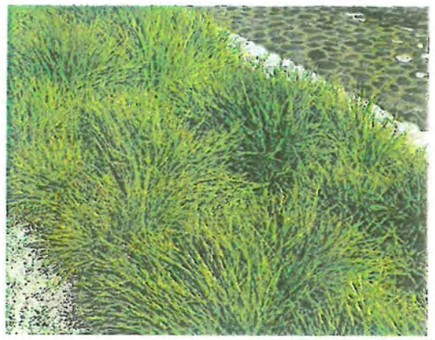
Aceana inermis 'Purpurea'

Coprosma acerosa 'Hawera'

Coprosma acerosa 'Red Rocks'

Libertia peregrinans

Libertia 'Goldfinger'



Lomandra 'little con'

Liriope muscarii 'Monroe white'

Pimelea prostrata TBC
NZ Daphne

Medium planting

Metrosideros collina 'Tahiti'

Lomandra tanika

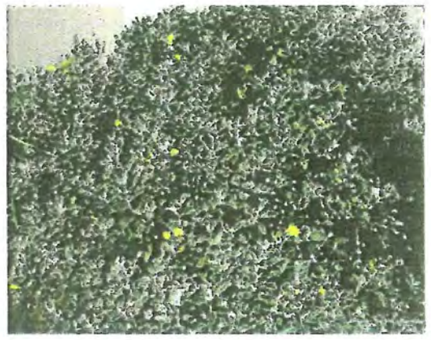
Hebe speciosa "Azure"

Dietes bicolor

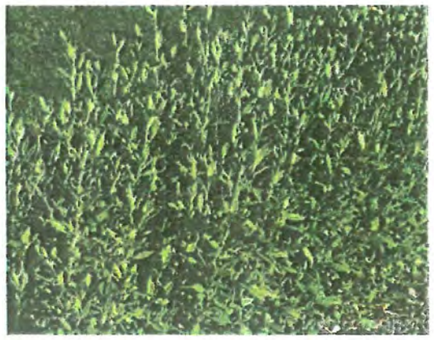
ATTACHMENT

Large planting

Astelia chathamica 'Silver spears'



Brachyglottis greyii



Corokia gentys green

Leptospermum 'Red Ensign'

ATTACHMENT

Grisselina littoralis

Pittosporum tenuifolium

Avenue Tree

Acer palmatum 'Osakazuki'

ATTACHMENT

Western Bay of Plenty District Council

Operations and Monitoring Committee

Sale of Land – Housing Affordability Forum

Purpose

To obtain direction from the Operations Committee regarding the sale price of Council land comprising 4839m^2, set aside for the Housing Affordability Forum, pilot project.

Recommendation

1. ***THAT the Strategic Property Manager's report dated 12 February 2019 and titled Sale of Land - Housing Affordability Forum be received.***

2. ***THAT the report relates to an issue that is considered to be of low significance in terms of Council's Significance and Engagement Policy.***

3. ***THAT it be recommended to Council that land within the Special Housing Area, designated for use by the Housing Affordability Forum, be offered for sale to the approved developer for $....., generally on the following conditions.***

    - ***Price fixed until 31 March 2020***
    - ***Development plan, funding and ownership structure to be approved by Council by 1 November 2019***
    - ***Subdivision consent (if required) to be approved by 31 March 2020***
    - ***Building consent to be lodged by 30 June 2020***
    - ***Payment for land 30 June 2020***
    - ***All development investment at purchasers' risk***
    - ***Buy back clause at cost if building does not proceed.***

AND / OR

4. ***THAT staff meet with the Housing Affordability Forum to discuss the developer options, funding and ownership structures and seek to reach agreement on an approach that meets the complimentary objectives of both the pilot project and Council's Housing Action Plan.***

Date: 12 February 2019 **Open Session**
Subject: Sale of Land - Housing Affordability Forum

Blaise Williams
Strategic Property Manager

Approved

Gary Allis
Deputy Chief Executive

1. Background

Councillors will recall that it has entered into an agreement with the Housing Affordability Forum for the creation of a pilot project related to affordable housing.
Attachment A

Part of this agreement requires the Housing Affordability Forum (HAF) to purchase the land required for the project, from Council, at a market related value. (Clause 17).

At the Policy Committee Workshop held on 5 February 2019, Councillors were given a presentation from HAF describing potential development opportunities on the HAF site. Councillors were also given a presentation by the Strategic Property Manager on an alternative development option supplied by Classic Builders.

A key tenet of both offerings is the value that they place on the Council land to be used for the pilot project. The HAF have assessed the financial viability for their project to require them to purchase the land at $750k + GST whilst the Classic offering have indicated that they are prepared to pay $1.1M for the land.

A schedule of the valuations follows:

	FEB 2018	MAY 2018	JAN 2018
Property Solutions	750k		1190k
Preston Rowe Paterson		1100k	
Classic Builders offer			1100k

Staff have also requested Preston Rowe Paterson to supply an updated valuation for the site. It is clear from the above valuations, and what Classic Builders are prepared to offer, that a reasonable estimated market value for the land would sit somewhere between $1M-$1.2M.

2. Options

Option One
Council may choose to consider to forgo a full market return for the land in question, in which case it could choose to sell the land to HAF for $750k. This is the value at which HAF feel they can undertake the development, and would effectively give them the go-ahead to proceed with the project.

This option would fit well with Council's Housing Action Plan in order to provide affordable housing, but would discount the land value.

Option Two
Council could choose to reaffirm its desire to charge a market related sale price in accordance with the agreement, which would be in the region of $1M-$1.2M and offer this to the HAF.

This would enable them to have certainty on land cost and allow them to make a decision on the viability of their project. The conditions of sale provide a developer incentive.

Option Three
Would be for staff to seek an outcome with both HAF and Classic Builders that would achieve a market price sale for Council as well as some of the aspirations of the HAF. Staff would then ensure that this option also delivered outcomes that met Councils Housing Action Plan.

Option Four – Subsequent Process
In the event the HAF choose not to proceed with a pilot project, Council could then consider its options for either negotiating a suitable development that complies with Council's Housing Action Plan, with Classic Builders, or choose to go back to the market to assess the markets appetite for a project of this nature.

2.1 Conditions

Under options 1 & 2, there needs to be conditions of sale. These would apply to both options. They are similar to recent sale conditions for other Council land.

- Price fixed until 31 March 2020
- Development plan, funding and ownership structure to be approved by Council by 1 November 2019
- Subdivision consent (if required) to be approved by 31 March 2020
- Building consent to be lodged by 30 June 2020
- Payment for land 30 June 2020
- All development investment at purchasers' risk
- Buy back clause at cost if building does not proceed.

3. Council's Housing Action Plan

Councils Housing Action Plan States amongst other things, that it:

- Continue to support the process to develop affordable housing on a designated land block within the Omokoroa Special Housing Area.
- Seek provision of Affordable Housing – the right size house at the right price.

Actions:

- In order to deliver more assisted rental and assisted ownership options, Council included the following action:
- Continue to support the process to develop affordable housing on a designated block within the Omokoroa Special Housing Area.

Assisted rental and assisted ownership is defined in the Housing Action Plan as:

- Housing for low/moderate income households, who can afford to spend no more than 30% of their gross income on rent or ownership.
- Can include rent to buy, affordable equity and shared ownership schemes

4. Housing Affordability Forum

The HAF have stated that the objectives for the pilot project include:

- Affordable and assessable housing to a wide range of households

- Sustainable house designs, that include:
    - Thermal envelopes
    - Resource efficiency
    - Solar orientated and intergenerational design
    - Private areas and common areas with a well designed open space

- Alternative ownership and financial models, such as:
    - Sale and rental (private and managed)
    - Shared equity variations
    - Meets Council Housing Action Plan

5. Significance and Engagement

This project is part of the Special Housing Area project which has been well consulted on and advertised and therefore does not require any further consultation.

In terms of the Significance and Engagement Policy this is considered to be of low significance.

3. Engagement, Consultation and Communication

This project is part of the Special Housing Area project which has been well consulted on and advertised and therefore does not require any further consultation.

4. Issues and Options Assessment

THAT it be recommended to Council that land within the Special Housing Area, designated for use by the Housing Affordability Forum, be offered for sale to the approved developer for $....., generally on the following conditions. • ***Price fixed until 31 March 2020*** • ***Development plan, funding and ownership structure to be approved by Council by 1 November 2019*** • ***Subdivision consent (if required) to be approved by 31 March 2020*** • ***Building consent to be lodged by 30 June 2020*** • ***Payment for land 30 June 2020*** • ***All development investment at purchasers' risk*** • ***Buy back clause at cost if building does not proceed.***	
Assessment of option for advantages and disadvantages taking a sustainable approach	Provides certainty for HAF Provides certainty for Council Would bring closer the potential to obtain rates income from the property
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	Depending on the final options taken, there may be staff time involved in bringing the project online.
Other implications	Any discounted sale would result in a loss to Council's ratepayers, but may, at the margins, assist with provision of accommodation to those that would not have been able to access it if land had been sold at a market value.
THAT staff meet with the Housing Affordability Forum to discuss the developer options, funding and ownership structures and seek to reach agreement on an approach that meets the complimentary objectives of both the pilot project and Council's Housing Action Plan.	
Assessment of option for advantages and disadvantages taking a sustainable approach	May assist the HAF to continue participation in the project. Would as far as possible result in a market related sale that also met the requirements of Councils Housing Action Plan.
Costs (including present and future costs, direct, indirect and contingent costs) and cost effectiveness for households and businesses	• Extensive use of staff time, for arguably a better outcome. • Utilises expertise of Classic Builders from adjacent development.

5. Statutory Compliance

This report complies with Councils legislative requirements, bylaws and policies.

6. Funding/Budget Implications

Council's budgets have been based on receiving more than $1m for land sales to HAF.

Council can choose to vary that sale price for its land should it be inclined to do so.

ATTACHMENT

AGREEMENT

Between

Western Bay of Plenty District Council ("The Council")

and

SmartGrowth through the Housing Affordability Forum (HAF")

Agreement to supply land in the Special Housing Area (SHA) at Omokoroa for an Affordable Housing Pilot Project.

BACKGROUND

- SmartGrowth through HAF wishes to undertake an Affordable Housing Pilot Project to demonstrate different housing typologies, densities and products in the SHA "The Pilot". This initiative stems from the SmartGrowth Strategy Action 10.3 which states:

Facilitate the delivery of a pilot project to provide a practical, best practice example of sustainable, affordable, quality housing to raise awareness amongst the housing sector and the public. The Pilot project will:

- *Establish and agree with partner Councils a framework for the delivery of affordable housing projects (including potential incentives /benefits to developers)*
- *Provide an opportunity to have a conversation about the levels of intervention councils are prepared to promote housing affordability including the use of Council land*
- *Include a literature review of intervention that have occurred elsewhere in NZ and internationally*
- *Include a definition of housing affordability for the Western Bay*

A) HAF has been established, under SmartGrowth to promote affordable housing.

B) HAF comprises representatives from:

- Western Bay of Plenty District Council
- Tauranga City Council
- Priority One
- Tauranga Community Housing Trust
- Sustainability Options
- Architects
- Resource Management Planning
- Developers Forum
- Closing the Gap

ATTACHMENT A

- PATAG
- Tangata Whenua Forum
- Independents

C) HAF is not a legal entity.

D) The Council has agreed to support the Smartgrowth / HAF Pilot within parts of the SHA at Omokoroa through provision of land in accordance with this agreement.

E) The remainder of the SHA will be developed by Classic Builders ("The Developer").

F) SmartGrowth through HAF is promoting the pilot project, but will not undertake the development.

G) The selected SmartGrowth HAF Pilot Project housing development will be undertaken by one or more developers "the Pilot" Developer.

ATTACHMENT A

Agreement between Western Bay of Plenty District Council "The Council" and the Housing Affordability Forum "HAF" dated 3 May 2016

AGREEMENT

1. The Council will reserve approximately 4000m² in the SHA for the SmartGrowth HAF Pilot.

2. The land will be in either one 4000m² block or 2 x 2000m² blocks, or alternative arrangement as maybe agreed.

3. The location of the block(s) within the SHA will be by agreement between the developer, SmartGrowth through HAF, and the Council.

4. SmartGrowth through HAF will procure affordable housing designs and proposals for the Pilot Project.

5. SmartGrowth through HAF will approve the Pilot Developer after the Registration of Interest process and consultation with Council and the Developer.

6. HAF and the Council will work with the Pilot Developer to ensure (to the extent that they are legally able) that the exterior cladding of the structures is suitable, of good quality and attractive in the relevant surroundings
7. The SHA is planned to be consented by September 2016, and for Stage 1 development to be developed in the 2016/2017 construction season.

8. Stage 1 of the SHA will be adjacent to Omokoroa Road, generally as shown on Attachment 1.

9. Part of the SmartGrowth through HAF Pilot Project land will if possible be allocated in Stage 1 of the SHA development.

10. SmartGrowth through HAF is permitted to assign the land to the Pilot Developer subject to Council approval by a staff member being part of the selection process by the independent panel.
11. The Council will enter into a commercial sale agreement with the Pilot Developer generally in accordance with this agreement.

12. SmartGrowth through HAF has 12 months from the date of the provision of the land titles to the allocated Site A or B respectively to have an agreement with the preferred developer in place and that the developers have achieved final design and consents for the pilot project.

13. The Pilot Developer is responsible for consenting the pilot project under the Resource Management Act.

14. Likely Development Time frame:

ATTACHMENT A

	Item	Due
A	SmartGrowth through HAF selects preferred Developer and their concept designs and proposal.	September 2017
B	Smartgrowth through HAF approves the final designs for the Pilot Project	December 2017
C	Land Use and subdivision Resource Consent for Pilot approved by Council	February 2018
D	Commercial Agreement between Council and Pilot Developer	January 2018
E	Construction of the first pilot houses commences	March 2018

15. The timeframes can be amended by agreement between SmartGrowth through HAF and Council.

16. In the event that construction has not commenced on the building within 2 years of a section 224 being granted, Council will be able to cancel this agreement and each party will bear their own costs incurred as a result of this agreement.

17. The land shall be supplied on the following basis:

17.1 Sale by Council to SmartGrowth through to HAF / Pilot Developer at market rates. Market rates shall be set by valuation on the developed land and shall relate to the section prices in the SHA. As at March 2017 each underlying lot in the SHA is valued at, of the order of $250 000. Final valuation (and cost) will be determined by registered valuation undertaken by Council. For clarity area A on the attached plan and allocated to HAF has five underlying lots and area B seven underlying lots.

17.2 Payment for the land shall be deferred until the earlier of:

- The sale of the land / building package to an owner
- Six months after construction of the first house and subject to alternative arrangements on the sale and purchase agreement

17.3 For both Sites A and B the land will be provided:

- With services to the boundary
- Agreed road access point
- Normal services in the public road (as provided to the SHA)

- Contour in accordance with the overall SHA finished contour to be supplied and attached to this Agreement.
- Financial contributions will be paid by Council and recovered through the agreed purchase price with the Developer. Note: 224 approval may be deferred until houses are ready for sale.
- Generally ready for development by the Pilot Developer
- As an un-subdivided block within the SHA ready for the Pilot Developer to prepare a scheme plan and lodge a subdivision consents.

18. Each party shall bear its own costs. For clarity the Pilot Developer shall bear all costs of the pilot as though it was a normal development.

18.1 The SHA Developer shall contour the land and provide services to the boundary including SHA roads and infrastructure.

18.2 The Council shall fund the land holding costs and the Pilot financial contributions.

MEDIATION

In the first instance disagreements shall be referred to the Chair of SmartGrowth with advice from HAF and the Deputy Chief Executive Officer or Chief Executive Officer of Council to resolve.

If this fails to resolve the issues it will be referred to either:

a) The Operations Committee of Council to decide

Or

b) To an agreed mediator.

ATTACHMENT A

Agreement between Western Bay of Plenty District Council "The Council" and The Housing Affordability Forum "HAF" date 3 May 2016

EXECUTED this 13th day of April **2017**

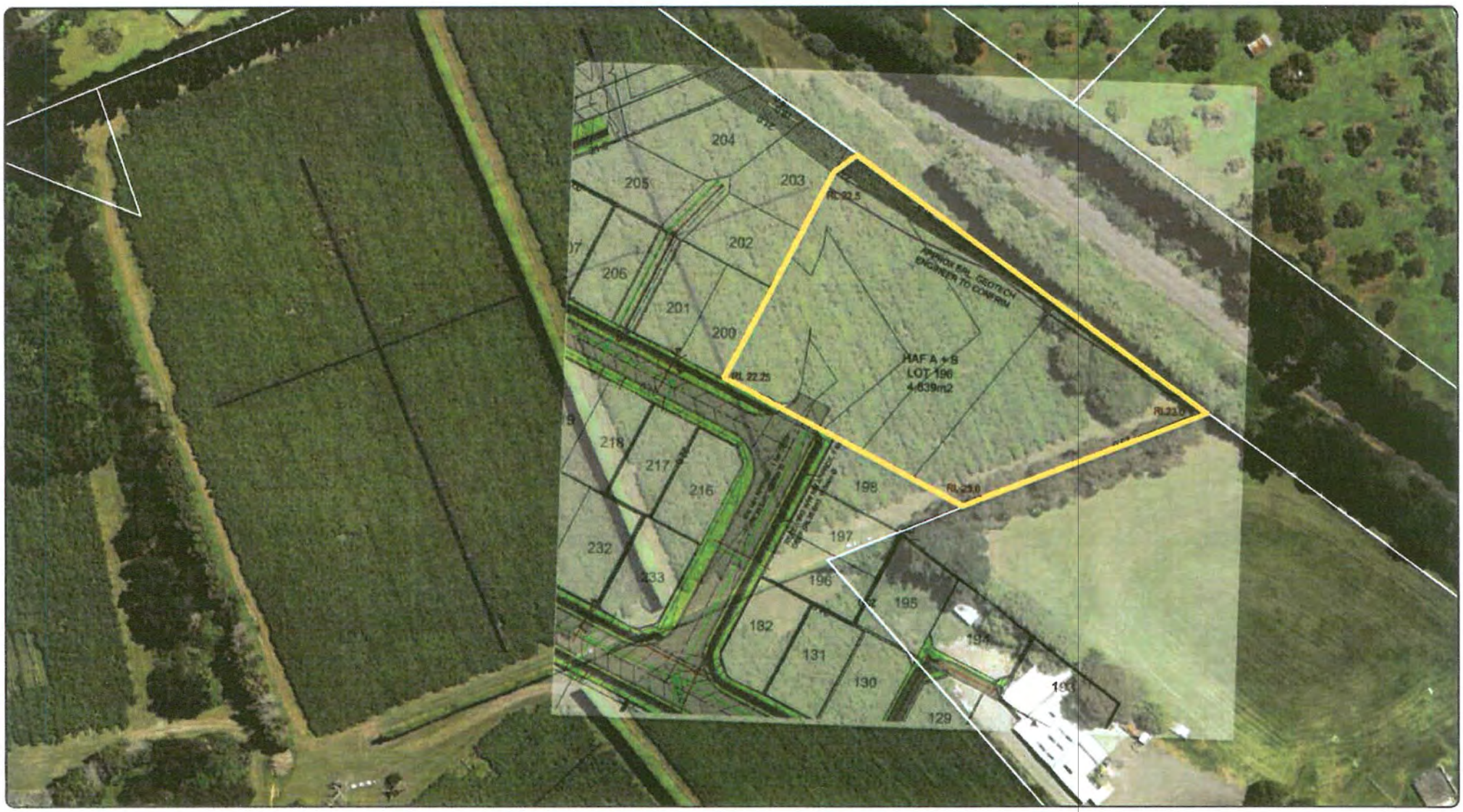
THE COMMON SEAL of)
WESTERN BAY OF PLENTY)
DISTRICT COUNCIL)
was affixed heretoin the presence of :-

THE WESTERN BAY OF PLENTY DISTRICT COUNCIL
The Common Seal of

Authorised Officer

THE COMMON SEAL of)
The HOUSING AFFORDABILITY FORUM ("HAF")
was affixed heretoin the presence of :-

Authorised Officer



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Location of services is indicative only. Council accepts no liability for any error.
Archaeological data supplied by NZ Archaeological Assoc/Dept. of Conservation.

Email: gis@westernbay.govt.nz
Date: 1/30/2019
Operator: mlb
Map: E:\Shape\MLB\2019\Projects\Omokoroa SHA Overlay.aprx

Scale A4 - 1:1,250
0 5 10 20 30 40 50
Meters

Western Bay of Plenty District Council

OMOKOROA SHA
OVERLAY
PHOTOGRAPHY 2014-15

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Western Bay of Plenty District Council

Operations & Monitoring Committee

Infrastructure Services Report February 2019

Purpose

To monitor and provide updates to the Operations & Monitoring Committee on current projects, contracts and works programmes.

Recommendation

1. ***THAT the Deputy Chief Executive's Report dated 12 February 2019 and titled Infrastructure Services Report February 2019 be received.***

2 ***THAT the Open Section of the Operations & Monitoring Committee Information Pack No. OP17 dated 28 February 2019 be received.***

3. ***THAT the report relates to an issue that is considered to be of low significance in terms of Council's Significance and Engagement Policy.***

Gary Allis
Deputy Chief Executive Officer

1. Utilities

1.1 Ongare Point Wastewater Scheme Preliminary Investigations

Council is currently building a Septic Tank Effluent Pump (STEP) wastewater system for the Ongare Point community.

Four final tanks are required to be installed. The Treatment Plant construction is complete with only finishing work, including fencing and the access track to be completed. The treatment plant is currently receiving waste from the connected tanks and is performing well.

1.2 Home Worm Composting Workshops

Dates for 2019 are being planned with the trainers and will be available on Council's website once confirmed at: http://www.westernbay.govt.nz/our-services/rubbish-recycling-waste/Pages/Worm-Composting.aspx

All bookings are now made through www.eventfinda.co.nz

1.3 Katikati Recycling Centre Opening Hours Trial

The Katikati Recycling Centre is operating under the proposed extended opening hours on Thursday afternoons. Ratification of the proposed extended hours will be sought from Council in April 2019

1.4 Te Puke Recycling Centre Extended Opening Hour Trial

The Te Puke Recycling Centre extended its opening hours during September 2018 for a three month trial. The extended hours were continued in December. There is proven support for extended opening hours and ratification for the increased level of service will be sought from Council in April 2019.

1.5 Katikati Alternative Options Assessment

The Katikati Wastewater Consent renewal was approved on 24 August 2018 and the Consent conditions requires Council to look at alternative options for the long-term discharge of the treated wastewater from the Katikati Wastewater Treatment Plant.

1.6 Highfields Pond

Refer to separate report.

1.7 Minden Road

A new trunk water main has been installed between Minden Reservoir and Florence Lane. Work commenced in late July with completion mid October 2018. Electrics and controls are now commissioned and this project is complete.

1.8 Omokoroa Water Main Improvements

Construction is underway on new water mains, rider mains hydrants, valves and service lines in Hamurana Road, Vivian Street, Myrtle Avenue and Walnut Grove. Also in Munro Road and a short section of Crawford Road. Work is now complete.

1.9 Western Supply Zone Water Main Improvements

Upgrade to water mains along Beach Road, Waihi Beach and replacement of water mains attached to Tuapiro Stream Bridge and Waitekohe Bridge on State Highway 2. Also a replacement of a short section of cross country water main between Lund Road and Hot Springs Road. Works will commence on 29 January 2019.

1.10 Two Mile Creek Update - Upstream Dillon Street Bridge

The Bay of Plenty Regional Council Resource Consent was lodged in June 2017. Two parties did not sign in favour of applying for the Consent.

BOPRC requested further information be supplied by WBOPDC including modelling of the effects of the new channel on the 100-year flood and environmental and ecological issues with the new concrete channel. These assessments are now complete and final information has been provided to BOPRC. Feedback received from the BOPRC and draft Consent conditions have been finalised. BOPRC has provided the Resource Consent, so ready to go from this perspective.

Due to the creek being located in a floodable zone, a separate Resource Consent is required from WBOPDC. The Consent has been lodged and Council staff have been working with two property owners regarding submissions. One submission has been resolved, the other is still in negotiation. The Consent was expected to be granted in September 2018.

Direction being given to WBOPDC resource consent manager to proceed with arranging a Commissioner to hold a hearing to deal with the one party who is objecting to the proposal based on other development issues with their land.

The property owner who objected to the Consent has entered into discussions with the Strategic Property Manager to see if a solution can be found to his existing development and the adjoining Two Mile Creek Project. Staff are awaiting the outcome of this discussion.

1.11 Maketu Stormwater Catchment Areas

Inspections were carried out in January with spraying and mechanical clearing to follow in February, March and April 2019.

1.12 Comprehensive Stormwater Consents - Eastern Zone

The Catchment Management Plan for the Eastern Catchment was lodged with the Bay of Plenty Regional Council prior to Christmas. The Eastern Zone includes the urban areas of Maketu, Te Puke, Pukehina and Paengaroa. The plan will form the basis for the Comprehensive Stormwater Consent Application. Consultation with the community was held on the Catchment Management Plan prior to it being lodged. Positive feedback was received.

1.13 Te Puke Wastewater Treatment Plant Resource Consent Renewal

The application to renew the Discharge Consent for the Te Puke Wastewater Treatment Plant has been lodged with the Bay of Plenty Regional Council. The application seeks a 35-year term. Submissions on the Consent application closed prior to Christmas. Sixty seven submissions were received on the application with the majority of the submissions in opposition to the application. Hearings are expected to be held in early April 2019.

1.14 Te Puke Water Main Improvements

Installation of new water mains in Moehau Street and Edgehill Place commenced late September 2018 and is due for completion in early 2019. All pipes have been installed, the final cut-over, commissioning and reinstatement are due for completion late February to early March 2019.

1.15 Comprehensive Stormwater Consents - Central Zone

The Comprehensive Storm water Consent (CSC) for the Central Zone (including Te Puna and Minden) has been lodged with Regional Council.

However, staff are still waiting on feedback from Regional Council. The central CSC excludes Omokoroa as a CSC was obtained for Omokoroa in 2007.

This application is currently sitting with the Bay of Plenty Regional Council for processing. A meeting was held in late October between Bay Of Plenty Regional Council and Western Bay of Plenty District Council staff to help progress the application. Bay of Plenty Regional Council have indicated they will be issuing Western Bay with a further information request but nothing has been received to date.

1.16 KiwiRail Bridge 91 ECMT Replacement – Access to Site

KiwiRail have confirmed they intend to replace the complete bridge that is located between the Council owned land of the Te Puke Wastewater Treatment Plant and the existing Council Reserve.

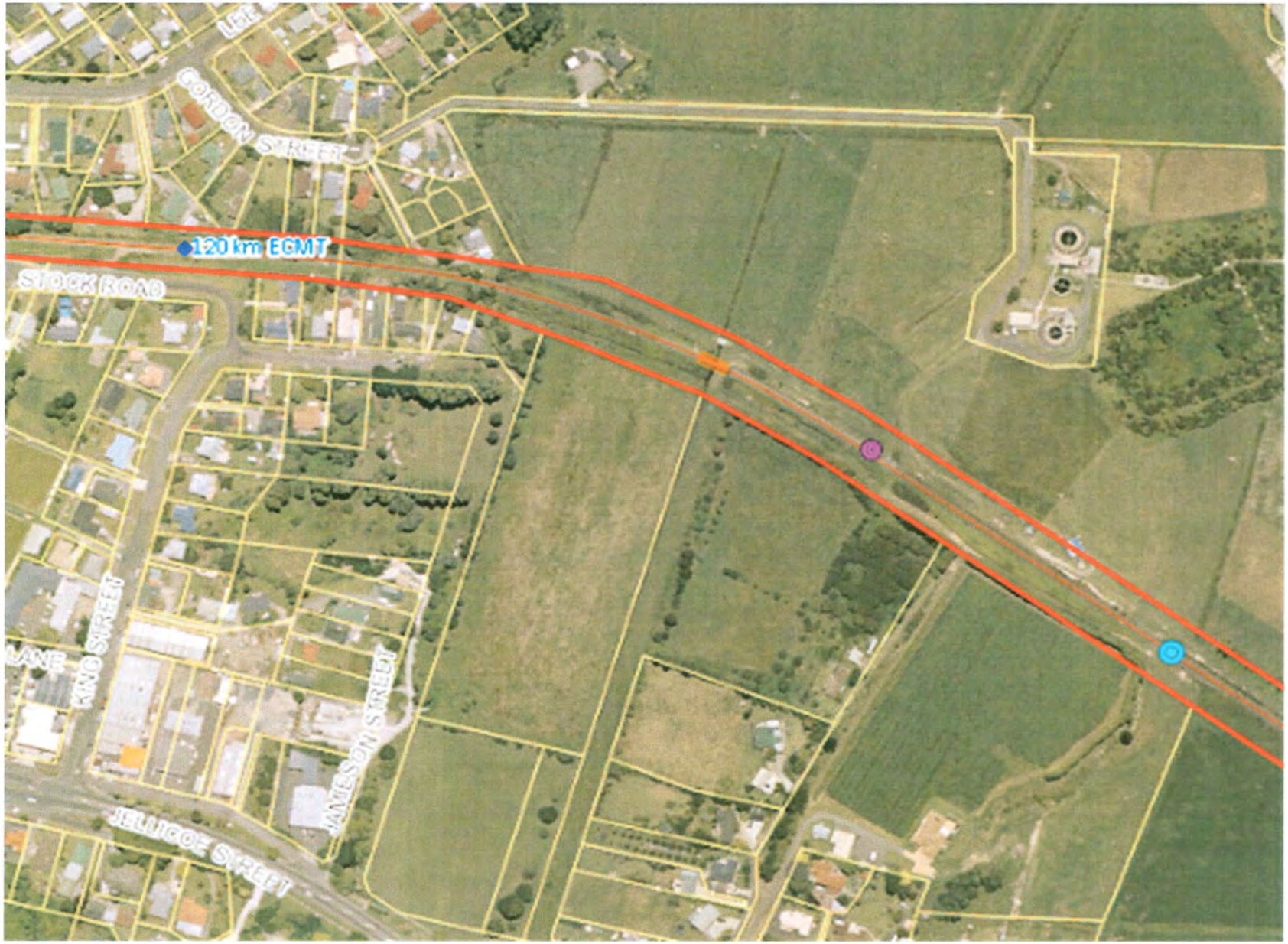
The physical works tender was sent out at end of January 2019. At this stage, no works will commence on site until the end of April 2019.

The cycleway section that passes under the bridge will need to be closed off for approximately a 10-week period while works are undertaken. The contractor will have large machinery on site including a piling rig and large earth moving equipment and plant, as such the area will be a high risk site with stringent Health and Safety procedures in place.

Works includes:

- Piles and new concrete abutments being constructed
- Erosion protection works under the bridge area were the current stream passes under
- The existing embankment formations will be widened along the entire length
- New bridge deck
- New railway track installed.

KiwiRail have confirmed more detailed information will be provided closer to the construction phase once the contractor has been chosen. It is likely the works will be completed in two separate stages


GORDON STREET
120 km EGMT
STOCK ROAD
KING STREET
JAMESON STREET
ELLICOE STREET

2. Reserves

2.1 Kauri Point Jetty – Walkway Re-Decking

The walkway is being monitored for safety and any minor repairs undertaken in the interim, until complete walkway decking renewal can occur post landslip / road reinstatement access. This delay will extend into to 2019/2020.

2.2 Kauri Point Slip Repairs

A geometrical design workshop was held on 30 January 2019.

The detailed design is being worked through and construction is scheduled for later this year subject to pricing and the Resource Consent process.

2.3 Haiku Park to Henry Road Cycleway/Walkway

The information/ interpretation sign-board has been constructed and is now with the Katikati Menz Shed to install. Installation expected in February - March.

2.4 Omokoroa to Tauranga Cycleway

Omokoroa User Statistics as follows:

Since the trail opened, the total count of users is 84,851 consisting of 63,329 pedestrians and 21,522 cyclists, with a daily average of 147 (110 & 37).

Approximately 25% of users are cyclists.

Holiday Season 2 Dec 2017 to 21 Jan 2018	**Holiday Season 1 Dec 2018 to 20 Jan 2019**
Total User Count:	Total User Count:
Daily Average:	Daily Average:

2.5 Omokoroa Sportsground Playground

The playground was opened prior to Christmas, although the official opening is planned for the first school term of 2019 (date to be confirmed).

Final additions involve shrub garden planting and additional trees, which will be planted during autumn.

2.6 Omokoroa Ferry to Opureora/Matakana Island – Facilities Upgrade

The bulletin board (confirmed by the Island community) is to be installed at the Opureora Boat Ramp, expected February or March.

2.7 Omokoroa Slips

There has been no change in the situation of those most affected by slips in 2017.

A proposal to repair a slip from No 69 Omokoroa Road onto Council walkway has been approved in principle. The owner advised the repair is likely to take the form of a tied back timber pole structure.

2.8 Opuereora Marae Public Toilet

Staff met with the Marae Committee on 25 January 2019 to discuss contract issues and the planned toilet building upgrade through the maintenance contractor.

An asbestos inspection has been undertaken in preparation for these repairs.

2.9 Waihi Beach Cycleways

Planning processes continue to progress a shared use loop trail through the water catchment reserve. Construction timing is dependent on Archaeological Authority application processing timeframe and funding.

Procurement for a clip-on cycleway bridge at 3-Mile Creek (Seaforth Road) is underway.

It is noted that the recently completed section through Island View Reserve has not been located as originally intended, instead, it connects to a much narrower gravel path alongside the carpark - which can conflict with overhanging parked cars & motorhomes. To improve the user experience, it is proposed that the carpark fence is removed, which will then allow for the widening and resurfacing of the gravel path.

The detailed design is underway for the Emerton Road shared path, this will be located on the harbour side of Emerton Road.

Land owner discussion is continuing for the Waihi to Waihi Beach Cycle Trail. Staff are working with the Waihi Beach Cycle Trails Trust on funding the completion of the bush loop. This will be challenging to construct due to contour and the need to retain a suitable track gradient.

Staff are working with the Waihi Beach Cycle Trail and Trust on funding the completion of the bush loop. This will be challenging to construct due to the contour and the need to retain a suitable track gradient.

2.10 Trig Walkway Use Statistics

Total Traffic for the period 1 Aug 2018 to 22 Jan 2019:	**92,856**
Daily average:	172
Weekdays:	155
Weekends:	214
Max average value January:	357
Min average value August:	89

Trig Walkway statistics for the holiday peak period.

Trig Trail Count comparison between 1 Nov 2017 - 7 Jan 2018 and 1 Nov 2018 - 7 Jan 2019		**Increase**
Busiest Days of the Period Analysed:		
31 December 2017	571	351
31 December 2018	922	
29 December 2017	528	250
29 December 2018	778	
1 January 2018	520	178
30 December 2018	698	

Approximately 250 people walk the Trig Trail each weekend day, as of 23 January 2019, the peak average number of users per day was 566. This daily average is higher than the highest single day record in 2018 overall, which occurred during Easter 2018.

The counter shows that most people walk between the hours of 7.30am and 9am. Regardless of whether this is a week or weekend day. Sundays are narrowly the busiest walking day, but most days are about the same for trail use in late spring and summer.

People are now completing their own loop, walking down the hill in the general direction of the dam bridge, placing importance on formalising the route to keep folk away from archaeology and steeper sections.

2.11 Waihi Beach Dam – New Toilet & Site Improvement Concept Plan

Contractors have been arranged to install water & wastewater services for the connection of the Exeloo toilet that has been relocated from Wilson Road, adjacent to the old depot building.

This toilet is being returned to the Exeloo factory for a "make-over" prior to being installed. Other features will be completed during this development including footpath connections, converting the buildings "lean to" into a recreation space trail head (undercover table/ seating, signage, potential BBQ facilities, bike racks).

It is also proposed that community artists may wish to paint artworks onto the building as a community led project. Overflow car-parking space is also being reviewed to see if a gravel car-park could be constructed on the other side of the driveway prior to the dam itself. Completion for all of these is expected late April to mid May 2019.

2.12 Dotterel Point Reserve Capital Development (Pukehina)

Monitoring of the upgraded septic tank system will remain ongoing and likely to remain this way until the Surf Club begin construction of their new facilities, the timing of which is subject to their funding being secured.

2.13 Rotoiti to Paengaroa Cycle Trail

The trail was temporarily opened over the Christmas period in response to interested local groups and good feedback was received. Construction of it is back underway again and is expected to be completed by the end of March – early April.

A multi-counter will be installed prior to trail opening and will provide user statistics as per the Omokoroa cycleway/walkway counter. The Project will include roadside parking at the end of Ridge Road and a tidy up of the parking area at Paengaroa.

Note: This project is fully funded by NZTA.

3. Strategic Property

3.1 Katikati Library

Staff have approved the design of the commended Mezzanine barrier and it is being fabricated off-site. Once installed, the final Code of Compliance Certificate will be issued.

3.2 Te Puke War Memorial Hall

This project is complete. There are no further outstanding works accounting queries resolved.

3.3 Omokoroa Library & Service Centre

Resource consent for the construction of a library and office as part of the sports pavilion on Western Avenue has been granted by an independent commissioner. Regular meetings are now being held with all parties to progress the design and future construction. The Building Consent has been programmed to be lodged in March 2019. A pre-lodgement meeting will be held with building control officials prior to that date.

3.4 Kaimai Views - Sales Update

Sale for stages two and three progressing well. The developer is in the process of purchasing these two stages and will see income for the sale of the land and receipt of financial contributions.

3.5 Te Puna Hall

Site blessing held. Currently seeking resource consent for construction of the Hall on McIntyre land.

3.6 Animal Shelters

The Te Puke animal shelter is progressing well and is likely to be completed in early March 2019. Once completed the contractor will move to proceed with construction of the Katikati animal shelter.

3.7 Beach Road Development

The road has been stopped in accordance with Council's direction and the site cleared. Further works will commence once the property is registered with LINZ as a separate title.

4. Projects

4.1 Omokoroa Stormwater PO2 Construction

The Contract for the construction of the Omokoroa pond has been awarded to Map Projects Contractors for $3.04 million. Unfortunately, the project is slightly behind schedule due to inclement weather that occurred during November/December 2018. However, despite this, the contractor is making good progress in carrying out the earthworks for the HAF area and forming the dam.

When completed, the pond will accommodate stormwater runoff from the residential development of the special housing area, Goldstone block, Neil Group block and areas beyond the currently zoned urban land. The project includes planting in the gully and access tracks.

4.2 Omokoroa Road Urbanisation – Western Avenue to Tralee Street

The section of Omokoroa Road from Western Avenue to Tralee Street including the Tralee Street intersection is currently being designed for construction in the 2018/19 and 2019/20 financial years. The current Omokoroa Road will be widened from 7.0m to 11.5m with provision for one lane of traffic in each direction with right turning facilities at several intersections. The road will include 1.5m footpath on the western side and 2.5m shared pedestrian and cycle path on the eastern side.

There will be several bus stops placed at strategic locations on both sides of the road. Lighting will be included to illuminate both the on road traffic and off road pedestrian and cycle traffic. Power along the road is planned to be undergrounded and the space between kerb and channel and road boundary will be either grassed or landscaped and planted similar to the section south of Western Avenue. Tralee Street intersection will include a roundabout to facilitate traffic movements and improve safety of the intersection.

4.3 Te Puke Highways – Pah Road Slip Reinstatement

The Resource Consent has finally been granted by the Bay of Plenty Regional Council for the reinstatement of the Pah Road slip. The New Zealand Transport Agency is managing the contract documents and tendering process for the construction of this project.

5. Emergency Management

5.1 Waihi Beach

Meeting attended on 10 October 2018 with the Community Response Team. The Community Response Plan has been finalised, and relationships initiated with the Waihī Community Response Team on 1 November 2018 (Waikato CDEM region). The Community Response Team Leader attended the recent Tier 1 exercise at WBOPDC (Ex Ranginui; 17 November).

5.2 Omokoroa

The Omokoroa Community Response Plan is being updated by the Community Response Team. We are awaiting feedback from the team before progressing further.

5.3 Katikati

Meetings attended on 2 September and 13 November 2018 with the Community Response Team. The Community Response Plan has been finalised; Community Response Team identifying opportunity to promote the team at a local event.

The CDEM radio and the Community Response Team storage cupboard is being arranged in the Hub.

5.4 Exercise Shakeout

Sixty five percent of WBOP schools committed to supporting ShakeOut (the national earthquake drill and tsunami hikoi).

6. Roading

6.1 Katikati Bypass Update

There has been no further change since the previous update – this is still pending further announcements from the New Zealand Transport Agency.

6.2 One Network Maintenance Contract (ONMC)

Refer to OP17 Information Pack. **Attachment A**

6.3 Omokoroa Road Construction - State Highway to Railway

The Omokoroa Road upgrade has been an exceptionally complex project due to weather delays, shortage of construction crews, roundabout and intersection builds, adjoining developer requests and the construction of multiple underground services with different utility authority ownership.

Most of the new road pavement has now been competed. The $12.9 million project, with the physical works beginning early in 2017, also hit setbacks with the discovery of multiple archaeological sites and the removal of redundant asbestos water main pipes requiring specialist handling and disposal.

Underground services installed during the construction have included new water mains, a new gravity sewer main, a new storm water main, new road culverts, communications and power cables, Ultrafast broadband fibre optic cabling and the relocation of sections of the Omokoroa sewer transfer main. The sewer transfer main air value, which was situated under the road shoulder, has now been relocated during an overnight shutdown.

The remaining construction works have included the street light installations, sections of the cycleway, berm top soiling, second coat surfacing and final pavement markings.
A section of the cycleway will not be surfaced with concrete in the area adjacent to the planned industrial road intersection because its final level will be determined by the new kerbing levels when they are designed and constructed. The roads chip seal surfaces have got their second coat seals and asphalt surfacing has been applied to the Omokoroa Carriers entranceway intersection to accommodate the heavy traffic turning requirements. The timing of the sewer main duplication into the transfer station will depend on suitably qualified drain layers being available to undertake the work in the New Year. The vegetation maintenance requirements and levels of service for this area are being developed. In the short term this will include berm mowing and after the developers maintenance period ends the planted embankments requirements.

6.4 Maketu Road Proposed Cycle Trail

The Preliminary design options and cost estimates have been completed by WestLink. The detailed design and archaeological authority will commence around late February to mid-March.