



Far North District Council



AGENDA

Infrastructure Network Committee Meeting

Thursday, 23 May 2019

Time: 10.00 am
Location: Council Chamber
Memorial Avenue
Kaikohe

Membership:

Cr Ann Court - Chairperson
Mayor John Carter
Cr Felicity Foy
Cr Dave Hookway
Cr Sally Macauley
Cr John Vujcich
Cr Kelly Stratford
Cr Mate Radich
Member Adele Gardner
Member Terry Greening
Member Mike Edmonds

INFRASTRUCTURE NETWORK COMMITTEE MEMBERS REGISTER OF INTERESTS

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
Hon John Carter QSO	Board Member of the Local Government Protection Programme	Board Member of the Local Government Protection Programme		
	Carter Family Trust			
Ann Court	Waipapa Business Association	Member		
	Warren Pattinson Limited	Shareholder	Building company FNDC is a regulator and enforcer	No FNDC controls
	Kerikeri Irrigation	Supplies my water		No EM intervention in disputes
	Top Energy	Supplies my power		No other interest greater than the publics
	District Licensing	N/A	N/A	N/A
	Top Energy Consumer Trust	Trustee	Crossover in regulatory functions, consenting economic development and contracts such as street lightning.	Declare interest and abstain from voting.
	Ann Court Trust	Private	Private	N/A
	Waipapa Rotary	Honorary member	Potentially community funding submitter	Declare interest and abstain from voting.
	Properties on Onekura Road, Waipapa	Owner Shareholder	Any proposed FNDC Capital works or policy change which may have a direct impact(positive/adverse)	Declare interest and abstain from voting.
	Property on Daroux Dr, Waipapa	Power of attorney and beneficiary		
	Flowers (I get flowers occasionally)	Ratepayer 'Thankyou'	Bias/ determination? Pre-	Declare to Governance
	Coffee and food	Ratepayers sometimes 'shout' food and beverage	Bias or pre-determination	Case by case
	Consider all staff my friends	N/A	Suggestion of not being impartial or pre-determined!	Be professional, due diligence, weigh the evidence. Be thorough, thoughtful, considered impartial and balanced. Be fair.
		My husband is a builder and may do work for		

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
		Council staff		
Warren Pattinson (Husband)	Warren Pattinson Limited	Director	Building Company. FNDC is a regulator	Remain at arm's length
	Air NZ	Shareholder	None	None
	Warren Pattinson Limited	Builder	FNDC is the consent authority, regulator and enforcer.	Apply arm's length rules
	Kurbside Rod and Custom Club (unlikely)	President NZ Hot Rod Association	Potential to be linked to a funding applicant and my wife is on the decision making committee.	unlikely to materialize but would absent myself from any process as would Ann.
	Properties on Onekura Road, Waipapa	Owner	Any proposed FNDC capital work in the vicinity or rural plan change. Maybe a link to policy development.	Would not submit Rest on a case by case basis.
Felicity Foy	Director - Northland Planning & Development	I am the director of a planning and development consultancy that is based in the Far North and have two employees.		I will abstain from any debate and voting on proposed plan change items for the Far North District Plan.
				I will declare a conflict of interest with any planning matters that relate to resource consent processing, and the management of the resource consents planning team.
				I will not enter into any contracts with Council for over \$25,000 per year. I have previously contracted to Council to process resource consents as consultant planner.
	Flick Trustee Ltd	I am the director of this company that is the company trustee of Flick Family Trust that owns properties on Weber Place, Seaview Road, and Allen Bell Drive.		

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Elbury Holdings Limited	This company is directed by my parents Fiona and Kevin King.	This company owns several dairy and beef farms, and also dwellings on these farms. The Farms and dwellings are located in the Far North at Kaimaumau, Bird Road/Sandhills Rd, Wireless Road/ Puckey Road/Bell Road, the Awanui Straight and Allen Bell Drive.	
	Foy Farms partnership	Owner and partner in Foy Farms - a farm in three titles on Church Road, Kaingaroa		
	Foy Farms Rentals	Owner and rental manager of Foy Farms Rentals for 6 dwellings on Church Road, Kaingaroa and 1 dwelling at 64 Allen Bell Drive, Kaitaia, and one property at 96 North Road, Kaitaia		
	King Family Trust	This trust owns several titles/properties at Cable Bay, Seaview Rd/State Highway 10 and Ahipara - Panorama Lane.	These trusts own properties in the Far North.	
	Previous employment at FNDC 2007-16	I consider the staff members at FNDC to be my friends		
Partner Felicity Foy	Employed by Justaplumber Taipa			
	Friends with some FNDC employees			
Dave Hookway	Resident shareholder in Kerikeri Irrigation			Declare if issues arise.
	Shareholder in Farmlands.			Declare if issues arise.
	Employee – Northland District Health Board – Public Health Unit – Health Improvement Advisor		Am employee have no personal gain.	Declare employment should issues concerning the Northland DHB arises.
	On property in Waipapa West Rd.		Possible issues relating to the street or zoning.	Declare when appropriate.
Sally Macauley	Chairman	Northland Northland District Health Board	Matters pertaining to health issues re Fluoride and freshwater	Declare a perceived conflict.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
			as an example.	
	Chairman	Oranga Tamaraki - Ministry of Vulnerable Children- Northland Community Response Forum	Matters pertaining to this ministry	Declare a perceived conflict.
	Judicial Justice of the Peace	Visitations to Ngawha Prison	Matters pertaining to Judicial Issues re Ngawha Prison	Declare a perceived Interest
	The Turner Centre	FNDC Representative	Observer, acknowledging FNDC financial contribution.	Note FNDC partnership
	Trustee	Kaikohe Education Trust	Providing students laptops - possible request for written support to funders	Declare a conflict
	Executive member	Kaikohe Business Association	Matters pertaining to request for written support to funders.	
	Chairman	Bay of Islands Arts Festival Trust	Issues pertaining to the application of support funds	Declare a conflict of interests
	Trustee	Bay of Islands Radio Marine	Issues pertaining to the application of support funds	Declare a conflict of interests
	Secretary/Trustee	Kerikeri International Piano Competition	Issues pertaining to the application of support funds	Declare a conflict of interests
	Trustee/Director	Kaikohe Community and Youth Trust	Possible application of support funding	Declare a conflict of interests
	Commercial	Palmer Macauley Offices- Kerikeri and Kaikohe	Infrastructural matters with FNDC	Declare a conflict
	Private property of which there would not be any conflict.			
	Paihia, Kerikeri, Kaikohe			
Peter Macauley (Husband)	Senior Partner	Palmer Macauley		
	Peter Macauley	Barristers and Solicitors- Kerikeri, Kaikohe and Manganui	Legal matters with FNDC	
	Director/Trustee			
	ST John NZ Priory Chapter	ST John Priory Chapter	Legal matters with FNDC	Declare a conflict
	Senior Partner	Peter Macauley- Palmer Macauley Barristers and Solicitors Kaikohe, Kerikeri AND Manganui	Legal matters with FNDC	Declare a conflict

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	ST John NZ	Priory Trust Board	Writing of policies and legal matters as an example	Note Interests
	Lions Club of Kaikohe	Director	Legal matters etc	Note Interests
	Kaikohe Rugby Club	Patron	Legal Matters	
	Viking Rugby Club, Whangarei	Life Member	Legal Matters	
	Private Property			
	Kerkeri, Paihia - no contents.			
John Vujcich	Board Member	Ngati Hine Health Trust	Matters pertaining to property or decisions that may impact of their health services	Declare interest and abstain
	Board Member	Pioneer Village	Matters relating to funding and assets	Declare interest and abstain
	Director	Waitukupata Forest Ltd	Potential for council activity to directly affect its assets	Declare interest and abstain
	Director	Rural Service Solutions Ltd	Matters where council regulatory function impact of company services	Declare interest and abstain
	Director	Kaikohe (Rau Marama) Community Trust	Potential funder	Declare interest and abstain
	Partner	MJ & EMJ Vujcich	Matters where council regulatory function impacts on partnership owned assets	Declare interest and abstain
	Member	Kaikohe Rotary Club	Potential funder, or impact on Rotary projects	Declare interest and abstain
	Member	New Zealand Institute of Directors	Potential provider of training to Council	Declare a Conflict of Interest
	Member	Institute of IT Professionals	Unlikely, but possible provider of services to Council	Declare a Conflict of Interest
	Member	Kaikohe Business Association	Possible funding provider	Declare a Conflict of Interest
Cr Kelly Stratford	Office manager at Kinghans.			
	Denture assistant at Kawakawa denture Services self-employed as book keeper Kelly@ksbookkeeing.net	None	None	

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	KS Bookkeeping and Administration	Business owner, bookkeeping and development of environment management plans for clients.	None perceived	I'd step aside from decisions that arise, that may have conflicts
	Kinghans Accounting	Office Administration	None perceived	Step aside from decisions that arise, that may have conflicts.
	Waikare Marae Trustees	Trustee	May be perceived conflicts	Case by case basis
	Kawakawa Business & Community Association	Committee member/newsletter editor and printer	None perceived	If there was a perceived conflict, I will step aside from decision making
	Bay of Islands College	Parent elected trustee	None perceived	If there was a perceived conflict, I will step aside from decision making
	Karetu School Bay Cosmos Soccer	Parent elected trustee. Committee member and coach	None perceived	If there was a perceived conflict, I will step aside from decision making
	Property in Waikare and Moerewa			If there was a perceived conflict, I will step aside from decision making
	Coffee and food	Ratepayers sometimes 'shout' food and beverage	Bias or pre-determination	Case by case
Kelly Stratford (Husband)	Puketona Junction Café 39 Gillies Café	Barista & Chef Barista	N/A	N/A
	Property in Moerewa		N/A	N/A
Adele Gardner	N/A - FNDC Honararian			
	The Far North 20/20 , ICT Trust	Trustee		
	Te Ahu Charitable Trust	Trustee		
	ST Johns Kaitaia Branch	Trustee/ Committee Member		
	I know many FNDC staff members as I was an FNDC staff member from 1994-2008.			
Partner of Adele Gardner	N/A as Retired			
Terry	Greening Family Trust	Beneficiary		Highly unlikely to interface with

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
Greening				FNDC
	Bay of Islands Walking Weekend Trust		Potential of seeking funds	Step aside from any requests or decisions regarding requests
	Russell 2000 Trust (Chairman)			Trust is about to wind up.
	Russell Centennial Trust (Chairman)	Manages Russell Museum	Seeks funds from council	Step aside from any requests or decisions regarding requests
	Residence at Kaha Place, Russell	Nil	Nil	N/A
Terry Greening (Wife)	Greening Family Trust	Beneficiary	N/A	N/A
	Residence at Kaha Place, Russell			
Mike Edmonds	Chair	Kaikohe Mechanical and Historic Trust	Council Funding	Decide at the time
	Committee member	Kaikohe Rugby Football and Sports Club	Council Funding	Withdraw and abstain

Far North District Council
Infrastructure Network Committee Meeting
will be held in the Council Chamber, Memorial Avenue, Kaikohe on:
Thursday 23 May 2019 at 10.00 am

Order Of Business

1	Apologies and Declarations of Interest.....	10
2	Deputation.....	10
3	Confirmation of Previous Minutes.....	11
3.1	Confirmation of Previous Minutes.....	11
4	Infrastructure and Asset Management Group	17
4.1	Inclusion of Te Rangi Cross Road in the Schedule of Far North District Council - Maintained Roads	17
4.2	Paua Fertiliser Shed - Asbestos Demolition	26
4.3	Opononi Green waste Trial	60
4.4	Addressing the key recommendations of the NTA Review	64
4.5	Northland Transport Alliance Structure Update	70
4.6	Paihia Water Treatment Plant Status Report.....	73
4.7	Kaitaia, Reducing Non Revenue Water	75
4.8	3 Waters Benchmarking 2017- 2018	80
4.9	Water Supply; Smart Water Meters	84
5	Public Excluded	87
6	Meeting Close	88

1 APOLOGIES AND DECLARATIONS OF INTEREST

Members need to stand aside from decision-making when a conflict arises between their role as a Member of the Community Board and any private or other external interest they might have. This note is provided as a reminder to Members to review the matters on the agenda and assess and identify where they may have a pecuniary or other conflict of interest, or where there may be a perception of a conflict of interest.

If a Member feels they do have a conflict of interest, they should publicly declare that at the start of the meeting or of the relevant item of business and refrain from participating in the discussion or voting on that item. If a Member thinks they may have a conflict of interest, they can seek advice from the Chief Executive Officer or the Team Leader Governance Support (preferably before the meeting).

It is noted that while members can seek advice the final decision as to whether a conflict exists rests with the member.

2 DEPUTATION

Megan McCracken will speak regarding the tar sealing of Pungaere Road, Kerikeri

Ken Rintoul will speak regarding the Okaihau Development

3 CONFIRMATION OF PREVIOUS MINUTES

3.1 CONFIRMATION OF PREVIOUS MINUTES

File Number: A2471595

Author: Kim Hammond, Meetings Administrator

Authoriser: Aisha Huriwai, Team Leader Governance Support

PURPOSE OF THE REPORT

The minutes of the previous Infrastructure Network Committee meeting are attached to allow the Committee to confirm that the minutes are a true and correct record.

RECOMMENDATION

That the Infrastructure Network Committee confirm that the minutes of the meeting held 21 March 2018 are a true and correct record.

1) BACKGROUND

Local Government Act 2002 Schedule 7 Section 28 states that a local authority must keep minutes of its proceedings. The minutes of these proceedings duly entered and authenticated as prescribed by a local authority are prima facie evidence of those meetings.

2) DISCUSSION AND OPTIONS

The minutes of the meeting are attached. Far North District Council Standing Orders Section 27.3 states that no discussion shall arise on the substance of the minutes in any succeeding meeting, except as to their correctness.

Reason for the recommendation

The reason for the recommendation is to confirm the minutes are a true and correct record of the previous meeting.

3) FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION

There are no financial implications or the need for budgetary provision as a result of this report.

ATTACHMENTS

- 1. 2019-03-21 Infrastructure Network Committee Minutes - A2411302**  

Compliance schedule:

Full consideration has been given to the provisions of the Local Government Act 2002 S77 in relation to decision making, in particular:

1. A Local authority must, in the course of the decision-making process,
 - a) Seek to identify all reasonably practicable options for the achievement of the objective of a decision; and
 - b) Assess the options in terms of their advantages and disadvantages; and
 - c) If any of the options identified under paragraph (a) involves a significant decision in relation to land or a body of water, take into account the relationship of Māori and their culture and traditions with their ancestral land, water sites, waahi tapu, valued flora and fauna and other taonga.
2. This section is subject to Section 79 - Compliance with procedures in relation to decisions.

Compliance requirement	Staff assessment
State the level of significance (high or low) of the issue or proposal as determined by the Council's Significance and Engagement Policy	Not applicable
State the relevant Council policies (external or internal), legislation, and/or community outcomes (as stated in the LTP) that relate to this decision.	Not applicable
State whether this issue or proposal has a District wide relevance and, if not, the ways in which the appropriate Community Board's views have been sought.	Not applicable
State the possible implications for Māori and how Māori have been provided with an opportunity to contribute to decision making if this decision is significant and relates to land and/or any body of water.	None
Identify persons likely to be affected by or have an interest in the matter, and how you have given consideration to their views or preferences.	Not applicable
State the financial implications and where budgetary provisions have been made to support this decision.	There are no financial implications or the need for budgetary provision arising from this report.
Chief Financial Officer review.	The Chief Financial Officer has not reviewed this report.

**MINUTES OF FAR NORTH DISTRICT COUNCIL
INFRASTRUCTURE NETWORK COMMITTEE MEETING
HELD AT THE COUNCIL CHAMBER, MEMORIAL AVENUE, KAIKOHE
ON THURSDAY, 21 MARCH 2019 AT 10:00 AM**

- PRESENT:** Cr Ann Court, Cr John Carter, Cr Felicity Foy, Cr Sally Macauley, Cr John Vujcich, Cr Kelly Stratford, Cr Mate Radich (video-conference), Member Adele Gardner, Member Terry Greening, Member Mike Edmonds
- IN ATTENDANCE:** Calvin Thomas (Northland Transport Alliance Manager), Shawn Baker (Northland Transport Alliance), Natalie Blandford (Contractor – Infrastructure and Asset Management), Seth Sirestarajah (Senior Project Consultant), Alan Houghton (Alliance General Manager – 3 Waters)
- STAFF PRESENT:** Andy Finch (General Manager - Infrastructure and Asset Management), Dean Myburgh (General Manager – District Services), Glenn Rainham (Manager - Alliances), Roger Ackers (Manager – Strategy Development), Tanya Proctor (Team Leader – Infrastructure Programmes), Melissa Parlane (Team Leader - Infrastructure Planning), Leanna Ransom (Infrastructure Compliance Planner), Jessica Crawford (Senior Infrastructure Consents Planner), Reshma Harikumar (3 Waters Planner), Kim Hammond (Meetings Administrator), Alan Houghton (3-Waters Alliance)

1 PRAYER/OPENING

Meeting was opened with a minutes silence for the victims of Christchurch followed by a karakia

2 DEPUTATION

Holli Rudolph and Ange Waitohi representative from Far North REAP spoke regarding the work that they undertake and projects being undertaken.

Shawn Baker from the Northland Transport Alliance spoke regarding the Regional Speed Reviews.

Attachments tabled at meeting

- 1 Presentation - Far North REAP
- 2 Tabled Document - Far North REAP Statistics
- 3 Presentation - NTA Regional Speed Reviews

3 APOLOGIES AND DECLERATIONS OF INEREST

RESOLUTION 2019/1

Moved: Cr Ann Court

Seconded: Cr John Vujcich

That the apology received from Cr Dave Hookway be accepted and leave of absence granted.

CARRIED

4 CONFIRMATION OF PREVIOUS MINUTES

3.1 CONFIRMATION OF PREVIOUS MINUTES

Agenda item 3.1 document number A2333862, pages 14 - 15 refers

RESOLUTION 2019/2

Moved: Cr Ann Court

Seconded: Member Adele Gardner

That the Infrastructure Network Committee confirm that the minutes of the meeting held 28 November 2018 are a true and correct record.

CARRIED

5 INFRASTRUCTURE AND ASSET MANAGEMENT GROUP

4.1 INFRASTRUCTURE AND ASSET MANAGEMENT UPDATE

Agenda item 4.1 document number A2365977, pages 23 - 23 refers

RESOLUTION 2019/3

Moved: Cr Ann Court

Seconded: Cr John Vujcich

That the Infrastructure Network Committee receive the report Infrastructure and Asset Management Update

CARRIED

At 11:06 am, Cr Kelly Stratford left the meeting. At 11:08 am, Cr Kelly Stratford returned to the meeting.

At 11:16 am, Member Terry Greening left the meeting. At 11:19 am, Member Terry Greening returned to the meeting.

4.2 WATER LOSS KEY PERFORMANCE INDICATORS

Agenda item 4.2 document number A2325526, pages 53 - 57 refers

RESOLUTION 2019/4

Moved: Cr John Vujcich

Seconded: Cr Felicity Foy

That the Infrastructure Network Committee receives the report Water Loss Key Performance Indicators.

CARRIED

4.3 SLUDGE STRATEGY PROGRESS REPORT #2

Agenda item 4.3 document number A2359497, pages 58 - 59 refers

RESOLUTION 2019/5

Moved: Cr Ann Court

Seconded: Mayor John Carter

That the Infrastructure Network Committee receives the Sludge Strategy Progress Report #2.

CARRIED

4.4 INFRASTRUCTURE COMPLIANCE REPORT

Agenda item 4.4 document number A2368499, pages 60 - 61 refers

RESOLUTION 2019/6

Moved: Cr Ann Court

Seconded: Member Terry Greening

That the Infrastructure Network Committee receive the Infrastructure Compliance Report.

CARRIED

At 11:58 am, Mayor John Carter left the meeting. At 11:58 am, Mayor John Carter returned to the meeting.

At 12:00 pm, Mayor John Carter left the meeting to attend the Race Relations lunch with Far North District Council staff.

4.5 PROJECT UPDATE ON DOG POUND IN KAITAIA AND NGAWHA

Agenda item 4.5 document number A2386025, pages 63 - 65 refers

RESOLUTION 2019/7

Moved: Cr Ann Court

Seconded: Cr Kelly Stratford

That the Infrastructure Network Committee receives the report - Project Update on Dog Pound Kaitaia and Ngawha, as an information report.

CARRIED

5 PUBLIC EXCLUDED

RESOLUTION TO EXCLUDE THE PUBLIC

RESOLUTION 2019/8

Moved: Cr Ann Court

Seconded: Cr John Vujcich

That the public be excluded from the following parts of the proceedings of this meeting.

The general subject matter of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48 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 for the passing of this resolution

5.1 - Confirmation of Previous Minutes	s7(2)(h) - the withholding of the information is necessary to enable Council to carry out, without prejudice or disadvantage, commercial activities	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7
5.2 - Northland Transportation Alliance Review Report	s7(2)(a) - the withholding of the information is necessary to protect the privacy of natural persons, including that of deceased natural persons s7(2)(f)(i) - free and frank expression of opinions by or between or to members or officers or employees of any local authority	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7
CARRIED		

6 MEETING CLOSE

The meeting closed at 12.59 pm.

The minutes of this meeting will be confirmed at the Infrastructure Network Committee Meeting held on 23 May 2019.

.....
CHAIRPERSON

4 INFRASTRUCTURE AND ASSET MANAGEMENT GROUP

4.1 INCLUSION OF TE RANGI CROSS ROAD IN THE SCHEDULE OF FAR NORTH DISTRICT COUNCIL - MAINTAINED ROADS

File Number: A2418687

Author: Glenn Rainham, General Manager - Infrastructure Asset Management (Acting)

Authoriser: Andy Finch, General Manager - Infrastructure and Asset Management

PURPOSE OF THE REPORT

To obtain a Council determination on the inclusion of Te Rangi Cross Road, Paihia in the schedule of FNDC-maintained roads.

EXECUTIVE SUMMARY

- Te Rangi Cross Road, Paihia was constructed in its current form as part of the development of the Bridgewater Apartments complex in the early 2000's. It was not constructed to the FNDC standard for this category of road. It is located entirely within road reserve (map attached).
- FNDC legal advice confirms that there is nothing that compels Council to take over the formed road as an FNDC asset.
- Residents believe the road either is, or should be, a Council asset and have taken legal advice that supports their position.
- To any casual observer, whether motorist or pedestrian, the road appears no different to any other local road accessed off the state highway in that vicinity.
- Parts of the road are currently in a state of disrepair that could cause damage to vehicles or create a road safety hazard. This state of disrepair can be expected to worsen as winter approaches.
- FNDC policies provide for Council to either take over the road as a maintained asset or not, at Council's discretion.
- This report concludes that on balance the road should be included in FNDC's schedule of maintained roads.

RECOMMENDATION

That Council approves that Te Rangi Cross Road is to be included in the schedule of FNDC - Maintained Roads.

1) BACKGROUND

Te Rangi Cross Road was constructed in the early 2000's as part of the development of the Bridgewater Apartment complex (Attachment 1) Refer Attached Map.

The entire carriageway is constructed within the legal road alignment.

Residents hold the view that the road was initially maintained by Council but that this stopped at some point in the past. Council records do not provide any evidence to support this view. The implication is that if Council contractors were undertaking maintenance it was not being paid for directly; rather the costs were being 'absorbed' in some way either by the contractor or through incorrect coding into other parts of the roading network.

Complaints about the lack of maintenance led to an internal investigation during 2018 that concluded with an internal legal opinion that there is no documentation contained in the resource consent that states the road was to be taken over by Council. For completeness it must also be noted that there is no definitive statement that the road shall be maintained as a private road.

Note that it is relatively common to see requirements for a body corporate, or similar, to take ownership of a critical asset of this nature when it is to be maintained in private ownership – that has not occurred in this case.

The road is not constructed to FNDC standards for the class of road. The Resource Consent required a 6m wide sealed carriageway. FNDC standard for the class of road would be an 8m wide sealed carriageway.

There is however, some ambiguity. Prior to construction of the current sealed road, the 'road' did exist in some form and was used as access to existing properties. The resource consent requires "...upgrading of the legal road...", rather than (for instance) '...construction of a new road...'

During the investigation for this report, the customer who initiated the most recent investigation (Ms. R. Stent) provided a legal opinion (attached) supporting the position that the road should be taken over by Council.

2) DISCUSSION AND OPTIONS

The principal options are:

1. Status quo (i.e. confirms Te Rangi Cross Road is not included in the schedule of FNDC-maintained roads).
2. confirm the inclusion of Te Rangi Cross Road in the schedule of FNDC-maintained roads.
3. that if the residents are prepared to form the road to the appropriate council standard at no cost to Council, then Council will include it in its maintained road schedule.

Option 1: Status Quo

Description

Council confirms Te Rangi Cross Road is not maintained by FNDC

Costs

FNDC incurs no ongoing maintenance costs.

FNDC may consider it prudent to incur the relatively minor costs of installing and maintaining signage that indicates the privately maintained status.

Further costs (legal/staff time etc) may be incurred as a consequence of actions by others (see risks, below).

Risks

- Potential ongoing complaints from residents – ongoing staff time, adverse publicity for Council.
- Potential legal action by residents
- Potential claims/complaints from other road users if/when the road continues to deteriorate and creates a safety hazard.
- Risk to the general public from an unsafe road adjacent to the state highway.
- Potential costs to Council to compel maintenance of the road by 'owners' to avoid safety risks noted above

Option 2: Accept Te Rangi Cross Road as part of the FNDC Roding Network

Description

Council confirms Te Rangi Cross Road as part of the schedule of FNDC-maintained roads.

Costs

FNDC incurs ongoing maintenance costs.

Risks

The most substantial risk is that of precedent. Where other 'private roads' have been developed the question might quite justifiably be asked why they would be treated differently.

Option 3: Residents to upgrade Te Rangi Cross Road to Council standards prior to Council accepting as part of the FNDC Roding Network

Description

Council confirms Te Rangi Cross Road as part of the schedule of FNDC-maintained roads, providing the residents upgrade the road to meet Council standards.

Costs

FNDC incurs ongoing maintenance costs.

Council may also consider a cost-share arrangement in the upgrade of the road to meet our standards.

Risks

Residents feel aggrieved that they have to pay for the road upgrade.

Discussion

Council's policies do not provide a definitive position. The road does not meet the policy standard where Council has stated it will take on responsibility for maintenance. However, the road has been formed to the standard required by Council through the resource consent. The policy allows Council to include the road in the schedule of FNDC-maintained roads at its discretion.

Council Policy #4103 states that:

2. The Council will maintain other formed roads subject to the following criteria being met:

2.1 The road is within a legally defined public road reserve;

2.2 The road connects with a road which is presently being maintained by the Council;

2.3 The road has been or will be formed to a standard appropriate to the planned use of the road to the satisfaction of, and, unless otherwise resolved by Council, at no cost to the Council; and

2.4 There is no alternative access to the properties which the road serves.

In relation to the above;

- The formed carriageway is entirely within legal road reserve
- Clause 2.2 would seem to ignore the possibility of connection to state highway rather than other local road. Te Rangi Cross Road joins the state highway.
- Clause 2.3 is where the principal ambiguity arises. The carriageway is not formed to meet the FNDC engineering standards of the time; however, it has been formed to a standard the Council of the day deemed "...appropriate to the planned use...", as required by the resource consent.
- There is no alternative access to the properties on Te Rangi Cross Road.

In consideration of all the information available, Option 2 is the most practical option.

Reason for the recommendation

Based on the information available Option 2 is the preferred and lowest risk option. Furthermore, Option 2 makes the most practical sense because to any and all road users this looks and feels like a public road. It is accessed directly from the State Highway in an area that has high visitor and tourist numbers. There is significant use of the road by the general public. Note that the general public has the right to access legal roads regardless of their formation or who maintains them.

The lessons from this case should be used to inform clearer drafting of future resource consent conditions; and the review of the abovementioned roading policies will be similarly informed. In the present, the weight of evidence suggests that on balance Option 2 is the appropriate course of action.

3) FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION

A typical sealed residential road with low volumes of heavy vehicles will incur minimal annual maintenance costs – less than \$1,000/year over the long run.

Resealing can be expected approximately every 10 – 15 years at a rough order cost of less than \$10,000.

Reconstruction may be required at some point in the next 25-30 years at a rough order cost of \$65,000. At that time FNDC may elect to carry out additional upgrades (e.g. widen the carriageway).

If the road were part of the FNDC road network these costs would not be separately budgeted for. The road would simply be part of the overall optimisation of available funds to deliver the agreed level of service.

Note that road maintenance and renewal costs would attract NZTA subsidy which is currently 66%.

ATTACHMENTS

1. Te Rangi Cross Road - Service Map - A2418580 [↓](#) 
2. Letter BE Brill (Barrister) to R.Stent (Resident) - A2418591 [↓](#) 

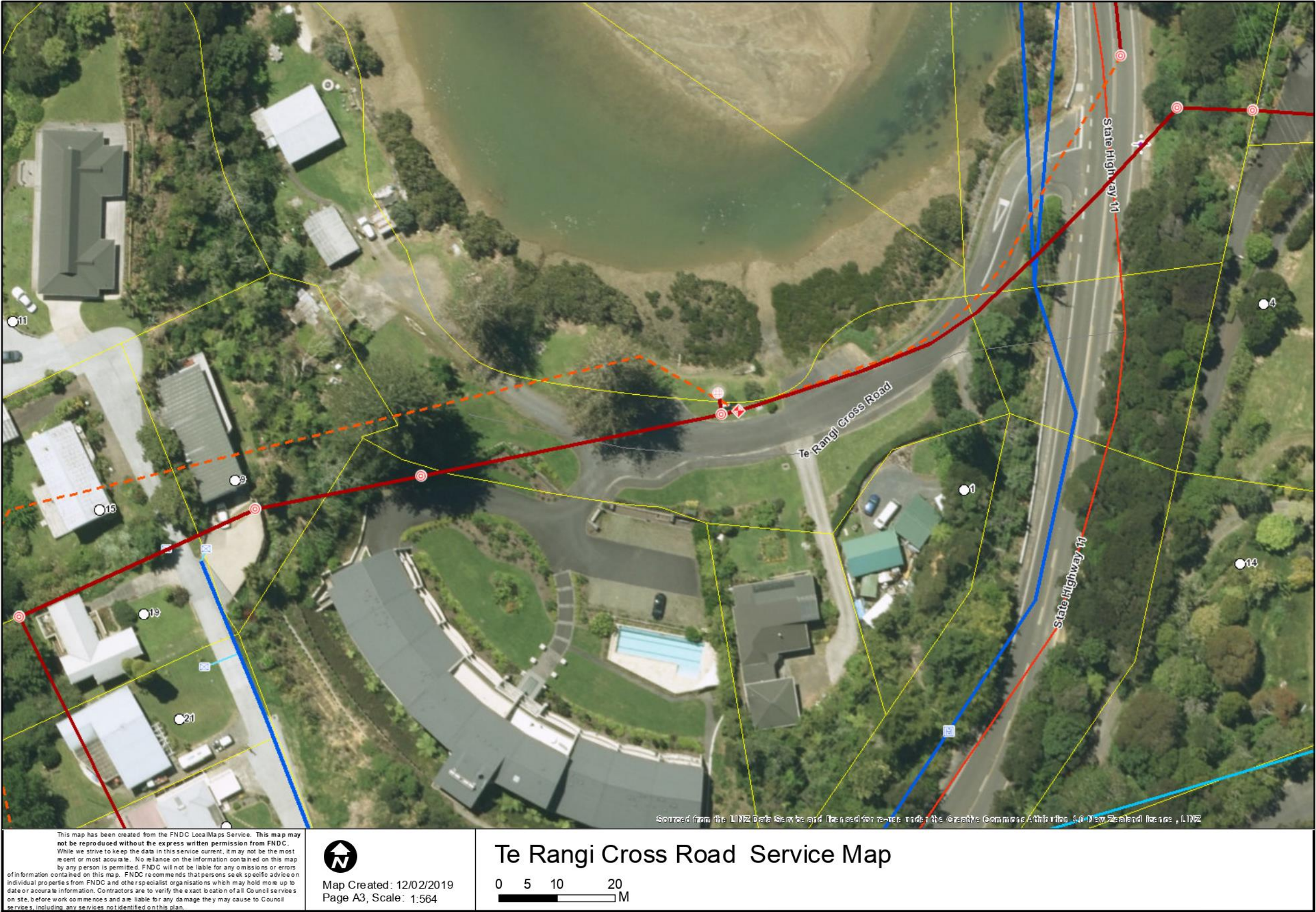
Compliance schedule:

Full consideration has been given to the provisions of the Local Government Act 2002 S77 in relation to decision making, in particular:

1. A Local authority must, in the course of the decision-making process,
 - a) Seek to identify all reasonably practicable options for the achievement of the objective of a decision; and
 - b) Assess the options in terms of their advantages and disadvantages; and
 - c) If any of the options identified under paragraph (a) involves a significant decision in relation to land or a body of water, take into account the relationship of Māori and their culture and traditions with their ancestral land, water sites, waahi tapu, valued flora and fauna and other taonga.
2. This section is subject to Section 79 - Compliance with procedures in relation to decisions.

Compliance requirement	Staff assessment
State the level of significance (high or low) of the issue or proposal as determined by the Council's Significance and Engagement Policy	The matter has 'low significance' in the context of the policy. It is a localised matter directly affecting a small number of residents and a greater number of visitors/tourists
State the relevant Council policies (external or internal), legislation, and/or community outcomes (as stated in the LTP) that relate to this decision.	Council policies in order of relevance are: 4103 – Limits of Council responsibility for formation / maintenance of roads 4105 – Private Roads and Right of Ways 4112 – Community Initiated Infrastructure – Rooding Contribution Policy It is noted that all of the above policies are designated as 'under review'.
State whether this issue or proposal has a District wide relevance and, if not, the ways in which the appropriate Community Board's views have been sought.	"...the roading network..." is a specific exclusion to the delegations to community boards. Specific community board views on this issue have not been sought.
State the possible implications for Māori and how Māori have been provided with an opportunity to contribute to decision making if this decision is significant and relates to land and/or any body of water.	The decision is of low significance (see above), does not relate to land use, water use, or any change to land or water use. The decision relates solely to funding of maintenance to an existing asset. Specific advice has not been sought regarding implications for Māori.
Identify persons likely to be affected by or have an interest in the matter, and how you have given consideration to their views or preferences.	The principal affected parties are residents of Te Rangi Cross Road. Those persons have initiated the process that has led to this report. Discussions have been held with the initiator to ensure her position is understood and fairly conveyed.
State the financial implications and where budgetary provisions have been made to support this decision.	Sporadic maintenance activity on the road and 'renewal' activity over the life of the asset. Refer to financial implications section of the report. Any financial implications would be incorporated into overall roading

	budgets.
Chief Financial Officer review.	The Chief Financial Officer (Acting) has reviewed this report



B E BRILL

Barry Edward Brill OBE, JP, LL.M, M.Com Law, OPM (Harv)
Barrister & Solicitor

PO Box 399
Paihia 0247
NEW ZEALAND

19 February 2019

Robyn Stent
204/7 Te Rangi Cross Road
Paihia

Maintenance of Te Rangi Cross Road

I understand the Council is finally looking into the question of the long-deferred maintenance of Te Rangi Cross Road and whether it falls squarely within the scope of Policy #4103.

The policy allows the Council to resolve to opt out of responsibility for a formed road "which is within a public road reserve but which serves only to provide access for less than five properties." However, no such Council resolution has been passed.

It is clear from your title (copy attached) that the road now named "Te Rangi Cross" is a "legal road 20.12 wide". It was a condition of the resource consent for the Bridgewater Bay Apartments that this road be formed by the developer and vested in the Council. No other access was available and the consent of the Land Transport Agency must have been obtained as Paihia Road is a limited access highway.

The subsequent building consent application was lodged with FNDC on 30 November 2001 and issued (as ABA20020801) on 18 March 2002. On 5 December 2003, the Council issued a Code Compliance Certificate effectively certifying that all conditions had been satisfied

The adjoining road would have automatically vested in FNDC upon the deposit under the Land Transfer Act of Unit Titles Flat Plan 324525 on 23 December 2003.

The term "properties" as mentioned in the Policy refers to "rating units" as defined in s 5(1) of the Local Government Act 2002. This definition refers on to s 5B(1) of the Rating Valuations Act 1988, which provides: *"For land for which there is a record of title, the land comprised in the record of title constitutes a rating unit."*

There is a record of title for no less than 22 properties at 7 Te Rangi Cross Road, and each of these has always been treated by the Council as a separate rating unit (no doubt the owners would wish otherwise).

In my view, the Council cannot squeeze Te Rangi Cross Road into the exception allowed by Policy 4103. Even if this was possible, the resolution would not have retrospective effect and the Council has already been in breach of its own policy for a long period of time.

Kind regards

Barry Brill
Solicitor

4.2 PAUA FERTILISER SHED - ASBESTOS DEMOLITION

File Number: A2443642

Author: Gordon Dellar, Assets Manager - Facilities

Authoriser: Andy Finch, General Manager - Infrastructure and Asset Management

PURPOSE OF THE REPORT

To seek approval to demolish an abandoned shed on Far North District Council (FNDC) property, roofed and clad in Asbestos Containing Material (ACM) and approve the required budget.

EXECUTIVE SUMMARY

- The Paua Building is an abandoned fertiliser shed, owned by FNDC, and situated at the end of Te Pua Road in the Te Hiku ward.
- Worksafe have inspected the shed confirming the presence of ACM in the roofing and cladding which is a health and safety risk to persons in the vicinity.
- An asbestos demolition report has been completed confirming the shed consists of non-friable cladding with soil contamination to the perimeter of the building.
- This report seeks approval for the demolition of the shed through unbudgeted OPEX funding estimated to be \$150,000.

RECOMMENDATION

That the Infrastructure Network Committee approves \$150,000 OPEX for the demolition and removal of the entire shed including contaminated soil surrounds and imports fill material as required for levelling the site.

1) BACKGROUND

The Paua Building is an abandoned fertiliser shed on Lot 1 DP 91881, 4047m², fee simple, owned by FNDC. This property is situated at the end of Te Pua Road which is a metal road off Paua Road which itself is off State Highway 1F in the northern end of the Te Hiku ward. The property is isolated being approximately 1 hour's drive north of the Kaitia Township. Te Kao is approximately 20 minutes to the south which has a small residential settlement with a local store. Pukenui is a further 20 minutes' drive from Te Kao.

Located across the road from the shed is the Te Pua Road Wharf, owned by FNDC which is utilised as a local fishing spot. The surrounding properties comprises the Paua Station of approximately 3017ha which is a dry stock farm except for a section to the east used for camping, all owned by Parengarenga Incorporated.

Lot 1 DP 91881 was formerly owned by 116 Maori owners being Parengarenga 5A1 Block. In 1970, the Northland Fertiliser Company was determined to construct a bulk fertiliser store near the Parengarenga Wharf to fertilise farms which formed part of the Parengarenga farm development scheme. In this development the Northland Harbour Board (NHB) agreed to receive the wharf provided they received land adjacent to the wharf. The Harbour Board also stated they would recommend a 42 year lease to the Northland Fertiliser Company (NFC) for the construction of a shed.

A Memorandum of Lease for Lot 1 has been located with NHB as the Lessor and the NFC Limited as the lessee. The lease commencement date was September 1974 for a term of 21 years. No further documentation has been found in the system by the property legalisation team or Infrastructure and Asset Management. It appears for the past 24 years the shed has been abandoned and by default became a liability to FNDC.

In 2018 an onsite inspection with FNDC asset management, Health Safety & Wellbeing and WorkSafe identified the shed cladding to be an ACM. It was also observed that the shed is in disrepair posing a safety risk. The Health and Safety at Work Act requires a Person Conducting a Business or Undertaking (PCBU) to ensure the health and safety, so far as is reasonably practicable to workers/public that may become exposed to ACM.

Momentum Services were commissioned to provide an Asbestos Demolition Survey which was carried out on 14 February 2019. A visual as well as four samples of material from the building and four soil samples suspected of Asbestos containing material were taken. Five of the eight samples tested positive for the presence of asbestos.

2) DISCUSSION AND OPTIONS

The recommendation is to demolish and remove the entire building from the existing lot by suitably qualified contractors.

The following work will be carried out:

- All asbestos cement sheets, dust and debris removed by workers holding a Class B Non-Friable Asbestos licence
- All the concrete, masonry, steel and timber building materials demolished and disposed of at approved landfills (Whangarei closest) for asbestos contaminated materials
- All visible debris around the structure up to approximately 15m collected and disposed of
- A soil scrape off of 100mm up to 3m from the face of the building carried out
- Air monitoring carried for the duration of the project
- Swab and soil sampling undertaken as part of the clearance process

The objective is to remove, so far as is reasonably practicable, all building materials and asbestos contamination to the soil. Imported fill will be required to ensure a levelled site remains on completion.

As an interim measure security fencing restricting public and signage has been put in place. This will not prevent people accessing the building; however it is a deterrent until such time a budget is approved to remediate the issue.

Relevant references/legislation:

- Health and Safety at Work Act 2015
<http://www.legislation.govt.nz/act/public/2015/0070/latest/DLM5976660.html>
- Health and Safety at Work (Asbestos) Regulation 2016
<http://www.legislation.govt.nz/regulation/public/2016/0015/latest/DLM6729706.html>
- Work Safe New Zealand – Asbestos – New Zealand guidelines for the management and removal of asbestos
<https://worksafe.govt.nz/topic-and-industry/asbestos/management-and-removal-of-asbestos/>

Reason for the recommendation

The recommendation is made to mitigate FNDC exposure to health and safety risks the public and staff may be exposed to. As a regulatory authority FNDC has an obligation to comply with all current health and safety legislation.

3) FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION

There is currently no budget approved for this project. The asbestos demolition survey report writers estimate the demolition cost to be approximately \$120,000. The costs are difficult to establish due to the nature of the work, contractor availability, location of facility and distance to approved landfill for disposal of materials. A contingency of 25% is recommended.

Therefore an estimated budget required is \$150,000

ATTACHMENTS

1. Paua Fertiliser shed-1_Asbestos Demolition Report - A2443422 [↓](#) 

Compliance schedule:

Full consideration has been given to the provisions of the Local Government Act 2002 S77 in relation to decision making, in particular:

1. A Local authority must, in the course of the decision-making process,
 - a) Seek to identify all reasonably practicable options for the achievement of the objective of a decision; and
 - b) Assess the options in terms of their advantages and disadvantages; and
 - c) If any of the options identified under paragraph (a) involves a significant decision in relation to land or a body of water, take into account the relationship of Māori and their culture and traditions with their ancestral land, water sites, waahi tapu, valued flora and fauna and other taonga.
2. This section is subject to Section 79 - Compliance with procedures in relation to decisions.

Compliance requirement	Staff assessment
State the level of significance (high or low) of the issue or proposal as determined by the Council's Significance and Engagement Policy	This issue is significant as there is no budget provision, however has been identified as a health and safety risk.
State the relevant Council policies (external or internal), legislation, and/or community outcomes (as stated in the LTP) that relate to this decision.	Due to the current condition of the building and contains asbestos the Health and Safety at work (Asbestos) Regulation 2016 will have relevance.
State whether this issue or proposal has a District wide relevance and, if not, the ways in which the appropriate Community Board's views have been sought.	This is a health and safety issue and a decision falls to the Infrastructure Network Committee for approval.
State the possible implications for Māori and how Māori have been provided with an opportunity to contribute to decision making if this decision is significant and relates to land and/or any body of water.	This is a health and safety issue for not only Maori, but the land as well.
Identify persons likely to be affected by or have an interest in the matter, and how you have given consideration to their views or preferences.	Parengarenga Trust may have an interest, however FNDC is not developing but removing a building that poses a health and safety issue.
State the financial implications and where budgetary provisions have been made to support this decision.	Unbudgeted expenditure is required and is to be noted that this shed has not been recorded as an asset.
Chief Financial Officer review.	The Chief Financial Officer (Acting) has reviewed this report.



Asbestos Demolition Survey

Address: Te Pua Rd Paua

Samples taken: 14-02-2019.
Issued date: 19-02.2019



SITE INFORMATION

Document:
Asbestos Demolition Survey

Site address	Te Pua Rd Paua	
Date of survey	14 .02 .2019.	
Contact info	Contact name	Josh Barry
	Email	josh@protectus.co.nz
	Phone	021 586 978
Prepared By	Contact name	Thomas Waterer - Momentum Services Assisted by Josh Barry
	Email	tom.momentum@xtra.co.nz
	Phone	021 953 266

Disclaimer:

- This is an Asbestos Survey for the proposed demolition of the building it has been undertaken to identify Asbestos which may be disturbed during the upcoming Demolition.
- Before any major demolition works all Asbestos containing materials need to be removed.
- Regulation 12 of the Health and Safety at Work Asbestos Regulation 2016 states that "A PCBU with management or control of a workplace must ensure that the presence and location of asbestos or ACM identified (and in a way that complies with the requirements of any application any applicable safe work instrument) IE: the identified materials should be labeled, or their presence indicated by another satisfactory method.

CONTENTS

Executive summary	.....
Area of Survey	.....
1. Introduction	.....
1.1. Background	.....
1.2. Objectives	.....
2. Site description	.....
3. Nature and extent of survey	.....
3.1. General (Scope of Work)	.....
3.2. Inspection methodology	.....
3.3. Inspection and sampling	.....
3.4. Site sample maps	.....
3.5. Sample images	.....
3.5. Independent sampling results	.....
3.7. Site images	.....
4. Results	.....
5. Recommendations	.....
6. Caveat	.....
7. Sampling and analysis techniques	.....
8. References/Legislation	.....
9. Disclaimer	.....

EXECUTIVE SUMMARY

Momentum Services was commissioned to conduct an Asbestos Demolition Survey for the **Far North District Council** of the Fertilizer shed structure at **Te Pua Rd Paua**.

This type of Survey is to assist the client by locating and describing, as far as reasonably practicable, all ACM's detailed within the scope of works described above.

It provides enough information for the recording of the locations of Asbestos containing materials – in accordance with New Zealand Safety at **Work (Asbestos) regulations Sections 9 through 12**.

The purpose of the Survey is to identify as far as practicable, all Asbestos Containing Materials (ACM) present within the buildings structure, in order that the client can manage, remediate or remove items that may present a risk to health.

As a general principle the aim of any Asbestos survey is to provide the PCBU a report that will, as far as is reasonably practicable, locate and report on all the ACM's present within the scope of works, so that risks can be assessed and managed (Section 13 Asbestos regulations).

The Survey was carried out in accordance with Momentum procedures, which are based on the UK HSE (Health & Safety Executive) Guidanced document HSG264 'The Survey Guide' Tabled within this report.

Sample analysis results

Te Pua Rd							
Location	Sample ID	Material	Description	Risk Rating	Condition	Recommendation	Image no
Debris in shed	1 - 001	Cement Sheet	Bulk Sample	6	Poor	An Asbestos Removal Control Plan needs to be developed and implemented by a suitably Qualified contractor.	001
Debris in shed	2 - 002	Cement Sheet	Bulk Sample	6	Poor	An Asbestos Removal Control Plan needs to be developed and implemented by a suitably Qualified contractor.	002
Roofing Sheet	3 - 003	Cement Sheet	Bulk Sample	6	Poor	An Asbestos Removal Control Plan needs to be developed and implemented by a suitably Qualified contractor.	003
Cladding	4 - 004	Cement Sheet	Bulk Sample	6	Poor	An Asbestos Removal Control Plan needs to be developed and implemented by a suitably Qualified contractor.	003

Te Pua Rd Soil							
Location	Sample ID	Material	Description	Risk Rating	Condition	Recommendation	Image no
Western Wall	1 - 00S	Soil	Bulk Sample	0	Poor	N/A	S01
Northern Wall	2 - 00S	Soil	Bulk Sample	0	Poor	N/A	S02
East Wall	3 - 00S	Soil	Bulk Sample	0	Poor	N/A	S03
In shed	4 - 00S	Soil	Bulk Sample	6	Poor	An Asbestos Removal Control Plan needs to be developed and implemented by a suitably Qualified contractor.	S04



PO Box 11156
Ellerslie, Auckland, 1051
New Zealand

CERTIFICATE OF ANALYSIS

Asbestos Identification

Certificate No: 19-0824-001

Client: Momentum Services
Client Contact: Tom Waterer
Telephone: 021053266
Email: Tom.momentum@xtra.co.nz
Address: 117 Mellons Bay Road
Howick, Auckland 2016
Site: Pua Fertiliser Shed

Date Sampled: 14/02/2019
Date Received: 14/02/2019
Date Analysed: 14/02/2019
Order No.: Not Supplied
Sampled By: As Received

Test Method:

Qualitative identification of asbestos types in bulk samples at PROLABS Laboratory by polarised light microscopy, including dispersion staining techniques using PROLABS in-house method ID-1, AS4994 (2004). The results contained within this report relate only to the sample(s) submitted for testing. PROLABS accepts no responsibility for the initial collection, packaging or transportation of samples submitted by external persons. This document may not be reproduced except in full.

Lab ID	Sample ID	Sample Details	Sample Type	Size / Weight cm/g	Fibres Identified	Asbestos Present
001	Sample 2	Debris in shed	Fibre Cement	15 x 3	CHR, AMO	Yes
002	Sample 3	Roofing sheet	Fibre Cement	10 x 7	CHR, AMO	Yes
003	Sample 4	Cladding	Fibre Cement	6 x 8	CHR, AMO	Yes
004	Sample 1	Debris in shed	Fibre Cement	8 x 5	CHR, AMO	Yes

Fibre Identification Legend

CHR Chrysotile (white asbestos)
AMO Amosite (Brown/Grey asbestos)
CRD Crocidolite (Blue asbestos)
UMF Unknown Mineral Fibre
CRF Organic Fibre
SMF Synthetic Mineral Fibre
NFD No Fibres Detected
NAD No Asbestos Detected

Approved Identifier

Name: Philip Torrey

Approved Signatory

Name: Philip Torrey

IANZ Accredited Laboratory - IANZ No. 9447

NZBN: 9429045881237

Page 1 of 1



PO Box 11156
Ellerslie, Auckland, 1051
New Zealand

CERTIFICATE OF ANALYSIS Asbestos Identification

Certificate No: 19-0824

Client:	Momentum Services	Date Sampled:	14/02/2019
Client Contact:	Tom Waterer	Date Received:	14/02/2019
Telephone:	021953266	Date Analysed:	14/02/2019
Email:	Tom.momentum@extra.co.nz	Order No.:	Not Supplied
Address:	117 Mellors Bay Road Howick, Auckland 2016	Sampled By:	As Received
Site:	Paua Fertiliser Shed		

Test Method:

Qualitative identification of asbestos types in bulk samples at PROLABS Laboratory by polarised light microscopy, including dispersion staining techniques using PROLABS in-house method ID-1, AS4964 (2004). The results contained within this report relate only to the sample(s) submitted for testing. PROLABS accepts no responsibility for the initial collection, packaging or transportation of samples submitted by external persons. This document may not be reproduced except in full.

Lab ID	Sample ID	Sample Details	Sample Type	Size / Weight cm/g	Fibres Identified	Asbestos Present
001	Sample 1	Western wall	Soil	21	NAD, ORF	No
002	Sample 2	Northern wall	Soil	16	NAD, ORF	No
003	Sample 3	East wall	Soil	29	NAD, ORF	No
004	Sample 4	In shed	Soil	31	CHR, AMO, ORF	Yes

Fibre Identification Legend

CHR	Chrysotile (white asbestos)	ORF	Organic Fibre
AMO	Amosite (Brown/Grey asbestos)	SMF	Synthetic Mineral Fibre
CRO	Crocidolite (Blue asbestos)	NFD	No Fibres Detected
UMF	Unknown Mineral Fibre	NAD	No Asbestos Detected

Approved Identifier

Name: Philip Torley

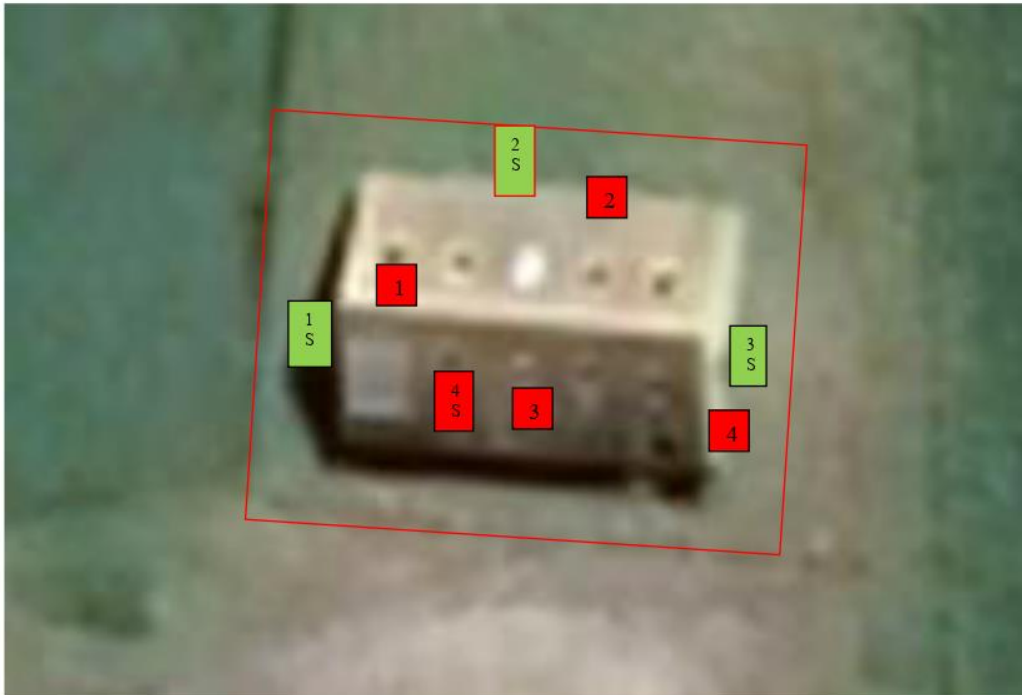
Approved Signatory

Name: Philip Torley

IANZ Accredited Laboratory - IANZ No. 9447

NZBN: 9429045881237

Page 1 of 1

AREA OF SURVEY Te Pua Rd Paua

1. INTRODUCTION

1.1. Background

The purpose of the Survey is to identify as far as practicable, all Asbestos Containing Materials (ACM) present within the buildings structure and immediate area, in order that the client can manage, remediate or remove items that may present a risk to health.

1.2. Objectives

The objective of this Asbestos Management Survey is to systematically identify and manage, as far as reasonably practicable, the location and condition of Asbestos containing materials within the proposed area of demolition.

The Survey will provide enough information to indicate the presence and location of asbestos or ACM, carry out a suitable risk assessment, and develop an Asbestos management plan. As such, this survey has three aims:

1. To find and record the location, extent and product type of any assumed or known asbestos and ACM.
2. To inspect and record information on the accessibility, condition and surface treatment of any assumed or known asbestos and ACM.
3. To determine and record the asbestos type, either by collecting representative samples of suspect materials for laboratory identification, or by assuming based on the product type and its appearance, etc.

This report presents the findings of the Survey undertaken on 14th of February 2019, and includes full survey results, with pictures of samples taken on site and laboratory results.

SITE DESCRIPTION

The structure surveyed at Te Pua Rd is a large fertilizer shed (Approximately 350m²) in bad disrepair.

It is sited in a flat pasture with vehicle access and an estuary on its South boundary.

It is estimated to be 60+ years old.

Care needs to be taken during the demolition to identify and possible Asbestos containing materials that become evident during the demolition.

In the event that these materials are identified, the area needs to be isolated and the assessor needs to be engaged for further assessment.

Site address	Te Pua Rd Paua	
	Description	
	Building age	60+
	Building type	Fertiliser Shed
	Wall construction	Concrete/timber/steel
	Roof construction	Super Six ACM sheeting

2. NATURE AND EXTENT OF THE SURVEY (scope of work)

3.1. General

Momentum Services was commissioned to conduct an Asbestos Demolition Survey for the Far North District Council of the Fertilizer shed structure at **Te Pua Rd, Paua**.

The shed consists of 500m² of non-friable cladding, breakdown of materials in 5. Recommendations.

There is widespread ACM debris around the entire structure. ACM sheets are stacked under heavy grass cover on the perimeter of the building. ACM debris has breached the barrier fencing and is in some places 10m into the car park. There is a large amount of heavily contaminated soil within the shed itself including rubbish, broken glass, fridges, freezers etc that will all need to be removed as ACM's. It would be prudent that a soil scrape was done around the perimeter of the entire building 3m away from the building footprint at a depth of 100mm. The steel and timber framing are not sound in some places so the removal methods are going need to be well thought out. Further soil testing would be required before the shed could be demolished as part of the validation report.

The purpose of the Survey was to identify, as far as reasonably practicable, the location and condition of all asbestos containing materials (ACM) present throughout the area of investigation.

3.2. Inspection Methodology

The scope of work covered by the hazardous materials survey included the following:

- A walkthrough of the site.
- A visual inspection of the external construction materials and components. This was done to identify and locate hazardous materials visible above ground and accessible.
- Momentum Services was contracted to carry out an Asbestos Survey and was able to investigate visible above ground suspected materials, external and internal building materials as per the scope of works.
- All materials that were suspected of containing asbestos were sampled. After that samples were forwarded to a Prolabs Limited laboratory, which is accredited by International Accreditation New Zealand (IANZ), for asbestos bulk sample analysis.
- Where possible, samples were collected without damaging the integrity of the material.
- Suspected asbestos containing materials were photographed where possible.
- Based on gathered information, a report was prepared, detailing the location, condition and type of hazardous materials detected.

3.3. Inspection and sampling

On 14 -02 -2019 the site was visited at Te Pua Rd.

and 4 (Four) indicative samples of suspected Asbestos containing materials were taken, as well as 4 (four) indicative samples of suspected Asbestos containing Soil.

These were collected, numbered, photographed and sent for analysis to Prolabs Limited, an IANZ accredited laboratory. The samples were examined using a Stereo Microscope, selected fibres were further analyzed using polarized light microscopy, supplemented with dispersion staining.

Where sampling was not possible, a determination was reasonably made as to the presence or absence of asbestos, based on factors such as the age, physical appearance or fixing method, as well as inferring from similar materials that were able to be sampled during the survey.


The material risk table used by the Survey team is based on that provided within the HSE Guidance document HSG 264 "The survey Guide"


The Material Risk Assessment assesses the ability of an Asbestos Containing Material (ACM) to release fibers into the air should it be disturbed. The Material Risk Assessment gives a good initial indication to the priority for control action as it will immediately identify the high-risk materials. However, the Client needs to consider that a material with a high-risk score may not necessarily be a priority action if it is present within an area that is Isolated.

Initial risk assessment score	Potential to release fibres
10 or more	High
7-9	Medium
5-6	Low
4 or less	Very Low


Score	Product type (or debris from product)
1	Asbestos reinforced composites (plastics, resins, mastics, roofing felts, vinyl floors tiles, semi-rigid paints of decorative finishes, asbestos cement etc)
2	Asbestos insulating board, mill boards, other low-density insulation boards, asbestos textiles, gaskets, ropes and woven textiles, asbestos paper and felt
3	Thermal insulation (pipe and boiler lagging), sprayed asbestos, loose asbestos, asbestos mattresses and packing
Score	Extent of Damage or deterioration
0	Good condition with no visible damage
1	Low damage with a few scratches or surface marks, broken edges on boards, tiles etc
2	Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose asbestos fibres
3	High damage or delamination of materials, sprays and thermal insulation, visible asbestos debris
Score	Surface Treatment
0	Composite materials containing asbestos: reinforced plastics, resins, vinyl tiles
1	Enclosed sprays and lagging, asbestos insulating board (with exposed face painted or encapsulated), asbestos cement sheets etc
2	Unsealed asbestos insulating board, encapsulated lagging or sprays
3	Unsealed lagging and sprays
Score	Asbestos Type
1	Chrysotile
2	Amphibole asbestos – Brown, excluding Crocidolite
3	Crocidolite
	Total

3.5. SAMPLE IMAGES


Sample number	Sample 1 - 001	Accessibility	Easy (1)
Quantity	Approximately 350M2	Condition	Poor
Area / Location	Debris in shed	Item / Material	Dust and Debris
Material risk no	6	Analysis	Positive
		Surveyor comments	
		<p>A control plan needs to be developed for its removal by a suitably qualified contractor.</p>	


Sample number	Sample 2 - 002	Accessibility	Easy (1)
Quantity	Approximately 350 M2	Condition	Poor
Area / Location	Debris in shed	Item / Material	Dust and debris
Material risk no	6	Analysis	Positive
		Surveyor comments	
		<p>A control plan needs to be developed for its removal by a suitably qualified contractor.</p>	


Sample number	Sample 3 - 003	Accessibility	Easy (1)
Quantity	Approximately 300 M2	Condition	Good
Area / Location	Roof Sheeting	Item / Material	Cement Sheet
Material risk no	6	Analysis	Positive
		Surveyor comments	
		<p>A control plan needs to be developed for its removal by a suitably qualified contractor.</p>	


Sample number	Sample 4 - 004	Accessibility	Easy (1)
Quantity	Approximately 120 M2	Condition	Good
Area / Location	Cladding	Item / Material	Cement Sheet
Material risk no	6	Analysis	Positive
		Surveyor comments	
		<p>A control plan needs to be developed for its removal by a suitably qualified contractor.</p>	

Soil Samples

Sample number	Sample 1 - 00S	Accessibility	Easy (1)
Quantity	Approximately M2	Condition	Poor
Area / Location	Western Wall	Item / Material	Soil
Material risk no	0	Analysis	Negative
		Surveyor comments	
		N/A	

Sample number	Sample 2 - 00S	Accessibility	Easy (1)
Quantity	Approximately M2	Condition	Poor
Area / Location	Northern Wall	Item / Material	Soil
Material risk no	0	Analysis	Negative
		Surveyor comments	
		N/A	

Sample number	Sample 3 – 00S	Accessibility	Easy (1)
Quantity	Approximately M2	Condition	Poor
Area / Location	Eastern wall	Item / Material	Soil
Material risk no	0	Analysis	Negative
		Surveyor comments	N/A

Sample number	Sample 4 – 00S	Accessibility	Easy (1)
Quantity	Approximately M2	Condition	Poor
Area / Location	In Shed	Item / Material	Soil
Material risk no	6	Analysis	Positive
		Surveyor comments	A control plan needs to be developed for its removal by a suitably qualified contractor.

3.7. SITE IMAGES


Image number	001
Area / Location	East
	
<p>Surveyor comments</p> <p>All cement sheet tested positive for Asbestos. A control plan needs to be developed for its removal by a suitably qualified contractor.</p>	


Image number	002
Area / Location	West
	
<p>Surveyor comments</p> <p>All cement sheet tested positive for Asbestos. A control plan needs to be developed for its removal by a suitably qualified contractor.</p>	

Image number	003
Area / Location	South
	
<p>Surveyor comments</p> <p>All cement sheet tested positive for Asbestos. A control plan needs to be developed for its removal by a suitably qualified contractor.</p>	


Image number	004
Area / Location	North
	
<p>Surveyor comments</p> <p>All cement sheet tested positive for Asbestos. This is a typical close up of the cement sheets condition. A control plan needs to be developed for its removal by a suitably qualified contractor.</p>	

Image number	005
Area / Location	Interior
	
Surveyor comments	
<p>All cement sheet tested positive for Asbestos. The debris on the interior of the building is extensive and in very poor condition. A control plan needs to be developed for its removal by a suitably qualified contractor.</p>	

Image number	006
Area / Location	Interior
	
Surveyor comments	
<p>All cement sheet tested positive for Asbestos. A control plan needs to be developed for its removal by a suitably qualified contractor.</p>	

Image number	007	
Area / Location	Interior	
	Surveyor comments	
	<p>All cement sheet tested positive for Asbestos. The contamination on the interior is extensive . A control plan needs to be developed for its removal by a suitably qualified contractor.</p>	


Image number	008	
Area / Location	Interior	
	Surveyor comments	
	<p>All cement sheet tested positive for Asbestos. A control plan needs to be developed for its removal by a suitably qualified contractor.</p>	


Image number	009
Area / Location	Interior
	Surveyor comments
	<p>All cement sheet tested positive for Asbestos.</p> <p>All rubbish is to be treated as contaminated.</p> <p>A control plan needs to be developed for its removal by a suitably qualified contractor.</p>


Image number	010
Area / Location	Surrounding area
	Surveyor comments
	<p>The soil in the surrounding area is littered with cement sheet.</p> <p>As we have positive lab results for cement sheet, we should Strongly Presume all cement sheet product to contain Asbestos. A control plan needs to be developed for its removal by a suitably qualified contractor.</p>

Image number	011
Area / Location	Surrounding area
	Surveyor comments
	<p>The grass in the surrounding area is littered with cement sheet.</p> <p>As we have positive lab results for cement sheet, we should Strongly Presume all cement sheet product to contain Asbestos. A control plan needs to be developed for its removal by a suitably qualified contractor.</p>

Image number	012
Area / Location	Surrounding area
	Surveyor comments
	<p>The soil in the surrounding area is littered with cement sheet.</p> <p>As we have positive lab results for cement sheet, we should Strongly Presume all cement sheet product to contain Asbestos. A control plan needs to be developed for its removal by a suitably qualified contractor.</p>

Image number	013
Area / Location	Surrounding area
	Surveyor comments
	<p>The soil in the surrounding area is littered with cement sheet.</p> <p>As we have positive lab results for cement sheet, we should Strongly Presume all cement sheet product to contain Asbestos. A control plan needs to be developed for its removal by a suitably qualified contractor.</p>


Image number	014
Area / Location	Interior Debris
	Surveyor comments
	<p>All cement sheet tested positive for Asbestos.</p> <p>All rubbish is to be treated as contaminated.</p> <p>A control plan needs to be developed for its removal by a suitably qualified contractor.</p>


Image number	015
Area / Location	Interior Debris
	Surveyor comments
	<p>All cement sheet tested positive for Asbestos.</p> <p>All rubbish is to be treated as contaminated.</p> <p>A control plan needs to be developed for its removal by a suitably qualified contractor.</p>

Image number	016
Area / Location	Surrounding area
	Surveyor comments
	<p>The soil in the surrounding area is littered with cement sheet.</p> <p>As we have positive lab results for cement sheet, we should Strongly Presume all cement sheet product to contain Asbestos. A control plan needs to be developed for its removal by a suitably qualified contractor.</p>

Image number	017		
Area / Location	Surrounding area		
			<p>Surveyor comments</p> <p>The soil in the surrounding area is littered with cement sheet.</p> <p>As we have positive lab results for cement sheet, we should Strongly Presume all cement sheet product to contain Asbestos. A control plan needs to be developed for its removal by a suitably qualified contractor.</p>



Image number	017		
Area / Location	Surrounding area		
			<p>Surveyor comments</p> <p>The soil in the surrounding area is littered with cement sheet.</p> <p>As we have positive lab results for cement sheet, we should Strongly Presume all cement sheet product to contain Asbestos. A control plan needs to be developed for its removal by a suitably qualified contractor.</p>

Image number	017	
Area / Location	Surrounding area	
		Surveyor comments <p>The soil in the surrounding area is littered with cement sheet.</p> <p>As we have positive lab results for cement sheet, we should Strongly Presume all cement sheet product to contain Asbestos. A control plan needs to be developed for its removal by a suitably qualified contractor.</p>

4. RESULTS

On the site at Te Pua Rd a series of 4 bulk and 4 Soil samples were taken from potential Asbestos Containing Materials located in the building.

Samples were then sent for analysis to Prolabs Limited, an IANZ accredited laboratory. Qualitative identification of asbestos types in bulk samples at Prolabs Laboratory by polarised light microscopy, including dispersion staining techniques using Prolabs in-house method ID-1, AS4964 (2004).

Out of the 8 (eight) samples, 5 (five) tested positive for the presence of asbestos.

5. RECOMMENDATIONS

Remediation recommended

Site address	Te Pua Rd Paua	
Estimated Quantities	Material	Location
350 M2	Dust and debris	Interior
300 M2	Cement sheet	Roof
120 M2	Cement sheet	Cladding
200M2	Soil	2 metres around the perimeter of the building

Based on the site investigation and the results of the samples, Momentum Services recommend that:

1. All Cement sheet and dust and debris removal be done by a suitably qualified contractor under Class B conditions.
2. The Scope of work item 3.1 be considered in the methodology.
3. Air monitoring to be done during set up as a datum, then every day removal is being undertaken.
4. Swab and soil sampling to be undertaken as part of the clearance process.
5. In the event that other Asbestos containing materials are identified, the area needs to be isolated and the assessor needs to be engaged for further assessment.

General Recommendations:

- a. Any ACM'S found to be treated as Notifiable works with the appropriate controls put in place.
- b. Any contractor engaged by the owner/occupier to carry out work on the site must be supplied with the Asbestos register and made aware of the hazards.
- c. The PCBU with the management of the workplace must ensure that exposure to airborne asbestos is eliminated so far as is reasonably practicable. If it is not reasonably practicable to eliminate exposure to airborne asbestos, exposure is minimized as per Regulation 9 of the Health and Safety at Work (Asbestos) Regulations.
- d. Momentum Services further advise that the materials be treated as asbestos contaminated during any further refurbishment or demolition works.

Monitoring Quality Assurance

Suitably trained and experienced personnel will undertake air monitoring. Monitoring equipment will be calibrated, serviced and maintained in line with the manufacturer recommendations.

Our quality assurance / quality control (QA/QC) program would insist on the following components (as a minimum):

- Equipment calibration;
- Duplicate monitoring (where required);
- Cross checking and
- Database management.

Records

Records regarding the design, specification, operation, inspection, maintenance and monitoring of the work will be maintained online.

6. CAVEAT

This report has been prepared by Momentum Services and is subject to the following limitations:

- The specific instructions received from the client.
- The report has been prepared to a specific scope of works as set out in an agreement between Momentum Services and The Client.
- The scope of the inspection did not include any tenant owned items but focused on fixed building fabric and services only.
- This report may not be relied upon by any third party not named in this report for any purpose except with the prior written consent of Momentum Services.
- The advice provided in this report is based on information obtained from the identified building material inspection locations and/or sampling points. Materials present in other parts of the building structure or site may differ from those identified at the inspection locations and/or sampling points. Stated quantities of observed materials or items should not be inferred as a definitive quantity survey of such materials or items.
- The report relates to the site as at the date of the inspection as conditions may change thereafter due to natural processes and/or site activities.
- No warranty or guarantee is made regarding any other use than as specified in the scope of works and only applies to areas inspected and reported in this report.
- Where third party survey work, reports or verbal information has been relied upon, the responsibility for the accuracy of such data remains with the third party, not with Momentum Services.
- This report is applicable to known occurrences of asbestos containing materials at the time of the inspection. It may require updating if additional occurrences are identified or legislation changes.

7. SAMPLING AND ANALYSIS TECHNIQUES

In areas on the site where there were substantial quantities of visually uniform material, then a small number of samples were taken and should be considered as being representative of the whole area.

Reference to Asbestos Insulating Board or Asbestos Cement are based upon their asbestos content and visual appearance alone.

Certain types of textured coatings and decorative plasters may contain very small quantities of asbestos. In-situ these coatings are often composed of different batches of product or may have been repaired/patched at different times. It is therefore possible that any textured coating samples taken may not be representative of the entire coating. Trace fibres may not be visible by the optical microscopy method described in AS 4964 (2004) - Method for the Qualitative Identification of Asbestos in Bulk Samples. If required, we can arrange for more advanced analysis at an additional charge.

All work procedures are to be updated/ amended as required to reflect current Work Safe Regulations.

8. REFERENCES/LEGISLATION

The following list can be used to gain further information on handling and management of asbestos containing materials within the workplace. Most of these documents can be downloaded from the internet:

1. Health and Safety at Work Act 2015

<http://www.legislation.govt.nz/act/public/2015/0070/latest/DLM5976660.html>

2. Health and Safety at Work (Asbestos) Regulations 2016

<http://www.legislation.govt.nz/regulation/public/2016/0015/latest/DLM6729706.html>

3. Work Safe New Zealand - Asbestos - New Zealand guidelines for the management and removal of asbestos

<https://worksafe.govt.nz/topic-and-industry/asbestos/management-and-removal-of-asbestos/>

8. DISCLAIMER

Asbestos Demolition SURVEY:

This document has been prepared in good faith on the basis of the information made available to Momentum Services.

Momentum Services does not guarantee the areas inspected and sampled.

Asbestos containing materials existing within areas not specifically covered by this report are considered outside the scope of work.

This report should be read in full. No responsibility is accepted for use of any part of this report for any other purpose or third parties. This report does not give legal advice.

4.3 OPONONI GREEN WASTE TRIAL

File Number: A2447332

Author: Simon Millichamp, Solid Waste Engineer

Authoriser: Andy Finch, General Manager - Infrastructure and Asset Management

PURPOSE OF THE REPORT

To provide an update on the green waste collection trial at the Opononi Refuse Transfer Station, and to determine whether or not to continue the service.

EXECUTIVE SUMMARY

- Opononi is one of seven Council Refuse Transfer Stations that isn't contracted to accept green waste. Far North District Council (FNDC) has a total of 15 Refuse Transfer Stations.
- An initial trial from November 2016 to September 2017 resulted in a poor response to accepting green waste at Opononi.
- A request to undertake another trial was implemented with improved communication from October 2018.
- Since October 2018, a total of 18m³ of green waste equating to approximately six standard trailer loads has been received.
- It is estimated that the annual cost to Council to provide this service is \$1200 based on the received quantity of 18m³. The customers would pay an additional \$400 in drop off fees.

RECOMMENDATION

That Infrastructure Network Committee approves the discontinuation of the green waste trial at the Opononi Refuse Transfer Station.

1) BACKGROUND

Green waste is accepted for composting at 8 of the 15 FNDC Refuse Transfer Stations. Customers pay \$22/m³ drop off fees. These are retained by the contractor to pay for processing the greenwaste.

Green waste is not accepted at any of FNDC's 11 Community Recycling Centres.

Green waste services were not included in the waste contracts for some sites due to their rural nature and the resulting lack of demand for green waste services. The overwhelming majority of residents have space on their rural properties to compost green waste.

Northland Waste and Waste Management both utilise Waipapa Landscapes Ltd to process the green waste from FNDC Transfer Stations as it is more cost effective than purchasing and operating their own machinery.

2) DISCUSSION AND OPTIONS

Initial trial

In response to a submission to Council's 2016 Annual Plan, it was agreed to trial the acceptance of green waste at the Opononi Transfer Station and to determine if there was a demand for such a service.

The trial operated from November 2016 to September 2017. During this period, less than 14m³ of green waste was received, equating to less than 5 standard trailer loads.

Part of the failure in the acceptance of this service was seen as being the lack of communication, marketing and promotion.

Overall, the green waste removal and composting resulted in an overall cost of \$90.15m³ (\$68.15. paid by FNDC from general rates, \$22 paid by the public as drop off fees). Staff thought this cost outweighed the benefits so the trial was ended.

Second trial

Kaikohe-Hokianga Community Board Chair expressed concern that green waste acceptance had ceased. Council staff were requested to reintroduce this service through a further trial.

The second trial period ran from 1 October 2018 until May 2019 and covered the busy summer months including accommodating residents who would return to the area and do landscaping work on their properties.

To promote this trial:

- Letters were delivered to the letter boxes at the Opononi and Omapere dairies.
- Posters were displayed at the Opononi i-SITE and local businesses.
- A notice put into the 'Creating Great Places' October newsletter.
- Posts in the Hokianga Environmental Protection Group, Kaikohe-Hokianga Community Board, Rawene. What's up and Opononi Area group Facebook pages.
- Signage advertising the service was placed on the green waste bin near the entrance and at the recycling area.

Council's notice was shared 14 times from the FNDC Facebook site.

To date, a total of 18m³ of green waste has been received and it is expected volumes will drop off as winter approaches.

Methodology and costs

Trialled Method

Waste Management provided a 9m³ bin at the Opononi Refuse Transfer Station to accept green waste. Once full, the bin is taken to a composting facility in Kerikeri for disposal.

Costs to Council for the second trial are:

- Bin rental: \$52.65 per month x 6 months = \$315.90
- Bin empty: \$161.18 each (2 empties required) = \$322.36

Total cost to Council (\$638.26 divided by 18m³) = \$35.46/m³

Cost to the public: \$22m³ (drop off fees)

Total cost \$57.46/m³

Green waste drop off fees are retained by the Contractor not passed on to Council. The contractor uses these fees to contribute towards the cost to dispose of the green waste in Kerikeri.

The overall cost per m³ i.e.: \$57.46/m³ was lower in the current trial as bins were not hired over the winter period when minimal green waste is received.

The annual cost to Council to provide this service is estimated to be around \$1200 annually.

Bin Costs

Bin rental is the biggest proportion of the cost of providing this service.

The cost to hire one bin is \$52.65 per month

The cost to purchase a 9m³ bin is approximately \$3500.

If Council purchased bins, two bins would be required. The alternative is that two trips are required for each empty i.e.: drive out empty, bring back full bin, drive out again with empty bin, drive back empty resulting in another 170km round trip.

3) CONCLUSION

Taking into account the cost to operate this service in comparison to the amount of green waste received, it is believed the service does not provide value for money.

Reason for the recommendation

Accepting green waste at Opononi is relatively expensive for the size of the service provided. It is recommended that this service cease and that residents are encouraged to:

- Seek alternative options that would enable them to compost their green waste without relying on Council providing this service.
- Dispose of larger items such as branches as firewood.

The above options, although not ideal will have less of an impact on the environment than sending an 8 ton truck on a 170km trip to collect 9m³ of green waste.

4) FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION

There are no provisions in the current budget for the provision of a permanent green waste service at Opononi.

The annual cost to provide this service is estimated to be around \$1,200.

ATTACHMENTS

Nil

Compliance schedule:

Full consideration has been given to the provisions of the Local Government Act 2002 S77 in relation to decision making, in particular:

1. A Local authority must, in the course of the decision-making process,
 - a) Seek to identify all reasonably practicable options for the achievement of the objective of a decision; and
 - b) Assess the options in terms of their advantages and disadvantages; and
 - c) If any of the options identified under paragraph (a) involves a significant decision in relation to land or a body of water, take into account the relationship of Māori and their culture and traditions with their ancestral land, water sites, waahi tapu, valued flora and fauna and other taonga.
2. This section is subject to Section 79 - Compliance with procedures in relation to decisions.

Compliance requirement	Staff assessment
State the level of significance (high or low) of the issue or proposal as determined by the Council's Significance and Engagement Policy	Low
State the relevant Council policies (external or internal), legislation, and/or community outcomes (as stated in the LTP) that relate to this decision.	2017-23 Waste Management and Minimisation plan
State whether this issue or proposal has a District wide relevance and, if not, the ways in which the appropriate Community Board's views have been sought.	Mike Edmonds asked for a second trial as he thought the initial trial was not suitably advertised.
State the possible implications for Māori and how Māori have been provided with an opportunity to contribute to decision making if this decision is significant and relates to land and/or any body of water.	No specific implications to Maori
Identify persons likely to be affected by or have an interest in the matter, and how you have given consideration to their views or preferences.	The trial has been well publicised to encourage locals to demonstrate their support of the trial.
State the financial implications and where budgetary provisions have been made to support this decision.	Estimated unbudgeted cost of \$1,200 per annum.
Chief Financial Officer review.	The Chief Financial Officer (Acting) has reviewed this report.

4.4 ADDRESSING THE KEY RECOMMENDATIONS OF THE NTA REVIEW

File Number: A2468183

Author: Jewel Eketone, Executive Officer to General Manager (Acting)

Authoriser: Glenn Rainham, General Manager - Infrastructure Asset Management (Acting)

PURPOSE OF THE REPORT

To update the Infrastructure Network Committee on improvements underway within the Northern Transportation Alliance (NTA) that is addressing the key recommendations identified within the recent NTA Review.

EXECUTIVE SUMMARY

The recent NTA Review identified a number of opportunities for improvement and 3 key recommendations around (i) NTA communication and reporting to FNDC elected representatives; (ii) engaging an Alliance coach to work with the NTA leadership group; and (iii) engaging an asset manager to ensure the quality of FNDC's next AMP is adequate to secure appropriate funding.

Two new roles currently being recruited by the NTA will have as core responsibilities the task of establishing communication and reporting requirements across the business and with elected members.

In late 2018, the Alliance Leadership Group (NTALG) and Alliance General Managers completed a full day Alliance Alignment Workshop, facilitated by Kym Williams of BRS. The outputs of the workshop were captured and have identified key areas of focus to be worked through by the NTA and NTALG to ensure the objectives required to make the Alliance a success are met.

The Asset Management team within the NTA have been working together on an AMP Improvement programme for the 3 Council's. Significant progress has been made in the areas of (i) Council being able to demonstrate effective optimisation across the programme and across the 3 year NLTP period; (ii) the NTA developing the AMP in conjunction with the NZTA; (iii) addressing data quality; and (iv) implementing the ONRC Performance Measures Reporting Tool (PMRT) that enables an assessment the investment is having on efficiency gains in the operations and maintenance of the road networks.

RECOMMENDATION

That the Infrastructure Network Committee receives the report Addressing the key recommendations of the NTA Review.

BACKGROUND

Far North District Council (FNDC) is a committed member of the Northern Transportation Alliance (NTA) and wished to run a lens over the performance of the NTA to gauge the value of return and equitability for the FNDC, against the initial outcomes identified in the Northland Transportation Opportunities Business Case, 6 April 2016, and where appropriate, identify recommendations and opportunities for improvement.

The review undertaken by LGNZ Equip took a two staged approach by firstly undertaking a desktop document review to establish the review's criteria and NTA performance to date. This was followed by a structured interview process using a standard questionnaire based on the desktop review to gauge the perceptions of performance across NTA and FNDC personnel.

While it is still early days, the review noted that the NTA has produced benefits for FNDC. It also identified a number of opportunities for improvement and 3 key recommendations.

1. Using a collaborative workshop process with the NTA Leadership Team, to improve NTA communication and reporting to FNDC elected representatives thereby assisting FNDC oversight of the NTA through establishing mutually agreed expectations and a reporting regime against delivery of these expectations.
2. Engaging an Alliance coach experienced in the international best practice principles of collaborative working to assist the NTA Leadership Team develop the NTA into a true alliance with a strong collaborative culture and systems and process to embed this culture and make it enduring, thereby maximising NTA business case opportunities.
3. The urgent appointment, or if need be temporary engagement, of a suitably qualified asset manager to ensure the quality of FNDC's next AMP that is currently being developed and to access the additional NZTA funding for forestry roads.

DISCUSSION AND NEXT STEPS

Summary of the NTA Current State

There is a significant level of continued under resourcing across the NTA, resulting in the resources available working primarily in a reactive mode (currently 18 of 64 total positions are vacant and are in the process of being recruited). While the NTA remains significantly understaffed during the recruitment period, there is no capacity for focus on improvements, embedding required changes associated with maintenance contract changes or working on activities required to enable full benefit realisation.

While under resourcing has been an issue since the inception of the NTA, the impact of this on the NTA's ability to structure itself to enable delivery of the identified transportation benefits has only recently been fully appreciated.

1. Improving communication and reporting to FNDC Elected members:

The NTA are presently in the process of recruiting both a Business Performance Manager and Transformational Change Manager, with the primary purpose of these roles being:

Business Performance and Change Manager:

- Complete a full stakeholder engagement and requirements gathering exercise across all NTA partnering groups to determine consistent communication and reporting requirements across the discrete business levels (General Managers, Chief Executives, Infrastructure Committees and Elected Members).
- As an outcome of this exercise the NTA will develop a single source reporting tool with functionality to report to level of granularity required by each stakeholder group. The source data for reporting will remain as the individual council financial, safety and customer management systems.
- Further work will be completed with the incoming Maintenance and Operations Manager to define and implement fully transparent performance reporting related to delivery of the Maintenance Contract requirements.

Transformational Change Manager:

- Within the original 2016 Northland Transportation Alliance Business Case, a number of people, culture, system and process pre-requisite activities were identified as required to support any move to a functional based structure.
- While the functional based structure has been put in place, the identified pre-requisite activities have either yet to start or not yet been fully completed and embedded.
- The NTA Manager and Alliance Leadership group have recognised that to complete these activities, and bring the NTA to a fully functioning "business as usual" state, requires an investment in temporary appropriately skilled and dedicated resource as the vehicle to accelerate and initiate the programme of work required to create an NTA identity and support organisation change leading to improved customer outcomes and the successful delivery.

The fundamental principles and objectives for the NTA as an organisation remain consistent with those outlined in the original approved Business Case. It is envisaged that with the engagement of this specialist and dedicated resource, the NTA Manager can successfully work on the business and focus on the identify areas that will best delivery capability to improve the value achieved with the available transportation funding.

2. Engage coaching/training to develop NTA leadership team into true Alliance

In late 2018, the Alliance Leadership Group (NTALG) and Alliance General Managers completed a full day Alliance Alignment Workshop, facilitated by Kym Williams of BRS. The primary purpose of the workshop was to obtain clarity and agreement of requirements and expectations of:

- Governance structure and role
- Confirmation of Alliance purpose and objectives
- The NTA's relationship with NZTA
- Alliance partner objectives and expectations
- Stakeholder engagement processes and expectations
- Alliance priorities – short, medium and long term

The outputs of the workshop were captured and have identified key areas of focus to be worked through by the NTA and NTALG to ensure the objectives required to make the Alliance a success are met.

These objectives and workshop outputs, in conjunction with the original 2016 Business Case objectives, have been utilised by the incoming Northland Transportation Alliance Manager as a key input to his developed 100 Day plan.

The present focus of the NTA is on recruiting and embedding a full management and leadership structure (identified as key in the Alliance alignment workshop), including the positions outlined in point 1. The embedding phase of this will include coaching and training of the NTA leadership team, not only in the aspect of effective Alliance leadership and governance, but also lifting the base leadership competencies across the organisation. The ability to invest in this area is a direct result of the Alliance structure, with training and coaching investment of the individual council partners maximised to provide benefit to all.

Further to the base training planned to be completed within the existing funding streams, additional budget has been provided through the Kaipara Kickstart PGF programme to develop the "Unsealed Roads Centre of Excellence" within the NTA, with a specific ring fenced component of this funding identified for NTA leadership development.

3. FNDC Asset Management

a. Recruitment of FNDC Asset Manager

The NTA are presently actively recruiting for both an Asset Manager Lead and an FNDC Asset Manager. While these recruitment activities take place, and until the roles are filled, the NTA are utilising existing Asset Management staff and consultant services to ensure Asset Management activities specifically related to FNDC are completed.

b. Quality of FNDC Asset Management Plan & Forestry Road additional funding

Asset Management Plan - Background

The NZTA approved the FNDC's programme request for the 2018-21 Local roads Maintenance Programme as outlined below.

Activity Class	Requested 3 year Programme (Gross\$)	Approved 3 year Programme
Local Roads Maintenance	\$78,484,480	\$73,221,486
Road Safety Promotion	\$3,415,000	\$3,415,000

The shortfall in the Local Roads Maintenance funding related to a further request for enhanced funding for the Council's Unsealed Forestry Road Investment Programme, that Council had previously received about \$10M funding for in the previous 2015-18 NLTP, (see below).

NZTA assessed the FNDC AMP as part of their moderation and funding approval process and concluded:

"We consider the AMP is approaching a good standard, but has not fully demonstrated the merits of the programme request submitted."

The approved Local Roads Maintenance funding matched the Council request as defined in Council's AMP, (excluding the enhanced funding request) but came with some AMP improvement requirements for Council to work on before the next AMP in 2021.

Asset Management Plan – NTA progress on NZTA identified AMP improvements

The Asset Management Group in the NTA have been working together on an AMP Improvement programme for the 3 Council's. An overview of the identified improvements and update on the current progress for the FNDC AMP programme is outlined below.

These specific conditions were:

- a) Council to demonstrate effective optimisation across the programme and across the 3 year NLTP period

Progress Update:

The NTA are now using the dTIMs modelling software to undertake optimisation of the FNDC sealed road network to develop the forward works programme. External consultants Scott Verevis and Khaldoon Azawi have been engaged to manage this modelling work and together with validation by FNDC maintenance staff helps develop the renewals and maintenance programmes as part of the forward works programme. This exercise is being completed across the whole region including the FNDC network, and the wider NTA team involvement allows for the evidence of effective optimisation and the consistency NZTA are requiring.

In 2018, the 3 Council's engaged OPUS consultants, to develop the Unsealed Road Strategy for managing our unsealed road networks. The implementation of this strategy is currently being developed within the KDC's PGF funded Kai for Kaipara project, where IDS have been engaged, and funded by the PGF project, to develop an optimisation processes for maintenance and renewals of the unsealed network. The PGF requirements also look to develop a "centre of excellence" in the NTA for the management of the unsealed network, the outputs of which can be exported to the other networks in the Region. The NTA has also started the development of the optimisation programme for the FNDC's unsealed road network as part of the enhanced funding request as detailed below.

- b) NTA develop with NZTA:

- an Asset/Operational Management dashboard that provides a useful tool to demonstrate progress and outcomes on;
- a RAPT tour is implemented and applied, (NZTA assistance is available for start-up);
- an improvement plan implementation programme & progress, delivering superior asset management, improved strategy, planning and procurement, and value for money

Progress Update:

- i) The NTA has developed the AMP Improvement Programme Dashboard in association with REG for the three Northland Councils.

- ii) As part of the development of the optimised programme for the sealed network, the wider NTA team has been involved in the development of this programme supported by the external consultants. A limited internal RAPT review was undertaken with some of these team members were involved in site visits to validate the FNDC's renewals programme for 2018/19. However due to the shortened timelines brought about by the retendering of the maintenance contracts in 2018,

external RAPT tours were not possible for this year's programme. It is anticipated future RAPT tours will involve external parties (intended to also include NZTA representatives).

iii) The AMP Improvement Plan has been developed together with NZTA and in accordance with the REG guidelines. Regular Regional REG workshops are held 2 monthly and attended by NTA and NZTA staff, where progress on the AMP Improvement Plan is reviewed and discussed. The Dashboard as referred to above contains the improvement plan details and reports on progress.

c) A commitment addressing data quality to an acceptable standard

Progress Update:

A major part of the AMP improvement plan, and objective of the REG guidelines is improving data quality. The data Council holds in the RAMM database for the road network is the basis of all of Councils AMP, and forward works programme development and decision making. Improving data quality and increased use of the evidence to influence the outcome is part of the Improvement Plan and is reported on in the Dashboard as referred to above. REG also publish data quality reports for each Council, that allows Council to review their results and work on improvement plans.

d) Commitment to regular reporting against delivery of signalled efficiency gains.

Progress Update:

As part of REG AMP Improvement Framework, REG provide regular reports on Council's ONRC performance measures and data quality results. REG have developed the ONRC Performance Measures Reporting Tool (PMRT), that allows Council to assess, evaluate and challenge the results and compare these with the results of other networks or Councils. Council is working closely with REG and NZTA to use these reporting tools and results as part of the Improvement Plan to improve the data quality, and the results to obtain efficiency gains in the operations and maintenance of the road networks.

Enhanced Funding Request for Unsealed Road Strengthening

At the time of funding approval for the 2018-21 programme, NZTA did not approve the FNDC's enhanced funding request of \$4M for Unsealed Forestry Road Strengthening, being a continuation of the enhanced funding programme of \$10M that FNDC had received during the preceding three year programme. NZTA stated at that time that the application "...has not fully demonstrated the merits of the programme request submitted."

FNDC are required by NZTA to:

- Provide details of the roads strengthened as part of the previous \$10M enhanced funding programme.
- Identify which roads from the 2016 OPUS business case have not been strengthened.
- Provide evidence the works done achieved the intended outcomes, i.e. reduced maintenance costs.
- Provide evidence that FNDC is employing best practise for asset management, aggregate use and drainage on these works.
- Show optimisation in the programming of roads to be treated in the enhanced funded programme.
- Detail what works are to be funded from the Council's existing core funding and provide evidence to show what additional funds will be required to fund this work above the core funding allocation.
- Determine long term strengthening need and break-even point for when maintenance savings outweigh the investment in strengthening works
- Undertake dTIMS modelling of the unsealed road network to confirm the optimised programme of strengthening works.

- Develop a business case using the above information to show a compelling case for change based on good practise, good procurement, clear problems and sound evidence.

The NTA have formed a project team to develop the required business case and a detailed programme of works. The developed timeline for this presently has the requirements and evidence collection taking place through until June 2019, after which the full supporting business case will be developed for submission to NZTA. NZTA have advised that this Business Case needs to demonstrate a compelling case for change based on good practice, good procurement, clear problems and sound evidence.

The team is continuing to work on this project and is currently meeting to project timelines. As part of this work the NTA is working closely with local NZTA representatives to ensure NZTA requirements are being met as we progress.

FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION

The activities identified to address points 1 and 2 of the discussion section this report are to be completed within existing Council and/or NTA budgets with no additional funding required.

FNDC funding will be required to complete the Asset Management review exercise identified with this to be quantified as part of developing the scope of the review

ATTACHMENTS

Nil

4.5 NORTHLAND TRANSPORT ALLIANCE STRUCTURE UPDATE

File Number: A2462753

Author: Glenn Rainham, Manager - Alliances

Authoriser: Andy Finch, General Manager - Infrastructure and Asset Management

PURPOSE OF THE REPORT

The purpose of this paper is to provide the Far North District Council Infrastructure Network Committee with an update on the recent organisational structure changes within the Northland Transport Alliance (NTA).

EXECUTIVE SUMMARY

This report provides information pertaining to recently implemented NTA structural changes, specifically:

- Roles and responsibilities
- Structure objectives
- Proposed individual Council support and escalation mechanisms

RECOMMENDATION

That the Infrastructure Network Committee receive the report Northland Transport Alliance Structure Update.

BACKGROUND

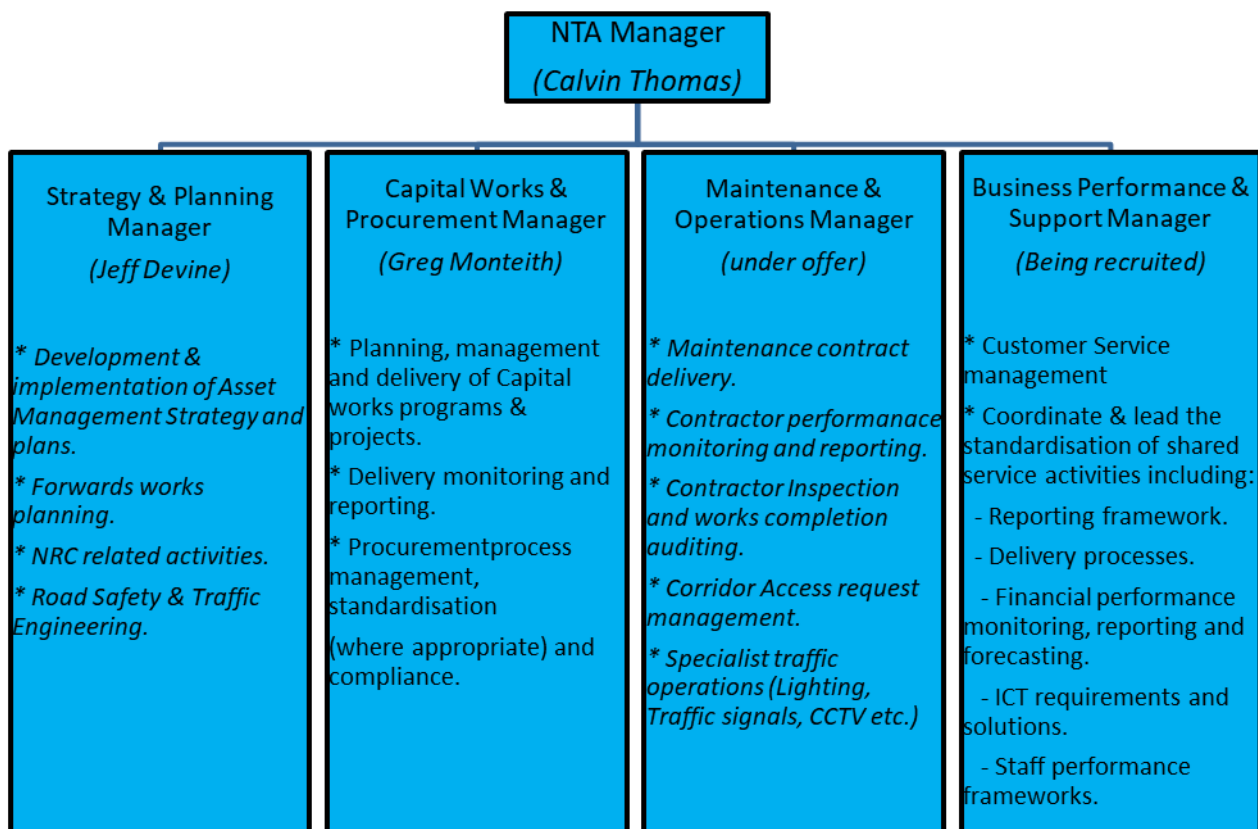
Recent structural changes have been made within the Northland Transport Alliance resulting in a change to the delivery and support to Far North District Council (FNDC).

This report has been authored to provide information associated with the recent NTA structure change and answer questions raised regarding escalation and support structures to be provided to FNDC.

DISCUSSION AND NEXT STEPS

Functional Structure & responsibilities

Within the approved business case for the Northland Transportation Alliance it was identified that while some efficiencies could be gained through the co-location of resources (primarily in Whangarei), a key contributor to delivering the desired long term benefit outcomes was to move to a more functional based, cross council organisational structure, focussed primarily on four key streams as illustrated.



The staff consultation and confirmation process was completed in late 2018, with the final structure becoming effective (in principle) on Monday 4th March 2018. At the time of compiling this report, of the total structure is made up of 64 positions, approximately 20 are presently vacant and/or new and being recruited for. The critical gaps associated with these vacant positions are presently being covered through use of consultants and seconded resources, with it planned for the majority of the recruitment for these positions will be completed by end of June.

The key objectives of the structure change are to:

- Provide a specialised, regionally focused, highly integrated, end-to-end approach to strategy, capital projects, renewals, maintenance and operations.
- Group roles into functional areas with centralised management while enabling capability and development opportunity improvements over time.
- Local area-based customer and maintenance teams to provide consistency, build relationships with community and key stakeholders and ensure integration.
- Facilitate opportunities for potential savings on capital works, maintenance and operations programs through more consolidated and standardised approaches.
- Larger specialised team approach creates strong technical teams as centres of excellence to provide greater professional support, development opportunities and succession planning
- Structure ensures resource efficiency across functions and projects & provides support across councils to cover leave, absences and unexpected vacancies.
- Increase support resources and alignment of support services facilitating greater consistency and enables a regional approach to working

- Widen recruitment interest through provision of greater range of work scope, challenge and opportunities combined with flexibility of location within the Northland Region.

Individual Council Liaison & Escalation

On finalising the recruitment and appointment of the “Maintenance and Operations Manager”, each Alliance Council will be assigned a primary lead, noting that the primary lead may not necessarily be directly employed by that council, with each lead tasked with:

- Key contact for respective Council Infrastructure General Manager’s
- Provision of support to elected members at forums such as Regional Transport Committee meetings
- Lead representation at respective Council Infrastructure Committee / Council meetings.
- Facilitating response and resolution of escalated issues

Based on the current assumption that FNDC will be the hiring council for the Maintenance & Operations Manager role, the indicative primary contact points are:

Council	Primary Escalation & Support Manager		Maintenance Contract Delivery & Contractor performance management	
	Position	Position Holder	Position	Position Holder
FNDC	Maintenance & Operations Manager	<i>TBC – Under offer</i>	FNDC Maintenance Lead	<i>TBC – Recruitment process underway</i>
KDC	Capital Works & Procurement Manager	Greg Monteith	KDC Maintenance Lead	Bernard Peterson
WDC	Strategy & Planning Manager	Jeff Devine	WDC Maintenance Lead	Mike Batchelor
NRC	Senior Transport Manager	Chris Powell	<i>Not Applicable</i>	

In addition to the primary lead, the three district Councils each have a Maintenance Lead responsible for delivery and contractor performance for maintenance contract work.

FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION

This is an information only report and accordingly there are no additional financial implications

ATTACHMENTS

Nil

4.6 PAIHIA WATER TREATMENT PLANT STATUS REPORT

File Number: A2437073

Author: Barry Somers, Assets Manager - 3 Waters

Authoriser: Andy Finch, General Manager - Infrastructure and Asset Management

PURPOSE OF THE REPORT

To provide an overview of the status and issues associated with the Paihia Water Treatment Plant

EXECUTIVE SUMMARY

Due to the Paihia water treatment plant being near the end of its useful life, there are multiple issues that are affecting or could affect the production of sufficient water for Paihia. Individually each of the issues is potentially solvable; however collectively it is indicating the treatment plant is reaching the end of its useful life.

Tourist Infrastructure Funding has been obtained to both develop a business case and investigate options to overcome these issues.

RECOMMENDATION

That the Infrastructure Network Committee receives the report Paihia Water Treatment Plant Status Report.

BACKGROUND

The Paihia water treatment plant is located next to the Haruru Bridge and extracts water from the Waitangi River for treatment.

Risks and Issues associated with this plant are;

1. **Site.** The treatment plant is located on a confined site with minimal room for expansion. Over the years there have been modifications and additions to the treatment process which have used most of the available footprint and have led to a somewhat haphazard development of the site.
2. **Flooding.** Being a critical lifeline asset, the treatment plant should be functional in at least a 1:50 year event. In 2007 there was a 1:40 year flood and 2011 a 1:32 year flood. Both these floods went up the side of the building and caused electrical damage. While effort has been made to waterproof the walls, a 1:50 year flood would result in possible further damage taking the treatment plant out of service for an extended period of time.
3. **Storage of Hazardous Substances.** Due to changes in the regulations in 2017, the current storage arrangement no longer complies. The compactness of the site makes full compliance very difficult.
4. **Taste and Odour.** Paihia water has taste issues with complaints regularly received. During the summer of 2017/2018, microbes in the Waitangi River created elevated levels of geosmin. At very low concentrations geosmin give a strong earthy taste and are noticeable at between 7 and 15 parts per trillion. Tests at that time showed levels as high as 59 parts per trillion resulting in additional taste and odour complaints.
5. **Intake Screen.** The intake screen has both back wash and air scour facilities. However the filamentous algae found in the river cause blockages of the screen and require routine diver attendance to clear the algae off the screen.

6. **Raw Water Quality.** With the lack of raw water storage, whatever the water quality is in the river has to be treated. This results in variable turbidity, pH and alkalinity making the water difficult to treat. During a storm the treatment plant often struggles to treat the water requiring either turning off, or significantly slowing down the process. This has led to situations where operators have had to be continuously present and continually adjusting the treatment process to ensure the treatment plant is able to treat water.
7. **Treatment Capacity.** Peak day capacity has been continually increasing since 2010. Peak day is dependent on time of year and weather conditions. The day peak demands have now reached, and slightly exceed, peak production capacity. However, Paihia does have a very high level of unaccounted for water and some spare headroom could be obtained by reducing the amount of unaccounted for water.
8. **Contaminant Risk.** The Waitangi River is a modified catchment and as such there is an increased risk of an upstream pollution event. With no raw water storage, production would have to stop until the risk abated.
9. **THM's.** Trihalomethanes (THM's) are a by-product of the treatment process when chlorine reacts with dissolved organics left in the water after treatment. The levels of THM's in the treated water reservoirs have on occasions exceeded the trigger level of 50% of the NZ Drinking water standard.

DISCUSSION AND NEXT STEPS

Individually, each of these issues are potentially resolvable. Collectively they are indicating the Paihia water treatment plant is nearing the end of its useful life.

Tourist Infrastructure Funds have been obtained to formalise the business case as to why a change is needed, and to investigate potential solutions. This report is due in December 2019 and will provide the basis for further discussions around the best way forward.

FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION

Currently the LTP 2018/2028 contains \$6.8M in total in the years 2021/2022 and 2022/2023 for a new water treatment plant. Once the options investigations have been completed, it is likely this figure will have to be revised higher.

ATTACHMENTS

Nil

4.7 KAITAIA, REDUCING NON REVENUE WATER

File Number: A2453748

Author: Barry Somers, Assets Manager - 3 Waters

Authoriser: Glenn Rainham, General Manager - Infrastructure Asset Management (Acting)

PURPOSE OF THE REPORT

To advise Council around the level of non- revenue water in the Kaitaia reticulation, and a process to reduce the currently very high level of non-revenue water.

EXECUTIVE SUMMARY

A recent investigation has found the level of unaccounted (non-revenue) for water in the Kaitaia reticulation has progressively increased from 150 Litres / property / day in 2010 to 375 Litres / property / day in 2018. The current level of non-revenue water is very high and Council is now in breach of a resource consent condition relating to leakage. The investigation concluded leakage is the likely major cause of the unaccounted for water.

During the last decade, water reticulation maintenance has been largely reactive i.e. responding to water breaks when reported, along with some mains replacements and some water meter replacements. During this time the situation has got progressively worse. To change this worsening trend will require a change from how the Kaitaia water scheme has been traditionally managed. A key part of a proposed change is the installation of zonal monitoring. Zonal monitoring will provide multiple benefits including; real time flow information, early warning of new breaks and quantifying any improvements that are made. The additional information gained through zonal monitoring will enable moving from largely reactive management to an informed management programme for the Kaitaia water reticulation.

RECOMMENDATION

That the Infrastructure Network Committee receive the report Kaitaia, Reducing Non Revenue Water.

BACKGROUND

This report is in response to a request made at the Infrastructure Network Committee on the 21 March 2019 for further information on reducing water losses in the Kaitaia reticulation. It should be noted that the investigation that was undertaken in Kaitaia which provides the basis for this report, is currently being repeated for the Paihia and Kaikohe water schemes.

In March 2019, an independent Consultant undertook a detailed investigation into the level of non-revenue water in Kaitaia. This review looked at;

- the accuracy of the bulk water meters
- the accuracy of the domestic water meters
- water production and sales since 2010 and the amount of non-revenue water over that period.

A review of the Kaitaia population shown in Fig 1 shows a steady growth until the mid 1990's with a static population. From this it was concluded that population growth was not a factor in increasing water production.

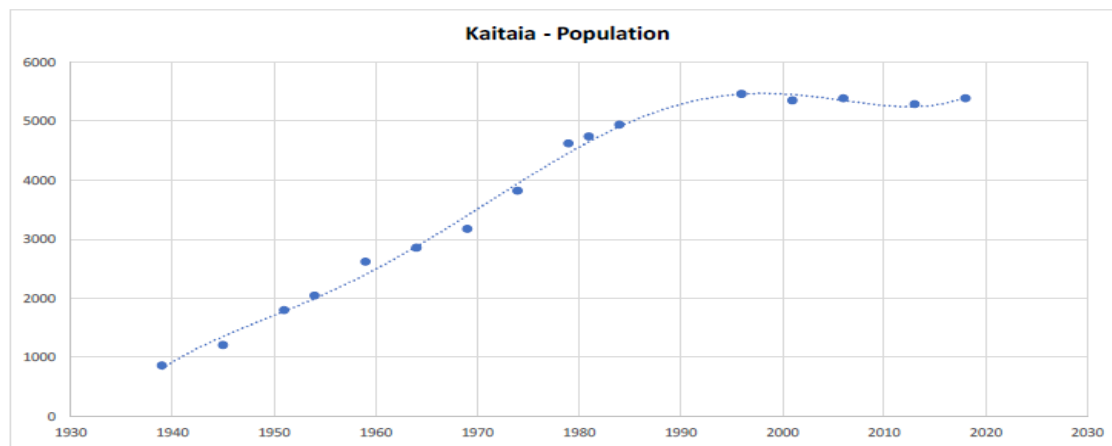


Fig 1; Population Growth

Since 2010 annual water production has been increasing at around 1.8% p.a. This growth trend is detailed in Fig 2. This growth trend doesn't align with population changes shown in Fig 1.

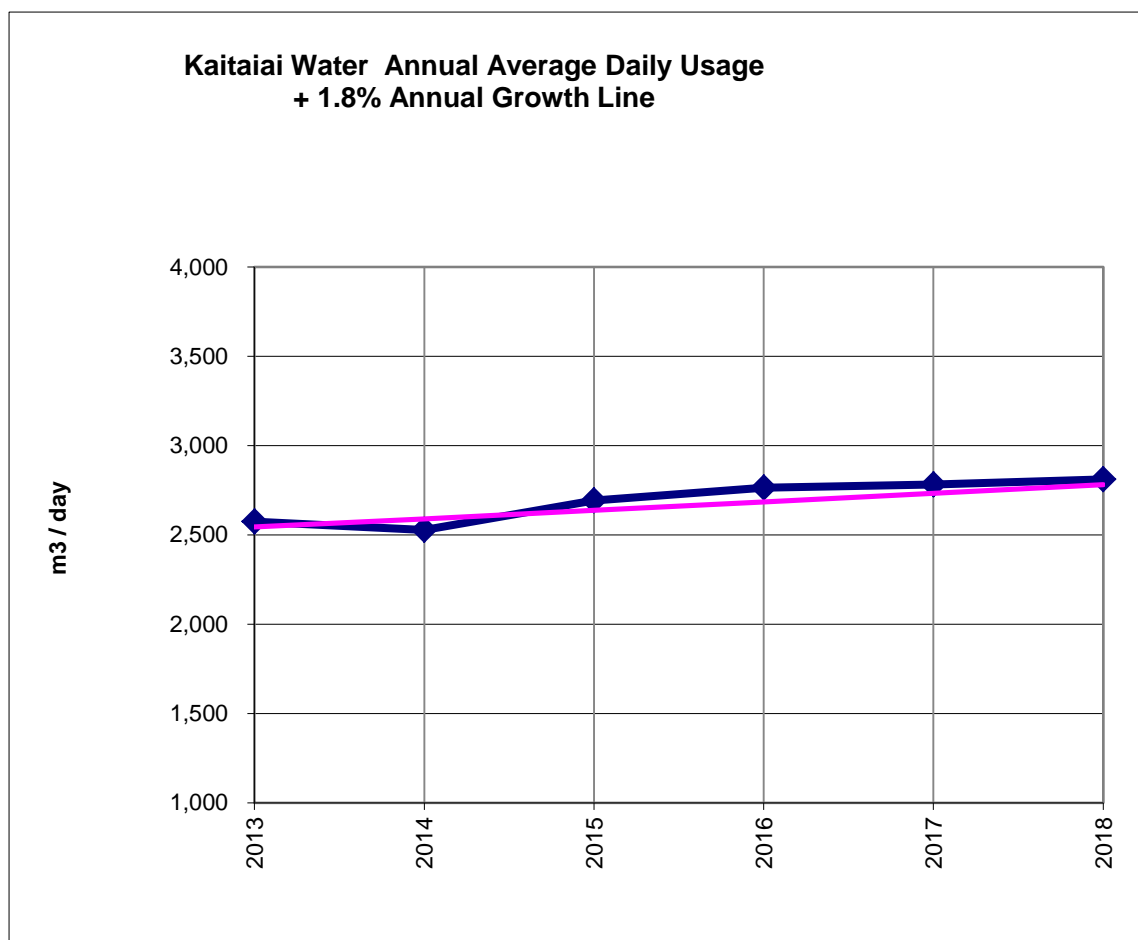


Fig 2; Annual Average Water Production

For the period 2010 to January 2019, water production water sales to the JNL Kaitaia Mill and other water sales were plotted. This is detailed in Fig. 3. This showed that the general water sales

have been relatively static to slightly decreasing, the JNL water usage slowly decreasing and the volume of non-revenue water progressively increasing.

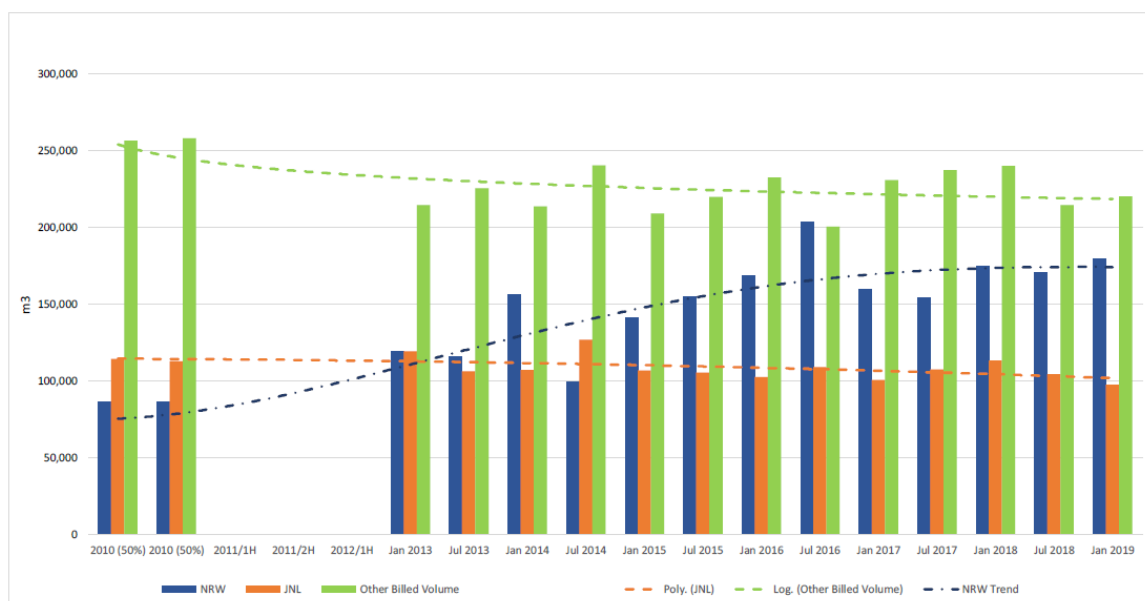


Fig 3; Water Sales and Non-revenue water

When considering just non-revenue water, the report determined the volume of non-revenue water has progressively increased from 180 Litres / connection / day in 2010 to 375 Litres / connection / day in 2018. The current level of non-revenue water puts Council in breach of a resource consent condition relating the water extracted from the Awanui River.

The report considered possible reasons for the increasing amounts of non-revenue water. An assessment of meter accuracy determined overall the water meters were in an acceptable range of accuracy and that unauthorised consumption was unlikely. The most likely cause of the increasing volume of non-revenue water was a progressive increase in undetected water leaks. Being a progressive increase indicate there are multiple undetected leaks.

DISCUSSION AND NEXT STEPS

There are three broad areas to reduce non-revenue water;

- Mains replacement
- Water meter replacement
- Leak detection.

Mains replacement

As the asbestos cement water mains age, their failure rate increases. Kaitia has an annual mains replacement programme and it is proposed to continue with this programme. In addition to failure of asbestos cement mains, Kaitia has some fitting on the longer life PVC mains that are failing early. In this situation a targeted replacement of the fittings will be required. Until better information is available, it is proposed to maintain the current level of water main replacement.

Water Meter replacement

Water meters have a defined accuracy life. Typically domestic meters start running slow after 3,000 m³, therefore an average life of around 15 to 20 years is normal. Historically water meters were replaced on failure resulting in a period when they were under reading before failure

occurred. Until better information is available, it is proposed to maintain the current level of water meter replacement.

The installation of universal smart water meters could provide better information around customer water usage and usage patterns however, they come with their own set of operational challenges. For this reason the installation of universal smart water meters is not proposed.

Leak Detection

Council has a very good response time to water leaks and breaks when they are reported. The issue in Kaitia is the number of unreported leaks has continued to grow. These leaks tend not to appear in the surface and can discharge into the ground water or find their way into the stormwater or sanitary sewer networks. Locating these leaks can be time consuming and problematic. To enable better detection it is proposed to introduce zonal monitoring into Kaitia.

Zonal monitoring has the following advantages.

- 1) It helps pinpoint the areas where the leakage occurs and prioritise work areas; and
- 2) It provides for sub areas where water sales and water supplied can be cross checked; and
- 3) It allows minimum night flows to be measured showing when new leaks occur; and
- 4) It allows the effectiveness of any leak repair work to be quantified.

Each zonal meter will be connected to our Supervisory Control and Data Acquisition (Scada) system enabling continual flow monitoring. Essentially, zonal monitoring will enable;

- smart network management
- early leak detection
- easier pin pointing of leaks and losses
- quantifying improvements and changes

The report recommends that zonal monitoring is installed before leak detection works are undertaken. This way the effectiveness of any works can be quantified.

Zonal Monitoring Kaitia

The report recommended 5 separate water supply zones be established. This is done through utilising the existing mains configuration without needing to install special trunk mains. A plan of the proposed zonal monitoring is included in the Attachments. The estimated cost to install zonal monitoring is \$146,000.

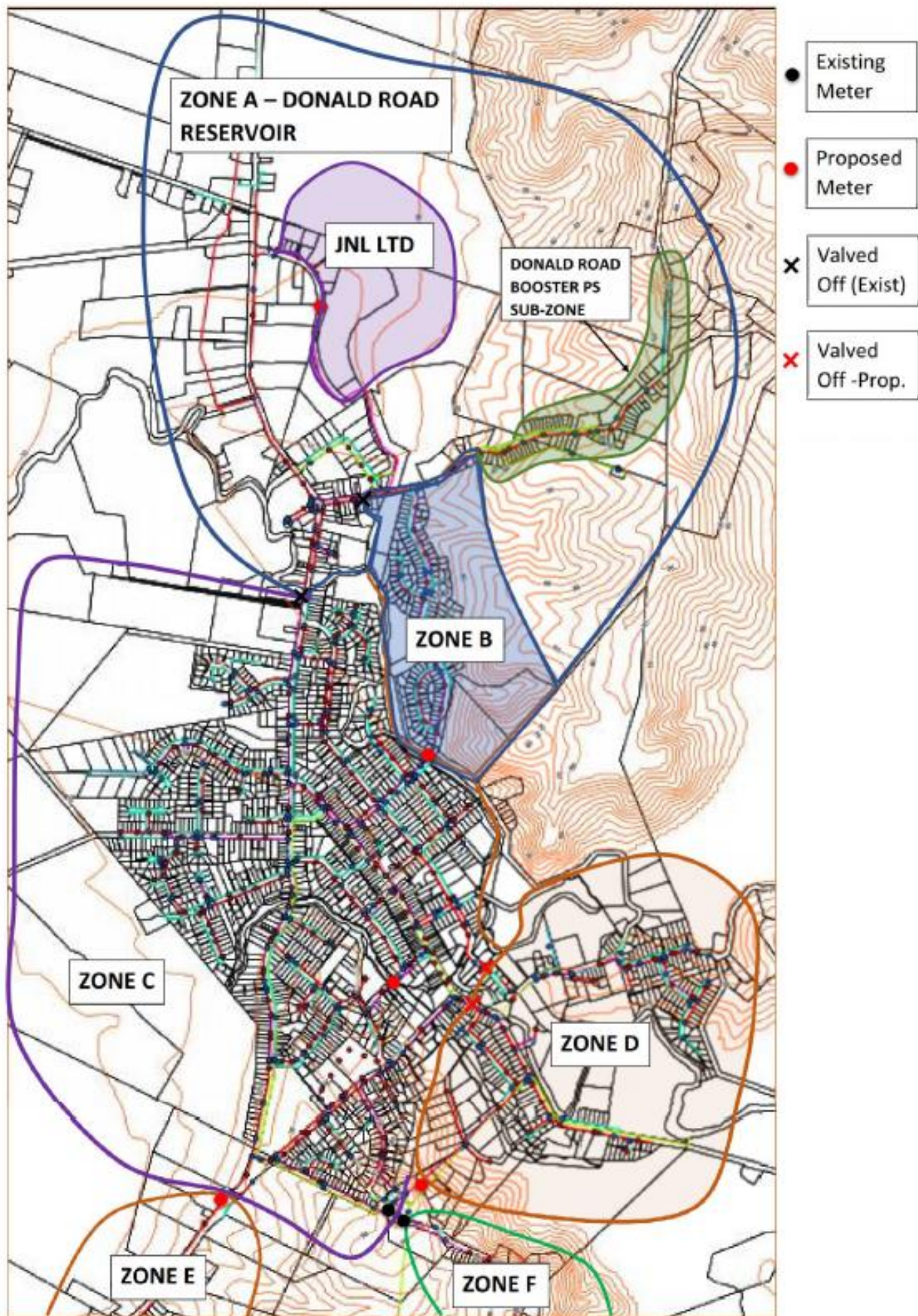
Funding has been included as part of the current Annual Plan process. If approved, it will take approximately 4 months to procure and install the meters to enable zonal monitoring.

FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION

\$150,000 has been requested as part of the Annual Plan for 2019/20 to fund the installation of the zonal meters. The finding and repair of the leaks will be OPEX cost.

ATTACHMENTS

Nil



Plan of Proposed Zonal Monitoring for Kaitia

4.8 3 WATERS BENCHMARKING 2017- 2018**File Number: A2457308****Author: Barry Somers, Assets Manager - 3 Waters****Authoriser: Andy Finch, General Manager - Infrastructure and Asset Management****PURPOSE OF THE REPORT**

To provide a summary of the 2017 to 2018 3 Waters benchmarking outcomes.

EXECUTIVE SUMMARY

Similar to the benchmarking undertaken two years ago, FNDC is doing well in some areas with other areas being highlighted where improvements are possible. Both the previous and recent benchmarking exercises show the cost of 3 water services in the Far North is very high relative to the average of similar sized Councils.

RECOMMENDATION

That the Infrastructure Network Committee receive the report 3 Waters Benchmarking 2017-2018.

BACKGROUND

Water New Zealand annually run a national 3 Water benchmarking exercise known as the National Performance Review (NPR). The benchmarking enables Council to compare their 3 Waters activities outputs with other Councils. This is the second time the Far North District Council has taken part in the NPR. This year 48 Councils took part.

The findings of the NPR cover two broad areas:

1. A view of the industry as a whole
2. Relative performance of each participating Council.

The National findings were presented in a booklet form, whereas results of individual Councils were viewable in an online data set.

Key findings at a national level:

- There is a high level of staff vacancies in the water industry
- Efficiencies of scale are apparent
- Wastewater wet weather overflows need improvement
- There is a large number of resource consents coming due for wastewater treatment plants
- On average wastewater discharge consents take two to four years to obtain and the processing cost is on average around \$500,000
- Affordability of water and wastewater services for small communities is an issue
- Overall water is costing more
- Electricity used in water and wastewater accounts for 0.3% of greenhouse emissions
- Few Councils are compliant with the Fire Fighting Code of Practice.

A summary of FNDC results are detailed in Table 1.

Shown are the last benchmarking results, the current benchmarking results and the variance between the current and the average for similar sized Councils. 2015/16 was the first time

benchmarking was undertaken. Since then recording systems have been improved providing a higher degree of confidence in the results.

A brief summary of the FNDC results are:

- **Public Health**

Wet weather overflows are higher than average. While the rate of dry weather overflows appears low, this is due to FNDC only reporting on number of large wastewater overflows that occurred. Generally there is room for improvement with regards to reducing wastewater overflows.

- **Customer Focus**

FNDC is providing good customer focus with response times similar to other Councils.

- **Economic Sustainability**

The cost to ratepayers is roughly double that of the average of similar size Councils. This is in line with the previous benchmarking that was undertaken. Other Councils with high cost per ratepayers are;

Water: Tasman, Waipa, Clutha, Kaipara, Rangitikei

Wastewater: Western Bay of Plenty, Waikato, Selwyn and Kaipara.

- **Reliability**

Fault rates are on par with other Councils. Typically pipes are slightly younger than for most Councils.

- **Resource efficiency**

Water consumption per person is lower than for most Councils. This is probably due to universal metering and the high cost of water per cubic metre. Energy use is on par and fire hydrant testing is well below average.

Detailed FNDC comparison with the average of similar sized Councils.

		FNDC 2015/16	FNDC 2017/18	Average Other Councils	Variance 2017/18 to Average	Comments
Public Health						
1	Wastewater; Wet weather overflows per 1000 connections	1.100	3.944	1.288	+2.656	High value primarily driven by the overflows in the Kaitia network
2	Wastewater; Dry Weather Overflows per 1,000 connections (Note 1)	7.800 (data uncertain)	1.288	1.288	0	The value used by FNDC was for large overflows only, i.e. >1,000 Litres. If total overflows used FNDC values would be much higher per 1,000 properties
Customer Focus						
3	Water Supply; Resolution of urgent fault callouts in hours	0.300 (data uncertain)	2.700	2.500	+0.2	On par with other Councils

4	Wastewater; fault resolution time hours	3.000	2.900	2.808	+0.092	On par with other Councils
5	Water Supply; Average Annual Residential Cost Water Based on 200m3/year	\$845.00	\$899.88	\$389.00	+\$510.88	Determined assuming 200m3 per annum water usage. Significantly higher than other Councils
6	Average Annual Residential Wastewater Charge	\$930.00	\$973.49	\$476.00	+\$497.49	Determined assuming a 200m3 annual discharge. Significantly higher than other Councils.
Economic Sustainability						
7	Water Supply; Revenue per Property:	\$749.00	\$850.34	\$502.90	+\$347.44	Determined by total revenue divided by properties supplied
8	Wastewater; Revenue per Property:	\$932.00	\$1,255.92	\$614.30	+\$641.62	Determined by total revenue divided by properties supplied
9	Stormwater; Total Revenue per Property	\$174.00	\$213.77	\$125.40	+\$88.37	Determined by total revenue divided by properties supplied
10	Water Supply; Operating Cost per Property	\$548.35	\$449.92	\$268.20	+\$181.72	Significantly higher than other Councils
11	Wastewater; Operating Cost per Property	\$382.00	\$533.42	\$251.10	+\$282.32	Significantly higher than other Councils
12	Stormwater; Operating Cost per Property	\$57.00	\$96.55	\$72.32	+\$24.23	Higher than other Councils
Reliability						
13	Water Supply; Unplanned interruptions per 1000 properties	43.1 (data uncertain)	1.071	5.409	-4.338	Significantly lower than other Councils
14	Wastewater; Weighted average peak wet to average dry weather ratio	Not measured	2.632	3.548	-0.916	Slightly lower than other Councils
15	Wastewater; Maximum peak wet to average weather ration	Not Measured	4.200	5.567	-1.367	Slightly lower than other Councils
16	Water Supply; Average Age of Pipelines in Years	31	32.50	34.00	-1.5	Network slightly younger than average
17	Wastewater Average Age of Pipelines in Years	28	29.00	37.90	-8.9	Network younger than average
18	Stormwater; Average Age Pipelines in years	31	30.00	34.44	-4.44	Network slightly younger than average
Resource Efficiency						
19	Water Supply; Average Daily	213.00	238.00	268.50	-30.5	Lower water

	residential water consumed litres/person/day					consumption than average. Probably due to cost of water.
20	Water Supply; Energy Intensity GJ/m3	0.001391	0.001260	0.001412	-0.000152	Energy demand similar to other Councils
21	Wastewater; Energy Intensity GJ/m3	0.001931	0.001551	0.001443	+0.000108	Energy demand similar to other Councils
22	Water Supply; ILI (Infrastructure leakage Index)	3	3.400	3.230	+0.17	Slightly worse than other Councils
23	Water Supply; CARL (current annual real loss)Litres/property/day	209	264.1	224.80	+39.3	Moderately higher than other Councils
Resilience						
24	Water Supply; Fire hydrants tested in the previous five years	Not Measured	10%	41%	-0.31	Substantially fewer hydrants tested than the average.
25	Water Supply; Days of treated water storage in reservoirs on average	3.1	2.518	1.208	+1.31	Treated water storage double the average.

Table 1 Results**DISCUSSION AND NEXT STEPS**

Benchmarking provides valuable information as to relative performance and shows area where operations are satisfactory, and areas in need of improvement. It is proposed to continue with the annual benchmarking so longer term trends can be established.

FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION

No financial implications

ATTACHMENTS

Nil

4.9 WATER SUPPLY; SMART WATER METERS

File Number: A2460620

Author: Barry Somers, Assets Manager - 3 Waters

Authoriser: Glenn Rainham, General Manager - Infrastructure Asset Management (Acting)

PURPOSE OF THE REPORT

To provide Council with an overview around the opportunities, benefits, risks and costs associated with Smart Water Meters

EXECUTIVE SUMMARY

The installation of universal Smart Water Meters (SWM) will involve a significant additional cost with no significant savings. SWMs do have their place in the water industry, but this needs to be clearly defined and the benefits clearly quantified before SWMs are installed. Indications are that unless the whole SWM system is properly assessed and tested to ensure full compatibility across all council systems, the installation of SWMs could become an expensive and problematic exercise.

RECOMMENDATION

That the Infrastructure Network Committee receive the report Water Supply; Smart Water Meters.

BACKGROUND

Overview;

Far North District Council has 10,300 water meters in 8 communities. The majority are 20mm Class C mechanical meters which are manually read twice per year. In addition, there are around 30 high use meters that are read monthly plus 2,000 special or re-reads and 1,000 final meter readings annually.

SWMs refer to water meters that can be read remotely. There are multiple forms of SWMs and the way in which SWMs are read. This includes; drive by readings and the use of cellular signals and radio signal. The SWM unit can either be built into a purpose built SWM, or strapped onto a compatible mechanical meter.

SWMs need a power supply to operate which is normally supplied by an internally located battery. The physical meters have a typical life of 15 years, whereas, depending on the frequency of data collection and transmittal, the inbuilt batteries have a life between 5 to 7 years. This means there is likely the need of at least 2 battery changes over the life of the smart meter.

Data collection can vary from daily reading through to very frequent readings that can tell which appliances are being used.

SWMs can add value to a water supply network in multiple ways including;

- Reduced meter reading costs
- More frequent billing cycles
- Used to change usage behaviour through either fairer charging or deferring capital expenditure
- Reduce health and safety risks associated with some water meters
- Enable a higher degree of network management
- Enable consumers to better manage their water use.

Issues;**Rating**

With regards to universal metering, Council is legally limited in how it charges for water. It is doubtful whether either seasonal or time of use charging can legally be implemented. Should Council wish to consider these rate options, separate legal advice should be obtained to clearly understand what can be done.

Data management

SWMs generate a lot of data. The more frequently they record data the higher the volume of data generated. Before SWMs are installed, the frequency of data collection and how it is stored needs to be clearly defined.

Privacy

SWMs can provide a lot of information around the activities within a household. If it is chosen to collect detailed information, how this information is accessed, used or shared, should be consulted on and documented before the data is collected. To avoid privacy issues and only a low level of data is collected; some of the benefits of the SWMs would be lost.

Data compatibility of different brands of meters

The different brands of SWMs have different communication protocols. This means once one particular brand is installed; changing to a different brand is likely to require duplication of communication systems and associated software programmes.

Data compatibility with FNDC systems

To comply with Councils financial requirements, any SWM software must be compatible with Councils core financial management system. This would need to be checked case by case.

General comment

In a water metering guideline by Water NZ, there was a comment that communication systems incompatibility and data storage are typically issues with SWMs.

New Zealand experience with SWMs

There is limited information on the use of SWMs in New Zealand. None of the other Councils have installed universal SWMs. SWMs are installed successfully in compact areas, where meter access can be difficult. This includes places like airports, commercial buildings, apartment buildings and dense development areas. There have been two known trials by other Councils. One using a drive by system, which failed through the number of miss reads that were occurring. The other used a SIM type communication which proved an expensive form of communication.

Internationally, a Google search quickly found cities having teething problems installing their SWM networks.

Cost estimate

As there are multiple iterations for the installation of SWMs, the following criteria has been used as a basis to provide a rough order cost estimate. The majority of the existing water meters are Kent PSM's. The Kent PSM is capable of having a SWM unit attached externally to it to convert it to a SWM. This system would use a radio communication device with receivers strategically placed in each community. The receivers would have a nominal range of 50m to 2 km depending on the terrain or other activities that could limit the signal. The data from the receivers would be relayed to a central collection point, and then transferred to Council in the same format as the existing meter reader's use.

It is unknown how many non-PSM meters are in use. It is assumed 25% of the existing meters would need to be upgraded, either through age, or being non-PSM meters.

It is unknown how many existing water meter boxes will need adjusting to accommodate the strap on smart unit.

It is unknown how many meters will experience communication difficulties and require some form of improvement to their communication.

Item	Rough Cost Estimate
Capital	
Update 25% of meters to PSM meters	\$625,000
Purchase communication unit/meter	\$2,250,000
Install communication units	\$260,000
Purchase area wide communications	\$75,000
Install area wide communication	\$300,000
Set up costs	\$250,000
Contingency 30%	\$1,128,000
TOTAL Capital	\$4,888,000
Operating	
Battery Change	\$72,000p.a.
Data acquisition	\$126,000 p.a.
Data management and storage related	unknown
Extra billing costs	unknown

Potential Savings

The most tangible saving is the reduction in the cost of a meter reader. This is estimated at a saving of \$60,000 pa. With the majority of the FNDC communities served, there is no growth, so potential savings through behavioural changes, or asset deferral are unlikely to provide any financial benefits.

DISCUSSION AND NEXT STEPS

SWMs have their place, but typically it is when they are being used in a smart way. Based on current information, it is likely that just changing to SWMs to save on meter reading costs will result in additional costs and no savings.

Technology around SWMs is still evolving and it is likely other Councils will conduct trials. As better information comes available then the need for SWMs should be reassessed.

FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION

None

ATTACHMENTS

Nil

5 PUBLIC EXCLUDED**RESOLUTION TO EXCLUDE THE PUBLIC****RECOMMENDATION**

That the public be excluded from the following parts of the proceedings of this meeting.

The general subject matter of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48 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 for the passing of this resolution
5.1 - Contract 7/15/108 Lighting Maintenance and Renewals - Contract Extension	s7(2)(h) - the withholding of the information is necessary to enable Council to carry out, without prejudice or disadvantage, commercial activities	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7

6 MEETING CLOSE