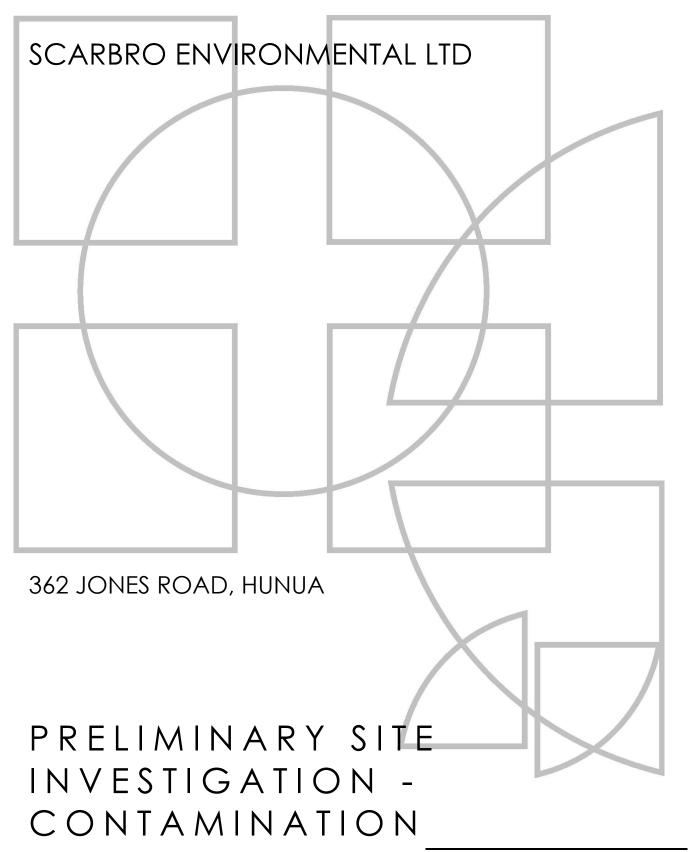


PRELIMINARY SITE INVESTIGATION -CONTAMINATION



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SCARBRO ENVIRONMENTAL LTD PRELIMINARY SITE INVESTIGATION REPORT - CONTAMINATION 362 JONES ROAD, HUNUA

EXECUTIVE SUMMARY

In response to instructions from Scarbro Environmental Ltd, Fraser Thomas Limited (FTL) has undertaken a Preliminary Site Investigation (PSI) of 362 Jones Road, Hunua, to identify any potentially contaminating activities or land uses, past or present, that may prevent the development of a proposed Managed Fill facility that will occupy approximately 12ha of the 25.2ha site.

This investigation involved a desktop study, site walkover and reporting associated with potential land contamination issues.

The main rationale and objectives for this investigation were:

- To identify the main actual or potential contamination issues due to ongoing and historic use of the land.
- To confirm that the site is suitable or can be made suitable for a proposed Managed Fill.

This investigation has been undertaken in general accordance with the requirements of the Ministry for the Environment 'Contaminated Land Management Guidelines No.5' (CLMG5) or site investigations and analysis of soils with contamination of this nature. Furthermore, this investigation has been managed, reviewed and approved by a Suitably Qualified and Experienced Practitioner (SQEP), as defined in the National Environment Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS).

The NESCS governs a number of activities, including soil sampling, soil disturbance, subdivision and changes of land use on potentially contaminated land in New Zealand. In general, the rules of the NESCS apply to sites on which it is "more likely than not" that a HAIL (Hazardous Activities and Industries List) activity has occurred or is occurring (Regulation 5(7)).

This PSI has identified the property has essentially been used for rural purposes for at least the last 80 years as a dry stock farm. The following potential or actual HAIL activities on the subject site have been identified, but all of these are located outside of the proposed works area and hence do not trigger the NESCS. For completeness, these activities are:

- Wastewater treatment system has been carried out at the site at a domestic scale and the system is still in use (HAIL Category G6: Waste recycling or waste or wastewater treatment).
- Possible soil contamination from historical asbestos and lead based paint usage (HAIL Category: I Any other land that has been subject to the intentional or accidental release of

a hazardous substance in sufficient quantity that it could be a risk to human health or the environment).

 Potential uncertified filling of the northern culvert and southern section of site (HAIL Category: I).

Potential HAIL activities that are located within the proposed works area and hence do trigger the NESCS are:

Potentially uncertified filling observed around the southern culvert (HAIL Category: I).

However, based on the information gathered in this PSI, we consider the likelihood of the fill being offsite sourced to be low. Furthermore, the area is small and localised; therefore, if the fill material is potentially contaminated, it is highly unlikely that there would be sufficient quantity to pose a risk to human or environmental health.

Therefore, we consider HAIL activity I does not apply and the contaminated land provisions of the NESCS do not apply to this site.

The contaminated land provisions of the Auckland Unitary Plan: Operative in Part (AUP: OP) do not apply to this subject site, as HAIL activities have been confirmed to not be present on site.

In summary, based on the information presented in this report, it is unlikely that HAIL activities have occurred at the site where proposed works are to take place, and therefore it is highly unlikely that there may be a risk to human health if the areas of the site where HAIL activities have taken place are developed as part of the Managed Fill soil disturbance works.

SCARBRO ENVIRONMENTAL LTD PRELIMINARY SITE INVESTIGATION REPORT - CONTAMINATION 362 JONES ROAD, HUNUA

TABLE OF CONTENTS

EXEC	UTIVE SUMMARYI
1.0	INTRODUCTION1
2.0	RATIONALE, OBJECTIVES AND SCOPE OF WORK1
3.0	INVESTIGATION METHODOLOGY2
4.0	SITE DETAILS
4.1	LOCATION, PROPERTY DETAILS AND LAND USE2
4.2	TOPOGRAPHY, GEOLOGY AND SOILS
4.3	PROPOSED DEVELOPMENT
5.0	DESKTOP STUDY AND WALKOVER SURVEY RESULTS3
5.1	SITE IDENTIFICATION AND USE
5.2	COUNCIL RECORDS
5.3	PROPERTY FILES
5.4	INTERVIEWS
5.5	AERIAL PHOTOGRAPHS
5.6	SITE WALKOVER RESULTS
5.7	DESKTOP SUMMARY
6.0	DATA QUALITY OBJECTIVES AND CONCEPTUAL SITE MODEL8
7.0	REGULATORY REQUIREMENTS9
7.1	NESCS 9
7.2	AUP: OP9
8.0	CONCLUSIONS AND RECOMMENDATIONS9
9.0	LIMITATIONS

FIGURES

Figure 1 – Site Location Plan

Figure 2 – Site Features Plan

APPENDICES

- A Ministry for the Environment Contaminated Sites Report Checklist
- B Historical Aerial Photographs (1941, 1957, 1963, 1973, 1981, 2006, 2010 & 2017)
- C Site Walkover Photos
- D Site Contamination Enquiry
- E Historic Building and Wastewater site plan

SCARBRO ENVIRONMENTAL LTD PRELIMINARY SITE INVESTIGATION REPORT - CONTAMINATION 362 JONES ROAD, HUNUA

1.0 INTRODUCTION

In response to instructions from Scarbro Environmental (the client), Fraser Thomas Limited (FTL) has undertaken a Preliminary Site Investigation (PSI) to identify any potentially contaminating activities or land uses, past or present, that may prevent the development of a proposed Managed Fill that will occupy approximately 12ha of the 25.2ha site.

This investigation involved a desktop study, site walkover and reporting associated with potential land contamination issues.

The format of this report is as follows:

- Rationale, objectives and scope of work;
- Investigation methodology;
- Site details;
- Desktop study and site walkover results;
- Discussion, conclusions and recommendations; and
- Site plans, representative photographs and other relevant information in appendix form.

This investigation has been undertaken in general accordance with the requirements of the Ministry for the Environment 'Contaminated Land Management Guidelines No.5' (CLMG5) for preliminary site investigations. Furthermore, this investigation has been managed, reviewed and approved by a Suitably Qualified and Experienced Practitioner (SQEP), as defined in the National Environment Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS).

2.0 RATIONALE, OBJECTIVES AND SCOPE OF WORK

The main rationale and objectives for this investigation were:

- To identify the main actual or potential contamination issues due to ongoing and historic use of the land.
- To confirm that the site is suitable or can be made suitable for a proposed Managed Fill.

3.0 INVESTIGATION METHODOLOGY

The methodology used for this site assessment is summarised below:

- 1. Desktop study involving review of existing historical information for the proposed area of development (Figure 2) including aerial photographs, certificates of title, property files and Auckland Council (AC) files (contaminated land and related information).
 - Historical aerial photographs from 1944, 1960, 1977, 1980, 1988, 2003 & 2004, 2010 & 2011 and 2019 & 2020 were reviewed. Aerial photographs from 2003 & 2004, 2010 & 2011 and 2019 & 2020 were accessed from the Auckland Council GeoMaps website. Aerial photographs from 1944, 1960, 1977, 1980, 1988 were accessed from the Local Government Geospatial Alliance (LGGA) Retrolens historical image resource (provided as Appendix B).
- 2. Site walkover investigation of the subject site, with a visual appraisal to identify any disturbed and potentially contaminated areas. (relevant photographs are provided in Appendix C).
- 3. Preparation of a PSI report including the results of the desktop study, site walkover survey and conclusions and recommendations.
- 4. Provision of site plans, relevant documentation and representative photographs as appendices to this report.

Fraser Thomas Limited Health and Safety Management Plan procedures were followed throughout the duration of the investigation.

4.0 SITE DETAILS

4.1 LOCATION, PROPERTY DETAILS AND LAND USE

A map showing the location of the site is set out in Figure 1. The site comprises one residential property, multiple garages and utility sheds and covers an area of 252,000m². Details of the property where the Managed Fill site is proposed are listed in Table 1, including the current land use.

4.2 TOPOGRAPHY, GEOLOGY AND SOILS

The site has a moderate sloping landscape, including multiple gullies.

In carrying out the appraisal of the site, reference has been made to the Institute of Geological and Nuclear Sciences geological web map (NZ 1:250,000). The map indicates that the site at 362 Jones Rd, Hunua is underlain by sandstone and siltstone rocks of the Waipapa group, consisting of a massive to thin bedded, lithic volcaniclastic metasandstone and argillite, with tectonically enclosed spilite, chert and red and green argillite.

Fraser Thomas Ltd have undertaken a geotechnical investigation of the subject site in 2024. In brief, twenty-three hand augured boreholes (H1 – H23) were put down as part of the geotechnical investigation. Topsoils were generally encountered between 0.2 – 0.4m depth below ground level (BGL). Topsoil was not encountered in Boreholes H10, H12, H14 and H19. Fill was encountered beneath the surficial topsoil material in Boreholes H15, H18, H21, H22 and H23 to a depth of approximately 1.5 m, 1.0 m, 1.5 m and 0.6 m BGL respectively, and to the extent of Borehole H21. The fill material generally comprised of gravelly silts and clayey silts. Borehole locations H15 & H21 – H23 are located in the southernmost section of the site, and location H18 is located by the southern culvert. Due to the proximity of these locations to Hunua Road, it is suggested that the fill may have been reworked during the cut section of road.

4.3 PROPOSED DEVELOPMENT

The proposed development involves soil disturbance works associated with the development of a Managed Fill on the site.

5.0 DESKTOP STUDY AND WALKOVER SURVEY RESULTS

The results of the desktop study and the site walkover survey are summarised in this section and illustrated in the attached site features plan (Figure 2), aerial photographs (Appendix B) and site photographs (Appendix C). Throughout the site walkover survey, a visual assessment was used to classify any foreign materials as particular contaminants, without any formal identification. Hence, reference to a specific contaminant in the survey results should essentially be read as "suspected contaminant", unless otherwise stated.

5.1 SITE IDENTIFICATION AND USE

The site details and ownership history are summarised below.

Table 1: Site Details and Ownership History

Registered Owners		Lynley Ruth Monk, Lance Richard Patrick, Trevor Bryce Patrick,				
		Wayne John Patrick				
Street Address		362 Jones Rd, Hunua				
Legal Description		Part Allotment 10 and Allotment 264 Parish of Hunua				
Title NA67C/59		NA67C/593, N	NA67C/594			
Total Area (ha)		252,000m ²				
Zoning		Rural - Rural Production zone				
Ownership History						
CTs	From		Registered Owner			
NA67C/593	09/09/1988 –		B. & S. Patrick Limited			
	01/06	/2023	B. & S. I derick Entitled			

NA67C/593	01/06/2023 –	Lynley Ruth Monk, Lance Richard Patrick, Trevor			
	Present	Bryce Patrick, Wayne John Patrick			

The CT information available does not indicate any obvious occupations of previous owners that may have caused soil contamination (e.g. intensive horticultural activities).

5.2 COUNCIL RECORDS

An enquiry regarding site contamination information was made to the Auckland Council on 5th July 2024. The Council database was searched for records of pollution Incidents (including air discharges, oil or diesel spills), bores, contaminated sites, industrial trade process consents, closed Landfills, air quality permitted activities and identified HAIL activities.

No such records were identified for the site.

5.3 PROPERTY FILES

Review of the property file provided, identified the following:

- A subdivision of Part Allotment 10 Parish Hunua District was made in approximately 1987, creating Lot 1 DP 120826. This Lot borders the southeast boundary of the subject site (362 Jones Road). Lot 1 was proposed for mixed horticultural use, focussing on the production of courgettes and capsicums.
- In the adjacent site (lot 1), by 1990, shelter trees were planted, approximately 600m² ground ploughed for outdoor planting and eight feijoa & 16 stone fruit trees were planted. By 1992, two plastic houses were erected and crops planted in each.
- No documentation demonstrates that there was horticulture use on the subject site (362 Jones Road), instead it was likely pastoral land.
- Multiple building consents for a utility shed/garage during 2017-2019 were provided, including drainage plans.
- An investigation by Tisley Engineering Ltd in a report titled 'Effluent Disposal and Stormwater Management report (2017)' provides information regarding the new garage and toilet facilities onsite and installing of a new wastewater system.
- The proposed building and wastewater site plan (Appendix F) indicates there was an existing disposal trench west of the main dwelling which was decommissioned. The proposed and currently operating disposal trench was established northeast of the main dwelling. Wastewater treatment is identified as a HAIL activity (G6); however, as this treatment system is still in use and no proposed soil disturbance is to be conducted in this area, the HAIL activity is considered not to apply.

5.4 INTERVIEWS

An interview was conducted with Lynley Patrick, whose family have been the site owners for over 50 years. The following information was gathered;

- Prior to the ownership of the property the site was known to be used as dry stock farming. This was continued after the Patrick family took ownership of the site.
- A hay and pig shed were present on the property when the land was purchased, and these have since been demolished. It is understood that these structures consisted of timber, and tin, and did not contain any asbestos containing material. The demolished materials are still on site in piles.
- The remaining structures onsite include the dwelling (1940s), animal pens (1940s), and sheds (new shed built 2019).
- There are no known excavations or fill onsite, including relating to the culverts.
- There has been no known fuel stored onsite or chemical spills.
- There are no known areas that could be a 'hotspot' for land contamination.

5.5 AERIAL PHOTOGRAPHS

Historical aerial photographs from 1944, 1960, 1977, 1980, 1988, 2003 & 2004, 2010 & 2011 and 2019 & 2020 were reviewed as part of the desktop study. Aerial photographs were accessed from the Auckland Council website and Retrolens.

1944 Aerial: The subject site appears to have two main structures in the center of the site. One of the structures appears to be surrounded by planted trees, shrubs and hedges. A smaller standalone structure lies to the east of the main structure. South of the main structure, there is a hedgerow that spans the width of the subject site from west to east. Signs of culvert crossings in the northern and southern section of the site are observed. The subject site appears to be used for rural/pastoral purposes, with grass paddocks present. The site is bounded by Jones Rd to the east and Hunua Rd to the south. Part of Hunua road encompasses the southern portion of the subject site. Surrounding properties appear to be in use for a mix of rural, rural-residential, and pastoral purposes.

1960 Aerial: Three new structures are visible on the subject site, including what appears to be a shed located at the east end of the hedgerow on the north side. The southern culvert crossing is no longer visible. A section of Hunua road has been reworked and no longer encompasses the southern section of the site. A cut section has been made and the road now runs adjacent the southern boundary of the site. No other discernible changes on the subject site or surrounding properties are noticeable.

1977 – 1980 Aerials: Several new structures are visible in the center of the subject site, along with a driveway extending northwest from the main dwelling to reach them. A couple of the existing structure have been removed/demolished in this same area. The southern culvert crossing is faintly visible again. No other discernible changes on the subject site or surrounding properties are noticeable during 1977 - 1980.

1988 Aerial: Rural-residential development has occurred on the surrounding properties. There appears to be some horticultural activity occurring in the neighboring properties to the southeast of the site. No discernible changes on the subject site are noticeable.

2003 & 2004 Aerial: A new hedgerow is visible on the southeast boundary, along with a strip of vegetation to the southwest of the subject site. A new structure also appears to the west of the main structure (likely a shed). Development has occurred on the surrounding properties, with new structures and hedgerows visible.

2010 & 2011 Aerial: A new structure, is visible to the north of the main dwelling on the subject site, potentially a new shed or animal shelter. No discernible changes to the surrounding properties are noticeable.

2019 & 2020 Aerial: The hedgerow on the southeast boundary and strip of vegetation on the southwest of the subject site has been removed. A new structure is visible to the northwest of the main dwelling on the subject site. The surrounding properties appear to remain in use for a mix of rural, rural-residential, and pastoral purposes.

5.6 SITE WALKOVER RESULTS

A site walkover of the subject site was undertaken by FTL Environmental Scientists, Elliot Bish and Alice Field on 12th July 2024. The site was accessed from 362 Jones Road, Hunua from the eastern portion of the property via a gravel driveway.

The gravel driveway led from the eastern site entrance and passed a large, empty metal shed before leading to a residential dwelling on the central west side of the site. The dwelling was observed to be constructed on raised piles, consisting of timber weatherboards, tin roof, and PACM (potential asbestos containing material) soffits. Baseboards were not observed. The materials were partially painted and were in an average condition. The potential for soil contamination from degraded building materials was noted in this area.

Opposite the dwelling was a larger metal shed used as storage for three vehicles. The ground surface inside this shed was exposed soil. No signs of spills or staining were observed and therefore, no soil contamination risk exists at this time.

Continuing northwest, the driveway led past a small animal shelter, constructed with unpainted timber, with a tin roof. No signs of soil contamination were identified in this area of the site.

Past the small animal shelter, a small residential greenhouse, made from timber and mesh netting was observed. No signs of soil contamination were identified in this area of the site.

The end of the driveway led to a large newly built garage, which was built on a concrete foundation and had metal cladding and a metal roof. All materials appeared painted and in good condition and are not considered to pose a soil contamination risk at this time.

North of this garage was a larger animal shelter, constructed with cement blocks and tin cladding, with surrounding timber fence posts. No signs of soil contamination were identified in this area of the site.

North of these structures and driveway, towards the northern boundary, grassed paddocks on moderately steep hills were observed. No signs of soil contamination were identified in this area of the site.

At the beginning of the driveway, looking north, a culvert was observed. Adjacent to the culvert, on the top of a hill, a small metal shed was observed. Signs of potentially uncertified filling were observed around the culvert.

Further north on Jones Road, the northern portion of the site was observed to comprise mainly grassed paddocks on moderately steep hills. No signs of soil contamination were identified in this area of the site.

South-east of the driveway there was a grassed gully. At the southernmost portion of the site, which borders Hunua road, there was a grassed paddock accessed via a wooden gate. At the bottom of the hill within this paddock, there was another culvert and adjacent on the bank was an old damaged culvert pipe, which appeared to be made of concrete. The culvert crossing in use was constructed using telephone poles, while the material used to fill the culvert was not visible. Signs of potentially uncertified filling were observed around the culvert.

The remainder of the site was observed to be undeveloped paddocks, with no signs of contamination observed.

5.7 DESKTOP SUMMARY

In summary, the information gained from the desktop study and site walk view indicates that HAIL activities are more likely than not to have been undertaken on the subject site.

- Two culverts were observed during the site walkover within the site development area. The aerials confirm that there are both culvert crossings from 1944, but the southern culvert disappears by 1960, then is visible again by 1977. This may be the old culvert that was relaced and that was observed in the walk over. The interview with the current owner indicated they are not aware of any fill on site or in relation to the culverts. As the southern culvert is within the proposed access road location and potentially subject to uncertified fill, as shown in figure 2, HAIL activity I does apply to the site.
- Fill material was identified by FTL Geotechnical investigation in the Southern section of the site (including the southern culvert) which potentially was reworked from the cut section of Hunua road, directly South. The aerials confirm that the cut section in the road was made by the 1960s. However, as this localised area is west of the proposed access road location, HAIL I does not apply.
- The property files showed that there was a subdivision of the subject site in 1987, and the new LOT 1 was intended for horticulture production from the early 1990s. Aerials of the 1990's was unavailable, therefore were unable to cross reference this information.

- However, this does not encompass the subject site and therefore not relevant. Instead, the subject site has been largely pastural land, as shown by the aerials.
- The property files also confirmed that there is a decommissioned and current domestic
 wastewater treatment adjacent the main dwelling. This falls under HAIL activity G6
 (Waste recycling or waste or wastewater treatment). However, as this section of the
 subject site is not proposed to be disturbed, HAIL G6 does not apply.
- The potential for asbestos and lead based paint to have caused soil contamination within the halos of the select structures was noted during the site walkover due to the potentially asbestos containing material (PACM) soffits and degradation of other painted building materials. The interview with the owner indicated that there were some structures demolished in the past but they consisted on tin, timber and iron. This is an indication of HAIL activity I (Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment.). However, it should be noted this section of land is not being disturbed during the proposed works and therefore, HAIL I does not apply.

6.0 DATA QUALITY OBJECTIVES AND CONCEPTUAL SITE MODEL

In accordance with MfE Contaminated Land Management Guidelines (CLMG) No 5 the Data Quality Objectives (DQOs) and Conceptual Site Model (CSM) for this investigation are summarized in Table 2.

Table 2: DQOs and CSM

Purpose of	Assess human health and environmental risks associated with the				
Investigation	proposed Managed Fill site development.				
Define boundaries	362 Jones Rd, Hunua: Encompassing the fill development area,				
	access roading and associated earthworks areas.				
Develop	Known/possible HAIL	HAIL Category: I Any other land that has			
Conceptual Site	land use within	been subject to the intentional or accidental			
Model	proposed work area	release of a hazardous substance in sufficient			
		quantity that it could be a risk to human			
		health or the environment. Localised to the			
	filling of the southern culvert onsite.				
	Known/ possible HAIL Category G6: Waste recycling or waste				
	HAIL land use	or wastewater treatment. Localised to the			
	outside of proposed	d current domestic wastewater treatment			
	work area	HAIL Category: I Any other land that has			
		been subject to the intentional or accidental			
		release of a hazardous substance in sufficient			
		quantity that it could be a risk to human			
		health or the environment. Localised to the			
		main dwelling PACM soffits and degrading			
		painted building materials. Also localised to			
	the southern portion of the site, west of				

	proposed access road, and the northern
	culvert.
Contaminants of	Heavy Metals (HMs)
concern	Polycyclic Aromatic Hydrocarbons (PAHs)
Distribution of	Lateral – across the site
contaminants	Vertical – depending on the soil type
Potential pathways	Dermal, Ingestion, Inhalation
Receptors	Site users (long term) and construction
	workers (short term)
Applicable land use	Rural-Residential
scenario	

7.0 REGULATORY REQUIREMENTS

7.1 NESCS

The NESCS governs a number of activities, including soil sampling, soil disturbance, subdivision and changes of land use on potentially contaminated land in New Zealand. In general, the rules of the NESCS apply to sites on which it is "more likely than not" that a HAIL (Hazardous Activities and Industries List) activity has occurred or is occurring (Regulation 5(7)).

There is evidence that HAIL activity I (Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment) may apply to select areas at the site as there are signs of potentially uncertified filling observed around the southern culvert, which is within the proposed areas of work on site and may require further investigation. However, based on the information gathered in this PSI, we consider the likelihood of the fill being offsite sourced to be low. Furthermore, the area is small and localised; therefore, if the fill material is potentially contaminated, it is highly unlikely that there would be sufficient quantity to pose a risk to human or environmental health.

Therefore, we consider HAIL activity I does not apply and the contaminated land provisions of the NESCS do not apply to this site.

7.2 AUP: OP

The contaminated land provisions of the Auckland Unitary Plan: Operative in Part (AUP: OP) do not apply to this subject site, as HAIL activities have been confirmed to not be present on site.

8.0 CONCLUSIONS AND RECOMMENDATIONS

This investigation has determined that the subject site has been primarily used for rural/pastoral purposes.

This PSI has identified the following potential or actual HAIL activities on the subject site, but all of these are located outside of the proposed works area and hence do not trigger the NESCS. For completeness, these activities are:

- Wastewater treatment system has been carried out at the site at a domestic scale and the system is still in use (HAIL activity G6)
- Possible soil contamination from historical asbestos and lead based paint usage (HAIL I).
- Potential uncertified filling of the northern culvert and southern section of site (HAIL I).

Potential HAIL activities that are located within the works area, hence do trigger the NESCS:

Potentially uncertified filling observed around the southern culvert (HAIL I).

However, based on the information gathered in this PSI, we consider the likelihood of the fill being offsite sourced to be low. Furthermore, the area is small and localised; therefore if the fill material is potentially contaminated, it is highly unlikely that there would be sufficient quantity to pose a risk to human or environmental health.

Therefore, we consider HAIL activity I does not apply and the contaminated land provisions of the NESCS do not apply to this site.

The contaminated land provisions of the Auckland Unitary Plan: Operative in Part (AUP: OP) do not apply to this subject site, as no HAIL activities have been confirmed to be present on site.

In summary, based on the information presented in this report, it is unlikely that HAIL activities have occurred at the site where proposed works are to take place, and therefore it is highly unlikely that there may be a risk to human health if the areas of the site where HAIL activities have taken place are developed as part of the Managed Fill soil disturbance works.

9.0 LIMITATIONS

We have performed our services for this project in accordance with current professional standards for an assessment of the nature and extent of any soil contamination on-site, based upon preliminary site assessment investigations and current regulatory standards for site contamination. The scope of the site assessment activities was generally in accordance with the Ministry for Environment Contaminated Land Management Guideline's (Parts 1 (2003), 2 (2003) and 5 (2004)) and the NES (2011). Conclusions on actual or potential contamination cannot be applied to areas outside of the proposed area of development assessed in this PSI.

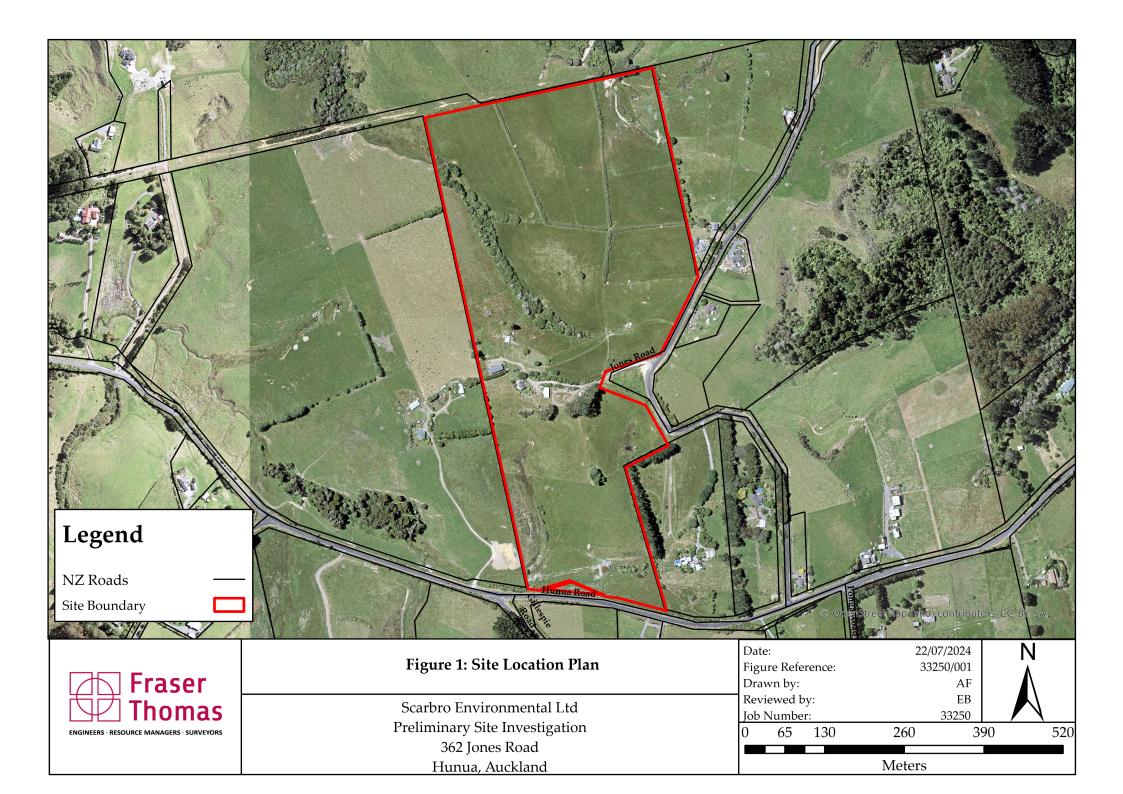
We do not assume any liability for misrepresentation or items not visible, accessible or present at the subject site during the time of the site inspection.

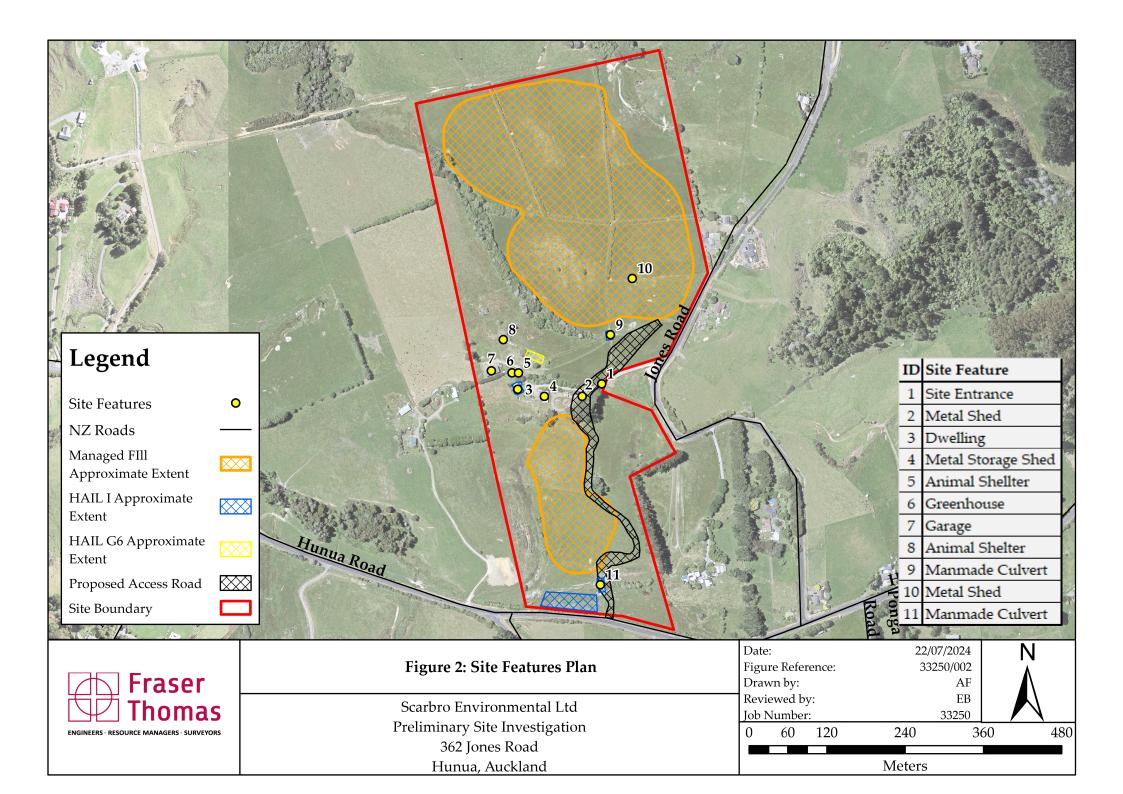
Copyright of this report is held by Fraser Thomas Ltd. The professional opinion expressed herein has been prepared solely for, and is furnished to our client, Scarbro Environmental Ltd,

on the express condition that it will only be used for the works and the purpose for which it is intended.

No liability is accepted by this firm or by any principal, or director, or any servant or agent of this firm, in respect of its use by any other person, and any other person who relies upon any matter contained in this report does so entirely at its own risk. This disclaimer shall apply notwithstanding that this report may be made available to any person by any person in connection with any application for permission or approval, or pursuant to any requirement of law.







Appendix A

Ministry for the Environment Contaminated Site Report Checklist

SCARBRO ENVIRONMENTAL LTD PRELIMINARY SITE INVESTIGATION REPORT - CONTAMINATION 362 JONES RD, HUNUA

SUMMARY CONTAMINATED SITES REPORT CHECKLIST

Report sections and information to be presented	PSI	DSI	RAP	SVR	ММР	Notes
Executive summary	R ☑	R□	R□	R □	R□	
Scope of work	R ☑	R□	R□	R□	R□	
Site identification	R ☑	R□	R□	R□	R□	
Site history	R ☑	S□	S□	S□	S□	
Site condition and surrounding environment	R ☑	S□	S□	S□	S□	
Geology and hydrology	A ☑	R□	S□	S□	S□	
Sampling and analysis plan and sampling methodology	A 🗆	R□	Х	R□	R□	
Field quality assurance and quality control (QA/QC)	N□	R□	Х	R□	S□	
Laboratory QA/QC	N□	R□	Х	R□	Х	
QA/QC data evaluation	N□	R□	R□	R□	Х	
Basis for guideline values	R□	R□	R□	R□	R□	
Results	Α□	R□	R□	R□	S□	
Site Characterisation	R ☑	R□	R□	R□	R□	
Remedial actions	Х	Х	R□	S□	S□	
Validation	Х	Х	Х	R□	S□	
Site management plan	Х	Х	R□	S□	S□	
Ongoing monitoring	Х	Х	Х	N□	R□	
Conclusions and recommendations	R ☑	R□	R□	R□	R□	

KEY:

- 1. PSI = preliminary site inspection report; DSI = detailed site investigation report
 - RAP = site remedial action plan; SVR = site validation report
 - MMP = ongoing monitoring and management plan
- 2. R = corresponding details required
 - A = readily available information should be included;
 - S = summary of this section's details is adequate if detailed information has been included in an available referenced report;
 - N = include only if no further site investigation is to be undertaken;
 - X = not applicable and may be omitted.

Appendix B

Historical Aerial Photographs

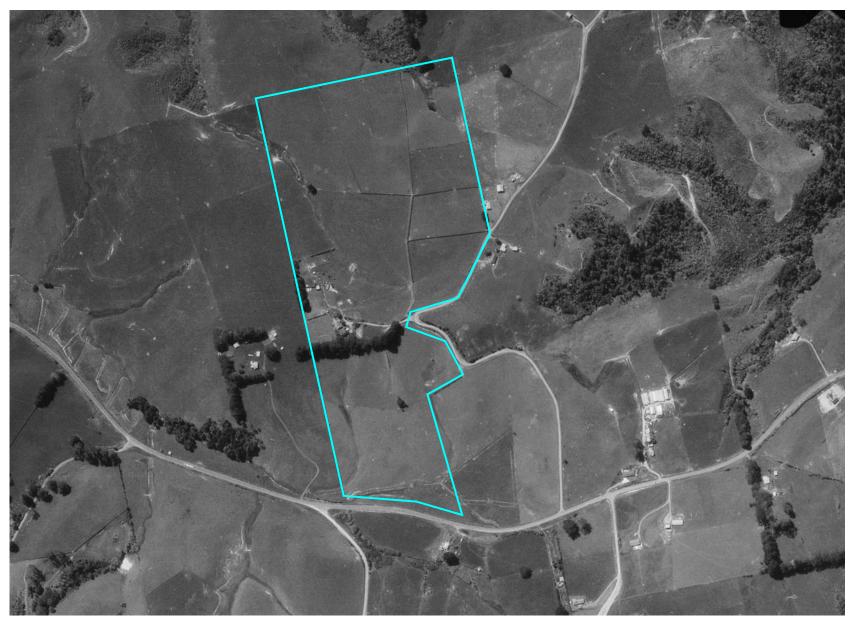


Source: https://retrolens.co.nz/ : Retrolens Image Resource



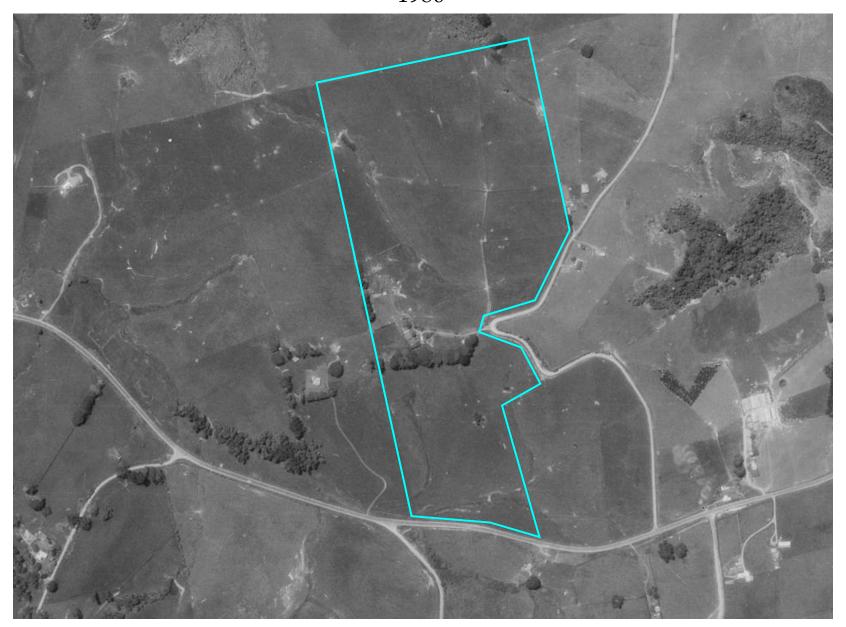
Source: https://retrolens.co.nz/ : Retrolens Image Resource

1977



Source: https://retrolens.co.nz/ : Retrolens Image Resource

1980



Source: https://retrolens.co.nz/ : Retrolens Image Resource

1988



Source: https://retrolens.co.nz/ : Retrolens Image Resource

2003 and 2004



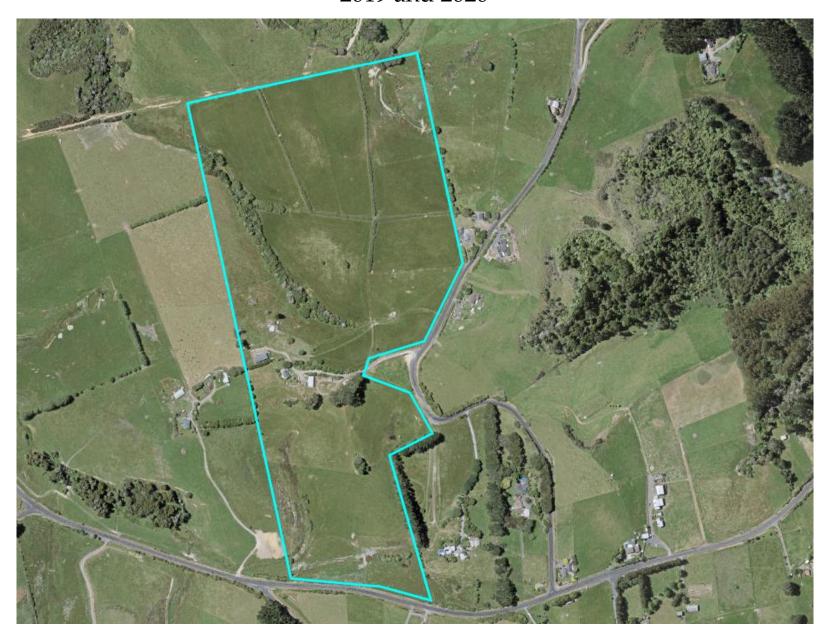
 $Source: \underline{https://geomapspublic.aucklandcouncil.govt.nz/viewer/index.html}: Auckland Council Geomapspublic.aucklandcouncil.govt.nz/viewer/index.html$

2010 and 2011



 $Source: \underline{https://geomapspublic.aucklandcouncil.govt.nz/viewer/index.html}: Auckland Council Geomapspublic.aucklandcouncil.govt.nz/viewer/index.html$

2019 and 2020



 $Source: \underline{https://geomapspublic.aucklandcouncil.govt.nz/viewer/index.html}: Auckland Council Geomapspublic.aucklandcouncil.govt.nz/viewer/index.html$

Appendix C

Site Walkover Photos



Access to driveway from the East



East Façade of dwelling



Metal shed left of the driveway



Metal storage shed looking East of dwelling



Interior of Metal storage shed



Greenhouse North of dwelling



Animal shelter North of dwelling



Garage looking from the end of the driveway



Animal shelter looking north of the garage



Erosion and metal shed in the distance, looking north east from the driveway access



North paddock and culvert looking from the driveway access



North paddock looking from East on Jones road



East gully and boundary line view from Jones road



Manmade culvert in South paddock



South paddock view from Hunua Road



Old damaged culvert Southeast of existing culvert

Appendix D

Site Contamination Enquiry



22/07/2024

Fraser Thomas Limited L1 21 El Kobar Drive Auckland

Attention: Elliot Bish

Dear Elliot,

Site Contamination Enquiry - 362 Jones Road, Hunua

This letter is in response to your enquiry requesting available site contamination information within Auckland Council records for the above site. Please note this report does not constitute a site investigation report; such reports are required to be prepared by a (third-party) Suitably Qualified and Experienced Practitioner.

The following details are based on information available to the Contamination, Air & Noise Team in the Resource Consent Department. The details provided may be from former regional council information, as well as property information held by the former district/city councils. For completeness the relevant property file should also be requested to obtain all historical records and reports via 09 3010101 or online at:

 $\underline{https://www.aucklandcouncil.govt.nz/buying-property/order-property-report/Pages/order-property-file.aspx.}$

1. <u>Hazardous Activities and Industries List (HAIL) Information</u>

This list published by the Ministry for the Environment (MfE) comprises activities and industries that are considered likely to cause land contamination as a result of hazardous substance use, storage, and/or disposal.

There is no contamination information held within Council's records for the site (362 Jones Road, Hunua).

Please note:

- If you are demolishing any building that may have asbestos containing materials (ACM) in it, you have obligations under the Health and Safety at Work (Asbestos) Regulations 2016 for the management and removal of asbestos, including the need to engage a Competent Asbestos Surveyor to confirm the presence or absence of any ACM.
- Paints used on external parts of properties up until the mid-1970's routinely contained lead, a
 poison and a persistent environmental pollutant. You are advised to ensure that soils affected
 by old, peeling or flaking paint are assessed in relation to the proposed use of the property,
 including high risk use by young children.

2. Consents and Incidents Information (200m radius of the selected site)

The Council database was searched for records of the following activities within approximately 200 metres of the site and results are displayed in Figure 1 below:

- Pollution Incidents (including air discharges, oil or diesel spills)
- Bores

- Contaminated site and air discharges, and industrial trade process consents
- Closed Landfills
- Air quality permitted activities
- Identified HAIL activities

No relevant records were identified.

Please note:

The HAIL activity hatching in Figure 1 only reflects whether a site has been identified as a HAIL site (both verified and non-verified) by the Council and the type of HAIL associated with the site. This does not confirm whether the site has been formally investigated or the contamination status of the property (e.g. contaminated, remediated etc.). Additionally, due to limitations within Council's records, the specific HAIL activity is not included in the data for all properties. For further information on any of these known HAIL sites, a subsequent site contamination enquiry can be lodged for the specific property (up to 5 adjacent properties can be covered in one request).

While the Auckland Council has carried out the above search using its best practical endeavours, it does not warrant its completeness or accuracy and disclaims any responsibility or liability in respect of the information. If you or any other person wishes to act or to rely on this information, or make any financial commitment based upon it, it is recommended that you seek appropriate technical and/or professional advice.

If you wish to clarify anything in this letter that relates to this site, please contact contaminatedsites@aucklandcouncil.govt.nz. Any follow up requests for information on other sites must go through the online order process.

Should you wish to request any of the files referenced above and/or listed in the attached spreadsheet for viewing, please contact the Auckland Council Call Centre on 301 0101 and note you are requesting former Auckland Regional Council records (the records department requires three working days' notice to ensure the files will be available).

Please note Auckland Council cost recovers officer's time for all site enquiries. As such an invoice for the time involved in this enquiry will follow shortly.

Yours Sincerely,

Contamination, Air and Noise Team Specialist Unit | Resource Consents Auckland Council

Appendix E

Historic Building and Wastewater Site Plan

