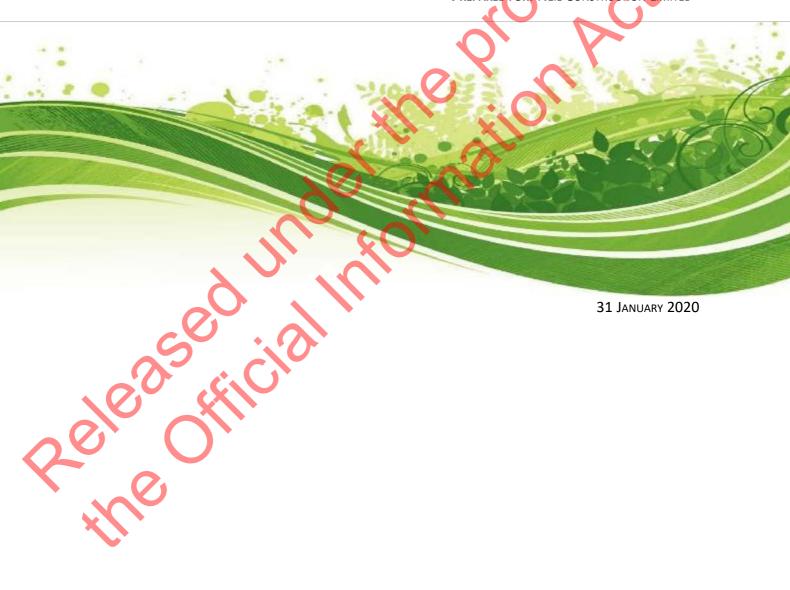
PRELIMINARY SITE INVESTIGATION

(PSI)

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Reference Number: REP-1441/PSI/JAN20

PREPARED FOR: NEIL CONSTRUCTION LIMITED





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Released under the provision Act.



Disclaimer

This report is provided on the condition that Geosciences Ltd disclaims all liability to any person or entity other than the client and Auckland Council in respect of anything done or omitted to be done and of the consequence of anything done or omitted to be done by any such person in reliance, whether in whole or in part, on the contents of this report. Furthermore, Geosciences Ltd disclaims all liability in respect of anything done or omitted to be done and of the consequence of anything done or omitted to be done by the client, or any such person in reliance, whether in whole or any part of the contents of this report of all matters not stated in the brief outlined in our proposal and according to our general terms and conditions and special terms and conditions for contaminated sites.

Statement

This site investigation has been prepared in accordance with the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011. It has been managed by a suitably qualified and experienced practitioner (SQEP); and reported on in accordance with the current edition of the Ministry for the Environment's Contaminated Land Management Guidelines No.1 – Reporting on Contaminated Sites in New Zealand.

Report prepared on behalf of GSL Report reviewed and authorised

by: on behalf of GSL by:

David Wilkinson
Environmental Scientist
Geosciences Ltd

Carl O'Brien General Manager Geosciences Ltd Thank you for the opportunity to carry out this investigation. Should you have any queries regarding this report please do not hesitate to contact us on 09 475 0222.

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EXECUTIVE	
SUMMARY	
1 INTRODUCTION	2
2 PROPERTY DETAILS	2
3 PROPOSED CHANGE IN LANDUSE, SUBDIVISION AND DEVELOPMENT	2
4 STANDARDS AND REGULATIONS	2
4.1 NATIONAL ENVIRONMENTAL STANDARD (NES)	2
4.2 AUCKLAND UNITARY PLAN (OPERATIVE IN PART) (AUP(OP))	3
5 PSI OBJECTIVES	3
6 SCOPE OF WORKS	3
7 ENVIRONMENTAL CONTEXT	4
7.1 GEOLOGY & GEOHYDROLOGY	4
7.2 TOPOGRAPHY AND DRAINAGE	4
8 SITE HISTORY	5
8.1 CERTIFICATES OF TITLE	г
	5 5
8.2 HISTORIC AERIAL PHOTOGRAPHS	•
8.2.1 Summary of Historic Aerial Images	6
8.3 PROPERTY FILE	6
8.4 FORMER INVESTIGATIONS	7
9 SITE INSPECTION & INFRASTRUCTURE	8
10 POTENTIAL FOR CONTAMINATION	9
11 CONCLUSIONS	9
11.1 NATIONAL ENVIRONMENTAL STANDARD (NES)	10
11.2 THE AUCKLAND UNITARY PLAN (OPERATIVE IN PART) (AUP(OP))	10
12 RECOMMENDATIONS / FURTHER INVESTIGATIONS REQUIRED	10
13 REFERENCES	12

NVIRONMENTAL SOLUTIONS

TABLE OF CONTENTS

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the Official Information Act 1986
the Official Information Act 1986



LIST OF FIGURES

FIGURE 1 SITE LOCATION

FIGURE 2 SITE INFRASTRUCTURE

FIGURE 3 FURTHER INVESTIGATION REQUIRED

APPENDICES

APPENDIX A PROPOSED SCHEME PLAN

APPENDIX B

CERTIFICATE OF TITLE

APPENDIX C

APPENDIX D

HISTORIC AERIAL PHOTOGRAPHS

APPENDIX E PROPERTY FILE EXTRACTS

APPENDIX F MANUKAU CITY COUNCIL MEMORANDUM

SITE PHOTOGRAPHS



EXECUTIVE SUMMARY

Neil Construction Ltd has identified the piece of land located at 109 Beachlands Road, Beachlands for potential future residential subdivision and development, as part of their pre-purchase due diligence Geosciences Ltd (GSL) were engaged to conduct a preliminary site investigation (PSI) on the piece of land.

The PSI included a desktop study of publicly available information including a review of the sites current and historic certificates of title, historic aerial images, previous environmental reports, and a review of the Council property file for the site. Desktop studies revealed that the site has been utilised for pastoral grazing for its discernible past, while a residential dwelling was constructed in the 1950's with a woolshed, and stables and hay barn constructed through the 1950's and 1960's. Historic aerial images and permits in the property file revealed that the original dwelling was demolished in 2009.

GSL conducted a site inspection in order to confirm the findings of the desktop study, at the time of the inspection the site was found to be in the same configuration as noted in the desktop study. That is, predominantly vacant pasture utilised for horse grazing with a small yard in the northeast corner of the site consisting of an L-shaped stable block and woolshed with small holding pens for livestock, a hay barn is located separate from the yard on the sites western boundary. Loading races and pens constructed by the woolshed are not consistent with spray race / sheep dip activities, and no evidence was found for any spray or dip activities having occurred on site.

During the inspection, residual paint was noted on some exterior cladding materials on the sheds, and aged paintwork on the weatherboards on the stables, due to the age of the buildings the use of lead based paint cannot be ruled out. Potentially asbestos containing materials were noted in the soffits of the stable building, while not observed on the woolshed or haybarn, the potential for ACM to have been used on those structures and on the former dwelling is noted. All observed potentially ACM was in good condition and painted, as such is not considered a risk for soil contamination or generation of fibres. That said, all structures on site must be subject to fully intrusive hazardous building material surveys in accordance with the *Health and Safety at Work (Asbestos) Regulations 2016* prior to demolition.

The investigation has identified that the only potential sources of contamination on site relate to historical building products; asbestos containing materials and lead based paint. Asbestos containing materials (ACM) are included on the Ministry for the Environment (MfE) Hazardous Activities and Industries List (HAIL) under Item E.1 when in broken or degraded condition and likely to result in the release of fibres, while the impacts of lead based paint can be encompassed under Item I of the MfE HAIL under Item I while a risk to human or environmental health is present only.

Outside of lead based paint and ACM this investigation found no evidence of any activity or industry included on the MfE HAIL having been or currently being undertaken on the site. As a result, outside of the yard, former dwelling location, and hay barn, the proposed change in landuse, subdivision and development of the site is highly unlikely to result in a risk to human or environmental health.

With respect to those areas noted above, further investigation will be required in order to assess the potential impacts of lead based paint and / or ACM and to inform on whether or not the regulation of the NES and AUP(OP) will be applicable to the proposed

change in landuse, subdivision, and development.



1 Introduction

Geosciences Ltd (GSL) has prepared the following report for Neil Construction Limited in accordance with the GSL proposal, Ref: *Pro-1991/Jan20*, dated 9 January 2020.

This report has been prepared in accordance with the Ministry for the Environment (MfE) Contaminated Land Management Guidelines (CLMG): No. 1 - "Guidelines for Reporting on Contaminated Sites in New Zealand", and No. 5 - "Site Investigation and Analysis of Soils" (References 1 and 2).

2 PROPERTY DETAILS

Location: 109 Beachlands Road, Beachlands

Legal Description: Lot 1002 DP 512674

Size: 16.2808

Zoning: Residential - Single House Zone

The property at the above address, and hereafter referred to as 'the site' (shown in Figure 1) is located on the southeast portion of the rural suburb of Beachlands, East Auckland, approximately 23 km to the east of the Auckland CBD.

The site is a predominantly vacant block of rural land on the eastern edge of the developed suburban portion of Beachlands and is bounded to the north, south, and west by single dwelling residential lots and to the west by a newly developed commercial precinct.

3 PROPOSED CHANGEIN LANDUSE, SUBDIVISION AND DEVELOPMENT

GSL understands that the site has been identified by Neil Construction Ltd for potential future subdivision and residential development in fitting with the operative zoning under the Auckland Unitary Plan (Operative in Part). Indicative scheme plans identify the possibility of creating some

140 residential lots of approximately 1,000 m² each alongside associated access roads and infrastructure. A copy of the proposed scheme plan is attached in Appendix A.

The proposed development would therefore entail the change in landuse of the site from vacant rural land to residential landuse, the subdivision of the existing title, and the development of the land for the purpose of constructing residential dwellings.

4 STANDARDS AND REGULATIONS



Because of the change in landuse, subdivision, proposed development outlined above it will be necessary to address the requirements of the following standards, rules, and regulations applicable for the site.

4.1 NATIONAL ENVIRONMENTAL STANDARD (NES)

The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES) (MfE, 2012) ensures that land affected by contaminants in soil is appropriately

identified and assessed. When soil disturbance and/or land development activities take place it should be, if necessary, remediated or the contaminants contained to make the land safe for human use.

Under the NES, land is considered to be actually or potentially contaminated if an activity or industry on the MfE Hazardous Activities and Industries List (HAIL) has been, is, or is more likely than not to have been, undertaken on the land. Consequently, a change in landuse, subdivision, or development requires a preliminary site investigation (PSI) of the land to determine if there is a risk to human health because of any current or former activities that are occurring, or may have occurred, on the land under investigation.

4.2 AUCKLAND UNITARY PLAN (OPERATIVE IN PART) (AUP(OP))

Section 30(1)(f) of the RMA provides the Auckland Council with a statutory duty to investigate land for the purposes of identifying and monitoring contaminated land and for the control of discharges of contaminants into or onto land or water and discharges of water into water.

The Auckland Unitary Plan (Operative in Part) (AUP(OP)), which was formally notified on 30 September 2013, is a combined regional policy statement, regional coastal plan, regional plan, and district plan. Auckland Council notified an operative in part version of the plan on 15 November 2016 (Reference 4).

Chapter E.30 of the AUP(OP) deals specifically with contaminated land and maintains that Council is required to manage both the use of land containing elevated levels of contaminants and the discharge of contaminants from land containing elevated levels of contaminants. As no appeals have been lodged on Chapter E.30, the provisions of that section can be considered operative under Section 87 of the Resource Management Act 1991. For all purposes of this investigation, the relevant provisions of the AUP(OP) relating to soil contamination have legal jurisdiction and those provision have been considered where they may have an impact on the proposed development.

5 PSI OBJECTIVES

The objectives of this investigation were to assess:

if the land is covered by the NES as a result of current or former HAIL activities;



- the extent of any current or former HAIL activities on site;
- if the activity can comply with NES permitted activity conditions;
- what, if any, contaminated land rules of the AUP(OP) apply to the proposed development;
- the soil quality and associated risk to human health and the environment as a result of former activities on the site; and
- the need, if any, for further detailed investigations.

6 SCOPE OF WORKS

To achieve the objectives of the PSI, GSL has undertaken the following:

Rep-1442/PSI/Jan20

3

- a review of the current and historic certificates of title;
- a review of historic aerial photographs of the site;
- a review of the property file held by Council;
- a review of former site investigations;
- a visual site inspection of the piece of land; and
- the preparation of this report in accordance with the Ministry for the Environment (MfE)
 Contaminated Land Management Guidelines (CLMG): No. 1 "Guidelines for Reporting on
 Contaminated Sites in New Zealand", detailing the findings of this investigation and the
 need, if any, for further work.

7 ENVIRONMENTAL CONTEXT

7.1 GEOLOGY & GEOHYDROLOGY

The local geology is described by Edbrooke (Reference 7) as alternating sandstone and mudstone with variable volcanic content and interbedded volcaniclastic grits.



7.2 TOPOGRAPHY AND DRAINAGE

The topography of the site is rolling pasture dominated by a central gully system running from the northeast corner of the site to the middle of the southern boundary. A small plateau forms the sites high point in the northwest corner at approximately 48 m above sea level (asl) while the low point lies within the lower reaches of the gully system at approximately 22 m asl in the southernmost extent of the gully. The high point to the southeast of the gully is approximately 30 m asl in the sites southeast corner.

Drainage is via overland flow paths (predominantly the central gully) and soakage. The site is not connected to the stormwater network, rather rainwater is collected from the roof of the stable building and is utilised for the sites water supply. Auckland Council GEOMaps notes an unnamed stream in the gully system which drains the site to the southwest, forming a tributary of a network of small watercourses which ultimately drain to the Hauraki Gulf immediately to the south of Pine Harbour Marina some 1.6 km to the west of the site.

A review of the floodplains, flood prone, or flood sensitive areas of the Auckland Region (available on the Auckland Council GEOMaps service) revealed that a minor flood plain associated with the overland flow in the gully is present, however confined to the gully itself, no flood prone or flood sensitive areas are noted on the site.

The site is not part of the Natural Stream Management Areas – refer to Map Series 1, Map 31, Maraetai, Manukau, of the Auckland Regional Council's Regional Plan Map Series.

The site is not located in a sensitive aquifer area or on any aquifer defined in the Auckland Regional Plan Map Series 2.





8 SITE HISTORY

A desktop study of publicly available files and photographs was undertaken to determine the history of the site with respect to any current or historic potentially contaminating landuses.

8.1 CERTIFICATES OF TITLE

GSL has reviewed a copies of the current and historic Certificates of Title for the aforementioned property, including any instruments on the title which detail relevant property information such as: current ownership, registered interests, easements, covenants, lease restrictions and transmissions, to determine if pre-existing consent notices or other restrictions / notifications which may be relevant to historic uses or potential soil contamination are held against the property. No notes of interest were recorded on the titles and copies of these documents are attached in Appendix B.

8.2 HISTORIC AERIAL PHOTOGRAPHS

Historic aerial photographs from 1939, 1955, 1961, 1972, 1978, and 1987 are available for the site on the Retrolens website, while images from 2001, 2006, 2008, 2010, and 2017 are available on the Auckland Council GEOMaps website. The findings of the historic aerial photograph review are summarised below, while copies of these aerial photographs have been attached in Appendix C.

The 1939 image is the earliest available image of the site and shows the full extent of the site under pasture. The site is bisected by a distorted 'Y' shaped gully system running in a broadly north-south direction. There are no distinct structures noted on the site, however Beachlands Road is present along the northern boundary, but unpaved in the image.

By the time of the 1955 image the site remains predominantly vacant, the only discernible development is the construction of a structure along the northern boundary, adjacent to Beachlands Road. The exact use of the structure cannot be confirmed, but its layout appears consistent with a large shed or small dwelling.

Imagery from 1961 confirms the structure identified in 1955 is a residential dwelling, which has potentially been extended. The plate clearly shows a fence demarcating the yard from the wider farm and access is discernible via driveway directly off

Beachlands Road. Two sheds have also been constructed on site since 1955, the first is boundary appearing to be accessed from Karaka Road while the



second shed includes two holding pens and a short farm race within the northeast corner of the site. The arrangement of the race, pens and shed is consistent with a shearing shed. The remaining site area remains vacant pasture with discernible paddocks separated by farm fencing, a large number of sheep are noted across the site, but not other features of note are present.

1972 - By 1972 two further sheds have been constructed immediately to the south of the shearing
 1978 shed in the northeast quadrant of the site, served by a new access road from
 Beachlands Road. There are no other significant developments noted on the site in the 1972 image.

There are no discernible developments to the site in the 1978 image

1987- There are few significant developments across the site, however a small extension joining2008 the two sheds to the south of the shearing shed is evident alongside the rearrangement of the race adjacent to the shearing shed in the 1987 image.

No further developments are noted through the images from 2001, 2006, and 2008.

2010- By the time of the 2010 image the residential dwelling has been demolished / removed
2017 from site, there are no other discernible developments on site.

The only discernible development on site in the 2017 image is a newly constructed loading race by the shearing shed.

8.2.1 SUMMARY OF HISTORIC AERIAL IMAGES

GSL has reviewed the available historic aerial images of the site, the aerial images show the site has been primarily utilised for pastoral grazing for its discernible history. A residential dwelling was established on site between 1939 and 1955, which was then removed between 2008 and 2010. An apparent shearing shed is constructed on the northeast corner alongside a second shed on the western boundary on site by 1961, with two further sheds being constructed adjacent to the shearing shed by 1972.

Due to the age of the now removed dwelling on site, and the sheds constructed prior to 1961 the potential for lead based paints to have been used on building materials is noted, alongside the potential for asbestos containing materials to have been used in any structure constructed prior to 1 January 2000.



GSL notes that the short race and holding pens associated with the shed in the northeast corner of the site (apparent woolshed / shearing shed), do not present a typical arrangement for spray races or sheep dips; rather the configuration appears to be holding pens and loading ramp(s) associated with the shed itself. Imagery identifies that the original loading ramp is replaced by the current arrangement of pens by 1987 while the current sorting / loading race is only constructed between 2010 and 2017. GSL therefore considers that it is highly unlikely that a spray race or sheep dip has been present on the site.

8.3 PROPERTY FILE

GSL requested the property file from Auckland Council for review of historic activities. Copies of relevant historic plans, correspondence, permits, and consents have been attached in Appendix D. Included in the property files was a previous preliminary site investigation, undertaken in 2005 on the sites parent lot prior to subdivision creating the site and adjacent commercial lot. That report is reviewed in full within Section 8.4 below while the following additional items of note were on the supplied file:

1957- A bulk scan of microfiche documents contains plans relating to the construction of a woolshed in 1957 including elevations and floor plans.

Plans and correspondence are held on file relating to an unauthorised building on the site, correspondence in the file relates to a lean-to hay shed, this is presumed to be a lean to structure included on the south side of the woolshed as the footprint of the

plans does not match the observed footprint in the historic aerial photographs above. **1960**-Bulk scans of documents are held relating to the construction a Steelmaster Building,

inferred to be the western hay shed, and the construction of stable blocks on the site, one set of plans confirms the presence of a 'wool-shed' on the site and the progressive development of additions to the stable block and extensions to the residential dwelling.

2009 Building consent documentation is held on file relating to the demolition of the original dwelling on site.

Following the review of the property file, the findings of the historic aerial review are confirmed, that is; the original dwelling on site was constructed in the 1950s while the stables, woolshed and yard were progressively developed from 1960 to 1975. The documents held in the property file confirm the observations of the historic aerial images.

8.4 FORMER INVESTIGATIONS



As noted in the property file section above, a preliminary site investigation was undertaken by Environmental and Earth Sciences Ltd on the site's parent lot prior to a subdivision carried out in 2005 to form the sites current boundaries. The PSI included a desktop review of historic aerial photographs, Manukau City Council property files, a site visit and discussion with the farm manager at the time of the investigation.

The desktop study did not reveal any potential sources of contamination on the site and the discussion with the farm manager revealed that sheep had been grazed on the site up to the 1960s or 1970s at which point cattle had been run on the site. The farm manager indicated that the stockyard races around the woolshed had been constructed in the 1950s or 1960s and had been used for loading of cattle for transport. At the time of the inspection cattle were still grazed on site, as well as a small number of horses.

The PSI concluded that the site has been the location of grazing for its discernible history and identified no potential sources of contamination on site. It was concluded that no further soil and / or groundwater investigations were required for the 2005 subdivision.

An internal memorandum from the then Manukau City Council reviews the EES PSI and agrees with the findings. The memo recommends that the 30.4 ha property be accepted as suitable for the intended development and considers that no further investigation is warranted in relation to site contamination. A copy of the Manukau City Council memo is included Appendix E while a copy of the EES report can be provided upon request.

8.5 GEOTECHNICAL INVESTIGATION

At the time of the GSL site visit, CMW Geosciences were undertaking a geotechnical investigation of the site. The investigation included the advancement of twelve hand auger boreholes to approximately 4 m below relative ground level. In consultation with CMW Geosciences, GSL were provided with preliminary borehole logs from the investigation to provide geological context and any indications of potential sources of contamination, e.g. unverified filling. All 12 boreholes present a soil profile of between 300 mm and 800 mm of topsoil overlying natural silt deposits with minor clays. No fill was identified in any of the 12 boreholes, nor was any indication of any

9 SITE INSPECTION & INFRASTRUCTURE

potential sources of contamination noted.

GSL personnel undertook a site inspection on 22 January 2020, at which time the weather was fine and clear following an extended period of dry, fine weather. At the time of the inspection the site appears exactly as observed in the most recent aerial images, that is; predominantly vacant pasture with paddocks arranged around a large 'y' shaped gully feature running through the centre of the site. The site can be accessed from various locations with farm gates forming the access to the



paddocks off Beachlands Road on the northern boundary, the eastern termination of Karaka Road on the west boundary, and Mahutonga Avenue on the eastern boundary.

Vegetation on site was noted to be very dry brown grass within the paddocks due to the extended dry period preceding the site visit, while the gully was densely overgrown with gorse, woolly nightshade and other weed species and largely inaccessible. Portions of the paddocks within the property appeared to have recently been cut for hay.

The only structures noted on the site are a corrugated iron clad hay barn adjacent to the Karaka Road entrance, and a stable block and former wool shed (currently utilised as a hay barn) in the northeast corner of the site.

The Karaka Road hay barn was noted to be sited on a concrete slab foundation and framed with structural steel and corrugated iron cladding. The barn was in a relatively poor state of repair, but remained in use as a hay barn storing hay bales and miscellaneous household items. The majority of the barns cladding was unpainted galvanised corrugated iron, however, a number of iron sheets had residual paint present on the surface rendering it unclear if repairs have been undertaken or these relate to the original construction materials. There was no evidence of any asbestos containing materials used on the hay barn. Some surficial refuse was noted around the barn, predominantly timber and corrugated iron building products, with minor discarded refuse and occasional car tyres. None of the material observed would be considered putrescible or a distinct risk of causing soil contamination.

The yard area in the northeast corner of the site is accessed by a farm gate and gravel drive directly off Beachlands Road with the yard consisting of an L-shaped stable block, the former woolshed, small water bore / pump shed and cattle, pens, and loading race / ramp around the wool shed. The arrangement of the races indicates that they were used for loading stock only and no indication of any spray race type activities or infrastructure (such as pipes or residual concrete) which indicate that the race has been used for spraying or dipping activities. The loading race is constructed along the northern gable end of the woolshed and adjoins a loading ramp on the northeast corner of the shed. The race arrangement is not generally consistent with what would be expected from a spray race. The observations made reconcile with the observations made by EES in 2005.

The shed is constructed with a raised floor on timber piled foundations with a timber frame and clad in unpainted galvanised corrugated iron, the only evidence of residual paintwork on the exterior of the shed is around the door frame on the east and west sides of the shed. No evidence for asbestos containing materials was noted in or around the woolshed.

The stable block was noted to be constructed on a concrete foundation slab and clad on the exterior (south and east) faces with corrugated iron, while the interior faces of the L-shape were timber weatherboards, and corrugated iron roofing material. The concrete slab is noted to extend under the awning on the interior faces of the L-shape



Potentially asbestos containing materials were noted in the soffit boards of the awning; however, all boards were in good condition and well painted. Exterior surfaces of the stable building were painted, however the paintwork was noted to be in deteriorated condition, especial on the inside of the L-shaped block, any potential impacts from potential lead based paint in this instance would be mitigated to an extent by the concrete footpath under the awning.

During the inspection, the footprint of the former residential dwelling located on the sites northern boundary was inspected. The area of the dwelling and gardens was identified by the gated access and residual driveway remaining in place, while the footprint of the dwelling was inferred from depressions in the ground surface in the inferred location of foundation pile post holes. The full extent of the former residential footprint was systematically inspected using a grid based walkover on 5 m spaced transects intersecting at 90 degrees in accordance with the BRANZ *New Zealand Guidelines for Assessing and Managing Asbestos in Soil (BRANZ 2016)*. While some minor building rubble (brick fragments, tile, ceramic pottery) was noted, there was no evidence of any asbestos containing material observed.

10 POTENTIAL FOR CONTAMINATION

This investigation did not reveal any distinct evidence for any activity or industry included on the MfE HAIL currently ongoing on the site. The only potential source of contamination noted was the possible historic use of lead based paints on the sheds on site and the potential for lead based paints to have been used in the former dwelling, now removed from site. While not explicitly included on the MfE HAIL, the use of lead based paint can be encompassed by Item I of the HAIL only where a risk to human or environmental health is present. All potentially asbestos containing materials (soffit boards on the stable block) were in good condition and painted, as such they are not assessed as presenting any risk for soil contamination.

Lead based paint can present a risk for soil contamination when in degraded condition or at times of routine maintenance, such as sanding or scraping, when insufficient ground protection is used. Paint flakes or dust can infiltrate the uppermost topsoil in the immediate area surrounding the structure. While lead concentrations can be elevated in the immediate curtilage of the structure, concentrations are expected to attenuate rapidly to background concentrations with distance from the structure, it is generally expected that impacts would be constrained to a hotspot of around 3 m surrounding structures where lead paints have been used. Similarly, lead concentrations are generally expected to be constrained to the uppermost topsoil horizon due to the low mobility of lead in soil.

11 CONCLUSIONS

GSL has conducted a preliminary site investigation, in accordance with the MfE Contaminated Land Management Guidelines to determine the location and extent of current and / or former HAIL



Activities on site and the potential for soil contamination, and the associated risk to human health and the environment, as a result. GSL has consequently concluded that:

- the site has been predominantly vacant grazing for its discernible history;
- the only structures noted in the sites history are a small residential dwelling constructed in the 1950's and demolished in 2009, a stable block and woolshed in the main yard in the northeast corner of the site, and a corrugated iron hay barn on the western site boundary;
- due to the age of the structures the potential for lead based paint to have been used on exterior surfaces is noted;
- the impacts of lead based paint can be encompassed by Item I on the MfE HAIL where a risk to human or environmental health is present only;
- there is no evidence for any activity or industry included on the MfE HAIL, other than
 potential impacts from historical building products used on site, having been or currently
 being undertaken on the site

Based on the findings of this investigation GSL concludes that for the majority of the site, the proposed change in landuse, subdivision, and development is highly unlikely to result in any risk to human health.

However discrete portions of the site consisting of the curtilages of both the remaining and historic structures on site will require further investigation in order to assess the potential impacts of historical lead based paint use.

11.1 NATIONAL ENVIRONMENTAL STANDARD (NES)

Portions of the site, namely the immediate curtilages of the remaining structures, and former location of a residential dwelling will require further investigation in order to assess the potential impacts of lead based paint use. Those areas of the site may result in potential risks to human or environmental health and as such the Regulations of the NES may apply to any change in landuse, subdivision, or development of those discrete areas.

Outside of the portions of the site noted above, as there is no distinct evidence for any activity or industry included on the MfE HAIL having been, or currently being undertaken on the piece of land.



Consequently, GSL concludes that the change in landuse, subdivision and development proposed will be highly unlikely to result in any risk to human health and the regulations of the NES do not apply to those portions of the site.

11.2 THE AUCKLAND UNITARY PLAN (OPERATIVE IN PART) (AUP(OP))

For the same reasons as outlined above, portions of the site may meet the Auckland Council definition of contaminated land as a result of historical lead based paint use.

As with the NES above, outside of those areas as the piece of land does not meet the Auckland Council definition of contaminated land and the provisions of Chapter E.30 of the AUP(OP) will not apply to any change in landuse, subdivision or development of the piece of land.

12 RECOMMENDATIONS / FURTHER INVESTIGATIONS REQUIRED

In order to assess the potential impacts of historical lead based paint use, GSL recommends that further investigation around the remaining structures on site and the former residential dwelling be undertaken. If necessary, a site management plan / remediation action plan may be required as a result of the findings of that investigation, should concentrations of lead be present in soil at levels which present a potential risk to human or environmental health.

The portions of the site requiring further assessment are set out in Figure 3







13 REFERENCES

- Ministry for the Environment (2003) Contaminated Land Management Guidelines No.1: Reporting on contaminated Sites in New Zealand. Ministry for the Environment, Wellington, New Zealand.
- 2. Ministry for the Environment (2003) *Contaminated Land Management Guidelines No.5: Site Investigation and Analysis of Soils.* Ministry for the Environment, Wellington, New Zealand.
- 3. Ministry for the Environment (2012) Users Guide National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health. Ministry for the Environment, Wellington, New Zealand.
- 4. Auckland Council (2013) -Auckland Unitary Plan (Operative in Part), Auckland, New Zealand.
- Auckland Council (2011) Auckland Council GEOMAPS.
 http://geomapspublic.aucklandcouncil.govt.nz/viewer/index.html
- 6. Retrolens Historical Image Resource www.retolens.co.nz
- 7. Edbrooke, S.W (2001) *Geology of the Auckland Urban Area* Institute of Geological and Nuclear Sciences Geological Map 3, Lower Hutt, New Zealand.
- 8. Ministry for the Environment (2011) *Methodology for Deriving Standards for contaminants* in Soil to Protect Human Health. Ministry for the Environment, Wellington, New Zealand.



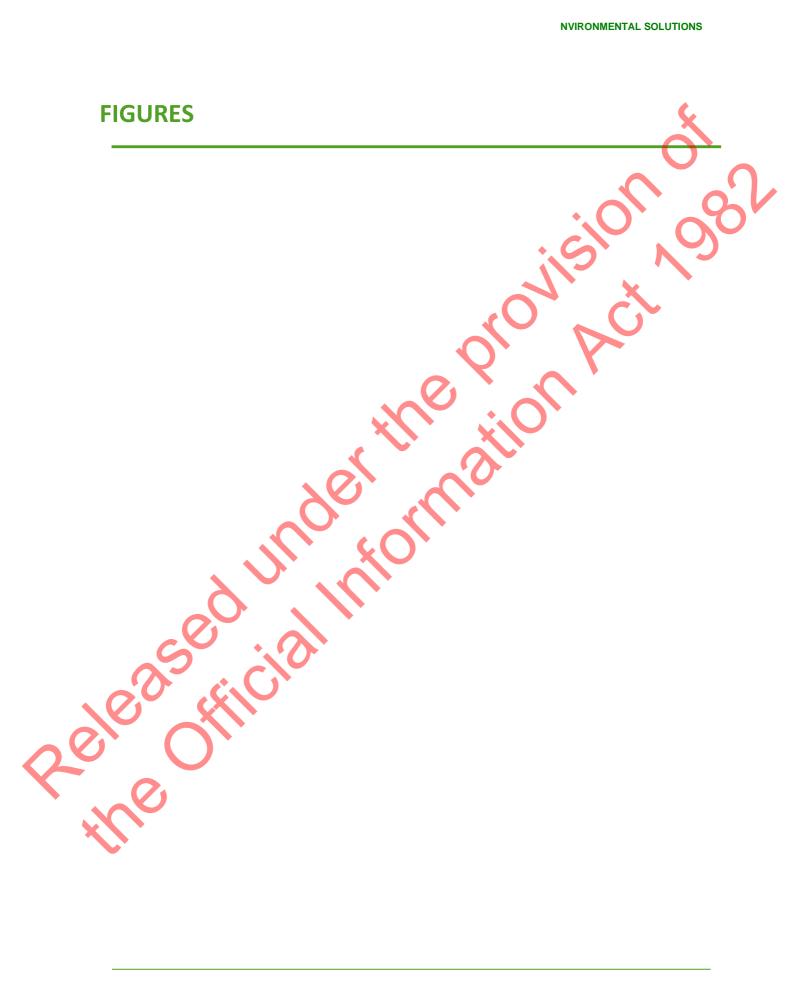
The conclusions and all information in this Report are given strictly in accordance with and subject to the following limitations and recommendations:

- 1. The assessment undertaken to form this conclusion is limited to the scope of work agreed between GSL and the client, or the client's agent as outlined in this Report. This report has been prepared for the sole benefit of the client and neither the whole nor any part of this report may be used or relied upon by any other party.
- 2. The investigations carried out for the purposes of the report have been undertaken, and the report has been prepared, in accordance with normal prudent practice and by reference to applicable environmental regulatory authority and industry standards, guidelines and assessment criteria in existence at the date of this report.
- 3. This report should be read in full and no excerpts are to be taken as representative of the findings. No responsibility is accepted by GSL for use of any part of this report in any other context.
- 4. This Report was prepared on the dates and times as referenced in the report and is based on the conditions encountered on the site and information reviewed during the time of preparation. GSL accepts no responsibility for any changes in site conditions or in the information reviewed that have occurred after this period of time.
- 5. Where this report indicates that information has been provided to GSL by third parties, GSL has made no independent verification of this information except as expressly stated in the report. GSL assumes no liability for any inaccuracies in or omissions to that information.
- 5. Given the limited Scope of Works, GSL has only assessed the potential for contamination resulting from past and current known uses of the site.
- 7. Environmental studies identify actual sub-surface conditions only at those points where samples are taken and when they are taken. Actual conditions between sampling locations may differ from those inferred. The actual interface between materials may be far more gradual or abrupt than an assessment indicates. Actual conditions in areas not



- sampled may differ from that predicted. Nothing can be done to prevent the unanticipated and GSL does not guarantee that contamination does not exist at the site.
- 8. Except as otherwise specifically stated in this report, GSL makes no warranty or representation as to the presence or otherwise of asbestos and/or asbestos containing materials ("ACM") on the site. If fill has been imported on to the site at any time, or if any buildings constructed prior to 1970 have been demolished on the site or materials from such buildings disposed of on the site, the site may contain asbestos or ACM.
- 9. Except as specifically stated in this report, no investigations have been undertaken into any off-site conditions, or whether any adjoining sites may have been impacted by contamination or other conditions originating from this site. The conclusion set out above is based solely on the information and findings contained in this report.
- 10. Except as specifically stated above, GSL makes no warranty, statement or representation of any kind concerning the suitability of the site for any purpose or the permissibility of any use, development or re-development of the site.
- 11. The investigation and remediation of contaminated sites is a field in which legislation and interpretation of legislation is changing rapidly. Our interpretation of the investigation findings should not be taken to be that of any other party. When approval from a statutory authority is required for a project, that approval should be directly sought by the client.
- 12. Use, development or re-development of the site for any purpose may require planning and other approvals and, in some cases, environmental regulatory authority and accredited site auditor approvals. GSL offers no opinion as to whether the current or proposed use has any or all approvals required, is operating in accordance with any approvals, the likelihood of obtaining any approvals, or the conditions and obligations which such approvals may impose, which may include the requirement for additional environmental works.
- 13. GSL makes no determination or recommendation regarding a decision to provide or not to provide financing with respect to the site. The on-going use of the site and/or planned use of the site for any different purpose may require the owner/user to manage and/or remediate site conditions, such as contamination and other conditions, including but not limited to conditions referred to in this report.
- 14. Except as required by law, no third party may use or rely on, this report unless otherwise agreed by GSL in writing. Where such agreement is provided, GSL will provide a letter of reliance to the agreed third party in the form required by GSL.
- 15. To the extent permitted by law, GSL expressly disclaims and excludes liability for any loss, damage, cost or expenses suffered by any third party relating to or resulting from the use of, or reliance on, any information contained in this Report. GSL does not admit that any action, liability, or claim may exist or be available to any third party.

16. Except as specifically stated in this section, GSL does not authorise the use of this report by any third party.





Eiguro 1 Sito Locality

Reference: J1442

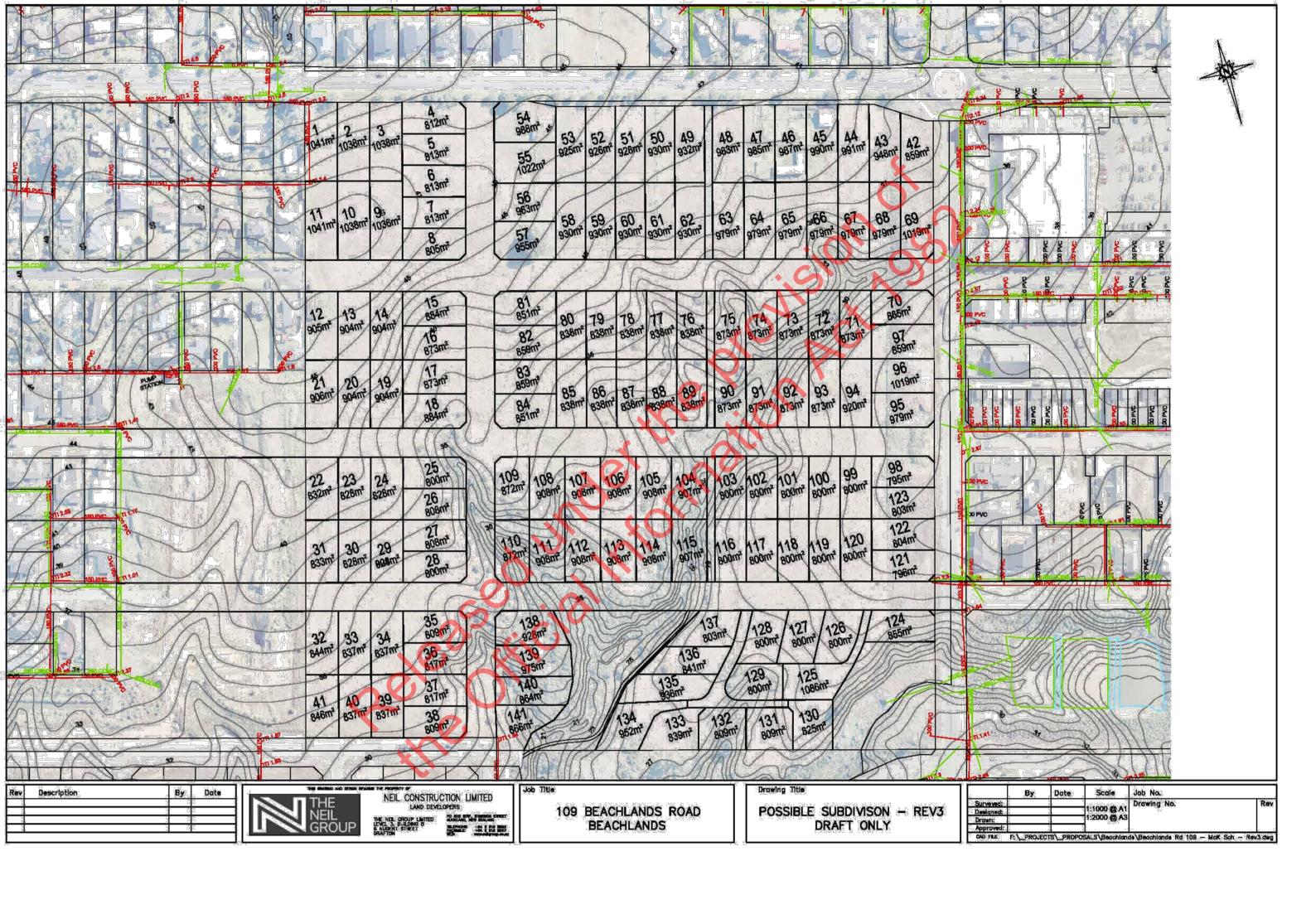


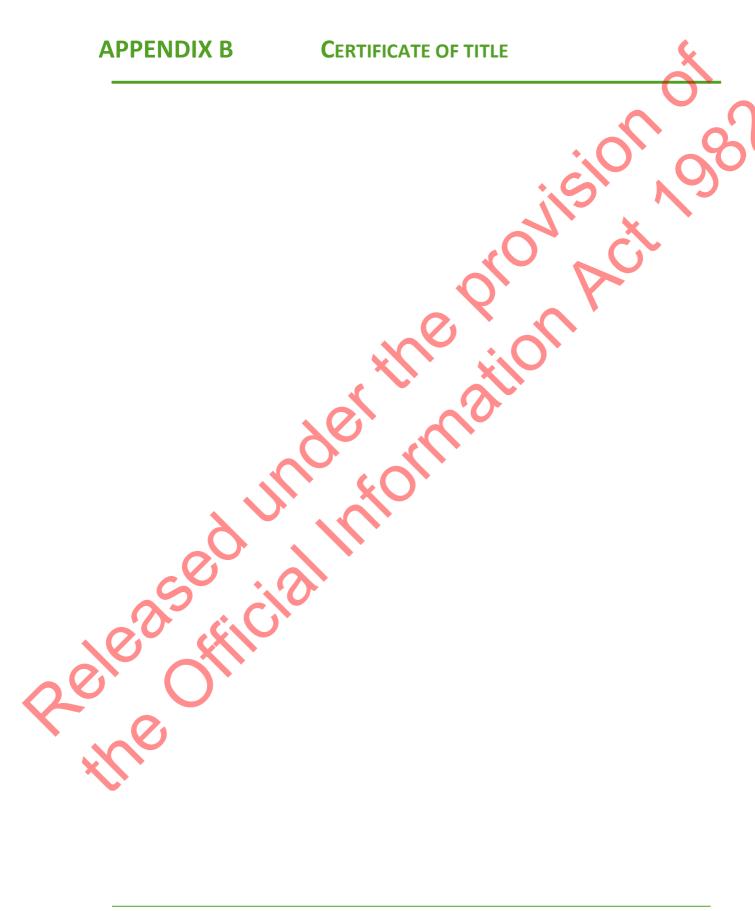


Reference: J1442 Released under the provision Act 1982 the Official Information Act 1982











RECORD OF TITLE **UNDER LAND TRANSFER ACT 2017 FREEHOLD**

Search Copy



Identifier Land Registration District North Auckland **Date Issued**

790096 08 December 2017

Prior References

787010

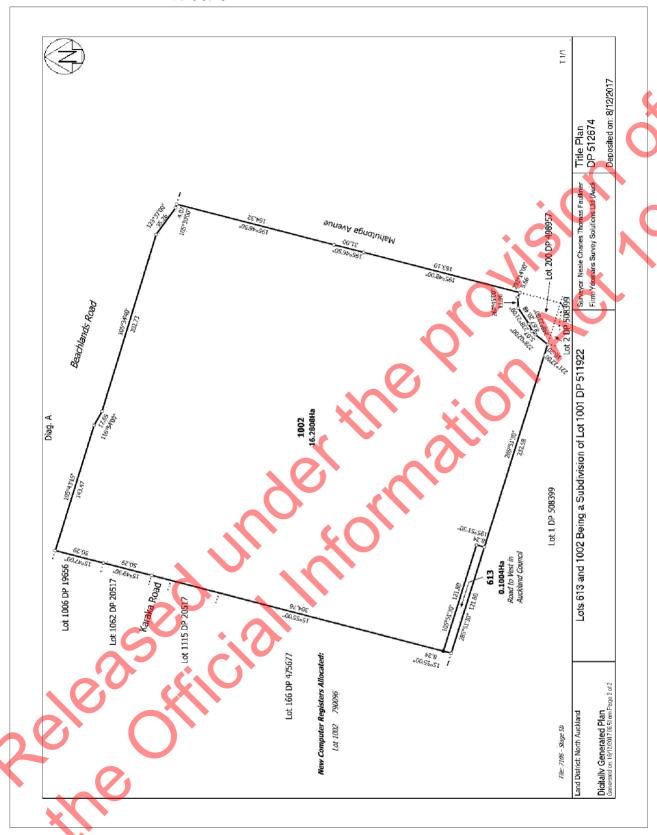
Fee Simple **Estate**

Area 16.2808 hectares more or less Legal Description Lot 1002 Deposited Plan 512674

Registered Owners Nawa (NZ) Limited

Interests

7703414.1 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 5.2.2008 at 9:00 am Land Covenant in Easement Instrument 10929672.9 - 7.11.2017 at 10:50 am





RECORD OF TITLE **UNDER LAND TRANSFER ACT 2017 FREEHOLD**





Constituted as a Record of Title pursuant to Sections 7 and 12 of the Land Transfer Act 2017 - 12 November 2018

Identifier Land Registration District North Auckland **Date Issued**

790096 08 December 2017

Prior References

787010

Fee Simple **Estate**

Area 16.2808 hectares more or less Legal Description Lot 1002 Deposited Plan 512674

Original Registered Owners

Nawa (NZ) Limited

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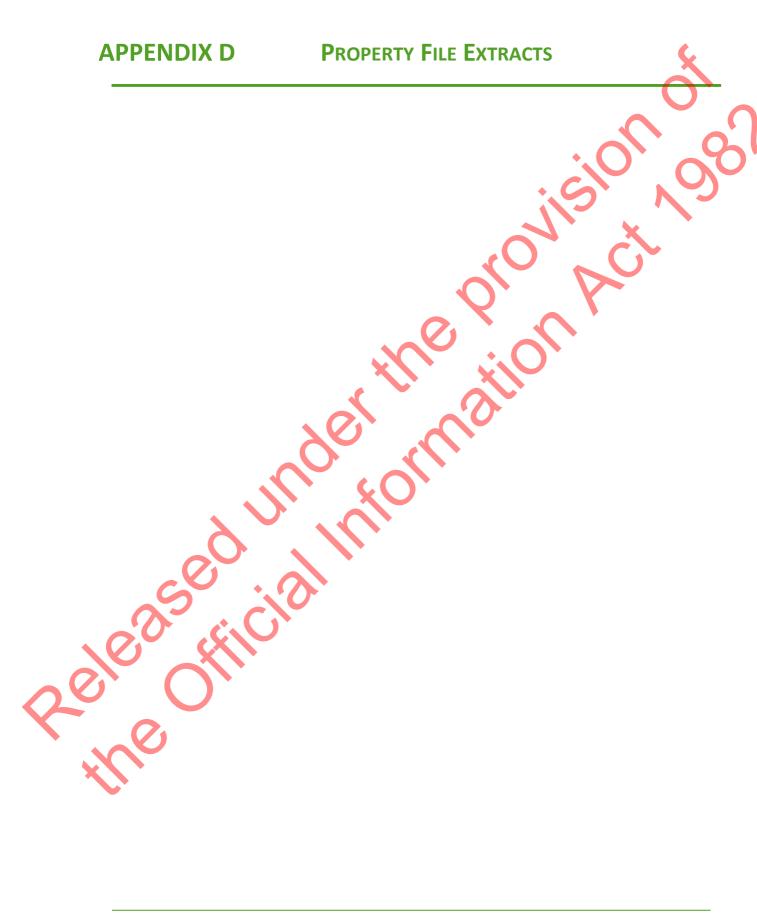


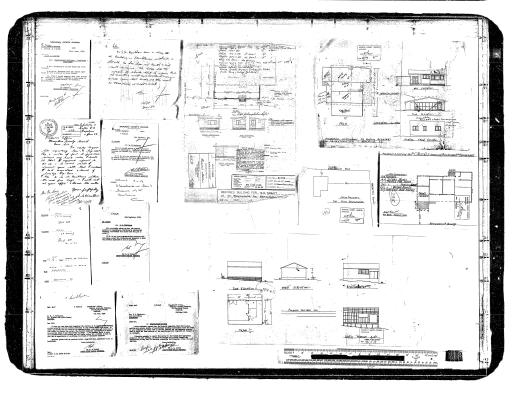
APPENDIX C

HISTORICAL AERIAL PHOTOGRAPHS

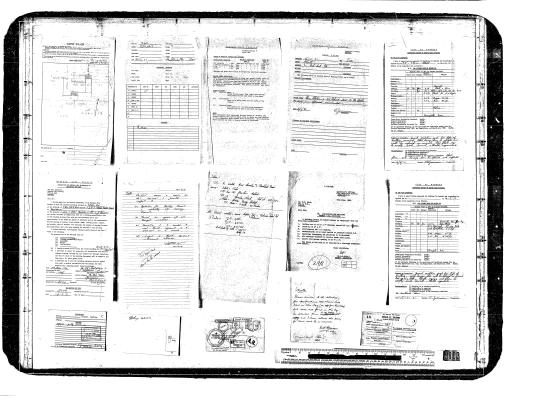




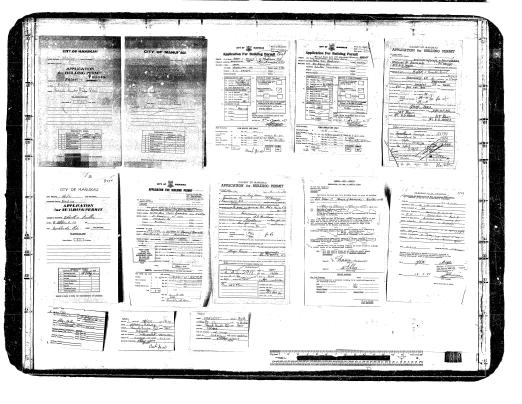




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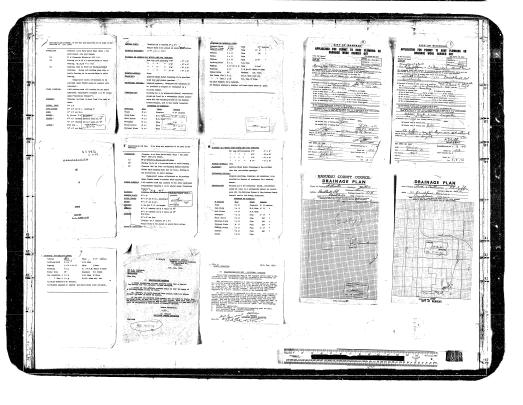
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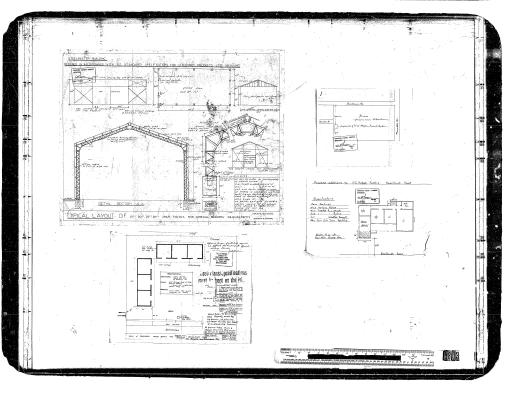
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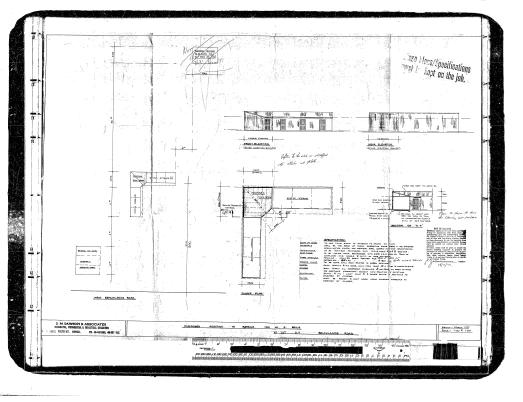
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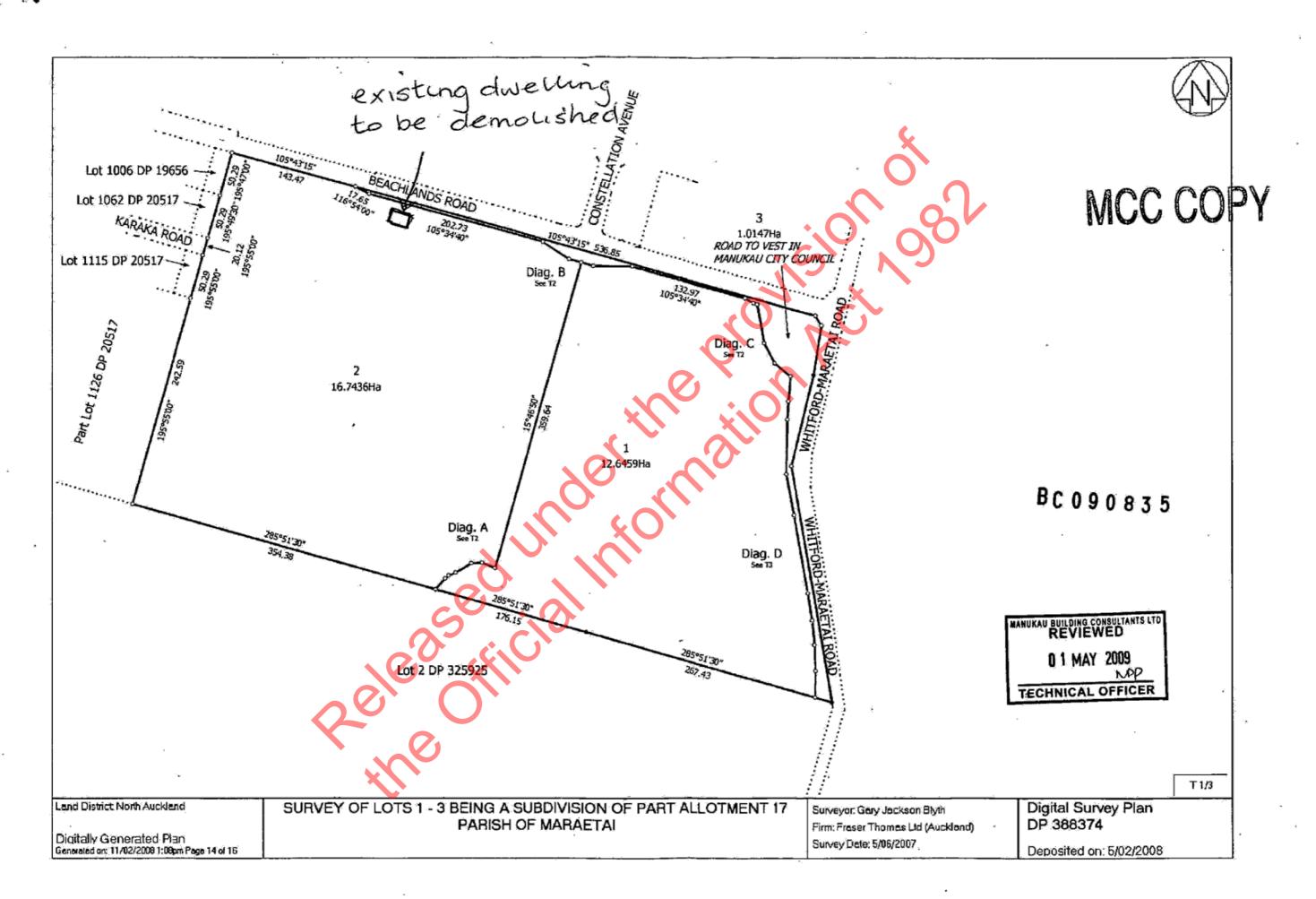


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MCC COP FARM PROPERTY Beachlands Rd Beachlands DP 388374 lemolition of existing dwelling



Environmental Services

12 August 2005

Project Consultancy Group Ltd. C/o SMLO Limited PO Box 96 177 Balmoral AUCKLAND

Attention: Adrian Low

Dear Sir.

DECISION ON AN APPLICATION FOR SUBDIVISION RESOURCE CONSENT

Applicant:

Project Consultancy Group Ltd

Application:

Restricted Discretionary Activity to subdivide a site into two allotments

with access or frontage onto the Primary Road Network.

Location:

109 Beachlands Road, Beachlands

Legal Description:

Part Allotment 17 Parish of Maraetai

MCC Reference:

SP 9072

Proposal No:

28143

Zone:

Special Rural 1 - Manukau Operative District Plan 2002

DECISION

I wish to advise that consent for the above application was granted on 12 August 2005 under delegated authority and pursuant to the provisions of Council's Operative District Plan 2002 and Sections 104, 104C and 108 of the Resource Management Act 1991 subject to the following conditions being completed to the satisfaction of Council and at no cost to the Council:

General

- That pursuant to Section 36 of the Resource Management Act 1991, this consent (or any part thereof) shall not be exercised until such time as all charges in relation to the receiving, processing and granting of this Resource Consent are paid in full.
- The subdivision shall be generally in accordance with the plans and information submitted with the application and numbered P28143 SP9072 by Council.

Reference: SP9072 Proposal 28143 Enquiries to Consent Co-ordinator – Euan Williams

Facsimile Extension 262-5109 5806

anaded a contravally

- 3. The land located within Lots 1 and 2 of the proposed subdivision that is designated for road widening and upgrading as shown on Map 61 of Council's Proposed Plan Change No. 8 Whitford Rural and as generally shown on the scheme plan of subdivision shall vest in the Manukau City Council as legal road.
- 4. Prior to Council's approval to the Land Transfer Plan pursuant to Section 223 of the Act, the final boundaries of the land to vest as road under condition 3 shall be approved by Council and shall be shown on the Land Transfer plan to the satisfaction of the Council's Manager of Transportation.

Advice Note:

Upon vesting of the legal road in the Council, the Council will reimburse the applicant for the land required to vest as road under conditions 3 and 4 in excess of the areas required to be vested without compensation for road widening under the provisions of the Manukau Operative District Plan 2002. The rate of reimbursement will be \$33.00 plus GST per square metre.

- 5. Upon the further subdivision or development of Lots 1 and 2, the owner(s) shall either:
 - (i) Upgrade the southern side of Beachlands Rd in accordance with the provisions of the Manukau Operative District Plan 2002; or
 - (ii) Make a financial contribution to Council for this upgrading, if undertaken by Council prior to the future subdivision and/or development of Lots 1 and 2.

This condition shall be registered as a consent notice on the Certificates of Title of Lots 1 and 2 pursuant to Section 221 of the Resource Management Act 1991 and at no cost to Council. This will also be recorded on Council's Land Information Register.

- 6. Upon the further development of Lot 1, the owner(s) shall either:
 - (i) Upgrade the western side of Whitford-Maraetai Road in accordance with the provisions of the Manukau Operative District Plan 2002; or
 - (ii) Make a financial contribution to Council for this upgrading, if undertaken by Council prior to the future development of Lot 1.

This condition shall be registered as a consent notice on the Certificate of Title of Lot 1 pursuant to Section 221 of the Resource Management Act 1991 and at no cost to Council. This will also be recorded on Council's Land Information Register.

7 Power and telephone services shall be installed underground within road reserve to provide service connections to the boundary of both lots.

The applicant shall supply completion certificates from the utility service providers and certified 'as builts' giving locations of all plinths, cables and ducts.

Financial Contributions

8. A Comprehensive Stormwater Discharge Levy of \$17,445.32 including GST shall be paid to Manukau City Council.

This levy (FC45) has been calculated at \$510 plus GST per hectare for the total area of this subdivision being of 30.4058 hectares.

 A Road Upgrading contribution of \$2,925.00 including GST shall be paid to Manukau City Council for the Beachlands Road / Whitford Maraetai Road intersection upgrading.

The contribution has been assessed at \$2,600 plus GST for the new additional lot.

All contribution rates shall be reassessed in accordance with the current Statistics NZ
Capital Goods Price Index for Other Construction-S2GC (for the previous year) if
payment is not made within 12 months of date of this consent.

Reserve Contribution

11. (a) A reserve contribution of \$43,875.00 including 12.5% GST being 6% (plus GST) of the average market value of a notional 2000m² building site on Lots 1 and 2, shall be paid within two years or prior to the issue of the Section 224 certificate for the subdivision, whichever is the sooner.

Note: The Reserve contribution payable specified above has been derived as follows:

Assessed average market value of a notional 2000m² building site on Lots 1 and 2:

\$650,000.00 (including GST)

Contribution: \$650,000.00 x 6% + GST

\$43,875.00 (including GST)

(b) If the reserve contribution determined in accordance with this condition has not been paid within two years of the date of this consent, the Council may at any time thereafter review this condition pursuant to Section 128 of the Resource Management Act 1991 to reassess the reserve contribution required by this condition on the basis of new valuation(s) undertaken at the time of review. Any such valuation shall be undertaken at the consent-holder's expense.

224 Certification

12. The above conditions shall be fully complied with, the Land Transfer plan number notified to the Council and a copy of the survey plan (showing co-ordinates) shall be supplied before a certificate is issued pursuant to Section 224c of the Act.

REASONS FOR THE DECISION

- The proposal merits consent pursuant to Section 104, 104C and 108 of the Resource Management Act and is not contrary to the relevant objectives and policies of the Manukau Operative District Plan (2002).
- 2. It is considered that the proposed subdivision will be consistent with the anticipated environmental results for the zone and the effects of the proposal on the surrounding environment will be no more than minor.

ADVICE NOTES

1. In accordance with Section 125 of the Resource Management Act 1991 this consent will lapse five years after the date on which it was granted unless it has been given effect to before the end of that period. However the Council does have the power to

extend this period in certain cases where a further application is made within three months of the date of expiry.

- The Council's Land Information Register will record the notations regarding financial contributions and road upgrading pursuant to Conditions 5 and 6 of this consent.
- Upon the further development of Lots 1 and 2, resource consent is required for access onto the Primary Road Network.

COSTS

- In addition to the consent charge for this consent, and pursuant to Section 36(1)(c) of the Resource Management Act 1991, an engineering administration and inspection charge, relating to the engineering conditions of the Resource Consent will be applicable (together with administration charges relating to the release of the subdivision) by determining all reasonable and actual costs incurred by Council. The actual charges incurred in the Council's field monitoring of the engineering works will be determined at the completion of works and will be payable prior to release. The applicant will be advised of the charges as they fall due.
- 2. The aforementioned fee is in addition to the normal fees and requirements as imposed by the Manager Building Consents & Compliance to the Building Consent.

RIGHT OF OBJECTION

Within 15 working days of receipt of this decision (commencement date stamped below) you may lodge an objection to the decision pursuant to Section 357(2) of the Resource Management Act 1991. Any such objection shall be made by notice in writing to the Council setting out the reasons for the objection and the relief sought.

Please note that from 1 October 1999 the Council requires a deposit fee of \$450 (inclusive GST) to accompany any objection relating to valuation figures, financial contributions and the provision of works associated with the provision of infrastructure. (Minute No. 1455/99).

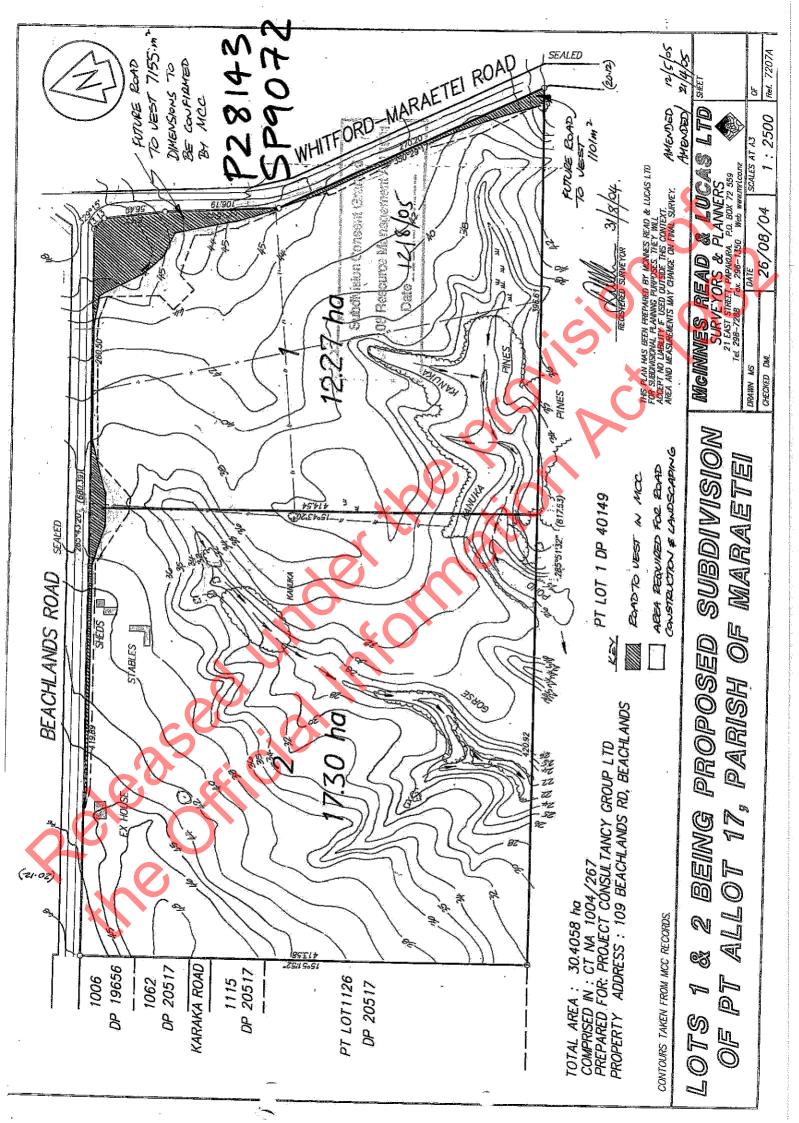
Any such objection may incur the reasonable costs of processing the objection above and beyond the deposit fee (Sec 36(3) of the Act).

Should you wish to enter into any future correspondence, building consent applications, or enquiries relating to this consent, could you please ensure that you include the file reference at the foot of page one of this letter.

Yours faithfully

Robert Chieng

Team Leader - Resource Consents ENVIRONMENTAL SERVICES





APPENDIX E

PREVIOUS INVESTIGATION EXTRACTS



ENVIRONMENTAL SERVICES

Internal Memo

TO

Mike Pritchard, Resource Management Planner

FROM

Tara Linkhorn, Environmental Scientist

DATE

17 May 2005

REFERENCE:

Proposal No 28143

SUBJECT

STAGE 1 PRELIMINARY SITE INSPECTION REPORT

ADDRESS: 109 Beachlands Road, Beachlands

Pt Allot 17 Parish of Maraetai

Introduction

A report on the investigation of potential contamination at the above-mentioned site prepared by Environmental & Earth Sciences Limited (EES) and dated April 2005 was received by this office on 13 May 2005.

The subject site consists of an area of 30.4 hectares (30,400 m²) and is located in the rural zone of Manukau City. The property is in pasture with some thick vegetation including trees along the major watercourses on the property. The owner of the property wishes to subdivide it into two fee simple parcels.

This Stage 1 Preliminary Site Inspection was undertaken in order to establish if any past or present potentially hazardous activities as listed on the HAIL index have been or are presently undertaken on the subject site.

Investigation Methodology

The methodology used for this site assessment consisted of:

- a) Desktop study
 - This involved the examination of current and historical aerial photographs of the site, the review of Manukau City Council (MCC) property records and a discussion with the current farm manager.
- b) Site inspection/walkover

A visual appraisal of the properties and the general vicinity in order to identify any disturbed and/or potentially contaminated areas.

a) Desktop Study

Aerial photographs of the site taken between 1985 and 2001 were reviewed for this investigation. In general, all the aerial photographs dated 1985, 1996 and 2001 show the site as grazing pasture land. The only structures that are evident are a small residential dwelling, a

number of used and disused horse stables and a rundown farm shed. There is also a stockyard along Beachlands Road.

The review of the historical information held at MCC revealed no information on any possible contamination of the property, nor were there any records indicating that dangerous goods or hazardous substances were stored on the property.

As the information obtained from the aerial photographs and from MCC did not provide any evidence that hazardous activities has occurred on site, the Auckland Regional Council's (ARC) site contamination database was not searched.

The discussion with the current farm manager confirmed that the site was part of a larger farm that was used for sheep farming. The rundown farm shed was the original sheep shearing and implement storage shed. Sheep farming on the property ceased somewhere in the 1960s or 1970s when cattle farming was introduced. The site is still used for cattle grazing while the stockyard behind the barn, which was possibly built during the 1950s or 1960s, is still being used to lad and transport cattle. A few horses are kept on the property also.

b) Site Inspection/Walkover

A site inspection was undertaken in order to confirm the information ascertained from the desktop study. At the time of the inspection the property was vacant and it was found that the site is predominantly covered in pasture species which appeared cropped, indicating recent grazing. The structures as previously discussed were in disuse and have not been maintained for a number of years.

The site inspection/walkover has confirmed the desktop information provided.

Conclusions

In their report, GES has provided a satisfactory investigation of potential contamination at the subject site that meets the relevant Ministry for the Environment guideline document Contaminated Land Management Guidelines: Reporting on Contaminated Sites In New Zealand (November 2003).

The desktop study and site walkover undertaken has indicated that the site has historically and recently been used for grazing purposes. The investigation has not identified any activities that would have resulted in contamination of the property.

MCC accepts Environmental & Earth Sciences Limited's conclusion that animal farming/grazing has occurred on the subject site and that the environmental impact resulting from animal grazing and the human health risk associated with contaminants from this landuse activity are regarded as negligible.

MCC agrees with EES that in light of the findings of the investigation, no further investigation of the property in relation to site contamination is required.

Recommendations

That the site be accepted as suitable for the intended development based on the report provided by Environmental & Earth Sciences Limited.

Tara Linkhorn
Environmental Scientist
ENVIRONMENTAL SERVICES



Private Bag 76917 Manukau City

> New Zealand DX EP75557

Ph 09 263 7100

Fax 09 262 5151

www.manukau.govt.nz

Environmental Services

17 May 2005

Project Consultancy Group Limited P O Box 58 672 Greenmount AUCKLAND

Attention: Mike Joseph

Dear Sir

109 BEACHLANDS ROAD, BEACHLANDS - STAGE 1 PRELIMINARY SITE INSPECTION REPORT

COUNCIL'S REFERENCE: PROPOSAL NUMBER 28143

I refer to the above-mentioned report on investigation of potential contamination at 109 Beachlands Road, Beachlands (Pt Allot 17 Parish of Maraetai) that was prepared by Environmental & Earth Sciences Limited, dated April 2005 and received by this office on the 13 May 2005.

I have reviewed the report and based on the information provided, Manukau City Council accepts the conclusion reached by Environmental & Earth Sciences Limited that animal farming/grazing has occurred on the subject site and that the environmental impact resulting from animal grazing and the human health risk associated with contaminants from this landuse activity are regarded as negligible.

The property is therefore considered suitable for the proposed landuse subject to compliance with all other building and planning rules. No further information or action is required with regard to site contamination issues at this property.

If you have any further queries, please do not hesitate to contact the writer on $s \cdot 9(2)(a)$ $s \cdot 9(2)(a)$

Yours sincerely

Tara Linkhorn

Environmental Scientist ENVIRONMENTAL SERVICES

cc: SMLO Limited

P O Box 96 177

Balmoral AUCKLAND

Attention: Adrian Low

Environmental & Earth Sciences Limited

P O Box 35853

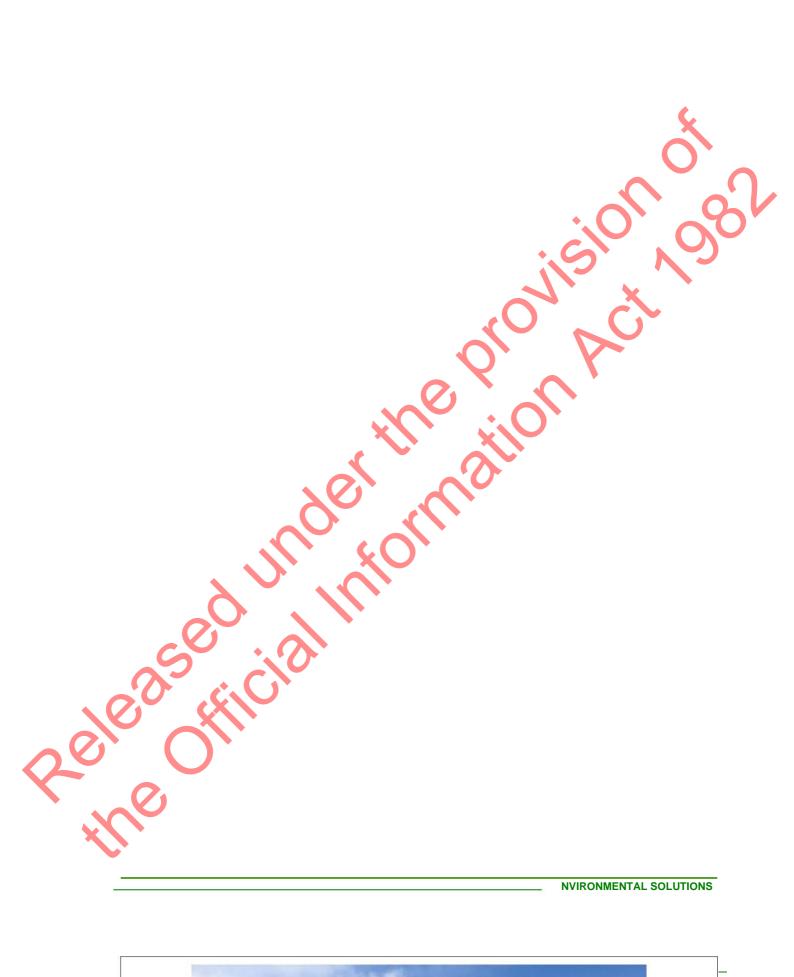
Browns Bay

AUCKLAND

Attention: Johan Faurie



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NVIRONMENTAL SOLUTIONS



PLATE 21: REAR OF STABLE BLOCK, NEWER ADDITION TO BLOCK



PLATE 22: REAR OF STABLE BLOCK, ORIGINAL SECTION WITH RESIDUAL PAINT ON EXTERIOR SURFACE