



SOUTHERN LINK 1: INDUSTRIAL DEVELOPMENT AREA A – CONTAMINATED SOILS AND REMEDIATION ACTION PLAN

Prepared by Swiftsure Consultants Ltd

30 August 2026

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Swiftsure Consultants Ltd Document Control:

Report Title	Southern Links 1: Industrial Development Area A - Contaminated Soils Management & Remediation Plan		
Client	Industre Property Tahī Ltd	Client Contact	Dillon Kelliher
Date	Revision Details / Status		
30 August 2026	Final for Release		

SQEP Certifying Statement

I certify that the site has been assessed in accordance with current New Zealand Regulations and guidance documents and reported in general accordance with the Ministry for the Environment's Contaminated Land Management Guidelines No. 1: Reporting on Contaminated Sites in New Zealand (dated 2021).

I am considered by Swiftsure Consultants Ltd Limited to be a suitably qualified and experienced practitioner (SQEP) able to certify reports pursuant to the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011.

Emma Lewis, Contaminated Land Specialist



Dated: 30 August 2026

1 Introduction

This Contaminated Soils Management and Remediation Action Plan (CSMRAP) relates specifically to Area A of the SL1 Industrial Development, comprising the land owned by Industrie Property Tahī Limited. Area A includes Lot 1 DP 584573, with an area of approximately 7.89 ha and addresses of 160 and 162 Higgins Road, and Lot 1 Deposited Plan 396081 and Lot 1 DP 486522, with a combined area of approximately 2.0007 ha and comprising the eastern parcel off Wickham Street. For the purposes of this CSMRAP, references to “the site” herein relate specifically to Area A and the land parcels described above (refer to **Figure 1**). The remediation and contaminated land management measures set out in this CSMRAP apply only to Area A and do not apply to the adjoining land owned by Southpark Agri Development Limited.

2 Project Description

The SL1 Industrial North development forms part of the industrial component of Southern Links 1, a listed project under FTAA 2024. The Southern Links 1 project is a combined 106ha development, including residential and industrial activities. The industrial component comprises circa 60ha and is in joint landownership and is currently used for a mix of rural and related activities. The landholding includes four parcels Lot 2 Deposited Plan 603134, Lot 1 Deposited Plan 603134 both within Southpark Agri Development Limited landholdings (circa 50ha), and Lot 1 Deposited Plan 584573 Industrie Property Tahī Limited and S&S Property Investments Limited (7.8ha) and Lot 1 Deposited Plan 396081 and Lot 1 Deposited Plan 486522 within Industrie Property Tahī Limited landholding (2.1ha).

The proposal seeks approval for a Substantive Application under the Fast-Track Approvals Act 2024 for a comprehensively master planned and staged industrial development. This includes all necessary resource consents under the Resource Management Act 1991, including regional, district approvals where required.

The industrial component provides for the establishment of 60ha gross developable industrial land, together with associated infrastructure and services, including roading and associated stormwater ponds. The proposed industrial development is underpinned by a series of design principles, with a focus on creating a functional, efficient and contiguous industrial development that underscores the locational attributes of SL1 Growth Cell, the Hamilton Southern Links designation and future industrial growth. An integrated roading network which connects to both existing and planned infrastructure underpins this approach.

The 22 serviced industrial lots vary in size and attributes to support a range of industrial uses, none of which are heavy or noxious. A truck and logistics activity is proposed on lot 7 to facilitate the landowners existing national trucking operation. All other industrial lots are sized to support a range of anticipated and provided for industrial activities, underpinned by bulk and location controls.

The proposal includes substantial enabling works to establish developable land, including bulk earthworks across the site and necessary pre-load to manage ground conditions. An integrated stormwater management system including wetlands, detention/attenuation devices and treatment ponds supports the development.

Access and integration with the surrounding Hamilton area is provided through connected transport framework, including the establishment of intersections, roading, and walking and cycle networks, along with upgrades to existing transport infrastructure. The industrial development is proposed to be serviced

via a coordinated strategy, including the extension of public networks, upgrades, and installation of appropriate infrastructure.

3 Objective and Scope

The objective of this CSMRAP is to set out the procedures to be implemented during site development to manage the disturbance, handling, and movement of soils within the development area, with particular regard to identified contaminated soils.

This CSMRAP and information provided herein is with regards to areas excluding the fill mound and paddocks only.

This CSMRP is intended to function as a live document and shall be used to guide the contractor in the application of good practice measures for the management of contaminated soils during all ground disturbance activities. The CSMRAP may be reviewed and updated as necessary throughout the course of the works in response to site observations, changing ground conditions, or the identification of additional risks, to ensure that potential human health and environmental risks associated with contaminated soils are appropriately managed. In the event of an unexpected discovery, procedures may require modification or supplementation to address the nature and extent of the material encountered.

Any amendments to this CSMRP shall be reviewed and approved by the Contaminated Land Specialist (CLS) prior to implementation.

This CSMRAP sets out the procedures for managing the contaminants of concern identified in the Swiftsure Detailed Site Investigation (March, 2026). This CSMRP has been prepared in general accordance with the following documentation:

- Ministry for the Environment's (MfE's) Contaminated Land Management Guidelines No.1 – Reporting on Contaminated Sites in New Zealand (MfE, 2021).
- Ministry for the Environment's (MfE's) Contaminated Land Management Guidelines No.5 – Reporting on Contaminated Sites in New Zealand (MfE, 2021).
- Approved Code of Practice: Management and Removal of Asbestos (2016) (AcoP, 2016).
- New Zealand Guidelines for Assessing and Managing Asbestos in Soil (2017) (GAMAS, 2017).



4 Detailed Site Investigation

A Detailed Site Investigation (DSI) was undertaken to determine whether site is a 'piece of land' subject to the NES-CS as well as the Waikato Regional Plan, and to assess the potential risk to human health and the environment. The DSI was for the wider site – this CSMRAP and information provided herein is with regards to areas excluding the fill mound and paddocks only. Refer to **Appendix B** for the extent of the site.

4.1 Desk Study Review

Historical aerial imagery indicates the site was largely undeveloped in 1943, consisting primarily of dense scrub and natural vegetation, with surrounding land used for rural farming. By 1971–1974 the vegetation had been cleared and the land subdivided into paddocks, indicating use for pastoral or arable farming. Minor earthworks were visible in the north-western portion of the site by the mid-1970s.

Historical aerial photographs from the late 1980s to early 1990s, show development began to occur in the surrounding area. Large-scale earthworks and land disturbance were evident in the north-eastern portion of the site by 1990, with access tracks and nearby buildings associated with adjacent activities such as the horse racing track. Through the 1990s and 2000s, the site experienced increasing soil disturbance, filling, and development, including stockpiling of materials, and the establishment of yard areas. By 2015 the central portion of the site contained stockpiles of material, while the western portion had been developed into laydown and storage yards. The eastern half continued to show signs of significant land disturbance and filling.

Council records indicate several investigations have been undertaken at the site and have Hazardous Activities and Industries List (HAIL) notations associated with activities such as waste management, timber treatment, transport depots, and fill sites. Waipā District Council also noted that parts of the wider site area have consent to receive construction, demolition, and industrial fill, with past compliance issues resulting in an abatement notice in respect of the area of fill referred to as “Latham’s Mountain”.

Previous investigations undertaken by Pattle Delamore Partners (2019) at 16A Wickham Street identified HAIL-related activities and detected some heavy metals, petroleum hydrocarbons (TPH), and polycyclic aromatic hydrocarbons (PAHs) in soil. Contaminant concentrations were generally within acceptable limits for commercial/industrial land use, although elevated arsenic was identified in one stockpile requiring management. No asbestos was detected in analysed samples. Ground conditions were described as mixed fill overlying organic peat soils with shallow groundwater.

Additional investigations confirmed that while some contaminants were present at low concentrations, risks to human health and environmental receptors were generally considered low, provided appropriate site management measures are implemented during redevelopment. Recommendations included removal and appropriate disposal of contaminated stockpiled material, preparation of a Contaminated Site Management Plan (CSMRP), and potential additional testing if soil is removed from the 16A Wickham Street site.

A Preliminary Site Investigation undertaken by HD Geo (2020) at 160 Higgins Road assessed proposed earthworks associated with a cleanfill facility. This was in relation to the wider area – specifically the large fill mound to the west. The facility reportedly accepts only non-contaminated materials and operates with controls such as fencing, locked gates, and inspection of incoming loads. Based on the desktop review, site inspection, and available information, the risk of contamination was considered

low, and the proposed earthworks were considered a permitted activity under the NESCS provided a CSMRAP is implemented.

A recent site visit confirmed the Site is currently used for light industrial and rural activities. Land uses include transport and storage yards, container storage, landscaping supplies, heavy machinery storage, and multiple laydown areas.

In terms of the wider Site, significant areas of fill and stockpiled materials were observed, including a large, vegetated mound known locally as “Latham’s Mountain.” Waikato Regional Council reported that a resource consent was held for *“Authorisation to Place up to 35,000 cubic metres per year of construction, demolition & industrial waste into & onto land”*.

Additional observations included numerous material stockpiles, an above-ground fuel tank with staining on the ground surface nearby, an artificial watercourse adjacent to the northern boundary of the yards, and portacabin-style structures used for site operations. Overall, the site reflects a long history of rural use followed by progressive filling, storage, and industrial yard activities.

4.2 Soil Investigation

Soil sampling was undertaken on 3 and 4 February 2026. Sample locations are included as **Appendix C**. Samples were obtained using a combination of hand augering, shallow test pitting and deeper mechanical test pitting. Seven hand augers were advanced in areas where there was no hard seal ground cover. Fifteen test pits were advanced in the compounds, transport yard and laydown areas.

The following key observations were during the site investigation:

Transport Yard

- The transport yard was covered with a gravel cap noted to be potholed in several locations.
- Hydrocarbon staining was noted on the surface gravels in several locations.
- Fill material extended to ~0.5m blg which was underlain by an organic and silty gravelly clay in some locations.

Storage Yards

- The yards were covered with ~0.3m of compacted basecourse/gravel.
- Fill material extended to ~0.5m blg which was underlain by an organic and silty gravelly clay in some locations.
- Hydrocarbon staining was noted on the surface gravels in several locations.

Green Waste Facility (HCC)

- The existing building had deteriorated building paper lining the roof that had the potential to contain asbestos.
- Chemicals were stored in the building associated with the compost manufacturing process.
- Fill extended to ~1m bgl in the majority of locations.

- General waste materials as well as concrete, brick and building materials were noted in several locations.

Filling Site

- The area was actively being filled by truck & trailer during the investigation.
- Multiple piles of millings and concrete were noted.
- Various fill observations extended to ~1m bgl.

4.3 Results

A summary of the results is as follows:

Heavy Metals

- Samples from 0.1m bgl and 0.3m bgl from TP10 exceeded the adopted environmental criteria for zinc. This was from the storage yard area.
- All soil sample results comply with SCSs and other SGVs for commercial / industrial land-uses.
- Heavy metals exceeded Waikato region background ranges variously across the investigation area.

Organics

- There were no detections of semi volatile organic compounds (SVOCs) in any samples.
- Polycyclic Aromatic Compounds (PAHs) were detected in several samples from shallow depths ranging from 0.1m bgl to 0.4m bgl.
- One sample reported TPH (C10-C14) concentrations above the Tier 1 Petroleum Guidelines All Pathway Criteria and LandCare Research Eco-SGVs for commercial/industrial landuse.
- Five samples reported TPH (C15-C36) concentrations above the Tier 1 Petroleum Guidelines All Pathway Criteria LandCare Research Eco-SGVs for commercial/industrial landuse.
- A maximum concentration for Total TPH of 30,000mg/kg in sample AS01 from a depth of 0.1m bgl.

Asbestos

- No soil samples exceeded the adopted human health criteria for asbestos. No ACM was observed during the course of the site work.

Summary

Soils in the investigation area were observed to comprise of basecourse gravels, underlain by mixed fill and organic peat soils. No evidence of refuse, construction and/or demolition waste (other than concrete and asphalt), or ACM was encountered in the underlying fill/soils at any of the locations investigated.

Hydrocarbon concentrations exceeding the Soil Contaminant Standards (SCSs) and Soil Guideline Values (SGVs) were identified in shallow soils in the storage yard and will require remediation or management as part of site redevelopment.

All other soil samples generally complied with the relevant SCSs and SGVs and are therefore considered unlikely to pose a risk to human health in the context of the current or proposed future site use. The only exception was an elevated zinc concentration identified in one location within the storage yard area.

Polycyclic aromatic hydrocarbons (PAHs) were detected at low but measurable concentrations in several samples across the investigation area, primarily within surface and stockpiled soils. However, all reported PAH concentrations were below the relevant human health criteria for commercial/industrial land use and are not considered to present a risk to human health.

Overall, the results indicate that the soils at the site are unlikely to represent a significant contamination source capable of generating ongoing contaminant discharges within the site or beyond the site boundary.

5 Site Description

5.1 Site Details and Layout

Table 1 provides a summary of details relating to the site. **Appendix B** shows the location of the site.

Table 1: Site Details

Item	Description
Physical address	160 and 162 Higgins Road No address, eastern parcel off Wickham Street
Legal description	• Lot 1 DP 584573 • Lot 1 Deposited Plan 396081 and Lot 1 DP 486522
Relevant authorities	Waikato Regional Council Waipā District Council
Current use	Laydown areas, storage facilities.

6 Published Geology

6.1 Geology and Hydrogeology

Geological maps¹ for the area depict the regional geology for the low-lying areas as comprising Holocene peat deposits. The peat is underlain by interbedded Silts and Sands of the Late Pleistocene aged alluvial deposits of the Hinuera formation, which is underlain by Early Pleistocene aged, fluvially reworked igneous silt/clay of the Walton Subgroup Formation which also form the base of the nearby hills.

The geotechnical investigation for the area² states that the site contains areas of gravel yards, material stockpiles, and pastureland overlying Peat, Hinuera Silts/Sands and Walton Subgroup Silts and Clays. The topography is generally level between RL38 and 41. However there are large uncontrolled fill and excavations onsite ranging between RL36 m up to RL61. The regional groundwater table is generally within 3 metres of the surface. It states that the ground conditions encountered during the site investigations were generally consistent with the published geology with the exception of imported gravel fill in the gravel yard areas. CMW summarised the strata as follows:

Table 2: Geology Summary

Geology	Unit Description	Top of Unit (m bgl)		Thickness (m)	
		Min	Max	Min	Max
Uncontrolled fill (Gravel Yard/Latham's Mountain)	Stiff to very stiff Clayey Silt and medium dense Sand	0.0	0.2	0.5	3.2*
Peat (swamp deposits)	Firm to very stiff fibrous organic Peat	0.1	1.0	0.3	12.0
Hinuera Formation	Loose to medium dense Sand with interbedded stiff to very stiff Silt, and lenses of Organic Silt	0.1	7.0	3.3	17.5

¹ Geological Map of New Zealand: 1:125K. Institute of Geological and Nuclear Sciences Ltd, 2010.

² Geotechnical Investigation Report: Southern Links Industrial Stage 1 – Resource Consent/Substantive Fast Track Application, CMW, 17 June 2026

Geology	Unit Description	Top of Unit (m bgl)		Thickness (m)	
Walton Subgroup	Stiff to very Stiff Silt and Dense to Very dense Sand	5.2	19.8	0.2	>14.8

*Note: unable to penetrate to full depth, based on contours likely to be ~19m thick in the construction waste site

There are 7 bores within 500m of the site as follows:

Table 3: Bore Information

Bore ID	Static Water Level (m)	Status
Bore 72 - Station 7946	4.5	Existing
Bore 72 - Station 1349	1.0	Existing
Bore 72 - Station 1348	1.0	Existing
Bore 72 - Station 1347	2.0	Existing
Bore 72 - Station 2039	-	Existing
Bore 72 - Station 13319	-	Existing
Bore 72 - Station 1346	0.5	Existing

6.2 Geomorphology

Existing geotechnical assessments for the SL1 area³ state that the site is within a wetland/alluvial plain and that this landform is defined by an essentially level to gently undulating plain at between RL43m and RL35m (Moturiki Datum) that lies to the west of the Low Hamilton Hills. The report states that the plains are often crossed with a network of open drains which are typical of farmland in peat areas. Most of the site is low-lying flat farmland.

6.3 Groundwater

The Geotechnical report² prepared for the wider area states that groundwater was encountered between 0.0m to >16.2m below the existing ground surface at time of testing. Groundwater within the Low Hamilton Hills areas is expected to get closer to the ground surface the lower in elevation the ground surface is. Perched groundwater tables can be present within the layered Walton Subgroup deposits.

7 Conceptual Site Model

A conceptual site model (CSM) has been developed to assess the potential exposure pathways present at the site. A contamination conceptual site model consists of three primary components. For a contaminant to present a risk to human health or an environmental receptor, all three components are required to be present and connected. The three components of a conceptual site model are:

- Source of contamination.
- An exposure route, where the receptor and contaminants come into contact (e.g. ingestion, inhalation, dermal contact).
- Receptor(s) that may be exposed to the contaminants.

The potential source, pathway, receptor linkages at this subject site are provided in **Table 4** below

Table 4: Conceptual Site Model

Source	Contaminant of Concern	HAIL Code	Exposure Pathway	Potential Receptor	Pathway Complete?
Hydrocarbon use and storage/bitumen emulsion and chemical containers Above ground fuel tank	Hydrocarbons Heavy metals	A.17 Storage tanks or drums for fuel, chemicals or liquid waste.	Exposure of workers to contaminants in soils and groundwater during site redevelopment – dermal contact, ingestion or inhalation of dust/vapours.	Construction workers.	Complete Pathway – Contaminants in soils are at levels to pose a risk to human health.
			Exposure of future site users to contaminants in soils – dermal contact, ingestion or inhalation of dust/vapours.	Future site users.	Complete Pathway – Contaminants in soils are at levels to pose a risk to human health.
			Exposure of general public to contaminants in soils– dermal contact, ingestion or inhalation of dust/vapours.	General public.	Incomplete Pathway – General public do not have access to the site.
			Groundwater resources for public consumption.	Leaching and migration of soil contaminants into groundwater.	Potential Pathway – Contaminants in soils may be at levels to have the potential to leach. Leachability testing would confirm this.

Source	Contaminant of Concern	HAIL Code	Exposure Pathway	Potential Receptor	Pathway Complete?
			Surface water	Sediment and runoff directly into surface water.	Potential Pathway – Contaminants may be at levels to have the potential to leach to adjacent stormwater channel. Leachability testing would confirm this.
Transport yard including bitumen yards	Wide variety of chemicals, dependent on products being transported. Includes hydrocarbons	F.8 Transport depots or yards including areas used for refuelling or the bulk storage of hazardous substances	Exposure of workers to contaminants in soils and groundwater during site redevelopment – dermal contact, ingestion or inhalation of dust/vapours.	Construction workers.	Complete Pathway – Contaminants in soils are at levels to pose a risk to human health.
			Exposure of future site users to contaminants in soils – dermal contact, ingestion or inhalation of dust/vapours.	Future site users.	Complete Pathway – Contaminants in soils are at levels to pose a risk to human health.
			Exposure of general public to contaminants in soils– dermal contact, ingestion or inhalation of dust/vapours.	General public.	Incomplete Pathway – General public do not have access to the site.
			Groundwater resources for public consumption.	Leaching and migration of soil contaminants into groundwater.	Potential Pathway – Contaminants in soils may be at levels to have the potential to leach. Leachability testing would confirm this

Source	Contaminant of Concern	HAIL Code	Exposure Pathway	Potential Receptor	Pathway Complete?
			Surface water	Sediment and runoff directly into surface water.	Potential Pathway – Contaminants may be at levels to have the potential to leach to adjacent stormwater channel. Leachability testing would confirm this
Filling activities	PAHs Heavy metals Asbestos	G.5 Waste disposal to land (excluding where biosolids have been used as soil conditioners)	Exposure of workers to contaminants in soils and groundwater during site redevelopment – dermal contact, ingestion or inhalation of dust/vapours.	Construction workers.	Incomplete Pathway – Contaminants in soils are not at levels to pose a risk to human health.
			Exposure of future site users to contaminants in soils – dermal contact, ingestion or inhalation of dust/vapours.	Future site users.	Incomplete Pathway – Contaminants in soils are not at levels to pose a risk to human health.
			Exposure of general public to contaminants in soils – dermal contact, ingestion or inhalation of dust/vapours.	General public.	Incomplete Pathway – Contaminants in soils are not at levels to pose a risk to human health.
			Groundwater resources for public consumption.	Leaching and migration of soil contaminants into groundwater.	Incomplete Pathway – Contaminants in soils are not at levels to pose a risk to groundwater

Source	Contaminant of Concern	HAIL Code	Exposure Pathway	Potential Receptor	Pathway Complete?
			Surface water	Sediment and runoff directly into surface water.	Incomplete Pathway – Contaminants in soils are not at levels to pose a risk to surface water

8 Management Procedures

This section sets out the general requirements for the management of contamination during site works.

Implementation of this CSMRP shall be mandatory for the duration of the bulk earthworks.

- All personnel involved in earthworks or ground disturbance activities shall be familiar with the requirements of this CSMRAP and shall comply with its provisions at all times.
- A current copy of this CSMRP shall be kept onsite and readily accessible for reference during the works.
- This CSMRAP has been prepared to assist the Contractor in managing risks associated with potentially contaminated soils, including risks to human health and the environment. It does not replace general construction health and safety requirements and does not remove the Contractor's legal or statutory obligations.
- Site works, including excavation, demolition, and construction activities, may also be subject to additional regulatory requirements, approvals, and controls under the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES-CS). All applicable consent conditions and regulatory requirements shall be complied with.
- This CSMRP is expected to form part of the management framework for any excavation or soil disturbance works undertaken at the site to ensure contamination-related risks are appropriately controlled.
- Overall responsibility for implementation of this CSMRAP shall rest with the site owner. Day-to-day compliance with the requirements of this CSMRP shall be the responsibility of the site Contractor, unless otherwise agreed.

9 Roles and Responsibilities

Table 5: Roles and Responsibilities

Role	Responsibility
Site Owner	To distribute this RAP and be responsible for ensuring that the site works are undertaken in accordance with this document and any revisions to this document.
Contractor TBC	The Contractor will be required to ensure that personnel involved in the site works are made familiar with this plan prior to commencing work on the site, and that there be regular reminders about its requirements. The requirements within in this plan should be followed at all times.
Contaminated Land Specialist Swiftsure Consultants Ltd	A suitably qualified and experienced practitioner (SQEP/Contaminated Land Specialist) as defined in the NES-CS, should liaise with the contractor during the course of the works. The Contaminated Land Specialist will provide specialised contaminated land support to the Site Owner and Site Contractor and will be responsible for undertaking site supervision, validation sampling of remedial activities completed, and for preparation of a Soil Validation Report (SVR) at the completion of works.

10 Remedial Works

Remedial earthworks will be necessary to remove the two hydrocarbon hotspots in the storage yards identified as containing contaminants above the adopted human health and environmental criteria. The impacted material is confined to the shallow soils.

10.1 Purpose of Remedial Works

The remedial strategy selected for the identified contamination site is removal of soil that has been identified as containing contaminants above the adopted human health and environmental criteria.

The approximate remedial area is shown on the figure in **Appendix C**.

10.2 Remedial Volume Estimate

The area of hydrocarbon impacted fill has not been fully identified. The table below provides an approximate area and depth of the fill based on conservative assumptions and site topography. Validation sampling will confirm all contaminated material has been removed upon completion of earthworks.

Table 6: Remedial Volume Estimation

Remedial Area	Sample Exceeding Relevant Criteria	Analyte Exceedance	Estimated Impacted Area (m ²)	Estimated Vertical Extent of Impacted Material (m bgl)	Estimated Volume to be Remediation (m ³)
Hydrocarbon contamination	TP10/1 AS01 AS04 AS05	TPH	4	0.0 - 0.3	1.2

10.3 Remedial Methodology

Remedial excavation of hydrocarbon-impacted soils shall be undertaken in advance of bulk earthworks to ensure that identified contamination is removed prior to wider site development activities. Impacted soils shall be excavated under the supervision of the CLS and transported off-site to an appropriately licensed or consented disposal facility.

The CLS shall be present during excavation to monitor the works and assess the extent of contamination based on field observations, including visual evidence, hydrocarbon odour, soil discolouration, staining, and any other indicators of petroleum hydrocarbon impact. Excavation shall continue until the CLS considers that all reasonably practicable hydrocarbon-impacted material has been removed.

Following completion of the remedial excavation, validation soil sampling shall be undertaken to confirm that the remediation objectives have been achieved and to verify the extent of any residual contamination. Validation sampling shall be undertaken in general accordance with the Ministry for the Environment (MfE) Oil Industry Guidelines⁴ with sampling locations determined having regard to the dimensions of the excavation, observed contamination extent, and relevant contaminant distribution.

10.4 Assessment Criteria

The following guidelines were used to provide remedial criteria for future site users:

Human Health Criteria

- Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand, MfE, 1999. Soil results should be compared to the Tier 1 soil assessment criteria for 'All Pathways'. The Tier 1 soil acceptance criteria via All Pathway. A "sand" soil type of <1 m bgl should be applied for comparison with the relevant criteria for the soil samples, as it is considered to best typify the nature of the soils encountered at the site.

Environmental Criteria

- Assessment of potential ecological risk associated with site soils should be used with reference to the draft ecological soil guideline values (Eco-SGVs) published by Landcare Research (2019). The

⁴ Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand, MfE, 1999

commercial/industrial land use category, based on 60% species protection, is considered the most appropriate assessment criterion with regards to the current site conditions and the proposed future land use.

10.5 Soil Validation

Validation soil sampling shall be undertaken following completion of remedial excavation to confirm that hydrocarbon-impacted soils have been removed to the extent practicable and that the remediation objectives have been achieved.

Validation samples shall be collected from the base and sidewalls of the excavation under the supervision of the CLS, prior to any backfilling or reinstatement. The number and distribution of validation samples shall be determined by the CLS based on the excavation dimensions, observed extent of contamination, and field observations recorded during the works.

Samples shall be submitted to an IANZ-accredited laboratory for analysis of the relevant contaminants of concern. Analytical results shall be assessed against the adopted human health and environmental assessment criteria applicable to the site.

Where validation results indicate that residual contamination remains above the adopted criteria, the CLS shall determine whether additional excavation or other management measures are required.

All validation works, including sample locations, field observations, analytical results, and remediation outcomes, shall be documented in the validation reporting prepared following completion of the remedial works.

11 Site Management Practices and Controls

The controls in this section shall be implemented during all ground-disturbing works, unless otherwise directed by the CLS.

These controls shall be reviewed regularly by the Site Supervisor and updated as required based on site conditions, the identification of contaminated material, or completion of remediation works. Any changes to the required controls shall be communicated by the CLS.

11.1 Site Control Procedures

11.1.1 Boundary Controls

Earthworks areas shall be secured using temporary fencing and warning signage to prevent unauthorised access.

11.1.2 Sediment Controls

Appropriate erosion and sediment controls shall be installed and maintained throughout the works in accordance with Waikato Council GD2016/005. As a minimum, controls shall include:

- Stabilised site entrance.
- Perimeter sediment controls (e.g. silt fencing).
- Stormwater inlet protection where required; and

- Separation of clean and dirty work areas.

11.1.3 Soil Management

Within contaminated or potentially contaminated areas, soils shall be handled in a manner that prevents spills, runoff, tracking, and cross-contamination.

Trucks transporting contaminated or potentially contaminated material shall be loaded in a designated area and all loads shall be securely covered prior to leaving the site.

Outside identified remedial areas, disturbed soils may remain on-site where suitable and where consistent with this CSMRAP.

11.1.4 Stockpiling

Temporary stockpiling of contaminated or potentially contaminated soils shall be avoided where practicable.

Where stockpiling is required, stockpiles shall be managed by:

- Wetting down to suppress dust.
- Covering where left overnight or during dry/windy conditions; and
- Using bunding and sediment controls where required.

11.1.5 Off-site Disposal

Soils requiring off-site disposal shall be taken to a facility authorised to accept the material.

Any testing required by the receiving facility, including waste classification and TCLP testing, shall be completed prior to disposal where necessary.

11.1.6 Equipment Decontamination

Machinery used in contaminated areas shall be cleaned in a designated wash-down area before leaving the work area.

Wash water shall not be discharged off-site and shall be contained within the site.

11.2 Health and Safety Protection Measures

11.2.1 General

All workers and visitors entering the work area shall:

- Complete a site induction.
- Be informed of contamination-related hazards.
- Avoid unnecessary contact with soils; and
- Wash hands before eating, drinking, vaping, or smoking.

Any health and safety incidents shall be reported to the Site Supervisor or nominated health and safety representative.

11.2.2 PPE

Additional PPE shall be used where there is potential exposure to contaminated soils, dust, or splashes.

Depending on site conditions, this may include:

- Dust masks / respirators.
- Gloves.
- Coveralls / disposable overalls.
- Safety glasses / goggles.

11.3 Environmental Management Procedures

11.3.1 General

All environmental incidents, including spills, leaks, runoff, and sediment control failures, shall be reported to the Site Supervisor and addressed immediately.

11.3.2 Dust

Dust shall be managed through appropriate suppression measures, including:

- Limiting vehicle movements on exposed soils.
- Wetting exposed surfaces.
- Use of covers or wind protection where necessary; and
- Suspension of works where dust cannot be adequately controlled.

11.3.3 Odour

If odorous soils are encountered, odour controls shall be implemented. These may include:

- Covering material.
- Minimising exposure time; and
- Prompt removal or containment of odorous soils.

11.3.4 Stormwater

Uncontrolled stormwater discharge from disturbed or contaminated areas shall not be permitted.

Any failure of erosion or sediment controls shall be rectified immediately, and any contaminated water shall be contained and managed appropriately.

11.4 Imported Fill

If imported fill is required to be used at the site, it shall meet the Waste Management Institute of New Zealand technical guidelines for disposal to land⁵ which defines clean fill material as Virgin Excavated Natural Material (VENM) such as clay, soil and rock that are free of combustible, putrescible, degradable or leachable components.

11.5 Unexpected Discovery

Should any unanticipated contaminated material be uncovered during earthworks, works shall stop in that area and CLS shall be called out to assess the potential risk and advise on what measures should be taken to manage the soil in that area. Typical indicators of contamination include but are not limited to:

- Buried waste (for example drums or tanks with unknown liquid).
- Odour (petroleum hydrocarbons, oil).
- Discoloured soil (black, purple, or green staining most common).
- Asbestos containing materials (ACM) as fragments visible with the naked eye.
- Uncontrolled fill material.

⁵ Technical Guidelines for Disposal to Land (Waste Management Institute New Zealand), September 2023

12 Limitations

This report is the property of Industrie Property Tahi Ltd and Swiftsure Consultants Ltd. It was produced for the purpose stated above in accordance with the conditions of the contract dated 22 October 2024. It does not purport to provide legal or financial advice. Swiftsure Consultants Ltd accepts no liability to any other party or for any other purpose.

The recommendations in this report are based on information provide to Swiftsure Consultants Ltd at the time of writing this report.

This report is current as of 30 August 2026. Site conditions may change in future, as may regulations and guidance. Readers must make their own judgements as to whether this report remains current at the time of reading, and/or seek further advice from Swiftsure Consultants Ltd.

APPENDIX A: SL1 Residential and Industrial Masterplan

Southern Links 1: Industrial Development Area A - Contaminated Soils Management & Remediation Plan

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SL1 Industrial North Masterplan, Hamilton 1 For Urban Design Assessment

B&A



Client: SL1 Consortium
Job Number: 25546 & 26111

Drawing: Industrial North Overall Masterplan
Version: Draft for UDA
Date: June 2026

Scale: 1:5,000 @ A3
Sheet:



SL1 Mexted Residential and Industrial North
Substantive Application
37A, 49A, 49B Savvys Road, 160, 162 Higgins Road, 16A, 18, 20, 24 Wickham Street, Hamilton

B&A
Urban & Environmental

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APPENDIX B: Site Location



APPENDIX C:

Sample Locations





SOUTHERN LINKS 1: INDUSTRIAL DEVELOPMENT AREA B – REMEDIATION ACTION PLAN

Prepared by Swiftsure Consultants Ltd

30 August 2026

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Swiftsure Consultants Ltd Document Control:

Report Title	Southern Links 1: Industrial Development Area B - Remediation Action Plan		
Client	SouthPark Agri Development Ltd	Client Contact	Dillon Kelliher
Date	Revision Details / Status		
30 August 2026	Final for Release		

SQEP Certifying Statement

I certify that the site has been assessed in accordance with current New Zealand Regulations and guidance documents and reported in general accordance with the Ministry for the Environment's Contaminated Land Management Guidelines No. 1: Reporting on Contaminated Sites in New Zealand (dated 2021).

I am considered by Swiftsure Consultants Ltd Limited to be a suitably qualified and experienced practitioner (SQEP) able to certify reports pursuant to the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011.

Emma Lewis, Contaminated Land Specialist



Dated: 30 August 2026

1 Introduction

This Remediation Action Plan (RAP) relates specifically to Area B of the SL1 Industrial Development, comprising the land owned by Southpark Agri Development Limited. Area B includes Lot 1 Deposited Plan 603134, with an area of approximately 16.8379 ha and an address of 20 Wickham Street, and Lot 2 Deposited Plan 603134, with an area of approximately 33.2799 ha and an address of 24 Wickham Street. For the purposes of this RAP, references to “the site” herein relate specifically to Area B and the two land parcels described above. The remediation and contaminated land management measures set out in this RAP apply only to Area B and do not apply to the adjoining land owned by Industrie Property Tahiti Limited.

2 Project Description

The SL1 Industrial North development forms part of the industrial component of Southern Links 1, a listed project under FTAA 2024. The Southern Links 1 project is a combined 106ha development, including residential and industrial activities. The industrial component comprises circa 60ha and is in joint landownership and is currently used for a mix of rural and related activities. The landholding includes four parcels Lot 2 Deposited Plan 603134, Lot 1 Deposited Plan 603134 both within Southpark Agri Development Limited landholdings (circa 50ha), and Lot 1 Deposited Plan 584573 Industrie Property Tahiti Limited and S&S Property Investments Limited (7.8ha) and Lot 1 Deposited Plan 396081 and Lot 1 Deposited Plan 486522 within Industrie Property Tahiti Limited landholding (2.1ha).

The proposal seeks approval for a Substantive Application under the Fast-Track Approvals Act 2024 for a comprehensively master planned and staged industrial development. This includes all necessary resource consents under the Resource Management Act 1991, including regional, district approvals where required.

The industrial component provides for the establishment of 60ha gross developable industrial land, together with associated infrastructure and services, including roading and associated stormwater ponds. The proposed industrial development is underpinned by a series of design principles, with a focus on creating a functional, efficient and contiguous industrial development that underscores the locational attributes of SL1 Growth Cell, the Hamilton Southern Links designation and future industrial growth. An integrated roading network which connects to both existing and planned infrastructure underpins this approach.

The 22 serviced industrial lots vary in size and attributes to support a range of industrial uses, none of which are heavy or noxious. A truck and logistics activity is proposed on lot 7 to facilitate the landowners existing national trucking operation. All other industrial lots are sized to support a range of anticipated and provided for industrial activities, underpinned by bulk and location controls.

The proposal includes substantial enabling works to establish developable land, including bulk earthworks across the site and necessary pre-load to manage ground conditions. An integrated stormwater management system including wetlands, detention/attenuation devices and treatment ponds supports the development.

Access and integration with the surrounding Hamilton area is provided through connected transport framework, including the establishment of intersections, roading, and walking and cycle networks, along with upgrades to existing transport infrastructure. The industrial development is proposed to be serviced via a coordinated strategy, including the extension of public networks, upgrades, and installation of appropriate infrastructure.

3 Purpose and Scope

The objective of the RAP is to outline the process and procedural to be followed when removing or managing contaminated soil during earthworks in order to avoid or mitigate the risk posed to human health and/or the environment by contaminants.

This RAP details appropriate procedures for dealing with impacted soil with the development area. Included are also procedures to be followed should an unexpected discovery of impacted soil occur during site redevelopment.

This RAP has been prepared in general accordance with the following documentation:

- Ministry for the Environment's (MfE's) Contaminated Land Management Guidelines No.1 – Reporting on Contaminated Sites in New Zealand (MfE, 2021).
- Ministry for the Environment's (MfE's) Contaminated Land Management Guidelines No.5 – Reporting on Contaminated Sites in New Zealand (MfE, 2021).
- Approved Code of Practise: Management and Removal of Asbestos (2016) (AcoP, 2016). New Zealand Guidelines for Assessing and Managing Asbestos in Soil (2017) (GAMAS, 2017).
- Health and Safety at Work (Asbestos) Regulations (2016), (HSWAR, 2016).

The RAP is a 'living document' that will also be used to inform the Licensed Asbestos Removalist of minimum procedures to manage ground disturbance activities in areas where elevated asbestos has been identified. This document will be reviewed and amended as necessary during site works to ensure the environmental and human health risks associated with contaminated soil are managed appropriately.

4 Site Description

Table 1 provides a summary of details relating to the site. **Figure 1** shows the location of the site.

Table 1: Site Details

Item	Description
Physical address	20 Wickham Street 24 Wickham Street
Legal description	Lot 1 Deposited Plan 603134 Lot 2 Deposited Plan 603134
Relevant authorities	Waikato Regional Council Waipā District Council
Current use	Fill mountain, industrial use, truck yard.

Figure 1: Area B



5 Definitions

5.1 Friable

Friable is defined as: 'In relation to asbestos or asbestos containing materials (ACM), in a powder form or able to crumbled, pulverised, or reduced to a powder by hand pressure when dry' (ACoP, 2016).

5.2 Non-Friable

Non-friable material is defined as: 'asbestos or ACM, means not friable (and, for the purposes of this definition, asbestos and ACM include material containing asbestos fibres reinforced with a bonding compound)' (ACoP, 2016).

5.3 Asbestos Containing Dust

Asbestos Containing Dust is defined as: 'dust or debris that has settled within a workplace and is, or is assumed to be, contaminated with asbestos' (ACoP, 2016)

5.4 Trace

'Trace level means an average concentration over any eight-hour period of less than 0.01 asbestos fibres per millilitre of air.' (ACoP, 2016).

5.5 Asbestos Contaminated Soil

Work involving asbestos-contaminated soil is permitted either as asbestos-related work or asbestos removal work. However, asbestos-related work is only permitted if a competent person (usually a suitably qualified and experienced practitioner (SQEP) has determined the soil does not contain enough asbestos or ACM to lead to airborne asbestos contamination above trace level. If the amount of ACM or friable asbestos in the soil is likely to lead to airborne asbestos contamination above trace level, the only work that may be carried out is asbestos removal work. See section 19 of this code for further information.' (ACoP, 2016)

6 Detailed Site Investigation

A DSI was undertaken to determine whether site is a 'piece of land' subject to the NES-CS as well as the Waikato Regional Plan, and to assess the potential risk to human health and the environment. The DSI was for the wider site – this RAP and information provided herein is with regards to the fill mound and paddocks only. Refer to **Appendix B** for the extent of the site.

6.1 Desk Study Review

Historical aerial imagery indicates the site was largely undeveloped in 1943, consisting primarily of dense scrub and natural vegetation, with surrounding land used for rural farming. By 1971–1974 the vegetation had been cleared and the land subdivided into paddocks, indicating use for pastoral or arable farming. Minor earthworks were visible in the north-western portion of the site by the mid-1970s.

Historical aerial photographs from the late 1980s to early 1990s, show development began to occur in the surrounding area. Large-scale earthworks and land disturbance were evident in the north-eastern portion of the site by 1990, with access tracks and nearby buildings associated with adjacent activities such as the horse racing track. Through the 1990s and 2000s, the wider site experienced increasing soil disturbance, filling, and development, including stockpiling of materials, and the establishment of yard areas. By 2015 the central portion of the site contained stockpiles of material, while the western

portion had been developed into laydown and storage yards. The eastern half continued to show signs of significant land disturbance and filling.

Council records indicate several investigations have been undertaken within the site and have Hazardous Activities and Industries List (HAIL) notations associated with activities such as waste management, timber treatment, transport depots, and fill sites. Waipā District Council also noted that the site has consent to receive construction, demolition, and industrial fill, with past compliance issues resulting in an abatement notice i.e. “Latham’s Mountain”.

A Preliminary Site Investigation undertaken by HD Geo (2020) at 160 Higgins Road assessed proposed earthworks associated with a cleanfill facility. The facility reportedly accepts only non-contaminated materials and operates with controls such as fencing, locked gates, and inspection of incoming loads. Based on the desktop review, site inspection, and available information, the risk of contamination was considered low, and the proposed earthworks were considered a permitted activity under the NESCS provided a CSMP is implemented.

A recent site visit confirmed the site is not receiving filling activities and the fill mound no longer operates. The mound was heavily vegetated with numerous observations of construction and building waste as well as other miscellaneous waste items.

It is understood that building and demolition waste material has been disposed of at “Latham’s Mountain” for the last 30 years. Waikato Regional Council reported that a resource consent was held for *“Authorisation to Place up to 35,000 cubic metres per year of construction, demolition & industrial waste into & onto land”*.

There is no record of superphosphate use at the site in the Waikato Regional Council (WRC) Land Use Information Register.

Although general pastoral and dairy farming activities are not individually listed on the HAIL, associated on-farm practices such as sheep dipping, livestock holding yards, farm waste dumps, and the storage or use of agricultural chemicals and petroleum products are included due to their potential to result in soil and groundwater contamination. These ancillary activities are not always documented in public records or identifiable through desktop assessments, but their historical occurrence on the site remains a possibility.

6.2 Soil Investigation

Soil sampling was undertaken on 17 December 2025 and 4 February 2026. Sample locations are included as **Appendix B**. Sampling was undertaken in two areas: the fill mound and the grazing paddocks.

Twelve test pits were advanced using a 20-tonne excavator within the fill mound. Test pits were located where access permitted and to provide a reasonable distribution of sampling locations. Soil samples were collected from various depths and analysed for a combination of heavy metals, asbestos and PAHs. A total of 21 soil samples were collected, and nine bulk samples were collected for presence/absence asbestos.

Hand augers were used within the paddocks to collect 8 shallow soil samples for heavy metals and SVOCs on selected samples. Three bulk samples were collected for presence/absence asbestos.

The following key observations were during the site investigation:

- The large mound is heavily vegetated and was difficult to access in several areas.
- Various waste materials were observed across the mound, including car bodies, concrete, rubble, tiles, roofing materials, timber, power poles, and scrap metal.
- The toe of the mound, located toward the south-eastern side, appeared to represent the oldest part of the fill.
- Suspected asbestos-containing materials (ACMs) were observed in several locations.
- Gravel tracks were present across the mound, likely providing access during historical filling activities.
- Fill material extended for all test pits with various locations where suspected ACM debris was encountered. Brick, roofing tiles glass, timber and metal were noted in numerous pits.
- A significant building fire was encountered in one test pit where fire-damaged building materials were uncovered. It looked to be likely that the building had been set on fire in situ and buried.
- Construction and demolition debris was noted in several areas across the paddocks adjacent to the fill mound.

A summary of the results is as follows:

- Selected heavy metals (arsenic, cadmium, copper, chromium, lead, nickel and zinc) exceeded the adopted background criteria in most samples.
- No samples exceeded the adopted human health or environmental criteria for heavy metals.
- Asbestos was detected above laboratory detection in one soil sample but was below the adopted human health criteria.
- Bulk samples taken from the paddock did not contain asbestos.
- Two bulk samples from the fill mound contained asbestos.

The investigation found that soils within the grazing paddocks could not be classified as cleanfill but had contaminant concentrations below the adopted human health and environmental criteria. This material was therefore suitable for reuse within the site.

The investigation confirmed that soils associated with the fill mound” contain fragments of asbestos-containing material (ACM) within fill material. Although laboratory analysis did not detect free asbestos fibres within the analysed soil matrix, this is not considered inconsistent with the field observations or the known history of filling at the site. Asbestos contamination associated with demolition waste is typically highly heterogeneous, with asbestos present as discrete fragments of ACM within otherwise clean soil. The presence of ACM fragments confirms that asbestos-containing demolition materials are present within the fill and that additional fragments may remain undiscovered within the filled area.

From a human health perspective, the primary risk relates to the disturbance of soils containing ACM, which may result in the release of airborne asbestos fibres during activities such as excavation, piling, landscaping, or redevelopment. Appropriate management measures will therefore be required for any future ground disturbance within the affected areas.

Overall, the results indicate that soils within the fill mound are likely highly variable due to the heterogeneous nature of the fill materials and the full composition of the fill mass cannot be completely characterised and the presence of additional contamination cannot be ruled out. Provision should therefore be made for the management of unexpected contamination during future ground disturbance works.

7 Published Geology

7.1 Geology and Hydrogeology

Geological maps¹ for the area depict the regional geology for the low-lying areas as comprising Holocene peat deposits. The peat is underlain by interbedded Silts and Sands of the Late Pleistocene aged alluvial deposits of the Hinuera formation, which is underlain by Early Pleistocene aged, fluvially reworked igneous silt/clay of the Walton Subgroup Formation which also form the base of the nearby hills.

The geotechnical investigation for the area² states that the site contains areas of gravel yards, material stockpiles, and pastureland overlying Peat, Hinuera Silts/Sands and Walton Subgroup Silts and Clays. The topography is generally level between RL38 and 41. However there are large uncontrolled fill and excavations onsite ranging between RL36 m up to RL61. The regional groundwater table is generally within 3 metres of the surface. It states that the ground conditions encountered during the site investigations were generally consistent with the published geology with the exception of imported gravel fill in the gravel yard areas. CMW summarised the strata as follows:

Table 2: Geology Summary

Geology	Unit Description	Top of Unit (m bgl)		Thickness (m)	
		Min	Max	Min	Max
Uncontrolled fill (Gravel Yard/Latham's Mountain)	Stiff to very stiff Clayey Silt and medium dense Sand	0.0	0.2	0.5	3.2*
Peat (swamp deposits)	Firm to very stiff fibrous organic Peat	0.1	1.0	0.3	12.0
Hinuera Formation	Loose to medium dense Sand with interbedded stiff to very stiff Silt, and lenses of Organic Silt	0.1	7.0	3.3	17.5

¹ Geological Map of New Zealand: 1:125K. Institute of Geological and Nuclear Sciences Ltd, 2010.

² Geotechnical Investigation Report: Southern Links 1 – Industrial Development. Version 4. 17 July 2026.

Geology	Unit Description	Top of Unit (m bgl)		Thickness (m)	
Walton Subgroup	Stiff to very Stiff Silt and Dense to Very dense Sand	5.2	19.8	0.2	>14.8

*Note: unable to penetrate to full depth, based on contours likely to be ~19m thick in the construction waste site

As outlined in the project hydrogeological effects assessment³, the site is located within the highly modified Mangaotukutuku Stream catchment. There are numerous artificial farm drains. Hamilton Lake and the Waikato River are located approximately 2.5km to the north of the site.

There are 7 bores within 500m of the site³ as follows:

Table 3: Bore Information

Bore ID	Static Water Level (m)	Status
Bore 72 - Station 7946	4.5	Existing
Bore 72 - Station 1349	1.0	Existing
Bore 72 - Station 1348	1.0	Existing
Bore 72 - Station 1347	2.0	Existing
Bore 72 - Station 2039	-	Existing
Bore 72 - Station 13319	-	Existing
Bore 72 - Station 1346	0.5	Existing

7.2 Geomorphology

The project geotechnical assessment² state that the general landform of the project area is low-lying peatland. The site ranges in elevation between RL36m and RL61m. Pre-development, the site would have been near level, grading gently from RL39m in the north to RL41m to the south. This profile can still be seen in the undeveloped southern half of the site. It is noted the southern crop pasture portion of the site has had recontouring for drainage purposes. The northern half of the site has been extensively developed with gravel yards covering most of the central area (RL36 to 42m). Additionally, there are three sites along the northern boundary which contain large material stockpiles: Hamilton Organic (Hamilton City Council Owned) has stockpiles up to 4m high (between RL38m and RL42m). The adjacent landscape supply is outside the Project/Industrial Area site boundary and has stockpiles up to 514m high (between RL40 and RL54m). The construction waste site in the north-eastern corner of the site has the largest stockpiles up to 21m high (between RL40m and RL61m) with slope angles up to 60 degrees to the horizontal.

³ Southern Links 1 Industrial Stage 1 Northern Block Hydrogeological Effects Assessment, WGA, May 2026.

7.3 Groundwater

The Geotechnical report² prepared for the wider area states that groundwater was encountered between 0.0m to >16.2m below the existing ground surface at time of testing. Groundwater within the Low Hamilton Hills areas is expected to get closer to the ground surface the lower in elevation the ground surface is. Perched groundwater tables can be present within the layered Walton Subgroup deposits.

8 Conceptual Site Model

A conceptual site model (CSM) has been developed to assess the potential exposure pathways present at the site. A contamination conceptual site model consists of three primary components. For a contaminant to present a risk to human health or an environmental receptor, all three components are required to be present and connected. The three components of a conceptual site model are:

- Source of contamination.
- An exposure route, where the receptor and contaminants come into contact (e.g. ingestion, inhalation, dermal contact).
- Receptor(s) that may be exposed to the contaminants.

The potential source, pathway, receptor linkages at this subject site are provided in **Table 4** below

Table 4: Conceptual Site Model

Source	Contaminant of Concern	HAIL Code	Exposure Pathway	Potential Receptor	Pathway Complete?
Uncontrolled building and demolition waste	Asbestos Heavy metals	E1 - Asbestos products manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition (current and former structures). 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.	Exposure of workers to contaminants in soils and groundwater during site redevelopment – dermal contact, ingestion or inhalation of dust/vapours	Construction workers.	Complete Pathway – Contaminants in soils are at levels to pose a risk to human health.
			Exposure of future site users to contaminants in soils – dermal contact, ingestion or inhalation of dust/vapours.	Future site users.	Complete Pathway – Contaminants in soils are at levels to pose a risk to human health.
			Exposure of general public to contaminants in soils– dermal contact, ingestion or inhalation of dust/vapours.	General public.	Incomplete Pathway – General public do not have access to the site.
			Groundwater resources for public consumption.	Leaching and migration of soil contaminants into groundwater.	Potential Pathway –Contaminants in soils may be at levels to have the potential to leach. Leachability testing would confirm this.
			Surface water	Sediment and runoff directly into surface water.	Potential Pathway –Contaminants in soils may be at levels to have the potential to leach. Leachability testing would confirm this.
		I- any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity	Exposure of workers to contaminants in soils and groundwater during site redevelopment – dermal contact, ingestion or inhalation of dust/vapours.	Construction workers.	Incomplete Pathway – Contaminants in soils are not at levels to pose a risk to human health.
			Exposure of future site users to contaminants in soils – dermal contact, ingestion or inhalation of dust/vapours.	Future site users.	Incomplete Pathway – Contaminants in soils are not at levels to pose a risk to human health.

Source	Contaminant of Concern	HAIL Code	Exposure Pathway	Potential Receptor	Pathway Complete?
Superphosphate application	Cadmium	that it could be a risk to human health or the environment.	Exposure of general public to contaminants in soils– dermal contact, ingestion or inhalation of dust/vapours.	General public.	Incomplete Pathway – General public do not have access to the site.
			Groundwater resources for public consumption.	Leaching and migration of soil contaminants into groundwater.	Incomplete Pathway – Contaminants in soils are not at levels to pose a risk to groundwater
			Surface water	Sediment and runoff directly into surface water.	Incomplete Pathway – Contaminants in soils are not at levels to pose a risk to surface water.
Filling activities	PAHs Heavy metals Asbestos	G.5 Waste disposal to land (excluding where biosolids have been used as soil conditioners)	Exposure of workers to contaminants in soils and groundwater during site redevelopment – dermal contact, ingestion or inhalation of dust/vapours.	Construction workers.	Incomplete Pathway – Contaminants in soils are not at levels to pose a risk to human health.
			Exposure of future site users to contaminants in soils – dermal contact, ingestion or inhalation of dust/vapours.	Future site users.	Incomplete Pathway – Contaminants in soils are not at levels to pose a risk to human health.
			Exposure of general public to contaminants in soils– dermal contact, ingestion or inhalation of dust/vapours.	General public.	Incomplete Pathway – Contaminants in soils are not at levels to pose a risk to human health.
			Groundwater resources for public consumption.	Leaching and migration of soil contaminants into groundwater.	Incomplete Pathway – Contaminants in soils are not at levels to pose a risk to groundwater
			Surface water	Sediment and runoff directly into surface water.	Incomplete Pathway – Contaminants in soils are not at levels to pose a risk to surface water

9 Remedial Approach

Based on the findings of the DSI, soils within the paddock areas have been assessed as being suitable for reuse within the project footprint, subject to appropriate earthworks management controls. No active remediation is considered necessary for these areas, provided that soil handling, placement, and reuse are undertaken in accordance with the requirements of this RAP and any relevant site management procedures.

9.1 Assessment of Onsite Fill

It is understood the landowners intend to reuse the construction waste fill stockpile where practicable. To assess its suitability for reuse, Swiftsure undertook preliminary contaminant testing of surface soils within the stockpile as part of the Detailed Site Investigation (DSI)⁴. The investigation identified the presence of asbestos-containing material (ACM), zinc and polycyclic aromatic hydrocarbons (PAHs) at low but detectable concentrations.

The results indicate that the stockpile is unlikely to represent a significant source of contaminant migration or pose a risk to surrounding land. However, due to the heterogeneous nature of the construction and demolition fill, the stockpile cannot be fully characterised through discrete sampling alone, and the presence of further contamination cannot be ruled out.

The principal risk associated with reuse of the material relates to the potential disturbance of ACM during earthworks, which could result in the release of airborne asbestos fibres. Accordingly, appropriate asbestos management controls will be required during excavation, handling and placement of the material.

The suitability of the stockpiled fill for reuse will be confirmed through additional targeted sampling, validation and construction-phase monitoring by Swiftsure. Preliminary testing and management requirements are provided in **Section 10.2**.

9.2 Resue of Onsite Fill

Preliminary investigation results indicate that a proportion of the surficial fill may be suitable for reuse, subject to further characterisation and implementation of appropriate management controls. These controls include supervision by a suitably qualified land contamination specialist, visual inspection of excavated materials, targeted laboratory testing, and airborne asbestos fibre monitoring during earthworks.

A preliminary excavation methodology has been developed in consultation with the project team. The stockpile is proposed to be excavated in stages of approximately 1,000 m³. Each batch of material will be screened to remove oversized construction and demolition waste (e.g. concrete, steel and other debris), with the remaining soil placed into discrete stockpiles for contaminant assessment.

Stockpiles containing contaminant concentrations exceeding the applicable acceptance criteria will either require disposal to an appropriately licensed landfill or, where approved by a suitably qualified land contamination specialist and permitted by the relevant regulatory approvals, be managed onsite beneath a suitably designed clean cover system.

⁴ Detailed Site Investigation, SL1 Northern Block, Swiftsure, 25 June 2026

Stockpiles demonstrated to comply with the relevant acceptance criteria may be reused onsite in accordance with the recommendations provided in Section 8.1.2 of the CMW Geotechnical Investigation (June 2026). The final earthworks methodology, testing frequency and reuse criteria should be confirmed during detailed design and incorporated into the Construction Environmental Management Plan and earthworks specifications.

9.3 Unexpected Discovery Protocol

A conventional pre-defined excavation-based remediation strategy is not considered appropriate or proportionate at this stage. Instead, remediation and contamination management for this area will be undertaken through the implementation of an Unexpected Discovery Protocol (UDP) during all intrusive works involving the fill mound and any other areas of uncertified or potentially disturbed ground.

The UDP will apply to all future earthworks, trenching, excavation, or other ground disturbance activities undertaken within the fill mound area. The purpose of the UDP is to ensure that any previously unidentified contamination or suspect materials encountered during works are identified promptly and managed in a safe, compliant, and environmentally appropriate manner.

9.4 Site Supervision

A suitably qualified contaminated land specialist shall supervise all earthworks associated with the excavation and assessment of the stockpile. The specialist should undertake regular visual inspections of excavated materials, identify any evidence of unexpected contamination, direct additional sampling where required, and determine the appropriate management or disposal pathway for the material.

The stockpile is to be excavated in stages of approximately 1,000 m³. Each stage of material is to be screened to remove oversized construction and demolition waste (e.g. concrete, steel and other debris), with the remaining soil placed into discrete stockpiles for contaminant testing.

Based on the results of contaminant testing and field observations, stockpiles that comply with the applicable acceptance criteria may be reused onsite. Material exceeding the relevant criteria should either be disposed of at an appropriately licensed landfill or, where appropriate and approved by the contaminated land specialist and relevant regulatory authorities, managed onsite beneath a suitably designed clean cover system.

9.5 Air Monitoring

A suitably qualified contaminated land specialist shall implement and manage the asbestos air monitoring programme throughout the earthworks. The monitoring programme shall be risk-based and adapted to reflect the nature of the works, known areas of ACM contamination, and any unexpected contamination encountered during excavation.

Near-source static air monitoring shall be undertaken using four (4) monitoring locations positioned on the north, south, east and west sides of the active excavation area, approximately 25m beyond the earthworks zone where practicable. This arrangement is intended to account for changing wind directions throughout the working day and provide representative monitoring of potential airborne asbestos fibre emissions. Each sample shall collect a minimum air volume of 480 L in accordance with WorkSafe guidance.

The frequency of air monitoring shall be determined by the contaminated land specialist based on the level of risk. Daily monitoring is recommended during works within known ACM-affected areas, with the monitoring programme adjusted as required in response to changing site conditions or the discovery of previously unidentified asbestos contamination.

All air samples shall be analysed by an asbestos laboratory approved by the Asbestos Institute of New Zealand (AINZ) and operating under ISO/IEC 17025 accreditation.

The contaminated land specialist shall maintain a project-specific air monitoring register documenting monitoring locations, sampling dates, laboratory results and the corresponding excavation areas. This record will provide traceability of monitoring results throughout the duration of the project.

A personal air monitoring programme is also recommended for plant operators undertaking excavation works. As a minimum, personal monitoring should be undertaken weekly, or fortnightly where risks are demonstrated to be low. Increased monitoring frequency should be implemented when working within known ACM-contaminated areas or where unexpected asbestos contamination is encountered.

9.6 Contamination Indicators

Potential indicators of contamination may include, but are not limited to:

- Stained or discoloured soils.
- Hydrocarbon or chemical odours.
- Ash, clinker, or burnt materials.
- Buried refuse, demolition waste, or other anthropogenic materials.
- ACMs.
- Drums, tanks, or other buried infrastructure; and/or
- Groundwater exhibiting sheen, odour, or other evidence of contamination.

9.7 UDP Process

If suspect contamination or unusual materials are encountered during works, the following actions shall be implemented:

1. Works shall cease immediately in the affected area.
2. The suspect material shall be isolated and secured to prevent unnecessary disturbance or cross-contamination.
3. The area shall be assessed by a Contaminated Land Specialist (CLS).
4. Where necessary, additional sampling and laboratory analysis shall be undertaken to determine the nature and extent of contamination.
5. Based on the assessment findings, the material shall be either:
 - Managed for reuse onsite (if demonstrated to be suitable).
 - Segregated and stockpiled pending further classification; or
 - Removed and disposed of offsite to an appropriately licensed or consented facility.
6. Any required health and safety controls, including dust suppression, worker protection measures, and contamination containment procedures, shall be implemented as necessary.

9.8 Remediation Strategy

Accordingly, the remediation strategy for the site will comprise the following:

- Reuse of suitable soils from the paddock areas within the project footprint.
- Controlled earthworks and soil handling practices during construction.
- Implementation of an Unexpected Discovery Protocol for all intrusive works in the fill mound and other potentially variable fill areas; and
- Assessment, segregation, and offsite disposal of any contaminated or unsuitable materials encountered during works.

This approach is considered appropriate given the current understanding of site conditions and the variable nature of the fill materials. The strategy adopts a risk-based and adaptive remediation framework, which is considered the most practical and effective means of managing residual uncertainty associated with the fill mound while enabling the proposed works to proceed.

10 Remedial Criteria

The proposed remedial goal for this assessment is the values for Industrial / Commercial human health criteria.

Table 5: Remedial Criteria

	Arsenic	Cadmium	Chromium	Copper	Lead	Nickel	Zinc
Background Criteria ⁵⁶	27.21	0.6	17.18	49	150	11,9	162.7
	6.8	0.22	30	25	20	7.6	53
Human Health Criteria (Commercial/Industrial) ⁷	<u>70</u>	<u>1,300</u>	<u>6,300</u>	<u>>10,000</u>	<u>3,300</u>	<u>6,000</u>	<u>400,000</u>
Environmental Criteria (Commercial/Industrial) ⁸	150	33	650	420	2,500	-	480
Soil Asbestos Investigation Criteria			Site End Use				
0.001% w/w asbestos for FA and AF			All sites uses				
No ACM in surface soils (0 – 0.1 m)			All site uses				
0.05% w/w asbestos for ACM			Commercial/industrial				

⁵ Criteria from Appendices (Waikato Surface Soils Background Data), Internal Document: Caldwell, J. 2017. Waikato Regional Council Standard Operating Policies for Defining Cleanfill Acceptance Criteria. Document # 10581789.

⁶ Criteria from Waikato Regional Council 'Natural background concentrations in the Waikato region' - 95% upper limit background concentrations for selected elements in soil of the Waikato region -.

⁷ Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (Commercial/Industrial land use).

⁸ Landcare Research: Technical Document. Eco-Soil Guideline Value for typical soil, aged contamination source, and a commercial/industrial land use.

10.1 Health and Safety at Work (Asbestos) Regulations 2016 (Asbestos Regulations)

As outlined in the GAMAS, the Asbestos Regulations impose specific obligations in relation to asbestos removal or asbestos-related work involving soil that is likely to lead to airborne contamination over the acceptable trace level. when one or more of these conditions are met:

Work involving asbestos in soil is classified into these categories:

- Unlicensed asbestos removal work.
- Asbestos-related work.
- Licensed asbestos removal work, divided into two categories:
 - Class A licensed asbestos work
 - Class B licensed asbestos work.

Given the concentrations of asbestos in soil were found to above 0.001% w/w FA/AF and/or 0.01% w/w ACM, remedial works should be undertaken as licensed asbestos removal.

The asbestos removalists must prepare and implement an Asbestos Removal Control Plan (ARCP).

WorkSafe NZ should be notified at least 5 working days prior to starting work.

An independent licensed assessor should provide a clearance certificate once the site has been validated.

11 Roles and Responsibilities

Table 5: Roles and Responsibilities

Role	Responsibility
Site Owner	To distribute this RAP and be responsible for ensuring that the site works are undertaken in accordance with this document and any revisions to this document.
Contractor TBC	The Contractor will be required to ensure that personnel involved in the site works are made familiar with this plan prior to commencing work on the site, and that there be regular reminders about its requirements. The requirements within in this plan should be followed at all times.
Contaminated Land Specialist Swiftsure Consultants Ltd	A suitably qualified and experienced practitioner (SQEP/Contaminated Land Specialist) as defined in the NES-CS, should liaise with the contractor during the course of the works. The Contaminated Land Specialist will provide specialised contaminated land support to the Site Owner and Site Contractor and will be responsible for undertaking site supervision, validation sampling of remedial activities completed, and for preparation of a Soil Validation Report (SVR) at the completion of works.
Asbestos Removal Supervisor TBC	Responsible to ensure that the asbestos works are undertaken in accordance with this Asbestos Removal Control Plan (ARCP), RAP, health and safety legislation and all applicable asbestos regulations and guidance. The asbestos removal contractor must provide a supervisor that is "competent in managing the removal of asbestos in soil", or utilise the person identified as SQEP below.
Licensed Asbestos Assessor TBC	A licensed asbestos assessor is required to carry out air monitoring during licensed asbestos removal works and undertake validation sampling / issue a validation report at the conclusion of licensed asbestos works.

12 Site Management

Due to the potential for encountering asbestos-containing materials (ACMs), the engaged Licensed Asbestos Removalist shall, prior to the commencement of earthworks, prepare and implement an Asbestos Removal Control Plan (ARCP). The ARCP shall complement the management measures outlined in this RAP and set out the specific health, safety, and operational controls applicable to the proposed asbestos removal and associated earthworks. Landfill acceptance of excavated materials shall be obtained prior to works commencing.

A site meeting shall be held and attended by the Client, the Contractor, Asbestos Removalist, Licensed Assessor, the Contaminated Land Specialist and any other personnel involved with the earthworks to discuss the risks and site procedures for handling contaminated soils.

Prior to works commencing, the Contractor shall establish controls including but not limited to:

- Access to the earthwork areas shall be restricted to authorised personnel; this shall be achieved via security fencing and be always maintained as secure. Access to this area will be following appropriate site induction procedures.
- Signage, including site works information, health and safety requirements, and site reporting requirements shall be in place in accordance with the ACoP.
- Decontamination facilities.
- Dust control systems including a full height fence with dust cloth.
- Health and safety facilities including first aid points.
- Stormwater (surface runoff) diversion and collection systems.

13 Excavation of Asbestos Contaminated Soil

The following methodology shall be adhered to when excavating asbestos containing soil and shall be put in place by the contractor during the earthworks at the site.

Specific job-related methodology will be outlined in the separate ARCP provided by the engaged Licenced Asbestos Removalist. This will be submitted to the client and WorkSafe as part of the notification process a minimum of five days prior to works commencing.

- All asbestos removal works shall be supervised by a Class B licensed Asbestos Removal Supervisor in line with WorkSafe NZ requirements.
- Access to the area must be restricted prior to commencement of excavation works. Please see the below note on exclusion zones.
- Personnel operating machinery involved in excavations, stockpiling and transferral of fill must adhere to requirements within this plan.

- Excavators used during the works should ideally be closed cab with laboratory grade HEPA filters fitted over the air inlets. Should open cabs be used, operators should be wearing appropriate PPE and RPE.
- Any personnel handling the asbestos containing soil or material must have the appropriate training and experience for handling asbestos materials and of the required decontamination procedures.
- Access to asbestos removal area by other work parties will only be allowed during 'tools down' periods under the direct supervision of the Contractor and when wearing appropriate PPE and RPE.
- At completion of asbestos removal, a visual inspection will be undertaken by a licensed asbestos assessor or "Competent Person" as defined by WorkSafe.
- The area will remain isolated until a Clearance Certificate has been issued stating the area is "Safe to re occupy" at which time restrictions may be lifted.

13.1 Personal Protective Equipment (PPE)

When working with Class B asbestos contaminated soils, appropriate personal protective equipment (PPE) and respiratory protective equipment (RPE) is required to be worn in order to minimise the effects if any exposure to asbestos fibres, specifically the inhalation of airborne asbestos fibres. The following PPE and RPE is required to be worn by any workers while within the works exclusion zone:

- Disposable overalls (rated type 5, category 3 (EN ISO 13982–1)).
- Steel cap boots or gumboots (should have no laces or material insets as these can become contaminated and are difficult to clean. If these are not available or practical, then disposable boot covers should be worn over your footwear).
- Gloves.
- RPE should have a minimum of a P3 filter attached and should be worn at all times when within the removal area.

13.2 Air Monitoring

Due to the likely non-homogenous nature of asbestos contamination in soil, control air monitoring is recommended to be undertaken daily during the asbestos removal works in order to inform that appropriate procedures are being undertaken to minimize the possibility of airborne fibres being produced by the works.

This requirement shall include, at a minimum:

- Be undertaken by an independent competent person as defined by the ACOP.
- Be undertaken using a membrane filter method.
- Include the placement of an air monitor on each boundary of the soil disturbance work zone.

13.3 Dust Suppression

Sprinklers will be installed around the boundaries of the earthwork area and dust suppression equipment installed within the interior. These will be operating at all times during removal, with the exception of prolonged/heavy rain events. Work will cease if unacceptable concentrations of dust are generated.

Surface water run off must be avoided, and in the event that surface water runoff is generated, this should be collected and filtered in accordance with the ARCP water filtration methods.

14 Onsite Retention of Material

Should ACM be encountered as part of the UDP this material may be suitable for onsite retention. In this event, the following should be followed:

- The controls provided in **Sections 13, 14 and 16** should be adhered to when excavating and moving the contaminated soil around site.
- The proposed location of the retained asbestos contaminated soil should be provided to Council for approval in advance of excavation.
- Once the contaminated soil is in place, the area should be cordoned off and dust control/sediment runoff measures in place until the final cap is in place.
- A hard cap comprising asphalt will cover and seal the isolated asbestos contamination.
- A geotextile membrane will place under the asphalt seal when placing the cap. Should the cap be removed in the future, this membrane will prevent the capping itself from becoming contaminated. In addition, this membrane acts as a demarcation layer for the residual asbestos in soil.
- All works should be supervised by a Contaminated Land Specialist and documented within a Works Completion Report.
- A Long-Term Management Plan will be prepared for the site. The plan will:
 - Document the location and volume of the retained contaminated soil.
 - Outline maintenance checks of the cap required to be undertaken periodically or following significant natural disasters.
 - Outline controls that will be required should the containment area be disturbed during future development.

15 Offsite Disposal

This section provides further information with regards to the offsite disposal of asbestos contaminated waste material if encountered during the UDP:

15.1 Vehicle Movements

Trucks and trailers will be required to have their wheels washed before exiting the site. This will be maintained by the removal contractor. There is to be no tracking of material onto roads or footpaths. A visual inspection should be undertaken for each truck and trailer before it leaves the site to look for possible asbestos contamination. Any possible asbestos contamination found should be appropriately remediated before the truck or trailer leaves the exclusion zone to avoid the spread of asbestos contamination to the surrounding areas.

15.2 Stockpiling

Stockpiling of asbestos containing soil is not recommended, however should stockpiling be required, stockpiles must be placed on top of 200 µm plastic sheeting to avoid contamination of underlying surfaces. They should be kept damp and covered with 200 µm plastic sheeting, geocloth or equivalent to avoid rain related run-off, and wind disturbance.

15.3 Transport and Disposal of Asbestos Waste

Asbestos containing material (including used PPE) excavated around sample S09 shall be placed in vehicles double-lined in 200µm thick virgin plastic. Once full these vehicles should be completely sealed with 200µm thick virgin plastic so that no spillage or dispersal of the waste to the atmosphere occurs. Care must be taken to ensure that the integrity of the plastic is not damaged during handling or transportation.

Controlled wetting of waste shall be employed where practicable, to reduce dust emission during bag sealing and in cases of accidental bag rupture during transportation. Excessive water logging shall be avoided as the excess contaminated water may leak out of the bags, creating a future source of airborne asbestos fibres.

The asbestos waste shall be disposed of at an appropriate waste facility authorised by the Resource Management Act 1991 to accept asbestos waste and where a certificate of disposal shall be issued. This will include the name of the authorised waste facility, weighbridge docket and registration number of vehicles for every disposal. Copies of waste disposal certificates and related documentation must be kept by the Contractor and supplied to the site.

Should it be necessary to temporarily store asbestos waste prior to transport for disposal then all plastic bags containing the waste shall be held in leak-proof metal containers or bins suitably marked and held in a secured area displaying appropriate warning signs.

15.4 Contaminated Water

Water used for cleaning asbestos-contaminated equipment (including vehicles) shall be placed into a plastic lined drum or skip and disposed of at an appropriately licensed facility. If excessive water is applied, ponding or runoff may occur which could permit the transport and accumulation of asbestos fines from outside of the site. Water from the work area shall be retained inside the boundary of the site and wash water directed back into excavations and the site.

16 Decontamination

16.1 Personal Decontamination

Prior to work commencing, a decontamination area will be identified. Personal decontamination should be undertaken as outlined in the ACoP. All disposable PPE used during removal works are to be considered asbestos containing waste and are to be disposed of appropriately.

16.2 Equipment and Vehicle Decontamination

All items of equipment used during asbestos removal (such as spades) must be treated as one of the following:

- Decontaminated using wet or dry decontamination methods as outlined in the ACoP (i.e. fully dismantled and cleaned under controlled conditions); or

- Placed in sealed containers (and used only for asbestos removal work); or
- Disposed of as asbestos waste.

For vehicles in Class B licensed removal sites a thorough visual inspection would be undertaken and controlled removal of visible debris and soil should take place. Attention should be given to the tracks and buckets of excavators.

While there is no requirement for surface tests looking for asbestos containing dust to be undertaken after the removal of Class B asbestos containing material, a Licensed Asbestos Assessor or “Competent Person” as defined by WorkSafe can opt to have these taken if there is reason to believe asbestos containing dust associated with the Class B removal has not been appropriately remediated or encapsulated.

17 Imported Fill

If imported fill is required to be used at the site, it shall meet the Waste Management Institute of New Zealand technical guidelines for disposal to land⁹ which defines clean fill material as Virgin Excavated Natural Material (VENM) such as clay, soil and rock that are free of combustible, putrescible, degradable or leachable components.

18 Validation & Clearance

Should remediation be required as part of the UDP, validation sampling will be required to confirm the area has been sufficiently remediated.

The Contaminated Land Specialist should work in parallel with the demolition contractor and licensed assessor to undertake validation testing associated with the demolition of the buildings.

A Contaminated Land Specialist shall be engaged to undertake validation testing to ensure the remedial targets have been met. Validation sampling should be undertaken in accordance with CLMG based on areas and volumes to be remediated and will be at the discretion of the Contaminated Land Specialist dependent on the supplementary site investigation and associated remedial volumes.

A Site Validation Report (SVR) shall be prepared by the Contaminated Land specialist and provided to WDC and WRC at completion of works.

Access to the asbestos removal area will be restricted until a Licensed Asbestos Assessor or “Competent Person” as defined by WorkSafe has carried out a visual inspection and issued a Clearance Certificate stating the site is “safe to re-occupy”.

The clearance certificate will be provided by the site to WDC and WRC for their records. In preparation of the clearance inspection, all asbestos containing waste must have been removed from the site.

⁹ Technical Guidelines for Disposal to Land (Waste Management Institute New Zealand), September 2023

19 Limitations

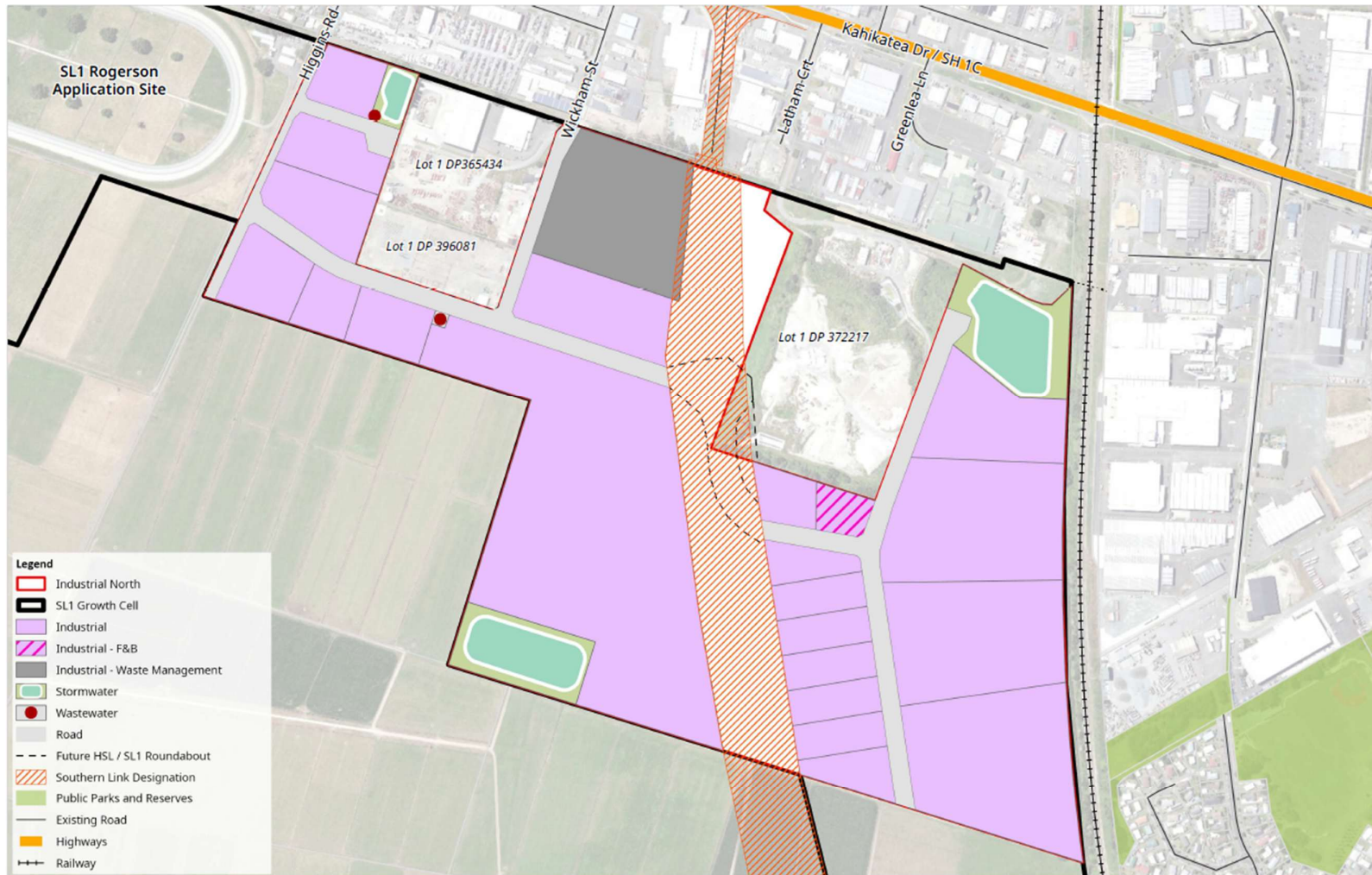
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The recommendations in this report are based on information provide to Swiftsure Consultants Ltd at the time of writing this report.

This report is current as of 30 August 2026. Site conditions may change in future, as may regulations and guidance. Readers must make their own judgements as to whether this report remains current at the time of reading, and/or seek further advice from Swiftsure Consultants Ltd.

APPENDIX A:

Masterplan



Client: Saxby Rd JV Ltd, Industrie Property Tahi & South Park Agri Development Ltd
Job Number: 25546 & 26111

Drawing: Industrial North Proposed Masterplan
Version: Draft
Date: 30/06/2026

Scale: 1:5,000 @ A3
Sheet: 1 of 1



SL1 Residential South & Industrial North Substantive Application
 49A and 49B Saxbys Road, Saxbys Road, 18, 20 & 24 Wickham Street, 160 & 162 Higgins Road, Waikato

B&A
 Urban & Environmental

File Path: I:\Jobs\13000-13999 General Jobs\025546 SL1 Industrial and Residential Stage 1\025546 SL1 Stage 1 Residential\

APPENDIX B:

Site Location



APPENDIX B: Sample Locations

