Interim Environmental Management Plan

Australian Rail Track Corporation Ltd

Goulburn Railway Yards
Off Sloane Street,
Goulburn NSW 2580

February 2022

Ref. 21065 R02

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Report Details

Report:

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Ref: 21065 R02

for

Australian Rail Track Corporation Limited

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Table of Contents

Figures

1.0 Introduction

This interim environmental management plan (EMP) has been developed by Cavvanba Consulting Pty Ltd (Cavvanba) on behalf of Australian Track Rail Corporation Limited (ARTC) to manage contaminated land issues at the Goulburn Railway Yards located off Sloane Street, Goulburn, New South Wales (NSW) 2580 (herein referred to as the site). The site location is presented on Figure 1.

This report should be read in its entirety, and in conjunction with Cavvanba's *General Limitations*, included as Section 1.5.

1.1 Background

This interim EMP has been prepared based on investigation data collected from three environmental investigations completed across broad areas within the Goulburn railway yards. These areas are referred to as the North Goulburn Railway Yards and the Goulburn Wheat Yard Sidings. For the purposes of this interim EMP, these areas have been combined and are collectively referred to as the Goulburn railway yards.

The EMP relates to the presence of asbestos and lead contamination within soil associated with the site's current and historical use as railway yards. The contamination investigation process is ongoing, and it is understood that further investigation and/or remediation activities will be completed so the site can be made suitable for its intended land use.

The purpose of this interim EMP is to ensure that all practicable steps are taken to minimise the risk of exposure to asbestos and lead contamination at the site prior to further investigation and remediation, and/or until more permanent measures are put in place.

1.1.1 Implementation

The information provided is intended to assist a person conducting work in the development of their own project specific environmental and work health and safety (WHS) management, described herein as their *systems of work*. Any recommendations provided herein are for information purposes only, and users of this information should develop project – specific requirements in accordance with their environmental and WHS systems of work.

1.2 Objective

The overarching objective of this interim EMP is to manage asbestos and lead contamination in soil at the site until additional information is obtained which supports more permanent measures, or demonstrates that the site is suitable for its intended land use.

The EMP has therefore been developed based on current information and applies an appropriate level of precaution to managing exposure to contaminants.

1.2.1 Timeframe for EMP

The EMP will apply immediately and must not cease until further information is available to demonstrate that the risks are no longer present.

1.3 Scope of this EMP

The scope of this EMP is limited to ensuring an appropriate level of awareness of site contamination is communicated and applies to the following:

- to authorised personnel requiring access to the site;
- maintenance and management of the site*;* and

- for any necessary and controlled subsurface activities.

This EMP intends to ensure appropriate management measures are in place to prevent potential off-site migration of contaminated airborne dust and/or surface water and prevent unauthorised persons access the site.

This EMP is not intended to enable the future redevelopment and/or unrestricted occupation of the site.

1.4 Relevant documents

This EMP has been prepared to act as a standalone document, however the following documents are considered relevant to the site and can be referred to if further information is required. The following environmental investigations have been prepared for the site:

- *Preliminary Site Investigation – Goulburn Wheat Yard Sidings, Off Sloane Street, Goulburn, NSW 2580* (Ref: 21028 R01) (Cavvanba, 2021).
- *Preliminary Site Investigation – Goulburn Railway Yards, Off Sloane Street, Goulburn, NSW 2580* (Ref: 21065 R01) (Cavvanba, 2021).
- *Environmental Site Assessment – Goulburn Railway Yard, Off Sloane Street, Goulburn NSW 2580* (Ref: 21072 R01) (Cavvanba, 2022).

1.5 Limitations

The findings of this reporting are based on the objectives and scope of the services provided. Cavvanba Consulting performed the services in a manner consistent with the normal level of care and expertise exercised by members of the environmental assessment profession. No warranties or guarantees, expressed or implied, are made.

Cavvanba's review/assessment is strictly limited to identifying the environmental conditions associated with the subject property in regard to site contamination, and does not seek to provide an opinion regarding other aspects of the environment not related to site contamination, or to the suitability of the site in regard to: landuse planning and legal use of the land; and/or regulatory responsibilities or obligations (for which a legal opinion should be sought); and/or the occupational health and safety legislation; and/or the suitability of any engineering design. Reviews of such information are only in relation to the contaminated land aspects of any project or site. If specialist technical review of such documents is required, these should be obtained by an appropriate specialist.

The reporting and conclusions are based on the information obtained at the time of the assessments. Changes to the subsurface conditions may occur subsequent to the investigation described, through natural processes or through the intentional or accidental addition of contaminants, and these conditions may change over time.

Field monitoring, sampling and chemical analysis of environmental media and structures are based on appropriate guidance documents made and approved by the relevant regulatory authorities. Conclusions arising from the review and assessment of environmental data are based on the sampling and analysis considered appropriate, based on regulatory requirements, site history, and the proposed landuse, not on sampling and analysis of all media, at all locations, for all potential contaminants.

Ground conditions, contaminants, and material types/composition can vary between sampling locations, and this should be considered when extrapolating between sampling locations. Except at each sampling location, the nature, extent and concentration of contamination is inferred only.

Furthermore, the test methods used to characterise the contamination at each sampling location are subject to limitations and provide only an approximation of the contaminant concentrations. Monitoring and chemical analytes are based on the information detailed in the site history. Further chemicals or categories of chemicals may exist at the site, which were not identified in the site history and which may not be expected at the site.

The absence of any identified hazardous or toxic materials at the site should not be interpreted as a warranty or guarantee that such materials do not exist at the site. Therefore, future work at the site which involves subsurface excavation or removal of structures or parts thereof, should be conducted based on appropriate management plans. These should include, *inter alia*, environmental management plans, including unexpected finds protocols, hazardous building materials management plans, and occupational health and safety plans.

If additional certainty is required, then additional site history information should be obtained, or additional exploration and sampling and analysis should be conducted. This decision should be made by the user of this information based on an appropriate risk management process, and the user should commission additional services if required.

2.0 Site information

The site is located within the Goulburn railway yards between railway chainages 224.18 kilometres (km) at the Blackshaw Road Level Crossing in the north to 227.430 km (approximately) in the south.

The site is completely fenced, with access restricted to authorised personnel only.

The site identification and land use details are provided below.

Site Owner:	Transport for NSW (TfNSW)
Site Manager:	ARTC
Site Lessee	N/A – Vacant
Site Address:	Off Sloane Street, Goulburn, NSW 2580
Legal Property Description:	North Goulburn railway yards: Part Lot 9991 in Deposited Plan (DP) 1221196 and Part Lot 2 DP 1192120. Goulburn wheat yard sidings: Part Lot 1 DP 1185735 and Part Lot 1 DP 1187262, Part Lot 2 DP1192120 and a small portion of land in the southern section of the site to which no formal land title applies.
Property area:	North Goulburn railway yards – Areas A to D: Approximately 10,670 m^2 Goulburn wheat yard sidings: Approximately 103,703 m^2
Co-ordinates:	Latitude: -34.763524 Longitude: 149.715046
Local Government Authority:	Goulburn Mulwaree Council
Elevation:	Approximately 635 to 638 m Australian Height Datum (AHD)
Landuse:	Commercial / industrial –Railway yards
Zoning – Existing:	IN1 – General Industrial / RU1 – Primary Production (small portion) / B4 – Mixed Use

3.0 Known contamination areas

A summary of the known contamination sources areas for the North Goulburn railway yards and former Goulburn wheat yard sidings is discussed in the following sub-sections, with reference to the soil exceedance figures presented in Figures 2a to 2d and 3a to 3e. This summary is based on data collected as part of environmental investigations completed in 2021 and 2022.

The contamination is characterised by elevated concentrations of lead and the presence of asbestos containing material in surface soils. The nature and extent of contamination remains uncertain at this stage of the assessment process, and a more detailed investigation would be required to further characterise the extent of contamination on-site.

3.1 North Goulburn railway yards

3.1.1 Lead in soil

Lead was reported to exceed the human health commercial/industrial criteria of 1,500 mg/kg at the following three borehole locations:

- Area C: BHC07 at 0.0 – 0.05 m in depth, with a reported concentration of 2,640 mg/kg as presented pm Figure 2b;
- Area F: BHF03 at 0.0 – 0.05 m in depth, with a reported concentration of 1,620 mg/kg as presented on Figure 2d; and
- Area F: BHF08 at 0.0 – 0.05 m in depth, with a reported concentration of 2,480 mg/kg as presented on Figure 2d.

Isolated lead exceedances were identified within the six foot of the operational Main South railway line and within the immediate vicinity of the former Crookwell railway line. Based on the findings of the investigations completed, there was no discernible source, however may be associated with metal ore concentrate that was historically transported within the network.

3.1.2 Asbestos

Non-friable asbestos containing material fragments were observed within Area F and Area C during the ESA (Cavvanba, 2022). Representative samples of ACM fragments were collected and returned positive results for chrysotile asbestos and a combination of chrysotile and amosite asbestos. Therefore, all potential ACM was inferred to be asbestos containing. ACM locations have been presented on Figure 2d and 3a.

3.2 Former Goulburn wheat yard sidings

3.2.1 Lead in soil

Widespread lead contamination has been reported throughout the former Wheat Yard Sidings, with a maximum detected concentration of 44,000 mg/kg, which extends laterally for approximately 1.3 kilometres (km). The elevated lead concentrations within the area adjacent to the current railway refuge loop strongly correlate to shallow fill material present to a maximum depth of 0.5 m, as presented on Figures 3a to 3e. These have otherwise not been delineated vertically or laterally within the former Wheat Yard Sidings areas and to the east within the railway corridor beyond the Main South railway line, and therefore the nature and extent remains uncertain.

3.2.2 Asbestos

Fragments of non-friable ACM were identified within the proximity of borehole locations TP01, TP02, BH11, BH12 and BH15 as presented on Figures 3a, 3b and 3c. The fragment collected from adjacent to TP02 and BH11 returned a positive result for chrysotile asbestos. Based on this positive result, all other fragments were inferred to be asbestos containing. Based on the findings of the investigations completed, gross ACM fragments on the ground surface were not observed. However, Cavvanba acknowledges the limitations associated with boreholes when identifying asbestos in fill material / subsoils.

3.3 Hazard identification

Lead is the primary risk driver for the preparation of this interim environmental management. Lead is a cumulative toxicant that affects multiple body systems and is particularly harmful to young children and developing foetuses. Its widespread use has resulted in extensive environmental contamination, human exposure and health problems.

The main route of human exposure is via inhalation and ingestion of lead particulates (dust), and therefore management measures are focussed towards minimising dust generation and exposure on-site. Children and pregnant women are particularly susceptible to lead related health effects, and care should be taken to prevent the disbursement of lead dust and prevent any migration off-site within the surrounding environment.

4.0 Regulatory requirements

Regulatory aspects considered pertinent to the site and this EMP are discussed in the sub-sections below.

4.1 Contaminated Land Management Act 1997

The general objective of the *Contaminated Land Management Act 1997* (CLM Act) is to establish a process for investigating and (where appropriate) remediating land that the EPA considers to be contaminated significantly enough to require regulation under Division 2 of Part 3.

The Goulburn wheat yard sidings was notified to the NSW EPA under Section 60 of the CLM Act. The site is currently listed as under assessment. This interim environmental management plan may assist the NSW EPA in their decision-making process on whether the contamination present on-site is significant enough to warrant regulation under the CLM Act.

4.2 Protection of the Environment Operations Act 1997

Under the *Protection of the Environment Operations (POEO) Act* 1997, there is a duty to notify a pollution incident occurring in the course of an activity that causes or threatens material harm to the environment. The Act includes general provisions regarding requirements to not pollute waters, to prevent or minimise air pollution, to maintain and operate plant in a proper and efficient condition/manner, and to deal with materials in a proper and efficient manner to minimise noise impacts. The Act defines 'waste' for regulatory purposes and establishes management and licensing requirements.

PCBUs should ensure their systems of work include appropriate procedures and controls to ensure compliance with the requirements of the POEO Act, including the appropriate classification and management of wastes.

ARTC hold a licence for the site under the POEO Act for the scheduled activity of railway systems activities (EPL 3142). Based on the current contamination status of the sites, there is no imminent pollution incident requiring notification under the POEO Act.

4.3 Environmental Planning and Assessment Act 1979

Land contamination must be evaluated during development through local planning and development control processes. The site is not being managed under the planning process in accordance with the requirements of state environmental planning policy 55 (SEPP 55).

4.4 Work Health and Safety Act 2011

The *Work Health and Safety (WHS) Act* 2011 no 10 is the overarching act in NSW relating to worker health and safety, and employer responsibilities. In addition, the *WHS Regulation* 2017 details the duties for employers, and sets regulations for employers to achieve required worker health and safety performance.

4.4.1 Asbestos

Chapter 8 of the *Work Health and Safety Regulation 2017* deals with the duty of care of a person conducting a business or undertaking with regard to asbestos. The key points relating to management of asbestos at the site are contained in Chapter 8, Part 8.3:

> *Clause 422 (1) A person with management or control of a workplace must ensure, so far as is reasonably practicable, that all asbestos or ACM at the workplace is identified by a competent person.*

> *Clause 429 (2) A person with management or control of the workplace must ensure that a written plan (an asbestos management plan) for the workplace is prepared.*
>
> *Clause 429 (3) A person with management or control of the workplace must ensure that the asbestos management plan is maintained to ensure the information in the plan is up to date*

In accordance with Safe Work Australia *(*July 2020*) How to Manage and Control Asbestos in the Workplace, Code of Practice*, (Safe Work Australia (SWA) Code of Practice), the following steps should be taken:

- identify all ACM at the site;
- develop and implement an asbestos management plan; and
- communicate the requirements to relevant stakeholders, such as contractors, tenants and / or employees.

4.4.2 Lead

Under the WHS Act 2011, a person conducting a business or undertaking at a workplace is required to ensure, so far as reasonably practicable, the health and safety of workers and others. Part 7.2 of the WHS Regulation 2017 sets out specific requirements to protect the health and safety of people at workplaces where lead risk work is undertaken. These include requirements to notify Comcare of lead risk work and the removal of a worker from lead risk work. Clause 392 describes the meaning of "lead process" as it relates to work health and safety.

A lead process must be assessed to determine if the process is lead risk work. Lead risk work means work carried out in a lead process that is likely to cause the blood lead level of a worker carrying out the work to exceed levels set out in the definitions. An assessment of whether lead risk work is or potentially will be undertaken at the site will be based on an assessment by a duly qualified professional experienced in contaminated land management and ARTC, and in accordance with the ARTC Lead Management Procedure (COR-PR-030).

4.5 Comcare

The *Commonwealth Work Health and Safety*, and *Safely Rehabilitation and Compensation* laws apply to ARTC. Comcare is the national authority for work health and safety, and workers' compensation for ARTC employees.

5.0 Integration and inductions

5.1 Integration of this EMP

ARTC must ensure that a system is in place to identify works which require management and integration of this EMP. The following list of typical personnel should be aware of and conduct their work in accordance with this EMP:

- authorised personnel requiring access to the site;
- maintenance and management of the site; and
- for any necessary subsurface activities.

This EMP also intends to ensure appropriate measures are in place to prevent potential off-site migration of contaminated airborne dust and/or surface water and prevent unauthorised persons access the site.

5.2 Induction

Inducting individuals prior to their work ensures that they are aware of the contamination that remains on the site. An induction should provide the individual with information regarding the site's management systems, the site's condition and their individual responsibilities, including how to enact their responsibilities.

6.0 Management of contamination

This interim management plan relates to the presence of non-friable asbestos containing material and lead contamination in soil at the site. In the absence of a detailed site investigation and appropriate characterisation of lead contamination at the site, this management plan is interim and requires ongoing review and amendment as the conceptual site model develops. A summary of asbestos areas of concern and lead in soil exceedances, based on the results of the preliminary site investigations have been graphically presented on Figures 2a to 2d and 3a to 3e.

6.1 Strategy

The SafeWork Australia code of practice for managing risks of hazardous chemicals in the workplace provides a hierarchy of control measures. This hierarchy is a framework that is integrated widely into health and safety planning and is applicable for the management of contamination at the site.

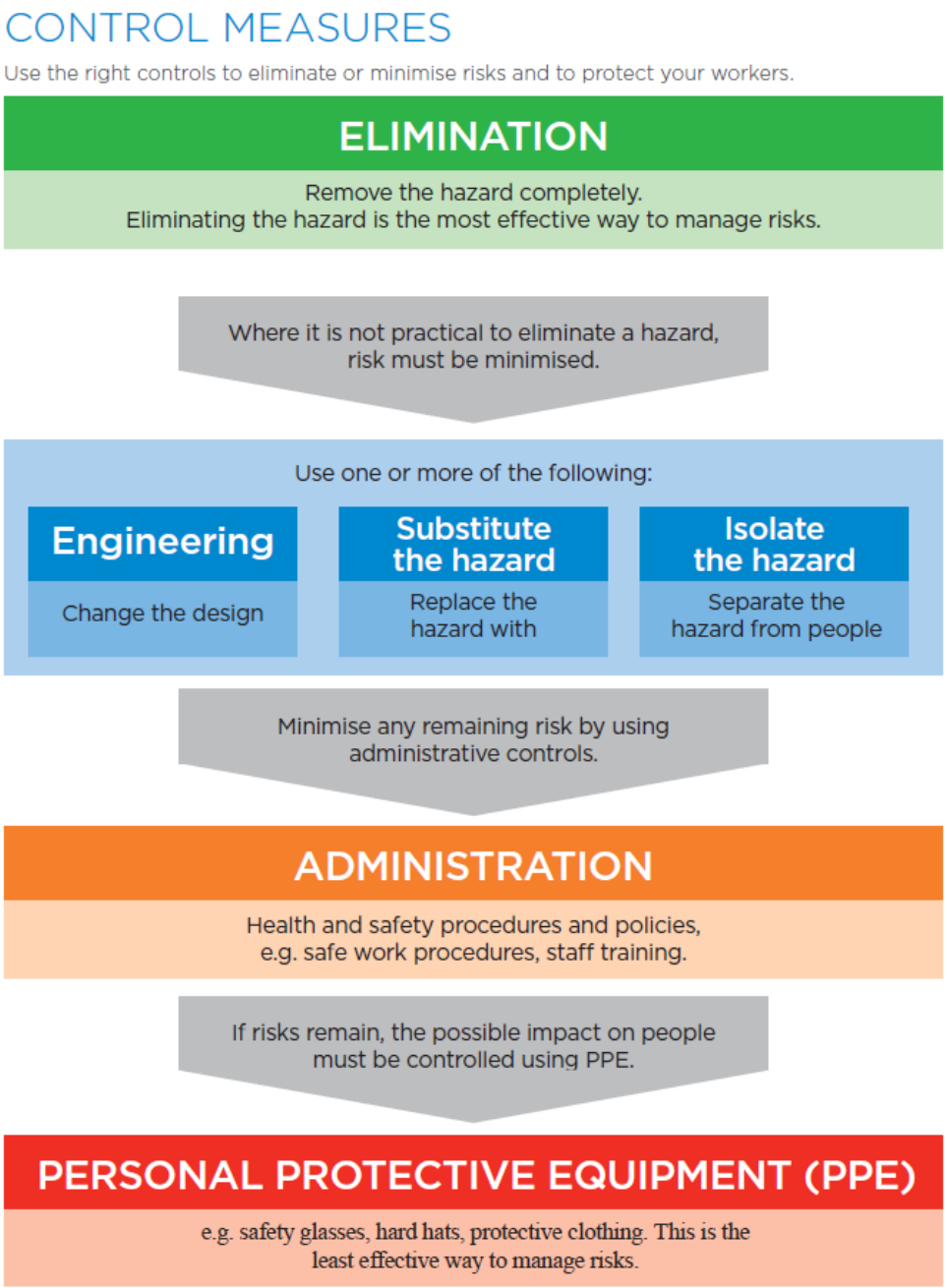

Figure 1: Hierarchy of controls (SafeWork NSW, 2019)

6.2 On-site management

The recommended interim environmental management controls for on-site activities are described in Table 6.1, below. These are provided only as a guide, as it is recognised that general activities conducted on-site can vary considerably. Therefore, it is the responsibility of the ARTC, their contractors and any future tenants to determine the suitability of these controls with respect to their systems of work.

Table 6.1: Environmental management controls – On-site

Control	Person Responsible
Information management – Contamination awareness Prior to any works commencing, confirmation must be sought from ARTC environmental representatives regarding whether contamination will impact the proposed works. Appropriate environmental awareness training must be completed for all on-site personnel, which includes being inducted into this plan. Ensure all personnel working within the site understands how the contamination issues impact their work, and develop site-specific safe work method statements to make provisions for lead and potential asbestos contamination in soil are in place, where: – authorised personnel require access to the site; – maintenance and management of the site; and – for any necessary subsurface activities.	ARTC / site occupier / contractors
Housekeeping and exposure abatement *Exclusion zones – Restricting access and movement* Areas of widespread lead contamination within the Goulburn Wheat Yard Sidings as presented on Figures 3a to 3e are to be demarcated as an exclusion zone with appropriate signage. These areas must not be used as trafficked thoroughfares and shall only be accessed by persons inducted into this plan. *Personal protective equipment (PPE)* PPE must include full length high visibility clothing, safety toe fully enclosed footwear, protective eyewear and gloves at all times. Hard hats / safety helmets and hearing protection will be task specific and based on company policies. A P2 dust mask must be worn whenever exposure to dust is likely. *Decontamination – On-site* The use of PPE is required whenever entering the site. Decontamination when leaving lead contaminated areas by removing / washing / cleaning clothes, boots and tools / equipment. Wash hands and face before eating, drinking and smoking or any hand to mouth behaviour. Avoid chewing gum or smoking when exposure to lead dust is likely. Purpose built facilities are to be considered during lead risk works which provide clean and dust free areas for crib rooms, toilet facilities and decontamination areas, laundering and appropriate disposal of gloves, masks, coveralls, etc. All vehicles, plant and machinery must be inspected and decontaminated prior to leaving site, to ensure that contaminated soil is not tracked off-site. *Decontamination – Off-site* Decontamination prior to entering home. If possible, shower and launder clothes at work. If this cannot occur, leave boots and work clothes outside and launder separately. Baby / child seats and related equipment should not be in work vehicles. Discourage family visits to the workplace.	ARTC / site occupier / contractors

Site maintenance and management The primary purpose of management during lawn maintenance / trimming is to prevent soil disturbance and the generation of dust / windborne dust. Lawn maintenance must only occur when absolutely necessary. If the below principles cannot be achieved, lawn maintenance should not proceed. Ensure the following principles are adhered to: – the above housekeeping and exposure abatement principles must be adopted; – avoid lawn mowing within areas of thin or eroded grass; – avoid trafficking within areas of thin or eroded grass; – lawn cutting height is to be set as high a reasonably practicable, ensuring no disturbance of bare ground (i.e. scalping); – maintenance works should only be undertaken during favourable weather conditions to ensure no generation / transportation of dust (i.e. not during dry, windy conditions); and – ensure the cabin of the excavator is enclosed, windows closed and cabin air conditioning is on recirculate with a high efficiency air filter. Ensure all seals are maintained to eliminate dust into the cabin. If this cannot be achieved, ensure operator dons appropriate respiratory protection and personal protective equipment.	ARTC / site occupier / contractors
Excavation activities All excavation activities to be undertaken within areas of widespread lead contamination, as presented on Figures 3a to 3e, will likely be defined as lead risk work. An assessment will be undertaken by a duly qualified professional experienced in contaminated land management and ARTC, and in accordance with the ARTC Lead Management Procedure (COR-PR-030). Excavation activities must only be undertaken when visible airborne dust is not generated. The following control measures must be adopted: – Do not exacerbate the problem. It is unacceptable to exacerbate exposure through unnecessary or uncontrolled disturbance. – Avoid dust generating activities. Where dust generating is considered likely during adverse weather conditions (dry and windy) the works must not proceed and/or be reassessed and modified as necessary. – Ensure the cabin of the excavator is enclosed, windows closed and cabin air conditioning is on recirculate with a high efficiency air filter. Ensure all seals are maintained to eliminate dust into the cabin. – All workers must remain upwind from the excavation, and don a P2 dust mask and Type 5 single use Tyvek suit should exposure to dust be considered likely. – Application of dust suppressants such as water (watercart) on disturbed surfaces, vehicle routes, stockpiles and excavations, etc. The use of polymer-based dust suppressants are to be considered, where required. – Minimise travel speeds and distances within excavation areas. – Minimise drop heights of materials when loading / unloading. – Air monitoring is to be undertaken where required and in accordance with the ARTC Lead Management Procedure.	ARTC / site occupier / contractors
Stockpiling Any proposed stockpiling of excavated contaminated material must follow the principles outlined above. Stockpiling must only be undertaken when visible airborne dust is not or not likely to be generated. The following control measures must be adopted: – all stockpiles must be placed away from drainage lines and stormwater infrastructure and include appropriate erosion and sediment and water management controls (see Landcom (2004) *Managing Urban Stormwater: Soils and Construction*); – all stockpiles must be securely covered to minimise surface water infiltration, and to prevent runoff and windborne dust; – all stockpiles must be stored in secure areas and appropriately labelled / signed to ensure that it is not moved, uncovered or intermixed with other material;	ARTC / site occupier / contractors

– stockpile heights are to be kept to a minimum, positioned on level surfaces and bunds constructed to control runoff should this occur; – materials tracking and stockpile management must continue until such time that more permanent measures are put in place; – routine inspections of the stockpiles must be completed on a monthly basis and following rainfall events of > 10 mm within a 24 hour period; and – stockpile rectifications works must occur within a timely manner following any integrity issues / changes.	
Contaminated soil management Any necessary disturbance and/or reuse of the material must only be undertaken once confirmation has been sought from ARTC environmental representatives and/or a duly qualified professional experienced in contaminated land management. If excavation activities are required, all material excavated should be backfilled in the same location and same order to which it has been excavated. There must be no movement / relocation of soil within the site boundary without advice from a duly qualified professional experienced in contaminated land management. All material to be handled must be tracked to verify appropriate movement and handling using a materials tracking procedure. The procedure must track materials from cradle-to-grave, and provide detailed information on the origin, quantity and fate of all materials excavated. Records must be maintained by the construction personnel defining chainage of origin, material types loaded and material fate. These records must be consolidated in a register to be maintained by ARTC environmental representatives.	ARTC / site occupier / contractors
Waste Management Any soil proposed to be removed from the site should be appropriately managed, both through the establishment of appropriate erosion and sediment and water management controls (see Landcom (2004) *Managing Urban Stormwater: Soils and Construction*), and through the appropriate classification and disposal of any wastes generated (see NSW EPA (2014) *Waste Classification Guidelines Part 1: Classifying Waste*). The waste hierarchy of avoid, reduce, re-use, recycle, dispose should generally be adopted. Any material to be removed off-site is classified as a waste under the POEO Act, and is to be appropriately classified and managed in accordance with the requirements of the POEO Act. Depending on the material to be removed/disposed, appropriate approvals may be required from the EPA and/or Council. Waste removed should be transported by a suitably licensed waste transporter to a suitably licensed waste facility, and waste tracking should be undertaken for all waste removed.	ARTC / site occupier / contractors

6.3 Off-site migration prevention measures

There are uncertainties in the current conceptual site model due to the preliminary nature of environmental investigations completed at the site to date, to determine whether off-site management of contamination is required. However, in the absence of such data, the following management measures should be implemented to minimise off-site migration of contamination until further investigations have been completed:

- ***Establishment of exclusion zones on-site*.** To prevent incidental dust generation and migration, areas of widespread lead contamination within the Goulburn Wheat Yard Sidings are to be demarcated as an exclusion zone (refer to Table 6.1), meaning restricting access and movements within these areas. Should dust generation be an issue during adverse weather conditions, the application of dust suppression techniques through the use of a water cart and / or a polymer sealant must be considered and applied, where required.

- ***Erosion and sediment control.*** The stormwater drainage system within the Goulburn Wheat Yard Sidings are to be mapped to understand stormwater flow paths and discharge points. The application of appropriate erosion, sediment and water management controls (see Landcom (2004) *Managing Urban Stormwater: Soils and Construction*) must be implemented, should the discharge of contaminated soils be an issue for the site. The routine removal of all grit and sediment from stormwater drains is recommended and must be undertaken, and maintained through monthly inspections and following rainfall events of > 10 mm in a 24 hour period. It is understood that this data gap will be addressed within future environmental investigations at the site.

6.4 Reporting

Organisations conducting works on-site must comply with this management plan, and keep records of soil excavated, reused or disposed, as well as waste classification certificates and waste disposal documentation, significant environmental incidents, and any environmental data collected as part of their scope of work. This information should be conveyed to ARTC for their records and for action, in addition to reviewing the effectiveness of the EMP.

ARTC should record any information provided, and along with environmental information, use this to determine any additional actions required, and as inputs to the EMP review discussed in Section 6.

Should additional requirements be necessary associated with the nature of the contamination, discussions should be held with the site owner, ARTC and a duly qualified professional experienced in contaminated land management.

7.0 Measurement, evaluation and review

This EMP is not intended to be a static document. It is a working document that requires ongoing review and amendment as site conditions change and as the conceptual site model develops. As previously discussed, this EMP is intended to be temporary until such time that further investigation and/or remediation activities are completed, and the site can be made suitable for its intended land use. Making amendments to this EMP is an important aspect of improving environmental management and is the responsibility of the site ARTC. This section details the audit and review process that should be undertaken.

Any external organisations relying on this EMP should keep records of their management and findings. It is recommended that they provide this information to the ARTC, to enable the effective and ongoing development of this EMP.

7.1 EMP review

This EMP should be reviewed:
- during any proposed works;
- when roles or responsibilities are changed/require updating;
- following significant environmental incidents / complaints;
- where it is highlighted that a particular activity/action is not effective and requires review;
- when there is a need to improve performance in an area of environmental impact; and
- at the completion of any environmental audits.

The review process should include reviewing the environmental controls, monitoring and procedures in use to ensure they remain effective. Any changes to the EMP should be documented, and the original EMP, and subsequent versions should be kept for project records.

It is acknowledged that this EMP is temporary, however it recommended that this EMP be reviewed biannually by ARTC as a minimum.

7.2 Record keeping

ARTC shall keep all records associated with the distribution and use of this EMP, including:
- the details of the organisation that conducted the works which affect this EMP;
- the date and form of provision of the EMP; and
- any plans, reports and actions resulting from the works in relation to this EMP.

ARTC is responsible for assigning and documenting individual responsibilities for implementing the environmental controls as discussed in this EMP.

7.3 Modification of this EMP

Any proposed modifications to this EMP should be conducted to the satisfaction ARTC and the relevant regulatory agency.

Any changes to the current site layout, fencing and/or land use will require further assessment and potential modification of this EMP. Advice should be sought from a duly qualified professional experienced in contaminated land management.

7.4 Cessation of this EMP

The requirements of this EMP will be considered unnecessary when further information is available to demonstrate that the risks are no longer present.

8.0 References

Previous environmental investigation reports

Cavvanba (January 2022) *Environmental Site Assessment – Goulburn Railway Yard, Off Sloane Street, Goulburn, NSW 2580* (Ref. 21072 R01).

Cavvanba (June 2021) *Preliminary Site Investigation – Goulburn Wheat Yard Sidings, Off Sloane Street, Goulburn, NSW 2580.*

Cavvanba (October 2021) *Preliminary Site Investigation – Goulburn Railway Yards, Off Sloane Street Goulburn, NSW 2580.*

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Parsons Brinckerhoff Australia Pty Ltd (PB) (2011) *Combined Phase 1 and 2 Environmental Site Assessment – Caltex Goulburn Fuel Depot, Sloane Street, Goulburn, NSW (22643)*.

PB (2011) *Remedial Action Plan – Caltex Goulburn Fuel Depot, Sloane Street, Goulburn NSW (22643)*.

PB (2013) *Demolition, Remediation and Site Validation – Goulburn Depot, Sloane Street, Goulburn NSW (22643).*

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Figures

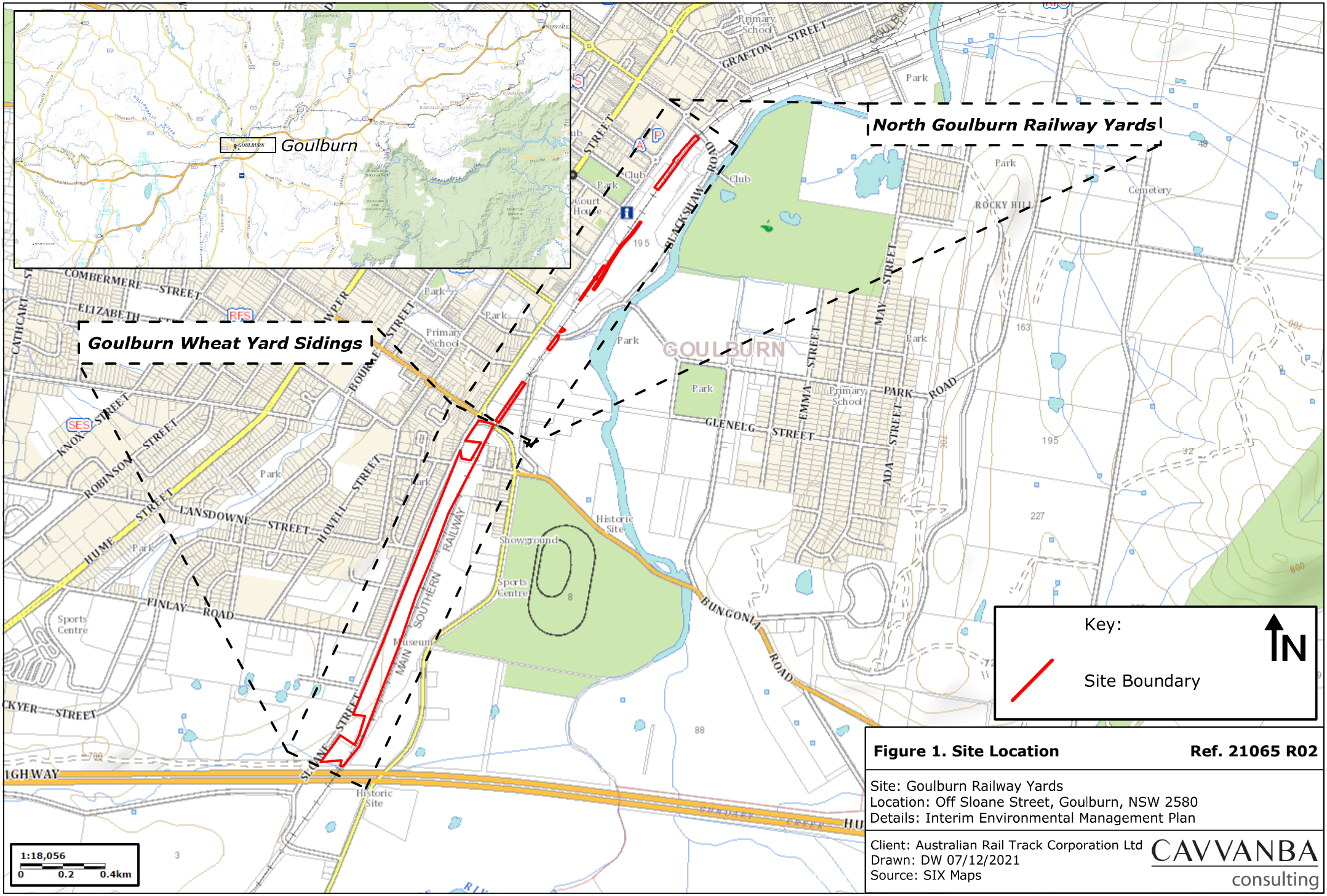

Figure 1. Site Location **Ref. 21065 R02**

Site: Goulburn Railway Yards
Location: Off Sloane Street, Goulburn, NSW 2580
Details: Interim Environmental Management Plan

Client: Australian Rail Track Corporation Ltd
Drawn: DW 07/12/2021
Source: SIX Maps

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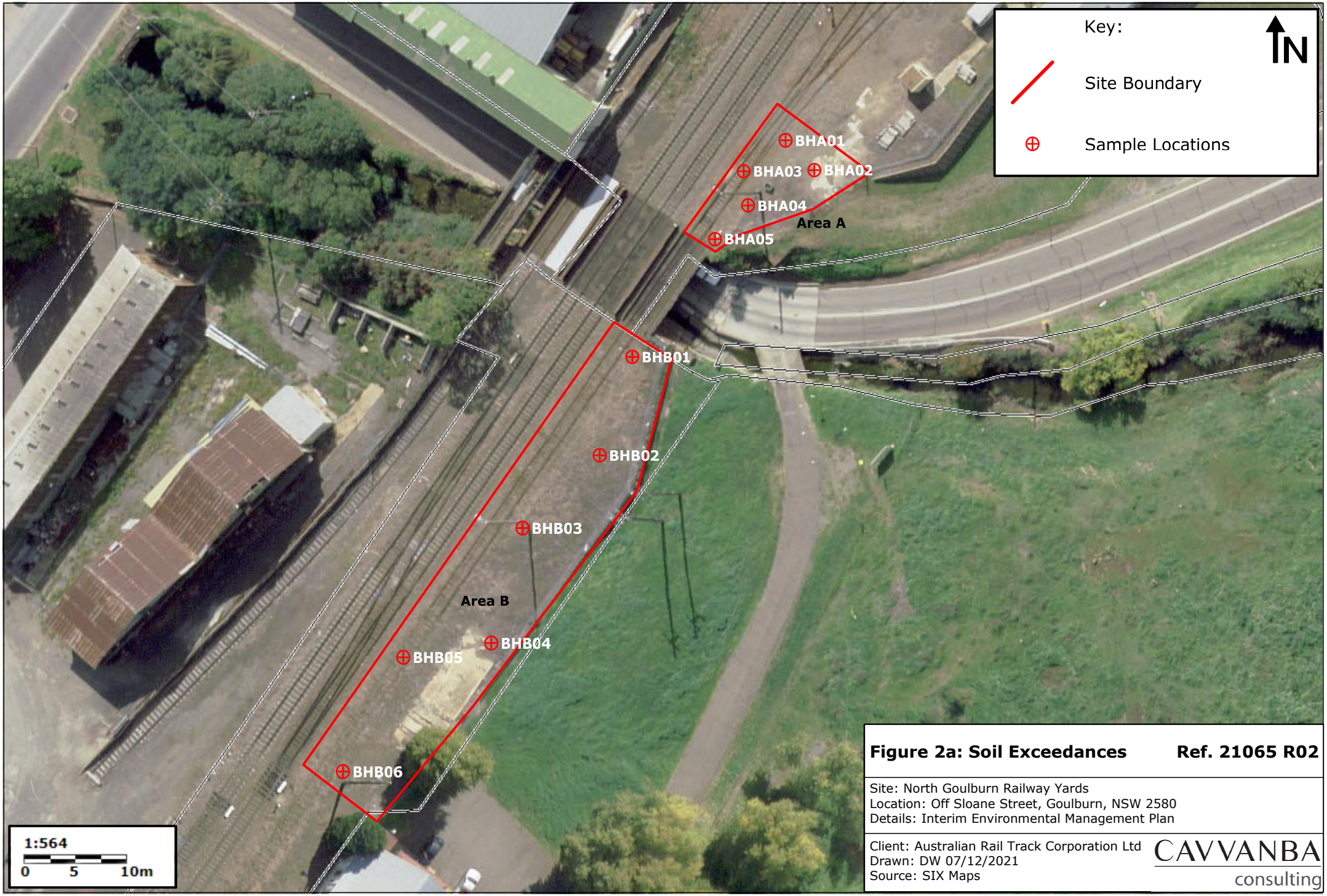

Figure 2a: Soil Exceedances **Ref. 21065 R02**

Site: North Goulburn Railway Yards
Location: Off Sloane Street, Goulburn, NSW 2580
Details: Interim Environmental Management Plan

Client: Australian Rail Track Corporation Ltd
Drawn: DW 07/12/2021
Source: SIX Maps

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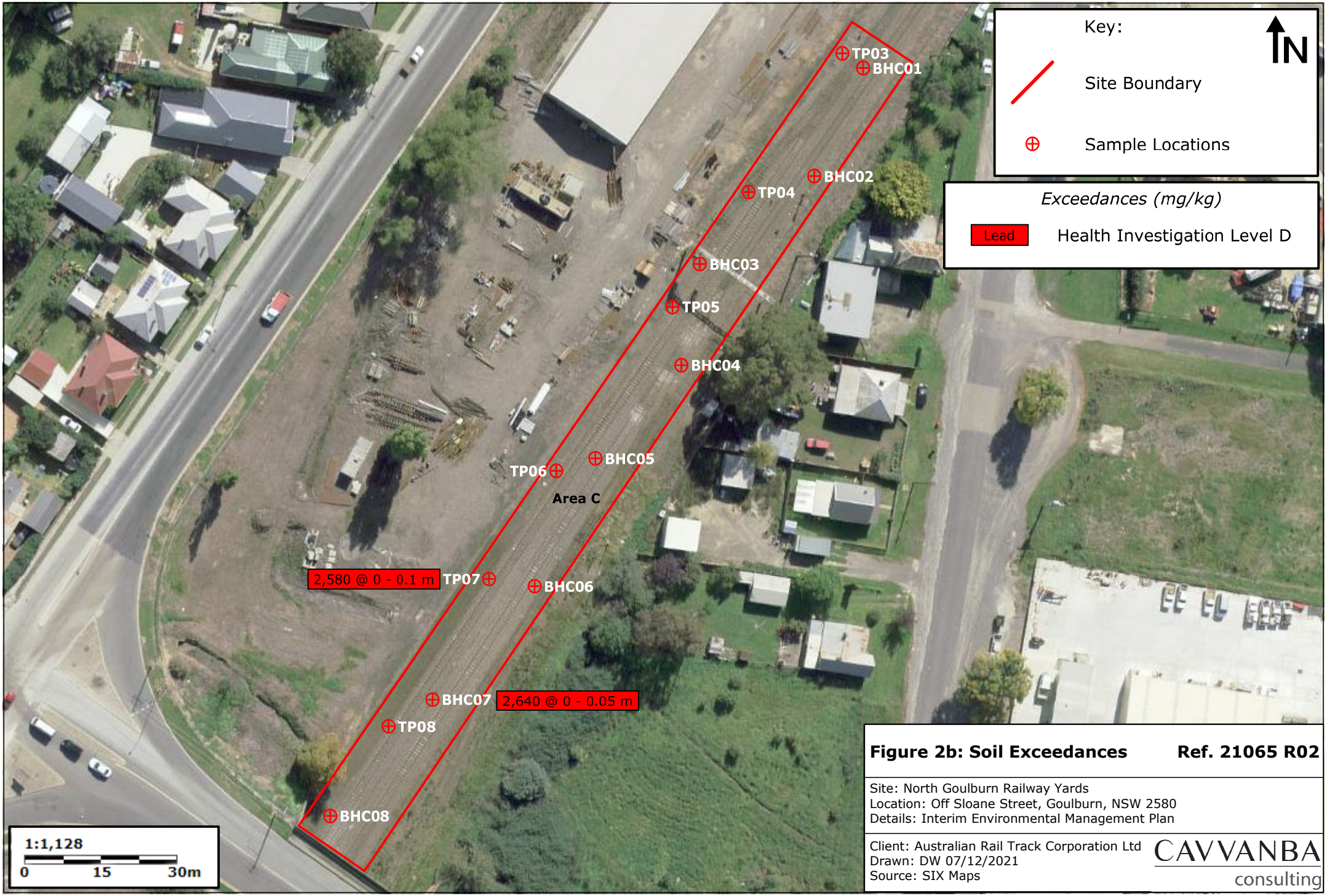

Figure 2b: Soil Exceedances **Ref. 21065 R02**

Site: North Goulburn Railway Yards
Location: Off Sloane Street, Goulburn, NSW 2580
Details: Interim Environmental Management Plan

Client: Australian Rail Track Corporation Ltd
Drawn: DW 07/12/2021
Source: SIX Maps

CAVVANBA consulting

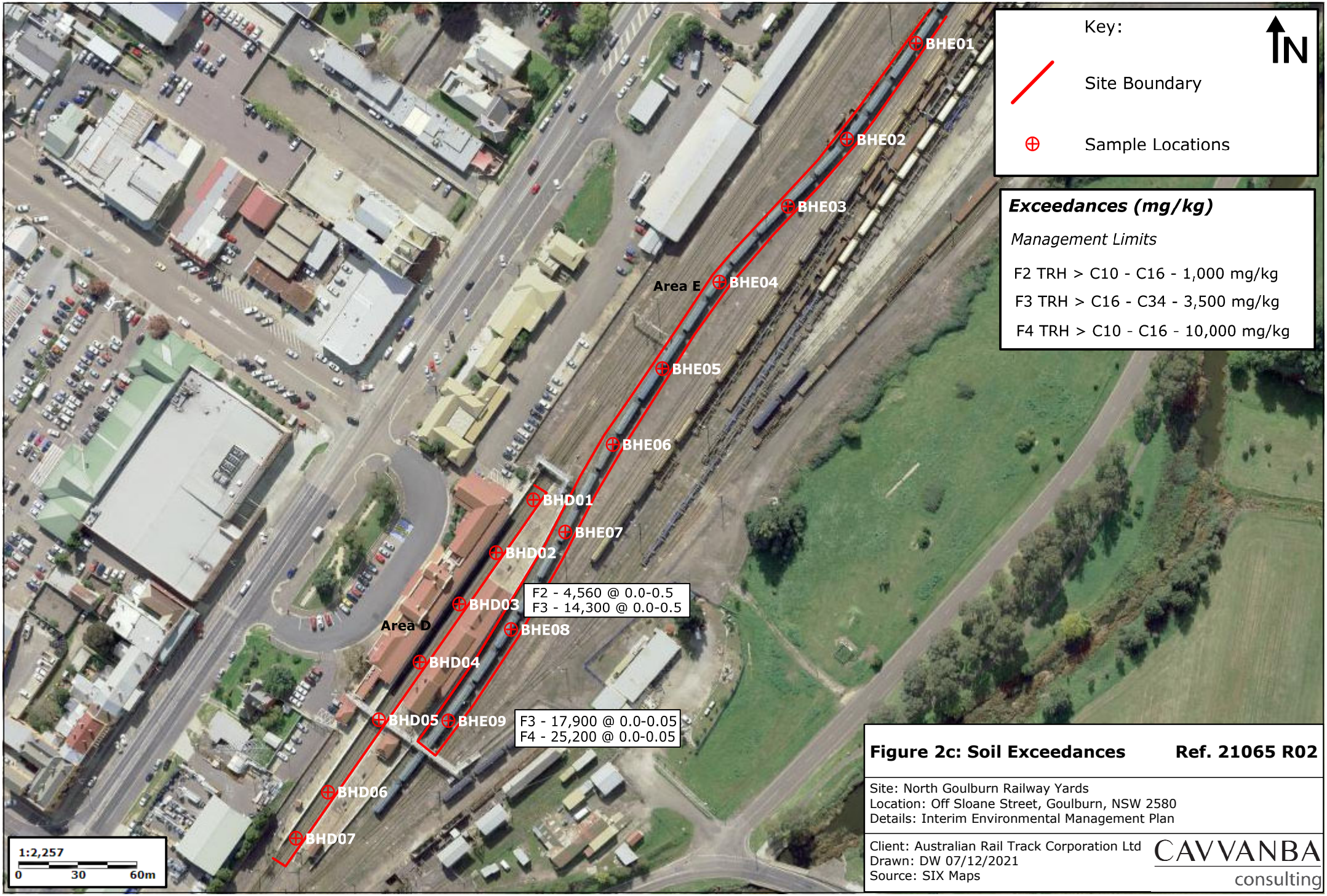

Figure 2c: Soil Exceedances **Ref. 21065 R02**

Site: North Goulburn Railway Yards
Location: Off Sloane Street, Goulburn, NSW 2580
Details: Interim Environmental Management Plan

Client: Australian Rail Track Corporation Ltd
Drawn: DW 07/12/2021
Source: SIX Maps

CAVVANBA consulting

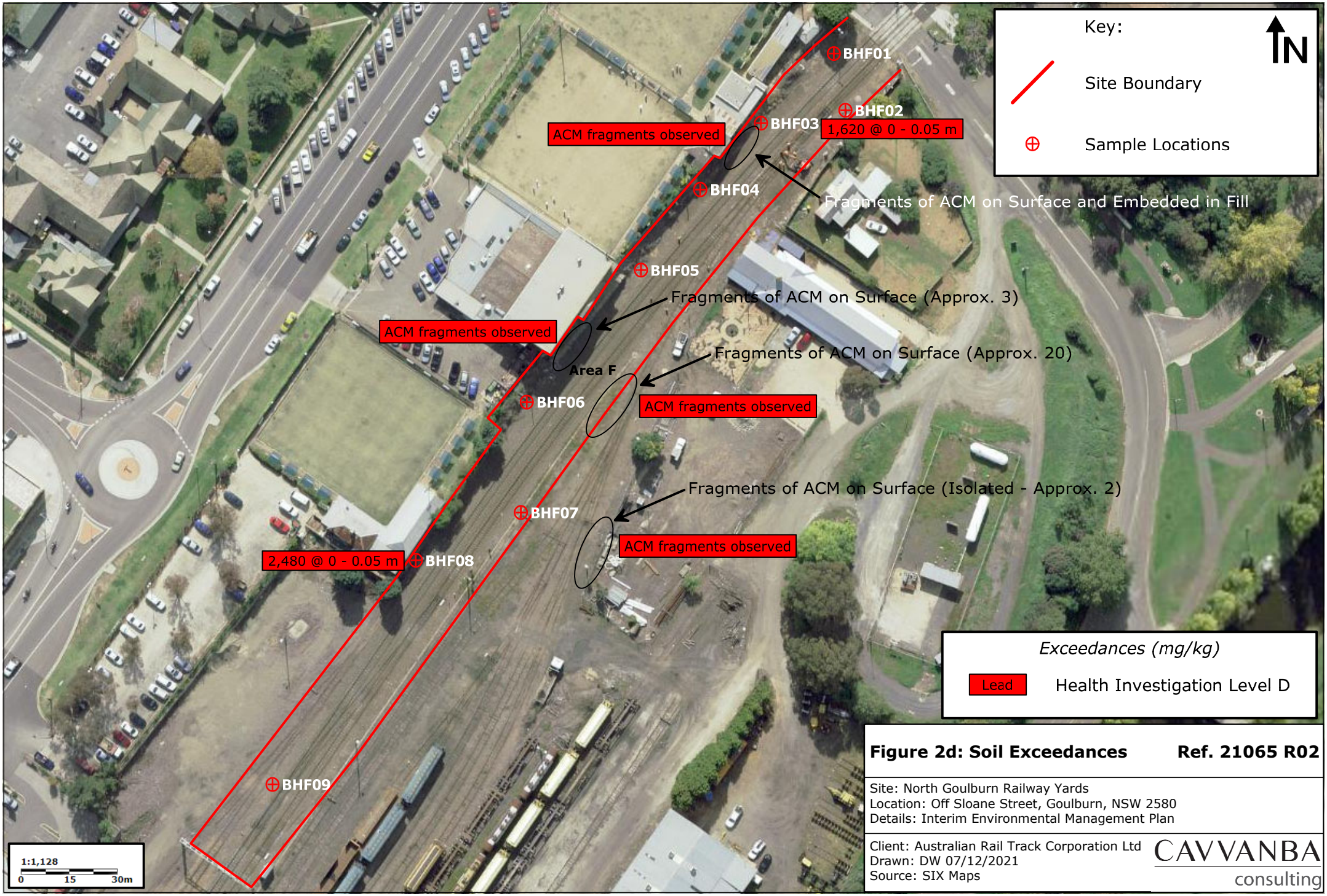

Figure 2d: Soil Exceedances **Ref. 21065 R02**

Site: North Goulburn Railway Yards
Location: Off Sloane Street, Goulburn, NSW 2580
Details: Interim Environmental Management Plan

Client: Australian Rail Track Corporation Ltd
Drawn: DW 07/12/2021
Source: SIX Maps

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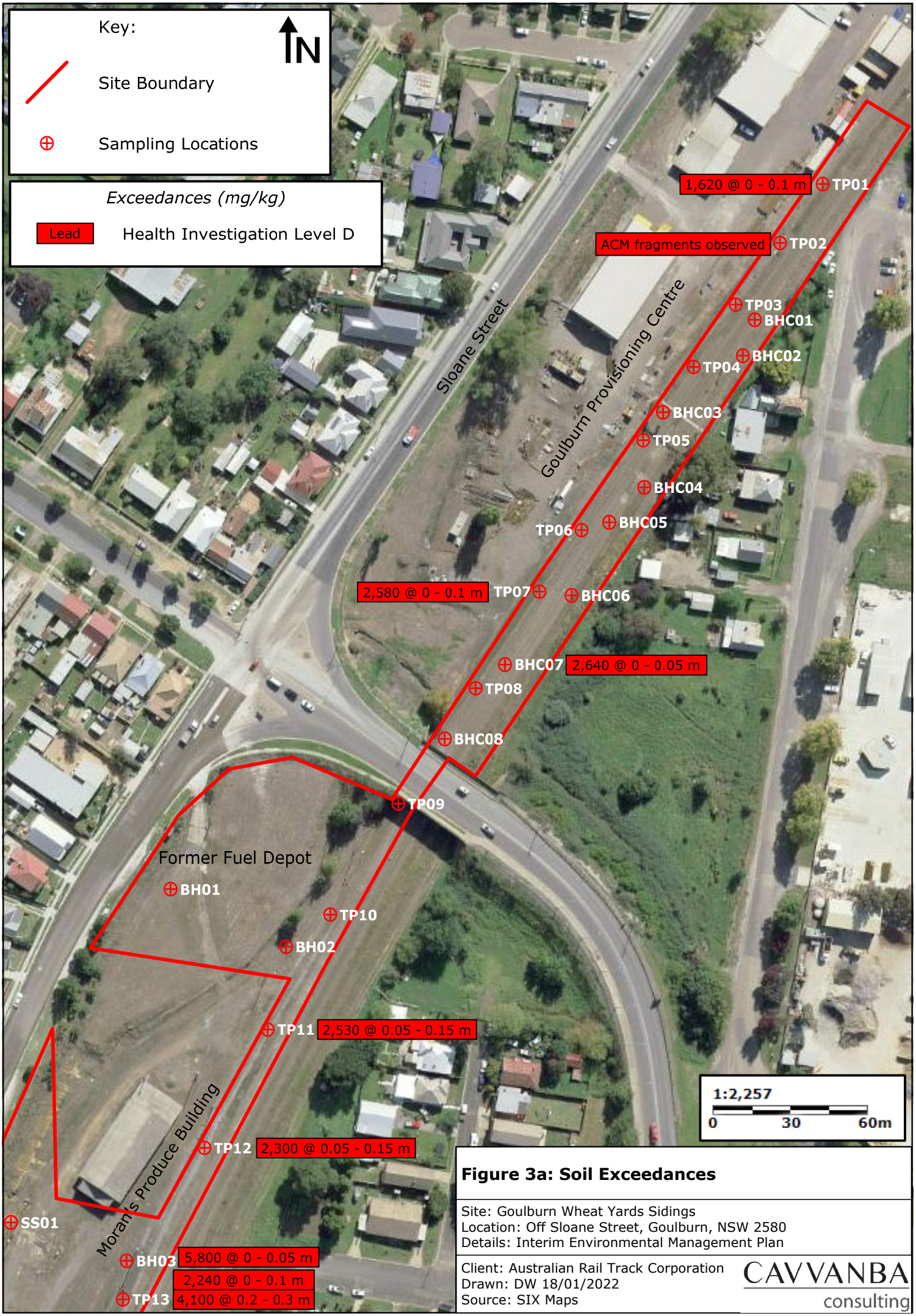

Figure 3a: Soil Exceedances

Site: Goulburn Wheat Yards Sidings
Location: Off Sloane Street, Goulburn, NSW 2580
Details: Interim Environmental Management Plan

Client: Australian Rail Track Corporation
Drawn: DW 18/01/2022
Source: SIX Maps

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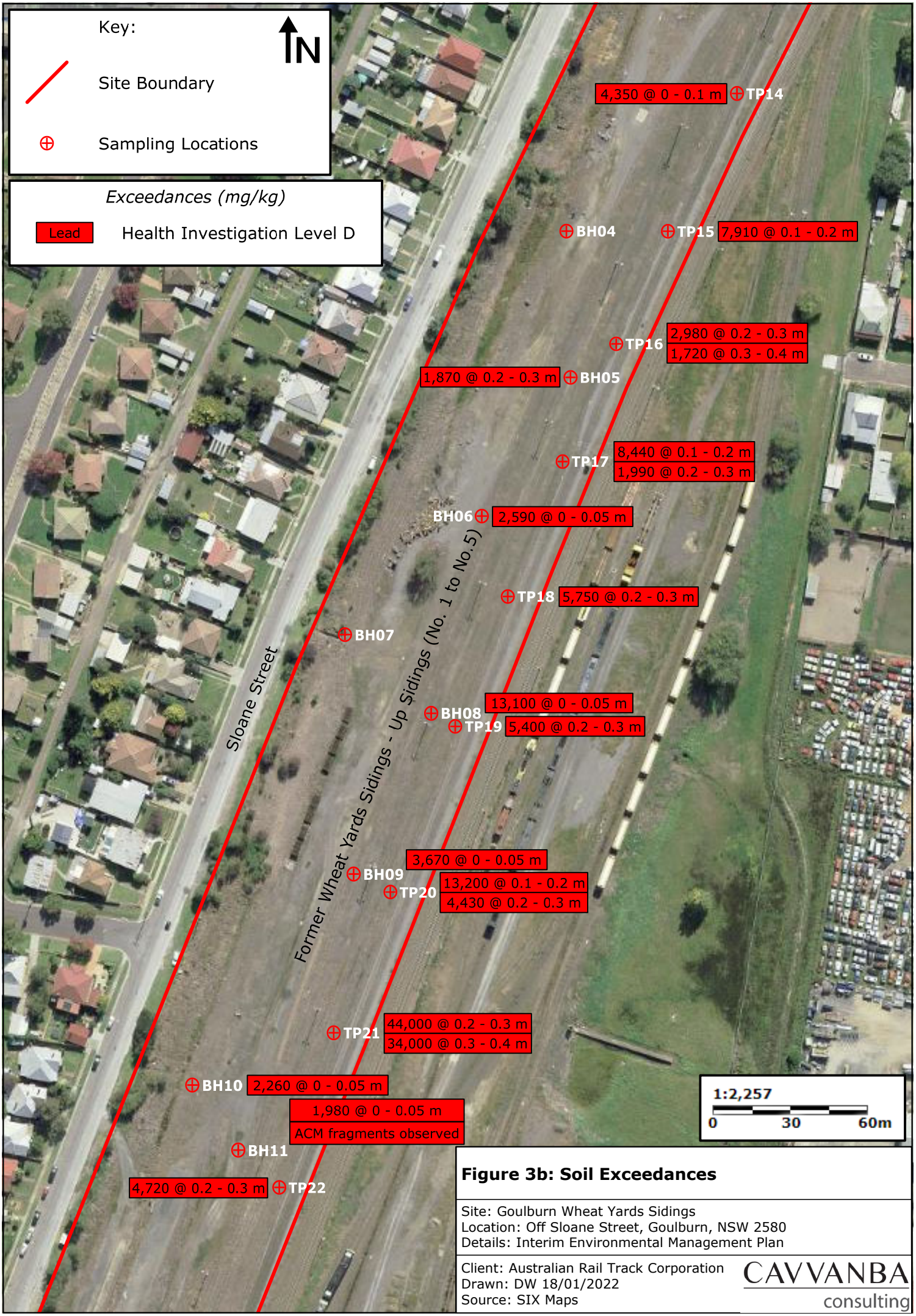

Figure 3b: Soil Exceedances

Site: Goulburn Wheat Yards Sidings
Location: Off Sloane Street, Goulburn, NSW 2580
Details: Interim Environmental Management Plan

Client: Australian Rail Track Corporation
Drawn: DW 18/01/2022
Source: SIX Maps

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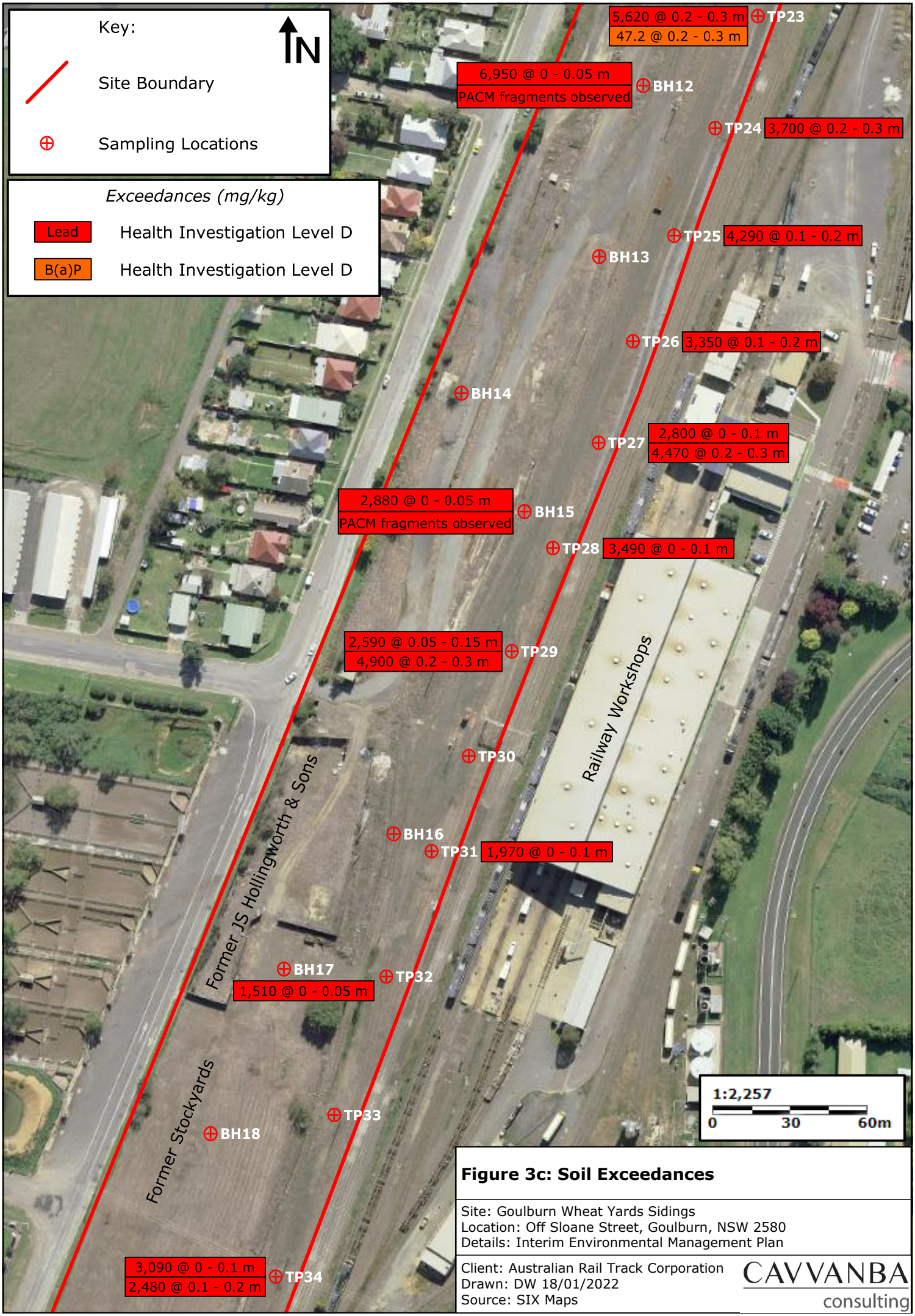

Figure 3c: Soil Exceedances

Site: Goulburn Wheat Yards Sidings
Location: Off Sloane Street, Goulburn, NSW 2580
Details: Interim Environmental Management Plan

Client: Australian Rail Track Corporation
Drawn: DW 18/01/2022
Source: SIX Maps

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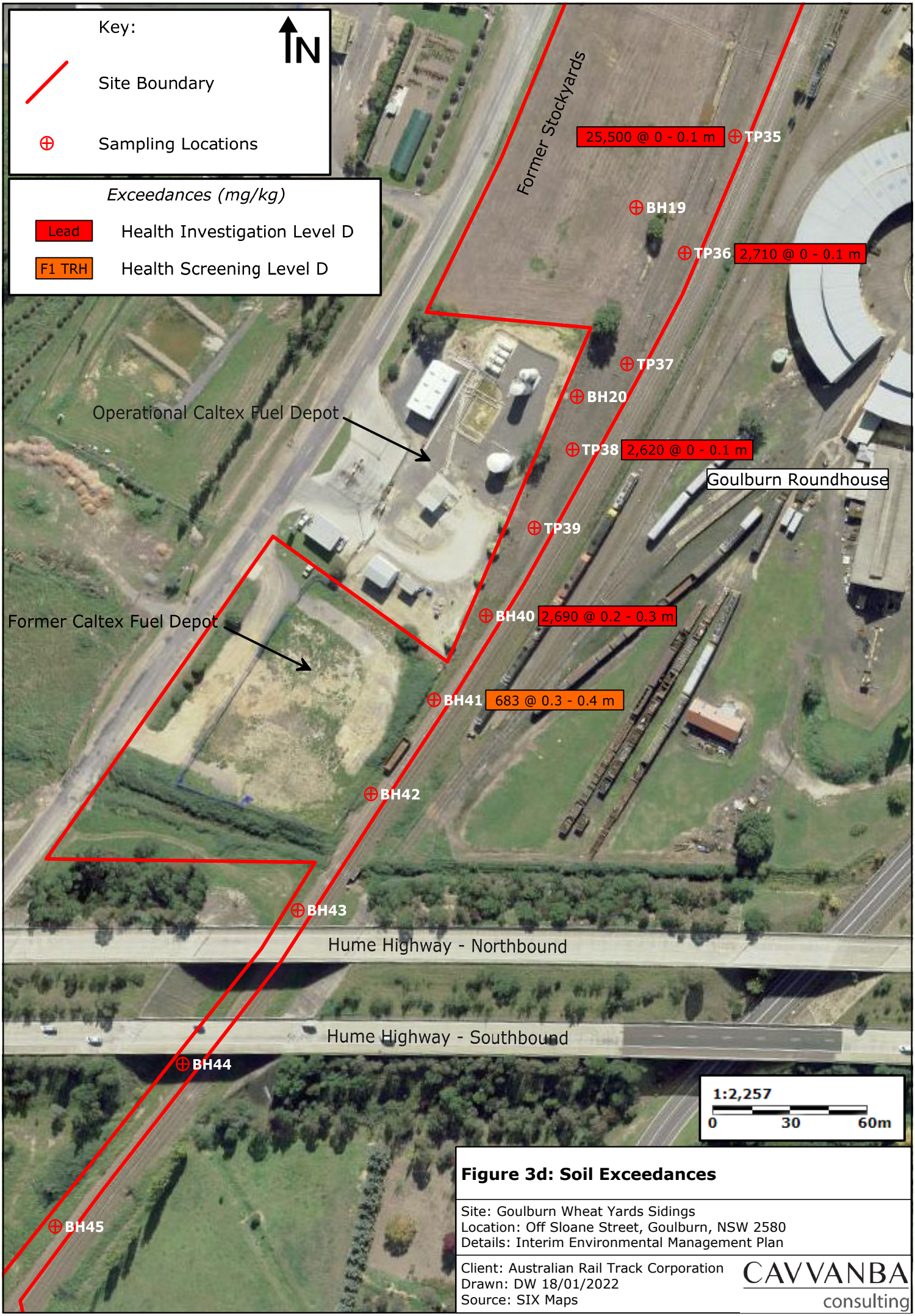

Figure 3d: Soil Exceedances

Site: Goulburn Wheat Yards Sidings
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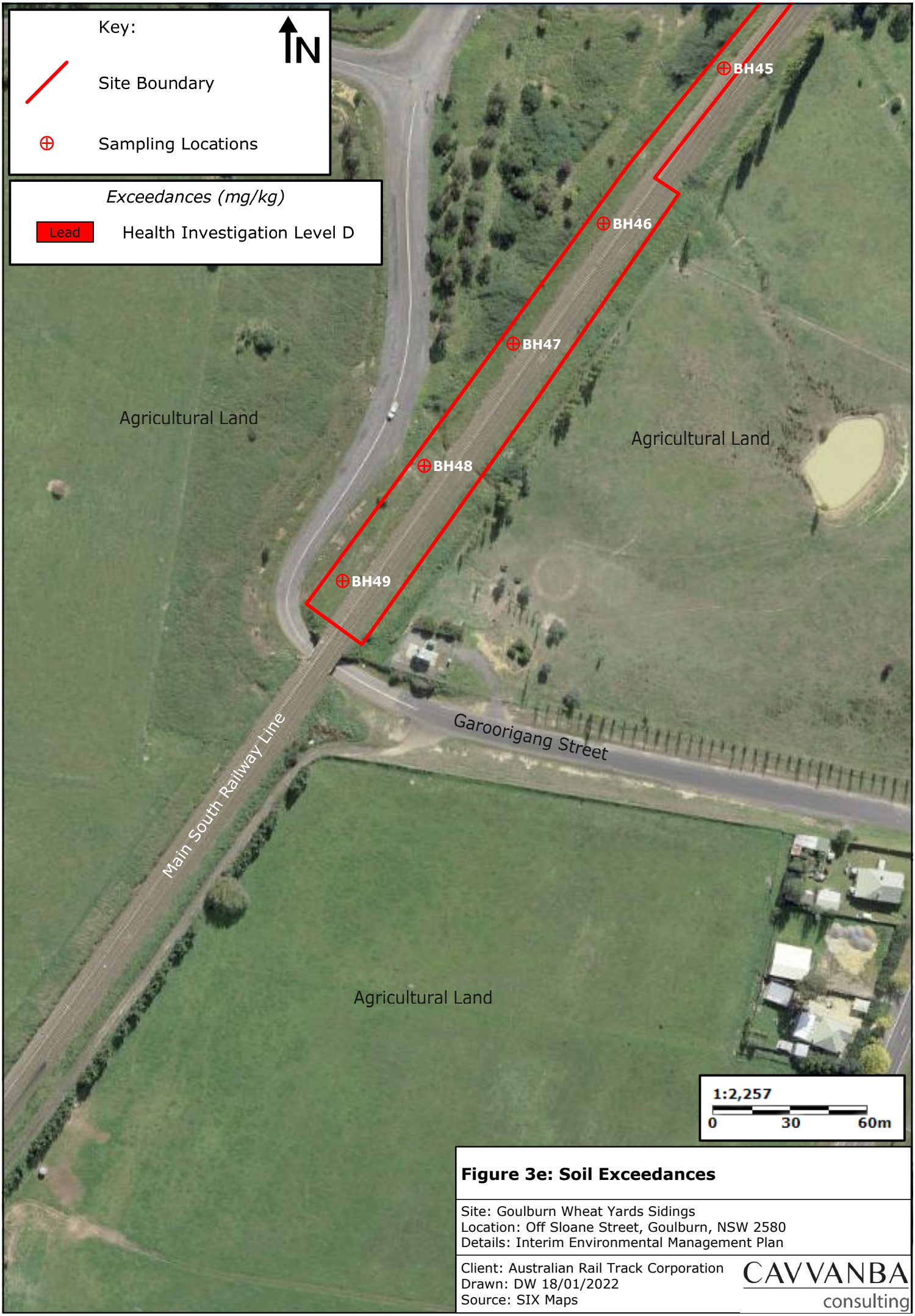

Figure 3e: Soil Exceedances

Site: Goulburn Wheat Yards Sidings
Location: Off Sloane Street, Goulburn, NSW 2580
Details: Interim Environmental Management Plan

Client: Australian Rail Track Corporation
Drawn: DW 18/01/2022
Source: SIX Maps

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