APPENDIX J

Unexpected Contamination Procedure

Frasers Property Industrial
Altis Property Partners

Unexpected Contamination Procedure

657-769 Mamre Road,
Kemps Creek, NSW

26 February 2021

58404 - 129742 (Rev 0)
JBS&G Australia Pty Ltd

www.jbsg.com.au

Frasers Property Industrial
Altis Property Partners

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1. Introduction

1.1 Background

JBS&G Australia Pty Ltd (JBS&G) was engaged by Frasers Property Industrial (Frasers) and Altis Property Partners (Altis) (the client, joint venture parties) to prepare an Unexpected Find Protocol (UFP) for the redevelopment of a property located at 657 to 769 Mamre Road, Kemps Creek, NSW (the site), as shown on **Figure 1**. The site is legally identified as Lot 34 DP1118173, Lot X DP421633, Lot 1 DP1018318, Lot Y DP 421633 and Lot 22 DP258414 and covers an area of approximately 116.3 hectares (ha).

This UFP has been prepared in satisfaction of Condition B85 of SSD-9522 which states: *"Prior to the commencement of earthworks, the Applicant must prepare an unexpected contamination procedure to ensure that potentially contaminated material is appropriately managed. The procedure must form part of the of the CEMP in accordance with condition C2 and must ensure any material identified as contaminated must be disposed off-site, with the disposal location and results of testing submitted to the Planning Secretary, prior to its removal from the site"*.

This UFP will be incorporated into the overarching Construction Environmental Management Plan (CEMP) to address the discovery of unexpected contamination that may be encountered during bulk earthworks at the site.

1.2 Objective

The objective of this report is to provide an appropriate UFP presenting the actions required to protect human and environmental health from unexpected contamination that may be identified during bulk earthworks at the site, in satisfaction of Condition B85 in SSD-9522

2. Unexpected Finds Protocol

2.1 Unexpected Finds Identification

Previous environmental assessments undertaken at the site, namely JBS&G (2019[1]), found that the site was suitable for the proposed land use without the requirement for additional remediation and/or validation. However, potential aesthetic issues associated with anthropogenic materials within fill materials and an isolated fragment of asbestos containing materials (ACM) was identified at the site. There is therefore the potential for varied ground conditions across the site, which may result in unexpected contamination including aesthetic issues being encountered during bulk earthworks at the site.

The nature of any contaminant hazards that may be present at the site are generally detectable through visual or olfactory means, as shown in **Appendix A**, and may include:

- petroleum contaminated soils (staining / discolouration visible, odours);
- asbestos containing material (ACM) in or on soils (e.g. irrigation pipes) that are visible with exception of fibrous asbestos (FA) and asbestos fines (AF));
- containers / drums of chemicals (visible/odours);
- construction / demolition / general waste (visible);
- ash and/or slag contaminated soils / fill materials (visible); and
- volatile organic compound contaminated soils (odorous).

As a precautionary measure to ensure the protection of the workforce and surrounding community, should any of the abovementioned substances be identified (or any other unexpected potentially hazardous substance), the procedure summarised in **Appendix B** and detailed in the following sections is to be followed.

An enlarged version of the unexpected finds protocol, suitable for use on site, should be posted in the Site Office and referred to during the Site Specific Induction by the Principal Contractor.

2.2 Unexpected Find Register

All unexpected finds identified on site should be documented in an unexpected finds register by an appropriately qualified and experienced environmental consultant. An example register is provided in **Appendix C.** A copy should be made available onsite to allow initial documentation of any unexpected finds and to provide a record of successfully managed unexpected finds.

2.3 Assessment of Unexpected Finds

The sampling strategy for the characterisation and validation of each 'unexpected find' shall be designed by a suitably qualified environmental consultant dependent upon the nature and extent of the unexpected find, in accordance with guidelines made or endorsed by EPA. The strategy will, however, be aimed at determining the nature of the substance – that is, is it hazardous and, if so, is it at concentrations which pose an unacceptable risk to human health or the environment?

[1] *Environmental Site Assessment, 657-703,707-711, 707A, 713-755 & 757-769 Mamre Road, Kemps Creek*. JBS&G Australia Pty Ltd. Reference 54963/120704 (Rev 0). Dated 27 February 2019 (JBS&G 2019)

The assessment approach for the identified substance/materials shall meet the requirements detailed in NEPC 2013[2] and EPA 1995[3]. Approaches to the assessment and management of potential unexpected finds are provided in **Section 2.4**.

2.4 Appropriate Assessment and Management Strategy

2.4.1 General Management Strategy

The general management strategy to manage unexpected contamination finds will be dependent on the results of the characterisation assessment. Materials will generally be retained on the site if they are assessed by the environmental consultant to be suitable for the intended land use consistent with NSW EPA made or endorsed guidelines including NEPC (2013) guidance. Or alternatively, unexpected finds may be managed via offsite disposal. All soil requiring offsite disposal will be classified, managed and disposed in accordance with the *Waste Classification Guidelines* (NSW EPA 2014)[4] or EPA waste exemptions if applicable and the regulatory framework established in LG (2021[5]). Appropriate documentation shall be maintained to provide evidence for all soil disposal and provided to the environmental consultant for inclusion in validation letters as per **Section 2.5.2**.

It should be noted that prior to the disposal of any contaminated soil from the site, notification to the planning secretary is required, in accordance with Condition B85 of SSD-9522.

2.4.2 Asbestos

Minor asbestos unexpected finds should be assessed in accordance with *Managing Asbestos in or on soil* (SafeWork NSW 2014), specifically, the flow chart provided by SafeWork (2014) document, which is presented in **Appendix D**.

Should significant asbestos unexpected finds be identified (i.e. greater than 10m^2), these should be assessed by an appropriate qualified and experienced environmental consultant (competent person) in accordance with NEPC (2013) and WA DoH (2009) [6] and an asbestos management plan may be required.

Asbestos containing materials should be managed in accordance with the following guidance documents:

- *Managing Asbestos in or on soil* (SafeWork NSW 2014).
- *How to Manage and Control Asbestos in the Workplace Code of Practice* (SafeWork NSW 2019).
- *How to Safely Remove Asbestos Code of Practice* (SafeWork NSW 2019.

Management and removal of greater than 10 m^2 non-friable asbestos materials must be undertaken by a Class B licensed asbestos contractor. Any friable asbestos materials must be removed by a Class A licensed asbestos contactor. A licensed asbestos assessor (LAA) will be required for clearance of friable asbestos impacts.

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[2] *National Environment Protection (Assessment of Site Contamination) Amendment Measure 2013 (No. 1)*, National Environment Protection Council (NEPC 2013).
[3] *Contaminated Sites Sampling Design Guidelines* NSW EPA, September 1995 (EPA 1995)
[4] *Waste Classification Guidelines.* NSW EPA 2014 (EPA 2014)
[5] *Construction and Demolition Waste Management Plan, Warehouse/Logistics Hub Facility, 657-769 Mamre Road, Kemps Creek, NSW,* LG Consult, 1 February 2021 (LG 2021)
[6] *Guidelines for the Assessment Remediation and Management of Asbestos Contaminated Sites in Western Australia*, WA Department of Health, May 2009 (WA DoH 2009).

Asbestos air monitoring is required during all asbestos related works at the site and may be recommended for non-friable asbestos management particularly when close to public areas. Air monitoring for friable asbestos management will require supervision by a LAA.

2.4.3 Ash / Slag or Demolition /General Waste Impacted Fill Material

Any identified ash / slag or demolition / general waste material in fill materials should be inspected by an appropriately qualified and experienced environmental consultant, and if required will be sampled and analysed for relevant contaminants. The extent of impact may be determined by excavation of the unexpected find or by test pitting on a grid pattern across the unexpected find.

Ash / slag and demolition / general waste material can pose an aesthetic issue if present in sufficient quantities on/near the ground surface and may require assessment to assist in the management of soil.

If assessment deems the ash / slag or demolition / general waste material unsuitable for the proposed land use, this material will require remediation or management, as noted in **Section 2.5.1**.

It is noted that open air burning of materials is prohibited in all NSW local government area.

Uncontrolled filling may also present compaction and geotechnical issues, which would require assessment by appropriately qualified and experienced geotechnical engineers. Geotechnical considerations are beyond the scope of this document.

2.4.4 Petroleum Drums / Chemical Containers and Petroleum / Chemically Impacted Soils

Should drums and / or other chemical containers be observed, the type of contaminant present in the drum or chemical container will be identified where practicable and safe to do so by an appropriately qualified and experienced environmental consultant. Adjacent soils will need assessment for residual contaminants consistent with NEPC (2013) and EPA guidelines.

Any drums / chemical containers will be removed offsite to a licensed disposal facility in accordance with relevant guidelines and codes of practices for the type of contaminant identified. This may include removal of liquids, flammable materials or hazardous materials from the interior and / or adjacent soils of the unexpected find.

Should any malodourous, stained or otherwise impacted soils be observed the unexpected find should be inspected and sampled by an appropriately qualified and experienced environmental consultant consistent with NEPC (2013) and EPA guidelines. If volatile organic compounds (VOCs) are identified, an appropriate soil vapour assessment will be undertaken if materials are to be considered for onsite retention or excavated and disposed offsite.

Soil analytical data will be assessed against appropriate land use criteria for consideration for onsite retention, or, classified according to the *Waste Classification Guidelines* (NSW EPA 2014) or compared against relevant waste exemptions to determine the management of the soils. Soils not suitable to be retained onsite (i.e. contamination, as per the definition provided in the *Contaminated Land Management Act (1997)*, being a presence that presents a risk of harm to human health (Section 5, CLM Act 1997), will require offsite disposal to a licensed waste disposal facility. Consideration of the waste regulatory framework outlined in LG (2021) is required.

It should be noted that prior to the disposal of any contaminated soil from the site, notification to the planning secretary is required, in accordance with Condition B85 of SSD-9522.

2.4.5 Stockpiled / Dumped Material

Unexpected finds in stockpiles or illegally dumped material will be inspected by an appropriately qualified and experienced environmental consultant and assessed in accordance with NEPC (2013) and EPA guidance, as detailed in **Table 2.1** below, irrespective of whether they are intended for site re-use or waste disposal.

Table 2.1: Stockpile Sampling Frequency

Stockpile Volume (m^3)	Number of Samples
<75	3
75 - <100	4
100 - <125	5
125 - <150	6
150 - <175	7
175 - <200	8
> 200	Appropriate characterisation subject to statistical assessment (NSW EPA 1995)

Stockpiled spoil may be able to be assessed under NSW EPA waste exemptions, such as excavated natural material (ENM), subject to advice from an environmental consultant.

If ACM is present, the stockpiles will require to be assessed for off-site disposal as special waste in accordance with NSW EPA (2014) or assessed in accordance with NEPC (2013) and WA DoH (2009) for possible alternate onsite management options. Soils impacted with ACM may be remediated onsite to reduce ACM to acceptable levels for on-site retention at depth or below structures with no further long-term management, or, be retained beneath structures/depth with ongoing long-term management if asbestos concentrations are above applicable land use criteria. Onsite retention of asbestos materials will require inclusion on an asbestos register consistent with WHS Regulations.

Stockpiled or spoil materials that satisfy the site validation criteria, outlined in **Section 2.5**, (as well as aesthetic criteria) may be reused onsite. Stockpiled or spoil material that does not meet the site validation criteria or aesthetic criteria may require offsite disposal following waste classification to a licensed waste disposal facility or may be removed off-site under EPA waste exemptions where appropriate. It is noted some materials that do not meet site criteria may be retained on site with an appropriately planned capping/containment strategy and ongoing management plan. This assessment will need to be made by an appropriately qualified and experienced environmental consultant.

2.5 Validation of Unexpected Finds

Validation inspection and possible sampling/analysis is required to be undertaken to demonstrate that unexpected finds have been managed to a standard suitable for the proposed landuse.

Table 2.2: Validation Sampling and Analytical Schedule

Validation Area	Sampling Frequency	Analytes[1]
Excavations formed by the removal of unexpected finds	Minimum of 1 validation sample per 10 m linear of wall and 1 m depth, minimum of 1 validation sample per 100 m^2 area for the base (10 m grid).	As appropriate, based on the characteristics of the find
Contaminated material requiring disposal offsite	See **Table 2.1** above.	TPH/BTEX, PAHs, heavy metals, OCP/PCBs, asbestos and TCLP (if required), or as appropriate based on the characteristics of the find
Residual soils underneath stockpiles where contaminated material has been stored	Minimum of 1 sample per 10 m grid.	As appropriate, based on the characteristics of the find

Note:

[1] All samples analysed for asbestos validation / re-use purposes (including ENM) will be 500 mL samples in accordance with WA DOH (2009) guidelines, and analysed in accordance with AS 4964-2004. Asbestos samples for waste disposal purposes will be 50 g samples.

2.5.1 Assessment/Validation Criteria

It is understood that the site will be utilised for land uses consistent with a commercial/industrial land use scenario as per NEPC 2013. As such the validation criteria applicable to any unexpected finds are as follows:

- HIL D – Commercial/Industrial includes premises such as shops, offices, factories, roadways and industrial sites;
- HSL D – Commercial/Industrial includes premises such as shops, offices, factories and industrial sites (clay – fine textured soils).

In addition to the above, materials assessed for onsite reuse and/or validation at the walls and base of the resulting excavations will be required to satisfy aesthetic considerations and ecological guidelines, as per NEPC (2013), as relevant to the proposed location for onsite retention.

2.5.2 Clearance / Validation Reporting

Clearance / validation letter reports will be prepared at the completion of the management of each unexpected find. The clearance / validation letter will be prepared in general accordance with relevant EPA published or endorsed guidelines, documenting the works undertaken. These will need to be prepared by suitably qualified and experienced environmental consultants.

The letter report will generally contain:

- Details on type of contaminant, size, extent and location of the unexpected find;
- Information demonstrating that the unexpected find was adequately assessed (including sampling plan, all relevant analytical or observational data, QA / QC);
- Information on the remediation / management of the unexpected find (such as disposal dockets from a licensed waste facility or asbestos surface picking);
- Information on the clearance / validation of the unexpected find to meet the adopted site criteria (including all relevant analytical and / or observational data);
- Advice on the removal of temporary exclusion zones and return to work as per the Unexpected Find Protocol (see Flowchart in **Appendix B**).

3. Limitations

This report has been prepared for use by the client who has commissioned the works in accordance with the project brief only, and has been based in part on information obtained from the client and other parties.

The advice herein relates only to this project and all results conclusions and recommendations made should be reviewed by a competent person with experience in environmental investigations, before being used for any other purpose.

JBS&G accepts no liability for use or interpretation by any person or body of the report for purposes beyond the intent. This report should not be reproduced without prior approval by the client, or amended in any way without prior approval by JBS&G, and should not be relied upon by other parties, who should make their own enquiries.

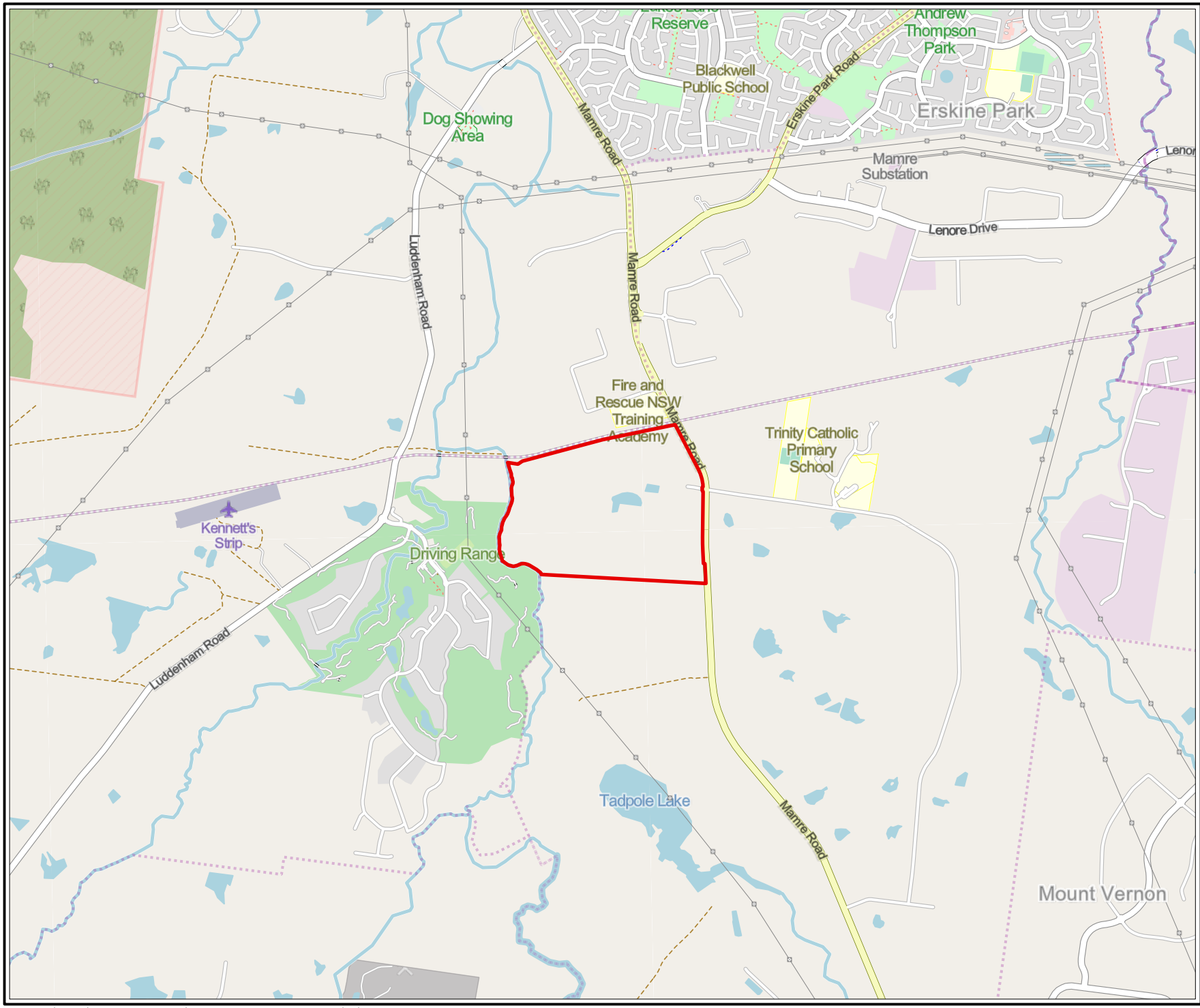
Sampling and chemical analysis of environmental media is based on appropriate guidance documents made and approved by the relevant regulatory authorities. Conclusions arising from the review and assessment of environmental data are based on the sampling and analysis considered appropriate based on the regulatory requirements.

Information provided by the client indicated limited sampling and laboratory analyses by others was undertaken as part of previous investigations, however specific investigation reports were not available for review in preparing this document. It is noted that ground conditions between sampling locations and media may vary, and further chemicals or categories of chemicals may exist at the site, which were not identified in the information provided and which may not be expected at the site.

Changes to the subsurface conditions may occur subsequent to previous investigations, through natural processes or through the intentional or accidental addition of contaminants. The information presented in this report are based on the information obtained at the time of preparation.

This report does not provide a complete assessment of the environmental status of the site, and it is limited to the scope defined herein. Should information become available regarding conditions at the site including previously unknown sources of contamination, JBS&G reserves the right to review the report in the context of the additional information.

Figures



Legend

Approximate Site Boundary

JBS&G

Job No: 58404	
Client: Frasers Property Australia	
Version: R02 Rev A	Date 20/05/2020
Drawn By: JA	Checked By: CB

Scale 1:35,000

0 500 1,000

metres

Coord. Sys. GDA 1994 MGA Zone 56

657-769 Mamre Road
Kemps Creek, NSW

SITE LOCATION

FIGURE 1

File Name: N:\Projects\Frasers Property Australia\58404 - 657-769 Mamre Rd, Kemps Creek\GIS\58404_FrasersProperty.aprx
Reference: OpenStreetMap

Legend

Approximate Site Boundary

JBS&G

Job No: 58404	
Client: Frasers Property Australia	
Version: R02 Rev A	Date 20/05/2020
Drawn By: JA	Checked By: CB

Scale 1:7,000

0 75 150

metres

Coord. Sys. GDA 1994 MGA Zone 56

657-769 Mamre Road
Kemps Creek, NSW

SITE LAYOUT

FIGURE 2

File Name: N:\Projects\Frasers Property Australia\58404 - 657-769 Mamre Rd, Kemps Creek\GIS\58404_FrasersProperty.aprx
Reference: Nearmap - www.nearmap.com (Capture Date: 25/04/2020)

Appendix A: Unexpected Finds Summary

BE AWARE

UNEXPECTED HAZARDS MAY BE PRESENT

drums

asbestos

chemical bottles

staining

odour

ash / slag

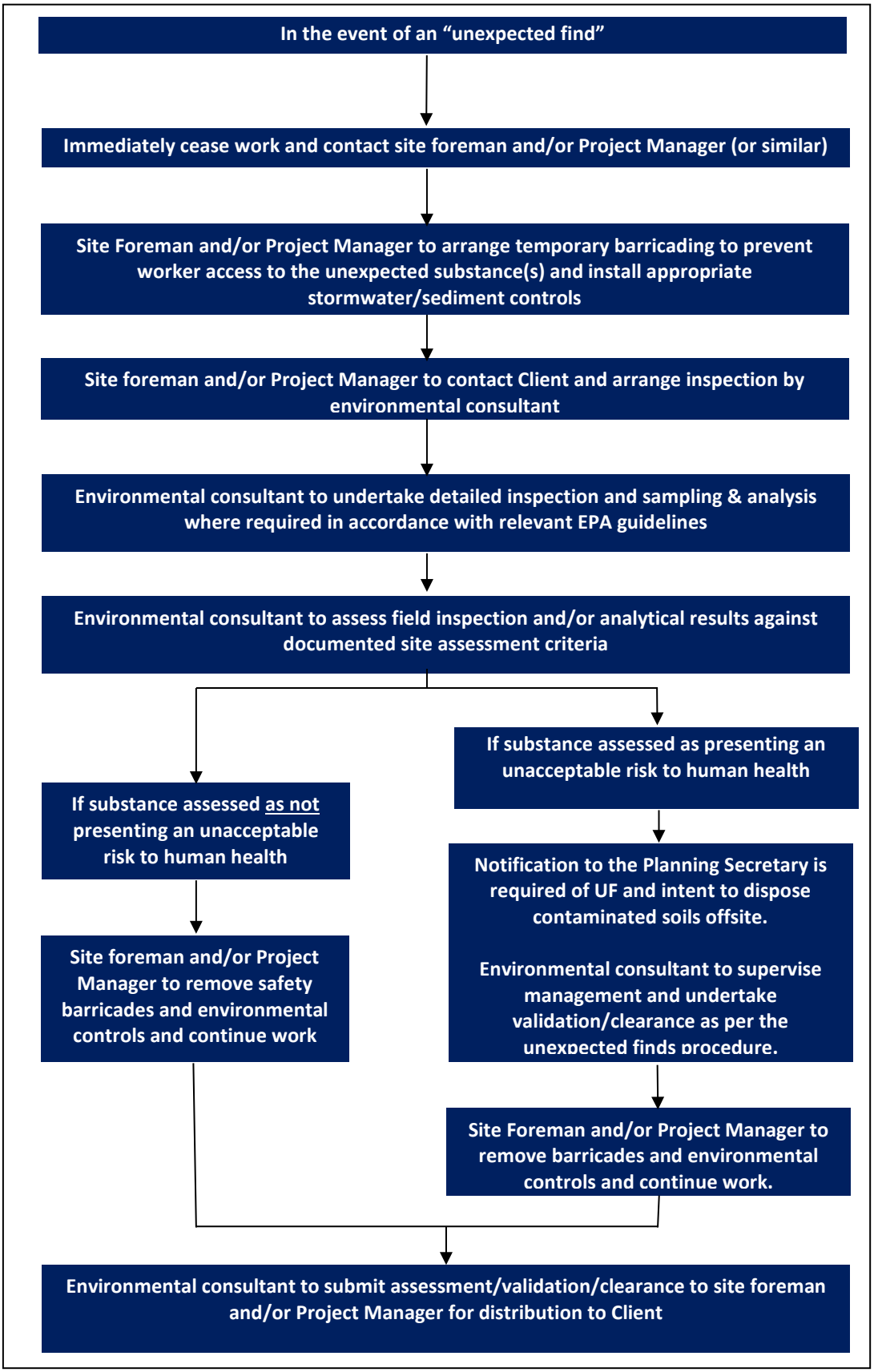
demolition waste

if you <u>SEE</u> or <u>SMELL</u> anything unusual

<u>STOP WORK</u> & contact the Site Foreman

do not restart working before the area has been investigated and cleared by an Environmental Consultant

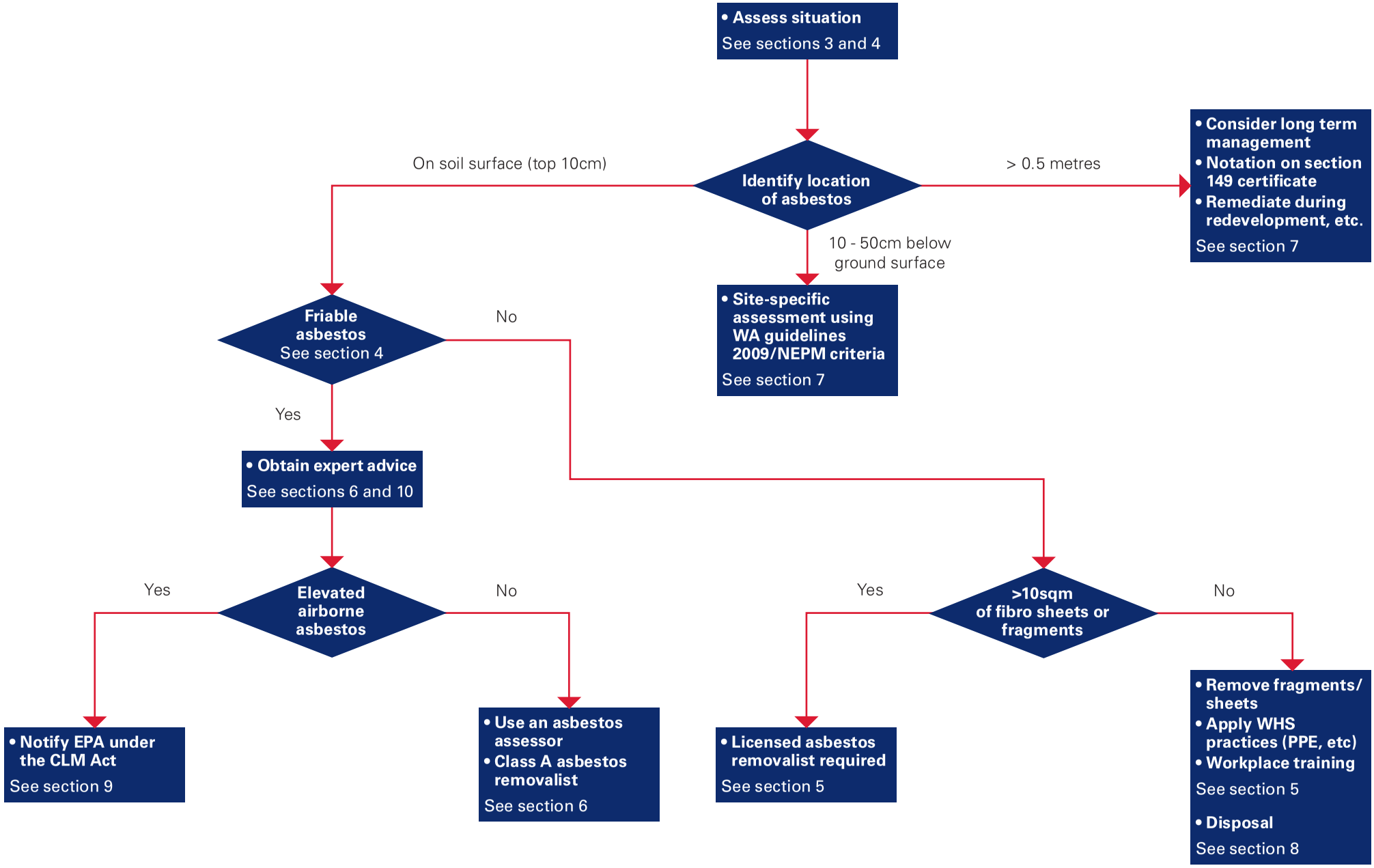
Appendix B: Unexpected Finds Protocol Flowchart



Appendix C: Unexpected Finds Register

Unexpected Find Identification							Unexpected Find Characterisation		Remedial Action	Unexpected Find Validation				
UF#	Grid Reference	Date	Nature of Find	Approximate Area of UF (m^2)	Depth of Impact (m bgs)	Appox. Volume (m^3)	Characterisation Samples	Lab Report	Remedial Actions Undertaken	Validation Action Undertaken	Lab Report Number	Clearance of UF	Additional Notes	Closed?
Example	*I 9*	*28/09/2017*	*Asbestos fragments in soil*		*>3*	*>3*	*WC01 to WC08*	*565229*	*Offsite Disposal*	*E*	*-*	*As per UF27 & UF28*	*As per UF27 & UF28*	*Yes*

Appendix D: SafeWork Asbestos Flowchart (SafeWork NSW 2014) and Asbestos Checklist (SafeWork NSW 2016)


• Assess situation
See sections 3 and 4
Identify location of asbestos
On soil surface (top 10cm)
> 0.5 metres
10 - 50cm below ground surface
• Consider long term management
• Notation on section 149 certificate
• Remediate during redevelopment, etc.
See section 7
• Site-specific assessment using WA guidelines 2009/NEPM criteria
See section 7
Friable asbestos
See section 4
No
Yes
• Obtain expert advice
See sections 6 and 10
Elevated airborne asbestos
Yes
No
• Notify EPA under the CLM Act
See section 9
• Use an asbestos assessor
• Class A asbestos removalist
See section 6
>10sqm of fibro sheets or fragments
Yes
No
• Licensed asbestos removalist required
See section 5
• Remove fragments/ sheets
• Apply WHS practices (PPE, etc)
• Workplace training
See section 5
• Disposal
See section 8
Higher Risk
Lower Risk

SAVE AS PRINT

NSW GOVERNMENT | SafeWork NSW

Work Health and Safety Act 2011 (WHS Act) –
Work Health and Safety Regulation 2017(WHS Regulation)

ASBESTOS AND DEMOLITION CHECKLIST

OCTOBER 2016

Completed by

Date

Time

Company name

Nominated supervisor

Site address

Contact number

Checklist	WHS Regulation	Yes	No	N/A	Notes/comments
Is the workplace secured from unauthorised access?	298	☐	☐	☐	
Are barricades erected to delineate the asbestos removal area?	469	☐	☐	☐	
Is there adequate signage for asbestos removal work?	469	☐	☐	☐	
Are adequate facilities available for workers (toilets, meal area, drinking water, means to wash hands)?	41	☐	☐	☐	
Is there an adequate first aid kit available?	42	☐	☐	☐	
Is someone trained in first aid?	42	☐	☐	☐	
Is there an emergency plan for the workplace?	43	☐	☐	☐	
Is the designated asbestos supervisor present for friable work?	459 and 529	☐	☐	☐	
Is the designated asbestos supervisor present for non friable work (ie able to arrive at the workplace within 20 minutes)?	459 and 529	☐	☐	☐	
Does the contractor hold the correct licence for the work being undertaken?	485 and 487	☐	☐	☐	

Checklist	WHS Regulation	Yes	No	N/A	Notes/comments
Has licensed asbestos removal work been notified to SafeWork NSW?	142 and 466	☐	☐	☐	
Are work surfaces and access ways clear of debris and trip hazards?	40	☐	☐	☐	
Is there an asbestos removal control plan prepared?	464	☐	☐	☐	
Is the Asbestos Removal Control Plan readily accessible?	465	☐	☐	☐	
Are there arrangements (eg health and safety representative, health and safety committee or other agreed arrangements) to consult with workers on safety matters?	Sections 47 – 49 of the WHS Act	☐	☐	☐	
Have safe work method statements been prepared for high risk construction work?	299	☐	☐	☐	
Is there an asbestos register?	450 and 463	☐	☐	☐	
Has the structure been inspected to determine whether asbestos is present?	451–453	☐	☐	☐	
Do all persons working with asbestos have correct training?	460	☐	☐	☐	
Do all workers have construction induction cards?	316	☐	☐	☐	
Is plant inspected on a regular basis?	213	☐	☐	☐	
Do workers have high risk work licences (if required)?	81	☐	☐	☐	
Is correct personal protective equipment provided, fit tested, and used?	44	☐	☐	☐	
Have all services been disconnected (ie electrical, gas, water, fire)?	163	☐	☐	☐	
Is dust generated by demolition activity being controlled?	35	☐	☐	☐	
If air monitoring is undertaken, is it done by a competent person?	475 and 482	☐	☐	☐	
Are workers prevented from falling through open penetrations and unprotected edges?	78	☐	☐	☐	
Are exclusion zones or overhead protection in place to stop building debris from falling on workers below?	54	☐	☐	☐	
Is a compliant scaffold provided?	225	☐	☐	☐	
Has the handover certificate been provided for the scaffold?	225	☐	☐	☐	

Checklist	WHS Regulation	Yes	No	N/A	Notes/comments
For a Class A Friable Asbestos Removal License holder, is there a current certified safety management system in place?	493	☐	☐	☐	
Are arrangements in place for a clearance inspection to be carried out, after asbestos is removed, by an independent licensed assessor or competent person?	473	☐	☐	☐	
Is asbestos waste and contaminated PPE planned to be disposed of as soon as practicable at a site authorised to accept asbestos waste?	472	☐	☐	☐	
Has notification of asbestos removal been given to the neighbours?	467	☐	☐	☐	
Are there facilities available to decontaminate the following: asbestos removal area, plant used in the asbestos removal area, workers carrying out asbestos removal work, other persons who have access to the asbestos removal area?	471	☐	☐	☐	
Does the licence holder have systems in place for decontamination and annual maintenance of Class H asbestos vacuum cleaners?	35	☐	☐	☐	
Has health monitoring for workers been undertaken by a licensed medical practitioner?	435–444	☐	☐	☐	

Notes

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