



# REMEDIATION ACTION PLAN

**Former Bankstown Golf Course Driving Range  
Corner of Bullecourt Avenue & Bullecourt Lane  
Milperra NSW 2214**



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Document Approval		
Approved by	Date	Signed
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## **Executive Summary**

Environmental Consulting Services Pty Ltd (ECS) was engaged by Anglicare to prepare a Remediation Action Plan (RAP) for the management of soil impacts during the redevelopment of the former Bankstown Golf Course Driving Range. The purpose of this RAP is to outline the strategy for the remediation of the Site during redevelopment for residential purposes.

ECS understands that the site will be redeveloped for residential use with some landscaped areas.

The objective of the RAP are to establish the remediation goals for the site to ensure impacts are managed during redevelopment and that once developed the site is suitable for the proposed use. The RAP sets procedures and measures to evaluate the success of remediation works and provide assurance that the remediation goals have been achieved and identifies some safeguards necessary to undertake the remediation of the Site.

The redevelopment of this site is the driver for remedial activities. The contamination at the site is limited to the presence of asbestos containing material at one location. In addition inspection of the site surface is needed following the removal of a shed from the north east corner of the land.

Records of all site remediation activities need to be maintained and presented in a formal report. The report needs to include a clear description of the scope of work completed and the results of inspections and sampling that confirm the removal of asbestos impacted fill material.

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## **1.0 INTRODUCTION**

Environmental Consulting Services Pty Ltd (ECS) was engaged by Anglicare to prepare a Remediation Action Plan (RAP) for the management of soil impacts during the redevelopment of the former Bankstown Golf Course Driving Range. The purpose of this RAP is to outline the strategy for the remediation of the Site during redevelopment for residential purposes.

### **1.1 Background**

The Site has been the subject of several environmental investigations including a:

- Preliminary Contamination Assessment (Geotechnique Pty Ltd 2011);
- Limited Contamination Assessment (Enviropacific Services Pty Ltd 2013); and
- Detailed Site Investigation (Coffey Environments Australia Pty Ltd).

This RAP has been prepared based on the Detailed Site Investigation which includes summaries of both the preliminary assessment and the limited assessment.

### **1.2 Objectives and Scope of Work**

The objective of this RAP is to document the procedures and standards to be followed to manage the risks posed by potential soil contamination which include:

- To establish the remediation goals to ensure impacts are managed during construction and that the developed Site is suitable for the proposed use;
- Set procedures and measures to evaluate the success of remediation works and provide assurance that the remediation goals have been achieved; and
- Identify safeguards necessary to undertake the remediation of the Site.

### **1.3 Site Development**

The proposed redevelopment of the Site will consist of the construction of four residential buildings and a residential care building. The development will include landscaped areas and basement car parking. Copies of development plans are included in Appendix 1.

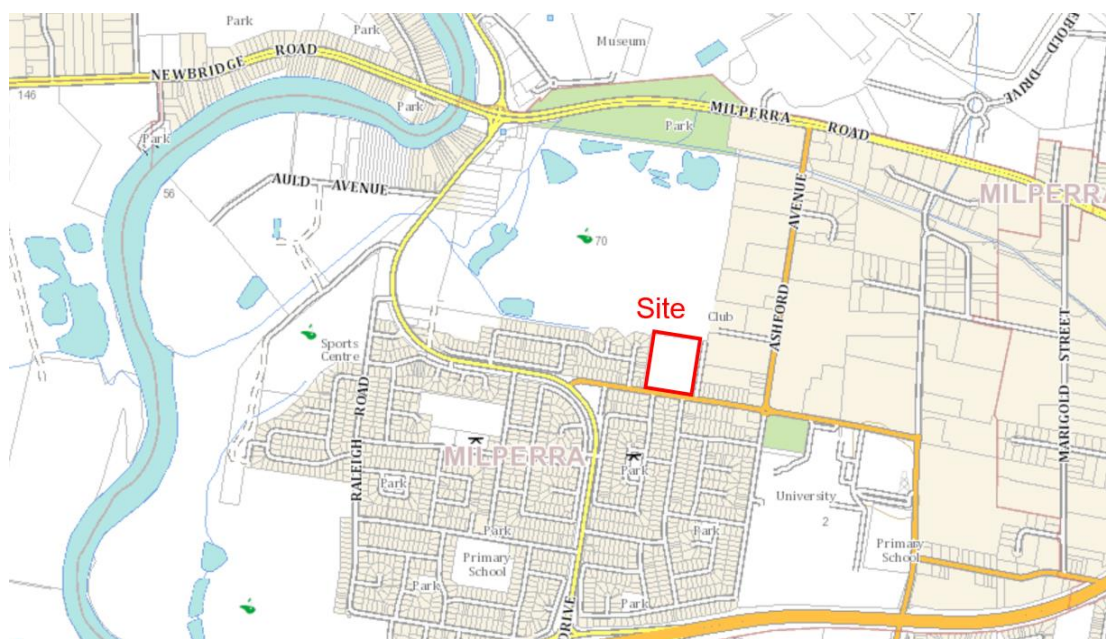
## **2.0 SITE SETTING**

### **2.1 Site Identification**

The Site is located at the corner of Bullecourt Avenue & Bullecourt Lane in Milperra and has a total area of approximately 2.75 hectares. The Site is described as Lot 161 and Lot 272 2 on DP 752013 and is zoned R2 Low Density Residential under Bankstown Local Environment Plan 2015.

The location of this Site is presented on Figure 1 - Location Plan (Six Maps).

**Figure 1 - Site Location Plan**



## 2.2 Site Description

The Site is rectangular in shape and is bounded by Bullecourt Avenue to the south and Bullecourt Lane to the east. The Site has a length north-south of approximately 170m and a width of approximately 160m. The developments that surround the Site include commercial/industrial, residential and open space and are specifically:

- To the east across Bullecourt Lane, there is a commercial/industrial facility used for various purposes;
- To the west and to the south across Bullecourt Avenue are residential dwellings;
- To the north is Bankstown Golf Course.

The Site is relatively level with minor undulations and is predominantly covered with grass. There is a storage shed at the north east corner of the Site that was formerly used for chemical and equipment storage. There is also a stockpile of soil located near the north west corner of the Site which is the location of a former practice green.

There are some mature trees along the southern and eastern boundaries of the Site and around the shed in the north east corner. There is also an unlined open stormwater drain along the northern boundary of the site.

The layout of the Site is presented on Figure 2 (Six Maps).

**Figure 2 – Aerial Photo**



### **2.3 Regional Geology and Hydrogeology**

The local geology has been described on the 1:100,000 Sydney geological map (series sheet 9130) as being Triassic age shale of the Wianamatta Group known as Ashfield Shale.

The result of the previous investigation undertaken on the Site indicated that there is a thin layer of fill across much of the Site although in some locations a thicknesses of more than 1m were encountered. Depth to groundwater in the three wells installed at the Site ranged from approximately 1.6m and 2.3m below ground level.

### **3.0 PREVIOUS INVESTIGATIONS**

The findings of the Detailed Site Investigation were presented in the report entitled *Detailed Site Investigation Bankstown Golf Course Corner of Bullecourt Avenue and Bullecourt Lane Milperra NSW 2214* (Coffey Environments Australia Pty Ltd 15 February 2013). This report included a summary of the findings of a preliminary contamination assessment conducted at the Site and a limited contamination related to underground storage tanks located to the north of the Site.

The following sections summarise the information presented in the Detailed Site Investigation.

### **3.1 Preliminary Contamination Assessment**

The preliminary contamination assessment (Geotechnique 2011) was undertaken to evaluate the potential for contamination that could represent a human health risk for residential land use. This preliminary assessment included a review of the Site history and the collection soil samples collected from test pits excavated across the Site.

The history review indicated that the Site was purchased by the Bankstown Golf Club in the early 1950s. The historical aerial photograph indicated that there were some buildings located on the southern half of the Site that were demolished in and around 1970. Following the demolition of the buildings on the southern half of the Site, there has been no significant changes to the Site layout except for the construction of the existing shed located in the north east corner of the Site in the 1990s.

A dangerous goods search indicated that there have been no fuel storage at the Site, however, two underground storage tanks (USTs) were located in the maintenance shed located to the immediate north of the Site. These USTs were owned and maintained by the golf club.

The preliminary assessment included the excavation of 40 test pits to a maximum depth of 3m below ground surface (bgs). Selected soil samples were collected from the test pits which were combined to form 11 composite samples from chemical analysis. The composite samples were prepared using three equal-mass discrete samples from three test pit locations. All discrete soil samples were collected from the surface 0.15m of material encountered. All composite samples were analysed for heavy metals and six were also analysed for organochlorine pesticides (OCPs).

Based on the observed conditions in the test pits it was reported that the majority of the Site was covered by topsoil to depths ranging between 0.1m and 0.3m bgs. Fill material was encountered in the eastern and northern portion of the Site to depths ranging between 0.1m and 1.5m bgs. The fill material was underlain by natural clayey soils. Asbestos-cement pieces were not observed in the test pits or the recovered soil samples.

The soil analytical results indicated that concentrations of metals and OCPs were below adopted soil criteria for low density residential land use. Zinc was detected at concentration exceeding the provisional phytotoxicity based investigation level (PPBIL) in one composite sample. The individual discrete samples were analysed for zinc and the reported concentrations were below the PPBIL.

It was concluded that the Site was considered suitable for the proposed residential development, subject to the implementation of a Stage 2 Assessment. It was recommended that the Stage 2 Assessment should include:

- Sampling and testing of the fill, soil stockpiles and residual soils in the footprints of the former buildings in the southern portion of the site;
- Assessment of the soils in footprints of the shed and hardstand after complete demolition and removal;
- Assessment of soils along the eastern and north-eastern boundaries of the Site to evaluate for impacts of from properties including the presence USTs associated with the golf club maintenance facility to the north; and
- Assessment of the groundwater quality beneath the Site.



### **3.2 Limited Contamination Assessment**

Enviropacific Services Pty Ltd conduct a limited contamination assessment around the former USTs located at the maintenance shed to the immediate north of the Site. The objective of this assessment was to evaluate the soils in the vicinity of the USTs for petroleum hydrocarbon impact.

Two USTs were located at the maintenance facility at the golf club approximately 20m to the north of the Site. The capacities of the tanks were 2,000 litres and 5,000 litres and were used to store unleaded petrol and diesel, respectively. Two bowzers were located adjacent to the tanks. The USTs were abandoned in situ by backfilling with cement stabilised sand.

To evaluate for contamination in the vicinity of the abandoned UST three boreholes were drilled to a maximum depth of 2.4m bgs in the vicinity of the tanks. The conditions encountered around the USTs consisted of fill material to approximately 0.3m bgs which was underlain by sands and silty sandy clay.

One soil sample from each borehole was analysed for petroleum hydrocarbons, polycyclic aromatic hydrocarbons and lead. Based on the analytical results it was concluded that soils in the vicinity of the tanks were not impacted by the past use.

### **3.3 Detailed Site Investigation**

The objectives of the detailed investigation that were listed in the report were to:

- Assess if the Site is suitable for the proposed residential use in its current state;
- If the site is not suitable in its current state, identify if remediation can be undertaken to make the site suitable for the proposed residential use; and
- If remediation is required, provide a range of remedial options including the preferred option.

The scope of work undertaken during the detailed investigation included:

- Drilling of three boreholes using a Geoprobe to a maximum depth of 12 m bgs;
- Excavating thirty-four (34) test pits across the site using a backhoe to a maximum depth of 2.5m bgs. Test pit locations are shown on Figure 3;
- Collecting soil samples from each borehole and test pit, at the surface and at regular intervals thereafter, or where there is a change in material type or field evidence of potential contamination is observed;
- Converting the three boreholes into groundwater monitoring wells. The monitoring well locations were selected to target potential groundwater contamination from the USTs to the north of the Site;
- Laboratory analysis of selected soil samples for; Total Petroleum Hydrocarbon (TPH), Benzene, Toluene, Ethylbenzene and total Xylenes (BTEX), Polycyclic Aromatic Hydrocarbons (PAH), Organochlorinate Pesticides (OCP), Organophosphate Pesticides (OPP), Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel and Zinc and asbestos; and
- Laboratory analysis of groundwater samples for TPH, BTEX, PAH (ultra-trace level) and heavy metals.

Figure 3 – Test Pit Locations (Coffey 2013)



The detailed investigation indicate that the general subsurface profile across the site comprises of:

- Topsoil that consisted of sandy silty and silty sand, with some clay and traces of gravels;
- Fill materials that included gravelly and silty sand or silty clay at depths ranging between 0.2m and 1.5m bgs;
- Silty sand, generally comprising pale grey and white fine grained sand, at depths ranging between 0.4m and 0.8m bgs;
- Clay or sandy clay, generally comprising medium plasticity, grey, orange, brown and red, at depths ranging between 0.2m and 8.4m bgs; and
- Shale, highly to extremely weathered shale, grey, black and brown, at depths ranging downwards from 2.0m bgs.

The subsurface conditions encountered during the Coffey investigation were considered to be generally consistent with the conditions reported in preliminary contamination assessment.

No evidence of suspected asbestos containing material (ACM) was observed during soil sampling program or staining and odours that may be evidence of contamination.

The results of analysis of soil samples did not indicate concentrations of any contaminants at levels above the nominated assessment criteria for residential land use. However, chrysotile asbestos was detected in soil sample TP3\_0.05-0.15, in the form of fibre cement fragments. Asbestos was not detected in all other soil samples submitted for asbestos screening.

In addition the concentration of copper in soil sample of TP14\_0.05-0.15 was reported at 560mg/kg, exceeding the Provisional Phytotoxicity Based Investigation Level (PPBIL) of 100 mg/kg.

Analytical results for groundwater samples indicated that concentrations of TPH and BTEX were reported below laboratory levels of reporting. Concentrations of PAH were detected in the groundwater samples. The PAHs detected included acenaphthene, anthracene, fluorene and naphthalene. The levels detected were all below the site assessment criteria (were criteria were established).

Analysis of the groundwater samples from the monitoring wells installed at the Site indicated:

- Concentrations of arsenic, chromium and mercury were below the site assessment criteria; and
- Concentrations of cadmium, copper, lead, nickel and zinc were above the site assessment criteria

The detailed investigation noted that although no soil sampling was undertaken at the storage shed footprint. However, given that soil and groundwater contamination was not encountered in the boreholes, test pits and monitoring wells located in the vicinity of the shed, it was considered that significant soil or groundwater contamination is unlikely to be present in that area.

The elevated concentrations of arsenic, cadmium, copper, lead, nickel and zinc that were detected in groundwater samples was considered likely to be attributable to the regional groundwater quality. The concentrations detected were considered to be

minor and implied source of the heavy metals was an upgradient source and possibly regional but not related to historical and current site activities.

The detailed investigation concluded:

- The Site does not appear to be significantly impacted by historical or current activities, with the exception of the area in the vicinity of test pit TP3 where asbestos impacted soil was detected at the surface;
- The Site does not appear to be significantly impacted by the former USTs located to the immediate north-east;
- The heavy metals detected in groundwater are likely to be representative of the regional groundwater quality.

It was considered that the Site could be made suitable for residential use through:

- The removal of the asbestos impacted soils in the vicinity of test pit TP3 and subsequent validation sampling; and
- Inspection and/or sampling following demolition of the storage shed for the presence of impact beneath the footprint of the shed.

It was recommended that a RAP be prepared for the remedial work.

#### **4.0 REMEDIATION REQUIREMENT**

The only measured impact at the Site is a detection of asbestos in one near surface soil sample at test pit TP3.

The extensive sampling that has been completed during the preliminary assessment and the detailed investigation limits the uncertainty with regard to the nature and extent of asbestos impact on the Site.

The detailed investigation considered as the asbestos impacted area was localised, the preferred remedial option was to remove the impacted soils from the Site.

#### **5.0 REMEDIATION/MANAGEMENT METHODOLOGY**

The objective of the proposed remediation works is to manage risk posed to future Site occupants by making the Site suitable for the proposed residential land use.

##### **5.1 Guidance Framework**

The preferred hierarchy of options for Site remediation and/or management is set out in the Assessment of Site Contamination Policy Framework of Schedules A and B of the NEPM. Potential options include:

- On-site treatment so that the contaminant is either destroyed or the associated hazard is reduced to an acceptable level;
- Off-site treatment of excavated soil so that the contaminant is either destroyed or the associated hazard is reduced to an acceptable level after which the soil is returned to the site;
- Removal of contaminated soil to an approved site or facility, followed where necessary by replacement with clean fill; and

- Consolidation and isolation of the soil on site by containment within a properly designed barrier.

## **5.2 Asbestos Management Options**

Asbestos containing material (ACM) at the Site has only been identified in fill material at one location.

The guideline Managing Asbestos in or on Soil (WorkCover NSW March 2014) provides general guidance on the assessment and management of asbestos in soil. The objective of the approach outlined in the guideline is to ensure that proportionate and practicable controls are applied in accordance with regulatory requirements and in a manner commensurate with actual risk.

The guidelines recommends that:

- Where fragments of non-friable asbestos (e.g. fibro-cement) are identified on the soil surface, then the fragments may be removed by hand-picking, tilling or screening (applying suitable work health and safety practices);
- Where non-friable or friable asbestos is present in soil at depth (greater than 0.5 metres below the soil surface), the asbestos material should not be disturbed unless it is for the purpose of site remediation, redevelopment or site management; and
- Where asbestos is found at depths between 10cm and 0.5 metres, a site-specific assessment should be undertaken to determine an appropriate management strategy.

## **5.3 Preferred Remedial Approach**

Due to the limited extent of impacts at this Site it is considered reasonable and appropriate to remove the ACM contaminated fill. The preferred remediation strategy for the site comprises:

- The excavation of fill material at test pit location TP3. The thickness of fill material at this location is indicated to be 0.15m thick. Excavation of fill should extend 5m from test pit TH3 in all directions. This is expected to result in the excavation of approximately 12m<sup>3</sup> of material;
- The classification of the excavated material in accordance with NSW EPA waste guidelines (considered to be Asbestos Waste);
- The off-site disposal of the excavated material at a licenced facility able to receive Asbestos Waste;
- Inspection of the excavation area to ensure that fill material has been removed exposing natural underlying soil;
- Inspection of the edges of the excavated area to observe for ACM in any fill material on the surrounding land;
- The collection of validation soil samples around the perimeter of the excavations directly to the north, south, east and west of test pit TP3;
- Analysis of the validation samples for asbestos;
- Preparation of a validation report.

## **5.4 Excavation Inspection**

Following the selective removal of fill material a detailed inspection will be undertaken to identify possible ACM within the remediation area and the surrounding land. The inspection will be undertaken in a methodical grid pattern with both north/south and east west transects to ensure a structured and systematic approach to assessment and removal.

Following the preliminary inspection no visible asbestos fragments should be present on the Site surface. If ACM is identified it must be collected and securely wrapped in dedicated and labelled plastic bags for off-site disposal at an appropriate licenced landfill. The presence of ACM will require the consideration of additional excavation activities and a review of the proposed validation work.

Records of the inspection and any waste disposal need to be documented and retained.

## **6.0 UNEXPECTED FINDS**

Following the demolition of the shed at the north east corner of the Site an inspection should be undertaken to evaluate for soil contamination beneath the footprint of the shed. This inspection should include observations for staining and ACM and also note the presence of odours that may represent contamination.

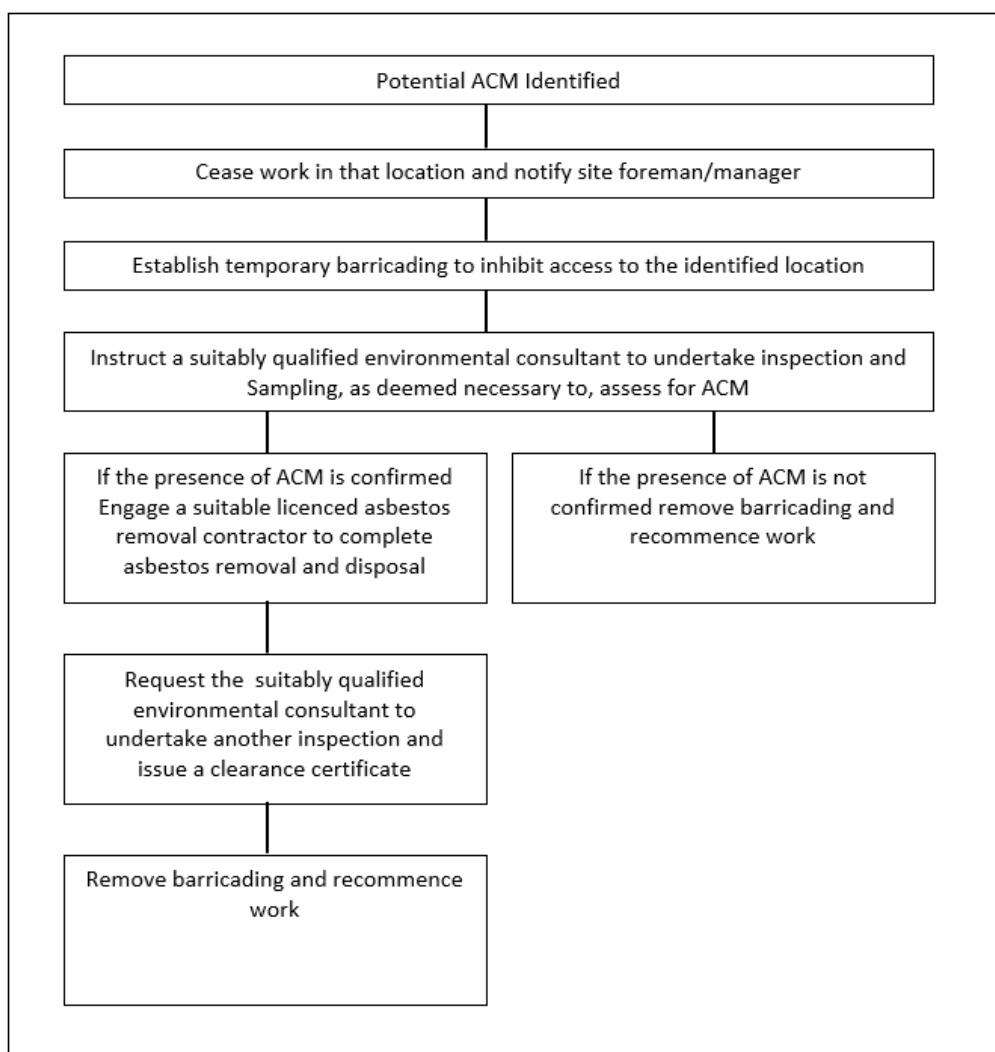
As a precautionary measure to ensure the protection of the workforce should any ACM be identified (or any other unexpected potentially hazardous substance), the procedure summarised in the following flow chart shall be followed.

The sampling strategy for each “unexpected find” shall be designed by a suitably qualified environmental consultant. The strategy will, however, be aimed at determining the nature of the substance and the risks associated with the unexpected find.

The sampling frequency of the identified substance/materials shall meet the minimum requirements of the NEPM.

During the proposed recontouring work, if material considered to potentially be ACM is encountered then the following actions need to be taken:

- Work in the vicinity of the potential ACM should be suspended and the area isolated;
- A suitable qualified assessor should be engaged to undertake an investigation of the potential ACM;
- The suitable qualified assessor should present the findings of their investigation and recommendations for the management or removal of the potential ACM;



## 7.0 VALIDATION PLAN

### 7.1 Data Quality Objectives

The Data Quality Objective (DQO) process is a systematic, seven-step process that defines the criteria an investigation should satisfy including; the type, quantity and quality of data required to support decisions relating to the investigation. DQOs for this RAP have been developed based on the seven step approach in accordance with Appendix B of Schedule B2 of the NEPC (2013) - National Environment Protection Measure for the Assessment of Site Contamination.

The DQOs are presented in detail in the following sections.

#### Step 1 - State the Problem

The detailed investigation has indicated the potential for ACM to be present in fill material at one location. The aim of the remediation activities is to manage impact during development and to ensure the Site is suitable for the intended land use.

## Step 2 - Identify the Decisions

The primary decision related to the remediation of the Site are:

- Determining the most appropriate remedial strategy; and
- Setting appropriate measurable remediation standards.

The proposed remediation will involve the removal of asbestos impacted fill and thus removing any known contamination. This approach only appears to require the excavation of a relatively small quantity of material. The on Site management of this small volume of impact is considered more complex and not warranted for the anticipated volume.

## Step 3 - Identify Inputs to the Decision

The inputs required to make the identified decisions include:

- The observed conditions following the excavation of fill material around test pit TP3; and
- The results of validation sample analysis.

## Step 4 - Define the Study Boundary

The boundaries for this RAP have been identified as the fill material around test pit TP3 and have been nominally set as within 5m of this location.

## Step 5 - Develop a Decision Rule

The decision rules for validation of the Site is:

- Has all fill material been excavated and removed from around test pit TP3;
- Is ACM visible in fill on surrounding land; and
- Do validation samples confirm the absence of asbestos.

## Step 6 - Specify Limits on Decision Errors

The decisions associated with this remediation are limited to yes/no responses. If:

- Fill material is identified within 5m of test pit TP3 following excavation;
- ACM is observed in fill on surrounding land (within 5m of the perimeter of the excavation; or
- Validation samples indicate the presence of asbestos

Then validation is not considered to have been achieved.

## Step 7 - Optimise the Design for Obtaining Data

The data sources for validation are inspections and samples.



## **7.2 Validation Report**

At the completion of the remedial works a validation report will be prepared in general accordance with the NSW EPA (1997) Guidelines for Consultants Reporting on Contaminated Site and Schedule B(2) of the NEPM.

The validation report should document the works as completed and contain:

- Confirmation that the objectives of the RAP have been achieved;
- Information demonstrating compliance with appropriate regulations and guidelines;
- Any variations to the strategy undertaken during the implementation of the remedial works;
- Details of any environmental incidents including the management of any unexpected finds encountered;
- Details the classification, management and disposal of waste generated during the remediation work.

The report will serve to document the remediation works for future reference.

## **8.0 SITE MANAGEMENT**

During Site remediation management controls need to be established to ensure that work is conducted in accordance with any Development Consent for the Site and to ensure that workers are not adversely affected by the potential contamination of the Site. The remediation contractor that undertakes the work at this Site must prepare a Site health and safety plan which addresses;

- Site access and security;
- Traffic control;
- Hours of operation;
- Noise control;
- Air quality management; and
- Erosion and sediment control

The Site health and safety plan must include at a minimum the details in the following sections.

### **8.1 Site Access and Security**

The contractor will be responsible for ensuring the security of all work areas, plus all plant and equipment maintained on-site during remediation works. Appropriate signage should be maintained around the excavation area at all times and the contractor will be responsible for ensuring all persons on-site are authorised personnel (i.e. persons not employed by the contractor, the consultant, or their agents will not be permitted on-site unless authorised by the contractor and / or consultant).

### **8.2 Traffic Control**

The contractor will be responsible for ensuring adequate traffic control measures are in place to ensure Site safety. The excavation area must be clearly marked (including

fencing and appropriate signage) and appropriate records are to be kept, documenting all vehicle ingress and egress from the Site related to the remediation.

### **8.3 Hours of Operation**

Remediation works will only be permitted in accordance with any Development Consent and are anticipated to be limited to the following hours:

Monday to Friday: 7:00 am to 6:00 pm

Saturday: 7:00 am to 1:00 pm

## **9.0 OCCUPATIONAL HEALTH & SAFETY**

This section describes the minimum standards to be adopted to protect the health and safety of all persons associated with the project during the course of the remediation works. The information herein should be used by the remediation contractor to develop its own occupational health and safety plan, taking into account activities that are not discussed.

### **9.1 Occupational Health & Safety Plan (OHSP)**

An OHSP is an essential part of all remediation projects to ensure the health and safety of all personnel working on or visiting the site. A OHSP shall be prepared by the remedial contractor prior to the commencement of any Site activity.

The purpose of the OHSP is to provide all relevant health and safety information for all personnel undertaking work at the site and to provide and maintain safety standards and practices which offer the highest practical degree of personal protection to the on-site workers, based on current knowledge.

All personnel must read the OHSP and confirm acceptance of its requirements prior to commencing remediation work at the Site.

### **9.2 Hazard Assessment**

The primary contaminant of concern at the Site is asbestos and as such appropriate precautions must be taken to prevent unacceptable exposure.

In general, personnel working at the site will be required to wear “Level D” protective clothing at all times. This includes:

- Trousers and long sleeve shirt;
- Steel capped boots;
- Hard hat;
- Safety vest; and
- Safety glasses (when in an active work zone).

## **10.0 CONTINGENCY & EMERGENCY RESPONSE PLANNING**

The purpose of the contingency plan is to specify procedures that can be implemented to manage unexpected situations and prevent adverse impacts to the

environment and human health. The information that will be contained herein includes:

- Assignment of responsibilities to nominated key personnel;
- Reporting to regulatory authorities; and
- Unexpected situations.

Unexpected situations that have been identified include:

- Uncovering types of contamination that are not presently known;
- Generation of unacceptable dust or vapour;
- Generation of unacceptable noise; and
- Complaints from local residents and / or adjacent site users.

Details of the procedures that will be adopted in the event of these occurrences are defined in the following sections.

### **10.1 Unknown Types of Materials**

The presence of unknown materials would be highlighted during Site works by the observation of any unusual physical / sensory characteristics of the contaminated soils and fill and / or the results of the materials testing.

In the event that any significant unknown type of material is identified at the Site, an assessment of the influence of the material on the remediation project will be undertaken. If required, a variation to the RAP will be issued for review and approval.

### **10.2 Control of Dust and Vapour**

The remediation contractor shall implement contingency measures if dust levels are found to exceed acceptable levels (based on observations made on Site).

If unacceptable dust levels are considered to have been generated (i.e., from excavations or vehicle movements) dust shall be suppressed or work practices modified.

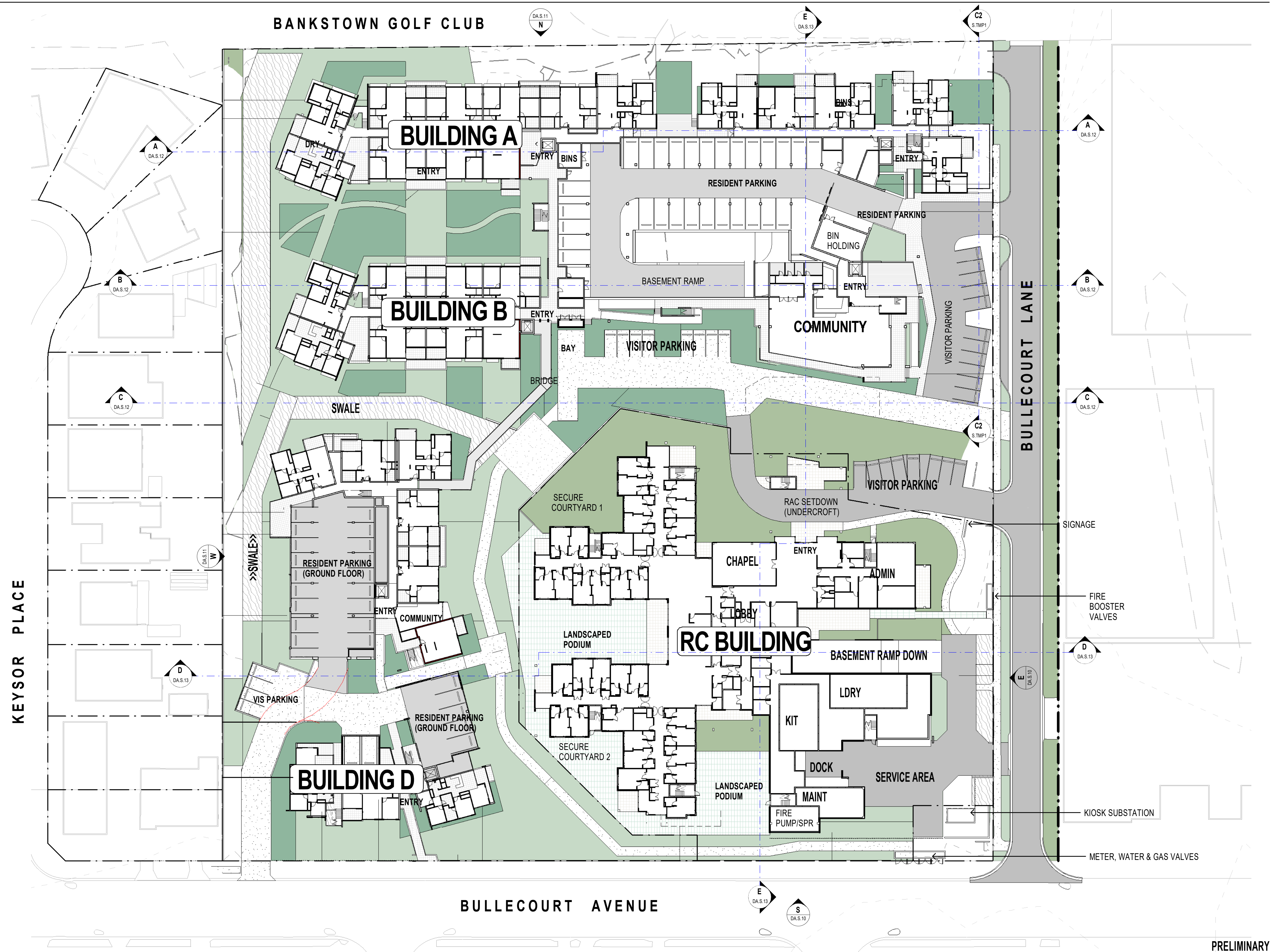
### **10.3 Failure of Environmental Controls**

Contingency measures shall be implemented by the remediation contractor if, at any time, the environmental controls (bundling / sediment fences) surrounding the Site or any stockpiled material become damaged or ineffective during a significant rainfall event.

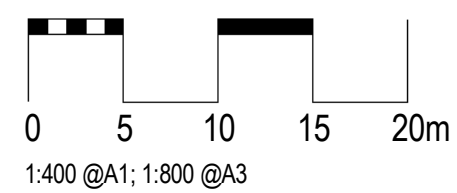
Upon notification that a failure, or potential failure of the control system is imminent, the project contractor shall undertake rectification works, as necessary to prevent any major failure of the system. Such works may entail (but are not limited to):

- Placement of additional bunding materials (such as sandbags) and / or silt fences, to complement the existing system; and / or
- Emergency maintenance works (such as immediate repair to any damaged component of the control system).

## APPENDIX 1



## RELIMINARY

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 SYDNEY**

PROJECT:  
MILPERRA VILLAGE - 2  
STOREY MODEL  
BULLECOURT AVENUE,  
MILPERRA

DRAWING TITLE:  
SITE PLAN - GROUND LEVELS

DATE: NOV 16, 2018  
DRAWN:  
SCALE: 1 : 400@A1  
FILE :  
CHECKED:

PROJ: 973      DRAWING: DA2.S.08      REVISION:



