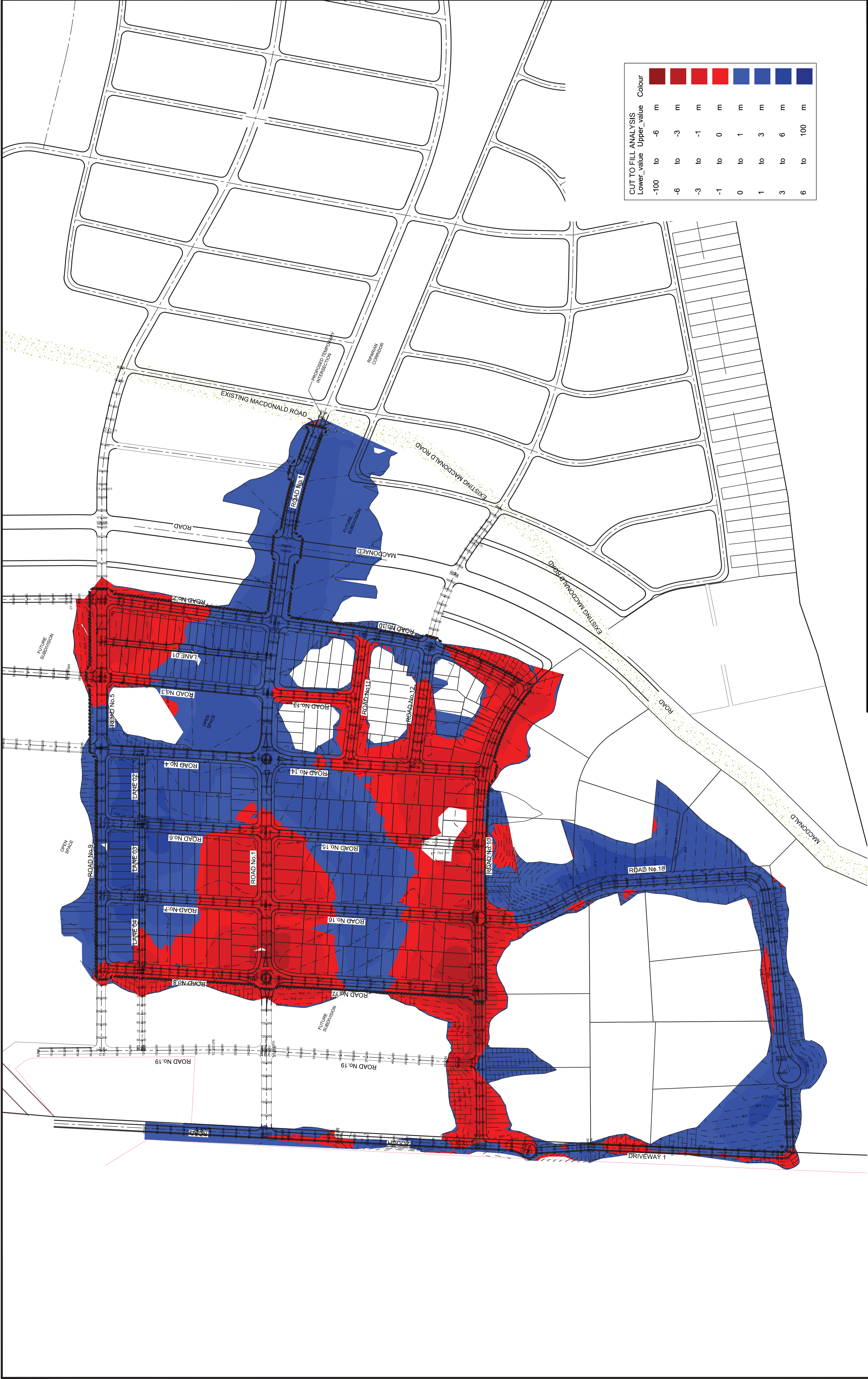


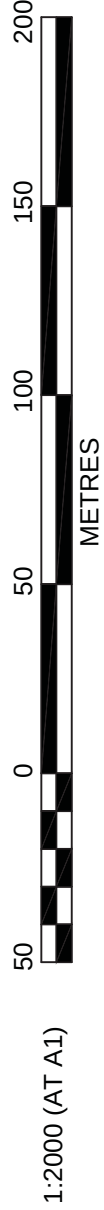


APPENDIX C

Cut to Fill Plan (JWP, Drawing No 9015/SK62)



CUT TO FILL ANALYSIS			Colour
Lower_value	Upper_value		
-100	to -6	m	
-6	to -3	m	
-3	to -1	m	
-1	to 0	m	
0	to 1	m	
1	to 3	m	
3	to 6	m	
6	to 100	m	



1:2000 (AT A1)

CLIENT:

J. WYNTHAM PRINCE
CONSULTING CIVIL INFRASTRUCTURE ENGINEERS
& PROJECT MANAGERS

P 02 4720 3300 F 02 4721 7638 W www.jwprince.com.au E jwp@jwprince.com.au

LANDCOM

DESIGNED: _____
DRAWN: DJH
CHECKED: _____

ORIGIN:
SCALES:

STAGE 1 PRELIMINARY LAYOUT

CUT TO FILL PLAN

PLAN No. 9015/SK62

FILE No. 9015SK62

ISSUE	AMENDMENT	DATE	BY
D	ISSUED FOR INFORMATION	11/09/10	DJH
C	CLIENT REVIEW	05/09/10	DJH
B	CLIENT REVIEW	27/07/10	DJH
A	CLIENT REVIEW	22/07/10	DJH

ADVANCE COPY ONLY
NOT FOR CONSTRUCTION



APPENDIX D

Contamination Management Plan



25 August 2010

CELEBRATING
50
YEARS
in 2010

PART 3A EDMONDSON PARK SOUTH - CONCEPT PLAN

CONTAMINATION MANAGEMENT PLAN

Submitted to:
Landcom
Level 2, 330 Church Street
Parramatta, NSW 2150

REPORT



A world of
capabilities
delivered locally

Report Number. 107623113-006-R-Rev0





Table of Contents

1.0 INTRODUCTION.....	2
1.1 General Introduction	2
1.2 The Site	2
1.3 Proposed Development	3
1.4 Planning Background.....	5
1.5 Contamination Management Plan Objectives.....	5
2.0 CONTAMINATION MANAGEMENT PLAN	7
2.1 Contamination Management Plan Flow Chart	7
2.2 Roles and Responsibilities.....	8
2.3 Potential Chemical Contamination.....	9
2.4 Potential Ordnance Materials	10
2.5 Significant Find	11
3.0 LIMITATIONS	12
 TABLES	
Table 1: Summary of Roles and Responsibilities	8



1.0 INTRODUCTION

1.1 General Introduction

This Contamination Management Plan (CMP) has been prepared by Golder Associates Pty Ltd (Golder) to accompany a Concept Plan Application under Part 3A of the Environmental Planning & Assessment Act, 1979 (EP&A Act) and a proposal for State Significant Site listing under Schedule 3 of State Environmental Planning Policy Major Development 2005 (SEPP Major Development) in relation to the former Ingleburn Army Base and certain adjoining lands within the Edmondson Park Release Area of the South West Growth Centre (referred to herein as 'Edmondson Park South'). A CMP is considered an effective means of ensuring workers on the site are not exposed to residual contamination from unexpected finds which may be uncovered during the bulk earthworks phase of the site development:

Landcom is proposing to deliver a new diverse and sustainable urban community at Edmondson Park South. Once complete, Edmondson Park South will accommodate a mix of land uses, a diversity of housing (approximately 3,200 dwellings), a new town centre incorporating 35,000 – 45,000m² retail, business and commercial floor space with employment opportunities for 1,000 people, multi-purpose community and education facilities, a new 150 hectare Regional Park, a number of other local parks and environmental conservation areas.

The new urban community at Edmondson Park South will meet the State Government's objectives to increase housing supply, provide community benefits and create jobs.

The purpose of the Concept Plan is to secure statutory approval for the overall planning framework for the site and to further resolve a number of remaining site-wide infrastructure delivery and land use planning issues. The Project Application (submitted concurrently with the Concept Plan) for early works, infrastructure and subdivision relating to the initial phases of the development will enable site works to begin in 2010.

1.2 The Site

The subject site comprises an area of approximately 410 hectares and forms part of the larger Edmondson Park Release Area within the South West Growth Centre. It is located to the north-west of the M5 Motorway and lies approximately 40 km to the south west of Sydney CBD. Approximately 260 hectares of the site is located within the Liverpool LGA and approximately 150 hectares is located within the Campbelltown LGA. Refer to Location Plan, **Figure 1**.

The site is largely vacant. Remnants of military facilities (i.e. cottages, former building slabs, internal roads, training facilities etc) associated with the site's former Defence use are scattered through-out the site. There are a number of cottages / houses previously used by Defence personnel in an area of the site generally referred to as "Ingleburn and Bardia Villages". The Ingleburn North Public School (1.835 hectares) is located on the southern and the Bambi Preschool on the northern side of Campbelltown Road.

The site is undulating to steep. It slopes from its highest point (80 m AHD) at the intersection of Zouch and Campbelltown Roads to its lowest point (40 m AHD) at its eastern corner and to a similar elevation adjacent to the M5 Motorway in the south-west corner. The central portion of the site along Campbelltown Road forms a ridge with gentle falls to the north and south.

The condition of existing vegetation on the site varies from exotic pasture with negligible ecological value to areas of good condition vegetation with high recovery potential. The existing cleared portions of the site generally contain non native species.

The site is at the top of three catchments. Maxwell Creek, Bunbury Curran Creek and Cabramatta Creek pass through the site, with associated riparian zones and some woodland habitat (notably Cumberland Plain Woodland).



1.3 Proposed Development

Concept Plan

The Concept Plan establishes the overall planning framework for the site, including:

- land use type and distribution;
- a mix of housing types and densities (approximately 3,200 dwellings);
- concept location of and approximately 35,000 – 45,000 m² of retail / business / commercial floor space within the new Edmondson Park Town Centre;
- identification and location of open space and drainage corridors, environmental conservation lands (to form the new Regional Park), and local active and passive recreation facilities, including levels of embellishment;
- expanded Ingleburn North Primary School and new combined Primary/High School to the north of the site;
- road network layout;
- pedestrian and cycleway network layout;
- pedestrian bridge over the south western railway;
- Campbelltown Road corridor including the establishment of key intersection locations and configuration;
- utilities (including power, telecommunications and gas), infrastructure strategy, potable water strategy, sewer concept plan and water cycle management plan;
- location and dimensions of Bushfire Asset Protection Zones;
- appropriate interpretation of European and Aboriginal heritage located on the site;
- erection of signage and billboards;
- remediation works;
- decommissioning of the existing Sewerage Treatment Plant (STP); and
- demolition.

The Concept Plan also sets out an approval framework that will enable the carrying out of the works necessary to remediate the site in accordance with a Remediation Strategy without the need for undertaking further environmental assessment.

A variety of housing types is proposed to be delivered. This will provide for a range of housing price points and will include moderate income housing and housing for seniors.

It is proposed to develop the Edmondson Park site progressively in stages over a 15-20 year period. The Concept Plan will address the staging and delivery of the overall development having regard to the progressive delivery of necessary infrastructure, services and facilities; and market demand.

The Concept Plan is accompanied by a proposal with respect to the future developer contributions framework for the provision of local facilities and services within the Liverpool and Campbelltown LGAs as well as State Infrastructure.



Project Application

The residential subdivision Project Application comprises:

- the creation of 207 residential lots, 8 super lots for future subdivision 15 Environmental Living lots and 3 lots for dedication to Campbelltown City Council as Public Reserve in 5 stages;
- the dedication of roads to Campbelltown City Council;
- On-site works comprising:
 - tree removal;
 - earthworks including excavation, cut and fill;
 - design and construction of physical infrastructure, including roads, stormwater drainage and utility reticulation, traffic management works, establishment of open space areas;
 - retaining walls as determined during detailed design;
 - design and construction of staged stormwater water quantity and quality infrastructure to achieve objectives required by the Water Cycle Management (WCM) strategy for the greater site;
 - demolition of all existing structures;
 - erosion and sediment control to areas of roadworks and bulk earthworks including provision of temporary sedimentation ponds and diversion drains;
 - Design and construction of an ornamental pond;
 - Landscaping of road reservations;
 - erection of signage and billboards; and;
 - Embellishment of open space.
- Off-site works comprising:
 - construction of the sewer lead in from the Sydney Water carrier main at Ash Road;
 - upgrade of overhead mains and construction of electrical lead-in feeders from the existing zone substation at Prestons;
 - connection to utility services, potable and recycled water, electricity, gas and telecommunications in Campbelltown and MacDonald Roads;
 - Connection to existing stormwater drainage;
 - tree removal;
 - earthworks including excavation, cut and fill;
 - design and construction of physical infrastructure, including roads, stormwater drainage and utility reticulation, traffic management works, including the connection to the existing MacDonald Road;
 - design and construction of staged stormwater water quantity and quality infrastructure to achieve objectives required by the Water Cycle Management (WCM) strategy for the greater site;
 - erection of an acoustic wall;
 - erection of signage and billboards;



PART 3A EDMONDSON PARK CONCEPT PLAN - CONTAMINATION MANAGEMENT PLAN

- extension or relocation of existing services including potable and recycled water, gas, telecommunication, power;
- demolition of all existing structures; and;
- Proposed new intersection to existing Macdonald Road.

It is intended to seek staged Construction Certificates as necessary to facilitate the efficient delivery of each phase of, the development works.

The first stage residential Project Application will include the proposed construction of a gravity sewer line through the future Regional Park.

1.4 Planning Background

The Edmondson Park Release Area, including the site, has been the subject of broad strategic planning investigation and environmental assessment over a number of years by Liverpool and Campbelltown City Councils, the Department of Planning, the Department of Defence (the current landowner of the Ingleburn Army Camp) and Landcom (owner of certain lands).

The whole of the Edmondson Park Release Area has been released for urban development by the Minister for Planning. Part of the site, the Ingleburn Army Camp, is currently the subject of a 'delayed' rezoning for urban purposes under Liverpool Local Environmental Plan 2008 and Campbelltown (Urban Area) Local Environmental Plan 2002.

In June 2010 the Minister for Planning considered a Preliminary Assessment Report for the Edmondson Park South Project that provided justification for the planning, assessment and delivery of the project to occur under Part 3A of the EP&A Act, having regard to the demonstrated contribution that the project will have to achieving State and regional planning objectives.

Subsequently, on 23 July 2010, pursuant to Clause 6 of SEPP Major Development, the Minister for Planning formed the opinion that the Edmondson Park Project constitutes a Major Project to be assessed and determined under Part 3A of the EP&A Act, and also authorised the submission of a Concept Plan for the site. In doing so, the Minister also formed the opinion that a State Significant Site (SSS) study be undertaken to determine whether to list the site as a State Significant Site in Schedule 3 of SEPP Major Development.

The Part 3A process under the EP&A Act allows for the Edmondson Park South Project to be planned, assessed and delivered in a holistic manner, with a uniform set of planning provisions and determination by a single consent authority. Given the scale of the proposal, the Concept Plan and SSS listing provide the opportunity to identify and resolve key issues such as land use and urban form, development staging, infrastructure delivery and environmental management in an integrated and timely manner.

1.5 Contamination Management Plan Objectives

The objective of this CMP is to provide a framework for identifying and addressing any discovery of residual chemical contamination (including asbestos containing materials – ACM) or potentially explosive ordnance so as to ensure a safe working environment for workers during development and to avoid unacceptable impact on the natural environment. The plan also considers the occurrence and remediation of ordnance waste that, although may be harmless, can cause unnecessary alarm.

Unexpected finds may be encountered in areas which, although subject to an assessment, contain remnant materials which were obscured by the local topography, the type of surface cover (e.g. vegetative cover, building) or at a depth preventing detection.

The successful implementation of the CMP requires an appropriate Site Specific OHS Induction of Site Operatives who may uncover potential chemical contamination (including potential ACM) and/or explosive ordnance. The induction will include the review of this CMP and the associated flow chart (**Figure 1**), as well as basic environmental contamination awareness training.



PART 3A EDMONDSON PARK CONCEPT PLAN - CONTAMINATION MANAGEMENT PLAN

Key Site personnel (Site Manager and Site Foreman) should be subject to additional training with respect to basic identification of ordnance by the Ordnance Consultant/Contractor.

This CMP describes reporting procedures and lines of responsibility (See Section 2.2, Table 1). The roles include those with detailed knowledge of the remediation which has been undertaken at the site and details on the location of, and access to, the supporting documents related to the assessment and remediation of the Western Precinct.

Parts of Edmondson Park South have been remediated, subjected to interim site audits and considered suitable for its intended land uses, and residual contamination, if present, is most likely to be discovered during the development earthworks which will occur prior to subdivision.

The procedures included in this CMP are intended for use only during the site preparation phase of development, during which structures may be demolished and disposed off site, bulk earthworks which will alter existing surface levels and redundant infrastructure is removed and new infrastructure is installed.



2.0 CONTAMINATION MANAGEMENT PLAN

The objective of the CMP is to provide clear guidance on the safe and appropriate actions in the event of encountering potential chemical or explosive ordnance contamination during site development works. Where such material is uncovered the CMP prescribes the quarantining of the relevant area of concern, allowing other site works to proceed unhindered, while the area of concern is assessed and, if necessary, remediated and validated.

Two classes of potential contamination are discussed separately below: chemical (including potential ACM) and ordnance.

2.1 Contamination Management Plan Flow Chart

The operation of the CMP is described in the following flow-chart (**Figure 1**).



2.2 Roles and Responsibilities

Table 1 provides the key roles and responsibilities with respect to this CMP.

Table 1: Summary of Roles and Responsibilities

Role	Responsibility
Site Manager	<p>The Site Manager is responsible for:</p> <ul style="list-style-type: none">■ Ensuring the induction of Site Personnel;■ Initial assessment of potential contamination and/or ordnance materials identified, and assessing whether further action is required;■ Review adequacy of quarantine measures and contacting the relevant Consultants and/or Contractors, as well as the Site Auditor (where appropriate); and■ Once an area is declared free of the contamination, the Site Manager's role will be to remove the quarantine and allow site works to proceed.
Site Personnel	<p>Site Personnel (e.g. excavator and grader operators, underground services contractors) will be required to:</p> <ul style="list-style-type: none">■ Be inducted to the site, inclusive of environmental contamination awareness training prior to commencing work at the site;■ During the works, the Site Personnel will be vigilant for potential contamination and/or ordnance; and■ Where potential contamination and/or ordnance is identified, Site Personnel will cease work and quarantine the identified area and inform the Site Manager.
Environmental Consultant	<p>Environmental Consultants will be responsible for:</p> <ul style="list-style-type: none">■ Attend Site within a reasonable time after notification of find;■ Assessing the potential chemical contamination find;■ Carry out any necessary sampling and delineation, if required, developing a remedial scope and validating remediation to render the site suitable for residential development;■ As appropriate, have expertise in environmental risk assessment and/or asbestos assessment; and■ Reporting all findings and conclusions, as appropriate and to the satisfaction of the Site Manager and/or the Site Auditor or Asbestos Consultant if a Site Audit is not required.
Asbestos Consultant	<p>The Asbestos Consultant will be responsible for:</p> <ul style="list-style-type: none">■ Reviewing assessments carried out by the Environmental Consultant of areas potentially contaminated by asbestos containing materials;■ Monitoring of site works during remediation works where required; and■ Provide a brief report which certifies the subject area is suitable for residential development.



PART 3A EDMONDSON PARK CONCEPT PLAN - CONTAMINATION MANAGEMENT PLAN

Ordnance Consultant/ Contractor	<p>The Ordnance Consultant/Contractor should be a Department of Defence approved UXO consultant/contractor and will be responsible for:</p> <ul style="list-style-type: none">■ Attend Site as requested to assess finds;■ If find is confirmed to be an ordnance of concern, review adequacy of quarantine measures in place and modify as appropriate;■ Assessing the ordnance find, undertaking any surveying sampling and delineation, developing any necessary remedial scope and validating any remediation necessary to render the site suitable for residential development.■ Complete clearance reports on each area investigated and/or remediated and provide a copy for review by the Site Auditor and/or Independent Ordnance Consultant/Contractor.
Site Auditor	<p>The independent NSW DECCW accredited Site Auditor will be responsible for:</p> <ul style="list-style-type: none">■ Reviewing the assessment and remediation of areas as a consequence of discovery of unexpected finds.■ When satisfied by the information provided by the Environmental and Ordnance Consultants, review the wrks in context of previous Site Audits and issue further Site Audit Statements and Reports as warranted.
Asbestos or Environmental Contractor	<p>Responsible for removal or treatment of contaminated material in accordance with this procedure and direction by the Environmental Consultant and the Site Manager.</p>
Independent Ordnance Consultant /Contractor	<p>As necessary (significant ordnance find and as requested by SA), an Independent Ordnance Consultant/Contractor will conduct a review of completed reports where significant ordnance are discovered.</p>

2.3 Potential Chemical Contamination

Contamination which could be encountered during the development will typically be associated with the historical land use activities identified as:

- Petroleum hydrocarbons associated with former fuel storage areas;
- Near surface and buried demolition waste (typically ACM); and
- Pesticides associated with the management of weeds.

Potential chemical contamination may be indicated in the field by:

- Distressed vegetation;
- Odorous soils;
- Discoloured soils;
- Potentially asbestos containing sheeting, fragments or insulation materials; or
- The presence of other foreign materials, such as drums, waste dumps or building rubble which could harbour contamination.



PART 3A EDMONDSON PARK CONCEPT PLAN - CONTAMINATION MANAGEMENT PLAN

Should suspect chemical contamination be encountered, the works in the immediate area will cease, access restricted and the Site Manager informed. If the Site Manager considers material to be potential chemical contamination the area will be quarantined and a suitably qualified Environmental Consultant will be commissioned to assess the find. The Environmental Consultant will be responsible for characterising and delineating the extent of the potential contamination and defining appropriate remedial actions, if required.

Suspected ACM will be managed in accordance with relevant WorkCover requirements and a site specific Asbestos Management Plan.

If deemed necessary by the Environmental Consultant, the contamination will be removed for disposal at a suitably licensed facility in accordance with *Waste Classification Guidelines* (NSW DECC, April 2008). The resultant excavation will be validated by the Environmental Consultant and a report on the remediation and subsequent validation will be completed and, if appropriate, be reviewed and approved by an independent NSW EPA accredited Site Auditor. The quarantine barriers can be removed and the earthworks continued upon receipt of advice from the Environmental Consultant, or preliminary advice from the Site Auditor.

If the area is determined by the Environmental Consultant to not be contaminated or the analyses meet the relevant site validation criteria, the Environmental Consultant should notify the Site Manager that the quarantine restrictions on the area can be lifted and the works in that area may resume. The Environmental Consultant will prepare a report on the investigation and the conclusions drawn.

2.4 Potential Ordnance Materials

Potential ordnance which may be encountered during development of the site could include:

- Small arms ammunition (SAA), plastic blanks and metal jacket;
- Training ordnance, 81mm mortars, grenades and rocket propelled grenades; and
- Remnants of the above (i.e. fragmented pieces)

Potential explosive ordnance material may be indicated in the field by:

- Lead Particulate;
- Ammunition packaging;
- Grenade components; or
- Metal debris of uncertain origin.

Should potential ordnance material be uncovered, earthworks shall cease immediately and the Site Manager informed. The find and immediate area should be quarantined, by means of some appropriate barrier to prevent access to the area to protect site personnel and visitors to the site from potential injury.

The Site Manager will make a preliminary assessment of the find and determine whether it is some miscellaneous debris, a fragment of ordnance or a potentially explosive device.

Where the Site Manager can identify the item as non-ordnance debris or a minor harmless fragment of ordnance debris, the material should be removed from the excavation and disposed of appropriately.

Where it is considered to be a potentially explosive device, the Site Manager shall contact an appropriately qualified Ordnance Consultant/Contractor, to assess the item and the area.

Should the Ordnance Contractor consider the object(s) to be non-ordnance or harmless fragments of ordnance, the object(s) can be removed and disposed of appropriately. The quarantine restrictions can be lifted and the earthworks continued.



PART 3A EDMONDSON PARK CONCEPT PLAN - CONTAMINATION MANAGEMENT PLAN

If the Ordnance Contractor identifies the object(s) as potential explosive ordnance, the Ordnance Contractor shall inform the Site Manager, and arrange disposal by the Department of Defence.

Based on the nature of the find, it may be recommended that a geophysical survey of the area be undertaken to establish whether the item was an individual piece, one of a number of pieces or a disposal pit. Such surveys may, as appropriate, utilise magnetic, electromagnetic or other relevant diagnostic techniques.

The survey would be undertaken by the Ordnance Consultant/Contractor. Further surveys are mandatory if the explosive ordnance is considered a Group A item or more than three readily identifiable Group B items are found at one location.

- **Group A** - An item clearly of a military nature and which might readily be recognized by a member of the public as such (e.g. in effect complete in appearance as a projectile of 20 mm calibre or greater, hand grenade, mortar, bomb, etc) and containing explosive filling, but excluding small arms ammunition.
- **Group B** - An item clearly of a military nature and which might readily be recognized by a member of the public as such (e.g. in effect complete in appearance as a projectile of 20 mm calibre or greater, hand grenade, mortar, bomb, etc) and not containing explosive filling, and excluding small arms ammunition.

Additional ordnance surveys required will be designed to assess the extent and nature of the ordnance contamination and then (or concurrently) remove the item so that the area is safe for development activities to resume.

In the event that further explosive ordnance is discovered the search area may need to be extended to ensure a suitable buffer zone is searched. A remediation and sampling strategy for the area is to be developed in consultation with the Environmental Consultant and Site Auditor.

All additional finds should be logged and disposed of appropriately. Once the investigation is complete a report on the scope of the investigation, remedial work and results should be produced by the Ordnance Consultant/Contractor, and provided to the independent Site Auditor. The quarantine restrictions on the area can be removed and the earthworks resumed.

2.5 Significant Find

In the event that assessment by the Environmental and or Ordnance Consultants identifies that the chemical or ordnance contamination is extensive in its lateral and/or vertical extent, then a sampling and analysis plan will be prepared to delineate the contamination and assess the extent of any remediation required. The sampling and analysis plan will be reviewed by the independent Site Auditor, who would be engaged to review the assessment works, and any associated remediation.

If in the opinion of the independent Site Auditor the extent of contamination materially affects the validity or appropriateness of the conclusions in the Site Audit Statement or Report, DECCW guidance requires the Auditor to notify DECCW and Planning Authority. A revised site audit report and/or statement (as appropriate) may be required to take account of the find.



3.0 LIMITATIONS

This Document has been provided by Golder Associates Pty Ltd ("Golder") subject to the following limitations:

This Document has been prepared for the particular purpose outlined in Golder's proposal and no responsibility is accepted for the use of this Document, in whole or in part, in other contexts or for any other purpose.

The scope and the period of Golder's Services are as described in Golder's proposal, and are subject to restrictions and limitations. Golder did not perform a complete assessment of all possible conditions or circumstances that may exist at the site referenced in the Document. If a service is not expressly indicated, do not assume it has been provided. If a matter is not addressed, do not assume that any determination has been made by Golder in regards to it.

Conditions may exist which were undetectable given the limited nature of the enquiry Golder was retained to undertake with respect to the site. Variations in conditions may occur between investigatory locations, and there may be special conditions pertaining to the site which have not been revealed by the investigation and which have not therefore been taken into account in the Document. Accordingly, additional studies and actions may be required.

In addition, it is recognised that the passage of time affects the information and assessment provided in this Document. Golder's opinions are based upon information that existed at the time of the production of the Document. It is understood that the Services provided allowed Golder to form no more than an opinion of the actual conditions of the site at the time the site was visited and cannot be used to assess the effect of any subsequent changes in the quality of the site, or its surroundings, or any laws or regulations.

Any assessments made in this Document are based on the conditions indicated from published sources and the investigation described. No warranty is included; either express or implied, that the actual conditions will conform exactly to the assessments contained in this Document.

Where data supplied by the client or other external sources, including previous site investigation data, have been used, it has been assumed that the information is correct unless otherwise stated. No responsibility is accepted by Golder for incomplete or inaccurate data supplied by others.

Golder may have retained subconsultants affiliated with Golder to provide Services for the benefit of Golder. To the maximum extent allowed by law, the Client acknowledges and agrees it will not have any direct legal recourse to, and waives any claim, demand, or cause of action against, Golder's affiliated companies, and their employees, officers and directors.

This Document is provided for sole use by the Client and is confidential to it and its professional advisers. No responsibility whatsoever for the contents of this Document will be accepted to any person other than the Client. Any use which a third party makes of this Document, or any reliance on or decisions to be made based on it, is the responsibility of such third parties. Golder accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this Document.

GF/SM/gf

A.B.N. 64 006 107 857

Golder, Golder Associates and the GA globe design are trademarks of Golder Associates Corporation.

At Golder Associates we strive to be the most respected global group of companies specialising in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organisational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

Africa	+ 27 11 254 4800
Asia	+ 852 2562 3658
Australasia	+ 61 3 8862 3500
Europe	+ 356 21 42 30 20
North America	+ 1 800 275 3281
South America	+ 55 21 3095 9500

solutions@golder.com
www.golder.com

