Waste Management Plan

GWS Giants Centre of Excellence

Proposed Field Lighting, Scoreboard, Spectator Mound, Camera Pole & Field Fencing

Project Details	
Date:	09th September 2024
Revision:	A
Project Location:	1 Olympic Boulevard, Sydney Olympic Park
Client:	Western Sydney Football Club Pty Ltd

Revision Date	REVISION DESCRIPTION	AUTHOR INITIALS
09/09/2024	Revision A – Original Issue	BS

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1 Overview

a) The purpose of this Waste Management Plan is to outline the proposed method to deal with construction waste throughout the entire construction phase of the external works from excavation through to the construction and handover.

b) The method of dealing with construction waste is consistent throughout to ensure that our environmental obligations are being met. These works will take place concurrently with the main pool hall works, hence the waste management methodologies are consistent with the plan approved as part of the previously approved DA.

c) Practical and feasible waste management options have been identified and detailed. The priorities of waste management principles for this project includes:

- Reduce wastes at the source;
- Reuse materials, where possible;
- Recycle wastes, where practical;
- Removal all waste from the site where it cannot be retained; and
- Disposing of associated wastes appropriately and responsibly.

d) For the location of onsite storage of garbage bins and recycling containers, please refer to the below figure:

2 Recycling

a) Recycling is a vital means whereby Australia's natural resources are conserved and efficiently utilised. FDC aim to develop a waste management system based on resource recovery and recycling.

2.1 Option 1: On-site Recycling

a) The efficiency of on-site recycling depends on the anticipated waste stream types and quantity along with space being available (and suitable) to house the bins required.

b) The on-site separation of scrap metals such as aluminium, copper pipe and wire, lead and steel is viable. Bins will be identified clearly on sites to aid in the separation of materials. FDC will work together to reduce waste coming to site.

c) Site conditions permitting separate on-site bins for cardboard and paper are also possible and FDC have committed to providing a paper bin for use on site for this purpose.

d) FDC feel that off-site recycling is the more viable option for all other wastes.

2.2 Option 2: Off-site Recycling

a) Off-site recycling is the most appropriate course of action for mixed waste streams and sites with minimum room or access difficulties.

b) At the landfill and recycling facility, it is possible to sort and recycle wastes coming in. This sorting and recycling includes the recovery and production of the following materials:

i. Paper / Cardboard / Glass

ii. Steel – OSI and Black Iron

iii. Non-ferrous metals such as: lead, copper, electrical cable, brass and aluminium, all of which are sorted and sent to the appropriate processing plants.

iv. Timber, such as formwork pallets, hardwood, oregon and the like are sorted for reuse with the remainder being processed to make woodchip.

v. Plasterboard and Gyprock are transformed into soil conditioners. Green waste is transformed into mulch.

vi. Problem waste, such as tree stumps and plastics are all processed or recycled to avoid the potential problems that wastes such as these cause at landfills.

3 Environmental Management and Compliance

a) FDC offer a waste management service in accordance with the Protection of the Environment Operations Act 1997 and the Waste Minimisation and Management Act 1995.

b) Clients of FDC are secure in the knowledge that their waste is being disposed of according to environmental protection legislation and the principles of ecologically sustainable development. FDC has in place, as a major part of our business, a materials recovery and recycling program that exceeds the objectives of the waste minimisation and management legislation.

4 Legislation and Due Diligence

4.1 Legislation

a) The disposal of wastes is under the control of the local authorities and Environmental Protection Authority. The EPA administers the Protection of the Environment Operations Act and associated legislation and regulations.

4.2 Due Diligence

a) Companies and individuals are required to act with due diligence in respect of the disposal of the waste they generate. Companies and individuals are exercising due diligence by using appropriate organisations to dispose of waste.

b) Due diligence may be considered to be the legal opposite of negligence. If due diligence is not exercised, then negligence may be considered to have occurred. Due diligence applies to both a requirement to act and to a failure to act, thus commission and omission of action. Due diligence applies to companies, company Directors and employees. Due diligence means that companies and individuals have all the reasonable means to ensure that legal obligations have been met.

c) For waste management, due diligence requires both the waste producer and the waste collector to mutually exercise:

   i. Duty of care, and

   ii. Duty of disclosure

5 Definitions of Waste

5.1 Wastes

a) Wastes are described by many different names and come in many different types, i.e. industrial, commercial, building and demolition, clinical, solid, domestic, putrescible, non-putrescible, hazardous, household, inert, municipal and trade waste. They are defined for regulatory purposes in the Protection of the Environment Operations Act.

6 Waste Sources

There are several sources of potential waste that may be encountered during the construction phase. These include:

- Solid waste (clearance material);
- Solid waste ('domestic' debris);
- Solid waste (putrescibles);
- Hazardous waste (oils and sludges)

6.1 Potential Impacts

6.1.1 Solid Waste – Demolition & Clearance Material

During construction works, concrete, steel, cabling, timber and scrap metal may be encountered. The approximate quantities of waste resulting from construction are provided at Appendix 1. In accordance with the principles of waste management, opportunities for re-use will be utilised.

Inert material will be kept in a designated 'clean' stockpile area and covered as required with plastic and/or tarpaulins, to minimise potential dust impacts, while awaiting transport off-site.

Where possible, the material will be transported to a building waste recycling facility to be specified later. Alternatively, it will be disposed at a licensed landfill site.

6.1.2 Solid Waste – Domestic Debris

'Domestic' debris comprises everyday waste such as paper, aluminium cans and other materials generated by construction and maintenance workers. It is proposed to continue to service the site by private contractors. A cigarette collection point will be provided on-site for construction workers.

6.1.3 Solid Waste – Putrescible

Putrescibles and 'green' waste comprises food scraps. These wastes will be collected and stored separately from other wastes produced during construction and disposed off site by a licensed contractor to either a 'green waste' facility or landfill.

6.1.4 Hazardous Waste – Contaminants, Oils and Sludges

The subject site and its past history of land uses have not given rise to contaminants. Any waste oils accumulated during maintenance of heavy machinery will be disposed off-site by the contractor as part of their own licence agreements. Waste oil contractors and maintenance and refuelling contractors will be required to have spill response procedures in place. Refuelling will be carried out at designated areas to control potential spill and maintenance issues. Spill response equipment will be stored at the construction sites in the event of unforeseen spills due to hose breaks, etc. Minor waste oil spills will be contained and impacted soils disposed of according to NSW legislation.

No other hazardous wastes are anticipated on site. Should unexpected materials be discovered during the course of the project, work will cease immediately and plans for the safe handling, storage and disposal in accordance with relevant statutory guidelines will be developed.

7 Mitigation Measures

7.1 Detailed Waste Management Plan

All wastes to be disposed of off-site must be sampled tested and classified in accordance with the NSW EPA Waste Classification Guidelines Part 1: Classifying Waste 2014 and be disposed of to a facility that can lawfully receive that waste. All waste classification reports, and weighbridge documents will be retained and provided to the Site Auditor and SOPA if requested. A detailed waste management plan is a part of the projects CEMP. For detailed direction on construction waste management, please refer to the below sections:

a) Capping Material Excavation and Stockpiling (section 11.3.1 in CEMP)
b) Off-site Disposal of Excavated Material (section 11.3.2 in CEMP)
c) Importation of Soil (section 11.3.3 in CEMP)
d) Unexpected Waste or Contamination Finds (section 11.3.4 in CEMP)
e) Penetration of the landfill Waste (section 11.3.5 in CEMP)

Capping Material Excavation & Stockpiling

The following procedures must be undertaken prior to and during any excavations or soil disturbance activities at the Site:

- the work area must be clearly delineated to prevent unauthorised access using warning signage and temporary barriers. Only personnel inducted into this CEMP will be permitted to enter the work area;
- personnel entering the work area must wear appropriate PPE (e.g. safety glasses, gloves, long sleeve high visibility clothing and a hard hat) at all times in accordance with the task specific SWMS prepared by the contractor or sub-contractor undertaking the works;
- personnel entering the work area may also require personal gas monitors with any capping excavation works to be undertaken in consideration of landfill gas management measures presented in Section 13.3;
- sufficient room must be provided within the works area to allow stockpiling of spoil from excavations, if required;
- store excavated material on the high side of the excavation so that any liquid travels back into the excavation;
- where stockpiles are kept for more than one day: excavated material should be stockpiled in the flat designated area in the eastern extent of the construction area, excavated material should be placed on top of plastic sheeting, and erosion control measures placed around them;
- stockpiles are not to be placed on the footpath or road reserve, close to waterways, on slopes >10% grade, or areas of concentrated water flow. Stockpiles should not exceed 2m in height, and need to be covered with plastic sheet or tarpaulin if in place for more than 2 weeks or in a high-risk location;
- at the completion of works, where excavations are to be backfilled replace excavated material in the reverse order that it was removed, replacing material in 300 mm layers;
- Layers are to be compacted with a powered compactor to a compaction density of 98%, and topsoil restored and/or landscaping consistent with procedures required under the RLMP;
- ensure minimum capping thickness of 1m of clay above waste is maintained outside of building footprints;
- all soils excavated at the Site will be documented from origin to final destination within a tracking log, with information including the source area and location of any stockpiled soils accurately noted to ensure the origin, contamination status and fate of the soils are accurately tracked;
- any surplus capping materials should be used on-site or disposed of off-site in accordance with Section 11.3.2;
- any equipment used during the intrusive works must be cleaned of loose soil prior to vacating the site.

Off-site Disposal of Excavated Material

Any material to be disposed off-site during the construction works is required to be classified by a suitably qualified environmental consultant in accordance with NSW EPA's Waste Classification Guidelines Part 1: Classifying Waste 2014, including the following:

- Maintenance of a soil tracking log;
- Sampling and analysis of soils intended for off-site disposal in accordance with the relevant NSW EPA waste guidelines;
- Documentation detailing the classification of soils based on NSW EPA waste guidelines must be obtained and provided to the intended licensed disposal facility prior to the off-site disposal of soils;
- If the soils are classified as hazardous waste, the soils are to be transported with associated waste tracking accurately completed; and
- Ensure all waste documentation including waste tracking, landfill and weighbridge dockets are retained and kept on file and provide copies to SOPA or the Auditor, if requested.

Unexpected Waste or Contamination Finds

In the event that unexpected waste or contamination finds are encountered in-ground during intrusive works which have the potential to cause harm to either human health or the environment, the following measures should apply:

- Refer to the Management of Unexpected Waste within the RLMP;
- Restrict public access to the area;
- Report the location and nature of the waste to the Site Occupier, Principal Contractor, and SOPA for further investigation;
- A suitably qualified contamination consultant should be engaged to assess occupational, public, and environmental risks, particularly considering potential explosive or toxic gases, toxic chemicals and buried unexploded ordinance;
- Induct contractors on risks and procedures, and provide personal protective equipment as required;
- A minimum capping thickness of 1m of clay is required to be in place (outside of building footprints) and as such further excavation of waste material and backfill and compaction of waste material may be required to achieve the capping requirements;
- Where an existing capping layer is disturbed and where replacement is being contemplated, a suitably qualified environmental consultant should be engaged to ensure that the capping level can be restored in accordance with the SOPA Remediated Lands Management Plan (RLMP);

- Clay replacing the waste should be placed in 300mm layers, compacted with a power compactor to a compaction density of 98% and where appropriate include 100mm of topsoil;
- The location of new ground levels should be surveyed with information provided to SOPA within one week of completion for assessing potential settlement;
- Any material to be excavated must be managed in accordance with Section 11.3.1;
- Spoil from within the waste mass should be placed into labelled drums or skips. Classify the material for subsequent off-site disposal to a licensed disposal facility in accordance with Section 11.3.2; and
- Seal all drums and skips, and cordon the area if contractors leave the worksite.

Penetration of the Landfill Waste

The improvement works require screw piles to support the additional features which will require penetration of the clay capping into underlying landfill waste.

Under the CLM Act and RLMP it is a requirement to seek approval from the NSW EPA to undertake excavation works that will result in the penetration of the clay capping or the disturbance of waste prior to the commencement of any excavation works. The approval application to the NSW EPA is submitted by SOPA on behalf of GWS Giants. The contractor will need to provide details of the works to SOPA.

The following procedures specific to penetration of the clay capping must be undertaken prior to and during any related works at the Site:

Continuously monitor gas levels within ambient air of the workspace in accordance with landfill gas management measures in Section 12 of the CEMP.

7.2 Waste Register

A register of wastes will be kept throughout the refurbishment/construction project. The register will contain details pertaining to:

a) The types and quantity of wastes for each load taken off site;
b) The place to which the waste was taken for treatment or disposal; and
c) The waste contractor used for each waste load.

A requirement that all weighbridge dockets and/or receipts from waste material transported off site will be kept as part of the waste register.

8 Spectator Mound

The spectator mound is a key component of the scope of works that is part of this DA submission. Proposed excavated spoil from the light pole / camera pole footings & pool facility is to be re-used and retained on-site in the mound. The mound, shown as a 625m2 area on the south-east corner of the site

All remaining excavated spoil from the pool facility is to be exported to an EPA accredited facility. Any contaminated material (whilst not anticipated), if identified, works in constructing the mound will cease and plans for safe handling, storage and disposal in accordance with relevant statutory guidelines.

9 Operational Waste Management

As part of the future operations of the premises, the services of private contractors will be utilised to remove recycling and waste. All waste removal will occur via the existing loading dock against the Football department entry (GWS Carpark).

The following waste is collected on a weekly basis:

- Landfill (Red) 240Ltr
- Paper & Cardboard (Blue) 240Ltr
- Organic Waste (Purple) 240Ltr
- Paper & Cardboard Large (Blue) 660Ltr
- Comingle Recycled (Yellow) 240Ltr

The proposed development will not significantly impact or change the current waste being generated on the premises. The anticipated additional waste (expressed as a percentage) would be 5-10%.

10. Transport & Vehicle Management

As per the TPMP all construction vehicles will be entering and exiting the site off Sarah Durack Ave. As part of this management procedure, the body of any vehicle or trailer used to transport waste or excavation spoil from the site, will be covered to prevent any spill, escape of dust, waste, or spoil prior to leaving the site.

A cattle grid will be installed onsite as part of the sediment and environmental control strategy. This will be located at the entry/exit point to mitigate excess soil/dirt from leaving the site via the wheels of vehicles. Any mud, splatter dust and other material likely to fall from the wheels, underside of bottom, trailer or mortised plant must be removed prior to leaving the site. An inspection of each vehicle to ensure that this standard is met will be required.

Further to the above, the below strategies will be in place to manage the vehicular movements and potential waste generation:

- Daily inspections (2 off) to ensure the access road from Sarah Durack Avenue is clear of debris (in accordance with Condition B7(e)
- Street sweeping to clear any debris along the access road from Sarah Durack Avenue during excavation works.

11. Asbestos & Hazardous Waste Management

a) A **hazardous material** is any item or agent (biological, chemical, radiological, and/or physical), which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors.

b) **Hazardous materials professionals** are responsible for and properly qualified to manage such materials. This includes managing and/or advising other managers on hazardous materials at any point in their life cycle, from process planning and development of new products, through manufacture, distribution and use, and disposal, clean-up and remediation.

c) The purpose of this Management Plan is to highlight FDC's compliance to all requirements stated within these documents. Procedures, policies and safeguards set out within the plan are in accordance with recommendations for the safe removal of the hazardous materials. Through stringent compliance FDC can ensure that all of our HAZMAT removal projects are conducted in a professional and safe manner.

d) The following plan will set out in details all procedures relating to this HAZMAT removal project including, site set up, work area set up, removal, decontamination, personal protection equipment, disposal, air monitoring and site clearance.

e) This plan shall be read and implemented in accordance with the Project Management Plan.

11.1 Asbestos

a) Asbestos poses a risk to health whenever fibres become airborne in close proximity to people. Accordingly, the best preventative measure to avoid such exposure is for high risk materials to be removed. Due to the inherent risk involved in removing an unstable and highly hazardous material, remediation works shall be completed in accordance with Legal Register including:

i. Guide Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC: 3003(2005)];
ii. Code of Practice – How to Manage and Control Asbestos in the Workplace 2016;
iii. Code of Practice –How to Safely Remove Regulation 2011;
iv. Local Acts and Regulations.

b) Compliance to the procedures stated within these documents is vital for the safe removal of any asbestos material.

11.2 Hazardous Materials Works Plan

a) The following sections relate to the procedures and precautions required by contractors involved in the removal of hazardous building materials from the building. This document does not cover all procedures and precautions required for the proposed demolition and refurbishment works i.e. the safe operation of machinery, site safety and other general work site requirements etc.

11.2.1 General Site Set Up for the Removal of Hazardous Building Materials.

a) Prior to the commencement of removal activities, the following procedures are to be observed:

i. Appropriate Safe Work Method Statements and Site and Environmental Risk Assessments are to be prepared by all parties involved and followed in accordance with site safety procedures.
ii. Establish an exclusion zone for the works area(s) to prevent access to the area by personnel not involved in the works.
iii. Establish area for decontamination facilities (area for wetting down and disposal of PPE).
iv. Establish area for wash down (decontamination) of equipment.
v. All appropriate signage is to be erected within and surrounding the exclusion zone, including appropriate warning signs.

11.2.2 Requirements for the Removal of Asbestos Containing Materials

a) All identified occurrences of asbestos materials outlined within Hibbs and Associates Report are considered to be ***Bonded and Friable Asbestos.*** Prior to the commencement of asbestos removal activities, the following procedures are to be observed.

i. All bonded asbestos removal work is to be undertaken by an appropriately qualified AS1 or AS2 licensed contractor.
ii. An exclusion zone (a minimum of 10m where practicable) from the asbestos containing areas is to be established, barricaded and access restricted to essential personnel.
iii. Establish area decontamination facilities (area for wetting down and disposal of PPE).
iv. Establish area for wash down (decontamination) of equipment.
v. All appropriate signage is to be erected, including appropriate asbestos warning signs.
vi. Remove all asbestos materials are to be double bagged/wrapped in 200µm thick plastic and placed in appropriately lined binds/trucks and disposed of as asbestos waste.
vii. 200µm thick drop sheets are to be used on floor surfaces immediately beneath the asbestos removal area.
viii. Precautions should be taken to prevent slip and trip hazards.
ix. Care is to be taken to remove all asbestos cement sheeting debris that remains around nail heads.
x. All dust and decontaminated debris on all horizontal surfaces are to be vacuumed clean with a vacuum fitted with a HEPA filter and subsequently wet wiped.
xi. All remaining timber/metal framework is to be sprayed with a dilute PVA emulsion.
xii. All used drop sheets are also to be disposed of as asbestos waste.

Removal of asbestos cement debris

a) All identified occurrence of asbestos cement debris is to be collected via the process of “sparrow picking” in conjunction with hand raking.
b) All allocated asbestos cement debris are to be double bagged / wrapped in 200µm thick plastic and placed in appropriately lined bins/trucks.

Airborne asbestos monitoring & clearance inspection

a) NATA accredited asbestos air monitoring is required during all asbestos decontamination works.
b) If the results of the asbestos air monitoring during the asbestos decontamination works indicate that airborne asbestos levels are equal to or exceed 0.02 fibres/mL, the Decontamination Contractor shall cease work immediately and the work practice shall be reviewed with appropriate measures taken to rectify the problems.
c) Following all asbestos decontamination activities, an Asbestos Clearance Assessment will be carried out. The Asbestos Clearance Assessment will involve:
    i. A visual inspection to check that all visually identified asbestos containing materials have been removed to a satisfactory industry standard.
    ii. Subsequent to satisfactory inspection results an Asbestos Clearance Certificate will be issued and normal activities will be able to proceed within designated area.

Lead Dust Removal

a) If there is lead dust found on the project, The following procedures are to be followed in the removal of lead dust from the building:
    i. All workers to wear appropriate Personal Protective Equipment (PPE), including but not limited to respiratory protection, disposal overalls, safety shoes, gloves, and hard hat.
    ii. All penetrations to the contaminated areas containing lead dust are to be sealed to prevent the movement/transport of lead dust contamination.
    iii. The contaminated areas containing lead dust are to be vacuumed clean with a HEPA filter vacuum and then wet-wiped clean accordingly.
    iv. Use established area for decontamination facilities.
    v. Use established area for wash down (decontamination) of equipment.
    vi. Ensure appropriate personal lead hygiene precautions are observed, i.e. washing of face and hands after the lead removal activities.

Lead Paint Removal

a) Paints that contain more than 1.0% of lead content are generally considered to be lead containing paints as per Australian Standards AS 4361.2 – Guide to Lead Paint management, Part 2: Residential and Commercial Buildings

b) If lead paint is found present, the following procedures are to be followed in the removal of lead paint from each of the above-mentioned properties:

i. Place disposable polyethylene sheets below the work area. If working on scaffolding, tie a sheet underneath to catch falling paint debris.
ii. Work in such a way to minimize debris and fume generation and the transfer of debris from the immediate work area. Avoid working in windy conditions as it can cause paint debris to be blown away and contaminate adjacent areas.
iii. P2 respirators, disposable coveralls and gloves need to be worn during the removal activities. Ensure these items are disposed of when leaving the work area.
iv. Remove accumulated paint debris frequently to minimize spreading from the immediate work area. Use a vacuum fitted the HEPA filter for particular removal.
v. After vacuum removal there are still likely to be traces of lead dust remaining. Remove lead traces by wiping surfaces with a damp cloth. Dispose of the cloth after use.
vi. Use established area for decontamination facilities.
vii. Use established area for wash down (decontamination) of equipment.
viii. Ensure appropriate personal lead hygiene precautions are observed, i.e. washing of face and hands after the lead removal activities.

Airborne Lead Monitoring & Clearance Inspection(s)

a) Airborne Lead Monitoring is to be conducted during all Lead Dust and Lead Paint removal works by a suitably qualified consultant.
b) If the results of the airborne Lead levels exceed 0.15mg/m3 the Contractor shall cease work, the work practices shall be reviewed, and appropriate measures will be taken to rectify the problems.
c) Following Lead Dust and Lead Paint activities, a suitable qualified consultant is to conduct a clearance assessment. The clearance assessment will involve an inspection of the remaining surfaces to check that all identified Lead Dust and Lead Paints have been removed to a satisfactory industry standard.
d) NOTE: As part of the clearance assessment for Lead Dust, surface dust sampling should be conducted to confirm inspection results. The acceptance criteria for lead loading as outlined in Section 5.6 of Australian AS 4361.2-1998. Guide to Lead Paint Management Part 2.
e) Following satisfactory inspection, surface sampling (if requested) and monitoring results, a Lead Dust or Lead Paint Clearance Certificate will be issued.

Removal of Materials Containing Synthetic Mineral Fibres (SMF)

a) Should Synthetic Mineral Fibre (SMF) materials be identified within building, the following procedures are to be followed in the removal of SMF materials:

i. All SMF containing materials are to be double bagged/wrapped in 200µm thick plastic and placed in appropriately lined bins/trucks and disposed of appropriately.
ii. 200µm thick drop sheets are to be used on floor surfaces immediately beneath the removal area.
iii. Precautions should be taken to remove all SMF containing materials that remains around nail heads.
iv. All remaining horizontal and vertical surfaces are to be vacuumed clean with a vacuum fitted with a HEPA filter and subsequently wet wiped.
v. All remaining timber/metal framework is to be sprayed with a dilute PVA emulsion.

Removal of Materials Containing Polychlorinated Biphenyls (PCBs)

a) Polychlorinated biphenyl (PCB) materials were identified within the building:

b) The following procedures are to be followed in the removal of PCB containing materials:

   i. All PCB containing materials are to be double bagged/wrapped in 200µm thick plastic and placed in appropriately lined bins/trucks and disposed of appropriately.

   ii. Precautions should be taken to prevent slip and trip hazards.

Procedure for Dealing with Unexpected Finds

What does Asbestos look like?

In the event you find asbestos, or suspect the presence of asbestos or cannot identify a substance that may be unidentified asbestos, you must:

⇩

STOP WORK IMMEDIATELY

⇩

Report the suspected find to FDC Management for assessment and/or action

⇩

FDC Management shall set-up exclusion zone around suspect area to prevent unauthorised access

⇩

FDC shall undertake verification of the suspected material

⇩

Work must not recommence until you have received instructions from FDC Management that it is safe to do so.

If in doubt – ASK.