SYDNEY FOOTBALL STADIUM REDEVELOPMENT

Construction Waste Management Sub Plan

Environmental Management Plan

SFS-JHG-00-PLN-PM060002

SSD-9835

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1 Revisions and Distribution

1.1 Revisions

Draft issues of this document are identified as Revision 1, 2, 3 etc. Upon initial issue (generally Contract Award) this will be changed to an alphabetical revision. Revisions will continue at Revision A, B, C etc.

Rev	Date	Prepared By [Name & Signature]	Reviewed By [Name & Signature]	Approved By	Remarks
1	09/01/2020	Shaun Collins	M. Turner	S. Maclaren	Initial Draft for review
2	21/01/2020	M. Turner	M. Stephenson M. Males	S. Maclaren	Final review and reformatting.
A	5/5/2020	Cameron Newling	S. Maclaren		Updated as per comments from Site Auditor. Issued for Construction (Old Doc No.: SFS-JHG-PLN-CEMP-003)
B	13/01/2021	Steve Maclaren	M. Chapple	S. Maclaren	Incorporate Stadium Fitness Facilities (SSD 9835 Modification No.2) and update GMR references
C	02/11/2021	Holly Hofland			Incorporate the Roosters Centre of Excellence (SSD 9835 Modification No.6)

Copy Holder Details		
Name	Position	Copy Number
Steve Maclaren	HSEQ Manager	1

1.2 Distribution List

Client's Representative	Via Aconex
Project Manager	Via Aconex
Project Site Manager	Via Aconex
HSEQ Manager	Via Aconex
Project Environment Representative	Via Aconex

The controlled master version of this document is available for distribution as appropriate and maintained on the document management system being used on the project. All circulated hard copies of this document are deemed to be uncontrolled.

1.3 Development Consent Conditions

Consent Condition Requirement		Reference
B24	The Construction Waste Management Sub-Plan (CWMSP) must address, but not be limited to, the following:	This Plan
a	Detail the quantities of each waste type generated during demolition and the proposed reuse, recycling and disposal locations;	Section 10
b	Removal of hazardous materials, particularly the method of containment and control of emission	Section 6
c	Measures to conduct electronic monitoring of waste vehicles entering and leaving the development site; and	Section 7
d	Details of arrangements for the disposal of waste from the premises with evidence that the waste facility is legally able to accept that waste.	Section 6, 11
B38	Details of the proposed truck routes to be followed by trucks transporting waste material from the site, must be submitted to the Sydney Coordination Office and Transport Management Centre and the Planning Secretary, prior to the commencement of the removal of any waste material from the site.	Detailed in CTPMP
C36	The construction waste must be managed and disposed of in accordance with the CWMSP required by condition B24.	This Plan
C37	Waste must be secured and maintained within designated waste storage areas within the site at all times until picked up by a waste disposal contractor.	Section 6.0
C38	All waste generated during construction must be assess, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).	Section 6.0
C41	The movement of materials from stockpiles of waste materials for disposal and / or materials for reuse or recycling must always be recorded.	Section 6.0
C42	The waste materials stockpiled for disposal and materials stockpiled for re-use or recycling must be appropriately managed to ensure waste streams reach their intended final destinations, being premises legally able to accept those wastes and materials for re-use or recycling.	Section 6.0

2 Definitions

AMS – Activity Method Statement

CA/Client – Contract Administrator/Client

CoE – Roosters Centre of Excellence

DPIE – Department of Planning, Industry and Environment

EMP – Environmental Management Plan

ENM – Excavated Natural Material

EPA – Environmental Protection Authority

Fm – Foreman / Supervisor

JHET – John Holland Event Tracker

OEH – Office of Environment and Heritage

PER – Project Environmental Representative

PM – Project Manager

RAP – Remediation Action Plan

SEP – Site Environmental Plan

SM – Site Manager / Superintendent

TRA – Task Risk Assessment

VENM – Virgin Excavated Natural Material

WRA – Workplace Risk Assessment

3 Scope of the Waste Management Plan

EMS reference
Environment Management Manual JH-MAN-ENV-001

The Sydney Football Stadium Redevelopment Stage 2 and the Stadium Fitness Facility (SFF) projects (in this document both are jointly referred to as the Project) are an Infrastructure NSW initiative to build a new rectangular stadium. The Project is part of the SCSGT Precinct, adjacent to the SCSGT and part of the wider Moore Park sports and entertainment precinct.

Stage 2 works include Detailed design, construction and operation of a new stadium comprising:

- construction of the stadium, including:
    - 45,000 seats (additional 10,000 - person capacity in the playing field in concert mode) in four tiers including general admission areas, members seating and corporate I premium seating;
    - roof cover over all permanent seats and a rectangular playing pitch;
    - a mezzanine level with staff and operational areas;
    - internal pedestrian circulation zones, media facilities and other administration areas on the seating levels;
    - a basement level (at the level of the playing pitch) accommodating pedestrian and vehicular circulation zones, 50 car parking spaces, facilities for teams and officials, media and broadcasting areas, storage and internal loading areas;
    - food and drink kiosks, corporate and media facilities; and
    - four signage zones.
- construction and establishment of the public domain within the site, including:
    - hard and soft landscaping works;
    - publicly accessible event and operational areas;
    - public art; and
    - provision of pedestrian and cycling facilities.
- wayfinding signage and lighting design within the site;
- reinstatement of the existing Moore Park Carpark 1 (MP1) upon completion of construction works with 540 at-grade car parking spaces and vehicular connection to the new stadium basement level;
- operation and use of the new stadium and the public domain areas within the site for a range of sporting and entertainment events; and
- extension and augmentation of utilities and infrastructure.

Table 1 Modifications to SSD 9835

Modification	Approved	Description
Modification 1	3 April 2020	Amend Conditions B14 and B15 to enable the condition to be satisfied in accordance with the principles and framework prescribed by the *Contaminated Land Management Act 1997.*
Modification 2	14 December 2020	Reinstate fitness facilities that were previously available within the former SFS.
Modification 3	7 December 2020	Alter the approved mezzanine slabs at the eastern and

		western stands and relocate the approved administration facilities. design amendments to the south western glazed façade. inclusion of an additional stadium signage condition.
Modification 4	22 April 2021	Relocate the photovoltaic (PV) cells from the stadium's roof to Level 5 (above the eastern and western plant rooms) and a reduction in the amount of kilowatts peak (kWp) generated.
Modification 5	8 June 2021	Minor modification to correct plan revisions and dates.
Modification 6	29 September 2021	Fit-out, use and operation of the eastern mezzanine of the stadium for the purpose of a dedicated training and administration facility for the Sydney Roosters NRL football club, known as the Sydney Roosters Centre of Excellence.

The Sydney Roosters Centre of Excellence is a modification to the fit-out, use and operation of the eastern mezzanine of the SFS, as such is included in the staging for SFS and does not need to be staged separately. The Sydney Roosters Centre of Excellence will be delivered as part of CC5.

Table 2 SFS Staging

CC No.	Proposed works	Duration	Start Date	Finish Date
CC1	Bulk earthworks, retaining walls, enabling and temporary works (for example shoring) to facilitate future stages.	11 months	March 2020	February 2021
CC2	Stadium sub-structure elements including piles, foundations, footing construction and in-ground services	7 months	April 2020	October 2021
CC3	Structure - basement to concourse level construction.	9 months	July 2020	March 2021
CC4	Above concourse level works (structure – Level 1 to Level 5)	7 months	November 2020	May 2021
CC5	Roof, façade, fit-out and remaining elements.	18 months	February 2021	July 2022

The Stadium Fitness Facility (SFF) is owned and operated by Venues NSW and provides fitness amenities for members of the Sydney Cricket and Sports Ground.

Stadium Fitness Facilities is integrated into the SFS redevelopment and will reinstate the facilities that operated in conjunction with the former, demolished stadium on the site. The proposed Stadium Fitness Facilities comprise:

A low level pavilion building located behind the southern entry abutment wall and a basement level structure, which is largely integrated into the under-croft space beneath the approved SFS entry stairs to accommodate

1. Gymnasium, training area and three group fitness areas.
2. Two squash courts, sauna, spa and steam room as well as wet and dry change rooms.
3. Day spa and treatment rooms
4. Café with indoor and outdoor seating
5. 25 metre (m) and a 50m open-air swimming pool.

6.Function spaces on the rooftop, poolside and at the café for members and their guests.

7.Basement level plant and equipment, landscaping and associated services.

The Stadium Fitness Facilities will largely occupy the vacant under-croft space below the SFS entry stairs, being largely imperceptible and occupying land that already forms part of the approved SFS redevelopment footprint. A modest pavilion building, swimming pools, and minor outdoor structures will also occupy land that was formerly used for the Indoor Cricket Centre, part of the Sydney Cricket Ground's (SCG) practice area, part of a tennis court, and part of the wall extending from the Moore Park Terraces to the south along Driver Avenue. This small area of additional land is controlled by Venues NSW and has been integrated into the site as part of the Stage 1 SSD DA (9249).

Table 3 SFF Staging

CC No.	Proposed Works	Duration	Start Date	Finish Date
CC1	Demolitions works, piling, civils including retaining walls	5 months	February 2021	July 2021
CC2	In-ground services, substructure, structure to L0 including pools	7 months	April 2021	November 2021
CC3	Remaining structure, façade, services	10 months	May 2021	March 2022
CC4	Interiors	12 months	July 2021	July 2022

This Environmental Management Plan (EMP) Sub-Plan specifies the requirements of the John Holland Environmental Management System (EMS) (which is certified to ISO AS/NZS14001) that the Sydney Football Stadium Redevelopment Project (the Project) will use to enhance its environmental performance. Consistent with John Holland Environment Policy, the intended outcomes of this EMP include:

- enhancement of environmental performance on the Project;
- fulfilment of the Project's compliance obligations; and
- achievement of the Project's environmental objectives.

This Sub Plan (Waste Management Plan) enables the Project to manage its environmental responsibilities in a systematic manner and contribute to the environmental pillar of sustainability. This Waste Management Plan is applicable to the Project and applies to the environmental aspects of the Project's activities, products and services that the Project determines it can either control or influence considering a life cycle perspective.

This Waste Management Plan is applicable to all construction phase works (Stage 2) associated with the Sydney Football Stadium Redevelopment (John Holland and subcontractors).

3.1 Objectives

The objectives of this Waste Management Plan are to:

- Prevent environmental impacts from waste generated during all phases of the Project.
- Correctly manage and dispose of waste through identification of waste types and ensuring appropriate segregation, storage and disposal

- Create better waste outcomes through minimising waste and maximising re-use and recycling opportunities.
- Ensure a clean and tidy workplace that minimises environmental, quality and safety risks.

3.2 Project Location

The site is located at 40-44 Driver Avenue, Moore Park within the Sydney Cricket Sports Ground Trust (SCSGT) Precinct bounded by Moore Park Road to the north, Paddington Lane to the east, the existing SCSGT stadium to the south, Driver Avenue to the west, and is located within the City of Sydney local government area.

The site is legally described as Part Lots 1528 and 1530 in Deposited Plan 752011 and Lot 1 in Deposited Plan 205794 and is Crown Land, with the SCSGT designated as the sole trustee under the Sydney Cricket and Sports Ground Act 1978.

The site is largely surrounded by Centennial and Moore Parks, the Fox Studios and Entertainment Quarter precincts and the residential suburb of Paddington.

The site is approximately 3km from the Sydney CBD and approximately 2km from Central Station, is connected to Sydney's transport network through existing bus routes and will benefit from a dedicated stop on the soon to be completed Sydney CBD and South East Light Rail.

Figure 1: Site boundaries and structures: 1. Allianz stadium 2. Sheridan Centre 3. Sydney Roosters 4. Cricket NSW 5. MP1 Carpark 5. Fox Studios 7. Extension of boundary for the Stadium Fitness Facility

4 Performance

4.1 Project general context

- No environmental incidents resulting from waste management.
- Recycling and re-use of waste wherever practicable.
- Segregation of waste streams for recycling (either on site or off site)
- Quantity of waste delivered to landfill minimised wherever practicable.
- Hazardous and non-hazardous chemicals and substances used during all phases of the Project will be selected and managed to minimise the potential adverse environmental impacts associated with their disposal.
- Waste generation is minimised through reduce, reuse and recycle initiatives
- No litter to be observed across work sites.
- Waste transport vehicles use only the approved waste transport route.
- All waste generated on site is appropriately stored prior to disposal.
- No waste disposed at unapproved/non-licensed facilities.

4.2 Targets

- Construction waste diverted from landfill and either reused or recycled: 80%
- Number of waste related incidents: Nil

5 Legislation and Guidance Documentation

5.1 Federal Legislation

- Environmental Protection and Biodiversity Conservation Act 1999

5.2 State legislation

- Protection of the Environment Operations Act 1997 (NSW)
- Protection of the Environment Operations (Waste) Regulation 2014 (NSW)
- Waste Avoidance and Resource Recovery Act, 2001 (NSW)
- Environmentally Hazardous Chemicals Act 1985 (NSW)

5.3 Standards / Codes

- Australian Dangerous Goods Code,
- Waste Classification Guidelines: Part 1 Classifying Waste (DECCW 2009).
- Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes (DEC 2004).
- Guidelines on Resource Recovery Exemptions (Land Application of Waste Materials as Fill) (DECCW, 2011).

5.4 Supporting Documentation

- Construction Environmental Management Plan (CEMP)
- Air Quality Management Plan
- Site Environmental plan (SEP)
- John Holland Hazardous Chemical Management Procedure
- John Holland Resource Use Reporting Procedure (JH-MPR-ENV-002)
- John Holland Incident and Event Management Procedure (JH-MPR-SQE-010)
- Unexpected Finds protocol for contamination (Appendix 6 of the CEMP)
- John Holland Global Mandatory Requirements #9 –Environmental Management (GMR#9)
- State Significant Development approval SSD-9835.
- Sydney Football Stadium Environmental Impact Assessment (Stage 2 Construction and Operation) prepared for INSW dated 12th June 2019.
- Storing and Handling Liquids: Environmental Protection – Participants Manual (NSW Department of Environment and Climate Change (DECC) 2007).
- State Significant Development Consent SSD-9835.
- Douglas Partners Asbestos Assessment (99553.00.R.004) – (February 2020)
- Douglas Partners Remediation Action Plan (99533.00.005) – (March 2020)
- Section B Site Audit Statement (JC-NSW27) – (March 2020)

6 Waste Management Action Planning

Inductions, Training and Awareness	Staff Responsible	When
Site inductions will include the following specific components for waste management: ▪ Identification of waste types, including non-hazardous waste, hazardous waste and Listed/Controlled/Regulated wastes. ▪ Key requirements for handling, transportation and storage, including segregation of wastes. ▪ Waste storage facilities on the Site.	PER, Safety Advisor/Manager	Project delivery
Personnel who routinely handle hazardous chemicals or hazardous or Listed/Controlled/Regulated waste (e.g. refuelling personnel, pump operators, mechanics and stores personnel) will receive training in handling, transporting and storing hazardous chemicals or hazardous Listed/Controlled/Regulated wastes; in reporting and documentation requirements; and in spill clean-up techniques and practice.	PER, Project Safety Advisor/Manager, First Aiders	Project delivery
Communicate best waste minimisation practices with site personnel to ensure employees are aware of project waste procedures, the need to maintain a clean worksite and reduce risk of environmental harm resulting from inappropriate waste handling practices.	PER, Safety Advisor/Manager	At induction, prestart/toolboxes when appropriate

Waste Avoidance and Reduction	Staff Responsible	When
A plan, describing methods to minimise waste and maximise efficient use of resources must be implemented and monitored.	PER, Engineers	Workplace Planning
All workplaces must recycle construction and demolition waste, paper, cardboard, electronics, printer cartridges, fluorescent lights, glass, plastics and batteries, where recycling services are available.	All personnel	Project delivery
Waste minimisation measures will be included in tendering, subcontracting and procurement processes wherever practicable.	PER, Engineers, Supervisors	Workplace Planning
All waste, wherever practicable will be either segregated on-site or comingled and separated off-site. Waste will then be reused, recycled or disposed of in an appropriate manner at licensed facilities. Waste segregation measures will consider separate bins for each waste stream. ▪ General waste (construction and other) ▪ Concrete/masonry waste ▪ Metals ▪ Paper, cardboard etc. ▪ Plastics ▪ Glass ▪ Hazardous wastes ▪ Special waste (asbestos)	All personnel	Project delivery
Recycling bins will be provided in office and crib rooms. (where practicable)	PER, Engineers	Project Delivery
For building materials imported to site that have excessive packaging, efforts must be undertaken to negotiate alternative packaging arrangements with the supplier.	PER, Contracts	Workplace planning, project delivery
Recycling skips (co-mingled or otherwise) will be provided within the vicinity of on-site works.	PER, Engineers, Supervisors	Project delivery

General Waste Handling, Housekeeping and Storage	Staff Responsible	When
Details of the proposed waste haulage truck routes are documented within the CTMP and are to be followed by trucks transporting construction waste material from the site. The CTMP has been developed in consultation with the Sydney Coordination Office and Transport Management Centre prior to the commencement of the removal of any waste material from the site.	PER, Safety Advisor/Manager, Community and Stakeholder Manager	Prior to project commencement
All trucks transporting construction waste material from the Project site must follow thee approved routes documented within the CTMP throughout Project Delivery.	PER, Safety Advisor/Manager, Community and Stakeholder Manager	Project delivery
All waste trucks leaving the site are to have their loads secured and covered where applicable. This includes all skip and hook bins (or other waste receptacles).	All personnel	Project delivery
Waste must be secured and maintained within designated waste storage areas within the site at all times until picked up by a waste disposal contractor. These areas must be clearly defined and well signed.	All personnel	Project delivery
Splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorised plant leaving the site must be removed before leaving the premises.	All personnel	Project delivery
Concrete waste and rinse water are not to be disposed of on the site and will be prevented from entering any natural or artificial watercourse or waterbody.	All personnel	Project delivery
The waste materials stockpiled for disposal, re-use or recycling must be appropriately classified and managed to ensure waste streams reach their intended final destinations, being premises legally able to accept those wastes and materials for re-use or recycling.	All personnel	Project delivery
Ensure provision of correctly signed bins or skips for collection and storage of all wastes. Locations and bin type shall be determined by the following: ▪ Type of waste; ▪ Proximity to watercourses and drainage lines; ▪ Proximity to sensitive or protected flora and fauna; ▪ Accessibility for removal; ▪ Protection from weather; ▪ Proximity to work areas; and ▪ Available space. Locations will be marked on the Site Environmental Plan (SEP)	PER, Supervisors, Safety Advisor/Manager	Project delivery
If Spoil is to be reused off-site, the following must be provided prior to transporting the material: ▪ Name of waste subcontractor ▪ Address of source destination ▪ Material to be supplied (e.g. VENM/ENM) ▪ Evidence that facility is legally able to accept the waste (such as DA, exemption or EPL). The consent must be viewed and confirmed as covering all intended material. Signed Section 143 Notice under the POEO Act 1997. A spoil permit must be completed prior to the removal of the spoil. All exported material must meet the criteria in Table 11 of the Remediation Action Plan.	PER, Safety Advisor/Manager, Supervisors Environmental Consultant	Project delivery

General Waste Handling, Housekeeping and Storage	Staff Responsible	When
All truck movements will be recorded on tracking sheets.		
Waste bins and skips will be provided for all office and crib facilities. Wastes will be separated into recyclable waste, non-recyclable waste and Listed/Controlled/Regulated waste.	All personnel	Project delivery
Waste skips/bins will meet the following provisions: ▪ Adequate number for waste segregation (recycling, re-use and disposal) and sufficient volume; ▪ Labelled to clearly identify the contents; ▪ Appropriate for the waste being contained – be compatible, leak-proof and fit for purpose; ▪ Be accessible and appropriately located; ▪ Be covered (where necessary) to prevent ingress of rain and prevent animals from entering.	PER, Safety Advisor/Manager, Engineers, Supervisors	Project delivery
Sanitary waste facilities will be provided for all female ablutions.	All personnel	Project delivery
Waste will be removed by an appropriately licensed waste subcontractor and taken to an appropriately licensed recovery, recycling or disposal facility. The subcontractor is to provide monthly reports detailing: ▪ Date(s) of waste collection ▪ Description of waste ▪ Cross reference to relevant waste transport documentation ▪ Quantity of waste collected ▪ Origin of waste ▪ Destination of waste (for listed/controlled/regulated wastes) ▪ Intended fate of waste, e.g. re-use, recycling or disposal. Refer: JH-MPR-ENV-002 Resource Use Reporting	PER, Safety Advisor/Manager	Project delivery
The following licence records are to be obtained from any licensed waste subcontractor engaged, prior to transporting any waste from site: ▪ Name of waste subcontractor ▪ Address ▪ Waste streams to be handled, transported, stored and/or disposed of by the waste subcontractor ▪ EPL number (EPL must cover all intended waste streams each contractor intends to transport) ▪ Landfill(s) used by waste subcontractor ▪ Landfill(s) EPL number	PER / waste subcontractor(s)	Prior to commencement of works, project delivery
No waste is to be burned or buried on Site.	All personnel	Project delivery
Upon Project completion all temporary materials and wastes will be removed from site unless otherwise instructed.	Safety Manager / Project Manager	Project completion
Spoil import permits will be completed to ensure only VENM, ENM or other material approved in writing by the EPA are imported to site. All imported material must meet the criteria in Table 11 of the Remediation Action Plan. The site auditor will also approve all material being imported. Material brought to site must be verified prior to acceptance with dockets supplied during material movement. All truck movements will be recorded on tracking sheets.	PER Site Auditor Site Manager Environmental Consultant	Project delivery

Listed/Controlled/Regulated/Hazardous Waste Management	Staff Responsible	When
Listed/controlled/regulated/hazardous waste which will require segregation typically include, but are not limited to: ▪ Waste oil ▪ Oil filters ▪ Grease ▪ Coolant ▪ Solvents ▪ Oily-water mixtures ▪ Empty hydrocarbon drums ▪ Absorbent materials contaminated with hydrocarbons ▪ Contaminated soil ▪ Tyres ▪ Sanitary and clinical wastes ▪ Sewage ▪ Special waste (asbestos)	All personnel	Project delivery
Dedicated waste receptacles suitable for storage and segregation of Listed/controlled/regulated/hazardous wastes will be provided as necessary. Containers and storage areas will comply with storage requirements as per SDS and relevant Australian Standards. Refer Storage and Control of Hazardous Chemicals (refer to Hazardous Chemical Management Procedure) and Hazardous Chemical Disposal Requirements (refer to Hazardous Chemical Management Procedure).	PER, Safety Advisor/Manager	Project delivery
All listed/controlled/regulated/hazardous waste removed from the site, both solid and liquid wastes, must be removed by a licenced waste contractor who holds a current licence to transport such waste under the respective provisions of the POEO Act and Regulations and disposed of at facility licensed to receive that waste. EPL's for both the receiving facility and the transport company must be obtained prior to any hazardous waste being removed from site. These licenses must be held on site. Records for all listed/controlled/regulated/hazardous waste must be maintained by John Holland, the Transporter and Receiver of wastes. Waste transport and disposal documentation to be provided by the licensed waste contractor for each load (within 14 days) If waste transport involves movement across state jurisdiction, consignment authorisation must be obtained from an agency (or designated facility) to move controlled waste into the jurisdiction.	PER, Safety Advisor/Manager	Project delivery
Soil contaminated with hydrocarbons will be managed as Listed/Controlled/Regulated waste. Depending on the size of contamination appropriate protection, storage, testing and remediation are to occur.	PER, Safety Advisor/Manager	Project delivery
All listed/controlled/regulated/hazardous wastes must be stored appropriately such that there is no stormwater runoff does not come into contact with the wastes.	PER, Safety Advisor/Manager	Project delivery

Listed/Controlled/Regulated/Hazardous Waste Management	Staff Responsible	When
A detailed unexpected finds protocol for contamination (including asbestos containing material) and associated communications procedure must be developed and followed at all times. The Plan has been developed to be consistent with the Unexpected Contamination Finds Protocol_V2.1 prepared by Lendlease dated June 2019 and including a chain of responsibilities for undertaking the unexpected finds protocol	PER, Safety Advisor/Manager, Community and Stakeholder Manager	Project delivery
Where any hazardous materials are required to be removed from site, suitable measures must be implemented in consultation with the contamination consultant (where required) to contain and control the emission of fibres to the air (if potential exists). This may include wetting down surfaces.	PER, Safety Advisor/Manager	Project delivery
All waste generated during construction must be assessed, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).	PER	Project delivery

7 Monitoring

Monitoring Required	Staff Responsible	When
Waste management will be monitored daily, with observations entered into daily diaries where necessary.	PER, Safety Advisor/Manager, Engineers, Supervisors	Daily
Waste management will be inspected as part of the Weekly Environmental Inspection Checklist, or HSE site inspection. Results of the weekly inspection will be entered into JHET.	PER, Safety Advisor/Manager, Engineers, Supervisors	Weekly
All waste storages locations must be inspected to ensure that there is no risk of unplanned movement of waste around or off site via wind, water or other means.	PER, Safety Advisor/Manager	Project delivery
All waste vehicles entering and leaving site must have adequate truck GPS monitoring systems. The requirements for these monitoring systems to be installed in any engaged waste contractors' trucks must be included in their contracts and information supplied to John Holland if requested.	Commercial Manager	Prior to commencement of works, project delivery

8 Reporting

Reporting Required	Staff Responsible	When
All waste data will be tracked for the duration of the Project. The recorded information will include: ▪ Waste description and coding (if applicable) ▪ Date of pick-up of waste ▪ Cross referenced to relevant waste transport and facility receipt documentation ▪ Quantity of waste ▪ Origin of waste ▪ Destination of the waste including relevant EPL details ▪ Intended fate of the waste (Type of waste treatment – re-use, recycle or disposal) This data will be utilised to ensure John Holland recycling/reuse targets are achieved.	PER, contracts	Project delivery
Records of all waste quantities generated (including that reported by subcontractors) and any associated waste transport certificate documentation will be entered into Project Pack Web in accordance with JH-MPR-ENV-002 Resource Use Reporting.	PER	Project delivery
All material/waste tracking will also be required as part of the site audit process for the purposes of determining site suitability. Ensure appropriate tracking of internal fill/soil movements, removal off-site and importation to site is undertaken as required by the Remediation Action Plan for future reporting as part of the site validation	PER Site Auditor	Project delivery
All subcontractors will provide an Energy, Water and Waste Report in accordance with JH-MPR-ENV-002 Resource Use Reporting	PER, contracts	Project delivery
Details of field observations will be reported via the Weekly Environmental Inspection Checklist, and communicated to staff during pre-starts, toolbox and team meetings as appropriate.	PER, Safety Advisor/Manager	Project delivery
Complaints / incidents regarding waste will be reported immediately to the PER and/or Safety Advisor/Manager and Community and Stakeholder Manager.	All personnel	Following incident
The Project Director shall be notified immediately of all incidents and valid complaints. Relevant John Holland procedures for incidents and complaints handling reporting shall be followed	PER, Safety Advisor/Manager, Community and Stakeholder Manager	Following incident, project delivery
Incident details will be entered into JHET in accordance with the Incident and Event Management Procedure (JH-MPR-SQE-010)	PER, Safety Advisor/Manager	Following incident
John Holland Operational HSE Team is to be immediately informed of any incident that has caused or is likely to cause material harm to the environment and will advise on the notification of relevant regulators and stakeholders (As required by the Protection of the Environment Operations Act 1997).	PER, Safety Advisor/Manager, Community and Stakeholder Manager	Following incident
Any incident requiring regulator notification will be done so in accordance with Appendix 2 of SSD-9385 and John Holland Incident Notification and Reporting Matrix (refer to Incident Management Procedure).	PER, Safety Advisor/Manager	Following incident

Summary of environmental performance to be provided in the monthly Project Safety/Quality/Environment Report (refer: Performance Statistics – Safety, Quality & Environment JH-MPR-SQE-009)	PER, Safety Advisor/Manager	Monthly

9 Corrective Action Plan

Problem	Suggested Corrective Action
Wastes incorrectly separated/segregated	▪ Inspect facilities for adequacy ▪ Notify and train personnel
No/inadequate collection	▪ Arrange for collection by approved/licensed waste contractor ▪ Segregate and reuse or recycle wastes wherever practicable
Reuse or recycling opportunity not recognised	▪ Train/re-train personnel ▪ Arrange for recycling collection by approved/licensed waste contractor
Unlicensed operator	▪ Confirm operator license/s are appropriate for the required service.
Incorrect disposal	▪ Confirm suitability of waste removal contractor. ▪ Confirm/inspect disposal facilities for suitability. ▪ Notify/train personnel. ▪ Notify site auditor and DPIE/EPA as applicable
Contamination of the Site	▪ Notify client, assess degree and real extent of contamination. ▪ Notify site auditor ▪ Manage in accordance with the RAP ▪ Prevent access to the area. ▪ Cover contamination to prevent exposure to rain. ▪ Remove contaminated material and remediate in accordance with Regulator/Client requirements.
Inaccurate records management	▪ Update records ▪ Improve reporting system ▪ Train personnel

10 Suspected Waste Streams

Identified waste streams	Project activities likely to generate waste stream	Subcontractor obligations	Management of Waste Stream	Destination of Waste Streams	Estimated quantities for duration of Project
Concrete	Concrete pours (excess and washout)	Subcontractors to manage concrete waste at specific dedicated project washout area	Dedicated offsite concrete slurry/washout locations at concrete supplier facility/batch plant.	Off-site reuse by concrete supplier or recycling by waste subcontractor: Intended destination to be provided by successful concrete contractor.	2400m3
Asphalt and masonry	Demolition and removal of existing car park and footpath areas	Subcontractors required to manage waste on-site using existing bins.	Segregated – dedicated asphalt and masonry bin.	Off-site recycling by waste subcontractor. Licensed Waste Contractor to be determined.	1250m3
Wastewater (cutting, paint wash-out)	Painting wash out and brick saw activities	Subcontractors required to manage waste on-site utilising own bins and recycling system.	Segregated – dedicated masonry slurry/washout bin.	N/A – the system utilises a recycling/pumping system which produces no wastewater.	2000L
Metals	Steel fixing, stud wall construction, structural steel erection, roofing, miscellaneous metal works	Subcontractors required to manage waste on-site using existing bins.	Segregated – dedicated metals bin.	Off-site recycling by waste subcontractor. Licensed Waste Contractor to be determined.	1780m3
General construction waste	Remaining waste on site.	Subcontractors required to manage waste on-site using existing bins.	Segregated – dedicated general construction waste bin.	Off-site recycling by waste subcontractor. Licensed Waste Contractor to be determined.	50m3
Spoil (contaminated/non-contaminated)	Excavation of utilities, drainage and bulk earthworks	Civil subcontractor required to stockpile, segregate and manage waste on-site to avoid cross-contamination and/or incorrect disposal.	Segregated	Off-site disposal by civil subcontractor to an appropriately licenced facility legally able to accept the waste or a valid development consent (where material is not contaminated).	86,000m3

Identified waste streams	Project activities likely to generate waste stream	Subcontractor obligations	Management of Waste Stream	Destination of Waste Streams	Estimated quantities for duration of Project
		Manage as per requirements in the RAP		Where material is trackable, an EPA licensed transporter to dispose at a landfill licensed to receive it.	
Contaminated / Hazardous Substances Waste (other than soil)	General chemical use including curing and jointing compounds, paint, adhesives and solvents; or waste arising from hydraulic spills/leaks	John Holland and subcontractors required to manage waste on-site using existing bins.	Segregated – dedicated contaminated/ hazardous substances waste bin.	Off-site recycling by waste subcontractor. Licensed Waste Contractor to be determined. Waste subcontractor will engage an EPA licensed transporter to dispose at a landfill licensed to receive it.	180L
Effluent	Ablution and toilet facilities	Pump out and disposal at licensed facility	Effluent storage tanks	Pump out and off-site disposal by civil subcontractor. Licensed Waste Contractor to be determined.	120,000L
Timber	Formwork from other temporary supports, pallets from building material deliveries	Subcontractors required to manage waste on-site using existing bins and storage locations	Segregated – dedicated timber bin.	Off-site recycling by waste subcontractor. Licensed Waste Contractor to be determined.	400m3
Paper and cardboard	Office facilities and packaging from deliveries	Subcontractors required to manage waste on-site using existing bins.	Segregated – dedicated paper and cardboard bin.	Off-site recycling by waste subcontractor. Licensed Waste Contractor to be determined.	50m3

11 Licenses

(to be updated when new facilities required)

Waste Contractor	License No.	Waste Facility(s)	Waste Facility License No.
BINGO Recycling	20392	Environmental Treatment Solutions PTY LTD	13230
Cleanaway Operations PTY LTD	4560	Bingo Bins PTY LTD (McPherson Recycling PTY LTD)	12857
Environmental Treatment Solutions PTY LTD	13230	OneSteel Recycling PTY LTD	872
MANN Group (operating for Tox Free Australia)	20271	SUEZ Recycling & Recovery PTY LTD	4068
Benedict's Recycling	12794	Eco Cycle Materials PTY LTD	10699
SITA Australia	12889	Synergy Resource Management	20906
		Tox Free Australia PTY LTD	20271
		Sydney Recycling Park	12901
		MET Recycling	20948
		Boral Asphalt	6893
		Cleanaway Operations PTY LTD Homebush Bay Liquid Treatment Plant	4560
		Veolia Environmental Services PTY LTD Horsley Park Waste Management Facility	11584
		Veolia Environmental Services PTY LTD Horsley Park Resource Recovery Facility	20339
		Brandown PTY Limited Brandown Recycling Yard	12618
		Dial-a-dump PTY LTD Genesis Facility	13426
		Dial-a-dump PTY LTD	4679
		Sell & Parker PTY LTD	11555
		Concrete Recyclers (GROUP) PTY LTD	6664
		Breen Resources PTY LTD	4608

		Cleanaway Resources Co PTY LTD	20937
		Fairfield Sustainable Resource Co	5713
		Boral Recycling PTY LTD, Wetherill Park	11815
		Visy Paper PTY LTD	4100
		Grima Environmental Services PTY LTD	20647
		Suez Recycling & Recovery PTY LTD	5065