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22 February 2022

Department of Planning, Industry and Environment
12 Darcy Street
Parramatta
NSW 2150

Dear Planning Secretary

Re: Meriden School Strathfield – SSD 9692 Condition C12 – Construction Environmental Management Plan

In accordance with Condition C12 of SSD 9692, and in preparation for the commencement of Construction works for Stage 2: 4 Vernon St Playground, the Meriden School has commissioned Landscape Solutions to prepare a Construction Environmental Management Plan for review by the Secretary.

The Plan addresses a number of consent conditions. For ease of review we provide below a summary of the conditions addressed and their location in the report.

Condition	Description	Location in CEMP
C7	Unexpected contamination finds protection	Appendix D
C12	Construction Environmental Management Plan inclusions	
	(i) Hours of work	Section 1
	(ii) 24-hour contact details of site manager;	Section 1
	(iii) management of dust and odour to protect the amenity of the neighbourhood;	Section 1
	(iv) stormwater control and discharge;	Appendix A
	(v) measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site;	Appendix A
	(vi) external lighting in compliance with AS 4282-2019 Control of the obtrusive effects of outdoor lighting; *Not applicable for 4 Vernon Street project*	N/A
	(vii) an alternate location(s) for the concrete pump station for the Senior School construction site that provide a minimum setback of 10 metres from 15 Margaret Street; *Not applicable for 4 Vernon Street project*	N/A
	(viii) community consultation and complaints handling;	Section 6.21

C12 (g)	Unexpected Finds Protocol For Aboriginal and Non-Aboriginal Heritage	Appendix C
C15	Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP)	Appendix E
C16	Construction Noise and Vibration Management Subplan	Appendix G
C17	Construction Waste Management Subplan	Appendix B
C18	Construction Soil and Water Management Plan	Appendix A
C19	Driver Code of Conduct	Appendix F
C20	Construction Worker Transportation Strategy	Appendix E

Yours sincerely,

Robin Merrick
Senior Project Manager

Construction Environmental Management Plan

4 Vernon Street
Meriden School

Jan 2022

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1. PROJECT INFORMATION

LANDSCAPE SOLUTIONS through carrying out its works on the Meriden School Upgrade will aim to ensure the relevant environmental issues are addressed in accordance with Landscape Solutions Environmental Policy and relevant Conditions of Consent for SSD9692.

The works are to be completed between Jan 2022 and April 2022

The site address is: 4 Vernon Street, Strathfield, NSW

Hours of Works are between 7am and 6pm, Mondays to Fridays inclusive; and between 8am and 1pm, Saturdays. No work will be carried out on Sundays or public holidays.

The works include:

- Remediate site of ACM (up to 400mm)
- Supply and install VENM to construction levels
- Supply and install the following:
    - Brick retaining walls ○ Brick edging
    - Brick seating wall with timber sections
    - Artificial turf
    - Water bubbler
    - Concrete ramp, stairs and driveway extension, incl tactiles
    - Irrigation to garden areas
    - Timber carport and Arbor
    - Garden soil, plants and mulch to garden areas
    - Bollard lighting
    - 4 weeks landscape Maintenance

Contact details for this project:
Michael Warren – Construction Manager
Email: mwarren@landscapesolutions.com.au
Mobile Phone: 0404 068 884

Organisation Details

Business name/ABN	Landscape Solutions Australia 88 101 054 086
Address	16 Distribution Place, Seven Hills, NSW, 2147
Phone	1300653013
Fax	02 8805 6299

2. ENVIRONMENTAL POLICY

Landscape Solutions acknowledges its responsibility with regard to the environment. To satisfy this responsibility the company has developed and implemented an environmental management system consistent with AS/NZS ISO 14001.

The management system is maintained through the active involvement and support of all senior managers who ensure that the company philosophy as set out in this Environmental Policy is understood and effectively implemented.

Landscape Solutions is committed to:

- complying with all relevant environmental legislation, regulations, standards and other requirements to which the company subscribes that relate to its environmental aspects;
- communicating the responsibilities for environmental management to employees and managing environmental responsibilities to a high standard;
- seeking innovative solutions that enhance the environment and minimise potential harm to the environment;
- striving towards the elimination of environmental incidents and the prevention of pollution;
- planning and allocating sufficient and appropriate resources to minimise the impact of incidents;
- training of employees to improve awareness and knowledge of environmental issues;
- implementing the principles of ecologically sustainable development;
- considering environmental performance as part of the procurement and contracting process;
- managing the activities of employees, subcontractors, suppliers and other persons on company sites through the implementation of effective environmental plans;
- implementing processes to monitor, measure and report on the effectiveness of environmental management activities; and
- establishing and reviewing measurable objectives and targets to ensure continued improvement.

Landscape Solutions will review its Environmental Policy on an annual basis to ensure that it remains relevant and appropriate to the organisation.

Tim Buckle
Managing Director
Landscape Solutions
Issue Date 5/3/20 Review 5/3/2023

3. ENVIRONMENTAL ISSUES

Awareness of Environmental issues allows Landscape Solutions to undertake all works in an environmentally responsible manner. Environmental issues may include but are not limited to the following:

- Natural Flora/ Fauna.
- Endangered/Threatened Species.
- Introduced Flora and Fauna.
- Resource Usage/Conservation.
- Waste Conservation and Recycling.
- Chemicals and Hazardous substances.
- Soil Erosion and Contamination.
- Air Pollution.
- Water Pollution.
- Indigenous or Cultural Sites.

Through a site-specific risk assessment process, using the attached matrix rating, Landscape Solutions has assessed its contractual activities to identify potential risks and develop or instigate specific procedures for the site works.

KEY 1-6 = High 7-15 = Medium 16-25 = Low

CONSEQUENCE LIKELYHOOD	ALMOST CERTIAN	LIKELY	POSSIBLE	UNLIKELY	RARE
A.CATASTROPHIC	1	2	4	7	11
B. MAJOR	3	5	8	12	16
C. MODERATE	6	9	13	17	20
D. MINOR	10	14	18	21	23
E. INSIGNIFICANT	15	19	22	24	25

Aspects and Impacts

No.	Aspect	Impact	Control measures
1	Earthworks / operation of machinery causing site contamination to surrounding areas	Water entering stormwater or ripairian zones containing sediment	Sediment control plan to be created and maintained Sediment controls to be implemented and maintained through regular inspections Drains to be protected and regularly inspected Vehicles leaving site to ensure wheels are clean
2	Earthworks / operation of machinery causing site contamination to surrounding areas	Dust entering the atmosphere causing air pollution	Dust suppresion must be maintained where ground areas are disturbed and on traffic routes.

3	Operation of machinery producing excessive exhaust emissions	Air pollution, poor public image, inefficient running plant	All plant and equipment to be maintained in accordance with manufacturers specifications
4	Unwanted release of Hydrocarbons (fuels / hydraulic oils)	Contamination of soils, groundwater or water courses	Regular maintenance of plant to monitor and replace any visibly damaged or wearing hydraulic hoses When refueling plant, do so in a designated refuelling
			area where appropriate relevent spill kit is available
5	Unwanted release of chemicals / hazardous substances	Contamination of soils, groundwater or water courses	All chemicals used on site must have current SDS on site Appropriate sized spill kit for chemical quantities used / stored on site must be maintained and on hand near chemicals Decanting or mixing of chemicals to take place well away from waterways, drains and environmentaly sensitive areas
6	Incorrect disposal of construction wastes	Additional costs, land / water pollution or illegal waste disposal	All wastes removed from site are to be disposed of at a licensed waste facility. Seperation of waste into recyleables and recycled where reasonably practicable All loads leaving site must be covered

4. RISK ASSESSMENT AND RISK STATEMENT

Prior to commencement, Landscape Solutions will complete a Hazard identification and risk assessment of the site, including Environmental Hazards.

5. OBJECTIVES

When performing contractual obligations Landscape solutions endeavours to ensure the following targets are met in response to the Risk Statement:

- No damage to the existing Flora.
- No harm to the existing fauna.
- Protect identified threatened or endangered species.
- Not assist the spread weed or feral species.
- To use resources to minimise waste.
- Not use Ozone depleting substances.
- Not pollute the air, water, or soil.
- Not produce excess noise.
- Recycle or reuse waste by-products.
- Not allow the traffic of sediment off site.
- Dispose of waste responsibly.
- Recognise environmental incidents.
- Mitigate damages resulting from environmental incidents.

- Staff training in regards to environmental awareness and the impact of improper management programs and improper maintenance practices.
- All environmental safeguards undertaken as part of the landscaping maintenance contract are carried out correctly.
- Adverse impacts on the environment are minimized.
- The biodiversity of the site is conserved and/or enhanced
- The Protection of the Environment Operations Act 1997 (as at 29th Feb 2012), The Environment Protection Act 1997 and the Environment Protection (Amendment) Act 2006 are complied with.
- The project is monitored for environmental impact
- Site Audits in sensitive areas to be undertaken prior to any works.
- Planning to minimize any unnecessary risks that could cause environmental damage.

These are designed to reflect our works on site, but they also apply to the whole of our operation.

Additionally, Landscape Solutions has read Gledhill's Construction Plan of Management and has incorporated all relevant recommendations into this Construction Plan of Management as they relate to the 4 Vernon St playground project (Stage 2 of the SSDA).

6. STANDARD PROCEDURES

Landscape Solutions has standard procedures in place that are designed to ensure our environmental objectives are met. Some procedures obviously satisfy more than one objective and by no means are this list exhaustive. Responsibility is generally inferred by the task.

6.1 Risk Assessment/Risk Statement

A preliminary assessment to identify possible environmental problems prior to works commencing. A statement which outlines the environmental issues and the likely hood of incidents occurring.

6.2 Site Coordination

Set out and planning of site works to ensure the construction activities' environmental impact is minimised.

6.3 Existing Services

Call 1100 Dial before You Dig to obtain the location of existing services, follow their directions in relation to site works. Site locators and non-destructive potholing will be completed where necessary. If services are damaged during works follow relevant emergency procedures.

6.4 Erosion & Sediment Control / Soil & Water Management Plans

Landscape Solutions will implement the standard sediment control measures listed below. Additionally, works will be carried out in accordance with TTW's Stormwater and Siteworks plan and associated specification Revision P1 dated 15.12.21. The Plan has been reviewed and endorsed by Strathfield Council on 18.2.22.

Sediment control measures include;

- All sediment control measures will be installed prior to work commencing on site as much as practical.
- Install sediment fences below site prior to commencement of earthworks
- Check all controls after rain and ensure all sediment controls are still in working order.
- Store all soil and mulch within the boundaries of the sediment control areas and if necessary install diversion banks around such stockpiles.
- When excavating keep surface moist to avoid dust and windblown waste.
- Fit dust catchers to equipment wherever possible.
- During windy or dry weather exposed areas within site are to be kept moist.

6.5 Tree Protection

One tree, identified as Lophostemon confertus (Tree A: Brush Box), is a street tree located within the Vernon Street road reserve. A low height retaining wall is proposed to be rebuilt within the TPZ of this tree. In accordance with the arborist report, design factors and tree sensitive methods can be used to minimise the impact of the encroachment. These methods are to be confirmed as feasible by civil engineer and may require flexibility at the time of construction.

Subject to a feasibility assessment by the structural engineer, the wall is to be supported on piered footings (with all other part of the structures positioned above existing ground levels). Excavation for the pier holes will be undertaken using tree sensitive methods (hand/hydrovac/airspade etc). Pier hole locations should be flexible to enable the retention of roots (>25mmø) as deemed necessary by the Project Arborist.

Drainage will be designed around roots (>25mmø) in accordance with the arborist report, as will tree protection measures during construction.

6.1 Access roads:

Construction access or haul routes designed to accommodate the movement of construction plant and machinery to ensure minimal compaction and safe movement of materials on site. Roads to be suitably rehabilitated after completion of works.

6.2 Construction Traffic Management

Construction Traffic and pedestrian flow will be managed in accordance with the Construction Traffic and Pedestrian Management Subplan provided in Appendix E. This plan has been developed in accordance with recommendations from Ason Group's Draft Traffic and Parking Management Plan, Issue 3, dated 26 November 2019 as relevant to the Vernon Street site.
Of particular importance is that no work zones are currently proposed or envisaged along Vernon Street during construction of the 4 Vernon Street playground. If this circumstance changes during construction any work zone required along Vernon Street to facilitate construction on the Junior School will be located clear of 2 Vernon Street, and the change will be determined in consultation with Strathfield Council.

6.3 Compound:

An enclosed secure area with provision for stockpiles, storage of hazardous materials, Site ablutions, Site Sheds, a washout area and car parking. Visitors enter, workers inducted, deliveries are received, and wastes are sorted and disposed of.

6.4 Incident Reporting:

Incident reporting is carried out in accordance with legislative requirements (The Protection of the Environment Operations Act 1997 (as at 29th Feb 2012) and The Environment Protection Act 1997), whereby notification is carried out immediately to all relevant authorities (as per section 10. Incident Response of this document), depending on the risk score of the incident.

6.5 Hazardous substances:

Areas where herbicide has been identified as a last resort are assessed for risk of environmental damage. Chemical storage is within site compound and in accordance with the *Code of Practice for safe use and storage of chemicals*. The hazardous substances register is to be maintained for the duration of the project (A30OHS-SF-30-08). Safety Data Sheets (SDS) are kept on site with safety plan for access in case of emergency. Staff using chemicals must be suitably trained (Chemcert AQF3, ACDC (QLD), or equivalent), follow the SDS, any relevant codes of practice and have completed the Chemical Application register (A61-OHS-SF-61-01).

6.6 Topsoil reuse:

Topsoil will not be reused for this project

6.7 Recycling and Disposal of wastes:

A commitment to minimising excessive waste is adopted at Landscape Solutions. Waste products are sorted wherever practical prior to disposing to aid in the effort to recycle. Waste created can be recycled or returned to suppliers for reuse. All waste is disposed of in accordance with EPA regulations.

For the 4 Vernon Street project waste management will be carried out in accordance with the Construction Waste Management Subplan provided in Appendix B

6.8 Use of Environmentally responsible materials:

Products with minimal packaging, that are non-toxic, are water based or made from plantation timbers are used preferentially where applicable.

6.9 Vehicle Logbooks:

Vehicles and machines are maintained regularly, log books are kept (vehicle records are kept at head office, machinery log books are kept with machines). Noise and air pollution is minimised, and the risk from leaking fuel or exhaust is minimised through regular maintenance and servicing. All service / repair records are kept on the company server.

6.10 Dust and Odour Suppression:

Air pollution from dust is minimised using a water truck / site watering and through planning of earthworks to minimise the amount of exposed earth at any one time. Deliveries will be monitored and managed to reduce dust.

Products will be reviewed which may have an odour which could affect the public for a less odorous material. This is not expected to be an issue for this project.

6.11 Noise and vibration control

All equipment on site to be fitted with appropriate exhaust, muffler and baffle systems in compliance with relevant Australian standards. No loud radios are to be used on site.

All work will be completed in accordance with the Noise and Vibration Subplan developed to meet requirements of SSDA Condition 16 and provided in Appendix G.
It is noted that the site is immediately adjacent to a residential home. All care will be taken to minimise the impact of noise and vibration upon residents including measures listed below and in the Subplan.

4 Vernon Street Playground shaded in blue.
One individual residence is located immediately to the north (at 2 Vernon Street).

- Installation of sound barrier wall will be erected as per the scope of works and upon commencement of the construction works

- Plant Noise Audit – Noise emission levels of all critical items of mobile plant and equipment will be checked for compliance with noise limits appropriate to those items prior to the equipment going into regular service.

- Operator Instruction – LS will raise their awareness of potential noise problems and to increase their use of techniques to minimise noise emission. This will be conducted in the prestart toolbox talks daily.

- Equipment Selection – All fixed plant at the work sites should be appropriately selected, and where necessary, fitted with silencers, acoustical enclosures, and other noise attenuation measures in order to ensure that the total noise emission from each work site complies with EPA guidelines.

- Site Noise Planning – Where practical, the layout and positioning of noise-producing plant and activities on each work site should be optimised to minimise noise emission levels.

- To minimise the noise impact on the surrounding environment, construction work shall be carried out only between the hours of 7:00am and 6:00pm Monday to Friday inclusive, 8:00am and 1:00pm Saturdays. No work shall be carried out on Sundays and Public Holidays.

The following plant and equipment will be utilised onsite. The times and length will vary depending on the need and requirement for the operation of the machinery:

- Concrete trucks
- Concrete Pumps
- Trucks
- Hand tools
- Concrete mixers
- Mobile plant – bobcat, excavator
- Mobile crane
- Powered hand tools – brick saw, concrete saw, plate compactor, cement mixer

6.12 Water Management

All hoses are to have trigger nozzles and wherever possible a pressure washer will be used to reduce water consumption when using water to clean.

6.13 Construction Soil and Water Management

Landscape Solutions will ensure nothing other than stormwater will enter storm water systems and waterways. Measures will be implemented in accordance with the Construction Soil and Water Management Subplan in appendix A, including TTW's Stormwater and Siteworks plan

and associated specification Revision P1 dated 15.12.21. The Plan has been reviewed and endorsed by Strathfield Council.

6.14 Asbestos

Landscape Solutions have engaged Trinitas Group for the management and removal of Asbestos. Trinitas will be occupying the site for two days to remove all asbestos. It will then be deemed cleared by Douglas Partners (engaged by client) and Landscape Solutions will begin project works thereafter. All site contamination works will be audited by an independent site auditor in accordance with the Remediation Action Plan (RAP) and SSDA Conditions.

6.20 Signage

Signage will be placed at the entry point on the site fencing ensuring it can be easily read by anyone in public adjacent to site and must show:

a) Show the name, address and telephone number of the Principal Certifying Authority for the work, and

b) Show the name of the principal contractor for any building work and a telephone number on which that person may be contacted outside working hours, and

c) State that unauthorised entry to the work site is prohibited.

Any such sign is to be maintained while work is being carried out and removed on satisfactory completion of the works.

6.21 Complaint Resolution

Landscape Solutions will manage complaints in accordance with the Community Communications Strategy prepared by Urbis dated October 2020.

Additionally, Landscape Solutions will identify and display signage with key information including:

- Brief description of works
- Where and when works are to occur
- How to lodge a complaint
- Contact telephone number

7. PROJECT SPECIFIC PROCEDURES

7.1 Unexpected Finds Protocol for Heritage

In accordance with Condition C12 of SSDA 9692, Landscape Solutions will implement the Unexpected Finds Protocol for Heritage described in Appendix C

7.2 Unexpected Contaminated Finds Protection

In accordance with Condition C7 of SSDA 9692, Landscape Solutions will implement the Unexpected Contaminated Finds Protection protocol described in Appendix D

8. ROLES AND RESPONSIBILITIES

8.1 Construction/Project Manager

The Construction / Project Manager is responsible for;

- Overall responsibility for environmental management
- Provision of adequate resources
- Ensure understanding and compliance with environmental legislation/regulations
- Demonstrate a commitment to environmental management
- Prepare and implement Project Environmental Management Plan and EWMS
- Ensure non-conformances are rectified
- Monitor overall environmental management performance including SWMS
- Report compliance with regulatory and contractual requirements for client and authorities
- Ensure sub-contractors and employees comply with Landscape Solutions Project Environmental Management Plan.
- Provide relevant training and ensure documented toolbox meetings where works have the potential to cause environmental harm are completed
- Notify Principal Contractor (if not Landscape Solutions) of any environmental incidents and conduct incident investigations as required
- Ensure corrective actions resulting from incident investigations are completed - Participate in any incident investigation as required

8.2 Foreman

The Forman is responsible for;

- Communication of environmental performance to Construction /Project / Account Manager
- Implement project Environmental Management Plan
- Monitor site works and use environmental checklist/s where appropriate
- Ensure sub-contractors and employees comply with Environmental Management Plan requirements.
- Report any environmental issues to the Project Manager
- Assist in the development of EWMS for the project (if required)
- Implementation of controls required by EWMS
- Make sure that work activities are carried out in an environmentally sound manner - Actioning environmental inspection reports received from the Principal Contractor
- Communicate performance to the Project Manager

- Complete documented toolbox meetings where works have the potential to cause environmental harm.
-

8.3 Employees and subcontractors

- Ensure compliance with directions given regarding environmental management and in accordance with the Principal Contractor's Project Induction.
- Participate in toolbox talk on Environmental Work Method Statement and sign-on
- Assist in the development of EWMS for the Project as required
- Report all incidents to the Site Foreman or Project Manager - Comply with emergency and evacuation procedures

9. MANAGEMENT

9.1 Reporting

Weekly reporting is completed and forwarded to the office for review and collation on the main server. This includes all toolbox talks, Weekly environmental checklists, Programs, Task hours and daily prestart checklists for all sites. This is monitored to ensure completion.

Scheduled Internal audits are completed on randomly selected sites to ensure compliance with our IMS systems

Client surveys are sent out at the completion of every project to obtain feedback as to our service provided. This information is collated, reviewed and warranted amendments are made to continually improve our business. This external feedback is also raised with senior management, both as they are received and in the management review meeting and addressed as required. All site supervisors, Project Managers and Construction Managers have KPI's measured against client Feedback.

9.2 Review

Daily site inspections are completed using the **OHS-SF-71-02 Const Toolbox Prestart** or **OHS-SF-70-02 Maint Toolbox Prestart**. Site audits are completed (using the **OHS-SF-5604 Maint General Workplace Inspection** or **A25-OHS-SF-25-06 General Workplace Inspection Checklist.** Review of procedure and risk is scheduled on a 12 monthly basis. A review is reported to senior management based on: Results from audits, communication from external interested parties, the organisations environmental performance, objectives and targets met, status of corrective and preventative actions, follow up actions from previous reviews and recommendations for improvement to ensure compliance with ISO 14001.

The WHS & Training Manager is authorised to alter the Environmental plan if additional risks are identified the Project / Account manager and Foreman / Team leader are to be notified. The Foreman / team leader is authorised to change procedures for environmental control and is required to notify the crew and ensure the crew comply with the procedures.

9.3 Subcontractor management

All subcontractors are required to operate with the requirements of this Environmental Management Plan and associated documents.

Landscape Solutions shall establish whether a subcontractor is required to develop a project specific Environmental Management Plan to confirm that their process and procedures conform to the Landscape Solutions EMP or internal procedures. Landscape Solutions shall consider:

- The potential environmental impacts of the subcontractors activities;
- The environmental sensitivity of the area(s) in which the subcontractors shall be working;
- The nature and scope of the subcontractors activities;
- The scale of the subcontractors activities;
- The subcontractors capacity to manage its own environmental performance effectively; and
- The subcontractors previous environmental performance.

Where it is determined that a subcontractors works has a high potential to impact the environment under standard industry controls, an Environmental Management Plan / Environmental Work Method Statement is required from subcontractors, to address the specific work package(s) awarded and be submitted for approval to Landscape Solutions prior to commencement of work on site. The plan must assess the level of environmental risk and implement appropriate management controls for the subcontractor's full scope of work.

Monitoring of work activities shall be undertaken by Landscape Solutions to establish that subcontractors are carrying out work in accordance with the environmental documentation provided. Monitoring may be achieved by one or more of the following:

- Ongoing visual inspections by supervisors;
- Inspections; or
- Subcontractor audits of the EMP or EWMS.

10. INDUCTION/TRAINING

Discuss environmental plan and site procedure with Landscape Solutions personnel, Visitors and Subcontractors on a Record of toolbox Hazard Identification and Risk assessment (A01-OHS-SF-01). Highlight specifically what areas have environmental risks associated with them and what measures they must take to ensure the risk of incident is reduced. Make aware any site procedures in place and any penalties for noncompliance. Provide training on site issues and why procedures are in place. For staff consistently involved with environmental projects supply both internal and external training to ensure procedures are in place and methods are considered best practice. Outlined in the Capability matrix.

11. INCIDENT RESPONSE

11.1 Emergency procedures

In the case of an event, where environmental harm is caused or threatened, the first action should be assessing the incident to assess the possible damage / containment and if the equipment is available on site is able to contain or reduce damage then response procedures should follow. Your manager and the Principal contractor must be notified first. Completion of the ***ENV-08-01 Environmental Incident report*** will assist in gathering required information to provide to the relevant authorities (if required) and determine the risk score of the incident and who to contact.

No matter what the risk score is, every environmental incident must be reported to your manager, the Principal contractor and top management at Landscape Solutions, with a copy of the completed Environmental Incident form provided to all.

If the risk score is 7-15 (Medium) or 16-25 (Low) you must notify the Principal contractor and determine with them whether the risk is great enough to contact the EPA. Once the incident has been contained and dealt with accordingly, a toolbox talk must be completed with all Landscape Solutions site staff present, and determine the best approach to stop this sort of incident re-occurring, on this or any other site. All control measures must be implemented (as determined from the tool box talk) and amendments made to the appropriate SWMS and all staff re sign them to prove acceptance and understanding.

Once the Environmental incident Report, tool box talk, SWMS review and all control measures have been implemented, forward a copy of all documentation to the Principal Contractor and to the head office for recording.

If the risk score of the incident is 1-6 (High) the following must be followed
The requirements in relation to the notification of environmental incidents are as follows, in the order they must be contacted (after your site manager and the Principal contractor):

1. Contact 000 if the incident presents an immediate threat to human health or property
2. The appropriate regulatory authority (usually EPA)
3. The EPA (if they are not the regulatory authority
4. The Ministry of Health
5. The relevant Work Cover Authority
6. The local authority (if they are not the appropriate regulatory authority)
7. Fire and Rescue 000

FIRE BRIGADE	000	SPILLS, FIRE
AMBULANCE	000	SPILLS, HUMAN INCIDENTS
POLICE	000	SPILLS, INCIDENTS IN PUBLIC DOMAIN
EPA	131 555	ENVIRONMENTAL INCIDENTS
FIRST AID OFFICER	0404 068 884	HUMAN INCIDENTS
POISONS INFORMATION	131 126	HUMAN INCIDENTS
WORKCOVER	13 10 50	HUMAN INCIDENTS
FOREMAN / TEAM LEADER		SITE INCIDENTS / TBC
PROJECT MANAGER	0404 068 884	SITE INCIDENTS / Michael Warren
LOCAL COUNCIL	9847 6400	COUNCIL LAND AFFECTED
WIRES	13 00 094 737	NATIVE ANIMAL INJURY
RSPCA	9770 7555	ANIMAL INJURY
LOCAL WATER	132092	BURST WATER MAINS

11.2 Spills

In the event of a spill the following should occur:

- Stop the source of the spill,(if safe to do so)
- Contain the spill and prevent the contaminant from entering any water ways, (block storm water inlets).
- Consult SDS for information on how to clean up spill.
- If the spill harms or threatens the environment follow **10.1 Emergency response procedures**.
- Sites which have been assessed as having spills as a risk must have a spill kit on site. This should be available near where the materials are being used for ease of access and its location should also be made clear in the site induction.

Environmental Incident Report (ENV-08-01)

NOTE: You must follow the procedure for notification of Environmental Incidents in the Environmental Plan section *10. Incident Response* after you complete this report and determine the severity of the incident.

1. Time and Date of Incident

am/pm _____ (dd/mm/yy) _____

2. Location of incident site (where occurring or likely to occur)
Site Address:

3. Pollutant details (if known)

Nature: Estimated Quantity: Concentration:

4. Description of Incident (include any particular chemical, product, process equipment involved)

What was the cause of the incident? (if known)

Reconstruct the sequence of events that led to the incident

_____ 1 4
_____ 2 5
_____ 3 6

List contributing factors

5. Corrective Action Undertaken / proposed to be undertaken:

6. Any resulting pollution or threatened pollution (if known):

Environmental Incident Report (ENV-08-01)

7. Complete a risk assessment of the severity of the incident based on the risk matrix (below) and the containment / clean up methods you can implement

Risk Score =

Person completing this report

8.

Name _____ Position _____ Signature

Consequence	Almost Certain	Likely	Possible	Unlikely	Rare
A. Extraordinary	**1**	**2**	**4**	**7**	**11**
B. Major	**3**	**5**	**8**	**12**	**16**
C. Moderate	**6**	**9**	**13**	**17**	**20**
D. Minor	**10**	**14**	**18**	**21**	**23**
E. Insignificant	**15**	**19**	**22**	**24**	**25**

Risk Level	**Risk Rating**	**Action**
1 - 6	Extreme Risk	Address immediate incident and control as best as possible. Notify manager and Principal contractor and then notify relevant authorities as per Section 10 Incident response of the Environmental Plan. Once controlled, complete a toolbox talk, incident report, amend site procedures to introduce revised measures and forward to Landscape Solutions head office and Principal contractor. Long-term control strategies, such as engineering, isolation, substitution or elimination of the risk should be implemented.
7 - 15	Medium Risk	Address immediate incident and control as best as possible. Notify manager and Principal contractor and assess the need to notify authorities. Once controlled, complete a toolbox talk, incident report, amend site procedures to introduce revised measures and forward to Landscape Solutions head office and Principal contractor. Long-term control strategies, such as engineering, isolation, substitution or elimination of the risk should be considered.
16 - 25	Low Risk	Address immediate incident and control as best as possible. Notify manager and Principal contractor. Once controlled, complete a toolbox talk, incident report, amend site procedures to introduce revised measures and forward to Landscape Solutions head office and Principal contractor. Long-term control strategies, such as engineering, isolation, substitution or elimination of the risk should be considered

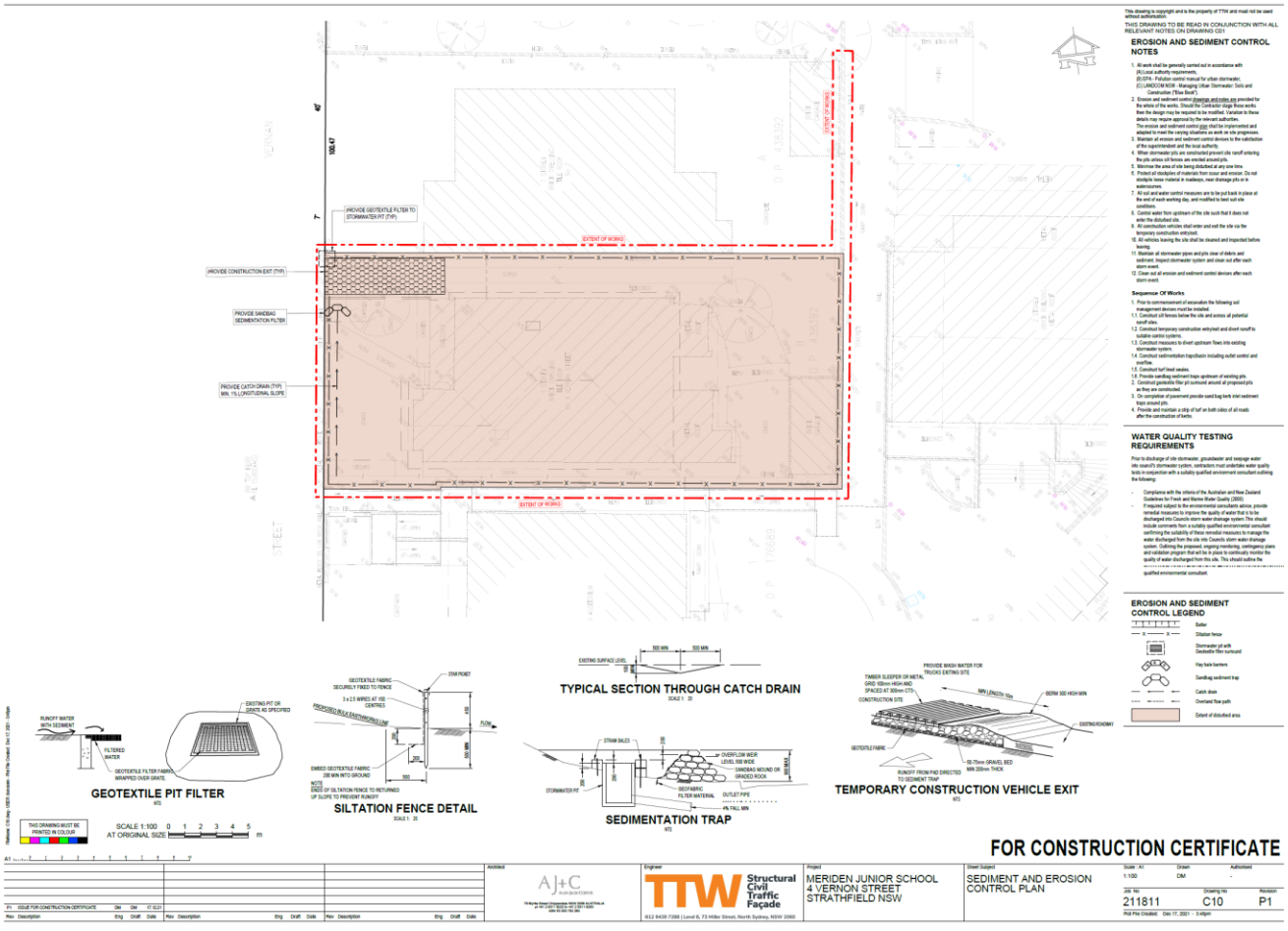
IMPORTANT NOTE: You must follow the procedure for IMMEDIATE notification of Environmental Incidents in the Environmental Plan section *10. Incident Response,* in accordance with the severity of the incident

APPENDIX A

Construction Soil and Water Management Subplan

Landscape Solutions will implement measures described in TTW's Sediment and Erosion Control Plan below.

The location of the construction exist will change to suit the staging of work on site however the performance of TTW's documented system will be met at all locations to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site;



Adherence to soil and water control measures will be monitored via compliance with hold points determined by TTW Civil in the Civil Works Specification dated 17 December 2021 , including measures listed overleaf.

ITEM	INSPECTION / TESTING REQUIREMENT (See key below)
Existing Services	
✦ Locate existing services.	(2)
✦ Building over, relocating or modifying existing services.	(2) (5)
Erosion/stormwater control	
✦ Silt fences and hay bales installed prior to commencing earthworks and maintained during earthworks.	(2)
✦ Temporary detention basins installed prior to commencing earthworks and maintained as required.	(2)
Excavation/filling	
✦ Clearing and grubbing completed and topsoil stockpiled.	(2)
✦ Prior to construction of batter profiles and protection,	(2)
✦ Shoring and ground anchors.	(6)
✦ Proof roll inspection of fill subgrades.	(1)
✦ Geofabric in place prior to filling.	(1)
✦ Material tests on filling materials.	(4)
✦ Compaction tests on each layer of fill.	(3)
✦ Proof roll inspection of completed earthworks.	(1)
Service trenches	
✦ Service trenches excavated prior to laying service.	(2)
✦ Material tests on bedding and trench backfill material.	(4)
✦ Backfilling of trenches.	(2)
✦ Compaction tests on bedding and trench backfill.	(3)
Placing topsoil	
✦ Cultivation of ground prior to placing topsoil.	(2)
Retaining walls	
✦ Underlying work.	(2), (3), (4)
✦ Material tests/ certificates for concrete and reinforcing.	(4)
✦ Prepour inspections of base reinforcing and formwork.	(1), (3)
✦ Site sampling of concrete.	(3)
✦ Prepour inspection of reinforced blockwork.	(1)

✦ Inspection of subsoil drains.	(1)
✦ Supply and compaction of granular backfill.	(3), (4)
Subsoil drainage ✦ Material tests on filter material and trench backfill	(4)
✦ Trenches excavated prior to laying pipes	(2)
✦ Subsoil pipes layer prior to covering	(2)
✦ Subsoil filter layer and filter fabric complete	(2)
✦ Compaction testing on trench backfill	(3)
Stormwater lines (including downpipe connections) ✦ Material tests on bedding, pipe surround and trench backfill	(4)
✦ Manufacturers data submitted for pipe type	(4)
✦ Trenches excavated prior to laying pipe	(2)
✦ Compaction tests on pipe bedding	(3)
✦ Pipes laid prior to backfilling and pressure testing (including all downpipe connections etc)	(1)
✦ Compaction testing on pipe surround and trench backfill	(3)
✦ Connections to existing services	(1), (5)
Pits and other structures ✦ Compaction testing and proof roll inspection of subgrade	(1), (3)
✦ Manufacturers certificates for precast items	(4)
✦ Prepour inspection of formwork and reinforcing	(1)
✦ Testing of concrete in accordance with Concrete specification	(4), (3)
✦ Inspection of completed concrete work prior to backfilling	(1)
✦ Material tests on backfill material	(4)
✦ Compaction testing on backfill	(3)
Subgrade ✦ Underlying filling and services trench backfill approved	(2), (3), (4)
✦ Compaction tests on completed subgrade	(3)
✦ Proof roll inspection of completed subgrade	(1)
Subbase and base ✦ Underlying work approved	(2), (3), (4)
✦ Material tests/ certificates on subbase and base materials	(4)
✦ Compaction tests	(3)
✦ Proof roll inspection of each completed pavement layer	(2)
✦ Application of wax emulsion to cement stabilised subbase	(7)
Concrete pavements ✦ Underlying work approved	(2), (3), (4)
✦ Material tests/ certificates for concrete and reinforcing	(4)

✦ Prepour inspection of completed reinforcing, formwork, dowels etc.	(1)
✦ Site sampling of concrete	(3)
✦ Curing	(7)
✦ Cutting of sawn joints	(7)
Joints ✦ Joint cleaned and prepared prior to priming	(2)
✦ Joint primed	(2)
✦ Material certification/ testing	(4)
Associated Elements (kerbs, footpaths etc) ✦ Material tests/ certificates for subbase, concrete etc,	(4)
✦ Placement of subbase	(2), (3)
✦ Subbase, formwork etc completed prior to pouring concrete	(1)
✦ Placing concrete	(2), (3), (7)
Guardrails ✦ Manufactures certificates, shop drawings etc	(4), (7)
✦ Inspection of guardrail posts, prior to concrete encasement of footings	(1)

KEY

1) Engineer to inspect
2) Engineer to be notified to allow opportunity to inspect
3) Test results from independent testing authority to be supplied to Engineer prior to covering work
4) Materials certificates/ testing to be supplied to Engineer prior to commencing work
5) Approval of relevant Statutory Authorities required
6) Submit Certification of Contractors design check
7) Contractors records of work

APPENDIX B
Construction Waste Management Subplan

Waste will be managed in cooperation with Bingo Industries as described below. Bingo Industries offers a complete, comprehensive solution to the management and recycling of wastes to assure compliance with clients' waste management policy.

Bingo Recycling Centre's combine bin storage, waste collection, waste recycling and waste transfer to service the building and construction industry and domestic waste management needs in New South Wales. Wastes collected by Bingo Bins are taken directly to one of these facilities where approximately 90% of wastes are converted to recovered resources.

Bingo Recycling Centre Alexandria	EPL No. 4679
Bingo Recycling Centre Artarmon	EPL No. 20763
Bingo Recycling Centre Auburn	EPL No. 10935
Bingo Recycling Centre Eastern Creek (Genesis)	EPL No. 20121
Bingo Recycling Centre Greenacre	EPL No. 20847
Bingo Recycling Centre Kembla Grange	EPL No. 20601
Bingo Recycling Centre Mortdale	EPL No. 20622
Bingo Recycling Centre Revesby	EPL No. 20607
Bingo Recycling Centre Tomago	EPL No. 20585

As can be expected waste materials inwards vary considerably and are delivered to the Recycling Centres in tipping and non-tipping vehicles or in skip bins. Of the wastes inwards approximately 90% is recovered and recycled as materials outwards and the balance 10% to landfill. Waste materials inwards are processed to achieve the maximum recovery of resources and the minimum of un-recoverable material for offsite disposal.

Typical Composition of Bingo's Wastes Inwards

Wastes Inwards	Percentage (approx.)
Heavy Recyclable Materials	45%
Light Recyclable Materials	35%
Metals	10%
Non-Recyclable Materials	10%
Total	100%

Heavy Recyclable Materials:

Soil
Dirt
Sand
Rubble
Brick
Concrete
Tiles
Stone
Asphalt

Light Recyclable Materials:

Timber
Green Waste
Cardboard / Paper
Plastic
Plasterboard

Metals

Ferrous (steel, black iron)
Non-Ferrous (copper, wire, aluminium, stainless)

At the Resource Recovery Facility a simple and effective waste processing procedure is applied. See Materials Flow Diagram (below). Wastes inwards unloaded onto the sorting area where the waste is raked with a hydraulic excavator to expose the contents and where recyclable materials are hand and machine sorted. The raking process separates the waste into four streams for further processing.

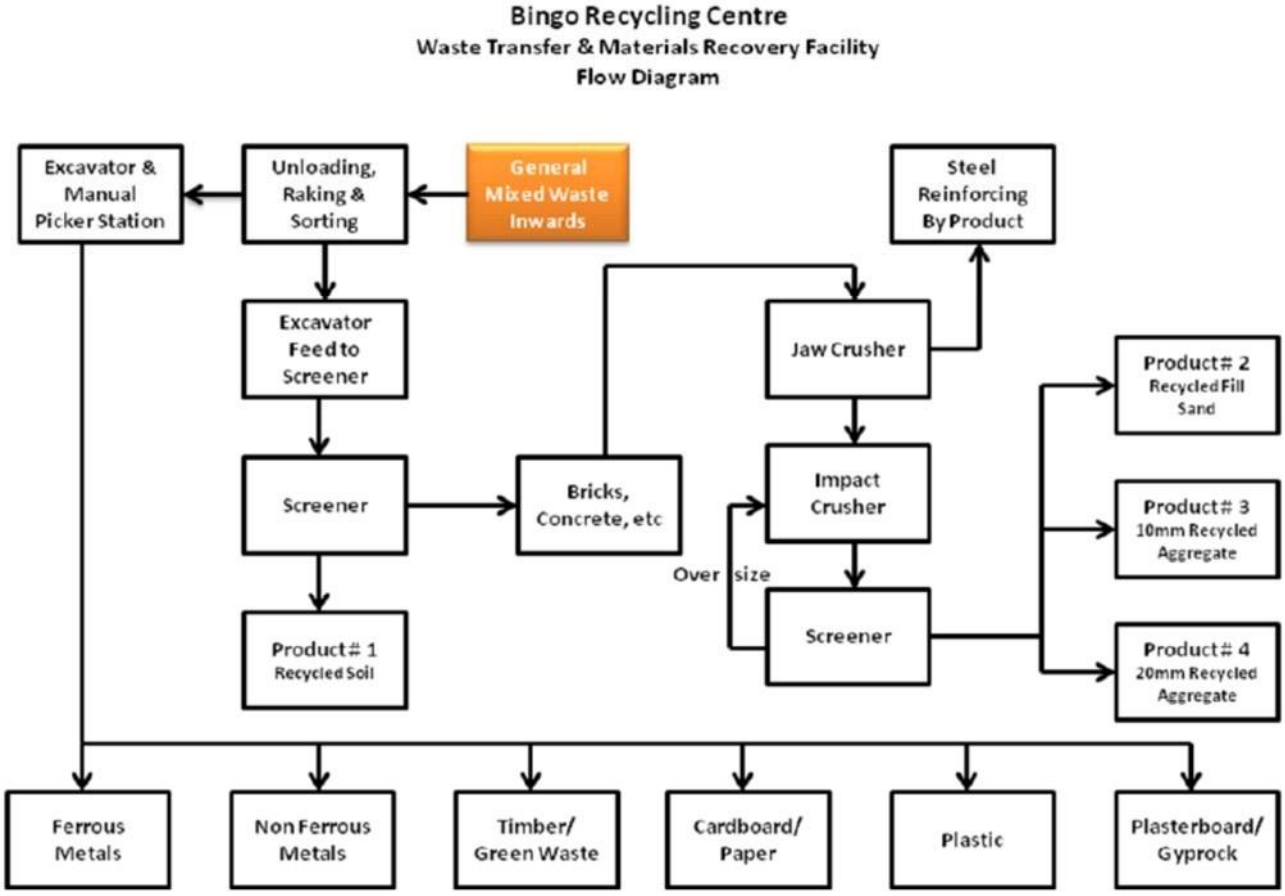
Stream #1 Non-recyclable materials. These wastes pass to a holding area for off-site disposal.

Stream #2 Metals and light recyclable materials are removed and stored for off-site recycling.

Stream #3 Large sized heavy weight brick, concrete and rubble pieces. These wastes pass to the crushers where they are crushed and re-enforcing fabric removed. The output from the crushers passes to the screener where products of different size are separated and stored in stockpiles. Re-enforcing fabric is collected and stored in the general steel bin for off-site recycling.

Stream #4 Small sized heavy weight soil, sand, brick, concrete and rubble. These wastes pass to the screener where the soil is separated form the brick, concrete and rubble. The brick, concrete and rubble then pass through Stream #3.

Stream #1 wastes are currently not recyclable and are removed from the land for off-site disposal. Stream #2 wastes, recovered metals and light recyclable materials are recycled off-site. Stream #3 and Stream #4 wastes are processed on site by crushing and screening to form saleable products such as soil, sand, and aggregates. These products are retained on site until sold.



In summary, Bingo Bins take all their mixed waste skip bins directly to EPA Licensed Recycling Centres. From there the waste is sorted and separated into the following material classes for processing and recycling.

Type of Material	**Where Processed/ Recycled**	**How Processed/ Recycled**
Heavy Recyclable Materials (soil, dirt, sand, rubble, concrete, brick, tiles, asphalt, stone)	Bingo Recycling Centres	Re-processed into recycled products (such as recycled soil, fill sand, aggregates, roadbase) by crushing and screening.
Timber/ Green Waste	Clean & Green Organics/ Genesis	Re-processed into woodchip and mulch by shredding.

Metal/ Steel	Sell & Parker/ CMI/ SIMS/ Sydney Copper Scraps	Re-processed into new metal and steel products by shearing, baling and re-smeltering.
Brick/ Concrete	Boral/ Genesis	Re-processed into recycled products (such as fill sand, aggregates, roadbase) by crushing and screening.
Cardboard/ Paper/ Plastic	Polytrade Recycling/ J.J. Richards/ Orora	Re-processed into new cardboard, paper and plastic products by breaking down the material into a form for re-use.
Plasterboard	ReGyp	Re-processed into gypsum products by shredding and screening.
General Waste	SUEZ Landfill/ Horsley Park Landfill/ Genesis Landfill	n/a

Bingo Recycling Centres
76-82 Burrows Road, Alexandria NSW 2015
10 Mclachlan Ave, Artarmon NSW 2064
3-5 Duck Street, Auburn NSW 2144
Honeycomb Drive, Eastern Creek NSW 2766
35 Wentworth St, Greenacre NSW 2190
50 Wyllie Road, Kembla Grange NSW 2526
20 Hearne Street, Mortdale NSW 2223
37-51 Violet Street, Revesby NSW 2212
29 Laverick Avenue, Tomago NSW 2322

Clean & Green Organics
769 The Northern Rd, Bringelly NSW 2566

Sell & Parker
45 Tattersall Road, Blacktown NSW 2148

CMI
38 York Road, Ingleburn NSW 2565

SIMS
43 Ashford Ave, Milperra NSW 2214
76 Christie St, St Marys NSW 2760

Sydney Copper Scraps

130 Adderley St, Auburn NSW 2760

Boral

6-10 Burrows Road South, St Peters NSW 2044

Polytrade Recycling

32 South St, Rydalmere NSW 2116

40 Madeline St, South Strathfield NSW 2136

J.J. Richards

12 Heald Rd, Ingleburn NSW 1890 8 Kommer Pl, St Marys NSW 2760

Orora

1891 Botany Rd, Matraville NSW 2036

ReGyp

330 Captain Cook Drive, Kurnell NSW 2231

SUEZ Landfill

Elizabeth Drive, Kemps Creek NSW 2178

Horsley Park Landfill

Wallgrove Road, Horsley Park NSW 2164

Genesis Landfill

Honeycomb Drive, Eastern Creek NSW 2766

APPENDIX C

Unexpected Finds Protocol for Heritage

Based on the findings of the Aboriginal Cultural Heritage Assessment (ACHA) and the archaeological investigation contained within the Environmental Impact Statement for SSD 9692, the following is recommended:

Works may proceed with caution

General measures will need to be undertaken to ensure unexpected finds of Aboriginal sites or objects are not harmed. These general measures include:

Aboriginal objects are protected under the National Parks and Wildlife (NPW) Act regardless if they are registered on Aboriginal Heritage Information Management Sydney (AHIMS) or not. If suspected Aboriginal objects, such as stone artefacts are located during future works, works must cease in the affected area and an archaeologist called in to assess the finds.

If the finds are found to be Aboriginal objects, the Office of Environment and Heritage (OEH) must be notified under section 89A of the NPW Act. Appropriate management and avoidance or approval under a section 90 AHIP should then be sought if Aboriginal objects are to be moved or harmed.

In the extremely unlikely event that human remains are found, works should immediately cease and the NSW Police should be contacted. If the remains are suspected to be Aboriginal, the OEH may also be contacted at this time to assist in determining appropriate management

Submit ACHA to AHIMS

In accordance with Chapter 3 of the Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011) the ACHA should be submitted for registration on the AHIMS register within three months of completion."

Based on the findings of the Heritage Impact Statement for SSD 9692, the following is observed:

Unlikely heritage deposits

All sites are highly disturbed as a result of building works associated with the school over the last 100 years. Notwithstanding the above, the provisions of the Heritage Act 1977 prevail in relation to unexpected finds.

APPENDIX D
Unexpected Contamination Finds Protection

An "Unexpected Finds Protocol" (UFP) has been prepared by Douglas Partners in the Remediation Action Plan for 4 Vernon St dated June 2019 to deal with unexpected findings and/or unplanned situations that may be uncovered during civil, excavation or construction works associated with the proposed development.

The protocol will be adhered to during the carrying out of work on site, and is as follows:

1. The contractor(s) undertaking any remediation, civil or construction works will be provided with a copy of the RAP (plus any amendment or addendum), including this UFP. The contractor(s) will nominate their site (project) manager who will be responsible for implementing the UFP;
2. Upon discovery of suspected (unexpected) contaminated material, the site (project) manager is to be notified and the affected area closed off by the use of barrier tape and warning signs (if appropriate) and sediment controls. Warning signs shall be specific to the findings and potential hazards and shall comply with the Australian Standard 1319-1994 – Safety Signs for the Occupational Environment;
3. A qualified environmental consultant is to be notified by the site manager to inspect the area and confirm the presence or otherwise of hazards or contamination, and to determine the method and extent of investigation or remediation works to be undertaken. A report detailing this information will be compiled by the environmental consultant and provided to the site manager, who will disseminate to the Principal (or their representative);
4. All work associated with the contaminated soil will be undertaken by an appropriately licensed contractor, as stipulated by the environmental consultant;
5. All works must comply with the provisions of the relevant legislation and guidelines;
6. Documentary evidence (weighbridge dockets) of appropriate disposal of the material is to be provided to the Principal (or their representative) if disposal occurs;
7. Details of all relevant activities are to be recorded in the site record system;
8. Details of the remediation and validation works undertaken with respect to the unexpected find must be incorporated into the final validation report as prepared by the environmental consultant.
    i. contamination in order to allow for cap and containment of the material;
    ii. In the event that remediation is required, the procedures outlined within this report should be adopted where appropriate, alternatively an addendum to this RAP should be prepared;
    iii. An additional sampling and analytical rationale should be established by the consultant and should be implemented with reference to the relevant guideline documents; and
    iv. Appropriate validation

APPENDIX E

Construction Traffic and Pedestrian Management Subplan and Worker Transportation Strategy

Management of Construction Traffic and pedestrian flow has been determined in accordance with recommendations from Ason Group's Draft Traffic and Parking Management Plan, Issue 3, dated 26 November 2019, noting that the majority of recommendations apply to Stage 1 of Meriden's SSDA projects being the School of Music and Drama.

Measures to be implemented for 4 Vernon Street include;

Work Zones

No work zones are proposed along Vernon Street during construction of the 4 Vernon Street playground. If this circumstance changes during construction any work zone required along Vernon Street to facilitate construction on the Junior School is located clear of 2 Vernon Street, and the change will be determined in consultation with Strathfield Counci.

Contractor Parking

There will be no parking provided on-site. No on-street parking will be allowed for construction workers. It may be suggested that employees can utilise public transport facilities in lieu of driving to the site to minimise parking demand and the impact of construction activities on on-street parking.

Contractors would be encouraged to utilise the available public transport services within the area. If Contractors have no alternative options other than to use private vehicles travelling to and from site, then there are several public car parks which can be utilised within the immediate vicinity of the Site.

Pedestrian and Cyclist Access

The majority of construction activities will occur off-street with the exception of works required to connect the on-site stormwater system with Council's stormwater assets under Vernon Street. For these roadworks permits will be sought from Council, (as has approval of the design).

Although construction activities occur off-road, the pedestrian and cycle connections across Site access points will be managed by traffic controllers during material deliveries or any other interruption to normal pedestrian and traffic flow. These construction activities will be scheduled outside of school pick-up and drop-off times to minimise disruptions. It is therefore expected that the Kiss & Ride zones on Margaret Street will be unaffected by construction activites.

It is noted that the Stage 2 Vernon St project – a playground, does not involve substantial construction work. Truck movements are not expected to exceed 20 vehicles per shift. Nevertheless, traffic control will be implemented at all times that traffic or pedestrian flow is interrupted including;

- Supervision of all construction vehicle movements into and out of site at all times,
- Supervision of all loading and unloading of construction materials during the deliveries in the construction phase of the project, and
- Pedestrian management, to ensure that adverse conflicts between vehicle movements and pedestrians do not occur, while maintaining radio communication with construction vehicles at all times.

APPENDIX F

Driver Code of Conduct

Construction vehicle drivers travelling to and from the site must:

- Have undertaken a site induction carried out by an approved member staff or suitably qualified person under the direction of management;
- Hold a valid driver's licence for the class of vehicle that they operate;
- Operate the vehicle in a safe manner within and external to the quarry site;
- Comply with the direction of authorised site personnel when within the site;
-

Heavy Vehicle Speed

Increased speed means not only an increased risk of crashing but also increased severity if an accident occurs. A study undertaken for the Australian Transport Safety Bureau found that travelling 10 km/h faster than the average traffic speed can more than double the risk of involvement in a casualty accident. (Source Roads and Maritime Services (RMS) previously known as Roads and Traffic Authority (RTA)).

There are two types of speeding:

- Where a heavy vehicle travels faster than the posted speed limit; and
- Where a driver travels within the speed limit but because of road conditions (e.g. fog or rain) this speed is inappropriate. (Source RMS).

Drivers and truck operators are to be aware of the "Three Strikes Scheme" introduced by the Roads and Maritime Services which applies to all vehicles over 4.5 tonnes. When a heavy vehicle is detected travelling at 15 km/h or more over the posted or relevant heavy vehicle speed limit by a mobile Police unit or fixed speed camera, the Roads and Maritime Services will record a strike against that vehicle. If three strikes are recorded within a three year period, the Roads and Maritime Services will act to suspend the registration of that vehicle (up to three months).

More information is available from the Roads and Maritime Services website.

Vehicle speed on public roads is enforced by the NSW Police Service.

The speed limit within the quarry site is 20 km/h which is to be strictly maintained.

Heavy Vehicles Driver Fatigue

Fatigue is one of the biggest causes of accidents for heavy vehicle drivers. The Heavy Vehicle Driver Fatigue Reform was therefore developed by the National Transport

Commission (NTC) and approved by Ministers from all States and Territories in February 2007.

The heavy vehicle driver fatigue law commenced in NSW on 28 September 2008 and applies to trucks and truck combinations over 12 tonne GVM (however there are Ministerial Exemption Notices that can apply).

Under the law, industry has the choice of operating under three fatigue management schemes:

- Standard Hours of Operation
- Basic Fatigue Management (BFM)
- Advanced Fatigue Management (AFM)

Heavy Vehicle Compression Braking

Compression braking by heavy vehicles is a source of irritation to the community generating many complaints especially at night when residents are especially sensitive to noise.

In some instances compression braking is required for safety reasons however when passing through or adjacent to residential areas or isolated farmsteads a reduction in the speed of the vehicle is recommended to reduce the instances and severity of compression braking.

Heavy Vehicle Noise

The operating hours for transportation of materials to and from site are:

Monday – Friday (except Public Holidays) 7:00 am to 6:00 pm

Saturdays 8:00 am to 1:00 pm

Sundays and Public Holidays No activities

The following activities may be carried out on the site outside these hours of operation;

- delivery or dispatch of materials as requested by Police or other authorities; and
- Emergency work to avoid the loss of lives, property and/or to prevent environmental harm. At the commencement of the working day it is not unusual for drivers to arrive early and wait for opening. If this occurs drivers are to wait with engines turned off.

Vehicle Departure and Arrival

Heavy Vehicles travelling in close proximity on single lane public roads can be of concern to light vehicle drivers as well as increasing noise through or adjacent to residential areas. To alleviate public concern and increase road safety, heavy vehicles leaving the site should be separated by a minimum two minute interval.

It is difficult to schedule arrivals to the site (except at the commencement of work for the day), however, when a driver becomes aware, through visual contact or two-way contact between trucks, that they will arrive at approximately the same time then they are to ensure that there is a suitable gap between vehicles.

APPENDIX G

Construction Noise and Vibration Management Subplan

Construction noise and vibration levels will be managed in accordance with RWDI's Construction and Operational noise report prepared by RWDI, Revision E, dated January 2020. The below measures are the recommendations stipulated by RWDI and will be adopted as objectives to work toward in minimising any noise impact at surrounding residences.

Applicable noise management levels at residential receivers in the vicinity of the site are provided in the table below.

Table 6-1 Site-specific construction noise management levels – dBA

Area	Construction Noise Management Level, L_{Aeq} – dBA						Highly Noise Affected Noise Level, L_{Aeq} dBA
	Day	Evening	Night	Saturday*			
~~1. 15 Margaret Street boundary~~			~~56~~	~~48~~	~~52~~	~~56~~	~~75~~
~~No2. Lingwood site~~			~~53~~	~~45~~	~~41~~	~~52~~	~~75~~
3. Vernon Street site*			48	40	36	41	75

* 8.00am to 1.00pm.

Noise from construction activities for the construction during the day period may potentially exceed established construction noise management levels, noting that the maximum level of 75 dBA will not be exceeded. Therefore, the planning and management of construction activities will consider the sensitivities of surrounding residents so as to minimise the impact of construction activities at these receivers.

To control construction noise and vibration the following project-specific mitigation measures will be adopted;

- Erection of the acoustic wall along the norther boundary early in the project programme to maximise acoustic separation
- Selection of quietest feasible construction equipment;
- Use of rock saws or smaller rock breakers where feasible; and
- Localised treatment, such as barriers, shrouds, and the like around fixed plant, such as pumps, generators, and concrete pumps.
- Rock breaking, rock hammering, sheet piling, pile driving and similar activities will only be carried out between the following hours: (a) 9am to 12pm, Monday to Friday; (b) 2pm to 5pm Monday to Friday; and (c) 9am to 12pm, Saturday, in accordance with SSDA Conditions.

Community Engagement

Community engagement activities carried out to communicate how high noise-generating works in close proximity to sensitive receivers will be managed are described in the Community Communications Strategy prepared by Urbis dated October 2020 and include the following;

Monitor and Reporting

Plant Noise Audit – Noise emission levels of all critical items of mobile plant and equipment will be checked for compliance with noise limits appropriate to those items prior to the equipment going into regular service.

Incident Reporting

Incident reporting will be carried out as described in Section 6.9.

END OF REPORT