

## Appendix A **Construction Noise Emissions Modelling**

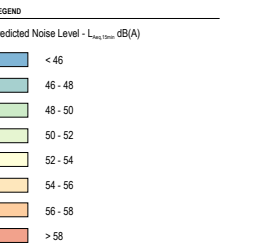




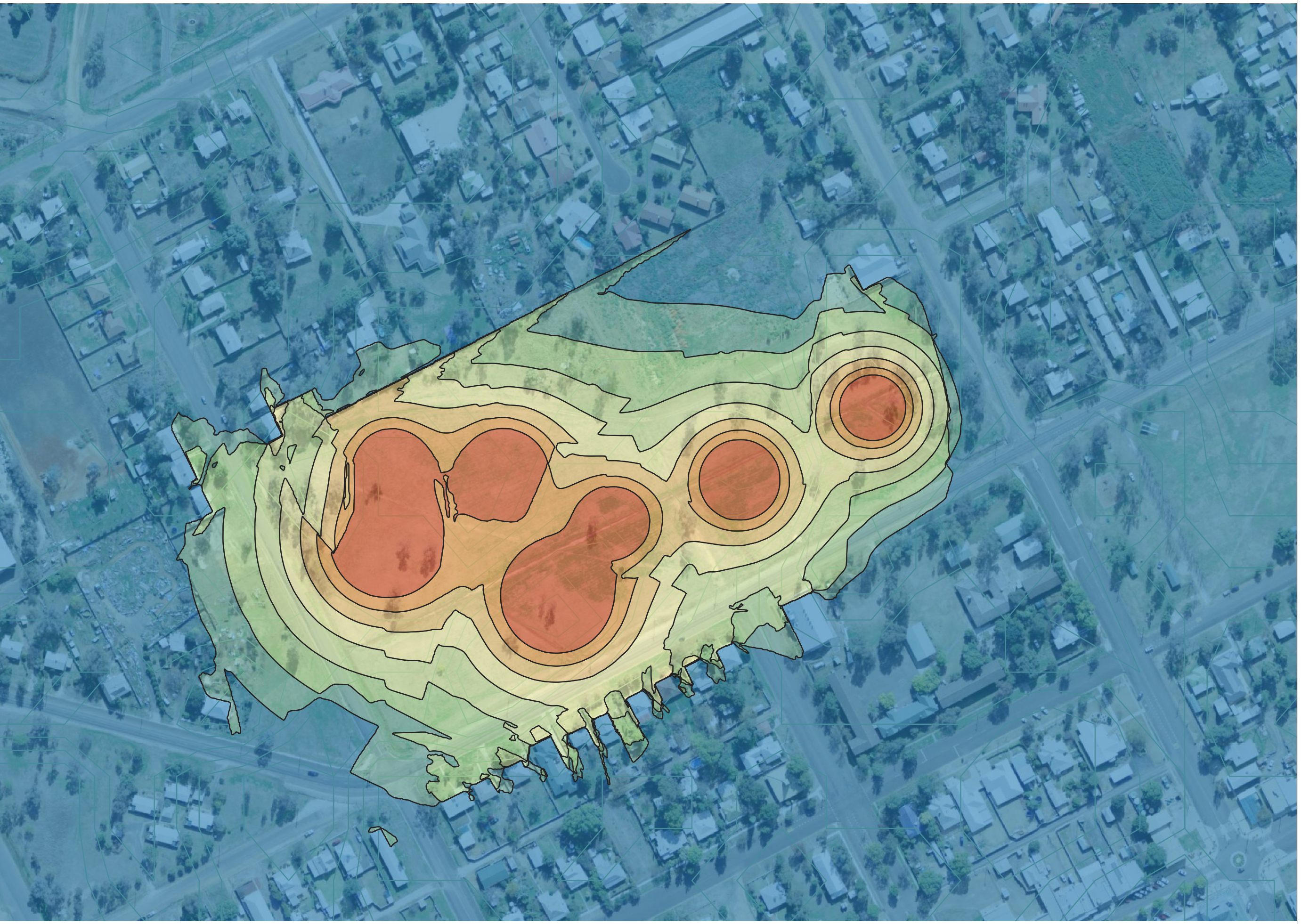


E-LAB CONSULTING

ISSUE	DATE	STATUS
1	26/09/2022	For Review
2	14/10/2022	For SSDA
3	01/11/2022	For SSDA



NOTES



PROJECT  
WEE WAA HIGH SCHOOL

PROJECT NO.  
P00145

ARCHITECT  
SHAC

CLIENT  
BUILT

SCALE  
NTS

STATUS  
FOR SSDA

DRAWING  
NOISE EMISSION MAP  
EXCAVATION STAGE

DISCIPLINE  
ACOUSTICS AND VIBRATION

DRAWING NUMBER  
AC-DWG-100-01-01

REVISION  
003





E-LAB CONSULTING

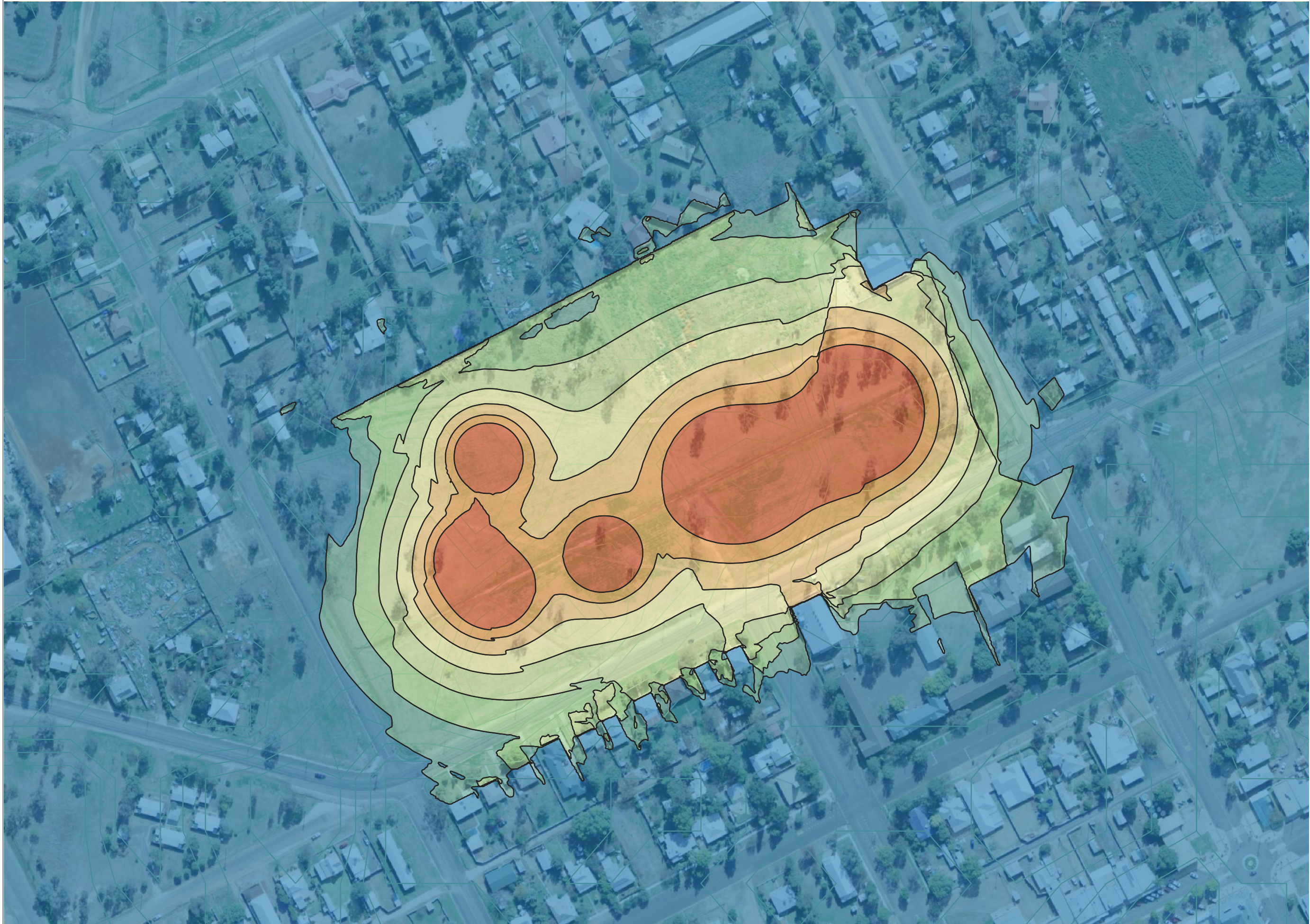
ISSUE	DATE	STATUS
1	26/09/2022	For Review
2	14/10/2022	For SSDA
3	01/11/2022	For SSDA

LEGEND

Predicted Noise Level -  $L_{Aeq,1hr}$  dB(A)

	< 46
	46 - 48
	48 - 50
	50 - 52
	52 - 54
	54 - 56
	56 - 58
	> 58

NOTES



PROJECT  
WEE WAA HIGH SCHOOL

PROJECT NO.  
P00145

ARCHITECT  
SHAC

SHAC

CLIENT  
BUILT

SCALE  
NTS

STATUS  
FOR SSDA

DRAWING  
NOISE EMISSION MAP  
PILING AND FOUNDATION STAGE

DISCIPLINE  
ACOUSTICS AND VIBRATION

DRAWING NUMBER	REVISION
AC-DWG-100-02-01	003





E-LAB CONSULTING

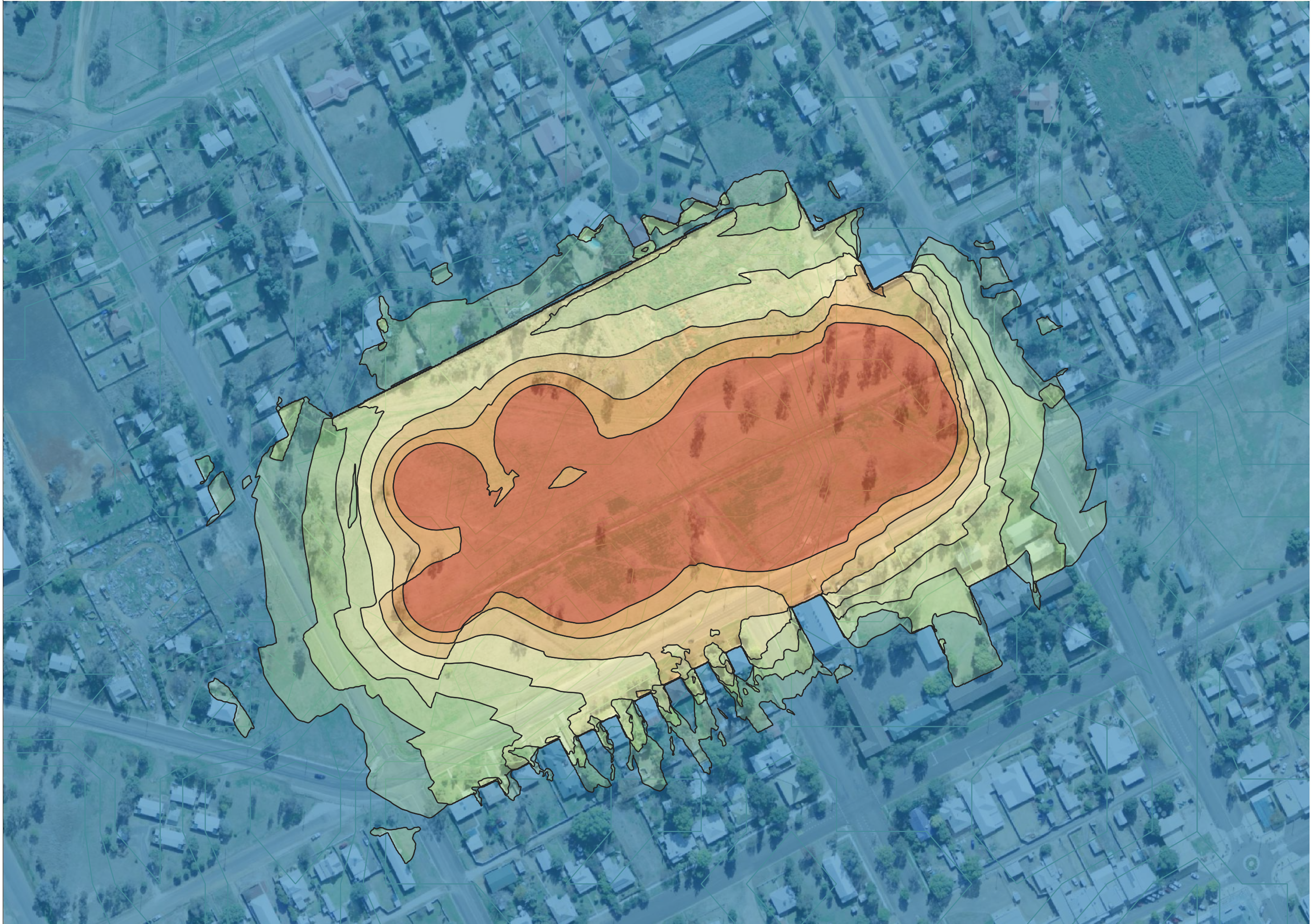
ISSUE	DATE	STATUS
1	26/05/2022	For Review
2	14/10/2022	For SSDA
3	01/11/2022	For SSDA

LEGEND

Predicted Noise Level -  $L_{Aeq,1hr}$  dB(A)

- < 46
- 46 - 48
- 48 - 50
- 50 - 52
- 52 - 54
- 54 - 56
- 56 - 58
- > 58

NOTES



PROJECT  
WEE WAA HIGH SCHOOL

PROJECT NO.  
P00145

ARCHITECT  
SHAC

SHAC

CLIENT  
BUILT

SCALE  
NTS

STATUS  
FOR SSDA

DRAWING  
NOISE EMISSION MAP  
CONSTRUCTION STAGE

DISCIPLINE  
ACOUSTICS AND VIBRATION

DRAWING NUMBER	REVISION
AC-DWG-100-03-01	003





# **Built**

## **APPENDIX F - Construction Waste Management Sub-Plan**

# Construction Waste Management Plan

PROPOSED WEE WAA HIGH SCHOOL

105-107 Mitchell Street

WEE WAA, NSW 2388



FOR:

**BUILT**

November 2022


## Manage-Design-Engineer DOCUMENT CONTROL

PROJECT: 105-107 Mitchell Street Wee Waa

CLIENT: BUILT

AUTHOR: Andrew Smith

### REVISION HISTORY

REVISION	DATE	CHECKED BY	
		NAME	SIGNATURE
0	06/10/2021	Troy Ryden	
1	12/10/2021	Troy Ryden	
2	17/10/2022	Troy Ryden	
3	08/11/2022	Troy Ryden	
4	16/11/2022	Troy Ryden	

### DISTRIBUTION RECORD

DATE	REVISION	TO	FORMAT
06/10/2021	0	NSW Department of Education	Electronic
12/10/2021	1	NSW Department of Education	Electronic
17/10/2022	2	BUILT	Electronic
08/11/2022	3	Built	Electronic
16/11/2022	4	BUILT	Electronic



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# 1 INTRODUCTION

## 1.1 BACKGROUND

Manage-Design-Engineer Pty Ltd have been engaged to undertake a Construction Waste Management Plan (CWMP) for a proposed high school development at 105-107 Mitchell Street Wee Waa. The site consists of the following Lots:

Lot 125 DP:757125

Lot 124 DP:757125

Lot 2 DP:550633

Lot 1 DP:577294

The total area of the site is 60,300m<sup>2</sup> with the proposed development involving the construction of a school, sports fields, and livestock paddocks.

## 1.2 PROJECT DETAILS

APPLICANT DETAILS	
Name	Manage-Design-Engineer
Address	1/64 Ballina Street, LENNOX HEAD NSW
Phone number(s)	0499 993 340
Email	troy@mde.au
PROJECT DETAILS	
SSD No.	21854025
Client Details	BUILT
Contractor Details	TBA
Address of development	105-107 Mitchell Street Wee Waa



Existing buildings and other structures currently on the site	Nil
Description of proposed development	Construction of a school buildings , sports fields, car parking & bus bays, upgrades to street kerb and gutter, and livestock paddocks.
Through implementing this CWMP, the development will achieve the waste objectives and intentions for minimising waste relating to this project. All records shall be kept onsite by the nominated construction contractor, demonstrating lawful disposal of waste. Documents will be required to be readily accessible for inspection by regulatory authorities such as council, DECC or WorkCover NSW.	
Contractor/Supervisor	
Signature	
CWMP document control and revision updates	Andrew Smith
Date	16/11/2022

### 1.3 SSSA CONDITIONS

SSD-21854025 – Wee Waa High School		
Condition Number	Description	Page Reference
B23	The Construction Waste Management Sub-Plan (CWMSPP) must address, but not be limited to, the procedures for the management of waste including the following:	N/A
B23 (a)	the recording of quantities, classification (for materials to be removed) and validation (for materials to remain) of each type of waste generated during construction and proposed use;	Section 4.7
B23 (b)	information regarding the recycling and disposal locations; and	Section 2.7
B23 (c)	confirmation of the contamination status of the development areas of the site based on the validation results.	Section 3.3



## 2 SITE CHARACTERISTICS

### 2.1 SITE LOCATION

105-107 Mitchell Street Wee Waa, has a total site area of 60,300m<sup>2</sup> and is bounded by residential lots to the north, Mitchell Street (Kamilaroi Hwy) to the south, Charles Street to the East and George Street to the West.



FIGURE 1 - SITE LOCALITY AERIAL IMAGE (SIXMAPS, 2021)

### 2.2 CONSTRUCTION TYPOLOGY

The Wee Waa High School is being constructed using the principals of Design for Manufacture and Assembly (DfMA). The main structural and building envelope will be manufactured off-site and delivered in order to assemble on-site without the need for conventional waste generating activities during the construction of these elements.

### 2.3 OBJECTIVES OF THE CWMP

The objectives of the CWMP include:

- a) Identify, quantify and classify waste streams to be generated during demolition, excavation and construction to address the Waste Classification Guidelines (EPA, 2014);
- b) Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site;
- c) To describe measures to be implemented to manage, reuse, and recycle and safely dispose of the waste;
- d) To maximise reuse and recycling of construction materials and materials from the school;
- e) To encourage building design techniques in general which minimise waste generation; and

- f) To minimise the amount of waste being deposited to landfill with targets to reuse or recycle at least 90% of construction and demolition waste as per the EFSG DG02 2.7.1 Construction and demolition waste requirements

## 2.4 NSW LEGISLATIVE REQUIREMENTS AND GUIDELINES.

Relevant key legislation and guidelines applicable to the project include:

- NSW Environmental Planning and Assessment Act 1979 (EP&A Act)
- Protection of the Environment Operations Act 1997;
- Protection of the Environment (General) Operations Act 1998;
- Waste Avoidance and Resource Recovery Act 2014;
- Protection of the Environment Operations (Waste) Regulation 2014;
- Waste Classification Guidelines (EPA, 2014);
- NSW Department of Planning and Environment, Secretary's Environmental Assessment Requirements (SEARs); and
- Tweed Shire Development Control Plan 2008 (DCP, 2008) – Section A15 Waste Minimisation and Management.

## 2.5 WASTE CONTRACTOR REQUIREMENTS

The current legislation determines that the generator of waste is the owner of the waste until the waste crosses a calibrated weighbridge into a licensed facility. Waste and demolition contractors to construction contractors are the primary transporters of waste off-site, accordingly, waste contractors will be required to provide verifiable monthly reports on waste reused, reprocessed or recycled (diverted from landfill) or waste sent to landfill. These reports have a direct bearing on the generator's compliance with the relevant regulations.

The CWMP will be implemented on-site throughout including, singularly or collectively, the demolition, excavation and construction phases.

A Waste Data File must be maintained on-site and all entries are to include:

- The classification of the waste;
- The time and date of material removed;
- A description of and the volume of waste collected;
- The location and name of the licensed waste facility that the waste is transferred to; and
- The vehicle registration and the name of the waste contractor's company.

The Waste Data File will be made available for inspection to any authorised officer at any time during the life of the site works. At the conclusion of site works, the designated person will retain all waste documentation and make this validating documentation available for inspection.

Arrangements will be made with the waste contractor to increase bin supply if there is an unexpected increase in waste generation.



## 2.6 WASTE MANAGEMENT STRATEGIES.

The waste management strategy for the project will operate over the design, procurement and construction including fit out of the project and is detailed in the below table

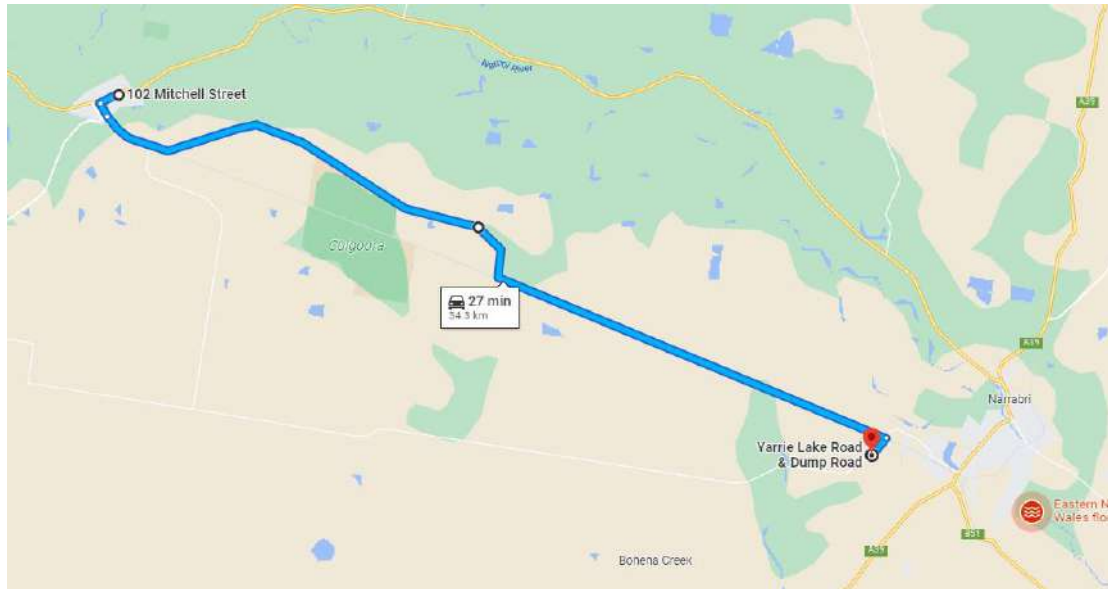
Management Strategies	Responsibilities
<b>Construction On-site</b>	
Use of modular components in the design	Builder & Subcontractors
Use of prefabricated components in the design	Builder & Subcontractors
Design of materials to standard sizes	Builder & Subcontractors
Use the avoid, reuse, reduce, recycle principles	Builder
Minimisation of recurring packaging materials	Subcontractors
Returning packaging to the supplier	Builder & Subcontractors
Separation of recycling of materials off-site	Builder & Waste Disposal operator
Audit & monitor the correct usage of bins	Builder & Waste Disposal operator
Audit & monitor the Waste disposal location to ensure demolition and construction waste is recycled and taken to a licensed facility	Builder

## 2.7 NARRABRI WASTE MANAGEMENT FACILITY

The local waste contractor will make use of the Narrabri Waste Management Facilities in order to manage the recycling and disposal of construction waste. This facility is located at Yarric Lake road and Dump Road, Narrabri



FIGURE 2 – NARRABRI WASTE FACILITY – YARRIC LAKE



**FIGURE 3 - TRAVEL TIME TO WASTE FACILITY – YARRIE LAKE ROAD AND DUMP ROAD, NARRABRI**



## 3 EXCAVATION AND FILLING

### 3.1 SITE EXCAVATION AND FILLING

The entire site generally will be stripped and cut or filling operations will occur. There is a small area in the eastern side of the site that existing site features will be retained.

The intention is to use the 100mm stripped sandy silty material as fill for the proposed swale batters and other landscaped areas.

### 3.2 STOCK PILING LOCATIONS

Stockpile locations have been indicated on the Erosion & Sediment Drawings. Consideration into alternate stockpile locations are possible provided sufficient erosion and sediment control devices are implemented, and the stock pile is not in an area that can lead to dirty water runoff into the existing or proposed stormwater channels and swale.

### 3.3 CONTAMINATION

Contamination has been identified on the site and a Remediation Action Plan 'RAP' has been separately developed to manage the Remediation of this project site. Please refer to the Project Specific RAP for the process relating to the disposal of this material.

## 4 CONSTRUCTION

### 4.1 TYPES OF WASTE DISPOSAL BINS

Narrabri waste disposal businesses generally supply up to 10-15m<sup>3</sup> steel bins. Collection is undertaken by 7.5m long 30t GVM trucks. Bin sizes are 2.5m x 6.0m

### 4.2 ON-SITE WASTE MANAGEMENT & STORAGE REQUIREMENTS

There will be a designated waste storage area for the disposal and storage of demolition, excavation and construction waste prior to collection. This area will be located conveniently for the work team to use the bins as well as for waste contractors to collect. An indicative location has been provided in section 4.5 of this report. Requirements include

- Construction waste storage is contained wholly within the site identified in Section 4.5
- The routes for movement of waste between work site and waste storage area are to be kept obstruction-free
- The routes for movement of bins and waste between storage and collection points are marked in the site drawing and will be kept obstruction free (if waste is moved between the waste storage area(s))
- The waste bin collection point provided will be accessible for waste collection vehicles. There are no obstructions to pulling up vehicles, turning or reversing and lifting bins.
- Access for waste collection vehicles will not be compromised by construction related activities, vehicles or other consequences of construction staging.
- All waste not being reused on-site will be removed during, or at the completion of the construction works.
- No waste will be left on-site unless it is part of a valid reuse on-site, which is integral to and in place in the design.
- All vehicles entering and leaving the site must have their loads covered.
- All vehicles before leaving the site are to be cleaned of dirt, sand and other materials to avoid tracking these materials onto public roads
- At the completion of the works, the work site is left clear of waste and debris.

### 4.3 SIGNAGE REQUIRED FOR SKIP BINS

To ensure adequate separation of building materials, use large signage to clearly indicate bins for steel waste and general building waste. If steel bins are contaminated with general waste the load will be charged at the general waste rate. It is recommended that at pre-starts, construction crews are reminded of the correct waste disposal process.

### 4.4 ACCESS FOR WASTE COLLECTION

Construction vehicle access is to remain at the final design entry location. No temporary access is permitted off Mitchell Street / Kamilaroi Highway.



Provide a sufficient turning circle arrangement for the intended location of skip bins, allowing for a 10m turning radius.



FIGURE 4 - SKIP BIN PICK UP LOCATION

## 4.5 SEPARATION OF WASTE

Steel waste is accepted for free at the Narrabri Waste Management Facility (NWMF), and thus a separate bin is recommended in order to prevent unnecessary disposal of steel material into land fill. Other waste streams that are to be collated and disposed of at the NWMF include:

- Paper
- Cardboard
- Aluminium
- Glass

## 4.6 REUSE OF CONSTRUCTION MATERIALS

Construction Materials and off-cuts can be reused onsite where practicable. An allocated area in the materials lay-down area can be allocated for the storage of materials to be reused.

These items include:

- Plastic buckets
- Timber crates
- Timber off cuts
- Paint brushers and rollers (wrapped in plastic to maintain moisture)
- Plasterboard offcuts
- Carboard boxes.

The Waste Data File will be made available for inspection to any authorised officer at any time during the life of the site works. At the conclusion of site works, the designated person will retain all waste documentation and make this validating documentation available for inspection.



## 4.7 WASTE GENERATED

MOST FAVOURABLE ←  LEAST FAVOURABLE

	REUSE	RECYCLING	DISPOSAL	
<b>Type of waste generated</b>	<b>Estimate Volume (m3) , (%), Weight (t)</b>	<b>Estimate Volume (m3) , (%), Weight (t)</b>	<b>Estimate Volume (m3) , (%), Weight (t)</b>	<b>Specify method of on site reuse, contractor and recycling outlet and /or waste depot to be used</b>
Site Stripping (Topsoil)	1500m3	-	-	All Cut to be used as Fill onsite
Cut to Fill for buildings	9000m3	-	-	All Cut to be used as Fill onsite
Timber (treated pine)	Landscaping Offcuts reused where possible	-	3%	Treated pine is not accepted at the recycling centre. As such will be added to land fill. Re-use where possible
Timber (untreated)	-	1%	-	Untreated timber will be accepted at the recycling centre. Where possible segregate in separate bin
Concrete	3%	-	-	All concrete overpours to be broken up and used in deep fill
Modular panels	>1%	-	-	Anticipated no waste. All panels made to order
Fibro/plaster board	-	-	1%	General waste skip bin
Scrap metal	-	Approx. 1t	-	Skip bin operators will pick up clean scrap metal for free, to be processed at the recycling centre
Glass	-	-	0.1%	General waste skip bin
Cladding metal sheets	-	1%	-	Off cuts to be added to steel bin
Fixtures and fittings	-	-	0.1%	Damaged goods to returned

Floor coverings	-	-	5%	General waste skip bin
Used pallets	-	0.25 t	-	Used pallets are to be made available to local business. Site engineer to contact local manufacturing or distribution to offer bulk pick up of pallets
Garden organics	2m <sup>3</sup>			Estimated 2m <sup>3</sup> turf to be re-used onsite to stabilise batters
Containers (cans, plastic, glass)	-	-	-	Reused / Recycled
Cardboard	-	-	Approx.. 4m <sup>3</sup>	General waste skip bin
Residual waste			2 m <sup>3</sup>	General waste skip bin
Hazardous/asbestos waste (specify)	-	-		Green build site. If asbestos is uncovered in filling operations. Site supervisor to follow correct procedures to process lawfully
Paving			3%	Offcuts to be taken to the waste station
Stormwater pipe			3%	Offcuts to be taken to the waste station. Where possible concrete pipe reinforcement steel to be separated.
Sediment fencing posts	100%			Pegs reusable. Also accepted at the recycling centre.
Sediment fencing mesh	100%			Ideally reuse sediment cloth/mesh on future jobsites.



## 4.8 CHECKLISTS

<b>Explain how the waste management systems have been designed and will be operated to prevent the potential risk or injury or illness associated with collection, storage and disposal of waste. Outline how measures for waste avoidance have been incorporated into the design, material purchasing and construction techniques of the development</b>
<b>Selected Garbage and Recycling systems:</b>
Supplier? (Name & Contact)
<b>Education and Communication:</b> All construction crews will be made aware of waste management practices (Y/N)
<b>Security:</b> Waste management collections services will occur within the development. No bins to be placed in the road reserve.
<b>Access to bins and/or storage areas:</b>
Level access to screened bin area (Y/N)
<b>Storage space and location:</b> (Attach an Illustration)
Proposed locations to be shown on plans/drawings if locations changed (Y/N)
<b>Collection points and presentation of bins:</b> Waste bin locations indicated on the plans/drawings.
<b>Cleaning, Odour and Noise:</b>
Bins will be cleaned on a regular basis. Collection of bins not before 7am and not after 5pm
<b>Ongoing Waste Management:</b> Once developed, the school is expected to maintain a

Consistent level of waste generation. New recycling opportunities will be taken advantage of as they become available to further reduce waste.
Further information regarding better practice in the design, establishment, operation and ongoing management of waste services in residential multi-unit developments (MUDs) can be found in the Better Practice Guide for Waste Management in Multi-Unit Dwellings. Refer to <a href="https://www.epa.nsw.gov.au/resources/warrlocal/080042-MUD-waste-mgt.pdf">https://www.epa.nsw.gov.au/resources/warrlocal/080042-MUD-waste-mgt.pdf</a>

**Plans and drawings (all developments)**

The following checklists are designed to help ensure WMPs are accompanied by sufficient information to allow assessment of the application.

Drawings are to be submitted to scale, clearly indicating the location of and provisions for the storage and collection of waste and recyclables during:

- Construction
- Ongoing operation

Do the site plans detail/demonstrate:

<b>Construction</b>	<b>Yes/No/NA</b>
Areas to be excavated	Y
Size and location(s) of waste storage area(s)	Y
Access for waste collection vehicles	Y
Types and numbers of storage bins likely to be required	Y
Signage required to facilitate correct use of storage facilities	Y

Further information regarding types of waste, state regulations, illegal dumping, litter prevention tools and resources can be obtained at <http://www.epa.nsw.gov.au/waste/>

**Plans and drawings (all developments).....continued**



Ongoing operation	Yes/No/NA
<b>Space</b>	
Size and location(s) of waste storage areas	
Size and location(s) of waste bins	
Space provided for access to and the manoeuvring of bins/equipment	
Any additional facilities such as lifters, compactors and bulky waste storage	
<b>Access</b>	
Moving bins to and from the storage point to the collection point on collection day	
Direction of traffic flow for internal access driveways and roads sufficient for bin collection	
Design allows for the waste collection vehicle to move in a forward direction with no (or minimal) need to reverse	
Location of final collection point or presentation of bins	
Height clearance and slope, geometric design and strength of internal access driveways and roads	
<b>Amenity</b>	
Aesthetic design of waste storage areas	
Signage – type and location	
Arranging for the prompt removal of dumped rubbish	
All bins and containers used confirm to the Australian Standard for mobile waste containers (AS 4213)	

# **Built**

## **APPENDIX G - Construction Soil and Water Management Sub-Plan**



1<sup>st</sup> February 2023

# CIVIL ENGINEERING SERVICES

Wee Waa High School

Construction Soil & Water Management Plan





## DOCUMENT CONTROL

01	21 <sup>st</sup> October 2022	Issue for Review	Superseded
02	28 <sup>th</sup> October 2022	Revised	Superseded
03	8 <sup>th</sup> November 2022	Revised	Superseded
04	16 <sup>th</sup> November 2022	Updated to suit SINSW comments	Superseded
05	17 <sup>th</sup> November 2022	Minor comments addressed	Superseded
06	25 <sup>th</sup> November 2022	Inclusion of FIA	Superseded
07	1 <sup>st</sup> February 2023	Incorporate of internal audit	Final
Rev #	Date	Description of Change	Status

## APPROVALS

01	R.XU		
02	R.XU	James Georgiades	
03	R.XU	James Georgiades	
04	R.XU	James Georgiades	
05	R.XU	James Georgiades	
06	R.XU <i>Engineer – Civil and Water Engineering</i>	James Georgiades <i>Team Leader – Civil and Water Engineering</i>	
07	R.XU <i>Engineer – Civil and Water Engineering</i>	James Georgiades <i>Team Leader – Civil and Water Engineering</i>	James Georgiades <i>Team Leader – Civil and Water Engineering</i>
Rev #	Author	Reviewer	Approver

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# CIVIL ENGINEERING SERVICES

## 1. INTRODUCTION

Warren Smith Consulting Engineers (WSCE) has been engaged by Built to prepare the SSDA Compliance Letter in support of the SSDA submission for the proposed development at 105-107 Mitchell Street, Wee Waa NSW 2388.

WSCE has undertaken design and documentation including the following civil engineering services:

- Construction Soil and Water Management Sub-Plan (CSWMSP)

## 2. DESIGN DOCUMENTATION

The following WSCE civil design documentation (Job No: 7490000, Title: Wee Waa High School Main Works) form part of the SSDA submission:

Drawing No.	Title	Rev. #
C2.01	Construction Soil & Water Management Plan - Stage 1	A
C2.02	Construction Soil & Water Management Plan - Stage 2	A
C2.03	Construction Soil & Water Management Plan - Stage 2	B



### 3. SSD CONDITIONS MATRIX – SSD 21854025 – Wee Waa High School

Condition No.	Description	Reference
B24 (a)	The Applicant must prepare a Construction Soil and Water Management Sub-Plan (CSWMSP) and the plan must address, but not be limited to the following: A. Be prepared by a suitably qualified expert, in consultation with Council;	CV included in Schedule 2 Consultation Evidence included in Schedule 3
B24 (b)	B. Measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site;	Section 4.2 & Drawing C2.01,C2.02, C2.03
B24 (c)	C. Describe all erosion and sediment controls to be implemented during construction, including as a minimum, measures in accordance with the publication Managing Urban Stormwater: Soils & Construction (4th edition, Landcom 2004) commonly referred to as the 'Blue Book'	Section 4.1 & 4.2 & Drawings C2.01, C2.02 & C2.03
B24 (d)	D. Provide a plan of how all construction works will be managed in a wet-weather events (i.e. storage of equipment, stabilisation of the Site);	Section 4.3
B24 (e)	E. Detail all off-site flows from the site;	Drawing C2.01
B24 (f)	F. Provide a construction methodology to address management of flood related impacts, supported by a Flood Impact Assessment prepared by a suitably qualified practising Engineer, addressing the following (but not limited to):	Note only
B24(f)(ii)	(i) Describe the measures that must be implemented to manage stormwater and flood flows for small and large sized events, including, but not limited to 1 in 5-year ARI and 1 in 100-year ARI	Section 4.2 & drawing C2.01 & C2.03 & Schedule 3
B24(f)(iii)	(ii) detailed construction staging plans and additional flood modelling to confirm that the construction would not result in unacceptable flooding conditions on adjoining properties and infrastructure, as certified by a suitably qualified practising Engineer; and	Schedule 3
B24(f)(iii)	(iii) compliance with the recommendations of the 'Remedial Action Plan Version V2 Final' prepared by EMM and dated 8 November 2021 relating to stockpiling of excavated material.	Section 4.2.1

## 4. Erosion and Sediment Control

The Objectives of the erosion and sediment control for the development site are to ensure

- Adequate erosion and sediment control measures are applied prior to the commencement of construction and are maintained throughout the construction.
- Construction site runoff is appropriately treated in accordance with Narrabri Shire Council requirements and
- Mitigate dust or polluted water entering the local waterways.

As part of the works, the erosion and sedimentation control will be constructed in accordance with Council requirements and the NSW Department of Housing manual, "Managing Urban Stormwater Soil & Construction" 2004 (Blue Book) prior to any earthworks commencing on site. The concept sediment and erosion control measures are documented in Warren Smith's design drawings C2.01, C2.02 & C2.03 incorporating the various construction methodology staging in order to complete the approved works.

### 4.1. Sediment Basin

one temporary sediment basin has been designed to capture site runoff during construction and have been located at logical points in relation to the existing terrain of the site. Construction of the basins will allow for maximum runoff capture assisted by diversion swales and direct run off to the basin.

Calculations to determine the concept design basin sizes have been based on available geotechnical information regarding soil types and through the use of Soils and Construction Volume 1 Manual.

To ensure the sediment basin is working effectively it will be maintained throughout the construction works. Maintenance includes ensuring adequate settlement times or flocculation and pumping of clean water to reach the minimum storage volume at the lower level of the settling zone. The settling zone will be identified by pegs to clearly show the level at which design storage capacity is available.

The pumped water from the sediment basin can be reused for dust control during construction.

Overflow weirs are to be provided to control overflows for rainfall events in excess of the design criteria which caters for a storm event up to and including the 1% AEP storm event.

The concept sediment basin sizing is noted on drawing C2.01 with reference to the overflow pumps approved under a separate s138 application with Narrabri Shire Council.

### 4.2. Sediment and Erosion Control Measures

Prior to any earthworks commencing on site, sediment and erosion control measures shall be implemented generally in accordance with the Construction Certificate drawings and the "Blue Book" to manage flows from the 1 in 5 year to 1 in 100 year storm event where appropriate. The measures shown on the drawings are intended to be a minimum treatment only as the contractor will be required to modify and stage the erosion and sedimentation control measures to suit the construction program, sequencing and techniques. These measures include:

- A Temporary site security/safety fence is to be constructed around the site and 1m high fencing to proposed sediment basins when a depth of sitting water is expected to exceed 300mm.
- Sediment fencing provided downstream of the disturbed areas, including any topsoil stockpiles.
- Dust control measures including covering stockpiles, installing fence hessian and watering exposed areas.
- Placement of hay bales or mesh and gravel inlet filters around and along proposed catch drains and around existing stormwater inlet pits;
- The construction of a temporary sediment basin as noted above in section 2.2
- Stabilised site access at the construction vehicle entry / exits

All stockpiles and embankment formations shall be stabilised by hydroseeding or hydro mulching on formation

These measures will be incorporated to also mitigate dust or polluted waters entering the overland flow channels surrounding the site.

#### **4.2.1. Stockpiling of material from unexpected find's protocol.**

Upon commencing works related to removal of unexpected finds protocols, the following advise has been received within the Remediation action plan for stockpiling of material associated with these isolated works.

Given the proximity of the site to stormwater drainage systems which discharge to the Namoi River, and to minimise contaminated soil loss in the event of heavy rainfall or flooding, the use of stockpiles should be minimised and where possible should be temporary in nature. Soils that are contaminated or not suitable for reuse at the site should be classified in-situ, then excavated and loaded directly onto trucks for disposal. Soils that are contaminated but can reused at the site (based on the results of additional investigations and validation sampling) should be classified/validated in-situ, then excavated and placed in the final location. Material movements will be tracked via the Materials Tracking System

For non-contaminated ('clean') material, stockpiling will be minimised to the extent practical with material temporarily stockpiled in designated stockpile areas located on elevated ground and not flood prone areas (unless approved otherwise by the projects flood consultant).

Any temporary stockpiles are to be appropriately located and tracked to avoid mixing of difference classes of material (eg soil types, evidence of contamination). Bunding and sediment controls will be installed as appropriate to minimise runoff from stockpiles to surrounding areas. All stockpiles should be formed in a manner that reduces the potential for erosion.

#### **4.3. Wet-Weather Management**

In circumstances of heavy rain sufficient to affect site access and ground conditions the Site Manager and Site Safety Committee representatives should complete a site inspection before work re-commences. The inspection needs to focus on;

- The suitability of pedestrian access to the amenities and into the construction work areas
- The Suitability of access for plant and equipment
- The suitability of ground conditions for plant and equipment to operate
- Nominate the construction zones suitable for work to commence

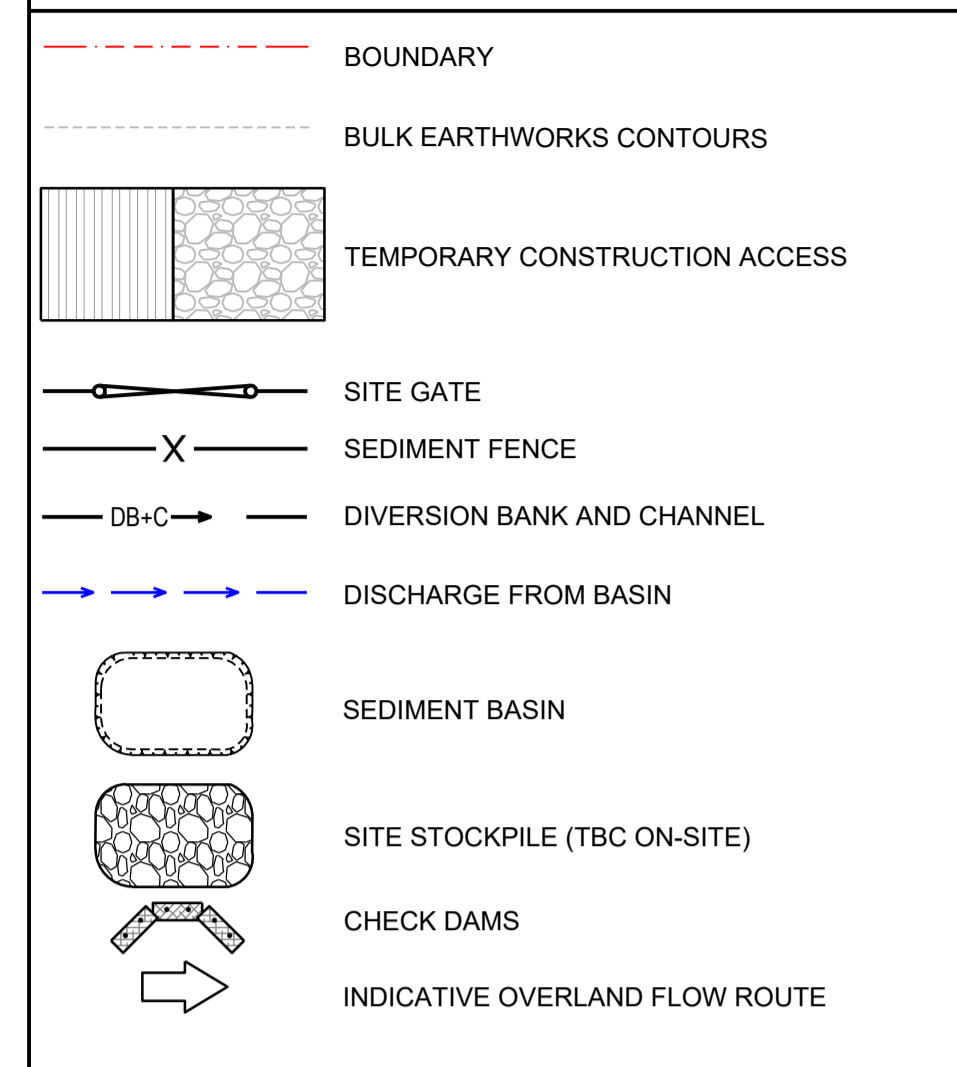
Actions to remediate those areas deemed not suitable for work to commence (de-water; prepare ground conditions and access ways etc.)**SCHEDULE 1 – WSCE CIVIL DRAWINGS**



## SCHEDULE 1 – WSCE CIVIL DRAWINGS



LEGEND



SEDIMENT BASIN NOTE:

SEDIMENT BASINS HAVE BEEN SIZED BY USING PROCEDURES DETAILED IN THE 'BLUE BOOK - MANAGING URBAN STORMWATER' FOR TYPE D BASINS. A SUMMARY OF THE CALCULATED AND PROVIDED VOLUMES IS PROVIDED BELOW.

SEDIMENT BASIN 1:  
REQUIRED VOLUME = 1000 m³ (100-YEAR ARI)  
BASE AREA = 1622 m²  
TOP AREA = 2376 m²  
DEPTH = 0.6 m  
MAX SIDE SLOPE = 1V:5H  
VOLUME PROVIDED = 1200 m³

PROVIDE 5 m WIDE X 0.15 m DEEP SPILLWAY.

SOIL AND WATER MANAGEMENT NOTES:

- 1. ALL EROSION CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH LANDCOM MANAGING URBAN STORMWATER: SOILS AND CONSTRUCTION ('BLUE BOOK').
2. SEDIMENT FENCING TO BE PROVIDED IN ACCORDANCE WITH STANDARD DETAILS AS REQUIRED TO PREVENT SEDIMENT FROM LEAVING THE SITE. TEMPORARY CONSTRUCTION ENTRY/ EXIT SEDIMENT TRAPS ARE TO BE PROVIDED AT ENTRY/ EXIT LOCATIONS.
3. DIVERSION DRAINS TO BE PROVIDED TO DIVERT RUNOFF FROM DISTURBED AREAS TO THE SEDIMENT BASIN.
4. PIT INLET SEDIMENT TRAPS ARE TO BE PROVIDED AT ALL EXISTING STORMWATER INLET PITS LOCATION WITHIN AREA OF WORK.

SEDIMENT CONTROL CONDITIONS:

- 1. SEDIMENT FENCES WILL BE INSTALLED AS SHOWN AND ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER TO CONTAIN COARSER SEDIMENT FRACTIONS INCLUDING AGGREGATED FINES AS CLOSE TO THE SOURCE AS PRACTICABLE.
2. SEDIMENT REMOVED FROM ANY TRAPPING DEVICE WILL BE RELOCATED WHERE FURTHER POLLUTION TO DOWNSTREAM LANDS AND WATERWAYS CANNOT OCCUR.
3. STOCKPILES WILL BE PLACED WHERE SHOWN ON PLAN OR ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER, NOT WITHIN 5m OF ANY HAZARDOUS AREAS INCLUDING LIKELY AREAS OF HIGH VELOCITY FLOWS SUCH AS WATERWAYS, PAVED AREAS & DRIVEWAYS.
4. PIT INLET FILTERS (SEE DETAILS) WILL PREVENT WATER FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS FREE OF SEDIMENT.
5. TEMPORARY SEDIMENT TRAPS WILL BE RETAINED UNTIL AFTER THE LANDS THEY ARE PROTECTING ARE COMPLETELY REHABILITATED.
6. CONTRACTOR TO CONSTRUCT TEMPORARY SEDIMENT BASIN. WATER SHOULD BE ALLOWED TO SETTLE BEFORE DISCHARGE. CONTRACTOR MUST VERIFY THAT WATER QUALITY MEETS AUTHORITIES REQUIREMENTS PRIOR TO DISCHARGE. ACCUMULATED SEDIMENT SHOULD THEN BE REMOVED & DISPOSED OF IN ACCORDANCE WITH ENVIRONMENTAL MANAGEMENT PROCEDURES.

GENERAL NOTES:

- 1. STOCKPILE LOCATION SHOWN INDICATIVELY SHALL BE DETERMINED ON SITE DURING CONSTRUCTION STAGE.
2. IMPACTS AROUND EXISTING TREES TO BE MINIMISED DURING CONSTRUCTION. PROPOSED LEVEL CHANGES IN THE VICINITY OF EXISTING PROTECTED TREES TO BE REVIEWED AND APPROVED BY PROJECT ARBORIST.
3. ALL WORKS AROUND EXISTING TREE ROOT PROTECTION ZONES TO BE CONFIRMED WITH THE PROJECT ARBORIST PRIOR TO COMMENCEMENT ON SITE. REFER TO PROJECT ARBORIST REPORT FOR TREE REMOVAL AND PROTECTION PLAN

CONSTRUCTION WORK MANAGEMENT IN WET-WEATHER EVENTS:

- ALL STOCKPILES TO BE CAPPED
• THE CARPARK MAY BE UTILISED AS TEMPORARY MATERIALS HANDLING AND STORAGE AREA. THE AREA IS TO BE TEMPORARILY STABILISED BY DGB AND SEALED
• DURING WET WEATHER, ALL PLANT AND EQUIPMENT TO BE STORED ON THE CARPARK
• AFTER EVERY RAIN EVENT, SAFETY INSPECTIONS TO BE CARRIED OUT PRIOR TO WORKS COMMENCING

OFF-SITE FLOWS DIRECTED TO EXISTING HEADWALL AND INLET. EXISTING INLET TO BE MAINTAINED FOR THE DURATION OF CONSTRUCTION
EMERGENCY OVERFLOW DIRECTED TO THE EXISTING STORMWATER INLET
WATER PUMP TO BE MAINTAINED FOR THE DURATION OF CONSTRUCTION

INVERT OF THE PUMP TO BE MINIMUM 600 mm ABOVE THE BASE OF THE SEDIMENT BASIN
EMERGENCY OVERLAND FLOW PATH (EXISTING SPOON DRAIN) TO BE MAINTAINED FOR THE DURATION OF CONSTRUCTION
EMERGENCY OVERFLOW WEIR 5m WIDE X 0.15m HIGH

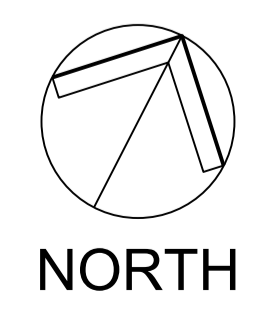
ALL STOCKPILE TO BE CAPPED, TYP.

THIS AREA TO REMAIN UNDISTURBED DURING CONSTRUCTION STAGE 2

DIVERSION BANKS AND CHANNELS TO BE DIRECTED TO THE SEDIMENT BASIN, TYPICAL

ALL VEHICULAR ACCESS TO SITE VIA TEMPORARY CONSTRUCTION ACCESS

Vertical text on the left edge containing project details and drawing information.



NORTH

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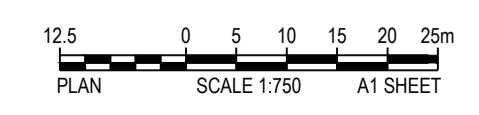


Table with 4 columns: REVISION, AMENDMENT, DATE, and another set of the same columns. Row 1 contains 'A', 'ISSUE FOR CONSTRUCTION', and '31/01/23'.

Client logo: Built NSW GOVERNMENT. Project name: WEE WAA HIGH SCHOOL MAIN WORKS.

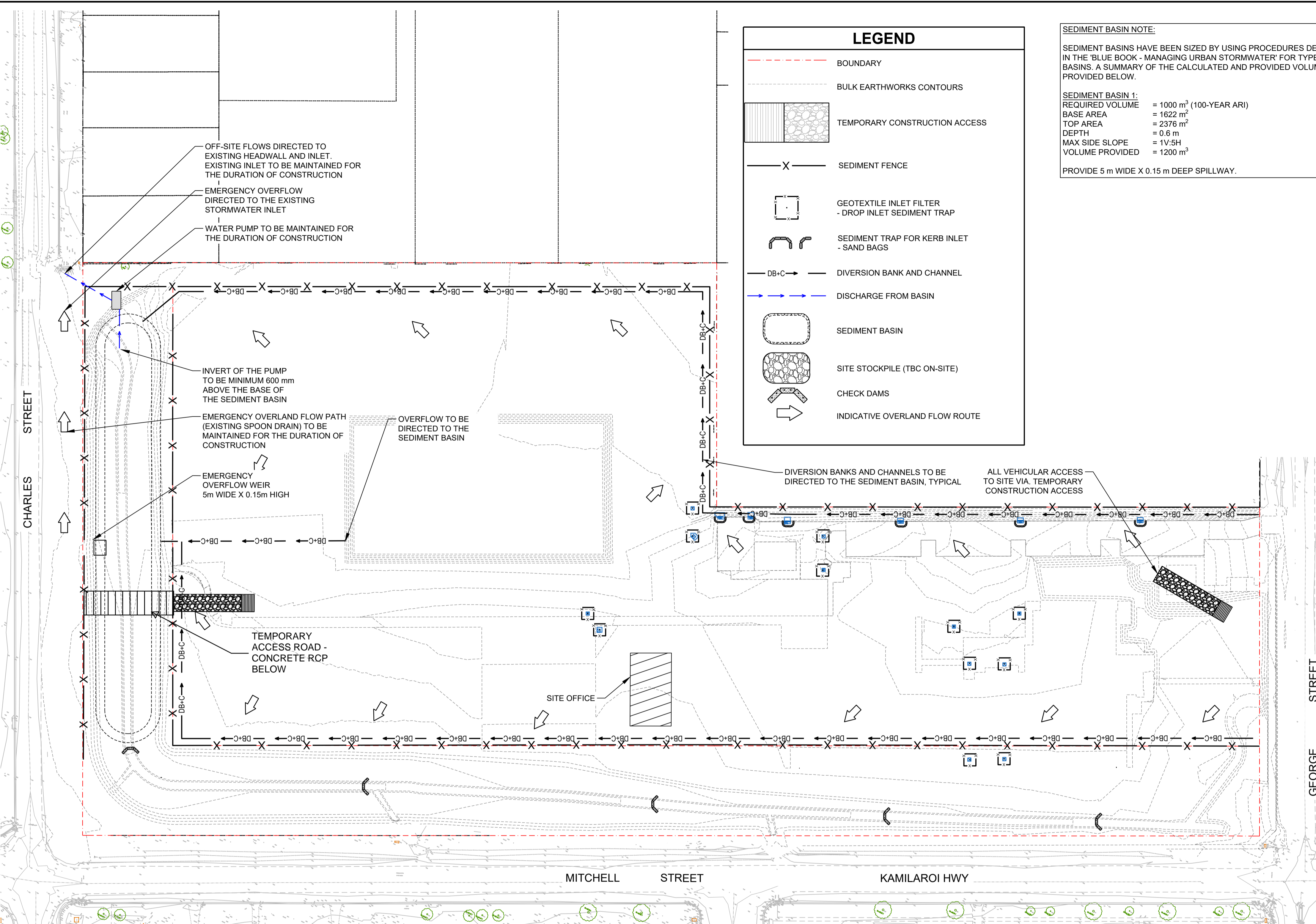
Prepared by: WARREN SMITH CONSULTING ENGINEERS. Includes contact information and logos for GCC and various engineering disciplines.

Title block table containing project number (7490000), drawing title (CONSTRUCTION SOIL & WATER MANAGEMENT PLAN - STAGE 1), drawing number (C2.01), sheet number (A), date (MARCH 2022), and status (ISSUED FOR CONSTRUCTION).









### LEGEND

- BOUNDARY
- BULK EARTHWORKS CONTOURS
- TEMPORARY CONSTRUCTION ACCESS
- X SEDIMENT FENCE
- GEOTEXTILE INLET FILTER  
- DROP INLET SEDIMENT TRAP
- SEDIMENT TRAP FOR KERB INLET  
- SAND BAGS
- DB+C DIVERSION BANK AND CHANNEL
- DISCHARGE FROM BASIN
- SEDIMENT BASIN
- SITE STOCKPILE (TBC ON-SITE)
- CHECK DAMS
- ↗ INDICATIVE OVERLAND FLOW ROUTE

**SEDIMENT BASIN NOTE:**

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PROVIDE 5 m WIDE X 0.15 m DEEP SPILLWAY.

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EMERGENCY OVERFLOW WEIR 5m WIDE X 0.15m HIGH

OVERFLOW TO BE DIRECTED TO THE SEDIMENT BASIN

TEMPORARY ACCESS ROAD - CONCRETE RCP BELOW

DIVERSION BANKS AND CHANNELS TO BE DIRECTED TO THE SEDIMENT BASIN, TYPICAL

ALL VEHICULAR ACCESS TO SITE VIA TEMPORARY CONSTRUCTION ACCESS

DO NOT SCALE FROM DRAWINGS, CHECK & VERIFY ALL DIMENSIONS & LEVELS BEFORE COMMENCEMENT OF ANY WORK.

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SCALE 1:750 A1 SHEET

REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
A	ISSUE FOR CONSTRUCTION	31/01/23			

**Built**

PROJECT  
**WEE WAA HIGH SCHOOL MAIN WORKS**

PREPARED BY

**WARREN SMITH CONSULTING ENGINEERS**  
SINCE 1981.

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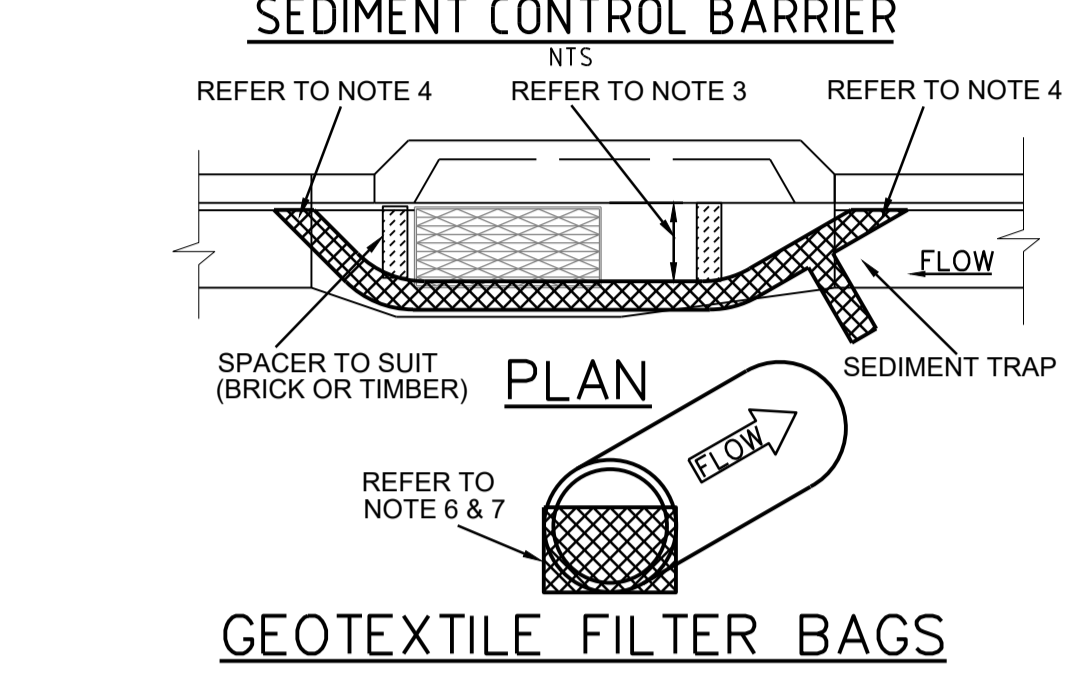
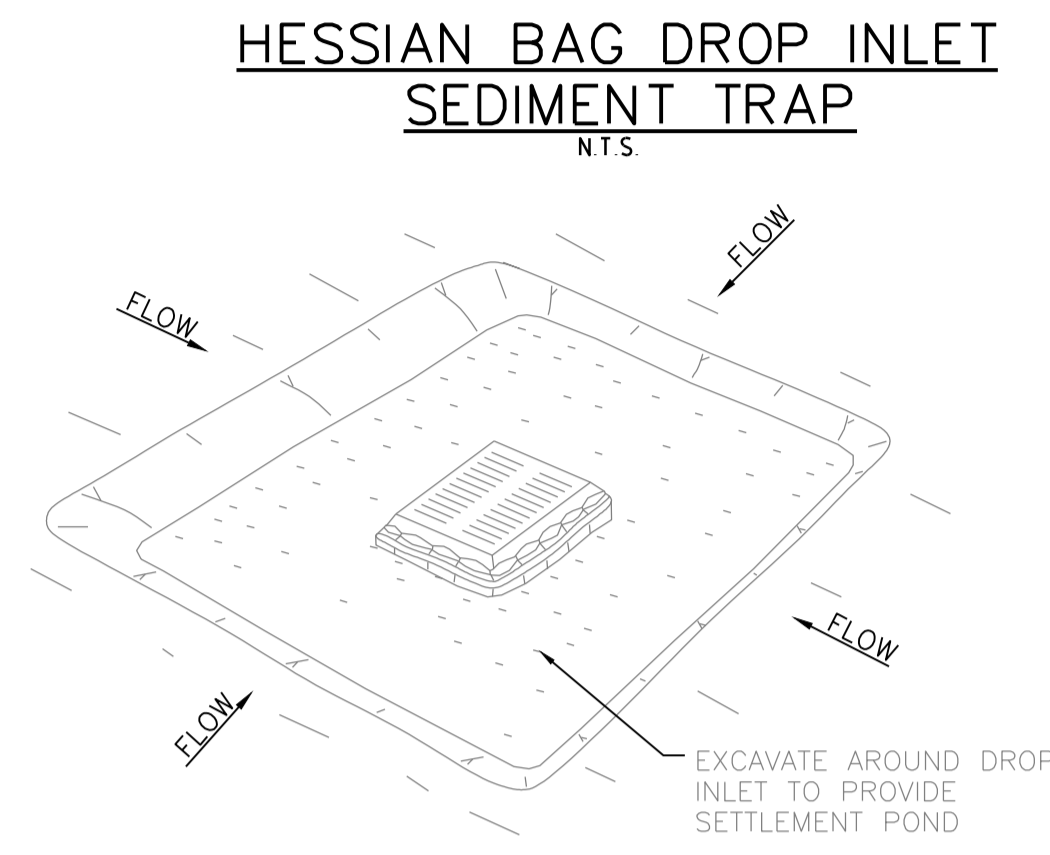
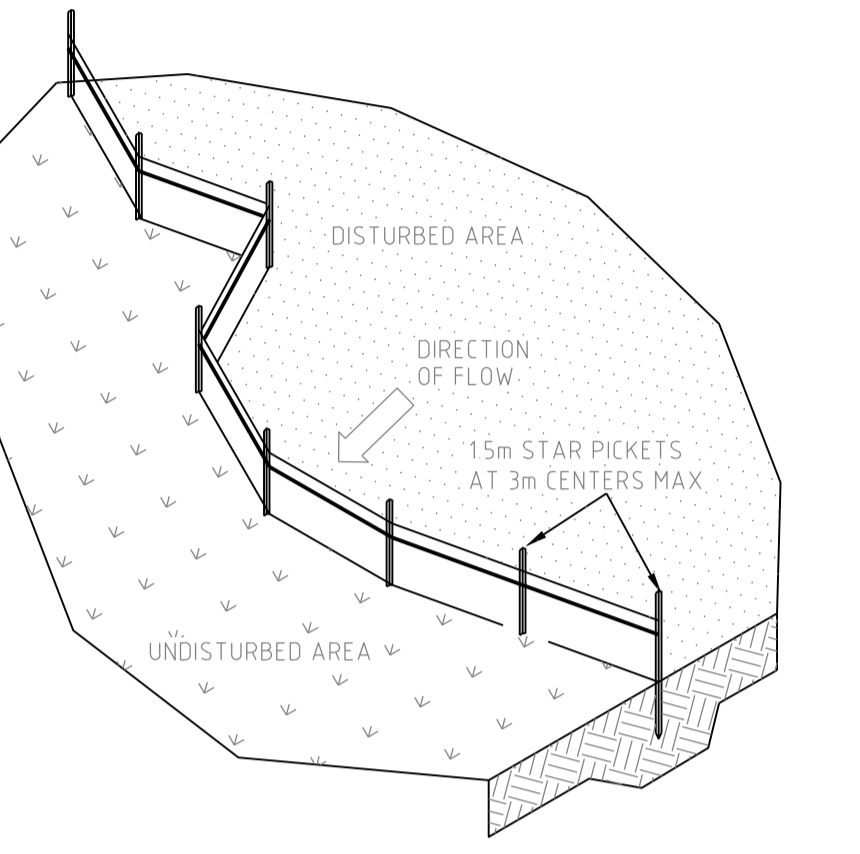
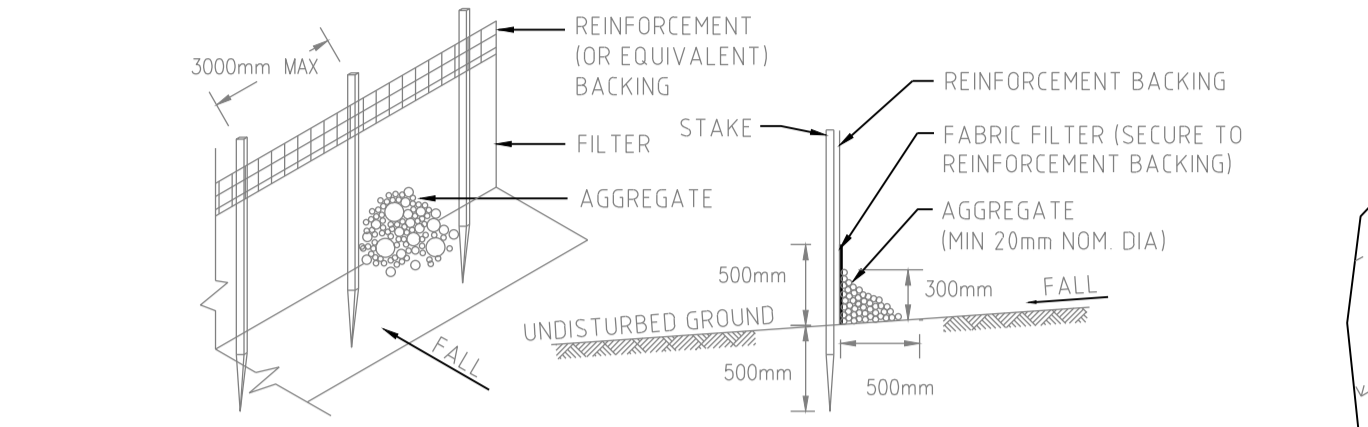
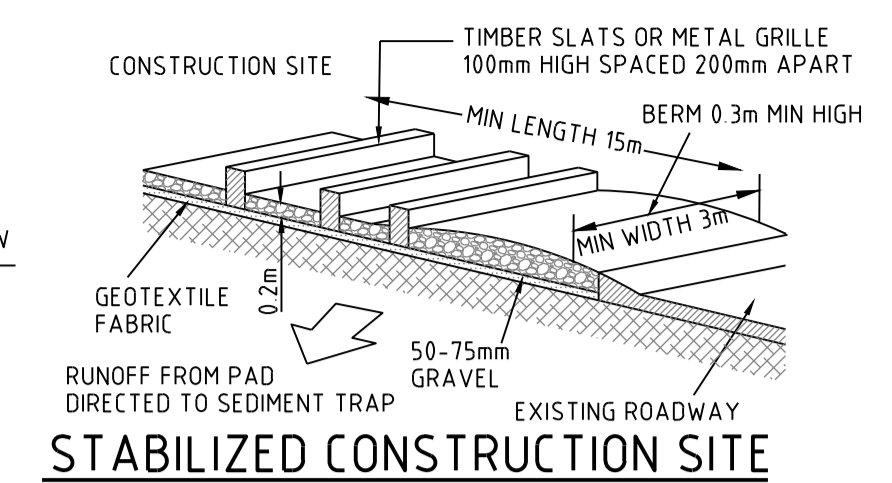
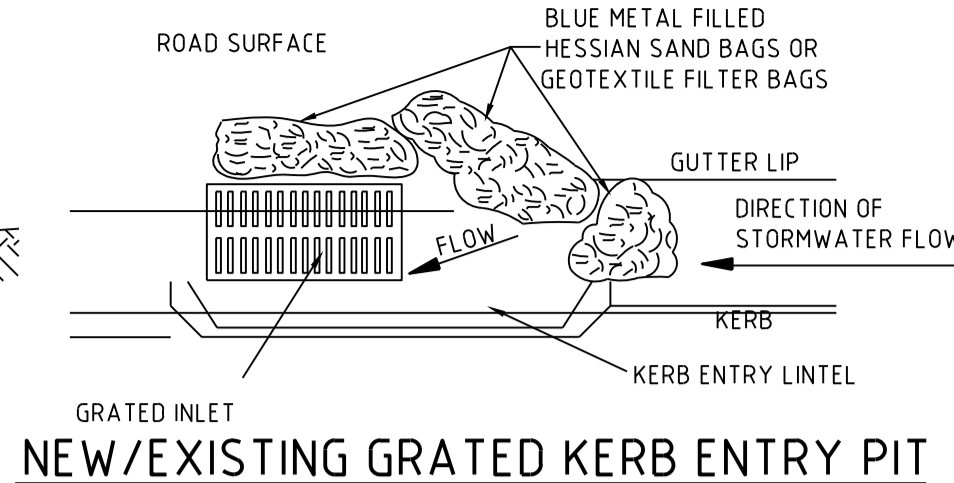
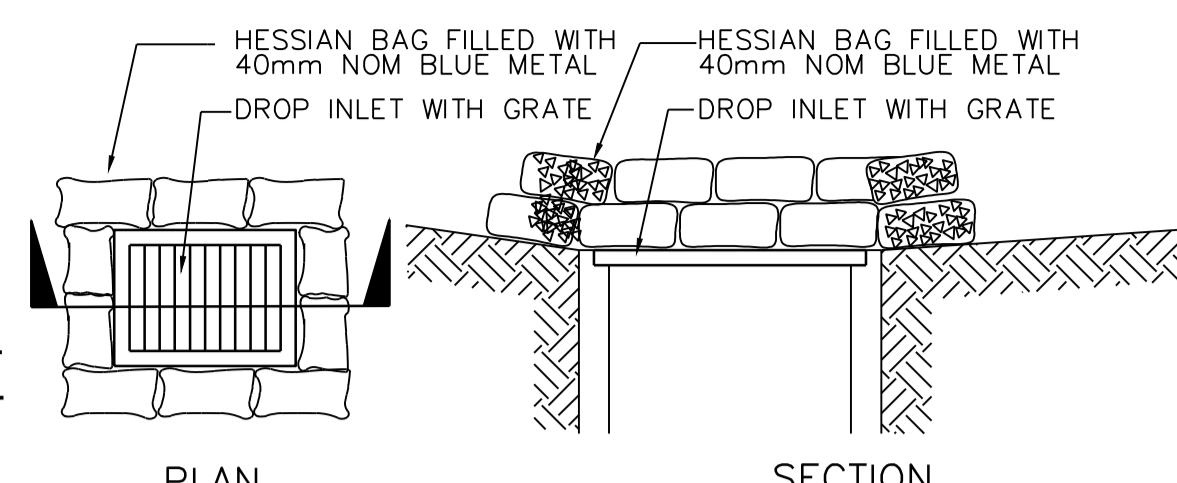
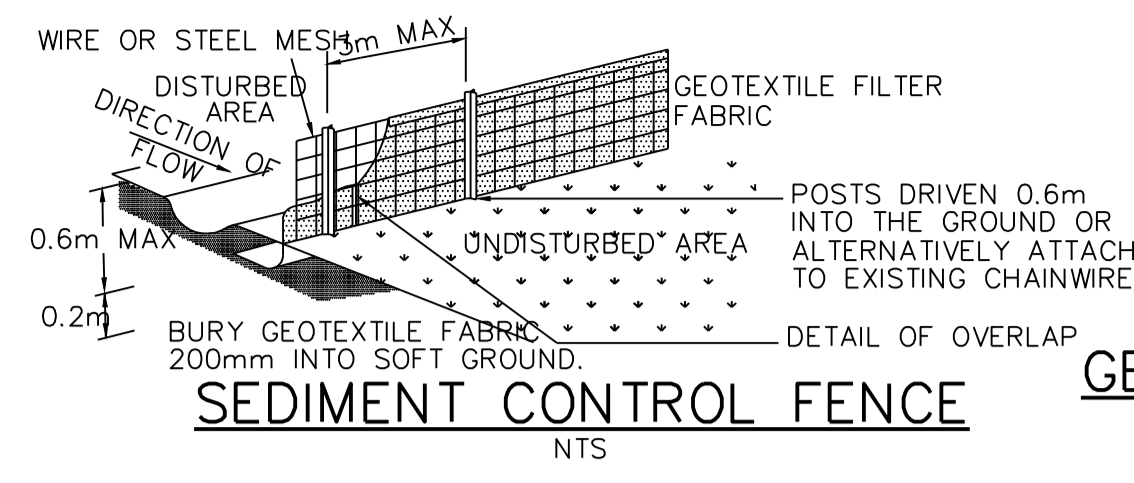
Hydraulic Fire Civil Utilities Infrastructure

**CONSTRUCTION SOIL & WATER MANAGEMENT PLAN - STAGE 3**

SCALE AS SHOWN	DRAWN I.K.	DESIGNED R.X.	CHECKED J.G.	APPROVED J.G.
JOB No. <b>7490000</b>	DRAWING No. <b>C2.03</b>		ISSUE <b>A</b>	
DATE MARCH 2022	STATUS ISSUED FOR CONSTRUCTION			

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 Plot Date: 30/01/2023 09:11:14 Login Name: you





**SITE ENTRY/EXIT NOTES: -**

- ALL VEHICLE ENTRANCES & EXITS TO THE CONSTRUCTION SITE MUST BE STABILIZED TO PREVENT THEM BECOMING A SOURCE OF SEDIMENT. BY PROVIDING A VEHICLE SHAKE AREA. THIS MAY CONSIST OF A TIMBER, CONCRETE OR STEEL SHAKER GRID OR RUBBLE AREA.
- THE VEHICLE EXIT AREA IS TO BE MAINTAINED IN A CLEAN & SERVICEABLE CONDITION DURING THE TOTAL TIME OF USAGE.
- ANY UNSEALED ROAD BETWEEN THE DEVICE AND COUNCILS ROADWAY IS TO BE TOPPED WITH 100mm THICK, 40mm NOMINAL SIZE AGGREGATE.
- PUBLIC ROADS MUST BE KEPT FREE OF DIRT AND MUD. SEDIMENT TRACKED ONTO THE PUBLIC ROADWAY BY VEHICLES LEAVING THE CONSTRUCTION SITE IS TO BE SWEEPED UP IMMEDIATELY.
- FENCES SHOULD BE ERECTED TO ENSURE VEHICLES CAN NOT BYPASS THE STABILIZED ACCESS POINTS, UNLESS COMING FROM A STABILIZED AREA.

**SEDIMENT FENCE DETAIL FOR ROCKY GROUND**  
NTS

- SEDIMENT FENCE NOTES: -**
- CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE OR AT THE TOE OF A SLOPE.
  - DRIVE 1.5 METRE LONG STAR PICKETS INTO GROUND SUFFICIENT TO PROVIDE RIGID SUPPORT, 3 METERS APART. WHERE THERE IS INSUFFICIENT SOIL DEPTH OVER ROCK, HOLES ARE TO BE DRILLED INTO ROCK TO ACCEPT THE STAR PICKETS.
  - ON SOFT GROUND MATERIALS, DIG A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
  - BACKFILL TRENCH OVER BASE OF FABRIC & COMPACT.
  - FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY THE GEOTEXTILE MANUFACTURER. USE A REINFORCEMENT BACKING WITH NON SELF-SUPPORTING GEOTEXTILE FABRIC.
  - JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
  - ON HARD OR ROCKY GROUND, SMOOTH A 500mm WIDE STRIP UPSLOPE OF THE FENCE LINE. TURN THE BOTTOM 500mm OF THE FABRIC UPSLOPE AND ANCHOR IN PLACE WITH SUITABLE AGGREGATE.

WHERE A SEDIMENT FENCE IS CONSTRUCTED DOWN SLOPE FROM A DISTURBED BATTER THE FENCE SHOULD BE LOCATED 1.5 TO 2.0 METERS DOWN SLOPE FROM THE TOE OF THE BATTER.

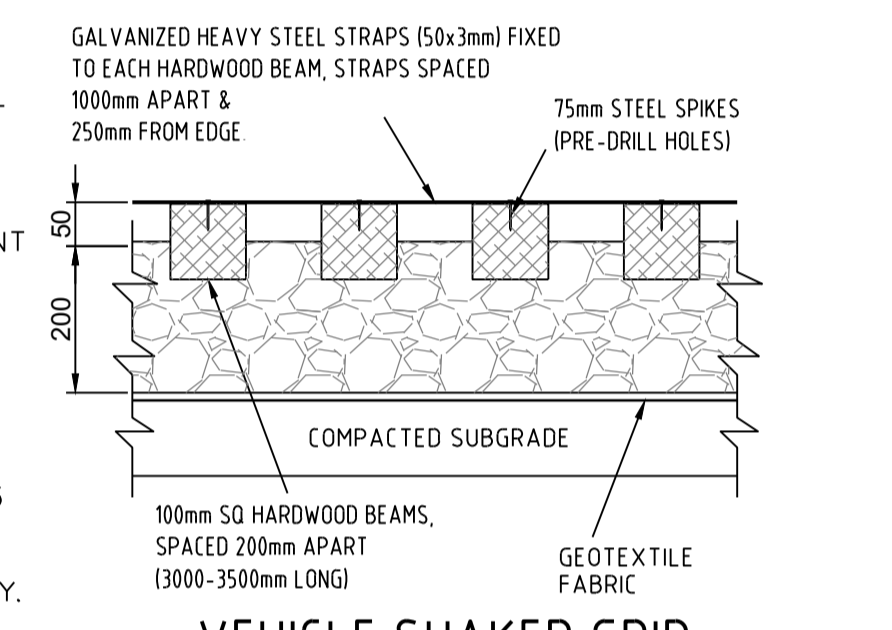
**EXCAVATED SEDIMENT TRAP**  
NTS

- EXCAVATED SEDIMENT TRAP NOTES: -**
- REMOVE THE SEDIMENT WHEN IT HAS ACCUMULATED TO HALF THE DESIGN DEPTH OF THE TRAP AND RESTORE THE TRAP TO ITS ORIGINAL DIMENSIONS.
  - PROVIDE 50 cu.m/Ha OF SEDIMENT STORAGE VOLUME.
  - REFER TO THE MAINTENANCE REQUIREMENTS.

**SEDIMENT BARRIER FOR PITS & PIPES. NOTES: -**

- SLEEVES ARE TO BE MADE FROM GEOTEXTILE FABRIC LONGER THEN THE LENGTH OF THE INLET PIT.
- FILL SLEEVE WITH 5 OR 10mm CLEAN GRAVEL.
- PLACE THE SLEEVE AT THE OPENING OF THE KERB INLET LEAVING A 100mm GAP TO ACT AS AN EMERGENCY OVERFLOW.
- SLEEVE MUST BE PLACED AGAINST THE KERB TO PREVENT BYPASS.
- FIT SLEEVE TO ALL INLETS DOWNSTREAM OF THE WORKS.
- FOR DRAINAGE WORKS FIT GEOTEXTILE FABRIC OR GEO BAGS TO UPSLOPE FACE OF ALL OPEN PIPES.
- MAINTAIN AN OPENING AT THE TOP OF THE PIPE OF 1/3 OF THE PIPE DIAMETER.
- THE FILTERS ARE TO BE CLEANED AND MAINTAINED DAILY.

ALL CARE SHOULD BE TAKEN TO MINIMIZE SEDIMENT REACHING THE STORMWATER SYSTEM BY MINIMIZING EXCAVATION WORKS AND PREVENTING EXCESS WATER FLOW THROUGH WORKS.



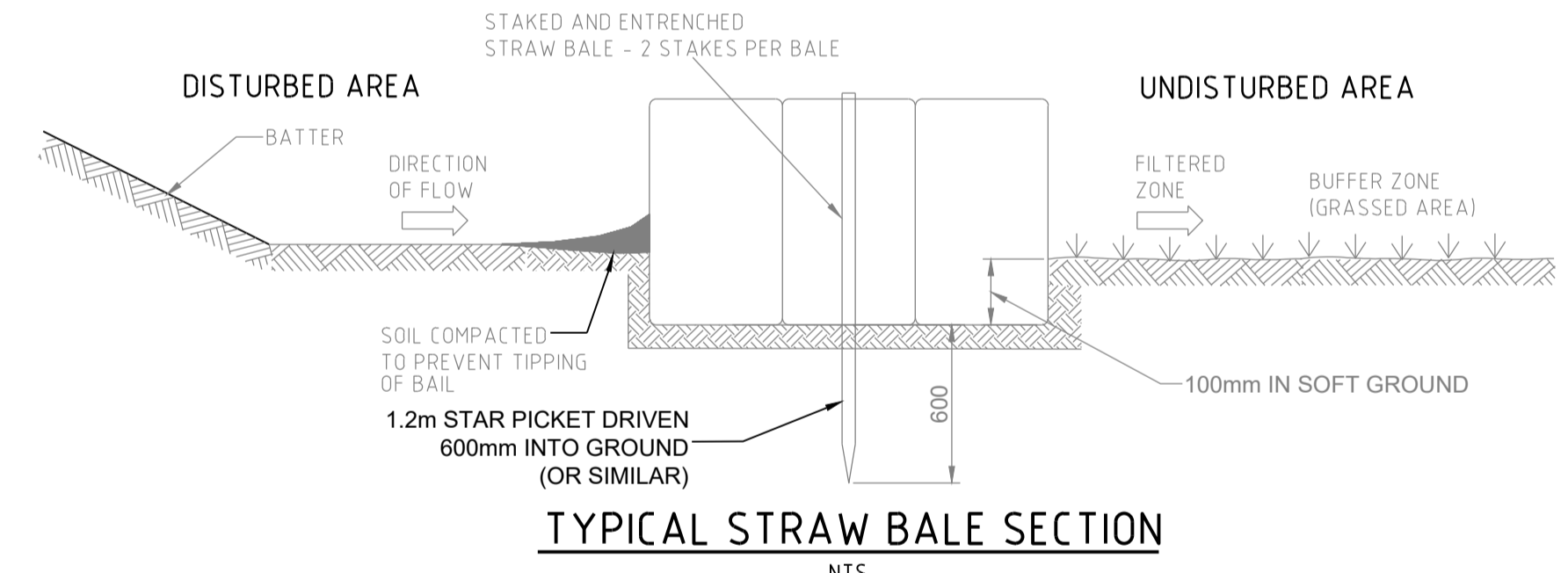
**VEHICLE SHAKER GRID**  
NTS

**SITE ENTRY/EXIT CONSTRUCTION NOTES: -**

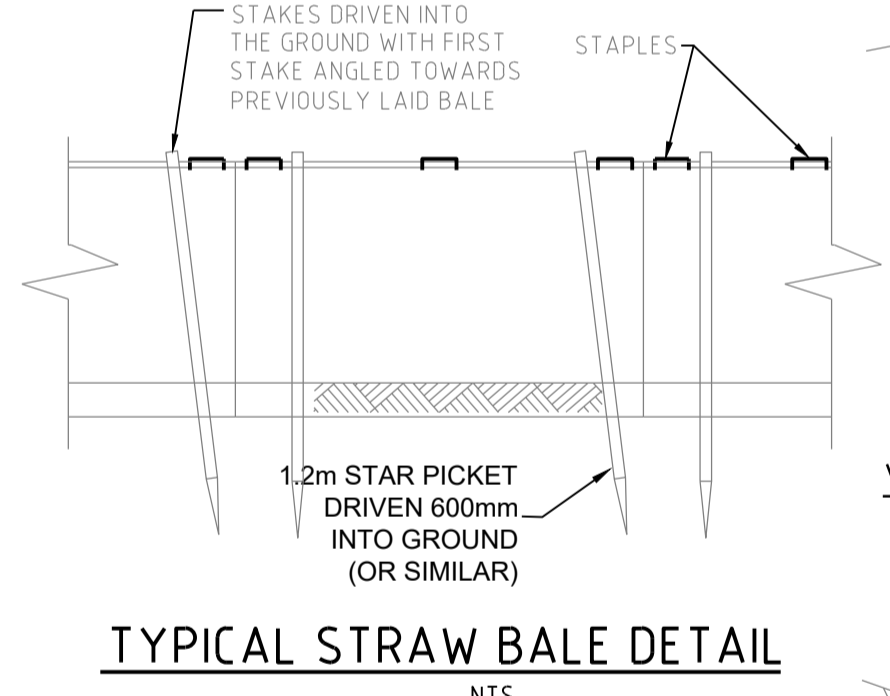
- STRIP TOP SOIL & LEVEL SITE. PROVIDE CHAIN DRAIN AT SIDES TO DIRECT RUNOFF WATER TO SEDIMENT TRAPS.
  - COMPACT SUBGRADE AND REMOVE ANY HIGH POINTS.
  - COVER AREA WITH GEOTEXTILE FABRIC. THIS MAY BE WOVEN OR NEEDLE PUNCHED PRODUCT WITH A MINIMUM CBR BURST STRENGTH (AS3706.4-90) OF 2500 N.
  - CONSTRUCT 200mm THICK RUBBLE PAD OVER GEOTEXTILE USING ROAD BASE OR 30-40mm AGGREGATE. MINIMUM LENGTH 15 METRES OR TO BUILDING ALIGNMENT. MINIMUM WIDTH 3 METRES. CONSTRUCT 300mm HIGH HUMP IMMEDIATELY WITHIN BOUNDARY TO DIVERT WATER TO A SEDIMENT TRAP.
  - WHERE GRIDS ARE USED FIRST CONSTRUCT A 150 THICK PAD OVER GEOTEXTILE FABRIC. LEVEL THIS IN BOTH DIRECTIONS. LOWER GRID ON TO THE PREPARED BASE AND ENSURE THAT NO PART IS SITTING ON ANY HIGH POINTS. BACKFILL THE SPACES BETWEEN THE GRIDS TO WITHIN 50mm OF THE TOP.
- PROVIDE RAMPS AT ENDS AND SIDE OF GRIDS. IF DEPRESSIONS OCCUR IN THE RAMPS DURING USE. ADD ADDITIONAL MATERIAL.

**MAINTENANCE REQUIREMENTS: -**

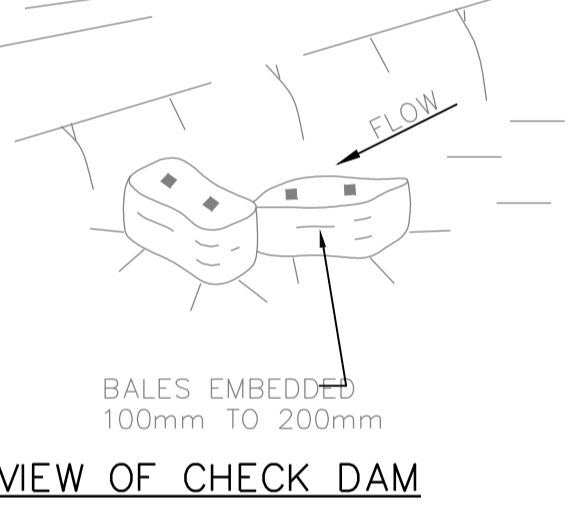
- ACCUMULATED SILT & SEDIMENT MUST BE REMOVED AT REGULAR INTERVALS AND AFTER EACH MAJOR STORM.
- SILT & SEDIMENT MUST BE REMOVED FROM OFF THE SITE OR TO A COUNCIL APPROVED LOCATION WITHIN THE SITE, WHERE IT WILL NOT ERODE.
- THE SEDIMENT FENCES, BALES & TRAPS SHALL BE REGULARLY INSPECTED, ESPECIALLY AFTER RAIN AND KEPT IN GOOD REPAIR AND FUNCTIONING CONDITION AT ALL TIMES.
- CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT SEDIMENT, EROSION & WATER POLLUTION SHALL BE MINIMIZED.
- THE SEDIMENT TRAPS SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE CONSTRUCTION AREA HAS BEEN PROPERLY STABILIZED.



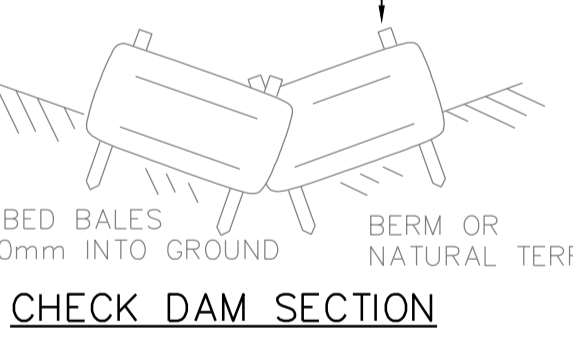
**TYPICAL STRAW BALE SECTION**  
NTS



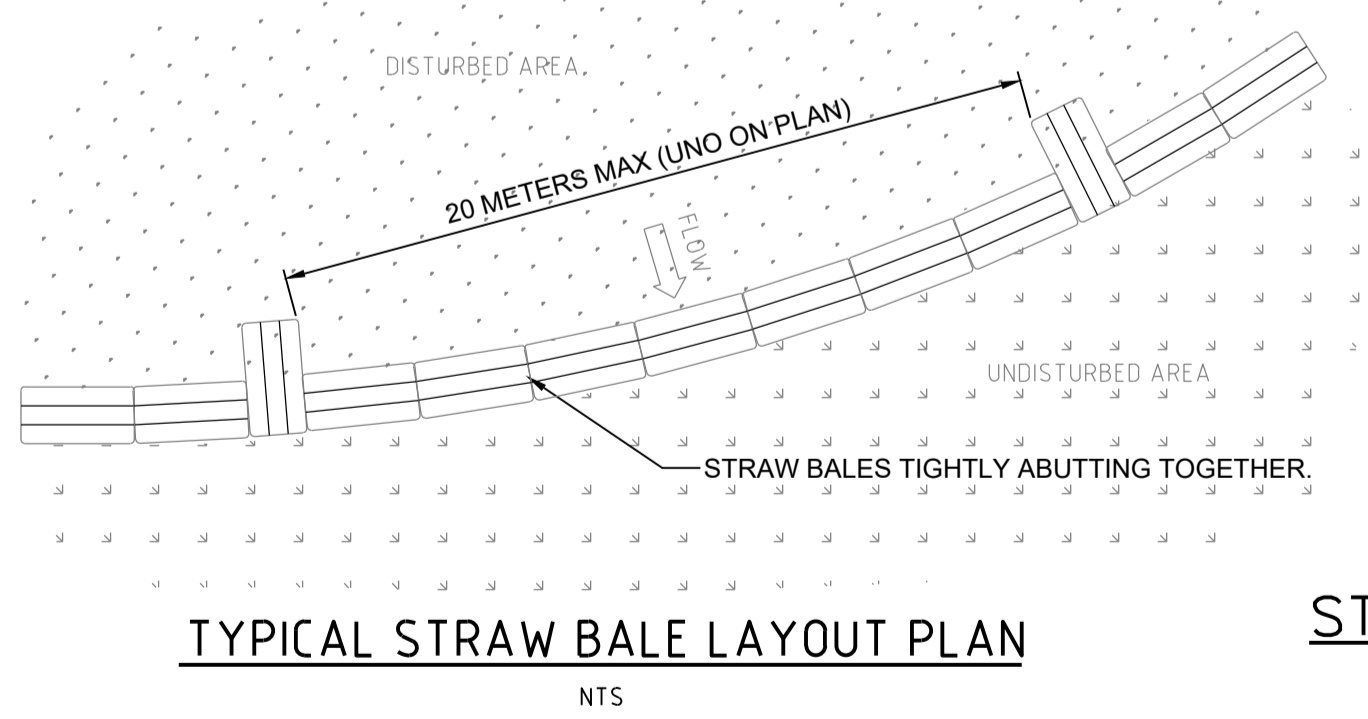
**TYPICAL STRAW BALE DETAIL**  
NTS



**VIEW OF CHECK DAM**  
NTS



**CHECK DAM SECTION**  
NTS



**TYPICAL STRAW BALE LAYOUT PLAN**  
NTS

**CHECK DAM SPACING TABLE**

LONGITUDINAL SPACING GRADE (%)	(METERS)
0 - 5	40
5 - 10	30
10 - 15	20
GREATER THAN 15	10

**STRAW BALE CHECK DAM DETAILS**  
NTS

- STRAW BALE NOTES: -**
- CONSTRUCT STRAW BALE FILTER AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE OR AT THE TOE OF A SLOPE.
  - PLACE BALES LENGTHWISE IN A ROW WITH ENDS TIGHTLY ABUTTING. USE STRAW TO FILL ANY GAPS BETWEEN BALES. STRAWS TO BE PLACED PARALLEL TO GROUND.
  - MAXIMUM HEIGHT OF FILTER IS ONE BALE.
  - ON SOFT MATERIALS, EMBED EACH BALE IN THE GROUND 75mm TO 100mm AND ANCHOR WITH TWO 1.2 METRE STAR PICKETS. ANGLE THE FIRST STAKE IN EACH BALE TOWARDS THE PREVIOUSLY LAID BALE. DRIVE STAKES 600mm INTO THE GROUND AND FLUSH WITH THE TOP OF THE BALES.

WHERE A STRAW BALE FILTER IS CONSTRUCTED DOWN SLOPE FROM A DISTURBED BATTER THE BALES SHOULD BE LOCATED 1.5 TO 2.0 METERS DOWN SLOPE FROM THE TOE OF THE BATTER.

WHERE REQUIRED WRAP GEOTEXTILE FILTER FABRIC AROUND BALES AND STAPLE IN POSITION.

**DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR**

REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
1	ISSUE FOR 100% DETAILED DESIGN	03/03/22			
2	CONTRACT SET - FOR REVIEW	02/08/22			
3	REVISED CSWMP TO SUIT SSDA CONDITIONS	02/09/22			



**WEE WAA HIGH SCHOOL MAIN WORKS**

PREPARED BY

**WARREN SMITH CONSULTING ENGINEERS**  
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Hydraulic Fire Civil Utilities Infrastructure

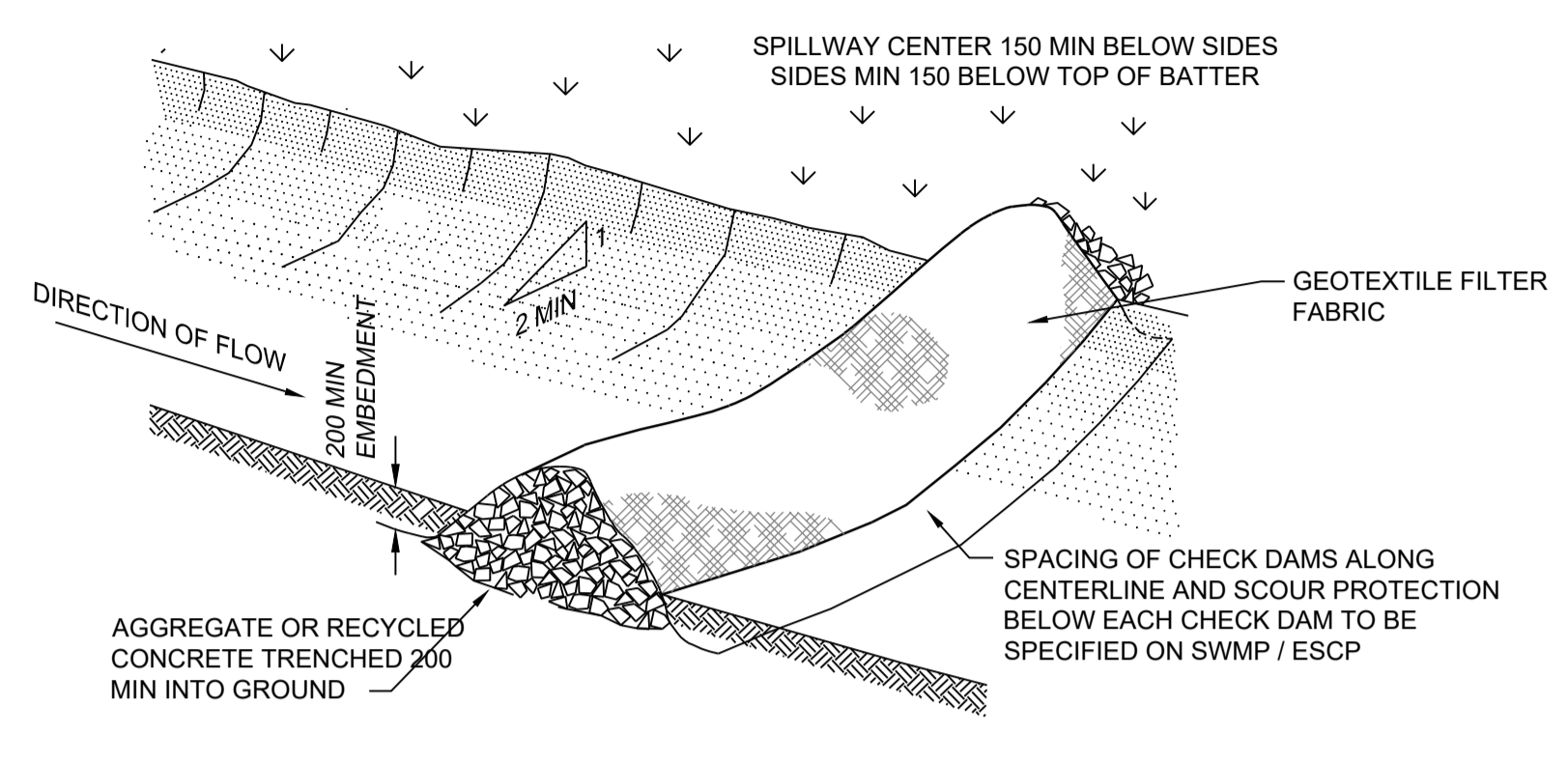
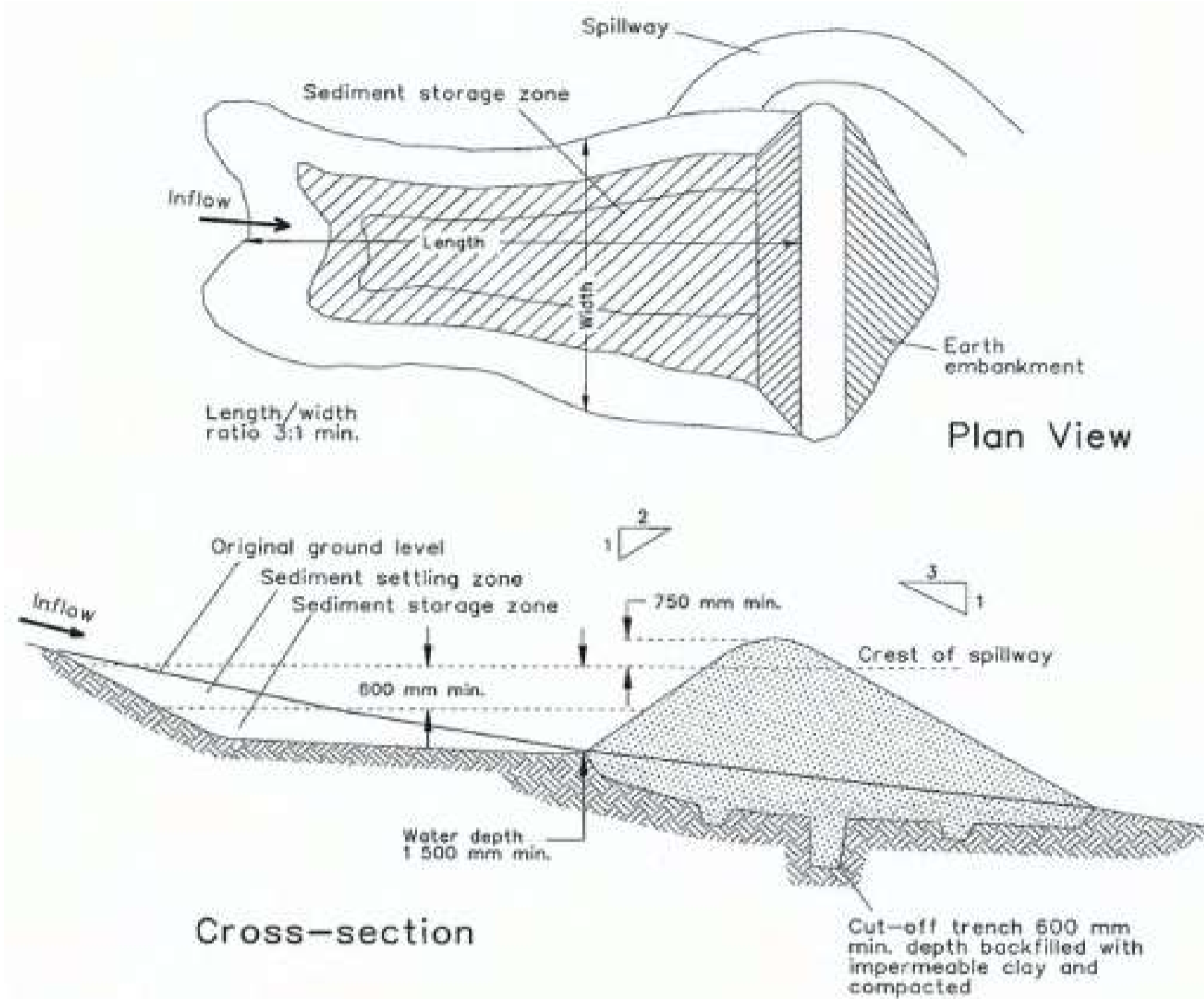
**CONSTRUCTION SOIL AND WATER MANAGEMENT DETAILS**  
**SHEET 1**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
AS SHOWN	N.G.	N.G.	J.G.	--
JOB No.	DRAWING No.		ISSUE	
7490000	C2.02		3	
DATE	STATUS			
MARCH 2022	CONTRACT SET - FOR REVIEW			

**PRELIMINARY - NOT FOR CONSTRUCTION**

File: X:\16000018\_A14\_Cad File\17490000\Drawings\AutoCAD\DWG\Civil\2022\02\_Sediment & Erosion Control Details.dwg  
Date: 02/09/2022 15:30:01  
User: jru





**ALTERNATIVE CHECK DAM DETAIL - ROCK**  
NTS

**Construction Notes**

1. Remove all vegetation and topsoil from under the dam wall and from within the storage area.
2. Construct a cut-off trench 500 mm deep and 1,200 mm wide along the centreline of the embankment extending to a point on the gully wall level with the riser crest.
3. Maintain the trench free of water and recompact the materials with equipment as specified in the SWMP to 95 per cent Standard Proctor Density.
4. Select fill following the SWMP that is free of roots, wood, rock, large stone or foreign material.
5. Prepare the site under the embankment by ripping to at least 100 mm to help bond compacted fill to the existing substrate.
6. Spread the fill in 100 mm to 150 mm layers and compact it at optimum moisture content following the SWMP.
7. Construct the emergency spillway.
8. Rehabilitate the structure following the SWMP.

**SEDIMENT BASIN (TYPE D SOILS) - MANAGING URBAN STORMWATER - SD-4**  
NTS

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REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
1	REVISED CSWMP TO SUIT SSSA CONDITIONS	02/09/22			

CLIENT

PROJECT

**WEE WAA HIGH SCHOOL MAIN WORKS**

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Hydraulic Fire Civil Utilities Infrastructure

TITLE				
<b>CONSTRUCTION SOIL AND WATER MANAGEMENT DETAILS SHEET 2</b>				
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
AS SHOWN	R.X.	R.X.	J.G.	--
JOB No.	DRAWING No.		ISSUE	
7490000	C2.03		1	
DATE	STATUS			
MARCH 2022	CONTRACT SET - FOR REVIEW			