2025

CONSTRUCTION MANAGEMENT PLAN GUIDE

hornsby.nsw.gov.au

HORNSBY SHIRE COUNCIL

Hornsby Shire Council has engaged with LOKA Consulting Engineers Pty Ltd to develop this guidance.

The purpose of this document is to provide guidance to consultants for the preparation of a construction management plan.

This is a mock scenario of a development involving demolition, excavation and construction. The information contained within the guide outlines the written procedures and plans that are required to be provided to Council to achieve a compliant outcome when submitting construction management plans with development applications, construction certificates and to satisfy conditions of consent.

There is no development occurring or proposed at the site described in this guide. The content of this document is for guidance purposes only as described above.

LOKA CONSULTING ENGINEERS PTY LTD

Office: 14A, 8 Avenue of the Americas, Newington NSW 2127

Phone: 02 8065 9689

Fax: 02 8065 9690

Mobile: 0404 142 063

Email: info@lceng.com.au

Web: www.lceng.com.au

LOKA CONSULTING ENGINEERS
www.lceng.com.au

TABLE OF CONTENTS

1. INTRODUCTION

Loka Consulting Engineers Pty Ltd has been engaged by Hornsby Shire Council to provide a mock construction management plan (CMP) as a guidance resource that will assist consultants with the preparation of CMPs associated with development applications and conditions of consent.

The site selected for this mock CMP is the Hornsby Shire Council office, located 296 Peats Ferry Road Hornsby NSW.

The location for this mock CMP is 296 Peats Ferry Rd, Hornsby (Figure1-1 and Figure1-2).

The site is bounded by:

- No. 19 & 7 Jersey St on the East,
- Peats Ferry Rd on the West,
- No. 298 & 300 Peats Ferry Rd on the North, and;
- Hornsby local court on the South.

The mock development proposal is described as the demolition of existing structures, excavation and construction of a 3-storey office building with 2 levels basement for carparking with a site area of 4,017 m^2.

Figure 1-1 Proposed site location (Source: SIX map)

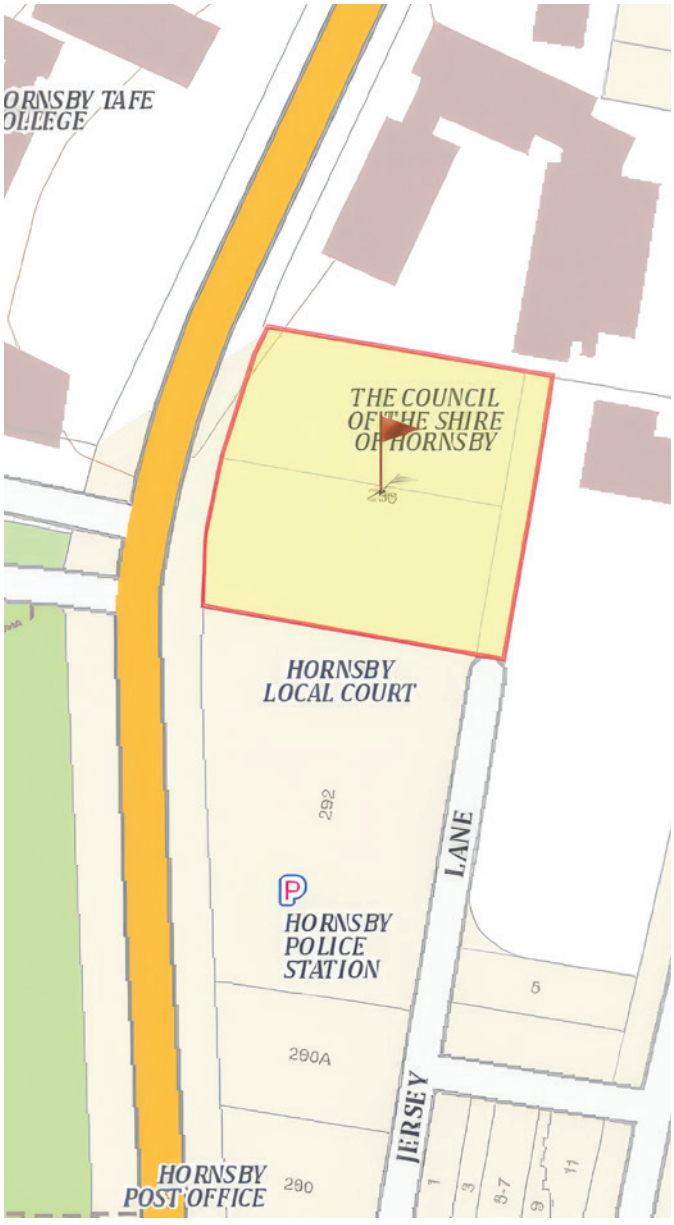


Figure 1-2 Proposed site location (Source: SIX map)

2. SITE ACCESS AND PARKING

2.1. SITE ENTRANCE AND EXIT

- All signage must be erected for the duration of work as per the attached Traffic Control Plan (Refer to Appendix C).
- All construction vehicles will enter and exit the site via the existing driveway on Peats Ferry Rd.
- Vehicles are NOT permitted to park or stop in front of the entrance to the site or any driveway of neighbouring premises.
- Material deliveries and waste collection will be undertaken within the site, unless otherwise approved through a work zone permit.
- To ensure there will be no trucks queuing on Peats Ferry Rd or nearby roads, the construction site manager will communicate with all vehicles attending the site including concrete trucks and delivery vehicles via radio.
- Where required, a work zone permit must be obtained from Council local authorities' prior construction.

2.2. PEDESTRIAN AND CYCLIST ACCESS

During all stages of construction, work will be carried out completely within the subject site.

Construction vehicles will be traffic controlled in accordance with the Traffic Control Plan provided within Appendix C1-C3.

All concrete or construction trucks must:

1. Limit the speed to 40 km/hr or less on Peats Ferry Rd.
2. Follow instructions of the construction site manager.
3. Not obstruct pedestrian access.

> Neighbours' driveways to be kept clear at all times during construction period. All concrete and construction trucks to avoid parking in front of any driveways.

2.3. SAFE PEDESTRIAN MANAGEMENT

- One certified traffic controller is required on Peats Ferry Rd during all deliveries and while construction vehicles enter and exit the site.
- It is the traffic controller's responsibility to ensure that all signage is erected in a manner that poses no hazard to pedestrians.
- The Traffic Controller warning signs must be covered outside working hours and on days where traffic controllers are not required to be present.
- "Pedestrians watch your steps" signages must be on displayed as shown on Appendix C Traffic Control Plan.
- The footpath and nature strips in front of the site must always be kept clear.
- Pavement surfaces adjacent to ingress and egress points are to be swept and kept clear of earth, mud and other materials likely to pose a hazard to pedestrians.
- The site supervisor is responsible for monitoring pedestrian management throughout and at the end of the working day.

2.4. VEHICLE MOVEMENT PLAN

- Truck associated with the work site will approach and depart the site in accordance with the travel route map provided in Appendix B.
- Construction vehicles will approach the site from the north along Peats Ferry Road and perform a left hand turn into the site (or Council approved work zone).
- Construction vehicles will exit the site by turning left onto Peats Ferry Road (or merging from a Council approved work zone) and continue along to the intersection with the Pacific Highway.
- The proposed location for layover area for large trucks during all stages of work is beside Storey Park on Lodge Street Hornsby, located on the vehicle travel path to reach the site (Please refer to Appendix B).
- Trucks must park in accordance with the signposted parking restrictions and NSW Road Rules, not obstructing any local resident access and ensure traffic flow is maintained.
- Neighbours' driveways to be kept clear at all times.

2.5. WORK ZONE

TIP: Approval of a CMP is not an approval for a work zone. If you need a work zone permit, a separate application must be submitted using Councils online application portal.

A work zone extending approximately 25m in length at the frontage roadway of the site is required for construction stage (Refer to Appendix C-3).

> Where a work zone is required, applications are to be submitted to Council for approval. A work zone approval is required prior to any works on the affected road reserve. Work specific traffic control plans are to be submitted with work zone applications.

2.6. EMERGENCY VEHICLE ACCESS

Emergency vehicle access to and from the site will be available during hours of work and a traffic controller is required to assist with access from the street.

2.7. SCHOOL ZONE

TIP: Check for schools within the vicinity of any development site and make sure deliveries occur outside peak times.

There are several schools located within a 1.5km vicinity of the proposed site, including Blue Gum Community School, Hornsby Girls' High School, and Asquith Boys High School.

> Construction vehicles are NOT permitted to arrive or depart from the site during the school zone period from 8:00am-9:30am and 2:30pm-4:00pm on school days.

Figure 2-4 Schools at site vicinity (from Google maps)

2.8. TEMPORARY CONSTRUCTION (SHORT TERM SIGNAGE)

During construction, signage will be in place in both directions of Peats Ferry Rd to provide warning to pedestrians and drivers that there is a construction site ahead. All the construction signage and spacing must be according to the Australian Standard 1742.3.

These signs are as following:

1. Work ahead
2. Prepare to stop
3. Traffic controller ahead
4. Pedestrians watch your step
5. End road work
6. Truck crossing or entering

2.9. LONG TERM SIGNAGE

No long-term signage will be required.

2.10. PUBLIC TRANSPORTATION

- It takes 1-minute walking (100m) from the site to Hornsby Park, Pacific Hwy, bus stop (refer to **Figure 2-1**).
- It takes 5 minutes walking (400m) from the site to Hornsby train station (refer to Figure 2-2).
- Refer to Transport NSW for accurate public transport details.

2.11. CAR PARKING FOR CONSTRUCTION WORKERS

- Workers are encouraged to use public transport, where feasible.
- Carpooling is also encouraged for construction workers and personnel attending the site.
- Neighbours' driveways must be always kept clear during all stages of work.
- Once constructed, the basement can be utilised for construction worker car parking.

> All construction worker vehicles that park on the street will be in accordance with the signposted parking restrictions, should be in accordance with the signposted parking restrictions and NSW Road Rules, not obstructing any local resident access.

Figure 2-4 Limited- hour Kerb side parking spaces along Peats Ferry Rd Street (from Google maps)

3. PRECAUTIONS AND PROTECTIONS

3.1. PUBLIC NOTIFICATION

A letter will be mailed to the adjoining property owners to inform them about the development works in vicinity to their property seven (7) days prior to commencement of site works.

Prior to demolition, the applicant must erect a sign at the front of the site to notify the public about the proposed development. The following information must be displayed on the signage:

- Unauthorised entry of the work site is prohibited.
- Contact information for developers, builder, private certifier and any emergency details during and outside work hours.
- The name, address and telephone number of the Principal Certifying Authority.
- The development consent approved hours of work.

3.2. PRECAUTION FOR PROTECTING ADJOINING PROPERTIES

Public areas in the vicinity of the site must be kept clear of any vehicles, all building materials and machinery and waste/ waste containers.

Prior to commencement of any site works, a 'Dilapidation Report' detailing the structural condition of the adjoining properties shall be prepared by a suitably qualified consultant and submitted to the Principal Certifier.

A copy of the 'Dilapidation Report' will be provided to Council.

The person having the benefit of the development consent must, at their own cost, rectify any damage caused to other properties during construction of the project.

3.3. PRECAUTION FOR PROTECTING COUNCIL PROPERTIES

During all stages of work, care must be taken to protect Council's infrastructure, including street signs, footpath, kerb, gutter, drainage pits etc. Protective measures shall be maintained during all stages of work.

Any damage to Council's infrastructure shall be repaired in accordance with Council's specifications and at no cost to Council.

> Approval from Council shall be obtained prior to closure of any Council's land.

3.4. PROTECTION OF STORMWATER PIPES AND COUNCIL INFRASTRUCTURE

The building contractor shall provide adequate protection to all Council assets prior to work commencing and throughout all stages of work.

The building contractor shall ensure that all stormwater pipes within trafficable areas are protected from any damage that may occur during all stages of work.

The public footpath will be maintained in a safe, serviceable condition for the entirety of the development.

Any damages sustained to Council assets, stormwater pipes, the footway etc. will be repaired at the earliest opportunity to an acceptable standard and/or Council's satisfaction.

3.5. CONTROLLING SEDIMENT FROM VEHICLES

- A shaker grid is required at the entry/exit of the site.
- All vehicles leaving the site must be hosed down before exiting the site.
- Should any sediment, mud or dirt be spilled on the roads by the vehicles exiting the site, the site manager will be responsible for arranging cleaning.
- Run-off from washing down vehicles shall be directed to the sediment control system provided within the site.
- Pavement surfaces adjacent to ingress and egress points including the road, are to be swept and kept clear of earth, mud and other materials at all times and at the end of each working day.
- A street 'scrub and dry' service shall be in operation during all stages of works.

3.6. PROTECTION OF TREES

Tree protection measures are to be installed in accordance with the Arborist report tree protection plan.

TIP: An arborist report will include details of the Tree Protection Plan (TPP). Attach a copy of any Arborist Report that was prepared with the approved development application as an Appendix.

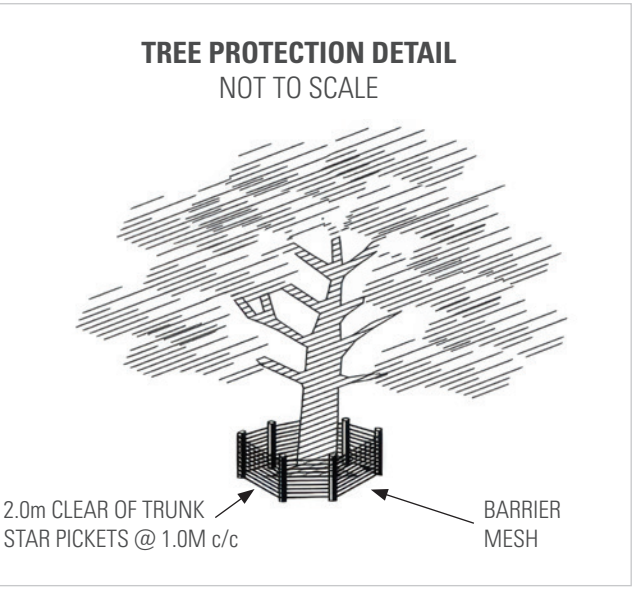
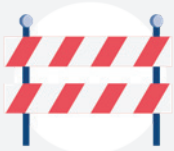


Figure 3-1 Illustration for Tree Protection

3.7. TEMPORARY FENCING AND HOARDINGS



TIP: You must submit an application to Council to install a hoarding using Councils online applications portal.

The site must be enclosed by a 1.8m high or above security fence, erected wholly within the confines of the site. The fencing must be erected before the commencement of any demolition work and maintained thereafter.

If the work involved in the demolition or construction of a building is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient, or building involves the closure of a public place, a hoarding or fence shall be erected. Where a hoarding is required, the principal contractor must submit an application with Council.

4. HOURS OF WORK

Hours of work, for all stages, will be in accordance with those specified by Council in the development consent.

Table 4-1 Operation Hours

	Days	Time
Construction Work	Mondays - Saturday	7.00am - 5.00pm
	Sundays and Public Holidays	No Work

Notes:

- No work is permitted on Sundays and Public holiday.
- Public notification of work commencing in accordance with any development consent condition and this plan.

5. CONSTRUCTION SCHEDULE

TIP: All CMP's must outline the construction schedule and detail the estimated length of time and number of vehicle movements for each stage.

5.1. CONSTRUCTION MACHINES OPERATION

Summary table 5-1, lists the machinery that will be operated during each stage of works.

Table 5-1 Operation Machines

	Stage 1 Demolition	Stage 2 Excavation	Stage 3 Construction
Machinery	Excavator Tip Truck	Excavator Tip Truck Jack Hammers Backhoe loader Concrete Saw/Rock saw	Excavator Backhoe Loader Concrete Pump Concrete Vibrator Concrete Truck Concrete Leveller Concrete Saw Tip Truck Spraying Machine Generator Drill Welders Compactor

5.2. CONSTRUCTION PHASES

The construction activities are expected to be undertaken over a duration of approximately 8.5 months as set out below.

Stage 1: Demolition stage

1. Demolition of structures and site establishment.
2. The expected duration for this stage is approximately 4 weeks.
3. There will be approximately 4 to 6 x 19m truck and dog vehicles per day. This would not occur every day as they would not be loading out every day of the demolition stage.

Stage 2: Excavation stage

1. Cut in soil.
2. Shoring stabilization, as per structural engineer's requirement.
3. The expected duration for this stage is approximately 6 weeks.
4. There will be approximately 5 to 6 x 19m truck and dog vehicles per day. This would not occur every day as they would not be loading out every day of the excavation.
5. The total number of trucks will be approximately 180 trucks to transport a total amount of excavated soil of 5347 m^3.

TIP: The number of truck movements needs to correlate to the volume of material being excavated and disposed. This also applies if your development involves fill importation.

Stage 3: Construction stage

1. Construction of footing and building framework.
2. Construction of internal and external finishes.
3. The expected duration for this stage is approximately 12 months.
4. There will be approximately 8 to 10 concrete trucks per day entering and exiting the site during major concrete pouring stages.
5. There will be approximately 5 x 12.5m heavy rigid trucks delivering material per day during construction.

6. MATERIALS HANDLING AND BIN STORAGE AREAS

- No materials (including any building waste or soil), equipment, structures or goods of any type are to be stored, kept or placed on Council footpath or nature strip without prior approval from Council.

TIP: Check the approved development consent condition. You must ensure that this statement is provided in a CMP.

- The storage of any materials on the roadway is not permitted under any circumstances.
- During all stages of work, material loading and unloading will be within the site. The on-site loading and unloading points are indicated in Appendix A.
- Waste storage will be as indicated in Appendix A.
- A detailed material handling risk assessment and SWMS shall be documented and submitted by the contractors for approval by the construction manager prior to any works.

6.1. CRANE

The preliminary crane location is provided in Appendix A.

> Council approval is required to place mobile cranes or other plant on footpaths, nature strips, road shoulders, roadways or road-related areas. This includes any activity that involves hoisting goods over a pedestrian area.

7. CONSTRUCTION WASTE MANAGEMENT

TIP: A CMP must include written procedures for managing waste during the development. Without procedures, Council is unlikely to approve the CMP.

7.1. SITE OPERATION AND MANAGEMENT

Waste generated during works will be managed according to this plan.

Regular inspections will be performed by sites supervisors to ensure procedures are being appropriately followed.

In addition, the project team leader will:

- Liaise with contractors to identify areas where they can reduce waste and reuse materials in their respective trades.
- Prevent pollution and damage to the environment.
- Protect the safety and health of the employees and the public.

Waste will be separated and stored onsite for reuse and recycling through maintaining separate areas for recyclables and waste going to landfill. Utilising selective deconstruction rather than straight demolition will ensure that good quality material can be reused or recycled.

7.2. CONSTRUCTION DESIGN AND MANAGEMENT

Waste reduction and prevention has been incorporated into the design of this development through the use of prefabricated materials and reuse of certain building materials in good condition from the demolition phase.

7.3. DEMOLITION WASTE AND ASBESTOS

Materials from the demolition stage shall be reused, recycled or disposed in accordance with the provisions outlined in this Waste Management Plan (WMP) and the requirements of the Protection of the Environment Operations (Waste) Regulation 2014.

Where possible, waste materials should be managed so most materials will be reused or recycled, with only a small proportion of waste going to landfill.

7.4. ASBESTOS MANAGEMENT PROTOCOL

- Prior to any demolition works, a suitably qualified person will assess the building for any hazardous materials, including but not limited to potentially Asbestos Containing Materials (ACMs) and prepare a hazardous materials report.
- Only an asbestos removal contractor who holds the required class of Asbestos Licence issued by SafeWork NSW can carry out the removal, handling, and disposal of any asbestos material.
- Prior to removal of asbestos, a work site-specific permit is to be obtained from Workcover NSW.
- If a structure or plant is suspected of containing asbestos and must undergo emergency demolition, notification to SafeWork NSW must be made. This is to be done by the principal contractor and/or the licensed asbestos removalist.
- The name, address and asbestos license number of the remover and details of the licensed waste facility where all asbestos will be taken and made available on request by any authority.
- The developer or demolition contractor must notify adjoining residents/properties at least two (2) working days prior to the commencement of asbestos removal.
- Where required, an appropriately qualified environmental hygienist will be engaged to undertake an assessment of the site. Air monitoring must be conducted by a NATA accredited company.
- All asbestos waste must be appropriately transported and disposed of in accordance with the Protection of the Environment Operations (Waste) Regulation 2014.
- The project manager will ensure a unique consignment number is created and reported to the EPA using Waste Locate if over 100 kilograms or 10 square meters of asbestos is being disposed of. No asbestos waste is permitted to be disposed to general waste or recycle bin; or reuse, recycle or illegally dumped.
- All records covering the transport and tipping of any asbestos construction materials or any asbestos contaminated materials must be maintained on site for the inspection of a Council officer or other Principal Certifying Authority.
- An asbestos clearance certificate is required to be completed by a licensed asbestos assessor (LAA) once all existing buildings and structures have been demolished.

7.5. MANAGING MATERIALS FROM DEMOLITION

Demolition waste will be managed and disposed in accordance with Table 7-1 below.

Table 7-1: Management of demolition materials

Materials on-site		Reuse and recycling		Disposal
Type of Material	**Estimated volume (m³) or area (m²) or weight (t)**	**On-site** How materials will be reused or recycled on-site	**Off-site** Contractor and recycling outlet (or appointed sub-contractor)	Contractor and landfill site (or appointed sub-contractor)
Timber	15m³	Reuse for formwork, landscaping, shoring	Benedict Recycling Belrose Challenger Dr, Belrose NSW 2085	Greenwood Landfill 447 Mona Vale Rd, St. Ives NSW 2075
Concrete	30m³	N/A	Benedict Recycling Belrose Challenger Dr, Belrose NSW 2085	Greenwood Landfill 447 Mona Vale Rd, St. Ives NSW 2075
Bricks/Pavers	30m³	Clean & reuse for landscaping, bricks in good condition used for internal wall	Benedict Recycling Belrose Challenger Dr, Belrose NSW 2085	Greenwood Landfill 447 Mona Vale Rd, St. Ives NSW 2075
Roof tiles	5m³	N/A	Benedict Recycling Belrose Challenger Dr, Belrose NSW 2085	Greenwood Landfill 447 Mona Vale Rd, St. Ives NSW 2075
Plasterboard	3m³	N/A	Benedict Recycling Belrose Challenger Dr, Belrose NSW 2085	Greenwood Landfill 447 Mona Vale Rd, St. Ives NSW 2075
Metal	2m³	N/A	Benedict Recycling Belrose Challenger Dr, Belrose NSW 2085	Greenwood Landfill 447 Mona Vale Rd, St. Ives NSW 2075
Green waste	3m³	Separated and stored on site for reuse in landscaping	Benedict Recycling Belrose Challenger Dr, Belrose NSW 2085	Greenwood Landfill 447 Mona Vale Rd, St. Ives NSW 2075

7.6. MANAGING MATERIALS FROM EXCAVATION

Excavated materials shall be stored as indicated on site plans and disposed in accordance with table 7-2.

Table 7-2: Management of Excavated materials

Materials on-site		Reuse and recycling		Disposal
Type of Material	**Estimated volume (m³) or area (m²) or weight (t)**	**On-site** How materials will be reused or recycled on-site	**Off-site** Contractor and recycling outlet	Contractor and landfill site
Excavated material	5347 m³	Nil	Benedict Recycling Belrose Challenger Dr, Belrose NSW 2085	Greenwood Landfill 447 Mona Vale Rd, St. Ives NSW 2075

7.7. MANAGING MATERIALS DURING CONSTRUCTION

Materials that are not used in the construction stage shall be reused, recycled or disposed in accordance with the provisions outlined in the WMP and the requirements of the Protection of the Environment Operations (Waste) Regulation 2014.

Where possible, waste materials should be managed so most materials will be reused or recycled, with only a small proportion of waste going to landfill.

Table 7-3 below details the amount of waste material that is estimated to be produced from the construction stage, as well as the planned reuse, recycling or disposal plans.

Materials on-site		Reuse and recycling		Disposal
Type of Material	**Estimated volume (m^3) or area (m^2) or weight (t)**	**On-site** How materials will be reused or recycled on-site	**Off-site** Contractor and recycling outlet (or appointed sub-contractor)	Contractor and landfill site (or appointed sub-contractor)
Timber	5-7%	N/A	Benedict Recycling Belrose Challenger Dr, Belrose NSW 2085	Greenwood Landfill 447 Mona Vale Rd, St. Ives NSW 2075
Concrete	3-5%	N/A	Benedict Recycling Belrose Challenger Dr, Belrose NSW 2085	Nil to landfill
Bricks/Pavers	5-10%	Clean & reuse for landscaping, bricks in good condition used for internal wall	Benedict Recycling Belrose Challenger Dr, Belrose NSW 2085	Nil to landfill
Plasterboard	5-20%	N/A	Benedict Recycling Belrose Challenger Dr, Belrose NSW 2085	Greenwood Landfill 447 Mona Vale Rd, St. Ives NSW 2075
Metal	2-5%	N/A	Benedict Recycling Belrose Challenger Dr, Belrose NSW 2085	Nil to landfill

8. WASTE STORAGE, RECYCLING AND LITTER CONTROL

8.1. PLANNING

Prior to commencement, all contractors will be required to develop and implement any waste minimisation initiatives (e.g., Use of a recycled product). Site waste minimisation details shall include:

- Practical measures associated with their works to prevent waste entering on site.
- Waste streams resulting from their works which can be recycled and will be actively managed as part of their waste reduction plan.
- Alternative products containing recycled material that could be utilised in their works, in place of more traditional materials, which conform and meet with the design specification.

8.2. CONSTRUCTION PHASE

8.2.1. BIN SYSTEM

- Licensed disposal contractors will be engaged to supply, deliver, remove, and certify the disposal of site generated waste.
- Three cubic metre forklift/crane bins on wheels shall be located at the workface for material rubbish. These shall be originally marked for separate materials for recycle and deposited either by forklift/crane into a fifteen-cubic meter bin located on site for pick up and disposal.
- Additional bins will be provided where possible to further separate waste. Examples include nominated bins for plasterboard and timber only.
- If a particular bin is found to be "contaminated" by waste material from a contractor, that contractor will be responsible for the tipping or sorting of waste in the contaminated bin.
- Signs will be located on each bin, indicating the type of waste to be placed in that bin.
- As construction progresses, the bins shall then revert to mixed waste with the waste company sorting waste at their facility, not on site.
- The introduction of wheelie bins shall be used mainly for the fit-out trades.
- All contractors performing work on site will be responsible for ensuring that waste materials go into nominated bins
- All contractors will be responsible for the daily cleaning of their respective work areas.

8.2.2. WASHOUT AREAS

- Washout areas will be provided as indicated on site plans.
- Washout facilities will NOT be plumbed to any building services and will be of a stand-alone nature.
- Washout processes must not result in water pollution into the stormwater network or polluted water discharge onto neighbouring properties.
- Contractor's are responsible for the maintenance of these facilities and the site supervisor will regularly inspect these facilities to ensure they are operating effectively.

8.2.3. TRAINING

All contractors will be provided with an initial site induction that includes training on the waste management system. Additional information will be included in the relevant contractor's scope of works (SOW), risk assessments and SWMS.

8.2.4. CORRECTIVE ACTIONS

The site manager will investigate the cause of detected non-conformance, develop a corrective action plan to prevent recurrence and communicate the outcome with contractors. Details of the non-conformance including any immediate corrective actions undertaken will be recorded, reviewed and accepted by the construction manager.

It is the responsibility of the construction manager to immediately initiate corrective actions, if required. The non-conformance and corrective action must include details of the action proposed and an appropriate close out date.

The site manager will conduct regular meetings or toolbox talks with contractors to address non-conformances.

8.2.5. WASTE MANAGEMENT IMPLEMENTATION PLAN

Control	Timing	Methodology	Responsibility	Monitoring and Reporting	Performance Measure
Waste Disposal					
Project waste types to be identified	Prior to works commencing	In accordance with the Waste Management Plan (WMP)	CM*	To be reviewed in EH&S Plan	Identify waste generation and Management Plan developed
All off-site waste to be disposed of to an appropriate disposal point as required under the relevant legislation	At all times	Waste contractor to address and follow legislative requirements.	CM	To be monitored through waste docket records.	Pre-arranged list of waste destinations and no waste disposed to unlicensed facilities.
Only licensed waste contractors to collect and dispose construction waste from the site.	At all times	Waste contractor to address and follow legislative requirements	CM	To be monitored through waste docket records.	All waste transported to appropriate waste facilities.
Waste reporting should include, quantity of waste streams generated and recycled.	Monthly	Waste Management Plan	SM**	EH&S Monitoring and Reporting	Monthly EH&S Managers review
Recycling and Minimisation					
Material to be reused or recycled where possible.	As required		CM/SM	Monitor waste pathways to ensure correct application of reuse/recycling	Identified waste generation to stay on site or recycled off-site.
Any material imported onto the site is to consist of certified clean material only	As required	Identification of material	CM/SM	Certificate	Certificate provided prior to receival at the site.
Where appropriate existing materials on site to be reused or recycled.	As required	Identification of material	CM/SM	Monitor waste pathways to ensure correct application of reuse/recycling	Identified waste generation to stay on site or recycled off-site
Site offices					
Recycling bins shall be provided within the site working area.	As required	Coordinated Waste Management Plan	CM/SM	Monthly reports from Waste Management Contractor	Monthly EH&S Managers review
Site amenities shall be provided on-site as required	Prior to works commencing	Coordinated Waste Management Plan	CM/SM	Monthly reports from Waste Management Contractor	All waste disposed of appropriately.

*Constructing Manager
**Site Manager

8.3. LITTER CONTROL

All staff working on the project must dispose of litter (including wrappings, plastic takeaway containers, drink cans, cigarette butts and construction waste) into the appropriate waste receptacle.

Materials are to be wholly contained within the waste receptacle and not overflowing.

9. SOIL & WATER MANAGEMENT PLAN

TIP: A soil and water management plan is required when for larger sites that are greater in area than 2500m^2 and an Erosion and Sediment Control Plan (ESCP) is required for all sites less than 2500m^2. A CMP will not be approved without one of these plans.

Planning is fundamental to preparing one of these plans. Consult with a specialist expert when developing a soil and water management plan or ESCP.

Planning is fundamental to ensuring that the work is performed to avoid erosion, sediment discharges and water pollution.

Water that accumulates on the site during all stages will be controlled in accordance with the Erosion and Sediment Control Plan included in Appendix E.

9.1. KEY MANAGEMENT ISSUES

Construction activity on the project site involves disturbing soils so that infrastructure and foundation activities can be constructed.

The excavation works have the potential to adversely impact water quality for receiving waterways.

9.2. SITE ACTIONS

The prevention of soil erosion and sediment pollution will be key components of the environmental management plan for the site. A preliminary stormwater, erosion and sedimentation control plan has been formulated in the early works Construction Management Plan.

Water quality impacts shall be minimised by incorporation of appropriate erosion and sediment control measures in the design, specification, contract arrangements and quality assurance inspections during all stages.

9.2.1. PLANNING

The Stormwater Management Plan has been developed in accordance with the following principles:

- Controlling access points onto the site. All approved access points shall be marked before the commencement of construction within that area.
- Stabilised entry to the site will be provided and maintained throughout all stages.
- A purpose-built wheel wash/shaker facility will be constructed at the exit gates of the site if required.
- Diverting runoff around disturbed areas.
- Directing runoff from disturbed areas through sediment traps or filters
- Preventing discharges to stormwater drainage.
- Installing sediment devices including fencing.
- Placing stormwater protection devices prior to and over inlets and protect the drainage line from erosion.
- Managing the placement and storage of stockpiles, install controls around the storage area and using temporary covers.

9.2.2. DISPERSAL CONTROL

Stormwater disposal from any detention basin or trapped within the site throughout will be in accordance with ANZECC guidelines or applicable Regional Environmental Heath Trigger Values for the area. Refer to the below table.

Table 3: Chosen regional environmental health trigger values for physical-chemical stressors and faecal bacteria for freshwater sites

Turbidity	Suspended Soilds	Total Phosphorus	Total Nitrogen	Oxidised Nitrogen	Ammonium Nitrogen	pH	Electrical Conductivity	Dissolved Oxygen	Faecal Coliforms
NTU	mg/L	mg/L	mg/L	mg/L	mg/L		mS/cm	%sat	cfu/100ml
<8	<7	<0.01	<0.32	<0.05	<0.02	4.8 to 7	<0.32	75 to 118	Median<150 and 80th%<600

- Flocculation will be used in case when the water is not clear and contains sediment. The contractor will hire a temporary sedimentation basin to treat the accumulated water on site prior the disposal.
- For de-watering of the excavated site, any water that accumulates must be removed and disposed of in a manner that does not result in the pollution of the water, nuisance to neighbouring properties or damage/ potential damage to neighbouring land and/ or properties.
- There will NOT be any discharges to Council's stormwater network.

9.2.3. TRAINING

Communication and education material on the stormwater, erosion and sediment controls will be provided as part of the site induction program, contractors' scope of work, risk assessments and SWMS's for all the work stages trades.

9.2.4. PERFORMANCE MEASURES

- Control methods in place before detailed earthworks commences in the nominated area.
- All site cut-off drains unobstructed.
- All major site drains are adequately stabilized.
- All controls are maintained and functional.
- All stockpiled material is adequately stabilized and protected.
- No de-watering stormwater/groundwater discharge unless approved
- Issues concerning mud/organic debris on the surrounding public roads to the site to be addressed.

9.2.5. MONITORING AND REPORTING

At least weekly, and after major rainfall, the contractors or nominated Stormwater / Sedimentation control contractors will inspect (and document) the entire site and provide particular attention to the following:

- Visual inspection of sediment control devices.
- Ensure drains operate effectively and initiate repair as required.
- Remove spilled soil (or other materials).
- Construct additional erosion and/or sediment control as necessary throughout works
- Remove trapped sediment from catch drains, pits, sediment fences, etc.
- Ensure rehabilitated lands have effectively reduced the erosion hazard and initiate upgrading or repair as appropriate.
- Maintain erosion and sediment control measures in a functioning condition until all activities are completed and the site is rehabilitated.
- Remove temporary soil conservation structures as a last activity in the rehabilitation program.
- Site manager will monitor and maintain inspection records on the condition of existing erosion and run-off controls (drains, silt fences, catch drains etc.) de-watering procedures and test results, and any site instruction issued to contractors to undertake remedial works.
- Rainfall data will be filed on-site, and management will keep records of poor drainage areas.
- The records will form part of the site EH&S Management Plan and will be made available on request.

9.2.6. CORRECTIVE ACTIONS

The site manager will investigate the cause of detected non-conformance, develop a corrective action plan to prevent recurrence and communicate the outcome with contractors. Details of the non-conformance including any immediate corrective actions undertaken will be recorded, reviewed and accepted by the construction manager.

It is the responsibility of the construction manager to immediately initiate corrective actions, if required. The non-conformance and corrective action must include details of the action proposed and an appropriate close out date.

The site manager will conduct regular meetings or toolbox talks with contractors to address non-conformances.

10. KEY RESPONSIBLE PERSONNEL

The applicant and all employees of contractors on the site must obey any direction or notice from the Prescribed Certifying Authority or Hornsby Shire Council.

TIP: If you are submitting a CMP as part of a construction certificate application, you must provide Council with the details of all responsible parties.

Entity Name	Contact Person	Contact Details
Principal Contractor	Jane Smith	**M:** 0434 405 942 **E:** jsmith@principlecontractor.com.au
Environmental Consultant	John Smith	**M:** 0434 405 942 **E:** jsmith@environmentalconsultant.com.au
Asbestos Removalist	Jane Smith	**M:** 0434 405 942 **E:** jsmith@asbestosremovalist.com.au
Demolition Contractor	John Smith	**M:** 0434 405 942 **E:** jsmith@demolitioncontractor.com.au
Excavation Contractor	Jane Smith	**M:** 0434 405 942 **E:** jsmith@excavationcontractor.com.au
Builder	John Smith	**M:** 0434 405 942 **E:** jsmith@builder.com.au
Site Manager	Jane Smith	**M:** 0434 405 942 **E:** jsmith@sitemanager.com.au
Emergency Contact	John Smith	**M:** 0434 405 942 **E:** jsmith@emergencenycontact.com.au
Private Certifier	Jane Smith	**M:** 0434 405 942 **E:** jsmith@privatecertifier.com.au
Hornsby Shire Council		**M:** 9847 6666 **E:** hsc@hornsby.nsw.gov.au
SafeWork NSW		**M:** 13 10 50 **E:** contact@safework.nsw.gov.au **W:** https://www.safework.nsw.gov.au/contact-us
Services	Dial Before you Dig 1100 Sydney Water Ausgrid	

APPENDICES A-C

SITE MANAGEMENT PLAN

ROUTE MAP

TRAFFIC CONTROL PLAN FOR DEMOLITION STAGE

TRAFFIC CONTROL PLAN FOR EXCAVATION STAGE

TRAFFIC CONTROL PLAN FOR CONSTRUCTION STAGE

APPENDIX A SITE MANAGEMENT PLAN

SYMBOL	LEGEND
	PROPOSED STRUCTURE
	PROPOSED DRIVEWAY
	NEIGHBOR'S DRIVEWAY
	STORAGE AREA
	SITE OFFICE
	TEMP. SITE TOILET
	RECYCLE
	SKIP PIN
	LOADING & UNLOADING
	RETAINED TREE
	TREE PROTECTION ZONE

N

SITE MANAGEMENT PLAN
SCALE 1:300

No	AMENDMENT	ENG	DRAFT	DATE
A	FOR COORDINATION	N.L	A.W	07-03-24

ARCHITECT
HORNSBY

LOKA CONSULTING ENGINEERS.Pty Ltd
144/8 AVENUE OF THE AMERICAS, NEWINGTON NSW 2127
T: +61 2 9748 8742/8065 9689 M: 0404 142 063
F: +61 2 9748 1290/8065 9690
EMAIL: info@Lceng.com.au www.Lceng.com.au

PROJECT
OFFICE BUILDING AT 294 PEATS FERRY RD, HORNSBY NSW 2077, AUSTRALIA

CONSENT AUTHORITY:
HORNSBY SHIRE COUNCIL

APPENDIX B ROUTE MAP

There are a no schools located within a 1.5km vicinity of the proposed site.

Therefore, there is no restriction for the movement of trucks.

ROUTE MAP
NOT TO SCALE

	ROUT FOR LAYOVER
	ARRIVAL
	DEPARTURE

N

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE
A	FOR COORDINATION	N.L	A.W	07-03-24					

ARCHITECT

HORNSBY SHIRE COUNCIL

LOKA CONSULTING ENGINEERS Pty Ltd
14A/8 AVENUE OF THE AMERICAS, NEWINGTON NSW 2127
T: +61 2 9748 8742/8065 9689 M: 0404 142 063
F: +61 2 9748 1290/8065 9690
EMAIL: info@Lceng.com.au www.Lceng.com.au

PROJECT
OFFICE BUILDING AT 294 PEATS FERRY RD, HORNSBY NSW 2077, AUSTRALIA

CONSENT AUTHORITY:
HORNSBY SHIRE COUNCIL

APPENDIX C-1 : TRAFFIC CONTROL PLAN FOR DEMOLITION STAGE

SYMBOL	LEGEND
	DELIVERY TRUCK
	EXISTING STRUCTURE
	PROPOSED DRIVEWAY
	NEIGHBOR'S DRIVEWAY
	RETAINED TREE
	TREE PROTECTION ZONE

VALUE OF DIMENSION BETWEEN SIGNS

SPEED OF TRAFFIC km/h	DIMENSION D m
45 or less	0 to 5
46 to 55	15
56 to 65	45
Greater than 65	Equal to speed of traffic, in km/h

N

TRAFFIC CONTROL PLAN
SCALE 1:500

NOTE:
MATERIAL DELIVERIES AND PICK UP SHOULD BE UNDERTAKEN WITHIN THE SITE.

NOTE:
WHERE A WORK ZONE IS REQUIRED, APPLICATION SHOULD BE SUBMITTED TO COUNCIL'S TRAFFIC COMMITTEE FOR APPROVAL PRIOR CONSTRUCTION

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE
A	FOR COORDINATION	N.L	A.W	07-03-24					

ARCHITECT
HORNSBY SHIRE COUNCIL

LOKA CONSULTING ENGINEERS Pty Ltd
14A/8 AVENUE OF THE AMERICAS, NEWINGTON NSW 2127
T: +61 2 9748 8742/8065 9689 M: 0404 142 063
F: +61 2 9748 1290/8065 9690
EMAIL: info@Lceng.com.au www.Lceng.com.au

PROJECT
OFFICE BUILDING AT 294 PEATS FERRY RD, HORNSBY NSW 2077, AUSTRALIA

CONSENT AUTHORITY:
HORNSBY SHIRE COUNCIL

APPENDIX C-2 : TRAFFIC CONTROL PLAN FOR EXCAVATION STAGE

SYMBOL	LEGEND
	DELIVERY TRUCK
	PROPOSED STRUCTURE
	PROPOSED DRIVEWAY
	NEIGHBOR'S DRIVEWAY
	RETAINED TREE
	TREE PROTECTION ZONE

VALUE OF DIMENSION BETWEEN SIGNS

SPEED OF TRAFFIC km/h	DIMENSION D m
45 or less	0 to 5
46 to 55	15
56 to 65	45
Greater than 65	Equal to speed of traffic, in km/h

N

TRAFFIC CONTROL PLAN
SCALE 1:500

NOTE:
MATERIAL DELIVERIES AND PICK UP SHOULD BE UNDERTAKEN WITHIN THE SITE.

NOTE:
WHERE A WORK ZONE IS REQUIRED, APPLICATION SHOULD BE SUBMITTED TO COUNCIL'S TRAFFIC COMMITTEE FOR APPROVAL PRIOR CONSTRUCTION

No	AMENDMENT	ENG	DRAFT	DATE
A	FOR COORDINATION	N.L	A.W	07-03-24

ARCHITECT
HORNSBY SHIRE COUNCIL

LOKA CONSULTING ENGINEERS Pty Ltd
14A/8 AVENUE OF THE AMERICAS, NEWINGTON NSW 2127
T: +61 2 9748 8742/8065 9689 M: 0404 142 063
F: +61 2 9748 1290/8065 9690
EMAIL: info@Lceng.com.au www.Lceng.com.au

PROJECT
OFFICE BUILDING AT 294 PEATS FERRY RD, HORNSBY NSW 2077, AUSTRALIA

CONSENT AUTHORITY:
HORNSBY SHIRE COUNCIL

APPENDIX C-3 : TRAFFIC CONTROL PLAN FOR CONSTRUCTION STAGE

SYMBOL	LEGEND
	DELIVERY TRUCK
	PROPOSED STRUCTURE
	PROPOSED DRIVEWAY
	NEIGHBOR'S DRIVEWAY
	RETAINED TREE
	TREE PROTECTION ZONE
	WORK ZONE
	CONCRETE PUMP TRUCK
	CONCRETE TRUCK

VALUE OF DIMENSION BETWEEN SIGNS

SPEED OF TRAFFIC km/h	DIMENSION D m
45 or less	0 to 5
46 to 55	15
56 to 65	45
Greater than 65	Equal to speed of traffic, in km/h

N

TRAFFIC CONTROL PLAN
SCALE 1:500

NOTE:
MATERIAL DELIVERIES AND PICK UP SHOULD BE UNDERTAKEN WITHIN THE SITE.

NOTE:
WHERE A WORK ZONE IS REQUIRED, APPLICATION SHOULD BE SUBMITTED TO COUNCIL'S TRAFFIC COMMITTEE FOR APPROVAL PRIOR CONSTRUCTION

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE
A	FOR COORDINATION	N.L	A.W	07-03-24					

ARCHITECT
HORNSBY SHIRE COUNCIL

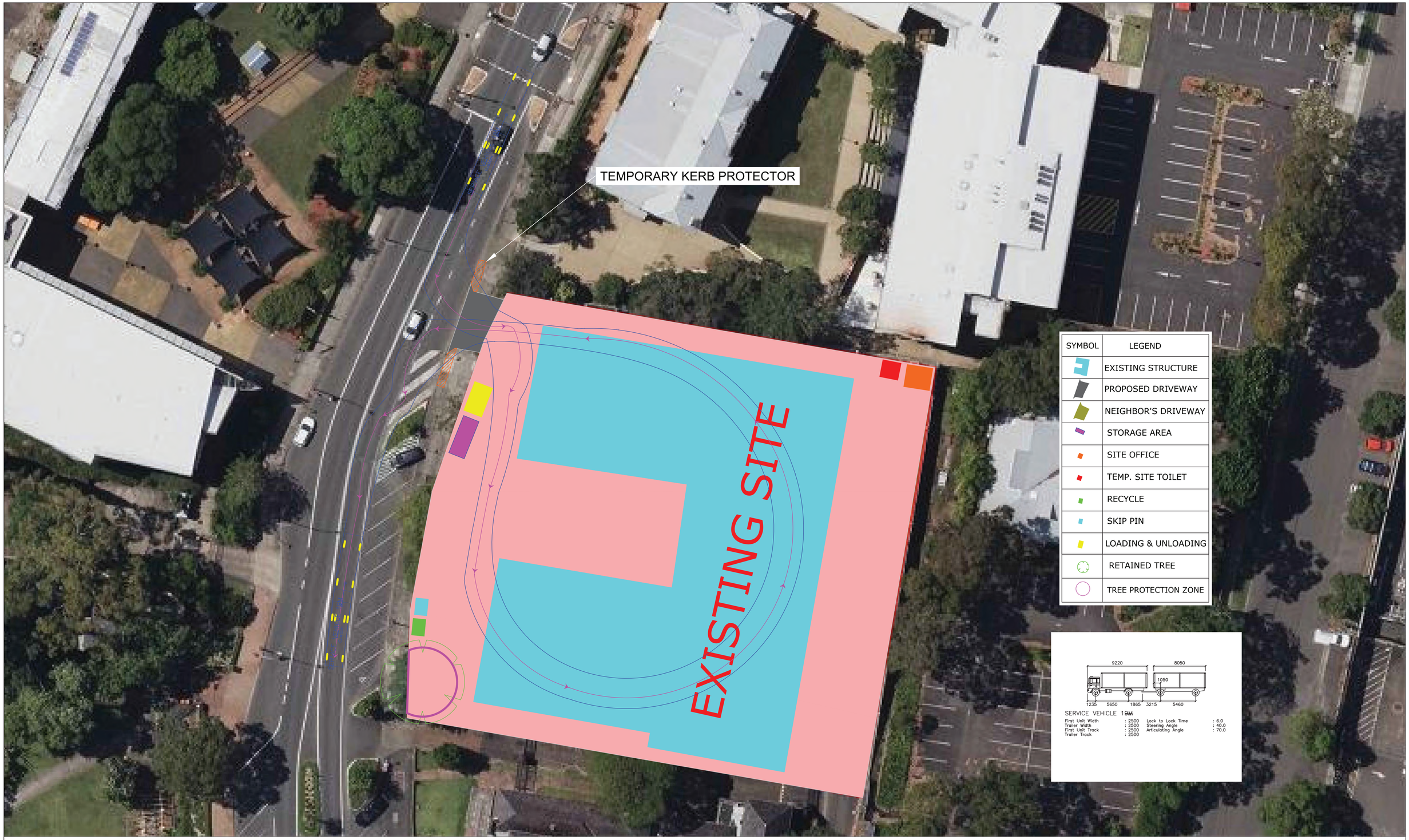
LOKA CONSULTING ENGINEERS Pty Ltd
14A/8 AVENUE OF THE AMERICAS, NEWINGTON NSW 2127
T: +61 2 9748 8742/8065 9689 M: 0404 142 063
F: +61 2 9748 1290/8065 9690
EMAIL: info@LCeng.com.au www.Lceng.com.au

PROJECT
OFFICE BUILDING AT 294 PEATS FERRY RD, HORNSBY NSW 2077, AUSTRALIA

CONSENT AUTHORITY:
HORNSBY SHIRE COUNCIL

APPENDIX D

SWEPT PATH ANALYSIS



SYMBOL	LEGEND
	EXISTING STRUCTURE
	PROPOSED DRIVEWAY
	NEIGHBOR'S DRIVEWAY
	STORAGE AREA
	SITE OFFICE
	TEMP. SITE TOILET
	RECYCLE
	SKIP PIN
	LOADING & UNLOADING
	RETAINED TREE
	TREE PROTECTION ZONE

SERVICE VEHICLE 19M

First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2500	Steering Angle	: 40.0
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2500		

SWEPT PATH ANALYSIS ENTRY AND EXIT DURING DEMOLITION STAGE

NOT FOR CONSTRUCTION

A1 0 1 2 3 4 5 6 7 8 9 10

SCALE 1:250

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE
A	FOR COORDINATION	N.L.	A.W.	07-03-24					

ARCHITECT

HORNSBY SHIRE COUNCIL

LOKA CONSULTING ENGINEERS Pty Ltd
14A/8 AVENUE OF AMERICAS, NEWINGTON, NSW
T: +61 2 8065 9689 F: +61 2 8065 9690
MOBILE: 0444 142 063 EMAIL: info@loceng.com.au

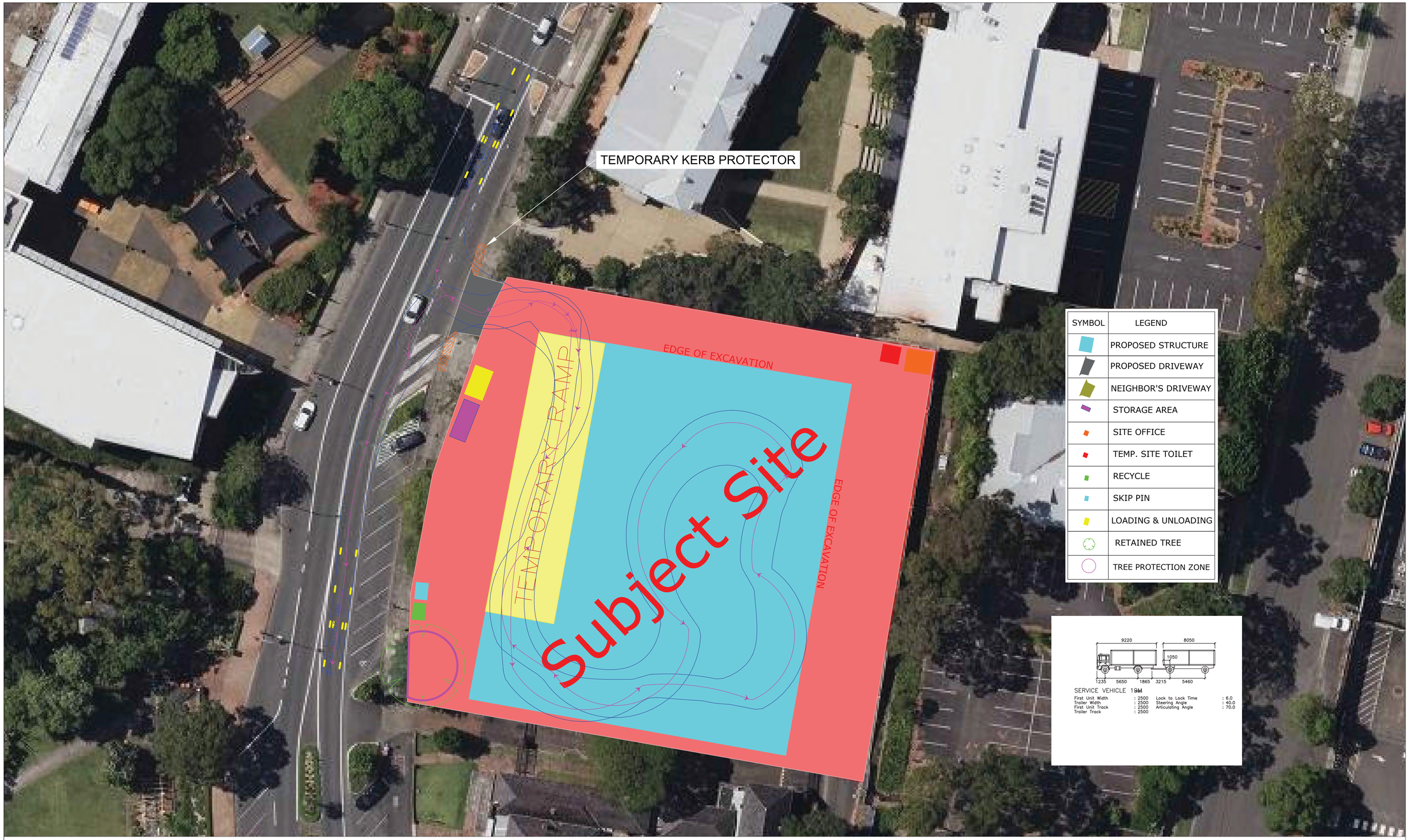
PROJECT
OFFICE BUILDING AT 294 PEATS FERRY RD, HORNSBY, NSW

CONSENT AUTHORITY:
HORNSBY SHIRE COUNCIL

N

SHEET SUBJECT
SWEPT PATH ANALYSIS ENTRY AND EXIT DURING DEMOLITION STAGE

PROJECT	294 PEATS FERRY RD, HORNSBY, NSW		
DATE FEB 24	DRAWN A.W.	DESIGNED A.W.	CHECKED N.L.
SCALE @ A1 1 : 250 U.N.O		JOB No 24NL005	
AUTHORISED NERMEIN LOKA		DWG No T01	REV A



SWEPT PATH ANALYSIS ENTRY AND EXIT DURING EXCAVATION STAGE

NOT FOR CONSTRUCTION

A1 0 1 2 3 4 5 6 7 8 9 10

SCALE 1:250

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE
A	FOR COORDINATION	N.L.	A.W.	07-03-24					

ARCHITECT

HORNSBY SHIRE COUNCIL

LOKA CONSULTING ENGINEERS Pty Ltd
14A/8 AVENUE OF AMERICAS, NEWINGTON, NSW
T: +61 2 8065 9689 F: +61 2 8065 9690
MOBILE: 0404 142 063 EMAIL: info@lceng.com.au

PROJECT
OFFICE BUILDING AT 294 PEATS FERRY RD, HORNSBY, NSW

CONSENT AUTHORITY:
HORNSBY SHIRE COUNCIL

N

SHEET SUBJECT
SWEPT PATH ANALYSIS ENTRY AND EXIT DURING EXCAVATION STAGE

PROJECT	294 PEATS FERRY RD, HORNSBY, NSW		
DATE FEB 24	DRAWN A.W.	DESIGNED A.W.	CHECKED N.L.
SCALE @ A1 1 : 250 U.N.O		JOB No 24NL005	
AUTHORISED NERMEIN LOKA		DWG No T02	REV A

SYMBOL	LEGEND
	PROPOSED STRUCTURE
	PROPOSED DRIVEWAY
	NEIGHBOR'S DRIVEWAY
	STORAGE AREA
	SITE OFFICE
	TEMP. SITE TOILET
	RECYCLE
	SKIP PIN
	LOADING & UNLOADING
	RETAINED TREE
	TREE PROTECTION ZONE

SU TRUCK mm

Width	: 2500
Track	: 2500
Lock to Lock Time	: 6.0
Steering Angle	: 36.6

SWEPT PATH ANALYSIS ENTRY AND EXIT DURING CONSTRUCTION STAGE

NOT FOR CONSTRUCTION

A1 0 1 2 3 4 5 6 7 8 9 10

SCALE 1:250

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE
A	FOR COORDINATION	N.L.	A.W.	07-03-24					

ARCHITECT

HORNSBY SHIRE COUNCIL

LOKA CONSULTING ENGINEERS Pty Ltd
14A/8 AVENUE OF AMERICAS, NEWINGTON, NSW
T. +61 2 8065 9689 F. +61 2 8065 9690
MOBILE: 0404 142 063 EMAIL: info@lceng.com.au

PROJECT
OFFICE BUILDING AT 294 PEATS FERRY RD, HORNSBY, NSW

CONSENT AUTHORITY:
HORNSBY SHIRE COUNCIL

N

SHEET SUBJECT
SWEPT PATH ANALYSIS ENTRY AND EXIT DURING CONSTRUCTION STAGE

PROJECT	294 PEATS FERRY RD, HORNSBY, NSW		
DATE FEB 24	DRAWN A.W.	DESIGNED A.W.	CHECKED N.L.
SCALE @ A1 1 : 250 U.N.O		JOB No 24NL005	
AUTHORISED NERMEIN LOKA		DWG No T03	REV A

APPENDIX E

EROSION AND SEDIMENT CONTROL PLAN AND DETAILS

EROSION AND SEDIMENT CONTROL PLAN

GENERAL NOTES

1. ALL EROSION & SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH “THE BLUE BOOK” - SOILS AND CONSTRUCTION, MANAGING URBAN STORMWATER, VOLUME 1, 4TH EDITION.
2. EFFECTIVE EROSION AND SILTATION CONTROL DEVICES ARE TO BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY WORKS AND MAINTAINED FOR THE DURATION OF ALL WORKS UNTIL THE SITE HAS BEEN SUFFICIENTLY STABLISED/REVEGETATED TO PREVENT DISCHARGE OF SEDIMENT AND SEDIMENT LADEN WATERS OFFSITE OR INTO THE STORMWATER SYSTEM.
3. INSTALL STABILISED ACCESS AT THE ENTRY/EXIT MARKED ON THE SITE PLANS AND ENSURE ALL VEHICLES USE THE DESIGNATED STABILISED ACCESS WHEN ENTERING AND LEAVING THE SITE.
4. ANY MATERIAL THAT IS TRACKED ONTO THE ROADWAY WILL BE REMOVED. A STREET CLEANING SERVICE WILL BE UTILISED DURING ALL STAGES OF WORK UNTIL GROUND SURFACES HAVE BEEN STABILISED.
5. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE (REFER TO THE BLUE BOOK FOR SEDIMENT FENCE CONSTRUCTION NOTES). WHERE POSSIBLE, INSTALL A SECONDARY SEDIMENT FENCE 2,000MM BEHIND THE FIRST FENCE.
6. SEDIMENT FENCES REQUIRE REGULAR INSPECTON & MAINTENANCE TO REMOVE SEDIMENT TRAPPED BEHIND FENCES, REINSTATE PICKETS, SECURE AND TIGHTEN FILTER CLOTH.
7. INSTALL TEMPORARY SEDIMENT BARRIERS TO ALL STORMWATER INLET PITS LIKELY TO COLLECT SEDIMENT LADEN WATER.
8. MESH AND GRAVEL INLET FILTER SEDIMENT TRAPS ARE REQUIRED TO BE PROVIDED SURROUNDING ANY STORMWATER DRAINAGE GUTTER INLET PITS.
9. DIVERT UPSLOPE WATER AROUND WORK SITE AND STABILISE CHANNELS.
10. SOIL, EARTH, SAND AND GRAVEL ARE NOT TO BE STOCKPILED ON THE ROADWAY OR IN DRAINAGE AREAS.
11. SECURELY COVER AND PLACE SEDIMENT FENCING AROUND STOCKPILES TO PREVENT AIRBORNE MOVEMENT, MATERIALS ERODING OR MIGRATING OFFISTE.
12. A DESIGNATED WASH AREA MUST BE PROVIDED AND DESIGNED TO BE SLIGHTLY DEPRESSED TO COLLECT WASTE MATERIAL AND PREVENT OFFSITE DISCHARGES OF WASTE WATER.
13. THERE SHALL BE NO DISCHARGE OF ANY SEDIMENT LADEN WATER FROM THE SITE WITHOUT PRIOR CONSULTATION AND APPROVAL FROM COUNCIL. REFER TO ANZECC GUIDELINES AND COUNCIL ENVIRONMENTAL HEALTH TRIGGER VALUES FOR WATER QUALITY PARAMETERS.
14. STABILISE/REVEGETATE ALL DISTURBED AREAS PROGRESSIVELY WHERE PRACTICAL.
15. ALL CONTROLS ARE TO BE MONITORED AND ADJUSTED AS REQUIRED TO REMAIN EFFECTIVE THROUGHOUT THE WORKS.

NOTE RE. SERVICES

APPROXIMATE LOCATIONS OF EXISTING SERVICES SHOWN

EXACT LOCATIONS & DEPTHS TO BE ACURATELY LOCATED BY BUILDER CONTRACTOR BY CONTACTING THE RELEVANT AUTHORTIES BEFORE COMMENCEMENT OF ANY WORKS

DIAL 1100 BEFORE YOU DIG

LEGEND

- EXISTING CONTOURS
- SILT FENCE
- WIRE MESH FENCE
- STABILISED SITE ACCESS
- Ø50 PUMP LINE
- STORMWATER DRAINAGE PIPE
- DOWNPIPE TO RAINWATER TANK
- SERVICE TRENCHES
- RUNOFF FLOW DIRECTION
- SAND BAGS
- HAY BALES
- MESH AND GRAVEL INLET FILTER
- TEMPORARY DOWNPIPE RUNOFF DIRECTION
- SSD SSD — SUBSOIL DRAINAGE PIPE (Ø100mm U.N.O)
- DP — DOWN PIPE (Ø100 U.N.O)
- VD — VERTICAL DROP PIPE (Ø100 U.N.O)
- VR — VERTICAL RISER
- IO — INSPECTION OPENING
- CE — CLEANING EYE
- MASONRY/BLOCK RETAINING WALL
- FP — FLUSHING POINT (Ø100 U.N.O)
- FW — FLOOR WASTE (Ø100 U.N.O)
- RWO — RAINWATER OUTLET (Ø300 U.N.O)
- DDO — DISH DRAIN OUTLET (Ø100 U.N.O)
- OF — OVERFLOW FLOOR WASTE (Ø100 U.N.O)
- SEALED PIT
- GRATED INLET PIT
- GRATED DRAIN
- OVERLAND FLOW PATH
- SP — SPREADER TEE CONFIGURATION
- SP — SPREADER L CONFIGURATION
- ES — EMERGENCY SPITTER (Ø65 U.N.O)
- EXISTING LEVEL
- HP — HIGH POINT

DRAWING SCHEDULE

DRAWING No.	DRAWING TITLE	REV
D00	COVER SHEET, LEGEND, DRAWING SCHEDULE & SPECIFICATIONS	A
D01	EROSION AND SEDIMENT CONTROL PLAN DURING DEMOLITION STAGE	A
D02	EROSION AND SEDIMENT CONTROL PLAN DURING EXCAVATION STAGE	A
D03	EROSION AND SEDIMENT CONTROL PLAN DURING CONSTRUCTION STAGE	A
D04	EROSION AND SEDIMENT CONTROL DETAILS	A

ABBREVIATIONS

CL	CENTRELINE LEVEL	OSD	ON-SITE DETENTION
CONV.	CONVERTER PIPE	PROP.	PROPOSED
D/S	DOWNSTREAM	PVC	POLYVINYLCHLORIDE
DDO	DISH DRAIN OUTLET	RL	REDUCED LEVEL
DN	DIAMETER	RW	RETAINING WALL
DP	DOWNPIPE	RWT	RAINWATER TANK
EX.	EXISTING	S/S	STAINLESS STEEL
FFL	FINISHED FLOOR LEVEL	SL	SURFACE LEVEL
GL	GROUND LEVEL	SSL	STRUCTURAL SLAB LEVEL
GMS	GALVANISED MILD STEEL	STW	STORMWATER
GSIP	GROUND SURFACE INLET PIT	TK	TOP OF KERB
GTD	GRATED TRENCH DRAIN	U/S	UPSTREAM
H.H	HEADHEIGHT		
HL	HIGH LEVEL		
HP	HIGH POINT		
IL	INVERT LEVEL		
IO	INSPECTING OPENING		
JP	JUNCTION PIT		
KIP	KERB INLET PIT		
LL	LOW LEVEL		
O/F	OVERFLOW		
OB	OBVERT LEVEL		

SITE OF WORK

LOCALITY SKETCH
NOT TO SCALE

1:150@A1 0 1 2 3 4 5 6 7
1:200@A1 0 1 2 3 4 5 6 7 8 9 10
1:100@A1 0 1 2 3 4 5

NOT FOR CONSTRUCTION

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE

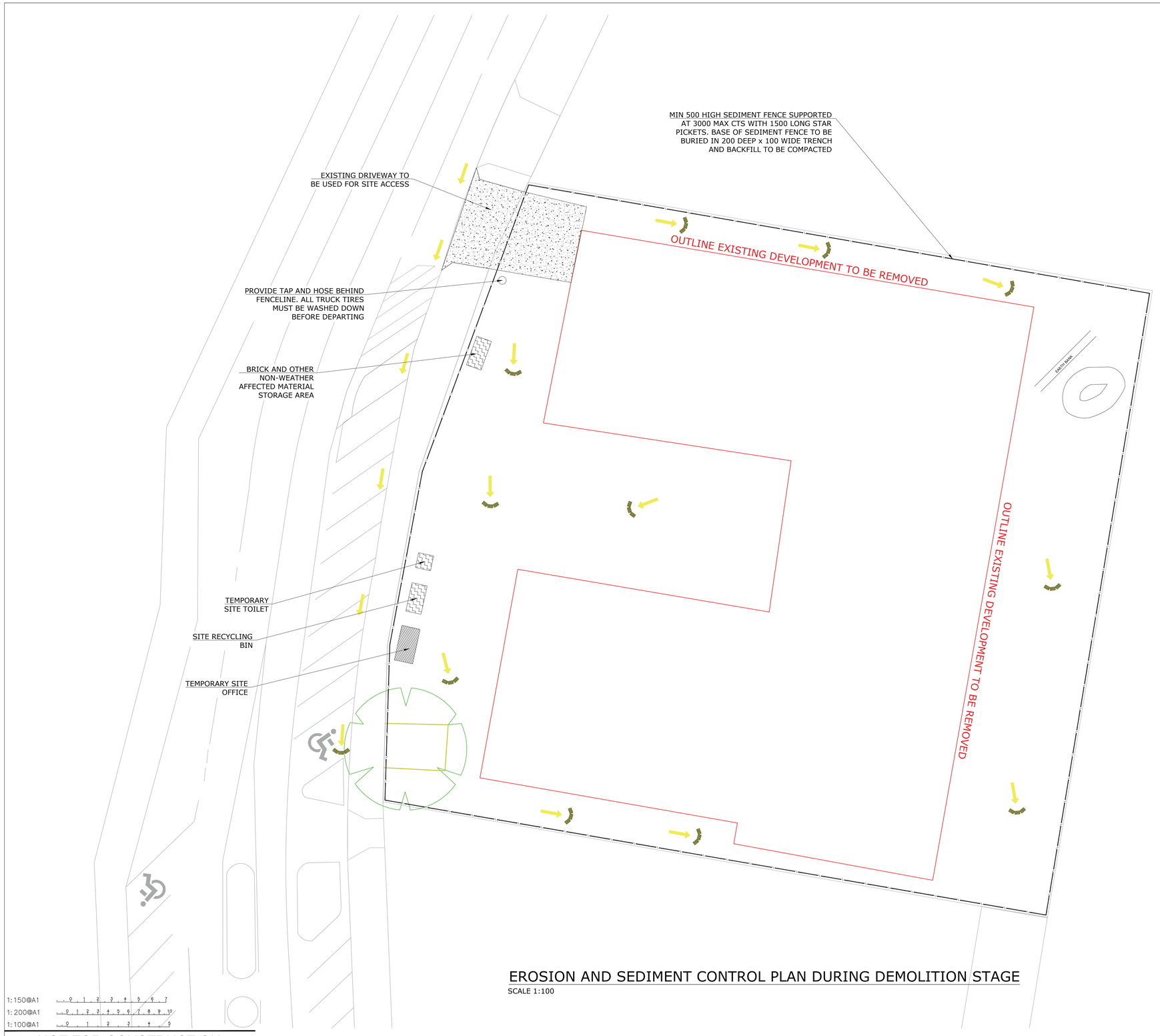
ARCHITECT

LOKA CONSULTING ENGINEERS.Pty Ltd
144/8 AVENUE OF THE AMERICAS, NEWINGTON NSW 2127
T: +61 2 9748 8742/8065 9689 M: 0404 142 063
F: +61 2 9748 1290/8065 9690
EMAIL: info@Lceng.com.au www.Lceng.com.au

PROJECT

SHEET SUBJECT: COVER SHEET, LEGEND AND DRAWING SCHEDULE

PROJECT			
DATE	DRAWN	DESIGNED	CHECKED
SCALE @ A1: N.T.S.		JOB No	
AUTHORISED		DWG No: D00	REV: A



LEGEND

- EXISTING CONTOURS
- SILT FENCE
- WIRE MESH FENCE
- STABILISED SITE ACCESS
- Ø50 PUMP LINE
- STORMWATER DRAINAGE PIPE
- DOWNPIPE TO RAINWATER TANK
- SERVICE TRENCHES
- RUNOFF FLOW DIRECTION
- SAND BAGS
- HAY BALES
- MESH AND GRAVEL INLET FILTER
- TEMPORARY DOWNPIPE RUNOFF DIRECTION
- SSD — SUBSOIL DRAINAGE PIPE (Ø100mm U.N.O)
- DP — DOWN PIPE (Ø100 U.N.O)
- VD — VERTICAL DROP PIPE (Ø100 U.N.O)
- VR — VERTICAL RISER
- IO — INSPECTION OPENING
- CE — CLEANING EYE
- MASONRY/BLOCK RETAINING WALL
- FP — FLUSHING POINT (Ø100 U.N.O)
- FW — FLOOR WASTE (Ø100 U.N.O)
- RWO — RAINWATER OUTLET (Ø300 U.N.O)
- DDO — DISH DRAIN OUTLET (Ø100 U.N.O)
- OF — OVERFLOW FLOOR WASTE (Ø100 U.N.O)
- SEALED PIT
- GRATED INLET PIT
- GRATED DRAIN
- OVERLAND FLOW PATH
- SP — SPREADER TEE CONFIGURATION
- SP — SPREADER L CONFIGURATION
- ES — EMERGENCY SPITTER (Ø65 U.N.O)
- EXISTING LEVEL
- HP — HIGH POINT

COUNCIL NOTE:

1. STORMWATER DISPOSAL FROM ANY DETENTION BASIN OR TRAPPED WITHIN THE SITE THROUGHOUT ALL DEVELOPMENT PHASES IN ACCORDANCE WITH REGIONAL ENVIROMENTAL HEALTH TRIGGER VALUES FOR THE AREA.
2. FOR DE-WATERING OF THE EXCAVATED SITE, ANY WATER THAT ACCUMULATES MUST BE REMOVED AND DISPOSED OF IN A MANNAR THAT DOES NOT RESULT IN THE POLLUTION OF WATER, NUISANCE TO NEIGHBOURING PROPERTIES OR DAMAGE/ POTENTIAL DAMAGE TO NEIGHBOURING LAND AND/OR PROPERTY.
3. ALTERNATIVE OPTIONS FOR THE DISPOSAL OF EXCAVATION PUMP-OUT WATER INCLUDE DISPOSAL TO SEWER WITH PRIOR APPROVAL FROM SYDNEY WATER, OR OFF-SITE DISPOSAL BY A LIQUID WASTE TRANSPORTER FOR TREATMENT/PROCESSING FACILITY.
4. FLOCCULATION TO BE USED IN CASE THE WATER IS NOT CLEAR. THE CONTRACTOR WILL HIRE A TEMPORARY SEDEMENTATION BASIN TO TREAT THE ACCUMULATED WATER ON SITE PRIOR THE DISPOSAL.

EROSION AND SEDIMENT CONTROL PLAN DURING DEMOLITION STAGE

SCALE 1:100

1:150@A1 0 1 2 3 4 5 6 7
1:200@A1 0 1 2 3 4 5 6 7 8 9 10
1:100@A1 0 1 2 3 4 5

NOT FOR CONSTRUCTION

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE
A	FOR COORDINATION	N.L	A.W	17-07-24					

ARCHITECT
HORNSBY SHIRE COUNCIL

LOKA CONSULTING ENGINEERS Pty Ltd
14A/8 AVENUE OF THE AMERICAS, NEWINGTON NSW 2127
T: +61 2 9748 8742/8065 9689 M: 0404 142 063
F: +61 2 9748 1290/8065 9690
EMAIL: info@Loceng.com.au www.Loceng.com.au

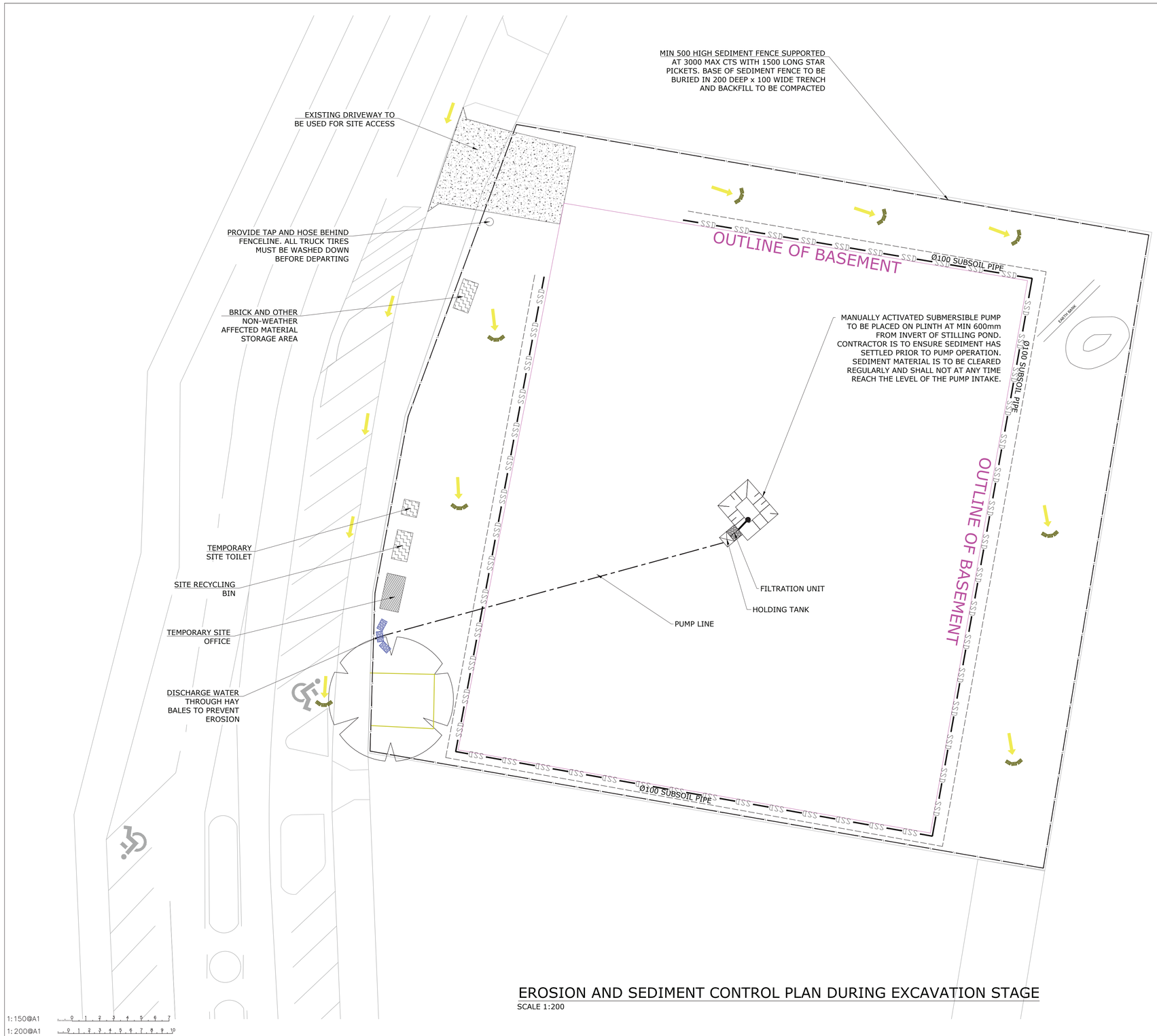
PROJECT
OFFICE BUILDING AT 294 PEATS FERRY RD, HORNSBY, NSW

CONSENT AUTHORITY:
HORNSBY SHIRE COUNCIL

N

SHEET SUBJECT
EROSION AND SEDIMENT CONTROL PLAN DURING DEMOLITION STAGE

PROJECT 294 PEATS FERRY RD, HORNSBY, NSW			
DATE MAR 24	DRAWN A.W.	DESIGNED K.V.	CHECKED N.L.
SCALE @ A1 AS SHOWN		JOB No 24NL005	
AUTHORISED NERMEIN LOKA		DWG No D01	REV A



LEGEND

- EXISTING CONTOURS
- SILT FENCE
- WIRE MESH FENCE
- STABILISED SITE ACCESS
- Ø50 PUMP LINE
- STORMWATER DRAINAGE PIPE
- DOWNPIPE TO RAINWATER TANK
- SERVICE TRENCHES
- RUNOFF FLOW DIRECTION
- SAND BAGS
- HAY BALES
- MESH AND GRAVEL INLET FILTER
- TEMPORARY DOWNPIPE RUNOFF DIRECTION
- SSD — SUBSOIL DRAINAGE PIPE (Ø100mm U.N.O)
- DP — DOWN PIPE (Ø100 U.N.O)
- VD — VERTICAL DROP PIPE (Ø100 U.N.O)
- VR — VERTICAL RISER
- IO — INSPECTION OPENING
- CE — CLEANING EYE
- MASONRY/BLOCK RETAINING WALL
- FP — FLUSHING POINT (Ø100 U.N.O)
- FW — FLOOR WASTE (Ø100 U.N.O)
- RWO — RAINWATER OUTLET (Ø300 U.N.O)
- DDO — DISH DRAIN OUTLET (Ø100 U.N.O)
- OF — OVERFLOW FLOOR WASTE (Ø100 U.N.O)
- SEALED PIT
- GRATED INLET PIT
- GRATED DRAIN
- OVERLAND FLOW PATH
- SP — SPREADER TEE CONFIGURATION
- SP — SPREADER L CONFIGURATION
- ES — EMERGENCY SPITTER (Ø65 U.N.O)
- EXISTING LEVEL
- HP — HIGH POINT

COUNCIL NOTE:

1. STORMWATER DISPOSAL FROM ANY DETENTION BASIN OR TRAPPED WITHIN THE SITE THROUGHOUT ALL DEVELOPMENT PHASES IN ACCORDANCE WITH REGIONAL ENVIROMENTAL HEALTH TRIGGER VALUES FOR THE AREA.
2. FOR DE-WATERING OF THE EXCAVATED SITE, ANY WATER THAT ACCUMULATES MUST BE REMOVED AND DISPOSED OF IN A MANNAR THAT DOES NOT RESULT IN THE POLLUTION OF WATER, NUISANCE TO NEIGHBOURING PROPERTIES OR DAMAGE/ POTENTIAL DAMAGE TO NEIGHBOURING LAND AND/OR PROPERTY.
3. ALTERNATIVE OPTIONS FOR THE DISPOSAL OF EXCAVATION PUMP-OUT WATER INCLUDE DISPOSAL TO SEWER WITH PRIOR APPROVAL FROM SYDNEY WATER, OR OFF-SITE DISPOSAL BY A LIQUID WASTE TRANSPORTER FOR TREATMENT/PROCESSING FACILITY.
4. FLOCCULATION TO BE USED IN CASE THE WATER IS NOT CLEAR. THE CONTRACTOR WILL HIRE A TEMPORARY SEDEMENTATION BASIN TO TREAT THE ACCUMULATED WATER ON SITE PRIOR THE DISPOSAL.

EROSION AND SEDIMENT CONTROL PLAN DURING EXCAVATION STAGE

SCALE 1:200

1:150@A1
1:200@A1
1:100@A1

NOT FOR CONSTRUCTION

No	AMENDMENT	ENG	DRAFT	DATE
A	FOR COORDINATION	N.L	A.W	17-07-24

ARCHITECT
HORNSBY SHIRE COUNCIL

LOKA CONSULTING ENGINEERS Pty Ltd
14A/8 AVENUE OF THE AMERICAS, NEWINGTON NSW 2127
T: +61 2 9748 8742/8065 9689 M: 0404 142 063
F: +61 2 9748 1290/8065 9690
EMAIL: info@Lceng.com.au www.Lceng.com.au

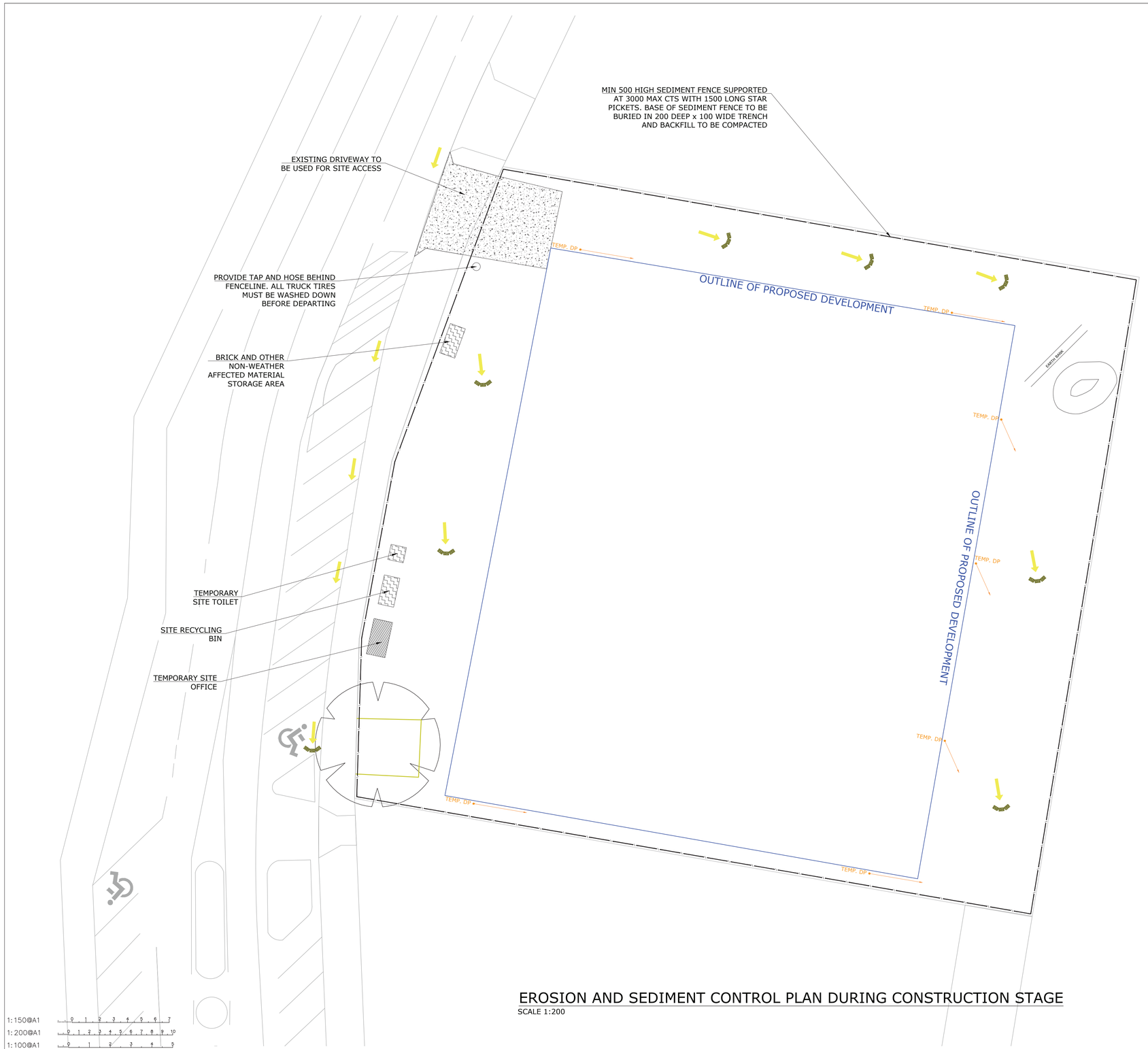
PROJECT
OFFICE BUILDING AT 294 PEATS FERRY RD, HORNSBY, NSW

CONSENT AUTHORITY:
HORNSBY SHIRE COUNCIL

N

SHEET SUBJECT
EROSION AND SEDIMENT CONTROL PLAN DURING EXCAVATION STAGE

PROJECT 294 PEATS FERRY RD, HORNSBY, NSW			
DATE MAR 24	DRAWN A.W.	DESIGNED K.V.	CHECKED N.L.
SCALE @ A1 AS SHOWN		JOB No 24NL005	
AUTHORISED NERMEIN LOKA		DWG No D02	REV A



LEGEND

- EXISTING CONTOURS
- SILT FENCE
- WIRE MESH FENCE
- STABILISED SITE ACCESS
- Ø50 PUMP LINE
- STORMWATER DRAINAGE PIPE
- DOWNPIPE TO RAINWATER TANK
- SERVICE TRENCHES
- RUNOFF FLOW DIRECTION
- SAND BAGS
- HAY BALES
- MESH AND GRAVEL INLET FILTER
- TEMPORARY DOWNPIPE RUNOFF DIRECTION
- SSD — SUBSOIL DRAINAGE PIPE (Ø100mm U.N.O)
- DP — DOWN PIPE (Ø100 U.N.O)
- VD — VERTICAL DROP PIPE (Ø100 U.N.O)
- VR — VERTICAL RISER
- IO — INSPECTION OPENING
- CE — CLEANING EYE
- MASONRY/BLOCK RETAINING WALL
- FP — FLUSHING POINT (Ø100 U.N.O)
- FW — FLOOR WASTE (Ø100 U.N.O)
- RWO — RAINWATER OUTLET (Ø300 U.N.O)
- DDO — DISH DRAIN OUTLET (Ø100 U.N.O)
- OF — OVERFLOW FLOOR WASTE (Ø100 U.N.O)
- SEALED PIT
- GRATED INLET PIT
- GRATED DRAIN
- OVERLAND FLOW PATH
- SP — SPREADER TEE CONFIGURATION
- SP — SPREADER L CONFIGURATION
- ES — EMERGENCY SPITTER (Ø65 U.N.O)
- EXISTING LEVEL
- HP — HIGH POINT

COUNCIL NOTE:

1. STORMWATER DISPOSAL FROM ANY DETENTION BASIN OR TRAPPED WITHIN THE SITE THROUGHOUT ALL DEVELOPMENT PHASES IN ACCORDANCE WITH REGIONAL ENVIROMENTAL HEALTH TRIGGER VALUES FOR THE AREA.
2. FOR DE-WATERING OF THE EXCAVATED SITE, ANY WATER THAT ACCUMULATES MUST BE REMOVED AND DISPOSED OF IN A MANNAR THAT DOES NOT RESULT IN THE POLLUTION OF WATER, NUISANCE TO NEIGHBOURING PROPERTIES OR DAMAGE/ POTENTIAL DAMAGE TO NEIGHBOURING LAND AND/OR PROPERTY.
3. ALTERNATIVE OPTIONS FOR THE DISPOSAL OF EXCAVATION PUMP-OUT WATER INCLUDE DISPOSAL TO SEWER WITH PRIOR APPROVAL FROM SYDNEY WATER, OR OFF-SITE DISPOSAL BY A LIQUID WASTE TRANSPORTER FOR TREATMENT/PROCESSING FACILITY.
4. FLOCCULATION TO BE USED IN CASE THE WATER IS NOT CLEAR. THE CONTRACTOR WILL HIRE A TEMPORARY SEDEMENTATION BASIN TO TREAT THE ACCUMULATED WATER ON SITE PRIOR THE DISPOSAL.

EROSION AND SEDIMENT CONTROL PLAN DURING CONSTRUCTION STAGE

SCALE 1:200

1:150@A1 0 1 2 3 4 5 6 7
1:200@A1 0 1 2 3 4 5 6 7 8 9 10
1:100@A1 0 1 2 3 4 5

NOT FOR CONSTRUCTION

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE
A	FOR COORDINATION	N.L	A.W	17-07-24					

ARCHITECT
HORNSBY SHIRE COUNCIL

LOKA CONSULTING ENGINEERS Pty Ltd
14A/8 AVENUE OF THE AMERICAS, NEWINGTON NSW 2127
T: +61 2 9748 8742/8065 9689 M: 0404 142 063
F: +61 2 9748 1290/8065 9690
EMAIL: info@Loeng.com.au www.Loeng.com.au

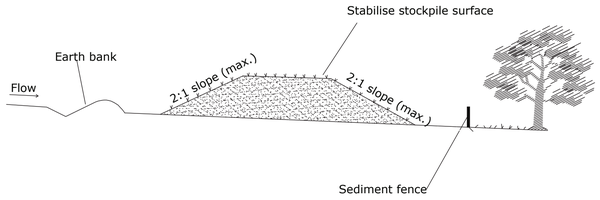
PROJECT
OFFICE BUILDING AT 294 PEATS FERRY RD, HORNSBY, NSW

CONSENT AUTHORITY:
HORNSBY SHIRE COUNCIL

N

SHEET SUBJECT
EROSION AND SEDIMENT CONTROL PLAN DURING CONSTRUCTION STAGE

PROJECT 294 PEATS FERRY RD, HORNSBY, NSW			
DATE MAR 24	DRAWN A.W.	DESIGNED K.V.	CHECKED N.L.
SCALE @ A1 AS SHOWN		JOB No 24NL005	
AUTHORISED NERMEIN LOKA		DWG No D03	REV A



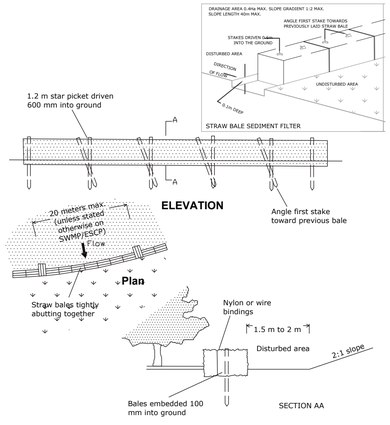
Stockpiles

Construction Notes

1. **Place tockpiles more than 2 (preferably 5) metres from existing vegetation, concentrated water flow, roads and hazard areas.**
2. **construct on the contour as low, flat, elongated mounds.**
3. **where they are to be in place for more than 10 days, stabilise following the approved ESCP or SWMPto reducethe C-factor to less than 0.10.**
4. **Construct earth banks (standard Drawing 5-5) on the upslope side to divert water around stockpiles and sediment fences (standard drawings 6-8) 1 to 2 meters downslope**

STOCKPILES

NTS



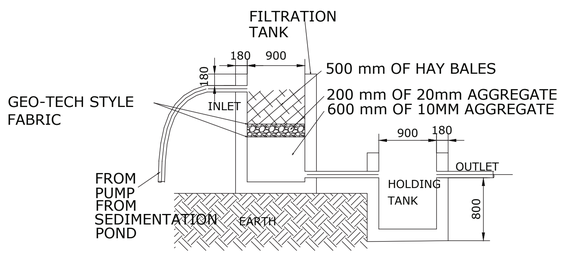
Straw bale filter

Construction Notes

1. **Construct the straw bale filter as close as possible to being parallel to the contours of the site,**
2. **Place bales lengthwise in a a row with ends tightly abutting. Use straw to fill gaps between bales. Straw are to be placed parallel to ground.**
3. **ensure that the maximum height of the filter is one bale.**
4. **embed each bale in the ground 75 mm to 100 mm and anchor with 1.2 meter star pickets or stakes. Angle the first star picket or stake in each bale towards the previously load bale. Drive them 600 mm into the ground and protrude above the bales , ensure they are fitted with safety caps.**
5. **where a straw bale filter is constructed downslope from a disturbed batter, ensure bales are placed 1 to 2 meters downslope from the toe.**
6. **Establish a maintenance program that ensures the integrity of the bales is retained - they could require replacement each two to four months.**

STRAW BALE FILTER

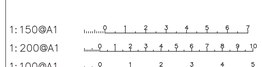
NTS

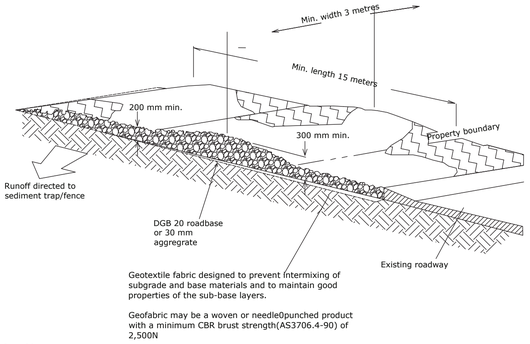


TYPICAL DETAIL OF FILTRATION UNIT

NTS

NOTE: HAY TO BE CHANGED EVERY DAY
GEO-TECH, SAND, AND BLUE METAL, TO BE CHANGED WEEKLY



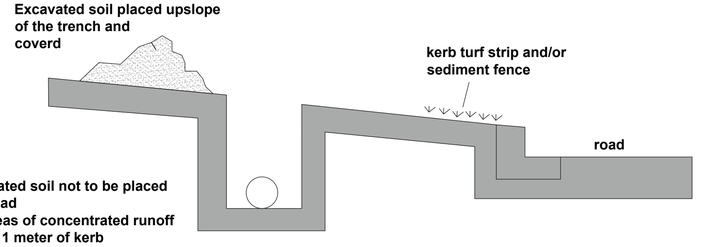


Construction Notes

1. **Strip the topsoil, level the site and compact the subgrade.**
2. **cover the area with needle-punched gertextile.**
3. **construct a 200-mm thick pad over the geotextile using road base or 30-mm aggregate.**
4. **Ensure the structure is at least 15 meters long or to building alignment and at least 3 meters wide.**
5. **where a sediment fence joins onto the stabilised access, construct a hump in the stabilised access to divert water to the sediment fence.**

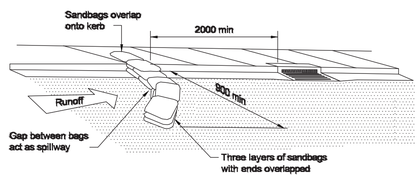
STABILISED SITE ACCESS

NTS



SERVICE TRENCHES

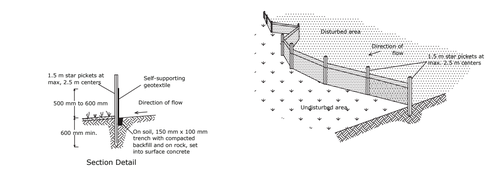
NTS



Sediment Trap for Kerb Inlet
(On Grade - Sandbag)

SEDIMENT TRAP FOR KERB INLET

NTS



Sediment Fence

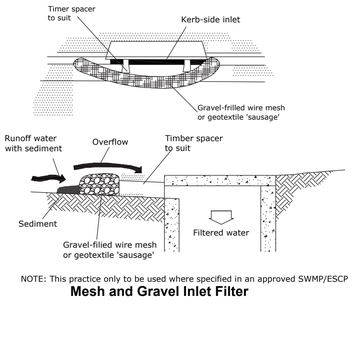
NTS

Construction Notes

1. **construct sediment fences as close as possible to being parallel to the contours of the site but with small returns as shown in the drawing to limit the catchments area of any one section. the catchments area should be small enough to limit water flow if concentrated at one point to 50 liters per second in the design storm event, usually the 10-year event.**
2. **cut a 150-mm deep trench along the upslope line of the fence for the bottom of the fabric to be entrenched.**
3. **drive 1.5 metre long star pickets into ground at 2.5 meters intervals (max) at the downslope edge of the trench. Ensure any star pickets are fitted with safety caps.**
4. **Fix self-supporting geotextile to the upslope side of the posts ensuring it goes to the base of the trench. fix the geotextile with wire ties or as recommended by the manufacturer. Only use geotextile specifically produced for sediment fencing. the use of shade cloth for this purpose is not satisfactory.**
5. **Join sections of fabric at a support post with a 150-mm overlap.**
6. **Backfill the trench over the base of the fabric and compact it thoroughly over the geotextile.**

SEDIMENT FENCE

NTS



NOTE: This practice only to be used where specified in an approved SWMP/ESCP

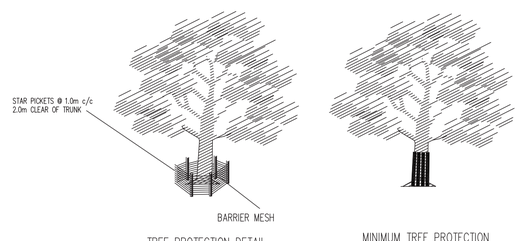
Mesh and Gravel Inlet Filter

Construction Notes

1. **Insert filters to kerb inlets only at sag points.**
2. **Fabricate a sleeve made from geotextile or wire mesh longer than the length of the inlet pit and fill it with 25 mm to 50 mm gravel.**
3. **Form an elliptical cross-section about 150 mm high x 40 mm wide**
4. **place the filter at the opening leaving at least a 100-mm space between it and the kerb inlet. Maintain the opening with spaces blocks.**
5. **Form a seal with the kerb to prevent sediment bypassing the filter.**
6. **sand bags filled with gravel can substitute for the mesh or geotextile providing they are placed so that they firmly about each other and sediment-laden waters cannot pass between.**

MESH AND GRAVEL INLET FILTER

NTS



TREE PROTECTION

NTS

NOT FOR CONSTRUCTION

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE
A	FOR COORDINATION	N.L	A.W	17-07-24					

ARCHITECT
HORNSBY SHIRE COUNCIL

LOKA CONSULTING ENGINEERS.Pty Ltd
14A/8 AVENUE OF THE AMERICAS, NEWINGTON NSW 2127
T: +61 2 9748 8742/8065 9689 M: 0404 142 063
F: +61 2 9748 1290/8065 9690
EMAIL: info@Lceng.com.au www.Lceng.com.au

PROJECT
OFFICE BUILDING AT 294 PEATS FERRY RD, HORNSBY, NSW

CONSENT AUTHORITY:
HORNSBY SHIRE COUNCIL

N

SHEET SUBJECT
EROSION AND SEDIMENT CONTROL DETAILS

PROJECT 294 PEATS FERRY RD, HORNSBY, NSW			
DATE MAR 24	DRAWN A.W.	DESIGNED N.L.	CHECKED N.L.
SCALE @ A1 AS SHOWN		JOB No 24NL005	
AUTHORISED NERMEIN LOKA		DWG No D04	REV A