Address:	Grosvenor Place, 225 George Street, Sydney NSW
Works:	Grosvenor Place Alterations and Additions to the existing base building
DA No:	4
Date:	13th August 2015
Re:	Construction Management Plan
Compiled By:	Mark Paterson
For:	NSW Government E&P Sydney Harbour Foreshore Authority and City of Sydney Council

Revision 1	Description Planning Issue	Date 13/8/15
01	Issued to Eastview Commercial Pty Ltd	13.08.15

CONTENTS

GENERAL

1 INTRODUCTION

This Construction Management Plan (CMP) has been prepared to address management of construction works associated with the proposed development in accordance with Development Application 4 and relevant standards. The CMP will outline procedures that are intended to be implemented to manage construction activities ensuring that unacceptable high levels of environmental or community disturbance do not occur throughout the duration of the works.

The location plan below depicts the site.

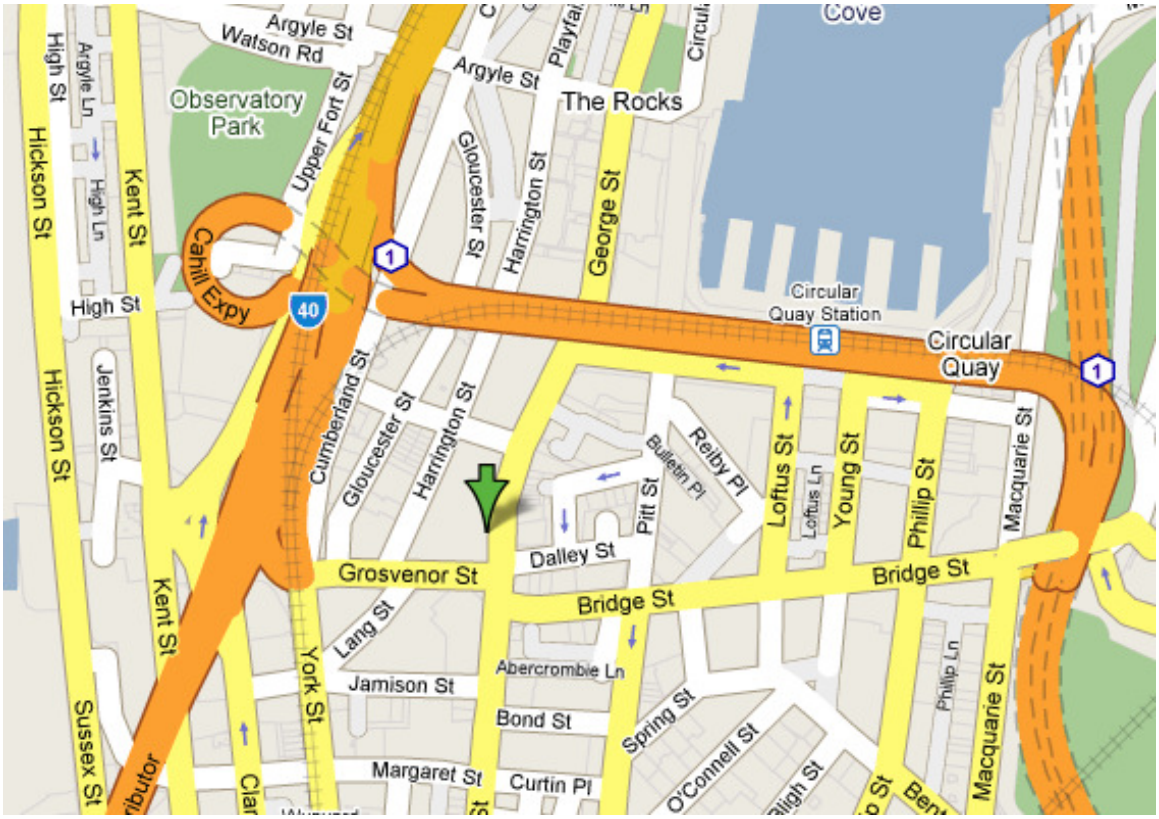

Figure 1 - Location Plan

1.1 OBJECTIVES

The objectives of the CMP are to address the following items within Sections 2 – 7 of the plan.

a) Site Safety Issues
b) Method of access to and from the site by construction plant and vehicles.
c) Provisions to ensure traffic flow to public roads surrounding the site are maintained at all times.
d) How access to neighbouring properties will be maintained at all times.
e) The proposed method of pedestrian management.
f) The proposed order in which works on the site will be undertaken, and the method statements on how various stages of demolition and construction will be undertaken.
g) The proposed manner in which adjoining property owners will be kept advised of the timeframes for completion of each phase development / construction process.
h) The proposed method of loading and unloading construction plant and equipment, building materials and erection of any part of the structure within the site.
i) The proposed area within the site to be used for storage of construction and waste materials.
j) The proposed location of the Construction Zone.
k) Waste Management

1.2 REFERENCES

- Local Council Regulations;
- Relevant Australian Standards;
  - AS1742.3
  - AS1742.10
  - AS2601 – Demolition
- Environment Protection Legislation
- Clean Waters Act 1970;
- Clean Air Act 1961;
- Waste Minimisation Act 1995 (NSW);

1.3 CONSULTATION

The planning and implementation of the construction works will be completed in consultation with the following statutory authorities where applicable:

- Sydney Harbour Foreshore Authority
- City of Sydney Council
- Sydney Water
- Energy Australia
- Roads and Traffic Authority
- Work Cover Authority;

1.4 CONSTRUCTION HOURS AND SITE CONTACT

The intended hours of work for construction are;

Monday to Friday	7.00am to 7.00pm
Saturday	7.00am to 3.00pm
Sundays and Public Holidays	No Work

These hours are in-line with the NSW EPA, Environment Noise Control Manual. Noise management methodology, during these working hours, is addressed in Section 7 of this CMP.

The Site Contact for Built is:

- Mark Paterson 0414 289 250

1.5 SCOPE OF CONSTRUCTION ACTIVITIES

The project involves the redevelopment and refurbishment of the Northern Ground Plane Forecourt at “Grosvenor Place, 225 George Street Sydney” will include although not be limited to:

External Works

- Removal of Existing Escalator from Harrington St
- The construction of through site link at Harrington st
- Upgraded 24hr lift access from Harrington st to George st .
- Alterations and additions to the existing north upper plaza tenancy
- The construction of a new Awning structure over the new Harrington st through site link
- New way finding signage to direct public through new cross link

General

The works will be carried out within “hoarding zones” that are separated from the building occupants and general public by “A” class hoardings and fencing.

1.6 SAFETY

Safety is the highest priority on the project. The Built Site Specific Safety Plan will be formulated for the project which lists the specific safety procedures for the project.

This document is always on site and is regularly updated with:

- High Risk Construction Work Safe Work Method Statements.
- Site Inspections.
- Site Inductions
- Roles and Responsibilities
- Other approved safety documentation

The Built Site Specific Safety Plan is updated and revised as necessary as the project progresses to suit the current onsite conditions.

The Built Site Specific Safety Plan sets out the procedures for the management of safety on the project and is supplemented by a number of specific safety forms and procedures that are part of the Built Safe 2 Management System.

2 PEDESTRIAN AND TRAFFIC METHODOLOGY DURING CONSTRUCTION WORKS

2.1 TRAFFIC MANAGEMENT

Traffic Management during the construction phase of the north ground plane forecourt development is detailed below.

- Applications for temporary lane closures to be submitted to Sydney Harbour Foreshore Authority (SHFA).
- State Transit Authority must be notified if bus zone is required.
- Applications for temporary works to be to the City of Sydney Council (CofSC).
- Applications for a new temporary access driveway and vehicular crossover from Essex Street to be submitted City of Sydney Council for approval.
- Applications for temp works permits to the Harrington Street Site Frontage to be submitted to the City of Sydney Council. The proposed zone is for use 7.00am – 5.00pm Saturday's.

2.1.1 PROPOSED INGRESS AND EGRESS ROUTES TO THE SITE FOR CONSTRUCTION VEHICLES & DELIVERIES WILL BE:

- If vehicles are to access Harrington Street works zone they are to approach the sites using George Street in a north bound direction and then turn left into Essex Street and then left into Harrington st.
- If vehicles are to access beneath Grosvenor Place they are to approach the site using Essex St in a West bound direction.
- Access from George St must be from the north bound direction.
- Refer to plan in Figure 2 below for vehicle movement to site.

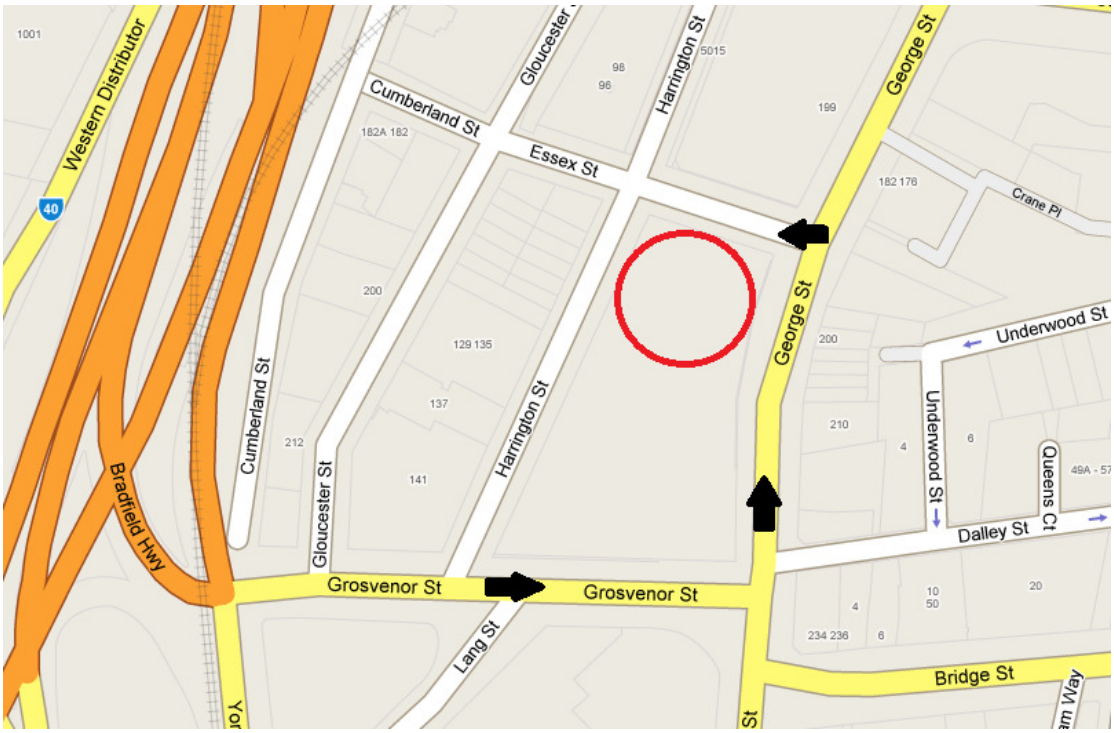

Figure 2 : Vehicular Access

2.1.2 Proposed Work Zone

- The Work Zone is indicated on the Site Establishment Plans.

Waste Bin Delivery Access and Removal to/from site;

- Waste bins will be within the construction zone located in the hoarded areas or located in the basement level loading dock bay. Traffic controllers will stop adjacent traffic and pedestrians while loading and unloading these items.

Workers travelling to work

- Workers will be encouraged to use public transport to and from site
- Trades people requiring vehicles to get to work which contain their plant and equipment will be parking within the building within the basement parking station which is entered from Essex St

The proposed method for access and egress to the site will be established at conception and altered as the works progress.

- Access from George Street and Essex Streets will be utilised in accordance with the traffic management and site establishment plans.
- Only vehicles that may enter work zone directly are bob cat, scissor lift, forklift and crawler crane, trucks of approved GMV and any other vehicle as required that is able to access and egress the site in accordance with the traffic management plans and that is within the approved KPA loads. All of these vehicles will be able to manoeuvre within the site and exit in a forward motion.
- RTA accredited Traffic controllers will be on hand to manage pedestrians if such plant has to enter or exit the site.

Disruption of traffic flows

- Peak hours for traffic are Morning from 7:30am – 9:30am Monday - Friday
- Peak hours for traffic are Afternoon from 3:00pm – 7:00pm Monday - Friday
- Traffic controllers will not unreasonably disrupt traffic for vehicles entering and exiting the construction zone.
- Works will be coordinated outside peak hours where possible to minimise traffic flow disruption.
- There will be no disruption to the traffic flows during peak hours.
- Any disruption to traffic flows out of peak hours will be minimized through the use of qualified traffic flows.

2.1.3 Preferred construction access

- Essex Street

2.1.4 Through traffic is to be maintained at all times

- When traffic has to be disrupted the relevant parties will be informed.

2.1.5 Traffic Control Method

- ❖ Traffic Management Plan will be developed to depict the site traffic control measures and methods, for implementation.

2.1.6 Access routes through council area and vehicle movements

- ❖ Main roads will be used to access the site, the most direct routes will be used, refer to Figure 2.
- ❖ Out of hours works permits will be sought to load and unload after hours when there are less pedestrians and vehicles on the street. These will be applied for as required.

2.1.7 Method for loading and unloading materials and equipment

- ❖ Traffic controllers will be used at all times to stop adjacent pedestrians and vehicles
- ❖ Trucks: Forklift or Crane Truck (HIAB Type or similar)
- ❖ Bins : Appropriate truck

2.1.8 Information to local residents and advertising as required

- ❖ The public liaison officer will make the relevant parties aware in a reasonable time of any disruptive activities.

2.1.9 Method of demolition and construction

- ❖ Refer to Section 3

2.2 SITE ESTABLISHMENT

The site establishment plans are shown within Appendix 1.

The plans show the proposed position of hoardings, site amenities, site access and exit routes and driveways and other general site establishment items.

The hoarding types and locations are summarised below:

Street	Type
Harrington St	Hoarding Class B
Harrington St	Hoarding Class A

2.3 PEDESTRIAN TRAFFIC

Pedestrian movement during the construction phase will not be affected by the development. Pedestrian management considerations are detailed below, also in the attached Traffic Management Plan and Site Establishment Plan. It includes the following;

- Protection for pedestrians will be as per statutory requirements with perimeter security fencing and A and B Class Hoardings at required areas.
- Traffic controllers for construction vehicles entering and leaving the site on special occasions such as pouring of concrete slabs;

2.4 CONSULTATION

Consultation shall be undertaken with the following statutory authorities;

- Sydney Harbour Foreshore Authority (SHFA)
- City of Sydney Council (COSC)
- Roads and Traffic Authority (RTA)
- State Transit Authority (STA)
- NSW Police

3 DEMOLITION AND EXCAVATION

The following is a summary of the construction methodologies for the project;

1) Hoardings & Scaffolding

- Hoardings will be required for the works as depicted within Site Plan Appendix 1.

2) Existing Services

- Each existing service affected by the construction work will be disconnected, capped off, removed, altered or redirected, as necessary for the completion of the works. Any redirection or capping of any services required will not affect any surrounding property.

3) Recycling

For recycling information refer to **section 5 – Waste Management**.

4 STORM AND WASTE WATER MANAGEMENT PLAN METHODOLOGY DURING CONSTRUCTION

4.1 INTRODUCTION

The site is contained within the building envelope care will be taken at all time to ensure that debris will not fall onto the street where they can be washed into the waterways.

4.2 SCOPE

- Storm water – The stormwater management philosophy for the site is to collect and treat all stormwater runoff, construction and wash down water prior to it draining to the street stormwater drainage system. Treatment of the runoff and construction wash water will consist of
- Provision of silt fences, swales and sediment traps along property boundaries and around stormwater inlet drains within the site as required
- Existing paint wash out area in Grosvenor Place will be utilised for the cleaning of painting materials.

4.3 REFERENCES

- ❖ All relevant local council regulations;
- ❖ Environmental Protection Legislation;
- ❖ Clean Waters Act 1970;

4.4 CONSULTATION

The following organizations and their regulations and guidelines will be consulted in the preparation of the storm and wastewater management plan:

- ❖ Environmental Protection Authority;
- ❖ Local Municipal Council;
- ❖ NSW Department of Land and Water Conservation;

5 WASTE MANAGEMENT METHODOLOGY DURING CONSTRUCTION

This is fully documented in the Waste Management Plan in Appendix 2.

The waste management information will be collated on a monthly basis as part of Built Pty Ltd internal procedures. A copy of the information will be forwarded to Eastview on a monthly basis for information and distribution as required.

5.1 PURPOSE

To ensure that resources are conserved and waste is processed responsibly by minimizing waste generation and maximizing recycling of materials.

5.2 SCOPE

To address the waste management procedures for the demolition and construction activities to be undertaken during the proposed development of 'Grosvenor Place, 225 George St, Sydney'

5.3 MAJOR MEASURES

i) Materials Selection & Ordering;

- Selection of all materials will be undertaken by architectural designers;
- Materials requirements are to be accurately calculated to minimize waste from over ordering;
- Materials ordering process is to aim at minimisation of materials packaging;
- Material Safety Data Sheets (MSDS) are to accompany all materials delivered to site, where required, to ensure that safe handling and storage procedures are implemented;

ii) Waste Recycling

- Waste generation from construction activities on site will be minimized, reused or recycled where applicable;
- Recyclable materials are to be specified wherever practical;

- Dedicated and secure containers will be provided on site by an approved waste handling company for non-recyclable waste;
- Where practical, dedicated and secure recycling containers will be provided on site by an approved waste handling company, manufactures, or specialist recycling organizations for the following materials;
    - Steel
    - Timber
    - Paper/Cardboard
    - Glass
    - Concrete/Brick/General Rubbish
    - Doors, Windows, fittings
    - Plasterboard

iii) Location of Waste

- All waste will be contained within the site within the appropriate containers and will be transported off site.

6 AIR QUALITY MANAGEMENT METHODOLOGY DURING CONSTRUCTION

6.1 PURPOSE

To ensure that demolition and construction activities do not lead to the generation of unacceptably high levels of dust or other air pollution.

6.2 SCOPE

To establish air quality management systems and procedures to be implemented during construction activities undertaken during the proposed development 'Grosvenor Place, 225 George St, Sydney'

6.3 MAJOR MEASURES

- All construction plant, equipment and vehicles are to be properly maintained and operated so as to alleviate excessive exhaust emissions;
- Waste loads leaving the site are to be covered at all times;
- All dust generating construction activities are to cease during high wind conditions unless such operations can be controlled by containing wind from the site with hoardings.
- The burning of waste materials and the lighting of fires will be strictly prohibited on the site at all times;
- Continual visual monitoring of the site will be undertaken by site management to ensure that works do not generate unacceptably high levels of dust;
- Wherever practical, materials and processes that are non-toxic will be employed to minimize possible harmful affects to air quality;
- Wherever practical any ozone depleting gases in building services installations will be removed prior to deconstruction works;

7 NOISE MANAGEMENT METHODOLOGY DURING CONSTRUCTION

7.1 PURPOSE

To allow the tenants of Grosvenor place, Royal Naval House and the Johnson Building the continued quiet enjoyment of their space

To ensure that construction activities do not lead to the generation of unacceptably high levels of noise.

7.2 SCOPE

To establish a noise management procedure to be implemented during construction activities to be undertaken in the proposed development of "Grosvenor Place, 225 George St, Sydney".

7.3 MAJOR MEASURES

Working Hours:

- The intended hours of work for construction are

Monday to Friday	7.00am to 7.00pm
Noisy works not permitted between (Monday to Friday)	12.00pm and 2.00pm
Saturday	7.00am to 5.00pm
Sundays and public holidays	No Work

Standards

- The maximum noise levels of all deconstruction and construction plant and equipment is to generally comply with EPA requirements;
- Noise levels to comply with Local Council Statutory regulations.

Management

Site Induction

- The Site Manager will ensure that all employees and sub-contractors are advised of the procedures under the 'Noise Management Methodology' during each Site Specific Safety Induction prior to commencement of work on the site.
- The Site Induction will:
- Explain employee's responsibilities as outlined in the 'Noise Management Methodology.

- Highlight the sensitivity of the issue of power tool noise to adjoining residents.
- Explain the restrictions of the usage of any equipment or device on site.
- Notify approved hours of work.

Communication

- A site contact phone number will be issued via the site contact signage displayed on the site hoardings to surrounding neighbours so they can immediately discuss any concerns they may have regarding noise associated with construction activities on site.
- Any unavoidable upcoming noisy works will be reported by Built to Eastview Commercial and Building Management so that appropriate notices can be given to tenants.

Practical Measures to reduce the impact of noisy works on the building occupants and surrounding properties

- Saw cutting of concrete for demolition rather than using hammers and breakers were possible. Saw cutting is a higher frequency noise than hammering and cause less vibration to the structure and thus cause less noise impact. This information will be provided to the proposed demolition contactors so that they can prepare a methodology for the demolition works.

- Parts of the structure have been specified by the structural engineers to be demolished by hammer and breaker rather than saw cutting. To minimise the impact on the building occupants and neighbouring properties this work will be scheduled for Saturdays and will be carried out either side of the "Lunch time" period of 12.00 noon – 2.00pm Monday to Friday. This will be as permitted by the construction program.

- It is proposed that the site areas will be contained within 2.7m high plywood hoardings. These hoardings will assist in the reduction of noise transference from the site area.

Appendix 1: Built – Site Establishment and Traffic Management Plans

Appendix 2: Waste Management Plan

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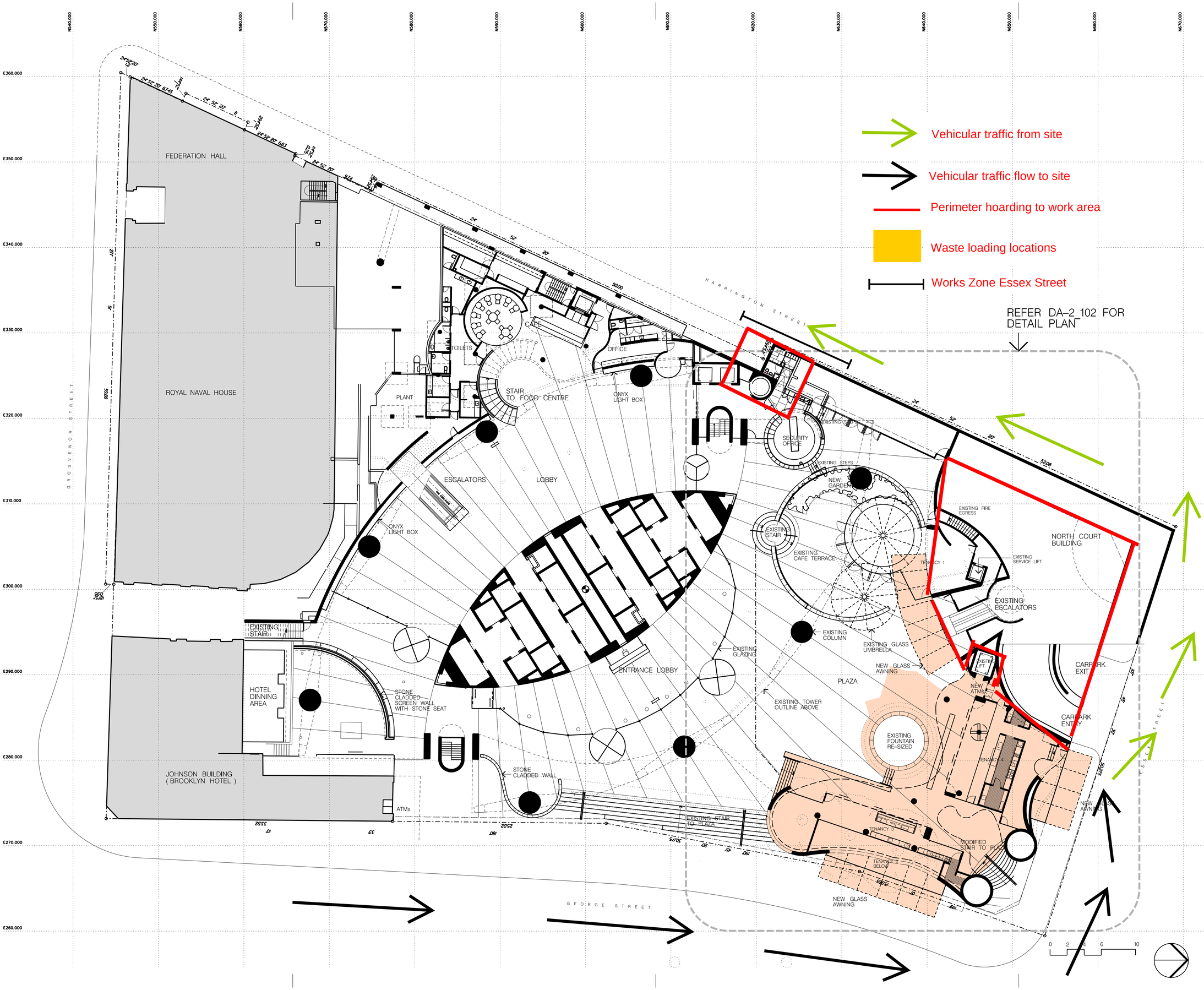

Note:

1. This drawing is copyright, the information shown remains the property of the Architect. The information shown is confidential and is for use only for Grosvenor Place. Any unauthorised use or copying of this document is prohibited.
2. Confirm all dimensions on site prior to ordering materials or commencing work.
3. Do not scale - ask.

LEGEND

AREA OF NEW WORKS

ISSUE	REVISION	DATE
E	Tenancy numbering.	30–06–14
D	Dumbwaiter changed to service lift. Furniture removed.	24–06–14 20–06–14
C	New works area amended.	16–06–14
B	Fit out layout amended.	13–06–14
A	Initial issue	06–06–14

Project
Grosvenor Place
North Plaza Refurbishment and End-of-Trip Facilities
Grosvenor Place
225 George Street
Sydney NSW 2000

Client
Grosvenor Place Pty Limited
Grosvenor Place
225 George Street
Sydney NSW 2000

Project Manager
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Built.

Stage
Development Application
Stage 2

Title
Appendix 1 - Site Plan and Traffic Management Plan

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Drawn	Checked	Co Ord.	Approved	Date
YK				JUN 2014

DA–2	Drawing Number 101	Issue E

Appendix 2: Waste Management Plan

Construction Waste Management Plan

The management of the Waste on Site is to principally maximize recycling, minimization of waste generation, and safe loading and removal from site.

Estimated Quantities of Waste

Material / Type of Waste	Estimated Quantity	Method of Disposal
Concrete	85 m^3	Crushed off site and Recycled
Paving and Mortar Beds	170 m^3 (1,680 m^2)	Crushed off Site and Recycled
Plasterboard	9 m^3	Recycled off site and landfill
Timber and Wood Product	5 m^3	Recycled off site
Glass	5 m^3	Recycled off site
Metal – Ferrous and Non-Ferrous	5 m^3	Recycled off site
General Waste and Petruscible items	50 m^3	Taken to landfill

Site Management of Waste

The principle of the site waste management is to provide the facility to separate waste on site and allow for the appropriate method of disposal. We intend to establish one area for the handling of rubbish.

Material Handling Positions are to be located at the upper level of the works face where the materials are to be loaded directly into trucks. The likely distribution of materials to this scenario, by weight is as follows:

- Toppings and paving
- Concrete
- Furniture fittings and equipment
- General Waste and Petruscible items
- Glass

Storage Location on Site of Construction Waste

Refer to Appendix 1 which shows positions of the waste loading locations and pick up areas (shown as yellow boxes).

The waste loading locations are a single point where materials are loaded by hand and machine (ie. bobcat). Bulky and heavy materials are distributed in moderately sized piles over the upper area to distribute the point load and transferred by machine at regular frequency onto trucks at the waste loading locations. Smaller items, manageable by hand, shall be sorted and collected into waste bins as the works progress. These bins are then emptied into trucks, as required, at the waste loading locations.

Methods of Removal of Waste from Site

All waste shall be removed from site by the use of suitably covered trucks in the form of skip type bins and tippers. No double bogey vehicles are to be used on this site. The waste loading locations are achieved from Essex Street with 2 Tonne Trucks and Small Chain Lift Skips driving into the site off Essex Street, completing a full turn and driving out onto Essex St. The vehicles shall be moving in a forward direction both entering and exiting the site. The appropriate signage and traffic control shall be implemented. Vehicular traffic flows onto and from site are indicated on the Appendix 1 Plan.

Recycling and Disposal

The recycling and disposal is as per the Schedule of Assumed Quantities at the beginning of this section. The specific methods of treatment are as follows:

- Concrete, paving materials and toppings are shipped to concrete recyclers where they are processed for re-use as road base and drainage layers primarily in civil works.
- Plasterboard recycling service is provided by CSR Gyprock on their own products. The balance of the items, typically ex demolition, is sorted and taken to landfill.
- Timber is taken to waste processing and transferred for paper production, etc.
- Glass and Metals are well established industries for the re-use of disposed and redundant materials.
- General and Petruscible waste is loaded into bins and taken to waste transfer stations where they are sorted and disposed of for maximum disposal efficiency.