

Attachment B

Code of Practice – Hoisting and Construction Activities On and Above Roads
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Draft Code of Practice: Hoisting and Construction Activities On and Above Roads

Eyes on the horizon by Reg Mombassa
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(image by Peter Conroy City of Sydney)

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Part 01

Preliminary

1.1 About this part

This part provides an overview of the city and the general administrative requirements that apply including setting out the purpose of the Code of Practice. The various statutory provisions that apply to managing *hoisting* and *construction activities* in *public spaces* including the application of the Code are also listed.

1.2 Overview

The City of Sydney local government area consists of some 26 square kilometres. The city is Australia's iconic face to the world and international gateway attracting around 320,000 visitors each day (early period of post-pandemic recovery) and a workforce of more than 437,000 people. The city is also home to approximately 242,000 residents.

The *footways* and local *road* network are therefore an important part of the city environment in providing effective and safe systems of movement for people, cyclists and vehicles to and from buildings, public transport systems and other destinations. This includes safe, convenient and accessible movement past *worksites*.

1.3 Title of the Code and legal status

This Code of Practice ("the Code") is called the '**Code of Practice: Hoisting and Construction Activities On and Above Roads**'. The Code is formally adopted and enforceable through a *Local Approvals Policy* under the provisions of the Local Government Act 1993 (see **1.8**).

The Code applies throughout the City of Sydney local government area, except as set out in **1.10**.

1.4 What activities and matters are dealt with in this Code?

This Code consists of four parts that deal with various activities that take place on and above roads (*public spaces*) and requirements to minimise impacts, as follows:

Part 01 – Preliminary

- Provides an overview of how the Code relates to and attains authority through the adopted *Local Approvals Policy*;
- Sets out the various activities that require *approval* and which are regulated through this Code including any activities that are not covered by the Code requirements;
- Details the primary aims of the Code;
- Relevant Acts, Regulations and other documents that may apply when undertaking activities in *public spaces*;
- Requirements relating to *performance bonds* and public risk (*public liability insurance*);
- General matters including seeking variations to the Code requirements; and
- Defined terms.

Part 02 – Activities requiring approval and regulation

- Various activities that require the lodgement of applications and formal *approval*;
- Detailed information and regulatory requirements that apply to specific activities including:
 - *hoisting* operations and mobile crane set-up on *roads*;
 - full and partial temporary closure of *roads* for mobile crane operation;
 - process for installing and removing *temporary structures* such as *hoardings* and *scaffolding*;
 - *temporary works*;
 - *road openings*; and
 - *works zone* operation.

Part 03 – Site management and other requirements

- Overview of various required site *approvals* and *City* monitoring responsibilities;
- *City* regulatory services (onsite meetings and inductions) to the construction sector;
- Construction times, processes for seeking variations and work limitations;
- Site management and plans including construction traffic management plans;
- Community information and communication strategies;
- Complaints management and site monitoring;
- Public safety including site security and signage;
- Off-site impacts including noise, dust and water impacts/offences; and
- Pedestrian and bicycle rider movement including temporary diversion.

Part 04 – Other requirements

- Ongoing maintenance and cleaning of *public spaces* adjoining *worksites*;
- Reporting public hazards and rectification;

- Excavation, shoring and ground-anchoring including protection of deep excavations;
- Management of vacant sites and temporary stockpiling of excavated material;
- Preservation of survey marks and protection/management of *City* infrastructure (historic stone kerbing and gutters);
- *Approval* for the movement of over-size and over-mass vehicles;
- Construction of permanent *vehicular crossings*; and
- Other activities and works including:
 - the placement and use of *skip bins*;
 - obtaining levels and gradients for works in *public spaces* associated with development;
 - stormwater drainage and connections to *City* systems;
 - temporary removal/relocation of street furniture and light poles; and
 - temporary site security fencing.

1.5 The purpose of the Code

The city undergoes continual change and activity through:

- the construction of new buildings;
- alterations and additions to existing buildings;
- maintenance of buildings;
- upgrades to *public spaces* including *roadways* and *footways*; and
- maintenance and installation of utility services.

These activities can affect and adversely impact on *public spaces* including the safety, amenity and convenience of the public and occupants of buildings adjoining or surrounding *worksites* and *workplaces*. Works can also impact on businesses through the temporary loss of services (water, gas, electricity and telecommunication) and obstructions to customer access and the delivery of goods to premises including businesses.

To minimise impacts the *City* expects, and requires, all activities in or affecting *public spaces* to be undertaken in a manner that complies with:

- (a) this Code;
- (b) applicable policies, codes and guidelines adopted by the *City*;
- (c) conditions of *development consent*; and
- (d) *approvals (permits)* allowing activities to be carried out in *public spaces*.

1.5.1 Regulating and controlling worksites in a high density city (see also 3.3)

For development sites and general work activities in *public spaces* the *City* has various statutory responsibilities to ensure that work is carried out in accordance with *approvals* and statutory controls and where necessary, to take appropriate action to deal with non-compliances or unsafe practices.

A person or entity including developers, builders, sub-contractors and building *certifiers* also have certain obligations and responsibilities to ensure work is undertaken in a manner that:

- (a) meets all *approval* requirements;
- (b) maintains acceptable public safety and protection; and
- (c) maintains acceptable standards of public and community amenity in and near *worksites*.

It is therefore critical to the effective operation and use of *public spaces* that activities associated with development and other works are undertaken in a controlled and orderly process to minimise adverse impacts. This is particularly important in areas that have high pedestrian densities and movement such as the city-centre and the outer suburb high density business and residential areas.

The regulation of *construction activity* includes:

- receiving and processing applications including assessing potential impacts and where necessary, conditioning an *approval* to address and minimise any likely impacts;
- issuing *approvals (permits)* where the *City* is satisfied that the activity is acceptable and allowable;
- overseeing works and other activities affecting *public spaces*; and
- issuing corrective directions and taking other actions where non-compliances arise (see 'note').

Notes:

These regulatory functions are applied and managed across several *City* units and teams including the Construction and Building Certification Services Unit, *City* Rangers and the Health and Building Unit.

1.5.2 Industry liaison and statutory approvals

As a means to achieve orderly development and associated activities with the least possible impact in *public spaces*, the *City*'s Construction Regulation team offers assistance to the development and construction sectors through the provision of detailed information and technical assistance about the city's special needs and requirements (see **3.4**). This includes the needs of pedestrians, cyclists, drivers and the city community (residents and businesses).

The Construction Regulation team is also responsible for granting *approvals* for various works and other activities in *public spaces*. This includes *approval* for:

- *hoisting* operations over public *roads* using mobile devices;
- the construction of temporary *footway vehicular crossings*;
- *road openings*;
- temporary barricading; and
- other activities as set out in this Code.

1.5.3 Other activities and approvals

Other activities may also require *approval* and/or concurrence from other *City* teams. This includes:

- street tree removal and/or pruning *permits* (see **3.18.3**);
- installation of construction-related *temporary structures* (see **2.6**); and
- site shoring/ground-anchoring to support *roads* when excavating (see **4.5**).

1.5.4 Monitoring workplaces

The Construction Regulation team will monitor *workplace* operations that affect *public spaces* to check for compliance with relevant conditions of *development consent* and *permits*.

1.6 Activities that are regulated through this Code**1.6.1 Activities that require approval by the City**

The following activities undertaken in, on or above roads (*public spaces*) are regulated by the Code and require the *approval* of the *City*:

- (a) *hoisting* operations (Category E(1) activities in the Table of Section 68 of the Local Government Act) using equipment or devices such as:
 - site-based cranes;
 - mobile cranes;
 - boom-lifts;
 - concrete placing boom (boom pumps);
 - scissor-lifts;
 - truck-mounted hoists (Hiabs);
 - suspended scaffold (swing-stage);
 - *building maintenance units* (BMUs);
 - rope access operations (abseiling); and
 - other equipment used to undertake any form of *hoisting* operation;
- (b) installation of temporary barricades and devices (Category E(2) activities in the Table of Section 68 of the Local Government Act) in *public spaces* associated with *worksites* and *workplaces* including:
 - *road openings*;
 - mobile *scaffolds/ladders*;
 - pedestrian exclusion zones (barricading) associated with *hoisting* operations; and
 - other minor works undertaken in *public spaces*;
- (c) installation of *temporary structures* (Category E(2) activities in the Table of Section 68 of the Local Government Act) such as:
 - pedestrian ramps over concrete pump static lines placed on *footways*;

- *work compounds*; and
- other *temporary structures* other than structures set out in **1.4**.

Further Information in relation to making an application can be found in **1.20** and **2.2**.

In all cases *approval* under the Roads Act 1993 and the Local Government Act 1993 must be obtained before undertaking various activities and erecting *temporary structures* in a *public space*.

1.7 Activities that are not regulated through this Code

The following construction-related activities (categories listed in the Table of Section 68 of the Local Government Act 1993) are not regulated by this Code:

- (a) the installation and use of *hoardings*, *scaffolding* and other *temporary structures* on and above roads (Category E(2)) – these *temporary structures* are regulated through the City of Sydney ‘*Local Approvals Policy* for Construction-related Temporary Structures On and Above Roads’ and a supporting Code of Practice;
- (b) the placement of *skip bins* in *public spaces* (Category C(3)) – regulated through the City of Sydney ‘*Managing Waste in Public Places - Local Approvals Policy*’;
- (c) carrying out stormwater drainage works (Category B(5)) – discharging rainwater collected in construction/excavation sites into the *City’s* stormwater drainage system; and
- (d) connecting a private stormwater drainage system to a drainage system under the control of the *City* (Category B(6)).

Note:

Some of the activities listed above will still require formal separate *approval* under other Policies and Legislation. Refer to the *City’s* website for further information.

1.8 Adoption of the Code

This Code of Practice was approved by Council on < < date > > and gains its authority through the ‘*Local Approvals Policy: Hoisting and Construction Activities On and Above Roads*’ approved and adopted under the provisions of the Local Government Act 1993.

1.9 Primary aims of the Code

This Code sets out the *City’s* minimum requirements, *approval* processes and ongoing regulation of *worksites* and *workplaces* to ensure activities in and/or affecting *public spaces* comply with acceptable work practices and prescribed standards to minimise impacts. To achieve this the Code:

- (a) assists *City* officers when considering and assessing various applications and undertaking site monitoring activities/inspections;
- (b) aims to provide practical controls and guidance to the development and construction sectors including contractors to assist in minimising impacts and meeting the *City’s* requirements;
- (c) sets out the regulatory controls to ensure that all activities associated with a *workplace* are undertaken in a safe and orderly manner in accordance with the Code, conditions of *development consent* and other *approvals*; and
- (d) seeks to minimise adverse impacts on *public spaces* including:
 - pedestrian access, safety and amenity;
 - cyclists, including safe passage past *worksites* and *workplaces*;
 - city infrastructure;
 - land uses near *worksites* and *workplaces* including businesses (see **3.18**); and
 - disability access.

1.10 Where does the Code apply?

The Code applies to all land within the City of Sydney Local Government Area (LGA) with the exception of land (*roads*) under the control and authority of:

- Place Management NSW (formerly Sydney Harbour Foreshore Authority and Property NSW);
- Infrastructure NSW in relation to the Barangaroo area; and
- Transport for NSW in relation to State *classified roads* including the need to obtain required *road occupancy licences* and concurrences (s138 of the Roads Act 1993) before carrying out activities on such *roads*.

In some circumstances the above agencies may require specific compliance with all or some of the regulatory aspects of this Code.

1.11 Relevant acts, regulations, instruments and other documents

The acts, regulations and other documents listed below may be relevant to the application of the Code of Practice and the various *approvals* issued by the *City*:

- Local Government Act 1993;
- Local Government (General) Regulation 2021;
- Roads Act 1993;
- Roads Regulation 2018;
- Road Rules 2014;
- Protection of the Environment Operations Act 1997;
- Work Health and Safety Act 2011;
- Work Health and Safety Regulation 2017;
- Environmental Planning and Assessment Act 1979;
- Environmental Planning and Assessment Regulation 2021;

- Access to Neighbouring Land Act 2000;
- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008;
- State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017;
- State Environmental Planning Policy (Transport and Infrastructure) 2021;
- The City of Sydney 'Local Approvals Policy for Construction-related Temporary Structures in Public spaces';
- The City of Sydney 'Code of Practice: Construction-related Temporary Structures in Public spaces';
- The City of Sydney 'Community Garden Policy';
- The City of Sydney 'Graffiti Management Policy';
- The City of Sydney 'Tree Management Donation Policy';
- The City of Sydney 'Urban Forest Strategy';
- The City of Sydney 'Street Tree Master Plan';
- The City of Sydney 'Inclusion (Disability) Action Plan';
- The City of Sydney 'Walking Strategy and Action Plan';
- The City of Sydney 'Inclusive and Accessible Public Domain Guidelines';
- The City of Sydney 'Compliance Policy';
- The City of Sydney 'Prosecution and Civil Enforcement Policy';
- The City of Sydney 'Performance Bond Policy';
- The City of Sydney 'Managing Waste in Public spaces - Approvals Policy';
- The City of Sydney 'Central Sydney On-Street Parking Policy';
- The City of Sydney 'Neighbourhood On-Street Parking Policy';
- The City of Sydney 'Interim Floodplain Management Policy' and Floodplain Management Plans;
- The City of Sydney 'Sydney Streets Technical Specifications';
- The City of Sydney 'Stormwater Drainage Manual'.

The Code also does not override any relevant conditions of a *development consent* applying to land adjoining a *road* on which a *temporary works* or plant operation take place.

Notes:

1. This list is not exhaustive.
2. Readers should refer to the *City's* website to check for current adopted documents that apply in the city and the NSW Legislation website in relation to current statutes.

1.11.1 Other related documents:

- The 'Guide to Traffic Engineering Practice', Austroads;
- Technical Directions issued by Transport for NSW;
- Technical Manual for Traffic Control at Work Sites, Transport for NSW;
- *SafeWork NSW* 'Code of Practice: Overhead Protective Structures';
- The City of Sydney 'Traffic Control Plans for People Riding Bicycles';
- Safe Work Australia 'Guide to managing risk in construction, Concrete pumping';
- AS 2550.15: 2019 Cranes, hoists and winches - Safe use - Concrete placing equipment;
- AS 1742.3 Manual of uniform traffic control devices (for minimum clear widths, gradients etc.);
- AS 1742.2 Design for access and mobility (for minimum clear widths, gradients etc.);
- AS 4970 Protection of trees on development sites;
- AS 4373 Pruning of amenity trees;
- AS 2436 Guide to noise control on construction, maintenance and demolition sites;
- AS4282 Control of the obtrusive effects of outdoor lighting; and
- AS2601 Demolition of structures.

1.12 Legislation and other matters

1.12.1 Federal and state legislation

The Code does not override state or federal legislation. Applicants must therefore check other relevant legislation, adopted codes of practice and guidelines that may apply to hoisting and construction activities in *public spaces*.

1.12.2 Approvals granted under this Code

An *approval* under this Code to undertake *hoisting* and construction-related activities on or above Council's land is given based on compliance with this Code and **1.12.3**.

1.12.3 Public safety - work health and safety legislation

It is the responsibility of the person *conducting a business or undertaking (PCBU)* as defined in the Work Health and Safety Act to ensure all activities satisfy relevant work health and safety legislation including guides, directives and codes of practice issued by *SafeWork NSW*.

1.12.4 Other approvals issued by the City

The Code does not override conditions of a *development consent* applying to the land adjoining the *road* on which activities are undertaken.

1.13 What are the implications for not complying with this Code?

Where non-compliance with the Policy occurs, and/or an *approval*, the *City* will take compliance and/or enforcement action in accordance with applicable statutes and policies including:

- (a) the *Local Approvals Policy* under which this Code is adopted;
- (b) the *City's* Compliance Policy and Prosecution and Civil Enforcement Policy;
- (c) the Local Government Act 1993;
- (d) the Roads Act 1993; and
- (e) the Environmental Planning and Assessment Act 1979.

A person who is guilty of an offence under the various Acts administered by the *City* may be liable, on conviction, for a maximum penalty as prescribed by the applicable legislation.

1.13.1 Corrective actions

In regulating various activities, an *authorised person* of the *City* may:

- issue penalty notices;
- give orders;
- issue directions – in writing, and in an emergency, orally under Section 237 of the Roads Act 1993; and
- initiate court action to enforce orders and directions, and prosecute for associated breaches of the applicable legislation.

Parties not acting in accordance with this Code and *approvals* may be given verbal and/or written notice to comply before an infringement notice is issued.

At all times, the *City* reserves the right to issue an immediate infringement notice or penalty depending on the seriousness of the circumstance and at the discretion of the *authorised person* including consideration of the *City's* 'Compliance Policy and Prosecution and Civil Enforcement Policy'.

1.14 Performance bonds

Performance bonds (also known as damage/security deposits) are used to ensure persons carrying out work in a *public space* meet prescribed technical standards.

1.14.1 Public spaces and City infrastructure

Bonds will be used to undertake repairs and/or complete works to city infrastructure and assets where the works do not comply or are not completed to the *City's* standards. *Bonds* must be in accordance with the *City's* 'Performance Bond Policy' and be in the form of:

- documentary evidence such as bank guarantee;
- an acceptable form of undertaking;
- bank cheque;
- cash (not exceeding \$10,000); or
- EFTPOS.

Where a *performance bond* is lodged through a bank guarantee or other form of acceptable undertaking it must not nominate a termination or expiry date.

Where a *performance bond* applies the required amount will be determined at the time of assessing an application. *Bond* rates are set out in the *City's* Revenue Policy (schedule of fees and charges). *Bonds* must be paid before an *approval (permit)* is released.

1.14.2 Bonds imposed by the City's Public Domain and Street Tree Management teams

Performance bonds (security deposits) may be required for any works and include rectification in relation to:

- damage of public infrastructure, both above and below ground;
- damage resulting from temporary shoring/ground-anchoring of *roads (footways/roadways)*;
- damage to street trees and garden beds and/or removal and ongoing maintenance of replacement trees; and
- other *public space* infrastructure damage sustained.

Bonds will be retained in full until a final occupation certificate for a development has been issued or where the work has been completed and inspected and found acceptable to the *City*.

Other specific requirements relating to *bonds* may also be specified as conditions of *development consent*.

Note:

Other *bonds* related to works and *temporary structures* erected on or taking place in *public spaces* such as *temporary structure* installations and *road opening* works may also apply.

1.14.3 Bonds imposed by the Construction and Building Certification Unit

The following provisions apply to *performance bonds* associated with *permits* issued by the City's Construction Regulation team:

- (a) making good any damage that may be caused to the City's property including street trees and for other purposes as set out in the relevant City application forms;
- (b) to ensure any damage or invasive works caused to the City's infrastructure is rectified to the City's standard requirements and specifications. *Bonds* will not be returned until the City is notified that any required rectification works have been completed to the required standard or it is confirmed that no damage has occurred. This may require an inspection by the City's asset inspectors; and
- (c) costs associated with administering and enforcing the conditions of an *approval* (*permit*) and the provisions of this Code where the person or entity having the benefit of an *approval* fails to comply with the conditions of *approval* and/or a direction of the City to rectify, repair or maintain *temporary works*.

1.14.4 Recovery of public land occupation fees

In circumstances where scheduled occupation fees for the use of City land are not paid the *performance bond* held to satisfy a condition of an *approval* may be used to recover outstanding fees.

1.15 Public liability insurance

The holder of an *approval* (*permit*) uses the road at its own risk. In the City giving *approval*, the permit-holder agrees to release and indemnify the City and to keep the City indemnified against any claim, damage, expense, loss, cost (including reasonable legal costs) or liability (including liabilities of the City to third parties) arising from or in connection with the use of the road.

An indemnification, in the form of a *public liability insurance* policy, affords protection to the City in respect of any claims including any excess on the insurance policy arising from a claim.

An indemnity must be in the amount of at least \$20 million for any individual claim that may be made

and any excess on the insurance policy arising out of any claim. The insurance policy must be held in the name of the person or entity holding an *approval*.

See also section 1.14 and 2.14.7 for further information about bonds that may be required including Tree Bonds.

1.16 Financial transactions associated with applications and road occupation fees

All financial transactions associated with granting an *approval* will be conducted between the City and the 'billable party' nominated in an application and stated in a *permit*.

1.17 Restrictions on works and other activities – December and Christmas/New Year periods

Due to extended trading hours and school holidays leading up to Christmas and New Year, works proposed to be undertaken during the month of December will be restricted. Maps showing the affected areas and the applicable dates can be found on the City's website.

Applications submitted for works during December will be treated on a case-by-case basis (see also 3.5.9).

1.18 Access to and above adjoining (neighbouring) land

An *approval* granted for various activities including *hoisting* from and/or over a *public space* does not include *approval* to swing, slew or operate any parts of a *hoisting* device including loads over private land adjoining or surrounding a *worksites*. The following matters must be noted by proponents:

- (a) A person cannot enter private land or operate in the air space above neighbouring land without the consent of the property owner. This includes land owned by the *City* such as reserves, squares and similar lands (see also **3.22**).
- (b) Where any part of a *hoisting* device operates or encroaches over private land, applicants/proponents have a legal obligation to seek and obtain access agreements from affected landowner/s.
- (c) The need for access agreements also applies to *City*-owned land but is not required in cases where an *approval* has been granted to allow *hoisting* activity on or above a *road*. Where *hoisting* is carried out fully within the boundaries of a site but parts of a crane swing or vane over a *road*, a Roads Act *approval* is required from the *City*.
- (d) In cases where parts of a crane or other *hoisting* device operation and/or crane jib vaning (wind actions causing the jib to move) occur over *City* land (excluding *roads* where a specific *hoisting permit* is in place) such as parks, reserves, squares etc., the agreement of the *City* must be obtained. Ground-anchoring and other works beneath a *road* also require agreement and *approval*. Further information including the process for obtaining formal access agreements should be directed to the *City*'s Properties team.
- (e) Where agreement for access with affected landowners cannot be reached the 'Access to Neighbouring Land Act 2000' entitles a person to make application to a local court to seek an order to gain access to neighbouring land to undertake works or carry out other activities.
- (f) Activities that could require access include:
 - installation of temporary *scaffolding*;
 - placement of overhead protective structures/ platforms for safety purposes; and
 - the operation of *hoisting* equipment such as cranes that may swing and hoist over neighbouring land.

Further information:

Requirements of the legislation including details for seeking access orders is set out in the 'Access to Neighbouring Land Act 2000' which is available on the NSW legislation webpage: **www.legislation.nsw.gov.au**

1.19 Variations to the Code

It is expected that in the majority of cases works and other activities in *public spaces* will be capable of complying with the prescriptive provisions set out in this Code. Where it is not possible or practicable to comply fully with the provisions due to special circumstances and/or site constraints, consideration will be given to alternative proposals and methods that meet the aims of the Code (see **1.9**) and the *Local Approvals Policy* (see **1.8**).

Where proponents wish to undertake activities that do not comply with the Code they must clearly demonstrate in their application how the proposed variation will satisfy the principal objectives of the Code.

1.20 Making an application (see also 2.2)

1.20.1 Activities that require approval

Each of the activities listed in **1.5** require *approval* which can be obtained by completing and lodging a valid application for:

- *road openings*;
- *temporary works*; and/or
- *hoisting*.

Standard forms for each are available on the *City*'s website.

1.20.2 Application fees

All applications require payment of a fee to assess a proposal against the *City*'s requirements including the *Local Approvals Policy* and this Code.

The applicable application fees are set out in the *City*'s Revenue Policy (Schedule of Fees and Charges) which is available on the *City*'s website. Fees are also stated in some application forms.

1.20.3 Information and documents that must be lodged with an application

To enable the *City* to undertake a thorough assessment of a proposal (application) against the *City's* requirements and codes, minimum information and details must be provided. Information that must be lodged is set out in the application forms applicable to various activities.

1.20.4 Assessment

Upon receipt and acceptance of a fully completed and valid application, the proposal will be assessed against the *City's* requirements including this Code.

In circumstances where additional information or clarification is required, the applicant will be contacted and requested to provide further details.

Where the *City* is satisfied that a proposal meets all of the relevant requirements including complying with the provisions set out in this Code, an *approval* will be granted (refer also to the *Local Approvals Policy* for further details).

In circumstances where an application is incomplete, invalid and/or a proposal does not meet the *City's* requirements, the application will be refused.

1.20.5 Forms of hoisting operations and other activities not specifically addressed in this Code

The Code regulates the common forms of *hoisting* and construction activities (as listed in **1.6.1**). In circumstances where *hoisting* and other activities are not specifically regulated or referenced by this Code the *City*, as owner of the land (*road*) on which activities occur will assess a proposal for compliance with the objectives and principles of this Code.

articulated vehicle a motor vehicle having at its rear a portion, on wheels, that is pivoted to, and a part of which (not being a pole, draw-bar or similar device or an accessory of it) is superimposed on, the forward portion of the vehicle. (NSW Road Rules 2014)

authorised person an employee of Council (the *City*) generally or specially authorised in respect of or whose duty it is to deal with, or to act in regard to, any acts, matters or things in relation to which the expression is used. (Local Government Act 1993)

Before You Dig Australia is a free national referral service designed to assist persons and entities in preventing damage and disruption to Australia's significant and extensive infrastructure service networks when undertaking work in *public spaces*.

building maintenance unit (BMU) a power operated suspended platform and associated equipment on a building specifically designed to provide permanent access to the faces of the building for maintenance. (Work Health and Safety Regulation 2017)

certifier a person who is a *registered certifier*.

City The Council of the City of Sydney.

classified road includes:

- a main *road*;
- a highway;
- freeway;
- a controlled access *road*;
- a secondary *road*;
- a tourist *road*;
- a tollway;
- a transitway; and
- a State *road*. (Roads Act 1993)

Note: A full list of *classified roads* is available on the website of Transport for NSW.

construction activity physical activities carried out within a *public space* including:

- works of any nature;
- the installation and use of *temporary structures*;
- the operation of plant and equipment including *hoisting* operations;

1.21 Definitions

All defined terms used in the Code are *italicised* for ease of reference and use.

accessible or **accessibility** having features to enable use or passage by people with disability.

approved or **approval** unless expressly stated otherwise, is a determination (*approval*) granted by the *City* in force under the Local Government Act 1993 and Roads Act 1993 which includes the term '*permit*'.

- demolition works;
- excavation works; and
- road openings.

community land land that is classified as *community land* under Division 1 of Part 2 of Chapter 6 of the Local Government Act 1993.

(Local Government Act 1993)

Note: *Community land* reflects the importance of the land to the community because of its use or special features. It is generally land intended for public access and use. Restrictions often apply to create obligations to maintain access such as a trust deed or land dedication.

control measure in relation to a risk to health and safety, means a measure to eliminate or minimise the risk. (Work Health and Safety Regulation 2017)

cycleway a pathway for use by people riding a bike and includes separated *cycleways*, bike lanes and shared pathways.

development consent (consent) means *consent* under Part 4 of the Environmental Planning and Assessment Act 1979 to carry out development and includes, unless expressly excluded, a complying development certificate. (EP&A Act 1979)

dog-trailer a trailer with:

- (a) one axle group or single axle at the front that is steered by connection to the towing vehicle by a drawbar, and
 - (b) one axle group or single axle at the rear.
- (Roads Rules 2014)

footway the part of a *road* that is set aside or formed as a path or way for pedestrian traffic (whether or not it may also be used by bicycle traffic). (Roads Act 1993)

hoarding a *temporary structure* placed on the City's land (*footway/roadway*) that separates a *workplace* from the *public space* and which may also form an overhead protective barrier in a *worksite* to protect the *public space* from objects that may fall from a work area. (City of Sydney 'Code of Practice: Construction-related Temporary Structures On and Above Roads')

hoisting the action of raising or lowering a load (material, plant, equipment) or workers, by powered mechanical or manual means and includes hoisting using a crane; winch; elevated work platform; mast-climbing work platform; *suspended scaffold*; personnel and materials hoist; boom lift including

concrete placing boom; and *building maintenance unit*.

local approvals policy a formal policy adopted by Council under the provisions of the Local Government Act 1993 and in relation to this Code refers to the *Local Approvals Policy* for Hoisting and Construction Activities On and Above Roads.

noise management plan a document that sets out:

- the expected noise and/or vibration levels from proposed work activities;
- how these levels are likely to impact on sensitive receivers in the locality; and
- the mitigation measures that will be implemented to minimise impacts.

A plan can also include details on how the community will be kept informed of the works.

Overhead protective structure (temporary)

an overhead structure or plant required for the protection of persons in *public spaces* (*SafeWork NSW* 'Code of Practice: Overhead Protective Structures').

permit an *approval* (determination) in force under the Local Government Act 1993 and/or Roads Act 1993.

permit-holder the person or entity having an approval.

performance bond (bond) a financial deposit or undertaking and held by the City for use in circumstances set out in this Code and in an *approval* (permit) in force under the Local Government Act 1993 and Roads Act 1993.

person in control of a business or undertaking (PCBU) (Section 5 of the Work Health and Safety Act 2011), for the purposes of this Code, is the holder of a determination (*permit*) allowing activities and *temporary structures* to be undertaken or installed in a *public space* and includes a builder, contractor or other person in control of such activity.

principal certifier (PC) a person appointed under legislation to carry out inspections of approved building works and undertake other statutory functions.

Note: A PC is generally not responsible for regulating activities within a *public space* adjoining a development site unless there are conditions of *development consent* that specifically require PC involvement.

public spaces/s a *road* including *footways* and *cycleways* (see also the definitions of 'road').

public liability insurance insured for legal liability owed to another person or entity who suffers loss, damage, injury or death by reason of the insured's activities.

registered certifier means the holder of registration under legislation acting in relation to matters to which the registration applies.

road a road is defined in both the Local Government Act 1993 and the Roads Act 1993. They must be read in conjunction. Under the Local Government Act 1993 a road is:

- (a) highway, street, *laneway*, pathway, footpath, *cycleway*, thoroughfare, bridge, culvert, causeway, road-ferry, ford, crossing, bypass, and trackway, whether temporary or permanent; and
- (b) any part of a road and any part of any thing referred to in paragraph (a), and
- (c) any thing forming part of a road or any thing forming part of any thing referred to in paragraph (a).

Under the Roads Act 1993 a road also includes:

- (a) the airspace above the surface of the road; and
- (b) the soil beneath the surface of the road; and
- (c) any bridge, tunnel, causeway, road-ferry, ford or other work or structure forming part of the road.

roadway (also known as 'carriageway') the portion of a *road* designed for use by moving vehicles including a light rail vehicle and bicycles.

road occupancy consists of any activity likely to affect the operational efficiency of the *road* network, in other words, an activity that requires the *road* to be used in such a way as to affect traffic flow.

(Transport for NSW, Technical Manual for Traffic Control at Work Sites)

road occupancy licence (ROL) a permit which allows the applicant to use or occupy a specified *road* space at approved times, provided that certain conditions are met. (Transport for NSW, Technical Manual for Traffic Control at Work Sites)

road opening any intrusive disturbance within a *road* including excavation required to carry out works such as installing and/or connecting subsurface *utilities* and stormwater drainage systems.

SafeWork NSW the authority constituted under the Workplace Injury Management and Workers Compensation Act 1998 and which is the regulator of the NSW workers compensation system and also the regulator for work, health and safety legislation in NSW.

scaffold (scaffolding) a *temporary structure* specifically erected to support access or work platforms. (Work Health and Safety Regulation 2017)

semi-trailer a trailer (including a pole-type trailer) that has:

- (a) one axle group or single axle towards the rear, and
- (b) a means of attachment to a prime mover that would result in some of the load being imposed on the prime mover.

Note 1: Axle group, prime mover, single axle and trailer are defined in this Dictionary.

Note 2: This is an additional NSW definition. There is no corresponding definition in the Dictionary of the Australian Road Rules. (Road Rules 2014)

shared path as defined in the NSW Road Rules Regulation 2014 (clause 242).

site management plans (SMPs) a generic term relating to the various management plans that are prepared and required for a development site such as plans relating to the management of:

- noise and vibration;
- construction-related traffic;
- demolition;
- soil, sediment and dust control including excavation;
- waste management and disposal;
- wastewater disposal and/or treatment; and
- other major *work activities* and potential impacts.

skip bin a container designed and used for the storage, transport and disposal of waste. (City of Sydney Local Approvals Policy for Managing Waste in Public Places)

street tree a tree that is growing within a footway, road verge or adjoining garden location. It may also include trees located close to the boundary of the adjoining private property, where their canopy (branches and leaves) overhang the public space.

suspended scaffold a *scaffold* incorporating a suspended platform that is capable of being raised or lowered when in use. (Work Health and Safety Regulation 2017)

Technical manual for traffic control at work sites means the manual published by Transport for NSW that sets out minimum requirements to maximise safety at *workplaces* by ensuring that traffic control complies with best practice site management procedures (TfNSW Technical Manual – Version 6.1, February 2022) including amendments.



temporary structure a structure that is not designed, installed or constructed to be permanent.

temporary works activities or works within a *public space* that are not permanent.

utilities a publicly, privately or jointly owned and operated entity, located on, in or above public property (*road*), the purpose of which is to transport or transmit for either the public or a private party a service or commodity such as electricity, telecommunications, gas, light, oil, power, television, water and waste by means of cables, conduits, ducts, fibre optics, pipes and wires and includes related objects, such as access chambers, pits, valves and other appurtenances.

Note: This defined term is based on the definition in AS 5488-2013 'Classification of Subsurface Utility Information (SUI)'.

vehicular crossing/s the portion of a driveway or vehicular accessway located between the *roadway* (street gutter/kerb) and the property/ *worksites* boundary (property frontage).

work compound a temporary enclosure established on a road that is:

- (a) used for construction-related activities such as the storage of material and equipment, *site sheds* (facilities for workers) and other similar uses and is associated with *approved* development on a land parcel in close proximity to the compound; and
- (b) formed by a framed and plywood sheeted fence equivalent to a Type-A *hoarding* but having a fence height of not less than 2.1m and which complies with the applicable provisions of *City's 'Code of Practice: Construction-related Temporary Structures On and Above Roads'*.

workplace for the purposes of this Code a workplace is where work is undertaken in *public spaces* including the placement of permitted work-related items.

worksites a place where work is undertaken on private land.

works zone a *City-approved* or approval issued by Transport for NSW and signposted space on a *road* dedicated to the temporary standing of vehicles associated with a *worksites* to allow the delivery and removal of material, plant and equipment to and from a *worksites* and *workplace* (see also Clause 181 in the NSW Road Rules 2014).

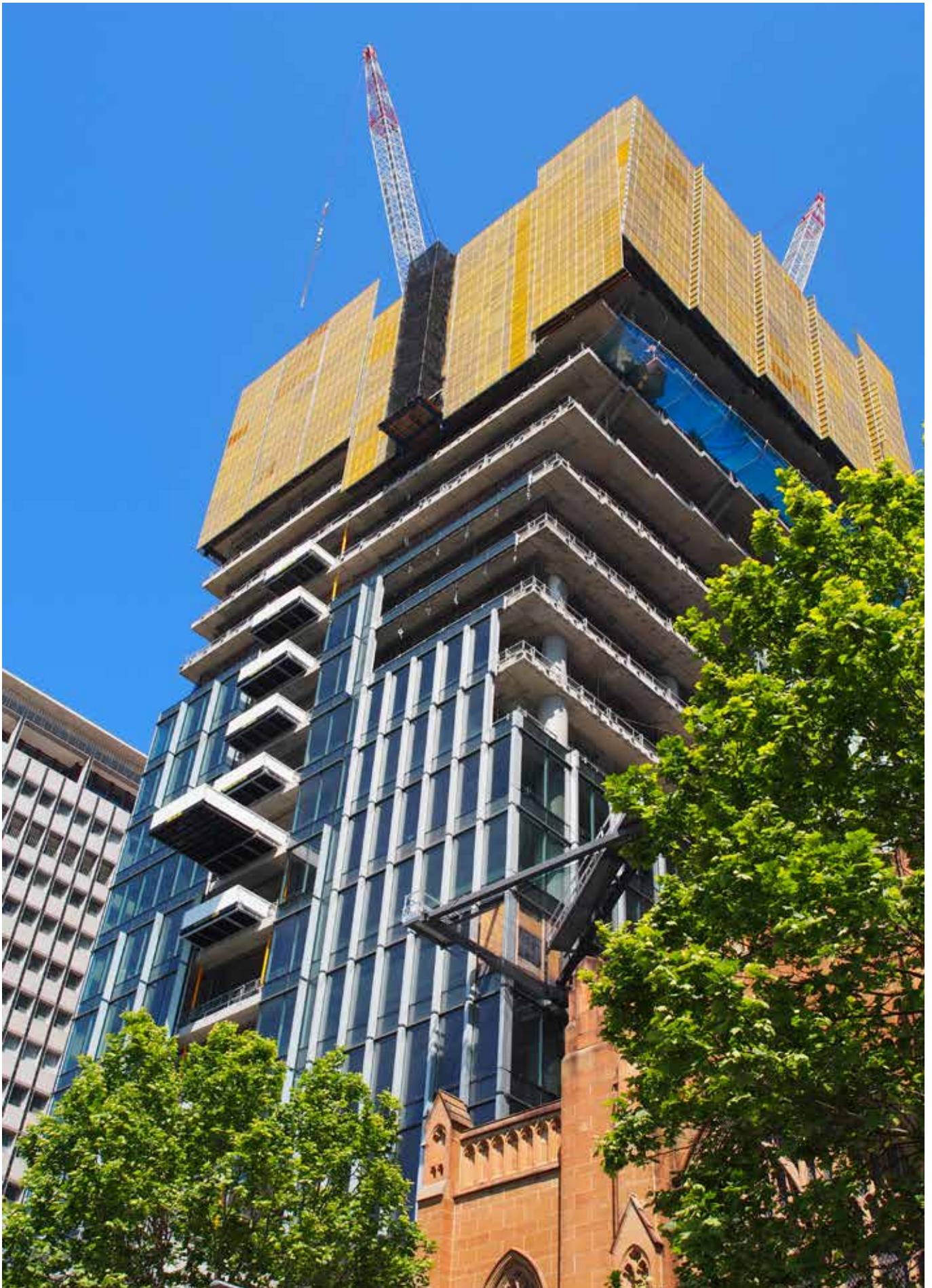


Photo: Peter Conroy / City of Sydney



Photo: Peter Conroy / City of Sydney

Part 02

Activities requiring approval and regulation

2.1 About this part

When undertaking development and *construction activities* it is important that such work is carried out in an orderly, controlled and safe manner to minimise impacts in the locality. To ensure this is achieved a number of statutory assessments and *approvals* are required for several types of activities including the installation of *temporary structures* in *public spaces*.

Obtaining an *approval* requires the lodgement of a formal application. This enables the necessary assessments to be undertaken to ensure that proposals meet the *City's* standards, guidelines, codes and other requirements thereby minimising adverse impacts in *public spaces* including importantly, the safe, convenient and *accessible* movement of the public.

Details of these activities and required *approvals*, including controls, standards and other requirements are set out in this Part.

2.2 Required applications and approvals

The following activities and placement of *temporary structures* in *public spaces* require *approval*:

- (a) installing a *temporary structure* e.g., *hoarding*, *scaffolding*, cantilevered work platform and hoisting activities associated with cantilevered materials landing platforms (see **2.5** and **2.6**);
- (b) construction of *vehicular crossings* (permanent and temporary) (see **2.11** and **4.11**);
- (c) erecting a fence to create a *work compound* (see **2.16**);
- (d) *road openings* (excavations – typically for services, *utilities* and *vehicular crossings*) (see **2.13**);
- (e) temporary *road closures* (partial or fully) to allow for mobile crane set-up and usage and/or to allow *temporary structures* i.e. *hoardings* to be erected/dismantled (see **2.10**);
- (f) use of a *hoisting* device on or above a public road such as mobile crane, materials lift, boom lift, cherry-picker, concrete placing boom, scissor lift, onsite crane operation (*hoisting*), *building maintenance unit* and *suspended scaffold* (see **2.4**);
- (g) *temporary works* e.g.: placement of ladders, mobile *scaffolding*, concrete static line across *footways* and temporary pedestrian ramps, temporary barricades for rope access work (abseiling), general barricading, constructing temporary vehicular crossings (see also 2.13 – *road openings*);
- (h) dismantling *hoardings* and/or *scaffolding* on or above roads (*public spaces*) (see **2.8**);
- (i) shoring and/or ground-anchoring of excavations to support a *road* (see **4.5**);
- (j) erecting temporary façade retention/support systems;
- (k) tree pruning/removal required as part of development or *construction activities* (see **2.14.7.1**);
- (l) temporary removal/relocation of street furniture and other city infrastructure including light pole removal required as part of development/*construction activity* or to accommodate the installation of *temporary structures* and temporary *vehicular crossings* (see **4.17**);
- (m) establishment of *works zone* to allow vehicles associated with *construction activity* to stand on a *roadway* for the purposes of loading and unloading when associated with a *worksite* (see **2.14**);
- (n) in-ground works such as concrete footings for large *temporary structures* (*hoardings*) – see the City's 'Code of Practice: Construction-related Temporary Structures On and Above Roads'; and
- (o) stormwater drainage connections from private development/*worksites* to the City's stormwater system (see **4.12** and **4.15**); and
- (p) temporary dewatering of sites (see **3.16**).

Note: Only minor tree pruning will be *approved* and only under exceptional circumstances will street tree removal be permitted to facilitate the establishment of a *works zone* and/or *temporary structure* (see **2.14.5** and **2.6**).

Notes: *Approval* for the above activities cannot be granted if works or activities commence prior to a formal written *approval* being granted and issued.

2.3 General requirements applying to works and activities on City-controlled roads

The following general provisions apply when undertaking work on *roads*:

- (a) the person/entity carrying out work must have all *approval* documents onsite at all times and produce them when requested by an *authorised person*;
- (b) street trees and street garden beds must not be adversely impacted (see **3.18.1** and **2.14.5**); and maintained when required by an *approval*.
- (c) pre and post-construction dilapidation reports, as appropriate and required, of *City* infrastructure must be undertaken (see **2.8.1**, **3.4.2.2** and **3.11**);

- (d) unless specifically *approved*, street furniture must not be altered, removed or relocated (see **4.17**);
- (e) access to street fire hydrants and utility pits must not be obstructed without the approval of the relevant utility provider or government agency including compliance with any conditions that may be imposed;
- (f) works must not interfere with or damage any public *utilities*, street infrastructure and street furniture;
- (g) kerbstones and stone gutters must not be interfered with, cut or damaged in *any way* unless specifically permitted by the *City* (see **4.8**);
- (h) large wheel or track-type vehicles must not cross a *footway* unless an *approved* temporary *vehicular crossing* built to the *City's* specifications is in place. Small equipment such as wheel scissor-lifts are permitted to cross and operate on *footways* subject to meeting minimum requirements (see **2.4.2.1**);
- (i) pedestrian kerb ramps must not be obstructed unless an alternative acceptable access pathway is *approved* by the *City*;
- (j) *footways*, *cycleways*, *roadways*, *vehicular crossings* and kerb gutter adjoining a *worksite* or *workplace* must be kept safe, clean and free of debris at all times (see **3.18**);
- (k) building material, spoil and/or *skip bins* must not be placed on a *footway*. Refer to *City's* 'Local Approvals Policy for Managing Waste in Public Places' for further details (see also **4.13**);
- (l) temporary *vehicular crossings* (see **2.11**) and marked pedestrian crossings must be kept open to the public and remain safe and *accessible* at all times;
- (m) provide and maintain *accessible* pathways complying with Part 3.5 in the *City's* 'Inclusive and Accessible Public Domain Guidelines' including keeping *footways* clear and *accessible* (see also **2.7.3**);
- (n) where pedestrians and/or cyclists are required to be diverted from a *footway* and/or *cycleway*, special design and site management requirements must be implemented and followed (see **2.7.5**); and
- (o) acceptable means of access to premises in vicinity of *approved* works must be maintained (see **3.18.1**).

Notes:

1. An *approval* does not allow the use of a *road* for the loading & unloading of vehicles at construction sites. Such activities generally require a specific and separate *approved/installed works zone* to be in place prior to commencement of any site works (see **2.14**). For short-term loading/unloading a *temporary works permit* may be granted by the *City's* Construction Regulation team, subject to consideration of site-specific needs and constraints (see **2.9.2** and **2.15**).
2. An *approval* must comply with the *City's* code regulating construction-related noise unless otherwise specifically varied for special circumstances such as undertaking works outside of standard times when there is reduced pedestrian and traffic volume and movement.

2.3.1 Light rail corridors

- (a) When planning to undertake works and any other activities within and/or adjoining a light rail corridor proponents must be aware of the potential risks to workers and *road* users including the operational needs of the light rail operator. Pedestrian access and cyclists safety must also be addressed.
- (b) Proponents must make themselves fully aware of any restrictions that may apply when working in and/or adjoining a light rail corridor including designated danger zones. Further details including steps to obtain required *approvals* (*work permits*) are available on Transdev's website.



Figure 1: Restrictions apply when working within and adjoining a light rail corridor. Proponents must make themselves aware of the light rail operator's requirements when planning works.

Photo: Adam Hollingworth / City of Sydney

2.4 Hoisting activity and equipment

All *hoisting activity* including associated crane slewing/wind-vaning actions over a public road requires *approval* under Section 68 of the Local Government Act and Section 138 of the Roads Act. This includes the use of mobile *hoisting* equipment placed on and operating from a *road*. Site-installed *hoisting* equipment such as tower cranes that operate and/or vane over a *public space* also require *approval* (see also **1.18**).



Photo: Peter Conroy / City of Sydney

The use of *hoisting* (lifting) equipment set out in the following subclauses and operating from or above a *road* require *approval*. In cases where public access around a site is likely to be affected by mobile *hoisting* equipment, proponents may need to provide additional information with an application such as a traffic guidance scheme (refer to the application form on the *City's* website for further details).

2.4.1 Mobile cranes

As a general rule mobile crane usage on roads to demolish or construct substantial parts of a building will not be allowed.

Where it is not practicable to undertake *hoisting* onsite *hoisting* activity using mobile cranes operating from a *road* requires special consideration and *approval*.

Mobile cranes vary in size from relatively small self-contained and self-driven units to major plant requiring transportation by several independent vehicles. It often requires considerable time to assemble and dismantle mobile cranes therefore this process can have significant impacts on a locality including traffic and pedestrian movement. The following matters apply and must be addressed:



Photo: Peter Conroy / City of Sydney

- (a) Due to the size of some large mobile crane plant and the area required to set-up and establish a safe footprint through the use of large outriggers, it is often necessary to temporarily close, partially or fully, a *road*. This has potential to cause conflict between builders/contractors and the needs and amenity of local residents and businesses. This must be considered in the planning and application processes.
- (b) Impacts on pedestrians, cyclists and motorists in the vicinity of a mobile crane also need to be considered.
- (c) Excessive noise during crane assembly, operation and dismantling can also cause impacts on surrounding properties particularly residential-type buildings. This must be addressed by proponents and builders. For installation and dismantling, this typically requires restricting work times and appropriate noise attenuation practices to be followed (see **2.4.1.5** and **2.4.1.6**).

- (d) In order to minimise disruption and loss of amenity to the city community, businesses and the general public, the set-up and *hoisting* operation must be undertaken safely and in a coordinated and orderly manner. In granting *approval* to operate cranes within *public spaces* minimum requirements will apply and must be followed. This includes protecting the *City's* assets and infrastructure.

2.4.1.1 Hoisting activity using mobile cranes

In the majority of cases mobile crane operations on *roads* can be undertaken through a partial temporary *road* closure such as the closure of a traffic lane on a multi-lane one-way *road* or a lane closure on a minor two-way *road*. This must be carried out under authorised traffic control (stop-go movement) to allow safe vehicle passing. Further details on partial temporary road closures are set out in **2.4.1.2**.

Full temporary *road* closures and traffic diversion are more complex and require consideration and endorsement by Committee if required by the current *City* guidelines (see **2.4.1.3**). The need to use very large cranes (over-size and over-mass – see **4.10**) often requires a full *road* closure.

To minimise impacts on a locality the following provisions apply to mobile *hoisting* activity operating from a *road* under either a partial or full temporary *road* closure:

- (a) *hoisting* will be restricted to certain activities (see **2.4.1.4**);
- (b) mobile crane set-up and usage must take place within the *approved* construction times applying to the site as specified in the *development consent*, or where no *consent* is required, in accordance with the *City's* standard times that apply generally to development (see **3.5.1**).

Cranes must be delivered to the site within the *City's* standard construction times unless otherwise specifically *approved* to meet the requirements of external agencies such as Transport for NSW and NSW Police (see **(d)**). Large cranes may need to be transported outside of peak traffic times and therefore arrive and stand on the *road* at the *worksite* outside of the consent or standard work times (see also **2.4.1.6(a)**);

- (c) Outriggers must not be placed on *footways* and nature strips because they do not have sufficient bearing pressure capacity to prevent

damage and provide adequate support. Outriggers must only be placed on roadway surfaces and structurally sound vehicular driveways. Placement on *cycleways* or shared path surfaces may be allowed, however, this is generally not supported. If permitted, cyclist temporary diversion will need to be specifically *approved* beforehand.

Outriggers associated with very large cranes must use large load-bearing pads to evenly distribute loads on *road* surfaces; and



Figure 2: Bearing pressures transferred through outriggers must be evenly distributed to prevent damage to *roadways*. Outriggers and crane bodies must not encroach on through-traffic lanes that are required to be kept open.

Photo: Peter Conroy / City of Sydney

- (d) prior to seeking *approval* for the set-up and use of an oversize mobile crane, the crane company must obtain the approval of NSW Police and Transport for NSW for permission to deliver the plant to the site (see also **4.10** for details on the transport and use of oversize/over-mass vehicles).

2.4.1.2 Partial temporary road closures (see also 2.10)

In the majority of cases the operation of small mobile cranes from a *roadway* is of a minor nature and can be allowed through obtaining a partial temporary *road* closure. These applications do not need to be referred to the Local Pedestrian, Cycling and Traffic Calming Committee for consideration and endorsement. They can be processed and determined by the *City's* Construction Regulation team in accordance with this Code. In these cases the following provisions apply:

- (a) applications must be lodged at least five (5) working days prior to the date of the proposed operation/partial lane closure;
- (b) for partial temporary *road* closures, at least one traffic lane must be maintained. This may require stop-and-go control using accredited traffic controllers to permit safe two-way movement. Traffic detours will not be permitted;
- (c) an *approval* can include an alternative back-up date to accommodate a deferral of works due to inclement weather (refer to the application form); and
- (d) an *approval* will include a requirement for the applicant to undertake a letterbox-drop within the surrounding area advising occupants of the proposed work and partial *road* closure (see also **3.18** in relation to impacts on business operators and tenants).

A template notice for partial temporary *road* closures is available on the *City's* website and must be used when giving notice.

2.4.1.3 Full temporary road closures (see also 2.10)

Proposals for the use of mobile cranes that will require a full temporary *road* closure can create significant traffic disruption and congestion therefore such applications must be referred to the Local Pedestrian, Cycling and Traffic Calming Committee for detailed consideration (see **2.14.1** for information on the make-up and operation of the Committee including details relating to *works zones*).

Prior to determination, an application will be referred to representatives of Transport for NSW and relevant *City* officers to review and provide feedback to the Committee.

The applicant may also be consulted throughout the assessment process to clarify any aspects of the proposal and/or require the lodgement of additional information.

Proponents must allow sufficient time (at least 8 weeks) in the programming of works to obtain an *approval*.



Figure 3: Full road closures require the endorsement of the *City's* Local Pedestrian, Cycling and Traffic Calming Committee.

Photo: Peter Conroy / City of Sydney

Further information

Further details about obtaining a full temporary road closure including completing and lodging an application are available on the *City's* website and/or by contacting the *City's* Traffic Works Coordinator (see **2.4.1.6(f)**).

2.4.1.4 Use of mobile cranes

Mobile crane operation on or above a *public space* must reflect best practice to minimise inconvenience to the general public including people walking, cyclists and vehicle drivers. The use of mobile cranes in a *public space* will only be permitted to facilitate:

- (a) maintenance works on existing buildings or works within the *public space* itself;
- (b) the installation and removal of site-based cranes;
- (c) the delivery of large plant and equipment (in the absence of an onsite fixed crane); and
- (d) the delivery of major structural elements or building fabric (roof members and cladding) where it is not practicable or safe for onsite crane/s to lift material or the onsite crane has been removed and the building needs to be completed and made weather-tight (e.g.: installation of roof coverings).

2.4.1.5 Hours of operation (see also 2.4.1.6(e))

The set-up and use of mobile cranes can result in offensive or intrusive noise impacts in the surrounding area therefore mobile crane operation should, wherever possible, be carried out within the City's standard construction times and days.

It is acknowledged that in many instances such as high traffic volumes and other special needs of the City, such work can only take place outside of standard times and days (see **3.5.6** and **3.5.7**) and therefore special *approval* will be required. Where permitted, the following provisions will apply together with any other requirements that may be imposed as part of an *approval*:

- (a) mobile crane operation proposed to take place outside of the standard work times must ensure that the amenity of nearby residents, workers and the general public will be maintained to the highest possible level. This is to be achieved through applying good practices to minimise any likely adverse impacts. The *approved* operating times will be specified in an *approval* (*permit*);
- (b) the measures required to be implemented and followed to maintain acceptable public amenity will be determined exclusively by the Construction Regulation team where partial temporary closures are proposed and where necessary, in consultation with the City's Traffic Operations Unit.

For full temporary *road* closures, the Local Pedestrian, Cycling and Traffic Calming Committee will endorse the acceptable dates and times of operation depending on the traffic needs and conditions; and

- (c) the applicant will be required to undertake an information letterbox-drop to affected tenants and residents within the local area for both partial and full temporary *road* closures (see **2.4.1.6 (g)(i)**).

2.4.1.6 Minimising impacts and communication requirements

To minimise disruption to the general public and businesses acceptable amenity must be maintained for residents, business operators, tenants, shoppers and visitors. The following requirements must be implemented and followed by mobile crane operators:

(a) Delivery of mobile cranes

- (i) the delivery of mobile cranes to *workplaces* must be undertaken in a manner that minimises disruption to the surrounding area, particularly residential-type premises (including apartment buildings and tourist accommodation). This is particularly relevant when delivery takes place outside of normal workdays and times.
- (ii) in circumstances where mobile cranes are delivered in the early morning or late at the night, the operation of external communication loudspeakers on vehicles is not allowed. Refer to **(d)** below for requirements.
- (iii) work must not commence on the set-up/establishment of a mobile crane prior to the time stipulated in the crane *hoisting permit* and will, in the majority of cases, not be permitted until after the standard work commencement time that applies to the development site (see **3.5.1**).
- (iv) in localities where there are no potential or likely noise impacts and there are special needs to commence crane set-up outside of the standard development times, applicants must highlight this in the application form and request special consideration (see also **(c)** below).

(b) Identification of mobile crane ownership

Crane operators must display the company name or some other form of identification on all vehicles to indicate that the works are being undertaken by the company listed in the crane *permit*.

(c) Noise associated with the erection/dismantling of mobile cranes

- (i) mobile cranes must be erected and dismantled in such a way as to minimise noise. Material, equipment and tools must not be thrown on the *road* or handled in way that generates unnecessary noise.
- (ii) it is acknowledged that the assembly or dismantling of large mobile cranes requires the use of hammers which will generate a noise level that cannot be circumvented. In these circumstances the City may require the letterbox-drop notification to also

indicate the potential for noise generation during assembly or dismantling of the crane (see **2.4.1.6 (g)(i)**).

(d) General conduct of crane operators

- (i) During the entire crane set-up and *hoisting* operation, operators and associated construction site personnel must consider the amenity of residents and/or employees of businesses in the vicinity including avoiding shouting instructions or otherwise generating unnecessary noise.
- (ii) Two-way radio usage or mobile phones (with vibration ring alert or low ring tone) are effective means of communication to minimise noise nuisances and is therefore preferred by the *City*.
- (iii) The need to use whistles as a means of communication is acknowledged and permitted. If the *City* considers that letterbox-drop notification is required, the notice must mention if whistle communication is to be used.

(e) Minimisation of operating times

- (i) The mobile crane operator and the site project manager must endeavour to minimise the duration of mobile crane usage. In circumstances where *approval* is given for full or partial temporary *road* closure the *approved* times specified for the closure does not automatically allow for the set-up and operation of the crane.
- (ii) In allowing *hoisting* operations to take place in a *public space* the equipment must not stand on the *roadway* for extended periods. This is necessary to minimise associated impacts, subject to:
 - the locality;
 - the size of the crane; and
 - the *hoisting* works to be undertaken,
- (iii) the *City* may restrict the times of crane operation. This will be determined on a case-by-case basis as part of the assessment process when considering a crane *hoisting* application.

(f) Time extensions

If, due to unforeseen circumstances, a time extension is required beyond the *approved*

times stipulated in the crane *hoisting permit*, contact must be made with the *City's* Construction Regulation team (ph. 9265 9333, 24/7) and NSW Police to determine if a time extension can be granted. An email seeking an extension may also be requested.

- (g) Other matters that must be considered and satisfied including notification

Mobile crane activity in a *public space* can have significant impacts on vehicular, cyclist and pedestrian movement including maintaining access to buildings where temporary partial or full *road* closures are necessary. To address these impacts the following must be considered and satisfied including additional matters and requirements specified as conditions of *approval* in a *permit*:

- (i) in granting *approval* to stand and operate a mobile crane in a *public space* including fully or partially temporarily closing a public *road* it will be necessary for proponents to advise:
 - affected parties (property owners, tenants, occupants and building managers) in the locality (typically a street block) in which the closure is to take place; and
 - likely affected parties in any other streets that may be impacted.
- (ii) notification must take place through a letterbox-drop as follows:
 - for partial *road* (traffic lane) closures, at least five (5) working days prior to the date of crane operation;
 - for full *road* closures, be undertaken 14 days prior to the date of temporary closure (see also **2.4.1.7**).
- (iii) any representations made or raised by affected parties must be resolved, and details of the resolution provided to the *City*.

Note: The notification letter must be in accordance with the standard template letter (one each for partial or total temporary closure) which are available on the *City's* website.

- (iv) traffic guidance schemes must be developed and be in accordance with AS 1742.3 and Transport for NSW *Technical Manual for Traffic Control at Worksites*

(including pedestrians and cyclists). All schemes must be *approved* and cannot be modified without prior consent. *Approved* schemes must be kept onsite during the proposed *hoisting* operation;

- (v) booms/jibs must not operate over pedestrians or vehicular traffic without *approved* overhead protection systems or acceptable *City-approved* pedestrian/traffic management being in place to isolate and prevent access within the overhead *hoisting* zone. Where *hoisting* over private land including *City* owned land (other than *roads*) such as buildings, parks, reserves squares, agreement must be reached with affected owners including the *City's* Property Unit. (see **1.18**);



Figure 4: Required signage in accordance with AS 1742.3 and the traffic guidance scheme must be clearly displayed.

Photo: Peter Conroy / City of Sydney

- (vi) all signage, pedestrian and traffic control devices must comply with AS 1742.3 – 2002 and be appropriate for all *activities approved* under a *hoisting permit*;
- (vii) full compliance must be given to the *City's* code regulating construction-related noise (work times may be varied through an *approval (permit)* - see **3.5**;
- (viii) the NSW Traffic Management Centre must be notified when works commence and finish;
- (ix) driveway and/or *footway* access to any properties in an affected area must not be obstructed unless the written consent or agreement from the owner/occupants is first obtained (see also **2.10.1** and **3.18**); and

- (x) where required by a condition of *approval* Transport for NSW accredited traffic/pedestrian controllers must be in place at all times.

2.4.1.7 Additional matters relating to full temporary road closure

The following matters, additional to the above provisions, must be considered and addressed, when a full temporary *road* closure is proposed:

- (a) where commercial car parks are affected by a proposed closure, the *City* must be indemnified against all claims of revenue loss as a result of the temporary *road* closure (see also **2.10.1**);
- (b) a public notice of the proposed closure must be placed in a Sydney metropolitan newspaper at least seven (7) days before the proposed *road* closure takes place. Copies of the newspaper clippings must be provided to the *City* as evidence of publication prior to issue of a crane *hoisting permit*;
- (c) prior to undertaking *hoisting activities* including *road* closure, the emergency services (NSW Police, Fire and Rescue NSW and NSW Ambulance Service) must be formally notified of the proposed temporary closure. Assurance that access for all emergency service vehicles will be available to properties in the affected street must be provided. All services (street and building fire hydrants /sprinkler booster connection points, emergency exit doors etc.) must be kept free of obstructions;
- (d) full *road* closures including traffic diversions will require the assistance of NSW Police officers to control traffic and direct traffic around the site;



Figure 5: The assistance of NSW Police is required for full temporary *road* closures.

Photo: Peter Conroy / City of Sydney

- (e) where bus services/facilities are affected by a *road* closure, proponents must notify the relevant bus companies. All costs associated with a closure must be paid by the applicant including for any required additional supervisory staff, rerouting services and/or temporarily relocating bus stops/layover facilities during each closure;
- (f) *road* closures and signage must be undertaken in accordance with the AS1742.3 unless otherwise directed by NSW Police or an *authorised* person of the *City*;
- (g) emergency vehicle access lane/s must be available at all times along the closed section of *roadway*. Access lanes must have a minimum width of 3.25 metres;



Figure 6: Where required by the *City* a clear 3.25 metre traffic lane must be provided and maintained during a partial *road* closure.

Photo: Peter Conroy / City of Sydney

- (h) appropriate and adequate traffic *control measures* including:
 - detour signs and traffic control personnel;
 - pedestrian exclusion barriers; and
 - safe and *accessible* movement of vehicles, bicycles and pedestrians,

must be fully implemented and maintained at all times during the placement and operation of the *hoisting* equipment.



Photo: Peter Conroy / City of Sydney



Figure 7: Appropriate barriers must be installed to isolate an *approved* work/crane operation area. In busy pedestrian areas such as the city-centre, metal barriers must be used.

Photo: Peter Conroy / City of Sydney

- (i) all temporary barriers and signs associated with a road closure must be removed immediately following the road reopening to traffic; and
- (j) a temporary *road* closure and crane *hoisting* operation must comply with *City's* requirements and the *approval (permit)* conditions.

2.4.1.8 Other matters

Other matters that may also apply and be required as part of an *approval* for temporary road barriers and mobile cranes include:

- (a) all conditions of a *Road Occupancy Licence* issued by the Transport Management Centre must be complied with;

- (b) at the discretion of NSW Police, additional traffic control such as Police officer attendance to supplement traffic control personnel may be required. All costs associated with providing Police personnel must be incurred by the proponent; and
- (c) vehicle/equipment operations including outrigger set-up/placement and counterweight swing must take place within the closed kerb lane. Where additional lanes are required, this will be assessed on a site-specific basis as part of the application assessment process.



Figure 8: Through-traffic lane/s adjoining a work place must be supervised by authorised traffic controllers.

Photo: Peter Conroy / City of Sydney



Figure 9: Where *approval* is given to establish and operate *hoisting* devices on *roadways*, special controls will need to be implemented including traffic/pedestrian *control measures*.

Photo: Peter Conroy / City of Sydney

Notes:

1. As part of an *approval (permit)* for temporary *road* closures and crane operation, the applicant will nominate alternative dates to accommodate inclement weather events and/or other *approved* works that may be required. In the event that the alternative date/s are needed to be used the *City's* Traffic Works Coordinator and Construction Regulation team must be advised on the first available workday post-cancellation of the *approved* primary date of operation.
2. Additional fees will apply for the use of alternative date/s and other proposed or required adjustments to *approval permits*. A 'Deferred Date Application' will need to be lodged if nominated back-up dates cannot be utilised.
3. Acknowledgement from NSW Police for the *approved* alternative dates does not absolve the applicant from the necessity to obtain a new *road occupancy licence* from the Transport Management Centre for the use of the alternative date/s.

2.4.2 Other types of mobile hoisting devices

The *City* will allow the placement and use of non-crane mobile *hoisting/lifting* devices on *roadways* and *footways*, subject to meeting prescribed minimum requirements including the use of structural-grade plywood and drop-sheets to protect surfaces.

Examples of mobile devices and their operation in a *public space* include:

- truck-mounted *hoisting* equipment (Hiabs);
- boom-type lifts (cherry-pickers, concrete placing booms etc.);
- elevated work platforms; and
- scissor lifts

2.4.2.1 Equipment placement/usage on footways and roadways

The following provisions apply:

- (a) where a mobile device is required to operate in a *public space* an application is required to obtain *approval* for its set-up and use. At least two (2) working days' notice (excluding weekends and public holidays) must be provided when seeking *approval*.

2.4.2.1 Equipment placement/usage on footways and roadways



Photo: Peter Conroy / City of Sydney

(b) the use of certain *hoisting/lifting* equipment on *footways* constructed of concrete or granite paving is permissible subject to meeting the following requirements, including maximum load limitations:

- (i) minimum two-axles rubber wheel equipment – **3 tonnes** (max.);
- (ii) rubber-track equipment – **5 tonnes** (max.); and
- (iii) 17 mm (min.) structural grade plywood or other suitable composite board allowed by the *City* must be used beneath the equipment at all times to distribute the loads on the pavement surface and to minimise damage including surface damage.

(c) when needing to access a *footway* from the adjoining roadway the following must be satisfied:

- (i) the use of *vehicular crossings* (building driveway access crossings) in close proximity to the *worksite* is preferred;
- (ii) where *crossings* are not available suitable temporary ramps appropriate for the type and size of *hoisting* plant to be used must be in place to minimise excessive pressures or damage to kerbing;

- (iii) It is critical to avoid damage to stone kerbing is present particularly if fragile and historically significant sandstone kerbing. Contact the Construction Regulation team for further advice.



Figure 10: All *hoisting* operations must be carried out within the boundaries of a *works zone* or a temporarily closed traffic lane (to a height of at least 4.5 metres above the *road surface*).

Photo: Peter Conroy / City of Sydney

- (d) where *footways* are of insufficient width to accommodate *hoisting* devices such as in narrow laneways, *approval* may be given to allow device set-up and operation on *roadways* subject to appropriate controls being implemented such as barricading and traffic/pedestrian control (see **2.7**).

2.4.2.2 Equipment usage–pedestrian safety, amenity and convenience

When using mobile lifting equipment, the following must be implemented to minimise disruption to the *public space* and maintain public safety:

- (a) except where the *City* grants specific *approval* allowing a partial obstruction/closure, ensure mobile *hoisting* or other lifting devices does not block the public thoroughfare including safe, *accessible* and convenient pedestrian movement and access to premises (see also **2.10.1** and **3.18**);

Note: In some circumstances such as very busy thoroughfares, the use of a Type-B *hoarding* to form an elevated work platform may be necessary and required to keep *footways/laneways* fully open (refer to the *City's* 'Code of Practice: Construction-related Temporary Structures On and Above Roads' for further details);

- (b) determine the most appropriate *hoisting* zones for medium and long-term use of the equipment and methods to minimise impacts on the *public space*;
- (c) conduct dilapidation surveys of surfaces before and after works to record the condition. Where necessary or required, protect pavement surfaces and kerbing;
- (d) implement effective operational procedures and lifting techniques to afford appropriate public safety in the adjoining *public spaces* in accordance with the responsibilities imposed on the *person in control of a business or undertaking* under the Work Health and Safety Act and Regulations; and
- (e) use appropriate traffic and pedestrian management procedures where required by a *permit* including displaying required directional and caution signage.

The above requirements may also form conditions of an *approval (permit)*.

2.4.3 Site-installed hoisting devices (cranes)

Crane installation should be within the property boundaries unless otherwise specifically allowed to encroach on a public *road* (see **2.4.4**). Hoisting operations including slewing and wind-vaning actions over a public *road* must be undertaken safely and have no adverse environmental impacts including impacts on pedestrians, vehicles and cyclists.

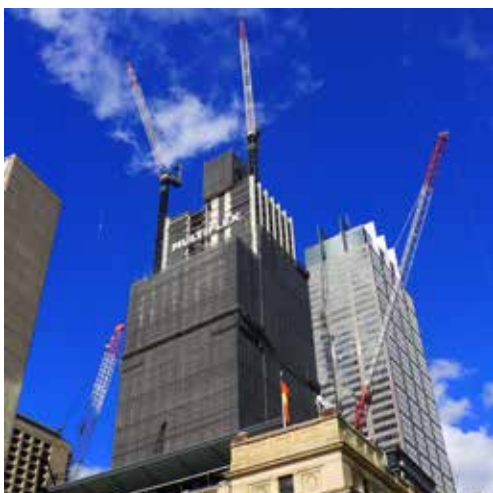


Photo: Peter Conroy / City of Sydney

The following requirements must also be satisfied:

- (a) the crane installation must be inspected and maintained at the prescribed intervals as set out in the device specification and/or plant item registration documentation including any other requirements of *SafeWork NSW*;
- (b) the owner and/or operator of a crane must ensure the plant is erected, maintained and operated in accordance with the Work Health and Safety Act 2011 and Part 5 of the Work Health and Safety Regulation 2017 including any requirements of *SafeWork NSW*;
- (c) all *hoisting* activity must be carried out within the *development consent approved* construction days and times;
- (d) *hoisting* activity must be undertaken in a manner that does not cause a nuisance including offensive noise to adjoining and surrounding premises (see 'Note'). When *hoisting/vaning* over private neighbouring land proponents have certain obligations that must be satisfied in relation to access agreements (see **1.18**);

Note: An *approval* may be revoked or modified for any purpose or reason including breaching conditions of an *approval* as prescribed by Section 108 of the Local Government Act.

- (e) other than crane operational actions to test the device for compliance with any *SafeWork NSW* requirements the following must be satisfied prior to *hoisting* activity commencing:
 - (i) a certificate issued under Section 93 of the Local Government Act 1993 (refer to the standard certificate templates on the *City's* website and the template certificate issued with the *permit*) must be provided to the *City* confirming that the crane has been installed in accordance with the *approval* including the structural design details and footings;
 - (ii) the crane meets all requirements of the relevant legislation; and
 - (iii) the crane complies with applicable requirements of *SafeWork NSW*.
- (f) all *hoisting* activity from a public *road* must be carried out from within the boundaries of the *approved works zone* (see **2.14**) and be undertaken safely and in a co-ordinated manner. The use of tag-lines can assist in controlling loads within the boundaries of the *hoisting* zone (see **2.14.3**) subject to meeting any required work health and safety provisions;

- (g) a separate *approval* must be obtained for the placement and operation of mobile cranes on a *roadway* for the purpose of installing a site-based *hoisting* device (see **2.4.1**). Proponents can seek *approval* through lodging an application for mobile *hoisting* devices;
- (h) where the principal construction works are subject to a *development consent*, a copy of the construction certificate issued by a *registered certifier* for any required concrete footings or other structural elements required to support and anchor a crane must be provided to the *City* prior to installation and operation of the crane. This includes structural steel grillage on which a craning device may be fixed and bear on an existing building undergoing alteration;
- (i) in cases where a site is located within 'prescribed airspace' of Sydney Airport, any conditions imposed by the Sydney Airport Corporation Limited in relation to a crane installation and operation must be adhered to;
- (j) street trees including tree canopies must not be damaged, trimmed or interfered with (see **2.14.6** and **2.14.7**); and



Figure 11: Permissible signage on site cranes and other *hoisting* devices must not be illuminated unless specific *approval* is granted through a *development consent*.

Photo: Peter Conroy / City of Sydney

- (k) other than:

- (i) minor crane company name signage; or
- (ii) minor principal contractor's name (where the contractor owns the crane); or
- (iii) signage that is classed as exempt development under the State Environmental Planning Policy (Exempt and Complying Development) Codes 2008,

signage must not be displayed on any part of the crane including the jib/boom without first obtaining *development consent*. Signage, including the crane owner/hire company, must not be illuminated unless specifically *approved* through a *development consent*.

Note: If proposing to hoist or swing any part of a crane including movement under wind-vaning actions over private land, refer to **1.18** in relation to obtaining access agreements over neighbouring lands under the provisions of the NSW 'Access to Neighbouring Land Act 2000'.



Figure 12: *Approval* under the Roads Act is required when any part of a *hoisting* device swings or operates over a *road* including encroachment under wind-vaning actions.

Photo: Peter Conroy / City of Sydney

2.4.4 Personnel/material hoists, tower cranes, mastclimbers and other similar equipment

The *City* generally does not allow the placement and operation of these types of *hoisting* equipment within a *public space*. Such equipment should be located within the allotment boundaries of a site. Where, however, there are site constraints such as small land parcels, narrow allotments or works are proposed on an existing building that is built to the property boundaries, the *City* may consider allowing hoist installation and use on or above:



Photo: Peter Conroy / City of Sydney

- (a) *footways* within a ply-sheet fenced *work compound* space where the *footway* width is sufficient to allow the safe and convenient passage of pedestrians past the *workplace* and *worksite* (see **2.16**);
- (b) the deck of a Type-B *hoarding*, subject to strict control criteria applying and being implemented and followed (see **2.4.4.1**); or
- (c) cantilevered *hoisting* equipment and operation above a public *road*.

In the above circumstances the *City* may require proponents to enter into an agreement, licence or other form of approval for the use of airspace or land below the surface. These approvals will include a requirement to meet any design requirements imposed by the *City*.

2.4.4.1 Hoisting equipment placed on hoarding decks

The primary aim of a *hoarding* deck is to form a protective barrier to objects that may fall from a *worksite* and thereby prevent objects impacting on the *public space* (refer to the *City's* 'Code of Practice: Construction-related Temporary Structures On and Above Roads' for further details).



Photo: Peter Conroy / City of Sydney

The *City* therefore allows overhead protective structures in *public spaces* to enable contractors to meet their work health and safety obligations to protect persons passing a *worksite* and *workplace* (refer to **1.12.3**). The use of a *hoarding* deck for other purposes is only allowed for essential uses and *temporary structures* (such as site sheds).

Decks should therefore not be used for the placement/support of *hoisting* equipment and associated material and equipment unless there are fully justified and sound reasons for doing so (and being specifically *approved* by the *City*).

Where hoisting equipment is *approved* for placement and use on a deck and a formal *works zone* is not established, the temporary standing (parking) of a truck on a *road* adjoining a hoarding to load and unload via the deck for transfer of material by hoisting equipment may not be allowed. This aspect must be considered as part of the project planning process which may require the establishment of a *works zone* or alternative short-term *approval* to stand a vehicle. Proponents should contact the *City's* Construction Regulation team prior to lodging an application to install hoisting equipment to discuss the proposed method of loading and unloading from a roadway.

2.4.4.2 Environmental impacts from hoist usage (noise, visual and privacy)

- (a) Hoist design, location and usage can result in potential impacts. Noise is a key factor which can result from motor operation, hoist

car movement and car-gate operation. Audio warning systems such as sirens fitted and used on mast-climbing platforms when operating can cause unacceptable noise. These impacts must therefore be considered and addressed in the preparation of an application.

- (b) Visual and privacy impacts must be considered particularly where hoists are proposed for installation in laneways (impacts on windows of occupied buildings opposite). Sensitive uses in the surrounding buildings must also be considered in the planning and application preparation stages. This is particularly important where residential-type buildings (apartments and tourist accommodation) are located nearby.
- (c) Where impacts are likely, *approval* may not be granted or, if permitted, the times of operation may be restricted to address operational noise. A hoist's vertical travel path may also need to be appropriately screened or enclosed, particularly where located in a laneway and/or adjacent to residential buildings.
- (d) In addressing potential off-site noise impacts from hoisting activity, proponents should contact owners and occupiers of likely impacted properties to seek feedback on the proposal prior to submission of the application and wherever possible, ensure that the proposal includes measures to mitigate these impacts.
- (e) Formal notification of applications to surrounding properties will be undertaken by the *City* for hoist installation in laneways. For hoist locations on main street frontages, the need for formal notification will be as determined by the *City* based on the locality and any sensitive building uses nearby.

2.4.4.3 Plan of management for hoisting activities

- (a) Where the *City* determines that there are sufficient grounds to allow a *hoarding* deck to support hoisting equipment and its use, the *City* may require that a site operation and plan of management be lodged with the *hoisting* application taking into account the impact on neighbouring properties and businesses.
- (b) A plan of management must specify details of the material/personnel to be hoisted and the type/s of activity to be undertaken on the

deck associated with the use of the *hoisting* including the proposed loads on the deck including parked platforms of mast-climbing equipment. The design and proposed loads must be assessed by the practising structural engineer responsible for the design and certification of the *hoarding* to:

- (i) determine the structural adequacy of the *hoarding* and supporting *footway/roadway* surface including the substrate support;
- (ii) consider the type/s of material and/or equipment proposed to be transported and specify any required *control measures* to address identified risks associated with the loading/unloading operation, including dynamic actions;
- (iii) clearly specify on the drawings the location of the hoisting plant including the extent and location of material and equipment that may be placed temporarily on the *hoarding* deck awaiting transfer via the hoisting equipment;
- (iv) confirm that the superimposed loads on the *hoarding* are not exceeded. Loads must not exceed 40% of the *hoarding* design – refer to the *City's* 'Code of Practice: Construction-related Temporary Structures On and Above Roads' and the *SafeWork NSW* 'Code of Practice: Overhead Protective Structures'; and
- (v) determine whether operational procedures and conditions of use including any *control measures* and *SafeWork NSW* requirements need to be followed in addition to *site management plans*.

2.4.4.4 Structural certification of hoisting plant

The structural design of the *hoarding* on which the hoisting plant is to be located must be certified against the proposed (and *approved*) *hoisting* usage plan. Certification must be in accordance with the provisions specified in the *City's* 'Code of Practice: Construction-related Temporary Structures On and Above Roads'.

For mast-climbing hoisting plant, engineering certification for the fixing of the equipment to the building facade must also be lodged with an application.

2.4.4.5 Implementation and compliance with the management plan for hoisting usage

The person in control of a *worksite* (typically the builder or principal contractor) must fully and effectively implement procedures to manage the site and hoisting operations including:

- (a) having in place appropriate management/oversight of the operation of the *hoisting* plant by nominated competent person/s;
- (b) effectively control and manage the placement and movement of material, equipment and workers on the *hoarding* deck;
- (c) ensure that the ongoing structural capacity and stability of the *hoarding* is fully maintained at all times and that required periodic inspections and certification are carried out and provided in accordance with the *City's* 'Code of Practice: Construction-related Temporary Structures On and Above Roads' and any other requirements imposed by the practising structural engineer;
- (d) any proposed modifications to the *hoarding* and/or *hoisting* plant/operation must be assessed and certified by the *hoarding* design engineer and *approval* obtained from the *City*; and
- (e) maintain at all times compliance with any operational conditions specified by the design engineer and other requirements specified in the *hoarding* and *hoisting* approvals (*permits*).

2.4.4.6 Screening of hoisting plant cars or platforms from the public space

Where *approval* is given, the lower section of the *hoisting* plant (parked hoist car, platform at deck level and other parked plant) and the area of *approved* allocated space for material and equipment placement on the deck, must be:

- (a) fully screened to shield the plant and material from the *public space* including on the sides in addition to the *hoarding* fascia on the primary frontage; and
- (b) screened using painted plywood or fencing such as the *hoarding* fascia of the Type-B *hoarding* or *work compound* (see the 'Code of Practice: Construction-related Temporary Structures On and Above Roads' for further details including artwork requirements).

The screening system must be fully detailed in the *hoarding* drawings and application.

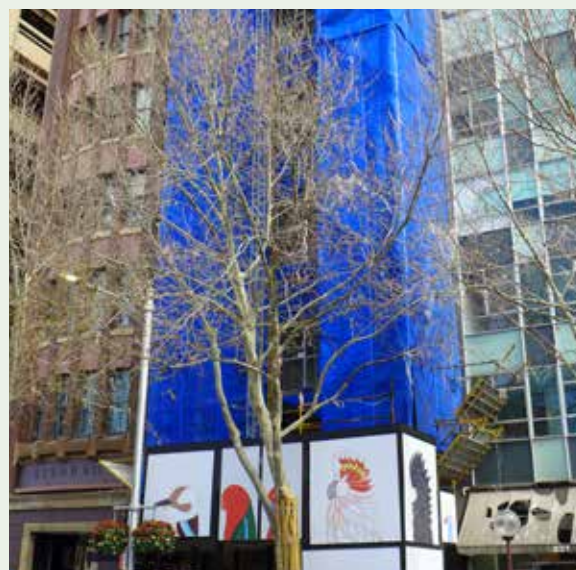


Figure 13: Hoist installations on *hoarding* decks are only permitted under special circumstances. Where *approved*, parked hoist cars at deck level must be fully screened by *hoarding* fascias including on the sides. Any mesh used to screen the hoist structure must meet the minimum flammability performance criteria in the *City's* 'Code of Practice: Construction-related Temporary Structures On and Above Roads'.

Birds of Australia by Egg Picnic

Photo: Peter Conroy / City of Sydney

2.4.5 Boom-lifts, scissor-lifts, Hiabs and other hoisting devices operating from a footway/roadway

The use of boom-type *hoisting* equipment such as elevated work platforms, cherry pickers, concrete placing booms, and other *hoisting* devices is *hoisting* activity and therefore requires *approval*.

In operating from and over *roads* minimum prescribed operational requirements must be followed. This is necessary to ensure that the safety, amenity and convenience of the public is not compromised in the vicinity of the *worksite/ workplace* and *hoisting* activity.

2.4.5.1 Minimum requirements

The following requirements must be satisfied when undertaking *hoisting* activity:

- (a) unless specifically *approved* by the *City*, equipment outriggers/stabilisers must not be

placed on the *footway* or kerb edge under any circumstances as *footways* do not have sufficient bearing capacity to support the increased loads transferred from plant and equipment. For small devices operating on *footways*, at least 17mm (min.) thick structural grade plywood must be used to protect and evenly distribute loads on the *footway* surface;

- (b) booms must not operate over pedestrians, cyclists or vehicular traffic without overhead protection being in place (Type-B *hoarding*) or *approved* alternative diversions/routes around the *workplace* being implemented (see **(e)**);
- (c) all traffic guidance schemes and associated signage used during works must be in accordance with AS 1742.3 and Transport for NSW's *Technical Manual for Traffic Control at Worksites*. Signs & safety devices, are to be in place at all times during the work activity;

All guidance schemes must be *approved* by the *City* and cannot be modified without prior consent. The most current *approved* schemes must be available onsite at all times during the set-up and works;

- (d) all required traffic controllers involved in the works must have current TfNSW accreditation and must comply with all requirements of Section 8 – 'Traffic controllers and speed zones' of the *Technical Manual for Traffic Control at Worksites*;



Photo: Peter Conroy / City of Sydney

- (e) where a *footway* needs to be closed to allow *hoisting* activity to take place specific *approval* must be obtained and, unless otherwise specifically permitted, pedestrians must be assisted/directed by pedestrian controllers to an alternative *accessible footway* in advance of a *worksite* at decision points where pedestrians can choose alternative routes, such as at:

- (i) traffic/pedestrian control signals; or
- (ii) intersections; or
- (iii) pedestrian crossings in advance of the site.

Where a *cycleway* or shared path is temporarily affected a safe and equivalent path of travel is to be provided to the satisfaction of the *City's* Cycling Team (see **2.7.5**);

- (f) where a *hoisting* activity/device affects a State classified road, a *road occupancy licence* from the Traffic Management Centre must be obtained;
- (g) unless otherwise permitted by an *authorised person*, *hoisting* activities and devices must not be located nor operate in a way that will have an adverse impact on street trees. Tree protection in accordance with **2.14.6** and **3.18.1** must be provided prior to the *hoisting/* lifting activities commencing;
- (h) building and driveway access points in vicinity of a *worksite* must remain unobstructed at all times, unless the written consent of affected property owners/occupants is first obtained (see also **2.10.1** and **3.18**);
- (i) where the works are likely to affect bus operating routes the *permit-holder* must contact the bus operator/s to obtain advice on any required changes to their operations and pay any applicable costs incurred;
- (j) all fire services (fire hydrant and sprinkler booster connections on buildings), emergency exit doors etc. must be kept clear of obstructions;
- (k) *hoisting* equipment and other plant must not stand within a *works zone* for extended periods unless otherwise specifically allowed by the *City*.

The *City* accepts that plant and equipment are commonly stored onsite. Where this is not possible, equipment must be removed from the *works zone* each workday and delivered to the *workplace* the following day. This allows for general parking, where sign-posted, to be available outside of the *approved works zone* times.



Figure 14: In special circumstances *approval* may be given to stand equipment in a *works zone* temporarily.

Photo: Peter Conroy / City of Sydney

- (l) all works must be undertaken in accordance with the provisions of the *City's* code regulating construction-related noise, unless otherwise specifically *approved* for special works and/ or to avoid interference with traffic/cycling/ pedestrian movement;
- (m) any damage caused to the *public space* resulting from *hoisting* activities must be repaired in accordance with the *City's* standard specifications. Where the *City* undertakes the repair work all associated costs must be reimbursed or will be deducted from any *performance bond* held (see **1.14**); and
- (n) all vehicle/equipment and operation including outrigger set-up and counterweight swing must be located and carried out wholly within the width of the kerb lane.



Figure 15: Concrete boom-pump operation requires *approval* when operating on and/or above a *road*.

Photo: Peter Conroy / City of Sydney

2.4.5.2 Additional requirements

In some circumstances additional requirements beyond those listed in **2.4.5.1** may be imposed as part of the application assessment process and will be specified in an *approval*.

2.4.5.3 Neighbourhood and business notification

In addition to the standard *permit* conditions a letterbox-drop using the *City's* standard template notice (available on the *City's* website) may need to be carried out to notify surrounding property occupants and business tenants of works (see **3.18.1**).

Where notification is required (specified in the *permit*), notice must be given at least two (2) business days prior to works commencing. A copy of the notification letter must be forwarded to the *City* prior to the commencement of work.

2.4.6 Suspended scaffold (swing-stage)

The use of *suspended scaffolds* above a public *road* must be undertaken in accordance with the applicable provisions of the Work Health and Safety Act 2011, the Work Health and Safety Regulation 2017, relevant codes of practice, any directions issued by *SafeWork NSW* and the requirements set out below.



Photo: Peter Conroy / City of Sydney

2.4.6.1 Storage of suspended scaffolds when not in use

- (a) When not in use, *scaffolds* must be appropriately parked/stored:
 - (i) on the roof of the building; or
 - (ii) within the property boundaries or behind the building line adjoining a *road*; or
 - (iii) on the deck of an *approved* Type-B *hoarding* (where installed) and be fully screened by the *hoarding* fascia; or

- (iv) on the *footway* behind a fully screening Type-A *hoarding* fence where the *footway* width is sufficient to allow safe and convenient passage of pedestrians. This will be subject to special consideration as set out in the *City's* 'Code of Practice: Construction-related Temporary Structures On and Above Roads' (see **2.6**). Where a *footway* has insufficient width temporary short-term closure may be allowed (see **2.4.6.2** below).
- (b) Proponents must comply fully with all requirements imposed through conditions of an *approval*.

2.4.6.2 Temporary closure of footways

For minor short-term usage (several days) the *City* may agree to temporarily close a *footway* to allow the operation of a *suspended scaffold* without the need for a *hoarding* or barricading to isolate the *public space* beneath a *scaffold*/work activity. This will only be considered where:

- (a) the *footway* pedestrian usage is very minor, as determined by the *City*;
- (b) alternative *accessible footways* are available, as determined by the Construction Regulation team in consultation with the *City's* Traffic Operations team. Alternative *footway* paths must not result in significantly increased travel distances for pedestrians;
- (c) *approved* pedestrian control methods are used; and
- (d) there is no obstruction to the entrances of the building including business premises, unless agreement is reached with the affected parties (see **3.18.1**).

2.4.6.3 Minor maintenance works on building facades

In some circumstances such as undertaking visual inspections of facades or carrying out minor maintenance works (cleaning and/or painting) of facades, lightweight *suspended scaffolds* may be permitted to operate above a building's street awning without a standalone Type-B *hoarding* or the establishment of a pedestrian exclusion zone.

The temporary placement of a lightweight suspended scaffold (when not in use) on a street awning is generally not allowed although it may be

permitted where no practicable alternative solution for its storage is available and where adequate temporary screening is installed to screen the suspended scaffold from *public spaces*.

Such proposals will only be allowed where an awning satisfies the following:

- (a) the PCBU must consider and assess the awning's adequacy to satisfy all potential risks from falling objects including failure of the *suspended scaffold* itself together with the loads associated with personnel. The PCBU must satisfy all work health and safety requirements. Codes of Practice can provide guidance to assist PCBUs and others who have a duty of care (refer also to **1.12.3** in relation to work health and safety obligations). The *SafeWork NSW* 'Code of Practice: Overhead Protective Structures' should be consulted for the use of lightweight *suspended scaffolds* above awnings;
- (b) a visual inspection of an awning's structural members and connections by a practising structural engineer holding National Engineers Registration with Engineers Australia must be carried out to verify structural suitability. A report and certificate from the engineer meeting the *City's* requirement must be lodged with an application;
- (c) the awning provides sufficient coverage of the *footway* for overhead protection;
- (d) the person undertaking the work and operating a *suspended scaffold* (i.e. the PCBU) has assessed all risks including risks to the public and implemented *control measures* as required by the NSW Work Health and Safety Act 2011; and
- (e) access systems to the awning/parked *suspended scaffold* must not obstruct the *footway*. Ladder access from a *footway* to an awning will generally not be permitted unless there is sufficient *footway* width to allow safe barricading and ladder placement.

For long-term projects the *City* may allow access via an enclosed temporary stairway subject to availability of adequate *footway* space (refer to the Code of Practice: Construction-related Temporary Structures On and Above Roads for stairway design provisions).

Note: For further information regarding *hoisting* equipment operation over neighbouring land including the need to obtain access agreements refer to **1.18**.

2.4.7 Building maintenance units (see also 2.12.2)

The operation of a *building maintenance unit (BMU)* above a *public space* is *hoisting* activity under the Local Government Act 1993 and therefore requires *City approval*. *Approval* is typically sought and held by the property owner on which the *BMU* is operated. Building managers or maintenance contractors can, on behalf of the property owner apply for and hold an *approval* providing that a valid *public liability insurance (PLI)* is held in accordance with **1.15**.

In cases where a new building is nearing completion and the principal contractor (typically the builder) wishes to use an installed *BMU* to access parts of the building such as the façade, the principal contractor must apply and obtain *approval* to operate the *BMU* over a *public space*. Upon the builder handing over a completed project (including the *BMU*) to the owner (typically the property owner) the builder must inform their client of the need to lodge a fresh application to seek the *City's approval* to allow the continued use of the *BMU*. This includes providing and holding valid *PLI* in the name of the *permit-holder*.

If proposing to operate a *BMU* over private land or *City-owned* land which is not a *road* such as public squares, malls, reserves etc., access agreements over this land must firstly be obtained from affected property owners including the *City*. Access over lands is regulated through the 'Access to Neighbouring Land Act 2000'. Refer to **1.18** for further details.



Photo: Peter Conroy / City of Sydney

2.5 Hoisting to or from cantilevered materials landing platforms

The use of cantilevered materials landing platforms fixed to buildings under construction or alteration requires *approval* when hoisting over a *road* (*roadway/footway*).

In addition to a hoisting approval being required, cantilevered platforms must also have approval. Refer to the Code of Practice 'Construction-related Temporary Structures On and Above Roads'. An application form must be used when seeking *approval* for these structures.

2.6 Construction-related temporary structures

The placement of *temporary structures* including *hoardings*, *scaffolds*, site fences and other structures on or above a *public space* must be *approved* before installation.



Eyes on the horizon by Reg Mombassa (a.k.a. Chris O'Doherty).
Photo: Peter Conroy / City of Sydney

2.6.1 Hoardings, scaffolding and site fencing

The *City's 'Local Approvals Policy'* and 'Code of Practice: Construction-related Temporary Structures On and Above Roads' control the design, use and maintenance of *temporary structures*. Public safety and amenity issues such as:

- (a) the visual condition and tidiness of a structure;
- (b) inadequate or non-operational lighting systems (*hoardings*);

- (c) defective parts of a structure; or
- (d) dangerous or uneven *footway* surfaces adjoining the site or beneath a *temporary structure* (*hoarding*).

must be monitored regularly by the *permit-holder*. The *City* will monitor installed *temporary structures* and the *public space* throughout the installation period. Where issues (defects) arise with structures, directions to rectify will be issued.

Further details on the standards of design and the information that must be provided with an application to install a *temporary structure* is set out in the 'Code of Practice: Construction-related Temporary Structures On and Above Roads'.

Approval can be sought through lodging an application available on the *City's* website.

2.6.2 Temporary site security/safety fencing on private land

The design and installation of temporary site security fencing, typically chain-wire or steel mesh, erected on development sites and which adjoins the *public space* (*footway*), are generally not regulated by the *City*. Refer to **3.12.1** for further details.

2.7 Temporary works and barricading to isolate work areas

If a *footway*, *cycleway* or *roadway* needs to be temporarily closed or partially obstructed to allow for minor works to be undertaken as part of development or other work activity, a *temporary works approval* must be obtained.

2.7.1 Types of work requiring barricading

The installation of barricading in *public spaces* is permissible with *approval* to isolate various types of work activity including:

- (a) set-up and use of ladders;
- (b) mobile *scaffolding* (fitted with wheels) to allow set-up and removal each day;
- (c) concrete static lines at grade with complying pedestrian ramps over, except where a *cycleway* or shared path is present (see **2.9**);
- (d) barricades for rope access activity (abseiling) when undertaking minor work on buildings,

inspecting and/or cleaning building facades and windows (see **2.12.2**);

- (e) barricades for *suspended scaffold* not covered under *hoisting* activity (see **2.4.6** and **2.12.3**);
- (f) construction of temporary vehicle driveways/laybacks (see **2.11**); and
- (g) other minor works in *public spaces*.



Photo: Peter Conroy / City of Sydney

2.7.2 Applications

Approval is required and can be obtained through lodging a *temporary works* application. An application can include multiple frontages of the same building/site.

An application must be lodged at least two (2) working days before the date of the proposed works being undertaken. *Approval* must be obtained before works commence therefore an application must be lodged as early as possible in the work plan.

2.7.3 Accessible pathways

Pedestrian movement through and around *workplaces* must provide and maintain *accessible* pathways complying with Part 1.1 of the *City's* 'Inclusive and Accessible Public Domain Guidelines' and satisfy the following:

- (a) as guidance, for *temporary structures* and works on *footways* in low pedestrian density areas, at least half of the existing clear *footway* width or 1.2m (whichever is the greater) must be provided and maintained past the works. In exceptional circumstances 1m may be allowed subject to acceptable site conditions as determined by *City* officers;



Photo: Peter Conroy / City of Sydney

- (b) where the reduced *footway* width is unacceptable it may be necessary to provide alternative *approved* stable (sealed) surface pathways past the *workplace* or provide localised assistance to persons with special needs such as users of wheelchairs and mobility scooters. This must be discussed with and *approved* by *City* officers prior to implementation; and
- (c) in high density pedestrian areas and including at transport nodes, proponents should check with *City* officers to establish minimum acceptable clear widths.



- (d) where temporary cables are placed over a *footway*, accessible cover plates must be provided to ensure safe, convenient and *accessible* pedestrian passage including importantly for wheelchairs.

2.7.4 Requirements for barricading

The following minimum requirements apply for barricading:

- (a) maintain, as a high priority, acceptable pedestrian access past a *workplace* and to building entrances, including business premises (see **3.18.1**). The preference is to retain at least half of the *footway* or at least 1.2m (whichever is the greater) must be kept open at all times. Where a *cycleway* or *shared path* is affected special consideration is required in consultation with the *City's* *cycleway* team and specific *approval* obtained for any temporary barricading;
- (b) depending on the area and pedestrian density, work may be restricted to non-peak pedestrian movement times to avoid impacts on commuters;



Figure 16(a): Temporary barricading must minimise impacts and maintain safe and convenient pedestrian passage. In some cases barricading will not be permitted during the peak pedestrian periods. In very busy areas such as shopping districts, works and barricading may need to be undertaken at night or on weekends.

Photo: Peter Conroy / City of Sydney

- (c) where required by the *City* assistance may need to be provided to pedestrians:
 - (i) to pass a *workplace*; or

- (ii) where pedestrians are directed to the *footway* opposite the *worksite* (when specifically *approved* to do so) to maintain appropriate, *accessible* and safe paths of travel (see **2.8.3**).

This may also include assistance and direction for cyclists, in consultation with and the *approval* of the *City's cycling team* (see also **2.7.5**). Contact with the *cycling team* will be via the Construction Regulation Team co-ordinating the *permit*;

- (d) short-term loading/unloading of material and equipment to and from a vehicle adjacent to the site is permitted subject to meeting prescribed requirements (see **2.15**);
- (e) only ladders and/or small mobile *scaffolding* associated with minor building or maintenance work will be allowed;
- (f) local building/vehicle access must be maintained at all times (see also **3.18**);
- (g) drop-sheets or other forms of protection must be in place during the works to prevent spillage or other damage to the *footway* surface (see also **2.12.2** – barricading associated with *hoisting* activity);
- (h) the *footway*, *cycleway* and *roadway* must be maintained in a clean & tidy state at all times;
- (i) signs & safety devices in accordance with AS 1742.3 and Transport for NSW *Technical Manual for Traffic Control at Worksites* must be installed and maintained at all times during the work/barricading placement. Signage must also be located so that it does not block or reduce the clear pathway of travel for people walking; and
- (j) all works are to be carried out in a continuous manner within the *approved* times and must be completed as soon as possible to allow the *footway/roadway* to be fully reopened.

2.7.5 Temporary diversion of pedestrians and cyclists

Where pedestrians and/or bicycle riders are required to be diverted from the *footway/cycleway* to allow works to be undertaken, an application must be lodged and the following satisfied:

- (a) a traffic/cyclist/pedestrian guidance scheme may be required, as determined by the *City*. The scheme must prepared by an accredited

person holding a 'Prepare a work zone traffic management plan' (PWZ) Training Card issued by SafeWork NSW.



Photo: Peter Conroy / City of Sydney



Photo: Peter Conroy / City of Sydney



Photo: Peter Conroy / City of Sydney



Figure 16(b): Temporary pedestrian and cyclists diversions should be avoided. Where works are proposed that require temporary closure of *footways/cycleways*, the *City* may agree to temporary diversions being established subject to meeting minimum design standards.

Photo: Joshua Faull / City of Sydney

- (b) Unless otherwise specifically approved or allowed by the *City*, a clear *approved* of 1.5m square must be provided at temporary pedestrian kerb ramps to provide safe and convenient wheelchair and mobility scooter access/manoeuvring. Ramps must have a minimum width of 1.0m and a gradient not steeper than 1:10.
- (c) any required plan must be prepared in accordance with AS 1742.3 and the '*Technical Manual for Traffic Control at Worksites*' published by Transport for NSW. The distance of travel along alternative routes must be minimised; and
- (d) access to buildings including access to business premises must be addressed and detailed in the scheme (see **3.18.1**).

Further information: For temporary diversions involving *cycleways* and shared paths, design guides are available on the *City's* website.

2.8 Requirements when installing and removing temporary structures

The design and installation of *temporary structures*, are regulated through the *City's* 'Code of Practice: Construction-related *Temporary Structures* On and Above Roads'. Some forms of temporary structures such as *hoardings* and *scaffolding* can be of significant size and complexity therefore may take many weeks to install/construct. Removal at the completion of a development or work can also take significant time.

There are potential impacts associated with the installation and removal of *temporary structures* therefore the *City* will restrict operational times to minimise local impacts.

The *City* requires that once work commences the installation/removal must take place in a continuous process (within *approved* days and times) to avoid extended disruption of roadways and footways. At the end of each day's work the *public space* must be made trafficable and safe.



Photo: Peter Conroy / City of Sydney

2.8.1 Working at night and on weekends

Footways or *cycleways* with high volume movement in the locality of the site may necessitate installation/removal to be undertaken outside of normal work times and days (see **2.8.2**). This is often required in the city-centre and sometimes includes traffic control and temporary diversions particularly in circumstances where *hoardings* need to be installed over *laneways*.

These factors therefore often require works to take place at night and sometimes under time constraints to minimise noise impacts on sensitive land uses such as residences, hotels and tourist accommodation in the locality.

Noise generation during installation and dismantling can cause unacceptable impacts. Night work has significant potential to cause adverse impacts (see also **3.5.11** regarding the use of temporary lighting). Additional time constraints to address potential noise impacts may therefore apply. This should be considered in the project planning and site establishment processes.

Time and day restrictions will also apply at certain times of the year (summer holiday period – see **1.17**) and during special events.

2.8.2 Controls to limit impacts

To limit impacts proponents (builders, *hoarding* suppliers and contractors) must make themselves fully aware of potential restrictions when determining the type and extent of *temporary structure/s* to be used. Large installations will require substantial time to construct that will necessarily delay the commencement of works on the site.

Breaches of times/noise control conditions and other requirements may result in further constrained work times being imposed and/or penalties (fines) being issued.

2.8.3 Installation and removal of temporary structures

Approvals for *temporary structures* will include a condition requiring proponents or suppliers of *temporary structures* to seek *approval* for the proposed days and times for installation/removal. A standard form is issued with the *permit* which must be completed and forwarded to the Construction Regulation team for assessment and *approval*. A similar process also applies for *temporary structure* removal.

During installation and removal of a *temporary structure* the following requirements apply and must be followed:

- (a) installation and removal of a *temporary structure (hoarding)* must be undertaken safely and not damage infrastructure including *footways*, kerbing, street trees and street gardens;
- (b) once installation or removal has commenced the work must be undertaken as a continuous process within the *approved* days and times to minimise excessive disruption to the public and building occupants/tenants in the locality; and
- (c) as a general rule the *City* expects Type-B *hoardings* to be installed by *hoisting* gantry

modules or structural members onto a *footway* directly from a truck standing legally on the adjoining *roadway*. In cases where there are site constraints preventing *hoisting* from the *roadway* such as:

- building awnings above *footways*; and/or
- restricted clear access along the kerb due to street trees or infrastructure;

forklift operation on *footways* will be permitted subject to (d) below.

- (d) Plant movement on *footways* must meet the following:
 - (i) the size (mass) of the forklift or other similar equipment including the load must be limited to 7 tonnes (max.);
 - (ii) 17 mm (minimum thickness) structural grade plywood complying with AS/NZS 2269.0, or other suitable composite board allowed by the *City*, must be placed on the *footway* surface to assist in distributing loads and to prevent damage to asphalt/stone surfaces (particularly from wheel twisting), cracking or subsidence of granite or brick paving;
 - (iii) utility service hatches/lids in the *footway* must be assessed for adequacy of loadbearing pressures and where necessary, temporary steel plates placed over pits;



Figure 17: Only authorised accredited traffic controllers are to be used in cases where traffic/pedestrian control is required or necessary.

Photo: Peter Conroy / City of Sydney

- (iv) plywood sheets and steel plates required by (ii) and (iii) must have a smooth transition (chamfered edges) at the interface with the *footway* surface to avoid trip hazards for pedestrians moving, under supervision and assistance, through the *workplace*;
- (v) forklift movement along *footways* must be minimised; and
- (vi) where existing *vehicular crossings* are not available in close proximity to the workplace to allow forklift access to the *footway* for *hoarding* installation/removal, appropriate temporary kerb ramps must be used to prevent damage when mounting a kerb.

- (b) The width of a *roadway*, particularly *laneways*, and the local traffic volume need to be considered to ensure that standing vehicles and work activity around the plant do not adversely impact on safe, *accessible* and convenient passage of pedestrians, cyclists and motor vehicles.
- (c) During concrete pumping operations the following must be considered and satisfied:
 - (i) noise levels must be minimised and comply with the *City's* code regulating construction-related noise;
 - (ii) concrete catchment/spillage devices or other suitable measures must be installed beneath concrete agitator chutes and pump hoppers. Such protection measures can include freestanding capture receptacles (see **Figure 18**) or appropriate impervious sheeting laid out on the *roadway* with bunding around the perimeter;

2.9 Concrete pumping, static lines and temporary pedestrian ramps

Concrete pumping operation can impact on safe and convenient pedestrian movement therefore various controls and requirements apply. Refer also to **1.12.3** and **3.7(b)** regarding Work Health and Safety obligations when operating in *public spaces*. PCBU's should also consider applicable *SafeWork NSW* Codes of Practice for guidelines relating to safe pumping operation.

2.9.1 Pumping operation

- (a) In selecting the type and size of concrete pumping equipment consideration must be given to:
 - (i) the *works zone* location, size and the width of the *roadway*; and
 - (ii) the location of tree trunks and size of tree canopies (potential for damage from concrete agitator and pump appliances). This is particularly important in cases where an *approval* may be given to allow a single day standing of a pump and agitator for small projects (see **2.9.2**).



Photo: Peter Conroy / City of Sydney



Figure 18: Pollution prevention measures must be in place during concrete pumping operations to prevent spillage onto *roadway* surfaces and pollution offences (stormwater pollution).

Photo: Peter Conroy / City of Sydney

- (iii) the potential for concrete over-splashing onto the adjoining *footway* including impacts on passing pedestrians must be addressed. This can include implementing specific *control* measures for concrete agitator and pump operators to follow such as the screening of concrete intake hoppers on pumping appliances (see **(iv)** below);
- (iv) screens can be of several design forms but must be of a suitable material and quality to the *City's* satisfaction in relation to visual appearance and public amenity (in addition to the safety aspects under work health and



Figure 19: The use of screens to protect pedestrians and cyclists from concrete over-splash at pumping locations is generally not supported by the City. Where *approval* is given temporary screens must be of a durable quality, satisfactory design and fixed securely in place. Screens must be removed from the *public space* immediately following completion of daily pumping operations. The City may allow screens such as roller blinds to be fixed to a *hoarding* (with blinds rolled up when not in use to allow unimpeded pedestrian access at the kerb).

Photo: Peter Conroy / City of Sydney

safety provisions) (see **Figure 19** as an example). Fabric roller screens permanently fixed to a Type-B *hoarding* may also be permitted. Factors that must be considered for any screen system include:

- visual appearance and ease of maintenance and cleaning (concrete over-splashing);
 - tensioning system to avoid flapping fabric under windy conditions impacting on passing pedestrians; and
 - adequate stability including loads from likely wind actions including extreme localised wind actions resulting from tall surrounding buildings;
- (v) the potential for concrete over-splashing onto tree pits, tree trunks or canopies and *hoardings* must be addressed. Where over-splashing could be an issue specific tree protection must be installed to the City's

satisfaction prior to concrete pumping commencing. Tree protection must remain in place during all pumping operation and be removed once the *works zone* is no longer active.

2.9.2 Daily permits for small concrete pours and pumping

For small projects involving a single day concrete pour, proponents should contact the City's Construction Regulation Team to check if the locality (street) will permit the standing of a concrete agitator and pump. See also **2.15**.

For other minor works associated with single residential dwellings the City's 'Neighbourhood Parking Policy' permits the temporary parking of a contractor's vehicle in the kerb lane (see **2.15.5**).

2.9.3 Temporary pedestrian ramps over concreting pump static lines

- (a) Due to the high pedestrian densities in many parts of the city, *footway* obstructions including changes in grade must be avoided or minimised. The primary aims that must be met include:
 - (i) keeping *footways* clear of obstructions at all times including maintaining existing *footway* grades at *workplaces* without interruption to ensure safety (avoiding potential slips, trips falls);
 - (ii) maintaining pedestrian amenity and convenience including for people with a disability;
 - (iii) providing safe and easy access for persons involved in the delivery of goods to buildings including persons using trolleys, and families with prams/strollers; and
 - (iv) minimising impacts on pedestrians when pumping concrete from the *roadway* (*works zone*).



Photo: Peter Conroy / City of Sydney

- (b) To minimise disruption of *footway* surfaces the use of concrete pump static lines at-grade must be avoided if possible.

2.9.3.1 Pedestrian safety and convenience

The construction sector commonly seeks approval to use temporary pedestrian ramps to span over static lines placed across *footways* from the *roadway* kerb/*works zone*. The *City's* preference is to keep *footways* clear of ramps and have lines pass over the *footway* using the deck of a Type-B *hoarding* to support pipes.

Keeping the *footway* clear of ramps is important for pedestrians particularly persons with physical disability, vision impairment, and persons with reduced mobility including older persons. This preference aligns with the aims and objectives of the *City's* 'Inclusive and Accessible Public Domain Guidelines' (see **2.7.3**). The use of pedestrian ramps is therefore generally not supported.

2.9.3.2 Special circumstances to allow ramps and the restrictions that apply

In certain circumstances the *City* will allow ramps where it can be clearly demonstrated that it is not feasible or practicable to use a Type-B *hoarding* or to pump concrete from within site. In these circumstances the following apply:

- (a) where *approval* is given to install a static line at grade on a *footway* the following requirements apply:
 - (i) generally ramps will only be permitted in areas of low pedestrian movement;
 - (ii) will only be considered for in-ground works and the construction of floor/s up to the height of a *hoarding* deck, at which point the static line must be installed over the deck of the *hoarding* and the ramp removed;
 - (iii) ramps must meet minimum design standards (see **2.9.4** and **Figure 20**) and be fully and appropriately maintained including keeping the *footway* beneath and around a ramp clean and free of litter/debris; and
 - (iv) under no circumstances will ramps be allowed in *cycleways* or shared pathways due to the potential fall and injury risks to cyclists. Type-B *hoardings*, or other suitable *approved temporary structure*, must therefore be provided in the area of the static line connection point at the outer kerb

alignment for lines to pass over a *cycleway* and *footway* to reach a *worksite*;

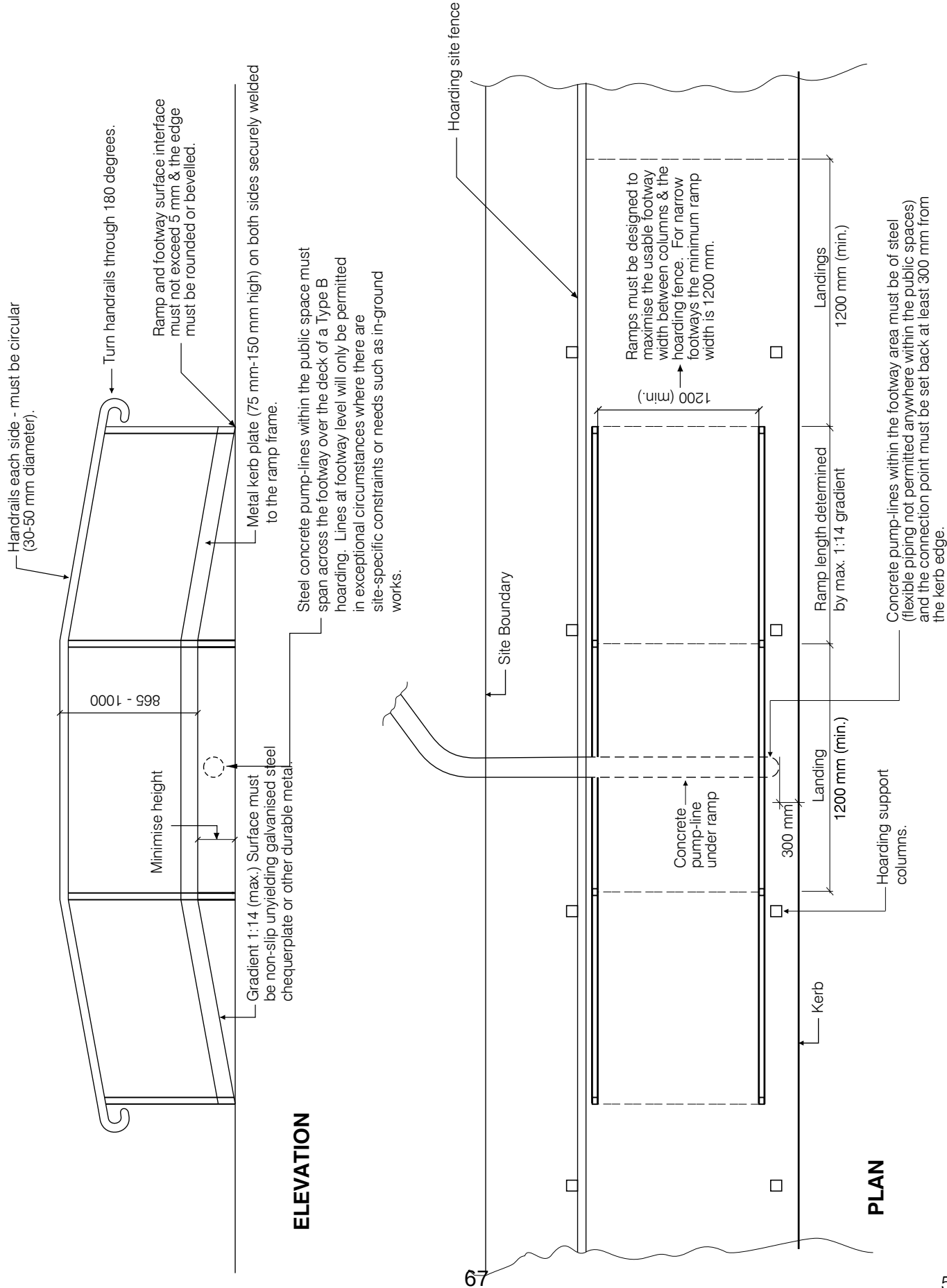
- (b) unless otherwise specifically *approved*, no part of the pumping system (other than the main static line from the pumping appliance) shall be placed or fixed to the *road* (*roadway* or *footway* surface); and
- (c) further details on static lines, mounting to Type-B *hoardings*, coupling protection and design, refer to the *City's* 'Code of Practice: Construction-related Temporary Structures On and Above Roads'.

2.9.4 Design criteria for temporary pedestrian ramps over pump-lines

Where *approval* is granted for an at-grade concrete pump-line due to site-specific needs as determined by the *City*, the pump-line must be bridged by a durable aluminium or galvanised steel ramp. Ramp surfaces must have a slip-resistant (chequer-plate or similar finish) and comply with the principal design provisions of AS1428.1 '*Design for access and mobility—General requirements for access*' and specifically as follows, including compliance with **Figure 20** and the following:

- (a) 1:14 including maintaining this grade on sloping *footways*
- Note:** The ramp length on the lower section of *footway* will therefore need to be longer);
- (b) have a non-slip surface;
 - (c) have a minimum landing length of 1.2m;
 - (d) the height of the landing above a static line must be minimised;
 - (e) handrails (865 mm to 1.0m high) and kerbs (65 mm to 150 mm high) in accordance with AS1428.1;
 - (f) the ramp surface at the *footway* interface must not exceed 5 mm; and
 - (g) the ramp width must be maximised. In areas of high pedestrian density as determined by the *City*, ramps must match the clear existing pedestrian width of the *footway* and be not less than 1.2m as required by the *City's* 'Inclusive and Accessible Public Domain Guidelines'. Where a ramp is used in conjunction with a *hoarding* placed on the *footway*, the width of the ramp must also be maximised i.e. between the *hoarding* site fence and the support columns and/or street furniture/ infrastructure (poles, trees, parking signage stems etc.).

Figure 20: Design standards for pedestrian ramps over concrete pumping-lines. **Note:** Ramps are not permitted in *cycleways* and are only allowed for in-ground works and up to one level above the *road surface* or to the height of a *hoarding deck*.



2.10 Temporary road closures (partial and fully)

Roads can be closed temporarily, either partially or fully, depending on the locality and site circumstances and the needs of builders and contractors. Temporary closures are required for various reasons including mobile crane installation and operation (see **2.4.1**) and *road openings* (see **2.13**).



Photo: Peter Conroy / City of Sydney

- (a) To minimise traffic disruption and congestion when a temporary full road closure is proposed the following requirements apply:
 - (i) in the city-centre and on major *City-controlled roads*, the *City* will only *approve* a temporary *road* closure if the proposed work or activity is scheduled to take place on a Sunday;
 - (ii) where applications affect minor low traffic *roads* as determined by the *City* and there are special needs, works may be permitted on both Saturday and Sunday; and
 - (iii) on minor *City-controlled roads* outside the city-centre, weekday and/or weekend operations may be permitted.
- (b) Applications for temporary partial *road* closures (see **2.10.1**) are dealt with by the *City's* Construction Regulation team. Such proposals will only be *approved* in low traffic volume conditions when at least one (1) through-traffic lane can remain open for safe traffic movement to ensure that two-way traffic can continue to operate under appropriate traffic control for the duration of the partial closure.

- (c) Any proposed diversion of traffic flow and/or full temporary *road* closures will require consideration by the *City's* Traffic Operations Unit and the endorsement of the *City's* 'Local Pedestrian, Cycling and Traffic Calming Committee' (see **2.14.1**).

Further information: For full temporary road closures contact the *City's* Traffic Works Coordinator and/or refer to the *City's* website which has details on the *City's* requirements including information about lodging an application.

2.10.1 Temporary partial road (traffic lane) closures for mobile crane operation and road openings (see also 2.4.1 and 2.13)

Approval is required under the Roads Act and the Local Government Act to set-up and operate a mobile crane (*hoisting* operations) on a *roadway* and to undertake other works such as *road openings*.

2.10.1.1 Undertaking a partial closure and other associated approved activities

- (a) The following general requirements apply:
 - (i) the *City* must be indemnified against all claims for damage or injury that may result from the activity or occupation of part of the *road* or *footway* during the activity. The applicant must provide documentary evidence of *public liability insurance* cover (see **1.15**);
 - (ii) any damage caused to the *road* or *footway* as a result of *approved* activities must be repaired to the *City's* standards or reimbursement made to the *City* for the costs of repair (see **1.14.2**);
 - (iii) all costs associated with a partial *road* closure including traffic control and required notification to surrounding property owners/occupiers (see **2.4.1.6(g)**) **(i)** shall be borne by the proponent;
 - (iv) where practicable to do so, the *City* may require alternate street parking arrangements for affected residents during a partial closure;
 - (v) a risk management plan for the partial *road* closure must be provided to the *City* (see 'note' below);

- (vi) where a closure is to take place on a bus route the applicant must notify bus operator/s prior to the closure event. All associated costs for any required rerouting of services and/or temporarily relocating bus stops during a partial closure must be borne by the proponent; and
- (vii) where variations to the *approved* date/s of work and/or conditions of *approval* are necessary such as for unforeseen circumstances or weather constraints, the *permit-holder* must contact the City's Construction Regulation team to seek confirmation/*approval* for the variation/s.

Note: In the event of a traffic incident or emergency, NSW Police will take control of all traffic and pedestrian arrangements.

2.10.1.2 Specific requirements associated with partial road closures

In granting *approval* for a partial temporary closure the following minimum provisions apply together with any specific or special conditions that may be imposed as part of an *approval*:

- (a) where required by a condition of *approval*, the applicant must contact the Sydney City Police to obtain a separate Police permit and to discuss deployment of user-pay Police officers for a *road* closure;
- (b) a *road occupancy licence* (ROL) from the Transport Management Centre must be obtained prior to commencement of works associated with a *road* closure. ROLs are generally required for occupation of State *classified roads* but can apply in other circumstances such as activities affecting city-centre roads, as determined by the Construction Regulation team and/or the Traffic Operations Unit;
- (c) if the *approved* closure dates conflict with any works associated with transport infrastructure works and other major works or special events, it may be necessary to seek new dates in consultation with the Transport Management Centre and the NSW Police;
- (d) in granting an *approval*, the holder of the *permit* must provide a telephone number of the supervisor responsible for the proposed closure and include contact details in the required notification letters that must be distributed to affected stakeholders (see (e) below);

- (e) where required, a letterbox-drop to affected property owners/occupants/business tenants/building managers must be undertaken (see **2.4.1.6(g)(i)**). Where parties raise issues and/or representations are made, the applicant is responsible for reaching resolution with affected persons to the satisfaction of the City;
- (f) the written agreement of any likely affected commercial carpark operators for a proposed partial *road* closure must be obtained including an indemnification that the City of Sydney is absolved against all claims of revenue loss as a result of a partial closure;



Figure 21: Unless otherwise specifically permitted, access to buildings including vehicle access must be maintained during temporary *road* closures.

Photo: Peter Conroy / City of Sydney

- (g) partial *road* closures must be undertaken in accordance with AS1742.3 and the *approved* Traffic Management Plan, unless otherwise directed by NSW Police or an *authorised person* of the City;
- (h) works and/or installation of plant and equipment must not occupy the *roadway*, traffic lane, *footway* or *cycleway* until the partial *road* closure has been fully implemented;
- (i) appropriate and adequate traffic *control measures* including signs and traffic controllers for the safe movement of traffic, cyclists and pedestrians must be implemented and maintained (refer to the City's 'Traffic Control Plan for People Riding Bicycles') – see **1.11.1** and the City's website for further information;

- (j) access by emergency service vehicles and personnel must be provided at all times to premises within the partially closed area. All services including street and building fire hydrants and sprinkler booster connection points must be kept free of any obstructions;
- (k) where car share vehicle parking bay/s are affected by the closure, operators must be advised of the *approved* closure at least seven (7) days before the closure takes place; and
- (l) driveways or access to buildings must not be obstructed unless written approval is obtained from affected owners/occupants.



Figure 22: Where car share parking spaces are affected by a proposed temporary road or kerblane closure, proponents must inform the operator prior to the temporary closure being established.

Photo: Katherine Griffiths / City of Sydney

Note: The City reserves the right to revoke a partial road closure approval at any time and for any reason without compensation to the applicant.

2.11 Site access and temporary vehicular crossings - demolition, excavation and construction activity

In the majority of cases existing *vehicular crossings* to access private land are unlikely to have sufficient bearing pressure capacity or the dimensions may not be suitable for the safe movement of vehicles to and from *worksites* across *footways*. The construction of a temporary *vehicular crossing* complying with the City's specifications will therefore be necessary.

The form and finish of construction *crossings* are also important for safe pedestrian movement through a *workplace* by the provision of a stable, smooth and durable surface at truck access points. This includes ongoing maintenance for the full duration of a project. The design requirements for *crossings* are set out in **Figure 23**. Refer to **4.8** regarding the temporary removal of stone kerbing.



Photo: Peter Conroy / City of Sydney

2.11.1 Use of existing vehicular crossings

Where an existing *crossing* is proposed to be used for construction vehicle access and which is specifically permitted by the City, the following must be considered and addressed to ensure the crossing is fit for purpose:

- (a) the type and size of trucks planned to enter and exit the site;
- (b) the expected loads and potential for damage of existing *crossings*, *footway* and kerbing (see **4.8** regarding significant stone kerbing and protection requirements) that may result from the proposed use including the duration of use (crossing must be safe for pedestrians at all times);
- (c) the nature of any proposed or required temporary protection systems to *crossings* and pavements; and
- (d) the need for a dilapidation survey of retained existing *crossings* and kerbing before and after the site works have been completed (see **4.8**).

Any damage caused to a crossing must be repaired to the City's satisfaction.

2.11.2 Design and other requirements for temporary vehicular crossings

The following provisions apply to the construction of temporary *vehicular crossings* and *approvals* granted:

- (a) the design must comply with the standard design details in **Figure 23** and be designed to minimise crossover width with an upper limit of 6.0m;
- (b) in cases of potential damage to *City* assets in the **public space**:
 - (i) a financial *performance bond* as determined by the *City* must be lodged in conjunction with the application (see also **1.14**);
 - (ii) any damage sustained to *City* assets including temporary assets removal must be repaired/reinstated in accordance with the *City*'s standards, specifications and policies at the completion of works; and
 - (iii) if the rectification work is not undertaken or carried out in accordance with the *City*'s specifications, the *permit-holder* will be required to undertake corrective actions or the *City* may take its own actions to rectify the defects and use the *performance bond* to recover all costs;
- (c) a *public liability insurance* policy in accordance with **1.15** must be provided prior to a *permit* being issued.
- (d) works must not impact on street trees and street gardens. Where trees are located adjacent to an *approved* temporary vehicular crossing tree protection in accordance with **3.18.1** must be installed prior to the construction of the crossing and shall remain in place whilst the crossing is in use. Root protection must also be addressed (see 'Notes' under **2.13.2**). Tree protection shall be removed once the crossing is no longer in use.
- (e) should any inadvertent damage occur to limbs, branches and/or root system or disturbance to garden beds, the applicant must contact the *City* to report the damage so that *approved* remedial action can be taken promptly. In many cases a *performance bond* will need to be lodged with the *City* to guarantee the recovery of costs in remediating any damage that is not rectified to the *City*'s satisfaction;
- (f) access to hydrants, utility pits, or any surface cover must not be affected without the approval of the relevant utility service authority/provider, and compliance being given to any conditions imposed as part of the *approval* given;
- (g) works carried out under an *approval* must not damage or interfere with any public *utilities* unless specifically *approved*;
- (h) unless specifically *approved*, kerbstones must not be cut or damaged in any way, unless specific *approval* is granted. Whole kerbstones that are *approved* to be removed to form a crossing must be stored safely for reinstatement upon removal of the temporary crossing (see **4.8**);
- (i) kerb gutter and stormwater pits must not be obstructed in any way and must be kept clean and free of debris (see **3.13** regarding sediment control);
- (j) pedestrian kerb ramps must not be obstructed during the establishment of a crossing unless otherwise specifically permitted by the *City* (see **2.7.3**). The design of ramps may require adjustment at the kerb; and
- (k) to minimise noise impacts, construction works are subject to the requirements of the *City*'s code regulating construction-related noise (see **3.5.8**).

2.11.3 Operational requirements

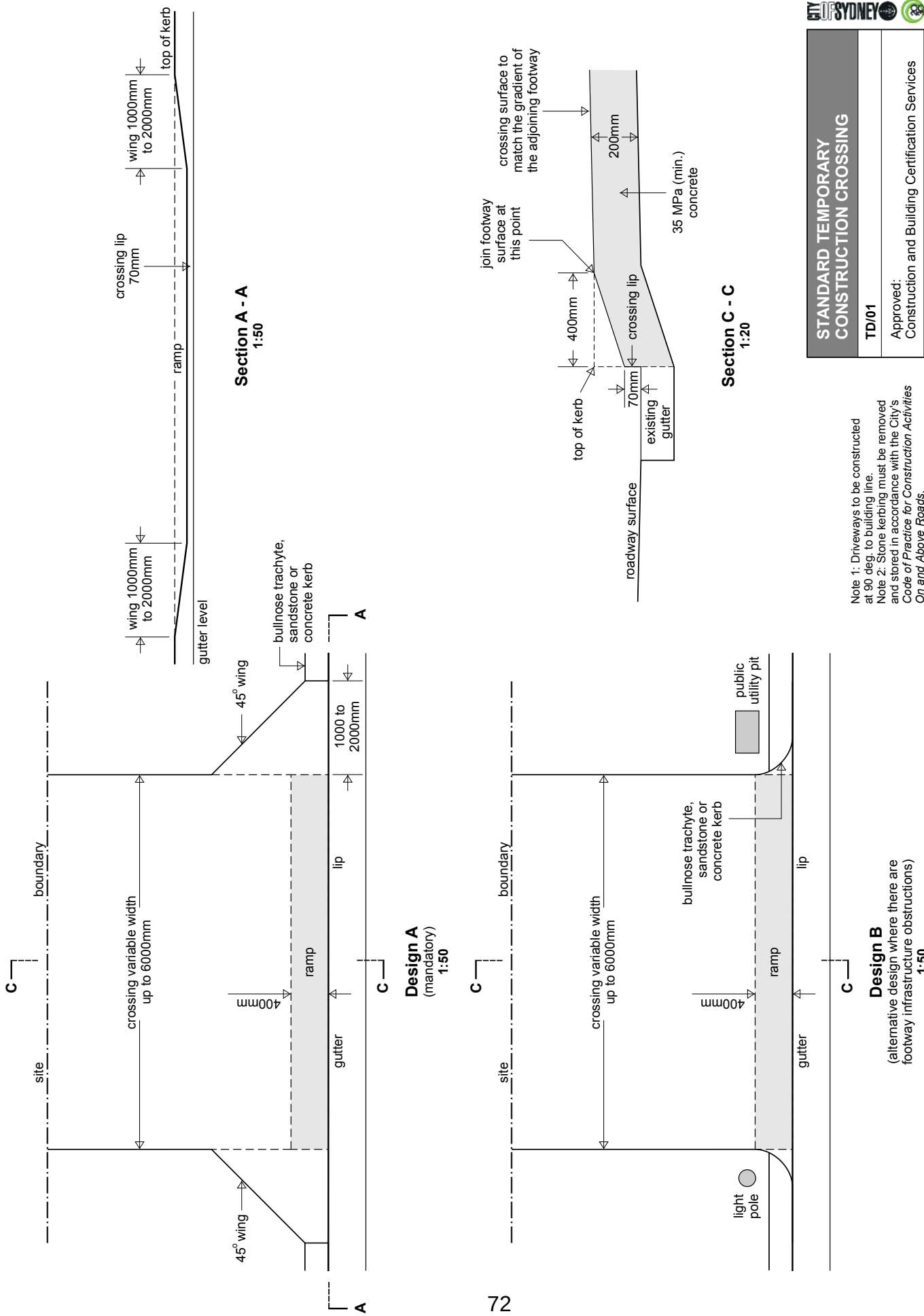


Photo: Peter Conroy / City of Sydney

The following requirements apply during the operation of the site including the use of a temporary vehicular crossing:

- (a) the adjoining *footway*, *cycleway*, *roadway* and temporary vehicular crossing must be kept open, safe, *accessible*, clean and free of debris at all time;
- (b) vehicles conveying debris or excavated material must be covered to prevent material falling or blowing from vehicles onto *roadways* (see **4.5.6**);

Figure 23: Standard design details for temporary construction vehicular crossings.



- (c) an *approval* for temporary vehicular *crossings* does not allow the use of the *road* for the loading & unloading of vehicles at *workplaces*. These activities require a separate *approval* such as an established *works zone* to be in place prior to commencement of any site works (see **2.14** and **2.15**);
- (d) the *permit-holder* is responsible for any damage caused to the *footway/roadway* or any other infrastructure as part of the use of a temporary *crossing*; and
- (e) pedestrian and cyclist control gates at truck entry and exit points must be in place and used during vehicle movements to and from a site (see **3.20** and **4.4**). Sirens, audible warning systems and/or flashing lights are not permitted.



Figure 24: Loads containing demolition material, soil, sand or excavated material must be fully covered before entering the *road network* (see **3.14**).

Photo: Peter Conroy / City of Sydney

2.12 Barricading associated with maintenance and minor works – hoisting activity (see 2.4)

All *hoisting* activity undertaken above a *road* requires *approval* under the Local Government Act and the Roads Act.

Hoisting activity associated with demolition and/or construction work and some forms of building maintenance generally requires the installation of a Type-B *hoarding* over *footways* and in some cases *cycleways* or *roadways*. This is often needed to afford overhead protection for public safety from objects that may fall from the *workplace* into *public spaces*. It may also be necessary for contractors to

meet their Work Health and Safety obligations (see **1.12.3**).

Some minor *hoisting* activities can however take place using barricades to form exclusion zones on *footways* and *roadways*.



Photo: Peter Conroy / City of Sydney

2.12.1 Minor activities associated with barricading

The person undertaking work has certain obligations and responsibilities under the Work Health and Safety Act to protect persons (the public) in vicinity of a *worksite* and *workplace*. This includes assessing risks in relation to objects that may fall into the *public space* and implementing measure/s that are required to address any specific risks (see **1.12.3**).

Sections 17 and 19 of the Work Health and Safety Act and Clauses 54 and 55 of the Works Health and Safety Regulation set out the relevant obligations.

- (a) For *hoisting* activity associated with minor works the person undertaking the work may determine that overhead protection in the form of a Type-B *hoarding* is not required. In these circumstances the *City* may allow the barricading of a *footway* for:
 - (i) rope access work such as window cleaning, façade inspections, minor make-safe work (see **2.12.2**);
 - (ii) the operation of permanently installed *building maintenance units* (see **2.4.7** and **2.12.3**); and
 - (iii) the use of a suspended *scaffold* for carrying out painting, cleaning, minor façade maintenance works/investigations etc. (see **2.6.7** and **2.12.3**),
- (b) The establishment of the pedestrian exclusion zone below the area of work is not to interfere with the safe, *accessible* and convenient

movement of pedestrians and access to buildings and business premises (see **3.18.1**).

- (c) Where it is not appropriate to establish an exclusion zone due to limitations of *footway* width and/or pedestrian densities, the *City* may allow a temporary full closure of a *footway/roadway* for short duration works subject to acceptable alternative pathways being available for pedestrians. This may require the use of accredited pedestrian/traffic controllers.
- (d) Where it is not practicable, feasible or safe to redirect pedestrians, a Type-B *hoarding* will be required to keep the *footway* fully open (see **2.6**).

2.12.2 Rope access and temporary barricades

Where *approval* is given for rope access work the *permit* will also require the establishment of an exclusion zone (barricaded space) on a *footway* to allow the formation of a small area to contain trailing ropes and as a landing point for workers. When allowing rope access activity and barricading the following minimum requirements apply:

- (a) appropriate signage must be displayed on barricade warning pedestrians of works being carried out above the *footway*;
- (b) a copy of the barricade *approval* must be displayed (attached) to the barricade;
- (c) a sign detailing the name of the person in control of the work and a 24 hour contact number must be displayed (see **3.18.2.3**);



Figure 25: Exclusion zones (barricading) required by the *PCBU* beneath rope access *hoisting* activity must be of adequate stability, visibility and positioned to minimise *footway* obstruction. For some activities drop-sheets to protect the *footway* surface may be necessary or required. Where used, sheets must be placed wholly with the exclusion zone/s to eliminate pedestrian trip hazards.

Photo: Peter Conroy / City of Sydney

- (d) drop-sheets on the *footway* may be required to protect the surface depending on the type of work being undertaken. Where installed, sheets must be kept within the boundaries of the exclusion zone (to eliminate pedestrian trip hazards); and
- (e) all ropes must be contained within the exclusion zone. This may require the stationing of a worker at ground level to supervise and monitor the works and exclusion zone. Refer also to **2.4.6.3**.

Note:

1. Additional requirements may be imposed as conditions of an *approval* (*permit*).
2. Safe Work Australia has published an industry 'Guide to managing risks of industrial rope access systems' to assist when undertaking this form of *hoisting* activity.



Figure 26: Rope access (*hoisting* activity) to undertake minor maintenance activity e.g.: window cleaning, is permitted subject to *approval* being given to establish exclusion zones (see **Figure 25**). The *PCBU* must risk assess this activity and implement any necessary *control measures*. All ropes are to be contained within the pedestrian exclusion zone (barricaded space).

Photo: Peter Conroy / City of Sydney

2.12.3 Barricading and pedestrian diversion - operation of building maintenance units (BMUs) and suspended scaffolds (see 2.4.6 and 2.4.7)

For *BMU/suspended scaffold* operation directly above *footways*, the following minimum requirements apply:

- (a) where there is sufficient *footway* width for pedestrian passage barricading part of a *footway* directly below the area of work may be allowed subject to the proponent satisfying Public Safety risks (see **1.12.3**). Where this is not available the following applies:
 - (i) where there is inadequate *footway* width and/ or the *City* considers that barricading cannot be accommodated or is not appropriate based on the type of work to be carried out, the *footway* may need to be closed (see **(c)** below); and
 - (ii) alternatively, a Type-B *hoarding* may need to be installed to afford overhead protection and to keep the *footway* fully open (see **2.6** for details regarding *hoardings*).
- (b) Where a *shared path* is temporarily partially barricaded special consideration is required in consultation with the *City's* *cycleway* team (see **2.7.5**);



Photo: Peter Conroy / City of Sydney

- (c) where a *footway* needs to be closed and pedestrians directed to an alternative (opposite) *footway*, *approval* will only be given where:
 - (i) pedestrians can be redirected at traffic/ pedestrian signalised lights/intersection in advance of the *workplace* subject to

approved pedestrian control and the route being fully *accessible* (see **(d)**);

- (ii) the distance of travel along alternative routes must be minimised; and
- (iii) potential impacts on pedestrian/ customer access to business premises in the temporarily closed section must be considered and appropriately addressed (see **3.18**);
- (d) certified Transport for NSW controllers must be used at all times;
- (e) depending on the area and pedestrian density, work may be restricted to non-peak pedestrian movement times to avoid impacts during the morning and afternoon commuter periods. Where *footways* are constantly busy throughout the whole day work may need to be carried out on weekends only within allocated/*approved* times;
- (f) all material and equipment used on the *hoisting* device must be secured by lanyards;
- (g) the *footway* must be maintained in a clean and tidy state at all times during the operation;
- (h) all equipment must be removed from the *road/ footway* and/or parked/placed securely on the building's roof at the completion of each days' work;
- (i) signs and safety devices, in accordance with AS 1742.3 & *RMS Technical Manual for Traffic Control at Worksites*, are to be in place at all times; and
- (j) required signage together with a copy of the front page of the *approval permit* must be displayed on barricades (see also **3.18**).



Figure 27: See **2.4.6** for information on the use of *suspended scaffolds*.

Photo: Peter Conroy / City of Sydney

2.13 Road opening works (including openings of footways)

Any work that involves excavation activity (intrusive digging) on a *roadway*, *footway* or *cycleway* requires an *approval*, commonly referred to as a '*road opening permit*'.

- (a) The types of excavation works requiring a *road opening permit* include:
- (i) installation, maintenance, repairs/ replacement or upgrading of *utilities* (water, gas, electricity or telecommunications – see also **4.16**);
 - (ii) any type of stormwater (see **4.15**) or sewer connection works and repairs;
 - (iii) constructing/reconstructing a temporary *vehicular crossing*/layback to a site for construction vehicle access (see **2.11** for more information);
 - (iv) constructing a permanent *vehicular crossing* or replacing a redundant crossing with a new *footway* (see 'note' below and **2.11.2** and **4.11**); and
 - (v) upgrading/reconstructing a *road*, *footway*, *kerb* and *gutter* (see **4.8**) generally associated with an *approved* development.



Photo: Peter Conroy / City of Sydney

- (b) In many cases *road openings* require the temporary closure of a *road* or traffic lane which will require formal *approval* (see **2.10** and **2.13.1**).



Figure 28: Road opening works must be isolated from the public accessible space by suitable barriers as determined by the PCBU or the City (where directed or required).

Photo: Peter Conroy / City of Sydney

Notes:

1. Constructing a permanent *vehicular crossing* (driveway) or replacing a redundant crossing with a new *footway* surface (see **4.11**) requires a 'Driveway Application' form to be lodged and *approval* obtained from the City's Construction Regulation team, unless a Public Domain condition has been imposed as part of a *development consent*. If a Public Domain condition applies, works associated with driveways will be assessed under that condition by the City's Public Domain team.
2. Time and day restrictions for work activity apply in certain areas (refer to **3.5**).

2.13.1 Road openings and temporary road closures

When undertaking works on a *roadway* including *road openings* it may be necessary to implement a temporary *road* closure (see **2.10** for further details and *approval* process).

2.13.2 Applying for a permit

A *road opening* application using the *City's* standard form can be made by property owners, residents, builders or tradespeople.

Applications must be submitted at least two (2) working days' (excluding weekends & public holidays) prior to the proposed start of works. The following also applies:

- (a) a single application can be used for multiple frontages of the same site;
- (b) all works must be undertaken by a qualified and licensed tradesperson. Licence/ accreditation details must be provided at the time of submitting an application; and
- (c) all financial transactions associated with granting an *approval* including *roadway/footway* occupation fees will be conducted between the City of Sydney and the 'billable party' listed in the application and the *approval*.

Notes:

1. Restrictions apply during the Christmas and New Year periods and special events (refer to **1.17** for details).
2. Tree roots often extend a substantial distance from tree trunks. Advice should be sought from the *City's* Tree Management team if proposed excavation is within the Tree Protection Zone (TPZ – in accordance with AS4970 'Protection of trees on development sites'). Where conventional excavation methods are likely to have an adverse impact on tree roots, non-destructive methods such as hand digging, Hydrovac or Airknife may need to be used. Minor root pruning may be *approved* to accommodate the opening and works.

2.13.3 Notification to the City's asset inspector

For permanent restoration works, the *City's* asset inspector (details provided in the *approval*) must be contacted prior to works commencing to arrange a site inspection to measure the *approved* works and provide a quote for the *City* to undertake the permanent restoration. Works can also be carried out by the applicant (see **2.13.4(c)**).

2.13.4 When works are completed

Upon works being completed the following must be satisfied:

- (a) for temporary restoration – the area of the works must be restored to a safe and trafficable condition for pedestrians and vehicles. Details for temporary restoration works can be found in **2.13.6**;
- (b) for permanent restoration of the *workplace* carried out by the *City*, all costs will be recovered from the deposit (*performance bond*) paid on issuing of the *permit*. If the cost of restoration is less than the deposit paid, a refund will be made to the billable party. If the cost of restoration is higher than the deposit paid the billable party will be advised and an invoice issued for the additional costs incurred which must be paid; and
- (c) where permanent restoration works are proposed to be carried out by the applicant, *approval* must be obtained from the Project Coordinator of the *City's* Infrastructure Maintenance Unit prior to any permanent works being commenced. The Project Coordinator can be contacted via email (see *permit* for details).

2.13.5 Additional documentation that may be required for road opening works

The following additional requirements may apply to proposed works and may be conditioned in an *approval* (*permit*):

- (a) a full traffic guidance scheme in accordance with AS1742.3 & Transport for NSW *Technical Manual for Traffic Control at Worksites* prepared by an accredited person. Consideration must also be given to potential impacts on access to building buildings including impacts on business premises (see **3.18.1**);
- (b) *Before You Dig Australia* cover sheet provided which includes the sequence numbers for Telstra & Ausgrid/Energy Australia and City of Sydney Asset Location Response confirmation;
- (c) where required by a site-specific condition of *development consent*, proof that a *works zone* application has been submitted. Proof is confirmed by providing evidence of payment (receipt) of the *works zone* application fee;

- (d) evidence (copies) of all required external *approvals/acknowledgements* from government agencies i.e. TfNSW for works on *classified roads*, NSW Police and bus operator/s;
- (e) for works, including upgrade works within the *public space* that are associated with a *development consent*, a copy of the 'Conditions Satisfied/Roads Act Approval' issued by the City's Public Domain team and evidence of any *performance bonds* held by the *City* for these works must be provided;
- (f) a safe work method statement is to be provided;
- (g) a photographic record of the state of the *footway/roadway* prior to commencement of works. A minimum of three photos showing close-ups of the *workplace* and two long shots from each end of the works must be provided;
- (h) lodgement of City of Sydney asset location documentation (searches) from *Before You Dig Australia*;
- (i) temporary lids/plate covers on *footways* must be capable of carrying loads of up to 5 tonnes (Class D vehicles); and
- (j) prior to any *road opening* work commencing an arboricultural impact assessment (AIA—including any impact mitigation recommendations) prepared by an AQF Level 5 arborist may be required to be submitted to and *approved* by the Tree Management team. An AIA will be required if more than 10% of the root system of a tree is likely to be impacted or if the excavation is proposed within the structural root zone (SRZ) in accordance with AS4970 'Protection of trees on development sites'.

2.13.6 Restoration works – specifications and requirements

At the completion of the *road opening* works the surface of the *workplace* must be restored to meet the *City's* technical specifications set out in Section B12 'Roads Openings and Restoration'. This is required to ensure the area is in a safe trafficable state for pedestrians, cyclists and vehicles.

Note: The party undertaking the works/temporary restoration must action requests from a *City Asset Inspector* to repair temporary restorations within four (4) hours of a direction being given.

2.14 Works zones

Due to the high volume of vehicular traffic, pedestrian densities and general movement in the city it is preferable to have all loading and unloading of material including concrete pumping associated with development undertaken within the property boundaries. The following matters must therefore be noted and considered:



Photo: Peter Conroy / City of Sydney

- (a) Locating all activities within a site minimises adverse impacts in *public spaces* and surrounding buildings through:
 - (i) maintaining availability of on-street parking, particularly critical in high demand areas;
 - (ii) maintaining the free flow and safe movement of vehicles and cyclists;
 - (iii) reducing noise impacts at street level such as during concrete pumping operations thereby maintaining pedestrian amenity;
 - (iv) keeping the *footway* fully open by reducing the need for a Type-B overhead *hoarding* structure associated with *hoisting* operations from the *road*;
 - (v) maintaining safe and convenient pedestrian access to *footways* along the kerblines; and
 - (vi) generally maintaining existing *public space* safety, amenity and *accessibility* in vicinity of a development site.
- (b) Where it is not possible or practicable to undertake loading/unloading onsite (within the property allotment boundaries) the *City* may allow the establishment of a *works zone* within the *public space* to allow vehicles to park on a *roadway* to load and unload.



Photo: Peter Conroy / City of Sydney

- (c) The *City* may require all loading and unloading to take place within a site once construction has reached a stage where the street established *works zone* is no longer essential.

2.14.1 Sites where loading/unloading cannot be done on the site

Where it is not possible or practicable to undertake loading/unloading on-site (within the property allotment boundaries) the *City* may allow the establishment of a *works zone* within the *public space* to allow vehicles to park on a *roadway* to load and unload subject to strict controls being implemented and followed. The *City* can, however, require all loading and unloading to take place within the site once construction has reached a stage where the street established *works zone* is no longer necessary or essential.

Applications for *works zones* are considered by the *City's* Local Pedestrian, Cycling and Traffic Calming Committee for consideration (see **2.14.2**).

A *works zone approval* allows a motor vehicle driver to stop within a zone if the vehicle that is engaged in demolition, construction and other related work activities or dropping off or picking up passengers. *Hoisting* operations using site-based equipment such as tower cranes, can also be undertaken from a *works zone*, however, separate *approval* must be obtained (see **2.4.3** and **2.14.7**).

2.14.2 Local Pedestrian, Cycling and Traffic Calming Committee

Transport for NSW is the state agency responsible for the control of traffic on all *roads* in NSW. In order to deal effectively with the large number and range of traffic-related matters, TfNSW has delegated certain aspects of traffic control on local roads to councils.

The TfNSW delegation to the *City* limits the types of prescribed traffic control devices and facilities that the *City* can authorise and imposes certain conditions as part of the delegation. One of these conditions requires the *City* to refer some traffic-related matters to the Local Pedestrian, Cycling and Traffic Calming Committee (LPCTCC) prior to exercising its delegated functions.

2.14.2.1 Authority and operation of the Committee

The Committee is an advisory body only, having no decision-making powers. It is primarily a technical review committee that advises the *City* on traffic-related matters referred to it.

Proposals recommended by the committee must be formally *approved* by either the elected Council or authorised *City* staff – depending on the nature of the proposal. The *City*, however, is not bound by the advice given by the committee.

Further information: Details on the committee membership and decision-making processes including the role of the Regional Traffic Committee in relation to appeals are available on the *City's* website.



Figure 29: To minimise impacts on the local *road* network and pedestrian/cyclist movement, *work zones* must be appropriately managed and operate at all times in accordance with the conditions of *approval* including directions issued by *authorised persons*. See also **4.4.2** in relation to the use of *footway/kerbside* barriers in *works zones*.

Photo: Peter Conroy / City of Sydney

2.14.3 Location of works zones and applications

The establishment of *works zones* will not be allowed in the following locations:

- bus stop zones;
- taxi zones;
- bus lanes or clearways;
- within 20 metres of an intersection with traffic control signals; and
- within 10 metres of an intersection without traffic control signals.

Additionally, a *works zone* will generally not be allowed in areas that are signposted 'No Parking' or 'No Stopping', or other areas where the *City* considers it unsuitable.

To seek *approval* for a *works zone*, the standard application form must be completed (available on the *City's* website). The assessment process typically takes 6-8 weeks from the date of application lodgment. It is therefore important that proponents lodge applications early in the site establishment process. Unless specifically agreed and varied by the *City* proponents must have an *approved* construction traffic management plan (if required) prior to lodging an application for a *works zone*.

2.14.4 Delineation of a works zone on roadways

When an *approved works zone* is operational, the *City* will allow the use of standard fluorescent plastic traffic cones to delineate the allocated boundaries of the zone on the *roadway* to minimise entry of non-work-related vehicles into the space.

The use of cones is not mandatory but where implemented, the following requirements apply:

- cones must be placed within the *approved works zone* allocated boundaries and not extend into the adjoining through-traffic lane; and
- cones must:
 - comply with AS1742.3;
 - have a height not less than 450 mm;
 - be of fluorescent red or orange plastic material;



Figure 30: The use of traffic cones to delineate a *works zone* is not mandatory, however, where used, cones must meet prescribed requirements as set out in this Code.

Photo: Peter Conroy / City of Sydney

- be suitably weighted;
- only be used within the *approved works zone* times;
- be spaced at distances of not less than 4 metres (to allow public vehicle drivers to stop to drop-off/pick-up passengers when the *works zone* is not occupied or operational); and
- be checked periodically to ensure that cones are not dislodged by wind or passing vehicles and remain contained within the boundaries of the *works zone*.

Where it is found that the above requirements are not being adhered to the *City* may issue a direction to cease the use of traffic cones.

2.14.5 Matters that must be satisfied as part of a works zone approval

There are several matters that the holder of a *works zone approval* must satisfy, including:

- property owners/occupiers adjacent to the *works zone* must be notified in writing at least 14 days prior to the establishment of

the *works zone*. The notification letter must be in accordance with the standard template available on the *City's* website;

- (b) the *City* must be provided with the name of the site supervisor (and contact details including 24/7 telephone number) who is responsible for the use and management of the *works zone*;
- (c) maintaining a valid and current *public liability insurance* policy in accordance with **1.15** during the period of use of the *works zone*. A copy of the insurance policy must be provided to the *City* upon request and whenever a renewal policy is issued by the insurer;
- (d) during the operation of the *works zone* full compliance with all relevant legislation, including Rule 181 of the NSW Road Rules Regulation 2014 (see box) must be maintained;

181 Stopping in a works zone

1. A driver must not stop in a *works zone* unless the driver is driving a vehicle that is:

- (a) engaged in construction work in or near the zone, or
- (b) dropping off, or picking up, passengers.

Maximum penalty: 20 penalty units.

2. A *works zone* is a length of a road to which a *works zone* sign applies.

(NSW Road Rules Regulation 2014)

- (e) a *works zone* must not be used for commuting purposes or private kerbside parking by builders, contractors, tradesmen or visitors to the site;
- (f) unless otherwise specifically agreed to by the *City*, a *works zone* must not be used to temporarily store building materials and/or waste containers;
- (g) unless otherwise specifically *approved* by the *City*, when a *works zone* is not operational all material and equipment associated with its use (such as during concrete pumping operations) must be removed from the *public space* and be taken away from the site or stored within the adjoining private land allotment;
- (h) the *works zone* must be maintained in a clean and tidy condition free of construction-related debris. The *road* surface must be checked at the end of each days' usage and where necessary, cleaned by hand broom or mechanical sweeper (not water hosing);



Figure 31: *Works zones* are granted for the primary purpose of standing vehicles to load and unload. They must not be used for other purposes such as the storage of equipment or building material unless otherwise specifically *approved*.

Photo: Peter Conroy / City of Sydney

- (i) all traffic and parking restriction signs around the building site, including *works zone* signs and other parking restriction signs implemented by the *City* to facilitate the building works must be fully maintained.

The holder of an *approval* must immediately notify the *City's* Traffic Works Coordinator of any loss or damage to signs and must pay all costs associated with the reinstatement of signs removed, destroyed, defaced or damaged.

It is an offence under section 667 of the Local Government Act to wilfully remove, destroy, deface, damage or otherwise interfere with notices or signs erected by the *City* or its contractors. Penalties apply;

- (j) safe pedestrian and cyclist access adjacent to a *works zone* must be provided and maintained during the hours of operation. All traffic and pedestrian control must be in accordance with the current version of AS1742.3 and its associated handbook including the TfNSW *Technical Manual for Traffic Control at Worksites*; and
- (k) where a *Type-B hoarding* adjoins a *works zone* and *hoisting* from the zone is proposed, refer to the 'Code of Practice: Construction-related Temporary Structures On and Above Roads' for details regarding permitted fascia extension in the area of *hoisting* operations.

Note: Where a proponent seeks *approval* to establish a *works zone* or *workplace* on a *footway* that will require the redirection of pedestrians via a temporary pathway on private land, the *City* will require the execution of a deed (see **2.14.8** and **3.21**).

2.14.6 Street trees within or adjoining a works zone

Street trees are an important community asset providing environmental, aesthetic, cultural and economic benefits. Street trees play a vital role in the health, social framework and economic sustainability of the city.

Works zones are a temporary short-term element of *construction activity* whereas street trees will be in existence for many years after a development is completed. It is therefore important to protect street trees when establishing and using a *works zone*.

Street trees located adjacent to or near proposed *work zones* are likely to constrain loading and unloading including *hoisting* activities within the zone. Any proposed pruning or required tree protection measures must therefore be resolved with the *City's* Tree Management team before a *works zone* application is lodged. Where *hoisting* operations may be impacted by street tree canopies contact must be made with the *City's* tree management team (see also **2.14.7**).

2.14.7 Planning a works zone to address the needs of street trees and urban wildlife

When planning a *works zone*, the following must be considered if there are street trees within or near the site:

- (a) street trees must be considered as a site constraint when planning a *works zone* and any proposed *hoisting* operations (see **2.4**). Trees must be adequately accommodated in the design and operational needs and plans;
- (b) street trees must be accurately surveyed and included in all *works zone* plans. This should also include an accurate mark-up showing the full extent of tree canopies over the *works zone*. The tree survey can inform the location and configuration of the proposed *works zone* areas particularly where *hoisting* cannot be undertaken to avoid tree damage and branch pruning to ensure safe *hoisting* operation;
- (c) where necessary, including when *hoisting* material to and from a site in the locality of street trees, material must be manoeuvred

around tree canopies. Care must be taken to avoid damaging or breaking tree branches and disturbing/impacting wildlife (see **(d)**). Furthermore, loads must not encroach within the adjoining through-traffic lane. Where *performance bonds* are held the *City* can use the bond to replace damaged trees or to undertake remedial works including the services of an arborist; and

- (d) where hoisting from a *works zone* is planned and/or street tree pruning is proposed within the zone, the following must be satisfied:
 - (i) an assessment/search for tree wildlife including the presence of nests must be undertaken; and
 - (ii) where there is evidence of wildlife, a detailed assessment must be carried out by a trained wildlife handler and the findings discussed with the *City's* urban ecology coordinator.

2.14.7.1 Tree pruning

- (a) If it is proposed to prune street trees to allow materials to be hoisted to and from a site or for *temporary structures* (*hoardings/scaffolding*) generally, a pruning specification report prepared by a qualified arborist (minimum AQF level 5) will need to be *approved* by the *City's* Tree Management team prior to submitting any *works zone* and/or *hoarding/scaffolding* application (see **2.14.7(d)** and **2.6**); and
- (b) Specific requirements that must be addressed in the pruning specification report are detailed below. Reports that do not adequately address these requirements will be rejected by the *City*.

2.14.7.2 Pruning specification report

The following minimum requirements apply in the preparation of reports:

- (a) must be prepared by a qualified arborist (minimum AQF Level 5);
- (b) a plan must be provided with all trees accurately surveyed and numbered. This should also include any trees that are not directly affected or do not require any protection;
- (c) must include the number of branches/roots and orientation, branch/root diameter and percentage of canopy/root system that are proposed to be pruned/removed;

- (d) a pruning specification must be included in a table for each individual tree. All branches/roots recommended for removal must be specified in accordance with AS4373 'Pruning of Amenity Trees' including branch order and branch/root diameter;
- (e) photos of each tree must be provided including individual branches/roots recommended for removal clearly marked. Reports that include photos with a single vertical line as the area recommended for pruning will not be accepted; and
- (f) the viability of street trees must not be diminished or compromised in any way if the establishment of a *works zone* is proposed. This must be addressed in the report.

Notes:

1. A maximum of 10% canopy removal and maximum of 100 mm diameter (100 mm for medium and large trees, the maximum diameter for young trees will be substantially less) will be permitted by Council.
2. Street tree removal must not be recommended in reports.
3. The City will not allow excessive pruning of street trees e.g.: pruning the entire canopy back to the kerb-line will not be *approved*.
4. Refer to **2.14.7(d)** regarding urban wildlife.



Figure 32: Appropriate and sound site management practices must be fully implemented and followed to prevent damage to *street trees* when undertaking *hoisting* activities.

Photo: Peter Conroy / City of Sydney

2.14.7.3 Tree protection near works zones

Where a *works zone* is adjacent to any street tree, trunk and/or major limb, protection must be installed prior to and during the period that the *works zone* is in place. The protection must be in accordance with AS 4970 'Protection of trees on development sites' and must include:

- (a) installation by a qualified arborist with a minimum AQF Level 3, or certified by a qualified arborist with a minimum AQF Level 5;
- (b) tree trunk/s and/or major branches must be protected by a padded material (hessian is not acceptable) to limit damage from the timber battens (or *approved* equivalent);
- (c) timber battens (50 mm x 100 mm) or *approved* equivalent shall be placed around tree trunk/s. The battens shall be placed at 100 mm intervals and be secured using appropriate strapping having no exposed sharp edges or ends (for pedestrian safety). The padded material and battens must not be fixed directly to the tree in any instance or in any manner;
- (d) protective materials and installation method shall allow for a tree's natural growth until the completion of the project, and/or adjusted as required;
- (e) tree trunk and major branch protection shall remain on tree/s during the period that the *works zone* is in place and shall be removed within seven (7) days of the removal of the *works zone*; and
- (f) any other tree protection as specified in relevant *development consent* conditions, tree works or *works zone approval* must be satisfied.

Note:

1. It is an offence under s629 of the Local Government Act to wilfully or negligently damage a tree and/or shrubs in a *public space*. The holder of the *approval* must immediately notify the City's Tree Management Team on 9265 9333 if any street trees are damaged due to loading/unloading of vehicles and *hoisting* activities.
2. The City will determine the appropriate response for maintaining the health and structural integrity of the tree/s and may require the applicant to undertake remedial works. If the applicant does not rectify the damage to the City's satisfaction, the City may undertake the necessary works



Figure 33: When planning the establishment of a *works zone* full consideration must be given to potential adverse impacts on street trees including tree canopies noting that limb/branch trimming may not be permitted.

Photo: Simon Wood / City of Sydney

which may include the full replacement of trees. All associated costs incurred by the *City* must be paid by the holder of the *approval*. See also **1.14** in relation to *performance bonds*.

2.14.8 Hoisting from a works zone

Swinging or *hoisting* material and/or equipment from a *works zone* requires *approval* from the *City's* Construction and Building Certification Services Unit. This is highlighted in all *works zone approvals*.

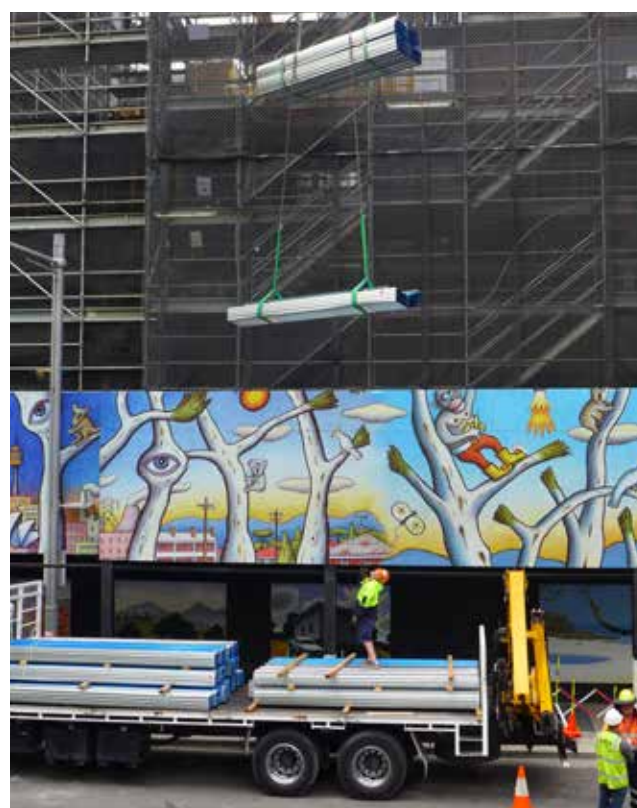
When undertaking *hoisting* operations from a *works zone* the following requirements apply and must be followed:

- (a) through-traffic movement must be maintained at all times – temporary stoppage of traffic is not allowed unless in circumstances as set out in **(b)** below;
- (b) when *hoisting* wide loads, generally wider than 2.4 metres, through-traffic can be temporarily halted for a short period to allow the load to leave or enter the minimum 4.5 metre traffic height clearance zone, however, this can only take place in conjunction with traffic stoppages (red light) at nearby traffic signals such as at *road* intersections or mid-block pedestrian

control signals (this avoids excessive vehicle stoppage); and

- (c) to control loads at low level particularly in high volume through-traffic streets, taglines* can assist in maintaining safe passage of vehicles past a *works zone* during *hoisting* activities and should be used where considered necessary (and safe to do so subject to complying with any relevant work health and safety provisions, guides or codes of practice).

* A tagline is a rope attached to a load being moved (hoisted) and is used to control or stabilise a load from the effects of spinning or pendulum motions. Taglines are also used to assist in orientating the placement of a load on the *road* surface or truck tray.



Eyes on the horizon by Reg Mombassa (a.k.a. Chris O'Doherty).

Photo: Peter Conroy / City of Sydney



Figure 34: Through-traffic must not be stopped during *hoisting* operations from a *road*. For wide loads (greater than 2.4 metres) traffic can be temporarily stopped for a short duration until the load has reached a height of 4.5 metres above the *roadway* (subject to meeting prescribed requirements of this Code and *approval*).

Eyes on the horizon by Reg Mombassa (a.k.a. Chris O'Doherty).

Photo: Peter Conroy / City of Sydney

2.14.9 Establishment of works zones on footways

If *approval* is granted to establish a *works zone* on a *footway* in conjunction with appropriate and *approved* temporary pedestrian pathways being implemented (see also **3.21**), upon removal of the *works zone*, the holder of the *approval* must restore the *footway* to the *City's* specifications and to the satisfaction of the *City's* Public Domain Unit. Where not repaired to the *City's* satisfaction the bond (see **1.14**) will be used to undertake the required work.

2.14.10 Minor construction works and building maintenance

For minor works not exceeding a single day proponents should contact the *City's* Construction Regulation team on 9265 9333 to discuss the proposed works and the local *road* conditions to determine if work-related vehicles and plant can temporarily park in a kerb-lane.

For works involving building maintenance on residential buildings, the *City's* 'Neighbourhood Parking Policy' allows for the parking of tradespersons' vehicles (see **2.15.5**).

Notes:

1. The use of a *works zone* is undertaken at the risk of the holder of the *approval*. The *City* is not responsible for any loss, damage, injury or death relating to the applicant's use of a *works zone* (a 'workplace' that is regulated through the NSW Work Health and Safety Act and Regulations). In granting an *approval* for a *works zone* the holder of the *approval* absolves and indemnifies the *City* against all liability, claims, action or demand associated with a *works zone*. Refer also to **1.12.3**.
2. The *City* is not responsible for any costs, loss or damage if the applicant is not able to gain access to an *approved works zone*.

2.15 Temporary parking of vehicles for loading/unloading at workplaces

To assist and facilitate the undertaking of minor construction projects *approval* may be given to allow the parking of a vehicle in the kerb lane of a *road* to load and unload.

It must be noted that any *approval* given for this purpose is not a parking permit.

Any *approval* to park a vehicle on a *road* is subject to operational conditions that will be specified in an *approval* (see **2.15.1** and **2.15.2**).



Photo: Peter Conroy / City of Sydney

2.15.1 Development associated with residential dwellings

For small building projects associated with a single residential dwelling or a single residential apartment the *City* may allow a work-related vehicle to park in the kerbside lane.

Where *approval* is granted the following will apply:

- (a) street parking signage will not be changed to accommodate a space for loading/unloading therefore use of the kerbside lane for this purpose must comply with **(b)**;
- (b) vehicles associated with the loading/unloading operation must park in accordance with the street parking control signage, except where otherwise specifically allowed by the *City*; and
- (c) the use of a loading/unloading space is restricted to the work times as specified in the *City*'s code regulating construction-related noise (see **3.5.1** and **3.5.8**) or within the work times prescribed in an *approval* (*permit*).

2.15.2 Works associated with development other than residential dwellings

For large projects proponents should contact the *City*'s Construction Regulation team to discuss the project and needs in the early stages of a development prior to a *works zone* being established (see **2.14**).

2.15.3 Applications

Where the temporary parking of a vehicle is required in association with construction-related works proponents should contact the *City*'s Construction Regulation team to discuss the proposal and establish if *approval* can be given.

Note: If a proposal is associated with the construction of a *vehicle crossing*/layback for vehicle access, a *road opening* application must be submitted before the processing of the *temporary works* application can commence (see **2.13**).

2.15.4 Approval requirements

Where an *approval* is granted various conditions will apply based on the type of vehicle proposed to temporarily park in the kerbside lane and the nature of the work. This may include the following:

- (a) TfNSW accredited controllers must be in place to assist pedestrians/vehicles around the *worksite*;

- (b) access to local buildings and driveways including access to business premises (see **3.18**), must always be maintained unless the specific consent of the potentially affected party is obtained in writing;
- (c) concrete-pumping involving line placement across a *footway* (where specifically allowed) will require complying temporary pedestrian ramps over lines (see **2.9**); and
- (d) barricading to form a truck parking space must comply with the *City*'s requirements. Where traffic cones are used, refer to **2.14.3** for minimum requirements that must be followed.

2.15.5 Resident parking permits for building maintenance works

The *City*'s 'Neighbourhood On-Street Parking Policy' allows the parking of a contractor's or tradesperson's vehicle (maximum gross mass: 4.5 tonnes) on the *road* in prescribed circumstances (see '**Note 2**'). To be eligible the works to be undertaken must be lawful i.e. the works must be 'exempt development' on private land (see '**Note 1**'). Eligible households may obtain up to six (6) one week parking permits each calendar year.

Notes:

1. The term 'exempt development' is a form of building work that can be carried out without needing to obtain a formal building approval. The types of work that can be undertaken are set out in the NSW State Environmental Planning Policy (Exempt and Complying Development Codes) 2008. Any works that are classed as 'exempt development', are considered lawful works for the purposes of qualifying for a parking permit.
2. A permit issued under the 'Neighbourhood On-Street Parking Policy' does not approve or allow obstruction of a *footway* that interferes with the safe and convenient passage of pedestrians e.g.: concrete pump static lines; transfer of large building elements to and from a standing vehicle; and crane set-up (*hoisting* activity - overhead protection issues). Where such plant/equipment is required to be used proponents should contact the *City*'s Construction Regulation team to discuss the proposal and to establish if the local road conditions and general locality are suitable to allow such usage.

Further information

Refer to the *City*'s 'Neighbourhood On-Street Parking Policy' for further details.



Photo: Peter Conroy / City of Sydney



Photo: Peter Conroy / City of Sydney

Part 03

Site management and other requirements

3.1 About this part

This part provides detailed information and controls for the regulation of work activities in *public spaces* including aspects associated with development and work activity on private land that may result in impacts within *public spaces*.

3.2 Site approvals and monitoring – responsibilities

In monitoring and regulating development activity in the city there are a number of roles and responsibilities that are split between several entities. The *City* therefore does not oversee and control all activities.

Approval of construction-related aspects of development activity on a site including ongoing monitoring and compliance functions are primarily the responsibility of the appointed *principal certifier* (PC). In the city these functions are typically carried out by private *registered certifiers* appointed by the developer or property owner, or their representative (see also **3.5.2**). The *City* can also be appointed to undertake these functions.

For the majority of development primary responsibility for regulating and monitoring development activity lies with private *certifiers* rather than the *City*. There are however a number of overlapping areas of responsibility such as aspects affecting *public spaces* that the *City* may also regulate in addition to the role of *certifiers*.

Where impacts from site activities impact on *public spaces* and/or complaints are received from the local community or general public, the *City* will be the first responder to investigate issues and to initiate corrective actions, if found necessary. In some circumstances this may also involve joint action by both the PC and *City* officers.

3.3 Regulatory functions of the City

Where the *City* is responsible for regulating works in *public spaces* including responding to complaints, there are several units within the *City* that deal with *worksites* and *workplaces* including issuing various statutory *approvals*. The *City's* Construction and Building Certification Services Unit is the primary unit responsible for *approving* and regulating activities in *public spaces* as set out below.

3.3.1 Approving and regulating

The following functions are some of the functions and responsibilities of the *City* including the issuing of *permits*:

- (a) the *approval* and regulation of *temporary structures* including *hoardings*; *scaffolding*; and *temporary works in public spaces excluding approvals* for temporary shoring and temporary ground anchors (administered by the *City's* Public Domain team);
- (b) construction-related matters when appointed to do so including addressing associated impacts;

- (c) monitoring *workplace* operations within *public spaces* (see **3.11** to **3.15**);
- (d) *road opening approvals* (excavations and works) – see **2.13**;
- (e) mobile *hoisting* operations from *roadways* (see **2.4.1**);
- (f) *hoisting* operations over public *roads* through the use of site-based cranes and other *hoisting* devices (see **2.4.3**);
- (g) temporary barricading (see **2.7** and **2.12.1**); and
- (h) giving approval to work outside of the *approved* times under special circumstances (see **3.5.4** to **3.5.7** and **3.6**).

3.3.2 Other functions including compliance and complaint handling

Other aspects and compliance functions associated with impacts generated onsite such as:

- (a) excessive noise caused by demolition and *construction activity* (see **3.5.8**, **3.6.1** and **3.11**);
- (b) dust generation and impacts (see **3.6.2**, **3.11**, **3.13**, **3.15** and **3.17**); and
- (c) pollution offences (see **3.13**, **3.15** and **3.17**), are regulated by the *City's* Health and Building Unit. This includes complaints lodged by the public and city community.

Other actions such as willfully or negligently damaging trees in *public spaces* or not obtaining *approval* for trimming or removal of street trees is an offence under s629 of the Local Government Act 1993.

3.4 Providing regulatory services to the construction sector

To ensure effective and sound compliance outcomes to minimise adverse impacts of development including allowing development and other work activity to take place with the least possible impact, the *City's* Construction Regulation team provides a free advisory service to builders and contractors covering the following areas:

- site establishment processes;
- overview of the relevant statutory requirements and other *City* controls that must be followed;
- highlighting and understanding important conditions of *development consent* that relate to *public spaces*; and
- setting out the various required applications and *approval* processes when operating various activities in *public spaces*.

This service can include meetings onsite with builders and contractors to discuss the above matters and resolve any potential impacts before work commences (see **3.4.1**).



Photo: Mark Leone / City of Sydney

3.4.1 Site meetings – pre-tender and post-contract appointment

To assist the development and construction sectors in understanding and complying with the various requirements of the *City* including the various activities that require *approval*, a free consultation and advisory service is available.

3.4.1.1 Primary aims in offering this service

The primary aims are:

- identify potential issues and methods of complying with the *City*'s requirements including the provisions of this Code regarding off-site activities and impacts;
- ensure an orderly and compliant undertaking of work within the various constraints and limitations of a site and adjoining public spaces; and
- achieve an optimum outcome for all parties including importantly the general public, visitors and the city's residential and business communities.

3.4.1.2 Information that the service can provide

Specific areas that can be discussed include:

- proposed work activity (demolition, excavation, construction and other activities) that may cause impacts on the *public space* and the steps that may need to be considered and/or implemented to minimise impacts;
- traffic, pedestrian and bicycle movement past a site and any *control measures* that may be necessary to address public safety and amenity;
- potential adverse impacts on street trees and street garden beds, and any required tree pruning that may be necessary to accommodate *temporary structures* and *hoisting* activity including the application/*approvals* processes;
- temporary *vehicular crossings* when truck access to a site is required including details of the *City*'s standard design specifications;
- *road openings*;
- *hoisting* activity applications and *approvals* (mobile and site-installed cranes); and
- other *public space* aspects and requirements that apply through the conditions of *development consent*.

3.4.1.3 Other matters that can be addressed

(a) The following can also be addressed and discussed:

- information about various *approvals* that may be required such as *temporary works permits*, *works zone approvals*, *hoarding* and *scaffolding permits*, requirements for tree pruning in crane *hoisting* zones including required information to accompany applications; and
- advice in relation to:
 - hours of work;
 - any special requirements or restrictions that may apply to works within *public spaces*; and
 - timeframes for obtaining various *approvals* e.g.: *works zones* and potential time restrictions that may

apply in some localities such as busy and high traffic volume key roads.

- (b) A similar service to discuss proposed temporary structure placement such as *hoarding* and *scaffolding* installations on roads is also available.

3.4.2 Industry induction services

For large and significant projects, the Construction Regulation team offers a formal induction service for key site personnel and sub-contractors (see **3.18.3** for details regarding employee and sub-contractor induction provisions).

The aim of the service is to identify and highlight important *City* requirements that must be followed. It also includes identifying and discussing site-specific issues that the principal contractor must be aware of and which may need special consideration in managing a site including activities and impacts in *public spaces*.

The induction service can be conducted onsite (in appropriate site accommodation facilities) or at the principal contractor's head office.

3.5 Work operations and times

All demolition, excavation and construction work must be undertaken within the *City's* standard days and times, except where varied through a specific condition of *development consent* applying to a site.



Photo: Peter Conroy / City of Sydney

3.5.1 Standard days and times when undertaking work

There are several common impacts that can arise during work activities. One significant impact is noise generation which can cause loss of amenity in surrounding land uses particularly residential-type buildings (dwelling houses, apartments and tourist accommodation). To address and minimise potential impacts the *City* has standard work times that must be adhered to.

Different times apply depending on the location of the development or *worksites*. Work times for physical activities are enforced by the *City*. Workers are, however, allowed to be onsite outside of the standard work times (or alternative times approved through a condition of *development consent*) with activities restricted to site shed occupation only (see **3.5.3**).

Further information: Refer to the *City's* website for details in relation to standard days and times that apply to development work. As a general requirement, works undertaken within *public spaces* must comply with the standard times unless otherwise specifically permitted by the *City* (see **3.5.4**, **3.5.5** and **3.5.7**).

Complaints relating to breaches of hours of work (see **3.6**) are regulated by *City* Rangers and the Construction Regulation team.

3.5.2 The role of principal certifiers

Principal certifiers (PCs) are appointed to ensure works are carried out in accordance with a *development consent* including the approved work times. *Certifiers* are also responsible for certifying that works are compliant with the National Construction Code.

Persons affected by breaches of work times can contact the builder or contractor directly to make a complaint. Contact can also be made with the *certifier*. Details (names and 24/7 telephone numbers) of both the builder and the PC are required to be displayed on sites (see **3.5.10**).

City rangers are also available 24/7 and can investigate breaches of work times. Affected parties can seek assistance by contacting the Rangers through the *City's* after-hours telephone service (9265 9333).

3.5.3 Workers onsite outside of standard work times

Workers are allowed to be onsite outside of the standard work hours in the immediate period leading up to the approved or standard commencement times however they must remain in the site sheds. They are also allowed to occupy site sheds within the immediate period following the end of the workday to shower/change but no physical work is to take place.



Figure 35: Workers are allowed to be onsite outside of the standard work hours in the immediate period leading up to the approved or standard commencement times (and at the end of the day for showering etc.) however, they must remain in the *site sheds*.

Note: Multiple sheds including multi-stack sheds, require *development consent* as they are not permissible under the 'exempt development' provisions of the NSW State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

Photo: Peter Conroy / City of Sydney

Key personnel are also allowed to carry out safety inspections prior to the standard commencement time and to undertake checks of the site post formal finishing time to ensure all workers have left the site and that the site is safe and secure (confirming access gates are secured and undertaking other checks).

3.5.4 Variations to standard work times

Requests to seek variations to the standard work times are generally not supported by the *City*. Formal approval may, however, be granted under special circumstances such as:

- (a) urgent works to avoid damage to surrounding private property including *City*-owned land (*roads*) e.g. issues encountered during

excavation such as land slippage/subsidence (see **3.5.5**);

- (b) preventing environmental harm (pollution incidents) (see **3.13**);
- (c) preventing imminent structural failure of a building under demolition or construction, or to urgently stabilise unsafe works/structure (see **3.5.5**);
- (d) where special works can only be undertaken outside of standard times due to site specific needs or local constraints (see **3.5.6** and **3.5.7**); and
- (e) any unforeseen circumstances that affect private or public safety (see **3.5.5**).

Where there is a danger to the public or occupants of surrounding properties verbal approval to work outside of standard times must be given by an *authorised person* and/or as directed by emergency service personnel (Fire and Rescue NSW, NSW Police, *SafeWorkNSW*).

In circumstances where pre-programmed works are required to be undertaken outside of approved times, an application must be lodged well ahead of the proposed date to allow full consideration by the *City* including any potential noise impacts on the surrounding area (see **3.5.6**) and whether any mitigation measures are necessary including restricted work times.

In considering applications the *City*'s code regulating construction-related noise may be used in the assessment process in conjunction with the provisions of the Environmental Planning and Assessment Act 1979.

3.5.5 Working outside of standard or approved times – unforeseen short-term circumstances

There may be special circumstances or needs to require work to take place outside of standard or approved times. This may include exceptional or unforeseen critical circumstances such as:

- (a) delays in concrete pouring due to equipment failure (concrete pumps or concrete batching plant failures);
- (b) inclement or dangerous weather conditions such as high winds which delayed the completion of critical works on the day; or
- (c) other delays such as crane failures during critical alignment construction phases e.g.: works required to stabilise a building and make-safe.

In circumstances where the completion of works within the standard work times or *development consent* times cannot be achieved, the person in control of the site or works must:

- (a) report the matter immediately by phone to the City's Construction Regulation team; and
- (b) forward a follow-up email.

Consideration of factors relating to the issue and request will be undertaken to determine if an extension of time beyond the standard hours can be given and if allowed, whether any measures may need to be implemented as part of permitting works to continue.

For planned proposed works outside of approved work times, a formal application to seek an amendment to the *development consent* must be lodged via the NSW Planning Portal (see **3.5.6**).

3.5.6 Planned works outside of standard times

Activities listed below may be permitted subject to relevant approvals being obtained beforehand:

- (a) the movement of large over-size and over-mass vehicles to deliver and erect (hoist) large structural members onto a site (see **4.10**);
- (b) undertaking works on major or key *roadways* associated with the development site that must be carried out at night to minimise traffic disruptions;
- (c) special *roadway/traffic* requirements imposed by Transport for NSW that impact on a site; or
- (d) other special needs.

Sufficient time must be allocated to allow for a thorough assessment of an application. This could include advertising and/or a formal neighbourhood notification of a proposal which can add several weeks to the processing period.

3.5.7 Works in public spaces outside of standard times

The standard times and days applying to a development or *worksite* also apply generally to *permits* granted for a number of activities carried out in *public spaces* including:

- *temporary works*;
- *hoisting* activity (mobile crane usage including set-up and dismantling);
- *road openings*; and
- *hoarding/scaffolding* installation and removal.

Where works cannot be carried out within the standard or *consent* times and a variation is sought, proponents must nominate the proposed work times and set out the reasons for seeking the variation. The proposed times sought will be assessed against:

- the locality (*road/traffic* requirements); and
- the surrounding land uses to determine potential impacts such as likely noise generation and temporary lighting, if proposed (for night works – see **3.5.8** and **3.5.11**).

In assessing an application the *City* will consider potential impacts and seek to minimise adverse impacts on building occupants particularly residential-type accommodation. This may include restricting the times of work and the type of work and equipment used (stricter time constraints may be imposed for noisy works).

3.5.8 Construction noise and regulation

All work, within or outside of standard times, must comply with the *City's* code regulating construction-related noise and Australian Standard 2436-2010 'Guide to Noise Control on Construction, Maintenance and Demolition Sites'.

3.5.9 Limitations on the granting of some permits during the December and January holiday period

During the months of December and January parts of the city experience a significant increase in pedestrian densities and vehicular movement. This is particularly evident in the major shopping and entertainment precincts which have extended retail trading hours.

To minimise impacts during this busy period, limitations are imposed on construction-related works and *approvals* within *public spaces* (see also **1.17**).



Figure 36: Detailed consideration must be given to minimising obstructions on *footways*. In busy parts of the city, this may require works to be undertaken outside of normal work times including on weekends.

Photo: Peter Conroy / City of Sydney

3.5.10 Display of key mandatory details on site signage

To enable the public, affected parties, *City* officers and/or emergency services personnel to contact key site personnel in cases where issues arise at a site, the following mandatory details must be displayed in a prominent position easily viewable from a *public space* (typically displayed on the construction site fence or *hoarding*):

- (a) the name of the principal contractor and the person in control of the site;
- (b) the name of the *principal certifier*;
- (c) a 24/7 contact telephone numbers for the persons in (a) and (b); and
- (d) other required information (see **3.12.2**).

3.5.11 Lighting of worksites and workplaces during night works

Lighting of a development site or *public space* including one-off urgent works that have been specifically *approved* (see **3.5.5** to **3.5.7**), must not cause unacceptable impacts on surrounding land uses. This can, in part, be achieved through meeting the following:

- (a) ensure the intensity of light is minimised and focused on the *workplace*;

- (b) illumination being restricted to the time of physical work particularly in potentially high impact areas;
- (c) the location and intensity of lighting complies with relevant Australia Standards; and
- (d) preventing or minimising impacts, particularly on residential-type premises.



Figure 37: The use of temporary lighting systems must avoid loss of amenity within the local neighbourhood. This can be achieved through selecting and positioning lighting systems that minimise or prevent light-spill and glare.

Photo: courtesy of Transport for NSW

Where complaints arise, the *City's* Health and Building Unit will investigate and take action to address any impacts. Lighting that is 'obtrusive light' as defined in AS 4282-2023 'Control of the obtrusive effects of outdoor lighting' (see below) will generally not be allowed.

Obtrusive light — spill light which, because of quantitative, directional or spectral attributes in a given context, gives rise to annoyance, discomfort, distraction or a reduction in the ability to see essential information, e.g. signal lights. (Clause 2.3.3, AS/NZS 4282-2023)

To minimise objectionable glare and loss of amenity lighting systems must be designed and operated to meet the following requirements:

- (a) face away from residential-type buildings;
- (b) generator powered lighting must comply with any noise control standards specified by the Environment Protection Authority; and
- (c) temporary lights must not have an upcast angle exceeding zero degrees (above the horizontal), unless otherwise specifically allowed.

If an *authorised person* determines that a loss of amenity is being caused, the lighting intensity, hours of illumination and location of the lighting systems must be altered at the *City's* direction to prevent or minimise adverse impacts particularly on residential-type premises. This also applies to works on *roadways* that are undertaken by government agencies and their contractors (see **4.16**).

3.6 Complaints

Complaints regarding *construction activity* including works being undertaken outside of standard times and/or noise impacts, are handled and investigated by several Units of the *City*. Complaints can be made online or through telephone 9265 9333.

3.6.1 Working outside of approved times

Where a complaint is received about activities being undertaken outside of the standard work times and/or excessive noise is occurring (see **3.5**, **3.6.2** and **3.11.1**) the *City's* rangers will be the first responder to investigate. This may include visiting the site and interviewing workers. Where there is no approval in place allowing work outside of the standard times, the site supervisor will be directed to stop work and to restrict activity to the approved times.

Further follow-up action will be taken by the Construction Regulation team including interviewing the site manager to establish the reasons for working outside of approved times.

The issuing of fines and/or civil prosecution will be considered in accordance with the *City's* 'Enforcement and Civil Prosecution Policy' (see **1.13**). Builders and contractors can seek approval to work outside of approved construction times due to special circumstances (see **3.5.4** to **3.5.7**).

Additionally, in some cases works may need to be carried out in the *public space* outside of standard work times to minimise impacts on drivers, pedestrians and/or safe traffic movement (see **3.5.6**). This is particularly critical on *roads* with high traffic volumes. For example, Transport for NSW require some *road* works to take place at night to avoid traffic disruption.

Other agencies may also need to work outside of normal hours including at night to undertake infrastructure works (see **4.16**).

3.6.2 Other impacts

Complaints relating to noise, vibration and dust generation within the boundaries of a development site (see **3.11** and **3.13**) and within approved construction times are generally the responsibility of the *City's* Health and Building Unit to investigate.

Issues and complaints associated with dust generation and tracking of soil and debris onto *roadways* will initially be investigated by the Construction Regulation team. If necessary, complaints may be referred to the *City's* Health and Building Unit for further follow-up action. These actions also apply to complaints arising from works on *roadways* by government agencies and their contractors (see **4.16**).

3.7 Construction site establishment and operation

The effective and orderly operation of a *worksites* and *workplace* to limit impacts on *public spaces* and building occupants in the surrounding area is dependent on a number of key areas being addressed.

This includes principal contractors:

- (a) being fully conversant and compliant with the relevant conditions of *development consent* and other approvals including ensuring that workers and sub-contractors are also made aware of these matters (see **3.18**);
- (b) being fully aware of the statutory (legal) regulations and obligations that apply such as this Code, *City* policies and guidelines and statutory provisions of the work health and safety regulations particularly responsibilities to afford protection to the public in and near *workplaces*; and
- (c) applying sound site management practices including the effective control and management of sub-contractors such as excavation and demolition works including the safe movement of trucks to and from *worksites*.



Photo: Peter Conroy / City of Sydney

3.8 Site management (see also 3.18)

Effective site management is critical to ensure a project proceeds smoothly with minimal impact and inconvenience in the locality and on the surrounding community including the business community. Developing and implementing sound site establishment and operational practices are key to minimising impacts in *public spaces* and surrounding land uses.



Photo: Peter Conroy / City of Sydney

Properly prepared and administered *site management plans* addressing the provisions set out in this Code will help minimise impacts and intervention by *City* officers from incidents and community complaints.

3.8.1 Site management plans

The *City* requires *Site Management Plans* (SMPs) for various activities associated with new development and significant alterations and additions to existing buildings.

The necessity for *SMPs* is generally dependent on a number of factors including:

- the nature and extent of work;
- likelihood of disruptions to pedestrian and vehicle movement and passage past a *worksite* and *workplace*;
- potential impacts on local amenity;
- safety risks to the public;
- noise (particularly demolition and excavation activities);
- stormwater management;
- sediment and erosion control;
- traffic management issues; and
- other relevant matters required to be addressed through specific conditions of *development consent*.

For large and/or complex sites that have many forms of *work activities* operating concurrently there is a greater potential for significant off-site impacts. Major demolition and excavation works, particularly rock excavation, can cause significant impacts on surrounding and nearby land uses, particularly residential-type premises.

For these development sites a single *SMP* that compiles and addresses the various inter-relationships between plans (impacts and *control measures*) for a site can be beneficial to all parties and may therefore be required by the *City*.

The *City* can impose specific targeted requirements for development located in high risk/high impact areas through:

- conditions of *development consent* under the provisions of the Environmental Planning and Assessment Act 1979;

- conditions imposed in an *approval* issued under the Local Government Act and Roads Act (see below) to require the submission a *SMP* or a review/amendment of an existing Plan; and/or
- the development and implementation of community information and communication strategies (see **3.10**).

A *SMP* may also be required at any time and for any work if the *City* considers that the activity is of such a nature and extent that a plan is necessary to address and minimise impacts.

A *SMP* must, as a minimum, meet the following requirements:

- fully address each key stage and the types of activities;
- address in detail a range of health, safety, traffic management and amenity issues relating to the site, the adjoining *public spaces* and surrounding community including residents and businesses. It must also consider broader contractor obligations including recycling, waste management and environmental initiatives during the development work (see **3.8.2**, **3.9**, **3.14** and **3.15**);
- be approved by the appointed *certifier* for the development or project;
- be implemented and followed for the duration of the development or work activity; and
- pre and post-construction dilapidation reports, as appropriate or directed, of the *City's* infrastructure.

3.8.2 Waste management and work method statements

Sites must be fully and effectively managed in relation to the production, storage and removal of demolition and construction waste including managing impacts on *public spaces*. The storage or placement of waste in *public spaces* is generally not allowed (see **4.13** – *skip bins*).

It is generally a requirement of a *development consent*, particularly for large projects, that prior to commencement of work the following documents must be prepared and submitted to and approved by the *principal certifier* for the project:

- demolition work method statement prepared by a SafeWork NSW licensed demolisher (see 'note');

- excavation work method statement prepared by an appropriately qualified person; and
- waste management plan for demolition and/or excavation activity.

Such statements must, where applicable, comply with:

- AS 2601-2001 Demolition of Structures;
- the Work, Health and Safety Act 2011 and Regulations;
- the *City's* 'Policy for Waste Minimisation in New Developments 2005';
- the Waste Avoidance and Resource Recovery Act 2001, and
- all other applicable acts and regulations.

Furthermore, other requirements beyond this Code may also be included as conditions of *development consent* therefore *consents* should be thoroughly checked as part of preparing statements.

Note: Demolition by:

- induced collapse;
- the use of explosives; or
- onsite burning,

is not permitted.

3.9 Construction traffic management plans (CTMP) (see also 4.6)

Well planned and managed control of traffic, pedestrians and cyclists in the vicinity of a *workplace* is critical to the effective and safe operation of a site and activities in *public spaces*. To achieve this outcome the *City* may require, typically through a condition of *development consent*, the development and approval of a construction traffic management plan (CTMP).

A CTMP is a report that assesses the potential impacts of development and works in *public spaces* including the *road* network resulting from activities including:

- demolition;
- excavation;
- construction; and
- any other activity that affects *public spaces* including the operation of mobile cranes and other equipment through an *approval* granted by the *City* (see **2.4.1**).

A CTMP may be required at any time and/or size/type of development where impacts are being experienced or are likely to be encountered, including works within *public spaces* (see also **4.6** in relation to truck access to and from sites).

Plans must be submitted to the *City* for *approval*.



Photo: Peter Conroy / City of Sydney

3.9.1 Content and structure of a CTMP

A CTMP must have a structure and sufficient content to enable the *City* to fully and properly assess and consider a proposal. Further information including planning for bicycle movement and maintaining safe pathways and passage for pedestrians is available on the *City's* website (see also **3.9.2** and **4.4.2** regarding truck access, sizes and types). This detail must be included in a CTMP.

Refer to 'further information' on the following page for details on the preparation of CTMPs.

3.9.2 Articulated vehicles and dog-trailers

The use of *articulated vehicles* and *dog-trailers* is generally not suitable for most development sites in the *City's* area. There are several reasons for this including:

- insufficient road width to allow safe and efficient truck turning pathways during entry and exit from sites;

- many sites have insufficient size and dimensions to accommodate truck maneuvering and turning circles to allow forward entry and exit to and from sites (reversing into sites is generally not allowed); and
- Transport for NSW does not generally support the use of *articulated vehicles* and *dog-trailers* due to the adverse impacts such vehicles have on traffic movement on the local *road* network. This is particularly relevant in the city-centre which has very high volume bus and light rail transport systems and large pedestrian density and movement.

Builders and contractors must consider these constraints and limitations as part of the site planning and tendering processes as truck size and type will have implications on timeframes to undertake proposed works, particularly for demolition and excavation works.



Figure 38: The use of *dog-trailers* associated with development activity is generally not permitted. Any proposed usage requires special consideration including specific *City assessment* and *approval*. *Dog-trailer* usage for sites in the city-centre is not allowed.

Photo: Peter Conroy / City of Sydney

In some circumstances such as site-specific needs, the *City* may consider allowing the use of *dog-trailers* and *articulated vehicles*. This must however be discussed with the *City's* Construction Regulation team early in the site planning process to obtain in-principle endorsement. This includes confirming if any special controls need to be addressed, met and implemented.

3.9.3 Compliance and enforcement of a CTMP

Traffic in the vicinity of a site including trucks entering and exiting a site must be managed effectively and safely throughout the full duration of a project and will be subject to the following:

- (a) in the event of *City* officers finding that a CTMP is not being followed regular compliance reports may be required to be submitted to the *City* demonstrating that the site is operating in accordance with the *approved* plan;
- (b) the *City* can require compliance reports from third-party auditors nominated by the *City* with all costs to be borne by the contractor; and
- (c) penalties (fines) can be issued for non-compliance with an approved Plan (see **1.13**).

In the event of *City* officers finding that a CTMP is not being followed regular compliance reports may be required to be submitted to the *City* demonstrating that the site is operating in accordance with the *approved* plan. The *City* can require compliance reports from third-party auditors nominated by the *City* with all costs to be borne by the contractor.

Penalties (fines) can also be issued for non-compliance with an approved Plan (see **1.13**).

3.9.4 Amending a CTMP

CTMPs can be amended (with approval) if there is a demonstrable need arising from:

- (a) a change in traffic conditions;
- (b) a change in land use or other development activity in the vicinity of the site;
- (c) changes in demolition, excavation or construction methods; and/or
- (d) a change of builder/contractor for the site which necessitates a review and change in the approved plan.

3.9.5 Vehicle parking – workers and contractors

Except for vehicles parking temporarily in an *approved works zone*, all vehicles associated with a development site should be parked wholly within the site. A *works zone* (see **3.14**) is primarily for the purpose of unloading/loading of trucks and/or concrete pumping.

Smaller contractor vehicles can park within a *works zone* when unloading and loading tools and equipment but must not be used for other purposes such as general parking for workers.

The following matters and requirements also apply:

- (a) where it is not possible to accommodate staff parking onsite workers should be encouraged to use public transport to minimise disruption to the local *road* network including demand for kerbside parking by local residents, businesses and visitors;
- (b) developers and/or builders must consider long-term parking availability for workers as part of the site management planning process. This may require arrangements being made to provide acceptable alternative off-street parking for contractors/workers at *approved* car parking stations; and
- (c) where a construction traffic management plan (CTMP) is required for a development it must include worker parking needs and solutions/methods to discourage kerbside parking.

Further information:

Information about the development of a CTMP including the requirements that apply are set out in the following documents which are available on the *City*'s website:

- 'How to prepare a Construction Traffic Management Plan (CTMP) report'; and
- Standard Requirements for Construction Traffic Management Plans'.

3.10 Community information and communication strategies

Developers and builders should maintain good relations and communication with local residential and business communities during construction and other associated activities. This can be achieved through a number of strategies.



Photo: Peter Conroy / City of Sydney

3.10.1 Communication strategies

In some circumstances particularly for large projects, the *City* may through a condition of *development consent* require developers/builders to prepare detailed communication strategies to keep the local community including businesses informed at various key stages of a project. Such strategies could include, as a minimum, information about:

- (a) any special conditions of *consent* that must be implemented and followed relating to minimising impacts on the surrounding area such as noise, operational limitations and monitoring (see **3.2** and **3.11.3** to **3.11.5**);
- (b) clear information about construction work times and scope of work;
- (c) specific activities that may be permissible outside of the *consent* approved hours of operation such as:
 - (i) large crane delivery and set-up (see **3.5.6** and **4.10**);
 - (ii) *hoarding* installation/dismantling;
 - (iii) special delivery of large plant (**4.10**); and
 - (iv) the transport and delivery of large structural members that cannot be undertaken during the approved standard work times;

- (d) key construction stages, commencement dates and estimated durations e.g.: demolition, excavation, in-ground works, above-ground works and completion; and
- (e) site management information including methods to minimise impacts such as:
 - (i) dust generation and controls to prevent movement off-site;
 - (ii) noise and vibration;
 - (iii) site remediation works/excavation;
 - (iv) truck unloading;
 - (v) truck movement and routes; and
 - (vi) maintenance of the *public space* adjoining a site keeping the area clean and tidy.

3.10.2 Forms of communication

Communication can take several forms including:

- (a) for very large development of lengthy duration, the establishment of a local construction liaison committee can be effective. This may be required as a condition of *development consent* however where not specifically required, developers and builders may wish to consider establishing a committee as best practice.

Committees will generally comprise:

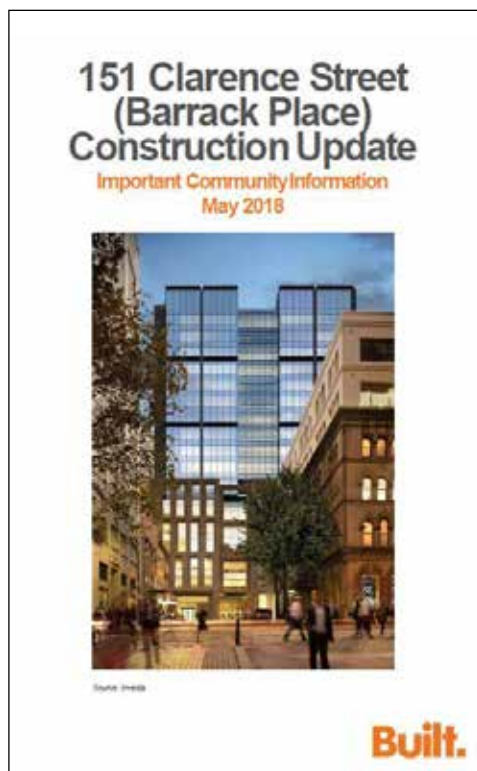
- (i) interested parties representing likely affected properties surrounding a site; and/or
- (ii) any interested group.

The *City* may, where necessary, nominate a committee representative and/or require that the *City* be kept informed of committee meeting agendas and outcomes;

- (b) for smaller development, community newsletters at key stages of a project can be an effective strategy. This may also be required as a condition of *development consent*. Where not required by a condition of *development consent*, communication with the community via newsletters can be an effective tool in keeping the local community informed and is encouraged by the *City*.

Information may be in the form of hard copy newsletters distributed via letterbox-drop and/or electronic communication through

- email delivery; and
- information on the developer's and/or builder's website in (c).



- (c) posting regular project updates on company websites or social media platforms can assist in keeping the community informed. Newsletters and websites must contain 24/7 contact details of key personnel to allow persons to report issues/impacts that may arise throughout a development. See also **3.18.1** and **3.18.2** in relation to works and other activities in *public spaces* and requirements to minimise impacts;
- (d) community newsletters and websites must also contain information about ongoing communication strategies and details for registering to receive electronic newsletters (if these are to be used) throughout a project; and

- (e) periodic tours of a site at key stages to allow interested parties (local residents) to view the works and obtain first-hand briefings on progress and future stages of the development.

3.10.3 Site management plans – notice to neighbouring and nearby properties

Builders and developers may be required, through a condition of *development consent* or as part of an approved *site management plan* (SMP), to consult:

- with property owners and occupiers of neighbouring and affected properties; and/or
- more broadly with the public through formal notification including information about any variation to a *SMP* (see **3.8.1**) that could affect the local community.

3.11 Demolition, excavation and construction noise/vibration management

Noise generation from construction works and other activities has significant potential to cause adverse impacts if not managed effectively.

Demolition, excavation and *construction activity* is inherently noisy therefore noise-related impacts from various work activities are likely to occur. To minimise impacts the *City* expects and requires that all reasonable steps will be implemented by builders and sub-contractors to minimise noise and loss of community amenity including impacts on the business community (see **3.18.1**).

To balance the needs of the development and construction sectors and the community including businesses, restrictions are imposed on the amount of noise that can be emitted.

This is required and achieved through the *City's* code regulating construction-related noise. The Code is typically referenced in conditions of *development consent*.

The Code includes measures to reduce noise and imposes time restrictions on all potentially noisy *construction activities*. Respite periods may also be required through a condition of *development consent* (see **3.11.3**).



Photo: Peter Conroy / City of Sydney

3.11.1 Noise and working outside of prescribed hours (see also 3.5.4 to 3.5.7)

Potentially noisy activities and the feasibility of undertaking works during the approved standard hours should be the primary consideration in the early stages of construction planning and scheduling works. There may however be special circumstances where there is a justifiable need for work to take place outside of the prescribed standard construction times due to local conditions such as the need to avoid traffic disruption. Examples include:

- the delivery of oversized plant or large structural elements (to minimise impacts on *road* traffic – see **4.10**);
- movement and set-up of large mobile cranes and installation of site-based cranes which often requires partial or full *road* closures (see **4.10**);
- emergency works (see **3.5.4**);
- maintenance, repairs or works on public infrastructure including *road openings* (see **2.13**); and
- works including maintenance activities by utility owners and government agencies (see **4.16**).

3.11.2 Construction noise

To balance the needs of the construction industry, residents and business community, the *City* manages the amount of noise produced by construction works and other works such as demolition and excavation. The *City's* code regulating construction-related noise requires builders and contractors to:

- include measures to reduce noise and detail these in development applications;
- obtain advice from qualified and competent acoustic consultants on noise mitigation and compliance measures;
- restrict all potentially noisy *construction activities* within the *City's* standard work hours and days (or within the work times prescribed in an *approval (permit)*); and
- take reasonable and practicable steps to prevent offensive noise.

Communicating with the local residential and business communities (see **3.10**) can be an effective means of minimising the potential for community complaint particularly when concentrated and very noisy works are necessary by allowing sufficient notice to be given to surrounding property owners and tenants.

3.11.3 Noise restrictions/limitations

Where possible, quieter machinery should be used in place of noisy equipment. Where noisy equipment is required then consideration should be given to retrofitting dampening material and/or mufflers. Acoustic barriers built around noisy operations can also be a means to mitigate noise impacts.

In cases where sound levels:

- (a) exceed those stated in site/construction/*noise management plans*; or
- (b) exceed a condition of *development consent*; or
- (c) cannot meet site-specific agreed levels as stipulated in a *development consent*,

the City's code regulating construction-related noise may be applied to provide guidance in determining the most appropriate solution to resolve a noise issue.

If activities and equipment cannot meet noise restrictions, the City may:

- (a) require developers to alter their work activities and programming which may require regular breaks or lengthy respite periods to minimise impact on affected parties;
- (b) impose time restrictions through formal directions if complaints arise during *construction activities*; and/or
- (c) place restrictions on the use of highly intrusive equipment.

3.11.4 Complaint monitoring

Builders and/or contractors should keep a log that details noise complaints made directly to the site and action taken to address the issues raised. This information can be requested by the City's environmental health officers as part of any investigation into noise complaints. In some circumstances the City can require the mandatory keeping of a logbook to record complaints and incidents and steps taken to mitigate impacts.

Contractors are expected to implement a complaint-monitoring and resolution procedure. A representative's contact details must be publicly displayed at the site and made available to neighbouring noise-sensitive properties (see **2.5.10** for mandatory site signage). Information and complaints handling processes on websites may also be effective in managing impacts (see **3.10.2** regarding 'forms of communication').

Complaints and any subsequent action taken must be logged and be available to *authorised persons* of the City if so requested.

3.11.5 Noise management plans

If *construction activities* and other associated works including works in *public spaces* are likely to have a significant impact on the local community, the developer or principal contractor must submit a *noise management plan* to the City. In the majority of cases large development sites will require a management plan to control noise and vibration.

Further information: Information on noise-related aspects associated with development sites including *noise management plans* is available on the City's website and through contacting the Health and Building Unit.

3.12 Public safety/amenity, site security and signage

To ensure the general public is adequately protected from activities occurring at *worksites* and *workplaces* the person in control of a site, typically the principal contractor, must develop and document strategies to provide a safe and secure *worksite* including maintaining the *public spaces* in a clean and tidy state (see also **3.8.1**).



Photo: Peter Conroy / City of Sydney

3.12.1 Fencing and isolating sites from public spaces

Before the commencement of work the site must be secured by a fence, *hoarding* or other suitable temporary barrier to prevent unauthorised access. Fencing is a requirement of the Work Health and Safety Regulation 2017 (Clause 298). steel mesh fencing to isolate and secure a site is generally not allowed to be placed on *City-land (road/footway)*. Such fencing will only be permitted in exceptional circumstances and where it meets all requirements of the City. Refer to **2.3(c)** of the City's Code of Practice: Construction-related Temporary Structures for further details.

The design and installation of site security/safety fencing erected within development sites (*worksites*) adjoining *public spaces (footway)*, must be approved by the *principal certifier for the site*.

Some forms of temporary construction site fencing on private land are permissible as 'exempt development' (no formal approval required) through the NSW 'State Environmental Planning Policy (Exempt and Complying Development Codes) 2008' (SEPP), subject to:

- (a) the fence being associated with works that are either 'exempt development' or 'complying development'; and
- (b) meeting prescribed minimum development standards as set out in the SEPP.

If a *hoarding* is proposed to be used as a method of securing and isolating a site from a *public space* and is placed on a *road* or related area, the *hoarding* must be designed and installed to meet the *City's* 'Code of Practice: Construction-related Temporary Structures On and Above Roads' (see **2.6.1** and **4.20**).

3.12.2 Site signage

- (a) Statutory signage including:

- the contractor's name;
- 24/7 contact details;
- safety signage; and
- other required signage (see **3.5.10**),

must be clearly displayed in a prominent space and be maintained in a good condition throughout a project.

- (b) The following additional details must also be displayed:

- (i) site notices/signs and project details a at the boundary on each frontage of the site for the purposes of informing the public of appropriate project details and relevant *approvals*. Notice/s must comply with the following:
 - minimum dimensions of the notice are to measure 841mm x 594mm (A1) with any text on the notice to be a minimum of 30 point type size;
 - the notice is to be durable and weatherproof and is to be displayed throughout the construction period;
 - a copy of the first page of the *development consent*, building approval (including any modifications to those approvals) and any *civic works approvals*

are to be posted alongside the notice in weatherproof casing/s; and

- the notice(s) is to be mounted at eye level on the perimeter fencing or *hoardings* and is also to state that unauthorised entry to the site is prohibited.
- (ii) safety signage required by the Work Health and Safety Act and Regulations;
- (iii) construction traffic control signage where required for construction and/or traffic guidance scheme;
- (iv) signage relating to any special safety measures such as danger notices where a deep excavation is present behind a site fence or *hoarding*; and
- (v) other signage as required by the *City's* 'Code of Practice: Construction-related Temporary Structures On and Above Roads'.

Note: Clause 308 of the Work Health and Safety Regulation 2017 also requires contractor signage to be displayed.

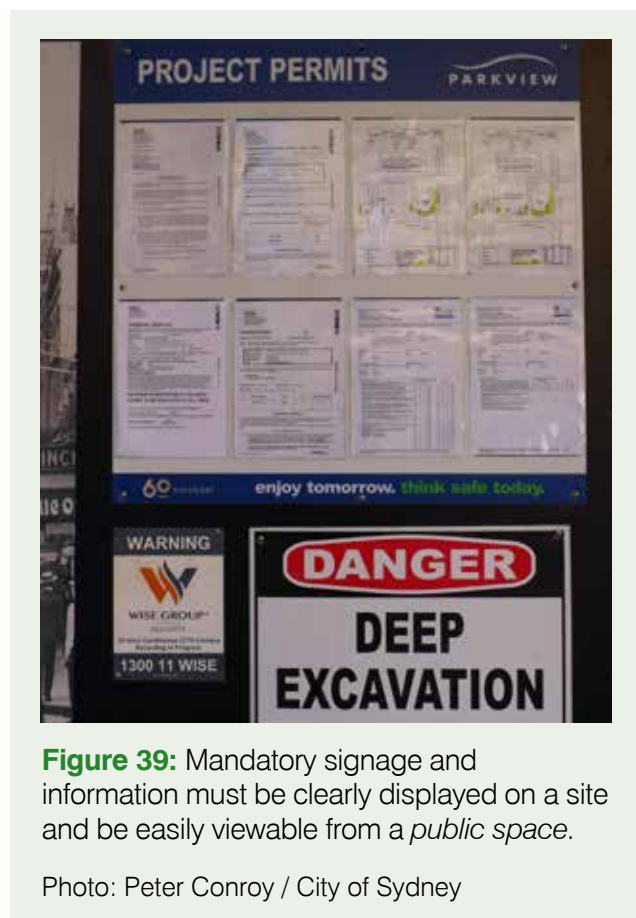


Figure 39: Mandatory signage and information must be clearly displayed on a site and be easily viewable from a *public space*.

Photo: Peter Conroy / City of Sydney

3.13 Erosion and sediment control, dust generation and other environmental controls

The environmental impact of sediment run-off from *worksites* such as mud, sand and soil can be significant. If sediment is not controlled it can enter the stormwater drainage system obstructing flow and causing local flooding. Impact on waterways including Sydney Harbour can also result.



Photo: Peter Conroy / City of Sydney

Some examples of other impacts include:

- direct pollution of creeks and rivers with sediment. This leads to poorer water quality, affecting swimming or leisure activities in and around *City* waterways;
- destroys aquatic habitats and smothers native plants and animals that live in waterways; and
- causes safety risks for pedestrians, drivers and cyclists through slippery *road* and *footway* surfaces.

Appropriate and effective controls must therefore be implemented to address these potential environmental and *public space* impacts.

3.13.1 Builders and contractors – obligations

Builders and contractors are responsible for implementing strategies and measures to prevent soil erosion and sediment moving off development sites including soil and debris being tracked on truck wheels into *public spaces* (see **3.8.1**, **3.13.2**, **3.14**, **3.19**, **4.5** and **4.5.6**).

It is an offence to allow any substance other than rainwater to enter a stormwater drainage system. If pollution incidents occur a builder/contractor is

required by law to notify the *City* so that appropriate steps can be taken to minimise any harm to the environment and impacts on the stormwater drainage system.

Penalties can be imposed by *authorised persons* for pollution offences and for non-compliance with conditions of *development consent*.

Where sites are not managed properly to control sediment the *City's* Construction Regulation team will attend to check the controls and where necessary issue directions to the builder and/or contractor to rectify the issues.

Where soil or mud is being tracked off-site by trucks (see **3.14** and **4.5.6**) or there is spillage of concrete onto the *roadway* from pumping operations (where adequate surface protection is not in place), *City* rangers will investigate and take steps to deal with the issue. This will include the issuing of clean-up directions. Fines may also be issued (see **1.13.1**).

3.13.2 Soil and water management plans

The provision of a soil and water management plan or erosion and sediment control plan is typically required as a condition of *development consent*. Where plans are required they must be implemented fully and regularly checked against site conditions throughout a project.

3.14 Covering loads and cleaning truck wheels/bodies

To minimise impacts on *public spaces* and the community, all vehicles involved in the demolition and/or excavation processes when departing a site, must have their loads fully covered before entering *public spaces*.

It is an offence to allow or cause materials to pollute or be placed in a position from which they may pollute waters. Appropriate procedures are to be developed, adopted and followed throughout the project to prevent loose soil, contaminated material, spoil, dust and/or demolition debris being deposited onto *roads* from trucks and associated equipment moving to and from a site.

3.14.1 Truck wheel and body cleaning

Prior to the commencement of work suitable measures must be implemented to ensure that sediment and other materials are not tracked and/or fall onto *roads* by vehicles leaving a site.



For large and/or lengthy construction projects the establishment of dedicated wheel cleaning facilities such as grated pits/water washing troughs together with high pressure water cleaning may be necessary. The *City* may require such facilities where other methods/systems of cleaning are found inadequate resulting in mud and debris being tracked into *public spaces*.

3.14.2 Cleaning public space surfaces

In addition to **3.14.1**, site management procedures must detail appropriate processes to clean the surrounding *roadway* (and *footway*) surfaces from any accidental spillage (see also **3.18** and **4.3** for general requirements relating to the cleaning of *public spaces* around *workplaces*). This can be achieved by manual sweeping of *road* surfaces. For larger development works appropriate mechanical sweeping plant may be necessary to periodically clean *roadway* surfaces in and within the vicinity of the *workplace*.



Photo: Peter Conroy / City of Sydney



Photo: Peter Conroy / City of Sydney

Where the *City* finds that manual cleaning is not effective mechanical sweeping can be made mandatory together with more effective onsite cleaning systems.

Note: The washing of *roads* with free-flowing water is not an acceptable method of surface cleaning as this will result in polluted water entering the stormwater drainage system and waterways and is an offence under the Protection of Environment Operations Act.

3.15 Dust generation and impacts

Dust generation resulting from all activities associated with development particularly demolition and excavation works, must be minimised by implementing effective systems including *control measures* under the Work Health and Safety Act. For the demolition of buildings this may require the full height enclosure of a structure through the use of perimeter *scaffolding*, combined with containment netting and dust meshing (see 'note' below).

The use of continuous water spray during the demolition and excavation processes can be an effective control method, however, waste water must be appropriately collected and processed in a manner that meets all regulatory controls that may apply (see also **3.16**).



Photo: Peter Conroy / City of Sydney

3.15.1 Impacts and complaints

Impacts and/or complaints relating to dust generation within the boundaries of a development site or from work activity within the *public space* such as *road openings* must be effectively managed by the person or entity in control of a *worksite*.

Cutting of concrete and asphalt surfaces in *public spaces* must include effective means to control dust generation. This can include the use of small amounts of water to suppress dust however all wastewater must be contained to the *worksite* to prevent material entering the stormwater pits and pipes. Wastewater must be collected and disposed of to an appropriate waste facility.

City officers will investigate complaints and take action which may include the issuing of fines for offences such as breaches of the *development consent* and/or pollution offences. Refer to **3.6** for matters relating to complaints and processes.

Where impacts cannot be resolved satisfactorily and the issue continues, the City's Health and Building Unit will take additional action that may include the issuing and enforcement of formal orders/directions.

Notes:

1. The NSW Work Health and Safety Regulation and applicable Codes of Practice should be checked for requirements regarding the enclosure/ encapsulation of demolition works. The City's 'Code of Practice: Construction-related Temporary Structures On and Above Roads' has performance criteria for containment netting and meshing where located on or above a *road*.
2. The use of compressed air to blow dust from a building or site is not allowed.

3.16 Pooled rainwater in excavations, de-watering and disposal of wastewater

Pooled water in excavations is classified as contaminated water and therefore must be dealt with accordingly to avoid pollution offences when it is discharged or removed from a site.

The City will allow pooled rainwater or water from de-watering processes to be discharged to the stormwater system subject to strict controls being implemented (refer to 'further information').

Sydney Water does not allow such water to be discharged into their sewage drainage system.

In circumstances where the City allows the discharge of wastewater into the stormwater drainage system, an application using the standard form 'Application for temporary de-watering' available on the City's website, must be lodged for assessment with the City's Public Domain team.



Photo: Peter Conroy / City of Sydney

Rainwater accumulation in excavations, particularly in circumstances where development and construction works have temporarily ceased must be effectively managed. This includes keeping the site free of stagnant water to avoid loss of amenity and nuisances (foul odours, mosquito infestation and other issues) to the local surrounding area.



Photo: Peter Conroy / City of Sydney

Where a site is not properly managed in relation to the removal of pooled water the *City* has powers to issue formal orders to require compliance. Penalty infringement notices (fines) can also be issued.

Further information: Contact the *City's* Public Domain team for information about lodging an application and the details that must be provided to seek approval to discharge water into the *City's* stormwater system.

3.17 Rainwater spouting and drainage of buildings under construction or alteration

Under the Roads Regulation 2018 (Clause 16), water must not drip or flow from a property (*worksite*) onto any part of a *road* other than a street gutter. All water must therefore be appropriately collected and disposed of to an *approved* drainage system (see 'note').

When discharging to the *City's* drainage system, the design and connection must comply with the *City's* 'Sydney Streets Technical Specifications' and the 'Stormwater Drainage Manual' (see **4.15**).

Temporary connection to the street gutter for minor development is allowed to dispose of unpolluted rainwater in a controlled manner. Permanent connections must be completed to the *City's* standard specifications as soon as it is practicable to do so.



Photo: Peter Conroy / City of Sydney

Property to be sufficiently spouted

The occupier of land having frontage to a road must not allow water to drip or flow from the land onto any part of the road other than the gutter.

Maximum penalty: 10 penalty units.

(Clause 16 of the Roads Regulation 2018)

Notes:

1. Unless specifically *approved*, contaminated fluids including contaminated rainwater must not be allowed to enter the stormwater drainage system (see **3.13.1**).
2. An *approval* is required under Section 68 of the Local Government Act 1993 to connect to a City-controlled/owned stormwater drainage system including a street gutter and/or drainage pit. Connection *approvals* are issued by the City's Public Domain Unit. See **4.15** for further details.

3.18 Management of public spaces (see also 3.8)

There are a number of important management procedures that must be developed and implemented to minimise impacts, protect city infrastructure and keep the *public space* adjoining a site in a safe, *accessible* and tidy state. This includes maintaining *footway* and *roadway* surfaces in a fully *accessible* and clean condition (see **4.3**).

Where the City determines it *necessary* a *site management plan* may be required. (see **3.8.1**).

Other matters that also require attention and consideration are detailed in **Part 04**.



Photo: Peter Conroy / City of Sydney

3.18.1 Working in public spaces - minimising impacts on nearby building occupants and business operators

The city undergoes constant change with the construction of new buildings and major alterations or additions to existing buildings. Maintenance works on buildings are also a significant activity. *Public spaces* are often used to facilitate these works.

Other works in *public spaces* such as *road excavations* associated with the extension, maintenance and renewal of utility services are also significant activities (see **4.16**). These and a range of other activities can cause impacts on the City's residential and business communities.

The City therefore expects and requires work to be undertaken in a controlled and orderly manner. This is particularly important when considering the sensitivities of some landuses such as residential premises that may be in the vicinity of works.

Compliance with the City's various adopted controls, *development consent* conditions and other *approvals* (*permits*) will assist in minimising impacts however other measures may be necessary to reduce impacts. The following, as a minimum, must be followed when undertaking works in *public spaces*:

- (a) dust and noise generation must be controlled and minimised. This may require the use of suppression systems and control methods (water dampening is acceptable – see **3.15.1** for further details) and the use of acoustic screens (barriers/curtains) around works, subject to *City approval*;

- (b) where works and/or temporary barricading fully or partially obstruct or interfere with access to:

- pedestrian pathways and building entrances including retail premises during the operational times of the businesses;
- on-street loading zones; and/or
- car parking and loading docks within buildings,

consultation with affected parties including formal written notice must be carried out in accordance with **3.18.2**. Alternative acceptable means of access or vehicle loading/unloading must be negotiated and made available during the proposed works, unless otherwise agreed with affected parties;

- (c) business identification signage must not be substantially obscured by proposed works and/or *temporary structures* such as *hoardings* and *scaffolding*. Where signage is affected the display of temporary signage may be allowed (refer to the *City's* 'Code of Practice: Construction-related Temporary Structures On and Above Roads' for further details);
- (d) works must be undertaken without unnecessary delays to minimise obstruction, other impacts, and to maintain access to businesses; and
- (e) project signage complying with the *City's* standard signage template (see **3.18.2**) must be displayed at *worksites*.

3.18.2 Consultation and information delivery

The *City* strongly encourages builders and contractors to maintain good relations and effective communication with local residents and business operators when working in *public spaces*. This is particularly important in the high-density commercial and retail districts which have significant pedestrian activity and customer trade.

It is therefore important and necessary for formal notice of proposed works to be given to likely affected parties to allow for any adjustments to be made ahead of works commencing. Signage displayed at *worksites* and *workplaces* providing public information about the works including details of the persons in control of the site must also be displayed (see **3.18.2.3**).

Formal notice will also allow for consultation to take place with affected parties to resolve any issues including special needs that contractors may not be aware when planning the proposed works and methodologies to address and minimise impacts. As a minimum, formal notice must be given as required by **3.18.2.1** however the *City* can require broader notice where special or site-specific needs so require.

3.18.2.1 Formal notice

Formal notice of works must be given in the following circumstances:

- (a) where access will be affected, either partially or fully, to building entrances including retail premises by:
- the *worksite* itself and/or the *workplace*;
 - the placement of barricades or fences in the locality of the *worksite* and *workplace*; or
 - the placement of *temporary structures* such as *hoardings*, *scaffolding* and other similar structures; and/or
- (b) where on-street sign-posted loading zones are obstructed preventing parking or where the space is temporarily removed as part of the works.

3.18.2.2 Extent and form of notice

Formal notice must be given in accordance with the following:

- (a) issued to occupants of premises located within 10 metres of the proposed works measured from the perimeter of the *worksite/workplace*;
- (b) delivered by hand to property owners, tenants and business operators;
- (c) be in a format that complies with the standard notification template available on the *City's* website; and
- (d) give notice at least two (2) working days prior to works commencing (Note: This requirement does not apply if the works are essential emergency works unless the works are to extend beyond 24 hours).

3.18.2.3 Worksite mandatory signage

A sign in accordance with the standard template (available from the *City*) must be displayed at *worksites* to provide contact details of the person directly in control of the site such as the site foreman or supervisor and include a 24/7 contact telephone number for this person. Contact person details must be kept up-to-date.

3.18.3 Induction of employees and sub-contractors

The principal contractor appointed to undertake the approved development or work, in part or whole, is responsible for ensuring compliance with all applicable conditions of *development consent* and any *permits* issued by the *City*.

Induction training including awareness of sources of potential adverse impacts and ways to reduce impacts can be an effective means of managing projects and also minimising complaints. The *City* therefore strongly encourages principal contractors to induct key personnel and contractors.

Induction should include information about key conditions of development relating to operational requirements such as approved *site management plans* and other *approvals (permits and conditions)* including, but not limited to, the following:

- (a) construction traffic management plans;
- (b) general site management (demolition, excavation, construction and waste management);
- (c) noise control and operating within approved work times;
- (d) erosion, sediment and dust control, covering loads and wheel/truck cleaning;
- (e) not obstructing the public way and keeping the *public space* in a clean and tidy state;
- (f) management of *temporary structures* and activities carried out in the *public space* including *hoardings/scaffolding, road openings, temporary works* and *hoisting* activities; and
- (g) loading and unloading activities on the *road (works zone operation)*.

In some circumstances such as large development projects located in close proximity to:

- residential-type buildings;
- tourist accommodation; or

- sites within high density/high traffic volume localities,

mandatory employee and sub-contractor induction may be required as directed by the *City* or as required by a condition of *development consent*.

The *City* can assist with site induction services, where required or requested (see **3.4.2**).

3.18.4 Street trees (see also 2.14.6 and 2.14.7)

Street trees must be protected in accordance with the *City's* requirements where they are located near or in *worksites* and/or *workplaces* (see also **2.14.6** and **2.14.7**). Details are available in the *City's* 'Tree Management Policy' and in Part D of the 'Street Tree Master Plan' (available from the *City's* website) which includes, but not limited to, the following requirements applying to tree trunk protection:



Photo: Peter Conroy / City of Sydney

- (a) tree/s must be protected in accordance with the 'Australian Standard 4970 – Protection of Trees on Development Sites';
- (b) tree trunk and major limb protection must be undertaken prior to the issuing of the construction certificate or complying development certificate and/or installation of *temporary structures*. The protection shall be installed by a qualified arborist with a minimum AQF Level 5 and must include:

- (i) tree trunk/s and/or major branches must be protected by padded material (hessian is not suitable) to limit damage from the timber planks (or *approved* equivalent);
- (ii) timber planks (50 mm x 100 mm or similar) shall be placed around tree trunk/s. The timber planks shall be spaced at 100 mm intervals and held in place using suitable strapping (non-metal strapping, such as durable fabric strapping, is preferred to avoid sharp edges and ends that may pose a risk of injury to the public. Protective padding and timber planks must not be fixed to the tree in any instance or in any manner;
- (iii) the protective materials and installation method must allow for the trees natural growth until the completion of the project, and/or adjusted as required;



Photo: Damian Shaw / City of Sydney

- (iv) (tree trunk and major branch protection is to remain in place for the duration of construction and development works and shall be removed at the completion of the project or removal of a *works zone*; and
- (v) any other tree protection as specified in relevant *development consent* conditions, tree works, *hoarding* or *works zone permits*.

3.18.5 Street gardens

Maintaining street garden beds adjoining a *workplace* is required. This may include, where necessary, watering street gardens in circumstances where a Type-B *hoarding* installation spans over a garden and restricts its exposure to rainfall. General cleaning around and within gardens to remove any litter and debris from the worksite must also be carried out regularly.

3.19 Vacant development sites

If proposed works involve demolition only and a site is to be left temporarily vacant, the land must be left in a condition complying with any applicable condition/s of *development consent* that may apply.

In cases where a specific condition of *consent* is not imposed the site must, as a minimum, be:

- (a) cleared of all demolition waste and debris;
- (b) maintained in a clean and tidy state;
- (c) fully fenced within the boundaries of the allotment with a complying fence (see **2.6.2**) or secured by a *hoarding* complying the City's 'Code of Practice: Construction-related Temporary Structures On and Above Roads' (see **2.6**); and
- (d) where there is open ground, be appropriately managed including preventing soil movement off-site through the installation of sediment control barriers or the ground surface stabilised (eg.: seeded using a suitable grass species and be appropriately maintained) to the City's requirements to prevent environmental impacts (wind-blown dust and soil movement off-site – see **3.13** and **3.15**).



Photo: Peter Conroy / City of Sydney

Any precautionary measures implemented for public protection purposes including *temporary structures* (site fencing etc.) erected within the *public space* or within the site boundaries must comply with relevant statutory provisions of the Work Health and Safety Act and any other *SafeWork NSW* requirements. Where fencing (a Type-A *hoarding*) is proposed, *approval* must be obtained (see **2.6**)

3.19.1 Performance bonds (see also 1.14)

The property owner is responsible for the site after it has been vacated by the demolition contractor, principal builder or other entity. In some circumstances typically through a condition of *development consent*, the *City* may require a financial *performance bond* to be lodged to ensure that all relevant conditions of consent applying to the site are complied with.

The *City* may also require a formal undertaking from the owner of the land accepting responsibility for the ongoing management and maintenance of the site that meets the *City's approval* and any other requirements that may apply.

Where the property owner fails to act on directions issued by an *authorised person* to maintain a site in an acceptable state, the *City* may seek Court orders to access the site and use the *performance bond* to recover costs incurred in any clean-up action and/or to carry out any other required works including matters that affect public safety and amenity (see **4.4**).

approval is granted by the *City* allowing them to remain in place. This will depend on the gates not causing obstruction to pedestrian movement and being fully secured/locked outside of work times. .



Photo: Peter Conroy / City of Sydney

Further information: Details relating to control gates are also set out in the *City's 'Code of Practice: Construction-related Temporary Structures On and Above Roads'* (see **2.6**).

3.20 Pedestrian and cyclist management at truck entry/exit points (see also 4.4.2)

At *approved* truck access points to a site the following must be satisfied:

- (a) concertina control gates must be installed and operated on each side of a crossing (driveway) and be appropriately manned in accordance with **(c)** to prevent pedestrians and cyclists moving through the crossing zone when vehicles are entering and exiting a site;
- (b) sirens, audible warning systems or flashing lights are not to be used;
- (c) traffic and pedestrian controllers required by (a) must wear distinctive uniforms or vests in accordance with the requirements of Transport for NSW;
- (d) gate usage and control must form part of the Construction Traffic Management Plan and have the *approval* of the *City's* Construction Regulation team; and
- (e) be removed from the *public space* outside of the approved work times unless specific

3.21 Full temporary footway closure and alternative pathways allowing pedestrian diversion

The *City* is generally not supportive of proposals that seek the full temporary closure of a *footway* to allow works on buildings to take place or to carryout required works in a *public space* such as reconstructing *footways*. In these circumstances partial temporary closure is preferred (see **2.7.3**).

There may however be extenuating circumstances or special site-specific needs that require a *footway* to be fully closed and to divert pedestrians around an area of work or exclusion zone. This also applies to *shared paths* and *cycleways*. In these cases, including where a *roadway* and local traffic/ pedestrian/cyclist characteristics *permit*, a suitably safe and *accessible* barricaded temporary pedestrian pathway established on a *roadway* may be allowed (see **2.7.5** and **2.13.6** for cyclist diversions).

3.21.1 Diversions

Where temporary closure of a *footway* and pedestrian diversion is not feasible or acceptable to the *City* and/or State agencies (Transport for NSW) due to *roadway* and local traffic conditions and needs, proponents can seek *approval* to fully close a *footway*

and/or cycleway and create a temporary diversion through the adjoining development *worksites* i.e. within the property boundaries of the site.



Photo: Peter Conroy / City of Sydney

Where this is considered acceptable to the *City* the following provisions will apply:

- (a) acceptable safe alternative pathways must be formed and be suitably maintained; and
- (b) temporary diversions through private land (sites) are subject to a deed of agreement being in place (see **3.21.2**) between the *City* and the proponent (typically the principal contractor responsible for the site).



Figure 41: The hatched area indicates a works zone on a temporarily closed footway (operational only during *approved works zone* times). A pedestrian by-pass is available through a fully enclosed protective tunnel within a construction site.

Equivalence by Ash Garwood
Photo: Peter Conroy / City of Sydney

3.21.2 Deed of agreement

Where a temporary pedestrian diversion through private land is considered warranted by the *City* an agreement in the form of a deed in accordance with the *City's* standard deed template must be completed by the proponent and submitted to the *City* for review and execution.

The minimum information and details that must form part of the deed (as annexures) include, but are not limited to, the following:

- (a) details, including drawings (site plan, plan, elevation and sections) of the proposed temporary diversion pathway;
- (b) the method or systems of isolating the diversion pathway from the *worksites/exclusion zone* to afford adequate protection, amenity and convenience of the public, including:
 - (i) the PCBU's risk assessment to determine the form of protective structure (enclosed passageway) such as a Type-B hoarding (minimum rating of 10 kPa for overhead protection) and walls (fencing) that have appropriate impact resistance;
 - (ii) ground surface construction/finish within the diversion (smooth and non-slip finish);
 - (iii) vandal-proof lighting and illumination levels (refer to the *City's* 'Code of Practice: Construction-related Temporary Structures On and Above Roads' for details);
 - (iv) a clear minimum overhead deck/ceiling height (generally not less than 3 metres as applies for Type-B *hoardings*);
 - (v) all surfaces (internal and external) being painted and finished in an appropriate colour and graphics to the *City's* requirements;
 - (vi) the use of temporary pedestrian ramps must be avoided but if essential, their use must be fully justified and accepted by the *City* and comply with the minimum design criteria set out in **2.9.4**;
- (c) details for ongoing maintenance, management processes and procedures for the regular cleaning, repainting of internal surfaces where necessary and checking lighting systems etc. within the diversion pathway and structure;

- (d) evidence of an *approval* from the *City's* Traffic Operations Unit for the proposed temporary full closure of the *footway* and/or *cycleway* (where closed to allow for public domain works to take place);
- (e) where a pedestrian diversion is associated with the establishment of a *works zone* on a closed *footway* and/or *cycleway*, evidence (a copy of the formal *approval*) for the *works zone* must be provided as an annexure in the deed; and
- (f) a copy of the proponent's *public liability insurance* policy in the amount of at least \$20 million (see **1.15**) and which must remain current for the full duration of the diversion.

The plans of management for Crown land also contain provisions for temporary uses and construction-related *temporary structures*. Provisions in relation to accessing private land to facilitate construction and/or building maintenance works are also set-out in the the plans of management.

If the land is *community land* owned or managed by the *City*, a plan of management (generic or land-parcel specific) will be in place to allow the *City* to grant a license for access purposes and the installation/use of *temporary structures*.

3.22.1 Obtaining access to sites adjoining public land

Many small parks and reserves in the city share a boundary with the side walls of buildings on adjoining land which can make access for construction activity on these adjoining sites difficult.

Approval to access *City* owned/managed land is necessary for the purposes of installing and using such items as *scaffolding*, ladders and other equipment to undertake construction works on adjoining buildings including for building maintenance.

Where access to *City* owned/managed land is required proponents should contact the *City's* Properties Unit for advice and approval.

In some cases proponents may need to seek access through the provisions of the 'Access to Neighbouring Land Act 2000' (see **1.18**) and/or enter into a licence agreement.

Further information: *Temporary structures* installed in the *City's* parks and reserves must be designed and installed so that there is no, or little, impact on existing trees and gardens. Trees must not be pruned without written consent from the *City* (Note: minor pruning only will be allowed). Tree protection in accordance with **3.18.3** must be implemented prior to structure/s being installed.

3.22 Temporary structures erected on or above community land and Crown reserve (parks, reserves and squares)

Many of the *City's* small parks and reserves are on land owned by the *City* or are Crown land managed by the *City* as Crown land Manager.

If a park is Crown land and managed by the *City*, the Crown land legislation allows the *City* to grant short-term licenses for access purposes to allow the installation and use of *temporary structures*.



Birds of Australia by Egg Picnic
Photo: Peter Conroy / City of Sydney



Photo: Jamie Williams



Photo: Peter Conroy / City of Sydney

Part 04

Other requirements

4.1 About this part

This part includes requirements and information relating to other matters that are additional to the provisions set out in Parts 02 and 03.

4.2 Reporting hazards and urgent repairs

Builders and contractors should be aware that the general public is encouraged to report unsafe *footway* surfaces and other hazards, including hazards on *worksites* and in *workplaces*. The public can report damage or unsafe *footways* online or by telephone. Reporting online allows photographs to be attached which assists investigating officers undertake initial or urgent action.



Figure 42: Footway surfaces and kerbing must be monitored regularly by the builders for safe pedestrian movement. Where surfaces are inadvertently damaged or have deteriorated, this must be reported to the City to establish the most appropriate form of action such as temporary barricading for prior to repair.

Photo: Peter Conroy / City of Sydney

In circumstances where damage occurs to the City's property (*roadways/footways*) and public safety is at risk, the person in control of the site must:

- (a) take immediate steps to make the area safe such as temporary isolation or surface treatment; and
- (b) advise the City immediately to allow for an inspection of the area to assess the damage and to arrange for any necessary rectification works and/or temporary *approved* public exclusion zones to be established (see also **4.4.1**).

In cases where defects are found to have resulted from development or building works and corrective actions are not implemented promptly by contractors:

- (a) the City may undertake rectification work to resolve the public risk;
- (b) all costs associated with this work may be recovered by the City including drawing down on any *performance bonds* (see **1.14**) held against the development or *workplace*; and
- (c) fines may also be issued (see **1.13**).

4.3 Ongoing maintenance and cleaning of public spaces adjoining worksites

It is the responsibility of builders and/or contractors to keep the *public spaces* in a clean and tidy condition in vicinity of a *worksite*. This is particularly important in the city-centre due to very high pedestrian volumes and is essential where a *temporary structure* is installed.



Photo: John Dennis / City of Sydney

Temporary structures such as *hoardings* can prevent or obstruct safe access by the City's mechanical *footway sweepers* therefore manual sweeping of *footways* by the *permit-holder* must be carried out regularly. An *approval* to place a *temporary structure* on a *footway* or for various activities to take place will require that the *permit-holder* maintain the *public spaces* in a clean and tidy state at all times.

4.4 Public space safety and public convenience adjoining worksites

The person in control of a *workplace* must ensure there are no trip or fall hazards on the public *footway/roadway* in vicinity of a *worksite/workplace*.

Safe and convenient pedestrian access including access for pedestrians with a disability and older persons must be maintained at all times.

This may require the use of temporary pedestrian ramps over works and services (see **2.9.3** for design details applying to ramps over concrete pump static lines). Unless specifically permitted and *approved*, *cycleways* and shared paths must be maintained where existing bicycle access is provided adjacent to and within a *worksite*. Ramps on *cycleways and shared paths* are not allowed due to potential increased fall risks for riders.

Where *approval* is given to temporarily alter a *cycleway or shared path* to accommodate proposed works or a *works zone*, the design and traffic control arrangements must comply with the 'Traffic Control Plan for People Riding Bicycles' available on the City's website (see **2.7.5**).

4.4.1 Repairing damage

The general public must be protected from construction activities including:

- vehicle loading and unloading in *public spaces* (see **2.4** in relation to *hoisting* activity); and
- vehicles entering and exiting sites (see **4.6**).

All risks must be identified and appropriate precautions and *control measures* implemented and maintained to address risks in *public spaces*. This may include and require:

- (a) the use of 'spotters' and traffic controllers (for pedestrians and cyclists);
- (b) restrictions on the hours of operation/work (no work during peak commuter and traffic periods);
- (c) restrictions on the type of work being carried out (welding, friction-cutting, etc.);
- (d) selecting the most appropriate type and size of machinery needed for the specific task and site constraints to minimise impacts;

- (e) concertina barricades, or other suitable measures acceptable to the *City*, to separate the public from a *workplace* and in some circumstances, *works zones* (see **Figure 44**), subject to specific *City approval* and compliance with **(f)**; and
- (f) where *approved*, concertina barriers must be freestanding and not fixed to *hoarding* columns/ counterweights. Unless otherwise specifically allowed by an *authorised person*, barriers must be removed from the *public space* outside of work times to allow full and unencumbered pedestrian access to and from the kerb/*footway*.

Note: Non-permanent concertina barricades that can be removed at the end of each day's work are the preferred pedestrian control system. Retractable belt safety barrier cassettes at a works zone may be permanently fixed to hoarding columns where endorsed by the *City*. (see **Figures 43 and 44**).

See also **4.6** for further requirements in relation to truck movement to and from sites.



Figure 43: The effective control and safety of pedestrians and cyclists at truck access points is essential. This is particularly important in high volume pedestrian areas. The *City* will allow, and require, the use of manned concertina gates as a *control measure*.

Photo: Peter Conroy / City of Sydney

4.4.2 Safety at works zones, workplaces and truck entry/exit points

The general public must be protected from *construction activities* including:

- vehicle loading and unloading within *public spaces* (see **2.4** in relation to *hoisting* activity); and
- vehicles entering and exiting sites (see **4.6**).

All risks must be identified and appropriate precautions and *control measures* implemented and maintained to address risks in *public spaces*. This may include and require:

- (a) the use of 'spotters' and traffic controllers (for pedestrians and cyclists);
- (b) restrictions on the hours of operation/work (no work during peak commuter and traffic periods);
- (c) restrictions on the type of work being carried out (welding, friction-cutting, etc.);
- (d) selecting the most appropriate type and size of machinery needed for the specific task and site constraints to minimise impacts;
- (e) concertina barricades, or other suitable measures acceptable to the *City* such as retractable belt cassettes, to separate the public from a *workplace* and in some circumstances, *works zones* (see **Figure 44**), subject to specific *City approval* and compliance with (f); and
- (f) where *approved*, concertina barriers must be freestanding and not fixed to *hoarding* columns/counterweights, unless otherwise specifically allowed by an *authorised person*. Where barriers are not allowed to be fixed they barriers must be removed from the *public space* outside of work times to allow full and unencumbered pedestrian access to and from the kerb/footway (see also **3.20**).



Figure 44: For public safety purposes, and subject to specific consideration by the *City*, *approval* may be given to allow the use of movable temporary concertina barriers or appropriately fitted retractable belt safety barrier systems to prevent pedestrians entering a *works zone* area during construction days and times.

Photo: Peter Conroy / City of Sydney

Notes:

1. Non-permanent concertina barricades that can be removed at the end of each day's work is the preferred pedestrian control system (see **Figures 43 and 44**).
2. Fitted belt cassettes and any mounting-plates must not cause snagging-points for pedestrians.
3. See also **4.6** for further requirements in relation to truck movement to and from sites.



Photo: Peter Conroy / City of Sydney

4.4.3 Public spaces – must be kept clear of material and equipment

Unless otherwise specifically allowable under other parts of this Code such as the establishment of an *approved work compound* (see **2.16**), all construction material and equipment must be stored onsite and not in *public spaces*. This also applies to the storage of material and equipment on the deck of Type-B *hoardings* located in and above *public spaces* (refer to the 'Code of Practice: Construction-related Temporary Structures On and Above Roads' and **2.4.4** for further details).

4.5 Excavation, shoring and ground-anchoring

As a general principle the clearing and excavation of land should be avoided until the development (construction works) are ready to commence (see **3.19** relating to staged development).

A number of statutory requirements apply when excavating land adjoining or near a *road* and also when introducing structures and other systems to support the perimeter of an excavation near a *road*.



Photo: Peter Conroy / City of Sydney

4.5.1 Excavations generally

Clause 17 of the Roads Regulation 2018 states that a person must not excavate land in vicinity of a *road* if the excavation is capable of causing damage to a *road* or any structures on a *road*.

Excavating near *roads* has the potential to cause subsidence and damage to *road* surfaces and other infrastructure including *utilities* within the *road* reservation. When excavating near *road* boundaries, proponents must contact the *City's* Public Domain team (where the *City* is the local *roads* authority) to discuss the proposed excavation works before commencement.

When support systems including shoring and ground-anchoring are to be placed beneath a *road* reservation formal *approval* is required (see **4.5.2**).

Excavations adjacent to road

A person must not excavate land in the vicinity of a road if the excavation is capable of causing damage to the road (such as by way of subsidence) or to any work or structure on the road. (Clause 17 of the Roads Regulation 2018)

4.5.2 Supporting roads and structures

Where support systems such as shoring and/or ground-anchors are proposed to be placed within the *road* reservation including projecting beneath a *road*, a formal application under s138 of the Roads Act 1993 must be made to the *City* and *approval* obtained before such works commence.

Applications must be made using the standard form available on the *City's* website and include drawings, details and certification as set out in the form including any other information that the *City's* Public Domain team may require.

Persons and other entities undertaking excavation near or adjoining *roads* also have a statutory obligation under the Environmental Planning and Assessment Regulation 2021 (sections 74 and 153) to provide support to *roads* (adjoining land) including any structures on a *road* (see **4.5.4**).



Figure 45: Shoring and ground-anchoring placed within the *road* reservation to support *roads* adjoining excavations require the approval of the *City*. Excavations must also be protected using appropriate pedestrian and traffic barriers (see **4.5.3**)

Photo: Peter Conroy / City of Sydney

For proposed works affecting a state *classified road* the approval (concurrence) of Transport for NSW will also be required. Where affected, proponents should allow additional time in the programming of works to obtain the required concurrences. The *City* will seek the required concurrences.

Further information: Further details about ground-anchoring, the support of *roadways* adjoining an excavation and protection of excavations can be obtained from the *City's* Public Domain team. Information, including requirements for lodging an application, are available on the *City's* website.

4.5.3 Protecting excavations

Development sites (excavations) must be secured and protected using suitable safety fencing and barriers (see **3.12.1**) to afford adequate protection to *public spaces* for pedestrians, cyclists and drivers of vehicles.

The Work Health and Safety Regulation 2017 requires the person undertaking excavation work such as the PCBU to manage the risks associated with excavating land. This includes meeting the provisions of clause 305 of the Regulations in relation to potential hazards and risks to the public such as falling into an excavation.

Fencing/barriers must therefore be capable of resisting the impact of motor vehicles (safety of drivers and passengers). A PCBU must undertake a risk assessment to establish the required form of barrier protection and likely potential impact forces (refer to 2.13 in the City's 'Code of Practice: Construction-related Temporary Structures On and Above Roads').

The *City* can also direct an owner or occupier of land, including builders and contractors, to protect excavations (s103 of the Roads Act 1993 – see box). This can involve the installation of barriers such as fencing and/or other more substantial fall-protection systems (concrete or steel barriers – see **Figure 46**).



Figure 46: Excavations (deeper than 1.5 metres) must be protected by suitable barriers that the PCBU determines is required and is of an acceptable and adequate design to withstand all likely impacts including vehicular impacts.

Photo: Peter Conroy / City of Sydney

103 Installation etc of fences, lights etc around dangerous premises

- (1) A roads authority may direct the owner or occupier of land to erect or install fences, lights or other equipment on or around any premises on the land that are, in the opinion of the roads authority, in a sufficiently dangerous condition to threaten the safety of persons or property on a public road in the vicinity of the premises.
- (2) A direction under this section may specify:
 - (i) the manner in which or the standard to which, and
 - (ii) the period within which the direction must be complied with. (Roads Act 1993)

4.5.3.1 Risk Assessment

As a minimum, the following statutory and other requirements must be addressed and satisfied:

- (a) the person responsible for a *worksite* and *workplace* must satisfy all requirements of *SafeWork NSW* and applicable codes of practice;
- (b) the *City*, as a *roads authority*, considers that excavations deeper than 1.5m pose a sufficiently dangerous risk or condition to threaten the safety of persons using a *public road* adjoining a *worksite* and in a *workplace*. This is particularly important for sites adjoining high traffic volume *roads* and at *road* intersections including roundabouts where there is greater potential risk of crash incidents and loss of vehicle control. Sign-posted road speeds and the type of vehicle usage (trucks and buses) are also factors.

The *City* may, irrespective of any risk assessment undertaken by the *person in control of a business or undertaking*, require appropriate safety barriers as a *control measure* to protect an excavation.

- (c) standards of barrier design must be based on the recommendations of any pedestrian/traffic risk assessment that has been undertaken to satisfy relevant requirements of the Work Health and Safety Act and Regulations including codes of practice.

Note: Further details about the protection of excavations including methods of protection when associated with a construction *hoarding*, can be found in the *City's* 'Code of Practice: Construction-related Temporary Structures On and Above Roads'.

4.5.4 Supporting land and/or structures on adjoining land

It is a requirement of the Environmental Planning and Assessment Regulation 2021 (section 74) that where an excavation extends below the level of the base of footings of a building, structure or work on adjoining land (including excavations below and adjoining *roads*), the person having the benefit of a *development consent* must:

- protect and support the building, structure or work on adjoining land (including *road*) from possible damage from the excavation; and
- where necessary, underpin the building, structure or work on adjoining land to prevent such damage.



Photo: Peter Conroy / City of Sydney

Note: The *City* does not regulate this statutory provision. The person having the benefit of the *development consent* must satisfy this requirement of the Regulation as part of any proposed excavation works.

4.5.5 Excavated material temporarily stockpiled on a site

Excavated material temporarily stockpiled on a site (with the *consent* of the *City*) must be adequately contained and stabilised to prevent the dispersal of the material around the site and onto *public spaces*. This includes wind-blown soil/sand and movement off-site in stormwater run-off.

Where sites can be viewed from a *public space* containment such as appropriate covering of material may be required.

Soil that is contaminated must have specific approval to be temporarily stockpiled. If allowed, the material will need to be treated to satisfy all conditions of an approval.



Figure 47: The short-term stockpiling of excavated material that is awaiting removal from a site is permissible subject to specific *approval* being given. Effective environmental and amenity controls must be implemented including measures to prevent the movement of material in water run-off and through wind actions.

Photo: Peter Conroy / City of Sydney

For sites that have been cleared of buildings and left vacant with open ground and undeveloped, specific requirements apply (see **3.19**).

4.5.6 Removal/transportation of excavated material from sites

Trucks leaving a site must have material covered and wheels adequately cleaned to ensure soil, mud and other site debris is prevented from spilling and being tracked onto adjoining *road* surfaces and the general *road* network (see also **3.14**).

Where minor dust and debris does accidentally fall onto the *public space* it must be cleaned up immediately and the general condition of the *public space* kept clean and tidy through regular cleaning (see **2.11**, **3.18** and **4.3**). The use of water to clean surfaces is not allowed except where a minor amount of water is used as part of mechanical street sweeper operation conducting an urgent recovery (see **3.14.2**).

4.6 Truck access to and from sites and public roads

Where vehicle (truck) access to a *worksite* is proposed or required by the *City* (see **2.14** for provisions applying to *works zones*), full and detailed consideration must be given to the type and size of vehicles that are planned to be used based on the constraints of the site and locality.



Photo: Peter Conroy / City of Sydney

4.6.1 Matters to consider when planning for vehicle access

City approval to allow truck access to and from a site must not be assumed. There may be factors including constraints associated with the adjoining *roadways* and land uses that will not permit site access.

The construction traffic management plan (CTMP) must address the above matters including

consideration of the following:

- (a) the physical constraints of the site including the area and site perimeter dimensions/configuration;
- (b) the size and configuration of the site to safely and effectively accommodate safe truck access and maneuvering including at truck entry and exit points to and from adjoining public *road/s*;
- (c) the number and location of proposed entry/exit points including the dimensions of existing proposed temporary *crossings* (widths) to facilitate compliance in (b);
- (d) local *road* network constraints including:
 - *roadway* width;
 - kerbside parking in the locality;
 - local land uses (residential, industrial, commercial etc. including vehicle movements in peak times); and
 - proposed times and duration (number of weeks) of proposed truck access etc.;
- (e) pedestrian and traffic densities in the locality; and
- (f) other site-specific special aspects and needs that may apply must be detailed and addressed.

The *City* will assess a CTMP against the above aspects and other factors (see 'Further information').

4.6.2 Articulated vehicles

Truck access including access by *articulated vehicles* (*semi-trailers*, *dog-trailers* etc.), are not permitted unless specifically *approved* by the *City's* Construction Regulation team (see also **3.9.2**).

Proponents seeking to obtain *approval* to allow truck access, particularly the use of *articulated vehicles* at sites and localities with special needs and constraints, should discuss their proposal with the Construction Regulation team prior to tendering and/or preparing a CTMP.

Further information: Further details about CTMPs including the requirements for lodging plans are available on the *City's* website. See also **3.9** of this Code.

4.7 Preservation of survey marks

Survey infrastructure assets within the City have been placed by federal, state & local government agencies and other public or private entities. The City provides information on survey infrastructure assets irrespective of ownership. It should be noted that the City does not explicitly or implicitly claim to own all assets indicated on plans held by the City.



Photo: Don Urquhart / City of Sydney

When undertaking works in *public spaces* associated with development sites all steps must be taken to ensure the preservation of existing permanent survey marks. Survey marks take several forms:

- a brass bolt fixed into the pavement or kerb surface; or
- a lead plug holding a brass tack, enclosed by a cast steel box and lid.

Mapped survey infrastructure within the city is typically a 'permanent survey mark' as prescribed in Schedule 4 of the Surveying & Spatial Information Regulation 2024 and may take one of three forms:

- a numbered brass disc set into concrete in the kerb, gutter or *footway* (Type 1 or Type 2 State Survey Mark [SSM]);
- a stainless steel pin or brass bolt set into concrete under a numbered steel cover box in the *footway* or *roadway* (Type 4 Urban [PM]);
- a small stainless steel disc and pin set into concrete in the kerb, gutter or *footway* (Type 15 State Survey Mark [SSM]).

Several examples of survey marks are provided in **Figure 48**.



Figure 48: Examples of survey marks located in the City of Sydney LGA. Survey marks are important survey assets and are protected under legislation.

Photo: Don Urquhart / City of Sydney

4.7.1 Sensitivity of survey marks and their importance to the City

All survey infrastructure (including cadastral reference marks) are protected under Section 24 of the NSW Surveying & Spatial Information Act 2002. Penalties may apply for unlawful alteration, removal, damage or destruction of survey marks. Further details are available from NSW Spatial Services.

Due to the nature of survey infrastructure and its sensitivity to disturbance, the following minimum clearances must be adhered to when undertaking works:

- 1.0m when operating pneumatic tools (jackhammers, vibrating plates etc.); and
- 1.5m when operating mechanical excavators.

4.7.2 Requirements when working near survey infrastructure

Persons undertaking works in a *public space* must:

- (a) inspect the area to check for any existing survey infrastructure prior to commencement of works;
- (b) where there is potential for adverse impact, works must avoid disturbance to survey marks; and
- (c) if survey infrastructure remains at risk of being disturbed or destroyed, in accordance with the Surveying & Spatial Information Act 2002, a registered surveyor must be engaged to undertake necessary works as set out in the Surveyor General's Directions No.11 'Preservation of Survey Infrastructure'.

Where it is not possible to avoid disturbing a survey mark, the following applies:

- (d) an application must be made by the surveyor to the NSW Surveyor General seeking approval to disturb a mark as required by the Surveyor General's Direction No.11 for Preservation of Survey Infrastructure. LPI will provide further instructions for moving and re-establishing the mark before and after the works; and
- (e) the surveyor engaged must make a report under SCIMS Status Report on the status of survey marks in the vicinity of the area under reconstruction once works have concluded.

Further information: Contact NSW Spatial Services for more detailed information and assistance.

Additionally, in relation to *City* alignment marks, the survey infrastructure may need to be reinstated by the *City's* surveyors. In these circumstances a fee will be charged in accordance with the *City's* Revenue Policy - Schedule of Fees and Charges.

4.7.3 Approval to undertake work near survey marks

Relevant approval must be obtained prior to commencement of works on or near survey infrastructure. The person undertaking work is responsible for ensuring that all required approvals have been obtained prior to works being undertaken in accordance with the requirements of any approval. The following also applies:

- (a) at least one (1) weeks' notice is required prior to the commencement of any works in the *public space* located within one (1) metre of a permanent survey mark. Contact must be made with the *City's* Principal Surveyor to arrange for the recovery of the mark;
- (b) prior to the issue of a construction certificate, a survey plan clearly indicating the location of all permanent survey marks fronting the site and within five (5) metres on each side of the frontages must be submitted to the *City*; and
- (c) a fee is payable to the *City* for the replacement of any permanent survey mark removed or damaged (refer to the *City's* Revenue Policy - Schedule of Fees and Charges) and for reinstatement of a survey box.

4.7.4 Damage to mapped survey infrastructure and reporting incidents

Parties undertaking works will be held responsible for all damage to survey infrastructure as a result of the works. This includes interfering with survey infrastructure and conducting unauthorised modification works.

Any damage to mapped survey infrastructure must be reported immediately to the *City*.

The *City* reserves all rights to recover compensation for any loss (including consequential losses) associated with adverse impacts on survey infrastructure.

4.8 Protection of stone kerbing and stone (cobble) roadway surfaces and other fabric

A reference to *public space* includes the *roadways*, *footways*, *kerbing*, *verges/street gardens* and other public land owned by the *City*.

The *public space* forms an important part of the character and heritage significance of many city streets and is particularly important in heritage conservation areas.

Any works in or adjoining a *public space* must therefore be undertaken in such a way, through effective site management, to respect and protect the heritage significance of elements and features that make up the streetscape. This includes preventing or minimising impacts and damage.

Approval must be obtained from the *City* prior to any work taking place that may affect stone kerbs and gutters, irrespective of heritage significance/status (see **4.8.1**).



Photo: Peter Conroy / City of Sydney



Figure 49: Cobble stormwater drainage gutters and stone kerbing are important historic fabric of the *City*. Unless specifically *approved* or permitted, alterations and/or removal of such street elements must not occur when undertaking works and activities within *public spaces*.

Photo: Peter Conroy / City of Sydney



Figure 50: Significant sandstone kerb stones marking the original location of the *roadway/footway* alignment. Such features must not be altered or disturbed without first obtaining the *approval* of the *City*.

Photo: Peter Conroy / City of Sydney

4.8.1 Heritage Development Control Plan

The City's 'Heritage Development Control Plan 2012' details important provisions that must be followed when undertaking work in *public spaces* including the following elements:

- (a) significant public domain features;
- (b) original glass pavement lights;
- (c) original or significant signposts, milestones, boundary markers, sandstone steps and supporting walls and the like; and
- (d) significant kerbing which should not be altered and be maintained wherever possible. Where an *approval* is given to replace kerbing, the new material must match existing (see **4.8.2**).

Further details are set out in 3.9.11 'Conservation of public domain features in heritage conservation areas' of the Development Control Plan.

4.8.2 Temporary removal and storage of stone kerbing

Many parts of the city have original stone kerbing dating from the mid to late 19th century. This has special aesthetic value and heritage significance. The City therefore seeks to retain and not disturb original stone kerbing and gutters wherever possible.

In some circumstances stone removal may be necessary to prevent damage. This can be required where:

- (a) there is a likelihood that kerbing may be exposed to potential damage during demolition, excavation or *construction activity*; or
- (b) there is a condition of *development consent* requiring removal and/or reconstruction; or
- (c) other *approvals* that are associated with the reconstruction of *footways*, *kerbings* and/or *road pavements* apply.

Specific *approval* to remove the stone must be obtained. Under these circumstances stones must be carefully salvaged and stored safely for later reinstatement.

4.8.3 Kerbstone removal and storage

Where specific *approval* is given for stone kerbing removal, the following requirements apply:

- (a) for stone kerbs that are in serviceable condition (i.e. stones are in good condition for reuse as confirmed by City officers) including where reinstatement is required at completion of development, stones must be stored in a safe and secure location (onsite or off-site) by the builder/contractor; or
- (b) where the City requires and approves stone kerbing to be replaced with new kerbing, all serviceable stone as determined by the City's Public Domain team must be returned to the City's stone storage facility for safe-keeping and reuse throughout the city. Stone must be safely packaged on pallets and delivered to the stone storage facility (see 'note').

Note: The City's stone storage facility must be contacted beforehand to arrange a convenient time for delivery.

4.8.4 Kerbstones and hoarding installations

Where a *hoarding* is proposed to be erected within the *public space* it must be designed to avoid placement on significant stone kerbing, particularly sandstone kerbing which is more susceptible to damage compared to granite, bluestone and trachyte which is also used throughout the city.

In circumstances where stone kerbing is required to be removed to accommodate concrete footings of a Type-B *hoarding*, or to create a temporary truck vehicular crossing (**2.11**) associated with construction sites, the removal must be undertaken in accordance with the requirements set out in **4.8.2** and be appropriately supervised.

The reinstatement of stone kerbing must be in accordance with the *City's* standard details and specifications. The following general requirements also apply:

- (a) damaged kerbs are to be replaced to match existing to the *City's* satisfaction. Where appropriate, this may require existing salvaged stones to be reinstated in an inverted position to expose a clean undamaged surface. The *City* must be contacted to provide guidance and *approval* if this method is proposed;
- (b) where new *approved vehicular crossings* are proposed to access a property or temporary construction crossings are required, affected kerbstones must be salvaged and reused wherever possible; and
- (c) all new driveway crossings and kerbs (see **4.11** for permanent *crossings*) are to be constructed with stone kerbs to match existing stones or as otherwise specified by *City* officers.

4.8.5 Cutting existing kerbstones

The cutting of existing kerbstones for stormwater kerb outlets is allowed provided that specific *approval* has been obtained from the *City* before undertaking such work. All works must minimise or prevent unnecessary damage. The outlets and stone modifications must be in accordance with the 'Sydney Streets Technical Specifications' available on the *City's* website (see **4.12**).

4.8.6 Costs and performance bonds (damage deposits)

The removal, salvaging, required transfer or storage and reinstatement of stone kerbing must be undertaken at no cost to the *City*.

A condition of *development consent* requiring lodgement of a 'Public Domain Deposit' or 'Kerb and Gutter Damage Deposit' (*performance bonds*) may be applied to the development. *Bonds*, calculated on the basis of lineal metres of site frontage, must be lodged with the *City* in accordance with the adopted Revenue Policy - Schedule of Fees and Charges. Refer also to **1.14** for further details.

Note: Where stone kerbing is to be temporarily removed, a temporary concrete kerb will need to be constructed to retain the *footway* in a safe and serviceable condition until the stone kerbs are reinstated.

4.9 Construction waste chutes

Construction waste chutes installed above public roads are not permitted in the City of Sydney local government area for several reasons including:



Figure 51: Demolition and construction waste chutes located above *public spaces* are not permitted.

Photo: Peter Conroy / City of Sydney

- (a) issues with dust generation and adverse impacts on the *public space* - dust escaping from chute segment joints and dust generation from material falling into a vehicle or receptacle standing in the *public space*;
- (b) risks to the public from chutes suspended above the *public space* (overhead protection issues);
- (c) potential risks to the public associated with waste material ricocheting into the *public space* from a truck standing on the public *road* receiving waste material;
- (d) noise impacts within the *public space* affecting the amenity of the city residents, businesses and visitors;
- (e) potential pollution issues associated with the use of water sprays to dampen dust generation at ground level within the *public space* and the potential for water and debris run-off into the stormwater drainage system (pollution issues and offences); and
- (f) a *works zone approval* allowing a vehicle to stand on the *roadway* to receive waste via a waste chute would not be issued for the purpose of collecting and disposing of demolition and construction waste generated.

4.9.1 Waste chutes on private land

Waste chutes installed within the property boundaries of a *worksite* are not regulated by the *City* nor through this Code. Builders must still ensure that their use does not contravene any conditions of *development consent* such as aspects relating to noise (material falling and impacting on the internal surfaces of the chute and waste receptacle – see **4.13**) and the generation of dust and other off-site impacts.

4.10 Oversize and over-mass heavy vehicle access through the city

Under the Heavy Vehicle National Law (NSW) the *City*, as the *road manager*, is responsible to approve the movement of oversize or over-mass vehicle journeys (Class 1 and Class 3 heavy vehicles) on *roads* under the *City's* control.

Transport for NSW is the designated *road manager* for state *classified roads*.



Photo: Peter Conroy / City of Sydney

Where oversize or heavy vehicles will use *City-controlled roads*, *approval* is required before a journey takes place. Under the Heavy Vehicle National Law, up to 28 days' notice is required to assess and determine an application.

An application can be refused if the journey is likely to cause asset damage, pose a risk to public safety or adversely affect traffic flow/movement (congestion), air quality or public amenity.

Further information: Applications must be lodged via the portal of the National Heavy Vehicle Regulator. A 'Clearance Authority Letter' for lodgment with an application can be obtained from the *City*. Further information about the assessment process, accessing an application form and the applicable fees can be obtained through contacting the *City's* Traffic Operations Unit.

4.11 Construction of permanent vehicular crossings (driveways) (see also 2.13)

Approval is needed to construct a permanent driveway crossing within a *road* reservation to allow vehicles to access private land. Vehicle access to a property must already exist or have been approved through a *development consent* to allow the establishment of a permanent *crossing*.

A property owner is responsible for all costs associated with constructing and/or maintaining a driveway. The *City* is responsible for making sure the driveway is safe for the community.

The *approval* and construction of a temporary *crossing* for demolition/construction vehicles is detailed in **2.11**. See also **4.8** in relation to the protection of stone kerbing.



Photo: Peter Conroy / City of Sydney

4.11.1 Residential and commercial driveways

A residential driveway provides vehicle access for a single detached house. A commercial driveway provides vehicle access for premises such as:

- townhouse developments;
- small shopping centres;
- large shopping complexes;
- business centres; or
- multi-level apartments.

Each has different standards of design and construction.

Further information: Details on the application and assessment processes including driveway construction standards are available on the *City's* website.

4.12 Public space design and construction standards

When works are undertaken on local streets including *footways*, the 'Sydney Streets Technical Specifications' apply. The specifications deal with a number of areas including stormwater drainage, street lighting, construction (kerbs, gutters, *footways*, *roadways*) and other aspects (see also **4.15** in relation to drainage).

The technical details provide developers, consultants, builders and service providers with the standards for the design and construction of infrastructure that the *City* will acquire and maintain after completion of development and other works.

The specifications complement the 'Sydney Streets Code', which sets out the *City's* vision for public infrastructure, including its relationship with 'Sustainable Sydney' objectives.



For restoration works on *roads*, see **2.13.6** and **4.16.2**.

Further information: Information including standard drawings and details is available on the *City's* website.

4.13 Placement of waste containers (skip bins) in public spaces

The placement of waste containers (*skip bins*) in *public spaces* is not preferred. The *City's 'Local Approvals Policy for Managing Waste in Public Places'* requires, in the first instance, that bins be placed on private land.

Where space is not available a single bin can be placed on a *roadway* subject to meeting prescribed criteria set out in the Policy. This includes a requirement that bin placement and usage must be associated with minor residential works only, for example the clean-out of a residential premises, minor renovation or works that are classified as 'exempt development' in the NSW State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.



Photo: Peter Conroy / City of Sydney

Further information: Details on *skip bin* usage and placement on a *roadway* can be found in the '*Local Approvals Policy for Managing Waste in Public Places*' available on the *City's* website.

4.14 Levels and gradients associated with development sites

Information and *approval* processes in relation to levels and required gradients for works within a *public space* is available on the *City's* website.

Submissions seeking levels and gradients must fully consider and clearly understand:

- (a) the existing *public space* levels and grades and their purpose;
- (b) *accessibility* in accordance with *City* standards and policies in cases where adjustments and enhancements to gradients are proposed or required; and
- (c) the proposed changes and relationship to existing levels, driveway *crossings* and building entries.



Photo: Peter Conroy / City of Sydney

A submission must include plans, cross-sections and longitudinal sections showing the *road*, *footway*, kerb and gutter levels and cross-falls for a site to enable a detailed and considered assessment of a proposal.

A submission is typically required when:

- a development proposal involves construction of a new building;
- the introduction or alteration of building entries or driveway crossings; and
- other impacts on the *footway* or *roadway* of the *workplace* may occur.

Further information: Details are available:

- on the *City's* website;
- through contacting the Public Domain team; and
- in the *City's* 'Public Domain Manual'.

4.15 Stormwater drainage connections to City systems

Approving and connecting new stormwater drainage systems from private development sites or land to the City's drainage system is administered by the City's Public Domain team.

Any works in the *public space* including stormwater drainage works and connection to City systems are subject to formal *approval* as required by Section 68 of the Local Government Act 1993 and the Roads Act 1993.



Photo: Peter Conroy / City of Sydney

4.15.1 Road opening permits for drainage works

A *road opening permit* is required to excavate City land to access in-ground drainage systems and lay new piping (see **2.13**).

4.15.2 Defects liability and documentation

Works may be subject to a defects liability period, submission of works completion documents (e.g. works-as-executed plans, certifications, warranties and/or CCTV footage) and infrastructure handover.

4.15.3 Stormwater design and connections – must be considered as part of the development application

Proposed stormwater drainage and disposal system from a development must be considered as a part of the development application process. This includes details of:

- (a) all proposed stormwater connections associated with the development;
- (b) any onsite detention requirements;
- (c) stormwater quality treatment requirements; and
- (d) proposed new stormwater drainage infrastructure associated with the development.

4.15.4 City of Sydney Drainage Design Code

Information on new stormwater infrastructure design and private connections for both kerb and underground connections is detailed in the City's 'Drainage Design Code'. This Code forms part of the 'Sydney Streets Technical Specifications' (see **4.12**). The City's 'Stormwater Drainage Manual' also contains relevant information.

4.15.5 Kerb stormwater connections

The City may consider kerb connections on a site-specific basis. This would generally relate to works that consist of gravity discharge of stormwater via downpipes to the kerb.

Further information: Details, including connections to street kerbs/gutters and application form, are available on the City's website and through contacting the City's Public Domain team.

4.16 Works associated with utility services and other infrastructure works

Across the city there is an extensive network of utility infrastructure that often requires maintenance, repair and upgrading. Infrastructure is commonly located in *road* reservations and is often located beneath busy traffic thoroughfares.



Photo: Peter Conroy / City of Sydney

4.16.1 Accessing services and site management

Where access is required the partial temporary closure of a *road* may be necessary. Works may also need to be undertaken at night and/or on weekends to minimise impacts on traffic movement and congestion. In some circumstances full temporary *road* closure and traffic diversions may be necessary to provide a safe space for workers and to also speed the completion of work.

The *City* often has little control over works undertaken by utility service providers and their contractors. This also applies to other infrastructure works within *public spaces*. In many cases these works are exempt from the formal *City* approval process including the imposition of conditions to limit potential adverse impacts (see **4.16.3**).

Utility owners have protocols and guidelines that must be followed to ensure public safety and minimise impacts on the local community including the business community where the temporary loss of services to premises are impacted. In some cases, contractors may need to seek formal *City approval* for works such as *road opening permits* (see **2.13**).

The *City* encourages the various utility service providers to coordinate their works including when works are planned by the *City*. This negates any future works needing to be undertaken in an affected area thereby reducing disruption and noise impacts on the local community. It also avoids damaging new works and surface finishes that may have been undertaken by the *City*.

4.16.2 Restoration works

Although utility service providers and their contractors can temporarily close *roads* (partly or fully) and excavate *roads* to access services without the approval of the *City*, the *road* and other infrastructure restoration works must be carried out in accordance with the *City's* specifications and codes (see **4.12**).



Photo: Peter Conroy / City of Sydney

4.16.3 Seeking approval from the City

Where a utility agency or contractor seeks *approval* from the *City* to carry out works (commonly referred to as seeking a *road opening permit*), the *City* may:

impose conditions to limit impacts on a local area including;

- restricting times of work; and/or
- requiring noise mitigation measures to be implemented (see **3.5** and **3.11**).

Restoration works must also comply with the *City's* requirements (see **2.13.6**).

4.16.4 Complaints

Where persons are affected by works, in the first instance complaints should be directed to the relevant government agency/utility owner or contractor undertaking the work. Where it is not possible to identify the nature of work and/or the agency/contractor involved, the *City* can be contacted on telephone 9265 9333 and will attempt to communicate with contractors to resolve the issues.

4.17 Temporary removal/relocation of street furniture, light poles and other street infrastructure

Where development or work requires the temporary removal or relocation of street infrastructure to allow works to take place e.g. the installation of *hoardings*, *road openings* or access driveway crossings to sites, proposals will need to be considered by the relevant units within the *City*.



Photos: Peter Conroy / City of Sydney

4.17.1 Street furniture

There is a vast array of street furniture throughout the city. Street furniture/infrastructure includes:

- bus shelters;
- kiosks (food/beverage, newsstand and florist retail outlets);
- phone booths;
- poster/advertising bollards;
- bicycle racks;
- light poles (see **4.17.2**); and
- other elements such as litter bins, bench seats, vehicle bollards and drinking fountains.

The approval of the *City* is required to permanently or temporarily remove or relocate furniture and light

poles. Other approvals or agreements from other agencies and organisations will also need to be obtained, such as:

- NSW State Transit – impact on bus stops and/or shelters;
- Telstra – telephone booths; and
- The *City*'s property manager – consideration of potential impacts on kiosk tenants.

Obtaining approvals from these entities can often take considerable time therefore this must be allowed for in the project timeframes and planning processes.

4.17.2 Street lighting alterations (temporary removal or relocation)

Proposals for temporary street lighting alterations (removal or relocation of existing street lighting) in order to facilitate site access or *construction activity* must be submitted to the *City* for consideration. To reduce delays in obtaining a decision, proponents must lodge requests as soon as possible in the planning and site establishment processes.

In lodging an application and obtaining *approval*, the following requirements apply:

- (a) lighting alteration requests must be accompanied by an alternative temporary lighting design /proposal that is certified by a suitably qualified practising lighting engineer confirming compliance with the *City*'s public domain lighting specifications;
- (b) evidence of *hoardings* and/or *works zone approvals* must be provided or confirmed prior to *approval* being granted for lighting alterations (see **2.6** and **2.14**); and
- (c) adequate security undertakings (*performance bonds* – see **1.14**) will apply and be held until reinstatement of the altered lighting assets is completed to the *City*'s standards and *approval*.

In circumstances affecting lights owned and maintained by Ausgrid, the *City* will need to review the temporary lighting proposals before requesting Ausgrid to relocate or remove a street light or pole. All costs associated with street lighting alterations must be borne by the proponent.

4.18 Site fences, gates and doors adjoining a public space

Unless otherwise specifically *approved*, no portion of a proposed *temporary structure* such as site safety fences, *hoardings* and *work compounds* including gates and doors, shall encroach or open over a *footway* or *roadway*.

It is an offence under the Roads Regulation 2018 (clause 18) to allow gates/doors to open over a *road* (*footway*).



Photo: Peter Conroy / City of Sydney

4.19 Commercial bill posters and graffiti on hoardings, worksite safety fencing and work compounds

Bill posters and graffiti on site safety fences, *hoardings* and *compound* fences (see **2.16**) are visually polluting and therefore must be removed within 24 hours of attachment.

The posting of bills is an offence and *City* rangers can issue on-the-spot fines to persons applying posters.



Photo: Peter Conroy / City of Sydney

The display of artwork and/or historic images on fences can prevent or reduce the incidence of graffiti attack and poster attachment. The *City* can require the display of artwork/images as a condition of an *approval* (see **4.20**).

Further information: Refer to the *City's* 'Code of Practice: Construction-related Temporary Structures On and Above Roads' for requirements regarding bill poster and graffiti controls that apply to *hoardings* including requirements to display artwork and other graphics.

4.20 Public art and other graphics on temporary site security/safety fencing

The *City* encourages the display of *approved* temporary public art/historic images on or around the perimeter of *worksites* to enliven the local streetscape and minimise adverse visual impacts of temporary fencing.



Photo: Katherine Griffiths / City of Sydney

The display of graphics can also act as a deterrent to graffiti and bill posters thereby reducing maintenance costs (removing, cleaning and repainting fence surfaces). Artwork also adds visual interest and increases the presence of creativity in the streetscape.

4.20.1 Approval requirements and processes

Where graphics are proposed to be displayed on site fences placed within the allotment boundaries of a property, *development consent* is required (see **3.12**).

For fencing used to form *work compounds* on *City* owned land (*footways* and *roadways*), refer to the *City*'s 'Code of Practice: Construction-related Temporary Structures On and Above Roads' and website for further details in relation to the display of graphics.

