

Hoarding and Tower Crane Standard 2020

Adopted: 22 May 2020

TRIM 105918.2020



Hoarding and Tower Crane Standard

DIRECTORATE: City Economy & Growth

BUSINESS UNIT: Community Standards

1. PURPOSE/ OBJECTIVES

1.1 The purpose of this Standard is to provide guidelines and controls for both hoardings and tower cranes during development activities undertaken within Liverpool City Council's local government area.

1.2 The Standard prescribes design and installation criteria to control the placement of hoarding located on, or tower cranes which overhang, slew or hoist over, public footpaths and roads.

2. SCOPE

This Standard applies to the erection of hoardings and tower cranes within the Liverpool City Council local government area.

3. DEFINITIONS

Hoarding means a temporary barrier erected on Council land to restrict public access to a construction site and to minimise potential harm on the public as a result of the development.

Type A Hoarding means a site fence which encloses or isolates the work site from public areas primarily to restrict site access from the public.

Type B Hoarding means a site fence which provides additional overhead protection

Classified Road means any of the following:

- (a) a main road,
- (b) a highway,
- (c) a freeway,
- (d) a controlled access road,
- (e) a secondary road,
- (f) a tourist road,
- (g) a tollway,
- (h) a transitway,
- (i) a State work.

(See *Roads Act 1993* for meanings of these terms.)

Hoisting means to raise or lift objects by means of ropes and pulleys.

Public Way means a road or footpath which the public are entitled to use

Shared Pathway means a pathway that supports multiple recreation and transportation opportunities, such as walking, bicycling, inline skating and people in wheelchairs

Slewing means the angular movement of a crane boom or crane jib in a horizontal plane.

Tower Crane means a crane which is fixed on site for an extended period of time.

STANDARD STATEMENT

The standard explains what is to be done, by whom and when. Set it out as shown below.

Responsible staff position	Step number	Action
Manager Community Standards		

AUTHORISED BY

Kiersten Fishburn, Chief Executive Officer

EFFECTIVE FROM

22 May 2020

REVIEW DATE

The standard must be reviewed every two years or more frequently depending on its category or if legislative or Standard changes occur.

VERSIONS

Version	Amended by	Changes made	Date	TRIM Number
1	Adem Sertlioglu & Aydin Sertlioglu	New Standard	29/01/2020	105918.2020

REFERENCES

The following acts and regulations are the guiding legislation for hoarding and tower crane matters:

Environmental Planning and Assessment Act 1979

Local Government Act 1993

Roads Act 1993

Work Health and Safety Act 2011

WorkCover's Code of Practice – Overhead Protective Structures

AS 1742 Part 3 Manual of Traffic Control Devices

Revision of Guide to Traffic Engineering Practice Part 8: Traffic Control Devices

ATTACHMENTS

- **Attachment One (1)** of this standard depicts typical hoarding illustrations
- **Attachment Two (2)** of this standard defines high and low risk zones

4. Standard

4.1 Hoardings are designed to protect the public from the hazards of adjacent construction, excavation or demolition works. All building sites within Liverpool City Council's Local Government Area must be secured to prevent unauthorised entry and to provide safe access in accordance with current work, health and safety requirements.

4.2 Approvals for hoardings or tower cranes (which are temporary structures) will be made by Council in accordance with Section 68 of the Local Government Act 1993 (an activity under Category E (2) of the table to that Section). Any approval issued by Council will be subject to conditions with which an applicant must comply.

4.3 Where it is proposed that a tower crane is erected on a classified road, the concurrence of the NSW Roads and Maritime Services (RMS) must also be obtained (s138(2) of the Roads Act 1993). Council must refer the application to RMS for their concurrence. It is important that applicants allow sufficient time in their work program to obtain the required concurrences and approvals. A list of classified roads is available on the RMS website.

4.4 Hoardings and tower cranes shall be of a good condition and maintained regularly to prevent injury to the general public and protect the amenity of the surrounding land.

4.5 Tower cranes (specifically the overhang, hoisting or slew) located or moving wholly within the confines of private property, are not obligated to obtain a tower crane approval from Council, however, development consent may still be required. Construction sites must comply with relevant parts of this standard, WorkCover's Code of Practice 1995 for Overhead Protective Structures and the Work Health and Safety Act 2011 to ensure public safety and access is maintained.

4.6 General- Hoardings

4.6.1 Hoardings shall be designed in accordance with adopted designs and specifications stipulated in this hoarding standard, known as either a Type A or a Type B hoarding. The type of hoarding required to be erected will be depicted by the locality, being either within a low risk or high risk zone, and nature of the proposed construction work.

4.6.2 Hoardings must be erected where it is proposed to carry out works adjoining a public way. Hoarding fees will be charged in accordance with Council's most current Schedule of Fees and Charges.

4.8 Type A Hoarding

4.8.1 Type A hoarding in a low risk zone:

- a. The hoarding is required to be a minimum height of 1800 mm;
- b. The hoarding may be constructed of a demountable open panel fence (temporary fencing) with dust preventative measures (mesh, dust preventative wrap);
- c. The hoarding may encroach onto Council's land to the extent of the nature strip and up to the footpath, ensuring the footpath is left accessible for pedestrians - in circumstances where there is no nature strip and the footpath abuts the boundary, a maximum encroachment of 600 mm is allowed;
- d. The minimum width of accessible footpath shall be 1200 mm or the existing footpath width (the greater of the two shall be adopted) to ensure continual pedestrian access;
- e. The consistency of the pedestrian access provided is required to be of the same quality and standard as what was there prior to the hoarding being erected;
- f. The supporting feet elements of the hoarding structure is to be visually obtrusive to ensure it is easily visible by pedestrians;
- g. Must not obstruct the view of traffic lights or signage; and,
- h. The area of encroachment on Council's road reserve is to be reinstated to original condition upon removal of the hoarding.

4.8.2 Type A hoarding in high risk zone:

- a. The hoarding is required to be a minimum height of 2100 mm;
- b. The hoarding must be constructed of solid timber panels with a minimum thickness of 17 mm. The hoarding is to be free of any protrusions (i.e. bolts and nails) and panels must be securely fixed flush and even;
- c. The minimum width of accessible footpath shall be 1500 mm to ensure continual pedestrian access;
- d. The consistency of the pedestrian access provided is required to be of the same quality and standard as what was there prior to the hoarding being erected;
- e. Must not obstruct the view of traffic lights or signage; and,
- f. Certification by a qualified and practicing structural engineer is required.

4.9 Type B Hoarding

4.9.1 A Type B hoarding can either be stand alone or incorporate site sheds or site offices. A Type B hoarding is required when works to an existing or proposed building, adjoining a public way:

- a. Are 7500 mm or greater in height and less than 3500 mm from the street alignment; or,
- b. Has a vertical height above footpath level of 4000mm or greater

4.9.2 A Type B hoarding must comply with the following requirements:

- a. Have a minimum clear distance of 250 mm from the edge of the kerb to any part of the hoarding structure. If this distance is greater than 400 mm, pedestrian access between the structure and the kerb is to be blocked off at each end;
- b. Have a minimum overhead clearance of 2200 mm to any bracing, beams or any other part of the structure;
- c. The street side should be open for at least two-thirds of its height for the full length of the structure to prevent a “tunnel effect”;
- d. A clear span of 1500 mm is required for continual pedestrian access at all times;
- e. The hoarding structure must be of square hollow section type or similar (subject to Council review i.e. container type)
- f. For visibility requirements, the structure shall be painted white below the deck level; and,
- g. Certification by a qualified and practicing structural engineer is required.

4.9.3 All Type B hoardings are required to be constructed in accordance with the above design criteria and WorkCover’s Code of Practice 1995 for Overhead Protective Structures regardless on whether the hoarding is located within a low or high risk zone.

4.10 Shared Pathways

4.10.1 When a hoarding is proposed along a Shared Pathway, the standard hoarding minimum clearances may not be applicable. In such cases, Council will evaluate hoardings and propose a solution in consultation with Council’s Traffic Engineers to ensure functionality of both the shared pathway and proposed hoarding.

4.11 Prohibited Hoarding Materials

4.11.1 For Type A and Type B hoardings, the following are not permitted to form part of the hoarding structure situated on Council's road reserve:

- a. Scaffolding;
- b. Demountable open panel fencing (temporary fencing) - with the exception of Type A low risk zone hoardings;
- c. Reinforcing mesh;
- d. Star pickets and Cyclone mesh; and,
- e. Similar structures as mentioned above that are not permanently fixed.

4.12 Lighting

4.12.1 Type B Hoarding lighting, connected to mains power supply, must be provided to ensure the pedestrian pathway or footpath is well lit for pedestrians. Lighting is to be equal to the level and distribution pattern of the existing street lighting in the area.

4.12.2 Where pedestrian hazards associated with the hoarding are present, Council will require the establishment of significantly higher lighting levels.

4.12.3 All lighting associated with hoardings must not impact on surrounding traffic.

4.13 Office Sheds

4.13.1 All site office and work sheds are to be located on private property. Where this is not possible, a Type B hoarding must be erected to facilitate this requirement.

4.13.2 Sheds placed above Type B Hoardings must have a minimum ceiling height of 2400 mm and must be tied down to the deck of the Hoarding by suitable structural fixings – which is to be certified by a qualified practicing structural engineer.

4.13.3 The office sheds and work are to be concealed from public view.

4.14 Use of Cranes or the Like

4.14.1 A crane or similar (i.e. mobile crane, hoist, concrete pump etc.) must not be used to convey material over a public way, unless a Type B Hoarding is in place and an appropriate approval has been obtained from Council.

4.14.2 The use of cranes, hoists, and concrete pumps shall not be placed on public property unless prior approval has been obtained from Council.

4.15 Safety and Access

4.15.1 Protective Footway Crossings

- a. Vehicles must not cross the footpath to gain access to the site. If a vehicle crossing is required a temporary vehicular crossing shall be constructed to the satisfaction of Council.
- b. The temporary vehicular crossing shall protect the existing footpath, be maintained and must not cause a tripping hazard or pose any danger to the public.

4.15.2 Utility Services

- a. Hydrants, utility services and sewer manholes are not to be obstructed to ensure ongoing access to these services is maintained at all times.
- b. If the structure is in close proximity to overhead electricity wires, electrical hazards are likely. Applicants must consult with the relevant electrical authority if the structure is within two metres of wiring. All electrical distribution boards required for site works are to be located within the site and not attached externally to the structure.
- c. Applicants must consult with the appropriate utility authority to ensure that there is no adverse impact on infrastructure from the proposed work.

4.15.3 Footpaths and Provision for People with Disabilities

- a. When required, pedestrian detours or alternative pathways must be designed to provide for disabled access. These routes must provide appropriate widths, levels, gradients, tactile indicators and colour schemes to assist people with disabilities.
- b. Pathways must be repaired immediately, if damaged, to ensure pedestrian safety. Footpaths must be reinstated to their original condition to the satisfaction of Council, when a hoarding is removed.
- c. Any obstruction to the footpath from a proposed concrete pour, laying of cables, conduits, drainage pipes, service lines and the like requires separate prior approval from Council.

4.16 Maintenance of Hoardings

4.16.1 Graffiti Prevention

a. Bill posters and/or graffiti must be removed or painted over on all hoarding structures within 48 hours of detection or Council notification. Hoardings must consist of appropriate coverings to assist in graffiti removal or measures to reduce the occurrence of graffiti.

4.17 Protection of Council Street Trees

4.17.1 The design of a hoarding, including the type and location of posts, counter weights, crossings and overhead decking, must be designed to minimise impact on the street trees and vegetation.

4.17.2 Tree preservation measures may be required if there is an impact on street trees. No tree cutting, lopping or removal is permitted without the prior consent of Council.

4.18 Council Assets

4.18.1 Council's infrastructure and assets must not be interfered with or damaged during the construction or operation of the hoarding. This includes the drainage system, kerb and gutters, footpaths and the like. Prior approval from Council is required for any modification to Council's Infrastructure.

4.18.2 The use of the roadway for storage of materials, loading and unloading is not permitted at any time, unless prior approval has been obtained from Council.

4.18.3 Council's footpaths, roadways and ancillary infrastructure assets (i.e. street furniture, signage and the like) must be reinstated to their original condition when a hoarding is removed. An initial dilapidation report must be prepared and submitted to Council prior to the commencement of works and a second dilapidation within one week of the completion of work.

4.19 Traffic Management Plan

4.19.1 A traffic management plan (TMP) must be prepared by an accredited traffic engineer, if a hoarding is likely to affect pedestrian or traffic movements during the construction, operation or removal phase. The TMP must identify traffic and pedestrian issues, recommend appropriate means for dealing with such issues and must be submitted with the hoarding application for Council approval. Council's traffic engineers may provide relevant advice regarding the contents a TMP and / or request additional permits be obtained in addition to the hoarding approval.

4.19.2 A TMP must refer to relevant Council, Police and/ or RMS requirements. Specials conditions may apply, especially in high trafficable areas of the City or in the vicinity of pedestrian malls and traffic interchanges.

4.19.3 The TMP should provide for traffic control in accordance with Revision of Guide to Traffic Engineering Practice Part 8: Traffic Control Devices Details should be included in a TMP as required.

4.19.4 A copy of the TMP must be available onsite at all times for the inspection of an authorised officer of Council, the NSW Police or the RMS.

4.20 Obstruction to Traffic Lights, RMS Cameras and CCTV Cameras

4.20.1 All hoardings must be constructed so that they will not obstruct the sight lines of either motorists or pedestrians to traffic lights and cameras.

4.20.2 The hoarding application site plan must set out the location of all traffic lights, RMS monitoring cameras, closed circuit television cameras and the like. The application must ensure there is no interference in the operation of these facilities. Referrals to the appropriate authority or Council or private organisations may be required to confirm there is no proposed interference.

4.21 Tower cranes

4.21.1 General

Tower cranes shall be designed and installed in accordance with engineer certified designs and specifications.

4.21.2 Suitable Locations

a) Tower cranes shall not be erected or encroach on any public land or neighbouring properties.

4.21.3 Hours of operation

a) Tower cranes shall only be operated between the approved operating hours prescribed by the relevant development consent.

4.21.4 Layout and Accessibility

- a) Tower cranes shall not compromise the existing street activities, through maintaining adequate clearances.
- b) The proposed location of the tower crane footing shall be incorporated into the site plan of the development and must be approved by Council and maintained at all times.

4.21.5 Information relating to hoisting activities and public safety

- a) The approval of hoisting activity over a public road (roadway and/or footway) is regulated through the Local Government Act 1993 and associated Regulations. Any approval granted for this activity does not endorse or approve the design or structural adequacy for a hoisting device, system or operation for the purposes of satisfying a person's responsibilities under the Work Health and Safety Act 2011 and Regulations; including the provisions of clauses 34, 35, 54, 55 and 235 of the Work Health and Safety Regulation 2011.

4.22 Tower Crane Lighting

- a) Tower crane imagery shall not be illuminated, aside from aviation warning lights.

4.23 Amendments to an Approval

a) Any modification to an approved hoarding or tower crane design, or change from one type of hoarding or tower crane to another, requires the submission of a further application for Council approval, accompanied with reasons to support the proposed changes and payment prescribed in Council's latest Schedule of Fees and Charges. Additional information may be requested by the assessing officer in order to appropriately assess the application.

4.23.1 Renewal of an Approval

- a) Council may determine to extend a hoarding or tower crane approval under section 107 of the Local Government Act 1993 if it is satisfied that there is good cause for doing so. An approval will not be extended beyond five years.
- b) An approval to extend an approval must be obtained before it lapses. The application must:
 - i. Provide reasons for an extension of approval;
 - ii. Set out the proposed extended period required; and,
 - iii. Set out any actual changes, if any, from the original approval.
- c) A certificate from an appropriately qualified person may also be required to confirm that the temporary structure remains structurally sound.
- d) A renewal must include payment, as prescribed in Council's latest Schedule of Fees and Charges. Failure to renew an application can cause all building or demolition works to cease on site.

4.24 Breaches and enforcement of this Standard

4.24.1 Breach of Act

a) Section 672 of the Local Government Act 1993 states that a non-compliance with an approval issued under this Act is a breach of the Act.

Type A Hoardings – Low Risk

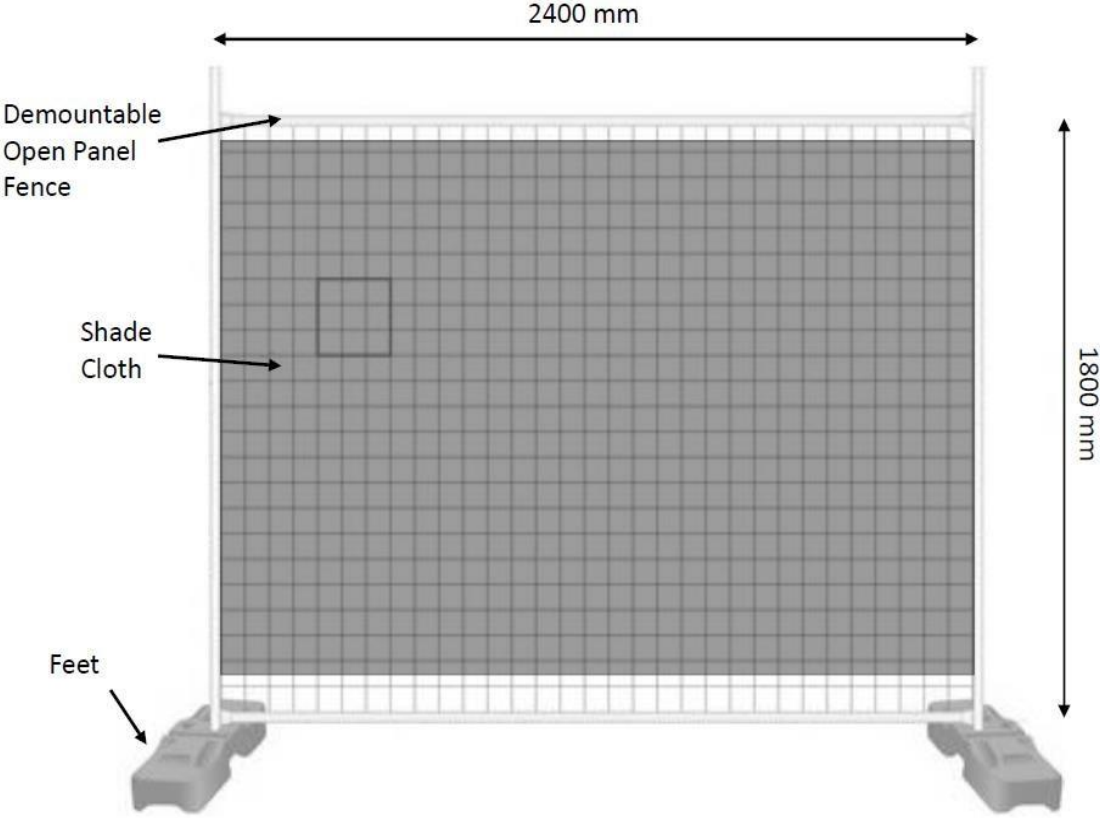


Figure 1: Typical Low Risk Type A Hoarding

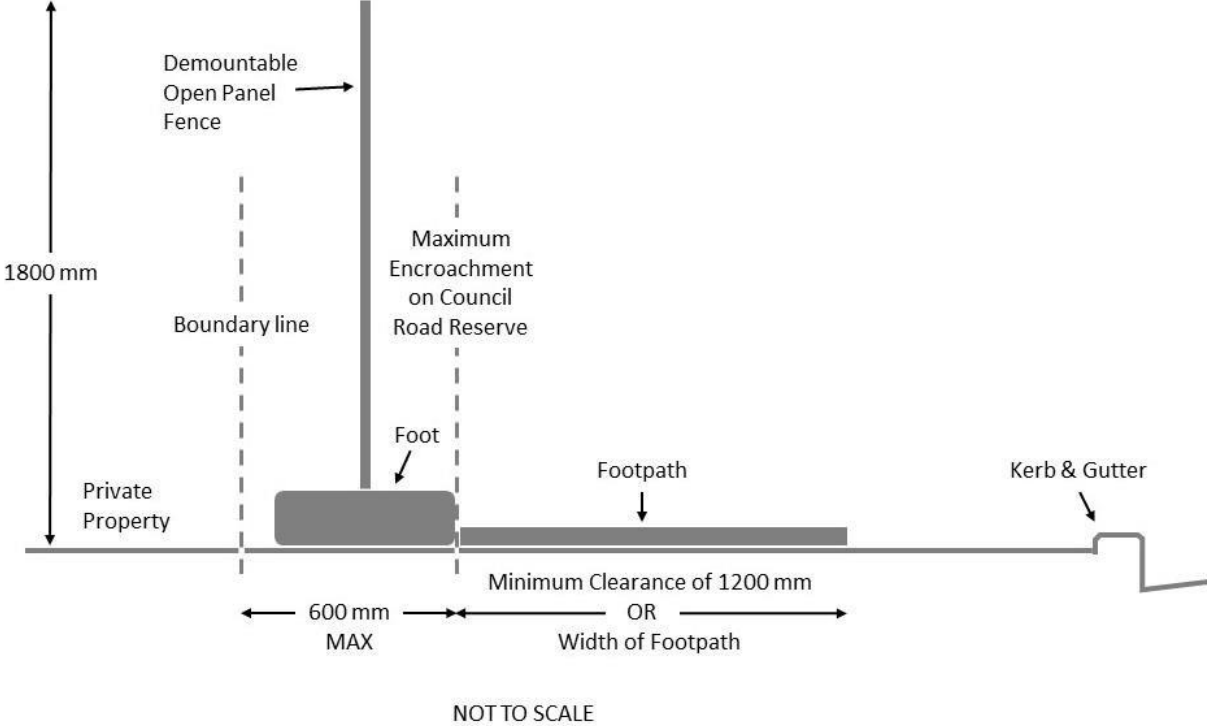
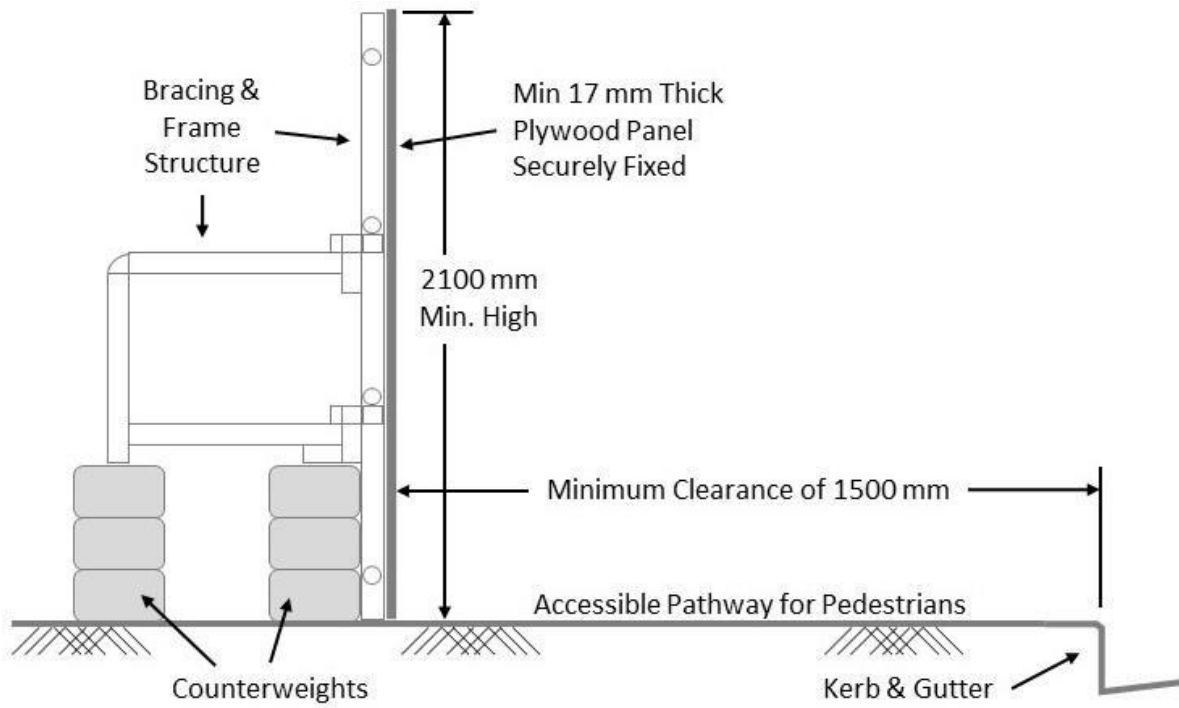


Figure 2: Typical Low Risk Type A Hoarding Section/Detail

Type A Hoardings – High Risk



NOT TO SCALE

Figure 3: Typical High Risk Type A Hoarding Section/Detail

Type B Hoardings

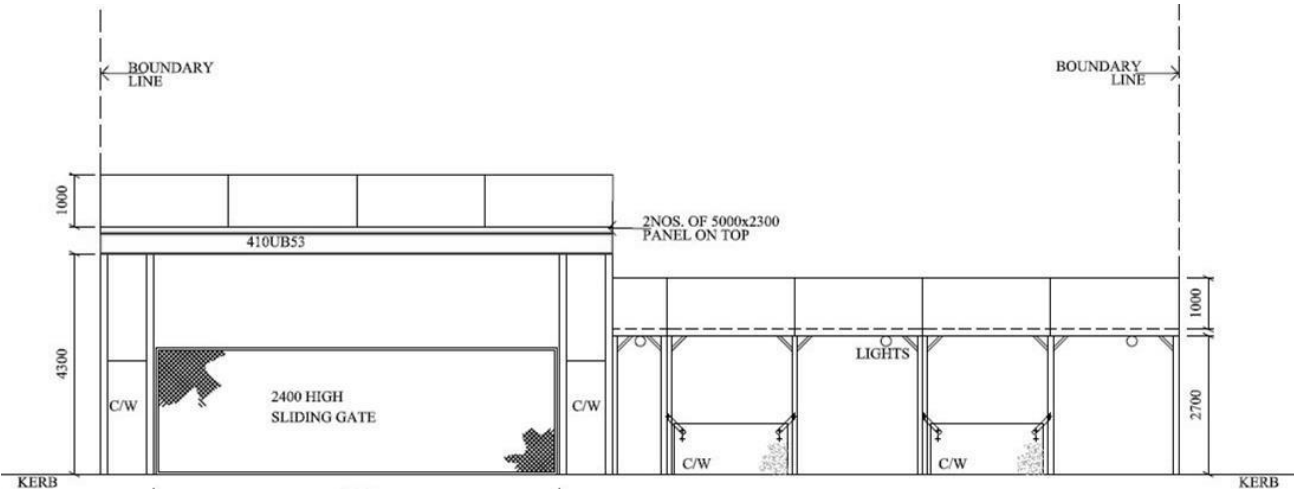


Figure 4: Typical Type B Hoarding Elevation View

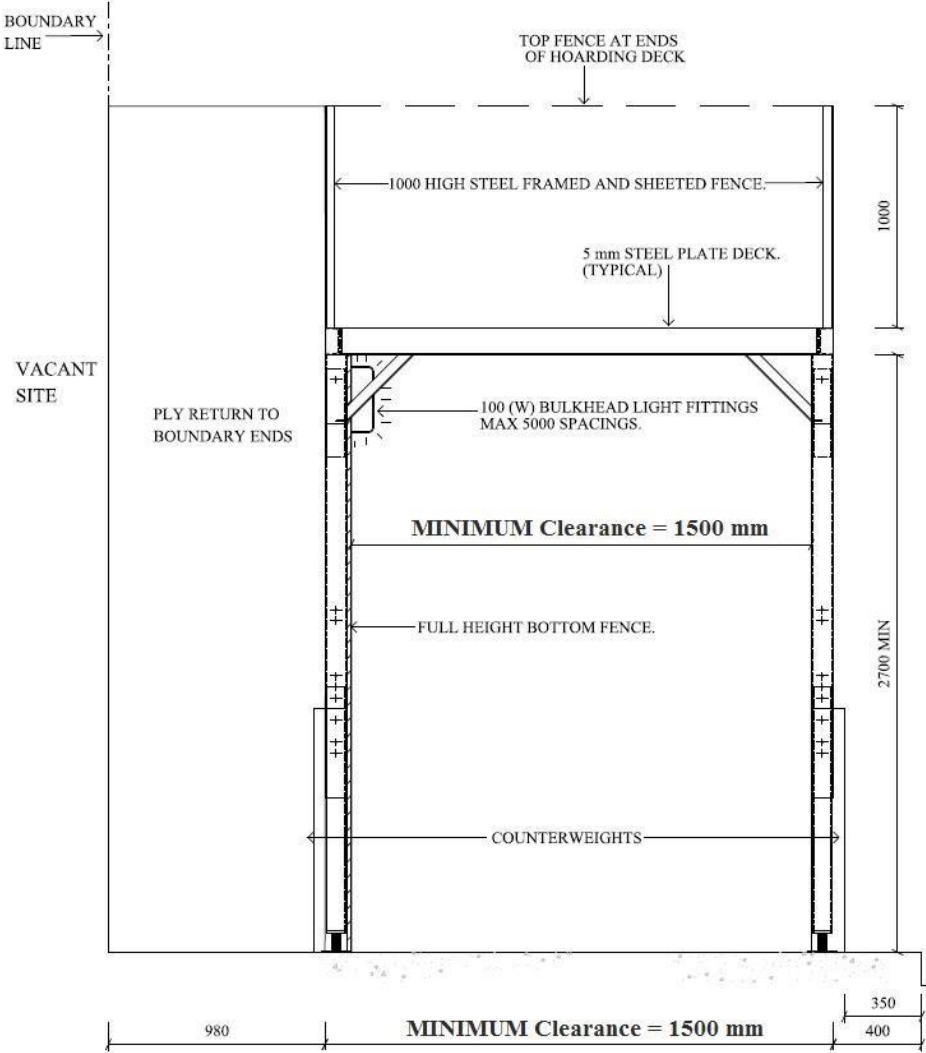


Figure 5: Typical Type B Hoarding Section/Detail

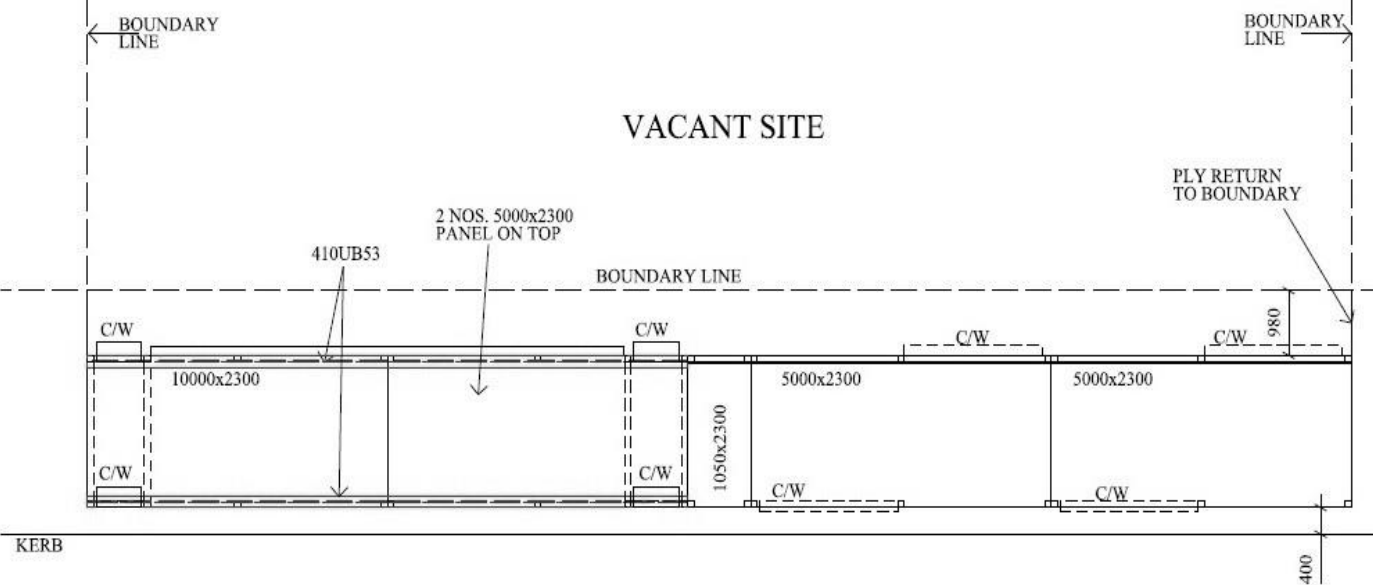


Figure 6: Typical Type B Hoarding Plan View

Attachment 2 – low and high risk zones

The type of hoarding required to be erected will be depicted by the locality, being either within a low risk or high risk zone.

Low Risk Zone

Classified by falling in either one of the following land zone categories pursuant to the Liverpool Local Environment Plan 2008:

- R1 - General Residential (unless development associated with high risk zone)
- R2 - Low Density Residential
- R3 - Medium Density Residential

High Risk Zone

Classified by falling in either one of the following land zone categories pursuant to the Liverpool Local Environment Plan 2008:

- B1 - Neighbourhood Centre
- B2 - Local Centre
- B3 - Commercial Core
- B4 - Mixed Use
- B5 - Business Development
- B6 - Enterprise Corridor
- E1 – National Parks and Nature Reserves
- E2 - Environmental Conservation
- E3 - Environmental Management
- IN1 - General Industrial
- IN2 - Light Industrial
- IN3 - Heavy Industrial
- R4 - High Density Residential
- R5 – Large Lot Residential
- RE1 - Public Recreation
- RE2 - Private Recreation
- RU1 – Primary Production
- RU2 – Rural Landscape
- RU4 Primary Production Small Lots
- SP1 - Special Activities
- SP2 - Infrastructure
- W1 - Natural Waterways
- W2 - Recreational Waterways