



## **THE WORKSHOPS DESIGN GUIDELINES**

*Adopted by Midland Redevelopment Authority - 29 November 2011*

MIDLAND REDEVELOPMENT AUTHORITY

**the  
WORKSHOPS**

PREPARED BY TPG TOWN PLANNING AND URBAN DESIGN  
IN ASSOCIATION WITH THE MIDLAND REDEVELOPMENT AUTHORITY



TOWN PLANNING  
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MIDLAND  
REDEVELOPMENT  
AUTHORITY

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2000 AERIAL ILLUSTRATING THE FORMER MIDLAND RAILWAY WORKSHOPS.



2011 AERIAL ILLUSTRATING THE SITE PREPARATION AND ONGOING DEVELOPMENT OF THE MIDLAND RAILWAY WORKSHOPS.

## INTRODUCTION

These Design Guidelines apply to development within The Workshops in the Helena Precinct of the Midland Redevelopment Area. This land is under the planning and development control of the Midland Redevelopment Authority (MRA), an agency specifically established to assist with the revitalisation of Midland. The MRA is the determining Authority for Development Applications.

The Workshops are a State heritage icon, located directly south of the traditional town centre and Midland Station and rail line, east of Woodbridge Lakes residential estate and west of the Midland Health Campus and WA Police Operations Centre. The Helena Foreshore provides a backdrop and southern boundary to The Workshops area. Figure 1 illustrates the extent of application of these Design Guidelines.

The Design Guidelines provide high-level design guidance, vision setting and the overall intent for The Workshops. They are aimed at increasing planning certainty to facilitate timely development approval and achieve desired built form outcomes whilst conserving the heritage significance of The Workshops.

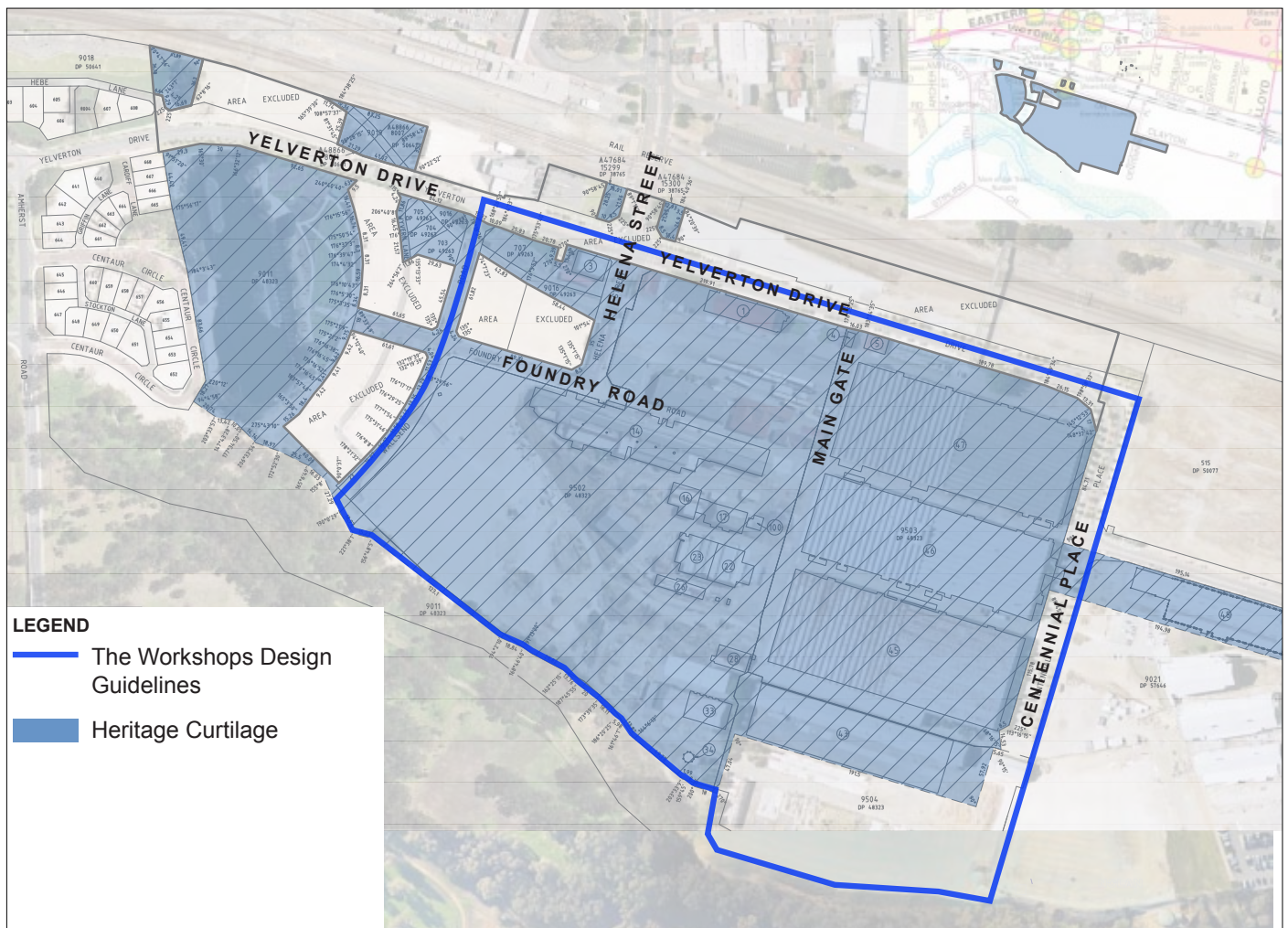


FIGURE 1 – APPLICATION OF DESIGN GUIDELINES AND HERITAGE CURTILAGE

## PLANNING FRAMEWORK

The Midland Redevelopment Scheme ('the Scheme') outlines the statutory processes and controls for land within the MRA's jurisdiction. The Scheme provides standards for parking and outlines preferred and potential land uses. It outlines objectives in relation to character, heritage and mixed use development and the procedures to manage these.

The MRA has prepared and adopted The Workshops Design Guidelines pursuant to Part 5 of the Scheme and they should be read in conjunction with the Scheme Text and other relevant planning policies and design guidelines. In determining any application for planning approval, the Authority will have due regard to all relevant documents. The MRA may exercise discretion and will be supportive of development that, in its opinion, advances good urban design and the planning objectives of the Scheme.

It is strongly recommended that prospective landowners and their architect approach the MRA at the earliest stage of design development to discuss proposals and facilitate the planning approval process. A collaborative approach is sought throughout design and development. The MRA encourages the use of architects/heritage architects with experience in large scale heritage environments due to the unique development requirements and special qualities of this iconic site.

The information requirements for planning applications reflect the need for a broad range of information for new development within Midland, particularly at the heritage listed Workshops. The aim is to gain a thorough appreciation of the site context, design response and development intent together with a reasonably detailed understanding of the physical form, finish and operation of the development and how it contributes to the overall character and values of The Workshops. The assessment process will look for demonstration that the development proposal will provide an appropriate high quality design outcome. Refer to the MRA website for information requirements for development applications. Please note that the MRA also seeks application information in digital form (PDF).



VIEW WEST TOWARDS HELENA STREET FROM PROPOSED RAILWAY SQUARE

## COMPANION SITE SPECIFIC GUIDELINES

In addition to these Design Guidelines, companion Site Specific Guidelines are prepared and adopted by the MRA as the need arises for sub-precincts and lots within The Workshops. They provide more detailed guidance that takes into consideration the design intent for that particular area and the neighboring built form, landscape and/or heritage related elements. Note that standards within The Workshops Design Guidelines may be varied in the Site Specific Guidelines.

Site Specific Guidelines are primarily (but not exclusively) prepared for lots that do not contain built heritage elements. Where a site includes a retained heritage building or element, design guidance will mainly be provided in the form of conservation plans with policy on adaptive reuse strategies. A range of planning and design matters may still be dealt with via the overarching Design Guidelines and Site Specific Guidelines.

## ENVIRONMENTAL DESIGN

The MRA wishes to foster the highest possible standards of development and promote innovation in design and construction, especially in the areas of energy efficiency and ecological sustainability, Crime Prevention Through Environmental Design (CPTED) and building design to ameliorate the effects of noise and vibration.

### Ecologically Sustainable Design (ESD)

Developers are encouraged to incorporate Ecologically Sustainable Design (ESD) standards in building and landscape design, promoting design to reduce carbon emissions; improve amenity and comfort; and reduce the lifecycle operating costs of buildings. Development that achieves a 4-star Green Star rating or higher under the Green Building Council of Australia rating system (<http://www.gbca.org.au>) is strongly encouraged. Developers will be required to report on the chosen ESD initiatives and their impact on benefits and savings.

A non-potable water purple pipe system has been installed at The Workshops. Whilst no treated water regime is in place, applicants are encouraged to make provision for future connection.

The Workshops has been through an extensive remediation process to clean up past industrial activities. The Department of Environment and Conservation (DEC) issue a site classification for each lot to confirm suitability for intended use and place a memorial on title in this regard. This addresses both soil and groundwater matters. For all lots within The Workshops there is a restriction on the abstraction of groundwater.

### Crime Prevention Through Environmental Design (CPTED)

CPTED principles have been embedded in the Design Guidelines to reinforce the safety and security of the area with a particular focus on maximizing casual surveillance and activation of the public realm. In the application of CPTED principles, overt expressions of access control and security features should be avoided, wherever possible. Many requirements in these Guidelines are aimed at meeting the needs of visitors, residents and pedestrians in a way that also reinforces safety.

## Noise and Vibration

The Workshops is located directly adjacent to the rail reserve where freight and interstate trains travel on a regular basis. A single rail line has been retained into The Workshops site for use on special occasions, with trains 'walked in' by flag bearers at very slow speed.

The Workshops, as with much of Midland, is close to Perth Airport. In the future, additional runways may be added to the Airport. The Workshops is under one of these possible flight paths and may fall within the 20-25 Australian Noise Exposure Forecast (ANEF) contours where noise amelioration measures may be required.

The intent for The Workshops is to create a vibrant mixed-use environment, where activity may occur outside of normal business hours. In addition to this, public places such as Railway Square will be used to host occasional organised events such as community festivals, celebrations or markets so it is important that design deals with such noise to enable multiple uses to coexist.

In response to these impacts the MRA have adopted Planning Policy 2.12 Noise Attenuation (see [http://www.mra.wa.gov.au/planning/planning\\_publications/Policy\\_2.12\\_-\\_Noise\\_Attenuation.phtml](http://www.mra.wa.gov.au/planning/planning_publications/Policy_2.12_-_Noise_Attenuation.phtml)). This sets out minimum indoor noise levels to be met for residential development and requires the preparation of an acoustic report by a suitably qualified professional and the implementation of measures at the construction stage.

Memorials have been placed on titles of all land parcels potentially affected by noise and vibration.

## HERITAGE CONSIDERATIONS

In June 2008 the former Midland Railway Workshops and its curtilage, including much of The Workshops, was entered on the permanent State Register of Heritage Places. Memorials on land titles reflect this status. Development applications will be referred by the MRA to the Heritage Council of Western Australia (HCWA) for comment prior to determination.

These Design Guidelines have been developed in conjunction with the HCWA. Applicants should also refer to the "Heritage Strategy for the Midland Central Redevelopment Area" adopted by the MRA in March 2003. The document provides additional guidance on responding to heritage within this area. An extensive amount of material is available from the MRA in relation to conservation plans and policies, archival records and interpretation strategies together with site wide planning and landscape strategies that have guided the redevelopment of The Workshops and may inform new proposals.

The MRA will require a Heritage Impact Statement (HIS) prepared by an appropriately qualified heritage specialist to be submitted with any significant development proposal in The Workshops. The HIS shall demonstrate how the development addresses the heritage of the site and adjacent heritage listed buildings and spaces.

Where a development application deals with a heritage building, the relevant conservation plan will apply and be considered in the assessment in addition to these Design Guidelines. The HCWA will enter into a heritage agreement with the purchaser of a heritage building and this will set out, amongst other matters, the scope of conservation works to be undertaken within a specified timeframe.



WORKSHOPS BLOCK 1 IS A KEY HERITAGE ELEMENT IN THE WORKSHOPS.



THE GP SUPER CLINIC CONTRASTS HERITAGE FORMS WITH CONTEMPORARY DESIGN AND MATERIALS.

THE WORKSHOPS HERITAGE CURTILAGE ILLUSTRATING KEY SIGHT LINES (IN RED).



- Industrial type buildings
- Administration type buildings
- Ancillary type buildings

## UNDERSTANDING THE PLACE

The Workshops is characterised by a mix of industrial, administration and ancillary buildings dating from the late 19th century, connected by an established network of roadways, rail tracks and open spaces. Table 1: Heritage Character Elements identifies the key aspects of these 3 building types.

TABLE 1: HERITAGE CHARACTER ELEMENTS		
<b>INDUSTRIAL BUILDINGS</b> e.g. Block 1 and Foundry	<b>ADMINISTRATION BUILDINGS</b> e.g. Chief Mechanical Engineer's Office and Railway Institute Building	<b>ANCILLARY BUILDINGS</b> e.g. Time Keeper's Office
<ul style="list-style-type: none"> <li>- Robust and simple forms with rectilinear floor plans.</li> <li>- Pitched gable roof or saw tooth roofs with parapet walls.</li> <li>- Stepped or corbelled parapet gables.</li> <li>- Facades divided into regular vertical bays formed by piers and recessed arches.</li> <li>- Regular vertically proportioned openings.</li> <li>- Clerestory windows or roof lights.</li> <li>- Warm face-brickwork.</li> </ul>	<ul style="list-style-type: none"> <li>- Simple rectilinear floor plans.</li> <li>- Large gable or hipped roofs.</li> <li>- Projecting awnings fixed over the bands of windows.</li> <li>- Simple decorative ornament to the cornice and upper wall areas.</li> <li>- Regular patterns across the facades by the arrangement of openings and the repetition and vertical proportions of elements.</li> <li>- Warm face-brickwork contrasting with rendered horizontal banding.</li> </ul>	<ul style="list-style-type: none"> <li>- Simple rectilinear floor plans.</li> <li>- Shed-like appearance with domestic scale details including timber-framed doors, awnings and porches.</li> <li>- Vernacular building materials including horizontal weatherboards and sheets of corrugated galvanised iron, combined with concrete and brick.</li> </ul>



CHIEF MECHANICAL ENGINEER'S OFFICE.



CONTEMPORARY ADAPTATION OF THE FLANGING SHOP.

To aid an appreciation of the place, the key principles that have shaped the approach to landscape and public realm development and will influence private development are that:

- The Workshops shall be treated as a single place for consistency and meaning;
- Surface treatments, landscape and management relate to the spaces between and around heritage buildings rather than the separate lot boundaries; and
- Significant open spaces, view lines and connections are respected, retained and appropriately integrated.

New infill development needs to be complementary to the local and historic architectural traditions and contribute positively to already established building patterns. Respecting this existing context, new infill development shall explore contemporary design responses that revitalise the area and add interest to existing buildings and new public places and are clearly distinguishable as the next generation of development.

## PLANNING VISION AND OBJECTIVES

The Workshops are being developed as an urban village with a mix of uses including residential, commercial, health, education and creative industries together with a festival square for community use. It is envisaged that The Workshops will become a vibrant and dynamic area that builds upon its proud history with a new era of activity, high quality contemporary buildings, a meaningful and memorable public realm, and restored and adapted historic buildings. Future development will need to recognise and respect its uniqueness and contribute to telling the story of the place.

The redevelopment will enhance Midland's rich heritage, strengthening its role as a strategic regional centre and bringing economic, social and environmental benefits to the Midland City Centre and Swan region.

Forming part of the Midland City Centre and with its location beside the Midland Train Station, the aspiration for The Workshops is to function as a transit oriented development where high density and high amenity contemporary development creates sustainable community living in a setting that maintains a strong link to its heritage.

In particular, the vision and objectives for The Workshops is to:

### 1. Promote a vibrant mixed-use transit oriented development that is part of the Midland City Centre by:

- Seeking a wide range of uses and intensity of development that will generate activity and attract residents, workers, students and visitors to The Workshops.
- Providing a high amenity inner city lifestyle for residents, workers and visitors.
- Strengthening the focus on creative industries and lifestyle.
- Supporting public transport use and offering a lifestyle that has less reliance on private vehicle travel.

### 2. Enhance the unique character and identity of the area and celebrate its heritage value by:

- Recognising that The Workshops are celebrated as a State heritage icon and ensuring that conservation and interpretation conveys the multi-layered stories of the place.
- Developing contemporary architectural forms that complement and interpret the industrial aesthetic of The Workshops.
- Ensuring the scale, form and materials of new development is appropriate to The Workshops' heritage context.
- Emphasising pedestrian movement and amenity by creating a slow speed zone within The Workshops and achieving an appropriate landscape treatment for shade, comfort and enjoyment.



MIXED USE TO PROMOTE HIGH AMENITY AND ACTIVITY WITHIN THE WORKSHOPS



CONTEMPORARY FORMS THAT INTERPRET THE INDUSTRIAL CHARACTER OF THE WORKSHOPS IS CONSIDERED APPROPRIATE.

**3. Encourage built form that promotes security and safety through activation and overlooking of streets and spaces by:**

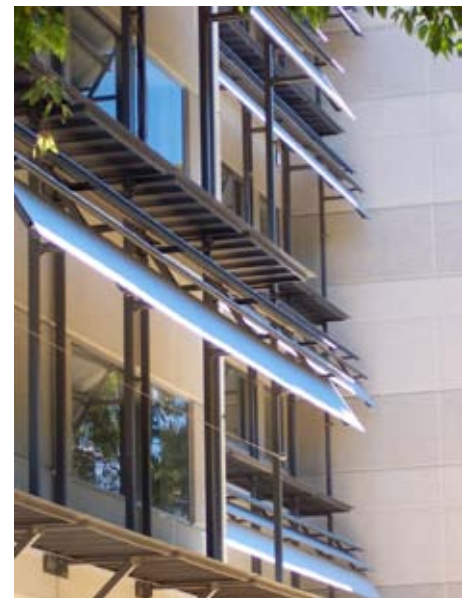
- Activating street edges and the public realm.
- Providing residential uses that overlook streets and the public realm.
- Delivering greater housing diversity, population density, employment and visitor experience to promote a higher level of activity and attract more people to The Workshops.

**4. Maximise opportunities to deliver sustainable development and best practices by:**

- Mixing of uses and intensity of development to support a compact, walkable environment that offers a high degree of local self containment.
- Promoting a minimum 4 Star rating using the GBCA Green Star rating tool for new development for a more comprehensive approach to achieving sustainability.
- Emphasising cycling and walking as attractive transport options by establishing high quality connections through The Workshops and across the rail line to the existing City Centre.
- Encouraging alternative energy choices through a major solar power demonstration project at The Workshops (60kWp photovoltaic array installed on heritage buildings).
- Pursuing integrated water harvesting opportunities and providing piped infrastructure to facilitate possible future reticulation of non-potable water throughout The Workshops.



ACTIVE FACADES PROVIDE OPPORTUNITY FOR SURVEILLANCE OF PUBLIC PLACES.



PROMOTING SUSTAINABLE DESIGN PRACTICES.

## GUIDELINES

These Design Guidelines provide an overarching framework for development. Requirements may be varied in an applicable Site Specific Guideline.

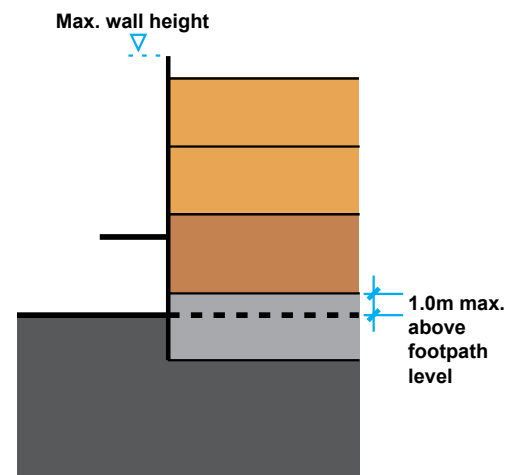
### 1. BUILDING ENVELOPE AND SETBACKS

- 1.1 Building height shall be generally consistent with heights of heritage buildings within The Workshops. Typically, a height of 3 to 4 floors applies across The Workshops, however in areas where increased or decreased height is considered appropriate, this will be addressed within the applicable Site Specific Guidelines. As a baseline, development shall be a minimum of 3 floors.
- 1.2 For 3 storey development, wall heights shall be a maximum of 10.5 metres. Ridge heights of pitched roofs shall not exceed 12 metres.
- 1.3 Floor to floor heights shall be a minimum of 3.5 metres on the ground floor and 3.0 metres on upper floors.
- 1.4 Where additional height is considered appropriate, development above the lower 3 floors shall be set back at least 2.5 metres. In such cases, where a parapet wall is provided that acts as the balustrade for balconies on the fourth level, an additional 0.5 metre wall height is permitted for the lower 3 floors.
- 1.5 To accommodate a semi-basement car park, the finished ground floor level may be raised a maximum of 1 metre above the finished level of footpaths abutting the lot boundary and the resultant wall and ridge heights may be increased by the same measure.
- 1.6 Where the ground floor is elevated above footpath/street level, there shall be a plinth that reads as a base element of the ground floor. Openings are permitted in the plinth wall for ventilation of semi-basement car parks but shall not allow a view into the car park by pedestrians.
- 1.7 Establishing a strong urban street edge is an important factor in reinforcing and building upon the rectilinear alignment of The Workshops layout. The intent is to achieve this by providing setbacks that either align with heritage buildings or by providing nil setbacks to the street and public realm. Breaks between buildings shall be limited to those required for pedestrian access and for vehicular access where no laneway is available.

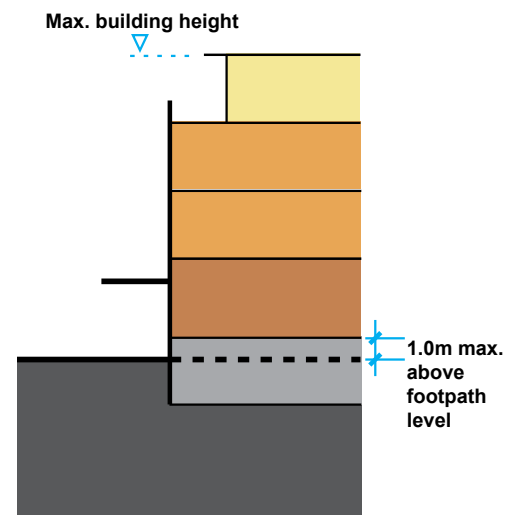
*NOTE: All heights are measured from finished ground level of the footpath on the adjacent street unless stated otherwise.*



3-4 STOREY HEIGHTS APPLIES ACROSS THE WORKSHOPS



INDICATIVE SECTION OUTLINING THE OVERALL WALL HEIGHT ALLOWANCE FOR BUILDINGS IN THE WORKSHOPS.



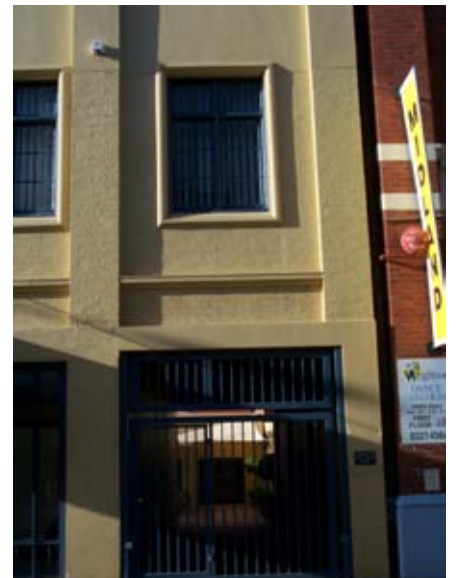
INDICATIVE SECTION OUTLINING THE OVERALL HEIGHT ALLOWANCE FOR BUILDINGS IN THE WORKSHOPS, INCLUDING A SETBACK TO THE UPPER FLOOR.

## 2. BUILT FORM AND FINISHES

- 2.1 New buildings shall be sympathetic to existing heritage buildings, however a contemporary response to the form and existing aesthetic of The Workshops is sought.
- 2.2 Any building façade that is visible from public view shall be designed and articulated as if it were the primary frontage of the building. Secondary frontages and internal courtyard frontages may have less detail but shall still relate to the design of the primary frontages and offer adequate amenity and visual interest.
- 2.3 The perimeter walls of large scale buildings shall present in simple form reflective of the industrial building type. This may be either a solid wall with openings or be developed as a frame spanning across the building and containing balconies, walls and windows that are set back behind this frame.
- 2.4 The structure and facade treatment shall establish a vertical rhythm that bears a relationship to the rhythm of the larger industrial style heritage buildings. Where contemporary building forms or materials are proposed, this may be achieved through an interaction between solid and void elements and through the application of materials and colour. Emphasis on horizontal elements shall be avoided and limited to the application of horizontal banding to façade detail.
- 2.5 New buildings shall respond to the high quality of architectural detailing of existing buildings within The Workshops. An appropriate design response shall address existing buildings at a variety of scales in terms of architectural detailing; visual interest; rhythm in facades; and cohesive building envelopes.
- 2.6 New buildings are to provide a visually solid massing for the lower 3 floors that will read as a predominantly masonry base element with the potential for recessed lightweight upper storey floors to be developed above. There is scope for alternative treatments to be considered such as glass and steel framed structures where the intent is to establish a deliberate contrast between the old and new and the design is handled with commensurate skill and sensitivity.
- 2.7 Where a crossover is provided between the property and a public street, built form is generally to be provided above the crossover to ensure that the driveway entry reads as a passage through the building façade.
- 2.8 Cantilevered structures are not permitted.
- 2.9 Generally roofs shall either be flat or skillion and hidden behind a parapet; saw tooth; or pitched. The relevant Site Specific Guidelines will identify where each of these roof types is applicable. Where not indicated, a parapet roof form is preferred.



VISUALLY SOLID MASSING FOR LOWER THREE FLOORS WITH LIGHT-WEIGHT UPPER LEVEL.



BUILT FORM SHOULD BE PROVIDED ABOVE VEHICLE CROSSOVERS.

- 2.10 Pitched roofs may include lofts. This may achieve an additional floor of development and offer a variety of internal spatial experiences.
- 2.11 Articulation of prominent corners is encouraged.
- 2.12 Windows shall be located and designed to maximise northern solar access, take advantage of views, provide for casual surveillance, capture natural light and offer a high standard of amenity for building occupants. Note that dark tinted glass and reflective glass finishes are not acceptable.
- 2.13 Window treatments are sought that do not obstruct two-way views in the zone of 1-2 metres above the footpath level.
- 2.14 Shade devices or awnings shall be provided to all windows. Feature areas of louvres, shading, glazing and balconies are encouraged.
- 2.15 Small windows, especially those to service areas such as toilets and bathrooms, shall be located away from street fronts and screened from public view. Where remaining visible, they shall be designed and glazed such that they do not read as bathroom windows.
- 2.16 New buildings shall utilise materials, colours and finishes that are neutral and based on natural materials. Materials such as steel, brick, glass, cement render, concrete, timber and corrugated iron equivalents are preferred. Contemporary materials and finishes are permitted. A component of red brick is encouraged to form part of the overall building materials palette. Concrete may be featured but shall not be a dominant material. Extensive areas of glass may be considered where the design outcome respects the industrial aesthetic of The Workshops. An anti-graffiti treatment may be required to final finishes at lower level.
- 2.17 Opportunity exists to integrate accent colours drawn from heritage features such as machinery and equipment at The Workshops. The MRA can assist with accent colour selection.
- 2.18 Where two facades are abutting, the abutting walls are not required to be detailed if they are to be constructed simultaneously. An appropriate interim treatment will be required when construction is not in the same stage of development.

*Note - Building features, awnings and roof overhangs that extend into the road reserve generally require special approval from the City of Swan that entails the creation of an easement or other means of transferring liability to the property owner. For awnings, the City of Swan may also require compliance with Regulation 17 of the Local Government (Uniform Local Provisions) Regulations 1996. Applicants should contact City of Swan to ascertain its requirements in this regard.*



MATERIALS SUCH AS STEEL, BRICK AND GLASS ARE ENCOURAGED



THE INDUSTRIAL AESTHETIC CAN BE ACHIEVED THROUGH CHOICE OF MATERIAL AND COLOUR.

**3. STREET ACTIVATION AND BUILDING TREATMENT**

- 3.1 All buildings shall be designed to incorporate Crime Prevention Through Environmental Design (CPTED) principles to ensure good surveillance of the street and public realm.
- 3.2 Areas of greatest activity and interest and public entries shall be placed to front onto public streets, priority pedestrian routes and public places.
- 3.3 Non-residential uses on the ground floor are encouraged and may be required in certain locations such as fronting Railway Square or at the corners of buildings in key pedestrian areas.
- 3.4 Design of ground floors shall maximise the relationship with the street through extensive areas of windows and frequent entrances.
- 3.5 Upper floors shall contribute to the creation of an active interface through incorporation of balconies and habitable room windows. Whilst the importance of privacy is acknowledged, this shall be balanced with the desire to be able to see movement and life on upper floors and to facilitate natural surveillance of the public realm at ground level. Balcony balustrades shall be partly visually permeable.
- 3.6 For buildings that include commercial activities, each upper level commercial tenancy is to have at least one balcony with minimum area of 10m<sup>2</sup> and a minimum dimension of 2.5 metres, although larger 'outdoor rooms' and upper level terraces or green roofs are strongly encouraged.
- 3.7 Where the ground floor is elevated above finished footpath level to accommodate a semi-basement, ramps that facilitate universal access shall be accommodated within the interior of the building to reduce their visual impact and assist in achieving a strong built edge to the street boundary.



ACTIVITIES THAT ATTRACT GREATEST INTEREST ARE TO FRONT ONTO PUBLIC STREETS AND PLACES.



THE RELATIONSHIP BETWEEN THE BUILDING AND THE PUBLIC REALM IS AN IMPORTANT ELEMENT IN PLACE ACTIVATION.

#### 4. DIVERSITY AND ADAPTABILITY

- 4.1 Unless designated as solely for residential use, new development shall be designed for robustness of use so that ground floor uses may be either residential or commercial and be capable of conversion. Consideration shall be given to depth of units, minimum ceiling heights and extent of non-load bearing walls.
- 4.2 Where restaurant and cafe or other hospitality uses are envisaged, provision shall be made for compliance with health and environmental requirements at the planning stage. Design to accommodate such matters as noise attenuation, mechanical ventilation and grease traps shall be integrated with the building from the outset.
- 4.3 All multiple dwelling developments shall provide for a minimum 10% and maximum 50% of single bedroom units, a minimum 20% of 2 bedroom units and a minimum 10% of 3 bedroom units.
- 4.4 Design flexibility is encouraged to allow for adaptability in the future to suit a variety of activities and purposes and to support ageing in place. Consideration should be given to the following initiatives in residential development:
- Incorporating space and services to support a home office or home based business;
  - Providing bathroom facilities and a room capable of being used as a bedroom on the ground floor to cater for health issues that may result in difficulty accessing upper levels;
  - Providing straight staircases to enable future installation of a chair lift;
  - Designing wide passageways and providing minimum 870mm wide doorways;
  - Enabling options for future modifications of wet areas to be retrofitted if required; and
  - Offering adaptable floor plans to suit various furniture layouts and occupancy types.



LOWER LEVELS OF SERVICE FRONTAGES MAY BE RETROFITTED AT A LATER STAGE TO ACCOMMODATE ACTIVE COMMERCIAL USES.

## 5. PEDESTRIAN ACCESS AND SHELTER

- 5.1 Buildings shall provide clearly defined entrances for pedestrians. In a mixed use building, separate entrances to the commercial and residential components shall be clearly legible.
- 5.2 All pedestrian entrances shall have casual surveillance from within the development and shall be covered to provide protection from the elements.
- 5.3 Clear wayfinding is required throughout the development with particular consideration of the needs of visitors and those with disabilities and impairments.
- 5.4 Where built form is provided to abut the street boundary or public realm, an awning with a minimum depth of 3.0 metres shall be provided for pedestrian shelter at ground floor level. Awning height shall provide a clear path of travel for a minimum of 2.7 metres and maximum of 3.5 metres above the footpath level. Awning depth may be reduced to cater for contextual features such as existing street trees and the ceremonial railway line.
- 5.5 Variation in awning height, depth, length and detail and varying treatment for entry canopies is encouraged to assist with legibility and streetscape interest and reduce the impact of long horizontal bands of awnings on building facades.

## 6. ACCESS AND PARKING

- 6.1 Only one vehicle access point is permitted for each lot. Vehicle crossover entrances to parking shall be located as indicated by an applicable Site Specific Guideline or as agreed by the MRA and have a maximum width of 6 metres. Vehicle access via a primary street shall only be permitted where no secondary street, laneway or vehicular access easement is available.
- 6.2 The MRA encourages sharing of vehicle access between adjacent lots through application of such instruments as shared access easements to improve efficiency of site utilization and reduce the impact of crossovers on the streetscape.
- 6.3 Building design shall ensure that City of Swan waste removal vehicles have potential to access and service bins on site, including in basements. The access route shall have a minimum clear height of 2.85 metres. Contact the City of Swan for further information on waste removal requirements. This arrangement may obviate the need for waste bins to be put out on verges.

*Note: Approval of the City of Swan is required for contracting to private waste collection services.*



AWNINGS ARE REQUIRED TO PROVIDE PEDESTRIAN SHELTER ON ALL FRONTAGES TO THE STREET OR PUBLIC REALM.

- 6.4 A variety of car parking design approaches are appropriate within The Workshops and include basement, undercroft, decked, car stackers and at-grade car parking subject to site context. Basement parking is preferred.
- 6.5 For new development, parking requirements shall be met on site. Provision shall include parking spaces for bicycles, scooters and motorcycles. Opportunities for reciprocal parking and shared parking may be explored to maximise efficiency of use.
- 6.6 Car parking for new development shall be screened or concealed from view from public streets and public places. Views from adjacent lanes are acceptable. Generally parking shall be sleeved behind built form that has sufficient depth to accommodate appropriate ground level uses that address streets and public places.
- 6.7 Where a parking structure is visible from streets or public places, it shall be appropriately designed and detailed to integrate with its setting and make a positive contribution to the streetscape.
- 6.8 Car parking for heritage buildings and car parking in proximity to heritage items within The Workshops area shall be negotiated between the applicant and the MRA. Where at grade parking is provided to service existing heritage buildings, the layout shall form a seamless component of the overall public realm with design and materials compatible with the design of adjacent public places.
- 6.9 Consideration shall be made for pedestrian movement, clear wayfinding, safety, security and comfort in the design of car parking areas.

*Note: Applicants should refer to the MRA Scheme and Planning Policy 2.6 Car Parking for further information with regard to car parking provision.*

## 7. CYCLING

- 7.1 Secure bicycle parking shall be provided for occupants and visitors of all development.
- 7.2 Locate some bicycle parking for visitors close to the building entry at ground level. Design for passive surveillance and provide a good level of night lighting.
- 7.3 For buildings with a significant non-residential component, provide end of trip facilities for cycling and other active forms of transport that are designed with convenience and safety of the user in mind, in accordance with CPTED principles. End of trip facilities shall include, but not be limited to, secure bicycle storage, showers, change rooms and lockers.
- 7.4 Bicycle parking facilities shall be designed to be attractive and sympathetic to the surrounding streetscape and other street furnishings within the Midland Redevelopment Area. Use of The Workshops preferred style of bicycle parking rack is recommended externally for continuity.

*Note: A Bicycle Facilities Policy is under development and may inform these Design Guidelines.*



SCREENING OF CAR PARKING IS IMPORTANT TO MAINTAIN HIGH VISUAL AMENITY.



THE WORKSHOPS PREFERRED STYLE OF BICYCLE RACKS.

## 8. OUTDOOR LIVING AREAS

- 8.1 Each dwelling shall be provided with at least one balcony, roof terrace or courtyard. Large balconies are encouraged, capable of being furnished and used for outdoor living. Balconies shall have a minimum dimension of 2.5 metres and a minimum area of 10m<sup>2</sup>. Balcony area is not included in calculation of plot ratio.
- 8.2 Where an air conditioning unit is to be on a balcony, the unit shall be floor mounted; positioned and screened to avoid visual impact when viewed from the public realm; and located to avoid impacting on user comfort on the balcony.
- 8.3 The MRA encourages the provision of communal open space areas, roof terraces and accessible green roofs to promote greater amenity within new developments and to deliver microclimate benefits.



BALCONIES SHOULD BE LARGELY PERMEABLE HOWEVER SCREENING ELEMENTS ARE RECOMMENDED FOR NATURAL SURVEILLANCE AS WELL AS PRIVACY AND SCREENING OF SERVICES.

**9. OPEN SPACE AND LANDSCAPE**

9.1 Landscape development is to be approved by the MRA and shall be designed to ensure continuity of themes and character.

*Note - Reference should be made to Landscape Guiding Principles for The Workshops (MRA October 2009). Applicants should contact the MRA to ascertain its requirements in this regard.*

9.2 Comfortable, safe and attractive outdoor areas are sought. Where open space is provided that abuts the street or public realm, it is to be landscaped to a high standard of finish and be integrated seamlessly with the adjacent public realm. Depending on site context, the setback may contain a variety of hard and soft landscaping elements such as public seating, shading devices, shade trees, water features, special lighting and details of interest such as interpretive pieces. Such spaces should enhance the interaction between the activity within the building and the public realm.

*Note: Items of machinery and equipment from the former Railway Workshops may be available for use in new development. Many of these pieces are sculptural in nature and offer excellent interpretive opportunities.*

9.3 Building setbacks should generally be hard paved and create a seamless transition between the public and private realm in terms of materials and colours. This may, where appropriate, include paving, edging, low seating walls, balustrades, handrails, steps, furniture, lighting and signage. Planting may be appropriate in selected locations.

9.4 For private development, the use of a greater proportion of soft landscape elements is supported, particularly internal to the development, to offset the hard paved industrial aesthetic of the public realm.

9.5 Large canopy shade trees shall be provided to at grade car parks and to external pedestrian links.

9.6 Landscapes shall be designed to assist microclimate management and to conserve water. Drought tolerant plants are encouraged and soils should be prepared with soil improvers and mulch. Use of University of WA/Water Corporation preferred turf species is encouraged.

*Note: The MRA has prepared recommended planting types for The Workshops. Landscape character types and associated plants have been identified for domestic settings and larger scale settings that relate to the heritage and cultural context of the area. Applicants should contact the MRA to ascertain its requirements in this regard.*



A VARIETY OF HARD AND SOFT LANDSCAPE FEATURES IS ENVISAGED



LEVEL CHANGES IN THE PUBLIC REALM PROVIDES OPPORTUNITY FOR PUBLIC SEATING.



ITEMS OF MACHINERY AND EQUIPMENT FROM THE FORMER RAILWAY WORKSHOPS MAY BE AVAILABLE FOR USE IN NEW DEVELOPMENT.

**10. FENCING**

- 10.1 Fencing shall not be used to define lot boundaries unless permitted under an applicable Site Specific Guideline. The intent is to develop The Workshops as a single place for consistency and meaning with landscape treatments and management relating to the spaces between and around buildings rather than the separate lot boundaries. To this end, fencing is to be avoided as it serves to define lot boundaries rather than keep the emphasis on the overall place.
- 10.2 Where fencing is permitted, or is required to keep safe retained heritage elements, this should generally be of an open metal railing fencing style and black in colour. It is recommended that fencing match the detailing of black metal vertical railing installed at The Workshops by the MRA, with the height to suit its setting and role.
- 10.3 In some locations there is scope for fencing and screening to be treated as an opportunity for artwork and heritage interpretation.



WHERE FENCING IS PERMITTED, OR IS REQUIRED TO KEEP SAFE RETAINED HERITAGE ELEMENTS, THIS SHOULD GENERALLY BE OF AN OPEN METAL RAILING FENCING STYLE AND BLACK IN COLOUR.

**11. LIGHTING, SAFETY AND SECURITY**

- 11.1 Lighting shall adequately illuminate entrances, footpaths, car parking areas, communal areas and other less public areas with minimal glare and avoidance of light spill during night time hours.
- 11.2 Where public lighting will be limited or screened by planting and awnings, additional lighting may be required (e.g. frontage to laneways, building entrances beneath canopies and under awnings over footpaths).
- 11.3 Lighting to ground floor frontages of non-residential development shall be provided to add illumination to key pedestrian areas, provide visual interest and display shopfronts and services on offer.
- 11.4 Movement sensor lighting is encouraged where there are concerns about loitering or safety, but should not be set off by movement beyond the site or lead to glare in the public realm or neighbouring property.
- 11.5 The incorporation of feature lighting with LED lighting on the exterior of buildings or within open space is sought to reinforce this type of lighting as a signature theme for The Workshops. Refer to Public Art provision 14.3.
- 11.6 To enhance safety and security, the principles of Design for Crime Prevention Through Environmental Design (CPTED) shall be demonstrated within the site layout, building design, detailing and landscape design. A short report on measures may be required by the MRA. Refer to WAPC Planning Bulletin 79- Designing Out Crime Planning Guidelines June 2006 for guidance on CPTED.



LIGHTING FROM WITHIN BUILDINGS PROMOTES VISUAL INTEREST WITHIN THE PUBLIC REALM.



THE TOWER OF MEMORY BY WARREN LANGLEY INTERPRETS ELEMENTS OF THE WORKSHOPS INDUSTRIAL HERITAGE. LED LIGHTING ENABLES THE ARTWORK TO BE EXPERIENCED AT NIGHT.

## 12. SERVICE AREAS AND ANCILLARY EQUIPMENT

- 12.1 Loading and service areas, storage areas and ancillary equipment such as mechanical plant shall be appropriately screened from public view in a manner that does not undermine the amenity of the area or quality of the development. These areas shall be integrated into the overall form of the development. Views from streets, public places and future upper floors of adjacent development shall be considered.
- 12.2 Service doors and other utilitarian features shall be located away from street fronts and appropriately treated to reduce their visual presence.
- 12.3 The incorporation of a secondary balcony that is designed to accommodate services such as air conditioning and clothes drying (screened from public view) is encouraged to promote greater amenity for the main balcony.
- 12.4 Photovoltaic solar panels and flat solar water heating panels may be on public view provided they are appropriately arranged and well integrated with the building design. Panels may sit flat against the roof pitch or may be integrated into special elements such as awnings. Where solar panels are not integrated in this manner and/or where solar water heating storage tanks are provided, they shall not be visible from the street or public places.
- 12.5 In assessing the visibility of roof plant and ancillary equipment from the public realm, the MRA will give due regard for visibility of such equipment from: adjacent developments; upper floors of other development; public places; streets; access ways; key sight lines; and across the rail reserve. Generally views from laneways are permitted as these have a service role.
- 12.6 Machinery and equipment shall not create a nuisance through noise, smell or other impact. Mechanical ventilation shall not discharge toward the public realm. Development shall comply with all relevant environmental protection regulations.



LOADING AND SERVICE AREAS, STORAGE AREAS AND ANCILLARY EQUIPMENT SUCH AS MECHANICAL PLANTS SHALL BE APPROPRIATELY SCREENED FROM PUBLIC VIEW IN A MANNER THAT DOES NOT UNDERMINE THE AMENITY OF THE AREA OR QUALITY OF THE DEVELOPMENT.



PARTIAL SCREENING TO THE BALCONY REDUCES VISUAL IMPACT OF BUILDING SERVICES.

**13. SIGNAGE**

- 13.1 Signage shall not adversely impact on visual amenity or the heritage values of the setting.
- 13.2 The MRA supports a limited amount of signage for commercial premises. Other than where it can be demonstrated that the signage is well integrated with the façade, signs shall be limited to a maximum dimension of 2.0 metres by 0.5 metres.
- 13.3 Signage shall generally not be provided above ground floor, save for naming of buildings or appropriate signage location and design for heritage buildings.
- 13.4 For heritage buildings new signage shall generally be offset from the wall or projected out from the face of the building. An artistic interpretive response to design is supported.
- 13.5 When providing signage, it is encouraged to be designed as a public art element to provide an interesting, unique and memorable feature. The Workshops tradition of small wrought metal signs hung off wall brackets offers scope for new signage with an artistic flavor and the development of a distinctive character for The Workshops. Similarly, the incorporation of LED lighting with signage in an artistic manner is encouraged.
- 13.6 A condition may be imposed on development approval requiring that a signage strategy be submitted for consideration and approval by the MRA prior to the commencement of construction.
- 13.7 Windows shall be free of advertising in the zone between 1.0 metre and 2.0 metres above the footpath and no upper floor windows shall contain signage or advertising.
- 13.8 A space suitable for the placement of plaques with street names or public place names may be required on buildings, together with acceptance of land owners for this arrangement. The MRA seeks to minimise the visual clutter of street signage and multiple poles. Affixing street names to the walls will assist in this regard and add character to The Workshops. Details to site these signs should be sourced from the MRA.

*Note - Applicants should refer to the MRA's signage policies as well as any City of Swan Local Laws relating to signage.*



EXAMPLE OF A TRADITIONAL SIGNAGE STYLE IN THE WORKSHOPS

## 14. PUBLIC ART

- 14.1 The MRA encourages inclusion of an artist in the building design process to enrich outcomes. Areas to consider inclusion of public art are those that are most publicly accessible, such as signage, lighting, foyer or public areas, and detailing of elevations and screening.
- 14.2 The MRA encourages art installations to reflect the character and local context by recording and interpreting past and present histories, culture and ideas. The use of materials and elements such as LED lighting, steel and glass respond to the Midland theme.
- 14.3 Use of lighting as an architectural and artistic expression on the exterior of new buildings is sought as a signature theme for The Workshops. Architectural features that use LED lighting as its primary form of creative expression are considered appropriate. Examples of lighting elements may include art features, spot lighting of key architectural elements, lighting of balustrades, artistic signage and special skyline treatments.

*Note: Refer to the MRA Workshops Village Public Art Strategy 2009 for guidance.*

*Note: Items of machinery and equipment from the former Midland Railway Workshops may be available for use in new development. Many of these pieces are sculptural in nature and offer excellent interpretive opportunities.*



LIGHTING TO BUILDINGS AS AN EXPRESSION OF PUBLIC ART.



PUBLIC ART THAT INTERPRETS THE HISTORY AND CHARACTER OF MIDLAND

## 15. NOISE AND VIBRATION

- 15.1 Vehicle, rail and aircraft noise and vibration impact on The Workshops, together with noise from events and noise associated with a mixed use environment, therefore a noise and vibration assessment is required as part of the development approval process. This shall be carried out by a suitably qualified and experienced acoustical professional. The recommendations of the acoustical consultant shall be incorporated within the working drawing documentation at building licence stage and shall be implemented prior to occupation. Typical design requirements are for double glazing or laminated glass; solid core entry doors; and appropriate sealing of junctions and joints to prevent air gaps.
- 15.2 All development must satisfy the requirements of the MRA Planning Policy 2.12 Noise Attenuation (see [http://www.mra.wa.gov.au/planning/planning\\_publications/Policy\\_2.12\\_-\\_Noise\\_Attenuation.phtml](http://www.mra.wa.gov.au/planning/planning_publications/Policy_2.12_-_Noise_Attenuation.phtml)). The consideration of sound attenuation at the planning stage of a development can contribute significantly to achieving the required Noise Criteria as well as reducing the eventual cost of construction.

## 16. ECOLOGICALLY SUSTAINABLE DESIGN

- 16.1 The Authority encourages development to be designed with;
- Energy saving initiatives;
  - Water saving initiatives;
  - Passive solar design principles; and
  - Efficient thermal performance of the building.
- 16.2 A commitment to achieve a minimum 4 Star Green Star rating under the Green Building Council of Australia system is highly encouraged. The Green Building Council of Australia, Green Star rating system is explained online at (<http://www.gbca.org.au>).
- 16.3 Where Photovoltaic (PV) solar panels are proposed, a minimum of 1kW should be provided with capacity to be added to over time. Visibility of solar equipment is addressed in Section 12 of these guidelines.
- 16.4 A non-potable water purple pipe system has been installed at The Workshops. Whilst no treated water regime is in place, applicants are strongly encouraged to design and install plumbing and reticulation that will enable future connection.





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