

PUBLIC DOMAIN Technical Manual

Revision G - August 2020



This Public Domain Technical Manual supersedes the Public Domain Technical Manual Bondi Junction Centre (2008), The Local Local Centres Public Domain Technical Manual (2006) and the draft Open Space Technical Manual.

The Public Domain Technical Manual was prepared by Waverley Council, Infrastructure Services, Open Space and Recreation team.

With contributions by Waverley Council Departments: Parks Operations, Urban Planning Policy and Strategic, Environmental Sustainability, Community Programs and Project Waverley.

Drawings and details included in this document are a guide only and not to be issued for construction.

| Rev | Date | Name | Initials |
|-----|----------|--|----------|
| А | 09/06/15 | Shaping Waverley and Creating Waverley | SM /YF |
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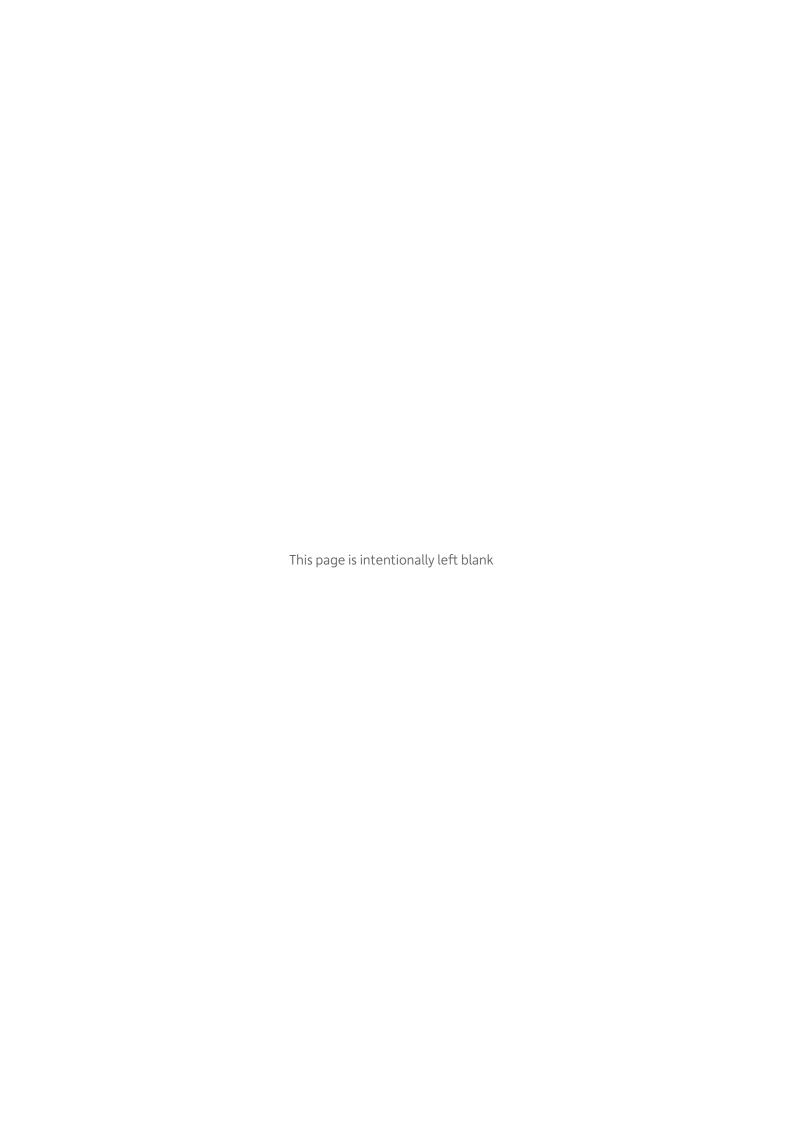
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Introduction

Purpose of This Document

Waverley's local government area boasts some of the most remarkable and beautiful urban and natural landscapes in Australia. Nevertheless, there is an opportunity to make them even better. It is important to consider the quality of the whole public domain, not just the special places. People should experience the entire municipality as a 'great place'.

The purpose of this Public Domain Technical Manual (PDTM) is to promote and reinforce a strong sense of place in Waverley's civic spaces. It will help to improve the quality of the public domain and provide a continuity of design across Waverley's diverse urban landscape.

The Technical Manual provides a coordinated, standard palette of materials, finishes and furniture to guide the design and maintenance of Local Centres, parks, open spaces and streets throughout the municipality.

The manual also identifies Waverley's 'special places' in which non-standard elements may be used. These include:

- selected high profile places;
- locations that have a distinctive character where the standard palette would be inappropriate physically or visually; and
- places or features of particular heritage significance that are to be conserved, requiring specific treatment.

The manual sets out considerations and controls for the design of custom elements for these special places.

Who This Document is For?

The Public Domain Technical Manual guides Council Designers, Park Supervisors, the Construction and Maintenance Team, external consultants and contractors and Development Application staff on the use of materials, finishes, furniture, design treatments and details.

How to Use This Document

The Technical Manual is organised into 3 sections.

- The Introduction firstly sets out the document's purpose and guiding principles. The principles form the selection criteria for the materials, finishes, furniture and guide design treatments and details.
- 2. The second section describes the varying character of Waverley's open spaces and parks across the municipality and sets out the quality standards to be applied. It describes the various characterisations and hierarchies of the spaces throughout the local government area and how these should be treated.
- 3. The third section comprises the guidelines and provides the necessary information to select, locate and install standard items. It also provides useful information for concept and design development of the public domain and for specific custom design elements.

The Technical Manual is an evolving document. With the consensus of the Project Control Group, pages may be revised to incorporate improvements, items may be discontinued and replaced with better solutions as they arise and when necessary, new items may be included.

Methodology Used

The development of a useful and meaningful Technical Manual requires in-depth knowledge and understanding of the qualities of the place, it's history, uses, the needs of the community and the natural environment.

The first phase of developing this manual involved on the ground and desktop analysis of Waverley's public domain. This included review of the following Strategic Planning documents:

- Local Local Centres Public Domain Improvement Plan;
- Local Local Centres Public Domain Technical Manual;
- Bondi Junction Centre Public Domain Technical Manual;
- Waverley Street Design Manual;
- Looking Good Strategy;
- Tree Management Plan;
- Access and Mobility Policy and Action Plan 2011-2015;
- Waverley Development Control Plan (Amendment No.2) 2012; and
- Bronte Centres policy 2004.

The next phase involved researching currently available materials, finishes and furniture and best practice details, then testing their suitability against the design principles. Where relevant, items were priced by a minimum of 3 suppliers so that the selected supplier could be placed under contract.

The third phase entailed selection. In order to utilise Council's vast knowledge and understanding of Waverley's open spaces, representatives from - Clean and Attractive Waverley (Maintenance and Construction);

Clean and Attractive Waverley (Parks Operations); Creating Waverley (Design);

Creating Waverley (Open Space Planning); Shaping Waverley (Design and Heritage); and Sustainable Waverley (Green Infrastructure) were invited to take part in a series of 10 workshops to discuss and select items to be included in the manual. The workshop format included review of what we are currently using, presentation of alternative selections/construction details, analysis of the various options and decision making. Decisions were based on consensus agreement.

Throughout the project, draft revisions of the document were issued so that Council could begin phasing in the new palette of materials, finishes and furniture.

Principles

The following principles form the basis for the criteria used to select the standard palette of materials, finishes, furniture and guide design treatments and details.

Character

Define, reveal and strengthen the distinctive qualities of Waverley's landscape character.

Use a consistent palette of materials, finishes and furniture that reflects Waverley's landscape character.

Conserve Waverley's urban and landscape heritage.

Quality

Provide high quality, attractive and robust materials, finishes and furniture.

Design, selection and Installation

Standardise selection, location and installation of materials, finishes and furniture.

Identify 'special places' that have their own distinctive character and custom design elements and furniture for those places.

Fit for Purpose

Ensure the materials, finishes and furniture palette support the uses of Waverley's public domain

Make sure the materials, finishes and furniture palette meet universal access requirements.

Ensure the design and positioning of furniture and landscape elements meet Australian Standards requirements and safety best practices.

Sustainability

Select the palette of materials, finishes and furniture based on the following principles of sustainability:

Environmental

- Source materials with low embodied energy
- Source Australia timber that has AFS, FSC, or PEFC certification
- Source energy efficient lighting
- Base plant species selection on: suitability to location, salt, drought, heat and wind tolerance; resistance to pathogens; low water and maintenance requirements; shade provision, life span and habitat embellishment
- Preference porous surface treatments
- Select repairable furniture
- Choose recycled materials
- Select robust and durable materials
- Reduce water use and waste
- Promote water re-use
- Conserve our biodiversity

Social

- Support social enterprises
- Promote comfortable spaces that support social interaction

Economic

- Prioritise value for money
- Source local materials

Design Considerations

The following standard design elements should be considered when designing in the public domain.

General Considerations

- Street furniture, paving and lighting create the detail and quality in the public domain.
- Furnishing in the public domain should respond to the scale, function and location of each place. There should be a limited range of materials used in a variety of ways to promote a uniformity in maintenance practices.
- Consider wider context.
- The design should encourage people to comfortably walk, ride, and access public transport.
- Consider integrating Water Sensitive Urban Design.
- Consider the future users and future character of the place.
- Always de-clutter.
- Protect pedestrians and cyclists from vehicles with fully pedestrian or regulated crossings where possible.
- Maintain desire lines.

Furniture

- Variety of seating options to accommodate a range of users.
- Seating is to be located, approximately every 60m along the street in town and Local Centres, in relation to street trees, and at bus stops, drop off points and near community facilities and public institutions. Furniture is to be set back from primary paths of travel and linked to footpaths with hard surfaces to match existing adjoining hard surfaces.
- Bins are to be located on the kerb side, 1.2m distance from lights at corners, and outside community buildings and food outlets. There should be a maximum of three bins per block.

Planting

- Consider view lines at street corners for placement of street trees and planting.
- Spacing for trees to match surrounding locations.

Universal Access

- Maintain or enhance passive surveillance and public safety.
- Establish a clear line of travel for pedestrians separate from the carriageway.
- Group objects in a logical manner.
- Promote accessibility provision of kerb ramps at all street corners & crossings, and comfort through regular placement of seating.
- Provide a network of linking, continuous, accessible pathways.
- Provide accessible parking and / or drop off areas.
- Provide universally accessible pathways.
- Provide universally accessible facilities.
- Provide safe and frequent pedestrian crossings.
- Provide wayfinding and signage information incorporating universally accessible features.

Lighting

- To illuminate high use areas in the LGA to provide adequate visibility for pedestrian and vehicular traffic. This includes conflict locations where there is safety concerns like: pedestrian crossing, intersections, changes of alignment (on sharp bends) and along vehicular/ pedestrian routes
- Support use of parks
- Activating public spaces
- Showcasing urban features
- Safe walking, cycling, public transport and driving

Surfaces

- Surfaces to meet Australian Standards for slip resistance.
- Appropriate set backs from kerbs, loading zones and universal access parking bays for bins, seats, poles and bike racks.
- Allow a minimum of 2.4m paved passage between property/ building line and any street elements.
- The area between kerb and building line to have a maximum cross fall of 1:40 to the kerb, and to match with existing adjoining levels.

Traffic Calming

- Prioritise pedestrian movement through a tighter kerb radius at corners to slow turning traffic and minimise clutter.
- Measures to control traffic should be balanced with pedestrian comfort and convenience, the existing geometry of streets, and the desired future character of each centre.

Water Sensitive Urban Design (WSUD)

WSUD is an approach to urban planning and design which integrates the urban water cycle, including stormwater, groundwater and wastewater management and water supply into streetscape design. WSUD has many environmental benefits as well as contributing to the aesthetics and functionality of the public domain.

Given the high recreational and conservation value of Centennial Park ponds, Sydney Harbour, neighbouring beaches and remnant vegetation, Waverley Council is investing in projects that treat and remove pollutants from stormwater discharged into waterways and remnant vegetation.

Council utilises a range of water sensitive urban design and traditional infrastructure to filter or remove stormwater pollutants including bioretention, sediment basins, treatment pits, gross pollutant traps, hydrocon pipes, permeable paving, net tech devices as well as stormwater harvesting and reuse systems.

In Waverley, WSUD principles are followed through:

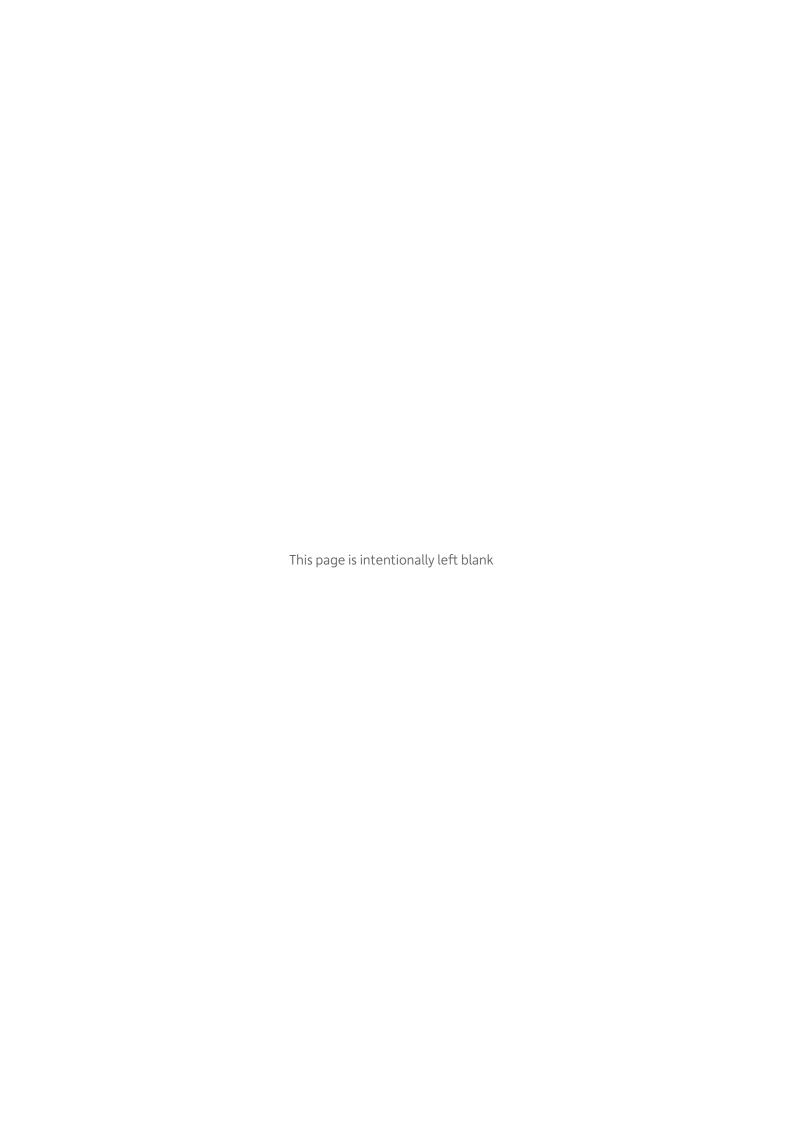
- Selecting plant species that help to conserve or purify water:
- Implementing passive irrigation methods for planting areas in streets;
- Installing permeable paving in areas with large paving surfaces or where water purification is required for groundwater recharge;
- Bioretention pits and raingardens to filter pollutants from stormwater before recharging the groundwater or discharging to the stormwater drainage system.

WSUD is very important in Waverley and should be considered in the following scenarios:

- Priority for protection of Centennial Park ponds, Sydney Harbour and coastal beaches through removal of stormwater pollutants.
- Aquifer recharge via infiltration to be applied in areas identified for infiltration in the Waverley Water Management Technical Manual.
- Areas where surfaces are being used by pedestrians. In this case under-ground stormwater treatment solutions should be considered such as permeable pipes and sediment basins.

This PDTM provides details of passive irrigation systems and stormwater quality improvement systems using bioretention treatments and passive irrigation treatments, as part of WSUD, under the Planting section. Other systems mentioned here are under development and can be applied in consultation with the Council.

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Waverley's Public Domain, Parks and Open Spaces

2

Strategic, Local and Neighbourhood Centres

The public domain is generally considered to be the land that is in public ownership and freely accessible to the public: the streets, parks and squares of the urban area.

Within the Local Centres, the public domain is generally comprised of streets and small public spaces, with some centres having small local parks and green spaces adjacent.

The public domain may also include the interface between public and private, such as spaces where building setbacks form an extension to streets and open spaces. All these spaces have been considered together for the purposes of the PDTM.

Character

When we think about the character of Waverley's urban centres, the images that comes to mind are ones closely associated with the urban character of Bondi Junction and the 'coastal character' of Bondi Beach. There are however quite distinct character shifts across the municipality. These can be grouped into 3 character types: Strategic Centres, Local Centres and Neighbourhood Centres with Special Places punctuating this streetscape.

Strategic Centres

Bondi Junction

Bondi Junction is one of 13 Major Centres in Sydney as defined by State Government Metropolitan Strategy and is the only Major Centre servicing the eastern sub-region, resulting in a broad catchment area. It has high volume of pedestrians, contains the busiest bike routes in Australia (2011), the bus/ rail transport interchange, Westfield's global flagship shopping centre which receives on average 58,000 visitors per day; and the popular Eastgate Shopping Centre adding to the activity in the Strategic Centre. Coupled with this are a large numbers of buses, loading vehicles and trucks circulating throughout the centre daily.

Bondi Junction is a regionally significant bustling urban environment and its civic spaces should reflect this position through the use of high quality materials and finishes that are timeless, durable, and evoke a strong sense of place.

Local Centres

Throughout Waverley there are a number of local Local Centres. These are smaller centres serving the local community, separate to the regional role of Bondi Junction and Campbell Parade at Bondi Beach.

The centres enjoy a unique position and character. Some of these centres are small but all provide valuable services, facilities and meeting areas to local residents and users. Thus the standard high quality paving, at a finer grain scale to that of Bondi Junction, is required in these areas along with standard furniture, to reinforce Local Centres as a local destination. Special areas may be treated with custom high quality elements to accentuate the role they play for creating interest and diversity.

Bondi Beach Local Centre, Bondi Beach

The Bondi Beach Local Centre includes Hall Street, Glenayr Avenue, Gould Street and parts of O'Brien Street, Curlewis Street and Beach Road. It is the second largest centre after Bondi Junction, serving the large Bondi Basin community and also the large number of visitors to Bondi Beach. The centre generally comprises a mix of commercial and retail uses at ground floor with residential above and has a somewhat Bohemian character combining commercial and coastal influences and is distinctly different from Campbell Parade and the beachfront

Bronte Rd, Charing Cross

Charing Cross is located in a heritage conservation zone along a strip of Bronte Road connecting the eastern beaches, Bondi Junction, Centennial Park and the City.

The centre has a diverse range of local shops and services that support the daily needs of local residents, workers and visitors who frequent the area. It has a 'high street' character, supporting the local commercial strip as well a major public transport route to and from the City.

Bondi Road, Bondi

Bondi Road is a significant transport corridor. It runs along the 'spine' connecting Bondi Beach to Bondi Junction and the city, with the existence of numerous bus stops for routes 333, 381, 380, 382 and a constant flow of pedestrians, cyclists, buses and other vehicles.

Rose Bay North and South

Old South Head Road is the local government boundary between the Waverley and Woollahra Councils. Two clusters located along Old South Head Road between Onslow Street and Strickland Street in the vicinity of Oceanview Avenue have been combined and are know as the Rose Bay Local Centres.

As the streetscape is divided between two councils a coordinated approach is required to continue to attain a unified streetscape design. Consultation with Woollahra Council is required prior to commencing any new streetscape works.

Neighbourhood Centres

Small neighbourhood centres are local destinations that create diversity, often with small scale shops that provide a meeting place for community. The use of high quality paving and a standard range of furniture is selected to visually and physically accentuate these centres from the residential surroundings.

Neighbourhood centres include:

- Fletcher Street, Tamarama
- Corner Murray Street and Belgrave Street, Bronte
- Murriverie Road East and West, Bondi
- Flood Street, Bondi
- Blair Street, Bondi
- Blake Street and Military Road, Dover Heights

Some larger Neighbourhood Centres also include:

Bronte Road, Bronte Beach

Bronte Beach centre sits at the lowest point of the Macpherson Street, Bronte Road loop. The terminus for the 378 bus service, which includes bus lay by and loading areas, is located opposite the commercial/dining strip. The terminus includes a heritage bus stop.

The centre is characterised by the setting of the park and the beach, with a relaxed atmosphere associated with recreation and leisure. The built form is mixeduse with largely shop top housing buildings.

The café strip and beach attract visitors, making a diverse population. Outdoor dining dominates the footpath, restricting pedestrian movement.

Macpherson Street, Bronte

The Macpherson Street local Local Centre provides approximately 60 small commercial premises spread out along the length of the street stretching from Leichhardt Street in the west to St Thomas Street in the east

Wairoa Avenue, Bondi

The centre comprises of two areas. The first is at the northern end towards Blair Street. The second is at the south end towards Warners Avenue. Both areas provide local cafes and small eateries frequented by local residents and visitors in the summer period. The two areas are fractured by residential dwellings, parklands and the North Bondi Primary school.

Special Places

Special Places punctuate the streetscape. These places are focal points in the street and contribute a special amenity in terms of community use and street character. They are often formed by kerb extensions, street closures or by the particular geometry of street intersections. Laneways are also considered as special places as they offer a finer-grain experience enriching the public domain.

Within these special places, there is an opportunity to create changes in character that will distinguish the focal places from the general streetscape.

Each place can have either individual paving that contrasts with the standard street paving, or the standard paving in an individual pattern. Bespoke furniture can be incorporated and individual lighting projects.

Campbell Parade, Bondi Beach

Campbell Parade is the gateway and urban edge to the world famous Bondi Beach, offering restaurants, cafes, bars, shops, hotels and convenience outlets. More than simply an access point to the beach, Campbell Parade is a crucial part of the Bondi Beach experience.

The arrival, views, architecture, landscape, land uses, the amenities it offers beach users, the movement and accessibility it provides, and the street life and atmosphere it supports, all intrinsically affect the beach experience.

The status of Campbell Parade as a world class destination should be reflected through high quality materials, furniture and fixtures and finishes that are above and beyond the standard palette outlined in this document. Campbell Parade requires a specific design to reinforce its importance as an iconic beach boulevard.

The Campbell Parade area extends from Sandridge Street to Hastings Parade, on both sides of the street.

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Urban Centres Map

The adjacent map locates Waverley's Strategic Centre, Local Centres and Neighbourhood Centres and highlights some important Special Places.

| S. No | Strategic Centre | S. No | Neighbourhood Centres |
|-------|---|-------|--|
| 01 | Bondi Junction | 10 | Wairoa Ave, North Bondi |
| | | 11 | Murriverie Road East and West, North Bondi |
| S. No | Local Centres | 12 | Flood Street, Bondi |
| 02 | Bronte Rd, Charing Cross | 13 | Blair Street, Bondi Beach |
| 03 | Bondi Road, Bondi | 14 | Blake Street and Military Road, Dover Heights |
| 04 | Bondi Beach Local Centre, Bondi Beach | | |
| 05 | Rose Bay North and South | S. No | Special Places |
| | | 15 | Campbell Parade, Bondi Beach |
| S. No | Neighbourhood Centres | 16 | Brisbane Plaza, Bondi Junction |
| 06 | Bronte Road, Bronte Beach | 17 | Waverley Library Forecourt, Bondi Junction |
| 07 | Macpherson Street, Bronte | 18 | Junction of O'Brien Street and Hall Street, Bondi Beach |
| 08 | Fletcher Street, Tamarama | 19 | Seven Ways, Bondi Beach |
| 09 | Corner Murray Street and Belgrave Street, Bronte | 20 | Roscoe Mall, Bondi Beach |

Legend



01 Strategic Centres



02 Local Centres

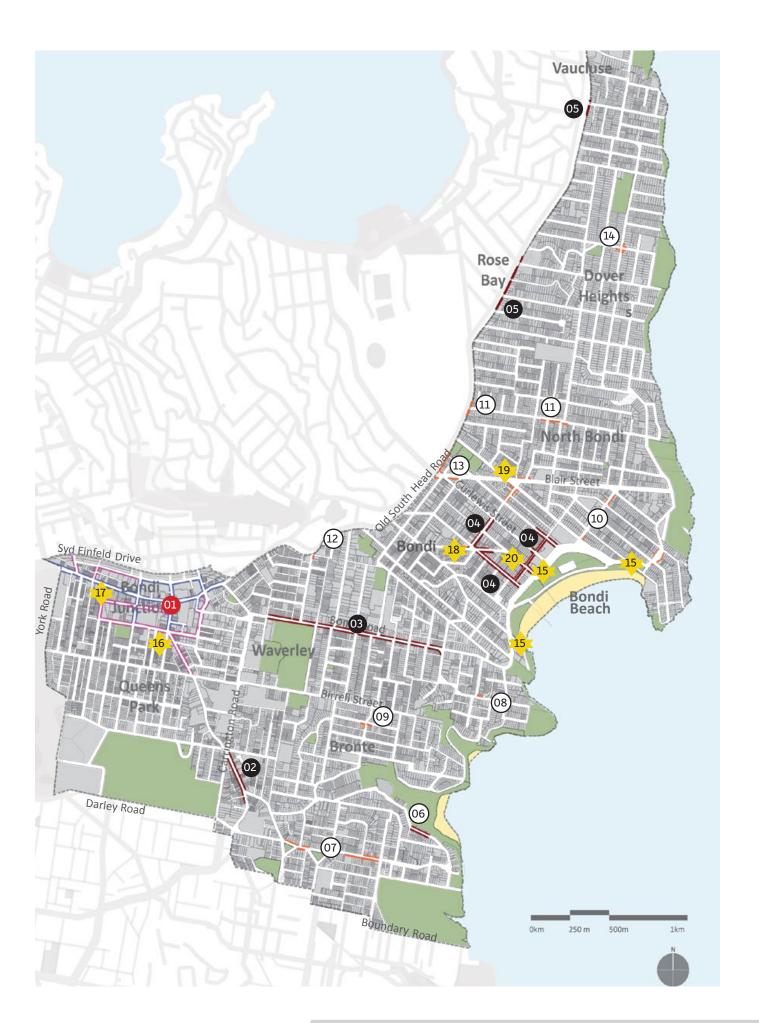


(11) Neighbourhood Centres



15 Special Places

Note. There are more 'special places' than denoted on this map. Consult with Council's Urban Design or Landscape Architecture teams prior to commencement of any work that may involve a bespoke furniture and finishes palette.



Open Spaces

We have 79 parks and reserves to manage, which service a range of activities and users. When we think about the character of Waverley's open spaces, the image that comes to mind is one closely associated with 'coastal character'. There are however, quite distinct character shifts across the municipality.

Councils draft Open Space and Recreation Strategy introduces a hierarchy and classification system of our parks and reserves. The hierarchy helps Council to prioritise maintenance decisions and improvement activities by providing an understanding of the level of provision and facilities expected for each type of open space. It indicates the catchment size and the extent that people travel to visit a space, and based on this information informs the approach to maintenance and servicing required for each space.

Our classification of spaces by five types:

Bondi Beach and Park Landscape: Unique and high profile destination in Waverley that attracts visitors locally, regionally and internationally and provides access to water-based recreation activities, spaces to socialise and relax, and high quality amenities.

Beach Parks: Provides open green space and space for passive and active recreation and includes access to water-based activities. Provides facilities and a landscape that attracts visitors from beyond the Waverley LGA.

Sports Parks: Provides open green space and space for passive recreation and team and organised sports. Provides sporting facilities that can cater for group and organised sports.

A destination park that services a substantial residential area or at least two local suburb catchments.

Neighbourhood: Provides open green space for primarily passive and casual turn up and play recreation. Provides green spaces to walk through. Caters to the local catchment of residents in the suburb or LGA.

Local: Provides open green space for primarily passive recreation. Provides green spaces to walk through. Includes small parks and parks on street verges and road closures and caters for immediate residents in the area.

Bondi Park and our beach parks and sports parks need to be looked after carefully, through use of high end materials, finishes and custom elements.

Special Places

A number of Waverley's open spaces have been identified as 'special places', where the use of custom design elements and nonstandard finishes are appropriate. These special places were selected base on the following criteria:

- high profile places;
- places that have a distinctive character where the standard palette would be inappropriate physically or visually; and
- places with features of particular heritage significance that are to be conserved, requiring special treatment.

Waverley's special places include:

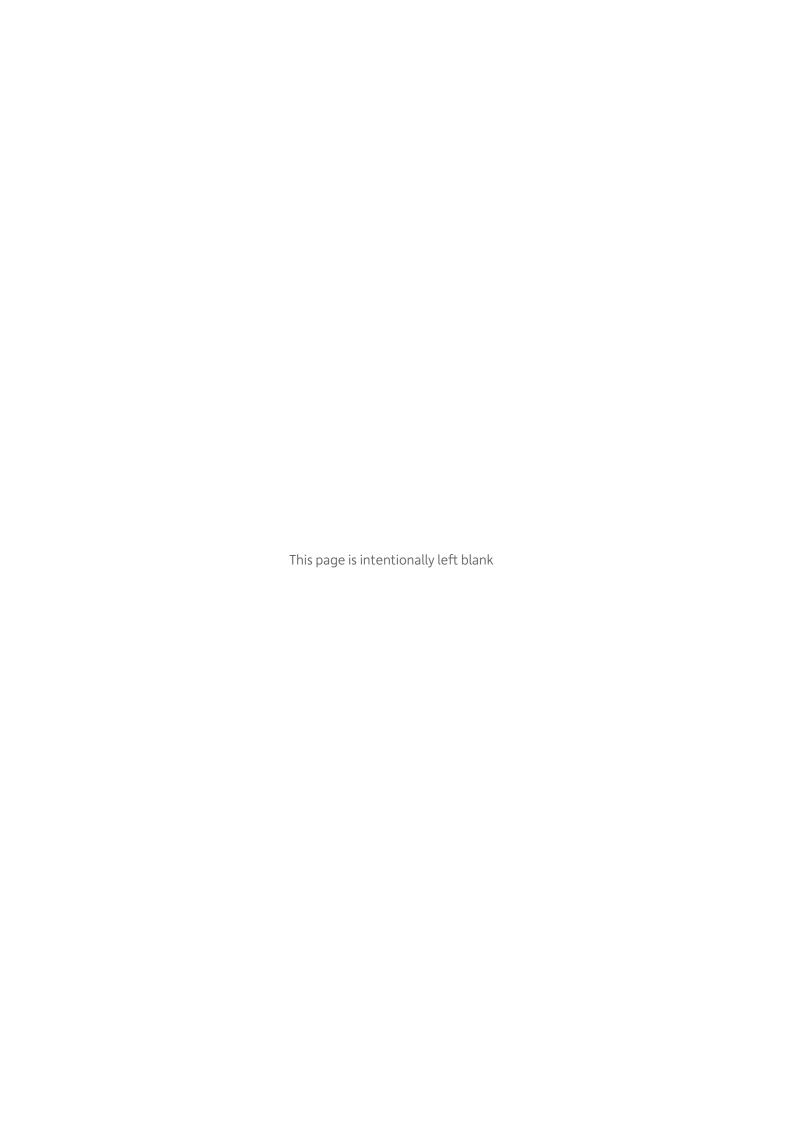
- Bondi Pavilion and surrounds
- Bronte Pool
- Coast Walk
- Waverley Cemetery

The adjacent map locates Waverley's open spaces and highlights the hierarchy and Special Places.

Playgrounds

The PDTM does not apply to the selection of play elements as these are typically site specific and should cater to wider play needs, as identified in the current version of the Waverley Council Play Space Strategy and draft Inclusive Play Strategy.





TechnicalSpecifications

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Making a Selection

Strategic, Local and Neighbourhood Centres

The Urban Design Team, and Landscape Architects of the Open Space Planning Teams are responsible for the design of Waverley's strategic, local and neighbourhood centres.

When selecting and locating materials, finishes and furniture elements, it is important to consider: the overall layout and use, the desired character, the users' needs, the wider context and long term plan for the space, traffic calming measures and any specific site constraints such as heritage overlays.

Replacement of 'like for like' elements identified through Council's Strategic Asset Management Plan, are to be selected and installed as detailed in this manual

When an alternative location for a replacement is sought, or a location for a new element is required, consult with a Council Landscape Architect.

Parks and Open Spaces

The Open Space Planning Team is responsible for the design of Waverley's parks and open spaces.

When selecting and locating materials, finishes, furniture and landscape elements, it is important to consider: the overall layout and use, the desired character, the users' needs, the wider context and long term plan for the space, the micro-climate and any specific site constraints such as heritage issues.

Replacement of 'like for like' elements identified through Council's Strategic Asset Management Plan, are to be selected and installed as detailed in this manual.

When an alternative location for a replacement is sought, or a location for a new element is required, consult with the Open Space Planning Team.

