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Liveable Neighbourhoods

3.1 Neighbourhood Renewal

DESIGN GUIDELINES

FOR SUSTAINABLE HOUSING & LIVEABLE NEIGHBOURHOODS

on behalf of the South Australian Housing Trust



Government of South Australia
SA Housing Authority

3.1 NEIGHBOURHOOD RENEWAL

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3.1 NEIGHBOURHOOD RENEWAL

INTRODUCTION

Background

Established in July 2018, the SA Housing Authority (SAHA) is a statutory corporation that administers the South Australian Housing Trust (SAHT) Act 1995.

The SAHA consolidates housing-related services and management of the housing stock; including strategy, service delivery, assets and related corporate supports; and plays a key role in enabling and supporting the State's modern, multi-provider housing system and in establishing an environment that promotes shared responsibility and ownership.

The Authority is committed to providing housing that is socially and environmentally affordable and sustainable. To help achieve this, a suite of design guidelines for sustainable housing and liveable neighbourhoods that are applicable to all types of new residential construction, both rental and affordable have been developed.

The suite of design guidelines comprise the following:

- 1.1 House Design Guide
- 1.2 Amenity Targets
- 1.3 Apartment Design BCA Class 2 Construction
- 1.4 Housing Accommodation Schedules
- 1.5 Affordable and Market Housing
- 2.1 Land Titling and Service Infrastructure
- 2.2 Design Guidelines for Site Layouts
- 2.3 SAHT Universal Housing Design Criteria
- 2.4 Environmental Sustainability
- 3.1 Neighbourhood Renewal
- 3.2 Row and Terrace House Design
- 4.1 Housing Modifications
- 4.2 Generic Design Guidelines for House Renovations

Designers must understand and incorporate the requirements of these guidelines on all residential projects that involve land and properties owned by the SAHT. These guidelines assist designers in the interpretation of current policies and practices and include applicable features of the Good Design Guide SA historically published by Planning SA.

Some design compromise is acceptable to take into account site constraints and local planning conditions. All designs will be considered by the SAHA on merit. However, the minimum spatial dimensions needed to meet universal housing living requirements are generally not negotiable.

3.1 NEIGHBOURHOOD RENEWAL

This Design Guideline

Neighbourhood renewal is a term used to include both urban renewal which is generally the physical and infrastructure upgrading of an area together with community renewal which is the social and economic community development activities.

Neighbourhood renewal objectives include:

- Enhancing housing and the physical environment including public space and recreation areas;
- Creating opportunities for affordable home ownership and affordable rental accommodation;
- Integration of new residential development;
- Improving personal safety and reducing crime;
- Increasing access to services;
- Improving the physical amenity and value of the assets;
- Distributing the concentration of social housing; and
- Increasing people's pride and participation in the community.

Local communities are places where people can connect, relate and be actively involved, groups and associations flourish, as do social networks, neighbourliness and a sense of community identity. Critical elements include: community composition, population density, quality, attractiveness and cleanliness, streetscapes, housing mix, local shopping precincts, local resources and facilities, local transport and community safety.

For SAHT projects, the key drivers for neighbourhood renewal include:

- High concentration of ownership of land and building assets;
- Declining asset value of houses;
- Increased maintenance cost;
- Social issues such as crime, safety and security;
- Location disadvantage;
- Tenancy management problems including low demand for housing, high turnover and vandalism;
- Outdated public infrastructure; roads, parks, children's facilities etc.

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History of Neighbourhood Renewal in South Australia

Mitchell Park was the first urban renewal project undertaken in South Australia and the first of its kind in Australia, commencing in 1986 with completion in 2005. The project area consisted of mainly double units built by the SAHT in the late 1950s. Prior to the urban renewal project, the SAHT ownership in the area was 75% of the total dwellings and the project aimed to reduce this ownership to 35%, with approximately 1000 houses affected. This was a \$30m project with objectives including the opportunity for home ownership, improving integration of new residential development, enhancing the social environment, assisting the distribution of public housing, improving physical amenity and value of SAHT assets, and lowering the maintenance liability.

A study of community perceptions and social outcomes in urban renewal in Mitchell Park conducted by the University of South Australia in 1998 found community perception after the redevelopment was positive. They found the neighbourhood to be quieter, safer, more attractive and friendlier and as a result, many residents were in favour of doing redevelopment.

There have been many other successful urban renewal projects including:

- Hillcrest;
- Windsor Gardens (Windsor Green);
- Gilles Plains;
- Westwood (Ferryden Park, Mansfield Park, Angle Park, Athol Park, Woodville Gardens);
- Salisbury North (Hawksbury Park);
- Kilburn South (Mapleton Grove).
- Playford North (Playford Alive);
- Elizabeth Park;
- Woodville West.

Regional South Australia projects include:

- Whyalla - Myall Place;
- Port Lincoln South;
- Port Pirie - Risdon Park.



Feature entrance to Risdon Park



Existing double unit rental house generally 50 to 70 years old. Potential for redevelopment - generally small 70m² family house on a large 600m² to 700m² allotment



2 storey townhouses at Mitchell Park

3.1 NEIGHBOURHOOD RENEWAL

IDENTIFYING & DEVELOPING URBAN RENEWAL INITIATIVES

The following strategies should be used for the identification and delivery of successful projects.

Project Scoping

(a) Opportunities and Constraints

It is critical to ensure the project scope is feasible and achievable. A comprehensive understanding of the following opportunities and constraints is required:

- Land/house values/asset condition;
- Existing infrastructure, its condition and capacity;
- Market conditions and demand;
- Competition;
- Planning controls/density provisions;
- Community assets and community engagement.

(b) Identification and Analysis of Options

Any proposal should be thoroughly compared with other options and the base line of 'do nothing'.

Engage with Key Stakeholders

(a) Shared Vision and Agreed Project Objectives

Early engagement of key stakeholders in identifying issues, common objectives, and degree of ownership of the solution, will demonstrate the level of understanding and commitment, and may clarify if the project should proceed, when and in what form.

It is generally acknowledged that urban renewal needs to be delivered through comprehensive and strategic inter-agency and local government partnerships in order to achieve significant change at the local level.

Different types of investment, both public and private are needed to complement one another and to develop effective working partnerships.

There is a key role for the private sector, local governments and housing associations in housing and community regeneration. The variety of agencies which need to be involved include health, education, community services, housing, transport, infrastructure agencies, police and service clubs.

3.1 NEIGHBOURHOOD RENEWAL

(b) *Whole of Government Commitment*

Housing led renewal activities can improve the physical condition and appearance of some neighbourhoods and broadened the socio economic characteristics. However, as the problems of an area are often multiple and diverse they are beyond the scope of a single agency to solve. Housing issues need to be considered as part of a wider program of addressing social and economic issues and the problems of lack of safe, secure areas and high crime rates.

The rejuvenation of a community requires a coordinated effort to improve social, economic and physical conditions, and the contribution from other Government agencies to such aspects as roads, public transport, education, health, welfare, training and employment and infrastructure.

A formal agreement between key stakeholders, signed by relevant Ministers, the heads of state agencies and local government, can provide the degree of certainty of financial and resource commitment, and should be secured prior to the SAHT commencing an urban renewal initiative.

Consideration should be given to forming an across government committee for larger renewal projects with representatives that have the authority to make decisions and commitments.

(c) *Local Government*

Local Government, including staff and elected members play a crucial role in any sustainable urban renewal initiative, and ideally would form a partnership with the SAHT to deliver an urban renewal project.

The Councils annual budget cycles and competing priorities for the allocation of resources can result in Councils initial enthusiasm faltering over what is often a long term renewal project. It is therefore critical to secure commitment via a Memorandum of Understanding and/or a Development Agreement with the Council.

3.1 NEIGHBOURHOOD RENEWAL

Community Consultation

Community development approaches are one aspect of urban renewal which can empower and enable local people to take the initiative by helping them to develop appropriate skills, knowledge and confidence. It may involve linking to other services such as training for employment.

(a) Input in Identifying Issues and Opportunities

It is imperative that a deliberate and genuine community engagement and consultation strategy be developed as part of the planning for an urban renewal project.

The most critical consideration in community consultation is to be able to identify up front and articulate to the community, the negotiable and non-negotiable aspects of the proposed renewal project.

Local people need to be involved in identifying issues, needs and potential solutions for the areas in which they live.

(b) Neighbourhood Development Officer (NDO)

The funding of a NDO position (most effective if jointly funded with Council) during the planning and community consultation phases of a project has contributed to the success of urban renewal projects.

The position should be occupied by someone who can empathize with and advocate on behalf of residents, balanced with an understanding of the development and financial imperatives of the key investors.

(c) Community Reference Group (CRG)

Many of the successful urban renewal projects have an active, enthusiastic and broadly representative CRG.

The role of the CRG should be clearly identified as part of the governance structure of the project. The CRG should operate with the support of the NDO within a clear framework which articulates role and responsibilities.

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Financial Considerations, Budget and Governance

(a) *Comprehensive Budget and Approvals*

Some projects may only be approved in stages, but the preferred outcome that provides certainty for stakeholders, investors and the community is a ‘whole of project’ approval and budget.

For a project that will be delivered over an extended period of years, the budget should reflect escalation in costs and revenue, thus reducing the potential need to revisit the budget approval process.

Invest time in defining the budget, ensuring that adequate funds and allowance for contingencies are provided.

(b) *Governance Structure*

The Governance structure should define the roles and relationship of key stakeholders, and clarify reporting and decision making responsibilities.

(c) *Internal Management*

A suitable project management and delivery structure should be formulated to suit the nature of the project, and may include a Steering Committee of Senior Management.

(d) *Private Sector/Marketing*

The participation of the private sector, both as developers and as consumers of land and housing is a critical component of any urban renewal project, and detailed research should be undertaken to ensure the products generated by the renewal are suited to the identified market.

Further, the project should make an early appointment of a marketing consultant and engage with the appointed Real Estate Agent to provide a total marketing and sales focus for the project.

(e) *Rolling Investment Fund*

Consideration should be given during the planning phase of the project, as to the market conditions, and whether the project would be assisted by the SAHT constructing housing product with the intention to sell on completion. Proceeds could be reinvested into further construction until the market conditions or consumer confidence in the project results in private sector acceptance and investment.

This has been used to great effect at Whyalla, and at Playford Alive where two storey products, or affordable housing for example were identified by the project to be desired outcomes.

The housing outcomes should be of a design to be both attractive to the private buyer, but suitable for retention by the SAHT as rental stock if they fail to sell.

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Economic, Social and Environmental Improvement

(a) *Project Goals and Objectives*

A successful renewal project needs to make real and sustainable improvements to the aspects of community life, to improve the social, economic and environmental conditions for residents. Typical project goals and objectives are indicated in the Table below.

Project Goals	Project Objectives
<p>1. Physical Viability</p> <p>To develop an attractive, safe and desirable living environment where people will want to live by improving the quality of housing, community facilities, public open space, and infrastructure in the area</p>	<p>1.1 To improve the provision of community facilities and the quality and amenity of public open spaces (eg parks, footpaths / walkways)</p> <p>1.2 To improve the quality (e.g. integration) and provision of public infrastructure</p> <p>1.3 To improve road and pedestrian safety</p> <p>1.4 To improve the quality and amenity of public and private housing to better match consumer needs and community standards and increase demand for housing in the area</p>
<p>2. Social Viability</p> <p>To increase community stability, cohesion, pride and self-reliance by changing the social and tenure mix, reducing crime and stigmatisation, improving access to and co-ordination of community facilities and services and involving residents and relevant stakeholders in the improvement process</p>	<p>2.1 To increase community spirit and pride and improve integration with the surrounding community.</p> <p>2.2 To increase community stability and cohesion</p> <p>2.3 To develop community leadership in initiating and managing actions for community involvement</p>
<p>3. Economic Viability</p> <p>To increase the value of public and private housing, reduce operating costs and provide adequate financial returns for stakeholders to ensure that area and housing improvements are revenue neutral</p>	<p>3.1 To increase public and private housing values</p> <p>3.2 To achieve an agreed balance between home ownership, public housing and private rental</p> <p>3.3 To reduce operating costs for public housing</p> <p>3.4 To provide appropriate financial returns for project partners relative to their respective risks to ensure that improvements are revenue neutral</p> <p>3.5 To develop initiatives to stimulate employment and training opportunities</p>

(b) *Monitoring Project Performance Against Objectives*

It is important to monitor and evaluate to what extent program goals are met and at what cost in terms of funding and efficiency, achievements and shortcomings.

The initial analysis of the project area should be undertaken at project commencement to establish base data, and the regular analysis over the life of the project should measure consistent indicators and use consistent methods to gather data. The use of surveys and face to face interviews with stakeholders and residents can prove an effective method to complement hard data and statistics to confirm actual and perceived improvements or shortcomings. The project governance structure should provide for an analysis of outcomes and a framework for modifying the project accordingly.

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Management of Housing and Project Area

Good housing management and maintenance should be considered in the design process.

It is important to consider the retention of existing housing that is in good condition. The retention of some housing maintains a community connection to the existing character of the neighbourhood.

(a) Maintenance of SAHT Stock and Public Spaces

The presentation of housing and public spaces that sit in outlying stages of a renewal project should not be left to deteriorate, and recurrent funds for maintenance should be maintained.

(b) Presentation of Land

The vacant allotments within renewal areas, whether cleared land parcels awaiting development or newly created and serviced allotments, should be regularly inspected for excessive vegetation growth, vandalism or rubbish dumping.

This is important for both prospective purchasers and existing residents.

(c) Security

The project should respond to any issues relating to security, whether personal safety is an issue for residents as surrounding housing is demolished, or to ensure that theft and/or vandalism of construction sites, completed developments and public facilities is minimised.

IMPLEMENTING SAHT URBAN RENEWAL PROJECTS

Planning Framework

South Australia has a draft planning and design code that is being developed in accordance with the Planning, Development and Infrastructure (PDI) Act 2016. When implemented, this code will replace all Council's Development Plans.

The SAHT is excluded from the definition of a state agency for the purposes of land division and building construction and it is required to obtain development approval in accordance with the PDI Act prior to proceeding with the work.

Physical Infrastructure Requirements

There are several important investigations that should be carried out during the identification stage of an urban renewal initiative. These include preliminary site investigation, areas affected by increasing housing densities, existing physical services capacities, stormwater implications, existing road patterns and road widths, significant trees, street furniture and council reserves. Guiding principles on understanding and dealing with each of these physical infrastructure requirements are as follows:

Preliminary Site Investigation

(a) Existing Buildings

Investigation into the structural integrity, maintenance cost and usefulness of existing buildings is required. Also, the internal floor layout, including circulation spaces and the buildings compliance with the SAHT's Accommodation Standards should be checked prior to deciding which of the existing buildings to maintain and upgrade and which to demolish.

(b) Contours and Land Fall

Prior to commencing detailed design work, it is necessary to obtain information on the existing land fall to determine the requirement for significant earthworks, allotment filling, rear of allotment servicing, retaining walls and easements. This is particularly important for steeper sites and sites with older infrastructure which may be inadequate for large increases in housing density (ie SA Water sewer mains were only designed to service 2/3 of the allotment depth and may not be deep enough for development at the rear of allotments). Also, existing stormwater infrastructure will probably be inadequate for today's standards and significant costs can be associated with extension and additions to the existing system.

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(c) *Desktop Analysis*

For proposed urban renewal areas, a desktop analysis of the existing physical environment is available utilising the resources of Google street view and SAHA's AssetIQ. This enables the identification of any likely clashes with existing street infrastructure, possible significant trees, existing water, sewer, telecommunications, electrical and gas services.

(d) *Regulated and Significant Trees*

It is important to determine the location of existing regulated and significant trees (in accordance with the Development Act 1993) which may need to be removed or which may affect future development opportunities. Some preliminary information can be obtained from Google Street View.

(e) *Ownership*

The existing ownership within the development area is important as it can significantly reduce opportunities for orderly redevelopment. Strategic buy backs which could enhance redevelopment potential should be identified as soon as possible to allow for negotiation and purchase.

(f) *Identify Existing Physical Service Infrastructure*

To enable more accurate estimating of development costs it is important to:

- Obtain Dial before You Dig location information from the Service Authorities (sewer, water, electrical, gas and telecommunications); and
- Identify the location of existing stormwater infrastructure from historic plan information held in SAHA's DIMS and AssetIQ or by direct contact with the local Council.

This will allow for the identification and thorough investigation of potential servicing issues that may adversely impact on the proposed redevelopment and could ultimately affect the viability of an urban renewal project.

(g) *Site History and Potential for Land Contamination*

A site history investigation should be carried out prior to the development proceeding to ensure that there are no potential contamination issues with the site associated with previous land uses. If the site history identifies that there are potential contamination issues then further investigations including the possible engagement of an Environment Protection Authority (EPA) accredited Environmental Auditor will be required. It should be noted that land that is rezoned to a more sensitive land use (ie residential use) will require the engagement of an EPA accredited Environmental Auditor to sign off on the suitability of the land for residential use.

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Identifying Infrastructure that may be Affected by Increasing Housing Densities

(a) Sewer

In South Australia, sewer mains generally run down the centre of roadways however there are areas where rear of allotment sewer drains are quite common, particularly in Elizabeth. In most urban renewal areas, to cater for the increased number of allotments, it is often necessary to extend the existing sewer mains. It is also imperative to check the depths of existing sewer mains to ensure that any additional allotments are able to be serviced without significant allotment filling or extension via easements within the new allotments.

Most local Councils do not encourage the construction of high retaining walls (ie higher than 600mm) at the rear of allotments as this has the potential to create overshadowing problems between neighbours. In areas where the existing sewer mains are laid at the rear of the allotments (ie within easements) there can be a significant impact on the housing yields that will be obtained.

(b) Water

In most urban renewal areas, there will be adequate water supply pipe-work within the road network and only minor extensions will be required. Where housing apartment developments are proposed, it is important to check the water pressure within the urban renewal area to ensure that adequate fire protection can be provided without the requirement for tanks and pumps on the housing apartment sites.

(c) Electrical

Electrical infrastructure may be inadequate for large increases in housing density and this will cause significant cost implications to the project. SA Power Networks (SAPN) normally require the cost of any infrastructure improvements to be borne by the developer. In some areas with existing underground electrical infrastructure, the electrical cables were direct buried and are now at the end of their economic life. SAPN require the SAHA to pay for the replacement of this infrastructure within urban renewal projects.

It is important to determine the location of existing High Voltage electrical infrastructure (either overhead or underground) and transformers so that an assessment can be made of possible extensions of this system. The location of new ground mounted transformers should be considered as the smaller allotment sizes make it more difficult to find suitable locations.

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SAPN has, over the years, increased the power requirements for each dwelling to 8Kva and this normally requires a transformer for approximately every 25 dwellings. In comparison, most of the previous urban renewal projects have an existing transformer for approximately 100 dwellings. For multi storey apartment blocks the general requirement is for a transformer for each apartment block.

(d) *Gas*

In most urban renewal areas, the gas infrastructure should be adequate and only minor extensions within the existing road reserves will be required. However, in some cases the size of the lead up pipe-work may have to be increased.

(e) *Telecommunications*

Telephone services in the older urban renewal areas are generally provided using the electricity poles and any alteration to these poles will affect these services.

(f) *National Broadband Network*

As a developer, the SAHT is responsible for providing telecommunications infrastructure to its new properties. Based on the SAHT development scenario, the project team may need to apply to NBN Co to do so. This means an nbn™ New Developments application form will need to be completed. For more information and the online application refer to:

<https://www.nbnco.com.au/develop-or-plan-with-the-nbn/new-developments>

Existing Physical Services Capacity

(a) *Involve Service Authorities and Councils*

Once a desktop analysis has been carried out to identify possible service inadequacies, the service authorities should be approached to determine the extent and cost implications to the project. This is particularly relevant when lead up infrastructure requires upgrading.

Prior to approaching the service authorities, it is important to ensure that plans are well advanced and construction timetables are reasonable so that the advice given is timely. Adequate time must be given to the service authorities to carry out an accurate assessment and provide their requirements.

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(b) *Easements for Service Extensions*

It is important to determine the requirements for any easements for sewer, stormwater, or electrical infrastructure as this can have implications on the allotment layout and sizes. Smaller allotments will not cater for 3m or 4m wide easements along the length of the allotment without compromising the building envelope. Also, SAPN transformer easements are 3m x 3.5m and need to be located to suit the allotment layout. Preference should be given to locating them on public reserves that can be landscaped to minimise the visual impact.

Stormwater Implications

(a) *Existing Stormwater Infrastructure*

In most urban renewal projects the existing stormwater systems are considered inadequate by today's standards and extension and modification to the existing system will usually be required. This is due to the requirement to reduce road flow widths, to cater for the increased densities and the lessening of soft surface open space for the disposal of surface water. Consideration needs to be given to overland flow paths for 1 in 100 year storm events and it should be noted that this level of stormwater provision was not normally required when the urban area was originally developed. It may be necessary to engage a specialist Engineer to prepare a stormwater master plan to examine the existing stormwater system and to provide advice on stormwater upgrade system requirements. The local Council should be approached to provide financial assistance to upgrade their current infrastructure to today's standards.

(b) *Additional Stormwater Detention Requirements*

In many cases, the Council will require some form of stormwater detention in addition to the statutory requirements of dwelling construction approval for stormwater collection. This can take the form of detention basins incorporated into Council reserves with controlled outlet to the existing stormwater system. The location of reserves within the development should be strategically placed to take this factor into consideration. It is sometimes possible to carry out land swaps with Council to obtain land in the correct location. It should be noted that development of these detention basins is normally at the developers cost and the reserves should be designed for multi use rather than only as drainage reserves. Also, when required the opportunity to incorporate swales into the street landscape should be investigated.

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(c) *Rear of Allotment Stormwater*

In some cases, it is not possible to direct surface water to the street watertable and rear of allotment stormwater systems are required. There are two types of stormwater easements:

- Council easement - when more than 1 allotment is required to be served by a rear of allotment drain to the street and a 3 metre easement in the name of the Council is required. Council then takes ongoing responsibility for the maintenance of the stormwater system.
- Private easement - it is possible to create a private easement when only 1 allotment drains through an adjoining property to the street. This easement can be 1 metre wide and the maintenance of the drain is a requirement of the owner of the easement.

General Definition of an Easement

An easement is a right held by someone or body to make use of the land of another, eg, legal access to rear of allotment storm water drains is provided by the creation of an easement for drainage purposes. The easement can either be a service easement, often referred to as a statutory easement, eg, to Council; or a private easement, eg, to another person.

Road Patterns, Street Parking and Landscaping

(a) *Investigate Opportunities to Close or Alter Existing Road Patterns*

In some cases, it may be possible to create a better outcome by closing existing roads, modifying existing road widths to incorporate traffic control devices and landscaping road reserves or reducing existing road widths. When proposing road closures, stormwater drainage and the location of other existing physical services are a major issue and should be considered. Also, discussion with the local Council and its consent will be necessary prior to any decisions being made.

(b) *New Road*

The construction of new roads within the urban renewal area can be problematic and costly, and careful consideration should be given to the overall benefit to the redevelopment before commencing the design. The new road construction, undergrounding of services and provision of footpaths within the road reserve, increases costs significantly when compared with developing new allotments within the existing road pattern.

(c) *On Street Parking Requirements*

There is an expectation from most Councils that the developer should provide 1 additional on-street car park for each additional 2 allotments created and this is in addition to the requirement for 2 off-street car parks per dwelling. However, with narrow frontage allotments, street landscaping and service pit and/or pole locations, this is becoming more difficult to achieve. Careful consideration needs to be given to the provision of on-street parking prior to commencing an urban renewal project.



Shared roadway at “Inspire” development at Noarlunga Central

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(d) Landscaping

With the advent of allotment frontages as narrow as 8 metres, the location of access points, service pits and/or poles and footpaths severely limits the opportunities for street planting. Careful consideration needs to be given to the grouping of services to the allotments and the combining of access points to allow sufficient space in the road verge to plant a tree. Combining the common service trench (in underground areas) and the location of the footpath assists in allowing sufficient clearance for tree planting. Planting of advanced specialist street trees within an urban renewal project is a cost effective way of improving the environment and creating a unique identity to the area.

Regulated and Significant Trees

(a) Impact on Future Development Opportunities

The occurrence of regulated and significant trees within the urban renewal area will have an impact on the allotment layout. A careful tree survey needs to be carried out prior to the commencement of the development to identify any potential restrictions by the location of these trees.

Development Approval from the local Council is required prior to pruning or removing a regulated or significant tree. Tree species that are native to the area, are most likely to cause issues with obtaining development approval and an arborist will need to be consulted to determine a trees suitability and the potential for its removal. Also, if the determination is left to the building approval stage of the development then there is the potential for a significant restriction to the housing densities being achieved.

It should be noted that there may be an opportunity to remove a regulated or significant tree within the road reserve if it can be shown that the replacement of advanced trees of a consistent type would enhance the streetscape.

Regulated Tree

Generally any tree with a trunk circumference of 2.0m or more (measured at a point 1.0m above natural ground level). In the case of trees with multiple trunks, regulated trees are those with trunks having a total circumference of 2.0m or more and an average circumference of 625mm or more (measured at a point 1.0 above natural ground level)

Significant Tree

Generally a regulated tree with a trunk circumference of 3.0m or more (measured at a point 1.0m above natural ground level). In the case of trees with multiple trunks, significant trees are those with trunks having a total circumference of 3.0m or more and an average circumference of 625mm or more (measured at a point 1.0m above natural ground level).



Street trees have amenity value

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Street Furniture

(a) *Cost Implications of Alterations to Significant Street Infrastructure*

Careful consideration needs to be given to the existing street furniture within the urban renewal project. As allotment frontages are reduced, the location of stobie poles, street trees, side entry pits and traffic control devices becomes a significant issue. Also, stobie poles supporting high voltage power lines, side entry pits and significant trees can be both expensive and difficult to relocate or remove and the allotment layout may need to be modified to suit.

(b) *Footpaths and Existing Kerbing*

Prior to the commencement of any redevelopment work, agreement should be reached with the local Council regarding the condition of existing footpaths, kerbing and road surfaces.

In urban renewal areas the footpaths and kerbing are sometimes in poor condition and the Council should contribute to the cost of their replacement. Also, narrower frontage allotments, with increased access points will generally require the replacement of existing footpaths. It should be noted that footpaths on one side of the road only, with enhanced landscaping on the other side may be considered by the local Council.

(c) *Rubbish Bins*

An issue often overlooked in the planning process is the location of areas within the road reserve to position rubbish bins for collection. Most local Councils now provide 3 bins (hard rubbish, recycling and green waste) with collection of 2 bins on a weekly basis. The waste removal contractors normally require the bins to be placed 1 metre apart to enable easy pick up. Consideration needs to be given so that adequate kerb space is available for the storage of bins without compromising footpath access and located away from on-street parking areas.



Orderly placement of rubbish/wheelie bins

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Council Reserves

(a) Location of Existing Reserves

Consideration needs to be given to the location of existing Council reserves and the potential to increase their size or relocate them to include requirements for stormwater detention. The enhancement of existing reserves should be done in consultation with the local Council and it may assist in the marketing of the new allotments. A contribution from the local Council may assist in providing facilities within the reserve which are currently not available in the area (eg basketball courts, skateboard facilities, barbeques)

(b) Requirement for Additional Reserves

As part of the planning process, consideration needs to be given when locating new reserves to take into consideration the need for stormwater detention. The local Council may have an overall plan for the provision of reserves within the area and the potential for consolidation of existing and new reserves should be investigated.



Wetlands and detention basin at Mitchell Park

