

City of Cockburn | Residential Verges |

Verge Development Guide



Revisions

Revision	Revision Date	Nature of Revision.	Revised by
Draft	06/06/14	Draft for comment	Andy Jarman
A	15/05/14	Compressed contents fewer pages	Andy Jarman
B	27/05/14	Shrubs removed from verge edge in templates	Andy Jarman
C	10/07/14	Verge development policy adopted – guide’s draft status dropped. Placed on website.	Andy Jarman

Table of Contents

1.0 Introduction 4

1.1 Recent State Government Policy Changes. 4

2.2 This document's structure. 4

2.0General Guidance. 5

2.1 Stormwater. 5

2.2 Street Trees. 5

2.3 Power Lines and Underground Services (utilities). 5

2.4 Parking on Verges. 6

2.5 Kerbside parking on the street. 7

2.6 Verge maintenance. 7

2.7 Footpaths. 7

2.8 Crossovers (driveways) 8

3.0 Verge types. 8

A. Single houses on single lots. 8

Corner lots. 8

Mid-block lots. 8

B. Battle Axe Lots. 9

C. Group housing containing less than five houses. 10

D. Large Group Housing developments (more than 5 homes) and Multiple Dwelling developments. 10

Generally 10

Multiple Dwelling developments with side crossover. 11

Multiple Dwelling developments on lots wider than 22m. 12

4.0 How verges are created. 13

A. The Planning Process. 13

B. The Subdivision Process. 13

C. House building phase. 13

D. Handover to the City. 13

5.0 Policies and Controls. 14

6.0 City of Cockburn assistance with verge development. 14

7.0 The Templates. 15

1.0 Introduction

This document is intended to provide guidance to both residents and to property developers who are intending to develop the street verge.

The Local Government Act requires that the City records improvements to its verges, residents and landowners are required to apply for permission to alter the City's verge.

The residential road verge has peculiar legal status. The verge is Crown Land set aside for the purpose of allowing pedestrians to use the street, for access and egress from the private lots and for utility providers* to use for supplying the adjacent households with basic services.

The care and management of the road verge is *vested* with the local authority. The local authority encourages maintenance of the verge by adjacent landowners. This is intended to foster civic pride and community spirit and to avoid foisting the expense of verge maintenance by the City onto the Council's local rates.

1.1 Recent State Government Policy Changes.

In 2007 the State Government's Department of Planning adopted a new system of planning controls known as the *Liveable Neighbourhoods* operational policy(LN). A central aim of LN is to reduce urban sprawl and the cost of servicing people's homes by encouraging more dense development in new suburbs.

Existing suburbs have also been encouraged to increase their development density through another state policy *Directions 2030 and beyond* (D2030). D2030 sets density targets in existing suburbs that local governments are required to achieve. Density increases are generally achieved through '*re-coding*' existing neighbourhoods, that is allowing more homes to be established on each residential lot than previously allowed.

The combination of smaller lots in new suburbs, and more homes per lot in older suburbs is leading to a need to define the role and preferred appearance of the verge more clearly. The application of LN and D2031 has lead to a reduced focus on the care of the verge by adjacent home owners. The narrower streets and smaller lots have reduced the area available for bin presentation, street trees and car parking. This is leading to the creation of streets that are less attractive to use as a pedestrian.

Without detailed guidance on how the verge should be developed, it is increasingly likely that new planning regimes will result in a progressive degradation of the appearance and functioning of the street.

2.2 This document's structure.

This document begins with general guidance intended to answer questions frequently asked by the public.

The general guidance section is followed a step by step consideration of the main types of verge and their particular qualities.

The second section intends to promote preferred layouts of the verge by referring to 'Templates' contained in the appendix to this guide.

The end of the report contains references to various state government controls. These controls predetermine how a road verge must be constructed and managed, and the various specialist teams within the City of Cockburn responsible for administering these state controls.

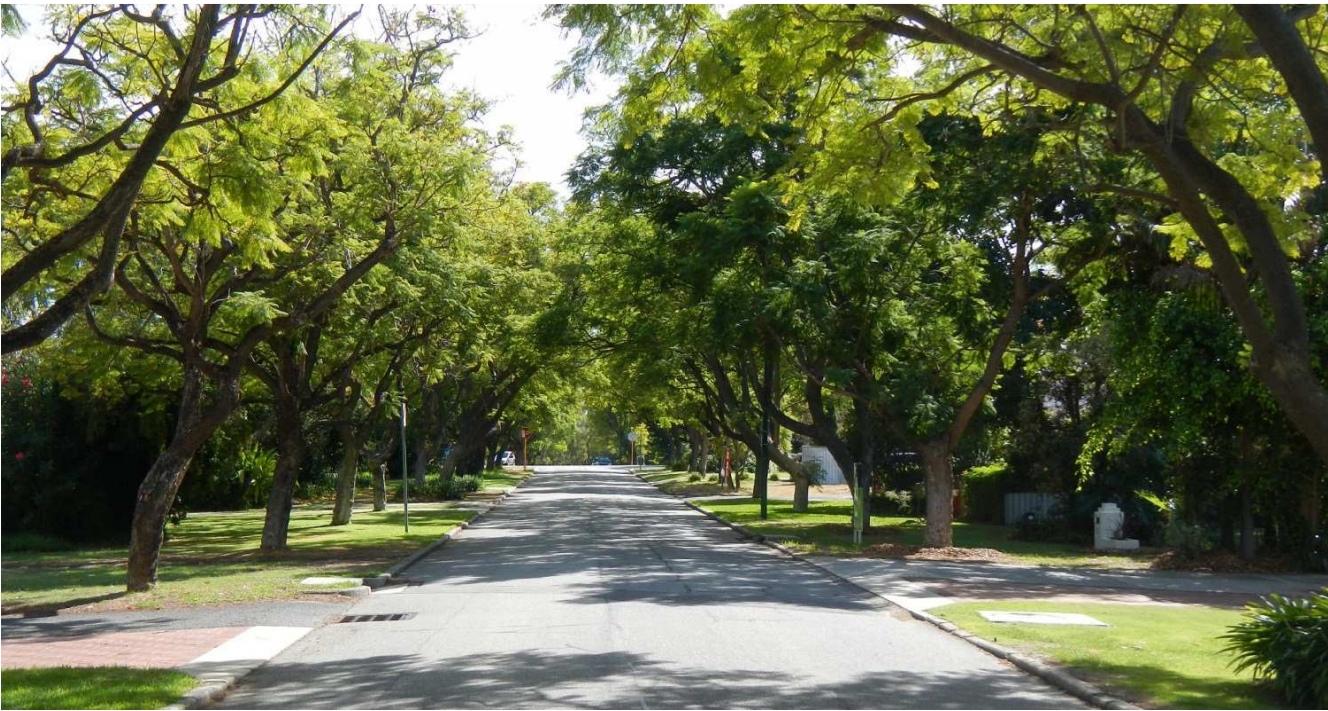
*(electricity, gas sewer, potable water supply and telecommunications)

2.0 General Guidance.

2.1 Stormwater.

Landowners are not permitted to shed storm water onto the City’s roads from either the verge or the lot. Landowners must provide either a strip drain or an area of planting that water running off verge paving can be shed onto.

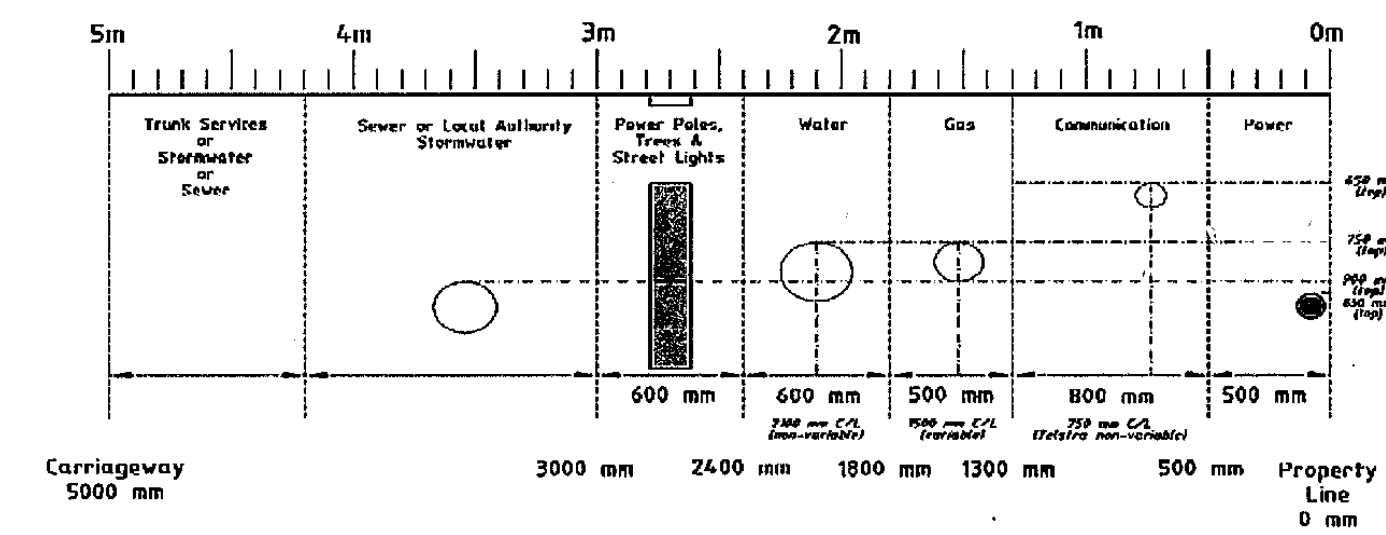
2.2 Street Trees.



The City requires landowners reserve at least one space measuring 2m x 2m on the verge for the City’s tree planting programme. Trees on verges are planted by the City through annual street tree planting programmes, or resident requests. If residents wish to plant a tree on the verge they are requested to contact City’s parks team for advise on the preferred tree species for that street. The State Government requires street trees are planted between 2.4 and 3m from the private property front boundary. On lots 7m deep or deeper, there is an opportunity for planting trees 1m behind the kerb

Council has determined that you are not permitted to remove the City’s street trees from the verge, even when redeveloping the houses on the adjacent lot.

2.3 Power Lines and Underground Services (utilities).



Utilities in your verge are located in agreed alignments parallel with your front property boundary. The Utility Providers have a right to dig up your verge to gain access to their alignment for new services, and to upgrade or repair existing services.

The repair to damage caused by excavations by utility providers is only required to a certain standard, these standards are described in a reinstatement agreement. The City has provided an amended version of the State Governmnets standards conditions, these are available from the City’s website. Unusual or expensive finishes/plantings may not be required to be reinstated as you might have otherwise expected. Residents are encouraged to anticipate this is the case before they invest in finishes such as artificial turf or expensive paving materials/plantings.



The photograph above shows extensive use of artificial turf on the City's verge. Any excavations required in this verge by utility providers will result in the home owner having to replace the artificial turf with new. Utility providers do not replace artificial turf or any other finish not listed in the State Governments agreement.

Not all verges contain the full suite of underground services, it is important that a *Dial Before You Dig* investigation is made of your verge. Dial Before You Dig is a free service offered by the utility providers. A search can be requested via the Dial Before You Dig website (see references toward the back of this guide).

The Dial Before You Dig search will identify the approximate location and presence of any services under your verge, you are responsible for any damage your verge works do to these utilities.

2.4 Parking on Verges.

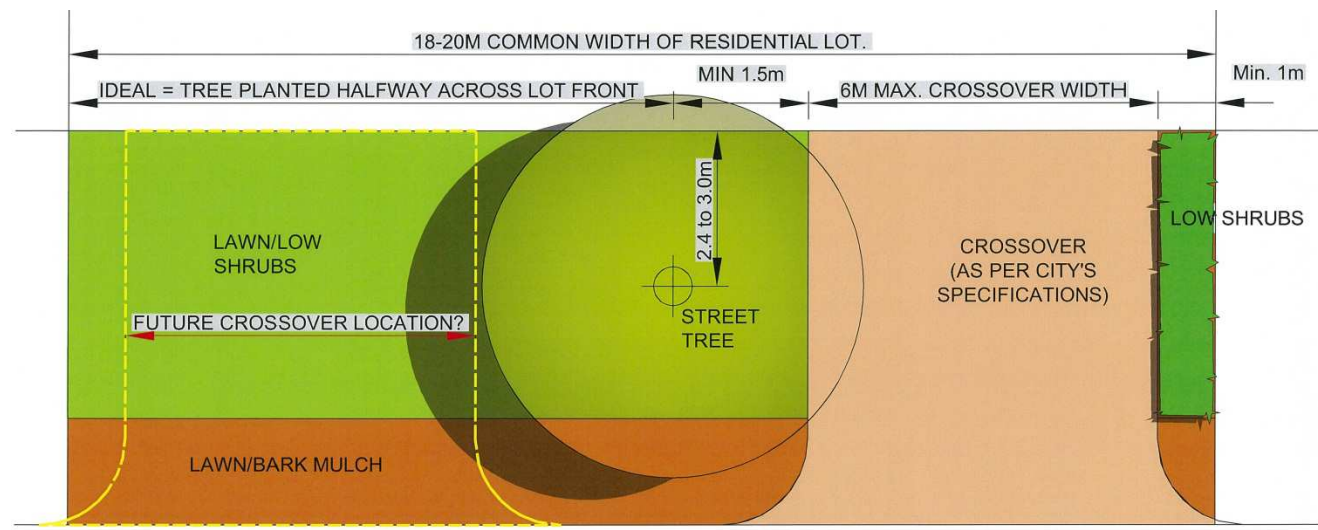


The City's Parking and Parking Facilities Local Laws state residents can determine who is welcome to park on their verge. The Local Laws can be viewed on the City's website.

It can be very difficult for the City's officers to enforce verge parking laws, especially in areas where there is a high demand for commuter or visitor parking, or where it is not clear who maintains the verge. This is likely in the following locations;

- higher density housing areas,
- areas close to public transport routes
- verges that are separated from adjacent homes by a change in level (see picture above)
- minor/side verges alongside corner lot houses.

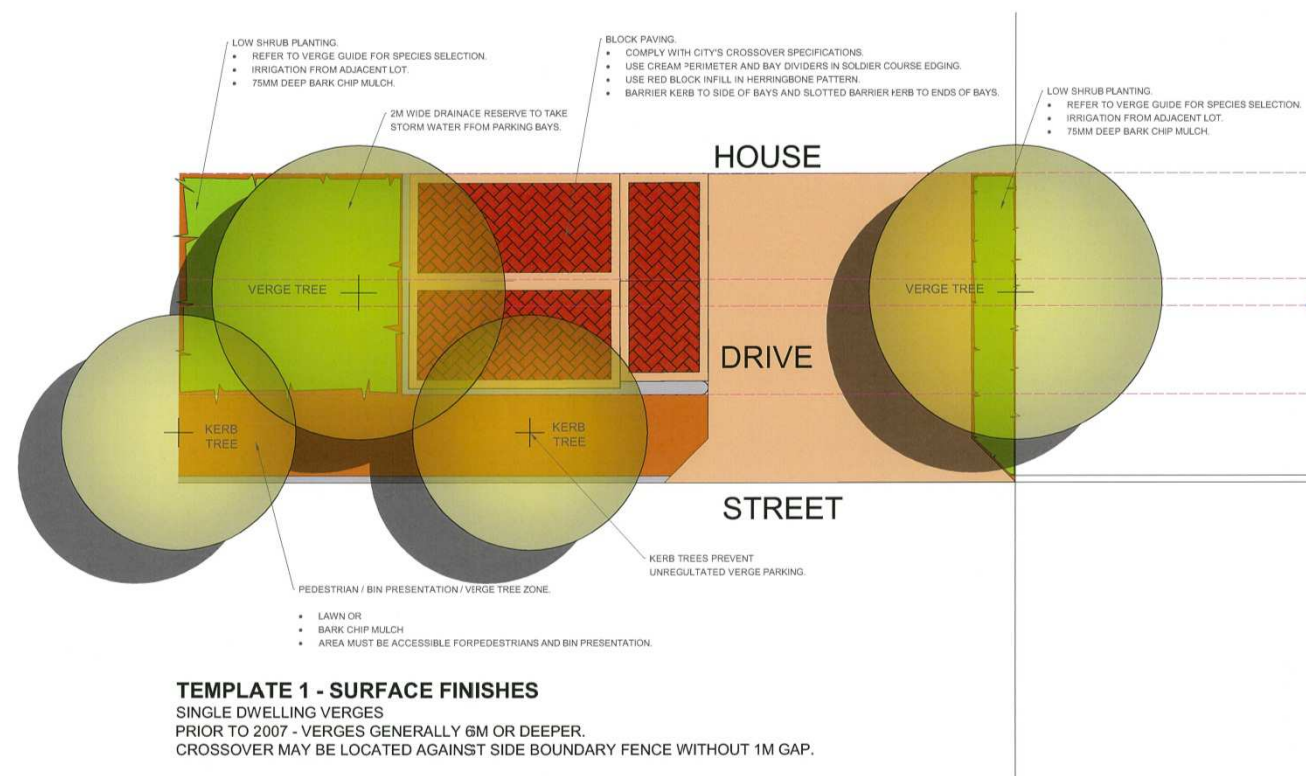
Nevertheless residents are not permitted to erect barriers or obstacles on the verge to stop unwanted parking.



RECOMMENDED VERGE IMPROVEMENTS (PRE 2007 VERGES)

The simplest, and recommended response is to accept that in certain areas, parking on the road (or on the verge itself) by others is going to occur. In such circumstances either paving the verge or planting it with non-irrigated turf which minimises the cost of repairs to plants and irrigation systems.

In areas where this problem arises some residents are keen to prevent unregulated verge parking. Some have erected small polite signs on their front property boundaries advising that verge parking by others is not welcome in front of their property.



It is unsafe to reverse across a footpath or to reverse into oncoming traffic. In this instance the City will consider development of the verge parking bays arranged such that they are entered from the crossover (the driveway leading into the property). A series of templates is presented at the end of this guide to demonstrate how these are best set out for different circumstances.

2.5 Kerbside parking on the street.

There is no restriction upon who can park on the street against the kerb unless

- the street is signposted otherwise, or
- by doing so you block other vehicles from using the street.

On-street kerbside parking is not permitted at least 10m from a road junction.

2.6 Verge maintenance.

The City does not maintain verges, except in very limited circumstances. For example, verges which are important public spaces (such as alongside parkland) will be maintained by the City. Unkempt verges that present a safety hazard (such as fire risks or an obstruction to sightlines) will be serviced a maximum of four times a year, upon receiving requests from local residents.

2.7 Footpaths.



If there is already a footpath on one side of the street it is unlikely a second path will be built on the other side of the street too.

The City will only install a second footpath when traffic levels on the street make it necessary. Where it is unlikely a footpath will be installed in the future, the City encourages residents and owners to adopt the whole verge (including the alignment a future footpath make occupy) as an extension of the front garden, as long as the modifications to the verge comply with the City's verge improvement policy.

If a street does not already contain a footpath on either side of the street it is more likely the City will install a footpath *alongside the kerb* at some time in the future – residents and owners must take this possibility into account when developing the verge.

2.8 Crossovers (driveways)

The City has detailed specifications and design guidance notes for the size position and materials from which crossovers may be constructed.

In certain circumstances funding is available from the City to assist with the construction of crossovers. Permission is required from the City for the construction of crossovers on all verges, details of which section of the City should be contacted to apply for a crossover are given in the last chapter of this report.

3.0 Verge types.

Different types of housing will place different demands upon the verge they abut. The following four classes will cover most of the residential verges found across the City's residential areas;

- A. A single house on a single lot**
- B. A battle axe development** (A single lot that has been subdivided leaving the old house at the front of the property)
- C. Small Group housing developments** (a single lot where the old house has been knocked down and a maximum of five houses have been built in its place)
- D. Large Group housing developments** (more than five homes) and **Multiple Developments** (flats or apartments)

The effect of each of these types of housing development on the adjacent verge is described in the following pages of this guide.

A. Single houses on single lots.

Corner lots.

Corner lots provide much more verge per household than mid-block lots, but they are also more constrained because they need to provide clear views for motorists turning the corner. Providing paving for cars to park on the verge outside corner lots also requires special consideration by the City's Engineers for safety reasons.

Mid-block lots.

The City's older verges are generally deeper than newer verges. In 2007 the State Government adopted new planning rules that encouraged shallower verges, generally 5m or less in depth (see 1.1 Recent State Government Policy Changes in the introduction to this guide).

The newer planning controls also encourage developers to locate a footpath on one side of the road against the front property boundary of people's homes, and not against the street kerb as happens in the City's older suburbs.

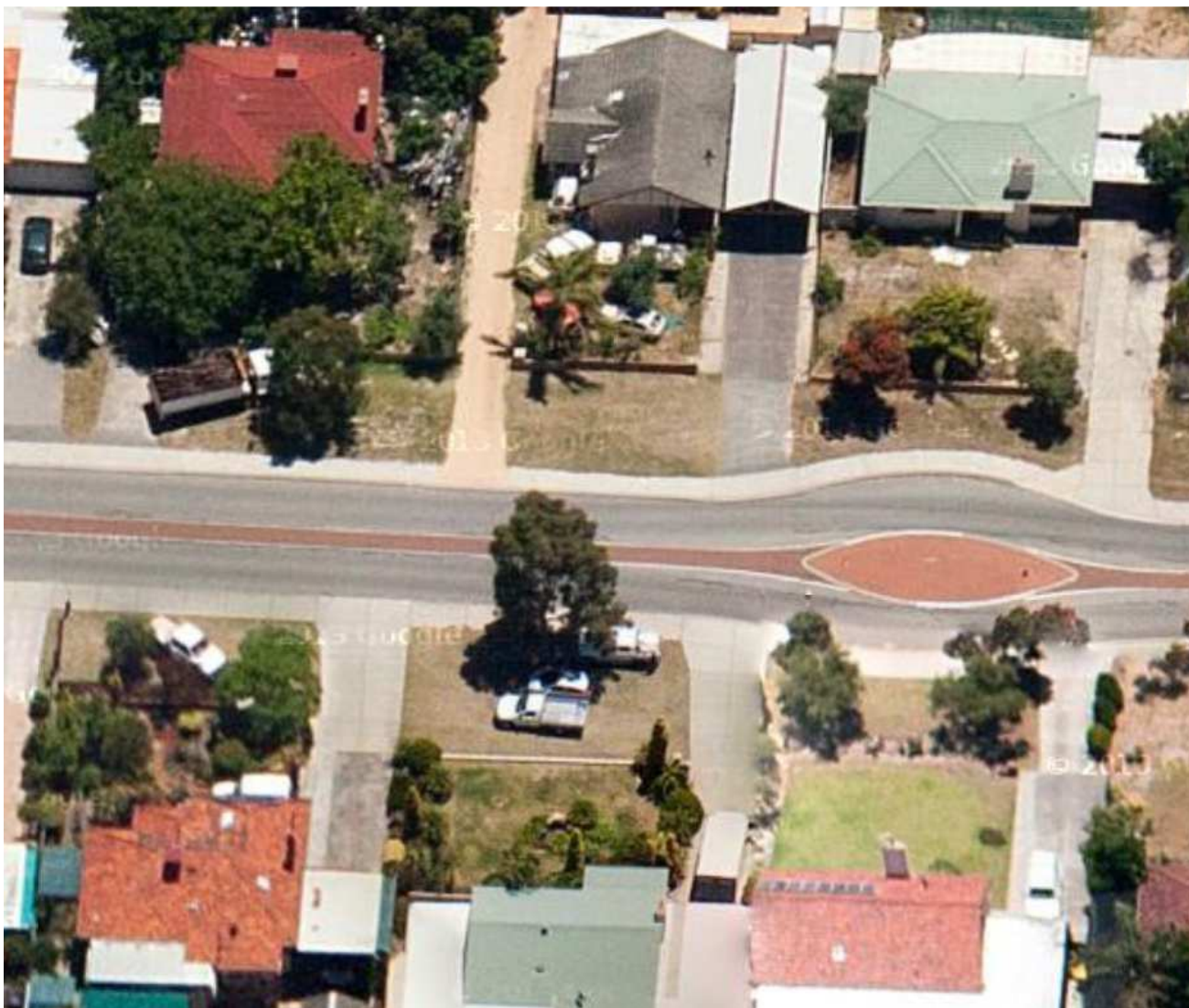


- **Newer verges** (built after 2007, less than 5m deep, footpaths usually located alongside the front property boundary, not alongside the road kerb – example in photograph above).

On newer verges residents and owners are encouraged to develop the whole verge as an extension of the garden in accordance with the City's verge development policy – both along side the kerb and between the footpath and the lot boundary. Take note of some of the general advice at the beginning of this guide regarding exotic surface finishes and tree planting positions.

Where the verge is separated from the front garden area (by a wall or footpath) it can become difficult to make it clear that parking on the verge is only permitted by the occupant and the occupants guests. Others may understandably assume the verge is available for public parking because they appear removed from the adjacent house.

In such circumstances there are advantages to making it clear the verge is the responsibility of the adjacent home occupants and NOT for public parking. Residents sometimes plant low shrub planting on these verges to dissuade parking, or erect small polite signs on their boundary fence to alert visitors to the verge's status.



- **Older verges** (built before 2007, deeper than 5m, usually 6 or 7m sometimes 12 or 15m deep, footpaths in the verge are usually located alongside the road kerb, not alongside the front property boundary – example in photograph above).

Older verges present good opportunities for creating paved parking bays on the verge, see design **Template 1**. Parking bays built on verges in accordance with Template 1 provide the following advantages;

- They enable the resident to establish the verge as their area of concern, especially if paving materials and styles match the house,
- They deter others from parking on the verge,
- They ensure that visitors do not damage planted areas/trees on the verge,
- They ensure that people parking on the verge do not reverse across the footpath or reverse onto the carriageway.
- They preserve more opportunities for kerb-side on street parking by visitors.

Street tree planting locations on older lots may be modified at the request of the resident to allow parking bays to be established in the future. This is particularly important in areas where the City has increased the permitted density of housing. In these *re-coded* density areas the owner may wish to redevelop the lot with more houses.

It is important residents think ahead, since the City doesn't permit its street trees to be removed to make way for crossovers. Planning ahead for lot redevelopment when improving the verge will increase the developable value of the lot.

B. Battle Axe Lots.



Where an existing house has been kept and a new house has been built behind it, the verge will usually contain two driveways or crossovers, these will commonly occupy more than half of the verge area in front of the two houses (see photograph above).

In such circumstances there is little opportunity for creating parking bays like those shown in Template 1, and the amount of kerb alongside which parking on the street can occur is also very constrained.

Some residents may be tempted to pave over the entire verge to maximise the space available for car parking, this is not recommended since it will;

- degrade the appearance of the street,
- create a reversing hazard for pedestrians and road users and
- will require expensive modifications to enable the City to plant trees on the verge

On battle axe lots the City requires that enough unpaved verge is left for planting street trees in the areas between verge crossovers. These trees will be planted on the 2.4 to 3.0m alignment described in the introduction to this guide. Each tree must be given a tree pit of bare soil at least 2m x 2m in size.

C. Group housing containing less than five houses.



Where a single lot contains several houses, each with their own ground level outdoor area, the development on that lot is known by the planning term *Group Housing* (three group housing developments and four single house on a single lot homes are shown in the photograph above).

The development of the verge alongside Group Housing is likely to be very similar to the Battle Axe development, except the increased density of homes in a Group Housing development will be likely to present a higher demand for use of the verge for guest parking, bin presentation and bulk waste collection among the residents who share the verge.

It is important that the layout of the verge improvement organises where people should park, where their bins will be placed during weekly collection and where bulk waste collection will be stacked. If this is not done residents can easily fall into conflict with each other and the verge become abused and unkempt. This is likely to degrade the reputation and appearance of the neighbourhood.

D. Large Group Housing developments (more than 5 homes) and Multiple Dwelling developments.



Generally

Under planning law, where one home in a group housing development has been built on top of another (multiple storeys) the development is known as a *Multiple Dwelling* development.

Multiple Dwelling developments and large Group Housing developments (more than 5 homes as shown in the photograph above) usually result in an exceptionally large number of people sharing a very small area of road verge.

The demand for car parking on the verge is very much *increased*, and the area on the verge available for bin presentation, and bulk waste collection is very much *reduced*. Street trees can easily be crowded out by this intensity of use, resulting in a much degraded street environment.

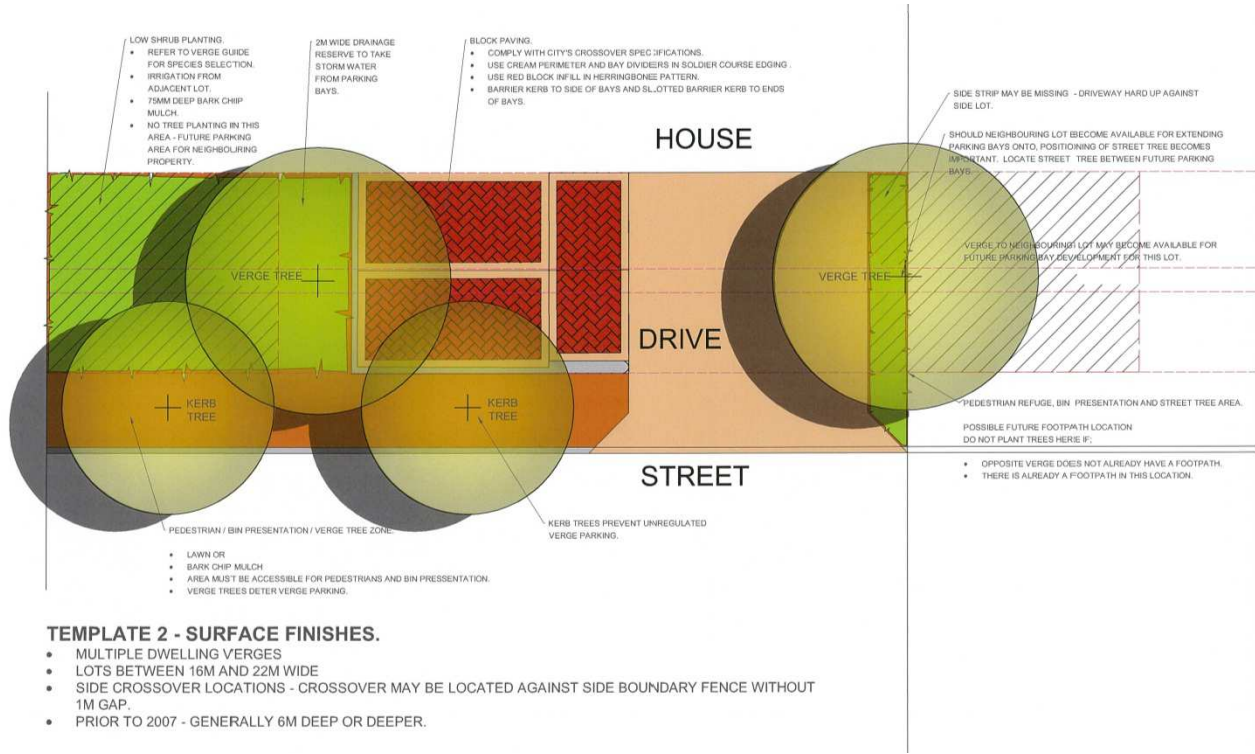
As stated in the introduction to this guide, it is important that;

- car parking on verges is set out so that vehicles do not reverse across the footpath, or reverse into oncoming traffic.
- bin presentation and bulk waste collection is carefully planned for, and
- tree planting is located in protected areas of the verge. Such housing can be so intensively developed that the verge is the **ONLY** place a tree can ever be grown.

Group Housing developments larger than five homes (see photograph below) on one lot must produce an approved City of Cockburn Waste Management Plan. The Waste Management Plan typically requires each household to share their two bins with two other homes on their lot. So six homes will typically only have to provide space for four bins on the verge (two yellow top, two green top bins).



Multiple Dwelling developments with side crossover.

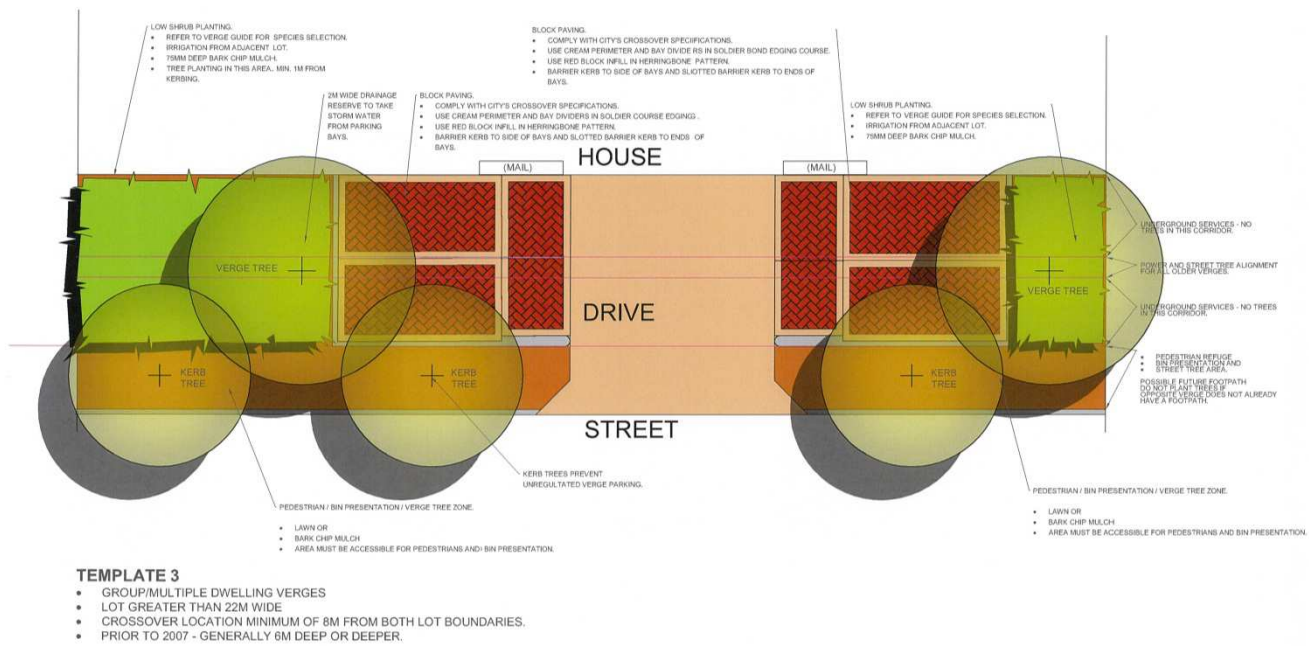


Template 2 describes a suitable layout for a verge where the lot is arranged with a crossover along the side of the lot, and the adjacent lot is also big enough to accommodate Multiple Dwelling /Group Housing developments of more than five homes.

Note that this is very similar to the layout in Template 1, except that Template 2 has left room for the further development of the verge by the neighbouring landowner to improve parking for their new residents. By maximising the amount of parking bays on the verge, the conflict between neighbours can be minimised, and the appearance of the street can be arranged into a coordinated whole.

Multiple Dwelling developments on lots wider than 22m.

When Multiple Dwellings and large group housing sites are wider than 22m it is common for the homes within the lot to be designed around a central access courtyard, with a crossover leading onto the road roughly halfway across the front of the lot. In such circumstances it may be possible to develop the verge in the way described in **Template 3**.



Template 3 allows more parking bays to be established on the verge, while preserving the opportunity for parking on the street against the kerb.

4.0 How verges are created.

A. The Planning Process.

Streets are created when a large parcel of usually rural land is developed through a process referred to as Subdivision.

Subdivision designs are required to follow planning documents called Structure Plans. The Structure Plans will indicate how wide road reserves will be, where Public Open Space should be located and where shops, houses and various other landuse types will be set up.

Structure Plans are plans that have been negotiated by the landowners with the City's Planners. The City's Council will review it's Planner's recommendations and approve or require modifications to their recommendations.

Council endorsed Structure Plans are then sent to the State Government for approval. The State Government's Department of Planning is headed by a commission of senior planning officers called the Western Australian Planning Commission (WAPC). This Commission decides whether the Structure Plan is acceptable, and determines which of the Cockburn Council's requirements it will enforce, which conditions it will recommend, and those that it judges to be too onerous and will therefore decline to mention in its approval.

B. The Subdivision Process.

The design of a new subdivision must follow the Structure Plan. Subdivision plans are reviewed by the City's Development Engineer who liaises with

- the City's Planners,
- Parks and Waste Managers
- Environmental Manager
- Environmental Health Officers and
- Landscape Architect

to ensure the new subdivision both complies with the State Government's requirements and the City's operational and legal requirements.

Whether streets are furnished with more than the basic requirements required by the WAPC remains at the discretion of the landowner. The WAPC's requirements for development of the street rarely go beyond one footpath, underground services, street lights and a road. Verge development such as tree planting, turf and additional or wider footpaths are sometimes installed by the landowner at subdivision to promote sales of the housing lots – but these improvements are not compulsory.

C. House building phase.

The landowner will be responsible for maintaining the new subdivision's verges for a two year period. During this time, most if not all the lots will be sold to individual owners for house building. House building frequently means that much of the verge is damaged. To counter the tendency for verges to be damaged by the house construction phase, many estate developers will offer 'Landscape' packages in the price of the lot. The packages typically include turf, shrubs, trees and irrigation to assist with establishing a presentable verge and front garden to the street.

Smaller estate developers may choose not to offer Landscape packages, some may plant trees on the verges, some may not.

D. Handover to the City.

New subdivisions are handed over to the City 12months after they are completed.

Should the developer choose to improve the subdivision's verges at subdivision stage they will be handed over to the City (along with any new parkland) after a two year period. During the initial two years the developer is responsible for maintaining the verges. At the completion of this maintenance period the maintenance of the verge becomes the responsibility of the adjacent owner.

Some developers chose to irrigate their verges from a bore sunk on a private lot. Because the City does not maintain verges, this irrigation is switched off at handover to the City.

5.0 Policies and Controls.

The State Utility Providers have agreed strict alignments for the underground utilities and overhead powerlines in the road verge. A handbook called the Utility Providers Code of Practice is available free from the Main Roads website here;

<https://www.mainroads.wa.gov.au/Documents>

Reinstatement of the verge by the utility providers will be in accordance with reinstatement standards set by the City. These can be viewed here;

https://www.mainroads.wa.gov.au/Documents/local_restoration_spec.RCN-D08%5E23177131.PDF

To confirm what services are buried under your verge refer to the Dial Before You Dig free web search at;

<http://1100.com.au/#>

To assist with managing the condition of the City's verges, the Council has adopted a number policies, these can be viewed on the City's website at;

http://www.cockburn.wa.gov.au/Your_Council/Acts_and_Information/Council_Policies/

Policies which control and regulate the condition of verges include the following;

- AEW1 Street Verge Improvements
- APD58 Residential Design Codes
- APD70 Waste Management in Multiple Unit Developments
- PSEW5 Construction of footpaths
- PSEW11 Subdivision Construction Standards
- PSEW12 Standard Specifications and Cost of Crossovers
- PSEW15 Removing and Pruning of Trees
- PSEW16 Unkempt Verge Mowing
- SEW1 Maintenance of Verges following subdivision

6.0 City of Cockburn assistance with verge development.

The City of Cockburn provides guidance on how to establish a crossover here;

http://www.cockburn.wa.gov.au/Council_Services/Engineering_Services/Crossovers/default.asp

The City can provide financial assistance with establishing some crossovers.

The City also provides a limited amount of subsidised native shrubs suitable for verge planting every year. Further information about this programme can be found here;

http://www.cockburn.wa.gov.au/council_services/environment/default.asp

As part of the Council's adopted Greening Plan policy document, the City is engaged in a programme of street tree planting.

http://www.cockburn.wa.gov.au/council_services/environment/greening_plan/default.asp

The City's Parks Services team administers this programme, you may contact the Parks Team and request a tree be planted in your verge for free;

http://www.cockburn.wa.gov.au/council_services/engineering_services/trees/default.asp

If you are unsure about what species of shrubs to plant on your verge, the City has compiled a series of brochures that describe useful native shrubs for use in private gardens. These brochures can be download from the City's website here;

http://www.cockburn.wa.gov.au/Council_Services/Environment/Documents_Publications_Plans_and_Brochures/default.asp

Alternatively a copy of the brochures can be collected from the City's administration building or sent to your home. Contact the City's Environmental Management team at the City's administration building for more details.

In addition to the native planting brochures, the City has also prepared a generalised list of plants suitable for commercial developments (such as offices, shops and factories). The plants on this list are not all native, but they are tough and hardy and readily available from local nurseries.

The plants in the commercial development design guide have generally proven suitable for gardens that are maintained under contract to corporate bodies. This species list is given in the appendix to the *Good Design Guide for Commercial Developments*. This guide is downloadable from the City's website at;

http://www.cockburn.wa.gov.au/Council_Services/City_Development/Planning_Documents/default.asp

7.0 The Templates.

The City's Landscape Architect has produced the following templates to describe preferred layouts for the various verge types discussed in section 3 *Verge Types* on this guide.

Each template is described by two drawings;

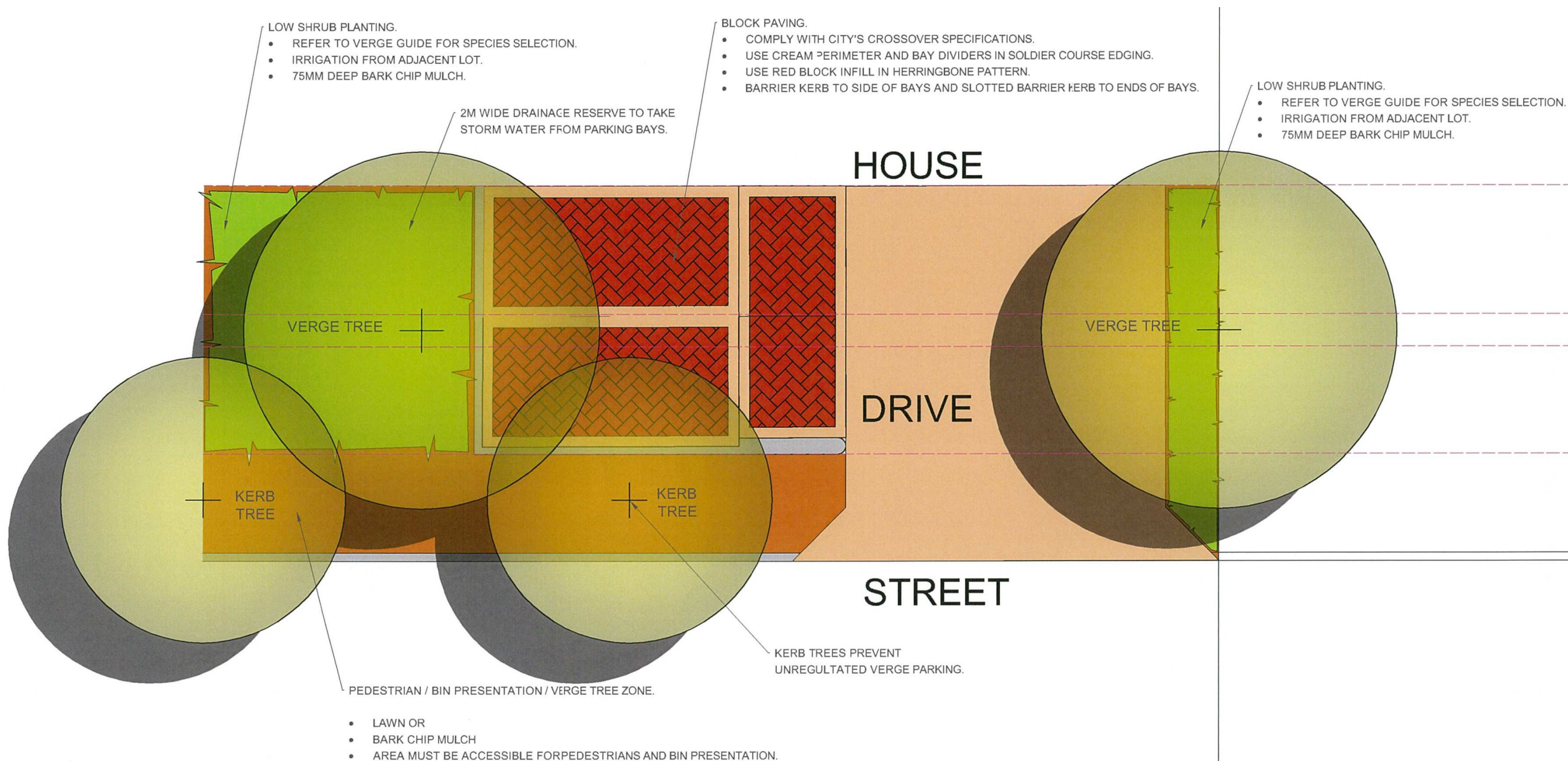
- A Surface Finishes drawing, followed by a
- Critical Dimensions drawing.

A template is not provided for lots containing the following;

- Most single dwelling developments (other than to suggest where and how parking is best arranged – Template 1)
- A Battle Axe or
- Three or Four Group Houses

The most appropriate layout for these types of verges is too difficult to predict.

Adherence to templates is most critical for verges that are shared by more than **five** households.

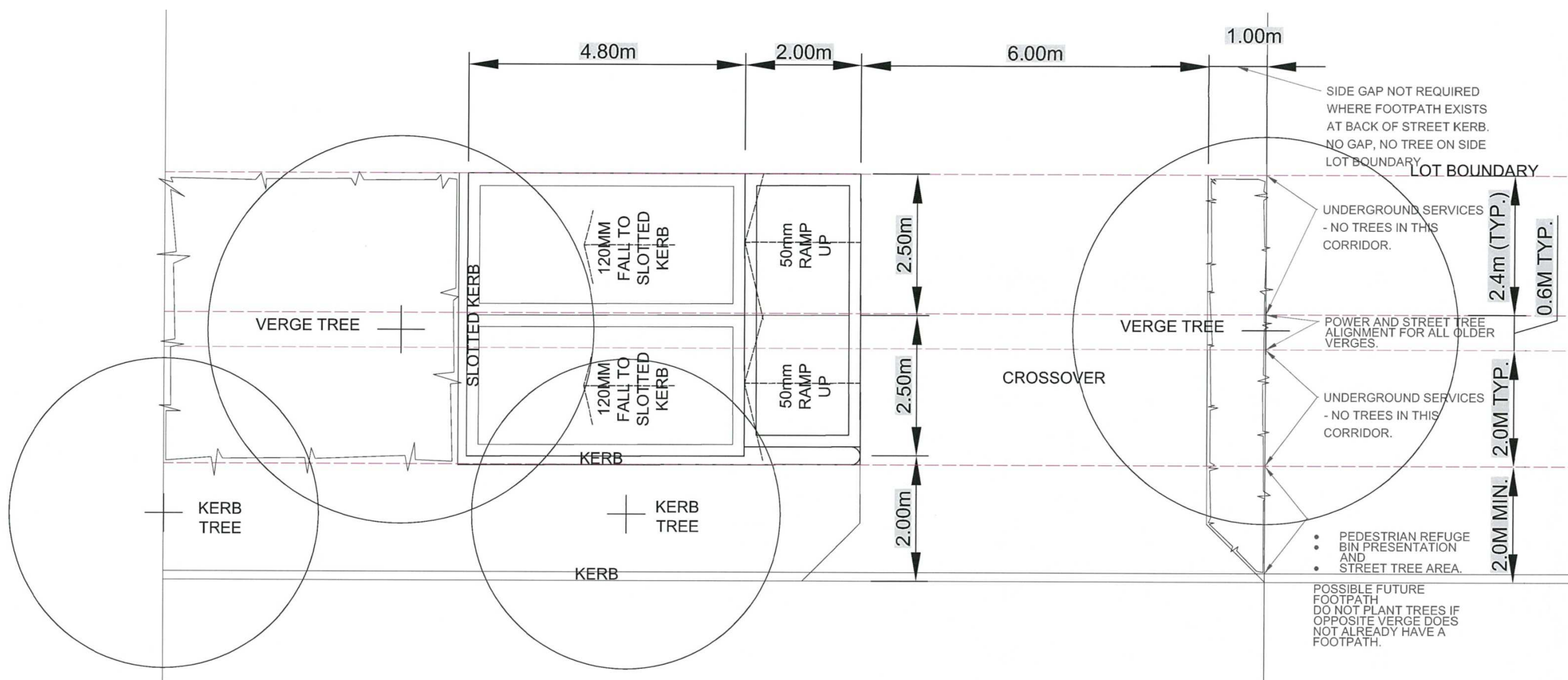


TEMPLATE 1 - SURFACE FINISHES

SINGLE DWELLING VERGES

PRIOR TO 2007 - VERGES GENERALLY 6M OR DEEPER.

CROSSOVER MAY BE LOCATED AGAINST SIDE BOUNDARY FENCE WITHOUT 1M GAP.



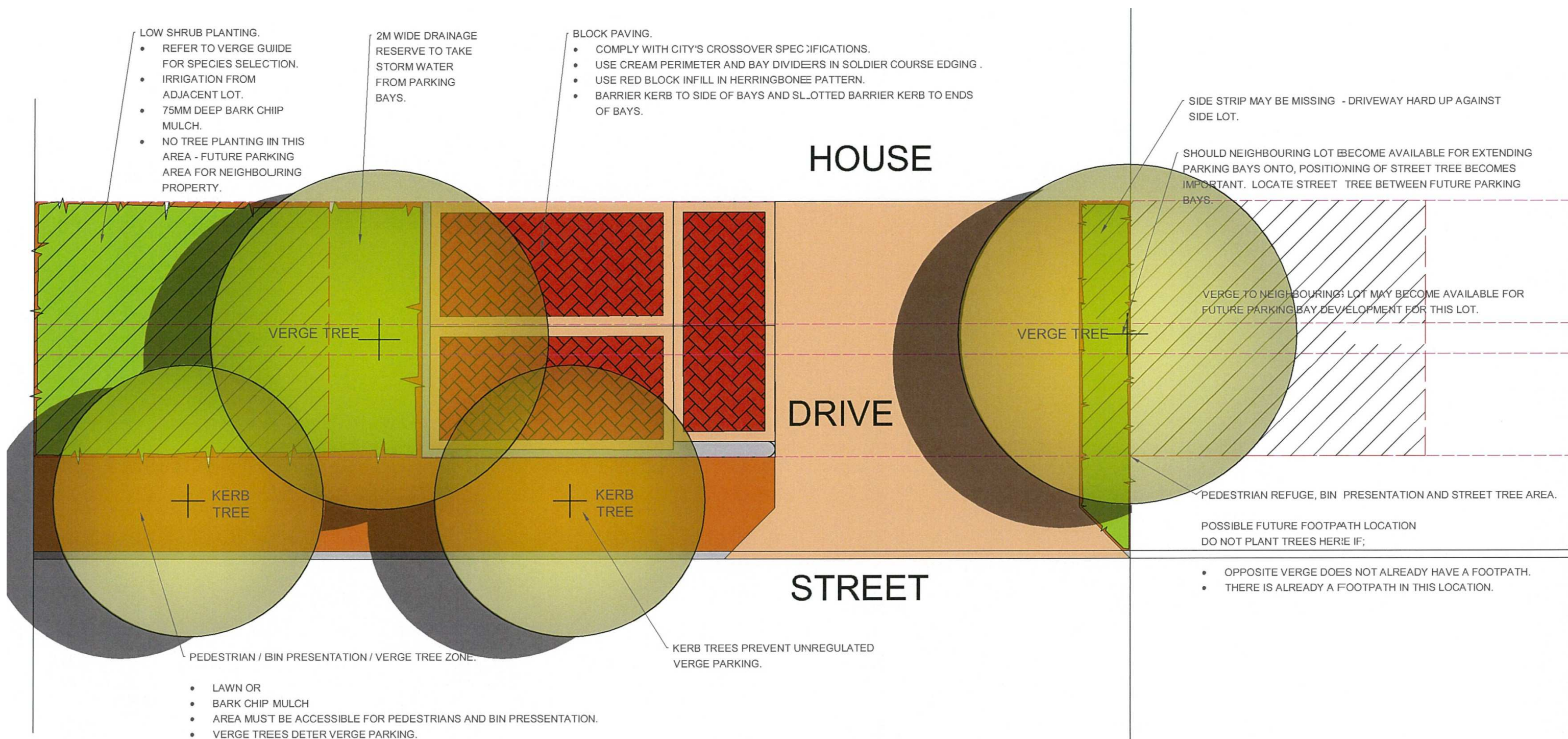
TEMPLATE 1

SINGLE DWELLING VERGES

PRIOR TO 2007 - GENERALLY 6M OR DEEPER.

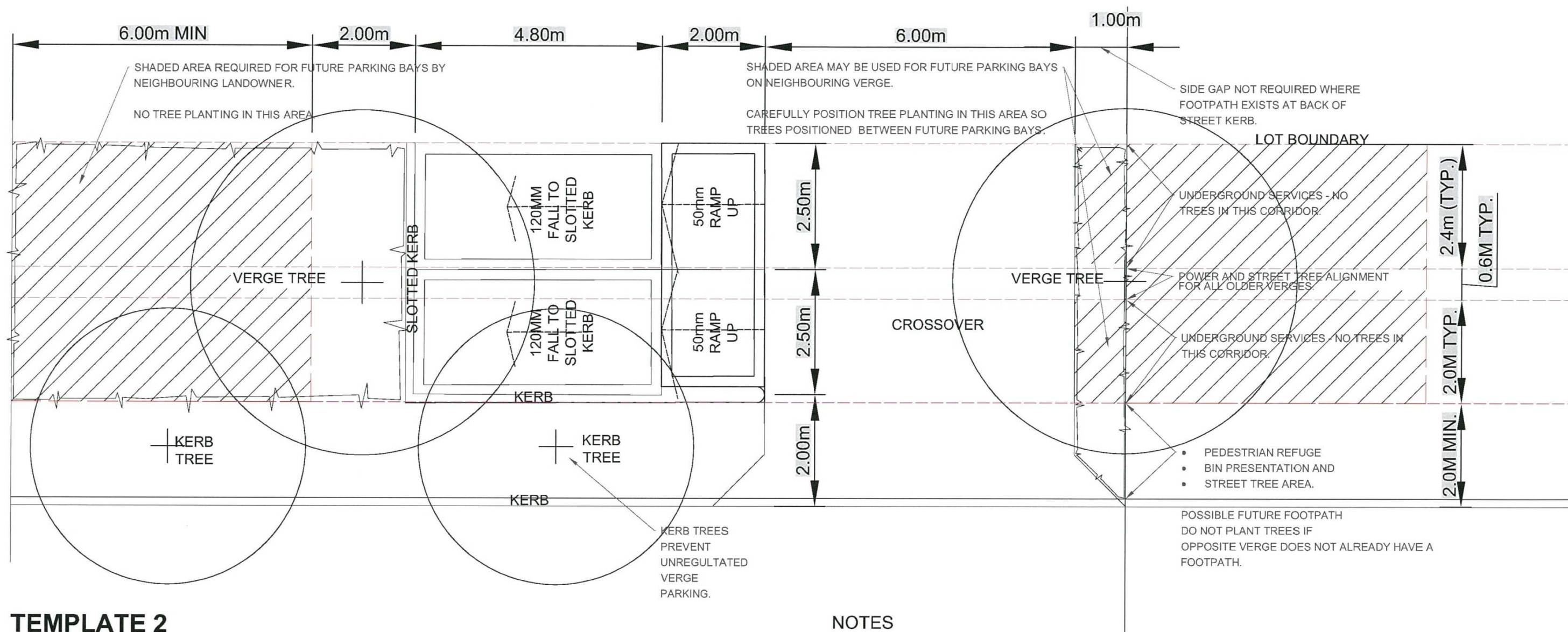
NOTES

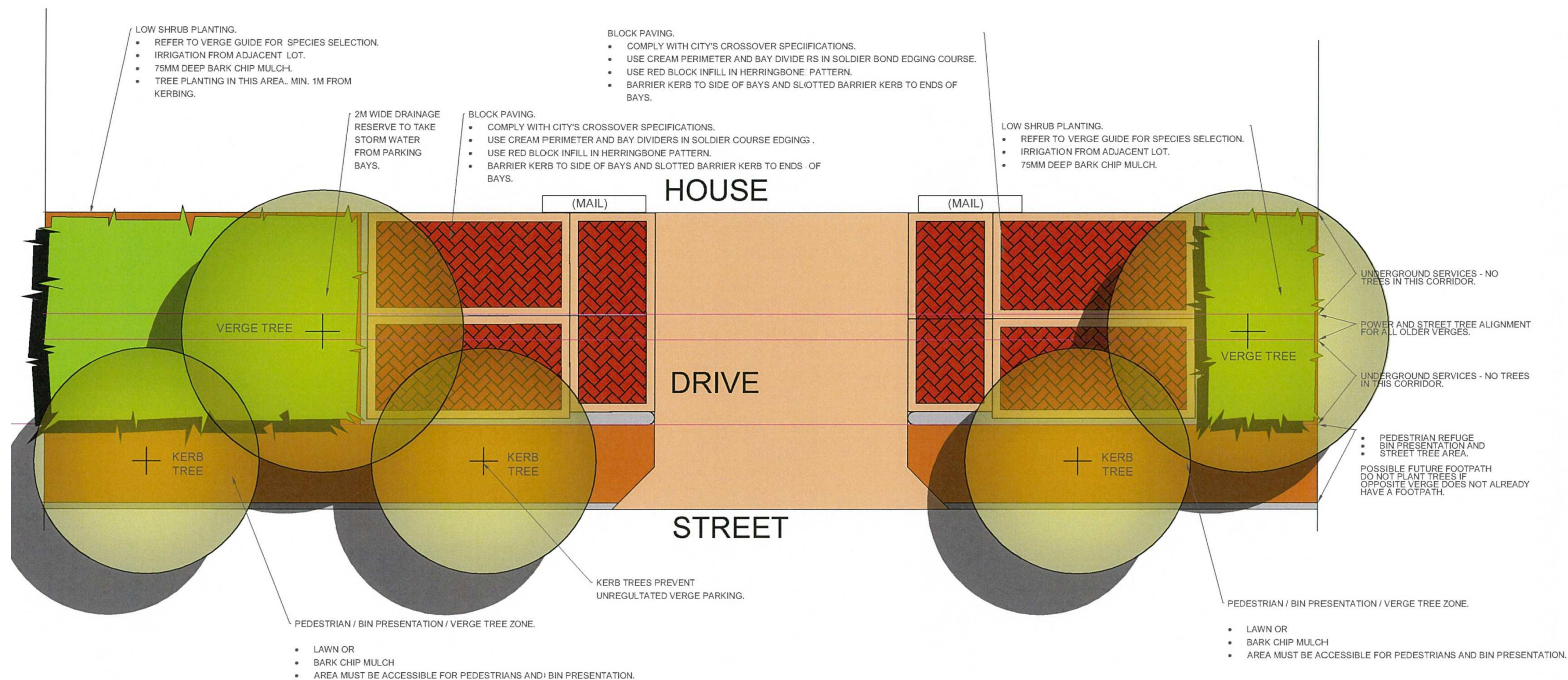
1. CHECK UTILITY LOCATIONS BEFORE COMMENCING DESIGN DRAWINGS.
2. CROSSOVER POSITION WILL BE AGAINST SIDE LOT BOUNDARY WHERE THERE IS A FOOTPATH AT THE BACK OF KERB.
3. KERB SIDE TREES
 - PREVENT CARS PARKING ON VERGE.
 - NOT APPLICABLE WHERE NO FOOTPATH EXISTS ON VERGE OPPOSITE.
 - NOT APPLICABLE WHERE FOOTPATH EXISTS ON THIS SIDE OF THE STREET.
4. 1M MINIMUM BETWEEN TREES AND PAVING.



TEMPLATE 2 - SURFACE FINISHES.

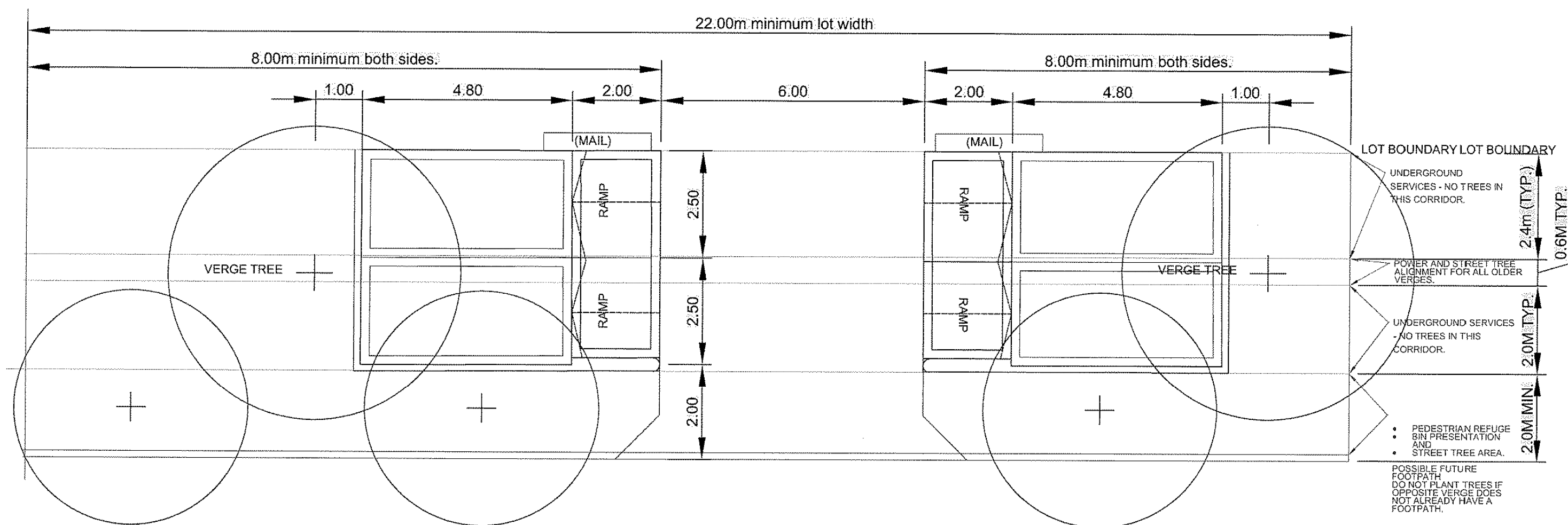
- MULTIPLE DWELLING VERGES
- LOTS BETWEEN 16M AND 22M WIDE
- SIDE CROSSOVER LOCATIONS - CROSSOVER MAY BE LOCATED AGAINST SIDE BOUNDARY FENCE WITHOUT 1M GAP.
- PRIOR TO 2007 - GENERALLY 6M DEEP OR DEEPER.





TEMPLATE 3

- GROUP/MULTIPLE DWELLING VERGES
- LOT GREATER THAN 22M WIDE
- CROSSOVER LOCATION MINIMUM OF 8M FROM BOTH LOT BOUNDARIES.
- PRIOR TO 2007 - GENERALLY 6M DEEP OR DEEPER.



TEMPLATE 3

- GROUP/MULTIPLE DWELLING VERGES
- LOT GREATER THAN 22M WIDE
- CENTRAL CROSSOVER LOCATION
- PRIOR TO 2007 - GENERALLY 6M DEEP OR DEEPER.

NOTES

1. CHECK UTILITY LOCATIONS BEFORE COMMENCING DESIGN DRAWINGS.
2. CROSSOVER POSITION MUST LEAVE AT LEAST 8M EITHER SIDE TO ALLOW PARKING AND TREE PLANTING.
3. KERB SIDE TREES ;
 - PROVIDED TO PREVENT CARS PARKING ON VERGE.
 - NOT APPLICABLE WHERE NO FOOTPATH EXISTS ON VERGE OPPOSITE.
 - NOT APPLICABLE WHERE FOOTPATH EXISTS ON THIS SIDE OF THE STREET.
4. 1M MINIMUM BETWEEN TREES AND PAVING.