PORTRUSH & MAGILL ROAD INTERSECTION

A proposal to the Department for Infrastructure and Transport

City of
Norwood
Payneham
& St Peters


FORTRUSH ROAD
MAGILL ROAD
FORTRUSH & MAGILL ROAD INTERSECTION - DRAFT
CITY OF NORWOOD PAYNEHAM & ST PETERS
Google Earth

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INTRODUCTION

The Portrush and Magill Road Intersection Upgrade is a joint funded Project of the Australian and South Australian Governments. A $98 million budget is reported to be spent on the Project, of which approximately $8 million is for project and contract management, $71 million is for land acquisition, and $19 million for is for construction.

The Project's four (4) key anticipated benefits which have consistently been promoted by the State Government and Department for Infrastructure and Transport (DIT) include:

1. **Improved travel times.**
2. **Improved safety for all users.**
3. **Improved network reliability.**
4. **Improved economic activity.**

1. Improved traffic times

Implementation of DIT's proposed plans for the Project are reportedly expected to reduce traffic delays by up to fifty percent (50%) in morning and afternoon peak periods, thereby improving travel times by approximately sixty (60) to ninety (90) seconds. However, the Project's remaining three (3) key benefits are not easily identifiable, and at this stage, measurable.

2. Improved safety for all users

While it is hoped that vehicle accident rates will decrease as a result of the Project, DIT's proposed plans maintain (rather than improve) the current access provision for pedestrians and cyclists (i.e. bicycle lanes and pedestrian crossings). In fact, the road widening will result in increased exposure of these vulnerable road users as an extended length of bike lane is exposed to traffic on both sides and pedestrian crossing distances are increased without change to the number or size of pedestrian refuges.

3. Improved network reliability

Improved network reliability is proposed to be realised through the delivery of a coordinated upgrade of key intersections across the traffic and freight network. In addition to the Portrush and Magill Road intersection, DIT's 2018 "*Keep Metro Traffic Moving*" report identifies the intersections of Portrush and Payneham Road and Portrush and Greenhill Road as "Priority Junctions", but there are no known coordinated plans to upgrade these latter two (2) intersections nor to address traffic flows at other important signalised intersections such as Portrush and Kensington Road and Portrush Road and The Parade.

4. Improved economic activity

Finally, economic productivity is proposed to increase due to improved travel times, as well as through facilitating development in the vicinity of the Portrush and Magill Road intersection. Nine (9) local businesses and thirty-four (34) privately owned properties have been acquired in order to deliver the Project. However, there is no understanding or planning of how the acquired property will be redeveloped.

Figure 01: Artist Impression of Intersection Upgrade (supplied by DIT)

With only one (1) of the four (4) benefits able to be quantified by DIT, it can be argued that the Project doesn't quite meet the 'Pub test' nor does it provide any tangible urban design outcomes. In fact, the design has simply focused on a 'kerb to kerb' approach of the proposed works and is significantly biased upon the 'concrete and bitumen' components of the Project.

Additionally, there are many negative impacts that the Project will have on the community and the City of Norwood Payneham & St Peters in terms of amenity and liveability.

- There will be loss of trees and gardens which provide the City of Norwood Payneham & St Peters benefits by reducing stormwater run-off, increasing air quality, storing carbon, providing shade and reducing urban heat island effects.
- There will be a loss of older, character buildings which contribute to the local 'sense of place' of the City.
- There will be an increase in hard paved surfaces and heavy vehicle traffic which further exacerbates the impacts caused by the loss of trees, greening and character buildings.

The City of Norwood Payneham & St Peters is *"a City which values its heritage, cultural diversity, sense of place and natural environment."* It is also *"a progressive City which is prosperous, sustainable and socially cohesive, with a strong community spirit."*

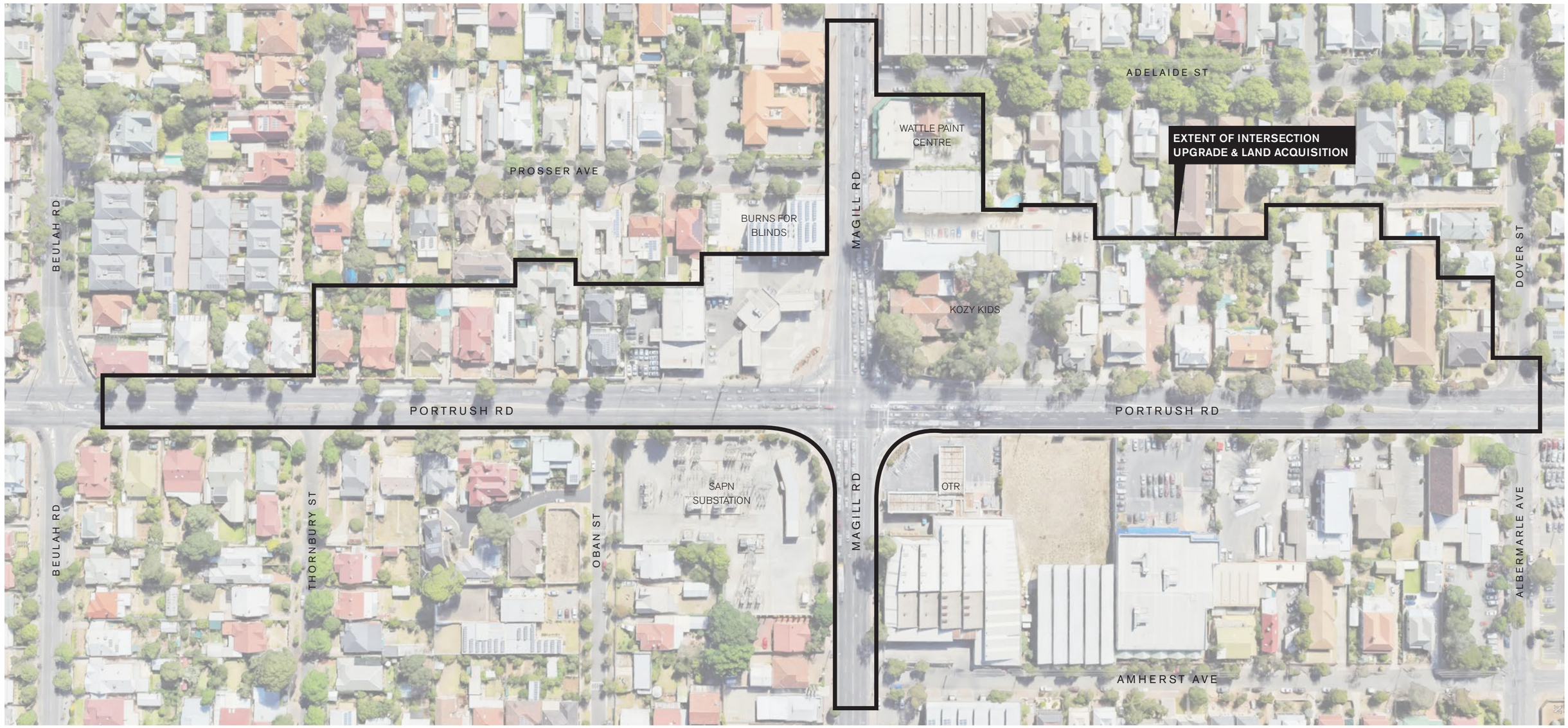
The preceding Vision for the City is underpinned by the Council's four (4) strategic outcomes: Social Equity, Cultural Vitality, Economic Prosperity and Environmental Sustainability. The Council and the community have identified several opportunities and ideas whereby the Portrush and Magill Road Intersection Upgrade can contribute towards these strategic outcomes in order to achieve 'Community Well-being'.

The State Government and DIT have indicated that they want to work with the local community and the Council to address the concerns and impacts which have been raised. The Council has therefore prepared this proposal in order to initiate and progress the opportunity to work together to achieve improved urban design outcomes and realise benefits for the community, the City and South Australia in addition to the road users for whom the Project is primarily aimed to benefit.

Figure 02: Quadruple Bottom Line Model for Community Well-being from the City of Norwood Payneham & St Peters *CityPlan 2030: Shaping our Future*

SITE & CONTEXT

The Project site includes Portrush Road between Beulah Road, Norwood and Dover Street, Maylands and Magill Road between Adelaide Street, Maylands and Amherst Avenue, Trinity Gardens.



LAND ACQUISITION

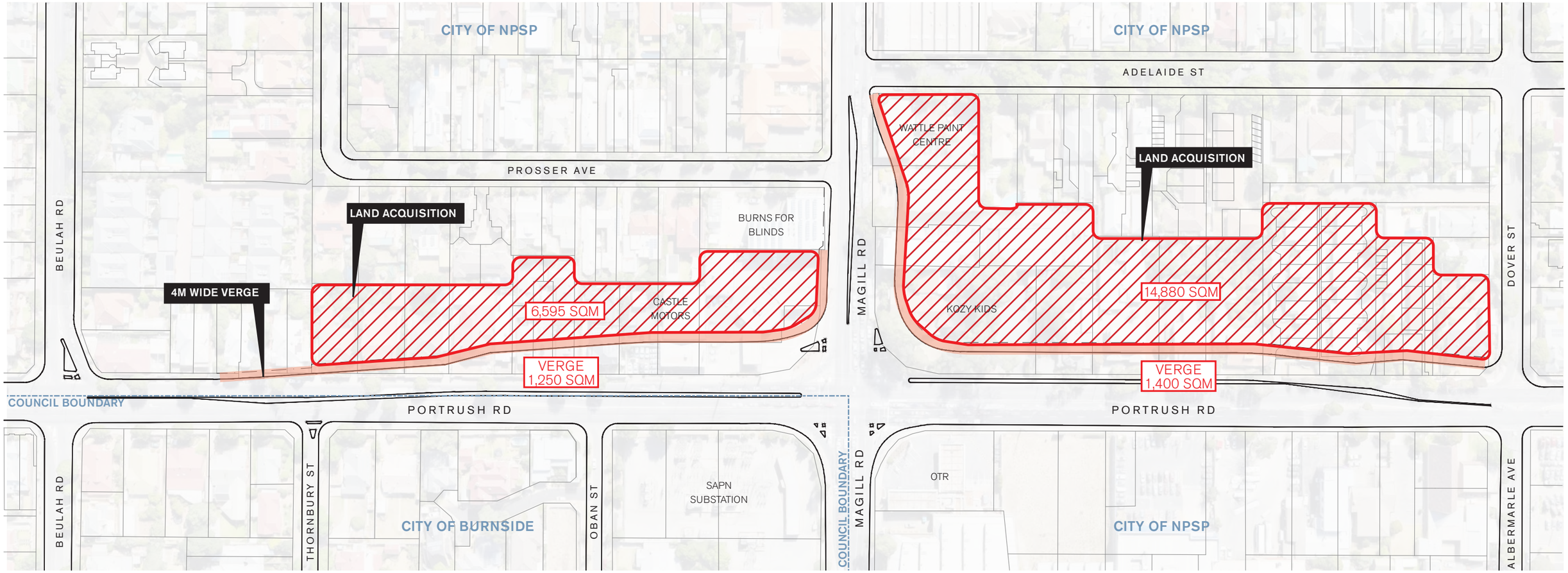
As part of the Project, the acquisition of residential and commercial properties on the west side of Portrush Road (which is within the City of Norwood Payneham & St Peters) has been undertaken. As part of the demolition works, a number of existing character buildings will be permanently lost.

To be demolished

- ***40+*** *trees*
- ***34*** *residential dwellings*
- ***9*** *commercial buildings*

To provide

- ***60-90*** *seconds improved travel time during peak periods*



Sample of buildings to be demolished

0 10 20 50 100

PROJECT OPPORTUNITIES

The Council has identified the following opportunities that would contribute to improved social, cultural, economic and environmental outcomes and provide a far superior urban design outcome.

Amenity & Character

Maintain and contribute to the local amenity and character

- Ensure consistency in design and use of paving and landscape materials.
- Maximise verge landscaping to soften the road edges.
- Introduce public art for visual interest and community benefit.

Climate Adaptation

Mitigate project impacts through best practice initiatives

- Maximise tree planting for shade, improved air quality, carbon storage, wildlife habitat and other environmental benefits.
- Utilise Water Sustainable Urban Design (WSUD) for passive landscape irrigation.
- Use “cool” pavements which reflect solar radiation.

Appropriate Development

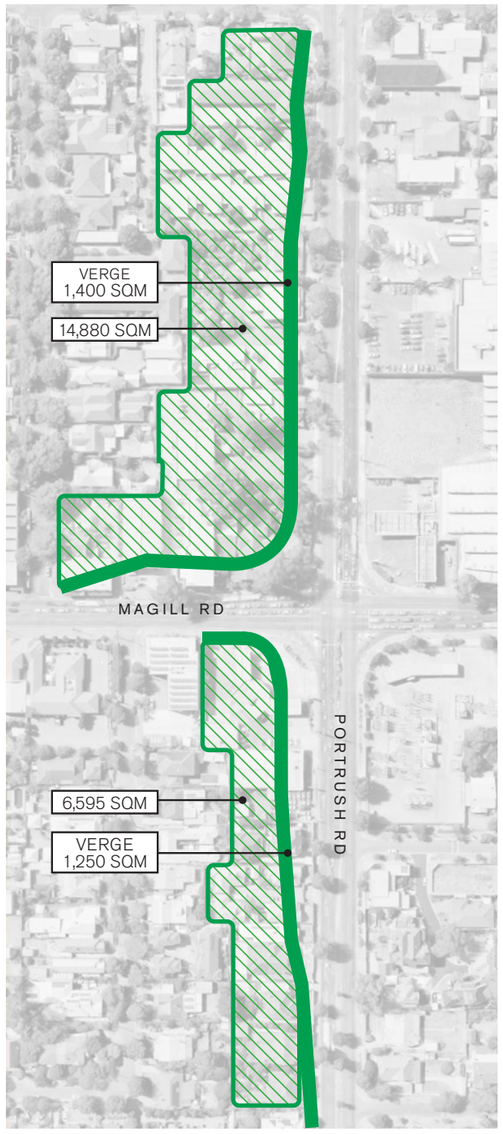
Appropriately plan and redevelop acquired property

- Provide a noise and physical buffer for adjoining residents.
- Create stormwater detention to cleanse and/or hold back stormwater flows to existing drainage system.
- Consider access and parking requirements and local traffic impacts for potential future development.

SCALE COMPARISONS

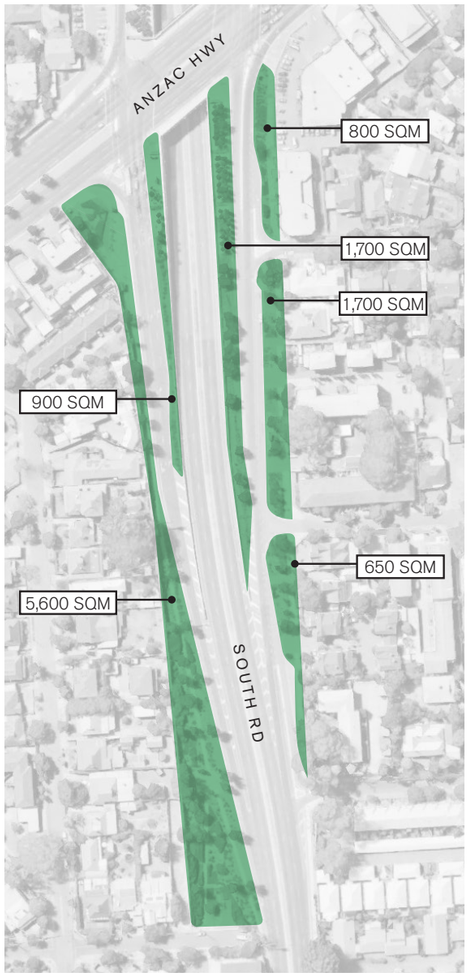
The adjacent verge and land which can be redeveloped is substantial in area. Below are size comparisons of landscaped medians, verges, reserves and entry statements which positively contribute to local amenity and character adjacent roadways in Adelaide.

PROJECT SITE 24,125 SQM

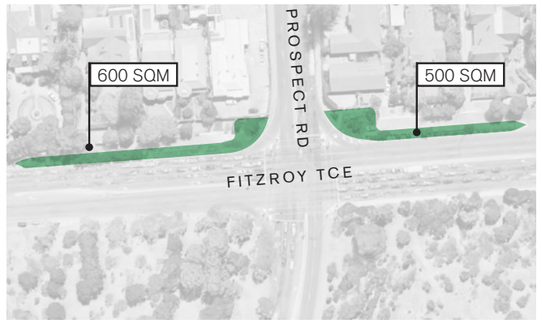


OSMOND TERRACE 4,400 SQM

ANZAC HIGHWAY 11,350 SQM



PROSPECT ROAD 1,100 SQM



WALKERVILLE 1,000 SQM

Figure 05: Scale Comparison Plans

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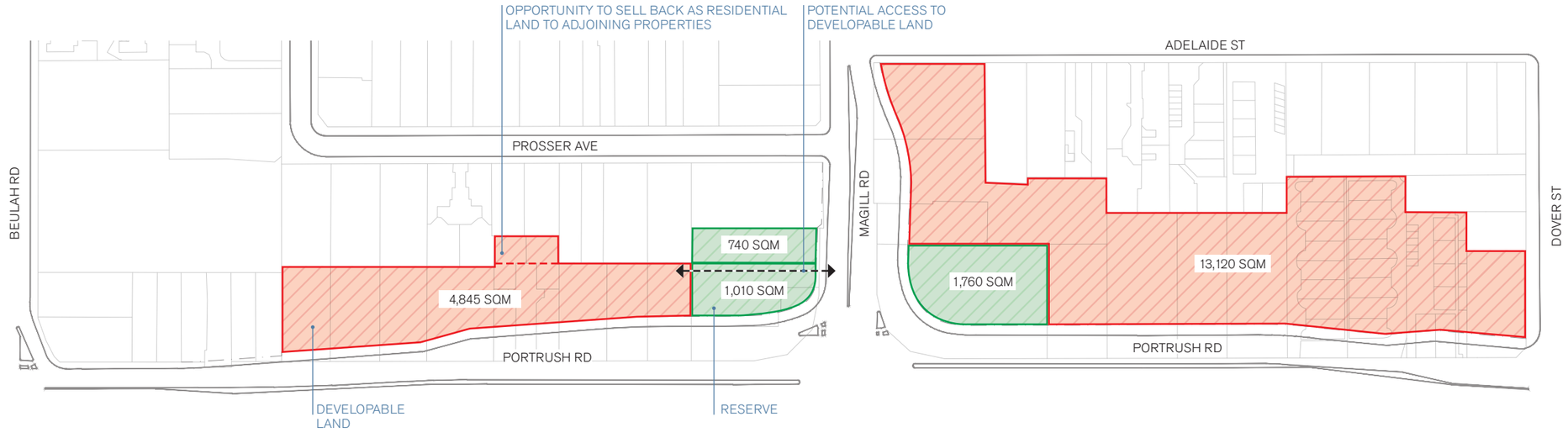
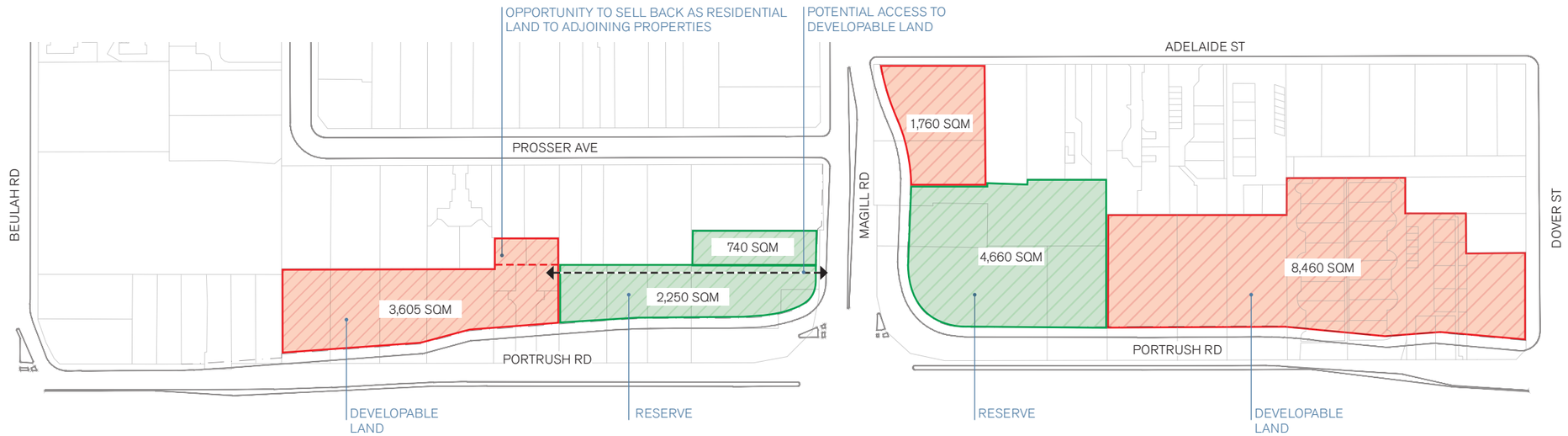
DEVELOPMENT SCENARIOS

The properties which have been acquired could be divided and developed in several ways. The following are just four (4) examples illustrating different combinations of potential community (i.e. open space) and private (i.e. residential and/or commercial) land uses.

Scenario A



Scenario B



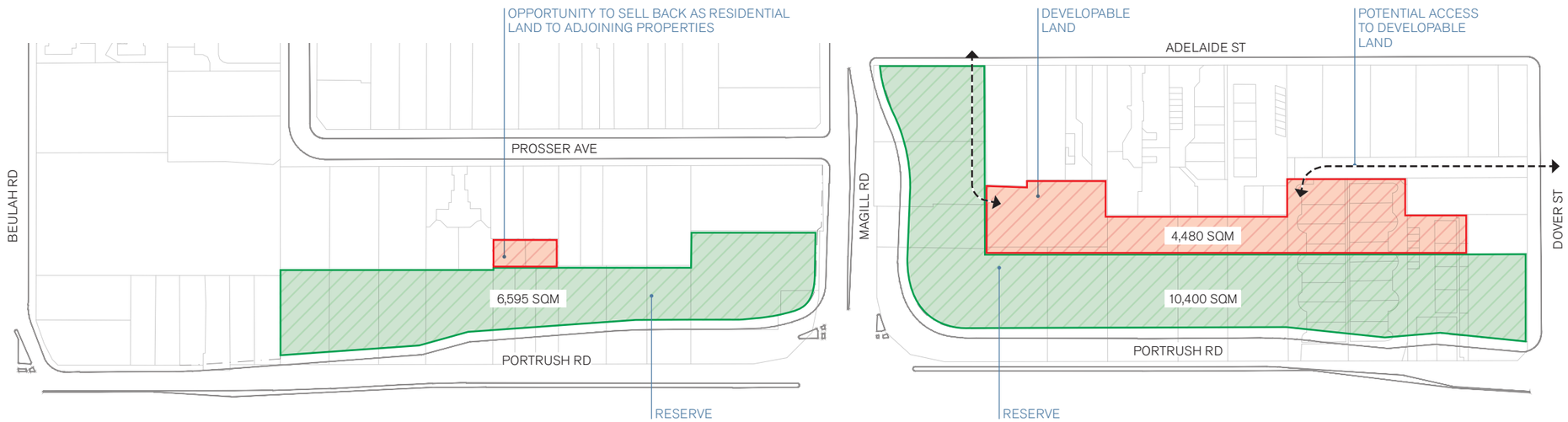
Reserve

Developable land

Potential access to developable land

Scenario C

Scenario D



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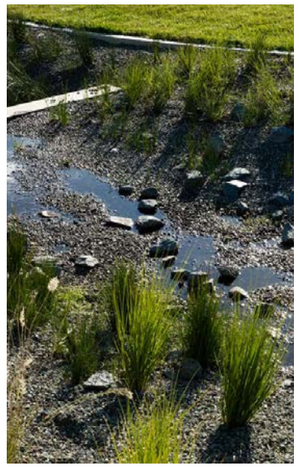
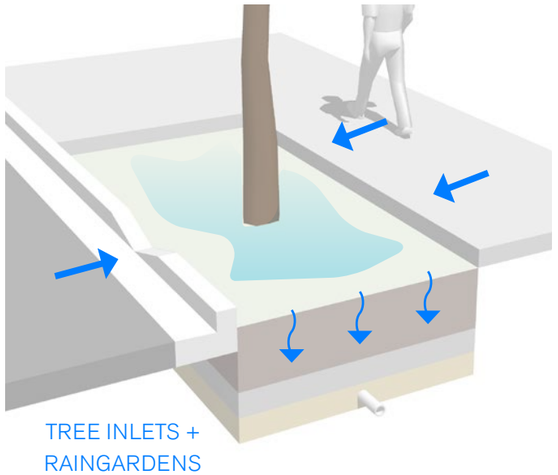
GREEN INFRASTRUCTURE

The following best practice ideas, which have been used successfully on major infrastructure and landscape projects, should be investigated and considered to alleviate the Project's environmental impacts, and create a sustainable landscape that can provide long-term environmental benefits for the community.

Water Sensitive Urban Design

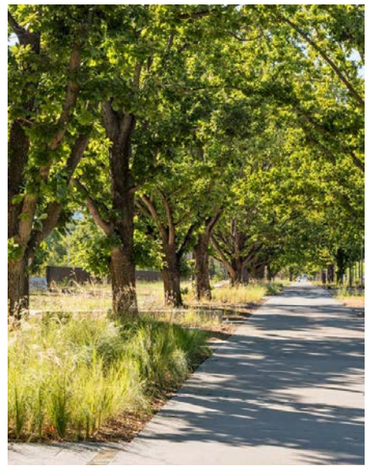




TREE INLETS +
RAINGARDENS

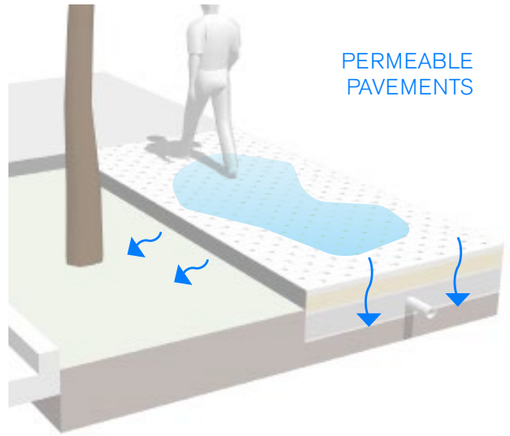
— Bio-retention / bio-infiltration / rain garden systems
— On-site detention
— Stormwater harvesting for reuse
— Tree inlets for passive irrigation

Urban Forest & Biodiversity



- Right tree in the right place to prevent future infrastructure damage
- Adequate soil volume to support long-term growth of large trees
- A variety of species to provide biodiversity and amenity
- Combat climate change, mitigate urban heat island effect and intercept stormwater runoff

Pavements

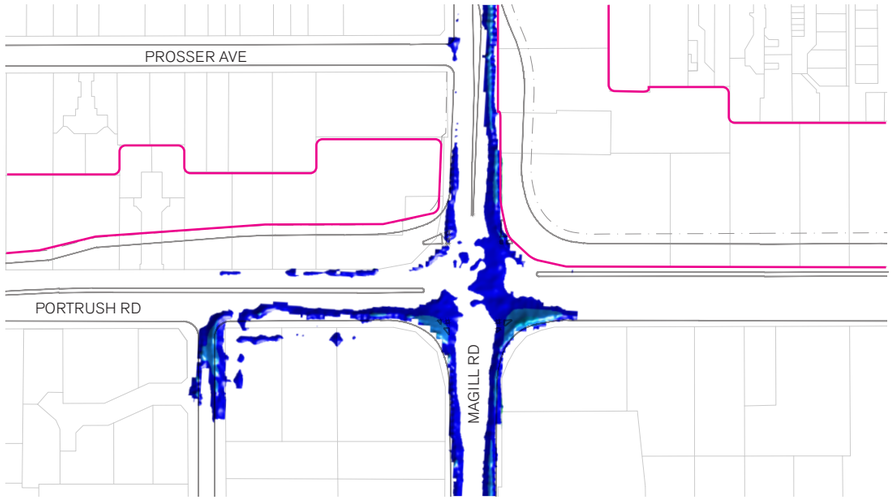


- Permeable / porous pavements to support passive water infiltration
- Solar reflective pavements to reduce surface heat gain and retention
- Pavements with low embodied energy
- Pavements suitable for shared walking and cycling use

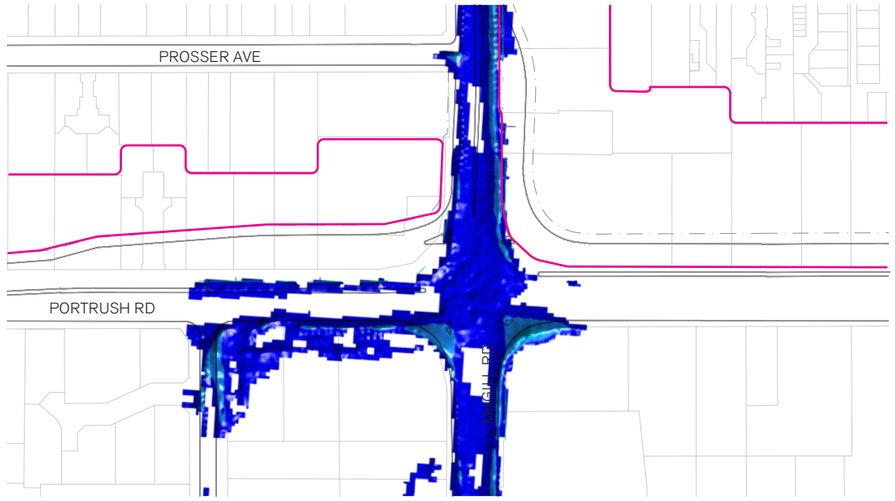
STORMWATER MAPPING

The following stormwater maps illustrate the amount of flooding which is likely to occur at the Portrush Road and Magill Road intersection during different major storm events. There is a significant amount of stormwater which can be captured and detained to alleviate surface flows across the intersection and downstream flooding. The redevelopment of properties which have been acquired should be mindful of contributing additional runoff to the existing surrounds.

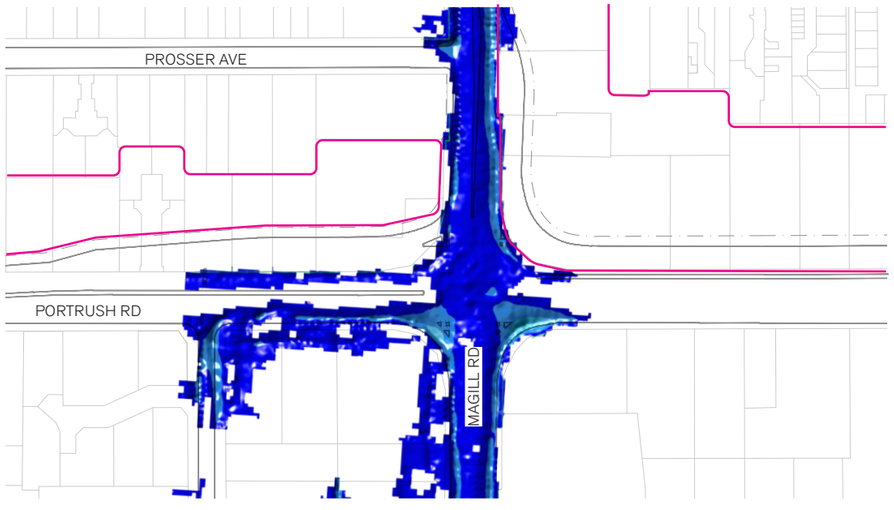
1:5 Flood Map



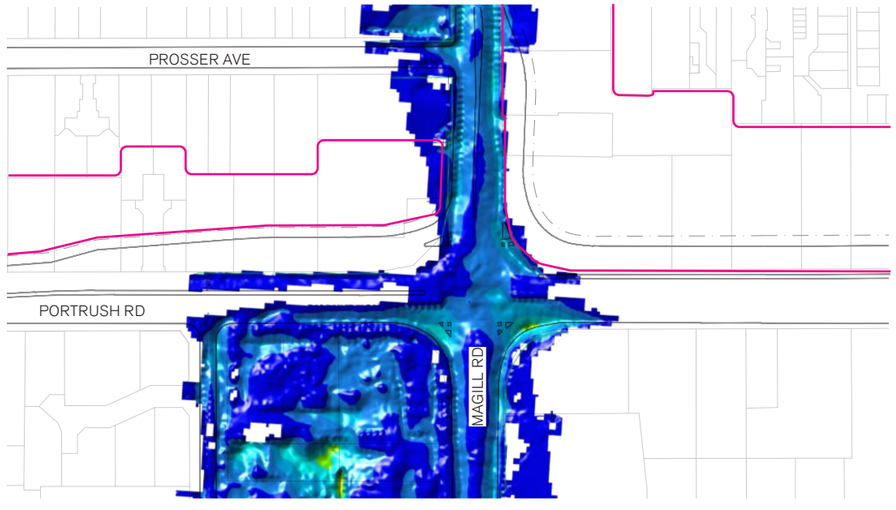
1:10 Flood Map



1:20 Flood Map



1:100 Flood Map



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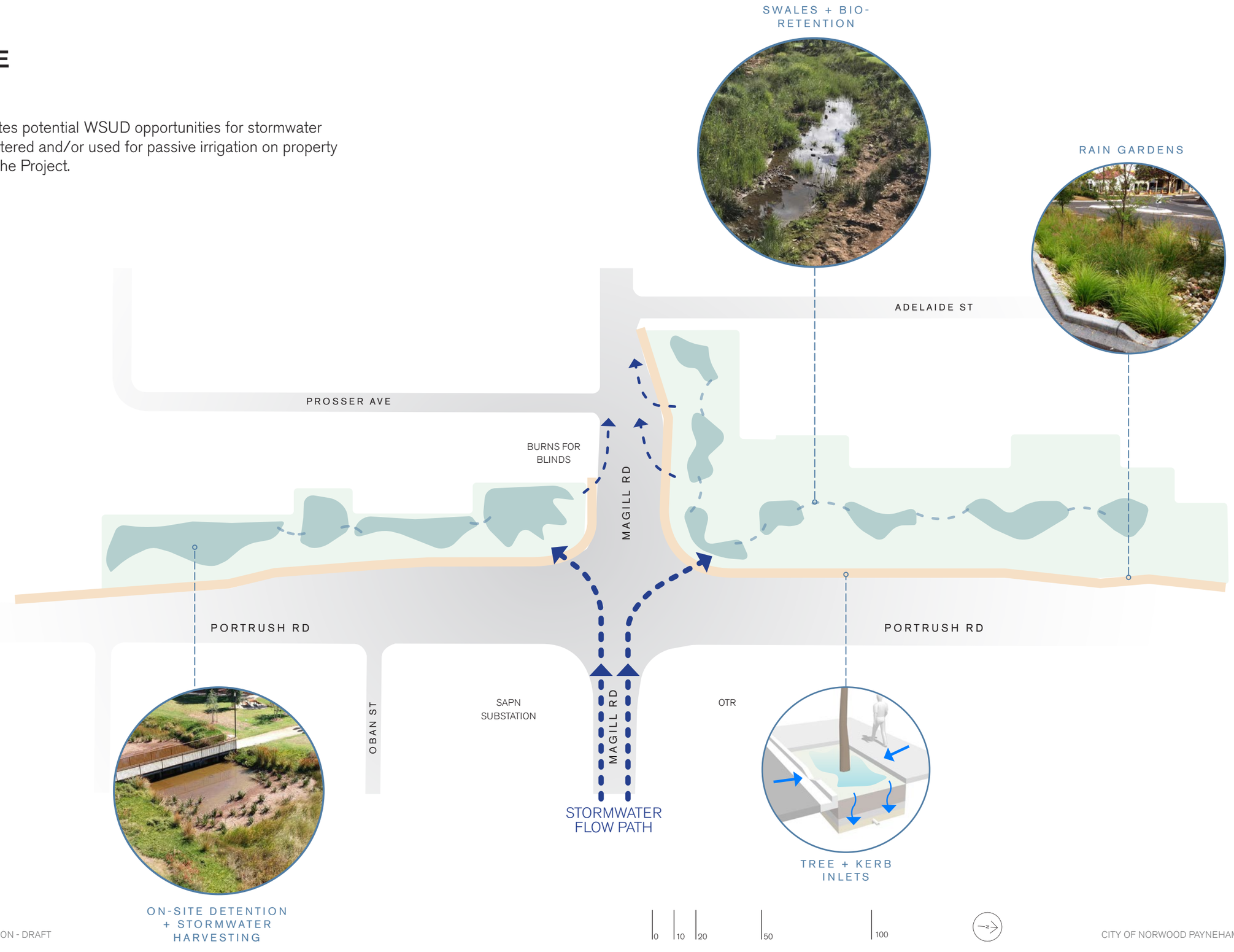
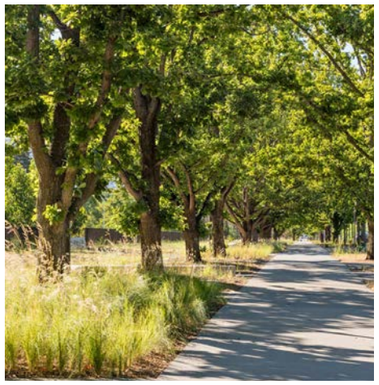
WATER SENSITIVE URBAN DESIGN

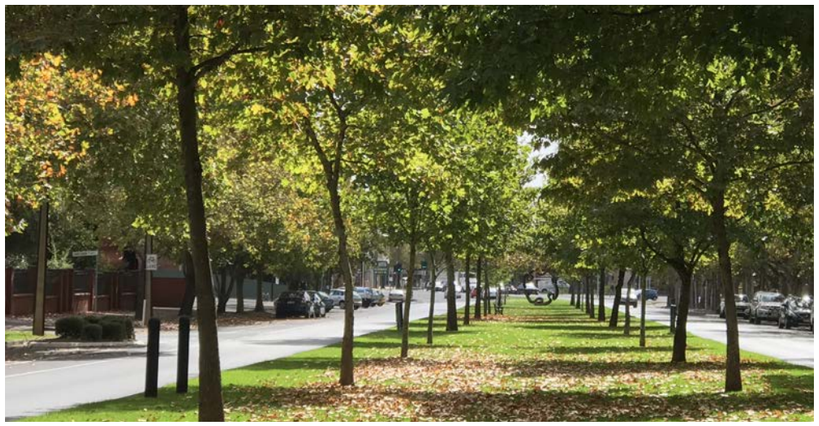
The following diagram illustrates potential WSUD opportunities for stormwater to be intercepted, detained, filtered and/or used for passive irrigation on property which has been acquired for the Project.

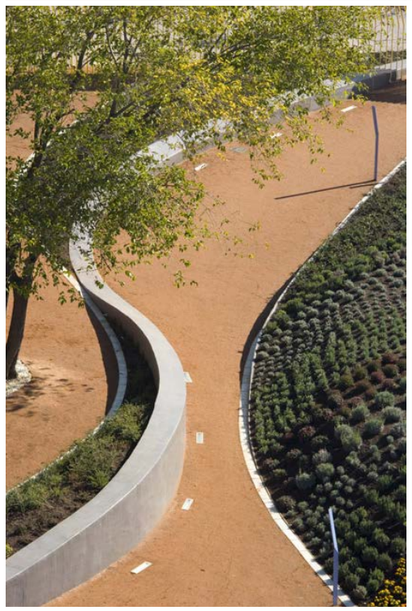


LANDSCAPE CHARACTER

These images depict the potential landscape character for new reserve area that could be developed on acquired property. Landscaping could be formal and/or informal, use a variety of plant species and incorporate public art.







LANDSCAPE SKETCH PLAN

The sketch plan below is a high level concept illustrating how the potential landscape character and green infrastructure opportunities could be implemented in an optimum open space / urban design outcome.

PROJECT OPPORTUNITY

INTERSECTION UPGRADE

PORTRUSH ROAD

MAGILL ROAD

CONCLUSION

During the community consultation period, the Council and the local community voiced their respective concerns regarding the Project. These concerns were expressed in a letter dated 17 March 2020 to the former Minister for Transport, Infrastructure and Local Government, Mr James Stevens MP, Federal Member for Sturt, and DIT's Chief Executive. These concerns were also raised at a meeting with The Hon Steven Marshall MP, Premier of South Australia.

While the issues and concerns raised by the Council were not formally acknowledged and progressed to resolution, DIT has advised that it remains committed to working with the Council and the community to progress this important project.

It is a fact that the Project is now progressing. The Council understands that DIT have completed 70% design and demolition of buildings and early works (i.e. services relocations) is well underway. The Council welcomes the opportunity to work in collaboration with the State Government.

Council staff have provided comments to DIT on the 70% design in order to deliver the Project with better outcomes for both the community and environment in respect to the immediate road works for the intersection and the future redevelopment of any sections of compulsorily acquired property.

The State Government and DIT now have the opportunity to demonstrate the positive outcomes which can be achieved when these large infrastructure projects are undertake.

To date, the community consultation process has unfortunately been less than satisfactory, which has affected the goodwill and trust between the Council and community, and DIT.

The current situation presents an opportunity to restore the trust and faith lost during the initial consultation phase to produce an outcome which all South Australians can be proud of.

The underlying principles of large infrastructure projects such as this one, should be based on more than just reducing travel times. These projects should always aim to improve a City's urban environment, amenity and quality of life for the affected community.

Within this proposal, the Council has now identified several opportunities which can still be investigated, considered, developed and implemented as part of the Portrush Road and Magill Road Intersection Upgrade. The Council is willing and looks forward to working with the State Government to deliver non-transport related project benefits. To do otherwise will result in the local community and Council being left with a less than satisfactory urban design outcome and waste the opportunity to deliver additional social, cultural, environmental and economic benefits for the City and South Australia.

Robert Bria
The Mayor of the City of Norwood Payneham & St Peters

City of
Norwood
Payneham
& St Peters