

CITY OF ARMADALE

MINUTES

OF DEVELOPMENT SERVICES COMMITTEE HELD IN THE COMMITTEE ROOM, ADMINISTRATION CENTRE, 7 ORCHARD AVENUE, ARMADALE ON MONDAY, 20 JUNE 2011 AT 7:00 PM.

PRESENT:

Cr H A Zelones JP	Chair
Cr P J Hart	
Cr C J MacDonald	
Cr M H Norman	
Cr L Sargeson	
Cr D M Shaw	(Deputy for Cr Reynolds)
Cr R J Tizard	

APOLOGIES: Cr L Reynolds AM JP

OBSERVERS:

Cr C M Wielinga	(7.00pm to 7.46pm)
Cr G A Best	
Cr J H Munn JP CMC	(7.00pm to 7.46pm)

IN ATTENDANCE:

Mr I MacRae	Executive Director Development Services
Mr P Sanders	Executive Manager Planning Services
Ms S Hillel	Building Services Manager
Mr G Windass	Manager Statutory Planning
Ms J Quartermaine	Special Projects Officer (7.00pm to 7.36pm)
Mr P Lanternier	Manager Parks (7.00pm to 7.36pm)
Mrs N Cranfield	Minute Secretary
Public	5

DISCLAIMER

The Disclaimer for protecting Councillors and staff from liability of information and advice given at Committee meetings was read by the Chairman.

DECLARATION OF MEMBER'S INTERESTS

Nil.

CONFIRMATION OF MINUTES

RESOLVED

Minutes of the Development Services Committee Meeting held on 16 May 2011, to be confirmed.

MOVED Cr Tizard
MOTION CARRIED (7/0)

ITEMS REFERRED FROM INFORMATION BULLETIN – ISSUE No.10/2011

The following items were included for information in the “Development Services” section -

- **Outstanding Matters & Information Items**
Report on Outstanding Matters - Development Services Committee
Community Heritage Advisory Committee – Minutes 20/1/11
Community Heritage Advisory Committee – Minutes 17/2/11
- **Health**
Health Services Report for the month of April / May 2011
- **Planning**
Planning Services Report for the month of May 2011
Reviews before the State Administrative Tribunal (SAT)
Town Planning Scheme No.4 - Amendment Action Table
Subdivision Applications - WAPC Approvals/Refusals - May 2011
Subdivision Applications - Report on Lots Registered for 2010/2011
PAW Closure Report - Significant Actions during May 2011
Road Naming Report 2010/11 & consequential action of Council Recommendation
Compliance Officer's Report for the month of May 2011
- **Building**
Building Services Manager's Report for the month of April/May 2011
Building Compliance Report for the month of April / May 2011
Building Applications Monthly Statistics - May 2011

Committee discussed the Building Compliance Report and the increase in alleged rubbish offences and relative compliance actions undertaken.

Committee noted the information and no further items were raised for discussion and/or further report purposes.

QUESTION TIME

Ms D Wallis – 10 Leschenaultia Street, Roleystone

1. In reference to the agenda item “POS Strategy and proposed Reserve Improvement Works”, and in regards to the proposed toilet block at Borrello Reserve, Roleystone and the petition circulated by Cr Wielinga seeking support for the proposed toilet block, were signatories aware by means of the prayer of the petition, the estimated \$250,000 cost of the proposed toilet block and that a portion of this money would be at the expense of five (5) other identified projects in Roleystone such as the various reserve / skate park upgrades and facilities such as picnic tables, walk trails, playground equipment and the like?

Chair advised that the Committee had not seen the petition and was unaware of the prayer of the petition and/or if the signatories were aware of the proposed estimated costs of the toilet block development.

Chair further advised that the proposed petition is being presented at tonight’s Committee meeting.

2. If signatories on the petition were not made aware of these issues in the petition prayer, would this mean that full disclosure was not made and that signatories unwittingly signed this petition without being made aware of the implications that the success of this petition would have, and therefore on the aforementioned grounds the petition should be disqualified?

Chair advised that when a petition is submitted to Council the “prayer” is not assessed or investigated by the City. A petition is normally forwarded to the Ward Councillor who will then formally present it to the next Council meeting for information and processing by the relevant department of the City.

Executive Director Development Services clarified that the petition regarding the proposed toilet block at Borrello Reserve was not a public consultation process formally run by the City but a petition run by the residents to be formally presented to the Council for information.

Mr J Newland – 23 Wygonda Road, Roleystone

3. In reference to the agenda item “POS Strategy and Proposed Reserve Improvement Works”, and that the proposal to use POS funding for toilets at Borrello Reserve at the expense of the full skate park proposal. The importance of establishing a Roleystone skate park is clearly recognised in Part 3 of the Council resolution of 19 March 2007. This along with the proposal of the POSWG has created a positive expectation in the local Roleystone residents that the skate park will be built. If the proposal for the skate park is now placed in jeopardy by the proposed funding of public toilets at Borrello Reserve the residents will arguably have a moral estoppel argument against Council.

Chair advised that the report contains no recommendation to prevent the skate park from going ahead in lieu of toilets or other public open space development. Council is well aware of the community views and support for the proposed skate park which is one of the principal features of the POS Strategy report in terms of development.

Mr O Davies – 37 Ranford Street, Kelmscott

4. In reference to the agenda item “POS Strategy and Proposed Reserve Improvement Works”, I understand that expert opinion from Council officers and consultants indicates that a public toilet at Borrello Reserve is not appropriate and could have a detrimental effect on the environment and amenity of the area and may cost up to \$250,000. Can the Chair confirm this?

Chair advised that a number of land administrative and planning processes need to be undertaken prior to establishing funding and costings for reserve improvement works.

5. I understand that the City of Armadale is undertaking a strategic review of public toilets in the City and that alternative funds for a toilet block may be available elsewhere rather than POS funding thus avoiding need to delete the other identified POS funded projects. Therefore would it not be fiscally responsible and appropriate to suspend a decision on the proposed toilet block until the draft review is tabled?

Chair responded that the matter was before Committee and that the issue would be considered when Committee deliberated on the item.

Ms D Hardie – 17 Calliandra Place, Roleystone

6. In reference to the agenda item “POS Strategy and Proposed Reserve Improvement Works”, the establishment of toilets at Borrello Reserve runs contrary not only to the City of Armadale Strategic Plan but would run contrary to the concerns expressed by the City’s Health Services unit, raising issues of occupational health and safety and public liability vulnerabilities. The proposal to seek funding for public toilets at Borrello Reserve, as noted on page 100 of the Development Services Committee meeting document for tonight’s meeting, 20 June 2011, “*may be more appropriately dealt with strategically, given these works would set a precedent for the whole of the City of Armadale and levels of service with significant funding implications*”. Thus it is not appropriate and wise for this meeting to consider the funding of toilets at Borrello Reserve.

Does the Chair accept that for this meeting to consider the funding of the toilets may compromise the overall strategic plan in relation to public liability vulnerabilities and the erection of public toilets in the City of Armadale and further established precedent consequences?

Chair advised that there is no proposal before the Committee to develop toilets at Borrello Reserve, the question is that, should we consider a toilet block development at Borrello Reserve in this current reserve improvement works proposal. Council has agreed to the funding of a range of improvements works at Borrello Reserve and in addition to these works a request for a toilet block has been proposed.

Chair further advised that the City is undertaking a strategic approach regarding the provision of toilet facilities throughout the City of Armadale.

DEVELOPMENT SERVICES COMMITTEE

INDEX

20 JUNE 2011

DEVELOPMENT

RETROSPECTIVE APPLICATION FOR A REFLECTIVE (SURFMIST COLORBOND) ROOF - LOT 115 (69) BROOKS ROAD, ROLEYSTONE	37
--	----

HOME BUSINESS

APPLICATION FOR APPROVAL TO CONDUCT A HOME BUSINESS FOR PERSONAL TRAINING AT LOT 200 (17) POSSUM PLACE, KELMSCOTT	52
RETROSPECTIVE APPLICATION FOR APPROVAL TO CONDUCT A HOME BUSINESS FOR MUSIC/GUITAR TUITION AT LOT 46 (29) COHUNA DRIVE, ARMADALE	64

ROAD CLOSURE / ROAD DEDICATION

DEDICATION OF LOT 7001 WARTON ROAD, PIARA WATERS AS ROAD RESERVE	76
--	----

SIGNAGE

APPLICATION FOR MODIFIED SIGNAGE TO REFLECT CHANGE IN TENANCY - LOT 833 (No.2938) ALBANY HIGHWAY, KELMSCOTT	7
PROPOSED SIGNAGE FOR MCDONALD'S FAMILY RESTAURANT AT PART LOT 16 NICHOLSON ROAD, HARRISDALE	84

STRATEGIC PLANNING

ADOPTION OF INFRASTRUCTURE COST SCHEDULE 2011 AND ASSESSED VALUES, DEVELOPMENT CONTRIBUTION PLAN NO.3	97
POS STRATEGY – PROPOSED RESERVE IMPROVEMENT WORKS – STAGE 3 (PRECINCT I) – HILLS NORTH 1	19

MISCELLANEOUS

**REVIEW OF FENCING LOCAL LAW	110
PLANNING INSTITUTE OF AUSTRALIA (WA DIVISION) 2011 CONFERENCE – 17 & 18 NOVEMBER 2011 – MANDURAH	119
EXECUTIVE DIRECTOR DEVELOPMENT SERVICES REPORTS	122

COUNCILLORS' ITEMS

POLICIES RELATING TO THE DEVELOPMENT CONTRIBUTION SCHEME	122
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LOCATION PLAN
LOT 833 (No. 2938) ALBANY HIGHWAY, KELMSCOTT

***APPLICATION FOR MODIFIED SIGNAGE TO REFLECT CHANGE IN TENANCY -
LOT 833 (No.2938) ALBANY HIGHWAY, KELMSCOTT***

WARD : RIVER

APPLN NO. : P34066; 11.2011.13.1

DATE : 7 June 2011

REF : MBB

RESPONSIBLE MANAGER : EMPS

APPLICANT : Getaway Outdoors Kelmscott

LANDOWNER : Seaprime Limited

SUBJECT LAND : Lot 833 (2938) Albany Highway, Kelmscott

ZONING
MRS : Urban
TPS No.4 : District Centre /
Restricted Use No.1

In Brief:

- A retrospective application (11.2011.7.1) was submitted 17 March 2011 for modified signage to reflect a change in tenancy for “Getaway Outdoors” Kelmscott which is part of a showroom complex.
- At its meeting of 23 May 2011, Council refused the application (D42/5/11) as it did not meet the City’s Sign Policy requirements.
- A revised application has since been received with a reduced height in lettering which is contained within the horizontal façade sign.
- The signs include 1x horizontal and 1x pylon tenancy insert.
- The proposed new horizontal sign does not meet the City’s Sign Policy requirements; however Council has the discretion to vary such requirements.
- The pylon tenancy insert sign does comply with the City’s Sign Policy requirements.
- Recommend that Council approve the application.

Tabled Items

Nil.

Officer Interest Declaration

Nil.

Strategic Implications

2.3 Diverse and attractive development that is integrated with the distinctive character of the City.

2.3.1 *Provide supportive planning and development guidance and liaison on major land developments.*

2.4 Attractive and user-friendly streetscape and open spaces.

2.4.1 *Implement townscape, streetscape and parkland improvements to enhance the distinctive character of the City.*

Legislation Implications

Planning and Development Act 2005



AERIAL PHOTOGRAPH
LOT 833 (No. 2938) ALBANY HIGHWAY, KELMSCOTT

Council Policy / Local Law Implications

Planning Policy (PLN) 4.2 - Signage (Advertisements)
Town Planning Scheme No.4
City's By-laws relating to Signs, Hoardings and Billposting

Budget / Financial Implications

Nil.

Consultation

Nil.

BACKGROUND

The previous tenancy “Ranger Outdoors” was granted approval by Council for a sign of 2.8 metres in height and 18.4 metres in length. This was not consistent with the Signage Policy discretionary standards of 1.5 metres in height and 3 metres in length for a horizontal sign. However Council used its discretion to vary the requirements of the horizontal sign at its meeting of 26 May 2008 (D65/5/08).

In January 2011, Council Officers noticed the “Ranger Outdoors” sign had been painted over which reflected a change in tenancy to “Getaway Outdoors”. An application was requested for a retrospective application for the change to signage. A retrospective application was consequently received on 17 March 2011, however those plans proposed a larger sign than previously approved. The proposed horizontal sign was 4.8 metres in height by 35 metres in length with lettering approximately 2 metres in height and to be painted on the entire façade above the tenancy. At its meeting of 23 May 2011, Council resolved to refuse the application (D42/5/11) as it did not meet the City's Sign Policy requirements.

The City is now in receipt of a new application received 30 May 2011.

DETAILS OF PROPOSAL

The applicant proposes to modify the horizontal and pylon tenancy insert signs to reflect the change in tenancy to advertise “Getaway Outdoors” which is part of a showroom complex at Lot 833, No.2938 Albany Highway, Kelmscott. The proposed horizontal sign is 4.8 metres in height by 35 metres in length with lettering for “Getaway Outdoors” at 1.2 metres in height and lettering for the words “Camping”, “Watersports” and “Fishing” at 0.5 metres in height. There is also an inclusion of a sun watermark and an additional picture of a sun. The horizontal sign is to be painted on the entire façade above the tenancy.

The applicant submitted the following arguments in support of their application:

1. *We would like to paint out the full facade of the building as it is consistent with signage across all other “Getaway Outdoors” stores.*
2. *We have added a sun watermark and an additional picture of a sun to soften the effect of having a large sign.*
3. *Ranbuild already has the full background of their façade painted.*

COMMENT

Response to issues raised by applicant

1. *We would like to paint out the full facade of the building as it is consistent with signage across all other “Getaway Outdoors” stores.*

The City acknowledges receipt of signage examples of other “Getaway Outdoors” stores however can not comment on examples as it is not within its jurisdiction or relevant to this application.

It should be noted that some of the signage examples are artist impressions and paint work does not cover the full façade of all buildings.

2. *We have added a sun watermark and an additional picture of a sun to soften the effect of having a large sign.*

The City supports the applicant’s attempts to reduce the impact of the whole façade being painted.

3. *Ranbuild already has the full background of their façade painted.*

As noted in 23 May 2011 Council report, “Ranbuild” is located in the corner of the showroom complex and beside a large construction that affects the tenancy with overshadowing. The height of “Ranbuild’s” sign is 4.8 metres with a length of 6.84 metres and is not considered unreasonable. Council resolved at its meeting of 25 January 2010 (Resolution D4/1/10) to approve “Ranbuild” signage due to the tenancy being of a smaller size and therefore the area allocated for signage, whilst having the same height as other signs approved in the complex, is smaller in length. The sign did not have a detrimental impact on the overall appearance of the building and streetscape.

ANALYSIS

Planning Policy (PLN) 4.2 - Signage (Advertisements)

The objective of the Signage Policy is to ensure that the erection and placement of signs in the City should not detract from the visual amenity and streetscape of the locality, and be compatible with the character of the buildings and localities in which they are erected.

Horizontal Sign

The proposed horizontal sign for the tenancy is 4.8 metres in height and 35 metres in length and is to be painted on the entire façade. This is not consistent with the Signage Policy discretionary standards of 1.5 metres in height and 3 metres in length for a horizontal sign, however Council has the discretion to vary such requirements.

The lettering of the words “Getaway Outdoors”, “Camping”, “Watersports” and “Fishing” is consistent with provisions of the City’s By-laws limiting lettering to 1.2 metres.

The main issue is the painting of the entire façade. In this complex only the small tenancy of “Ranbuild” has its full façade painted. Other showroom complexes in the City paint the entire façade and/or building for their businesses. The subject site is well setback from the street and the size of the lettering of the sign complies and there is no restriction in doing so by the Signage Policy. Colour schemes are approved as part of the development approvals and therefore the City could support the painting of the entire façade.

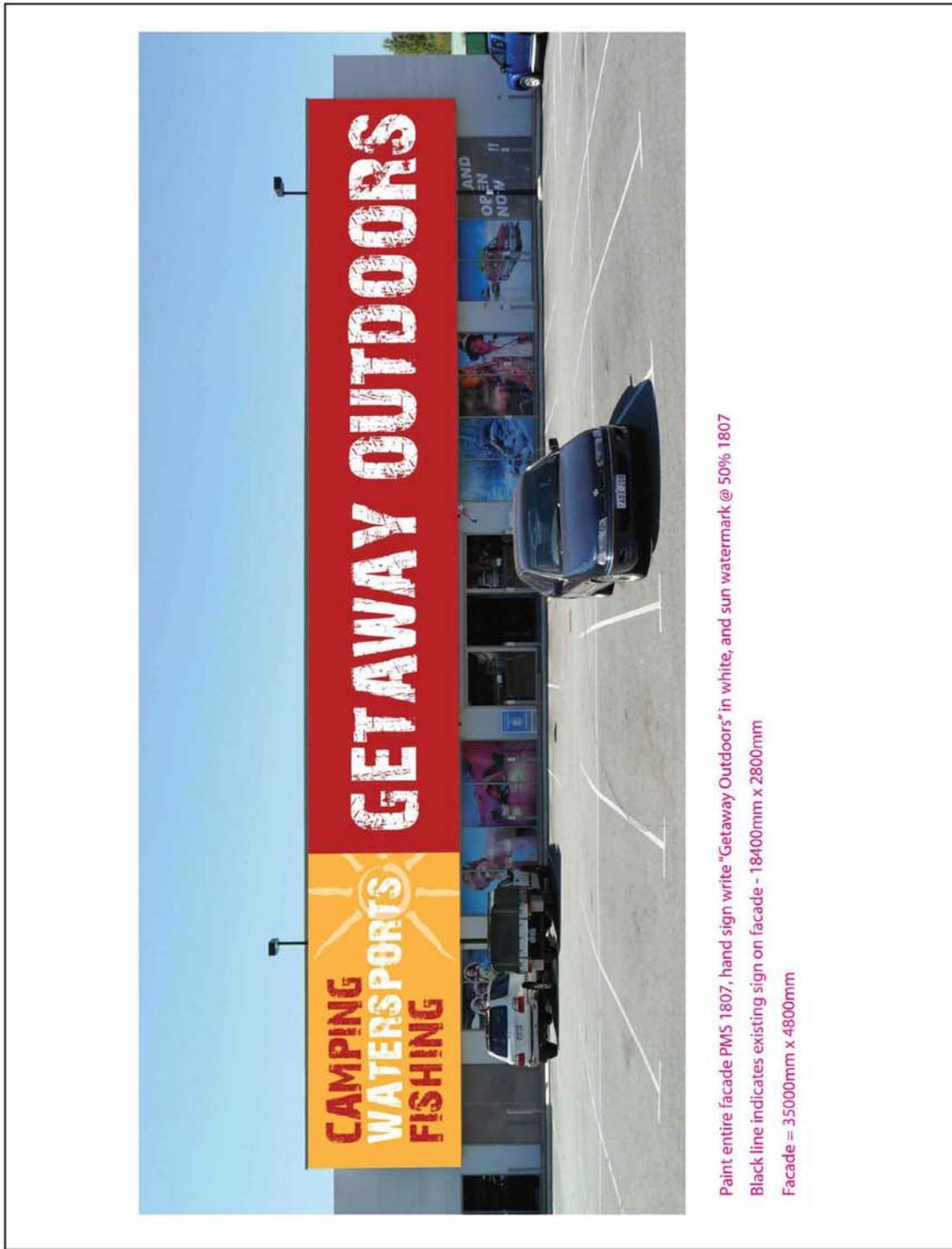
By-laws relating to Signs, Hoardings and Billposting

The proposed horizontal sign is also inconsistent with provisions of the City’s By-laws which limits the maximum height of a sign to 4.5 metres however Council has the discretion to vary such requirements.

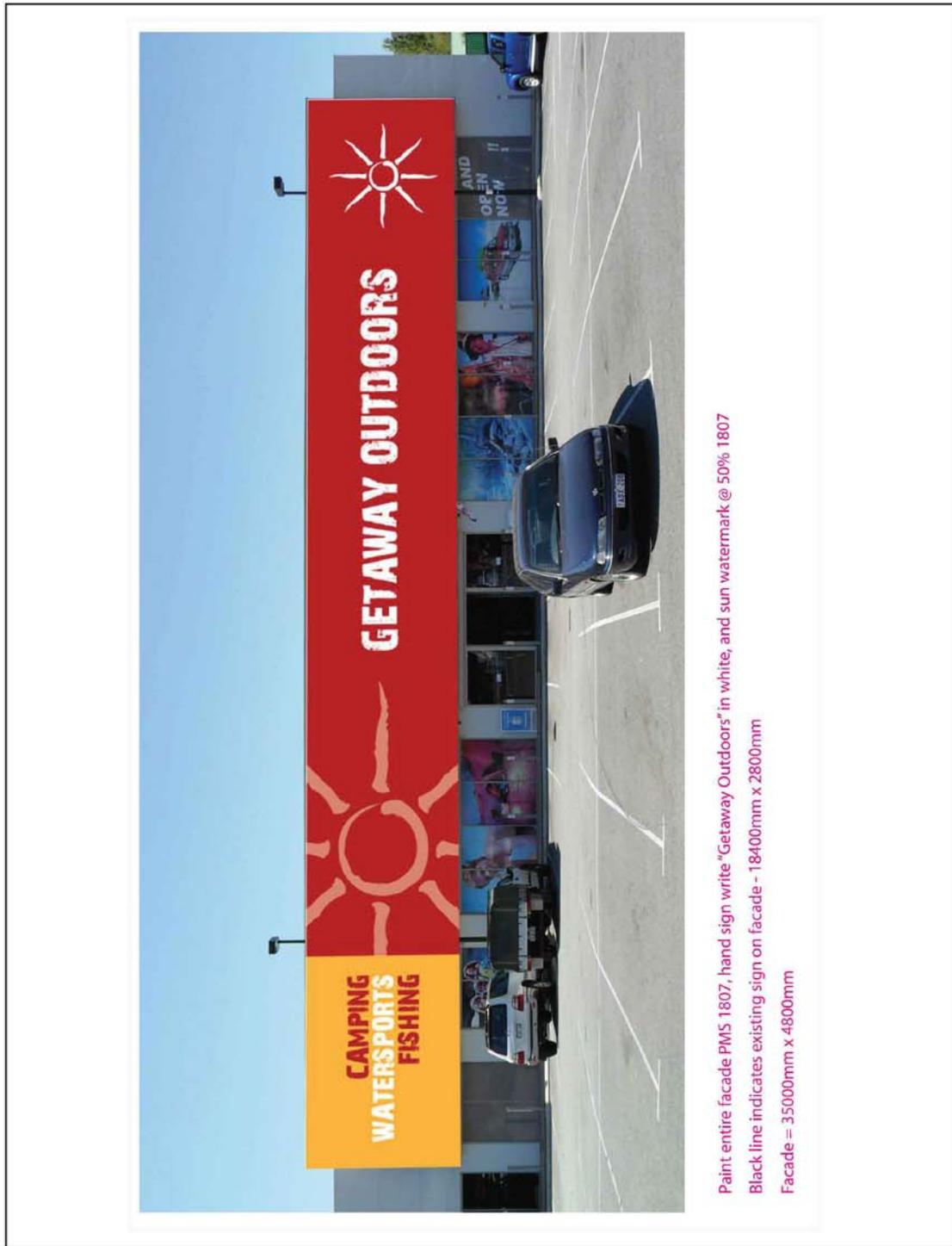
Pylon Sign Insert

The City approved a pylon sign in April 2008 at the subject site for the purpose of advertising various tenancies in the complex. A condition was imposed for all tenancies to make a separate application for signage to be placed within the pylon sign and as such “Getaway Outdoors” has sought approval to replace the original “Ranger Outdoors” pylon insert.

This is consistent with the original approval for the pylon sign and with the City’s Signage Policy and could be approved.



PREVIOUS REFUSED FACADE SIGN (23rd May 2011)
LOT 833 (No. 2938) ALBANY HIGHWAY, KELMSCOTT



PROPOSED FACADE SIGN
LOT 833 (No. 2938) ALBANY HIGHWAY, KELMSCOTT



PROPOSED SIGN - VIEW OF SUBJECT SITE
LOOKING TOWARDS THE NORTHEAST
City of Armadale superimposed proposed sign for illustration purposes only



EXISTING SIGN - VIEW OF SUBJECT SITE
LOOKING TOWARDS THE NORTHEAST



PROPOSED SIGN - VIEW OF SUBJECT SITE
LOOKING TOWARDS THE SOUTHEAST
City of Armadale superimposed proposed sign for illustration purposes only



EXISTING SIGN - VIEW OF SUBJECT SITE
LOOKING TOWARDS THE SOUTHEAST



PROPOSED SIGN - VIEW OF SUBJECT SITE
LOOKING TOWARDS THE SOUTHEAST
City of Armadale superimposed proposed sign for illustration purposes only



EXISTING SIGN - VIEW OF SUBJECT SITE
LOOKING TOWARDS THE SOUTHEAST



PROPOSED SIGNAGE ON PYLON



EXISTING SIGNAGE ON PYLON

OPTIONS

1. Council could refuse the application on the grounds that the horizontal sign does not comply with the signage size as set out in the policy.
2. Council could conditionally approve the application if it is of the opinion the proposed sign will not be injurious to the amenity and streetscape of the locality.

CONCLUSION

The horizontal sign component of the application does not comply with the provisions of the Signage Policy, however the size of the wording complies with the City's Signage By-laws and the tenancy is well setback from the street. Council however has the discretion to vary the provisions of the Policy. Approval of the application is recommended, as per Option 2.

D45/6/11

RECOMMEND

That Council:

1. **Approve the application for signage for Getaway Outdoors at Lot 833 (No.2938) Albany Highway, Kelmscott, subject to the following conditions:**
 - a) **The signs shall be erected in accordance with the approved plans and to the satisfaction of the Executive Director Development Services.**
 - b) **The signs and structures are not to be illuminated and shall not contain fluorescent, reflective or retro reflective colours or materials to the satisfaction of the Executive Director Development Services.**
 - c) **The landowner and applicant shall be responsible for all maintenance, removal (within 24 hours should any sign be damaged), replacement and removal of graffiti (within 3 workings days), and maintained to the satisfaction of the Executive Director Development Services.**
 - d) **This approval shall remain valid unless any alteration is made to the approved signs. In such an event a new application for Planning Approval will be required.**
2. **Advice Note to Applicant:**
 - a) **The applicant and landowner are advised that no other advertising signage (i.e. banners, portable/moveable signs etc) is permitted.**

MOVED Cr Zelones
MOTION CARRIED (7/0)

***POS STRATEGY – PROPOSED RESERVE IMPROVEMENT WORKS – STAGE 3
(PRECINCT I) – HILLS NORTH 1***

WARD : JARRAH

APPLN NO. : PLU/STU/2-03 &
PLU/STU/12

DATE : 16 June 2011

REF : JLQ

RESPONSIBLE : EDDS
MANAGER

LANDOWNER : City of Armadale

SUBJECT LAND : Precinct I of the City's
Public Open Space Strategy
(see Attachment "A10"
of the Minutes)

ZONING
MRS : Urban
TPS No.4 : Various

In Brief:

- A total of four properties in Stage 3 of the POS Strategy were identified for disposal and have been sold or close to sale. Three of these properties have sold at varying times, the fourth property within Stage 2, will not be sold at a profit to the City due to its size. An additional land sale of a former 20A reserve that is not a part of the POS Strategy, however will contribute to available POS Strategy funds, is Lot 501 Brookton Hwy, Karragullen.
- Net Monies available from the sale of former 20A reserves, minus GST and 30% for Capital Recreation Projects, is \$535,946 (including interest).
- Monies available from Public Open Space Cash In Lieu (POS CIL), minus 30% for Capital Recreation Projects, is \$82,075 (including interest).
- Recommend that Council endorse the priority list and schedule of works for reserve upgrades in Precinct I of the POS Strategy and request the Minister for Planning approve the expenditure of POS CIL funds in Precinct I.

Tabled Items

Nil.

Officer Interest Declaration

Nil.

Strategic Implications

2.4.2 Maintain and improve where required the quality, amenity and accessibility of open spaces.

4.2.1 Develop, implement and report on Council's strategic and business plans.

Legislation Implications

Planning and Development Act, 2005

Land Administration Act, 1997

Guidelines for the Administration of Section 20A "Public Recreation" Reserves

Local Government Act, 1995 – Section 3.58 – Disposing of Land

Local Government Act, 1995 – Section 3.59 – Commercial Enterprises by Local Government

Local Government (Functions and General Regulations), 1996

Council Policy / Local Law Implications

ENG 13 – Asset Management Vision

Budget / Financial Implications

Precinct I is the third precinct to have funds available to spend on upgrading existing reserves. The majority of funds are available from the sale of Lot 2285 Urch Rd, Roleystone, Lot 2241 Slab Gully Rd, Roleystone and Lot 2115 Calytrix Rd, Roleystone and Public Open Space Cash in Lieu (POS CIL) funds derived from subdivision approval conditions within this precinct.

The available funds for reserve improvements in Precinct I reflect 70% of the sale proceeds associated with the Public Open Space Strategy and the sale of a portion of former Reserve 38061 (now Lot 501 Brookton Hwy, Karragullen). Additionally the available funds include 70% of funds associated with the City's Public Open Space Cash-In-Lieu (POS CIL).

The Goods and Services Tax (GST) has been deducted from the total available funds and the 30% deductions from the POS Strategy land sales and POS CIL relates to funds that will be invested into the City's Capital Recreation Projects (Strategic Recreation Initiatives). This is as per Council's resolution on 17 July 2006 (CS75/7/06).

The report recommends that Council support capital improvements to parks within Precinct I to a total value of \$704,674 (including POS Land Sale, POS CIL and grant funds if successful). The proposed capital expenditure will in turn result in increased asset and renewal at 3.5% (in this instance approximately \$25,000) of the Capital Costs and maintenance costs of 2% (in this instance approximately \$15,000) that is not currently reflected in the forward estimates.

Consultation

- ◆ Corporate Services Directorate.
- ◆ Public Open Space (POS) Strategy Working Group (Executive Director Development Services, Manager Parks, Executive Manager Community Services, Manager Recreation Services, Executive Manager Planning Services, Environmental Coordinator, Environmental Officer, Manager Property Services and Special Project Officer).
- ◆ Department of Regional Development and Lands – State Land Services.
- ◆ Public consultation consistent with State Government Guidelines for the administration of Section 20A Reserves.
- ◆ Public consultation via the rezoning of the land as part of the introduction to Town Planning Scheme (TPS) No.4 for each of the lots.
- ◆ Public consultation of Business Plans consistent with Section 3.59 of the *Local Government Act, 1995*.
- ◆ Herron Todd and White (member of the City's Valuers Panel), when land is marketed for sale.
- ◆ Councillor Briefing 11 October 2010.
- ◆ Further submissions from Jarrah Ward Councillors 2011

BACKGROUND

The City's Public Open Space Strategy describes the characteristics of Precinct I as ...*"the innermost residential area of the municipality and contained entirely in the locality of Roleystone. It is generally bounded by the municipal boundary and Chevin Road to the north, Brookton Highway and Simons Drive to the east, Croyden Road and Brookton Highway to the south and Canning Mills Road and the extension of Coventry Road to the West"* (2000: 70). (*See Attachment "A10" - Precinct I of the City's Public Open Space Strategy*)

The overarching purpose of the City's Public Open Space Strategy (POS Strategy) since 1999 has been to establish a *"strategic approach to Public Open Space rationalisation... as a matter of high priority"* (D253/99). The City has implemented the POS Strategy in a staged manner since 1999 and has progressed a number of land administrative and planning processes to enable surplus Public Open Space to be sold. These processes include reserve cancellation, purchase of the former reserves from the Crown, rezoning, implementation of business plans, resolving site issues to enable the land to be sold and sales in accordance with the *Local Government Act, 1995*.

Council, at its meetings in 21 October 2002 (CS85/02) and 17 March 2003 (CS9/3/03), considered public submissions for Stages 2 and 3 of the POS Strategy. The properties in Stage 3 – Precinct "I", include:

- Lot 2285 Urch Rd, Roleystone (former Reserve 30232);
- Lot 3042 Knuckey Dr, Roleystone (former Reserve 35492);
- Lot 2241 Slab Gully Rd, Roleystone (former Reserve 2992); and
- Lot 2115 Calytrix Rd, Roleystone (former Reserve 28906).

Reserve Cancellation, Rezoning & Purchase

Council at its meeting of 17 March 2003 (CS9/3/03) resolved to cancel the reservations for each of the above four properties in Precinct I, purchase the land from the Crown and rezone the land as part of the introduction of Town Planning Scheme No.4.

The four properties were rezoned and recoded to a density of "Residential R5" to be consistent with adjoining residential land as a part of Town Planning Scheme No.4, gazetted November 2005.

The properties were subsequently purchased from the Crown with settlement taking effect in October 2007, the City's purchase prices was as follows:

- Lot 2285 Urch Rd, Roleystone - \$7,954.55 (Ex GST);
- Lot 3042 Knuckey Dr, Roleystone \$500 (Ex GST);
- Lot 2241 Slab Gully Rd, Roleystone \$8,409.09 (Ex GST); and
- Lot 2115 Calytrix Rd, Roleystone \$8,181.82 (Ex GST).

Business Plan & Public Sale

Council, at its meeting of 25 February 2008 (CS15/2/08) resolved to adopt a Business Plan. The Business Plan proposed to dispose of the lots using the methods stipulated within Section 3.58 of the *Local Government Act, 1995*. The methods by which local governments are able to dispose of land include sale by way of Public Auction, Public Tender or Private Treaty. The lots have either been sold by way of Tender or Private Treaty.

Lot 2285 Urch Rd, Lot 2241 Slab Gully Rd and Lot 2115 Calytrix Rd have sold at varying times and form the primary source of available funds in Precinct I of the POS Strategy. Lot 3042 Knuckey Dr, Roleystone will not contribute significantly to the funds generated for expenditure within Precinct I. This is due to the low value of the land and the limited funds that would accrue after the costs associated with facilitating the City’s disposal of this property.

Previous Community Consultation

Recommendations of the POS Strategy for Stage 3, Precinct I were initiated in 2002. Since this time community consultation has occurred four (4) times in association with the land administration and town planning processes to enable former 20A reserves to be cancelled, rezoned and sold. This includes the following:

- ◆ Consultation regarding Reserve Cancellation (included request for POS upgrade expenditure proposals) – October 2002 and March 2003;
- ◆ Consultation regarding Rezoning as a part of the induction of Town Planning Scheme No.4 (TPS No.4) – between March and June 2004; and
- ◆ Consultation regarding Business Plan – 42 days ending January 2008.

Nine submissions were received during the October 2002 public consultation. Seven of these submissions made suggestions on the use of funds from the sale of former reserves.

Table 1: Summary Suggestions for Expenditure as a Part of Previous Public Consultation

Suggestion	No. Submissions	Current POS Officer Comment in Relation to Current Expenditure Proposals
<i>Trail Development – by building a new bridge over River at old water pipe near Roley Pool and create a linear trail.</i>	3	Roley Pool is not within Precinct I of the POS Strategy. The funds made within this precinct are required to be spent within the same Precinct from which they derived.
<i>Trail Development - along contour channel.</i>	2	Contour Channel falls within a number of POS Strategy Precincts. This proposal may be more suitable for an environmental grant. In addition the City has undertaken a significant amount of works including trails along Contour Channel. Parts of the Contour Channel have been sold by the State Government.

Suggestion	No. Submissions	Current POS Officer Comment in Relation to Current Expenditure Proposals
<i>Trail Development – a central link trail between Cross Park to Mackie Road via shops, school, Hillandale to Wygonda Rd and Hall Road.</i>	1	There are existing formal and informal trails that have established a central trail link. Ward Councillor’s have advised formalised walk trails are not desired by local Bushcare groups.
<i>Trail Development – add interpretive signage to trails.</i>	1	Cr Wielinga has proposed laser etched stainless steel interpretive signage at prominent bushland reserves. Through the City’s ‘Bush Care and Environmental Working Group’, bushland prioritisation based on conservation values has been developed for priority bush reserves throughout the whole City. A strategic approach to identify higher priority bush reserves across the whole of the City would be beneficial in determining appropriate locations for specialised signage.

Expenditure of Sale Proceeds

The State Governments Land Administration & Registration Practice Manual outlines how funds from the sale of former reserves are able to be spent. Proceeds from the sale of former reserves must be used to either purchase replacement land of equal area and suitability for public recreation purposes, or spent on capital improvements to recreation land in the vicinity of the land sold. In addition, reserve upgrades are to be unrestricted to the public. Council has established appropriate Trust accounts to meet this requirement and expenditure of funds has been considered on a Precinct basis, as agreed with the State Land Services of the Department of Regional Development and Lands (formerly formed a part of Department for Planning and Infrastructure).

The City was granted permission to spend 30% of the funds from the POS Strategy and Public Open Space Cash in Lieu (POS CIL) on Capital Recreation Projects (strategic recreation initiatives). This is in accordance with Council’s resolution at its meeting’s of 17 July 2006 (CS75/7/06) and 20 November 2006 (CS109/11/06).

Councillor Briefing – POSWG Draft Proposals

A Councillor briefing session was convened on the 11 October 2010 to discuss draft expenditure proposals or ideas for reserve improvements in Precinct I of the POS Strategy, as drafted by the Public Open Space Working Group (POSWG).

This included upgrades to nine (9) reserves at a total cost of \$1,161,009. It was anticipated that a number of works at various reserves would be amended and deleted by Councillors. The total cost of works include works funded by other Budgets, in addition to the POS funds (i.e. some signage and other works supplied as a part of the City’s asset management process). The list was prioritised as funding was **not** available for all of the works.

A summary of the preliminary POSWG's reserve improvement proposals (\$611,009 works proposed exclusively by the POSWG) that were presented for Councillor's consideration during the October briefing and were listed below in order of priority:

1. Cross Park – Total Cost Est. = \$110,000
Roleystone Revitalisation Pathway Project (\$110,000).
2. Borrello Reserves (East and West R31139) Total Cost Est. = \$83,347
Footpaths (\$12,500); Parking (\$9,350); Landscaping (\$20,000); Boardwalk Structures In Road Reserve (\$9,765); Benches (\$3,000); Picnic Table (\$3,500); Bollards (\$17,500); Other Minor Works (Signs, Gate Service etc \$2,732); Contingency (\$5,000).
3. Lina Hart Reserve (East R25074 and West R3367) Total Cost Est. = \$116,776
New Playground (\$25,000); Existing Playground Relocation (\$2,500); Removal of existing wooden 1980's exercise equipment (\$3,500); Bollards (\$2,000); Bench (\$3,000); Solar Lighting (\$12,000); Path (\$5,000); Parking (\$3,300); Soft Landscaping of Fence Lines (\$1,500); Tree Pruning (\$2,500); Formalise 277m x 3m wide Walk Trail (\$41,550); Revegetate 432sqm (\$3,750); Other Minor Works (Reserve Signs, A-Frame Sign, Tree Pruning, Gate Service etc \$6,176); and Contingency (\$5,000).
4. Hall Road (Multiple Portions R37636) Total Cost Est. = \$57,750
Formalise Walk Trail 710m x 1.5m wide (\$53,250); and Revegetate Walk Trail (\$4,500).
5. Moseri Reserve (R50453) Total Cost Est. = \$48,420
Playground (\$25,000); Bench (\$1,000); Solar Lighting (\$6,000); Path (\$4,500); Other Minor Works (Site Clean Up, Tree Pruning, Signage, Gate Service etc \$9,420); and Contingency (\$2,500).
6. Warwick Savage Total Cost Est. = \$36,500
Site Works (Remove Rubbish & Weed Control \$20,000); and Revegetation 11,000sq/m (\$16,500).
7. Eskdale Reserve (R39812) Total Cost Est. = \$50,850
Formalise existing track 324m x 3m wide (\$48,600); and Revegetation (\$2,250).
8. Alice Reserve (R28728) Total Cost Est. = \$106,066
Benches (\$4,000); Picnic Table/Shelter (\$3,500); Path (\$12,500); Parking (\$9,350); Bollards (\$2,000); Gazebo (\$17,500); Gazebo Earthworks & Foundations (\$12,500); Boardwalk Structures (\$19,530); Railing for path around boardwalk (\$11,250); Drain Fencing (\$5,760); Soft Landscaping (\$1,500); Other Minor Works (Tree Pruning, Signage, Gate Service \$1,676); and Contingency (\$5,000)
9. Garland Reserve (R30058) Total Cost Est. = \$1,300
Minor Works (Signage \$1,300)

Jarrah Ward Councillors Proposals

In the past, Councillors had reviewed and revised draft proposals developed by the POSWG through a Councillor briefing. Further to the Councillor briefing in October 2010, the Jarrah Ward Councillors, Cr Hart and Cr Wielinga, requested additional time to review/revise priority reserves for upgrading and submit proposals.

The Ward Councillors agreed on improvements to four (4) of the reserves proposed to be upgraded by the POSWG to an estimated cost of up to approximately \$401,151 (this estimated cost includes points 1 – 4).

Jarrah Ward Councillors agreed on the following reserve upgrades:

1. Cross Park – Agreements made by Ward Councillors Total Cost Est. up to \$341,645

Deletion of the POSWG's proposal to commit \$110,000 to the Roleystone Revitalisation Precinct Plan Pathway Project, as some works had already been undertaken.

Improvements to Existing Skate Park (\$285,000 - \$300,000); approx 40sq/m footpath from toilets/disabled parking bay to oval and from car park to skate park and proposed basketball area (\$7,000); Basketball Half Court (\$8,775 half court or approx. \$19,890 full court); Basketball Hoops, Backboard and Line Marking (\$12,000); 4 x Seats (\$4,000); and Cr Wielinga also proposed to include a bitumen area between skate park and car park (approx. \$9,870, however additional costs may be required for earthworks and retaining walls).

2. Warwick Savage – Total Cost Est. -\$30,000

Site Works (Remove Rubbish & Weed Control - \$20,000); and Revegetation 11,000sq/m (\$10,000).

3. Borrello Park (R31139) Total Cost Est. – \$27,350

Footpath in western portion of Borrello Park (\$12,500); Handrails (\$5,500); and Car Parking (\$9,350).

4. Garland Reserve (R30058) and other Bush Reserves Total Cost Est. \$1,156

Cr Hart proposes signage in keeping with other small local signs currently used by the City (Local Law sign and reserve name sign \$1,156); Cr Wielinga proposed \$10,000 signage at prominent bush reserves, however the signage construction materials are not supported by the POSWG.

As mentioned the above works that both Ward Councillors proposed in their submissions have generally been integrated into a revised works/cost schedule for upgrades in Precinct I.

Councillor Hart's submission also proposed the following works, which have been integrated into the revised works/cost schedule as they are consistent with those works proposed by City officers in October 2010. This includes:

5. Lina Hart

Bench/Seating (\$3,000) and Picnic Table (\$3,500).

6. Alice Reserve

Bench/Seating (\$2,000) & Picnic Table (\$3,500).

Some of the Ward Councillors proposed works may be more appropriately dealt with strategically, given these works would set a precedent for the whole of the City of Armadale and levels of service with significant funding implications. These proposed upgrades include a proposed public toilet at Borrello Reserve at a cost estimate of \$190,000, replacement of the playground at Lina Hart, laser etched reserve signs, shade sails over the existing playground at Borrello Reserve and additional fencing and signage at bush reserves. The reasons the POSWG did not support these proposals or prioritised other works above these proposals are discussed in detail in the Comment Section of this report.

DETAILS OF PROPOSAL

The POS Strategy Working Group, comprising officers from Technical Services, Community Services and Development Services Directorates was convened to establish a priority list for improvement works. Councillors have provided advice on various proposals. It is proposed that Council adopt the schedule of works in Precinct I.

Works are proposed to be completed based on the ranking of priority parks, priority works and availability of funds, staff, contractors and materials. Funds are now available for expenditure and it is proposed Parks Services commence scoping for works, seek quotations and award contracts for works scheduled into the 2011/12 and 2012/13 financial years. Technical Services (Parks and Reserves) will need to consider when the works can be scheduled into their works programme.

There are six (6) parks within Precinct I that have been selected for reserve improvements at a total estimated cost of \$704,674. Table 2 identifies a summary of the priority works scheduled. A more detailed schedule of the proposed works is at *Attachment “A11” – POSWG Proposed Expenditure Proposals for Reserve Upgrades and Attachment “A12” – Location, Aerial and Upgrade Plans”*.

Table 2: Summarised Proposed Schedule of Expenditure for Upgrades in Precinct I of the POS Strategy

Budget Year	Rank	Reserve	Estimated Expenditure		Estimated Revenue Funding		
			POS Land Sale Amt \$	Other Revenues – Parks Budget	POS Cash-In-Lieu	Other Revenues – Grants (Tentative)	Total
2011 / 12	1	Cross Park	\$349,570	-	\$82,075	\$50,000	\$481,645
2011 / 12	2	Borrello Reserve	\$93,897	\$100		-	\$93,997
2011 / 12	3	Warwick Savage	\$47,500	-	-	\$30,000	\$77,500
2011 / 12	4	Lina Hart Reserve	\$42,176	\$2,700	-	-	\$44,876
	5	Garland Reserve	\$1,056	\$100	-	-	\$1,156
2011 / 12	6	Alice Reserve	\$5,500	-	-	-	\$5,500
TOTAL			\$539,699	\$2,900	\$82,075	\$80,000	\$704,674

COMMENT

Overview of former POS Land Sales

As mentioned previously four (4) public open space recreation reserves were identified in Stage 3, Precinct I of the POS Strategy to be cancelled, rezoned and sold. Three of these properties have been successfully sold and the sale of the last former reserve is in its final stages.

There is one lot remaining to be sold within Precinct I of the POS Strategy, being Lot 3042 Knuckey Dr, Roleystone. The sale of this property will not significantly contribute to the available expenditure of funds within Precinct I (estimated at \$4,500).

A portion of former Reserve 38061 (now Lot 501) Brookton Hwy, Karragullen has attributed to available funds for expenditure on public open space upgrades within Precinct I of the POS Strategy. Whilst sale of this land is not associated with the City's POS Strategy, the State Government's *Guidelines for the Administration of Section 20A Public Recreation Reserves* coordinates how these funds from this land sale may be spent. Funds associated with this land sale have been allocated to works, near public open space from where the land sale occurred. It is logical to include funds from this land sale in association with funds derived through the City's POS Strategy land sales, given the property was a former 20A reserve.

Available Land Sales Funds

The gross funds amount to approximately \$772,000 (excludes interest). This includes funds derived from Public Open Space Strategy land sales (Lot 2285 Urch Rd, Lot 2241 Slab Gully Rd and Lot 2115 Calytrix Rd). The anticipated land sale for Lot 3042 Knuckey Dr has also been included, plus the sale of Lot 501 Brookton Hwy, Karragullen (formerly R38061 which is not a part of the POS Strategy, however was a former 20A reserve).

The net amount of funds minus GST and 30% allocation towards Capital Recreation Projects (Strategic Recreation Initiatives) is approximately **\$535,946** (note this amount includes interest). The 30% deduction towards Capital Recreation Projects (Strategic Recreation Initiatives) is as per Council's Resolution 20 November 2006 (CS109/11/06).

Available Funds POS CIL

Additional funds are available for expenditure from the Jarrah Ward POS Cash-in-Lieu (CIL) account. POS CIL funds are obtained through subdivision conditions as per the *Planning and Development Act, 2005*. As at 10 May 2011 the net amount of funds available was approximately **\$82,075** (including interest).

A deduction of 30% from the above POS CIL funds has previously been allocated towards Capital Recreation Projects (Strategic Recreation Initiatives). The previous 30% deduction towards Capital Recreation Projects (Strategic Recreation Initiatives) is as per Council's Resolution on 17 July 2006 (CS75/7/06).

It should be noted that prior to expenditure of POS CIL funds, approval from the Minister of Planning as per Section 154 of the Planning and Development Act, 2005 is required. The WAPC Policy Development Control 2.3 (POS In Residential Areas) and Planning Bulletin No.21 (Cash in Lieu of POS) provides further detail and requirements. Expenditure of CIL funds must be directly related to the use or development of land for purposes with unrestricted public access. The use of CIL funds would not normally be acceptable for community halls or indoor recreation centres, enclosed tennis courts, bowling greens for clubs, facilities for private clubs or similar facilities where access by the public is restricted. Requests for expenditure of CIL funds are to be submitted to the WAPC for its recommendation to the Minister for Planning.

Previous Decisions

Council at its meeting of 19 March 2007 (CS22/3/07) resolved to “*note the signing of the Roleystone Revitalisation Project funding agreement between the Minister for Planning and Infrastructure on behalf of the State of Western Australia, and the City of Armadale*”. This plan proposed to allocate \$100,000 from funds made through the City's POS Strategy towards a Pathways Project at Cross Park and \$10,000 from grants towards this project, amongst other matters. As per Part 3 of this resolution Council also resolved to “*consider funding within the City's 15 Year Financial Plan, 2007/08 Budget and 5 Year Works Programme to accommodate the works outlined in the revised Roleystone Revitalisation Precinct Plan*”.

Jarrah Ward Councillors (on 17 March 2011) and Community Services (on 12 April 2011) have advised that some of these works associated with the fund allocation of Roleystone Revitalisation Precinct Plan (RRPP) Pathway Project had occurred. Those works remaining are no longer considered a priority by Ward Councillors or previous community group members involved in the development of the RRPP Project.

Ward Councillors and the POSWG are supportive of these funds being allocated towards improvements to the existing skate park at Cross Park.

Other Funding Opportunities

The success of grant applications to a total amount of \$80,000, will affect the City's ability to deliver proposed works at Cross Park at a value of \$50,000 and Warwick Savage at a value of \$30,000.

Federal Government Grant - \$50,000

The City recently received advice from the Attorney-General's Department confirming approval of an election promise by the Federal Labour Government to provide \$50,000 “*to help rejuvenate the Roleystone skate park, by contributing to its expansion and re-design in co-operation with local organisations*”. A condition of approval of the Federal Government grant has been on the basis the City will contribute a minimum \$300,000 towards the skate park upgrade. Additional funding may be sought if identified.

It should be noted that further works are required to identify options, obtain cost estimates and assess the feasibility of this proposal prior to a final decision by Council regarding the construction of the skate park upgrade. The POS Strategy is only making a funding allocation. The cost allocation for a skate park upgrade at Cross Park is proposed as follows:

- Preliminary Cost Estimates = \$30,000 from POS Strategy (feasibility studies and initial conceptual design);
- Detailed Design Cost Estimates = \$50,000 from POS Strategy (Detailed Design & Documentation);
- Construction Cost Estimates = Total \$350,000 – POS Strategy \$217,925, POS CIL \$82,075 & Grant -\$50,000

The POSWG has proposed to increase the skate park upgrade fund allocation to \$380,000 in consideration of consequential project costs. If Council is supportive of the proposal to allocate \$380,000 from the proceeds of the POS Strategy land sales and POS CIL funds in Precinct I, a total of \$430,000 would be available to upgrade the skate facility at Cross Park in lieu of the Federal Government \$50,000 grant. Funds required for community engagement specific to the skate park upgrade will be derived through the Federal Government grant.

If Council does not support a skate park upgrade or proposes an alternative fund allocation, City officers would be required to liaise with the Attorney-General's Department regarding the grant. Additional funding may be sought if identified.

Possible Environmental Grant - \$30,000

In order to undertake required upgrades to the bushland environment of Warwick Savage Park, external grant funding may be required. The POS allocation to the Warwick Savage Park works can be used as the City's in-kind contribution to the project to leverage additional grant funding. If Council adopts the proposed environmental works at Warwick Savage Park, the City's Environmental officers would seek a grant approval up to the amount of \$30,000. The grant would further contribute to environmental works, such as weed control, rubbish removal, earthworks and revegetation. Upgrades reliant on grants should be planned exclusive of grant monies to ensure the City is not financially over committed to a project. If a grant can not be obtained, the scale of works may be reduced.

Total Available POS and POS CIL Funds

The total amount of 'net' available funds from the sale of land associated with the POS Strategy and a portion of former Reserve 38061 (now Lot 501) Brookton Hwy, Karragullen (\$535,946, which includes interest) plus the 'net' available POS CIL funds (\$82,075 which includes interest) is to an amount of **\$618,021**.

ANALYSIS

Principles Guiding the POS Working Group

The main objective of improvement works was to ensure that works were readily visible to the public and to increase the useability of the parks. The POS Strategy Working Group has a list of criteria to evaluate the priority selection for the proposed works, these include the following principles:

- Parks to be completed in their entirety, where possible;
- Improvements to be readily visible;
- Upgrades to incorporate other Council Strategies (ie. Playground Strategy, Roleystone Revitalisation Precinct Plan, Strategic Trail Route and Skate Park Strategy);
- Access, safety and crime prevention principles to be included;
- Improvements must be sustainable; and
- Improvements to match the characteristics of the area.

In addition to the above, the POS Strategy Working Group has also considered previous submissions received during community consultation as a part of the POS Strategy, community groups and their interests in the reserves and also other funding opportunities.

Each park was analysed utilising the above mentioned principles and the POS Working Group resolved that the priority list be ranked in accordance with *Attachment “A11” of the Minutes*.

Councillor Submissions

After the Councillor briefing in October 2010, Jarrah Ward Councillor’s provided separate proposals for improvements in Precinct I. The majority of both of the Ward Councillors proposals have been integrated into a refined proposed works schedule by the POS Working Group.

However, there were insufficient funds for five (5) proposals. These include:

- Shade Sails over the existing playground at Borrello Reserve;
- Laser Etched Stainless Steel Signage – Interpretive Signage at Prominent Bush Reserves;
- Fencing at Bush Reserves;
- Replacement of the Existing Playground at Lina Hart Reserve;
- A Public Toilet at Borrello Reserve.

Upgrades made in each POS Strategy precinct are aimed at being sustainable and consistent with existing assets and/or materials used throughout the City.

Shade sails and laser etched stainless steel signage are materials that are not used in recreation reserves throughout the City. Shade sail products vary substantially in quality and price, whilst also requiring regular replacement and repair from vandalism and damage. The City has preferred to use trees to provide shade, which is more cost effective and environmentally friendly.

Laser etched stainless steel signage costs would depend on the content and size of each individual sign. It was proposed this type of signage could be trialled on some strategic bush reserves in Precinct I. Environmental improvements at Settlers Common Reserve may be a more appropriate location to trial specialised signage such as stainless steel laser etched signage. This improvement may be appropriate, however it would set a precedent across the City, therefore wider consideration and funding arrangements are required.

With regards to the fencing at bush reserves, new fencing could be considered as a part of upgrades through the POS Strategy, however repairs and/or replacement of existing assets are not normally funded through the POS Strategy, as they are existing assets. These works have not been prioritised by the POSWG in the proposed schedule of works. A strategic approach to identify higher priority bush reserves across the whole of the City would be beneficial in determining appropriate locations for signage and new fencing.

Part 3 of the City's ENG 13 – Asset Management Vision Management Practice outlines that *“priority will be given in the annual budgeting for the operation, maintenance and renewal/refurbishment of existing assets, where need requires their retention”*. The City's Playground Strategy proposes retention of the existing playground at Lina Hart Reserve, which is classified under the Playground Strategy as a 'local park'. Parks Services have advised this asset is required to be replaced given its age and new development standards. As this is an existing asset it would be required to be funded through the normal asset management funds as those funds become available.

The merits of a proposed toilet on Borrello Reserve, needs to be carefully considered. The funding of the toilet using POS funds would substantially reduce the amount of POS upgrading works in Borrello Reserve and other reserves. The City has several options in relation to the toilet proposal including:

1. Resolve to use POS Strategy funding for the toilet and delete other proposed works. Additional funding may be required to complete the toilet;
2. Resolve to use the POS Strategy funds on other park upgrades and not include funding for the toilet. The request for the toilet should be considered as part of the preparation of a toilet strategy or strategic review of the provision of toilets across the City;
3. Resolve to defer consideration of the toilet proposal to a further report on an overall strategy or strategic review on the provision of toilets across the City and consideration of their funding through the review of the 15 Year Plan; or
4. Resolve to defer consideration of the toilet proposal to a further report on an overall strategy or strategic review on the provision of toilets across the City and set aside \$200k from the POS Strategy Precinct I funds pending the outcome of the review, thereby reducing the scope of POS upgrades. If a toilet is not required in Borrello Park in the review, then the funds set aside be reconsidered by Council for further POS upgrades in Precinct I.

The POS Strategy working group does not oppose public toilets in Borrello Reserve in principle, however there are two significant issues associated with a proposed public toilet at Borrello Reserve that warrant this proposal being considered as a separate item to the POS Strategy. This includes previous issues discussed at the Councillor Briefing in October 2010, which related to environmental and health concerns. The second relates to recommendations of a draft document 'Guidelines for a Public Toilet Strategy' prepared by consultants, which still requires assessment and development before being considered by Council.

The City's Health Services have raised a number of issues that would need to be addressed and may impact on the location and appropriateness of a toilet. Borrello Reserve is unlikely to be an ideal location for a public toilet given the uncertainties associated with the site's capacity to support this infrastructure. For example:

- There is no capacity to connect to sewerage infrastructure at this reserve;
- At the southern boundary a perennial stream and lake flows through both eastern and western sections of the reserve, which forms a part of the drainage network within this locality;
- Setback requirements of 100m for a conventional septic tanks would be required or 50m for an ATU, which would need 150m² irrigation zone;
- A geotechnical investigation would be required to determine the soils suitability and whether there are possible springs on site; and
- The POSWG's estimated cost for a Toilet at Borrello Reserve is approximately \$250,000 dependant on consultant studies and/or investigations required.

It is unclear whether these issues can be resolved at this stage, as detailed studies and planning has not occurred for a toilet at Borrello Reserve.

The second issue relates to the need to establish a strategic approach regarding the provision of toilet facilities throughout the City of Armadale. Technical Services commissioned the preparation of the preliminary document, 'Guidelines for a Toilet Strategy' prepared by 'WC Innovations Sanitation Specialists'. The draft document requires substantial review and assessment, prior to Council's consideration. The guidelines briefly investigated current facilities across the City of Armadale. Borrello Reserve was not identified as a priority location for a public toilet. It should be noted the Guidelines did not undertake an in-depth analysis of population growth areas, such as North Forrestdale or Wungong or existing and future infrastructure within or around these reserves. In addition the Guidelines recommend replacement of existing public toilets in four (4) locations and establishing additional public toilet assets at thirteen (13) locations.

According to the draft Guidelines, a total of 17 new toilets facilities would have the following estimated construction costs of between approximately \$2.21 million - \$2.72 million or between approximately \$1.275 million - \$1.870 million (dependant on site and design conditions and whether a conventional or prefabricated unit is installed). Cleaning and unlocking costs for 17 new facilities is estimated to an amount of approximately \$170,000 - \$204,000 (p/a) for conventional public toilets and approximately \$102,000 - \$119,000 (p/a) for automated units. These costs have not been reviewed by officers and appear to be very conservative (including many exclusions), therefore it is highly likely that additional costs will need to be included, such as staffing, demolition costs, earthworks and infrastructure relocation or provisions/connections, in addition to asset management costs.

Option 2 above is recommended. A toilet at Borrello Reserve may benefit the City, however a strategic direction is required to address toilet provision across the whole City and there are higher priority POS upgrading works in Precinct I.

OPTIONS

1. Council could resolve to endorse the priority list and schedule of works for Reserves in Precinct I of the POS Strategy.
2. Council could modify the priority list or schedule of works for Reserves in Precinct I of the POS Strategy.
3. Recommit the priority list and schedule of works for Precinct I of the POS Strategy for a later date and retain the funds in a Trust Account for use at a later date.

CONCLUSION

Since the Councillor Workshop in October 2010, further consideration of priorities has been given in consultation with Ward Councillors. While there is a coincidence of views on the appropriateness and achievability of most of the priorities, it has been difficult for officers to justify the proposal to allocate the necessary funds to the development of a toilet block in Borrello Reserve. An alternative approach in regard to this proposal is recommended.

The POS Strategy has progressed over a number of years and has included community consultation occurring during multiple stages of implementation of the POS Strategy. The City and Ward Councillors have extensively considered the most efficient and equitable use of funds derived through the sale of former 20A reserves in Precinct I. The proposed expenditure schedule and priority works upgrades reflect a collaborative approach to development of the proposals and City officer's view of sustainable use of funds on reserve upgrades.

Given the above, Option 1 is recommended.

As requested by the Chair and for the Committee's reference a petition with approximately 100 signatories was tabled by Cr Shaw, the prayer of which reads as follows:

"We the undersigned respectfully request the Councillors of the City of Armadale to include an allocation of funds for public toilet facilities at Borrello Park from the Roleystone Public Open Space Trust Fund in addition to the skate park facility upgrade at Cross Park."

Committee expressed its appreciation to officers, in particular the Special Projects Officer and the Executive Manager Planning Services on their thorough and outstanding work in the preparation of the report.

Discussion included the following issues -

- ◆ *Briefing to Committee on the history of events associated with the POS funding, reserve improvement works and skate park upgrade at Cross Park, Roleystone.*
- ◆ *Reference to the officer's report relating to a number of issues that would need to be addressed and that may impact on the location and appropriateness of a toilet facility on Borrello Reserve given the uncertainties associated with the site's capacity to support this infrastructure.*

- ◆ *Additional proposal that the funding directly related to the skate park proceed and that all other proposals for funding be referred back for further consideration in the context of funding a toilet facility on Borrello Reserve.*
- ◆ *Reference to the petition and that there is community demand for a toilet facility to be provided at Borrello Reserve.*

After due consideration the Committee supported the officer's recommendation to endorse the priority list and schedule of works for Reserves in Precinct I of the POS Strategy.

D46/6/11 RECOMMEND

That Council approve the funding and early construction of the skate park at Cross Park and that the matter of allocation of the remainder of the funds in Precinct I of the POS Strategy be recommitted to the Development Services Committee.

Footnote - Approval includes application for Minister approval of cash-in-lieu funding.

MOVED Cr Hart
SECONDED Cr MacDonald
MOTION CARRIED (7/0)

Council resolved at its Ordinary Meeting on 27th June 2011 that Recommendation D46/6/1 be amended to read as follows:-

That Council approve the funding and early construction of the skate park at Cross Park and that the matter of allocation of the remainder of the funds in Precinct I of the POS Strategy be recommitted to the Development Services Committee.

Footnote - Approval includes application for Minister approval of cash-in-lieu funding.

Manager Parks and the Special Projects Officer left the meeting at 7.36pm and did not return.

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LOCATION PLAN
 LOT 115 (No. 69) BROOKS ROAD, ROLEYSTONE

***RETROSPECTIVE APPLICATION FOR A REFLECTIVE (SURFMIST COLORBOND)
ROOF - LOT 115 (69) BROOKS ROAD, ROLEYSTONE***

WARD : JARRAH
APPLN NO. : 10.2011.125.1
DATE : 7 June 2011
REF : AS/GW
RESPONSIBLE MANAGER : EMPS
APPLICANT : Plunkett Homes
LANDOWNER : Sara Manners and Roslyn Houston
SUBJECT LAND : Lot 115 (No.69) Brooks Road, Roleystone
Property size 2094m²
ZONING
MRS : Urban
TPS No.4 : Residential R5

In Brief:

- The application was considered by Council at its meeting on 23 May 2011 and recommitted for further consideration.
- The City received a retrospective application for a reflective (Surfmist) colorbond roof on 17/03/2011.
- The application was advertised for a period of two weeks. A total of 2 submissions were received, including 1 objection and 1 of conditional support.
- Recommend that Council conditionally approve the application.

Tabled Items

Nil.

Officer Interest Declaration

Nil.

Strategic Implications

2.3 Diverse and attractive development that is integrated with the distinctive character of the City.

2.3.1 Provide supportive planning and development guidance and liaison on major land developments.

2.4 Attractive and user-friendly streetscape and open spaces.

2.4.1 Implement townscape, streetscape and parkland improvements to enhance the distinctive character of the City.

Legislation Implications

Planning and Development Act 2005
Town Planning Scheme No.4



AERIAL PHOTOGRAPH
LOT 115 (No. 69) BROOKS ROAD, ROLEYSTONE

Council Policy / Local Law Implications

Local Planning Policy PLN 2.2 – Use of Reflective Materials on Residences

Budget / Financial Implications

Nil.

Consultation

Surrounding landowners

BACKGROUND

The subject site is zoned Residential R5 and consists of a single house that is currently under construction.

On the 26 October 2010, the applicant was issued with a Building Licence for a residence with a colorbond roof. A notation was included on the Building Licence envelope (which does not form part of the Building Licence approval) noting the proposed roof colour as Evening Haze.

On the 17 March 2011 the applicant submitted a retrospective application for a Surfemist (off white) colorbond roof. According to the applicant the reflective roof was installed in error, but they would like to be able to retain it. Originally the applicant was proposing to install a Surfemist colorbond roof, however due to TPS No.4 and PLN 2.2 requirements, Council officers requested a change in colour.

Although the City has discretion to approve the use of zincalume, metallic or white coloured finishes under Clause 5.9 of Town Planning Scheme No.4, the objection held by a nearby landowner, as well as the subjective nature and debate around the topic of reflective materials means careful consideration is required.

At its meeting on 23 May 2011, Council resolved (D40/5/11) to recommit this item to the next meeting of Development Services Committee.

DETAILS OF PROPOSAL

The proposal involves retrospective approval of a Surfemist (off white) colorbond roof, which has been installed on the residence at Lot 115 Brooks Road without prior Planning approval.

COMMENT

Public Advertising

The application was advertised for two weeks, closing on the 20th of April 2011. Advertising was carried out by way of letters to nearby landowners.

The application was advertised to 16 surrounding landowners with two submissions received. One landowner provided conditional support subject to vegetation being planted as a screening measure along their shared property boundary. The other submission strongly objected to the application with a number of issues raised.

Total No. of letters sent to residents/owners	:	16
Total No. of submissions received	:	2
No. of submissions of conditional support/no objection	:	1
No. of submissions of objection	:	1

The objector subsequently made two separate submissions, one dated 3 May 2011 after the advertising period and another dated 25 May 2011 following the matter being recommitted by Council. In addition, on 15 June 2011 the objector also submitted a list of questions and additional information sourced from a roofing manufacturer for further attention.

Refer to Confidential Attachment “B2” of the Agenda for location plan of submitters and objector’s submission dated 3 May 2011 and 25 May 2011.

Refer to Attachment “A1” of the Minutes for the objector’s list of questions and additional information.

The main issues raised during the submission period, together with a comment on each issue are outlined below.

Key Issues

Issue 1 - The impact of reflective glare from the roof onto Lot 108 (No.14) Tenhave Place is significant due to the northern orientation of the house and elevation of the house above the subject site.

Comment

The submitter noted that their property is subjected to strong glare from the reflective roof causing them to squint in some instances. Their concern is that in summer it is likely to be even worse. They believe that this will prevent them from fully utilising the passive solar design principles incorporated into their house design, especially the living areas being northern facing and causing a significant loss of amenity.

The submitter’s concern was noted from site inspections where minimal glare was evident from various vantage points. However, adjacent colorbond roofs that were darker in colour appear equally as reflective as the roof under consideration during the site inspection. Based on previous observation of other roofs, it should be noted that over time the roof is likely to dull in appearance.



DETAILED AERIAL PHOTOGRAPH
LOT 115 (No. 69) BROOKS ROAD, ROLEYSTONE

Reflectivity and its potential impact on amenity is not easily measured. The Building Code of Australia (BCA) classifies roof colour on the basis of their solar absorptance referred to as very light, light and dark as shown in the table below.

Table 1 - Colour Classification in Accordance with the BCA

Colour	Solar Absorptance Classification	
Classic Cream™	0.31	VL
Surfmist®	0.318	VL
Paperbark®	0.421	L
Evening Haze®	0.427	L
Shale Grey™	0.433	L
Sandbank®	0.455	L
Dune®	0.466	L
Windspray®	0.584	D
Pale Eucalypt®	0.597	D
Bushland®	0.619	D
Headland®	0.632	D
Wilderness®	0.651	D
Jasper®	0.682	D
Manor Red®	0.688	D
Woodland Grey®	0.706	D
Loft®	0.711	D
Monument®	0.732	D
Ironstone®	0.743	D
Cottage Green®	0.746	D
Deep Ocean®	0.749	D

Key: VL-Very Light: L-Light: D-Dark

Whilst the table above clearly demonstrates that lighter colours appear to be more reflective, it also proves that all colours reflect to a similar degree. It should be noted that according to the values in the above table Surfmist is slightly less reflective than Classic Cream, however TPS No.4 and PLN 2.2 do not prohibit the use of classic cream.



PHOTOGRAPH OF SUBJECT SITE AND NEIGHBOURING PROPERTY FROM THE
NORTHERN SIDE OF LOT 108 (No.14) TENHAVE PLACE



PHOTOGRAPH OF SUBJECT SITE SHOWING THE SOUTHERN AND WESTERN SIDE
OF THE PROPERTY

It could be argued that Surfmist, being whitish in colour, is brighter or more visible in appearance than other colours, however it is difficult to conclude that the colour alone will adversely impact on the surrounding amenity.

Whilst it is noted that the submitter's house is elevated slightly above the subject roof due the sloping topography and earthworks, it could be argued that the orientation and location of the subject roof being approximately 32m to the north-west is sufficient to mitigate the impacts of potential glare. The design of the subject roof and direction of the roof slopes also do not directly face the submitter's house, which would further mitigate the potential for glare.

Planting of appropriate species of trees or shrubs to achieve partial screening or to break up the subject roof could be required as a condition of approval to assist with mitigating any perceived impacts of glare. However, any planting must take into account the approved Fire Management Plan for the lot.

It should be noted that according to the City's aerial records, significant clearing has occurred on surrounding lots, including the submitter's lot, therefore there is ample opportunity for the submitter to also undertake appropriate screen planting if they desire.

Recommendation

That the issue is supported in part.

Issue 2 - It may be a potential traffic hazard for vehicles travelling along Chevin Road.

Comment

No other objection was made in regard to the impact on traffic safety. As the roof is elevated above the road the impact is not considered to be significant. The City's Technical Services also confirmed this. However, vegetation could be used as a screening measure along the boundary of Chevin Road for aesthetic reasons.

Recommendation

That the issue is not supported.

Issue 3. Approving the application will set an undesirable precedent.

Comment

Due to the presence of colorbond and zincalume roofs in the Residential zoned areas of Roleystone, it could be argued that a precedent has already been established in this locality. Whilst it is acknowledged that some of these houses were approved prior to Clause 5.9 of the Town Planning Scheme No.4 being introduced in 2005, a number have been approved or built since then. It should be noted however that each application should be assessed on its individual planning merit.



PHOTOGRAPH OF SUBJECT SITE AND NEIGHBOURING PROPERTY FROM THE
NORTHERN SIDE OF LOT 108 (No.14) TENHAVE PLACE



PHOTOGRAPH OF SUBJECT SITE SHOWING THE SOUTHERN AND WESTERN SIDE
OF THE PROPERTY

Single Houses in Residential zoned areas do not require Planning approval under TPS No.4 and are only subject to issue of a Building Licence and BCA requirements. Whilst every endeavour is made by the City to identify what colour scheme is being proposed upfront as part of the Building Licence application and to advise applicants that zincalume, metallic and white coloured finished are not permitted without prior Planning approval, this process places onus on the applicant or landowner to install an appropriate colour. If such roof colours are installed without approval and are brought to the City's attention within a reasonable time frame, then the City can request a development application or pursue the matter as a breach of its TPS.

Recommendation

That the issue is supported in part.

ANALYSIS

Town Planning Scheme No.4

Clause 5.9 of TPS No.4 specifically deals with reflective materials. The clause states the following:

“5.9 Use of reflective materials

5.9.1 No building structure, shall be constructed east of the Albany Highway from the City's northern boundary to its junction with the South Western Highway and thereafter east of the South Western Highway, with any external sheeted surface of zincalume, metallic or white coloured finish, without the City's approval.

5.9.2 The City may approve the development of buildings involving a roof or walls with any external sheeted surface of zincalume, metallic or white coloured finish, with or without conditions, or may refuse to approve the application, having due regard to:

- (a) the potential impact on the amenity of the locality; and*
- (b) the objectives and relevant performance criteria in the Residential Design Codes.”*

Clause 5.9.1 specifically prohibits the use of “*zincalume, metallic or white coloured finish*”, however it does not expand on or identify specific colours. It is difficult to argue and subsequently refuse colours which don't fit neatly into these definitions.

The term “amenity” as referenced in Clause 5.9.2 (a) above is defined under TPS No.4 as meaning “*all those factors which combine to form the character of an area and includes the present and likely future amenity*”

Whilst the potential impact on one resident is one factor, it is important to note that Council is required to consider the proposal in a wider context in terms of its potential impact on the character of the area and surrounding locality.

It is difficult to argue that the proposal is not in keeping with the character of the area as light coloured roofs are relatively common throughout the Roleystone townsite and other Residential zoned land in the City.

Local Planning Policy (PLN2.2) – Use of Reflective Materials on Residences

It should be noted that PLN 2.2 is a guide for the City to consider the discretionary matters under Clause 5.9 of TPS No.4 and is not binding on Council. In this regard, Council ultimately has the discretion to approve reflective materials, with or without conditions as stated under Clause 5.9.2 of the Town Planning Scheme No.4.

The City's Local Planning Policy (PLN2.2) states that when an application is received showing that a residence is to be roofed using reflective material, the application is to be evaluated to determine whether there is a possibility that the glare from this structure will have a substantial effect on any property in a close proximity or on rural amenity in the case of Rural zoned land (PLN2.2 – Clause 4.1). Should it be determined that glare may be a problem to one or more property, those affected property owners are to be consulted by the City. If any objections are raised or if the use of material is considered to be inappropriate, then the applicant should be requested to change the roof material to a non reflective material (PLN2.2 – Clause 4.5). Clause 4.6 states that *"In cases where the applicant refuses to modify the material, the application may be refused"*.

The owner/applicant does not wish to change the roofing material from Surfsmist. One neighbour has argued that allowing the roof would mean glare would be an issue. The submitter argues the northern facing rooms of their house have incorporated passive solar design principles and will be impacted on by the approval of the roof.

A number of issues have been raised recently in regard to reflective roofs, with a number of reasons in favour of why they should be allowed. For instance, roof manufactures have stated that high reflectivity can be found to occur regardless of colour. Bluescope Steel Corp indicate that most colours have a similar gloss level and would give a similar mirrored reflection - so changing from lighter to darker colours may not considerably reduce the perceived glare as all materials are reflective to some extent. This was the case found when visiting the site where adjacent darker metal roofs were considered equally as reflective as the Surfsmist roof.

The control of reflective roofs could be seen as being in conflict with the achievement of sustainability objectives by restricting the use of those colours that were more conducive to keeping residences cool in summer. A move towards authorities placing greater emphasis on sustainability measures over considerations of amenity is indicated in the Residential Design Codes (R Codes). The R Codes do not specify acceptable building materials for instance. However, a 2008 amendment to the Codes provided that solar collectors were permitted by right (whereas previously they were required to be not visible from the primary street or to be visually obtrusive). New colours have also been developed by manufacturers that are more reflective than those mentioned under the TPS, yet technically these colours would not be restricted. In addition, there are also no controls on the use or placement of glazing/windows etc.

The following table was presented at the Development Services meeting on 16 May 2011 to demonstrate the thermal performance of different coloured roofs.

Table 5.1.1
Approximate thermal transmission (for comparisons only)

	Roofing only		Roofing with reflective foil laminate		Roofing with 50 mm insulation blanket & reflective foil laminate		Assumptions • solar radiation = 850 W/m ² (*average* Australian summer) • ambient temperature = 30° C • wind velocity over roof = 3 m/s • still air under the roof system • inside temperature = 30° C
	Heat radiated from underside	Heat radiated + convected	Heat radiated from underside	Heat radiated + convected	Heat radiated from underside	Heat radiated + convected	
	W/m ²	W/m ²	W/m ²	W/m ²	W/m ²	W/m ²	
ZINCALUME®	25	40	2.0	9.0	2.0	7.0	
COLORBOND®							
Classic Cream	35.5	41.9	1.4	5.8	1.0	4.2	
Surfmist	37.1	43.8	1.5	6.1	1.1	4.3	
Sandbank	58.1	68.4	2.3	9.4	1.6	6.7	
Wilderness	91.2	106.9	3.6	14.4	2.5	10.3	
Woodland Grey	101.4	118.7	4.0	15.9	2.8	11.3	
Deep Ocean	108.2	126.6	4.3	16.9	3.0	12.0	

Comparison of thermal performance
Table 5.1.1 shows thermal performances of different insulation systems by showing the heat that may be expected through roofs of new materials.

Source: *Bluescope’s Roofing and Walling Installation Manual (2010/2011)*

In summary, the above table illustrates that the energy efficiency benefits of lighter coloured roofs compared to darker colours in terms of heat absorption appears to be diminished with the use of foil laminate and an insulation blanket.

Foil (commonly referred to as “sarking”) is a mandatory requirement under the Building Code of Australia 2009 (BCA) for the primary purpose of preventing condensation and moisture build up on the underside of metal roofs. Reflective foil sarking has the added benefit of providing greater heat insulation, however reflective sarking is not always utilised and also comes in non-reflective materials and colours (including blue and black).

Insulation methods stipulated by the manufacture are recommendations only to reduce heat absorption and such methods are not mandatory through the BCA. In this regard, the energy efficiency benefits of lighter coloured roofs should not be overlooked.

OPTIONS

1. Council could approve the retrospective application for the colorbond Surfmist roof.
2. Council could refuse the retrospective application for the colorbond Surfmist roof if it is of the opinions that glare will adversely impact on the amenity of the locality.

CONCLUSION

This report has identified the difficulties of measuring the impact of reflective surfaces, as well as the debate that surrounds whether or not reflective surfaces should be allowed. In regard to this particular application and its planning merits, it is considered that the Surfmist colorbond roof is unlikely to pose a significant impact on the amenity of surrounding locality in terms of reflectivity and glare. The orientation, location, possible landscaping and proximity of the subject roof to adjoining properties are considered to be sufficient to mitigate any potential significant impacts of glare. In this regard, it is recommended that Council adopt Option 1 above.

Manager Statutory Planning tabled additional information regarding the colorbond Surfmist roof for Committee's reference.

The majority view of the meeting was that Council support the recommendation. Committee discussed a number of issues regarding reflective roofs and was of the opinion that high reflectivity can be found to occur regardless of colour. The majority of colorbond roof colours have a similar gloss level and would give a similar mirrored reflection and changing from lighter to darker colours may not considerably reduce the perceived glare.

D47/6/11 RECOMMEND

That Council:

1. **Approve the application for Planning Approval for a Surfmist colorbond roof on Lot 115 (No.69) Brooks Road, Roleystone subject to the following conditions:**
 - a) **Submission of a Landscape Plan to achieve softening of the roof from all boundaries of the property to the satisfaction of the Executive Director Development Services. The development shall be completed and maintained in accordance with the approved Landscape Plan and the Fire Management Plan to the satisfaction of the Executive Director Development Services.**
2. **That the submitters be advised of the Council decision in this regard.**

MOVED Cr Tizard
SECONDED Cr Hart
OPPOSED Cr Shaw
MOTION CARRIED (5/2)

Cr Wielinga and Cr Munn left the meeting at 7.46pm and did not return.

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LOCATION PLAN
LOT 200 (No. 17) POSSUM PLACE, KELMSCOTT

APPLICATION FOR APPROVAL TO CONDUCT A HOME BUSINESS FOR PERSONAL TRAINING AT LOT 200 (17) POSSUM PLACE, KELMSCOTT

WARD : RIVER

APPLN No. : P17361; 10.2011.182.1

DATE : 13 June 2011

REF : MB

RESPONSIBLE MANAGER : EMPS

APPLICANT : J C Hanley

LAND OWNER : J C Hanley & H E Davidson

SUBJECT LAND : Lot 200, 17 Possum Place,
Kelmscott.
Property size 2896m²

ZONING :
MRS Urban
TPS No.4 Residential R10/25

In Brief:-

- Application for Home Business to conduct Personal Training from a residential property.
- Proposal advertised to neighbouring properties for comment. Four objections received.
- Petition also submitted by Applicant of 24 signatures of surrounding neighbours and residents.
- Recommend that the application be approved, subject to appropriate conditions.

Tabled Items

Nil

Officer Interest Declaration

Nil

Strategic Implications

2.1 Long term planning and development that is guided by a balance between economic, social and environmental objectives.

2.1.1 Review, update and implement the City's Town Planning Scheme, taking into account the Local Biodiversity Strategy and other environmental considerations.

Legislation Implications

Planning & Development Act 2005
Health (Public Buildings) Regulations 1992
Town Planning Scheme No.4
Environmental Protection (Noise) Regulations 1997
Health Act 1911
Local Government Act 1995



AERIAL PHOTOGRAPH
LOT 200 (No. 17) POSSUM PLACE, KELMSCOTT

Council Policy / Local Law Implications

Planning Policy (PLN) 3.3 – Home Occupations

Budget / Financial Implications

Nil

Consultation

- ◆ Surrounding neighbours
- ◆ Development Services Directorate (Health Services)
- ◆ Technical Services Directorate

BACKGROUND

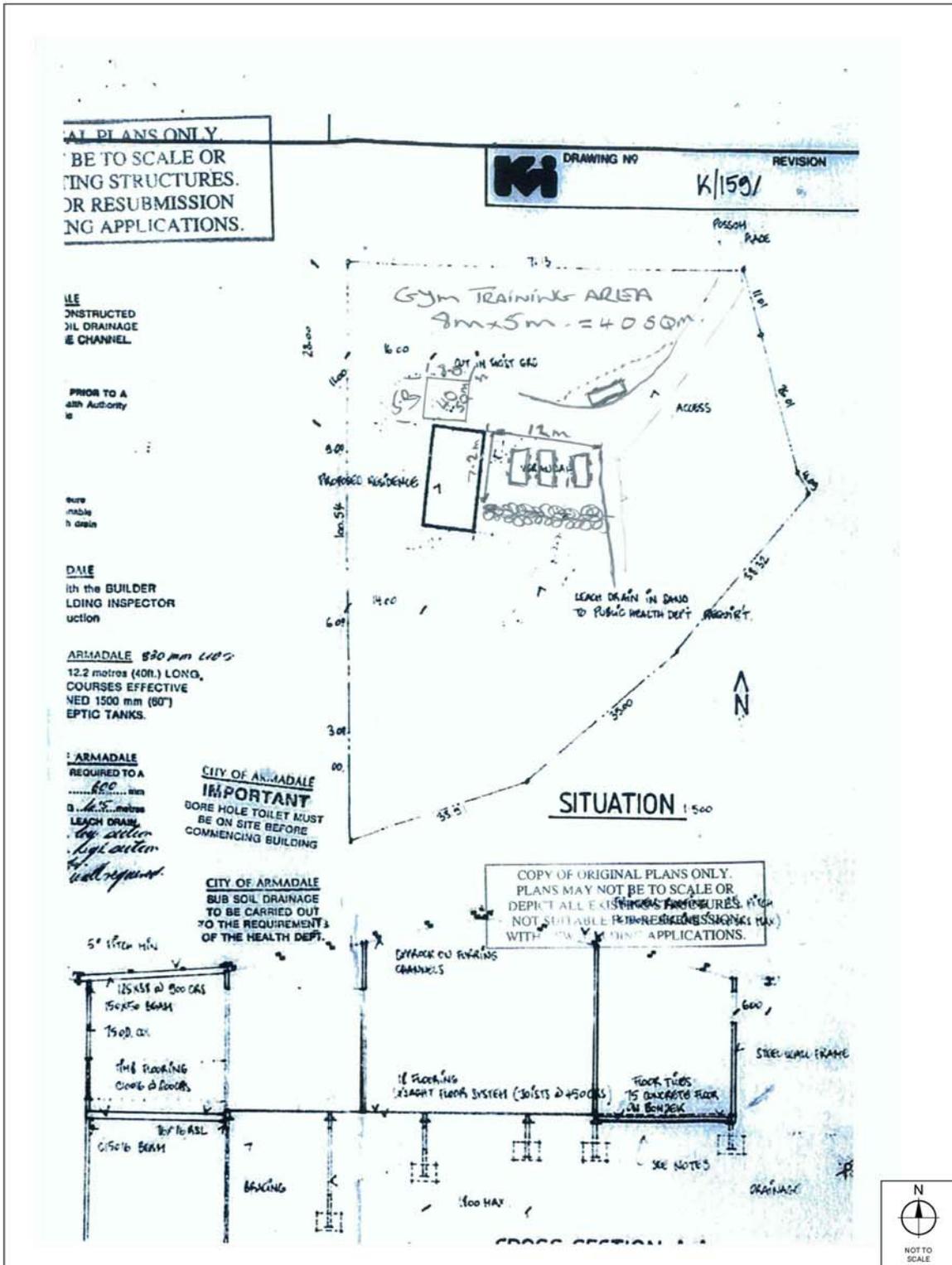
On 2 August 2010 the City received an application for Home Business for Fitness/Personal Training at the subject land and at that time the applicant proposed to operate 6:00pm to 7:00pm on Mondays and Wednesdays and 9:30am to 10:30am on Sundays with approximately 8 to 10 clients attending the property at the one time.

In accordance with Council Policy, the proposal was advertised for a period of two weeks to surrounding neighbours and City Officers inspected the premises. Following the inspection and advice of Health Services, the applicant was advised any such gathering of people for a common purpose constituted a "public building" as defined by the Health Act 1911. The applicant was also advised the premises should comply with the requirements of the Health (Public Buildings) Regulations 1992 (i.e. toilet/shower facilities, fire exists, disabled access, and sufficient effluent disposal system).

Following the completion of the submission period, a total of 5 objections were received from the 14 neighbouring residents/owners who were sent letters by the City.

In light of the objections received and issues raised by the City's Health Services, the applicant chose to withdraw the application on 23 August 2010 and was advised that this particular use at the property was unlawful and to seek an alternate location to conduct their proposed business. Neighbouring residents/owners were also advised by letter that the application for Home Business for Fitness/Personal Training was withdrawn.

On 9 March 2011, a complaint was received that the owners of the subject land were operating a fitness training business from the property without an approval. A City Officer inspected the premises and noted 3 cars parked in the "embayment" and 8 vehicles in the driveway along with a number of people (including children) dressed for exercise and completing training activities in the carport and paved area out the front of the property.



SITE PLAN
 LOT 200 (No. 17) POSSUM PLACE, KELMSCOTT

The owners chose to continue the operation of the business in breach of the City's Town Planning Scheme No.4 and failed to cease the unlawful activity when verbally requested by the City's Officer at the time of the inspection. Negotiations continued with the applicant to source other venues to conduct their business and the applicant commenced a regular booking from 11 April 2011 at John Dunn Hall and Harold King Community Centre. It should be noted however the applicant cancelled their bookings at both facilities on 21 April 2011.

Subsequently an application was received on 28 April 2011 for a revised home business for personal training.

DETAILS OF PROPOSAL

The applicant, being the only household member involved, proposes to conduct personal training located in the garage of the premises. The applicant originally advised that there will not be more than two clients on the property per hour. The proposed operating hours are from 9:00am to 7:00pm Monday to Friday.

Along with their application, the applicant submitted a petition signed from surrounding neighbours in support of their application. A total of 24 signatures formed part of the petition. It should be noted the petition advised the signatories that two personal training clients would be in attendance approximately 2-3 times per week. The application actually proposes 9:00am to 7:00pm Monday to Friday with no more than 2 clients on the property per hour.

The applicant has since clarified the conflicting advice between the application and petition. The applicant has advised that as they are unable to foresee when clients would like to train and can not specify a day and time. The applicant confirmed they will only train clients 2-3 times a week with 2 clients per visit as per their petition advice to signatories.

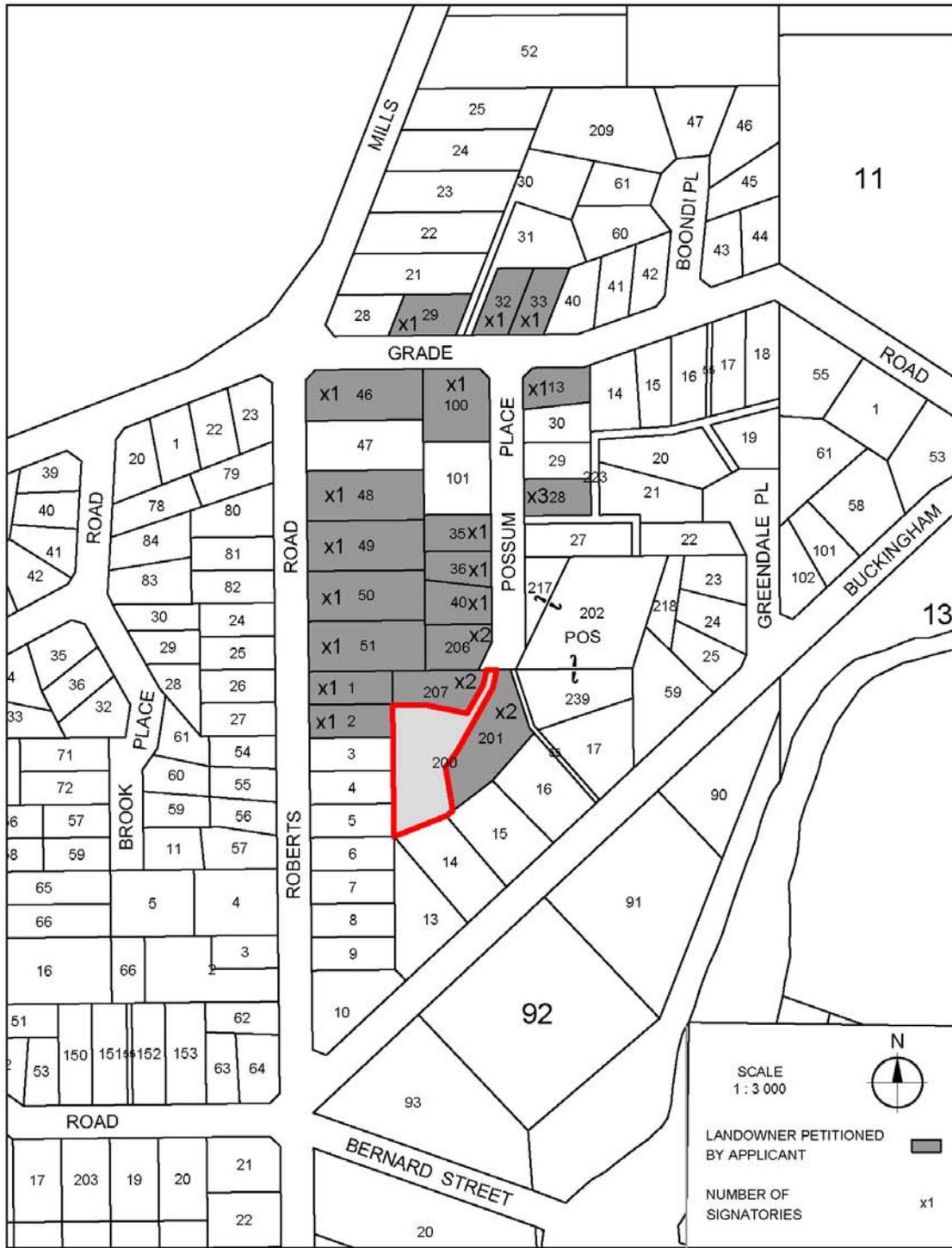
COMMENT

Council's Technical Services Directorate have advised that given the end of Possum Place, Kelmscott has three battleaxe driveways, no street parking should be allowed to block any access/driveways at any time as this constitutes an offence under the Road Traffic Act 2000.

The "embayment" in Possum Place is the only official turn-around area for the street and is used continuously throughout the day by traffic and the City's waste removal trucks twice a week. It should be noted the turn-around area is completely "no standing" anytime and will be sign posted as such in due course by the Technical Services Directorate.

This would mean that all parking for the home business needs to be provided on the subject property at all times and the applicant has shown there is room to accommodate two vehicles (side by side) on the driveway.

Council's Development Services Directorate (Health Services) does not have any concern with the revised application if only two clients are in attendance at one time. However, Health Services raised concerns with regards to noise, such as music and yelling of exercise instructions. It should be noted the allowable noise levels, before 7.00am Monday to Saturday and before 9.00am on a Sunday, and after 7.00pm on any day are generally low and the applicant would need to be aware of the noise constraints.



PLAN OF LAND OWNERS PETITIONED BY APPLICANT
 LOT 200 (No. 17) POSSUM PLACE, KELMSCOTT

Results of Advertising

The application was advertised for two weeks, closing on 19 May 2011. Advertising was carried out by way of letters to affected and nearby landowners.

Total No. of letters sent to residents/owners	:	18
Total No. of submissions received	:	4
No. of submissions of conditional support	:	1 (A petition with 24 signatures)
No. of submissions of objection	:	4

(Refer to Confidential Attachment “B3” of the Agenda for allocation plan of submitters).

The main issues raised in the submissions, together with a comment on each issue are outlined below.

Key Issues:

Issue 1. We object to the current/proposed times and would prefer Monday to Friday 9:00am to 5:00pm

Comment

Under the provisions of Town Planning Scheme No.4, Council has the discretion to approve a Home Business that, amongst other requirements, will not cause injury to or adversely affect the amenity of the neighbourhood.

The applicant proposes to operate Monday to Friday between the hours of 9:00am to 7:00pm, a condition could be imposed to restrict operating hours between 9:00am to 5:00pm only.

Recommendation

That the issue be supported.

Issue 2. Given past experience, we have doubts that the number of clients would remain at this number or indeed if these times would be observed.

Comment

The applicant proposes to have a maximum of two clients attending the property on each operating day per hour which would essentially allow approximately 20 clients visiting on each operating day.

As the applicant has clarified they will only train no more than two clients at one time, it would not be unreasonable to place a condition on the approval to reflect this. Whilst the applicant's previous history of non-compliance is of concern along with the cancellation of hall facilities, it should be noted each application is assessed on its individual merits.

Recommendation

That the issue be noted.

Issue 3. My neighbours contacted us (via petition) with a request for 2 evening sessions of 2 hours each per week with 2 customers.

Comment

The applicant proposes to conduct personal training on the property with no more than two clients on the property per hour. The proposed operating hours are from 9:00am to 7:00pm Monday to Friday. This contravenes a petition which was conducted by the applicant that stated the applicant intended having two personal training clients at the subject property approximately 2-3 times per week.

The applicant has since clarified the conflicting advice between the application and petition. The applicant has advised that as they are unable to foresee when clients would like to train and can not specify a day and time. The applicant confirmed they will only train clients 2-3 times a week with 2 clients per visit as per their petition advice to signatories.

Recommendation

That the issue be noted.

Issue 4. The noise factor, shouting of instructions and fists hitting punch bags is considerable, particularly over 10 hours, 5 day periods.

Comment

The City's Health Department has advised that all noise emissions from the premises must comply with the requirements of the Environmental Protection (Noise) Regulations 1997. As such the allowable noise levels, before 7.00am Monday to Saturday and before 9.00am on a Sunday, and after 7.00pm on any day are limited and the applicant should be made aware of the noise constraints. A condition could be imposed for the applicant to adhere to Environmental Protection (Noise) Regulations 1997 at all times.

It should be noted that Home Occupation/Business approvals are subject to renewal each year. An advice note could be imposed if, in the opinion of Council, a nuisance or annoyance to the owners or occupiers of land in the neighbourhood is caused, Council may revoke or refuse to renew an approval.

Recommendation

That the issue be supported.

Issue 5. This is a quiet cul-de-sac and several parked cars and speeding is not acceptable.

Comment

This issue has been clarified under the “comments” section of this report.

The applicant has demonstrated that there is sufficient parking to allow 4 vehicles to be parked on the subject property at one time. This would allow vehicles to be parked on the driveway and provide sufficient parking for clients. The applicant can manage their appointments to ensure attendance at the property will not exceed normal residential vehicle movements or cause significant impact. There is room to accommodate two vehicles (side by side) on the driveway.

A condition could be imposed on the applicant requiring that all clients must park on the property and not in the street, in the turn-around area or on the road verge.

Recommendation

That the issue be supported.

ANALYSIS

Planning Policy (PLN) 3.3 – Home Occupations

The objective of the Home Occupations Policy is to provide the opportunity for residents to work from their homes in small/domestic scale family businesses within guidelines such that the amenity of the area would not be significantly compromised by the approval of the use.

The application was assessed in terms of Council’s Home Occupation/Business Policy PLN 3.3 and scored 18 on the compatibility scale.

OPTIONS

1. Council could refuse the application if it is of the view that the proposal will adversely affect the neighbourhood in terms of traffic and noise.
2. Council could approve the application, subject to the conditions contained in the Home Occupation provisions of Council’s Town Planning Scheme No.4 and further conditions outlined in this report.

CONCLUSION

Whilst it is noted that the objections raised relate to previous unauthorised activities and potential concerns, the reduced scale of the proposed business is considered appropriate and complies with the Home Business criteria as set down in the Scheme. It is therefore recommended that Council approve the application in accordance with Option 2 above.

D48/6/11

RECOMMEND

That Council:

- A. Approve the application for a Home Business to conduct a Personal Training business at Lot 200 (17) Possum Place, Kelmscott subject to the following conditions:**
- 1. The proposal does not entail the employment of any person not a member of the occupier's household to the satisfaction of the Executive Director Development Services.**
 - 2. The proposal will not cause injury to or adversely affect the amenity of the neighbourhood to the satisfaction of the Executive Director Development Services.**
 - 3. The proposal does not occupy an area greater than 50m².**
 - 4. The proposal does not display a sign exceeding 0.2m² in area and be placed within the property boundaries and not at all on the verge.**
 - 5. The proposal does not entail the retail sale, display or hire of goods of any nature.**
 - 6. In relation to vehicles and parking the proposal:**
 - i) will not result in the requirement of a greater number of parking facilities than normally required for a single dwelling;**
 - ii) will not result in an increase in traffic volumes in the neighbourhood;**
 - iii) will not involve the presence, use or calling of a vehicle more than 2 tonne tare weight; and**
 - iv) will not include the provision for the fuelling, repair or maintenance of motor vehicles.**
 - 7. The proposal does not involve the use of essential services of greater capacity than normally required in the zone.**
 - 8. The use is restricted in its hours of operation to between 9:00am to 5:00pm Monday to Friday and not at all on Saturdays, Sundays and Public Holidays.**
 - 9. The proposal shall operate no more than three (3) times a week during Monday to Friday only, with no more than two (2) clients permitted to attend the site on any operating day to the satisfaction of the Executive Director Development Services.**
 - 10. The proposal shall not result in more than two (2) clients and two (2) client motor vehicles being on the subject property at any given time.**

11. Client's motor vehicles shall only be parked on the subject property and/or crossover and shall not be parked on road, verge or turn-around area.
12. Compliance with the Environment Protection (Noise) Regulations 1997

B. Advice to Applicant:

1. Compliance with Environment Protection (Noise) Regulations 1997 or such other legislation that may be in force from time to time.
2. The applicant and landowner are advised that it is a statutory requirement to comply with all conditions of this approval, and that not complying with any condition is therefore illegal. Failure to comply with any condition of this approval or the approved plans constitutes an offence under the Planning Development Act 2005. The City can issue a Planning Infringement Notice of \$500 (without notice) and/or commence legal action with higher penalties up to \$200,000 for each offence and a daily penalty of \$25,000 per day for the continuation of that offence.
3. Please note that this approval must be renewed annually for it to remain valid. A reminder will be sent to you approximately one month prior to the expiry date. At this time, it will be necessary for you to apply to Council in writing (enclosing the appropriate fee) for consideration of renewal of the approval.
4. If, in the opinion of Council, a nuisance or annoyance to the owners or occupiers of land in the neighbourhood is caused, Council may revoke or refuse to renew its approval.
5. If the applicant is aggrieved by a Refusal to Approve his/her application, or, where Approved, is aggrieved by any Condition imposed in that Approval he/she may apply for a Review to the State Administrative Tribunal pursuant to the provisions of Part 14 of the Planning and Development Act 2005 against such refusal or imposition of such aggrieved Condition.
6. Such application for Review must be made not more than twenty eight (28) days after the date of Council's decision via the form available from the State Administrative Tribunal (copies available from the State Administrative Tribunal, at Level 4, 12 St Georges Terrace, Perth, or GPO Box U1991, Perth, WA, 6845, or www.sat.justice.wa.gov.au)

C. Advise the submitters of Council's decision.

MOVED Cr Zelones
MOTION CARRIED (7/0)



LOCATION PLAN
LOT 46 (No. 29) COHUNA DRIVE, ARMADALE

RETROSPECTIVE APPLICATION FOR APPROVAL TO CONDUCT A HOME BUSINESS FOR MUSIC/GUITAR TUITION AT LOT 46 (29) COHUNA DRIVE, ARMADALE

WARD : MINNAWARRA
APPLN No. : P6412; 10.2011.181.1
DATE : 7 June 2011
REF : MB
RESPONSIBLE MANAGER : EMPS
APPLICANT : Z Hunt
LAND OWNER : Z & K Hunt
SUBJECT LAND : Lot 46, 29 Cohuna Drive,
Armadale
Property size 729m²
ZONING
MRS : Urban
TPS No.4 : Residential R15/25

In Brief:-

- Retrospective application for Home Business to conduct Music/Guitar Tuition from a residential property.
- Proposal advertised to neighbouring properties for comment. Two objections received.
- Recommend that the application be approved, subject to appropriate conditions.

Tabled Items

Nil

Officer Interest Declaration

Nil

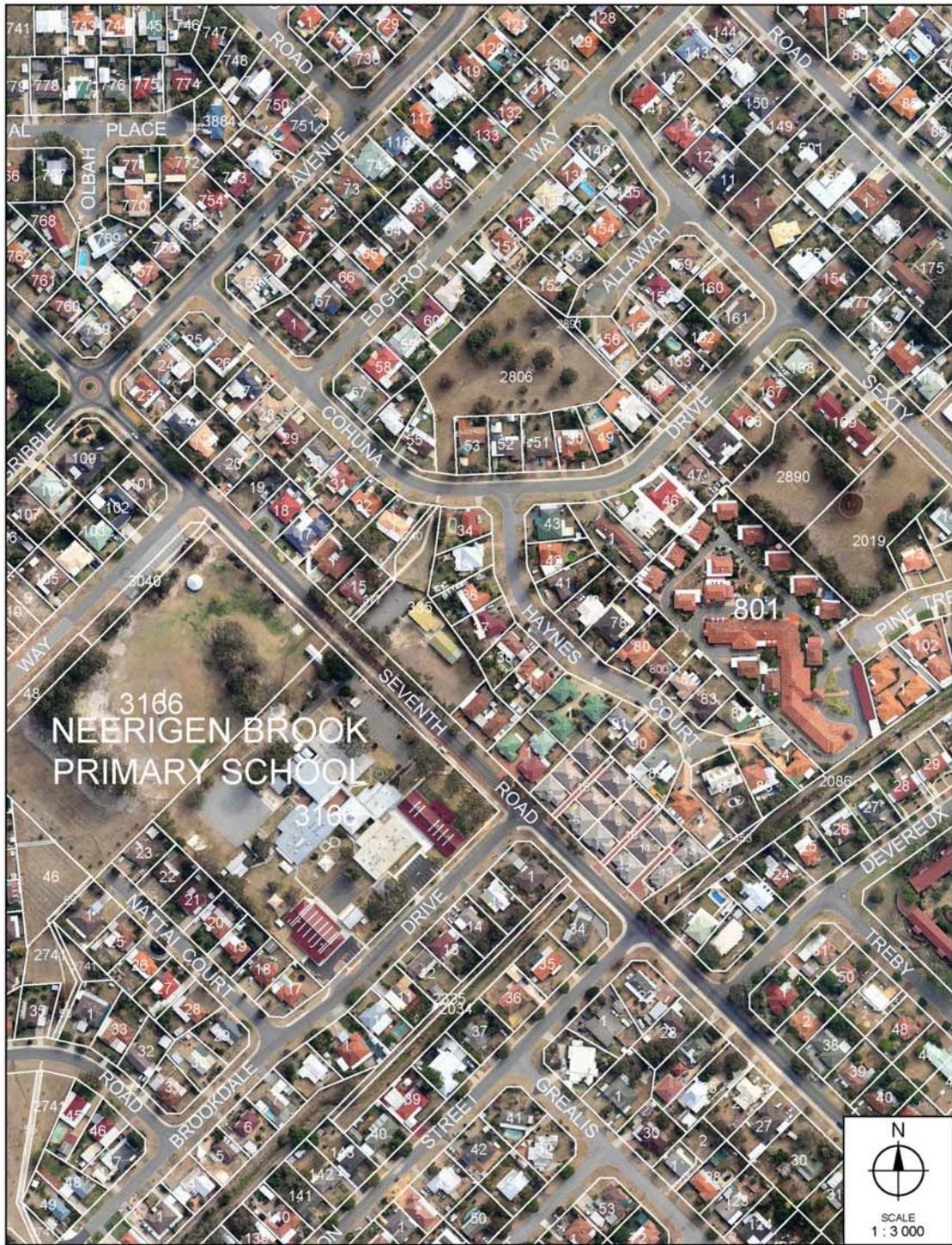
Strategic Implications

2.1 Long term planning and development that is guided by a balance between economic, social and environmental objectives.

2.1.1 Review, update and implement the City's Town Planning Scheme, taking into account the Local Biodiversity Strategy and other environmental considerations.

Legislation Implications

Planning & Development Act 2005
Town Planning Scheme No.4
Environmental Protection (Noise) Regulations 1997
Health Act 1911
Local Government Act 1995



AERIAL PHOTOGRAPH
LOT 46 (No. 29) COHUNA DRIVE, ARMADALE

Council Policy / Local Law Implications

Planning Policy (PLN) 3.3 – Home Occupations

Budget / Financial Implications

Nil

Consultation

- ◆ Surrounding neighbours
- ◆ Development Services Directorate (Health Services)
- ◆ Technical Services Directorate (Design, Traffic & Development)

DETAILS OF PROPOSAL

A retrospective application to conduct Music/Guitar tuition was received on 28 April 2011. The applicant, being the only household member involved, proposes to conduct music/guitar tuition within the lounge room of the premises. The applicant advises that there will not be more than one client on the property at any one time and expects approximately one to three clients per day. The proposed operating hours are from 11:00am to 5:30pm Monday to Friday.

COMMENT

The City's Technical Services Directorate has advised that provided clients are seen on a "one to one" basis i.e. one vehicle attending at a time, a second vehicle can be accommodated on the property, then the attendance of clients will not have a detrimental impact on other road users.

The City's Health Services does not have any concern with the application. However, Health Services have advised all noise emitted from the premises must comply with the requirements of the Environmental Protection (Noise) Regulations 1997. A condition could be imposed on the application requiring compliance with the Environmental Protection (Noise) Regulations 1997 along with an Advice Note on the application advising the following:-

1. The instrument is used for no more than one hour per day since the beginning of the relevant day.
2. The instrument is not to be used outside the hours of 7:00am and 7:00pm Monday to Saturday inclusive and not to be used outside the hours of 9:00am and 7:00pm on a Sunday or public holiday.
3. The noise resulting from musical instruments must not unreasonably interfere with the health, welfare, convenience, comfort or amenity of an occupier of premises receiving the noise.

Results of Advertising

The application was advertised for two weeks, closing on 19 May 2011. Advertising was carried out by way of letters to affected and nearby landowners.

Total No. of letters sent to residents/owners	:	4
Total No. of submissions received	:	2
No. of submissions of conditional support/no objection	:	0
No. of submissions of objection	:	2

(Refer to Confidential Attachment “B4” of the Agenda for location plan of submitters).

The main issues raised in the submissions, together with a comment on each issue are outlined below.

Key Issues:

Issue 1. Increase in traffic is a safety concern and clients park on my verge and lawn.

Comment

The applicant only proposes to have a maximum of three (3) clients attending the property on each operating day. The number of traffic movements is consistent with the residential scale and the City’s Technical Services Directorate raised no objections.

The length of the applicant’s driveway is approximately 7.5 metres and the Australian Standards recommend a minimum of 5.4 metres for car parking spaces however it should be noted that these standards apply to car parks and not necessarily to vehicles parked on driveways.

The applicant advises appointments can be managed to ensure attendance at the property will not exceed normal residential vehicle movements. There is room to accommodate two vehicles (side by side) on the driveway. A condition could be imposed on the application requiring that all clients must park on the property and not in the street or on the road verge, which is commonly imposed on Home Business approvals.

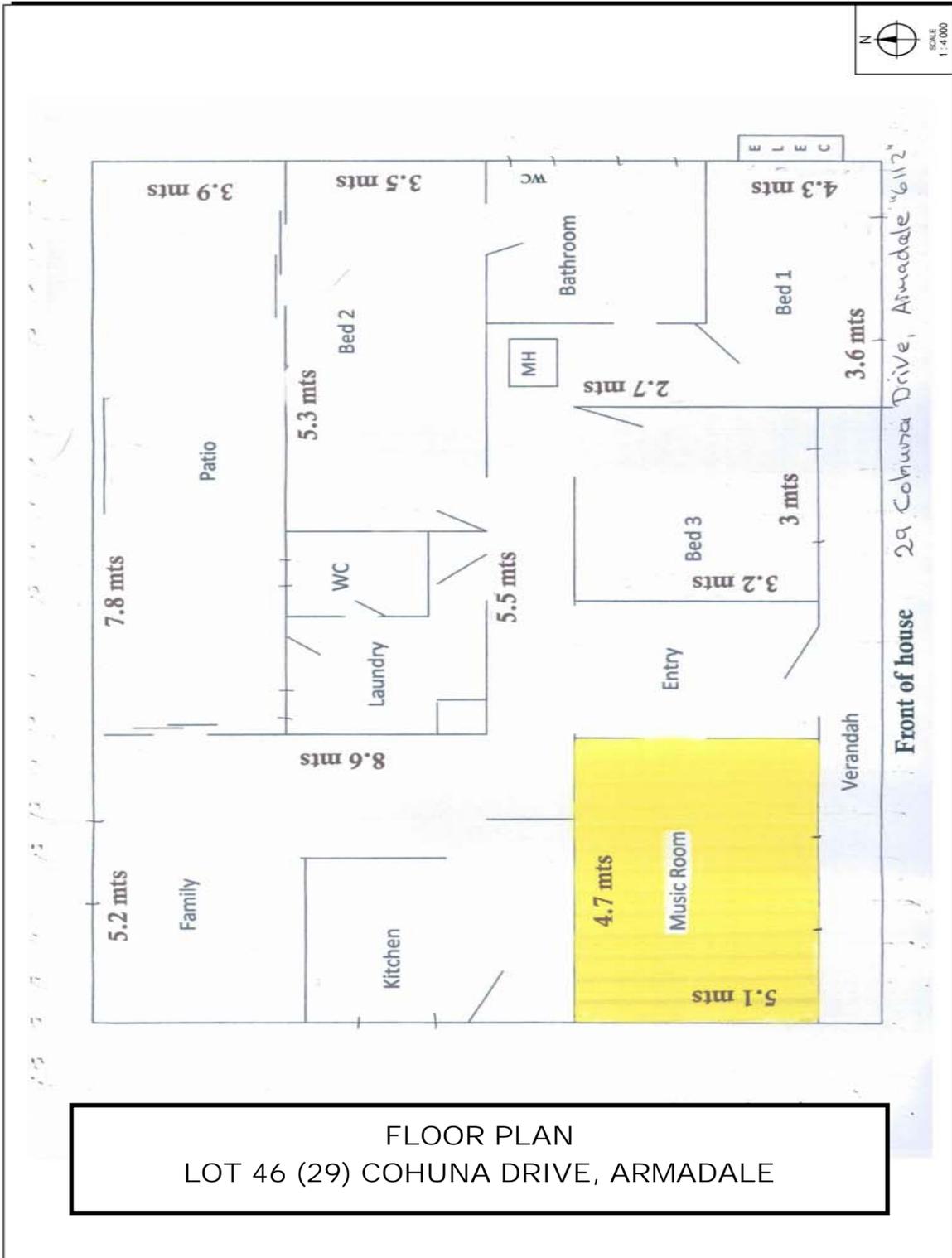
Recommendation

That the issue not be supported.

Issue 2. The business is already operating 7 days a week and there is an increase in noise.

Comment

The applicant submitted their application advising in their correspondence that the home business was already taking place and was aware by way of penalty, retrospective fees were applicable. In accordance with the City’s Schedule of Fees and Charges as the home business had already commenced, retrospective fees were charged.



FLOOR PLAN
LOT 46 (29) COHUNA DRIVE, ARMADALE

Under the provisions of the Town Planning Scheme No.4, Council has the discretion to approve a Home Business that, amongst other requirements, will not cause injury to or adversely affect the amenity of the neighbourhood.

The applicant proposes to operate between the hours of 11:00am to 5:30pm Monday to Friday only. A condition could be imposed on the application to reflect these days and times. It should be noted that the Environmental Protection (Noise) Regulations 1997 restricts the use of a musical instrument being used for no more than one hour per day amongst other restrictions as noted in this report.

A condition could be imposed on the application requiring compliance with the Environmental Protection (Noise) Regulations 1997 along with an Advice Note detailing restrictions.

It should be noted that Home Occupation/Business approvals are subject to renewal each year. A condition could be imposed if, in the opinion of Council, a nuisance or annoyance to the owners or occupiers of land in the neighbourhood is caused, Council may revoke or refuse to renew an approval.

Recommendation

That the issue not be supported.

ANALYSIS

Planning Policy (PLN) 3.3 – Home Occupations

The objective of the Home Occupations Policy is to provide the opportunity for residents to work from their homes in small/domestic scale family businesses within strict guidelines such that the amenity of the area would not be compromised by the approval of the use.

The application was assessed in terms of Council's Home Occupation/Business Policy PLN 3.3 and scored 17 on the compatibility scale, which would normally be approved.

OPTIONS

1. Council could refuse the application if it is of the view that the proposal will adversely affect the neighbourhood in terms of traffic and noise.
2. Council could approve the application, subject to the conditions contained in the Home Business provisions of Council's Town Planning Scheme No.4.

CONCLUSION

Given that the business complies with the criteria set down for Home Businesses in the Scheme and that the objections raised are either not substantiated or can be addressed via appropriate conditions, it is recommended that Council approve the application in accordance with Option 2 above.

D49/6/11

RECOMMEND

That Council:

- A. Approve the application for a Home Business to conduct a Music/Guitar Tuition business at Lot 46, 29 Cohuna Drive, Armadale subject to the following conditions:**
- 1. The proposal does not entail the employment of any person not a member of the occupier's household.**
 - 2. The proposal will not cause injury to or adversely affect the amenity of the neighbourhood.**
 - 3. The proposal does not occupy an area greater than 50m².**
 - 4. The proposal does not display a sign exceeding 0.2m² in area and be placed within the property boundaries and not at all on the verge.**
 - 5. The proposal does not entail the retail sale, display or hire of goods of any nature.**
 - 6. In relation to vehicles and parking the proposal:**
 - i) will not result in the requirement of a greater number of parking facilities than normally required for a single dwelling;**
 - ii) will not result in an increase in traffic volumes in the neighbourhood;**
 - iii) will not involve the presence, use or calling of a vehicle more than 2 tonne tare weight; and**
 - iii) will not include the provision for the fuelling, repair or maintenance of motor vehicles.**
 - 7. The proposal does not involve the use of essential services of greater capacity than normally required in the zone.**
 - 8. The use is restricted in its hours of operation to between 11:00am to 5:30pm Monday to Friday and not at all on Saturdays, Sundays and Public Holidays.**
 - 9. No more than three (3) clients shall be permitted to attend the premise on any operating day.**
 - 10. The proposal will not result in more than one client and / or more than one client's motor vehicle being on the subject property at any given time.**

11. **Client’s motor vehicles shall only be parked on the subject property and/or crossover and shall not be parked on the road or verge.**
12. **Compliance with the Environment Protection (Noise) Regulations 1997.**

B. Advice to Applicants:

1. **With regards to Condition 12 above, the Environmental Protection (Noise) Regulations 1997 exempt the playing of a single musical instrument from having to comply with the requirements of the regulations subject to the following:**
 - i) **The instrument is used for no more than one hour per day since the beginning of the relevant day.**
 - ii) **The noise resulting from musical instruments must not unreasonably interfere with the health, welfare, convenience, comfort or amenity of an occupier of premises receiving the noise.**
 - iii) **At all other times the noise levels must comply with the requirements of the Environmental Protection (Noise) Regulations 1997.**
2. **The applicant and landowner are advised that it is a statutory requirement to comply with all conditions of this approval, and that not complying with any condition is therefore illegal. Failure to comply with any condition of this approval or the approved plans constitutes an offence under the Planning Development Act 2005. The City can issue a Planning Infringement Notice of \$500 (without notice) and/or commence legal action with higher penalties up to \$200,000 for each offence and a daily penalty of \$25,000 per day for the continuation of that offence.**
3. **Please note that this approval must be renewed annually for it to remain valid. A reminder will be sent to you approximately one month prior to the expiry date. At this time, it will be necessary for you to apply to Council in writing (enclosing the appropriate fee) for consideration of renewal of the approval.**
4. **If, in the opinion of the City, a nuisance or annoyance to the owners or occupiers of land in the neighbourhood is caused, the City may revoke or refuse to renew its approval.**

- 5. If the applicant is aggrieved by a Refusal to Approve his/her application, or, where Approved, is aggrieved by any Condition imposed in that Approval he/she may apply for a Review to the State Administrative Tribunal pursuant to the provisions of Part 14 of the Planning and Development Act 2005 against such refusal or imposition of such aggrieved Condition.**
 - 6. Such application for Review must be made not more than twenty eight (28) days after the date of Council's decision via the form available from the State Administrative Tribunal (copies available from the State Administrative Tribunal, at Level 4, 12 St Georges Terrace, Perth, or GPO Box U1991, Perth, WA, 6845, or www.sat.justice.wa.gov.au)**
- C. Advise the submitters of Council's decision.**

MOVED Cr Norman
MOTION CARRIED (7/0)

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LOCATION PLAN
LOT 7001 WARTON ROAD, PIARA WATERS

DEDICATION OF LOT 7001 WARTON ROAD, PIARA WATERS AS ROAD RESERVE

WARD : LAKE

FILE REF : P34617; RDW/18

DATE : 3 June 2011

REF : MF

RESPONSIBLE : EMPS
MANAGER

APPLICANT : COA

LAND OWNER : Warrigal Developments Pty
Ltd

SUBJECT LAND : Lot 7001, Warton Road, Piara
Waters

ZONING
MRS/TPS No.4 : Rural-Water Protection/
: General Rural

In Brief:-

- The landowners granted the City a right of access over Lot 7001 on Deposited Plan 63674 and an additional 3 metres over adjoining Lot 9006 on Deposited Plan 69864 for the purposes of constructing a road reserve.
- The additional 3 metres of road widening from Lot 9006 on DP 69864 is required due to a change in the road design necessitated by an amendment to Western Power's safety provisions.
- The City is in the process of purchasing Lot 7001 on Deposited Plan 63674 from the landowners for the purposes of constructing a road reserve. The 3 metres of additional road widening on Deposited Plan 69864 has been ceded to the Crown for road widening purposes.
- Deposited Plan 69864 showing Lot 9006 is in order for dealing but Landgate has made it subject to the dedication of Lot 7001 as road reserve.
- Recommend that Council agree to facilitate the dedication by resolving to request the Minister for Lands to dedicate Lot 7001 Warton Road, Piara Waters as road reserve.

Tabled Items

Nil.

Officer Interest Declaration

Nil.

Strategic Implications

2.5.1 - "Provide a safe and efficient movement network including local and arterial roads and associated infrastructure."

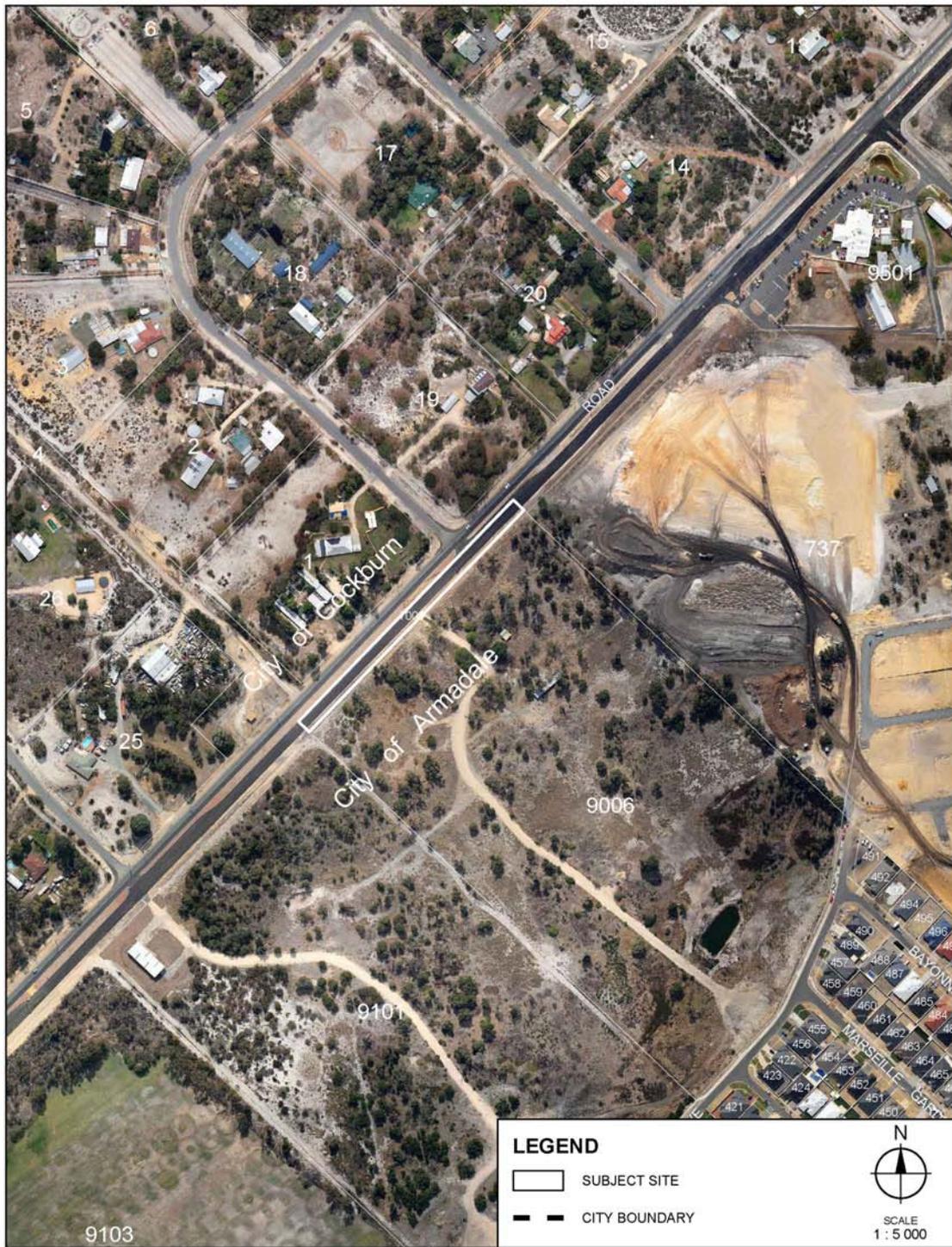
Legislation Implications

Land Administration Act 1997.

Town Planning Scheme No.4 – Development Contribution Plan No.3

Council Policy / Local Law Implications

Nil.



AERIAL PHOTOGRAPH
LOT 7001 WARTON ROAD, PIARA WATERS

Budget / Financial Implications

The land acquisition for the Warton Road dual carriageway upgrade is funded through the North Forrestdale Development Contribution Plan No.3 as per Clause 3.6.3(2) of Schedule 13B in the City's Town Planning Scheme No.4.

Consultation

- ◆ Landgate
- ◆ Technical Services Directorate

BACKGROUND

Following several years of negotiation, the landowners granted the City a right of access over Lot 7001 on Deposited Plan 63674 situated at Warton Road, Piara Waters, including an additional three (3) metres over adjoining Lot 9006 on Deposited Plan 69864 for the purposes of road construction. The additional three (3) metres is required due to a change in the road design necessitated by an amendment to Western Power's safety provisions. Deposited Plan 69864 is in order for dealing but Landgate has made it subject to the dedication of Lot 7001 Warton Road, Piara Waters as road reserve.

The City is in the process of purchasing Lot 7001 Warton Road from the landowners for road construction purposes and is awaiting receipt of the Transfer of Land documents from the landowners. The additional three (3) metres of Lot 9006 on Deposited Plan 69864 has been ceded to the Crown for road widening purposes.

DETAILS OF PROPOSAL

This proposal seeks Council's resolution to dedicate Lot 7001 Warton Road, Piara Waters as a road reserve. The dual carriageway upgrade of Warton Road is being completed and the legal formalities (that is to say, the Transfer of Land documents) to transfer Lot 7001 to the City are in the process of being sent to the City for execution.

COMMENT

Section 56 of the Land Administration Act 1997, among other things, provides that

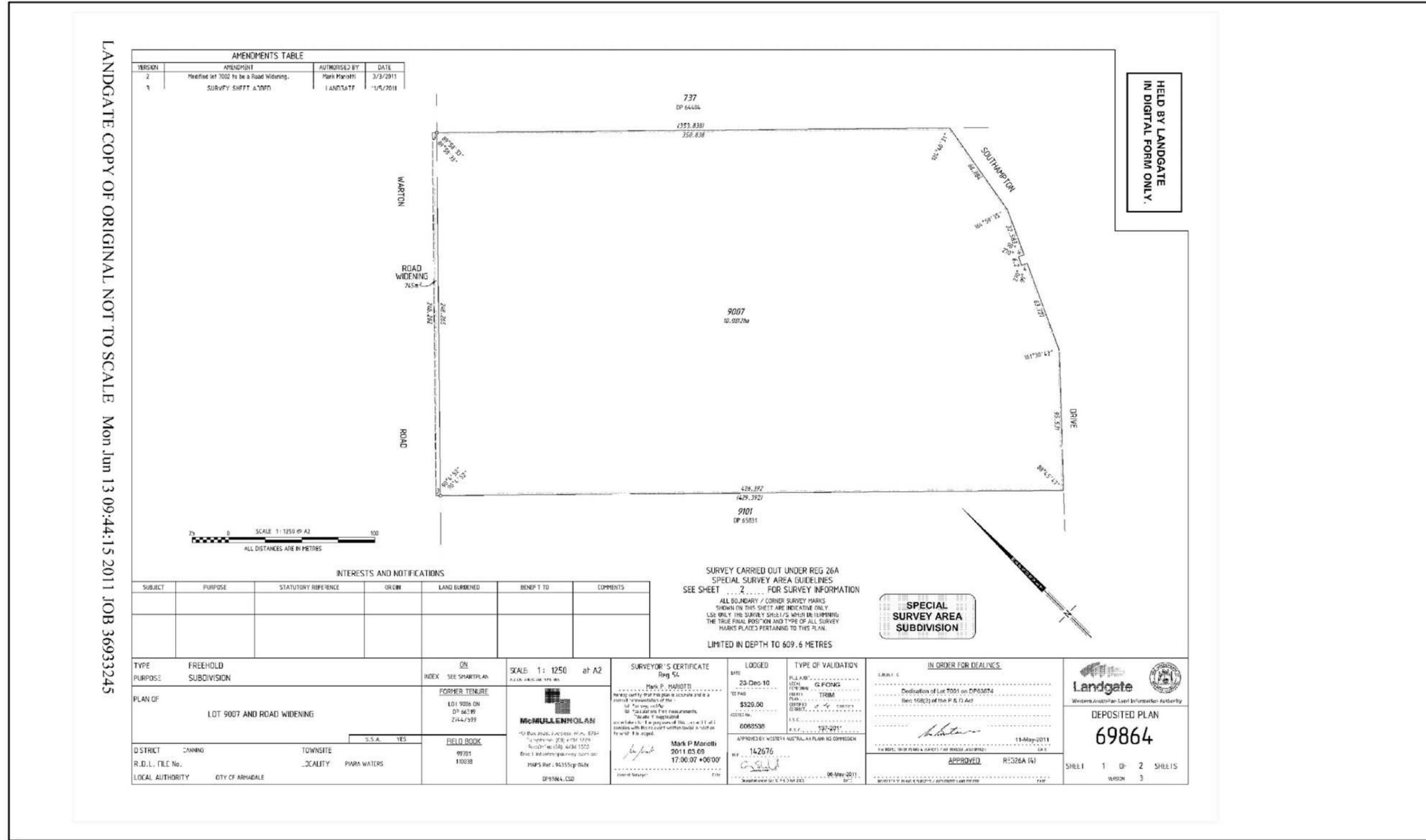
- (1) If in a district of a local government –
 - (a) land is reserved or acquired for use by the public, or is used by the public, as a road under the care, control and management of the local government;
 - (b) in the case of land comprising a private road constructed and maintained to the satisfaction of the local government –
 - (i) the holder of the freehold in that land applies to the local government, requesting it to do so; or
 - (ii) those holders of the freehold in rateable land abutting the private road, the aggregate of the rateable value of all the rateable land abutting the private road, apply to the local government, requesting it to do so; or
 - (iii) land comprises a private road of which the public has had uninterrupted use for a period of not less than 10 years,

- and that land is described in a plan of survey, sketch plan or document, the local government may request the Minister to dedicate that land as a road.
- (2) If a local government resolves to make a request under subsection (1), it must -
- (a) in accordance with the regulations prepare and deliver the request to the Minister; and
 - (b) provide the Minister with sufficient information in a plan of survey, sketch plan or document to describe the dimensions of the proposed road.
- (3) On receiving a request delivered to him or her under subsection (2), the Minister must consider the request and may then -
- (a) subject to subsection (5), by order grant the request;
 - (b) direct the relevant local government to reconsider the request, having regard to such matters as he or she thinks fit to mention in that direction; or
 - (c) refuse the request.
- (4) On the Minister granting a request under subsection (3), the relevant local government is liable to indemnify the Minister against any claim for compensation (not being a claim for compensation in respect of land referred to in subsection (6)) in an amount equal to the amount of all costs and expenses reasonable incurred by the Minister in considering and granting the request.
- (5) To be dedicated under subsection (3) (a), land must immediately before the time of dedication be -
- (a) unallocated Crown land; and
 - (b) designated in the relevant plan of survey, sketch plan or document as having the purpose of a road.
- (6) If land referred to in subsection (1) (c) is dedicated under subsection (3) (a), the holder of the freehold in that land is not entitled to compensation because of that dedication.

ANALYSIS

The purchase of Lot 7001 on Deposited Plan 63674 and situated in Warton Road, Piara Waters from the landowners for road construction purposes is dependant upon the receipt by the City of the Transfer of Land documents for execution to transfer this lot to the City for road purposes.

The additional 3 metres of road widening from Lot 9006 Warton Road is shown on Deposited Plan 69864 which is in order for dealing but Landgate has made it subject to the dedication of Lot 7001 as road reserve.



DEPOSITED PLAN 69864

OPTIONS

Council has two options:

1. Decline the dedication of Lot 7001 Warton Road, Piara Waters as road reserve.
2. Resolve to request the Minister for Lands to dedicate Lot 7001 Warton Road, Piara Waters as a road reserve in accordance with Section 56 of the Land Administration Act 1997.

CONCLUSION

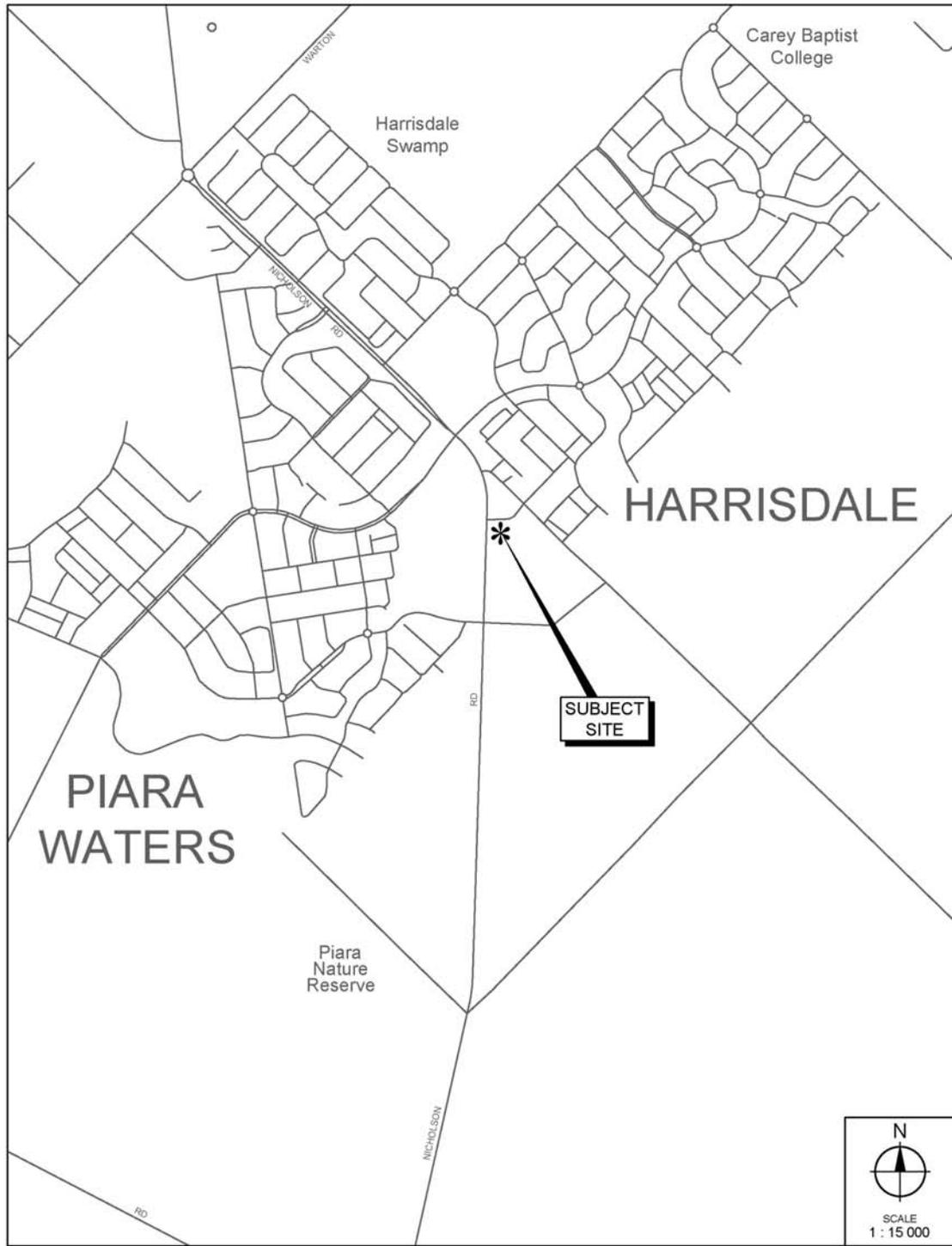
It is recommended that Council should adopt Option 2 and resolve to request the Minister for Lands to dedicate Lot 7001 Warton Road, Piara Waters as road reserve.

D50/6/11 RECOMMEND

That Council:

1. **Requests the Minister for Lands to dedicate Lot 7001 on Deposited Plan 63674 and situated in Warton Road, Piara Waters as a road reserve pursuant to Section 56 of the Land Administration Act 1997, subject to the completion of the legal formalities to transfer this lot to the City for road purposes.**
2. **Indemnifies the Minister for Lands against any claims for compensation in an amount equal to the amount of all costs and expenses reasonably incurred by the Minister in considering and granting the request pursuant to Section 56(4) of the Land Administration Act 1997.**

MOVED Cr MacDonald
MOTION CARRIED (7/0)



LOCATION PLAN
PART LOT 16 NICHOLSON ROAD, HARRISDALE

PROPOSED SIGNAGE FOR MCDONALD’S FAMILY RESTAURANT AT PART LOT 16 NICHOLSON ROAD, HARRISDALE

WARD : LAKE
APPLN NO. : P34171; 11.2011.6.1
DATE : 13 June 2011
REF : MBB
RESPONSIBLE MANAGER : EMPS
APPLICANT : Hindley & Associates Pty Ltd
LANDOWNER : Stockland Development WA Pty Ltd
SUBJECT LAND : Part Lot 16 Nicholson Road, Harrisdale
ZONING
MRS : Urban
TPS No.4 : Urban Development Zone

In Brief:

- An application for signage for a McDonald’s Family Restaurant has been received.
- The proposed pylon sign and three horizontal signs of the signage regime do not meet the City’s Signage Policy requirements; however the remaining signs of the sign regime do comply with Policy.
- Council has the discretion to vary the requirements of signage when considering an overall sign regime.
- Recommend that Council conditionally approve the application with a reduction of height to the pylon sign.

Tabled Items

Nil.

Officer Interest Declaration

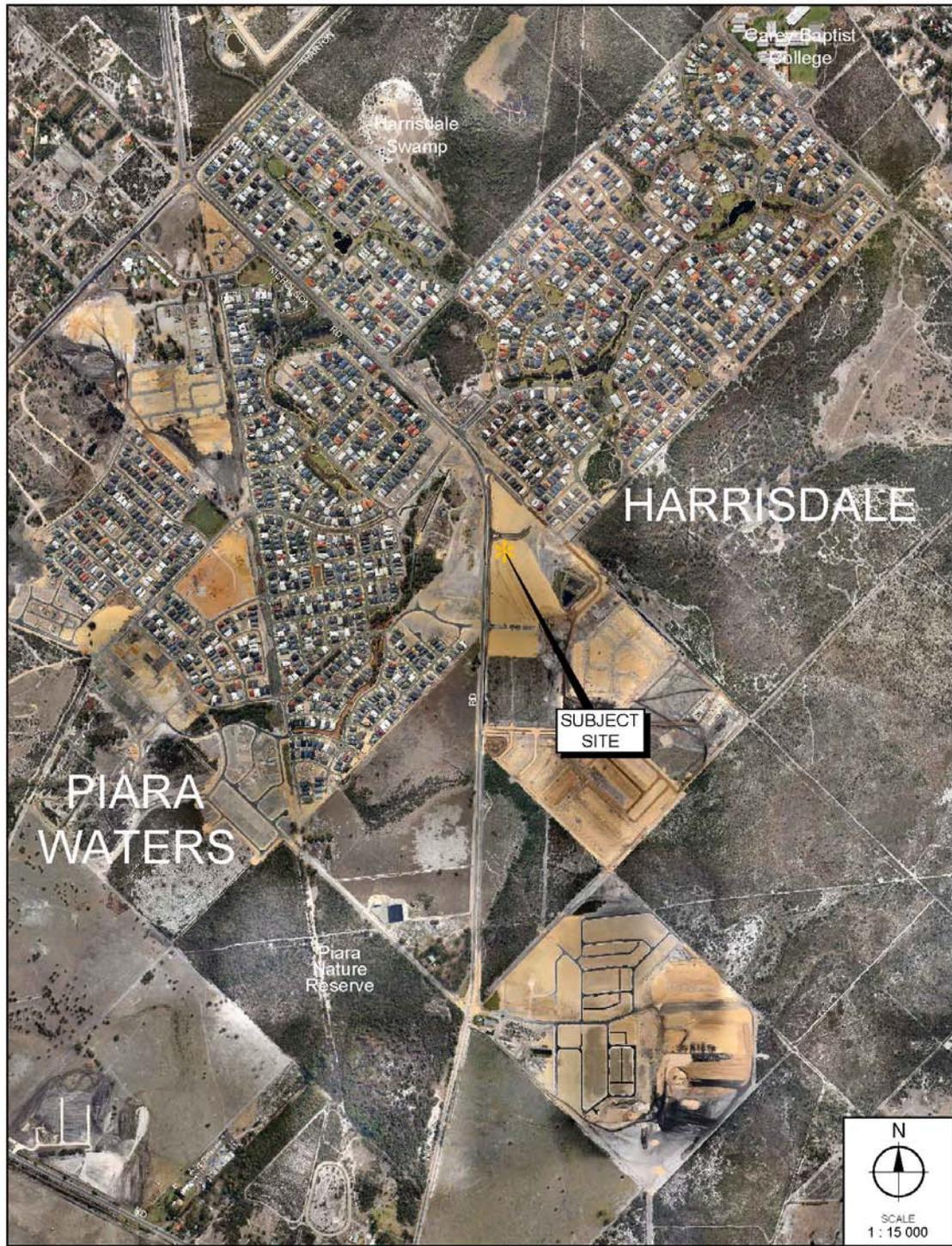
Nil.

Strategic Implications

- 2.3 Diverse and attractive development that is integrated with the distinctive character of the City.
2.3.1 *Provide supportive planning and development guidance and liaison on major land developments.*
- 2.4 Attractive and user-friendly streetscape and open spaces.
2.4.1 *Implement townscape, streetscape and parkland improvements to enhance the distinctive character of the City.*

Legislation Implications

Planning and Development Act 2005



AERIAL PHOTOGRAPH
PART LOT 16 NICHOLSON ROAD, HARRISDALE

Council Policy / Local Law Implications

Planning Policy (PLN) 4.2 - Signage (Advertisements)
Town Planning Scheme No.4
City's By-laws relating to Signs, Hoardings and Billposting

Budget / Financial Implications

Nil.

Consultation

Nil.

DETAILS OF PROPOSAL

The applicant proposes signage for the purpose of advertising McDonald's Family Restaurant at Part Lot 16 Nicholson Road Harrisdale. Advice Note H of the development approval issued for the fast food outlet requires a separate application to be submitted for all signs associated with the development. The restaurant will be located within the Harrisdale District Centre (Newhaven District Activity Centre), within the adopted Structure Plan.

The application includes the following wording for signage:
"McDonald's", "M", "McCafe", "Welcome", "Thank you / No Entry", "Any Lane, Any Time", "Drive Thru Any Time", "No U-Turn / No Entry", "Order Here / Pay Here" and various standard car parking signage, such as stop signs etc.

ANALYSIS

The proposed signage includes a pylon sign plus directional, horizontal and wall signs. All signs are located in such a way so as to not obstruct pedestrian/traffic visibility or movement. All signs are considered to be consistent with the design and appearance of McDonalds' national standards.

It should be noted that there are two existing McDonald's outlets within the City, on Albany Highway, Kelmscott and Jull Street, Armadale. Both have similar signage designs and include a 6 metre high pylon sign in Kelmscott and an 8 metre high pylon sign in Armadale.

Newhaven District Activity Centre Structure Plan (Clause 4.9)

Clause 4.9 of the Newhaven District Activity Centre Structure Plan states "*in order to prevent the proliferation of signs, signage and advertising shall be in keeping with the urban character of the Activity Centre and fixed as an integrated element into buildings*". The proposed 9 metre high pylon sign is not an appropriate scale and is inconsistent with this objective.

Planning Policy (PLN) 4.2 - Signage (Advertisements)

The objective of the Signage Policy is to ensure that the erection and placement of signs in the City should not detract from the visual amenity and streetscape of the locality, but be compatible with the character of the buildings and localities in which they are erected.

By-laws relating to Signs, Hoardings and Billposting

The proposed pylon sign is also inconsistent with provisions of the City's By-laws which limit the maximum height of a pylon sign to 6 metres.

Pylon Sign

The pylon sign is proposed to have a height of 9 metres and a length of 6 metres. These dimensions are not in compliance with Policy PLN 4.2's requirements of 6 metres maximum height and 2 metres maximum length. The clearance from the ground is 2.9 metres which is consistent with the policy and the sign will have a setback from Nicholson Road of 2.3 metres. The proposed sign will be backlit with fluorescent lighting, will not pulsate or flash and will have a static display.

The proposed pylon sign is not in proportion to the height of proposed and approved buildings within the Harrisdale District Centre, including the McDonald's building which has an approximate height of 5-6 metres and the approved shopping centre building which has a height of approximately 8.5 metres and is well setback. With the exception of retail pylon signs (i.e. shopping centres), the average height Council has approved for pylon signs within the City to date has been 7.5 metres, for example City Farmers and Better Pets and Gardens. These signs however are along Albany Highway Kelmscott, which is predominately a commercial district and are multi-tenancy signs advertising various businesses and not just single businesses.

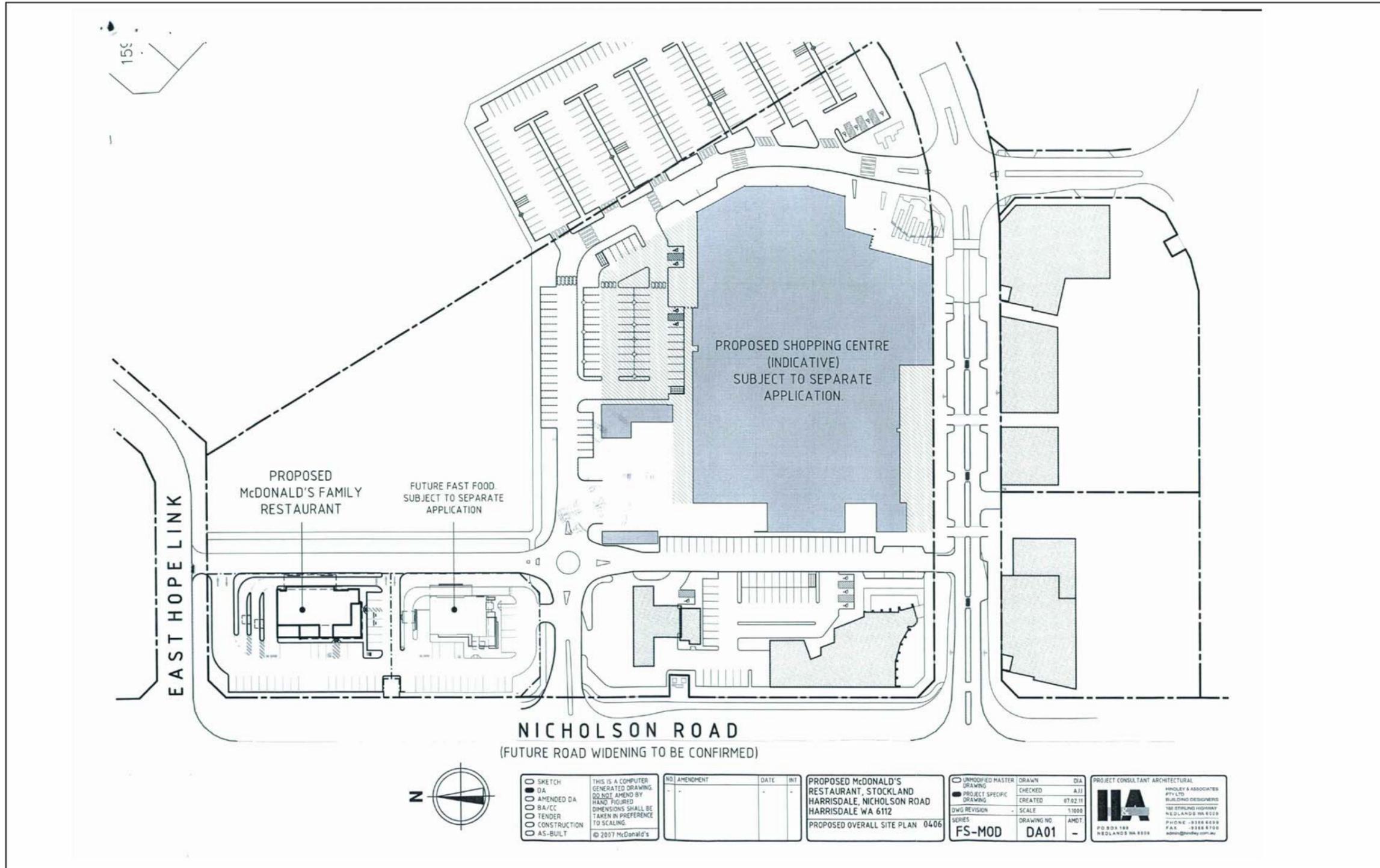
COMMENT

The applicant has submitted the following three (3) arguments (in italics below) to support the 9 metre high pylon sign.

Response to issues raised by applicant

- 1. The viability of the development is dependant on patrons being able to see the site as early as possible and to make safe vehicular movements into the site and a 9 metre high pylon will allow earlier vision given the current speed along Nicholson Road and the roundabout at Easthope Link.*

The current speed limits along Nicholson Road are 80kph and 90kph. There are plans to reduce the speed limit along Nicholson Road, to normal distributor road speeds, i.e. 70kph. The speed for the Harrisdale District Centre may be reduced to 60kph in future to enable safe pedestrian movement between residential areas on the other side of Nicholson Road and the District Centre.



NICHOLSON ROAD
 (FUTURE ROAD WIDENING TO BE CONFIRMED)



○ SKETCH
 ● DA
 ◐ AMENDED DA
 ○ BA/VCC
 ○ TENDER
 ○ CONSTRUCTION
 ○ AS-BUILT

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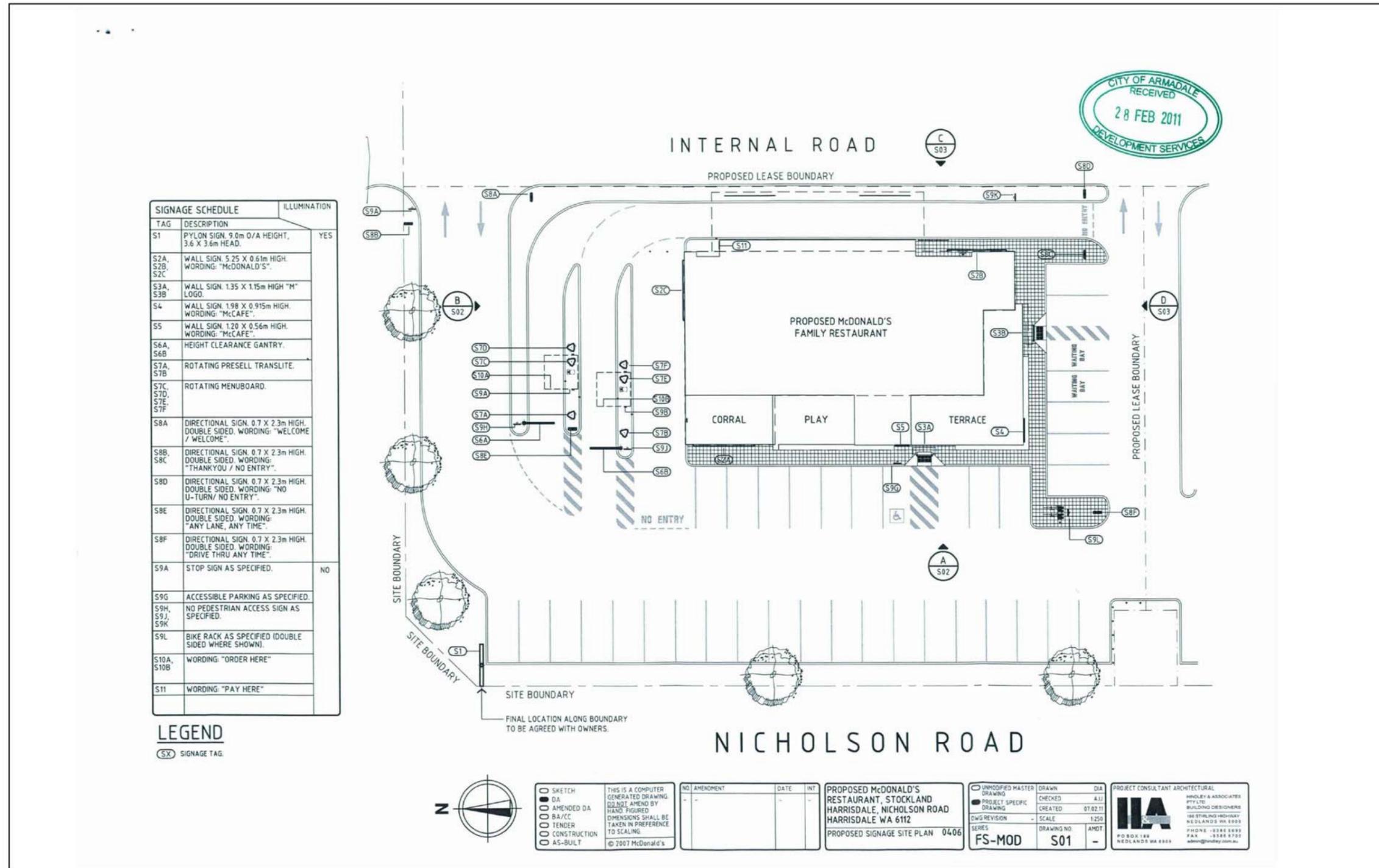
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PROPOSED McDONALD'S RESTAURANT, STOCKLAND HARRISDALE, NICHOLSON ROAD HARRISDALE WA 6112
 PROPOSED OVERALL SITE PLAN 0406

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DWG REVISION <td>CREATED</td> <td>07/02/11</td>	CREATED	07/02/11
SERIES <td>SCALE</td> <td>1:1000</td>	SCALE	1:1000
FS-MOD	DRAWING NO	AMDT
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PROJECT CONSULTANT ARCHITECTURAL
IAA
 HINDLEY & ASSOCIATES
 PTY LTD
 BUILDING DESIGNERS
 180 STURLING HIGHWAY
 WEDLANDS WA 6123
 PHONE (08) 9386 8330
 FAX (08) 9386 8700
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OVERALL SITE PLAN
 PART LOT 16 NICHOLSON ROAD, HARRISDALE



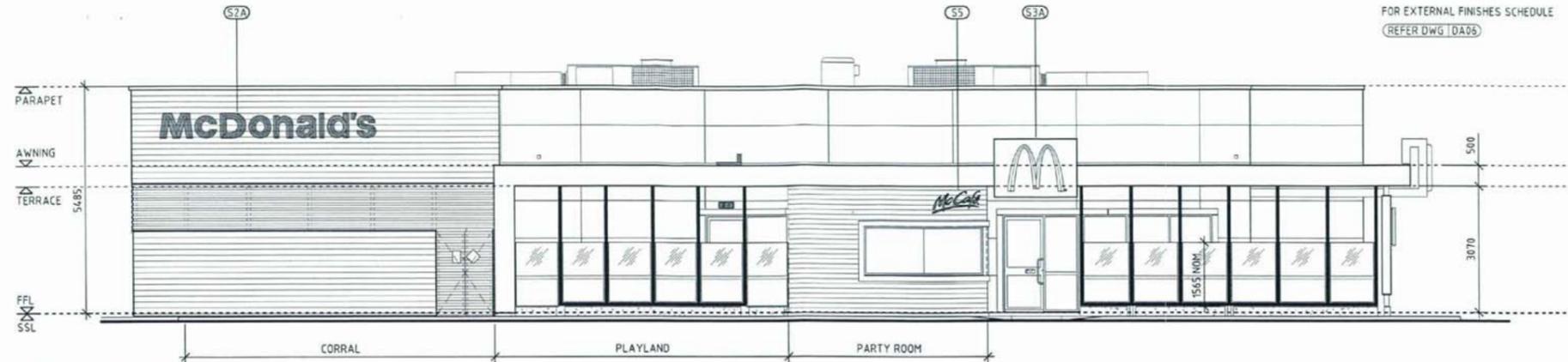
SIGNAGE SITE PLAN
PART LOT 16 NICHOLSON ROAD, HARRISDALE

LEGEND

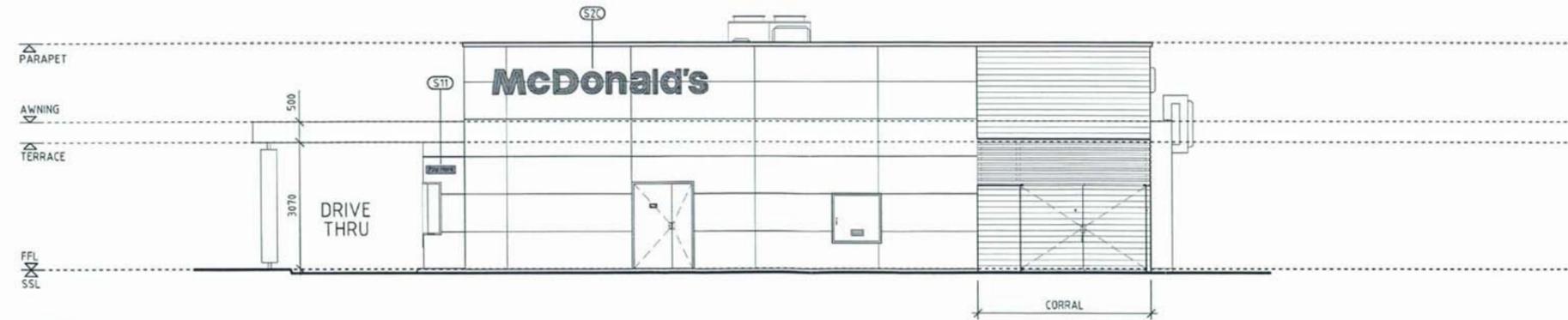
(SX) SIGNAGE TAG.

REFERENCES

FOR SIGNAGE PLAN
(REFER DWG S01)
FOR EXTERNAL FINISHES SCHEDULE
(REFER DWG DA05)



A SIDE ELEVATION
S01



B REAR ELEVATION
S01

<ul style="list-style-type: none"> ○ SKETCH ● DA ○ AMENDED DA ○ BA/CC ○ TENDER ○ CONSTRUCTION ○ AS-BUILT 	<p>THIS IS A COMPUTER GENERATED DRAWING. DO NOT AMEND BY HAND FIGURED. DIMENSIONS SHALL BE TAKEN IN PREFERENCE TO SCALING.</p> <p>© 2007 McDonald's</p>	<table border="1"> <thead> <tr> <th>NO.</th> <th>AMENDMENT</th> <th>DATE</th> <th>INT.</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>REAR ELEVATION SIGN SHOWN</td> <td>25.05.11</td> <td>DIA</td> </tr> </tbody> </table>	NO.	AMENDMENT	DATE	INT.	A	REAR ELEVATION SIGN SHOWN	25.05.11	DIA	<p>PROPOSED McDONALD'S RESTAURANT, STOCKLAND HARRISDALE, NICHOLSON ROAD HARRISDALE WA 6112</p> <p>SIDE AND REAR ELEVATIONS 0406</p>	<table border="1"> <thead> <tr> <th>UNMODIFIED MASTER DRAWING</th> <th>DRAWN</th> <th>DIA</th> </tr> </thead> <tbody> <tr> <td>● PROJECT SPECIFIC DRAWING</td> <td>AJJ</td> <td></td> </tr> <tr> <td></td> <td>CREATED</td> <td>07.02.11</td> </tr> <tr> <td>DWG REVISION</td> <td>13</td> <td>SCALE</td> </tr> <tr> <td>SERIES</td> <td>DRAWING NO</td> <td>AMDT</td> </tr> <tr> <td>FS-MOD</td> <td>S02</td> <td>A</td> </tr> </tbody> </table>	UNMODIFIED MASTER DRAWING	DRAWN	DIA	● PROJECT SPECIFIC DRAWING	AJJ			CREATED	07.02.11	DWG REVISION	13	SCALE	SERIES	DRAWING NO	AMDT	FS-MOD	S02	A	<p>PROJECT CONSULTANT ARCHITECTURAL</p> <p>IIA</p> <p>HOOLEY & ASSOCIATES PTY LTD BUILDING DESIGNERS 180 STRALING HIGHWAY NEDLANDS WA 6104 PHONE +61 8 9396 8000 FAX +61 8 9396 8782 www.hooley.com.au</p>
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DWG REVISION	13	SCALE																													
SERIES	DRAWING NO	AMDT																													
FS-MOD	S02	A																													

SIDE AND REAR ELEVATIONS
PART LOT 16 NICHOLSON ROAD, HARRISDALE

S9 CAR PARK SIGNAGE
S01 NON-ILLUMINATED ALUMINIUM REFLECTIVE SIGN ON GALVANISED STEEL POLE TYPICAL.

S6 HEIGHT CLEARANCE GANTRY
S01 SCALE 1:50
FRAMEWORK CONSTRUCTED FROM HOT DIP GALVANISED STEEL TUBE WITH BLACK PAINT FINISH. NON-ILLUMINATED. WHITE VINYL LETTERS. YELLOW VINYL "M" LOGO.

S11 WALL SIGN
S01 NON-ILLUMINATED ALUMINIUM PANEL WITH VINYL GRAPHICS. LETTERING FONT: ARIAL PLAIN. SCREW FIX TO BOOTH WALL.

NOTE
DEPENDING ON LOCATION WITHIN SITE, S9 SIGNAGE SHOULD BE SET A MINIMUM OF 2m ABOVE TOP OF KERB TO PREVENT OBSTRUCTION TO OCCASIONAL PEDESTRIANS, OR TO REDUCE INTERFERENCE FROM PARKED VEHICLES. IF THIS DOESN'T APPLY, SIGNAGE HEIGHTS SHALL BE SET AS NOTED.

REFERENCES
FOR SIGNAGE COLOUR SPECIFICATION (REFER DWG | S03)

CITY OF ARMADALE RECEIVED
28 FEB 2011
DEVELOPMENT SERVICES

LEGEND

○	SKETCH	THIS IS A COMPUTER GENERATED DRAWING DO NOT AMEND BY HAND FIGURED DIMENSIONS SHALL BE TAKEN IN PREFERENCE TO SCALING. © 2007 McDonald's	NO	AMENDMENT	DATE	INT
○	DA					
○	AMENDED DA					
○	BA/CC					
○	TENDER					
○	CONSTRUCTION					
○	AS-BUILT					

PROPOSED McDONALD'S RESTAURANT, STOCKLAND HARRISDALE, NICHOLSON ROAD HARRISDALE WA 6112
SIGNAGE DETAILS 0406

□	UNMODIFIED MASTER DRAWING	DRAWN	DIA
□	PROJECT SPECIFIC DRAWING	CHECKED	AJJ
		CREATED	07.02.11
		DWG REVISION	3
		SCALE	1:50 U.N.D.
SERIES	FS-MOD	DRAWING NO.	S05
		AMDT.	-

PROJECT CONSULTANT ARCHITECTURAL
IIA
HINZLEY & ASSOCIATES
PTY LTD
BUILDING DESIGNERS
198 STirling Highway
NEDLANDS WA 6009
PHONE +8388 8888
FAX +8388 8788
admin@hinzley.com.au

SIGNAGE DETAILS
PART LOT 16 NICHOLSON ROAD, HARRISDALE

S1 PYLON SIGN
S01

INTERNAL FRAMEWORK CONSTRUCTED FROM STEEL ANGLE AND HOT DIP GALVANISED. EXTERNAL SKIN CONSTRUCTED FROM EXTRUDED ALUMINIUM WITH POWDERCOAT FINISH. ACRYLIC SIGN FACES WITH PRISMATIC LETTERING. SIGN BOXES AND LOGO INTERNALLY ILLUMINATED BY 240 VOLT FLUORESCENT TUBING.

COLOUR	DULUX CODE	PMS CODE	VINYL COLOUR
RED.	#88216.	#485C.	3M DARK RED 3630-73.
YELLOW.	#88217.	#109.	3M YELLOW 3630-015.
WHITE.	VIVID WHITE.	-	-
BLACK.	-	PROCESS BLACK.	3M NON-TRANSLUCENT BLACK 3650-12.
McCAFE BURGUNDY.	10yr09/250.	#491C.	3M NON-TRANSLUCENT BURGUNDY 3630-49.
24/7 YELLOW.	-	#123.	-
24/7 BLUE.	-	#2757	C100 M94 Y0 K29

SIGNAGE COLOUR SPECIFICATION

S2 WALL SIGN
S01

INDIVIDUAL FULLY MOULDED ACRYLIC PRISMATIC LETTERING. INTERNALLY ILLUMINATED. WHITE LETTERS.

S5 WALL SIGN
S01

INDIVIDUAL HALO ILLUMINATED REVERSE PAN FABRICATED ALUMINIUM CHANNEL LETTERS. BRUSHED ALUMINIUM FINISH.

S3 WALL SIGN
S01

FULLY MOULDED ACRYLIC PRISMATIC LOGO. INTERNALLY ILLUMINATED. YELLOW LOGO ON SOLID RED BACKGROUND.

S4 WALL SIGN
S01

INDIVIDUAL HALO ILLUMINATED REVERSE PAN FABRICATED ALUMINIUM CHANNEL LETTERS. BRUSHED ALUMINIUM FINISH.

S7 ROTATING MENUBOARD / TRANSLITE
S01

BLACK CABINET AND BASE TYPICAL. CIRCULATION SPACE TO PERMIT ROTATION.

S8 DIRECTIONAL SIGN
S01

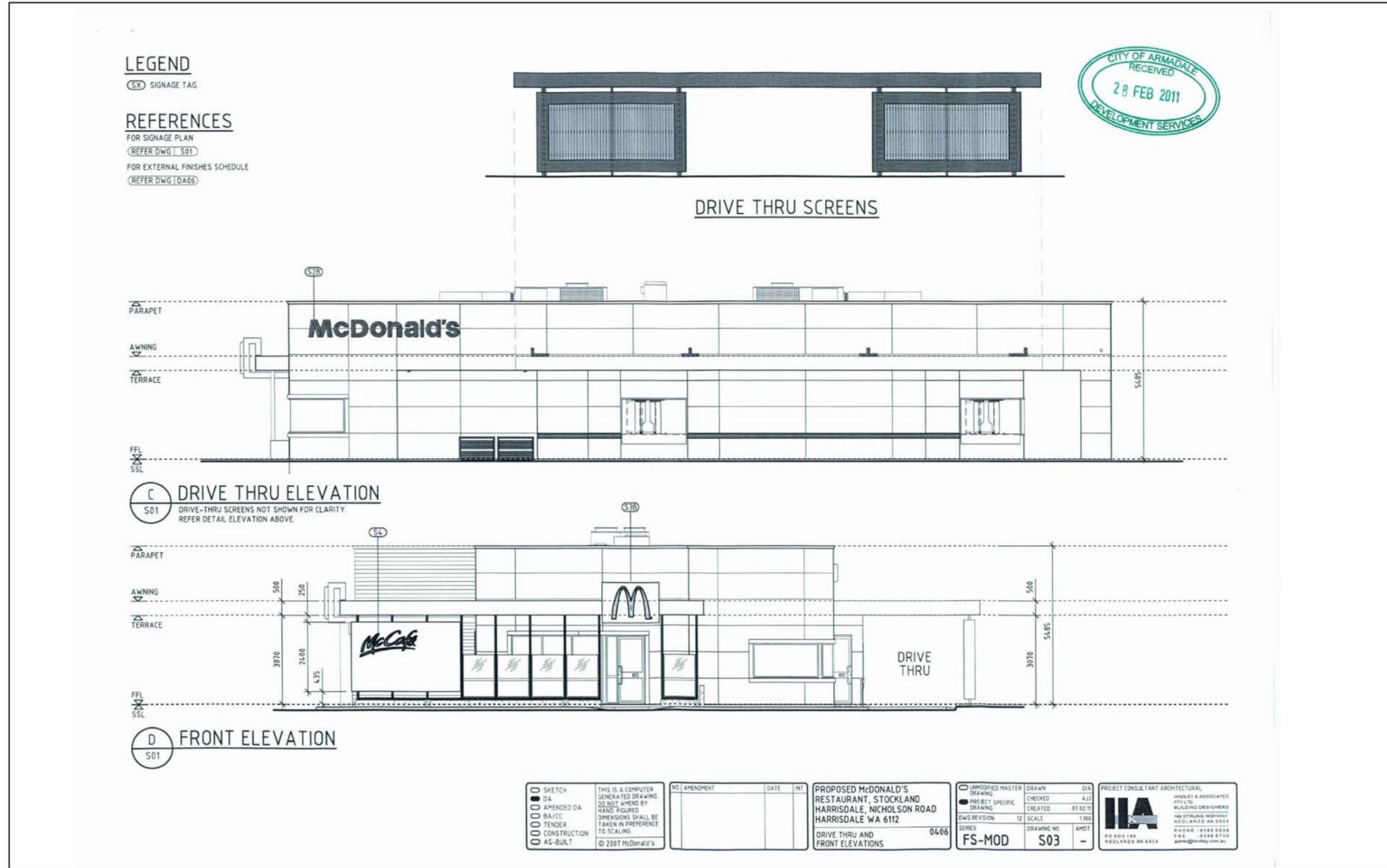
FABRICATED ALUMINIUM CABINET FACES SHALL WITH WET SPRAY FINISH. FLAT BAR ALUMINIUM EDGE BANDING WITH WET SPRAY FINISH. LOGO, LETTERS AND SYMBOLS SHALL BE PUSH THROUGH ACRYLIC TYPE. LETTERS AND SYMBOLS SHALL BE INTERNALLY ILLUMINATED BY 240 VOLT FLUORESCENT TUBING.

NOTE
SIGNS S4 & S5 WILL REQUIRE REMOTE TRANSFORMERS. TRANSFORMERS SHALL BE CONCEALED AND ACCESSIBLE VIA ACCESS PANELS AS LOCATED ON REFLECTED CEILING PLAN.

ALTERNATIVE WORDING
[ALL IN TITLE CASE]:
"DRIVE THRU",
"NO ENTRY",
"THANK YOU",
"ANY LANE, ANY TIME",
"NO U-TURN"

SKETCH DA AMENDED DA BA/CC TENDER CONSTRUCTION AS-BUILT	THIS IS A COMPUTER GENERATED DRAWING. DO NOT AMEND BY HAND. FIGURED DIMENSIONS SHALL BE TAKEN IN PREFERENCE TO SCALING. © 2007 McDonald's	NO. AMENDMENT DATE INT	PROPOSED McDONALD'S RESTAURANT, STOCKLAND HARRISDALE, NICHOLSON ROAD HARRISDALE WA 6112 SIGNAGE DETAILS 0406	UNMODIFIED MASTER DRAWING PROJECT SPECIFIC DRAWING DWG REVISION 8 SERIES FS-MOD	DRAWN DA CHECKED AJJ CREATED 07.02.11 SCALE 1:50 DRAWING NO. S04 AMDT -	PROJECT CONSULTANT ARCHITECTURAL HINDLEY & ASSOCIATES PTY LTD BUILDING DESIGNERS 188 STIRLING HIGHWAY NEDLANDS WA 6109 PHONE: 9338 8288 FAX: 9338 8700 admin@hindley.com.au
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SIGNAGE DETAILS
PART LOT 16 NICHOLSON ROAD, HARRISDALE



DRIVE THRU AND FRONT ELEVATIONS
PART LOT 16 NICHOLSON ROAD, HARRISDALE

It would set an undesirable precedent to base approval for the height of the pylon sign on current road speeds. It should be noted the speed limit on Albany Highway, Kelmscott in the vicinity of McDonald's is 60kph with a 6 metre high pylon sign.

2. *The pylon sign is the first point of site identification and therefore of primary importance given that the site has no direct access to Nicholson Road with access gained via Easthope Link to the north or the shopping centre access road to the south.*

The proposed restaurant is located at the corner of Nicholson Road and Easthope Link, Harrisdale. As the applicant has stated, there is no direct access to the restaurant and access will be gained via a roundabout at Easthope Link/Nicholson Road and an access road into the northern portion of the shopping centre off Nicholson Road. It should be noted however that there is also no direct access off Nicholson Road for the proposed second fast food outlet, tavern or service station. However, with Easthope Link, the central shopping centre access direct from Nicholson Road and Yellowwood Avenue motorists will have three opportunities to enter the shopping centre including the fast food outlets.

3. *In its proposed location the pylon sign is setback 2.3 metres from the Nicholson Road boundary due to the location of a Western Power easement and as such will not overhang the boundary or be positioned as would normally be the case, directly abutting the front boundary.*

The 2.3 metre setback is a requirement of Western Power for its easement and supported by the City and as such, the setback can be no less than 2.3 metres. The location of the outlet is on a prominent corner along Nicholson Road.

Given the above, and on the basis that the McDonald's outlet will be subsidiary to the main shopping centre, it is recommended that the height of the pylon sign be restricted to a maximum of 6 metres.

Horizontal Sign – three (3) “McDonald's”

The height of the proposed horizontal signs are 0.61 metres, with a length of 5.25 metres and do not meet Policy PLN 4.2's requirements of 1.5 metres maximum height and 3 metres maximum length. However, the policy gives Council the discretion to vary the requirements of signs.

The proposed horizontal signs are considered to be in keeping with the scale of the building and fast food outlet both in size and layout and will not adversely impact or detract from the overall visual amenity of the area.

All other remaining proposed signs are consistent with the requirements of Policy PLN 4.2.

OPTIONS

1. Council could refuse the application on the grounds that the pylon sign does not comply with the signage size as set out in the policy.
2. Council could conditionally approve the application if it is of the opinion the proposed signs will not be injurious to the amenity and streetscape of the locality.
3. Council could conditionally approve the application with a reduction in height for the pylon sign or any other sign.

CONCLUSION

The pylon sign component of the application does not comply with the provisions of the Signage Policy and it is considered that it may adversely impact on the amenity of the locality and the probability of it being seen from residential areas.

In maintaining the objectives of Council's Policy PLN 4.2, the proposed pylon sign would set an undesirable precedent for the remainder of the Harrisdale District Centre and the City, with the likelihood of other businesses requesting the same variations. Council has used its discretion to vary the provisions of Policy PLN 4.2 in the past for pylon signs to allow multi-tenancy signs with a height of 7.5 metres. However, it is considered that as the sign is for a single business, the maximum size requirements contained in both the Policy PLN 4.2 and the City's By-laws relating to Signs, Hoardings and Billposting should be adhered to.

Although the horizontal signs proposed do not comply with the Policy requirements, it is considered that they will be visually in proportion to the scale of the building and will not detract from the overall amenity of the area. The remaining signs comply with the requirements of Policy PLN 4.2.

Approval of the application is recommended, as per Option 3.

D51/6/11 RECOMMEND

That Council:

- A. Approve the application for signage for McDonald’s Family Restaurant on a portion of Lot 16 Nicholson Road, Harrisdale, subject to the following conditions:**
- 1. The pylon sign shall be reduced to a maximum height of 6 metres (measured from ground to top of sign) with the display panel to have a maximum length and width of 2 metres and a maximum depth of 300mm to the satisfaction of the Executive Director Development Services.**
 - 2. With the exception of the above modification to the pylon sign, all signs shall be erected in accordance with the approved plans to the satisfaction of the Executive Director Development Services.**
 - 3. All signs shall be placed on the subject land and no part of any sign is to protrude onto the road verge to the satisfaction of the Executive Director Development Services.**
 - 4. The landowner shall be responsible for all maintenance, removal (within 24 hours should any sign be damaged), replacement and removal of graffiti (within 3 workings days), and maintained to the satisfaction of the Executive Director Development Services.**
 - 5. This approval shall remain valid unless any alteration is made to any approved sign. In such an event a new application for Planning Approval will be required.**
- B. In respect of Condition 1, the applicant shall submit revised plans for the pylon sign for approval by the Executive Director Development Services, prior to the installation of the pylon sign.**

MOVED Cr MacDonald
MOTION CARRIED (7/0)

ADOPTION OF INFRASTRUCTURE COST SCHEDULE 2011 AND ASSESSED VALUES, DEVELOPMENT CONTRIBUTION PLAN NO.3

WARD : LAKE
REF NO. : PLU/DCA/3-02
DATE : 10 June 2011
REF : SW
RESPONSIBLE MANAGER : EMPS
SUBJECT LAND : Development Contribution Area No.3 – Special Control Area Map No.3
ZONING
MRS : Urban/Urban Development
TPS No.4 : Zone/Various

In Brief:-

- In April 2011 Council resolved to advertise the Draft Infrastructure Cost Schedule 2011 and associated “Proposed Values” in accordance with the requirements of Town Planning Scheme No.4.
- The Draft Infrastructure Cost Schedule was advertised for public comment for 28 days.
- Two (2) submissions were received on the Infrastructure Cost Schedule and no submissions on the Proposed Values.
- Recommend that Council adopt the Assessed Values and the Infrastructure Cost Schedule 2011 which includes a Gross Cost of Common Infrastructure Works of \$70,933,132.45, Common Infrastructure Works of \$44,687,907.26, lots to be produced in the unsubdivided balance of 3,525 and a Cost Contribution per Lot of \$12,678.87.

Tabled Items

Nil.

Officer Interest Declaration

The City’s Project Coordinator, who prepared this report, declares an interest to the extent that the Infrastructure Cost Schedule provides for the funding of the Project Coordinator position. The Project Coordinator has ensured adequate funding to match salary and on-cost information.

Strategic Implications

2.1 Long term planning and development that is guided by a balance between economic, social and environmental objectives.

2.1.1 Review, update and implement the City’s Town Planning Scheme, taking into account the Local Biodiversity Strategy and other environmental considerations.

Legislation Implications

Planning and Development Act 2005
Town Planning Scheme No.4
Local Government Act 1995
Commercial Arbitration Act 1985

Council Policy / Local Law Implications

ENG 13 – Asset Management Vision

Budget / Financial Implications

Nil - but see “Comment and Analysis - Overview - Financial Risk Management” below.

Consultation

- ◆ Relevant City of Armadale Managers
- ◆ Various consultants
- ◆ City of Armadale Valuation Panel
- ◆ Landowners and Developers within Development Contribution Area no.3
- ◆ Advertised for public comment for 28 days.

BACKGROUND

Town Planning Scheme No.4 Development Contribution Plan No.3

In accordance with the City of Armadale’s Town Planning Scheme No.4 (TPS No.4), all landowners within Development Contribution Area No.3 (DCA03) shall make a proportional contribution to the cost of Common Infrastructure Works. Development Contribution Plan No.3 (DCP No.3), within Schedule 13B of TPS No.4, provides the framework and authority for the City to determine the cost of Common Infrastructure Works within DCA03 and to establish a Contribution Cost per Lot.

The Cost Contribution per Lot, as per Clause 3.4 of Schedule 13B, is determined through the cost of Common Infrastructure Work over the subdivision potential in the unsubdivided balance of DCA03. The Cost Contribution per Lot and the associated process are published as the Infrastructure Cost Schedule for DCP No.3. It is stated in Clause 3.13.1 of Schedule 13B that the City shall review Contribution Costs and the Infrastructure Cost Schedule, provided such reviews are conducted at least on an annual basis.

Where Common Infrastructure Work includes a land component, DCP No.3 requires that “Assessed Values” be determined through a process of valuation and advertising of “Proposed Values”. The process to attain Assessed Values is set out in Clause 3.12 of Schedule 13B. It is intended, as per Clause 3.12.3 (e) of Schedule 13B, that any Assessed Value should apply for no more than 13 months.

In accordance with Clauses 3.12 and 3.13 of Schedule 13B in Town Planning Scheme No.4, Council at its May 2011 meeting resolved to adopt for the purpose of advertising the Draft Infrastructure Cost Schedule 2011, the Proposed Values included within it, the Contribution Cost per Lot of \$12,349.55, 3,644 predicted lots in the unsubdivided balance and a Gross cost of Common Infrastructure Works of \$69,850,362.61, for a period of 28 days.

The Draft Infrastructure Cost Schedule 2011 is at Attachment “A8” of the Minutes.



IMAGE 1 - Clause 3.6.3 (8) (c) Baker's House Community Centre



IMAGE 2 - Clause 3.6.3 (8) (b) and (f) Piara Waters (North)
Community and Sporting Facility

Attachment “A9” (flowchart) describes the Infrastructure Cost Schedule preparation and review process that generally reflects the statutory requirements. As required by Clauses 3.12.3 (c) and 3.13.6 of Schedule 13B and as indicated on the flowchart, objections to any of the costs in the Draft Infrastructure Cost Schedule need to be supported by qualified evidence.

Progression and Implementation of Common Infrastructure Works

Development Contribution Plan No.3 has now been operational since 2006 and has made significant progress in implementing key projects with over \$20.5 million expended. To date, through the urban development in North Forrestdale, there has been over \$26 million in development contributions paid and common infrastructure work cost offsets. The key points of progression since the last review period are identified below:

- **Baker’s House** (refer to Image 1)

The acquisition of a community building and land within Heron Park (Former Lot 49 Keane Road), has been finalised at a cost to DCP No.3 of \$592,090. The Community Centre has been named Baker’s House by Council. The possible utilisation of Baker’s House is being progressed by the City’s Community Services, in order to finalise the last stage of works funded through DCP No.3 which is \$859,749.41 towards the refurbishment of the building. In addition to the \$150,000 for purchasing the building, the DCP No.3 has already expended over \$270,000 towards the refurbishment of Baker’s House. Designs are being prepared and the project work is now being coordinated by Director City Projects, in consultation with Planning Services. The total contribution to the Baker’s House project through DCP No.3 is over \$1.7 million.

- **Warton Road**

The City has finalised the acquisition of land, for road widening purposes, from the majority of properties for the dual carriageway upgrade of Warton Road. The City now has agreements in place with the two remaining properties. Grant funds were expended 2009/10 financial year on implementing the Warton Road upgrade, with funds from DCP No.3 utilised since the last review in 2010/11 financial year. The implementation of the project, including road construction, street lightening and dual use path, is scheduled for completion in 2011 with the total cost funded through DCP No.3 in the order of \$7.6 million.

- **Wright Road**

The Wright Road upgrade funded through DCP No.3 was finalised during the last review period. The upgrade of Wright Road connects into the Ranford Road upgrade. Significant components of the Wright Road project are the lights at the intersection of Ranford Road, upgrading Wright Road to an urban standard and the addition of a dual use path which will tie in to the comprehensive network planned for Harrisdale and Piara Waters. A contribution from Bunning’s Group Limited was received towards the constructed intersection treatments fronting their land holding on Wright Road. This contribution has been shown as an income against the Wright Road project. Therefore, the funding component through DCP No.3 towards the upgrade of Wright Road is just under \$2 million.



IMAGE 3 - Clause 3.6.3 (3) (a) and (b) Nicholson Dual Carriageway Upgrade



IMAGE 4 - Clause 3.6.3 (7) (a) and (b) Newhaven Post Development Balannup Drain Multiple Use Corridor

- **Piara Waters (North) Community and Sporting Facility** (refer to Image 2)

Concept plans for the Piara Waters (North) Community and Sporting Facility have been adopted by Council. There has been positive feedback within the City, developers and landowners on said concept plans. The DCP has allocated funding for the early construction of this facility. The implementation of the project is now handed to the Director City Projects and is scheduled for commencement in 2011. The project will be implemented in two phases, the first being the oval and surrounds. The construction of the building will be implemented in the following year. This timing allows for the oval turf to have the required settling period, so it can be expected that the two components will become operation at relatively the same time. The DCP No.3 has combined funding towards this project of over \$4.6 million. The City has applied for grant funding this financial year to assist the implementation of the project. Following on from this success, the City is now working with the Department of Education on commissioning concept plans for North Forrestdale (South) Community and Sporting Facility to establish designs and costings earlier in the process.

- **Nicholson Road** (refer to Image 3)

The Nicholson Road project has seen close collaboration between Development Services and Technical Services. Whilst there have been a number of design delays, finalisation of the Nicholson Road design has become a top priority, with the development front moving south through the area and the necessity for implementing service infrastructure within the new alignment. In general, land acquisition for the Nicholson Road upgrade has occurred where, due to development and subdivision, the land has been made available. Development Services has approached and now has agreements in place with two landowners, where obtaining right of access ahead of development was necessary in order for surrounding landowners to progress their subdivisions. Construction of the first phase of Nicholson Road from Warton Road to Wright Road was finished in 2008 by the City. This year so far has seen the City progress the construction of Nicholson Road from Wright Road to Easthope Link. Earthworks on the next section to Mason Road are anticipated to commence this month. The overall cost of the Nicholson Road project in the Infrastructure Cost Schedule 2011 is over \$18.6 million.

- **Sewer Pump Station and Temporary Pressure Mains**

The DCP No.3 has finalised funding contributions towards the sewer pump station, on former Lot 49 Keane Road and former Lot 50 Wright Road, and the associated temporary pressure mains to allow subdivision in the area. The sewer pump station has formally been handed over to the Water Corporation. This financial year has seen the Water Corporation undertake substantial works on the site.

- **Balannup Drain Crossings**

Works relating to the Balannup Drain trunk water main crossings within Newhaven Estate have been formally approved by the Water Corporation. Reimbursement to Stockland for said prefunded works has been approved by the City. This completes the Balannup trunk main crossings funded through DCP No.3.



IMAGE 5 - Clause 3.6.3 (7) (a) and (b) Vertu Post
Development Balannup Drain Multiple Use Corridor



IMAGE 6 - Clause 3.6.3 (10) (a) Heron Park Post
Rehabilitation Conservation Category Wetland

- **Nicholson Road Culvert - Balannup Drain**

The period since the last review of the Infrastructure Cost Schedule has seen the finalisation and reimbursement for costs relating to the Nicholson Road culvert installation and reinstatement of road pavement. This project is now finalised and becomes a fixed cost during this review period.

- **Balannup Drain Land Acquisition** (refer to Images 4 and 5)

The City, in accordance with the Deed of Agreement, has conducted a final survey for land acquired from Lot 53 Skeet Road for arterial drainage purposes (now Lot 5000 Reilly Road). This marks the finalisation of the purchase price and demonstrates the City's compliance with the Deed of Agreement. During the period since the last review, the City through DCP No.3 has completed acquisition of land for the Balannup Drain within Vertu Estate (former Lot 50 Wright Road) and the majority of land within Heron Park Estate (former Lot 49). Acquisition has now been completed for over 45% of the Balannup Drain, as identified in the Infrastructure Cost Schedule. The total cost of land acquisition for drainage purposes in the Infrastructure Cost Schedule 2011 is over \$5.4 million.

- **Dual Use Path**

The DCP No.3 has contributed to over 4.5kms of Dual Use Paths in Newhaven Estate, Heron Park, Vertu Estate, Arion Estate and other areas. The implementation of the Dual Use Path network identified in the Infrastructure Cost Schedule will provide a valuable asset, in the order of \$3.5 million, to the permeability and accessibility of Harrisdale, Piara Waters and the wider City.

- **Community Nutrient Education Program**

This year has seen the finalisation of the Community Nutrient Education Program contract between the City as the administrator of DCP No.3 and the South East Regional Centre for Urban Landcare. The project delivered some good outcomes towards educating and promoting nutrient management in North Forrestdale. The project's final report was considered by Council at its meeting on 28 March 2011. The DCP No.3 has a total of over \$300,000 towards community nutrient education in North Forrestdale.

- **Conservation Category Wetland** (refer to Image 6)

The DCP No.3 has successfully acquired the land for two (2) of the three (3) Conservation Category Wetlands (CCWs) identified for acquisition. Acquisition of the third CCW and rehabilitation of the CCWs by the developer needs to be carried out before this item can be finalised. This is expected to occur this financial year as the final stage is released for the original area of the Heron Park Estate. In total, DCP No.3 has over \$1.5 million towards the acquisition of rehabilitated CCW's.

- **132kV Power Lines**

The DCP No.3 has finalised contributions towards the reconfiguration of the 132kV power lines through Heron Park and Vertu Estate. The contribution towards the reconfiguration of the 132kV power lines will be ongoing as affected lots in the North Forrestdale South East and North Structure Plans develop. This is a key component of DCP No.3 and required to ensure subdivision could occur.

DETAILS OF PROPOSAL

It is proposed to adopt the Infrastructure Cost Schedule 2011, the Assessed Values included within it, a Gross cost of Common Infrastructure Work of \$70,933,132.45, Common Infrastructure Work of \$44,687,907.26, lots to be produced in the unsubdivided balance of 3,525 and a Cost Contribution per Lot of \$12,678.87.

COMMENT AND ANALYSIS

Overview – Financial Risk Management

The City of Armadale is required to act as the administrator of Development Contribution Plan No.3, which will deliver a significant number of benefits to the City and its future residents. The developer Contribution Costs are determined by the Infrastructure Cost Schedule and are required to cover all associated costs incurred by the City in managing the Development Contribution Plan. The City aims to complete all of the Common Infrastructure Works in a timely manner and aims to ensure that there are no funding shortfalls. Annual review of the Infrastructure Cost Schedule aims to ensure equity of payment by developers over time.

Variables that can affect the aims and ultimate outcome include the accuracy of predicted costs and the number of Cost Contributions paid, and Council's ability to provide financial and project management support at critical times.

The accuracy of predicted costs has been maximised to the greatest extent practicable at this stage but for a project likely to be implemented over a 10 year span this is a difficult task and some estimates have had to be made. However, the Infrastructure Cost Schedule must be reviewed at least annually and costs reviewed at this time. As projects identified in the Infrastructure Cost Schedule are completed, they become fixed costs.

Projects which require Council's financial or project management support have generally been included in the City's 15 Year Forward Financial Plan. Although in most instances the financial support required from Council in relation to the total project are reasonable, if the funds are not available and the project cannot proceed it may then be subject to pressures such as increasing costs or suggestions to increase the scope of the project.

Clause 6B.8.1 of Town Planning Scheme No.4 provides that any shortfall in infrastructure costs after collection of all contributions may be made good by raising loans, entering into agreements with owners to fund the shortfall, or by the City funding the shortfall from its municipal fund. In accordance with Clause 6B.8.2, if there is an excess when works are completed, the City is to use the excess funds for the provision of additional facilities in the Development Contribution Area.

The City's careful management of Development Contribution Plan No.3 through annual review of the Infrastructure Cost Schedule should prevent any significant shortfall occurring or additional costs being imposed on the City. It is important to note that the Development Contribution Scheme enables the urban development of Piara Waters and Harrisdale and that without the operation of this DCP, the development would not have occurred.

Public Advertising

The Infrastructure Cost Schedule and Proposed Values were advertised for a period of 28 days, closing on Wednesday 25 May 2011. A notice was placed in the local newspapers stating that, during the advertisement period, the Draft Infrastructure Cost Schedule 2011 would be accessible on the Out for Comment section of the City's website. A covering letter, stating where to access the Draft Infrastructure Cost Schedule 2011, was also sent to 44 landholders holding large land parcels with subdivisional potential within DCA03 and/or to their planning consultants.

Two (2) submissions were received on the Infrastructure Cost Schedule and no submissions on the Proposed Values.

Refer to Confidential Attachment "B5" of the Agenda for location plan of submitters.

The issues raised by the submissions have been summarised and a recommendation made on each submission in Attachment "A7" (Schedule of Submissions) of the Minutes.

ANALYSIS

Preparation of the Infrastructure Cost Schedule and Assessed Values

Cost estimates have come from a range of sources including specialist consultants, relevant Managers within the City and State service providers. There is an appropriate level of accuracy throughout the infrastructure items which generally correlates to the level of design and planning that has been undertaken. Decisions have needed to be made on each item regarding the desired outcome, the level of cost accuracy that should be applied, whether or not a contingency should be included, and in the case of contributions or grants the value of the contribution or grant.

As detailed above, where land is identified as part of a Common Infrastructure Work the process shown on the attached flowchart has been followed to arrive at Assessed Values. To comply with Clause 3.12.5 of Schedule 13B, the Infrastructure Cost Schedule 2011 incorporates an additional 10% to the Assessed Values. The additional 10% assists with the early acquisition of land and helps prevent the loss of opportunities for acquisition.

Gross cost of Common Infrastructure Works – (Calculation of “A”)

The DCP No.3 details the calculation of the Gross cost of Common Infrastructure Work as the calculation of “A”. The Gross cost of Common Infrastructure Work is the total of all estimated costs and established fixed costs in the Infrastructure Cost Schedule.

Main Changes to Gross Cost of Common Infrastructure Works – (Calculation of “A”) from Advertised Draft Infrastructure Cost Schedule 2011.

As noted in the report to Council in May 2011, further investigations were being undertaken on some DCP items and cost estimates. The Gross Cost of Common Infrastructure Works has increased by 1.5% from the Draft Infrastructure Cost Schedule 2011. Notable costs which are now updated and/or included are:

- ◆ **Item 3b Nicholson Road Service Relocations** – Due to a Western Power policy change there is an aerial power line, originally scheduled to be decommissioned, that the City is now required to relocate underground in order to undertake the upgrade of Nicholson Road. Indications on the cost estimate are in the order of \$475,000 to undertake these works. The City is required to relocate two 132kV power poles at Keane Road in order to facilitate the necessary intersection treatment. The relocation cost, provided by Western Power of \$86,000, has been updated in the Infrastructure Cost Schedule 2011. Cost estimates to relocate the underground high voltage power line that services the Water Corporation’s pumping station has been refined to \$290,000 which indicates a cost saving of \$268,250. This can be used to partially offset the above mentioned additional service relocation costs. The DCP No.3 Item 3b Nicholson Road construction cost estimate has been adjusted accordingly.
- ◆ **Item 7f James Drain** – The cost of acquiring land for James Drain (1 in 10 year average interval event) had been added to the Draft Infrastructure Cost Schedule 2011 and advertised as per the above mentioned process. This has now been updated in the Infrastructure Cost Schedule 2011 for final adoption.
- ◆ **Item 8b Piara Waters (North) Community and Sporting Facility** – A submission received during the advertising period provided qualified evidence which indicated that the Draft ICS 2011 cost estimate for landscaping did not include the cost for the implementation of more advanced trees. The cost for this is estimated at \$30,000 and has been adjusted in the Infrastructure Cost Schedule 2011. During the advertising of the Draft Infrastructure Cost Schedule 2011 the City received formal notification that a grant for \$500,000 has been awarded for the first stage of works at Piara Waters (North) Community and Sporting Facility. The grant component for the stage 2 works at this facility has been updated to \$500,000 based on advice. The Infrastructure Cost Schedule 2011 has been updated to reflect these grants.

Estimated Lot Yield in Unsubdivided Balance – (Calculation of “D”)

The Estimated Lot Yield is the number of lots to be produced in the unsubdivided balance and is represented in DCP No.3 as the calculation of “D”. The Estimated Lot Yield denotes the number of lots within DCA03 that, when subdivision occurs, will contribute to the Cost of Common Infrastructure Work. The Draft Infrastructure Cost Schedule 2011 is proposing an unsubdivided balance of 3,525 lots.

The City has previously committed to monitoring the rate within the calculation of “D”, at 10 lots per hectare, specified by Clause 3.4.1 in Schedule 13B. In 2008, subdivision within DCA03 was achieving a developed density of 10.08 lots per hectare and increased to 10.91 lots per hectare in 2009. During the 2010 review, the density of lots per hectare decreased from 10.91 lots per hectare to 10.77. This review period has seen the density of lots per hectare decrease further to 10.63. It is evident the rate specified in Clause 3.4.2 (a), of 10 lots per hectare is still appropriate for DCA03 and there is no substantial evidence to warrant amending the rate. The development density of lots produced within DCA03 will continue to be monitored closely during future reviews.

Cost Contribution per Lot – (Calculation of “E”)

The Cost Contribution per Lot is represented as the calculation of “E” in the Infrastructure Cost Schedule 2011. The Infrastructure Cost Schedule 2011 proposes the value of “E” as \$12,678.87. Based on the proposed Infrastructure Cost Schedule 2011, the Contribution Cost per Lot will increase by 2.67% from \$12,349.55 per lot in the Draft Infrastructure Cost Schedule.

The increase from the Draft Infrastructure Cost Schedule can be attributed to a number of factors relating to the implementation and provision of Common Infrastructure Work prescribed in DCP No.3; such increases have been identified above in the calculation of “A” detailed above in this report under “*Main Changes to Gross Cost of Common Infrastructure Works – (Calculation of “A”) from Advertised Draft Infrastructure Cost Schedule 2011*”. Although the Contribution Cost per Lot has increased it is reasonable in comparison to submitter’s requests and through the City’s success in obtaining grant funding.

Review to include North Forrestdale Stage Four Structure Plan Harrisdale East (Amendment No.56)

When Amendment No.56 is gazetted, the City will need to undertake a further review of the Infrastructure Cost Schedule to include the following items; multiple use community and sporting facility and senior ovals, a contribution to the construction of Keane Road between Skeet Road and Anstey Road, construction and land acquisition for an upgrade of Balannup Road from Reilly Road and Ranford Road, dual use paths network, construction of Reilly Road between the existing pavement of Reilly Road and Balannup Road and construction of Skeet Road between Keane Road and the northern boundary of Reilly Road, if they are granted approval by the Minister. This Infrastructure Cost Schedule review will also include updates of other Common Infrastructure Works.

OPTIONS

1. Council may resolve to adopt the Infrastructure Cost Schedule 2011 and associated Assessed Values.
2. Council may resolve to further revise the Infrastructure Cost Schedule Items before adopting the Infrastructure Cost Schedule 2011 and Assessed Values.

CONCLUSION

The Infrastructure Cost Schedule represents a 10 or more year forward plan bound by Development Contribution Plan No.3. The document has been prepared to a standard which is considered satisfactory to minimise the financial risks to Council. Advertising the Infrastructure Cost Schedule provided the opportunity for qualified comment on the costs and provides a time when the Infrastructure Cost Schedule can be audited. Option 1 is recommended.

D52/6/11 RECOMMEND

That Council:

1. **In accordance with Clauses 3.12 and 3.13 of Schedule 13B in the City's Town Planning Scheme No.4 adopt the proposed Assessed Values and the Infrastructure Cost Schedule 2011 which includes a Gross Cost of Common Infrastructure Works of \$70,933,132.45, Common Infrastructure Works of \$44,687,907.26, lots to be produced in the un-subdivided balance of 3,525 and a Cost Contribution per Lot of \$12,678.87.**
2. **Advise submitters of Council's decision.**

MOVED Cr Shaw
MOTION CARRIED (7/0)

****REVIEW OF FENCING LOCAL LAW**

WARD : ALL
DATE : 12 April 2011
FILE LL/LE//9
REF : GW
RESPONSIBLE : A/EDDS
MANAGER

In Brief:

- Council at its meeting of 23 May 2011 (D44/5/11) resolved to amend and advertise amendments to the Local Law. However, the City's Governance and Administration has since advised that the resolution needs to be amended to reflect new procedures.
- The City's Local Law Relating to Fencing requires review in accordance with section 3.16 of the Local Government Act 1995.
- Council is required to determine whether or not it considers that the local law should be repealed or amended.
- Recommend that the local law be repealed and replaced with a new local law.

Tabled Items

Nil.

Officer Interest Declaration

Nil

Strategic Implications

- 2.1 Long term planning and development that is guided by a balance between economic, social and environmental objectives.
- 2.1.1 Review, update and implement the City's Town Planning Scheme, taking into account the Local Biodiversity Strategy and other environmental considerations.

Legislation Implications

Local Government Act 1995 (LG Act)

Council Policy / Local Law Implications

Local Law Relating to Fencing to be amended in accordance with section 3.12(3) of the Act. Western Australian Local Government Association (WALGA) Local Laws Manual 2010,

Budget / Financial Implications

Advertising and procedural costs can be accommodated within the Development Services budget. Building Services currently undertake compliance and respond to complaints regarding fencing, however there are limited resources to investigate such matters.

Consultation

Building Services
Planning Services

BACKGROUND

The purpose of a local law (as set out under Section 3.5 of Local Government Act 1995) is to enable a local government to perform any of its functions under this Act or any other relevant Act.

Fencing local laws are common across most local governments and are required in order to define a “sufficient fence” for the purpose of Section 16 of the Dividing Fences Act 1961.

Section 16 of the Dividing Fences Act states the following:

A sufficient fence, in relation to a dividing fence or a boundary fence means:

- (a) any fence prescribed by a local law as a sufficient fence for the part of the local government district in which the dividing fence or boundary fence is, or is to be, erected; or*
- (b) any fence of the description and quality agreed upon by the parties concerned which does not fail to comply with any local law referred to in paragraph (a), or where no such local law or agreement is made, means:*
- (c) any substantial fence that is ordinarily capable of resisting the trespass of cattle and sheep; or*
- (d) any fence determined to be a sufficient fence by the court pursuant to this Act;*

It is important to note that boundary fencing is predominantly a civil matter and is administered through the Dividing Fences Act 1961. Disputes over boundary fencing are handled through the civil courts, however the City’s Building Services has jurisdiction to enforce any specific breaches of the local law.

The fencing local law is a supplement to the Dividing Fences Act and prescribes minimum fencing standards including materials, types and structural specifications.

In accordance with section 3.16 of the LG Act, local laws require review within eight years of their commencement. The City has already provided Statewide public notice of its intent to review the *Local Law Relating to Fencing* (2000) during which no submissions were received following the 6 week advertising period (which closed on 5 February 2010).

In accordance with section 3.12(3) of the LG Act, Council is now required to determine whether or not it considers that the local law should be repealed or amended and advertise its intent accordingly.

Council at its meeting of 23 May 2011 (D44/5/11) subsequently resolved to amend and advertise amendments to the Local Law. However, the City’s Governance and Administration has since advised that the resolution needs to be amended to reflect new procedures.

DETAILS OF PROPOSAL

Whilst the City's *Local Law Relating to Fencing (2000)* is relatively robust and has operated without significant challenge since its commencement, it does contain a number of anomalies and requires amending to reflect current fencing standards and practices.

Whilst the primary intent and effect of the current local law is not being altered, given there are numerous minor amendments proposed and the format/numbering has changed, it is considered appropriate to repeal the current local law and replace it with a new local law.

A brief summary of the key proposed amendments include the following:

1. Rename the "Title" of the local law;
2. Amend the "Interpretations" to update terminology and add new definitions to reflect current practices and address areas of the City zoned Special Residential and identified within Development (Structure Planning) Area No.1 on Special Control Area Map No.3 of the City's Town Planning Scheme No.4;
3. Amend provisions relating to "Sufficient Fences" to provide greater clarity and add a provision requiring a fence to be erected at all times;
4. Amend provisions relating to "Fences within Front Street Setback Area" to reflect Residential Design Codes of Western Australia requirements and add new provisions for *Commercial* and *Industrial Lots*;
5. Amend provisions relating to "Fencing Materials" to provide greater clarification, consolidate existing provisions and add new provisions relating to uniform fencing and screening materials;
6. Relocate existing fencing specifications relating to "Tennis Courts" under a new Fourth Schedule;
7. Amend provisions relating to "Electrified Fencing" by deleting the requirement to obtain a licence and inserting "as of right" provisions;
8. Insert a new section "Application Requirements" to clarify how an application can be made and is to be determined for any discretionary matters under the local law;
9. Amend the provisions relating to "Offences" to reflect WALGA model Local Law provisions and increase the modified penalty from \$100 to the maximum of \$500 for any breach;
10. Amend the specifications contained in the First Schedule to reflect current Building Code of Australia and fencing construction standards for masonry fences, deleting reference to "Open Aspect Fencing" and increasing the maximum height of a fence from 1.8m to 2.1m to accommodate screening material;
11. Amend the Third Schedule by inserting reference to Special Residential Lots.

In addition to the above, other minor changes have been made in order to streamline existing provisions and reformatting (including renumbering as required) of the text for improved legibility and ease of reference.

The existing and proposed new local law are included at Attachments "A2" and "A3" of the Minutes.

COMMENT

Further explanations of the key proposed amendments to the local law are outlined below. It should be noted that existing clauses are quoted where relevant and proposed renumbering of such clauses are indicated in brackets.

1. *Renaming Title*

The current title *Local Law Relating to Fencing* is relatively wordy and inconsistent with the titling convention of other City Local Laws. The title has been simplified and renamed to *Fencing Local Law*.

2. *Amendments to “Interpretations” (Definitions)*

- (a) The definitions of *Commercial Lot*, *Industrial Lot*, *Residential Lot* and *Rural Lot* have been amended to reflect the specific zonings of Town Planning Scheme No.4 and any relevant zoning under a structure plan or any other Town Planning Scheme.

According to WALGA, it has been a longstanding practice of Local Governments to use generic descriptions when referring to parts of the district where a sufficient fence applies (i.e. “residential lot”, “rural lot”, “industrial lot” etc). WALGA’s Model Local Law recommends that Local Governments reference (where a relevant sufficient fence applies) from zoning descriptions contained in their Town Planning Scheme.

Whilst the current definitions refer to zoning in part, they are considered to be ambiguous as they refer to generic zones and land uses which “*are approved or may*” be permitted under the TPS or being the predominant use on a lot. Generic zones and land uses are not defined under the local law nor reflect the specific use classes contained in the TPS and are therefore difficult to interpret.

Defining lots by specific zones is considered to be the simplest and most effective method to identify where a relevant sufficient fence should apply.

It should be noted that the definitions also include reference to “*an equivalent zone under a Town Planning Scheme*” to capture areas which fall outside the City’s TPS No.4 control, including the Armadale Redevelopment Authority (ARA). The ARA Redevelopment Scheme (2004) and associated structure plans contain a number of differently named precincts as compared to the succinct zones of TPS No.4. Instead of incorporating all ARA precincts into the definitions (which are likely to change overtime and eventually be aligned with TPS No.4 as part of the normalisation process in any case), it is considered that such precincts are adequately covered by reference to the corresponding TPS No.4 zone.

- (b) The definition of *Commercial Lot* has been amended to specifically exclude reference to a lot “*occupied by residential premises*”.

Residential development is permissible within the District Centre, Local Centre and Mixed Business/Residential zones under the TPS. In order to protect the amenity of residents on such lots from potential adjoining commercial uses and prevent a lower standard (i.e. chain link mesh) being the basis of a sufficient fence, the definition of a *Commercial Lot* must specifically exclude lots occupied by residential premises.

Consequently, the definition of *Residential Lot* must include reference to lots occupied by residential premises in order to encompass such lots that fall within commercial areas and to invoke the higher residential standards of fencing contained in the First Schedule.

- (c) Two new definitions of *Special Residential Lot* and *Development Area No.1* have been added to encompass lots zoned Special Residential and land identified within Development (Structure Planning) Area No.1 on Special Control Area Map No.3 of the City’s Town Planning Scheme No.4, as the current local law does not address such lots.

Fencing in the Special Residential zone and Development Area No.1 is currently controlled by the City’s TPS via structure plan provisions. The existing TPS provisions are relatively simple and generally require fencing to be of “open-style rural fencing”, however do not prescribe specific construction specifications. As the type of fencing within such areas is consistent with the existing fencing specifications for *Rural Lots* under the local law, it is appropriate that the same standards should apply.

It should be noted that it was never the intent of TPS No.4 to control or enforce boundary fencing requirements as demonstrated by Clause 8.2 (j) which exempts the need to obtain planning approval for “*the erection, construction, maintenance, improvement or alteration of a boundary fence*”. In this regard, the local law is considered to be a much simpler and more efficient method of administering fencing throughout the City

In order to avoid unnecessary duplication and simplify compliance matters in the future, it is also recommended that reference to fencing types be deleted from TPS No.4 (including relevant Structure Plans and Planning Policies) as part of a separate text amendment.

- (d) A new definition of *Screening* has been added to acknowledge the common practice of affixing screening materials to fences and to reflect current terminology as referenced in the Residential Design Codes of Western Australia (RD Codes).

The current local law does not define screening or clarify how it should relate to a fence in terms of height and materials. The definition of *Fence* has subsequently been amended to include reference to screening and invoke new provisions of Clause 4.2 – Screening of the local law.

- (e) The definition of *Height* has been amended to address and clarify circumstances where the natural ground levels have been altered due to a retaining wall being erected along a boundary. In accordance with the RD Codes, the height is measured from the new finished ground level, being the top of the retaining wall for ease of determination.
- (f) A new definition of *Visually permeable* has been added to reflect current terminology as referenced in the RD Codes and clarify existing provisions and circumstances where open style fencing is required under the local law.
- (g) A new definition of *Uniform fencing* has been added to clarify and differentiate this type of fencing from the meaning of a sufficient fence. The terminology uniform fencing is commonly used to describe a fence erected by a developer as part of a subdivision or development approval which separates a lot from a public place and is usually of a much higher standard than a sufficient fence.

3. *Amendments to Part 2- Sufficient Fences*

- (a) A new clause 2.1(2) has been added requiring a sufficient fence to be erected at all times.

The current local law only prevents a person from erecting a fence that does not meet the specifications contained in the relevant First, Second or Third Schedules. There is currently no provision that requires a person to erect a fence or ability for the City to enforce the erection of a fence should such circumstances arise.

- (b) Reference to *Special Residential Lot* and *Development Area No.1* has been added to clause 6(2)(c) [Renumbered to clause 2.1(3)(c)] to invoke the provisions of the Third Schedule.
- (c) Clause 6(3)(b) [Renumbered to clause 2.1(4)(b)] incorrectly referred to the Second Schedule and has been replaced with the First Schedule to ensure a higher standard of fencing between a *Residential Lot* and *Commercial Lot*.

4. Amendments to Part 3- General (Fences within Front Street Setback Area)

- (a) Clause 7(1) [Renumbered to clause 3.1(1)] has been amended to permit visually permeable fencing above 1.2m up to a maximum height of 1.8m on a *Residential Lot*, to ensure consistency with RD Code requirements.
- (b) A new clause 3.1(2) has been added to preclude any fencing forward of the building line on a *Commercial Lot* in order to protect the existing amenity of shopping precincts throughout the district.
- (c) A new clause 3.1(3) has been added to require front fencing on an *Industrial Lot* to be visually permeable above 1.2m and to prevent solid fences dominating the streetscape.
- (d) Clause 7(2) [Renumbered clause 3.1(4)] has been streamlined and amended to reflect RD Codes requirements relating to truncations and reduced fence heights adjoining vehicle access ways.

5. Amendments to Part 4- Fencing Materials

- (a) Clause 11(1) [Renumbered to Clause 4.1(1)] has been reworded to correlate with the provisions of Part 2-Sufficient Fences and the First, Second and Third Schedules.

The current provision is poorly worded and does not differentiate fencing material and the relevant lot type. It implies that all the listed fencing materials can be used on any lot and contradicts the First, Second and Third Schedules.

- (b) A new Clause 4.1(2) has been added to prescribe a minimum fencing material for uniform fences. A new Clause 4.4(2) has also been added to prohibit uniform fences being altered or any visually permeable section being enclosed or screened.

The City currently has no prescribed standards for uniform fences, however it is common practice to encourage and request developers to construct uniform fences from predominantly masonry materials due to their durability and aesthetic appeal along public places. The City also requires visually permeable sections above 1.2m to be incorporated into such fences to provide opportunities for passive surveillance of public open space.

- (c) A new Clause 4.2 has been added to control the use of screening on a *Residential*, *Commercial* and *Industrial Lot* and to ensure screening material is designed to integrate with a fence in terms of colour, materials and structural specifications.

6. Amendments to Part 5- Tennis Court Fencing

Part 5 has been deleted and the fencing specifications for Tennis Courts have been inserted into a new Fourth Schedule for ease of reference. No changes are proposed to the specifications.

7. *Amendments to Part 6- Electrified Fencing*

Part 6 [Renumbered to Part 5] has been amended by deleting the requirement to obtain a licence, inserting “as of right” criteria for an *Industrial Lot* only and precluding the use of electrified fences on a *Residential Lot*, *Special Residential Lot* and *Commercial Lot*.

The need to obtain a licence from the City is superfluous as electrified fences must be installed by a licensed electrician and comply with Australian Standards accordingly.

8. *Inserting new provisions relating to Application Requirements*

A new section Part 6-Application Requirements has been added to clarify how an application can be made and determined for any discretionary matters under the local law.

9. *Amendments to Part 8- Offences*

Part 8 [Renumbered and retitled to Part 7- Offences and Enforcement] has been amended and streamlined to reflect WALGA Model Local Law provisions and increase the modified penalty from \$100 to the maximum of \$500 for any breach.

10. *Amendments to “First Schedule”*

(a) The specifications contained in the First Schedule relating to masonry fencing only have been updated to reflect current Building Code of Australia and fencing construction standards.

(b) Part A-Open Aspect Fencing has been deleted as the provision is ambiguous and reference to “*wooded urban areas*” is not defined under the local law. It is also inconsistent with the other higher sufficient fence specifications applicable to a *Residential Lot*.

11. *Amendments to “Third Schedule”*

Reference to *Special Residential Lot* and *Development Area No.1* has been added to the Third Schedule to correlate with the provisions of Part 2 –Sufficient Fences.

OPTIONS

Council could:

1. Review the local law and advertise its intent to amend the existing Local Law Relating to Fencing.
2. Review and repeal the existing Local Law Relating to Fencing and advertise its intent to adopt a new Fencing Local Law.
3. Review and make no changes to the local law.

CONCLUSION

The City's *Local Law Relating to Fencing (2000)* is outdated and contains a number of anomalies. The local law needs to be amended to address such anomalies to ensure the City can effectively administer and enforce fencing standards throughout the district. In addition, the local law needs to be brought into line with current fencing standards and practices. In this regard, it is recommended that Council adopt Option 2 above.

D53/6/11 RECOMMEND

That Council:

1. **Rescind previous resolution D44/5/11 as resolved by Council on 23 May 2011, which reads as follows: “*In accordance with Section 3.12(3) of the Local Government Act 1995 Statewide public notice be given stating that – the Council of the City of Armadale intends to adopt amendments to Local Law Relating to Fencing as specified in Attachment “A2” of the Minutes.*”****
2. **Pursuant to section 3.16 of the *Local Government Act 1995*, agree to repeal the City of Armadale Local Laws Relating to Fencing****
3. **Resolve its intent to adopt the new City of Armadale Fencing Local Law:**
 - a) **The purpose of which is to provide a sufficient fence for the purposes of the *Dividing Fences Act 1961* and to state the materials to be used and safety measures to be taken for some types of fencing.**
 - b) **The effect of which will enlarge the compliance requirements of the *Local Government (Miscellaneous Provisions) Act 1960* in the erection and maintenance of fencing.**
4. **In accordance with the provisions of Section 3.12(3) of the *Local Government Act 1995* advertise for public comment the proposal to repeal the City of Armadale Local Laws Relating to Fencing and adopt the *City of Armadale Fencing Local Law as detailed at Attachment “A3” of the Minutes.***

**** ABSOLUTE MAJORITY REQUIRED**

MOVED Cr Tizard
MOTION CARRIED (7/0)

PLANNING INSTITUTE OF AUSTRALIA (WA DIVISION) 2011 CONFERENCE – 17 & 18 NOVEMBER 2011 – MANDURAH

WARD : ALL
DATE : 10 June 2011
REF : HC
RESPONSIBLE : EDDS
MANAGER

In Brief:-

- The PIA WA Division is conducting its 2011 State Conference at the Mandurah Performing Arts Centre, Mandurah, on 17 and 18 November 2011.
- Matters to be covered should be of relevance to Armadale.
- Recommend that consideration be given to nominating a Councillor to attend.

Tabled Items

Nil.

Officer Interest Declaration

Nil.

Strategic Implications

Relates to the aim for good governance and leadership to:

- 4.1.1 Strengthen the governance role of Councillors by informing, resourcing, skilling and supporting their role.

Legislation Implications

Nil.

Council Policy / Local Law Implications

Council Policy ADM3 – Conferences and Training
Council Policy EM1 – Reimbursement Councillor's Expenses

Budget / Financial Implications

Conference Fees –

- ♦ For PIA Members - \$550 prior to 6 August, \$650 from 7 August to 28 October and \$750 after 31 October 2011.
- ♦ For Non-Members - \$700 prior to 6 August, \$800 from 7 August to 28 October and \$850 after 31 October 2011.

DETAILS OF CONFERENCE

The Planning Institute of Australia WA Division (PIA) is conducting its 2011 State Conference, entitled “Beyond Planning: Vision > Commitment > Infrastructure”, at the Mandurah Performing Arts Centre, Mandurah on Thursday and Friday 17 and 18 November 2011. ***A copy of the Conference Brochure is at Attachment “A4” of the Minutes.*** Study tours (information not available at this stage) will be conducted on Thursday 17 November and the conference program sessions will be held on Friday 18 November 2011.

The MC for the event will be Gary Carvolth. The Stephenson Memorial Lecture will be delivered by Stuart Hicks AO, Chair of the East Perth Redevelopment Authority.

Keynote Speakers at the conference include:

- ◆ Dyan Currie – National President of the PIA and Manager of Strategic Land Use for Toowoomba Regional Council, Queensland;
- ◆ Peter Baines – Leadership Expert and Socialpreneur (“Leadership Matters”);
- ◆ Steve Maccora – Investment Specialist / Speaker (“Addicted to Debt”);
- ◆ Kwende Keftense – Cultural Planner, City of Ottawa (“Cultural Planning”);
- ◆ Greg Tokarz – Manager, Transit Infrastructure Policy Office, Ministry of Transportation, Ontario (Planning and Delivery of Light Rail Systems in Ontario”); and
- ◆ Robin Williams AM - Science Journalist, Presenter and Author (“Future Perfect Cities”).

Other speakers include:

- ◆ Alannah MacTiernan (for the Young Planners Panel Discussion);
- ◆ Jane Frances Kelly – Program Director, the Grattan Institute (“Cities – Who Decides”);
- ◆ Bryan J Boruff – Assistant Professor, Oceans Institute and School of Earth and Environment UWA (“When the Rubble Clears: The Role of Recovery Planning and Community Resilience in WA”); and
- ◆ Rob Didcoe – Director Facilities and Camps, Department of Sport and Recreation (“Planning for Public Open Space”).

Many of the topics should be applicable to the Armadale experience and could provide insights on areas that are impacting on the City today.

CONCLUSION

Officers will be attending the 2011 PIA Conference.

The matter is brought to the attention of Council to determine if it wishes to nominate a Councillor to attend.

D54/6/11

RECOMMEND

- 1. That Councillor Shaw be nominated to attend the PIA State Conference to be held at the Mandurah Performing Arts Centre, Mandurah, on 17 and 18 November 2011, with costs incurred to be charged to GL Account 210128.1046.02.**
- 2. That the matter be referred to full Council in the event that any member wishes to be nominated.**

MOVED Cr Shaw
MOTION CARRIED (7/0)

LATE ITEMS

Nil.

COUNCILLORS' ITEMS

Cr MacDonald

1. **Policies relating to the Development Contribution Scheme**

Cr MacDonald requested that policies relating to the Development Contribution Scheme be of some consistency when referring to landscaping and the provision of facilities in local parks.

D55/6/11 RECOMMEND

That Councillor item regarding policies relating to the Development Contribution Scheme being of some consistency when referring to landscaping and the provision of facilities in local parks be referred to the appropriate Directorate for action and/or report back to Committee.

EXECUTIVE DIRECTOR DEVELOPMENT SERVICES REPORTS

1. **Churchman Brook Estate – Transfer of Community Building & Facilities and Finalisation of Legal Agreement Requirements**

The developer (Jim Paton) of the Churchman Brook estate has largely completed their subdivision and nearly all of the land sales for the main part of their estate, which is included in the 1994 Legal Agreement (Deed) between the City and developers. The City required the developers to enter into the Legal Agreement prior to executing the scheme amendment documents for the rezoning of Lots 1 and 2 to allow special residential subdivision. The Legal Agreement required the developers to fund and/or construct community facilities, maintenance of POS, underground power, construct Waterwheel Road, provide unconstructed walk trails, prepare and implement a Landscape Master Plan, revegetation of a portion of Settlers Common, transfer the recreational and community facilities to the City in fee simple free of cost, transfer of a lot to Telecom (now Telstra), contributions for fire fighting and upgrading of Carradine Road, etc. The Legal Agreement provided for the City to lodge an absolute caveat over Lot 101 to protect the City's interests in the Legal Agreement.

The developer has completed all of these works and has transferred Lot 188 to the City in fee simple free of cost (includes recreational and community facilities). The City has agreed to the removal of a caveat over Lot 101 Waterwheel Road to allow the land to be subdivided into special residential lots in accordance with the subdivision approval issued by the WAPC.

The developer has prepared a Constitution or Rules for the Community Association and advised that they have provided the document to purchasers as required by the Legal Agreement. Whilst the Legal Agreement intended that the Community Association would manage and maintain "*the Community Facilities and other public lands within the Estate by agreement with the Municipality*", it would be quite difficult for a Community Association to manage such facilities to the required standards and raise the required funding for this management. It is now proposed that the City will manage the recreational and community facilities on Lot 188 for public use.

The developer intends to maintain the community building and utilise the hall (for a sales office) until July/August 2011 (or possibly longer). The City raises no objection to the developer continuing to use the community building. The Community Services Directorate are currently considering possible uses and fit out of the community building and the booking arrangements for the tennis courts. The Technical Services Directorate are proposing to include the additional operating and capital costs (i.e. fit out) of the community building in their next budget. A Location Plan and photo's of the community building and surrounds are included at ***Attachment "A5" of the Minutes.***

2. **Water Corporation - Alteration to the Declared Drainage Area**

The City has recently become aware that the Water Corporation has added additional areas of the City to its Declared Drainage Area, including parts of Forrestdale, Harrisdale, Piara Waters and Haynes. Several residents have approached the City and Councillors raising queries about the new drainage rates. A local resident has provided the City with copies of two letters and an information sheet the Water Corporation has recently sent to landowners, which are included at ***Attachment "A6" of the Agenda.*** The new drainage rates are scheduled to apply from 1 July 2011. The City has been seeking further clarification from the Water Corporation on the new drainage rates.

3. **Directorate presentation to Committee**

Executive Director Development Services advised that the Chairman had requested that the Directorate provide a briefing to the Committee on the activities of each Department. While briefings had recently been provided on the Developer Contribution Scheme and the State of the Environment report, it was suggested that short presentations would be held at the commencement of future Committee meetings by the Planning, Health and Building Departments.

4. **Development Assessment Panels(DAPs)**

It was noted that development in excess of \$7 million would be referred to the newly established DAPs after 1st July 2011.

The Eastern Metropolitan DAP (to deal with applications from the districts of Armadale, Gosnells, Kalamunda, Mundaring, Swan and Serpentine-Jarrahdale) comprised of the specialist members Eugene Koltasz (presiding member), Matthew Young and Garry Middle.

From recent history it was not expected that there would be many applications referred to the DAP, and accordingly there would not be many meetings affecting the City. Over the past 12 months only one development application would have qualified.

The meetings of the DAP were expected to rotate although this had yet to be decided.

5. **Successful prosecution**

Executive Director Development Services advised that the City had successfully prosecuted Assured Holdings at 2904 Albany Highway, Kelmscott for illegal building works. The court had set the penalty at \$50,000 with costs.

MEETING DECLARED CLOSED AT 8:18 PM

Questions for the Chairperson presiding over the Development Services Committee meeting on Monday, 20 June 2011. In regard to Retrospective Application - Colourbond Surfmist Roof Installed Lot 115 (No. 69) Brooks Road, Roleystone.

My name is Adrian Malkovic, I reside at 11 Carob Tree Place Lesmurdie and am one of the owners of Lot 108 (14) Tenhave Place Roleystone and put the following questions to the Chairperson.

1. Does the committee have before it or have access to our comment to submission dated 17/04/11 and copies of my e-mails dated 3 May 2011 and 25 May 2011?
2. How did the council officer or officers preparing the report for the committee obtain information from the manufacturers of colourbond roofing material?
3. Did the council officer or officers preparing the report for the committee put to the manufacturers the scenario applicable to Lot 115 (No. 69) Brooks Road, Roleystone and Lot 108 (14) Tenhave Place, Roleystone i.e. a property to the south of and elevated above the reflective roof?
4. If yes, what was the manufacturer's response?
5. If the scenario was not put to the manufacturers, why not?
6. Did the council officer or officers preparing the report for the committee read – Blue Scope Steel Technical bulletin TB 28 – Building Materials, Thermal Efficiency & Reflectivity? (copy attached)
7. If yes, did the council officer or officers note the statement in the case by case assessment "...it is mainly when viewed from the south that roofs can result in glare for any extended period of the day"?
8. Did the council officer or officers note the statement "Issues such as roof pitch and slope of the ground (topography) need to be considered in drawing sketch such as that in Figure 1"?
9. If the Technical Bulletin was read, did the council officer or officers note the other statements in the case by case assessment?
10. Did the council officer or officers draw a sketch to represent the two properties in question (Lot 115 & Lot 108) as suggested in the Technical Bulletin?
11. If no sketch was drawn, why not?

12. If the council officer or officers did not read the Blue Scope Steel Technical bulletin TB 28 – Building Materials, Thermal Efficiency & Reflectivity, what methodology, test or other information did they use to make an assessment of the loss of amenity to Lot 108 (14) Tenhave Place, Roleystone caused by mirrored glare and reflectivity from the metal roof situated at Lot 115 (No. 69) Brooks Road, Roleystone?
13. Did the council officer or officers preparing the report for the committee read the Blue Scope Steel document titled Reflectivity and New Building Design? (copy attached)
14. If yes, did the council officer or officers note the statement "...that the main potential position of concern is a viewing position located to the south and above a roof"?
15. Did the council officer or officers preparing the report for the committee take the statement "... the main potential position of concern is a viewing position located to the south and above a roof" into account when assessing the likely impact of glare and reflectivity?
16. Did the council officer or officers preparing the report for the committee ask the manufacturers about the mirrored effect and the how a building located to the south and elevated above a reflective roof would be affected by glare & reflectivity?
17. If yes, what was the response from the manufacturer?
18. If the council officer or officers did not read the Blue Scope Steel document titled Reflectivity and New Building Design, what methodology, test or other information did they use to make an assessment of the loss of amenity to Lot 108 (14) Tenhave Place, Roleystone caused by glare and reflectivity from the metal roof situated at Lot 115 (No. 69) Brooks Road, Roleystone?
19. Did the council officer or officers preparing the report for the committee ask the manufacturers the period of time it would take for surfmist to dull to a point when there is little or no reflection or glare?
20. Did the council officer or officers preparing the report for the committee ask the manufacturers for an opinion about the scenario when a neighbouring residential house is to the south, elevated above and overlooking a roof with reflective material?
21. If yes, what was the response by the manufacturer?

22. Did the council officer or officers preparing the report for the committee ask the manufacturers for access to the manufacturers modelling system?
23. If not, why not?
24. What is the floor level of Lot 115 (No. 69) Brooks Road, Roleystone?
25. What is the floor level of Lot 108 (14) Tenhave Place, Roleystone?
26. What is the pitch of the roof of the house situated at Lot 115 (No. 69) Brooks Road, Roleystone?
27. What is the design of the roof (direction of the slopes) of the house situated at Lot 115 (No. 69) Brooks Road, Roleystone?
28. What methodology or test did the council officer or officers preparing the report for the committee use to determine the amount of loss of solar gain through the north facing windows at Lot 108 (14) Tenhave Place, Roleystone if blinds need to be drawn on the northern glazed area during periods of peak reflectivity and glare.
29. What methodology or test did the council officer or officers preparing the report for the committee use to determine when the peak periods of reflectivity and glare would be during summer months?
30. If the council officer or officers did not determine when the peak periods of reflectivity and glare would be during summer months how did they make an assessment that there would be "slight loss of amenity"?
31. How did the council officer or officers preparing the report for the committee determine the acceptable loss of solar gain through the north facing windows at Lot 108 (14) Tenhave Place, Roleystone?
32. Did the council officer or officers preparing the report for the committee estimate how high the proposed vegetation in the landscape plan will need to be before reflection is blocked to the property at Lot 108 (14) Tenhave Place, Roleystone including the side and rear yards?
33. If not, why not?
34. If yes, how did the council officer or officers preparing the report for the committee make the assessment?

35. Did the council officer or officers preparing the report for the committee estimate the length of time it would take for the proposed vegetation to grow before it effectively blocked reflection to the property situated at Lot 108 (14) Tenhave Place, Roleystone including the side and rear yards?
36. If not, why not?
37. If yes, how did the council officer or officers preparing the report for the committee make the assessment?
38. What factors did the council officer or officers preparing the report for the committee take into account when making their assessment?
39. On what date and at what time did the council officer or officers preparing the report for the committee assess glare, reflectivity and loss of amenity?
40. What was the location and position of the council officer or officers preparing the report for the committee that resulted in the statement to the committee "However, adjacent metal roofs that were darker in colour appear equally as reflective as the roof under consideration during the site inspection"?
41. Did council officer or officers disregard metal roofs to the west, east and south of Lot 108 (14) Tenhave Place Roleystone?
42. If not, why not?
43. What criteria did the council officer or officers preparing the report for the committee use to determine "slight loss of amenity"?
44. What criteria did council officer or officers preparing the report for the committee use to determine "slight loss of amenity" for subsequent years?
45. What did the council officer or officers preparing the report for the committee do to ensure their assessment included the sunlight hours during summer?
46. What methodology, test or other information did the council officer or officers preparing the report for the committee use to assess the changing position of the sun during summer?
47. What methodology, test or other information did the council officer or officers preparing the report for the committee use to assess what was an acceptable loss of amenity for Lot 108 (14) Tenhave Place, Roleystone?

48. What methodology, test or other information did the council officer or officers preparing the report for the committee use to determine the loss of amenity at Lot 108 (14) Tenhave Place Roleystone during the summer months?
49. What methodology, test or other information did council officer or officers preparing the report for the committee use to ensure the criteria or threshold for acceptable loss of amenity for residents of Lot 108 (14) Tenhave Place Roleystone was not exceeded in summers months?
50. Did the council officer or officers preparing the report for the committee take into account the mirroring effect?
51. If yes, how?
52. Did the council officer or officers preparing the report for the committee visit any existing properties in the aerial photograph submitted to the committee to ascertain properties with similarity to Lot 115 (No. 69) Brooks Road, Roleystone & Lot 108 (14) Tenhave Place, Roleystone?
53. If yes, how many properties were visited?
54. Can you describe the screening and the type of vegetation surrounding those properties in the aerial photograph presented to the committee?
55. Did any of the properties visited have the same orientation as Lot 115 (No. 69) Brooks Road, Roleystone & Lot 108 (14) Tenhave Place, Roleystone that is one property to the south of, elevated above the property with the reflective roofing material and little or no screening vegetation?
56. How does committee propose to ensure compliance and maintenance of the proposed landscape plan by subsequent owners of Lot 115 (No. 69) Brooks Road, Roleystone?
57. Since the review of Policy PLN 2.2 has the City of Armadale changed instructions regarding reflective roofing material to its officers dealing with building applications and issuing building licences?
58. If yes, what are those instructions?
59. If not, why not?
60. Has the City of Armadale advertised or otherwise informed builders in the area there has been a change in policy regarding reflective roofs and a relaxation of Town Planning Scheme #4 Clause 5.9?

61. If not, why hasn't the City advertised or otherwise communicated this change in approach to builders?

Adrian Malkovic

15 June 2011

BUILDING MATERIALS, THERMAL EFFICIENCY & REFLECTIVITY

TECHNICAL BULLETIN TB-28

Rev 3, December 2010

This issue supersedes all previous issues

INTRODUCTION

Good building design requires some thought in the selection and use of materials. Reflective building materials can benefit the occupants and the environment. However, in limited cases highly reflective materials or surfaces, if not properly used, can cause some annoyance to immediate neighbours (*note: highly reflective materials could include glazing and swimming pools, amongst other things*).

The challenge, therefore, is to develop an understanding of the key issues, to allow a balanced assessment of material choice, in the interests of the occupants, the neighbours and the environment. This note attempts to provide some insight on some of the issues.

INEFFECTIVE POLICIES

All building materials reflect sunlight. Occasionally policies or guidelines are developed with wording such as 'all building materials must be non-reflective'. One implication of such a statement would be that nothing could be built, as all materials are reflective to some extent.

There are several inadequacies in attempting to control the use of building materials based on reflectivity alone. One problem with this approach is that in most Australian climate zones materials with high solar reflectivity can offer better thermal performance (*lower energy costs and/or improved comfort*) than materials with lower reflectivity. Placing limits on reflectivity therefore precludes energy efficient design, to the detriment of the occupants and the environment.

Many other problems are introduced with reflectivity limits. For example, it is inappropriate to have such limits if they are not equally applied to all materials. Materials such as glass may have difficulty in meeting any reflectivity limit if assessed for all lighting angles and not just at normal incidence. While this would mean that some could not be used in any building application, these materials may not be a problem if they do not cause sunlight to be reflected directly back to the observer.

CASE-BY-CASE ASSESSMENT

The most effective method of determining which building materials are appropriate is to conduct a case-by-case assessment. Arbitrary approaches that do not account for site conditions will always be to the detriment of the applicants, the neighbours or the broader environment. A case-by-case assessment can be a reasonably simple process.

Important factors to be considered in appraising a building include:

1. The orientation. A simple sketch of the house in question, the typical position of the sun and the position of any neighbouring dwellings (*see Figure 1*) can be a great help in determining whether any neighbours can receive directly reflected sunlight. If they cannot, then glare will not be an issue.

For typical roofing pitches in the southern hemisphere, if a roof is viewed from the north, it is unlikely that it will ever cause glare. If such roofs are viewed from the west, it is unlikely that glare will occur other than for a short period in the morning. If such roofs are viewed from the east, it is unlikely that glare will occur other than for a short period in the afternoon. It is mainly when viewed from the south that roofs can result in glare for any extended period of the day. Furthermore, due to the sun's ever changing path, glare will normally only be present for a small part of the year.

2. Issues such as roof pitch and the slope of the ground (*topography*) need to be considered in drawing a sketch such as that in Figure 1. Any vegetation or other screening that is present or could be used to shield the view of the roof should also be considered (*see Figure 2*). Owners often go to great lengths to screen swimming pools and even glazing for privacy. If these surfaces were not screened, they would often cause annoying glare.
3. The time of year and the effects of weathering. If glare can occur, it will often be worst during summer, when the sun is at its most intense. Therefore, new

roofs built during summer that have not undergone any weathering cause the most glare for all roofing colours and materials. As the seasons change, the position of the sun will move in the sky and the observer may no longer receive direct reflection. Furthermore, in the case of roofing made from COLORBOND® steel, some weathering will occur over time and by the following year the amount of reflected light will be reduced. While this weathering

process reduces glare, it occurs in a manner that does not substantially affect the thermal performance of the roofing system. It is important to consider the effects of weathering, since the tendency for some materials to cause glare will change considerably with time, while others may continue to cause glare for most or all of their life (terracotta tiles, many types of glazing, swimming pools etc).

Figure 1: Direction tendency of mirrored sunlight to the North and to the South

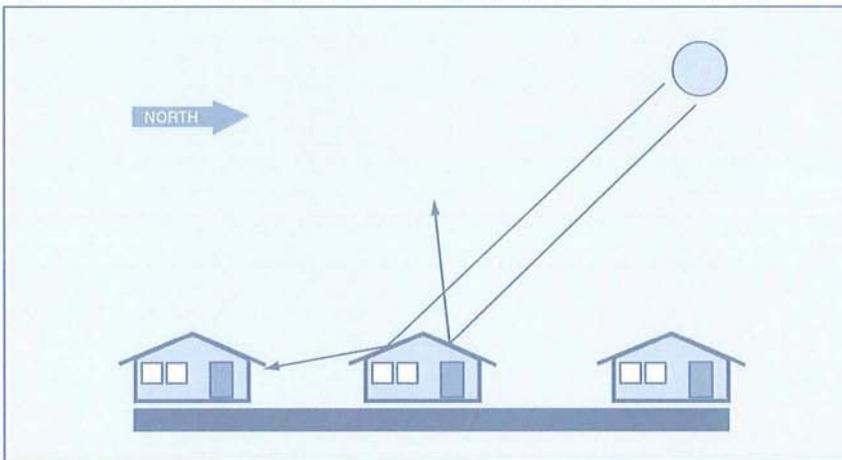
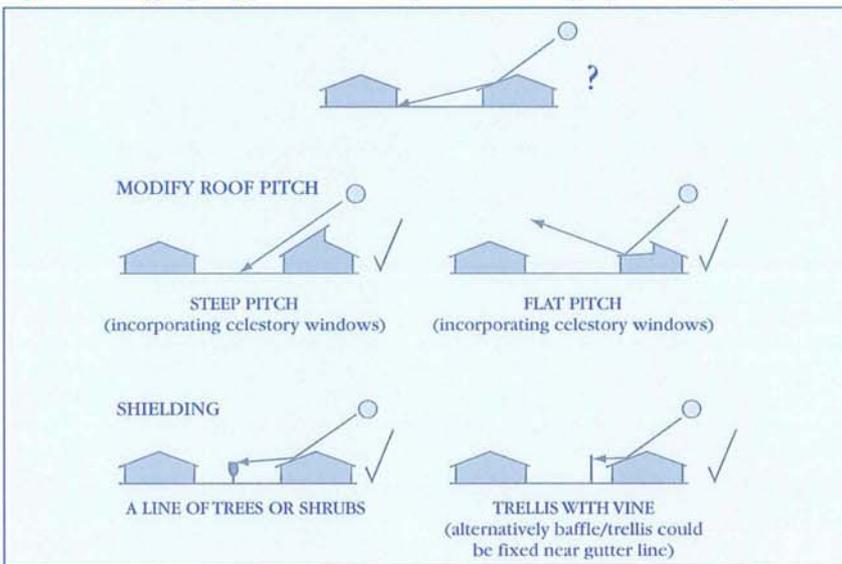


Figure 2: Modifying roof pitch or shielding to avoid directly reflected sunlight



4. Changing from a lighter to a darker colour may not have the desired effect of considerably reducing glare. Problem glare is commonly associated with directly reflected sunlight, which is driven primarily by material gloss level. Colour has a much smaller secondary impact on direct reflection. It is typical for all colours of a standard material range (COLORBOND® steel, tiles etc.) to have a similar gloss level and hence produce similar levels of directly reflected sunlight.

THERMAL EFFICIENCY

Many building materials are designed to be highly reflective. The main benefits centre on the fact that highly reflective materials do not absorb as much heat as other materials and therefore stay cooler. This results in a building that will be more comfortable and not as expensive to cool in warm weather. Highly reflective building materials may also allow the capacity of cooling equipment to be downsized or help it cope on hot sunny days.

The most exposed element of a building is its roof, hence it is an extremely important element in designing an energy efficient building. During hot sunny weather, the temperature of a light coloured roof can be up to 35°C cooler than a dark coloured roof. This results in a significantly lower cooling load from the roof. In warm climates, this can translate into large energy savings or improved thermal comfort for no additional cost. The benefit of light colours in warm climates has been well established through research and through monitoring of real buildings. Numerous experiments in several residential and commercial buildings in California and Florida in the USA, show that white roofs can reduce air-conditioning energy use by between 10% and 50%¹. The energy efficiency benefits of high solar reflectance roofs are recognised in both the Building Code of Australia and BASIX (NSW), and concessions are provided where appropriate to encourage their use.

COLORBOND® steel with Thermatech® solar reflectance technology, is a low maintenance and durable roofing material that can be used to improve building energy efficiency. Whilst the potential for reflective visual problems reduces with weathering, outdoor exposure testing has shown that the heat reflective properties of COLORBOND® steel is maintained. In addition to this, on hot summer nights a roof made from COLORBOND® steel will radiate less heat into your home. This is due to steel's low thermal mass, which enables it to cool down fast once the sun is off it. As with all roofing products, the use of light solar reflective colours is preferable for thermal

efficiency.

ENVIRONMENTAL BENEFITS

The cooler surface of a light coloured roof can offer benefits, not only for the occupants of the building, but also to the external environment.

A direct benefit to the environment from reflective light colour roofs arises from a reduced need to air-condition buildings leading to reduced energy use, and associated greenhouse gas emissions. This also helps to moderate our cities' increasing problems with meeting peak electrical summer loads, due largely to the huge increase of residential air-conditioners and reducing the need to build new power stations.

Indirect benefits to the environment also arise through the use of reflective light coloured roofs. The use of dark building materials (particularly high mass materials) in built-up areas is contributing to increased local temperatures causing, what is now commonly referred to as, urban heat islands (UHI). Elevated temperature from UHI, particularly during summer, can affect a community's environment and quality of life.

According to the US Environment Protection Agency, impacts of UHI include increased energy consumption, elevated emissions of air pollutants and greenhouse gases, as well as impaired water quality. For more information on UHI and their effects visit <http://www.epa.gov/heatisland/about/index.htm>.

COMMERCIAL/INDUSTRIAL BUILDINGS

Whilst most of the preceding comments are equally applicable to commercial/industrial buildings, these types of buildings tend not to cause many problems with regards to glare. Commercial/industrial roofs are usually light in colour, to take advantage of the thermal benefits discussed here. The roofs are often also high and flat and surrounding people seldom receive directly reflected sunlight. In fact, in many cases the roofs cannot be seen from ground level.

COLORBOND® Coolmax® steel has been designed to achieve the maximum solar reflectance for a prepainted steel product whilst maintaining all the quality and durability of COLORBOND® steel. Higher solar reflectance may raise concern that roofing made from COLORBOND® Coolmax® steel has increased potential for creating glare. It should be noted that the mirrored reflection of the sun from COLORBOND® Coolmax® steel in Whitehaven™ is similar, but slightly higher, than COLORBOND® steel in Surfmist®. Therefore, the performance of COLORBOND®



Coolmax® steel with respect to potential glare arising from mirrored reflection of the sun is also expected to be similar to COLORBOND® steel in Surfmist®. On this basis, if it was deemed appropriate to use COLORBOND® steel in Surfmist® for roofing, as would be the case for the large majority of commercial and industrial roofs, then COLORBOND® Coolmax® steel in Whitehaven™ should also be suitable.

Commercial/industrial walls also usually do not cause a glare problem, as direct reflection often goes straight to the ground and is not received by people around the building. The main case where reflection from walls may cause some concern is multi-storey buildings. In this case, if the observer can see direct reflection from a wall, glare from windows may also be a significant problem as the sun may hit the windows at a low angle and most of the light will be reflected.

CONCLUSION

Key Points to Remember:

1. All materials are reflective.
2. A simple case-by-case assessment is the most effective means of ensuring a good environmental outcome while addressing

relevant concerns and allowing appropriate materials to be used.

Alternative assessment methods, such as blanket policy statements, may have shortcomings for the owner, the neighbours and the broader environment.

3. In terms of reflectivity, studies show that the use of reflectivity limits alone has many inherent problems. Reflectivity limits tend to restrict the opportunity to use thermally efficient light colours, which have been shown to reduce energy use, greenhouse gas emissions, and help mitigate urban heat islands.

Given the benefits of choosing a reasonably reflective building material, it is suggested that building owners should be encouraged, rather than discouraged, in the use of products such as COLORBOND® Coolmax® steel and standard COLORBOND® steel with Thermatech® solar reflectance technology.

The information and advice contained in this Bulletin is of a general nature only, and has not been prepared with your specific needs in mind. You should always obtain specialist advice to ensure that the materials, approach and techniques referred to in this Bulletin meet your specific requirements.

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1. Akbari H, Konopacki S and Parker D, Updates on revision to ASHRAE Standard 90.2: Including roof reflectivity for residential buildings, Proceedings of the ACEEE summer study on energy efficiency in buildings, 2000.

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Reflectivity and New Building Design

In response to your recent enquiry BlueScope Steel sets out below some general information regarding the issue of glare and BlueScope Steel's building materials. You may wish to use this information in your interactions with your local council and other interested parties.

Please note that the information provided is general in nature and may not be appropriate to your individual situation. This information sheet does not constitute professional advice. We recommend that you seek professional advice if you have particular issues of concern.

What is glare?

Glare from buildings can result from the reflection of sunlight from any surface. New glossy surfaces are particularly prone to glare, including steel roofs, glazed terracotta tiles and concrete tiles. The degree of glare observed will depend, amongst other things, on the age and type of material used, its location, surrounding environment, position and gradient. The particular time of day and year also affect glare due to the constantly changing position of the sun.

Reflectivity numbers

Given the above factors, BlueScope Steel has no published data on reflectivity values of COLORBOND® steel or products manufactured from COLORBOND® steel that can sensibly be used on their own to ascertain the likelihood of glare from a potential building application. Simple individual assessments, such as recommended below, in our opinion offer a practical case-by-case solution.

Councils' policy considerations

Some local councils have introduced policies that concern reflectivity. The primary objectives of those policies appear to relate to controlling blending or glare. While these objectives in themselves are admirable, the application and outcome of these policies are often misunderstood and have been found to have numerous detrimental consequences.

Policies aimed at controlling blending

One objective of policies aimed at controlling blending is to restrict a homeowner's colour choice, with a view to encouraging a particular colour scheme within an area. This may be directed at achieving a perceived harmony between buildings and the surrounding environment or to minimise contrast.

Whilst we understand that there may be genuine aesthetic reasons for putting in place such a policy, such policies tend to differentially treat building materials. Such a policy may in practice also restrict colour choice to only dark materials. This consequence is at odds with good environmental policy, as discussed below.

Policies aimed at controlling glare

These policies are generally aimed at protecting views of importance and/or neighbourhood amenity. Problems can arise with these types of policies as they are typically:

- one-dimensional based on total reflectivity and ignoring the mirror-like properties of the building material,
- in the form of a blanket policy and are applied in cases where glare is of no concern, and
- drafted in such a way as to encourage the use of darker materials, which is at odds with good environmental policy.



General considerations

To reduce the negative consequences of the above types of policies, local councils should consider the following:

- Policies should not specify a specific material or brand. Rather than singling out a particular material or manufacturer, Councils should aim to establish performance-based policies.
- Arbitrary reflectivity limits should not be imposed on homeowners and builders. The limits do not take into consideration all significant variables that contribute to glare. Reflectivity limits are also inappropriate where they do not include reference to standards or other methods to demonstrate compliance..
- Consumer choice should not be restricted arbitrarily. Restricting choice to dark colours also contradicts National and State energy efficiency initiatives that encourage the use of light coloured roofs.
- Clear and accurate definitions regarding reflectivity should be adopted. It is inaccurate for council policy to refer to certain materials as "non-reflective" as all materials reflect light, even matte black surfaces.

Recommendation to council

Where control of glare is deemed appropriate, assessment should be considered on a case-by-case basis.

Most reflectivity policies are drafted in the form of a blanket statement (such as "the product used shall have a reflectivity not greater than X%"). This type of policy limits the ability to use building materials in the majority of cases where glare is not relevant. To take advantage of the significant thermal and environmental benefits of light coloured material, glare should be considered on a case-by-case basis and certain materials not excluded under a blanket exception.

When assessing whether a particular structure or roof should be allowed, consideration should be given, amongst other things to the local surroundings and environment (such as vegetation, aspect and surrounding structures) and the configuration, location and aspect of the structure. In many cases the assessment will be straightforward, as the roof will not be easily seen.

Where the roof can be seen then consideration of the mirrored reflection from the roof can quickly identify potential problems. Modelling has shown that the main potential position of concern is a viewing position located to the south and above a roof.

Gloss and glare in context

Problem glare is known to be associated with mirrored sunlight from new glossy surfaces. The mirror-like properties of glare mean that it will only ever occur in a particular position at a particular time of the day and only for a particular time of the year due to the constantly changing position of the sun.

An important point to note is that all new roofing materials (steel, concrete tiles, glazed terracotta tiles) have a glossier surface when first installed.

Over time the surface dulls, reducing the resulting glare. This means that once experienced in the year, the mirrored reflection will return in a year's time. However, at that time the building material will have also aged a year, losing gloss and subsequently reducing the amount of glare.

Colour choice and the environment

One outcome of most reflectivity policy is that they encourage dark roofing material. This is not in line with a good environmental policy and the growing need to reduce greenhouse gas emissions.



Light coloured roofs can be 30°C cooler on the surface than dark coloured roofs. This can result in numerous benefits to the building owner and the environment. Some of the benefits of light coloured roofing include:

- Improved energy efficiency and thermal comfort. The Building Code of Australia now has insulation concessions to encourage the use of light coloured roofs on the basis of energy savings.
- Minimised peak summer energy loads and improved summertime insulation. Most Australian cities are struggling to meet peak summer electrical loads. Light coloured roofs have been part of Florida's program to curb spiralling summertime electrical demand. BASIX NSW encourages light coloured roofs for this reason.
- Reduced urban heat islands caused from dark materials warming local air temperatures. Lower local air temperatures can reduce summer energy loads on all buildings and the potential for smog.
- Improved roof lifespan due to less thermal stress. Reduced thermal stress improves roof durability through reduced temperatures and by causing less thermal movement resulting in less chance of air or moisture leaks.
- Cost and energy savings for the household.

Summary

It is clear that where a reflectivity policy exists, a balance must be met between its intent and the environmental benefits of light colours.

Reflectivity is a complex and subjective issue. Whilst the intent of the policy may be well intentioned, it must be balanced against the benefits that light coloured roofing offers. National and state regulations encourage the use of light coloured materials, due to their environmental benefits. Therefore good environmental local government policy should also encourage their use rather than eliminate them as a choice. Case-by case assessment may be a way of balancing these concerns.

BlueScope Steel trusts that this information assists you in your dealings with council and other interested parties.

Thank you for using BlueScope Steel products and we wish you well in achieving a successful outcome.



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LOCAL GOVERNMENT ACT 1995

CITY OF ARMADALE

LOCAL LAWS

RELATING TO FENCING

Local Government Act 1995

City of Armadale

LOCAL LAWS RELATING TO FENCING

Under the powers conferred by the *Local Government Act 1995* and by all other powers the Council of the City of Armadale resolved to make the following Local Laws on the 21 day of August 2000.

PART 1 – PRELIMINARY

Citation

1. These Local Laws may be cited as the City of Armadale Local Laws Relating to Fencing.

Repeal

2. The City of Armadale By-laws Relating to Fencing published in the Government Gazette of 8 April 1988 and amended in the Government Gazette of 16 October 1992, are repealed.

Application of Local Laws

3. These Local Laws apply throughout the district.

Interpretation

4. In these Local Laws, unless the context requires otherwise-

“Act” means the *Dividing Fences Act 1961*;

“AS” means an Australian Standard published by the Standards Association of Australia;

“boundary fence” has the meaning given to it for the purposes of the Act;

“Commercial Lot” means a lot where a commercial use –

- (a) is or may be permitted under the town planning scheme; and
- (b) is or will be the predominant use of the lot;

"dangerous" in relation to any fence means-

- (a) an electrified fence other than one for which a current licence under Part 6 of these Local Laws has been obtained and is current;
- (b) a fence containing barbed wire other than a fence erected and maintained in accordance with these Local Laws;
- (c) a fence containing exposed broken glass, asbestos fibre, razor wire or any other potentially harmful projection or material; or
- (d) a fence which is likely to collapse or fall, or part of which is likely to collapse or fall, from any cause;

"district" means the district of the local government;

"dividing fence" has the meaning given to it in and for the purposes of the Act;

"electrified fence" means a fence carrying or designed to carry an electric charge;

"fence" means any structure, including a retaining wall, used or functioning as a barrier, irrespective of where it is located and includes any gate;

"frontage" means the boundary line between a lot and the thoroughfare upon which that lot abuts;

"height" in relation to a fence means the vertical distance between:

- (a) the top of the fence at any point; and
- (b) the ground level or, where the ground levels on each side of the fence are not the same, the higher ground level, immediately below that point;

"Industrial Lot" means a lot where an industrial use –

- (a) is or may be permitted under the town planning scheme; and
- (b) is or will be the predominant use of the lot;

"local government" means the City of Armadale;

"lot" has the meaning given to it in and for the purposes of the *Town Planning and Development Act 1928*;

"notice of breach" means a notice referred to in clause 18(1);

"Residential Lot" means a lot where a residential use –

- (a) is or may be permitted under the town planning scheme; and
- (b) is or will be the predominant use of the lot;

"retaining wall" means any structure which prevents the movement of soil in order to allow ground levels of different elevations to exist adjacent to one another;

"Rural Lot" means a lot located in any type or rural zone under the town planning scheme, where a rural use or bush-land conservation –

- (a) is or may be permitted under the town planning scheme; and
- (b) is or may be the predominant use of the lot;

"Schedule" means a Schedule to these Local Laws;

"setback area" has the meaning given to it for the purposes of the town planning scheme;

"sufficient fence" means a fence described in clause 6; and

"town planning scheme" means a town planning scheme of the Local Government made under the *Town Planning and Development Act 1928*.

Licence Fees and Charges

5. All licence fees and charges applicable under these Local Laws shall be as determined by the local government from time to time in accordance with section 6.16 of the *Local Government Act 1995*.

PART 2 – SUFFICIENT FENCES

Sufficient Fences

6. (1) Unless by agreement between the owners of adjoining properties, a person shall not erect a dividing fence or a boundary fence that is not a sufficient fence.
- (2) Subject to sub-clauses (3) and (4), a sufficient fence-
 - (a) on a Residential Lot is a dividing fence or a boundary fence constructed and maintained in accordance with the specifications and requirements of the First Schedule;
 - (b) on a Commercial Lot and on an Industrial Lot is a dividing fence or a boundary fence constructed and maintained in accordance with the specifications and requirements of the Second Schedule;
 - (c) on a Rural Lot is a dividing fence or a boundary fence constructed and maintained in accordance with the specifications and requirements of the Third Schedule;

- (3) Where a fence is erected on or near the boundary between:
 - (a) a Residential Lot and an Industrial Lot, a sufficient fence is a dividing fence constructed and maintained in accordance with the specifications and requirements of the First Schedule;
 - (b) a Residential Lot and a Commercial Lot, a sufficient fence is a dividing fence constructed and maintained in accordance with the specifications and requirements of the Second Schedule;
 - (c) a Residential Lot and a Rural Lot, a sufficient fence is a dividing fence constructed and maintained in accordance with the specifications and requirements of the Third Schedule.
- (4) Unless the local government specifies otherwise, a sufficient fence on a boundary between lots other than those specified in subclause (3) is a dividing fence constructed in accordance with the specifications and requirements of the Second Schedule.
- (5) Notwithstanding any other provisions in these Local Laws, a fence constructed of stone or concrete shall be a sufficient fence only if it is designed by a structural engineer where:
 - (a) it is greater than 1800mm in height; or
 - (b) the local government so requires.

PART 3 – GENERAL

Fences Within Front Setback Areas

- 7. (1) A person shall not, without the written consent of the local government erect a freestanding fence exceeding 1200mm in height within the front set-back area of a Residential Lot within the district.
- (2) The local government may approve the erection of a fence of a height greater than 1200mm in the front setback area of a Residential Lot only if the fence on each side of the driveway into the lot across the front boundary is to be angled into the lot from a distance of not less than 1500mm along the frontage to a distance of not less than 1500mm from the frontage, in order to provide appropriate splayed lines of vision for a motorist using the driveway for access to a thoroughfare.
- (3) The provision of sub-clause (2) shall not apply to a fence of open construction that does not obscure the lines of vision of a motorist using the driveway for access to a thoroughfare.

Fences on a Rural Lot

8. (1) No person shall, without the written consent of the local government, erect on a Rural Lot and within 7.5m of a thoroughfare, a fence of a height exceeding 1500mm.
- (2) No person shall without the written consent of the local government, erect a fence on a Rural Lot of sheet metal, brick, stone, reinforced fibre cement or any other form of screen fencing.

Maintenance of Fences

9. An owner and occupier of a lot on which a fence is erected shall maintain the fence in good condition so as to prevent it from becoming dangerous, dilapidated, unsightly or prejudicial to the amenity of the locality.

General Discretion of the Local Government

10. (1) Notwithstanding clause 6, the local government may consent to the erection or repair of a fence, which does not comply, with the requirements of these Local Laws.
- (2) In determining whether to grant its consent to the erection or repair of any fence, the local government may consider, in addition to any other matter that it is authorized to consider, whether the erection or retention of the fence would have an adverse effect on:
 - (a) the safe or convenient use of any land; or
 - (b) the safety or convenience of any person;
 - (c) visual amenity and aesthetics of the area.

PART 4 - FENCING MATERIALS

Fencing Materials

11. (1) A person shall construct a fence on a Residential Lot, a Commercial Lot or an Industrial Lot from only brick, stone, concrete, wrought iron, tubular steel framed, link mesh, timber, plastic coated or galvanised link mesh, corrugated fibre reinforced cement sheeting, colorbonded metal or a material approved by the local government.
- (2) Where the local government approves the use of pre-used materials in the construction of a fence under subclause (1), that approval shall be conditional on the applicant for approval painting or treating the pre-used material as directed by the local government.

Barbed Wire and Broken Glass Fences

12. (1) An owner or occupier of a Residential Lot or a Commercial Lot shall not erect or affix to any fence on such a lot any barbed wire or other material with spiked or jagged projections, unless the prior written approval of the local government has been obtained.
- (2) An owner or occupier of an Industrial Lot shall not erect or affix to any fence bounding that Lot any barbed wire or other materials with spiked or jagged projections unless the wire or materials are carried on posts at an angle of 45 degrees, and unless the bottom row of wire or other materials is set back 150mm from the face of the fence and is not less than 2m from the ground level.
- (3) If the posts which carry the barbed wire or other materials referred to in subclause (2) are angled towards the outside of the lot bounded by the fence, the face of the fence must be set back from the lot boundary a sufficient distance to ensure that the angled posts, barbed wire or other materials do not encroach on adjoining land.
- (4) An owner or occupier of a lot shall not affix or allow to remain as part of any fence or wall, whether internal or external, on that lot any broken glass.
- (5) An owner or occupier of a Rural Lot shall not place or affix barbed wire upon a fence on that Lot where the fence is adjacent to a thoroughfare or other public place unless the barbed wire is fixed to the side of the fence posts furthest from the thoroughfare or other public place.

Impervious Materials

13. No person shall, without the consent of the local government, erect or commence to erect within any portion of the district a fence of impervious material in any place, position or location where it will, or is likely to, act as a barrier to or restrict in any way whatsoever the normal flow of stormwater or other watercourse.

PART 5 – TENNIS COURT FENCING

14. (1) This clause does not apply to a Rural Lot.
- (2) A person shall not erect or repair a fence around or partly around a tennis court on a lot unless:
 - (a) the fence is not more than 3600mm in height;

- (b) the whole of the fence is at least 900mm from the boundary between the lot on which the tennis court is located and the adjoining lot, or if it is less than 900mm, the owner of the adjoining lot has first been given the opportunity to make submissions to the local government on the location of the fence;
- (c) the corner posts are at least 50mm nominal bore galvanised 3.6mm gauge pipe set into 750mm x 230mm diameter concrete bases;
- (d) the intermediate fence posts are of not less than 40mm nominal bore galvanised 3.2mm gauge pipe set into 600mm x 230mm diameter concrete bases and are not more than 3000mm apart;
- (e) corner stays are at least 40mm nominal bore galvanised 3.2mm gauge pipe concreted into the ground and secured to corner posts by clamp on fittings;
- (f) the chain link fabric mesh is not more than 3600mm in height and is 50mm x 2.5mm poly-vinyl chloride coated or galvanised; and
- (g) the supporting cables are double twisted 3.15mm poly-vinyl chloride coated wire and are fixed 75mm from the top and bottom of the mesh and 1530mm from the ground level.

PART 6 – ELECTRIFIED FENCES

Requirement for a Licence

- 15. (1) An owner or occupier of a lot, other than a lot zoned for General Rural purposes, shall not have and use an electrified fence on that lot without first obtaining a licence under subclause (2).
- (2) A licence to have and use an electrified fence shall not be issued-
 - (a) in respect of a lot which is or which abuts a Residential Lot;
 - (b) unless the fence complies with AS/NZS 3016:1994; and
 - (c) unless provision is made so as to enable the fence to be rendered inoperable during the hours of business operations, if any, on the lot where it is erected.
- (3) An application for a licence referred to in sub-clause (2) shall be made by the owner of the lot on which the fence is or is to be erected, or by the occupier of the lot with the written consent of the owner.
- (4) An application for a licence referred to in sub-clause (2) may be-
 - (a) approved by the local government;
 - (b) approved by the local government subject to such conditions as it sees fit; or
 - (c) refused by the local government.

Transfer of a Licence

16. A licence referred to in clause 15 shall transfer with the land to any new occupier or owner of the lot.

Cancellation of a Licence

17. Subject to Division 1 Part 9 of the *Local Government Act 1995*, the local government may cancel a licence issued under this Part if –
- (a) the fence no longer satisfies the requirements specified in clause 15(2); or
 - (b) the licence holder breaches any condition upon which the licence has been issued.

PART 7- NOTICES OF BREACH

Notices of Breach

18. (1) Where a breach of any provision of these Local Laws has occurred in relation to a fence on a lot, the local government may give a notice in writing to the owner or occupier of that lot ('notice of breach').
- (2) A notice of breach shall:
- (a) specify the provision of these Local Laws which has been breached;
 - (b) specify the particulars of the breach; and
 - (c) state that the owner or occupier of the lot is required to remedy the breach within 28 days from the giving of the notice.
- (3) Should an owner or occupier fail to comply with a notice of breach, the local government may by its employees, agents or contractors enter upon the lot to which the notice relates and remedy the breach, and may recover the expenses of so doing from the owner or occupier of the lot, as the case may be, in a court of competent jurisdiction.

PART 8 – OFFENCES

Offences and Penalties

19. (1) An owner or occupier who fails to comply with a notice of breach commits an offence and is liable upon conviction to a maximum penalty of \$5000 and, if the offence is a continuing offence, a maximum daily penalty of \$500.

- (2) A person who fails to comply with or who contravenes any provision of these Local Laws commits an offence and is liable to a maximum penalty of \$5000 and, if the offence is a continuing offence, a maximum daily penalty of \$500.

Modified Penalties

20. (1) An offence against any provision of these Local Laws is a prescribed offence for the purposes of section 9.16 (1) of the *Local Government Act 1995*.
- (2) Unless otherwise specified, the amount of the modified penalty for an offence against any provision of these Local Laws is \$100.

Form of Notices

21. For the purpose of these Local Laws –
 - (a) the form of the infringement notice referred to in a section 9.17 of the *Local Government Act 1995* is to be in or substantially in the form of Form 2 of Schedule 1 of the Local Government (Functions and General) Regulations 1996;
 - (b) the form of the notice referred to in section 9.20 of the Local Government Act 1995 is to be in or substantially in the form of Form 3 in Schedule 1 of the Local Government (Functions and General) Regulations 1996.

First Schedule Clause 6(2)(a)

**SPECIFICATIONS FOR A SUFFICIENT FENCE
ON A RESIDENTIAL LOT**

Each of the following is a "sufficient fence" on a Residential Lot:

A Open Aspect Fencing – Intended for use in the wooded urban areas of the City (Requires prior local government approval)-

- (a) posts to be 125mm diameter treated pine poles spaced at not more than 2.4 metre centres;
- (b) posts to be buried a minimum of 600mm into stable soil;
- (c) horizontal top rail to be 100mm diameter treated pine pole located at not more than 1100mm above the adjacent natural ground level;
- (d) ringlock or similar wire rural fencing material fixed to each post and to the horizontal top rail to control the movement of animals between lots.

B A picket timber fence which satisfies the following specifications-

- (a) corner posts to be 125mm x 125mm x 2400mm and intermediate posts to be 125mm x 75mm x 2400mm spaced at 2400mm centres;
- (b) corner posts to be struted two ways with 100mm x 50mm x 450mm sole plates and 75mm x 50mm struts;
- (c) intermediate posts to be doubled yankee struted with 150mm x 25mm x 450mm struts;
- (d) all posts to have tops with a 60mm weather cut and to be sunk at least 600mm into the ground;
- (e) rails to be 75mm x 50mm with each rail spanning two bays of fencing double railed or bolted to each post with joints staggered;
- (f) the fence to be covered with 75mm x 20mm sawn pickets, 1800mm in height placed 75mm apart and affixed securely to each rail; and
- (g) the height of the fence to be 1800mm except with respect to the front set back area for which there is no minimum height but which is subject to clause 7.

- C A fence constructed of corrugated fibre reinforced pressed cement sheeting which satisfies the following specifications-**
- (a) a minimum in-ground length of 25 per cent of the total length of the sheet, but in any case shall have a minimum in-ground depth of 600mm;
 - (b) the total height and depth of the fence to consist of a single continuous fibre reinforced cement sheet;
 - (c) the sheets to be lapped and capped with extruded "snap-fit" type capping in accordance with the manufacturers written instructions; and
 - (d) the height of the fence to be 1800mm except with respect to the front set back area for which there is no minimum height but which is subject to clause 7.
- D A fence constructed of brick, stone or concrete, which satisfies the following specifications-**
- (a) footings of minimum 225mm x 150mm concrete 15MPA or 300mm x 175mm brick laid in cement mortar;
 - (b) fences to be offset a minimum of 200mm at maximum 3000mm centres or 225mm x 100mm engaged piers to be provided at maximum 3000mm centres;
 - (c) expansion joints in accordance with the manufacturer's written instructions; and
 - (d) the height of the fence to be 1800mm except with respect to the front set back area for which there is no minimum height but which is subject to clause 7.
- E A composite fence having a minimum overall height of 1800mm except with respect to the front set back area for which there is no minimum height but which is subject to clause 7, which satisfies the following specifications for the brick construction-**
- (1) (a) brick piers of minimum 230mm x 230mm at 1800mm centres bonded to a minimum height base wall of 514mm;
 - (b) each pier shall be reinforced with one R10 galvanised starting rod 1500mm high with a 250mm horizontal leg bedded into a 500mm x 200mm concrete footing and set 65mm above the base of the footing. The top of the footing shall be 1 course (85mm) below ground level;

- (c) the minimum ultimate strength of brickwork shall be 20MPA. Mortar shall be a mix of 1 part cement, 1 part lime and 6 parts sand;
 - (d) the ground under the footings is to be compacted to 6 blows per 300mm and checked with a standard falling weight penetrometer;
 - (e) control joints in brickwork shall be provided with double piers at a maximum of 6 meter centres; and
 - (f) the height of the fence to be 1800mm except with respect to the front set back area for which there is no minimum height but which is subject to clause 7.
- (2)
- (a) brick piers of a minimum 230mm x 350mm x 2700mm centres bonded to the base wall; and
 - (b) each pier shall be reinforced with two R10 galvanised starting rods as previously specified;
 - (c) the height of the fence to be 1800mm except with respect to the front set back area for which there is no minimum height but which is subject to clause 7.

Specifications in Section D & E (*italics*) are to be certified by a Structural Engineer as being appropriate for the particular site and wind terrain category.

- F** **Colorbond metal fencing systems erected in accordance with the manufacture's specifications and instructions. The height of the fence to be 1800mm except with respect to the front set back area for which there is no minimum height but which is subject to clause 7.**

Second Schedule Clause 6(2)(b)

**SPECIFICATIONS FOR A SUFFICIENT FENCE ON A
COMMERCIAL LOT AND AN INDUSTRIAL LOT**

Each of the following is a "sufficient fence" on a Commercial Lot and an Industrial Lot:

- A A fence constructed of galvanised or PVC coated rail-less link mesh, chain mesh or steel mesh which satisfies the following specifications:**
- (a) corner posts to be minimum 50mm normal bore x 3.5mm and with footings of a 225mm diameter x 900mm;
 - (b) intermediate posts to be minimum 37mm nominal bore x 3.15mm at maximum 3.5m centres and with footings of a 225mm diameter x 600mm;
 - (c) struts to be minimum 30mm nominal bore x 3.15m fitted at each gate and two at each corner post;
 - (d) cables to be affixed to the top, centre and bottom of all posts and to consist of two or more 3.15mm wires twisted together or single 4mm wire;
 - (e) rail-less link, chain or steel mesh is to be to a height of 2000mm on top of which are to be three strands of barbed wire carrying the fence to a height of 2400mm; and
 - (f) galvanised link mesh wire to be 2000mm in height and constructed of 50mm mesh 2.5mm galvanised iron wire and to be strained, neatly secured and laced to the posts and affixed to cables. Vehicle entry gates shall provide an opening of not less than 3.6m and shall be constructed of 25mm tubular framework with one horizontal and one vertical stay constructed of 20mm piping and shall be covered with 50mm x 2.5mm galvanised link mesh strained to framework. Gates shall be fixed with a drop bolt and locking attachment.
- B A fence of fibre reinforced cement sheet constructed to the minimum specifications referred to Item B of the First Schedule.**
- C A fence constructed of painted or galvanised steel or aluminium sheeting when supported on posts and rails provided that this is used behind the building line and is of a minimum height of 1800mm but not higher than 2400mm.**
- D Fences of timber, brick, stone or concrete constructed to the minimum specifications referred to in the First Schedule.**

LOCAL GOVERNMENT ACT 1995

CITY OF ARMADALE

**FENCING
LOCAL LAW**

Local Government Act 1995

City of Armadale

FENCING LOCAL LAWS 2011

CONTENTS

PART 1 – PRELIMINARY	1
1.1 CITATION	1
1.2 COMMENCEMENT.....	1
1.3 REPEAL	1
1.5 INTERPRETATION.....	1
PART 2 – SUFFICIENT FENCES	4
2.1 SUFFICIENT FENCES	4
PART 3 – FENCING WITHIN FRONT STREET SETBACK AREA	4
3.1 FENCES WITHIN FRONT SETBACK AREA	4
PART 4 - FENCING MATERIALS, SCREENING AND MAINTENANCE.....	5
4.1 FENCING MATERIALS.....	5
4.2 SCREENING.....	5
4.3 BARBED WIRE AND BROKEN GLASS FENCES	6
4.4 MAINTENANCE OF FENCES.....	6
PART 5 – ELECTRIFIED FENCES.....	6
5.1 ELECTRIFIED FENCING	7
PART 6 – APPLICATION REQUIREMENTS.....	7
6.1 APPLICATION	7
6.2 DETERMINATION OF APPLICATIONS	7
PART 7 – OFFENCES AND ENFORCEMENT	8
7.1 OFFENCES	8
7.2 MODIFIED PENALTIES	8
7.3 INFRINGEMENT NOTICES	8
FIRST SCHEDULE [CLAUSE 2.1(3)(A)].....	9
SECOND SCHEDULE [CLAUSE 2.1(3)(B)]	12
THIRD SCHEDULE [CLAUSE 2.1(3)(C)]	13
FOURTH SCHEDULE [CLAUSE 4.1(4)].....	14

Local Government Act 1995

City of Armadale

FENCING LOCAL LAW

Under the powers conferred by the *Local Government Act 1995* and by all other powers the Council of the City of Armadale resolved to make the following Local Law on the day of 2011.

PART 1 – PRELIMINARY

1.1 Citation

These Local Laws may be cited as the City of Armadale Fencing Local Law.

1.2 Commencement

This local law comes into operation 14 days after the date of its publication in the Government Gazette.

1.3 Repeal

The City of Armadale By-laws Relating to Fencing published in the Government Gazette on 8 April 1988, 16 October 1992 and 13 September 2000 are repealed.

1.4 Application

This Local Law applies throughout the district.

1.5 Interpretation

(1) In this Local Law, unless the context specifies otherwise-

Act means the *Dividing Fences Act 1961*;

AS means an Australian Standard published by the Standards Association of Australia;

City means the City of Armadale;

Commercial Lot means a lot zoned District Centre, Local Centre or Mixed Business/Residential or an equivalent commercial zone

under a Town Planning Scheme and/or Structure Plan, but does not include a lot occupied by residential premises;

dangerous in relation to any fence means-

- (a) an electrified fence which does not comply with Clause 5.1 of this local law;
- (b) a fence containing barbed wire other than a fence erected and maintained in accordance with these Local Laws;
- (c) a fence containing exposed broken glass, asbestos fibre, razor wire or any other potentially harmful projection or material; or
- (d) a fence which is likely to collapse or fall, or part of which is likely to collapse or fall, from any cause;

Development Area No.1 means land identified within Development (Structure Planning) Area No.1 on Special Control Area Map No.3 of the City's Town Planning Scheme;

district means the district of the City;

dividing fence means a fence that separates the lands of different owners whether the fence is on the common boundary of adjoining lands or on a line other than the common boundary;

electrified fence means a fence carrying or designed to carry an electric charge;

fence means any structure used or functioning as a barrier, irrespective of where it is located and includes any affixed gate or screening;

height in relation to a fence means the vertical distance between the top of the fence at any point and-

- (a) the ground level or;
- (b) where the ground levels on each side of the fence are not the same, the higher ground level, immediately below that point or;
- (c) where the fence is erected on a retaining wall approved by the City, from the top of the retaining wall;

Industrial Lot means a lot zoned General Industry, Industrial Business or an equivalent industrial zone under a Town Planning Scheme and/or Structure Plan within the district;

lot has the meaning given to it in and for the purposes of the *Planning and Development Act 2005*;

Residential Lot means a lot zoned Residential or an equivalent residential zone under a Town Planning Scheme and/or Structure

Plan or a lot occupied by residential premises, but does not include a lot zoned Special Residential or land identified within Development (Structure Planning) Area No.1 on Special Control Area Map No.3 of the City's Town Planning Scheme

retaining wall means any structure approved by the City which prevents the movement of soil in order to allow ground levels of different elevations to exist adjacent to one another;

Rural Lot means a lot zoned Rural Living, General Rural or an equivalent rural zone under a Town Planning Scheme and/or Structure Plan within the district;

street setback area has the meaning given to it for the purposes of the *Residential Design Codes of Western Australia*;

screening means any perforated panels or trellises composed of solid or obscured translucent panels;

Special Residential Lot means a lot zoned Special Residential and includes lots identified as Special Control Area No.1 (Roleystone Hills Precinct) under the City's Town Planning Scheme;

"sufficient fence" means a fence described in Clause 2.1 of this local law;

town planning scheme means any gazetted town planning scheme operating within the district;

uniform fence means a fence erected by a developer or subdivider in accordance with a subdivision or development approval which divides a lot from a public place such as Pedestrian Access Way, public open space or road reserve;

visually permeable means the surface of a fence which has-

- (a) continuous vertical or horizontal gaps of at least 50mm width occupying not less than one third of its face in aggregate of the entire surface or where narrower than 50 mm, occupying at least one half of the face in aggregate, as viewed directly from the street: or
- (b) a surface offering equal or lesser obstruction to view.

PART 2 – SUFFICIENT FENCES

2.1 Sufficient Fences

- (1) A person shall not erect a dividing fence that is not a sufficient fence, unless otherwise approved or required by the City.
- (2) An owner and/or occupier of a lot must ensure a sufficient dividing fence is erected at all times.
- (3) Subject to clauses (4) and (5) below, a sufficient fence:
 - (a) on a Residential Lot is a fence constructed and maintained in accordance with the specifications and requirements of the First Schedule;
 - (b) on a Commercial Lot or Industrial Lot is a fence constructed and maintained in accordance with the specifications and requirements of the Second Schedule;
 - (c) on a Rural Lot or Special Residential or land within Development Area No.1 is a fence constructed and maintained in accordance with the specifications and requirements of the Third Schedule;
- (4) Where a fence is erected on or near the boundary between:
 - (a) a Residential Lot and an Industrial Lot, a sufficient fence is a fence constructed and maintained in accordance with the specifications and requirements of the First Schedule;
 - (b) a Residential Lot and a Commercial Lot, a sufficient fence is a fence constructed and maintained in accordance with the specifications and requirements of the First Schedule;
 - (c) a Residential Lot and a Rural Lot, a sufficient fence is a fence constructed and maintained in accordance with the specifications and requirements of the Third Schedule.

PART 3 – FENCING WITHIN FRONT STREET SETBACK AREA

3.1 Fences Within Front Setback Area

- (1) On a Residential Lot, a fence erected within the street setback area shall be visually permeable above 1200mm and not exceed a height of 1800mm.
- (2) On a Commercial Lot, no fence shall be erected forward of the building line.

- (3) On an Industrial Lot, a fence erected within the street setback area shall be visually permeable above 1200mm and not exceed a height of 2400mm.
- (4) All fences shall be truncated or reduced to no higher than 750 mm within 1500mm adjoining a vehicle access point where a driveway meets a public street and where two streets intersect.
- (5) Clause (4) above shall not apply to a visually permeable fence that does not obscure the lines of vision of a motorist using the driveway for access to a thoroughfare.

PART 4 - FENCING MATERIALS, SCREENING AND MAINTENANCE

4.1 Fencing Materials

- (1) Subject to clause 2.1, a person shall only construct a fence from materials specified in the First, Second and Third Schedule of this local law, unless otherwise required by the City.
- (2) Uniform fencing shall be constructed predominantly from masonry materials and where required by the City incorporate visually permeable sections above 1200mm to the satisfaction of the City.
- (3) Pre-used materials shall not be permitted in the construction of a fence, unless the pre-used materials are painted, treated and/or upgraded to the satisfaction of the City.
- (4) No person shall erect a fence of impervious material in any place, position or location where it will, or is likely to, act as a barrier to or restrict the flow of stormwater or watercourse.
- (5) Fencing surrounding a tennis court shall be constructed and maintained in accordance with the specifications and requirements of the Fourth Schedule.

4.2 Screening

- (1) On a Residential Lot, Commercial Lot or Industrial Lot, any screening affixed to a fence shall be designed to integrate with the colours, materials and specification of that sufficient fence to the satisfaction of the City.

- (2) On a Rural Lot or Special Residential Lot, no person shall affix any screening to a fence.
- (3) Screening affixed to a fence shall be installed and maintained in accordance with the manufacture's specifications and not undermine the structural integrity of a fence.

4.3 Barbed Wire and Broken Glass Fences

- (1) On a Residential Lot or Special Residential, a person shall not erect or affix to any fence on such a lot any barbed wire or other material with spiked or jagged projections,
- (2) On an Industrial Lot or Commercial Lot, a person shall not erect or affix to any fence bounding that Lot any barbed wire or other materials with spiked or jagged projections unless the wire or materials are carried on posts at an angle of 45 degrees, and unless the bottom row of wire or other materials is set back 150mm from the face of the fence and is not less than 2m from the ground level.
- (3) If the posts which carry the barbed wire or other materials referred to in subclause (2) are angled towards the outside of the lot bounded by the fence, the face of the fence must be set back from the lot boundary a sufficient distance to ensure that the angled posts, barbed wire or other materials do not encroach on adjoining land.
- (4) A person shall not affix any broken glass to a fence.
- (5) On a Rural Lot, a person shall not place or affix barbed wire upon a fence on that Lot where the fence is adjacent to a thoroughfare or other public place unless the barbed wire is fixed to the side of the fence posts furthest from the thoroughfare or other public place.

4.4 Maintenance of Fences

- (1) An owner and/or occupier shall maintain a fence in good condition and prevent it from becoming damaged, dangerous, dilapidated, unsightly or detrimental to the amenity of the locality.
- (2) An owner and/or occupier of a lot on which a uniform fence is erected shall not alter the fence in anyway, or enclose or screen any visually permeable sections of the fence.

PART 5 – ELECTRIFIED FENCES

5.1 Electrified Fencing

- (1) On a Residential Lot, Special Residential Lot or Commercial Lot or any other lot abutting such a lot, a person shall not erect or affix an electrified fence.
- (2) On a Rural Lot or Industrial Lot, an electrified fence shall-
 - (a) comply with AS/NZS 3016:2002 (as amended from time to time);
 - (b) be installed and certified by a qualified electrician;
 - (c) comply with any requirements of Western Power;
 - (d) be inoperable during hours of business; and
 - (e) be designed to integrate with the colours, materials and specification of a sufficient fence.

PART 6 – APPLICATION REQUIREMENTS

6.1 Application

- (1) An owner of a lot may apply to the City for any discretionary matter contained within this local law.
- (2) An application must be:
 - (a) in writing in a form approved by the City;
 - (b) accompanied by any document or information that is required by the City; and
 - (c) accompanied by an application fee.

6.2 Determination of Applications

- (1) In determining whether to grant its consent to the erection or repair of any fence, the City may consider, in addition to any other matter that it is authorized to consider, whether the erection or retention of the fence would have an adverse impact on-
 - (a) the safe or convenient use of any land;
 - (b) the safety or convenience of any person;
 - (c) the visual amenity of the streetscape or neighbouring properties.
- (2) Notwithstanding any other clause in this local law, the City may consent to the erection, alteration or repair of a fence, which does not comply with the requirements of this Local Law.

PART 7 – OFFENCES AND ENFORCEMENT

7.1 Offences

- (1) A person who fails to do anything required or directed to be done under this local law, or who does anything which under this local law that person is prohibited from doing, commits an offence.
- (2) A person who fails to comply with a notice of breach commits an offence and is liable upon conviction to a maximum penalty of \$5000 and, if the offence is a continuing offence, a maximum daily penalty of \$500.

7.2 Modified Penalties

- (1) An offence against any provision of these Local Laws is a prescribed offence for the purposes of section 9.16 (1) of the *Local Government Act 1995*.
- (2) Unless otherwise specified, the amount of the modified penalty for an offence against any provision of these Local Laws is \$500.

7.3 Infringement Notices

For the purpose of these Local Laws –

- (a) the form of the infringement notice referred to in a section 9.17 of the *Local Government Act 1995* is to be in or substantially in the form of Form 2 of Schedule 1 of the Local Government (Functions and General) Regulations 1996;
- (b) the form of infringement notice referred to in section 9.20 of the Local Government Act 1995 is to be in or substantially in the form of Form 3 in Schedule 1 of the Local Government (Functions and General) Regulations 1996.

First Schedule [Clause 2.1(3)(a)]

**SPECIFICATIONS FOR A SUFFICIENT FENCE
ON A RESIDENTIAL LOT**

Each of the following is a "sufficient fence" on a Residential Lot:

A Timber fence which satisfies the following specifications-

- (a) corner posts to be 125mm x 125mm x 2400mm and intermediate posts to be 125mm x 75mm x 2400mm spaced at 2400mm centres;
- (b) corner posts to be struted two ways with 100mm x 50mm x 450mm sole plates and 75mm x 50mm struts;
- (c) intermediate posts to be doubled yankee struted with 150mm x 25mm x 450mm struts;
- (d) all posts to have tops with a 60mm weather cut and to be sunk at least 600mm into the ground;
- (e) rails to be 75mm x 50mm with each rail spanning two bays of fencing double railed or bolted to each post with joints staggered;
- (f) the fence to be covered with 75mm x 20mm sawn pickets, 1800mm in height placed 75mm apart and affixed securely to each rail; and
- (g) a minimum height of 1800mm up to 2100mm (including screening), except within the street setback area which is subject to requirements outlined in Clause 3.1.

B Fibre reinforced pressed cement sheeting which satisfies the following specifications-

- (a) a minimum in-ground length of 25 per cent of the total length of the sheet, but in any case shall have a minimum in-ground depth of 600mm;
- (b) the total height and depth of the fence to consist of a single continuous fibre reinforced cement sheet;
- (c) the sheets to be lapped and capped with extruded "snap-fit" type capping in accordance with the manufacturers written instructions; and

- (d) a minimum height of 1800mm up to 2100mm, except within the street setback area which is subject to requirements outlined in Clause 3.1.

C Masonry (including brick, stone or concrete), which satisfies the following specifications-

- (a) footings of minimum 225mm x 150mm concrete 15MPa or 300mm x 175mm brick laid in cement mortar or 400mm x 400mm concrete 20MPa with minimum 1 layer 4-L11TM;
- (b) Continuous fence with engaged piers or infill panels between piers maximum 2100mm high with No 2 R6 Galvanised rod continuous in last mortar bed joint. Engaged or attached piers 290mm x 290mm (for 90mm wide masonry unit) and 350mm x 350mm (for 110mm wide masonry unit) with No 1 Y12 Galvanised reinforcing rod tied into footing and located centrally in pier. Pier core to be filled with 15MPa concrete. Piers at maximum 2.1m centres.;
- (c) expansion joints in accordance with the manufacturer's written instructions;
- (d) a minimum height of 1800mm up to 2100mm (including screening), except within the street setback area which is subject to requirements outlined in Clause 3.1; and
- (e) certified by a Structural Engineer as being appropriate for the particular site and wind terrain category.

D Composite fence, which satisfies the following specifications for the brick construction-

- (1) (a) brick piers of minimum 230mm x 230mm at 1800mm centres bonded to a minimum height base wall of 514mm; 290 x 290mm or 350 x 350mm piers shall be core filled with 15MPa concrete;
- (b) each pier shall be reinforced with one Y12 galvanised rod the height of the pier with a 250mm horizontal leg bedded into a 400mm deep concrete footing and set 65mm above the base of the footing. The footing shall be 100mm larger than the size of the pier. The top of the footing shall be 1 course (85mm) below ground level;
- (c) the minimum ultimate strength of brickwork shall be 20MPa. Mortar shall be a mix of 1 part cement, 1 part lime and 6 parts sand;

- (d) the ground under the footings is to be compacted to 6 blows per 300mm and checked with a standard falling weight penetrometer;
 - (e) control joints in brickwork shall be provided with double piers at a maximum of 6 meter centres;
 - (f) a minimum height of 1800mm up to 2100mm, except within the street setback area which is subject to requirements outlined in Clause 3.1; and
 - (g) certified by a Structural Engineer as being appropriate for the particular site and wind terrain category.
- (2)
- (a) Attached brick piers of a minimum 230mm x 350mm x 2700mm centres bonded to the base wall;
 - (b) each pier shall be reinforced with two R10 galvanised starting rods as previously specified;
 - (c) a minimum height of 1800mm up to 2100mm (including screening), except fencing within the street setback area which is subject to requirements outlined in Clause 3.1; and
 - (d) certified by a Structural Engineer as being appropriate for the particular site and wind terrain category.

- E Colorbond metal fencing systems erected in accordance with the manufacture's specifications and instructions.** A minimum height of 1800mm up to 2100mm (including screening), except within the street setback area which is subject to requirements outlined in Clause 3.1.

Second Schedule [Clause 2.1(3)(b)]

**SPECIFICATIONS FOR A SUFFICIENT FENCE ON A
COMMERCIAL LOT AND AN INDUSTRIAL LOT**

Each of the following is a "sufficient fence" on a Commercial Lot and an Industrial Lot:

- A PVC coated rail-less link mesh, chain mesh or steel mesh which satisfies the following specifications:**
- (a) corner posts to be minimum 50mm normal bore x 3.5mm and with footings of a 225mm diameter x 900mm;
 - (b) intermediate posts to be minimum 37mm nominal bore x 3.15mm at maximum 3.5m centres and with footings of a 225mm diameter x 600mm;
 - (c) struts to be minimum 30mm nominal bore x 3.15m fitted at each gate and two at each corner post;
 - (d) cables to be affixed to the top, centre and bottom of all posts and to consist of two or more 3.15mm wires twisted together or single 4mm wire;
 - (e) rail-less link, chain or steel mesh is to be to a height of 2000mm on top of which are to be three strands of barbed wire carrying the fence to a height of 2400mm; and
 - (f) galvanised link mesh wire to be 2000mm in height and constructed of 50mm mesh 2.5mm galvanised iron wire and to be strained, neatly secured and laced to the posts and affixed to cables. Vehicle entry gates shall provide an opening of not less than 3.6m and shall be constructed of 25mm tubular framework with one horizontal and one vertical stay constructed of 20mm piping and shall be covered with 50mm x 2.5mm galvanised link mesh strained to framework. Gates shall be fixed with a drop bolt and locking attachment.
- B Fences of timber, masonry (brick, stone or concrete), fibre cement or colorbond constructed to the minimum specifications referred to in the First Schedule. A minimum height of 1800mm up to 2400mm (including screening), except within the street setback area which is subject to requirements outlined in Clause 3.1.**

Third Schedule [Clause 2.1(3)(c)]

SPECIFICATIONS FOR A SUFFICIENT FENCE ON A RURAL LOT, SPECIAL RESIDENTIAL LOT AND LAND WITHIN DEVELOPMENT AREA NO.1

Each of the following is a "sufficient fence" on a Rural Lot and Special Residential Lot:

A Post and Wire Construction

- (1) In the case of a non-electrified fence of post and wire construction:-
 - (a) wire shall be high tensile wire and not less than 2.5mm. A minimum of five wires shall be used, generally with the lower wires spaced closer together than the higher wires so as to prevent smaller stock passing through, and connected to posts in all cases;
 - (b) posts shall be of indigenous timber or other suitable material including –
 - timber impregnated with a termite and fungicidal preservative;
 - standard iron star pickets; or
 - concrete;cut not less than 1800mm long x 50mm diameter at small end if round or 125mm x 60mm if split or sawn. Posts to be set minimum 600mm in the ground and 1200mm above the ground; and
 - (c) strainer posts shall be not less than 2250mm long and 50mm diameter at the small end (tubular steel to be 50mm in diameter) and shall be cut from indigenous timber or other suitable material. These shall be placed a minimum of 1000mm in the ground.
- (2) An electrified fence complying with (1) above and Clause 5.1(2) of this local law.

B Post and Rail Construction

- (a) All posts to be round of durable grade timber as defined by Australian Standards or other suitable material including timber impregnated with termite and fungicidal preservative cut not less than 2400mm long x 125mm diameter at the small end. Posts to be set minimum 900mm in the ground and 1500mm above the ground; and
- (b) All rails to be round of the same material specified in (a) cut not more than 2100mm long x 100mm diameter at the small end to be properly connected using R6 rod or double wire. No more than three rails to be used between posts.

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Welcome to the 2011 State Conference.

Invitation from Conference Convenor and Vice President of the Planning Institute of Australia WA Division

Make no little plans; they have no magic to stir men's blood....
Make big plans... aim high in hope and work.

Daniel H. Burnham (*American architect and urban planner 1846 -1912*)

It is perhaps the most famous quote in planning and speaks for the need of having a vision in order to mobilise the community to want to change things. Today we can contrast this approach with the "not in my back yard approach" to planning and development.

On behalf of the Planning Institute of Australia it is my pleasure to invite you to the 2011 State Conference in Mandurah. The conference provides a unique opportunity to bring together PIA members and practitioners from the planning, engineering and legal profession, local governments and councillors, developers and community groups to stimulate debate and exchange ideas.

The Conference Committee have developed a substantial program including a range of planned Study Tours and Social activities to provide you with the very best of opportunities to network and learn from other colleagues in your field.

Conference Theme:

The theme of the Planning Conference this year is
BEYOND PLANNING :: VISION > COMMITMENT > INFRASTRUCTURE.

Planning is a process of not only making decisions now but about what to do in the future. With the population of Australia predicted to reach around 36 million by 2050, planners will play a crucial role in meeting the demand for housing, services and infrastructure.

We will **explore** the challenges and impediments associated with 'What it takes to bring Vision to Reality'.

I look forward to welcoming you for what promises to be an exciting conference.

Charles Johnson MPIA
Conference Convenor and Vice President PIA WA Division

The 2011 PIA (WA) State conference is proudly sponsored by:

Event Details

When:
17th – 18th November 2011

Where:
Mandurah Performing Arts
Centre, Mandurah WA

Contact Us

**The Planning Institute of
Australia (WA Division)**
Post Office Box 625,
South Perth WA 6951

27 Charles Street,
South Perth WA 6151

Tel: 08 9367 2599
Fax: 08 9367 9599
Email: wa@planning.org.au

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Conference Program

Thursday 17th November 2011

9:00am – 5:00pm	Study Tours More information soon	
11:45am	Golf Registration	
12:00pm – 5:00pm	Golf - Ambrose Game <i>This is a fun team game, you don't have to be a golfer to play</i>	Venue: The Cut Golf Course at Port Bouvard Country Club Drive, Dawesville The Cut Golf Course Located off the Old Coast road just after the Dawesville Cut Bridge.
6:00pm – 8:00pm	Welcome Reception Venue: The Sebel Hotel, 1 Marco Polo Drive, Mandurah	<i>Sponsored by the City of Mandurah</i>

Friday 18th November 2011

7:30 – 8:30	Registration and Coffee	
8:30 – 10:15	OPENING PLENARY 1	
8:30	Introduction	Gary Carvolth, Master of Ceremonies
8:35	Welcome and Official Opening	Dyan Currie, PIA National President
8:55	STEPHENSON MEMORIAL LECTURE The Young Policeman at the William Street End of the Hay Street Mall.	Stuart Hicks AO, Chair, East Perth Redevelopment Authority
9:25	KEYNOTE ADDRESS Leadership Matters	Peter Baines, Leadership Expert and Socialpreneur
10:15 – 10:45	Cardno Coffee Break	
10:45 – 12:45	PLENARY SESSION 2	
10:45	KEYNOTE ADDRESS Addicted to Debt	Steve Maccora, Investment Specialist
11:25	KEYNOTE ADDRESS Cultural Planning	Kwende Kefense, Cultural Planner, City of Ottawa
12:05	YOUNG PLANNERS PANEL DISCUSSION	Special Guest Alannah MacTiernan
12:45 – 13:45	Lunch	
13:45 – 15:45	PLENARY SESSION 3	
13:45	KEYNOTE ADDRESS Cities who decides?	Jane Frances Kelly, Program Director, The Grattan Institute

14:15	KEYNOTE ADDRESS Planning and Delivery of Light Rail Systems in Ontario	Greg Tokarz, Manager, Transit Infrastructure Policy Office, Ministry of Transportation Ontario
14:45	When the rubble clears: The role of recovery planning and community resilience in WA	Bryan J Boruff, Assistant Professor, Oceans Institute and School of Earth and Environment UWA
15:15	Planning for Public Open Space	Rob Didcoe, Director Facilities and Camps Department of Sport and Recreation
15:45 – 16:05	Cardno Coffee Break	
16:05 – 17:00	FINAL PLENARY	
16:05	KEYNOTE ADDRESS Future Perfect Cities	Robyn Williams AM , Science Journalist, Presenter and Author
16:45	Closing Remarks	
17:00	Conference Close	
19:00	Conference Dinner	The Cut, Country Club Drive, Dawesville

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Speaker Profiles In order of appearance

Master of Ceremonies



Gary Carvolth
Master of ceremonies/ motivational speaker/ broadcaster/ celebrity auctioneer

Gary Carvolth commenced his career in radio and television whilst still in his early teens when he was contracted to present Channel 7's popular Club Seventeen program. He later went on to host In Perth Tonight, Telethon, and numerous other TV and radio programs in Perth. He has spent the last 40 years either in front of television cameras or behind a radio microphone.

During the early nineties Gary became known as the voice of sport through his long running daily sports program, Sports Connection, on Radio 6PR. The program covered every sport ranging from AFL and WAFL football, international & domestic cricket, rugby, tennis, athletics, golf and swimming.

For seven years from 1996 to 2003 Gary co-hosted 6PR's daily afternoon program with Jenny Seaton, and during this period the show proved a real hit with listeners. From 2004 Gary hosted the program solo.

Event Details

When:
17th – 18th November 2011

Where:
Mandurah Performing Arts Centre, Mandurah WA

Contact Us

The Planning Institute of Australia (WA Division)
Post Office Box 625,
South Perth WA 6951

27 Charles Street,
South Perth WA 6151

Tel: 08 9367 2599
Fax: 08 9367 9599
Email: wa@planning.org.au

Keynote Speakers



Dyan Currie
PIA National President

Dyan Currie is the National President of the Planning Institute of Australia (PIA) and the immediate Past President of the Qld Division of PIA. Ms Currie is a qualified and experienced Strategic and Development Assessment Manager and is currently the Manager of Strategic Land Use for Toowoomba Regional Council in Queensland. She is also a member of the Australian Government Urban Water Stakeholder Reference Panel.

Ms Currie has been a long term member of development industry organisations and was the Chair of the South East Qld Development Assessment Managers Group for three years. She has been a member of multiple boards implementing Development Assessment Reform projects in South East Queensland.

Ms Currie has qualifications in urban and physical geography, urban and regional planning and public sector management.



Peter Baines
Leadership Expert and Socialpreneur

Peter Baines is one of Australia's leadership experts having road tested leadership the hard way. Peter spent 22 years with the NSW Police leading teams in response to acts of terrorism and natural disasters on a scale not previously seen.

Peter was part of the leadership team that responded to Bali after the bombings in 2002 and was called upon in 2005 to lead national and international teams in response to the Tsunami of December

26, 2004 in South East Asia. Peter headed up multiple rotations into Thailand leading international teams in the identification process of those who died. All the time his leadership theories were tested in this trying environment. Peter was engaged to work in Queensland by one of the major Australian Banks and Universities to work with their staff and clients following the devastating floods and cyclone. His messages focused on leading in uncertain times and ensuring business continuity.

Creating sustainable leadership became a passion of his after witnessing the devastating effects of the 2004 Boxing Day Tsunami. He was deeply touched by the number of children left orphaned by the disaster and was inspired to set up an organisation that could make a significant difference in the lives of these children. In late 2005, Hands Across the Water was formed to raise funds for, and awareness of, the children of Thailand who were left orphaned. Today Hands is one of Australia's fastest growing boutique charities, having raised several million dollars without spending one cent of donor's money on administrative costs since its inception. With this they have built two orphanages, purchased a rubber plantation to ensure a sustainable and regular income, constructed a medical and community centre in the Khao Lak region of Thailand and is currently working towards the construction of a HIV Paediatrics Hospital in the North East of Thailand. Hands also is in a joint venture with Victoria University and the Starwood Hotel Group which provides education to students and staff from the Tsunami affected area of Khao Lak.

His final years with the NSW Police were spent on secondment to the National Institute of Forensic Science where he worked on national and international capacity building projects around counter terrorism and leadership. He spent time advising Interpol in France and the United Nations Office of Drug and Crime in South East Asia.

Peter has received various awards including Australian of the Year NSW Finalist for 2010, Thought Leaders Socialpreneur of the year 2008 and being the first Australian to be awarded the international honour of a Rotary Professional Excellence Award in 2008. He has completed university studies in Law, Forensic Science and post graduate studies in Management. He has received the NSW Police Service Medal and the Australian Federal Police Operations Medal, for work in response to the Bali Bombings and the 2004 Asia Tsunami. He was the first NSW Police Officer to be awarded the Humanitarian Overseas Service Medal and Australian National Medal.



Steve Maccora
Investment Specialist/ speaker

Our guest speaker this morning is Steve Maccora. Steve gained a wealth of experience in the financial services industry during a career spanning 41 years and has acquired a wealth of experience in Funds Management, Financial Planning, Master Funds and Dealership Management.

During the past 20 years he has been one of the most well known and respected people in Funds Management in Western Australia having been in State Management roles with Colonial First State and Rothschild.

Steve has had a significant impact in the training of Financial Advisers and was a Lead Lecturer for FINSIA (Financial Services Institute of Australasia) for many years and is also a Senior Fellow of FINSIA having served for many years on Regional Council, a number of which was as Vice Chairman.



Kwende Keftense
Cultural Planner, City of Ottawa

Kwende Keftense is a DJ, writer, researcher and cultural worker. Born and raised in the GTA, he is currently living and working in Ottawa. Fascinated by cities, his various professional ventures reflect different explorations and investigations into how they function, with a particular focus on culture. He was formerly a journalist for the Ottawa Xpress, and a guest author on Richard Florida's Creative Class Exchange, writing regularly about how cultural scenes develop and function in cities. His academic research about the emergence of Hip-hop culture and its connection to the built environment is being contributing to a feature for the National Film Board's Highrise documentary series. Kwende currently works with of a small team of Cultural Planners renewing the City of Ottawa's high-level Arts and Heritage plan. He also hosts and DJ's a bi-weekly radio show called Beet Roots radio on CKCU FM as well as a monthly dance party (3rd Friday) called Time Kode in Ottawa's Chinatown neighborhood. Stop by if you can - it's a good time.

Greg Tokarz
Manager, Transit Infrastructure Policy Office,
Ministry of Transportation Ontario

Greg is Manager of the Transit Infrastructure Policy Office at the Ontario Ministry of Transportation. The Office is responsible for developing provincial policy related to inter-regional and municipal transit infrastructure, working with transit stakeholders, and capital planning related to provincial funding of transit infrastructure.

Greg has worked with the Ontario Public Service for over eighteen years. Previous to his work in Transit Policy, Greg was a transportation planner for the Ministry of Transportation, and coordinated the development of regional transportation strategies across Ontario, including development of a strategy for expansion of inter-regional transit in the Greater Toronto Area.



Robyn Williams AM
Science Journalist, Presenter and Author

Robyn Williams is a science journalist and presenter of Radio National's Science Show (since 1975), Ockham's Razor and In Conversation. A fascinating and engaging presenter, he infuses his presentations with wit and humour - and has the enviable ability to make science interesting and fascinating for almost anyone.

Robyn Williams is as prominent on radio as he is on television, having narrated programs such as Nature of Australia, and Catalyst, and appeared on World Safari with David Attenborough.

He has conducted countless interviews with scientists for ABC TV and he hosted a link between leading scientists of Australia and the United Kingdom at the Grand Launch for the Royal Institution of Great Britain, attended by David Attenborough and the Queen.

Robyn Williams is highly respected in the academic world. In 1993 he was the first journalist elected as a Fellow of the Australian Academy of Science. In 1988, he received an Honorary Doctorate in Science from the Universities of Sydney, Macquarie and Deakin. The ANU awarded him a Doctorate of Law, and he is a Visiting Professor at the University of NSW and an Adjunct Professor at the University of Queensland.

Robyn Williams was appointed AM in the 1988 Australian Bicentenary Honours list. He was elected a National Living Treasure by the National Trust in 1987 and even has a star named after him by the Sydney Observatory. Robyn has served in various positions including President of the Australian Museum Trust, Deputy Chairman of the Commission For The Future, and President of The ANZAAS Congress. He is an Ambassador of the Queensland Museum Foundation.

Robyn Williams has written over 10 books, three of which are on the Higher School Certificate reading list. In 1994, Robyn Williams took up a Reuters Fellowship at Oxford University where he wrote his autobiography And Now For Something Completely Different, in deference to one of his most popular interviews with John Cleese on psychiatry. His book, Future Perfect, focuses on cities, transport, communication, education and science.

Although Robyn Williams graduated with a Bachelor of Science (Honours) in England, he admits to having spent as much time acting as he has studying. Early in his career he made guest appearances in The Goodies, Monty Python's Flying Circus and Dr Who and stood in for Tom Jones for four months in his TV series.

A superb communicator whose penetrating interpretations are enhanced by a lively wit, Robyn's unique mix of humour and fact is both stimulating and entertaining.

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2011 PIA (WA) STATE CONFERENCE
BEYOND PLANNING
Vision > Commitment > Infrastructure
17TH & 18TH NOVEMBER, MANDURAH PERFORMING ARTS CENTRE

...THEY GO BEYOND
AND PLAN TO
MAKE A DIFFERENCE.

Registration Form




HOW TO REGISTER

Online: Registration Forms can be downloaded from:
www.piastateconference.com.au

Fax: 9367 2599

Email: adminwa@planning.org.au

Tel: 08 9367 2599
Venue: Mandurah Performing Arts Centre
Ormsby Terrace, Mandurah

PD POINTS

7 PD Points apply for full conference = 1 point per session hour

PRIVACY

In registering for this event relevant details may be incorporated into a delegate list for the benefit of all delegates, sponsors, exhibitors, The Planning Institute of Australia WA Division and other parties directly related to the conference. If you do not wish to have your name and contact details provided to the above mentioned parties or for future promotion please tick this box

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Joint Platinum Sponsor:



EARLY BIRD

Discounted Early Bird registration fees are only applicable if the Registration Form and Payment is received by 5:00pm on **Friday August 6, 2011**

TEAM DISCOUNTS

Register a team of 3-5 save 5% off the standard price
Register a team of 5-6 save 10% off the standard price
Register a team of 6-8 save 12% of the standard price

CANCELLATION POLICY

Registration cancellations will only be accepted in writing. Cancellations made prior to 26th August will be refunded in full less \$100 to cover administration costs. Cancellations made from 26th August - 20th September will be refunded 50% of the full amount paid. NO REFUND will be made after Friday 30th September. Registrations are transferable to other attendees without incurring a penalty, however you must advise of the change in writing.

HOW TO PAY

Planning Institute of Australia WA Division, 2011 State Conference

By Post: PO BOX 625, South Perth WA 6951

Fax: 08 9367 9599 or:

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Department of Planning



SECTION A: PERSONAL DETAILS	
TITLE:	SURNAME:
ORGANISATION:	EMAIL OF DELEGATE:
POSITION:	EMAIL FOR INVOICE:
ADDRESS:	TELEPHONE:
SUBURB:	STATE:
Preferred Name On Badge:	POSTCODE:
	PIA MEMBER: <input type="checkbox"/>
	NON MEMBER: <input type="checkbox"/>
SPECIAL REQUIREMENTS: Please advise of any special requirements (Dietary, Accessibility etc...)	
SECTION B: REGISTRATION FEES	
SAVE UP TO \$ 200 ON EARLY BIRD PRICES BY REGISTERING AND PAYING BEFORE AUGUST 6	
Tick <input type="checkbox"/> relevant box	EARLY BIRD Closes 6/8/2011
PIA Member Registration	<input type="checkbox"/> \$550
Non Member Registration	<input type="checkbox"/> \$700
Full Time Student Planners (PIA Member)	<input type="checkbox"/> \$120
Full Time Student Planners (Non PIA Member)	<input type="checkbox"/> \$200
	STANDARD Closes 28/10/2011
	<input type="checkbox"/> \$650
	LATE From 31/10/2011
	<input type="checkbox"/> \$750
	<input type="checkbox"/> \$900
	<input type="checkbox"/> \$140
	<input type="checkbox"/> \$220
SUB TOTAL SECTION B	

SECTION C: SOCIAL EVENTS						
THE WELCOME RECEPTION AND CONFERENCE DINNER IS INCLUDED IN THE REGISTRATION OF DELEGATES. For catering and transport purposes delegates are required to indicate their attendance at these inclusive social events. *Failure to indicate will be registered as a not attending *						
Date	Function	Cost per person	Attendance (please tick)		No. of Tickets	Total Cost
Thursday 17 Nov	Welcome Reception Full Registration	Nil	Yes <input type="checkbox"/>	No <input type="checkbox"/>	1	Nil
6:00PM – 8:00PM	Additional Tickets	\$70	Yes <input type="checkbox"/>	No <input type="checkbox"/>		\$70
Friday 18 Nov	Conference Dinner Full Registration	Nil	Yes <input type="checkbox"/>	No <input type="checkbox"/>	1	Nil
7:00PM – 12:00AM	Additional Tickets	\$170	Yes <input type="checkbox"/>	No <input type="checkbox"/>		\$170
Do you require a complimentary bus transport to/from Performing Art Centre to The Cut		Nil	To the Cut <input type="checkbox"/>	From the Cut <input type="checkbox"/>	1	Nil
SUB TOTAL SECTION C						
SECTION D: STUDY TOURS						
Study Tour itineraries and durations are subject to confirmation – “Attendance on the study tours is strictly limited to bus capacity; registrations will be accepted on a first come first served basis. In the event of a cancellation, the next delegate on the waiting list will be notified and given the opportunity to take the place and arrange for payment to be made” ** Study Tours will be departing and returning to Mandurah Performing Arts Centre.						
Date	Tour	Cost per person	Attendance (please tick)		No. of Tickets	Total Cost
17 November	Tour A: Time: 9:00am – 5:00pm					
	PIA Member	\$80	Yes <input type="checkbox"/>	No <input type="checkbox"/>		
	Non Member	\$100	Yes <input type="checkbox"/>	No <input type="checkbox"/>		
	Tour B: Time: 9:00am – 5:00pm					
	PIA Member	\$80	Yes <input type="checkbox"/>	No <input type="checkbox"/>		
	Non Member	\$100	Yes <input type="checkbox"/>	No <input type="checkbox"/>		
Special Dietary Needs Or Accessibility Requirements <input type="checkbox"/>						
SUB TOTAL SECTION D						

SECTION E : GOLF		
PIA ANNUAL GOLF AFTERNOON		
Date:	Thursday November 17, 2011	
Venue:	The Cut Golf Course Located off the Old Coast road just after the Dawesville Cut Bridge.	
Time:	11:45am Registration, Tee-Off Shot Gun at 12:30pm	
Format:	Ambrose, this is a fun team game, you don't have to be a golfer to play	
Cost:	<input type="checkbox"/> \$95 Individual Player <input type="checkbox"/> \$380 Team of 4. Price includes green fee and motor cart hire	
RSVP:	Friday 28 th October, 2011 – Places are limited, book early to avoid disappointment	
FIRST NAME:	SURNAME: ORGANISATION:	
EMAIL:	ADDRESS:	
TELEPHONE:	FAX:	
My Golf party consists of the following players: (please note if playing as an individual you will be allocated to a team)		
No:	PLAYER NAMES: CATEGORY HANDICAP	
1		
2		
3		
4		
Player Category (indicate A, B, or C)		
A	<input type="checkbox"/> Registered Club Player B <input type="checkbox"/> Social Club/Group Player C <input type="checkbox"/> Irregular or Non Player	
Maximum handicaps for Men 22; Ladies 30; Unless the player has an official handicap, nomination required by Friday 28 October 2011. Payment required by Wednesday November 2, 2011 Tee – Off Times will be advised.		
EVENT TO BE HELD COME RAIN OR SHINE- Numbers are limited, queries about Golf event to Sandy Papalia, sandy.papalia@planning.org.au		
SUB TOTAL SECTION D		

SECTION F: PAYMENT SUMMARY AND DETAILS		FOR: Delegate Name:	
Payment:	All Prices are GST inclusive.		
Cheques:	Please make cheques payable to 'Planning Institute Australia WA Division'		
Electronic Funds Transfer	ANZ – BSB: 012 -950 Account No: 1972 -48295		
Sub Total Section B	Registration		
Sub Total Section C	Social Events		
Sub Total Section D	Study Tours		
Sub Total Section E	Golf		
	Total	\$	
CREDIT CARD PAYMENT:		Please charge \$	<input type="checkbox"/> MasterCard <input type="checkbox"/> Visa
Cardholder's Name:	Phone Number		
Email			
Card Number:		Expiry date:	CVV Number:
Signature			
I understand and accept the conditions of the cancellation policy (refer page 1)			
THIS REGISTRATION FORM IS A TAX INVOICE ABN 11 802 663 785 PLEASE PRINT CLEARLY AND KEEP A COPY FOR YOUR RECORDS			
SECTION G: ACCOMMODATION		* Information only, all bookings to be made through The Sebel	
Reservations requests are subject to hotel availability			
*Rates are for Arrival: Thursday November 17, 2011 - Departure: Saturday November 19, 2011.			
Hotel options	Nightly rate per room	Reservations: Contact the Hotel Reservations Department on: Telephone: +61 8 95128311 Website: www.mirvachotels.com Click Make a booking; Click 'The Sebel Mandurah'; Under 'Special Code' Enter 'PLAN1111'; Under 'Code Type' select 'Conference/Event'; Click 'Check Availability'.	
The Sebel Mandurah 1 Marco Polo Drive	\$144 room only, Studio Room King		
	\$216 1 Bedroom Apartment		
	\$292 2 Bedroom Apartment		
	\$427 3 Bedroom Apartment		



FUTURE COMMUNITY BUILDING AND TENNIS COURTS
LOT 188 WATERWHEEL ROAD, BEDFORDALE



FUTURE COMMUNITY BUILDING



ORNAMENTAL LAKE AND FUTURE COMMUNITY BUILDING



GRASS PLAYING AREA



TENNIS COURTS

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1 June 2011



Customer Centre

Postal Address:
Locked Bag 2
Osborne Park Delivery
Centre
Osborne Park WA 6916

Dear Customer

RE:

As your property is in a declared drainage area it will be rated for drainage charges from 1 July 2011. Therefore your next Annual Service Account will include a drainage charge of \$. The charge goes towards operating and maintaining the system.

We operate drainage systems with local governments to collect and carry water to rivers, wetlands, the ocean and infiltration basins. This helps protect developed land from flooding and assists with returning water to the aquifers. Excess surface water is caused by the introduction of roads, houses, buildings and car parks that collect and concentrate rainfall, which in native bushland would drain away naturally.

Properties are part of a declared drainage area if they:

- Are capable of contributing rain water runoff to the drain system, or
- Benefit from the system by being protected from flooding, or
- Benefit from local roads and foot paths that are protected from flooding.

We calculate drainage charges using your property's Gross Rental Value (GRV), which is supplied by the Valuer General.

More information on drainage is available on our website, visit www.watercorporation.com.au/drainage

or the Department of Water website www.water.wa.gov.au/Managing+our+water/Stormwater+and+drainage/default.aspx

Yours sincerely

Riley Nelson
MANAGER CUSTOMER CENTRE

Your Ref
Our Ref
Enquiries
Direct Tel

Customer Services Representative
1300 663 566



Customer Centre
Postal Address:
Locked Bag 2
Osborne Park Delivery
Centre
Osborne Park WA 6916

9 June 2011

Dear Customer

Recently you received a letter from us relating to drainage charges.

Following that letter we have had a number of calls from customers asking for more information. Please find with this letter an information sheet that explains why your property is now in a declared drainage area, the reasons why the boundaries required altering, why we charge for drainage, what the money is used for and other questions you may have.

These changes follow a comprehensive review of our declared drainage areas right across metropolitan Perth. There were two reasons why we needed to undertake this review. The first was to take into account the extensive development that has occurred over the past decade. The second, and this applied to older suburbs, was because we now have more accurate information on storm water catchments that enabled us to establish exactly where the boundaries in 2011 are.

The review resulted in a number of properties, including yours, now being included in one of our drainage areas and that is the reason you will be charged for drainage from your 2011/12 July annual service account.

Drainage charges have been included on annual service accounts for almost 80 years and currently more than 300,000 properties in the Perth metropolitan area benefit from our main drainage service and pay an annual service charge.

Further information on our drainage services in metropolitan Perth please refer to our website - www.watercorporation.com.au/drainage.

You can also contact us by:

- Phone: 1300 663 566
- Email: customer@watercorporation.com.au

Yours sincerely

A handwritten signature in black ink, appearing to read "Riley Nelson".

Riley Nelson
MANAGER CUSTOMER CENTRE



Drainage Charges
Information for customers June 2011

Introduction

A drainage service is provided in many parts of the Perth metropolitan area by the Water Corporation and local government. In May 2011, a number of new areas were declared as drainage areas following our first review of the existing Metropolitan Declared Drainage Area boundaries in ten years.

Local governments manage most of the smaller reticulation drains and outlets of Perth's urban drainage network. We are responsible for the main drains that cross the boundaries of several local governments. Our main drains provide suitable outlets (such as the ocean or a river) for the excess storm water runoff that local government drains cannot dispose of. Our drains also assist with returning water to underground aquifers.

The system consists of a network of compensation basins, natural watercourses, open and pipe work drains, pump stations and pressure mains. Without this infrastructure the areas in the drainage catchment would be prone to flooding.

Why are you charging for drainage?

Drainage charges apply to land that is within a declared drainage area which is served by one of our main drains. This means the land involved benefits from, or contributes to, the need for our main drains.

This is not a new charge, as Drainage charges have been included on Annual Service Accounts for close to 80 years. Currently, over 300,000 properties in the Perth metropolitan area benefit from our main drains and pay an annual service charge.

Properties in low lying areas quite clearly benefit from drainage infrastructure that takes away excess surface water. Properties on higher land benefit from the infrastructure as it means that they can use roads and footpaths in areas that could otherwise be flooded when it rains. Therefore, the main drain provides a beneficial service no matter where individual properties are located within the catchment area.

Why have the drainage boundaries been changed?

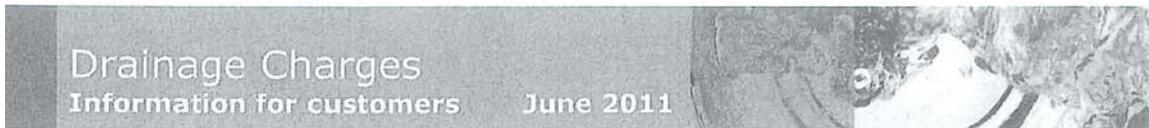
We reviewed the drainage boundaries because:

- Extensive development has occurred within metropolitan Perth over the past decade. In this time a lot of new sub divisions have gone ahead and the storm water runoff has been going into our main drains since they have been completed.

1300 663 566 Drainage charge enquiries



www.watercorporation.com.au



- In older areas, the boundaries were originally determined based on contours or plans of the land. We have now thoroughly reviewed these boundaries, conducted site inspections and sourced more accurate information on storm water infrastructure from local governments. This means we can determine more accurately what storm water runoff is coming into or going out of our catchments.

Plans showing existing drainage areas and the areas where boundaries have changed in 2011 can be viewed on the drainage section of our website - simply visit www.watercorporation.com.au/drainage.

What is the money used for?

Services charges raised are put towards the cost of building main drains and the regular maintenance of our drains.

How does local government manage drainage?

Local governments are responsible for the management of their drainage within their boundaries. They collect runoff and transfer it to sumps, natural water bodies or directly into our main drains. If they need to direct excess storm water or groundwater into our main drains, the areas that contribute to or benefit from this service are charged an annual service fee for drainage by the Corporation.

Why don't you charge everyone for drainage?

We can legally only charge properties within a declared drainage area.

I hold a concession card, am I eligible for a discount on the drainage charge?

Yes, if you have already registered with us as a senior or pensioner you will receive a discount of up to 50% automatically. If you have not registered with us, you can apply for a concession against your entire Annual Service Account by visiting www.watercorporation.com.au or by calling us on 1300 659 951.

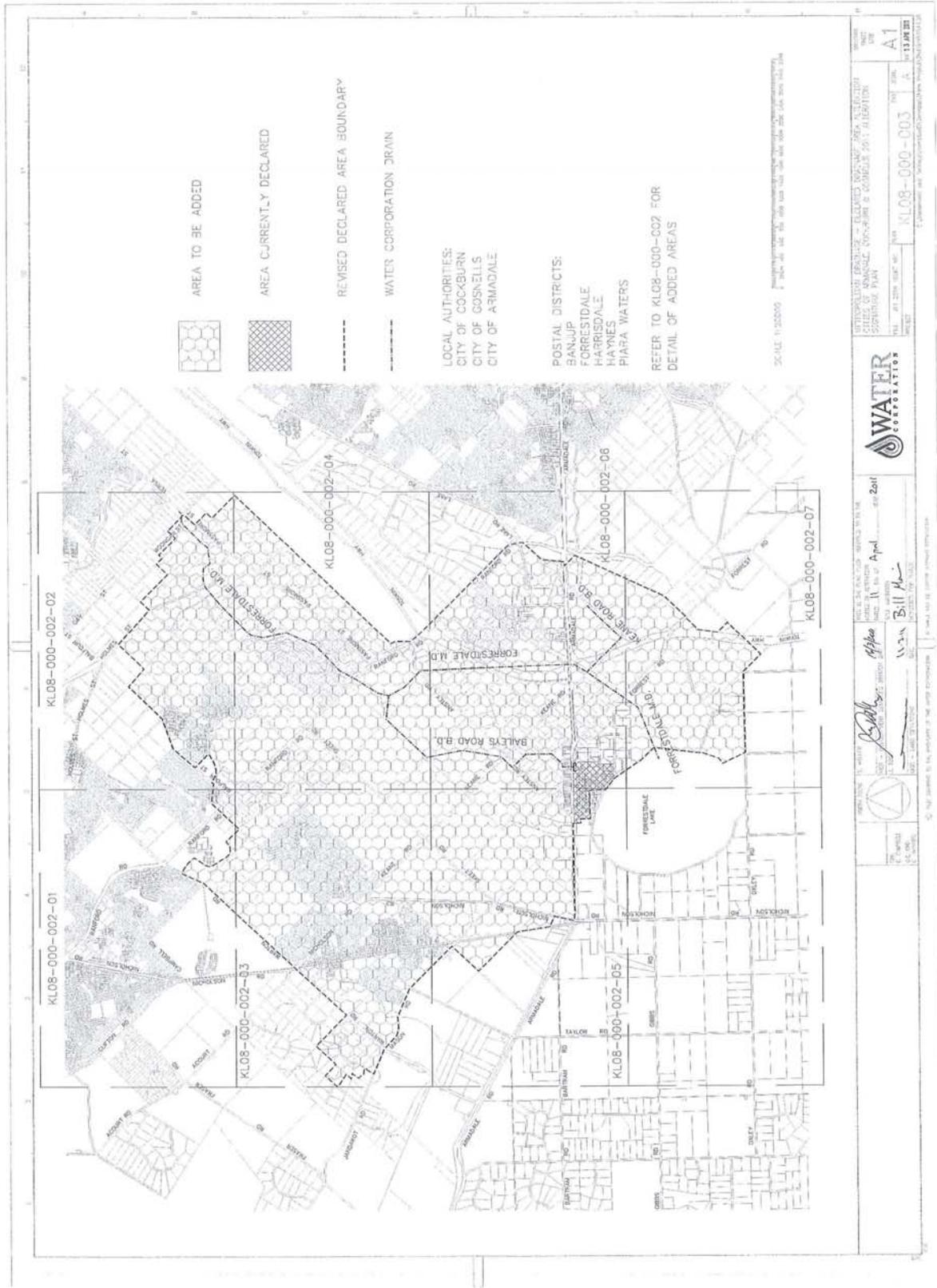
I'm having difficulty paying my accounts. What can I do?

We understand it is sometimes difficult to pay accounts on time. That is why we have a range of flexible options that can be tailored to meet your needs. Please contact us on 13 13 85 for more information when you receive your account.

1300 663 566 Drainage charge enquiries



www.watercorporation.com.au



SCHEDULE OF SUBMISSIONS - INFRASTRUCTURE COST SCHEDULE 2011					
DCP ITEM	SCHEDULE 13B TEXT	SUBMITTER	SUBMITTER'S COMMENT	RESPONSE	RECOMMENDATION
3 (a)	3a 100% of the total cost to acquire any road widenings for the ultimate road reserve and the ultimate traffic signalised intersection in the proposed North Forrestdale town centre	Stockland WA Developments Pty Ltd/Development Planning Strategies WA	In response to a number of changes to the design for Nicholson Road additional road widening is required. Please refer to page 5 the attached submission for particular land requirements submission points.	The City supports the inclusion of the additional land requirements based on the amended design for Nicholson Road. A number of the land areas noted in the submission are already included on the ICS from the 2010 review period. The City has produced land requirement plans based on the new design and updated the ICS 2011 reflective of this. In all areas of the submission the ICS 2011 acquires the land areas noted. In some the ICS 2011 acquires more than the submission area due to the method of calculating the additional area over and above a standard truncations. This method has been the consistent approach.	Support.
3 (b)	100% of the total cost of constructing the full earthworks, two dual carriageways and all structures.	Stockland WA Developments Pty Ltd/Development Planning Strategies WA	In response to a number of changes to the design for Nicholson Road additional construction costs for the slip lanes at the town centre site, realigned roundabout at Exchange Avenue and subsequent relocation of services is now required.	The City supports the inclusion of the construction cost of the slip lanes at the town centre site, realigned roundabout at Exchange Avenue and subsequent relocation of services due to the amended road design. The costs noted in the submission have been included in the Nicholson Road cost estimate.	Support.
6 (a)	6a A contribution towards the total cost of constructing the Regional Path Network within Development Control Area No.3 as identified in the adopted Infrastructure Cost Schedule.	Stockland WA Developments Pty Ltd/Development Planning Strategies WA	There appears to be a minor discrepancy in the length of Dual Use Path noted under Items 6 (a) (20) and (21) which is subsequent to the realignment of Mason Road on the structure plan. The revised distance is 660 metres and it is recommended that Items 6 (a) (20) and (21) are amalgamated under Item 6 (a) (20) to minimise confusion.	The City has amended the Dual Use Path to be consistent with the realigned Mason Road and combined the two path lengths under Item 6 (a) (20). The total length of the new 6 (a) (20) has been measured at 670m and this figured has been updated in the ICS 2011.	Support.
7 (b)	A contribution of approximately 100% of the cost of constructing an open	Stockland WA Developments Pty Ltd/Development	Confirmation sought that the cost contribution towards the construction of the Balannup Drain as an open channel includes the	The cost of constructing the Balannup Drain as an open channel in the multiple use corridor is applied as a contribution towards the cost on a linear metre rate basis. The original linear metre rate was derived	Noted.

SCHEDULE OF SUBMISSIONS - INFRASTRUCTURE COST SCHEDULE 2011					
DCP ITEM	SCHEDULE 13B TEXT	SUBMITTER	SUBMITTER'S COMMENT	RESPONSE	RECOMMENDATION
7 (c)	channel in the multiple use corridor and 100% of the cost of constructing the arterial drainage channel adjacent to Reilly Road.	Planning Strategies WA	provision to treat the 1 in 1 year events to be treated prior to infiltration.	by Parsons Brinckerhoff (in consultation with the North Forrestdale Steering Group) in 2006 and based on the North Forrestdale Structure Plan Central Urban Water Management Strategy. The costs were then compared and adjusted by Parsons Brinckerhoff based on information from Cossill & Webley on Heron Park Estate. Based on the above information the linear metre contribution factors in the requirements to meet the Urban Water Management Strategy.	Supported.
7 (c)	7c 100% of the cost of constructing Skeet Road pipe work, culverts and pavement reconstruction and reinstatement of Nicholson Road, Mason Road and any other portion of road pavement modified to install arterial drainage.	Satterley Property Group/JDA Consultant Hydrologists	There appears to be discrepancies in the current understanding of the capacity of the portion of Balannup Drain downstream of Skeet Road. It is proposed that costs are included in item 7 (c) to undertake a detailed survey (as constructed survey) and hydraulic modelling to confirm the capacity of the Balannup Drain downstream of Skeet Road.	There are a number of factors to be considered regarding the Balannup Drain downstream of Skeet Road. Undertaking a comprehensive as constructed survey of this section of open drain and subsequently establishing the hydraulic modelling for the capacity will provide a number of benefits to projects within DCP No.3.	
7 (c)		Stockland WA Developments Pty Ltd/Development Planning Strategies WA	Stockland's consultants have undertaken a more comprehensive cost analysis for the cost to implement the Skeet Road Arterial Drain and advise that the advertised cost estimate is consistent.	Information from consultants on the appropriateness of cost estimates is appreciated.	Noted.
8 (b)	(b) 100% of the total cost of a community facility on Lot 48 Nicholson Road including change rooms, toilets and	Stockland WA Developments Pty Ltd/Development Planning Strategies WA	Propose consideration of discrepancies in Draft ICS 2011 cost estimate for Piara Waters (North) Community and Sporting Facility. Emerge Landscape Architects have reviewed the cost	The submission has misinterpreted the cost allocation for some items in the ICS. Some of the submission items are still based on the original plan which has significantly changed. The site has reduced in size due to road widening requirements and the drainage swales have reduced.	Upheld in part.

SCHEDULE OF SUBMISSIONS - INFRASTRUCTURE COST SCHEDULE 2011					
DCP ITEM	SCHEDULE 13B TEXT	SUBMITTER	SUBMITTER'S COMMENT	RESPONSE	RECOMMENDATION
9 (c)	Contribution towards the cost to reconfigure the 132 KV power lines to an urban standard on current alignment as specified in the Infrastructure Cost Schedule. Other relocation costs to be met by individual subdividers.	Stockland WA Developments Pty Ltd/Development Planning Strategies WA	<p>estimates. Based on the current development standards within the area, the following discrepancies have been noted:</p> <ol style="list-style-type: none"> 1. Landscaping \$500,732.50 2. Irrigation \$156,810.00 3. Drainage Swales and Silcrete \$194,965.00 	<ol style="list-style-type: none"> 1. The landscaping costs in the ICS are based on works appropriate and sustainable for the City to manage and therefore, are based on fewer square metres of garden beds. The Stockland submission is still costing a planted landscaping area of over 8,800sqm and the City is proposing 1,500sqm. Support inclusion of cost for more advanced trees. 2. Dependant on the areas (turf vs landscaping) as City irrigation cost estimate is based on planting landscaping of 1,500sqm. 3. The City does not support this submission point as the bio-retention areas are also to accommodate the subdivisional area and are not solely the responsibility of the DCS. The City's cost estimate is only to cover the small proportion of the swales that relate to the building and carpark drainage and Nicholson Road. 	Noted.

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INFRASTRUCTURE COST SCHEDULE 2011

Contents

Clause 3.4.2 - Calculation of Contribution Cost Per Lot (this
Clause 3.4 - Calculation of Payments to date "B" and
Clause 3.3 - Deductions from Development Contribution Area
Clause 3.6 Common Infrastructure Works - Calculates "A"
Common Infrastructure Works - Summary
Clause 3.6.3 Specified Works
Arterial Roads
Regional Paths
Arterial Drainage
Community facilities
Sewer, power and CCW's
Clause 3.6.2 General Works
Clause 3.12.3 Proposed values

Calculation of Contribution Cost Per Lot		Notes
A = Gross cost of Common Infrastructure Work	\$70,933,132.45	Clause 3.6 Calculation of "A"
B = Payments to Date	\$26,245,225.19	See worksheet Clause 3.4 Calculation of "B" and "D".
C = Common Infrastructure Work Cost	\$44,687,907.26	C = A - B
D = Estimated Lot Yield (unsubdivided balance)	3,525	Calculated at 10 lots per hectare excluding land uses in Clause 3.3 of Schedule 13B and Clause 6B.4.4. See worksheet Clause 3.4 Calculation of "B" and "D" and Clause 3.3 Deductions from Development Contribution Area
E = Contribution Cost Per Lot	\$12,678.87	E = C/D

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Clause 3.4 - Calculation of "B" and "D"

Calculation Date	Location and Area in DCA 03				Net Area for calculation of B & D				Calculation of "B" (Insert Unsubdivided area first - Column O)				Calculation of "D"	
	Parent Lot	No 3 (see TFS 4 Special Control Area Map 3) (sqm)	Notes (= Part of lot outside DCA03)	CI 3.3 Deductions (sqm) (see over for Cals)	Parcel area in DCA No 3 minus CI 3.3 deductions (sqm)	Lots produced (at or from last calculation date)	Area within which Lots Produced (ha)	Density	Contribution Cost Per Lot	No of Lots for Calculation of "B"	"B" = No Lots x Contribution Cost Per Lot and Nominal Contributions	Unsubdivided area of Lot (ha) at 13 June 2011	Unsubdivided area source	"D" at 10 Lots per ha
13-Jun-11	SP Central	1,502,178.404	Mas_P	8,110.36	142,068.04	0	0.0000		0.00	\$0.00	14,2068		142.07	
12-May-08	3 Nicholson Rd	97,403.845		0.00	97,403.85	39	8.7234	4.4707	\$9,575.80	\$373,456.20	DP 60224			
27-May-09	4 Nicholson Rd	107,521.531		0.00	107,521.53	189	10.7522	17.5779	\$9,575.80	\$1,029,604.68				
26-May-10	3 Nicholson Rd					18	0.6785	26.5291	\$9,939.33	\$67,438.35	DP63370 & DP64793			
13-Jun-11	3 Nicholson Rd	481,758.351		8,195.13	473,563.22	35	1.6363	21.3897	\$11,504.29	\$188,244.70	DP65277		0.00	
13-Jun-11	6 Nicholson Rd	277,277.135		0.00	277,277.14	110	7.8694	13.9782	\$11,504.29	\$905,321.14	DP65277		394.87	
27-May-09	14 Mason Rd	238,901.625		0.00	238,901.63	0	0.0000		0.00	\$0.00	27,7277		277.28	
26-May-10	14 Mason Rd					124	13.2192	9.3803	\$9,939.33	\$1,232,476.92	DP65201 Lot 9040			
13-Jun-11	46 Wright Rd	310,820.138	Mas_P	40,000.00	270,820.14	0	0.0000		0.00	\$0.00			267.64	
15 Wright Rd		382,814.438		64.00	382,750.44						26,7637	DP65219		
48 Wright Rd		210,419.033		876.00	209,543.03	198	23.9926	8.2525	\$9,575.80	\$1,896,008.40	DP 58982			
12-May-08	15 & 48 Wright Rd					168	9.0036	18.6592	\$10,376.34	\$934,244.15	DP 50875			
27-May-09	15 & 48 Wright Rd					68	18.7949	3.6180	\$9,939.33	\$675,874.44	DP63326			
26-May-10	15 & 48 Wright Rd					39	2.2302	17.4872	\$11,504.29	\$256,568.68	14,2116	DP63326	142.12	
13-Jun-11	15 & 48 Wright Rd					230	23.2504	9.8923	\$9,575.80	\$2,202,434.00	DP 59398			
12-May-08	49 Keane Rd	538,206.000		31,238.91	506,967.09	149	9.6927	15.3724	\$10,376.34	\$1,005,747.51	DP63035			
27-May-09	49 Keane Rd					116	22.8808	5.0698	\$9,939.33	\$1,152,962.28	DP66306			
26-May-10	49 Keane Rd					53	4.5655	11.6088	\$11,504.29	\$525,228.36	DP70108		0.00	
13-Jun-11	50 Wright Rd	538,575.005		0.00	538,575.01	337	34.1453	9.8696	\$9,575.80	\$3,227,044.60	DP 57664 & 57670			
27-May-09	50 Wright Rd					14	1.4419	9.7094	\$10,376.34	\$145,268.76	DP57664			
26-May-10	50 Wright Rd					228	18.2703	12.4793	\$9,939.33	\$1,815,945.41	DP58941 & DP58940		0.00	
26-May-10	50 Wright Rd		Re-subdivisions			2	0.0000		\$9,939.33	\$19,878.66				
27-May-09	113 Warton Rd	145,657.995	P	40,000.00	105,658.00	0	0.0000		0.00	\$0.00				
27-May-09	114 Warton Rd	65,353.803	P	59,351.15	6,002.65	1	0.2983	3.3523	\$10,376.34	\$10,376.34	SUB/13190			
08-Apr-11	113 & 114 Warton					32	3.1790	10.0661	\$9,939.33	\$315,971.30	DP65356			
13-Jun-11	143 Warton Rd					42	4.0438	10.3889	\$11,504.29	\$465,091.44	DP65788		59.69	
13-Jun-11	143 Warton Rd	267,348.276	P	0.00	267,348.28	0	0.0000		0.00	\$0.00	26,7348		267.35	
27-May-09	151 Wright Rd	91,593.000		0.00	91,593.00	0	0.0000		0.00	\$0.00			0.00	
26-May-10	151 Wright Rd					120	9.1593	13.1014	\$9,939.33	\$910,373.05	0.0000	DP 65130 & DP 66319	0.00	
27-May-09	153 Wright Rd	90,515.000		0.00	90,515.00									
154 Mason Rd		65,606.000		0.00	65,606.00									
12-May-08	Lot 153 & 154 Combined					103	9.6062	10.7222	\$9,575.80	\$919,870.50	DP 58901 Lot 9000			
13-Jun-11	Lot 153 & 154 Combined					34	2.1443	15.8560	\$11,504.29	\$246,686.49	3,8616	DP68123	38.62	
12-May-08	388 Wright Rd	323,501.117		12,017.00	311,484.12	337	31.1484	10.8192	\$9,575.80	\$2,982,709.61				
27-May-09	388 Wright Rd		Re-subdivisions			4	0.0000		\$10,376.34	\$41,505.36				
26-May-10	388 Wright Rd		Re-subdivisions			2	0.0000		\$9,939.33	\$19,878.66	0.0000		0.00	
13-Jun-11	1000 Wright Rd	120,011.000		120,011.00	0.00		0.0000		0.00	\$26,550.00			0.00	
13-Jun-11	1001 Wright Rd	115,675.000		115,675.00	0.00		0.0000		0.00	\$0.00			0.00	
13-Jun-11	Water Corp Mains Corridor	56,901.958		56,901.96	0.00									
		4,676,038.654		492,440.51	4,183,598.15	2983	28.1748	10.5887		\$24,857,002.51			1,589.62	
13-Jun-11	334 Armadale Rd (SP SE)	118,993.244		101,463.00	17,530.24		0.0000			\$0.00	1,7530		17.53	
13-Jun-11	21 Nicholson Rd (SP SE)	388,401.000		23,371.03	365,029.97		0.0000			\$0.00	36,5030		365.03	
27-May-09	22 Nicholson Rd (SP SE)	473,912.000		20,382.55	453,529.45		0.0000			\$0.00				
13-Jun-11	22 Nicholson Rd (SP SE)					141	11.9670	11.7824	\$11,504.29	\$1,376,718.38	33,3859	DP67676	333.86	
		981,306.244		145,216.58	836,089.67	141.00	11.97	11.78		\$1,376,718.38			716.42	
13-Jun-11	12 Para - Former Mason (SP South)	40,140.509		522.00	39,618.51		0.0000			\$0.00	3,9619		39.62	
13-Jun-11	6 Nicholson (SP South)	98,965.833		582.84	98,383.00		0.0000			\$0.00	9,8383		98.38	
13-Jun-11	5 Nicholson (SP South)	11,776.792		433.75	11,343.04		0.0000			\$0.00	1,1343		11.34	
13-Jun-11	4 Nicholson (SP South)	9,848.028		256.38	9,591.65		0.0000			\$0.00	0,9592		9.59	
13-Jun-11	31 Armadale Rd	10,960.181		0.00	10,960.18		0.0000			\$0.00	1,0960		10.96	
13-Jun-11	39 Armadale Rd	25,500.076		0.00	25,500.08		0.0000			\$0.00	2,5500		25.50	
13-Jun-11	112 Armadale Rd	87,803.888		0.00	87,803.89		0.0000			\$0.00	8,7804		87.80	
13-Jun-11	111 Armadale Rd	49,237.336		0.00	49,237.34		0.0000			\$0.00	4,9237		49.24	
13-Jun-11	110 Armadale Rd	49,974.508		0.00	49,974.51		0.0000			\$0.00	4,9975		49.97	
13-Jun-11	58 Armadale Rd	343,828.123		14,510.00	329,318.12		0.0000			\$0.00	32,9318		329.32	
13-Jun-11	Road Reserve	15,539.362		4,618.00	10,921.36		0.0000			\$0.00	1,0921		10.92	
13-Jun-11	45 Wright	391,075.955		15,730.00	375,345.96		0.0000			\$0.00	37,5346		375.35	
13-Jun-11	25 Wright	4,285.321		0.00	4,285.32		0.0000			\$0.00	0,4285		4.29	
27-May-09	30 Wright	20,566.184		0.00	20,566.18		0.0000			\$0.00				
13-Jun-11	30 Wright					1	0.2323	4.3048	\$11,504.29	\$11,504.29	1,8325	DP68108	18.33	
13-Jun-11	14 Wright	14,668.191		0.00	14,668.19		0.0000			\$0.00	1,4668		14.67	
13-Jun-11	15 Wright	18,826.263		0.00	18,826.26		0.0000			\$0.00	1,8826		18.83	
13-Jun-11	16 Wright	29,148.911		0.00	29,148.91		0.0000			\$0.00	2,9149		29.15	
13-Jun-11	17 Wright	35,309.495		0.00	35,309.50		0.0000			\$0.00	3,5309		35.31	
		1,257,454.956		36,652.96	1,220,801.99	1.00	0.23 n.a			\$11,504.29			1,218.56	
		6,914,799.854		624,310.05	6,290,489.80	3,125.00	295.6111	10.9224		\$26,445,129.19	552,459.6		552.46	

The City of Armadale expressly disclaims liability for any loss or damage suffered by a person relying on this document.

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Clause 3.3 Deductions from Development Contribution Area

Location and Area	Nominal contribution areas (sqm) (Sch 13B CI 3.3)	CCWs (Sch 13B CI 3.3)	Drainage Reserves (Sch 13B CI 3.3)	Public Utility Sites (CI 6B4.4 (c) & Sch 13B CI 3.3)	Community purpose sites (Sch 13B CI 3.3)	Common Infrastructure Sites (Sch 13B CI 3.3)	Primary & Other Regional Roads (CI 6B4.4 (a - e))	Road notes	Government Schools (CI 6B4.4 (c))	Other Developments (CI 6B4.4 (e))	Total Deductions (area in sqm)	Notes
Parent Lot												
SP Central												
2 Skeet Rd							8,110.36	Nicholson Rd			8,110.36	updated ICS Review 2010
3 Nicholson Rd											0.00	
4 Nicholson Rd											0.00	
3 Nicholson Rd												
3 Nicholson Rd							8,195.13	Nicholson Rd			8,195.13	
6 Nicholson Rd											0.00	
13 Mason Rd											0.00	
14 Mason Rd									40,000.00		40,000.00	
14 Mason Rd												
46 Wright Rd												
14 Mason & 46 Wright Rd							64.00	Nicholson Road			64.00	IN/5341/10, updated ICS Review 2010
15 Wright Rd							876.00	Nicholson Rd			876.00	updated ICS Review 2010
48 Wright Rd												
15 & 48 Wright Rd												
15 & 48 Wright Rd												
15 & 48 Wright Rd												
15 & 48 Wright Rd												
49 Keane Rd		23,183.00			4,019.00		4,036.91	Nicholson Rd			31,238.91	Areas from Sub 129423
49 Keane Rd												
49 Keane Rd												
49 Keane Rd												
50 Wright Rd												
50 Wright Rd												
50 Wright Rd												
113 Warton Rd												
114 Warton Rd	55,585.00						3,766.15	Warton Rd & Nicholson Rd MKS	40,000.00		95,351.15	Nominal contribution area changed so D provides 6 residential lots only.
113 & 114 Warton											0.00	
143 Warton Rd											0.00	
151 Wright Rd											0.00	
151 Wright Rd												
153 Wright Rd											0.00	
154 Mason Rd											0.00	
Lot 153 & 154 Combined											0.00	
Lot 153 & 154 Combined											0.00	
388 Wright Rd												
388 Wright Rd							12,017.00	Roads DP 54277			12,017.00	
388 Wright Rd												
1000 Wright Rd	120,011.00										120,011.00	Nominal Contribution CI 3.5.1
1001 Wright Rd	75,675.00								40,000.00		115,675.00	Meeting 11/11/06 agreed no lot yield for this lot
Water Corp Mains Corridor											56,901.96	
											56,901.96	
											492,440.51	
SP South East												
334 Armadale Rd (SP SE)	101,463.00										101,463.00	Using area for school overestimates likely contributions
21 Nicholson Rd (SP SE)							8,371.03	Nicholson Rd & Armadale Rd - Figure GIS	15000		23,371.03	
22 Nicholson Rd (SP SE)							382.55	Nicholson Rd - Figure GIS	20000		20,382.55	
22 Nicholson Rd (SP SE)												
Totals SP SE											145,216.58	
SP South												
12 Piara - Former Mason (SP South)							522.00	Nicholson Road			522.00	IN/5341/10
6 Nicholson (SP South)							582.837	Nicholson Rd			582.84	
5 Nicholson (SP South)							433.75	Nicholson Rd			433.75	
4 Nicholson (SP South)							256.377	Nicholson Rd			256.38	
31 Armadale Rd											0.00	
30 Armadale Rd											0.00	
12 Armadale Rd											0.00	
11 Armadale Rd											0.00	
10 Armadale Rd											0.00	
58 Armadale Rd Road Reserve									14510		14,510.00	
45 Wright									4618		4,618.00	
25 Wright									15730		15,730.00	
30 Wright											0.00	
30 Wright											0.00	
4 Wright											0.00	
5 Wright											0.00	
6 Wright											0.00	
7 Wright											0.00	
Totals SP South											36,652.96	
Totals											837,892.09	

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ICS 2011

Common Infrastructure Works - Summary

Scheme Provision		Cost
3.6.2 General Works		
3.6.2a	(a) All costs incurred by the City associated with the preparation, processing and gazettal of the Development Contribution Plan No.3 and subsequent amendments, Infrastructure Cost Schedule and provisions under this scheme or former Town Planning Scheme No.2, including but not limited to any environmental assessment as required by the Department of Environmental Protection (DEP) and Environmental Protection Authority (EPA).	\$20,155.00
3.6.2b	(b) The acquisition of land, including associated infrastructure and structures, for the roads, intersections, sewerage pumping station(s), arterial drainage land for multiple use corridor, community facilities and Conservation Category Wetlands included in the Specified Works in Clause 3.6.3 of Schedule 13B.	
3.6.2c	(c) Any compensation paid or payable for or in respect of the provision of any of the Common Infrastructure Works or facilities referred to in this Schedule, or in the administration of Part 6B and Schedule 13B of the Scheme for this Development Contribution Plan.	\$335,615.99
3.6.2d	(d) Any consulting fees agreed to by the City associated with designing and undertaking of the Common Infrastructure Works, including but not limited to surveying, engineering, planning, quotes and certification of estimated costs, environmental, project management and landscaping.	\$299,218.75
3.6.2e	(e) The provision of any road listed in the Specified Works in Clause 3.6.3 of Schedule 13B, including but not limited to land acquisition, earthworks, shared paths, cycleways, footpaths, traffic management devices, limited landscaping, stabilisation of verges, the formation, preparation, priming and sealing of the road and the provision of kerbing, drainage, service ducts, intersection treatments and lighting and costs associated with the relocation of existing services in connection with the road or in the road reserve.	
3.6.2f	(f) Any environmental remediation or improvement including the removal of any contaminant and peat associated with the Specified Works referred to in Clause 3.6.3 of Schedule 13B.	
3.6.2g	(g) All costs incurred by Council associated with the preparation, administration and management of the Development Contribution Plan and Infrastructure Cost Schedule including but not limited to bank charges, audit fees, office and sundry costs, legal expenses, valuation fees, reviews of land values and costs, caveat and conveyancing fees, Council staff salaries including a Co-ordinator/Manager of the Development Contribution Plan, any interest costs incurred by Council in respect to loan funds required to provide timely implementation of any of the listed Common Infrastructure Works or related costs, any claims for injurious affection and the costs of establishing any required system to facilitate the administration and the ongoing management of Development Contribution Plan and Infrastructure Cost Schedule along with the specific requirements of the Scheme pertaining thereto.	\$2,348,861.46
Sub Total		\$3,003,851.20
3.6.3 Specified Works		
Arterial Roads		
1	Wright Road between Ranford Road and the northern boundary of Lot 50 Wright Road:	
1a	1a 100% of the total cost to acquire any road widenings for the ultimate road reserve, minus contributions from Lots 82, 106 and 107 Wright Road.	\$73,306.20
1b	1b 100% of the total cost of all road works and structures between the northern boundary of Lot 50 and Ranford Road, minus contributions or land ceded free of cost from adjoining lots and / or from any other developments or subdivisions with a nexus to the road works.	\$1,120,250.16
2	Warton Road between the southern boundary of Lot 201/ northern boundary of Lot 388 and Armadale Road:	
2a	2a 100% of the total cost to acquire any road widenings for the ultimate road reserve for Warton Road and roundabout at the intersection of Warton Road and Mason Road, minus any contributions and grants from external sources.	\$2,187,916.65
2b	2b 100% of the total cost of constructing the full earthworks, one carriageway, roundabout intersection, cycle facilities and all structures, minus any contributions and grants from external sources.	\$5,142,748.36
2c	2c 100% of the cost of temporary intersection works/upgrading of the intersection of Armadale Road and Warton Road, including any road widenings, minus any contributions and grants from external sources.	\$262,377.50
3	Nicholson Road between Warton Road and Armadale Road:	
3a	3a 100% of the total cost to acquire any road widenings for the ultimate road reserve and the ultimate traffic signalised intersection in the proposed North Forrestdale town centre	\$4,024,087.87
3b	3b 100% of the total cost of upgrading the intersection and installing traffic signals in the proposed North Forrestdale town centre.	\$13,393,833.73
3c	3c 100% of the total cost of upgrading the intersection and installing traffic signals in the proposed North Forrestdale town centre.	\$0.00
3d	3d 100% of the cost of temporary intersection works/upgrading of the intersection of Armadale Road and Nicholson Road, including any road widenings, minus any contributions and grants from external sources.	\$111,877.77
3e	3e A contribution towards landscaping works.	\$1,124,448.14
4	Mason Road between Warton Road and 550 metres east of Warton Road	
4a	4a 100% of the total cost to acquire any road widenings for the ultimate road reserve.	\$14,909.40
4b	4b 100% of the total cost of constructing the full earthworks, one carriageway and all structures.	\$353,678.00
5	Intersections with Ranford and Armadale Roads:	
5a	5a 100% of the total cost to acquire any road widenings located within the City of Armadale for the ultimate traffic signalised intersection, at Ranford Road and Wright Road except those areas ceded free of cost from adjacent lots.	\$0.00

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ICS 2011

Common Infrastructure Works - Summary			
5b	5b A contribution to the cost of upgrading the intersection at Ranford Road and Wright Road and installing traffic signals.		\$312,900.00
5c	100% of the cost of temporary intersection works/upgrading of the intersection of Armadale Road and Wright Road, including any road widenings, minus any contributions and grants from external sources;		\$2,324,600.75
5d	75% of the cost of temporary intersection works/ upgrading of the intersection of Armadale Road and the distributor road to the Primary School, including any road widenings, minus any contributions and grants from external sources.		\$283,804.78
6	Regional Path Network:		
6a	A contribution towards the total cost of constructing the Regional Path Network within Development Control Area No.3 as identified in the adopted Infrastructure Cost Schedule.		\$2,998,564.18
6b	A contribution towards the total cost of constructing the principal shared path on Wright Road between Nicholson Road and Ranford Road.		\$0.00
6c	A contribution towards the cost of a shared path along Armadale Road from Warton Road to Anstey Road.		\$494,000.00
7	Arterial Drainage and Water Management:		
7a	100% of the cost of acquiring land for the arterial drainage multiple use corridors up to 10 year average recurrence interval event for Ballanup Drain and the arterial drainage land for the open channel adjacent to Rellily Road as identified in the adopted Infrastructure Cost Schedule.		\$4,708,646.41
7b	A contribution of approximately 100% of the cost of constructing an open channel in the multiple use corridor and 100% of the cost of constructing the arterial drainage channel adjacent to Rellily Road.		\$2,683,280.06
7c	100% of the cost of constructing Skeet Road pipe work, culverts and pavement reconstruction and reinstatement of Nicholson Road, Mason Road and any other portion of road pavement modified to install arterial drainage.		\$2,348,110.73
7d	Maintenance works in Ballanup Drain.		\$155,206.00
7e	100% of the cost of providing the predevelopment water quality data, monitoring and Water Management initiatives.		\$2,348,252.53
7f	100% of the cost of acquiring land or easements for the arterial drainage multiple use corridors up to 10 year average recurrence interval event for part of James Drain north of the Armadale Road, and James Drain south of Armadale Road to Forrestdale Lake, as identified in the adopted Infrastructure Cost Schedule.		\$830,340.50
7g	100% of the cost of implementing administrative measures to ensure access in perpetuity along James Drain from Armadale Road to Commercial Road for the City of Armadale and any other drainage utilities responsible for management of the drain.		\$0.00
7h	Initial maintenance works in James Drain from the northern boundary of Armadale Road to Forrestdale Lake including upgrading of the drainage channel and including upgrading culverts at the road crossings including those at Armadale Road and Nicholson Road.		\$631,524.88
8	Community and Recreation Facilities:		
8a	A contribution to the cost of provision of sporting facilities for district sporting facilities, including change rooms, toilets, associated facilities and a multiple purpose sporting oval.		\$514,706.50
8b	100% of the total cost of a community facility on Lot 48 Nicholson Road including change rooms, toilets and associated facilities.		\$3,877,589.20
8c	100% of the total cost to acquire the land and existing building on Lot 49 Keane Road and 72% of the cost of the refurbishment of the existing homestead dwelling, car parking, playground and landscaping for a community facility.		\$1,724,867.59
8d	Contribution towards the provision of sporting facilities at Carey Baptist College – Lot 1000 Wright Road to provide public sporting facilities including 50% of the cost of car parking, change rooms and toilets.		\$253,981.42
8e	100% of the total cost to construct change rooms, car parking and toilet block associated with active recreational uses on two sites of public open space identified on the Structure Plan abutting proposed primary schools.		\$2,083,436.00
8f	50% of the total cost to construct a senior multiple purpose sporting oval adjoining each of the public primary schools and on Lot 48 Nicholson Road.		\$3,195,740.74
8g	100% of the cost of building a combined sporting pavilion / community meeting rooms on the proposed public open space in the area known as Structure Plan (SP) South, inclusive of change rooms, toilets, storage, community meeting space, car parking, a playground and landscaping, minus any probable or received grant funding.		\$3,677,624.40
9	Regional Sewer Infrastructure and 132KV Power Lines:		
9a	100% of the total cost to acquire the land for the sewer pump station buffer zone (public open space that is non-creditable) on Lot 49 Keane Road and Lot 50 Wright Road.		\$167,332.00
9b	Reimbursement of the portion of the cost of constructing the sewer pumping station and temporary pressure mains, which are not refunded by the Water Corporation.		\$654,899.50
9c	Contribution towards the cost to reconfigure the 132 KV power lines to an urban standard on current alignment as specified in the Infrastructure Cost Schedule. Other relocation costs to be met by individual subdividers.		\$2,299,600.87
10	Conservation Category Wetlands:		
10a	100% of the total cost to acquire the core area of the rehabilitated conservation category wetlands on Lot 49 Wright Road.		\$1,550,838.44
Sub Total			\$67,929,281.25
GRAND TOTAL			\$70,933,132.45

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ICS 2011

ARTERIAL ROADS - Land then other items

Item	Cost
1a	\$73,306.20
1b	\$1,120,250.16
2a	\$2,187,916.65
2b	\$5,142,748.36
2c	\$262,377.50
3a	\$4,024,087.87
3b	\$13,393,833.73
3c	\$0.00
3d	\$111,877.77
3e	\$1,124,448.14
4a	\$14,909.40
4b	\$353,678.00
5a	\$0.00
5b	\$312,900.00
5c	\$2,324,600.75
5d	\$283,804.78
TOTAL ROADS	\$30,730,739.30

1a 100% of the total cost to acquire any road widenings for the ultimate road reserve, minus contributions from Lots 82, 106 and 107 Wright Road.

TOTAL COST \$73,306.20

Parent Lot (New lot No.)	Area (sqm)	Assessed Value (per sqm)	Value	Value plus 10% for CI 3.12.5 or Final Value	Notes
Lot 100 Wright Rd (New Lot 174)				\$0.00	Acquired & funded from Ranford Rd project
Lot 106 (East) Wright Rd	245.6	\$170.00	\$41,752.00	\$45,927.20	Information from engineering drawings
Lot 82 Ranford Rd	262	\$95.00	\$24,890.00	\$27,379.00	May be ceded as part of Subdivision free of cost
Total				\$73,306.20	

2a 100% of the total cost to acquire any road widenings for the ultimate road reserve for Warton Road and roundabout at the intersection of Warton Road and Mason Road, minus any contributions and grants from external sources.

TOTAL COST \$2,187,916.65

Parent Lots (from North to South)	Area (sqm)	Assessed Value (per sqm)	Value	Value plus 10% for CI 3.12.5 or Final Value	Notes
388 Wright				\$387,530.00	PD 2007 (Thumb Drive No 53)
114 Warton				\$776,105.66	PD 2009 OUT/2670/09
113 Warton	2,542.00		\$58,720.20	\$64,590.40	Fixed cost, agreement with landowner (OUT/10403/09)
7001 Warton (Former 150)	2,979.00		\$78,407.28	\$86,254.48	Fixed cost, agreement with landowner (IE/5074/11)
9005 Warton (Former 150)	745.00		\$19,608.40	\$21,576.80	Fixed cost, agreement with landowner (IE/5074/11)
152 Warton (9001)				\$85,724.10	PD 2010 (OUT/2542/10)
155 Warton				\$130,515.00	PD 2009 (INT/10987/08) - See also Mason Rd
143 Warton	11,698.00		\$218,752.60	\$240,624.60	Fixed cost, agreement with landowners ICS 2009 (OUT/400/10)
8 Warton (86)				\$100,974.50	PD 2010 (OUT/576/10)
9 Warton (99)				\$74,203.25	PD 2010 (OUT/8807/09)
10 Warton (100)				\$44,709.50	PD 2010 (OUT/8807/09)
51 Warton (151)				\$86,303.25	PD 2009 (INT/3327/09)
50 Warton (150)				\$91,476.00	PD 2009 (INT/6004/09)
Sub total				\$2,187,916.65	

\$2,187,916.65

Sub total

Survey and other fees	Value	Notes
113 Warton	\$5,557.00	Fixed, review 2011 agreement with landowner. Estimate increased by CPI 3.4% 2010.
150 (9001) Warton	\$3,511.50	PD 2010 (Authority records)
152 Warton	\$3,400.50	PD 2010 (Authority records)
155 Warton - Survey, DP Lodgement	\$4,508.00	PD 2008 (INT/4382/08)
155 Warton - Landgate Fee	\$138.00	PD 2009 (Authority records)
143 Warton	\$4,751.66	Quotation from McMullen Nolan (INT/17/09) plus Landgate fee of \$111, estimate increased by CPI 3.4% 2010. Review 2011 total cost of \$4,504.10 increased by CPI of 1.5%.
8 Warton - Survey, DP and Lodgement	\$2,294.00	PD 2010 (Authority records)
Survey fees, Landgate fees and bank fees Lots 9, 10, 51 and 50 Warton	\$8,041.05	PD 2009 (Authority records)
Lot 10 Warton Lodgement fee	\$349.50	PD 2010 (Authority records)
Lot 9 Warton Lodgement, Landgate and bank	\$497.70	PD 2010 (Authority records)
555 Warton - Survey, DP Lodgement	\$1,838.00	PD 2011 (INT/15685/10)
Sub total	\$34,886.91	
Total Land and Survey and other fees	\$2,187,916.65	

TOTAL COST \$4,024,087.87

3a 100% of the total cost to acquire any road widenings for the ultimate road reserve and the ultimate traffic signalised intersection in the proposed North Forrestdale town centre

TOTAL COST \$4,024,087.87

Parent Lots (from North to South)	Area (sqm)	Assessed Value (per sqm)	Cost	Value plus 10% for CI 3.12.5 or Final Value	Notes
114 Warton Rd					Part of DP57861 - See Za Warton Rd above
388 Wright Rd				\$934,340.00	PD 2007 (Thumb Drive No 53)
49 Keane Rd				\$427,009.66	PD 2007 (Thumb Drive No 45 & 54)
6 Nicholson Rd				\$837,100.00	PD 2009 (OUT/3772/09)
2 Skeet Rd	7387		\$650,056.00	\$715,062.00	Agreement with landowner (IE/5644/11)
22 Nicholson Rd (SP SE)	322		\$26,565.00	\$29,220.00	Assessed Value Fixed Land Ceded 2010/11 DP 67643
21 Nicholson Rd (SP SE)	8041		\$650,315.88	\$715,347.46	Left
6 Nicholson Rd (SP South)	684		\$75.00	\$82.50	Right
5 Nicholson Rd (SP South)	442		\$100.00	\$110.00	Right
4 Nicholson Rd (SP South)	259		\$210.00	\$231.00	Right - Zoned Local Centre
3 Nicholson Rd (SP South)	101		\$210.00	\$231.00	Right - Zoned Local Centre
2 Nicholson Rd (SP South)	110		\$210.00	\$231.00	Right - Zoned Local Centre
Sub-total MRS areas			\$844,515.88	\$3,804,038.12	

\$3,804,038.12

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ICS 2011

ARTERIAL ROADS - Land then other items

Area in excess of MRS	Area (sqm)	Value	TS Drawing No.
Lot 9010 - Former Lot 49	89.0		PD 2011 OUT/4516/11 DP 65820
Lot 9035 - Former Lot 48	62.00	\$90.00	\$8,076.75 Area 3
Lot 16 - Former Lot 6	156.00	\$100.00	\$6,138.00 Area 5
Lot 16 - Former Lot 6	161.00	\$100.00	\$17,160.00 Area 5
Lot 9035 - Former Lot 48	181.00	\$90.00	\$17,710.00 Area 6
Lot 9035 - Former Lot 48	320.00	\$90.00	\$17,919.00 Area 7
Lot 9035 - Former Lot 48	142.00	\$90.00	\$31,680.00 Area 8
Lot 9035 - Former Lot 48	142.00	\$90.00	\$14,058.00 Area 11a
Lot 9035 - Former Lot 15	32.00	\$85.00	\$14,058.00 Area 11b
Lot 9035 - Former Lot 15	32.00	\$85.00	\$2,992.00 Area 9
2 Sheet Rd	244.00	\$80.00	\$21,472.00 Area 12
Lot 12 Piara Drive	522.00		\$51,678.00 Area 15, Agreement in place with landowner (IN/4230/11)

Sub total non_MRS \$132,890.00
Sub total all areas \$4,009,971.87

Survey costs	Value	Notes
6 Nicholson Rd survey costs (McMullen Nolan) and Lot 12 Piara Drive survey costs and fees	\$3,051.42 PD 2009 (Authority records) \$2,542.80 PD 2011 (Authority records)	
Survey and fees SP South Lots 2, 3 & 4 (unlikely to subdivide under Structure Plan)	\$8,516.77	Based on fees for Warton Rd road widening, estimate increased by CPI 3.4% 2010. Review 2011 total cost of \$8,390.91 increased by CPI of 1.5%

Sub total other costs \$14,115.99
TOTAL Costs \$4,024,087.87

4a 100% of the total cost to acquire any road widenings for the ultimate road reserve.

TOTAL COST \$14,909.40

Parent Lot	Area (sqm)	Assessed Value (per sqm)	Value	Value plus 10% for CI	Notes
Lot 155 (247) Warton Rd				3.12.5 or Final Value	
Lot 143 (765) Warton Rd	537			\$4,867.50	PD 2009 (INT/10987/08)
Sub total				\$10,041.90	Agreement with landowner (OUT/10403/09)
				\$14,909.40	

5a 100% of the total cost to acquire any road widenings located within the City of Armadale for the ultimate traffic signalised intersection, at Ranford Road and Wright Road except those areas ceded free of cost from adjacent lots.

TOTAL COST \$0.00 Covered by Ranford Road Grant

1b 100% of the total cost of all road works and structures between the northern boundary of Lot 50 and Ranford Road, minus contributions or land ceded free of cost from adjoining lots and / or from any other developments or subdivisions with a nexus to the road works.

TOTAL COST \$1,120,250.16 Fixed Cost 2011

Feature survey	\$3,670.00	PD 2007 - Opus International
Construction to date	\$320,364.46	PD 2008
Construction to 28 May 09	\$649,675.27	PD 2009
Construction to 10 June 10	\$167,482.00	PD 2010 OUT/5510/10
Less contribution	\$20,941.57	PD 2011 (DA 10.2009.10.1) Less contribution for intersection upgrades for Lots 106 & 107
TOTAL COST TO SCHEME	\$1,120,250.16	Fixed Cost

2b 100% of the total cost of constructing the full earthworks, one carriageway, roundabout intersection, cycle facilities and all structures, minus any contributions and grants from external sources.

TOTAL COST \$5,142,748.36

Section	Item	Cost	Notes
All	Feature survey (Quodling)	\$7,780.00	PD 2008 (Authority records)
All	Geotech Survey - Golder	\$19,907.00	PD 2008 (IE/919/08 & IE 1953/08)
All	Final design (L&L Design and SJR Civil)	\$30,308.55	PD 2008 (Authority records)
All	Design Services/ Final Design (SJR)	\$6,120.00	PD 2009 (Authority records)
	Western Power Design Fee	\$19,088.19	PD 2008 (Authority records)
Accrued expenses 2007			
Road construction	Clearing	\$4,737.27	PD 2008 (Authority records)
Mason/ Jandakot Intersection	Western Power - customer power relocation works	\$34,099.58	PD 2009 for works/ property reinstatement next to Lot 155 Warton & Lot 10 Warton Rd (Authority records)
Lot 8 to 50 near Armadale Rd	Noise survey	\$616.65	PD 2009 (IN/725/08)
Nicholson to Armadale	Construction cost	\$4,630.00	PD 2008 (OUT/936/08 and related files)
Nicholson to Armadale	Construction cost	\$1,894,654.36	PD 2011 (INT/6614/11)
Nicholson to Armadale	Western Power - power relocation works	\$3,285,330.40	Figure is construction cost estimate of \$5,292,642 (IE/2939/09 & IE/2939/09), less existing expenses other than Quotation January 2008 (IN/725/08) Works completed but invoice not received - further investigation required
Nicholson to Armadale	Relocation of private property	\$58,817.00	PD 2010 (INT/7811/10 & INT/7845/09)
Lot 143 Warton Road	Relocation of private property	\$160,000.00	PD 2010 (OUT/5433/10 & IE/9294/10)
Lot 8 Warton Road	Relocation of private infrastructure planting	\$12,000.00	PD 2011 (IE/21113/10 & INT/16666/10)
Lot 8 Warton Road	Relocation of private infrastructure bore & pump	\$26,930.00	PD 2011 (IE/21113/10 & INT/16666/10)
Lot 8 Warton Road	Relocation of private infrastructure Survey Cost	\$70,000.00	PD 2011 (IE/21113/10 & INT/16666/10)
Lot 555 Warton Road	Survey Cost	\$1,838.00	PD 2011
Warton Rd - Nicholson to Armadale	Relocation of private property Infrastructure	\$141,554.96	PD 2011 (INT/6614/11)
Nicholson to Armadale	Relocation of private property Infrastructure	\$75,000.00	See INT/5653/11, fixed costs detailed above.
Nicholson to Armadale	Western Power undergrounding Grant	\$688,238.00	Advice from Manager Civil Works INT/5653/11. Previous correspondence (IN/2221/09).
Adjacent to 388 Wright	Total cost	-\$2,296,607.00	Fixed Cost, grant funds expended 2009/10 financial year. Review 2011 grant total increased as per advice from Manager Civil Works.
		\$705,452.67	(See TRIM IE/2129/08). Fixed costs, works have occurred and scheduled for reimbursement to the City of Armadale scheduled in Forward Financial Plan

TOTAL \$5,142,748.36

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ARTERIAL ROADS - Land then other items

2c 100% of the cost of temporary intersection works/upgrading of the intersection of Armadale Road and Warton Road, including any road widenings, minus any contributions and grants from external sources.

TOTAL COST \$111,877.77 Estimate - Increased by CPI (4.3% in 2008, 2.2% in 2009 & 3.4% in 2010).
Total cost of \$110,224.40 increased by CPI of 1.5%

3b 100% of the total cost of upgrading the intersection and installing traffic signals in the proposed North Forrestdale town centre.

TOTAL COST \$13,393,833.73 Includes Specified Work (3c - Intersection).

Section	Item	Cost	Notes
Warton Rd to (former) Wright Rd	Earthworks by Perron	\$131,167.23	PD 2007 (Thumb Drive NO 44)
Warton Rd to (former) Wright Rd	Street lighting	\$80,950.41	PD 2007 (IN/895/07)
(Former) Wright Rd to Mason Rd Roundabout	Preparation of Final Design project brief	\$3,115.00	PD 2009 Opus International Consultants - under Tender 33/08. (Authority records)
(Former) Wright Rd to Armadale Road	Final design (including sub-consultants)	\$32,139.09	SJR Civil and subcontractors (e.g. survey) less fees already paid (below) (INT/3146/09), 2010 - Advice from A/Manager Technical Services IE/11583/10
(former) Wright Rd to Mason Rd Roundabout	Final Design progress payment	\$7,000.00	PD 2009 - SJR Civil (Authority records)
	Survey (Robert Quodling)	\$11,340.00	PD 2009 - SJR Civil (Authority records)
Wright Rd to Armadale Rd	Nicholson Road Design Costs	\$43,040.00	PD 2010 - SJR Civil (Authority records)
	Construction road and paths		IE/9799/10 Revised Cost Estimate from SJR Consulting. Additionally reviewed during advertising period by JG & GE INT/15110/10. Review 2011 revised costing from Manager Engineering and Design, recommendation to separate line item major service relocation costs INT/6891/11.
Stage 1 Construction Warton Rd to (former) Wright Rd	Survey and Construction by Council	\$914,519.00	PD 2007 & 2008 including variations (INT/4528/08) - includes regional path & square end
Stage 2 Construction	Construction road and paths	\$2,333,117.26	Harrisdale Drive to Road 'T' (Exchange Road) - Ongoing minus fixed
Wright Rd to Armadale Rd	Construction road and paths	\$1,085,982.74	PD 2011 (INT/6614/11) Fixed Cost
Stage 3 Construction	Construction road and paths	\$2,681,775.00	Road 'T' (Exchange Road) to Piara Drive (former Mason Road)
Stage 4 Construction	Construction road and paths	\$3,751,125.00	Piara Drive (former Mason Road) to Armadale Road (tie into MWRA intersection)
Wright Rd to Armadale Rd	Water Corporation Pipe Relocation	\$777,563.00	Advice from Manager Engineering and Design IN/3042/11
Bush Forever: Piara Nature Reserve	Retaining Wall	\$480,000.00	Advice from Manager Engineering and Design INT/6675/11. Australian Construction Handbook includes Safety Hand Ralls and Barriers
Keane Rd to Armadale Rd	Environmental Issues	\$150,000.00	Cost associated with resolving environmental issues and implementing revegetation associated with drainage of Nicholson Road. Review 2011 advice from Manager Engineering & Design INT/6675/11.
Keane Rd to Armadale Rd	Relocation of 132kV power line - alignment correction	\$86,000.00	Cost associated with relocation of 132kV power line at Keane Road on to correct alignment. Intersection desing changes (light to roundabout etc). Cost estimate provided TRIM ref IE/13234/11
Exchange Avenue and Easthope Link	Relocations of Services - Truncation Realignment	\$60,000.00	Submission received Draft ICS 2011 - Relocation of Services required due to necessary amendments to road design TRIM ref IE/11636/11
Keane Rd to Armadale Rd	Relocation of aerial power line - underground	\$475,000.00	Cost associated with relocation aerial power line - underground identified 2011 Western Power policy change.
Keane Rd to Armadale Rd	Relocation of high voltage underground	\$290,000.00	Cost estimate provided TRIM ref IE/13234/11
		\$290,000.00	Cost Estimate Reviewed 2011 TRIM ref IE/13235/11

TOTAL \$13,393,833.73

3c 100% of the total cost of upgrading the intersection and installing traffic signals in the proposed North Forrestdale town centre.

TOTAL COST \$0.00 Included in 3b

3d 100% of the cost of temporary intersection works/upgrading of the intersection of Armadale Road and Nicholson Road, including any road widenings, minus any contributions and grants from external sources.

TOTAL COST \$262,377.50 Temporary works only; Increased by CPI of 3.4% 2010, Review 2011 total cost of \$258,500 increased by CPI of 1.5%

3e A contribution towards landscaping works.

TOTAL COST \$1,124,448.14

	Area of median (sgm)	Cost per sqm	Total Cost	Notes
Contribution to landscaping of the median of Nicholson Road	14,348	\$65.00	\$932,590.10	Original input cost agreed at North Forrestdale Planning Steering Group 27 March 2007. Developers to landscape verge, City (or developers) to landscape median. No cost increase from 2008 to 2009 (See Manager Parks advice INT/4753/09). Cost estimate revised Manager of Parks 2010 increased to \$65.00per sqm INT/7596/10.
Contribution - Warton Rd to Harrisdale Dr	3,202		\$191,858.04	PD 2009 (OUT/5319/08)

TOTAL \$1,124,448.14

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ICS 2011

ARTERIAL ROADS - Land then other items

4b 100% of the total cost of constructing the full earthworks, one carriageway and all structures.

TOTAL COST	\$353,678.00
Survey	\$6,000.00 PD 2008 (OUT/1692/08)
Final Design	\$18,005.00 PD 2008 (57 & OUT/1692/08)
Construction	\$309,673.00 PD 2008 (OUT 1796/07 & 1692/08)
Construction - Outstanding on quote	\$20,000.00 Withheld to pay for join to roundabout & minor clean up. It will become evident if these funds are required during the current Warton Road construction.
TOTAL	\$353,678.00

5b A contribution to the cost of upgrading the intersection at Ramford Road and Wright Road and installing traffic signals.

TOTAL COST	\$312,900.00 PD 2009 to Technical Services Account PC 81.21.8138.56.2 (Authority records)
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5c 100% of the cost of temporary intersection works/upgrading of the intersection of Armadale Road and Wright Road, including any road widenings, minus any contributions and grants from external sources;

TOTAL COST	\$2,324,600.75
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Upgrading of intersection \$2,296,988.90 IE/10454/10 Porter Consulting provided cost estimate revision based on prior preliminary 15% designs. Western Power Estimate provided 2009 increased by CPI 3.4% 2010. Design cost only includes estimate for street lighting. Quote received from Western Power for \$687,623.07 in 2009 IN/5361/09. Western Power quote increased by CPI 3.4% 2010. Review 2011 total cost of \$2,263,043.25 increased by CPI of 1.5%.

Parent Lots	Area (sqm)	Assessed Value (per sqm)	Cost	Value plus 10% for CI Notes 3.12.5 or Final Value
Lot 35 Taylor Rd	155	\$18.00	\$2,790.00	\$3,069.00
Lot 45 Wright Rd	245	\$70.00	\$17,150.00	\$18,865.00
Sub total - Land value				\$21,934.00
Survey and other fees				
Lot 45 Wright Rd		\$2,838.92	Increased by CPI 3.4% 2010. Increased by CPI 1.5% 2011	
Lot 35 Taylor Rd		\$2,838.92	Increased by CPI 3.4% 2010. Increased by CPI 1.5% 2011	
Sub total - Survey costs		\$5,677.85		
Total Road Widening				\$27,611.85

5d 75% of the cost of temporary intersection works/ upgrading of the intersection of Armadale Road and the distributor road to the Primary School, including any road widenings, minus any contributions and grants from external sources.

TOTAL COST	\$283,804.78
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Item	Cost	Notes
Preliminary design brief and 15% design	\$233,054.78	IE/10454/10 Porter Consulting provided cost estimate revision based on prior preliminary 15% designs. Review 2011 total cost of \$229,610.62 increased by CPI of 1.5%.
Service Relocation costs	\$50,750.00	Review 2011 total cost of \$50,000 increased by CPI of 1.5%.

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ICS 2011

Regional Paths

Cost per m	\$113.00
6a	\$2,998,564.18
6b	\$0.00
6c	\$494,000.00
TOTAL COST	\$3,492,564.18

Construction to 2.5m wide
Civil Works 2009 (IN/3791/09), 2010 (INT/7734/10) and
2011 IE/5653/11

6a A contribution towards the total cost of constructing the Regional Path Network within Development Control Area No.3 as identified in the adopted Infrastructure Cost Schedule.

TOTAL COST \$2,998,564.18
Cost per m \$113.00

Some path costs included in road calculations. Cost assumes constructed as part of subdivision & then credited at the

Map Ref	Parent Lot or Nearest Lot No	Location	Distance (m)	Cost	Other information
6a01	50 Wright Rd	Old Wright Road West boundary Lot 50	479.09	\$82,000.00	Advice from Manager Civil Works, approval for consideration of clearing and road safety. INT/7048/11
6a01	50 Wright Rd	Old Wright Road 225m north from 49 Keane Rd	225	\$18,000.00	PD 2009 (OE/1576/09 - Constructed by Council)
6a02	49 Keane Rd	Old Wright Road Nicholson to N boundary Lot 50	300	\$19,116.00	PD 2007 (Authority records)
6a03	388 Wright Rd	Old Wright Road Nicholson to N boundary Lot 50	402.34	\$27,429.55	PD 2009 (OUT/6169/08)
6a04	50 Wright Rd	Reilly Rd N boundary of the lot, N side of the road	764.9	\$76,490.00	PD 2010 (OUT/11223/09)
6a05	50 Wright Rd	New Wright Rd	916	\$82,440.00	PD 2007 (Authority records)
6a05	50 Wright Rd	New Wright Rd	106.6	\$8,095.64	PD 2009 (OUT/595/09)
6a06	49 Keane Rd	New Wright Rd	407.9	\$46,092.70	
6a06	49 Keane Rd	Part of New Wright Rd	367	\$27,525.00	PD 2009 (OUT/6002/08)
6a07	48 Wright Rd	New Wright Rd	362.6	\$40,973.80	
6a08	15 Wright Rd	New Wright Rd	360.7	\$40,759.10	
6a09	14 Mason Rd	Old Wright Road S - western boundary of lot	618.8	\$69,924.40	
6a10	46 Wright Rd	Old Wright Road S - western boundary of lot	716	\$80,908.00	
6a11	45 Wright Rd (cnr Armadale)	Wright Rd S Lot 46 to Armadale Rd	733.7	\$82,908.10	
6a12	49 Keane Rd	Part of Gallinago Cnr	105.7	\$7,927.50	PD 2009 (OUT/6002/08)
6a12	49 Keane Rd	Part of Gallinago Cnr	369	\$25,456.84	PD 2007 (Authority records)
6a13	49 Keane Rd	Pardalote Rd	335	\$25,125.00	PD 2009 (OUT/6002/08)
6a14	6 Nicholson Rd	Wright Rd to Keane Rd	792	\$89,496.00	Distance from calculation by GIS officer from oval concept plan
6a15	6 Nicholson Rd	Keane Road - Nicholson Rd to eastern boundary of Nicholson	1120	\$126,560.00	Distance from calculation by Intramaps
6a16	6 Nicholson Rd	Internal to the lot	681	\$76,953.00	From Intramaps. IN/5933/09 transposed figures
6a17	2 Skeet Rd	Internal to the lot	50.1	\$5,661.30	
6a18	13 Mason Rd	Internal to the lot	338.9	\$38,295.70	
6a19	15 Wright Rd	Internal to the lot	250.1	\$28,261.30	
6a20	14 Mason Rd	Internal to the lot	670	\$75,710.00	
6a21	154 Mason Rd	Mason Rd	388	\$43,844.00	Deleted - combined with 6a20 submission 2011
6a22	Mason Rd - Urban area to Warton	Mason Rd Rural area	500.9	\$56,601.70	
6a24	16 Nicholson Rd	Skeet Road boundary	603.3	\$68,172.90	From 1:2000 Cadastral Plans - is lot boundary length
6a25	22 Nicholson Rd (SP SE)	Skeet Road boundary	577	\$65,201.00	Consultants mapping (TRIM IN/3755/08)
6a26	46 Wright Rd	Road reserve	587	\$66,331.00	Length provided by Chappell Lambert Everett 8 August 2008 Piara Nature reserve, over Trunk Main to connect triangle - eastern boundary
6a27	See SP South Paths, G-H				
6a28	See SP South Paths, C-D				
6a29	3 Nicholson Rd	Internal to the lot	35.8	\$4,045.40	
6a29	3 Nicholson Rd	Adjacent to Trunk Main N side	513.25	\$57,997.25	From 1:2000 Cadastral Plans - is lot boundary length
6a30	4 Nicholson Rd	Adjacent to Trunk Main N side	409.65	\$46,290.45	From 1:2000 Cadastral Plans - is lot boundary length
6a31	Wright Rd crossing	Adjacent to Trunk Main N side	25.4	\$2,870.20	From Intramaps
6a32	15 Wright Rd	Adjacent to Trunk Main N side	961.99	\$108,704.87	From 1:2000 Cadastral Plans - is lot boundary length
6a33	13 Mason Rd	Adjacent to Trunk Main N side	99.94	\$11,293.22	From 1:2000 Cadastral Plans - is lot boundary length
6a34	388 Wright Rd	N Side Nicholson Rd	496	\$55,876.00	PD 2007 & 2008 - Included in 3b
6a35	49 Keane Rd	N Side Nicholson Rd	438	\$49,116.00	Included in 3b
6a36	16 Nicholson Rd	N Side Nicholson Rd	821.17	\$92,468.00	Included in 3b
6a36	16 Nicholson Rd	N Side Nicholson Rd	27.5	\$3,097.50	Included in 3b
6a37	2 Skeet Rd	N Side Nicholson Rd	780.53	\$87,308.00	Included in 3b
6a38	21 Nicholson Rd (SP SE)	E Side Nicholson Rd (Lot 2)	1055	\$119,105.00	Included in 3b
6a39	48 Wright Rd	Eastern boundary of POS	449	\$50,737.00	Eastern boundary of Piara Waters (North) Community & Sporting Facility & internal to lot Nicholson to Wright Road link
6a40	Over Trunk Main	Mason Rd - Piara to Skeet Rd	100	\$11,300.00	From Map Info program
6a41	13 Mason Rd	Mason Rd - Piara to Skeet Rd	440	\$49,720.00	From Map Info program
6a42	2 Skeet Rd	Mason Rd - Piara to Skeet Rd	290	\$32,770.00	From Map Info program
6a43	22 Nicholson Rd (SP SE)	Internal to the lot	480	\$54,240.00	Consultants mapping (IN/3755/08)
6a44	21 Nicholson Rd (SP SE)	Internal to Armadale Rd	813	\$91,869.00	Consultants mapping (IN/3755/08)
6a45	21 Nicholson Rd (SP SE)	Local Centre to School	374	\$42,262.00	Consultants mapping (IN/3755/08)
6a46	21 Nicholson Rd (SP SE)	Next to school	514	\$58,082.00	Consultants mapping (IN/3755/08)
6a47	22 Nicholson Rd (SP SE)	To private school	52	\$5,876.00	Consultants mapping (IN/3755/08)
6a48	45 Wright Rd	A-B	1171	\$132,323.00	Consultants mapping (IN/5656/08)
6a48	45 Wright Rd	C-D	868	\$98,084.00	Consultants mapping (IN/5656/08)
6a49	45 Wright Rd	E-F	583	\$65,879.00	Consultants mapping (IN/5656/08)
6a27	45 Wright Rd	G-H	982	\$110,966.00	Consultants mapping (IN/5656/08)
6a50	45 Wright Rd	I-J	618	\$69,894.00	Consultants mapping (IN/5656/08)
6a51	45 Wright Rd	N-M	367	\$41,471.00	Consultants mapping (IN/5656/08)
		Fixed costs	3,894	\$317,605.53	
		Future costs	24,302	\$2,331,268.39	
		Contingency (15% of future)	28,196	\$349,690.26	Contingency pays for fixing gaps etc
		TOTAL		\$2,998,564.18	

6b A contribution towards the total cost of constructing the principal shared path on Wright Road between Nicholson Road and Ranford Road.

Map Ref	Parent Lot or nearest Lot No	Location	Distance (m)	Cost
6b01	106 & 107 Wright Rd		263.6	Included in 1b
6b02	82 Ranford Rd		94.7	Included in 1b
6b03	82 Ranford to 50 Wright		361.4	Included in 1b
	TOTAL		719.7	

Included in 1b

TOTAL COST \$0.00

6c A contribution towards the cost of a shared path along Armadale Road from Warton Road to Anstey Road.

Map ref	Section	Location	Distance (m)	Cost	Other information & Notes
6c		Northern side of Armadale Rd	4212	\$494,000.00	Advice from Manager Civil Works 2009 (IN/3791/09), 2010 (INT/7734/10) and IE/5653/11 2011
	TOTAL			\$494,000.00	

TOTAL COST \$494,000.00

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ICS 2011

Arterial Drainage

Summary

7a	\$4,708,646.41
7b	\$2,683,280.06
7c	\$2,348,110.73
7d	\$155,206.00
7e	\$2,348,252.53
7f	\$830,340.50
7g	\$0.00
7h	\$631,524.88
ARTERIAL DRAINAGE COST	\$13,705,361.11

7a 100% of the cost of acquiring land for the arterial drainage multiple use corridors up to 10 year average recurrence interval event for Ballanup Drain and the arterial drainage land for the open channel adjacent to Reilly Road as identified in the adopted Infrastructure Cost Schedule.

TOTAL COST \$4,708,646.41

Ballanup Drain

Mason Rd to western end Lot 53 Skeet Rd

Parent Lot	Length (m)	Area (sqm)	Assessed Value (per sqm)	Value	Value plus 10% for CI 3.12.5 or Final Value	Notes
14 Mason Rd	250	1386	\$85.00	\$117,776.00	\$129,553.60	
15 Wright Rd	555	3794	\$85.00	\$322,496.80	\$354,746.48	
48 Wright Rd	425	1902	\$90.00	\$171,213.75	\$188,335.13	
49 Keane Rd	89	570	\$85.00	\$48,472.95	\$79,174.40	
49 Keane Rd	318				\$224,076.91	PD 2009 (OUT/6002/08)
49 Keane Rd	215				\$125,599.82	PD 2011 (OUT/9723/10) Lot 8106 on DP 68520
49 Keane Rd	48				\$27,818.03	PD 2011 (OUT/9723/10) 50% of 96m Lot 8102 on DP 67299
50 Wright Rd	482				\$267,751.71	PD 2009 (OUT/3454/10) Wright Road to Reilly Road = 482m
50 Wright Road (Wright Rd to Benella Rd = 250m)	250				\$77,918.72	PD 2007 - DP50041 - 250m of 812 (30.7% of area) as at 12/5/06 (Thumb Drive Ref 20)
50 Wright Road (Wright Rd - Benella Dr to southern boundary of former Lot 50) = 205	205				\$126,530.89	PD 2009 (OUT/6717/09)
Sub total Mason Rd to western end Lot 53 Skeet Rd	2837				\$1,601,505.69	

Western end Lot 53 Skeet to Baileys Drain

Lot 53 Skeet - Payment for land					\$2,861,100.00	PD 2009 (IN/5253/08)
Lot 53 Skeet - Finalisation of Legal Agreement					\$255.00	PD 2010 (OUT/4660/10)
Lot 53 Survey, DP Preparation, and fees					\$6,884.43	PD 2009 (Authority records)
Lot 53 Settlement Fee, application for New Title and Transfer of Land					\$271.25	PD 2010 (Authority records) Registration of Western Power Easement Lot 53 Skeet Road
East of MRS P&R to Forrestdale Main Drain (Lot 67) - Fees (Survey, settlement fees & legal advice)	360	11520	\$18.50	\$213,120.00	\$234,432.00	Based on North Forrestdale Structure Plan cross sections need 36m wide at eastern end and 20m at western end - Assumed need 32m wide average because no information on ground levels in this distance.
Sub total western end Lot 53 Skeet Rd to Baileys Branch Drain	360				\$4,198.04	Increased by CPI 3.4% 2010, CPI of 1.5% increase review 2011
TOTAL					\$3,107,140.72	
					\$4,708,646.41	

7b A contribution of approximately 100% of the cost of constructing an open channel in the multiple use corridor and 100% of the cost of constructing the arterial drainage channel adjacent to Reilly Road.

TOTAL COST \$2,683,280.06

Sub-Totals

Ballanup Drain - Mason Rd to Baileys Drain	\$329,929.00
Ballanup Drain - Trunk Main	\$745,195.21
Ballanup Drain - Western end Lot 53	\$1,415,955.85
James Drain - Junction Point Lot 58	\$192,200.00

Description	Length (m)	Rate	Cost	Notes
Ballanup Drain - Mason Rd to Western end Lot 53 Skeet Rd		\$124.00		Rate of \$115 per m in 2008 increased by CPI 2009 of 2.2%, CPI 2010 of 3.4% (rounded down), CPI 1.5% 2011 (rounded up)
14 Mason Rd	250	\$124.00	\$31,000.00	
15 Wright Rd	555	\$124.00	\$68,820.00	
48 Wright Rd	425	\$124.00	\$52,700.00	
49 Keane Rd	89	\$124.00	\$11,036.00	
49 Keane Rd	318	\$100.00	\$31,800.00	PD 2009 (OUT/6002/08)
49 Keane Rd	215	\$122.00	\$26,230.00	PD 2011 (OUT/9723/10)
50 Wright Rd	482	\$124.00	\$59,768.00	
50 Wright Road (Wright Rd to Benella Rd = 250m)	250	\$100.00	\$25,000.00	PD 2007 (Thumb Drive Ref 20)
50 Wright Road (Wright Rd - Benella Dr to southern boundary of former Lot 50)	205	\$115.00	\$23,575.00	PD 2009 (OUT/6717/09)
Sub-Total Mason Rd to Western end Lot 53 Skeet Rd	2789		\$329,929.00	

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ICS 2011

Arterial Drainage

7b continued

Ballanup Drain Trunk Main Crossings

Trunk main crossing - Wright Road - Pipe lowering Design work	\$18,162.83	PD 2008 (OE/842/07 & OUI/1692/08)
Trunk Main Crossing - Wright Road - Siphon Construction	\$59,535.53	PD 2010 (OUI/5888/09)
Trunk main crossing - Ballanup Drain	\$667,496.85	PD 2010 (OUI/5021/10 & INT/7797/10)
Sub Total Ballanup Drain Trunk Main crossings	\$745,195.21	

Ballanup Drain - Western end Lot 53 Skeet Rd to

Drain Survey pick-up (needed to prepare quote) below Skeet Road to Bailey's Branch Drain As Constructed Drawings and Hydraulic Capacity Modelling	\$1,026.00	PD 2009 (Authority records)
West end Lot 53 to Baileys Branch Drain Construction	\$460,000.00	Advice from Manager Civil Works 2009 (IN/3791/09) and 2010 increased by CPI of 3.4%. Advice Manager Civil Works 2011 IE/5653/11
Lot 53 Skeet Rd (adjacent to Reilly Road) Vegetation Stabilisation with native species	\$397,839.00	ICS 2009 \$12per sqm and revised for ICS 2010 \$13per sqm based on DP63040 (30,603sqm) INT/6551/10
Lot 53 Skeet Rd - Consultancy advice on size of culverts under powerlines	\$2,465.00	PD 2009 (Authority records)
Lot 53 Skeet Rd (adjacent to Reilly Road) Piping/ culvert under powerlines as required by Western Power	\$273,000.00	Emerson Stewart advise need two 1.5m x 1.5m box culverts which would cost \$250,000 to install (IN/3796/09, included contingency so amended by IN/5933/09). Cost estimate revised manager Civil Works INT/7733/10. Advice Manager Civil Works 2011 IE/5653/11
Environmental Studies	\$100,000.00	Necessary to design and implement the Ballanup Drain relocation from Reilly Road reserve to Lot 5000 Reilly Road
Contingency (15% Estimated Costs)	\$169,625.85	
Sub Total Western end Lot 53 Skeet Rd to Baileys Branch	\$1,415,955.85	

James Drain Rate \$124.00

Description	Length (m)	Rate	Cost	Notes
Main arterial drainage corridor SP South				Information from Emerson Stewart and SP South LWMS IE/7049/11
Lot 45 Wright Rd	525	\$124.00	\$65,100.00	
Lot 58 Armadale Rd	700	\$124.00	\$86,800.00	
Lot 10 Armadale Rd	135	\$124.00	\$16,740.00	
Lot 3/4 Armadale Rd	110	\$124.00	\$13,640.00	
Lot 12 Armadale Rd	80	\$124.00	\$9,920.00	
Sub Total	1550		\$192,200.00	

7c 100% of the cost of constructing Skeet Road pipe work, culverts and pavement reconstruction and reinstatement of Nicholson Road, Mason Road and any other portion of road pavement modified to install arterial drainage.

TOTAL COST \$2,348,110.73

Emerson Stewart advise pipe work still required because topography adjacent to pipe prevents water from being discharged into wetland.

Description	Quantity (m)	Rate	Cost	Notes
Hale Rd 1350mm pipe	200	\$1,056.75	\$211,349.60	Increased by CPI of 3.4% - ICS 2009 \$204,400, rate \$1,022 LEG/OUI/6930
Hale Rd 900mm pipe	1900	\$486.10	\$923,597.75	Increased by CPI of 3.4% - ICS 2009 \$893,200 rate \$470.12
Allowance for headwalls			\$34,845.80	Increased by CPI of 3.4% - ICS 2009 \$33,700
Pre Treatment Drainage Basin for Skeet Road Arterial Drain in Lot 5000 Reilly Road			\$581,000.00	The requirement for a Pre-treatment drainage basin has been identified during the review of the ICS 2011. In association with further investigation into the Skeet Road Arterial Drain it was identified that the drainage would need further treatment prior to connecting to the easement to the east of Skeet Road ONT/6873/11.
Nicholson Road Culvert Installation			\$228,111.83	PD 2011 (OUI/937/11) - Newhaven Estate Nicholson Road Culvert
Nicholson Road Culvert Installation			\$77,111.18	PD 2011 (OUI/9223/10) - Northern side of culvert to Heron Park
Nicholson Road Culvert Installation			\$29,475.60	PD 2008 (OUI/7588/07)
Contingency (15% Estimated costs)			\$262,618.97	Used by PB in their estimates
Sub Total - Estimated Costs			\$2,348,110.73	

7d Maintenance works in Ballanup Drain.

TOTAL COST \$155,206.00 Fixed cost - see Infrastructure Cost Schedule 2008 for cost breakdown

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ICS 2011

Arterial Drainage

7e 100% of the cost of providing the predevelopment water quality data, monitoring and water management initiatives.

TOTAL COST	\$2,348,252.53	Approach proposed is that DCP responsible for Local Water Management Strategy post development monitoring & developers responsible for pre-development and UWMS monitoring
		Information source
North Forrestdale Stage 1 Structure Plan LWMS	\$164,239.77	PD 2008 (OUT/639/08)
Surface and Groundwater Monitoring Costs to August 2006	\$50,965.77	PD 2008 (OUT/639/08)
SP Central Surface water monitoring point installation (Western end Lot 53 Sheet) - Channel upgrade to provide required smooth flow	\$6,720.00	PD 2009 (Authority records) Works by COA Technical Services
SP Central - Surface water monitoring point installation (Western end Lot 53 Sheet)	\$5,000.00	Shared cost agreed with Department of Water and Stockland. Fixed costs, walking on invoice from Department of Water
SP Central - LWMS Surface Water Monitoring Costs (10 years)	\$763,455.03	Increased by CPI of 3.4% (ABS March 09 to March 2010) - ICS 2009 \$727,439.50. Estimate is being investigated as Sampling and Analysis Plan is developed by Department of Water. Based on cost for SP South & SP South East, 10year monitoring IN/5794/09. Review 2011 increased total from \$752,172.44 CPI of 1.5%.
SP Central LWMS Groundwater Monitoring - Installation	\$59,671.99	Increased by CPI of 3.4% (ABS March 09 to March 2010) - ICS 2009 \$56,857. Estimate is being investigated as Sampling and Analysis Plan is developed by Department of Water. Review 2011 increased total from \$58,790.14 CPI of 1.5%.
SP Central - LWMS Sampling and Analysis Plan	\$30,000.00	Was to be prepared by Department of Water but now needs to be contracted, cost associated with S & A Plan SP South & South East.
SP South East and SP South - Establishment and monitoring for 8 years of ground and surface water monitoring points	\$663,331.53	Increased by CPI of 3.4% (ABS March 09 to March 2010) - ICS 2009 \$653,528.60. Estimate is being investigated as Sampling and Analysis Plan is developed/implemented by Department of Water. Sampling and Analysis Plan JDA IN/5693/09 & IN/5694/09, 8 year monitoring plan. Review 2011 increased total from \$653,528.60 CPI of 1.5%.
Community Education Scoping Document	\$3,140.91	PD 2007 (Authority records)
Community Education Year 2008	\$7,500.00	PD 2008 (IE/2055/08)
Community Education Year 2009	\$37,351.66	PD 2009 (Authority records)
Community Education Year 2009	\$20,148.34	PD 2010 (IN/6369/09)
Community Education Year 2010	\$10,000.00	PD 2011 (OUT/2632/11)
Community Education to 2019	\$219,572.83	CPI of 4.3% in 2008, 2.2% in 2009 & 3.4% in 2010. PD to date (shown above) taken off estimate. Review 2011 increased total from \$216,327.91 CPI of 1.5%.
Signage to explain drainage system to residents	\$40,000.00	Required so residents understand areas may be underwater for periods of time following rainfall. New item resulting from complaints in 2008
Contingency (15% Estimated costs)	\$267,154.71	
Sub Total - Fixed Costs	\$300,066.45	
Sub Total - Estimated Costs	\$2,348,252.53	

7f 100% of the cost of acquiring land or easements for the arterial drainage multiple use corridors up to 10 year average recurrence interval event for part of James Drain north of the Armadale Road, and James Drain south of Forrestdale Lake, as identified in the adopted Infrastructure Cost Schedule.

TOTAL COST	\$830,340.50
Legal Advice Cost of Acquiring Easements and Land	\$52,475.50
	Increased by CPI of 3.4% (ABS March 09 to March 2010) - further investigation required, initial information IE/5539/08. Increased by CPI 1.5% 2011

James Drain Land Acquisition

Description	Length (m)	Area (sqm)	Assessed Value (per	Value	Value plus 10% for CI 3.12.5 or	Notes
Lot 45 Wright Rd	525	3675	\$70.00	\$257,250.00	\$282,975.00	Main arterial drainage corridor SP South. Advice from Emerson Stewart IE/7049/11
Lot 58 Armadale Rd	700	4120	\$70.00	\$288,400.00	\$317,240.00	
Lot 10 Armadale Rd	135	1080	\$62.50	\$67,500.00	\$74,250.00	
Lot 3/4 Armadale Rd	110	880	\$62.50	\$55,000.00	\$60,500.00	
Lot 12 Armadale Rd	80	600	\$65.00	\$39,000.00	\$42,900.00	
Sub Total	1550	10355			\$777,865.00	

7g 100% of the cost of implementing administrative measures to ensure access in perpetuity along James Drain from Armadale Road to Commercial Road for the City of Armadale and any other drainage utilities responsible for management of the drain.

TOTAL COST	\$0.00	Covered by 7e, and General Works (CI 3.6.2)
		Covered by 7e and General Works (CI 3.6.2)

7h Initial maintenance works in James Drain from the northern boundary of Armadale Road to Forrestdale Lake including upgrading of the drainage channel and including upgrading culverts at the road crossings including those at Armadale Road and Nicholson Road.

TOTAL COST	\$631,524.88
James Drain reinstatement	\$125,941.20
	Reinstatement to provide an even grade between the existing road crossings at Armadale Road, Nicholson Road, Swamp Road and Commercial Road (2,000m is above invert level to provide an even grade between road crossings) Advice from Emerson Stewart (IE/1326/09). Advice Manager Engineering & Design increase by CPI 1.5% 2011 INT/6675/11.
James Drain Swamp Road Alignment	\$334,950.00
	Costs provided by Emerson Stewart and relevant City Officers - includes cost to realign Swamp Road and construct drain. (IE/23199/10). Advice Manager Engineering & Design increase by CPI 1.5% 2011 INT/6675/11.
James Drain Maintenance/desilting	\$101,500.00
	Cost of \$20,000 per annum for 5 years from Emerson Stewart and City Officers (IE/23199/10). Advice Manager Engineering & Design increase by CPI 1.5% 2011 INT/6675/11.
Contingency (15%)	\$69,133.68
	Above reinstatement increased by CPI of 3.4% (ABS March 09 to March 2010) - further investigation required, initial information IE/5539/08
TOTAL	\$631,524.88

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ICS 2011

Community facilities

Ba	\$514,706.50
Bb	\$3,877,589.20
Bc	\$1,724,867.59
Bd	\$253,981.42
Be	\$2,083,436.00
Bf	\$3,195,740.74
Bg	\$3,677,624.40

COMMUNITY FACILITIES COST \$11,650,321.45

8a. A contribution to the cost of provision of sporting facilities for district sporting facilities, including change rooms, toilets, associated facilities and a multiple purpose sporting oval.

TOTAL COST	\$514,706.50	Is a contribution for District facilities: increased by 10% in 2008, 2009 & 2010 based on advice regarding increase in cost of sporting facilities (INT/4753/09) and increased on a pro-rata basis for the additional lots in DCP No. 3 (based on the calculation of B and D. Review 2011 total cost of \$507,100 increased by CPI of 1.5%.
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8b. 100% of the total cost of a community facility on Lot 48 Nicholson Road including change rooms, toilets and associated facilities.

TOTAL COST \$3,877,589.20 Item 8f pays for half cost of senior multipurpose sporting oval Assumes 25% grant (Sport & Rec)

Item	Notes
Preliminaries	\$443,417.20 Piara Waters (North) Community and Sporting Facility Cost Estimate Schedule - INT/7596/10. Advice from Director City Projects 10% total project cost INT/3816/11.
Building	\$2,400,000.00 Building to have Club/change rooms, Meeting room, public toilets, kitchen, umpires room and store rooms. Advice on sqm rate provided by Manager Property Services INT/7552/10. Advice from Director City Projects \$3,000 per sqm review 2011 INT/3816/11.
Head Works	\$50,000.00 Piara Waters (North) Community and Sporting Facility Cost Estimate Schedule - INT/7596/10. Advice Director City Projects INT/3816/11.
Playground	\$170,000.00 Piara Waters (North) Community and Sporting Facility Cost Estimate Schedule (Equipment, paving, fencing and gate) - INT/7596/10. Review 2011 advice from Director City Projects INT/3816/11.
Floodlighting	\$310,000.00 Piara Waters (North) Community and Sporting Facility Cost Estimate Schedule quoted \$220,000 for oval lighting but revised based on submission and supported by relevant City Officers, \$65,000 carpark lighting and \$25,000 for external building - remainder was mains and internal which is covered in building cost - INT/7596/10. Advice review 2011 Director City Projects no increase INT/3816/11.
Cricket Nets & AFL Goal Posts	\$110,000.00 Cost estimate in 2009 from Manager Recreation Services (INT/4753/09 & LEG/OUT/6931). 2010 cost estimate revised in accordance with Piara Waters (North) Community and Sporting Facility Cost Estimate Schedule. Increase review 2011 advice Director City Projects INT/3816/11.
Project management, design and documentation and fitout associated with building	\$380,000.00 Piara Waters (North) Community and Sporting Facility Cost Estimate Schedule - 50% Cost sharing with COA - INT/7596/10. No increase 2011 advice Director City Projects INT/3816/11.
Concept plan design and documentation	\$25,740.00 PD 2010 - Fixed Cost (OUT/6176/09 & TEN/31/09)
Parking	\$342,900.00 Information from Manager Civil Works INT/7734/10 - revised cost for Piara Waters (South) for ICS 2010 - same number of bays. No increase 2011 advice Director City Projects INT/3816/11.
Bin Store	\$5,000.00 Piara Waters (North) Community and Sporting Facility Cost Estimate Schedule - INT/7596/10. No increase 2011 advice Director City Projects INT/3816/11.
Landscaping	\$302,404.00 Piara Waters (North) Community and Sporting Facility Cost Estimate Schedule Turf for balance of lot and feature landscaping (21,863sqm) - INT/7596/10 and advice from Manager of Parks re Cost per sqm for landscaping (1,500sqm). No increase 2011 advice Director City Projects INT/3816/11. Including \$30,000 for trees submission IE/11636/11
Site Furniture	\$75,000.00 Piara Waters (North) Community and Sporting Facility Cost Estimate Schedule - INT/7596/10. No increase 2011 advice Director City Projects INT/3816/11.
Irrigation	\$131,178.00 Irrigation for balance of site, based on Piara Waters (North) Community and Sporting Facility Cost Estimate Schedule. Irrigation for oval site included in item 8f - Oval costing INT/7596/10. No increase 2011 advice Director City Projects INT/3816/11.
Drainage Swales and Silcrete	\$131,950.00 Indicative costing from Piara Waters (North) Community and Sporting Facility until drainage assessment conducted on the area - INT/7596/10. Information provided by Senior Subdivision Engineer. Increase total cost of \$130,000 CPI 1.5% review 2011.
Sub-total	\$4,877,589.20
Stage 1 Grant	-\$500,000.00 City notified of successful grant application received during advertising Draft ICS 2011
Stage 2 Grant	-\$500,000.00 As per City of Armadale 15Year Plan, advice from Recreation Facilities Planning Coordinator.
TOTAL	\$3,877,589.20

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ICS 2011

Community facilities

8c 100% of the total cost to acquire the land and existing building on Lot 49 Keane Road and 72% of the cost of the refurbishment of the existing homestead dwelling, car parking, playground and landscaping for a community facility.

TOTAL COST	\$1,724,867.59
Item	Notes
Building Purchase	\$150,000.00 PD 2007 & 2008 as per legal agreement (Authority records)
Cost to acquire the land (4019sqm)	\$442,090.00 PD 2009 (OUT/6002/08)
Sub total - Building and land cost	\$592,090.00

Refurbishment of existing homestead	Estimates based on 500sqm floor area; refurbishment figures based on advice from Manager Property Services 2009 INT/5223/09 & 2010 INT/7552/10. Structural report and implementation no longer required.
Toilets	Need to provide 8 to 10 toilets depending on configuration and disabled facilities. Review 2011 advice Director City Projects increase CPI 1.5%.
Kitchen (Minus Fixed Cost)	To a basic food preparation standard to enable functions. Review 2011 advice Director City Projects increase CPI 1.5%.
Kitchen	PD 2009 (INT/11602/08)
Gutters and downpipes	PD 2009 (INT/11602/08)
Re-roofing and lighting	PD 2009 (OUT/9630/09)
Disability access	\$118,953.00 Advice INT/3816/11 Director City Projects Review 2011.
Emergency lighting	Review 2011 advice Director City Projects increase CPI 1.5%.
Emergency exits	\$18,270.00 Review 2011 advice Director City Projects increase CPI 1.5%.
Security installation or modification	\$25,000.00 Advice INT/3816/11 Director City Projects Review 2011.
Alarm system	\$820.00 PD 2009 (INT/11602/08)
Fit out	\$180,467.00 Review 2011 advice Director City Projects increase CPI 1.5%. Including roof, painting and other building works
Sewerage connection	\$1,773.64 PD 2009 (INT/11602/08)
Sewerage connection	\$52,800.00 Review 2011 advice Director City Projects increase CPI 1.5%.
Heating/ Cooling system	\$10,130.00 PD 2009 (INT/11602/08)
Air conditioning	\$185,359.30 Review 2011 advice Director City Projects increase CPI 1.5%.
Ecosmart fireplace	\$17,263.64 PD 2009 (INT/11602/08)
Connect water	\$7,500.00 PD 2009 (INT/11602/08)
Connect power	\$17,903.51 PD 2009 (INT/11602/08)
Connect broadband	\$2,699.90 Review 2011 advice Director City Projects increase CPI 1.5%.
Energy Efficiency Implementation	\$4,940.00 PD 2009 (INT/11602/08)
Car Parking	\$30,000.00 Energy Efficiency Implementation Report INT/11946/10
Playground	\$74,517.75 PD 2009 (INT/11602/08)
Car Park Lighting	\$80,000.00 INT/7702/10 - refer to Playground Strategy adopted by Council T13/3/08, included design considerations for Regional Facility
Landscaping	\$79,798.35 PD 2009 (INT/11602/08)
	\$20,300.00 Energy Efficiency Implementation Report INT/11946/10. Review 2011 advice Director City Projects increase CPI 1.5%
DCP Fixed costs	\$273,028.18 A = Total Fixed Cost of Items
28% Contribution (Other)	\$76,447.89 B = A x 28%
Future Cost (DCP & Other)	\$1,038,344.70 C = Sum of Items - A (Fixed Costs)
Contingency 15% on future cost	\$155,751.71 D = C x 15%
Future Cost (DCP & City)	\$1,194,096.41 E = C + D
72% of Refurbishment future cost	\$859,749.41 F = E x 72%
28% Contribution (Other) Cost	\$410,794.88 G = (E x 28%) + B
Total Future Cost (DCP & Other)	\$1,270,544.30 H = F + G

TOTAL COST to scheme \$1,724,867.59

8d Contribution towards the provision of sporting facilities at Carey Baptist College - Lot 1000 Wright Road to provide public sporting facilities including 50% of the cost of car parking, change rooms and toilets.

TOTAL COST	\$253,981.42
	Increased by CPI of 3.4% (ABS March 09 to March 2010) - ICS 2009 \$242,000. Review 2011 increase total of \$250,228 by CPI 1.5%.

8e 100% of the total cost to construct change rooms, car parking and toilet block associated with active recreational uses on two sites of public open space identified on the Structure Plan abutting proposed primary schools.

TOTAL COST	\$2,083,436.00
	Identified in initial negotiations as facility adjacent to primary school. Costs based on "North Forrestdale Pavilion" design, with 25% grant funding of a building and a 35 bay car park. IE/6943/11 Advice Manager Property Services review 2011.

Sub totals	
Primary school Site A (Probably 1001 Wright Rd)	\$1,041,718.00
Primary school Site B (21 Nicholson Rd)	\$1,041,718.00

Site A - TOTAL \$1,041,718.00

"North Forrestdale Pavilion" model (estimate)	\$945,000.00 INT/7552/10 - Community and Sporting Facility 270sqm at \$3,500per sqm with preliminary costs. IE/6943/11 Advice Manager Property Services review 2011.
Car parking	\$120,015.00 As per Advice from Manager Civil Works INT/7734/10, 35 car bays
Contingency	\$213,003.00 IE/6943/11 Advice Manager Property Services review 2011.
Sport and Rec Contribution	-\$236,300.00 Assume 25% grant funded - rounded to nearest \$100, advice from Recreation Facilities Planning Coordinator.

TOTAL \$1,041,718.00

Site B - TOTAL \$1,041,718.00 Cost as per site 1

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ICS 2011

Community facilities

8f 50% of the total cost to construct a senior multiple purpose sporting oval adjoining each of the public primary schools and on Lot 48 Nicholson Road.

TOTAL COST \$3,195,740.74

Only available for senior ovals partly on public open space with a management agreement between the City and Department of Education and Training, except for Lot 48 Nicholson Rd

Construction Costs

Location	50% cost	Full Cost
Primary school Site A (1001 Wright Rd) - SP Central	\$715,179.66	\$1,430,359.32 IE/10000/10 Opus provided cost estimate revision based on prior preliminary 15% designs. Contingency of 10% included IE/11634/13. Review ICS 2011 total cost of \$1,409,221 increased CPI of 1.5%.
Primary school Site B (21 Nicholson Rd) - SP South East	\$1,049,962.18	\$2,099,924.37 IE/10000/10 Opus provided cost estimate revision based on prior preliminary 15% designs. Contingency of 10% included IE/11634/13. Review ICS 2011 total cost of \$2,068,891.00 increased by CPI of 1.5%.
Primary School Site C - 45 Wright/58 Armadale - Piara Waters (South) Community & Sporting Facility - SP South	\$631,525.90	\$1,263,051.79 IE/10000/10 Opus provided cost estimate revision based on prior preliminary 15% designs. Contingency of 10% included IE/11634/13. Review ICS 2011 total cost of \$1,244,386 increased by CPI of 1.5%.
Former Lot 48 - Piara Waters (North) Community & Sporting Facility - SP Central	\$799,073.00	\$1,598,146.00 IE/10000/10 Opus provided cost estimate revision based on prior preliminary 15% designs. Contingency of 10% included IE/11634/13. Review ICS 2011 total cost of \$1,598,146 increased by CPI of 1.5%.

Sub-total - construction \$3,195,740.74

Design fees (3.6.2 d)
Preliminary design brief and 15% design

PD 2009 Costed to 3.6.2 Scheme costs G (d)

8g 100% of the cost of building a combined sporting pavilion / community meeting rooms on the proposed public open space in the area known as Structure Plan (SP) South, inclusive of change rooms, toilets, storage, community meeting space, car parking, a playground and landscaping, minus any probable or received grant funding.

TOTAL COST \$3,677,624.40

Item	Notes
Grant funding probably available	
Building - Sporting pavilion/ community meeting place	INT/7552/10 - Community and Sporting Facility 1,000sqm at \$3,500per sqm. Advice Director City Projects based INT/3898/11 - no increase from 2010.
Probable grant component	-\$875,000.00 Assume 25% of costs, rounded to nearest \$100, advice from Recreation Facilities Planning Coordinator.
Cost to Scheme	\$2,625,000.00

Non-grant funded component	Notes
Project management, design and documentation and fitout associated with building	\$250,000.00 Assume half of these costs borne by City. Updated advice Director City Projects based on Frye Park. INT/3898/11
Car parking	\$353,187.00 Assumes 100 bays and same design as Item 8b. As per Advice from Manager Civil Works INT/7734/10. review 2011 advice Manager Civil Works IE/5653/11.
Landscaping	\$104,000.00 Advice from Manager Parks INT/7702/10, area of landscaping 1,600sqm.
Playground	\$170,000.00 Advice from Manager Parks INT/7702/10, Playground and associated amenities and infrastructure. Review 2011 advice from Director City Projects INT/3816/11.
Contingency	\$175,437.40 Contingency - Non grant funded items only

Non-grant funded sub-total \$1,052,624.40

TOTAL \$3,677,624.40

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ICS 2011
Sewer, power & CCWs

TOTAL COST		
9a	\$167,332.00	\$1,550,838.44
9b	\$654,899.50	\$1,550,838.44
9c	\$2,299,600.87	
TOTAL SEWER & POWER	\$3,121,832.37	

10a	\$1,550,838.44
TOTAL CCW	\$1,550,838.44

9a 100% of the total cost to acquire the land for the sewer pump station buffer zone (public open space that is non-creditable) on Lot 49 Keane Road and Lot 50 Wright Road.

TOTAL COST \$167,332.00 Water corp to buy land for pump station, scheme to buy buffer only. Fixed cost

Location	Final Value	Notes
49 Keane Rd	\$76,692.00	PD 2009 see OUT/3987/09
50 Wright Rd	\$90,640.00	PD 2009 see OUT/595/09
TOTAL	\$167,332.00	

9b Reimbursement of the portion of the cost of constructing the sewer pumping station and temporary pressure mains, which are not prefunded by the Water Corporation.

TOTAL COST \$654,899.50

Fixed cost
Included a Type 40 pump station - The Type 350 pump station will be pre-funded by Water Corporation

Section/ works	Length of powerline (m)	Cost per m	Predicted current cost	Powerline
Wright/ Nicholson Rd to Bartram Rd (~ 3.4km) and a type-40 pump station	700		\$229,600.00	Western (Cunnington to Marriot Road) PD 2007
49 Keane Road	810	\$367.33	\$297,536.09	Western (Cunnington to Marriot Road)
	740	\$367.33	\$271,823.09	Western (Cunnington to Marriot Road)
	60	\$367.33	\$22,039.71	Western (Cunnington to Marriot Road)
	960	\$367.33	\$352,635.36	Western (Cunnington to Marriot Road)
TOTAL	3270		\$1,173,634.25	

9c Contribution towards the cost to reconfigure the 132 KV power lines to an urban standard on current alignment as specified in the Infrastructure Cost Schedule. Other relocation costs to be met by individual subdividers.

TOTAL COST \$2,299,600.87

Cost provided March 2007 (LEG/IN/13153). Increased by CPI (4.3% in 2008; 2.2% in 2009 and 3.4% in 2010). Note normal variation in Western Power quotes of plus or minus 30%, and this is a contribution. Increased by CPI 1.5% 2011.

Lot	Length of powerline (m)	Cost per m	Predicted current cost	Powerline
49 Keane Rd	700		\$229,600.00	Western (Cunnington to Marriot Road) PD 2007
6 Nicholson Rd	810	\$367.33	\$297,536.09	Western (Cunnington to Marriot Road)
2 Skeet Rd	740	\$367.33	\$271,823.09	Western (Cunnington to Marriot Road)
21 Nicholson Rd (S2)	60	\$367.33	\$22,039.71	Western (Cunnington to Marriot Road)
21 Nicholson Rd (S2)	960	\$367.33	\$352,635.36	Western (Cunnington to Marriot Road)
Sub total	3270		\$1,173,634.25	
50 Wright Rd	200		\$56,468.00	Eastern (Cunnington to Pinjarra) PD 2009 OUT/595/09
49 Keane Rd	980		\$274,400.00	Eastern (Cunnington to Pinjarra) PD 2007
6 Nicholson Rd	830		\$256,146.30	Eastern (Cunnington to Pinjarra) PD 2007
2 Skeet Rd	380		\$117,271.80	Eastern (Cunnington to Pinjarra) PD 2007
22 Nicholson Rd (S2)	420		\$131,560.46	Eastern (Cunnington to Pinjarra) PD 2007
21 Nicholson Rd (S2)	620		\$194,208.30	Eastern (Cunnington to Pinjarra) PD 2007
334 Armadale Rd (S2)	120		\$37,588.70	Eastern (Cunnington to Pinjarra) PD 2007
Road reserves	180		\$56,383.06	Wright Road, Keane Rd & Hale Road
Sub total	3730		\$1,125,966.63	
TOTAL	7000		\$2,299,600.87	

10a 100% of the total cost to acquire the core area of the rehabilitated conservation category wetlands on Lot 49 Wright Road.

TOTAL COST \$1,550,838.44

Area (sqm)	Assessed Urban Value (per sqm)	Value at Assessed Urban Value	Assessed Value (62.5% of urban value - as per CI 3.1.2.4 (f))	Value plus CI 3.1.2.5 Allowance; or Value Paid
North Western Wetland				\$202,468.75 See below
South Western Wetland				\$1,104,743.75 See below
Combined NW & SW Wetland				\$1,307,212.50 PD 2008, but \$300,000 withheld for Wetland rehabilitation
Eastern Wetland	4169	\$85.00	\$354,365.00	\$221,478.13 \$243,625.94 Area taken from subdivision application
TOTAL				\$1,550,838.44

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ICS 2011

3.6.2 General Works

TOTAL COST	\$3,003,851.20
a	\$20,155.00 PD 2007 - Fixed Cost
b	Included under specified
c	\$335,615.99
d	\$299,218.75
e	Included under specified
f	Included under specified
g	\$2,348,861.46

Notes
All future costs to 2019 (10 years)

(g) All costs incurred by the City associated with the preparation, processing and gazettal of the Development Contribution Plan No.3 and subsequent amendments. Infrastructure Cost Schedule and provisions under this scheme or former Town Planning Scheme No.2, including but not limited to any environmental assessment as required by the Department of Environmental Protection (DEP) and Environmental Protection Authority (EPA).

Repayment to the City \$20,155.00 PD 2007 - Fixed Cost

Fixed Cost

(c) Any compensation paid or payable for or in respect of the provision of any of the Common Infrastructure Works or facilities referred to in this Schedule, or in the administration of Part 6B and Schedule 13B of the Scheme for this Development Contribution Plan.

TOTAL COST \$335,615.99 Increased by CPI (4.3% in 2008, 2.2% in 2009 & 3.4% in 2010, 1.5% in 2011)

(d) Any consulting fees agreed to by the City associated with designing and undertaking of the Common Infrastructure Works, including but not limited to surveying, engineering, planning, quotes and certification of estimated costs, environmental, project management and landscaping.

TOTAL COST \$299,218.75

Consulting fees included in Specified Works costs where practical

Year	Amount	Notes
2007	\$69,005.00	PD 2007 Scoping and preliminary design fees for roads - Stephenson consulting and Opus
2008	\$5,110.00	PD 2008 Re-costing Nicholson Rd & Ovals (OE/929/08) & Drainage (Ermerston Stewart)
2009	\$35,098.75	PD 2009 - Armadale Rd (5d & e) and Ovals 15% design and costing
2009	\$16,535.00	SP South East and SP South - LWMS Sampling and Analysis Plan
2010	\$3,470.00	Finalisation of LWMS Sampling and Analysis Plan & Re-costing of Item 5c & 5d
Future fees (estimate)	\$170,000.00	

(g) All costs incurred by Council associated with the preparation, administration and management of the Development Contribution Plan and Infrastructure Cost Schedule including but not limited to bank charges, audit fees, office and sundry costs, legal expenses, valuation fees, reviews of land values and costs, caveat and conveyancing fees, Council staff salaries including a Co-ordinator/Manager of the Development Contribution Plan, any interest costs incurred by Council in respect to loan funds required to provide timely implementation of any of the listed Common Infrastructure Works or related costs, any claims for injurious affection and the costs of establishing any required system to facilitate the administration and the ongoing management of Development Contribution Plan and Infrastructure Cost Schedule along with the specific requirements of the Scheme pertaining thereto.

TOTAL COST \$2,348,861.46 Cost to cover to 2019

All future costs to 2019 (8 years)

Cost estimate to end 2019/20 financial year (=10 years)	Value	Basis
Bank charges	\$5,562.40	Increased by CPI (4.3% in 2008, 2.2% in 2009 & 3.4% in 2010, CPI 1.5% 2011)
Audit fees	\$59,148.20	
2007	\$4,048.20	PD 2007 Audit by Barry Robbins (Authority records)
2008	\$5,500.00	PD 2009 Audit 2006 to 2008 by Macri Partners (Authority records)
2009	\$2,800.00	PD 2010 Audit 2009 by Macri Partners (Authority records)
2010	\$2,800.00	PD 2011 Audit 2010 by Macri Partners (Authority records)
Future audit costs	\$44,000.00	Estimate of \$5500 per annum based on Audit by Macri Partners - Cost per audit likely to be similar with number of transactions having little influence
Office costs		Included in Staff salaries and on-costs
Sundry	\$14,482.35	
Amd 12 Gazettal	\$1,818.18	PD 2007
Sundry 2008	\$649.57	PD 2008 - Includes construction cost index
Sundry 2009	\$658.44	PD 2009 (Authority records)
Sundry 2010	\$712.04	PD 2010 (Authority records)
Sundry 2011	\$1,194.12	PD 2010 (Authority records)
Future Sundry	\$593.25	
Legal expenses	\$8,856.75	Future costs of 8 years at \$1,050 per annum, plus remaining 2011
Legal advice	\$130,524.77	
Legal advice for Deed of Agreement	\$134.07	PD 2007
Settlement Fees	\$2,156.70	PD 2008 - Deeds of release
Future legal costs	\$1,078.00	PD 2009 to 27 May 2009 (Authority records), Lot 53 Skeet
Valuation fees & reviews	\$706.00	PD 2010 (Authority records)
2007	\$980.50	PD 2011 (Authority records)
2008	\$125,469.50	Cost for future 8 years at \$10,450 per annum, plus remaining 2011
2009	\$273,186.21	
2010	\$23,061.21	PD 2007
2011	\$13,875.00	PD 2008
Future valuation fees	\$20,500.00	PD 2009
Caveat & conveyancing fees	\$15,750.00	PD 2010 - updated during advertisement
Staff salaries & on-costs	\$750.00	PD 2011 - cost to date, review valuation costs pending
Recruitment contingency	\$199,250.00	Expect fewer valuations in future \$20,000 per annum, plus remaining 2011
Future Recruitment Fees	\$30,000.00	
Loan fees and interest	\$1,480,324.23	
2006	\$74,089.00	PD 2006 (Authority records)
2007	\$82,053.06	PD 2007 (Authority records)
2008	\$93,386.59	PD 2008 (Authority records)
2009	\$103,505.38	PD 2009 (Authority records)
2010	\$92,290.20	PD 2010 (Authority records)
2011	\$69,219.44	PD 2011 (Authority records)
Future salaries and on-costs	\$965,780.56	Costed bill 2019 based on Amendment 43. Cost includes on-costs, and responds to a work value review from 2008.
Recruitment contingency	\$20,000.00	
Future Recruitment Fees	\$2,542.84	PD 2010 (Authority records)
Loan fees and interest	\$17,457.16	Staff recruitment identified as a potential cost (INT/8130/08)
	\$335,633.30	Covers when forced to do work early; increased by CPI (4.3% in 2008, 2.2% in 2009 & 3.4% in 2010, CPI 2011 1.5%)
TOTAL	\$2,348,861.46	

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ICS 2011

ASSESSED VALUES

Only shows Assessed Values - Fixed costs and negotiated agreement prices not shown

Grand total

DO NOT EDIT BELOW THIS LINE

Lots	Area (sqm)	Assessed Value (per sqm)	Cost	Value plus 10% for CI 3.12.5
Lot 106 (East) Wright Rd	245.6	\$170.00	\$41,752.00	\$45,927.20
Lot 82 Ramford Rd	262	\$95.00	\$24,890.00	\$27,379.00

Scheme Text

1a 100% of the total cost to acquire any road widenings for the ultimate road reserve, minus contributions from Lots 82, 106 and 107 Wright Road.

Lots	Area (sqm)	Assessed Value (per sqm)	Value	Value plus 10% for CI 3.12.5
16 Nicholson Rd (Former 6)	317.00	\$100.00	\$31,700.00	\$34,870.00
21 Nicholson Rd (SP SE)	8041	\$80.875	\$650,315.88	\$715,347.46
5 Nicholson Rd (SP South)	684	\$75.00	\$51,300.00	\$56,430.00
5 Nicholson Rd (SP South)	442	\$100.00	\$44,200.00	\$48,620.00
4 Nicholson Rd (SP South)	259	\$210.00	\$54,390.00	\$59,829.00
3 Nicholson Rd (SP South)	101	\$210.00	\$21,210.00	\$23,331.00
2 Nicholson Rd (SP South)	110	\$210.00	\$23,100.00	\$25,410.00
Lot 9035 - Former Lot 48	#REF!	\$90.00	#REF!	#REF!
Lot 9035 - Former Lot 15	64.00	\$85.00	\$5,440.00	\$5,984.00

3a 100% of the total cost to acquire any road widenings for the ultimate road reserve and the ultimate traffic signalised intersection in the proposed North Forrestdale town centre

Lots	Area (sqm)	Assessed Value (per sqm)	Value	Value plus 10% for CI 3.12.5
Lot 35 Taylor Rd	155	\$18.00	\$2,790.00	\$3,069.00
Lot 45 Wright Rd	245	\$70.00	\$17,150.00	\$18,865.00

5c 100% of the cost of temporary intersection works/upgrading of the intersection of Armadale Road and Wright Road, including any road widenings, minus any contributions and grants from external sources;

Lots	Area (sqm)	Assessed Value (per sqm)	Value	Value plus 10% for CI 3.12.5
14 Mason Rd	250	1,385.6000	\$85.00	\$129,553.60
15 Wright Rd	555	3,794.0800	\$85.00	\$354,746.48
48 Wright Rd	425	1,902.3750	\$90.00	\$188,335.13
49 Keane Rd	89	570.2700	\$85.00	\$79,174.40
East of MRS P&R to Forrestdale Main Drain (Lot 67)	360	11,520.0000	\$18.50	\$234,432.00

7a 100% of the cost of acquiring land for the arterial drainage multiple use corridors up to 10 year average recurrence interval event for Ballanup Drain and the arterial drainage land for the open channel adjacent to Rellly Road as identified in the adopted Infrastructure Cost Schedule.

Lots	Area (sqm)	Assessed Value (per sqm)	Value	Value plus 10% for CI 3.12.5
Lot 45 Wright Rd	525	3,675.0000	\$70.00	\$282,975.00
Lot 58 Armadale Rd	700	4,120.0000	\$70.00	\$317,240.00
Lot 10 Armadale Rd	135	1,080.0000	\$62.50	\$74,250.00
Lot 3/4 Armadale Rd	110	880.0000	\$62.50	\$60,500.00
Lot 12 Armadale Rd	80	600.0000	\$65.00	\$42,900.00

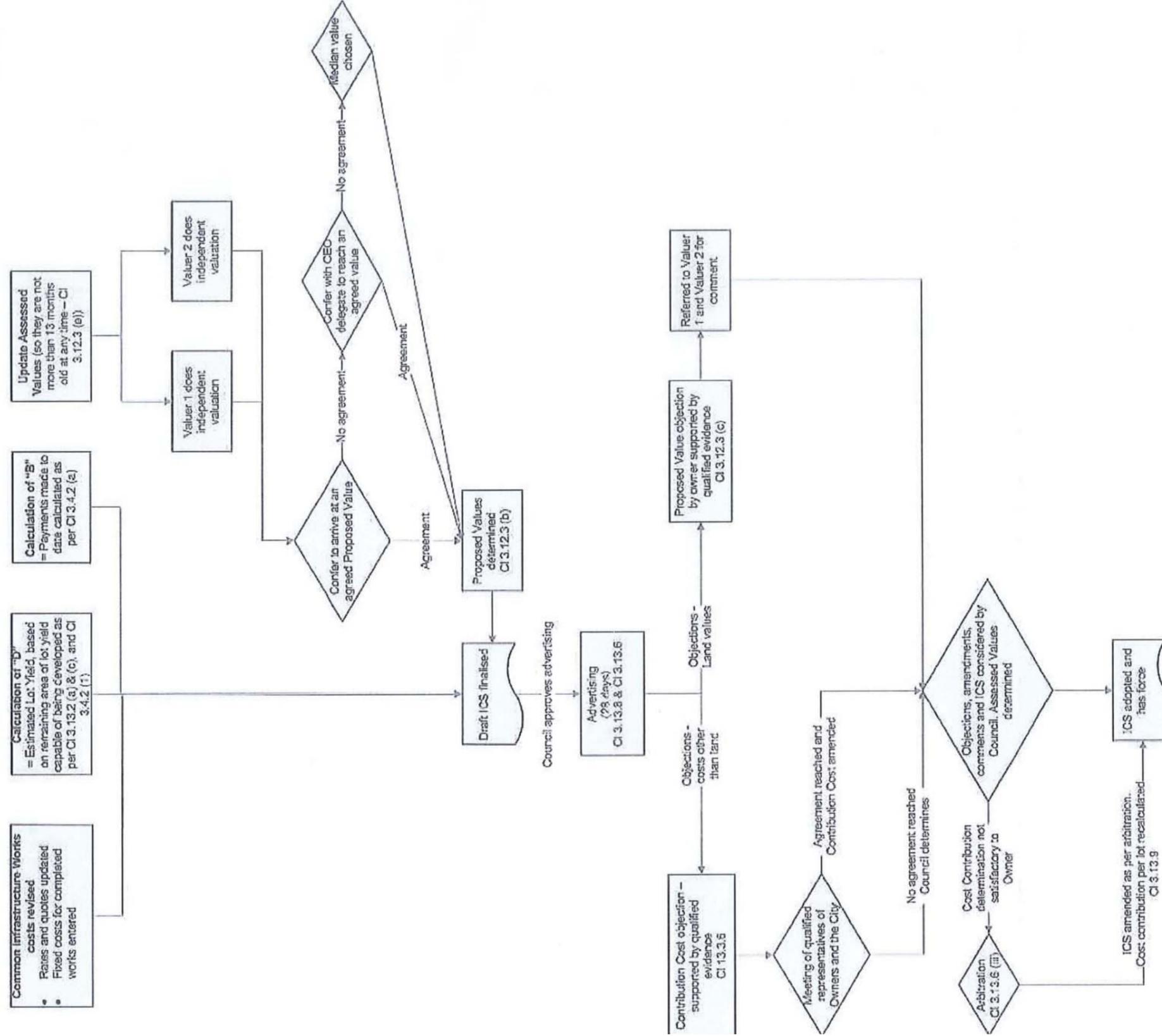
7f 100% of the cost of acquiring land or easements for the arterial drainage multiple use corridors up to 10 year average recurrence interval event for part of James Drain north of the Armadale Road and James Drain south of Armadale Road to Forrestdale Lake, as identified in the adopted Infrastructure Cost Schedule.

Lots	Area (sqm)	Assessed Urban Value (per sqm)	Assessed Value of urban value as per CI 3.12.4 (f)	Value plus 10% for CI 3.12.5
Eastern Wetland	4169	\$85.00	\$221,478.13	\$243,625.94

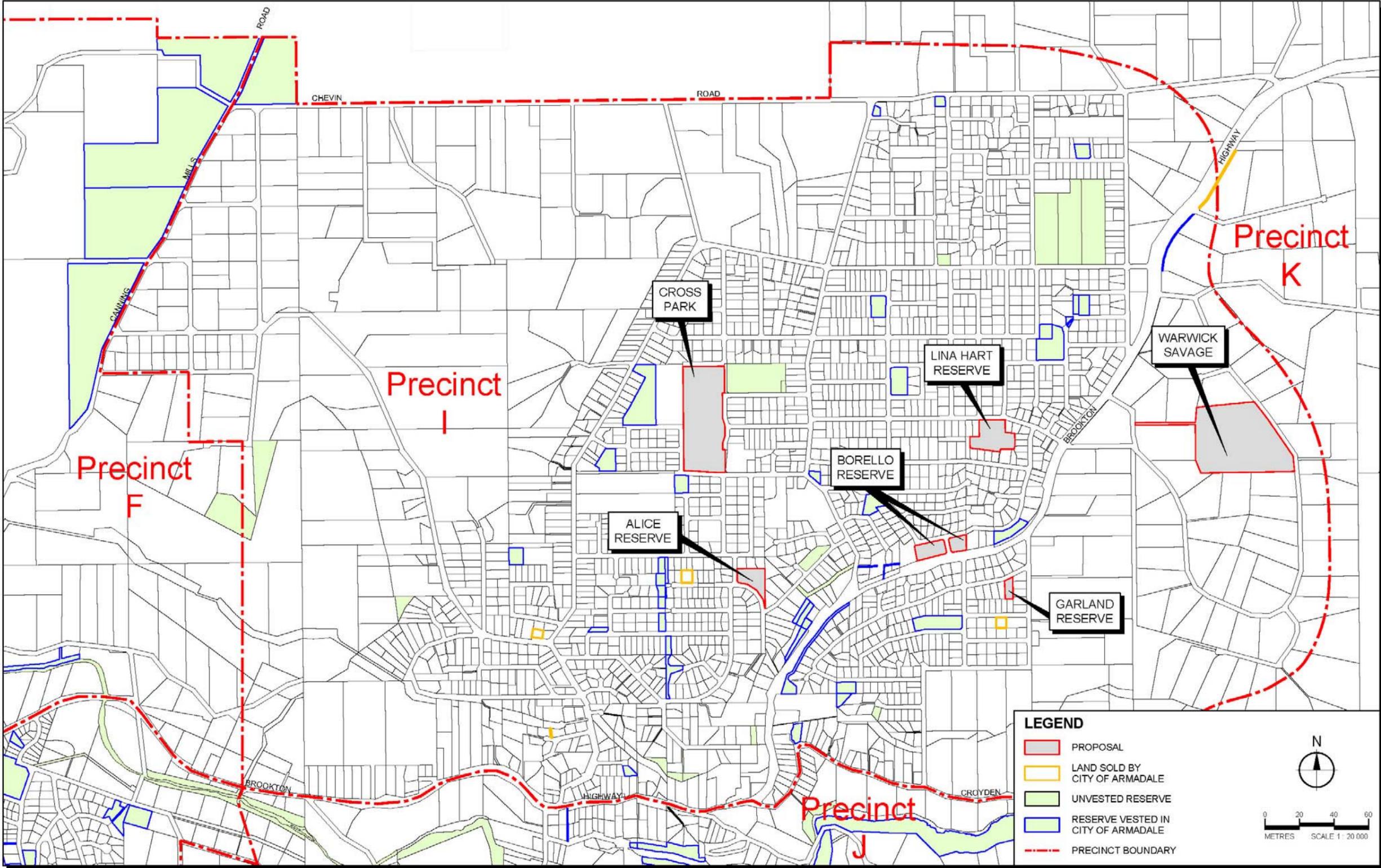
10a 100% of the total cost to acquire the core area of the rehabilitated conservation category wetlands on Lot 49 Wright Road.

The City of Armadale expressly disclaims liability for any loss or damage suffered by a person relying on this document.

INFRASTRUCTURE COST SCHEDULE – REVIEW PROCESS
(Updated July 2007)



DISCLAIMER: This flowchart provides an interpretation of and guide to the process expected to be used in the administration of City of Armadale Town Planning Scheme No. 4. The City expressly disclaims liability for any loss or damage suffered by any person as a result of relying on or acting on the basis of this flowchart rather than on Town Planning Scheme No. 4.



POS STRATEGY PRECINCT I EXPENDITURE PROPOSAL LOCATIONS
VARIOUS RESERVES AND PARKS ROLEYSTONE AND KARRAGULLEN

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POS STRATEGY - PRECINCT EXPENDITURE PROPOSALS FOR RESERVE UPGRADES

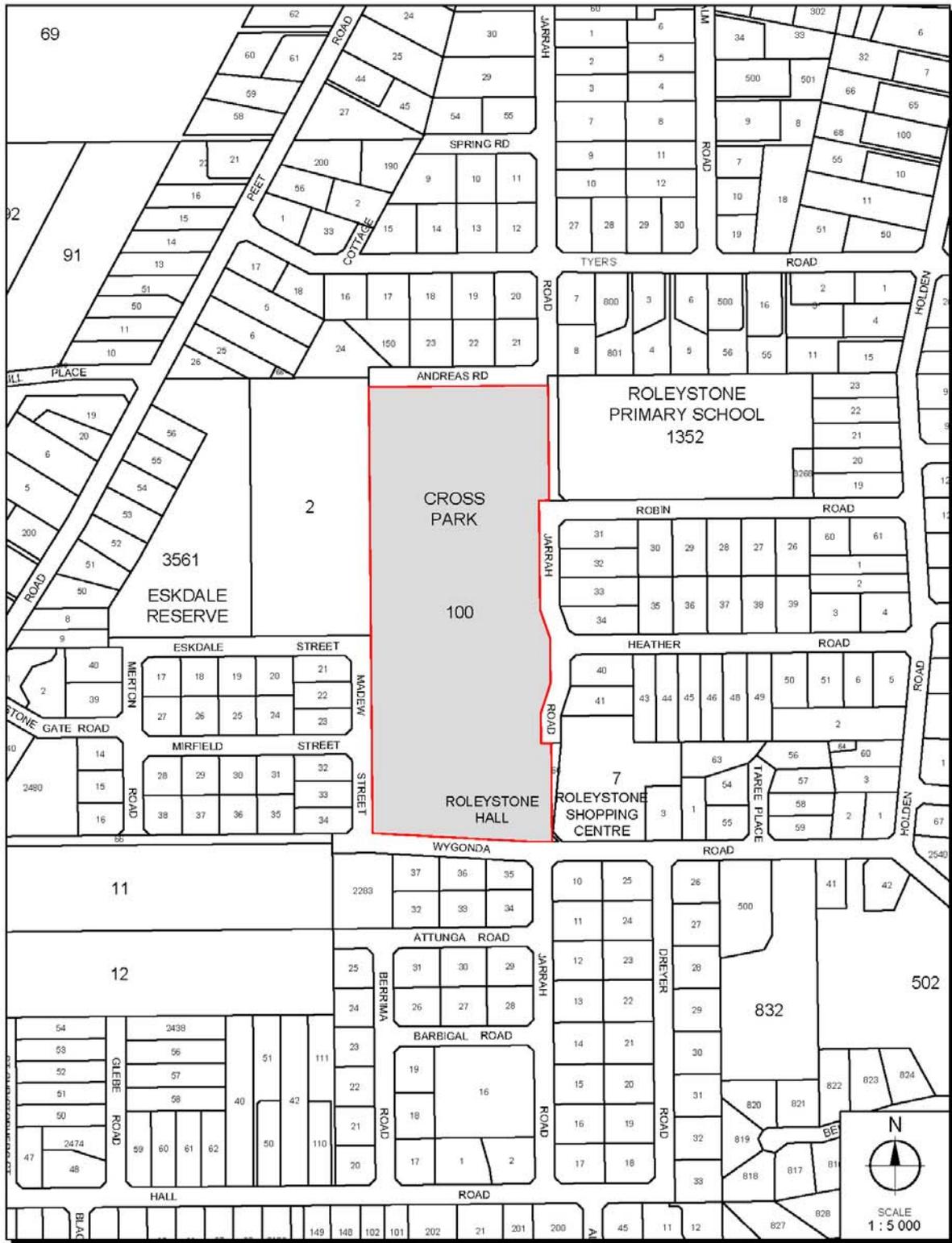
Available Funds from POS Land Sales and POS Cash in Lieu Funds (includes interest) = \$618,021

Priority	Reserve	Proposed Works	Quantity	Unit (\$)	POS CIL	External Grant	Funding from Alternate Source - Parks	POS Fund Estimate	Total	
1	Cross Park	Skate Park Improvement (Construction Costs)			82,075	50,000	0	217,925	350,000	
		Skate Park Improvement (Feasibility & Initial Concept)						30,000	30,000	
		Skate Park Improvement (Detailed Design & Documentation)						50,000	50,000	
		Path	40sqm	\$50sq/m				2,000	2,000	
		Bitumen -Between Skate Park and Existing Picnic Tables	app. 235sqm	\$42sq/m				9,870	9,870	
		Seats	4	\$1,000				4,000	4,000	
		Basketball Half Court	225sq/m	\$39sq/m				8,775	8,775	
		Basketball Hoop & Line Marking	1					12,000	12,000	
		Contingency						15,000	15,000	
						82,075	50,000	0	349,570	481,645
		2	Borrello Reserve	Sign - Reserve Name	2	1,056				2,112
New Gate	1			620				620	620	
Sign Local Law	1			100			100	0	100	
Bench Including Footings (Bench / Table / Shelter)	3			1000				3,000	3,000	
Picnic Table Shelter - (Bench /table/ shelter)	1			3500				3,500	3,500	
Path	250m			\$50sqm				12,500	12,500	
Handrails Adjoining Stairs	30m			\$185/L/m				5,550	5,550	
Parking	85			110 sqm				9,350	9,350	
Bollard	350			50				17,500	17,500	
Boardwalk Structures (In Rd Reserve)	1			9765				9,765	9,765	
Landscaping								20,000	20,000	
Contingency						10,000	10,000			
				0	0	100	93,897	93,997		
3	Warwick Savage	Remove Rubbish & Level Ground & Weed Control	1			10,000	0	20,000	30,000	
		Revegetation	11,000 sqm (1 2 plants/m2)			20,000	0	16,500	36,500	
		A-Frame	1	4,500				4,500	4,500	
		Dieback Hygien Station	3	500				1,500	1,500	
		Contingency						5,000	5,000	
						0	30,000	0	47,500	77,500
		Sign - Reserve Name	1	1,056				1,056	1,056	
		Sign Local Law	1	100			100	0	100	
		Sign - No Smoking	1	100			100	0	100	
		New Gate	1	620				620	620	
		Bench Including Footings	3	1,000				3,000	3,000	
Solar Lighting	2	6,000				12,000	12,000			
Path	100sqm	\$50sqm				5,000	5,000			
Revegetation	5000	1.5/plant				7,500	7,500			
Bollard	40	50				2,000	2,000			
Soft Landscaping / Fence Lines	1	1,500				1,500	1,500			
Tree Pruning		2,500			2,500	0	2,500			
Install A - Frame	1	4,500				4,500	4,500			
Contingency						5,000	5,000			
				0	0	2,700	42,176	44,876		
5	Garland Reserve	Sign - Reserve Name	1	1,056				1,056	1,056	
		Sign Local Law	1	100			100	0	100	
6	Alice Reserve	Seating/Benches including footings	2	1,000				2,000	2,000	
		Picnic Table Shelter - (Bench /table/ shelter)	1	3,500				3,500	3,500	
					82,075	80,000	2,900	539,699	704,674	

NB 1 - Available POS Strategy & POSCIL Funds = \$618,021.

NB 2 - Overcommitted by \$3,753

NB 3 - Expenditure of POS Cash in Lieu to an amount of \$82,075 is subject to approval from the Minister of Planning (and can take up to 12 months).



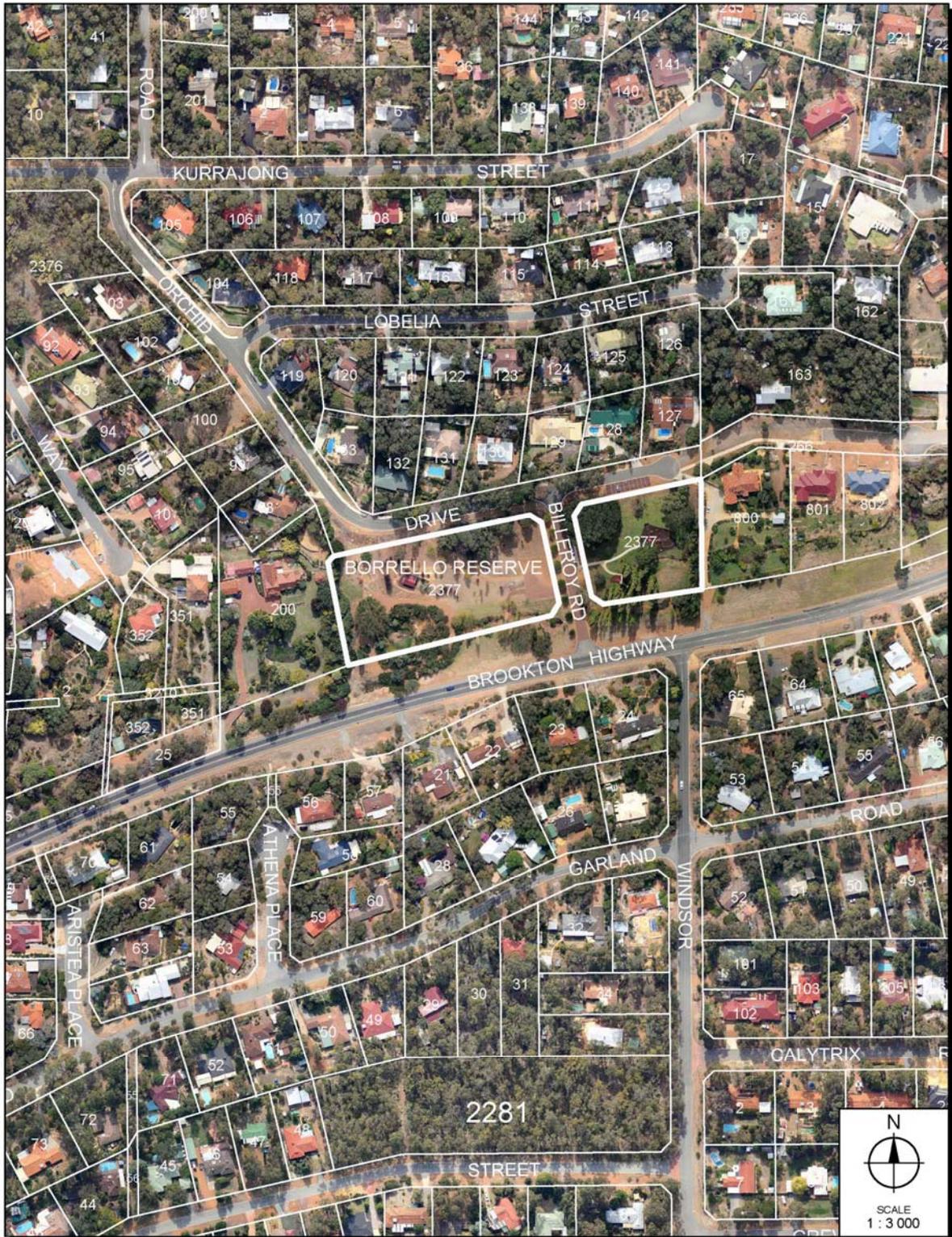
LOCATION PLAN
CROSS PARK ROLEYSTONE



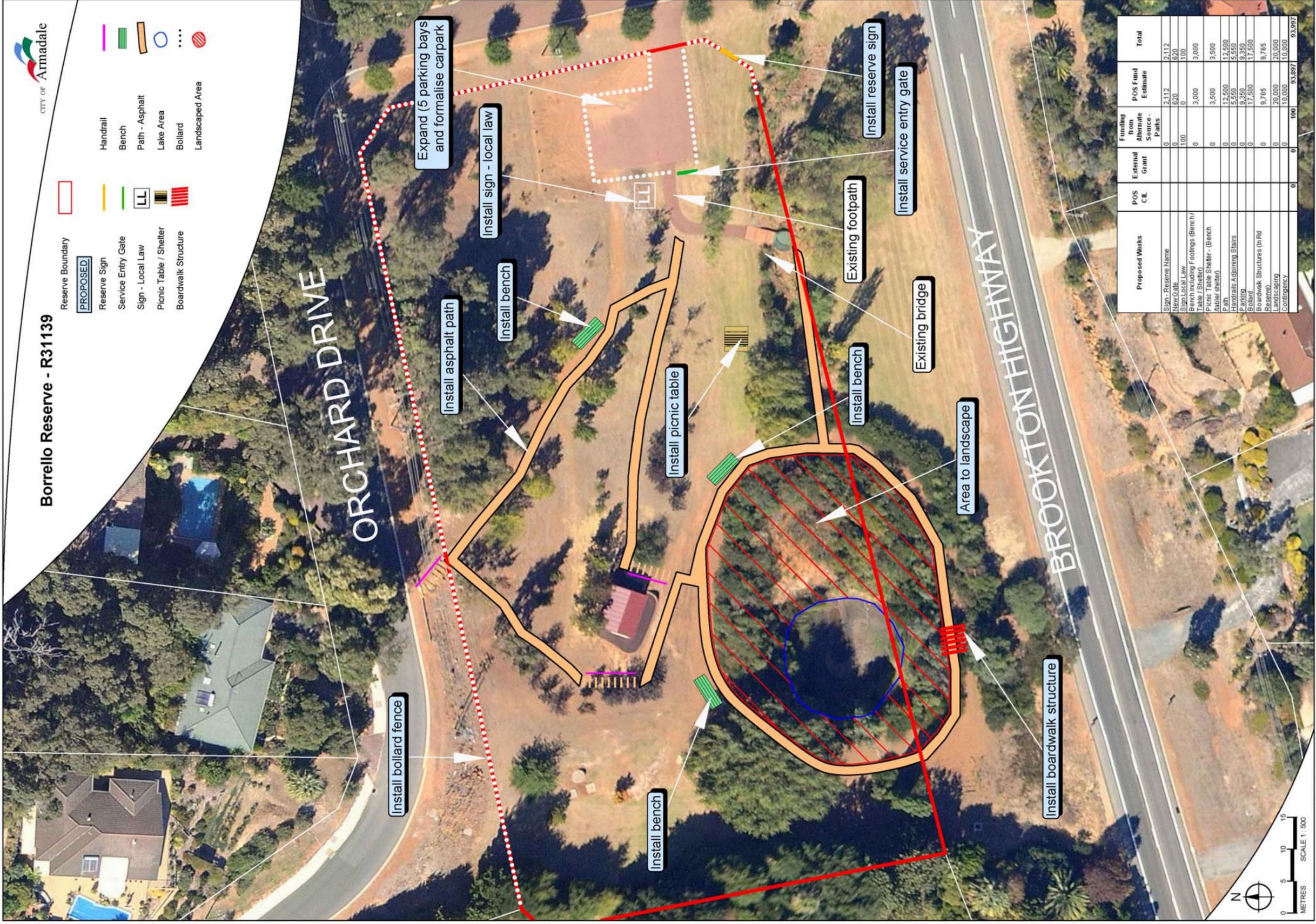
**AERIAL PHOTOGRAPH
CROSS PARK ROLEYSTONE**



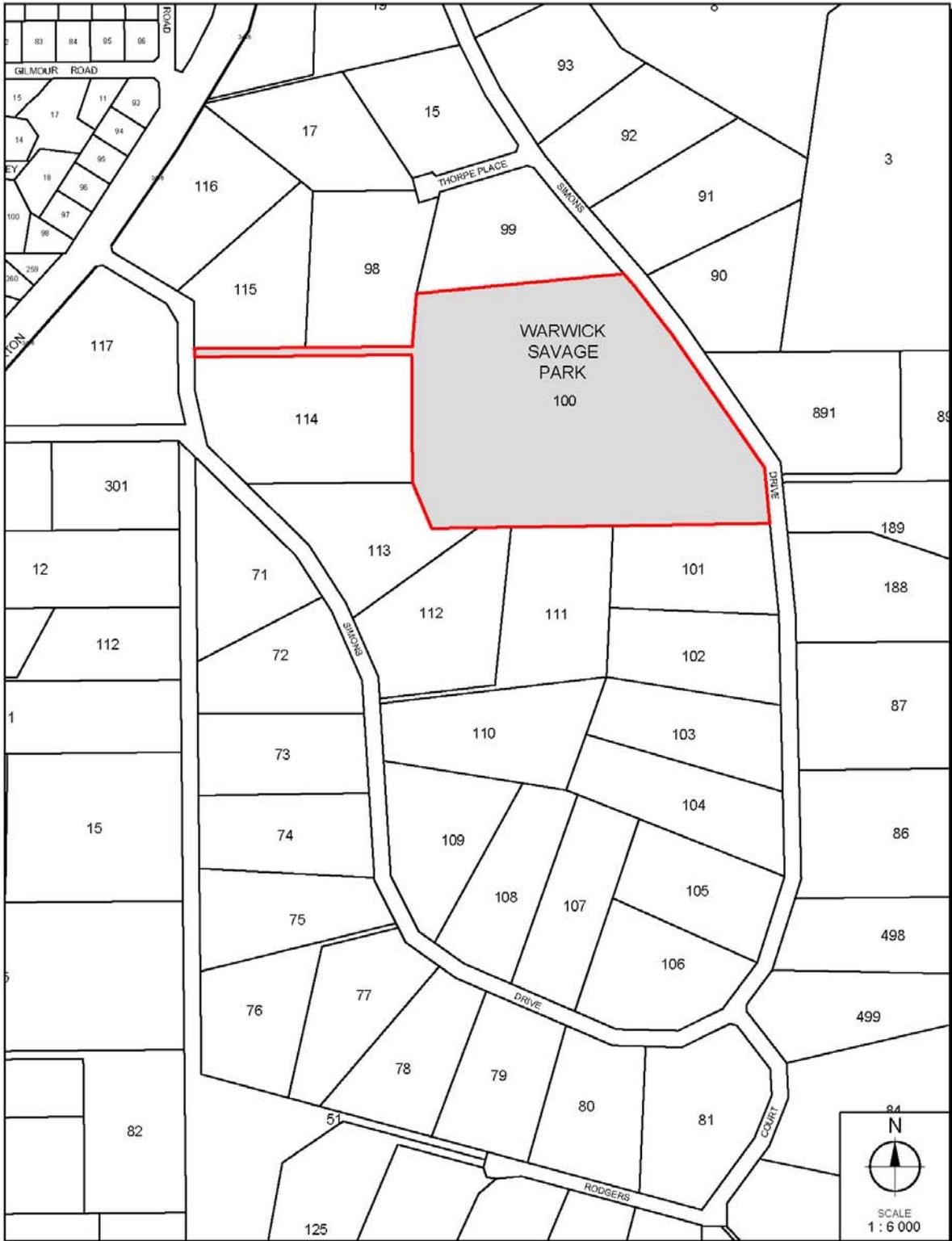
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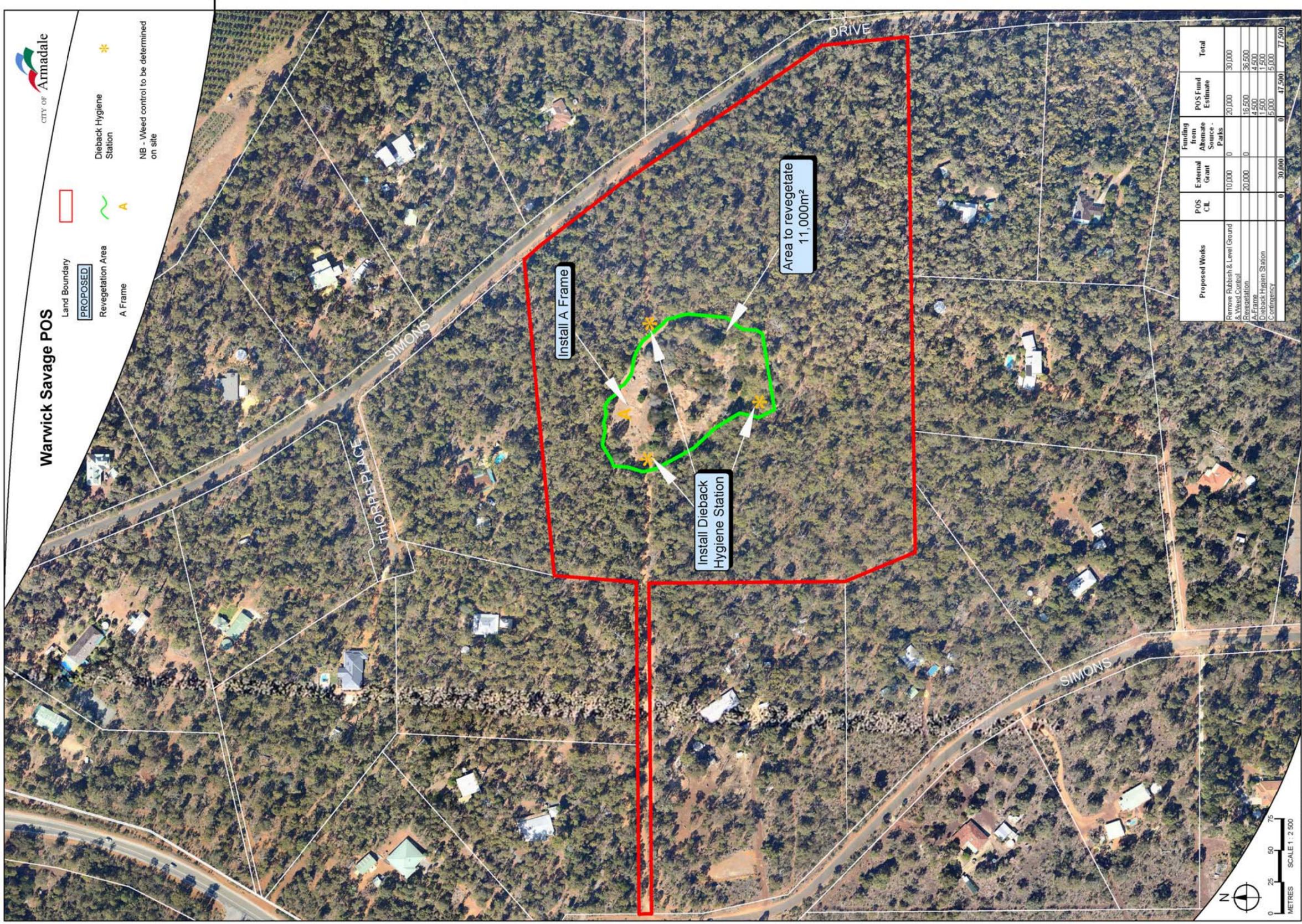
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BORRELLO RESERVE ROLEYSTONE



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LOCATION PLAN
WARWICK SAVAGE PARK ROLEYSTONE



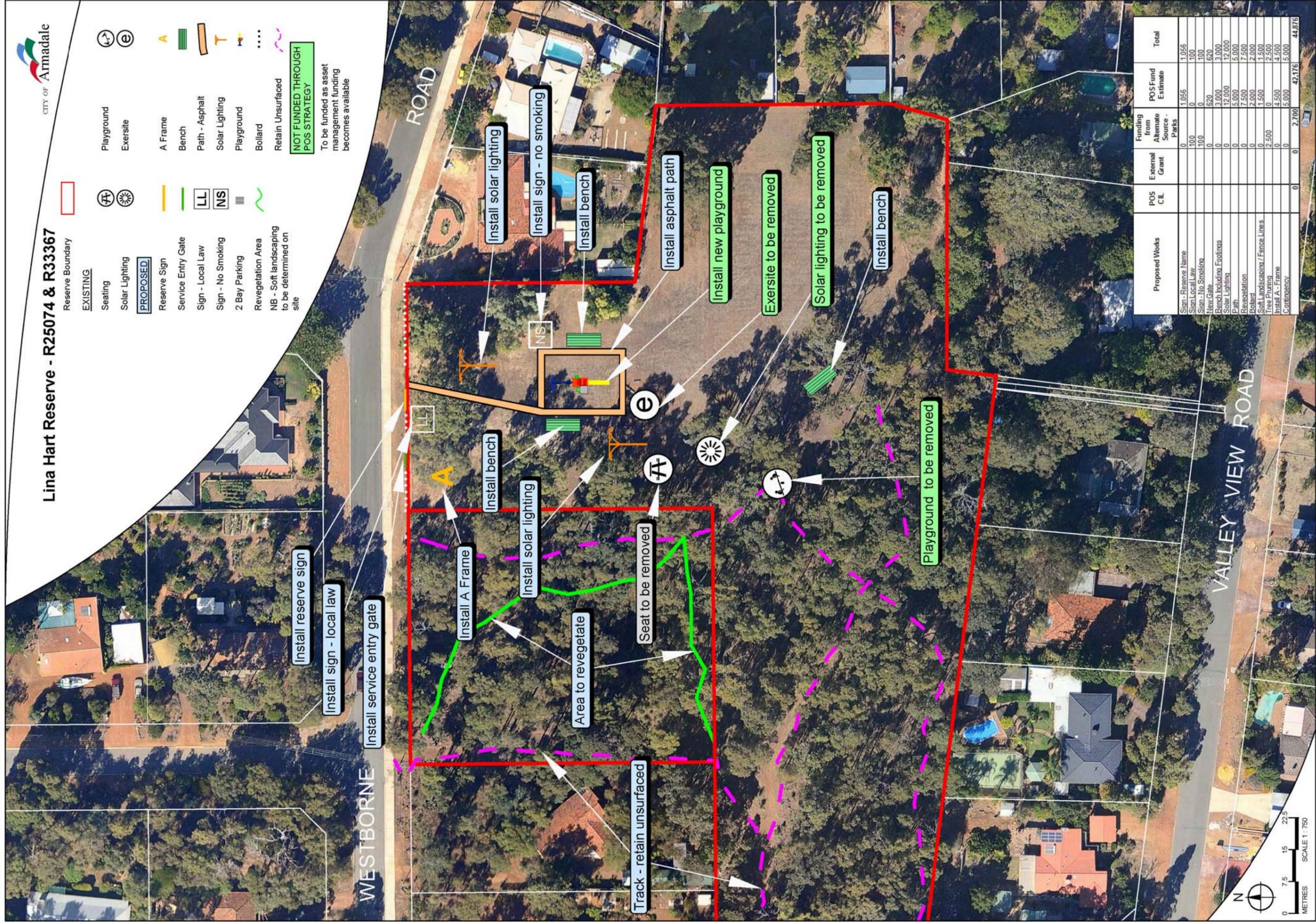
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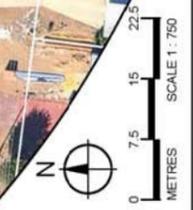
LOCATION PLAN
LINA HART RESERVE ROLEYSTONE



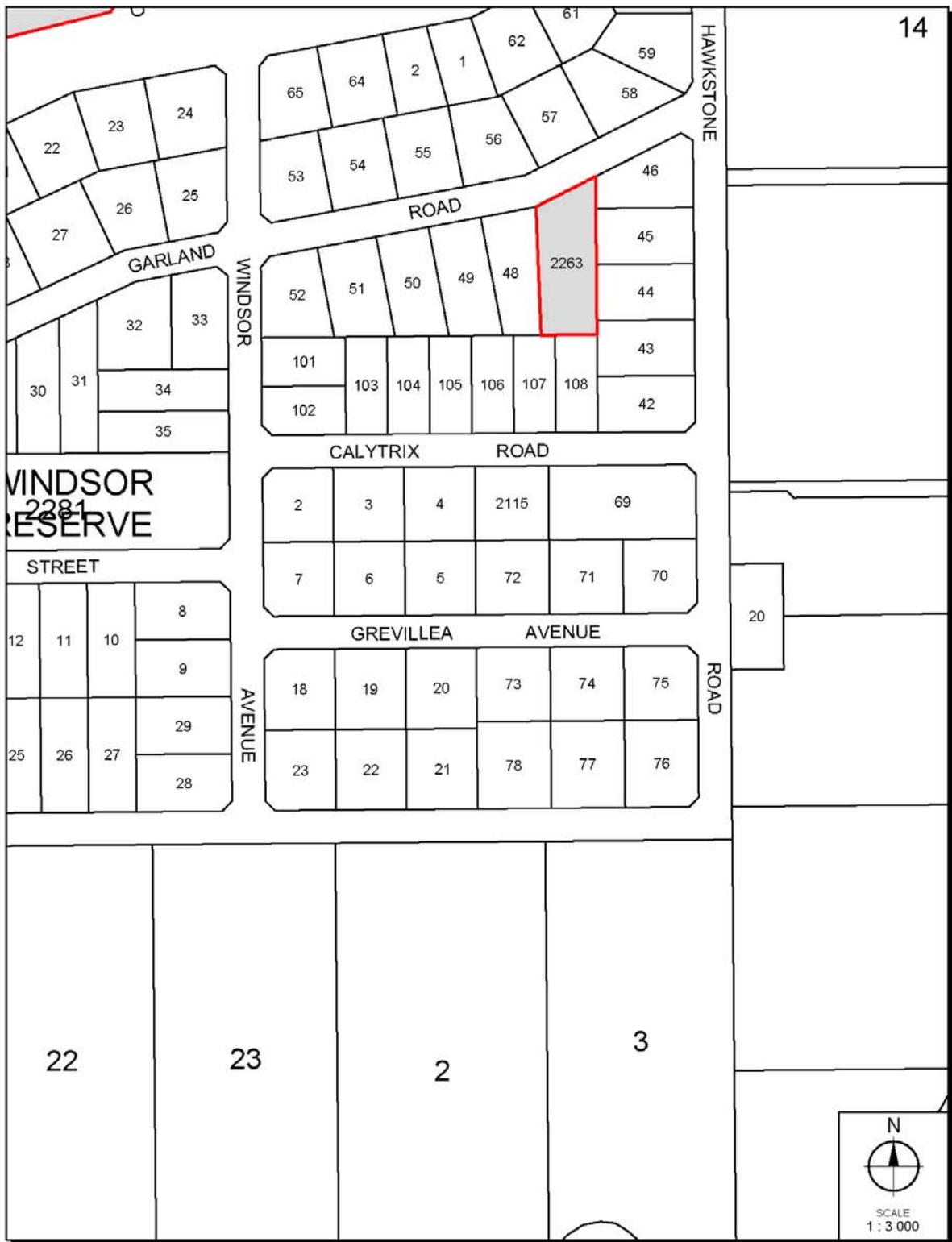
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LINA HART RESERVE ROLEYSTONE



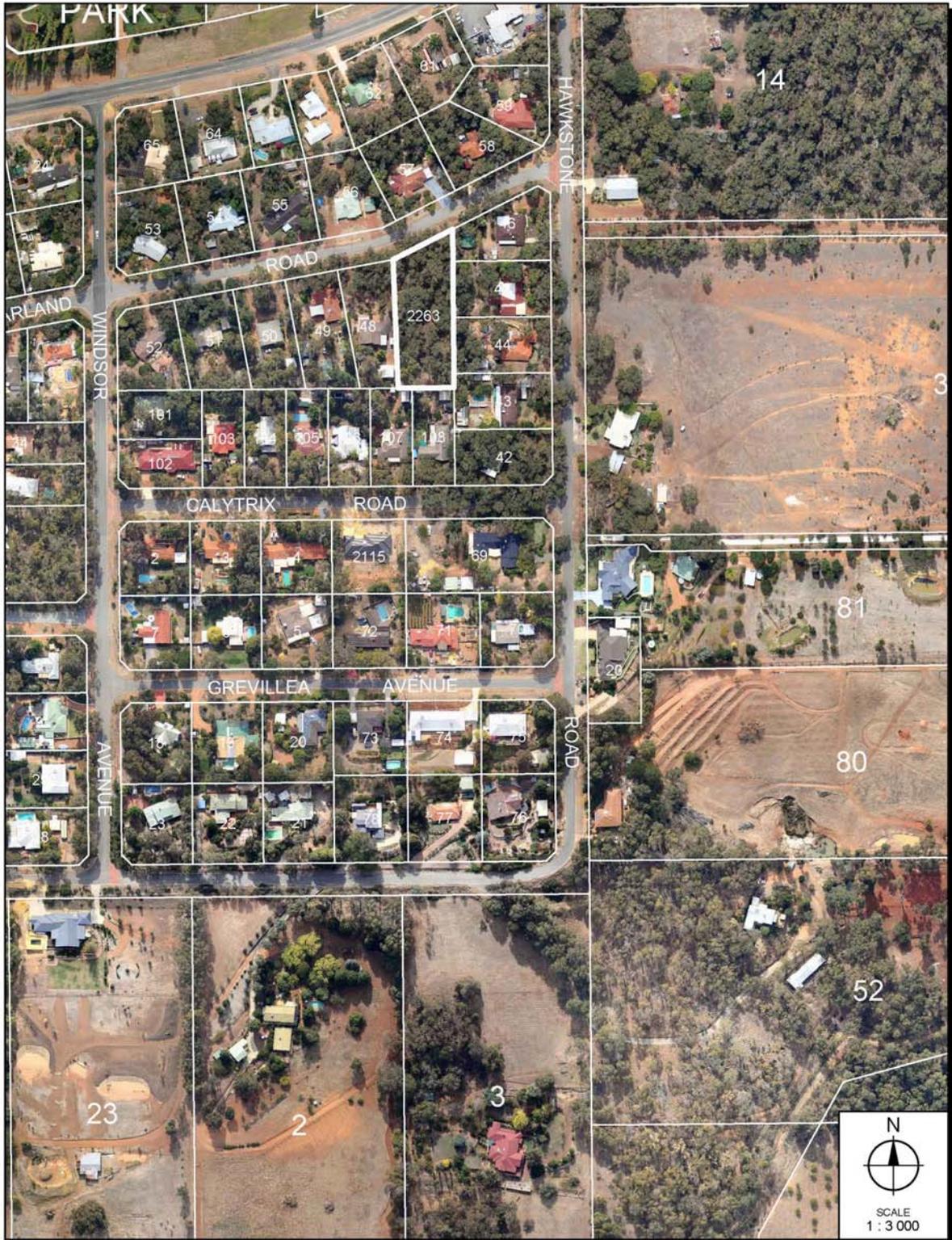
Proposed Works	POS CIL	External Grant	Funding from Alternate Source - Parks	POS Fund Estimate	Total
Sign - Reserve Name	0	0	0	1,056	1,056
Sign - Local Law	0	100	0	100	100
Sign - No Smoking	0	100	0	100	100
New Gate	0	0	620	620	620
Bench including Footings	0	0	3,000	3,000	3,000
Solar Lighting	0	0	12,000	12,000	12,000
Path	0	0	5,000	5,000	5,000
Revegetation	0	0	7,500	7,500	7,500
Bollard	0	0	2,000	2,000	2,000
Soft Landscaping / Fence Lines	0	0	1,500	1,500	1,500
Tree Pruning	0	2,500	0	2,500	2,500
Install A - Frame	0	0	4,500	4,500	4,500
Contingency	0	0	5,000	5,000	5,000
	0	0	2,700	42,176	44,876



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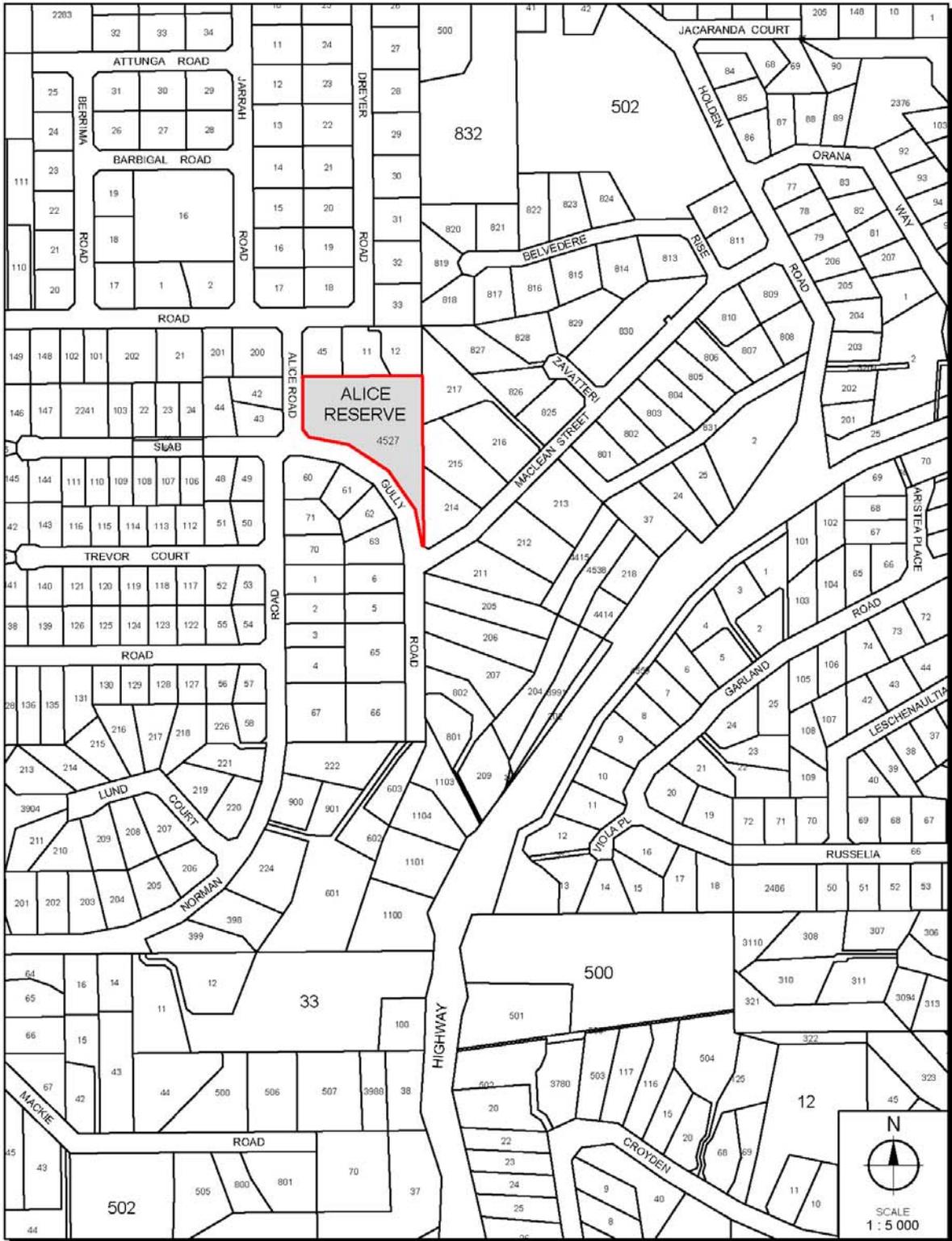


LOCATION PLAN
GARLAND RESERVE ROLEYSTONE



AERIAL PHOTOGRAPH
GARLAND RESERVE ROLEYSTONE

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LOCATION PLAN
ALICE RESERVE ROLEYSTONE



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ALICE RESERVE ROLEYSTONE

