

CITY OF ARMADALE

AGENDA

OF TECHNICAL SERVICES COMMITTEE TO BE HELD IN THE COMMITTEE ROOM, ADMINISTRATION CENTRE, 7 ORCHARD AVENUE, ARMADALE ON MONDAY, 5 FEBRUARY 2024 AT 7.00 PM.

A meal will be served at 6:15 p.m.

PRESENT:

APOLOGIES

OBSERVERS:

IN ATTENDANCE:

PUBLIC:

*“For details of Councillor Membership on this Committee, please refer to the City’s website
– www.armadale.wa.gov.au/your_council/councillors.”*

DISCLAIMER

The Disclaimer for protecting Councillors and staff from liability of information and advice given at Committee meetings to be read.

DECLARATION OF MEMBERS' INTERESTS

QUESTION TIME

Public Question Time is allocated for the asking of and responding to questions raised by members of the public.

*Minimum time to be provided – 15 minutes (unless not required)
Policy and Management Practice EM 6 – Public Question Time has been adopted by Council to ensure the orderly conduct of Public Question time and a copy of this procedure can be found at <http://www.armadale.wa.gov.au/PolicyManual>*

It is also available in the public gallery.

The public's cooperation in this regard will be appreciated.

DEPUTATION

CONFIRMATION OF MINUTES

RECOMMEND

Minutes of the Technical Services Committee Meeting held on 4 December 2023 be confirmed.

ITEMS REFERRED FROM INFORMATION BULLETIN

Outstanding Matters and Information Items

Various Items

Monthly Departmental Reports

Technical Services Works Programme

If any of the items listed above require clarification or a report for a decision of Council, this item to be raised for discussion at this juncture.

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TECHNICAL SERVICES COMMITTEE

5 FEBRUARY 2024

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1.1 - PETITION - SURFACING CARPARK AREA AT ARMADALE GOLF COURSE

WARD : MINNAWARRA
FILE No. : M/373/23
DATE : 28 June 2023
REF : SA/DC
RESPONSIBLE : Executive Director
MANAGER : Technical Services

In Brief:

- A petition was presented 26 June 2023, the prayer of which reads a request to bituminise the car parking area of Armadale Golf Course.
- Recommend that Council support the consideration of a sealed carpark at the Armadale Golf Course as part of the draft 2024-25 Annual Budget deliberations.

Tabled Items

Petition – Attachment One.

Decision Type

- ☐ **Legislative** The decision relates to general local government legislative functions such as adopting/changing local laws, town planning schemes, rates exemptions, City policies and delegations etc.
- ☒ **Executive** The decision relates to the direction setting and oversight role of Council.
- ☐ **Quasi-judicial** The decision directly affects a person's rights or interests and requires Councillors at the time of making the decision to adhere to the principles of natural justice.

Officer Interest Declaration

Nil

Strategic Implications

- 1.2 Improve Community Wellbeing
 - 1.2.2 Facilitate the alignment of service and program delivery to identify social priorities within the community.
- 1.3 Community Facilities meets Community needs.
 - 1.3.1 Ensure the equitable provision of Community Facilities throughout the City.
- 2.3 Functional, inclusive and sustainable infrastructure.
 - 2.3.3 Assets are to be effectively maintained in order to meet service levels throughout their life cycle.
- 3.2 Positive image and identity for the City.
 - 3.2.1 Prioritise the creation and promotion of a positive image and identity for the City in order to change the perception and narrative about Armadale and make it a location of choice for residents, business and visitors.

Legal Implications

Nil

Budget/Financial Implications

The costs associated with the design and construction of the Armadale Golf Course Carpark cannot be accommodated within the 2023-24 Budget. It is proposed that the estimated costs for the detailed design and construction be considered as part of the deliberations on the draft 2024-25 Annual Budget.

Consultation

1. Community Facilities
2. Community Planning

BACKGROUND

A Petition was presented to Council dated 26 June 2023, detailing 184 signatures, the prayer of which reads: -

We the undersigned request that the Council surfaces the car parking area of Armadale Golf Course with a suitable bituminous material in line with all the other Council owned sporting establishments. The existing car park surface is extremely sub-standard in comparison to the car parks of other Perth Metropolitan Council owned golf courses.

The standard of the current unsealed car parking area and crossover at the Armadale Golf Course is illustrated below.



The City installed traffic counters on Forrest Road for a seven day period in July 2023 to collect data on the number of vehicles entering and exiting the Armadale Golf Course. The data indicates an average of 43 vehicles per day.

City officers compared 9-hole specific golf courses in Perth at Embleton, Altone Park, Nedlands, Lake Claremont and Mosman Park Golf Courses. All of which have sealed carparks and roads to their clubhouses.

In comparison, it should be noted that the City has other facilities that also currently do not have sealed carparking areas:

- Fletcher Park
- Southern Districts Rifle Club
- Bedfordale Hall
- Settlers Common
- Armadale Tennis Club

However, patronage to these sites is estimated to be significantly lower than that of the Armadale Golf Course. Armadale Golf Course annual attendance numbers are greater than 17,500 which is based on the data collected from the rounds of golf purchased, not individual visits.

COMMENT

The City entered into a lease agreement with Golf Oracle Pty Ltd for the Armadale Golf Course on 1 July 2016, for a ten year term expiring on 30 June 2026. The lease agreement includes options to renew for two additional five year periods up to a maximum expiry of 30 June 2036.

For clarity, as part of the Operating Expenses in the lease agreement, the tenant is listed as being responsible for the costs involved in maintaining, repairing, refurbishing, renovating or replacing the Land or the Complex. However, as the carpark area sits outside of the leased area, as well as the works being the construction of a carpark area and not general maintenance of an existing asset, these works are not considered to fall within the tenants' maintenance responsibilities in the lease agreement, the responsibility residing with the City.

A proposed carpark concept plan has been prepared to accommodate 51 carparking bays and two access locations as per existing facilities. Please refer to the attachment – Concept Plan E23-86-01.

An approximate area of 1,800m² would be required to be constructed with appropriate basecourse and seal material to accommodate this proposed carpark concept at an estimated cost of \$250,000 depending on the type of treatment approved.

In line with the City's sustainability ambitions, the Design team is currently assessing the opportunity of integrating modified crumbed rubber materials into the design project. This approach aligns with environmental conservation goals by reusing materials that would otherwise end up as waste, thereby reducing the demand for new raw materials and minimising environmental impact. Again, in line with City expectation's, there will be no tree loss – this was confirmed by an onsite evaluation.

OPTIONS

Option 1

Do not proceed.

Option 2

Prepare a detailed design for a modified crumb rubber spray seal for the carpark and crossover construction at an estimated initial cost of \$185,000 to be considered as part of the draft 2024/25 Annual Budget deliberations. For reference, spray seal involves the application of a thin layer (7-10mm) of bitumen and aggregates onto an existing road surface, noting the existing hardstand once compacted, is suitable for such a treatment.

The anticipated future capital resurfacing would likely be \$75,000 approximately 7-years after the initial works.

Support the inclusion of Option 2 for consideration in the draft 2024/25 Annual Budget deliberations.

Option 3

Prepare a detailed design for a modified crumb rubber asphalt carpark and crossover construction at an estimated cost of \$250,000 to be considered in the draft 2024/25 Annual Budget deliberations. For reference, this method of construction is the composition of aggregates and an asphalt binder. The mixture is a hot-lay material and laid to achieve a specified thickness (in this case, 25-30mm) to create a smooth and durable road surface.

The anticipated future capital resurfacing would likely be \$100,000 approximately 15-years after the initial works.

Support the inclusion of Option 3 for consideration in the draft 2024/25 Annual Budget deliberations.

CONCLUSION

In consideration of the available options, it is recommended to proceed with Option 3. The decision to opt for a modified crumb rubber asphalt carpark construction, with an estimated cost of \$250,000, aligns with the pursuit of long-term value for money. The asphalt surface promises a prolonged service life of 15+ years, minimising the need for future capital resurfacing expenses until a later stage. This option not only ensures durability and longevity but also aligns with the cost-effectiveness sought in the draft 2024/25 Annual Budget. Therefore, Option 3 is deemed the most prudent choice for the carpark construction project.

RECOMMEND

That Council:

- 1. Note the Officer's comments and approve Option 3.**
- 2. Inform the petition convener.**

ATTACHMENTS

1. Petition - Armadale Golf Course Carpark Surface - Dave McEwan
2. Location Map - Armadale Golf Course
3. Concept Plan - E23-86-01

2.1 - WALGA SUSTAINABLE ENERGY PROJECT - PHASE 2

WARD : ALL

FILE No. : M/26/24

DATE : 23 January 2024

REF : NM

RESPONSIBLE : Executive Director
MANAGER Technical Services

In Brief:

- A confidential report is presented at Attachment B-1 to this Agenda.

Strategic Implications

The subject of this report is related to the following objectives of the Strategic Community Plan 2020-2030:

- 2.1 Conservation and restoration of the natural environment
 - 2.1.1 Sustainability initiatives are supported and implemented throughout the City.
 - 2.1.4 Minimise corporate and community carbon footprints within the City of Armadale.
 - 2.1.8 Facilitate the creation of partnerships and support strategies for the maintenance and enrichment of the natural environment.

Legal Implications

Sections 5.36, 5.38 and 5.39 of *Local Government Act 1995*.

Council Policy/Local Law Implications

Assessment of Policy/Local Law indicates that the following is applicable:

- Council Policy ADM 19 – Procurement of Goods and Services.

Consultation

- Intra Directorate
- Inter Directorate

A Confidential Report is presented at Attachment B-1 to this Agenda.

ATTACHMENTS

3.1 - NOTIFICATIONS - BLACKSPOT ROADWORKS & FOOTPATH WORKS (REFERRAL ITEM)

At the Council meeting held on 16 October 2023, Cr John Keogh, referred the following matter to the Technical Services Committee.

That the matter of Blackspot Roadworks and Footpath notifications be referred to the Technical Services Committee.

Comment from Cr J. Keogh

Requesting a policy or process to be put in place that relevant Ward Councillors are notified of planned upcoming road and footpath works to be done in their respective Ward at least two months in advance.

I would also like to request a policy or process where Council is provided with a list of identified Black Spot Projects by City Officers. This list is to be provided biannually with data/evidence for which projects have received funding and which projects have been identified by the City that are yet to be placed on the Black Spot List.

This information will assist with Councillors being aware of road and footpath issues within their Ward and the wider community and have the ability to provide feedback or Community concerns in a timely manner.

Officer Comment

Main Roads WA (MRWA) invites all Councils to nominate Black Spot Project submissions for the State Black Spot (SBS) and Australian Government Black Spot (AGBS) Programs in Quarter 3 (around February) of each financial year. The primary aim of the program is to improve road safety across the Western Australian road network by assisting Councils in funding the projects.

AGBS Program funding comes from the Federal Government (Department of Infrastructure, Transport, Regional Development and Communications) and projects approved under this program are fully funded. The SBS Program funding comes from the State Government, projects approved under this program have a 2:1 State and Local Government funding contribution respectively. Both programs use assessment criteria including benefit cost ratio (BCR), risk score calculation, crash data and potential hazardous problem consideration.

Benefit cost ratio is a financial indicator used in the evaluation of the economic feasibility of a project. It measures the ratio of the benefits of a project relative to its costs. In the context of road safety projects, such as addressing black spots on Main Roads, BCR can be used to assess the effectiveness of these interventions.

For clarity, benefit 'value' is based on crash costs avoided through the installation of the proposed treatments.

Risk assessment plays a crucial role in identifying black spots and prioritising safety interventions. It involves evaluating various factors that contribute to the likelihood and severity of accidents at specific locations.

Crash data helps in identifying trends, specific locations, and recurring issues contributing to accidents.

Identifying hazardous problems involves pinpointing the underlying reasons for accidents. For example, if a certain intersection consistently experiences rear-end collisions due to poor visibility or inadequate signalling, these problems are identified as hazards.

MRWA releases updated crash data around April each year along with a prequalified list which consists of locations meeting the crash criteria. The City's Design team review this prequalified list and consider potential black spot solutions. The closing date for both State and Federal Black Spot Project submissions is generally around July each year.

In response to the referral, City Officers propose to have biannually recurring updates in the months of January and July each year for Black Spot funding – this will be provided as a memorandum from the Executive Director Technical Services.

For convenience, a summary of approved projects for the 2022/2023 SBS and AGBS Programs is provided overleaf. Blackspot Project requests were submitted for funding consideration under both SBS and AGBS Programs at the same time to ensure maximum benefit but were all approved and fully funded through the AGBS Program.

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Project Location	Proposed Treatments	Funding Arrangement	Current Status
Railway Avenue/Streich Avenue intersection, Armadale	Modify the intersection to a left-in-left-out arrangement and improve pedestrian facilities. <ul style="list-style-type: none"> There have been a total of 37 reported crashes between 2016 and 2020, including 6 casualty crashes. The modification will improve traffic operation and safety at the intersection, which is currently in a priority controlled full movement T-intersection configuration. The modification will also improve safety of pedestrian crossing Railway Avenue. 	\$229,900 fully funded under the AGBS Program	Construction completed in late 2023.
Ranford Road/Lake Road/Remisko Drive roundabout, Forrestdale	Install pre-deflection on Ranford Road approaches to the roundabout and improve pedestrian facilities. <ul style="list-style-type: none"> There have been a total of 25 reported crashes between 2016 and 2020, including 3 casualty crashes. The modification will improve safety at the intersection by reducing approach speed towards the roundabout on Ranford Road. The modification will also improve safety of pedestrian crossing the roundabout. 	\$155,200 fully funded under the AGBS Program	Construction completed in late 2023.
Nicholson Road/Wright Road roundabout, Piara Waters/Harrisdale	Install pre-deflection on Nicholson Road approaches to the roundabout and improve pedestrian facilities. <ul style="list-style-type: none"> There have been a total of 18 reported crashes between 2016 and 2020, including 4 casualty crashes. The modification will improve safety at the intersection by reducing approach speed towards the roundabout on Nicholson Road. The modification will also improve safety of pedestrian crossing the roundabout. 	\$143,200 fully funded under the AGBS Program	Construction completed in late 2023.
Nicholson Road/Rowley Road intersection, Forrestdale/Oakford (Staged project over a two-year period)	Install a roundabout. <ul style="list-style-type: none"> There have been a total of 37 reported crashes between 2016 and 2020, including 7 casualty crashes. The modification will improve traffic operation and safety at the intersection, which is currently a staggered intersection configuration. 	\$1,690,920 fully funded under the AGBS Program	The City has been granted the funds with a one-year extension for the project due to complexity of the design. It is anticipated construction to be in FY 2024/2025.
Total Cost		\$2,219,220	

In July 2023, the City submitted the following projects for the 2024/2025 SBS and AGBS Black Spot Programs.

Project Location	Proposed Treatments	Funding Arrangement	
		AGBS Program (100% funded)	SBS Program (2:1 State and LG funding arrangement)
Nicholson Road/Easthope Link/Broadway Boulevard roundabout, Piara Waters	Install pre-deflection on Nicholson Road approach to the roundabout including skid resistant improvement, and improve pedestrian/cyclist facilities. <ul style="list-style-type: none"> There have been a total of 14 reported crashes between 2018 and 2022, including 1 casualty crash. The modification will improve safety at the intersection by reducing approach speed towards the roundabout on Nicholson Road. The modification will also improve safety of pedestrian/cyclist crossing the roundabout. 	\$430,709	\$433,666 Contributions: SBS (2/3): \$289,111 CoA (1/3): \$144,555
Wright Road/Columbia Parkway roundabout, Piara Waters	Install pre-deflection on Wright Road west leg approach to the roundabout including skid resistant improvement, improve pedestrian facilities, and upgrade street lighting to AS1158 standards. <ul style="list-style-type: none"> There have been a total of 2 reported crashes between 2018 and 2022. The community raised safety concerns at this roundabout. The City's Street Lighting Audit also identified a need for an upgrade in this area. The modification will improve safety at the intersection by reducing approach speed towards the roundabout on Wright Road west leg and improving lighting provision. The modification will also improve safety of pedestrian crossing the roundabout. 	\$254,615	\$257,565 Contributions: SBS (2/3): \$171,710 CoA (1/3): \$85,855
Skeet Road/Keane Road roundabout, Harrisdale	Install pre-deflection on Skeet Rd southwest leg approach to the roundabout, improve pedestrian/cyclist facilities, and upgrade street lighting to AS 1158 standards. <ul style="list-style-type: none"> The community raised safety concerns at this roundabout. The City's Street Lighting Audit also identified a need for an upgrade in this area. The modification will improve safety at the intersection by reducing approach speed towards the roundabout on Skeet Road southwest leg and improving lighting provision. The modification will also improve safety of pedestrian/cyclist crossing the roundabout. 	\$332,073	\$335,022 Contributions: SBS (2/3): \$223,348 CoA (1/3): \$111,674
Total Cost		\$1,017,397	\$1,026,253
<i>* Note: AGBS Program does not cover the cost of undertaking a road safety inspection and therefore, there is a difference in project cost in the AGBS Program and SBS Program columns.</i>			Contributions: SBS (2/3): \$684,169 CoA (1/3): \$342,084

In October 2023, MRWA determined the draft 2024/2025 Black Spot Program. All three project submissions were supported by MRWA, with the Wright Road/Columbia Parkway roundabout project proposed under the AGBS Program, and the Nicholson Road/Easthope Link/Broadway Boulevard roundabout and Skeet Road/Keane Road roundabout projects proposed under the SBS Program. It is anticipated MRWA will announce the formal approval in the first half of 2024.

The list of monitoring sites by the Design team is provided as Attachment No.1. The team will review the list when MRWA releases updated crash data around April 2024. Should there be crash patterns identified for any sites, the team will further investigate for the future consideration of potential black spot projects.

The team will also continue to monitor customer requests to identify potential black spot projects.

The team will provide an update to Council once the list of black spot projects has been determined for the upcoming 2025/2026 Black Spot Program in July 2024.

To provide an update on every road project and portion of footpath construction in every Ward at least two months in advance, would take Officer time away from other duties in an already resource constrained environment.

The City's Capital Works programme forms part of the Annual Budget each year.

Suggested Recommendations

That Council note the Officers comments on the matter and the proposal to update Councillors in January and July on Black Spot funding and projects.

RECOMMEND

That Council:

1. *To be considered.*

ATTACHMENTS

1. List of Black Spot monitoring sites

COUNCILLORS' ITEMS

This refers to any brief updates from Councillors from their attendance at working group or advisory group meetings on which they represent Council.

Nil

EXECUTIVE DIRECTOR TECHNICAL SERVICES REPORT

Nil

MEETING DECLARED CLOSED AT _____

TECHNICAL SERVICES COMMITTEE		
SUMMARY OF ATTACHMENTS		
5 FEBRUARY 2024		
ATT NO.	SUBJECT	PAGE
1.1 PETITION - SURFACING CARPARK AREA AT ARMADALE GOLF COURSE		
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1.1.3	Concept Plan - E23-86-01	23
3.1 NOTIFICATIONS - BLACKSPOT ROADWORKS & FOOTPATH WORKS (REFERRAL ITEM)		
3.1.1	List of Black Spot monitoring sites	25

PETITION

To: The Council
Organisation: City of Armadale
Address: 7 Orchard Avenue, Armadale
Western Australia 6112

This petition is submitted on behalf of the listed signatories by:

Name: Dave McEwan
Contact address: 123 Forrest Road, Armadale, WA 6112
Phone No. 0426 134 615 Email: dave-mcewan@live.co.uk (office use only-to remain confidential)

(All correspondence will be addressed to the person submitting this petition)

We the undersigned respectfully request that the Council:

Surfaces the car parking area of Armadale Golf Course with a suitable bituminous material in line with all the other Council owned sporting establishments. The existing car park surface is extremely sub-standard in comparison to the car parks of other Perth Metropolitan Council owned golf courses.

Full Name	Address (Number, Street, Suburb)	Signature	Date
David W. McEwan	123 Forrest Road, Armadale 6112	D. McEwan	05.05.23
DONALD STEWART	52 PATTERSON ROAD, MT. NASURA 6112	Donald Stewart	05.06.23
MARGARET RANDELL	31 Gascoigne Dr Gonswells	M. Randell	5/5/23
RONALD SHAIKEY	6/31 WILLIAM ST. ARMADALE	Ronald Shaikey	5/5/23
JOHN KINSEY	22 ASLEY ST GOSNELLS	J. Kinsey	5/5/23
WARREN STANDING	43 KINGSTON PL MADANTA	Warren Standing	5/5/23
Trish Laxon	10a Lancelot Ct Camillo	Trish Laxon	5/5/23
Pat Laxon	10a Lancelot Ct Camillo	Pat Laxon	5/5/23
Brian Stanley	5 Aard Ct Seville Grove	Brian Stanley	5/5/23
Lyn Stanley	" " "	Lyn Stanley	5/5/23
GRANT GORRING	11 CHISHOLM CR SEVILLE GROVE	Grant Goring	5/5/23
Rob Shaw	312 STRECH AV	Rob Shaw	5.5.23
Rob SHAWAN	18 CROST COURT THORNE	Rob Shawan	5.5.23
JOE TRENKA	17 ABON PL CAMILLE	Joe Trenka	5.5.23
GUY MCINNIS	54 HILTON MADANTON	Guy McInnis	5.5.23
Josh Hughes	24 Barraberry way byford	Josh Hughes	5.5.23
LAC DAWSON	6 RAINSON WAY SOUTHEN AVE	Lac Dawson	5.5.23
Alison Swanson	28 Daleford way SPRING	Alison Swanson	5/05/23
ILKEMP	36 CORSELA RD ARMADALE	Ilkemp	6/5/23
NEIL DEDMAN	6 GOSNELL V GOSNELL	Neil Dedman	6.5.23
NEIL DEDMAN	4 SPARGO ST MYARRE 6154	Neil Dedman	7.5.23
Joely Faggella	7th Lonsay Cres Auburn Grove	Joely Faggella	7.5.23
DAVE WILLIAMS	2, 21 DISNEY RD PALMELIA	Dave Williams	7-5-23
RAY ETRIDGE	42 ELVIRA ST PALMERA	Ray Etridge	7.5.23
CANDIE TOVEY	152 YAHW RD THORNE	Candie Tovey	7.5.23
JOAN BENSON	42B ELVIRA ST PALMYRA	Joan Benson	7.5.23
RAY LAYLER	4 TRAVERS ST SPEARWOOD	Ray Layler	7.5.23
Leela Nair	33 MORTON LOOP CIVIC	Leela Nair	7.5.23
Ravi Pragash	12 Cranbrook Pass CIVIC	Ravi Pragash	7.5.23

Note: The request must appear on every page of the petition

PETITION

To: The Council
Organisation: City of Armadale
Address: 7 Orchard Avenue, Armadale
Western Australia 6112

We the undersigned respectfully request that the Council:

Surfaces the car parking area of Armadale Golf Course with a suitable bituminous material in line with all the other Council owned sporting establishments. The existing car park surface is extremely sub-standard in comparison to the car parks of other Perth Metropolitan Council owned golf courses.

Full Name	Address (Number, Street, Suburb)	Signature	Date
ALAN CLARK	67 DISCOVERY DRIVE	[Signature]	9.5.23
JIM COOK	14 VIGNETA PLACE KEMURSTON	[Signature]	9.5.23
Tom Doyle	30 WATSON ST ROSARY	[Signature]	9.5.23
BRIAN HAWKER	6 COOLABAH DR MT NASCOTE	[Signature]	9.5.23
JIM BROWN	24 SEANARY CT. CHAMBERLAIN	[Signature]	9/5/23
John Kewell	76 SCHWARTZ ST. N. KALMISCOTT	[Signature]	9/5/23
KEVIN DAVEY	154 WILLOW AVE TAYLOR	[Signature]	9/5/23
Geoff McKeberly	47 CARRICK RD WA 6112	[Signature]	9.5.23
Tom GREGG	12 EDWARD ST	[Signature]	9.5.23
NEIL JONES	46 TALBOT RD SWANVIEW	[Signature]	9.5.23
PETER FERGUSON	24 WATLEDGE RD HAYNES	[Signature]	10.5.23
RON BLAIR	37 ROLLING CROOK LYNWOOD	[Signature]	10/5/23
TERRY McLAUGHLIN	14 CHICAGO CLOSE CIVALE	[Signature]	9/5/23
LEN HARDINGHAM	77 GERRARD ST, CANNINGTON	[Signature]	9/5/23
Geoff LANDWEH	19 Penrhyn Pl, Armadale	[Signature]	9/5/23
Justin Wakeley	14 Cornhill Ent, Hilbert	[Signature]	9/5/23
Col Kruar	3 Clarendon Court Thornlie	[Signature]	9/5/23
James Sharp	9 Consulate Court Thornlie	[Signature]	09/05/23
Beau Van de Sande	5 Fulmer Street Thornlie	[Signature]	09/5/23
Blair West	28 Malcolm St Spearwood	[Signature]	09/5/23
RAY BANKS	27 GEORGINA ST HILBERT	[Signature]	11/5/23
BRIAN COMMONS	39 ONYX ROAD MTRICHMOND	[Signature]	11/5/2023
GLEN TOWSTILL	11 COLWYN CL CHADWICK	[Signature]	11/5/23
CHRIS FELSTEAD	11 OSPREY WAY THORNLEE	[Signature]	12/5/23
KEITH CHAPMAN	147A LOCKHART ST COMU	[Signature]	12/5/23
SAM HUME	18/100 CLEMENTINE BLVD TREEBY	[Signature]	12/5/23
Col Bradley	10 Akana Court Macdonald	[Signature]	12/5/23
CHRIS HUNT	7 JANDA COURT ARMADALE	[Signature]	12/5/23
PAUL QUADD	21 LOOPING CREEK CAMMILLO	[Signature]	12/5/23
A. PINTO	32 TEAK WY	[Signature]	12/5/23
DENIS TODD	310 CAMPBELL RD CHURCH	[Signature]	12/5/23
D THOMAS	21 TITO GROVE ARMADALE	[Signature]	13/5/23
V WOOD	6A FOURTH AVE BASSENDEAN	[Signature]	13-5-23
DAVID QUITE	4/37 ELIZABETH ST. MANJURAH	[Signature]	13/5/23
EVERYAN SAMUELS	5 JURI ST, ARMADALE	[Signature]	13/5/23
DICK GENOBICKS	33 KIMLY RD. BANGUP	[Signature]	18/5/23

PETITION

To: The Council
Organisation: City of Armadale
Address: 7 Orchard Avenue, Armadale
Western Australia 6112

CAR PARK FIXE

We the undersigned respectfully request that the Council:

Surfaces the car parking area of Armadale Golf Course with a suitable bituminous material in line with all the other Council owned sporting establishments. The existing car park surface is extremely sub-standard in comparison to the car parks of other Perth Metropolitan Council owned golf courses.

Full Name	Address (Number, Street, Suburb)	Signature	Date
IAN LOFTICOUR	61 - DERRY AVE MT NAFURA	[Signature]	13-5-23
ROB SHERRIN	151 " " "	[Signature]	13-5-23
RAY ETTROG	42B ELVIRA ST PALMYRA	[Signature]	14-5-23
Daniel Thomas	27 Spinnaker Heights	[Signature]	14-5-23
JASON WOOD	255 Adelaide Terrace	[Signature]	14/5/23
MARTY THOMAS	54 BREAKSEA DRIVE MCOCKEE	[Signature]	14/5/23 F.
GLYLIAN SERRET	UNIT 16-14 BAYD CRES HAMILTON HILL	[Signature]	14/5/23
GARY MCKAY	9 MAKARSKA WAY SHALWOOD	[Signature]	04/3/23 697
A.J. MORTON	St Winifred DR BIRBA LAKE	[Signature]	14/5/23
WALLY HOGUE	7 AUGUSTUS CRT AUBINGROVE	[Signature]	14/5/23
Cameron Cassidy	17 MAYHEW CRSS, ATWELL	[Signature]	14/5/23
Isaac Guffy	17 MAYHEW CRSS, ATWELL	[Signature]	14-8-23
Kanna Pereira	5 COBHAM WY CAMILLO	[Signature]	14/5-23
Brian Puck	16 ORNATA ST BYFORD	[Signature]	14/5/23
CLAUDE IANNELLO	5 INN CLOSE BIRBA LAKE	[Signature]	15-5-23
Bethie Williams	Unit 7/32 CHIAMION DR	[Signature]	15/5/23
LORRAINE TAYLOR	4 LAWRENCE ST. GOSNELLS	[Signature]	15/5/23
ANTHONY SENECA	1 EUSTON CRT BYFORD	[Signature]	15/5/23
REG GERARD	30 MORA PURC BELMONT	[Signature]	15/5/23
GAVIN TAYLOR	4 LAWRENCE ST GOSNELLS	[Signature]	15/5/23
JOHN MCALINDON	20 SACKLER LINK	[Signature]	15/5/23
DAVID LUCICH	19 HEATHER RD ROLEYSTONE	[Signature]	15/5/23
KARNE ANDERSON	47 CONISTON WAY ARMADALE	[Signature]	15/5/23
D. BARR	16 CASELLA PL, WARDI	[Signature]	16/5/23
EDDIE EARL	18 WALCHA WAY	[Signature]	15/5/23
Doug Roche	12/128 BIRBA DR BIRBA LAKE	[Signature]	16/5/23
DAVID PORTS	27/7 FRANKLIN RD GOSNELLS	[Signature]	16/5/23
BOB McARTHUR	22 Whitthorn St Belmont	[Signature]	14/03/23
ROD JARVIS	10 GILCOL PL ROLEYSTONE	[Signature]	16/5/23
SHANE HUGHES	24 JOURNEYS CR THORNHILL	[Signature]	16/5/23
CATH ONELL	11 PEMBROOK LN	[Signature]	16-5-23
FIONA PENMAN	13 STEFANELLI CL, WARDI	[Signature]	16-5-23
GAYE KENNERBY	3 PATULA LINK, AUBINGROVE	[Signature]	16.5.23
CHRIS VORON	5 COADIE CIRCUIT BYFORD	[Signature]	16.5.23
SHARLA PEEBLEN	15 FORDRILL PROM HALLSDALE	[Signature]	16-5-23
Collian Pitt	Lot 25 Casella Pl. Wardi	[Signature]	16.5.23

PETITION

To: The Council
Organisation: City of Armadale
Address: 7 Orchard Avenue, Armadale
Western Australia 6112

Seal the carpark surface

We the undersigned respectfully request that the Council:

Surfaces the car parking area of Armadale Golf Course with a suitable bituminous material in line with all the other Council owned sporting establishments. The existing car park surface is extremely sub-standard in comparison to the car parks of other Perth Metropolitan Council owned golf courses.

Full Name	Address (Number, Street, Suburb)	Signature	Date
JUDY LEEBS	8 THE FAIRWAY JANDAKOT WA	J Leebs	16/5/23
R THOMAS	167 CHAMPION DRIVE, CAMULO	R Thomas	16/5/23
Ken Kenechington	18 CRAIGIE PL S. GROVE	Ken Kenechington	"
Dennis Cochr.	15/5 MARCH RD MT RICHMOND	Dennis Cochr.	18/5/23
PAUL FLICKET	4 GRIFFITH WAY THORNHILL	Paul Ficket	19-5-23
Sue THOMPSON	8 MADDON MEANS PARKWAY	Sue Thompson	19-5-23
KERRY WILKINS	30/41 GEOGRAPHIC WY TARMUL	Kerry Wilkins	19-5-23
Phil Scott	31 GAMING ST C/VALE	Phil Scott	19-5-23
HOYD DUNGERY	83A CLOISTERS AVE MANNING	Hoyd Dungerey	19-5-23
ROB STEWART	18 CREST COURT, THORNHILL	Rob Stewart	19-5-23
CHRIS BANTING	10 LURE CT THORNHILL	Chris Banting	19-5-23
FRANK MOLONEY	10/4 PAGE RD KELMSCOTT	Frank Moloney	19/5/23
BILL HUGHES	86 HOME ST & ROAD GOWERS	Bill Hughes	19/5/23
WILLIAM DAVIS	351 ACTON AV KENDALE	William Davis	19/5/23
COY McILVENNY	37 LUGAS RD CANNINGVALE	Coy McIlvenny	19/5/23
DAVID RAPATTONI	49 LEATHERWOODS HUNTINGDALE	David Rapattoni	19/5/23
Sam Luteri	Brewery Rd Leeming	Sam Luteri	20/5/23
LUKE TOGNOLINI	CORBRIDGE AVE WELLARD	Luke Tognolini	20/5/23
PAUL TOGNOLINI	- - -	Paul Tognolini	20/5/23
TRISH HOSKING	Colahan Pt Ferndale	Trish Hosking	21/5/23
NEIL DEDMAN	SPARCO ST MYARCEE	Neil Dedman	21/5/23
DAVE WILLIAMS	DISNEY RD PARMELIA	Dave Williams	21/5/23
RAY ETTRELL	ELVERA ST	Ray Ettrell	21.5.23
J FOWLES	BUCKINGHAM RD	J Fowles	" "
G. GLEESON	18 Buckingham Rd	G. Gleeson	22/5/23
H. RAY	17 Aurelian St PARMELIA	H. Ray	23/5/23
N. PRIGENT	4 CONNOR STREET JANDAKOT	N. Prigent	23/5/23
T. RAY	1 ELATA COURT THORNHILL	T. Ray	24/5/23
A. NETTO	4 JASMINE LOOP WA 6115	A. Netto	24/5/23
R. Nathan	30 NORTHFIELD CRE CANNINGVALE	R. Nathan	24/5/23
S. PEPPER	25 FRANKLIN CRES CANNINGVALE	S. Pepper	24/5/23
DAVE GARLAND	26 MILLER ST MT NASURA	Dave Garland	25/5/23
John Murrell	67 Canning Mills Rd	John Murrell	25/5/23
Rita Charlison	41 CHARLTON WY CHAMBERS	Rita Charlison	25/5/23
Michael Sebaly	5 Lyon Rd ATHLETIC	Michael Sebaly	25/5/23
N. KURN	10A PIELLE PARKWAY ALBION	N. Kurn	25/5/23

Note: The request must appear on every page of the petition

PETITION

To: The Council
Organisation: City of Armadale
Address: 7 Orchard Avenue, Armadale
Western Australia 6112

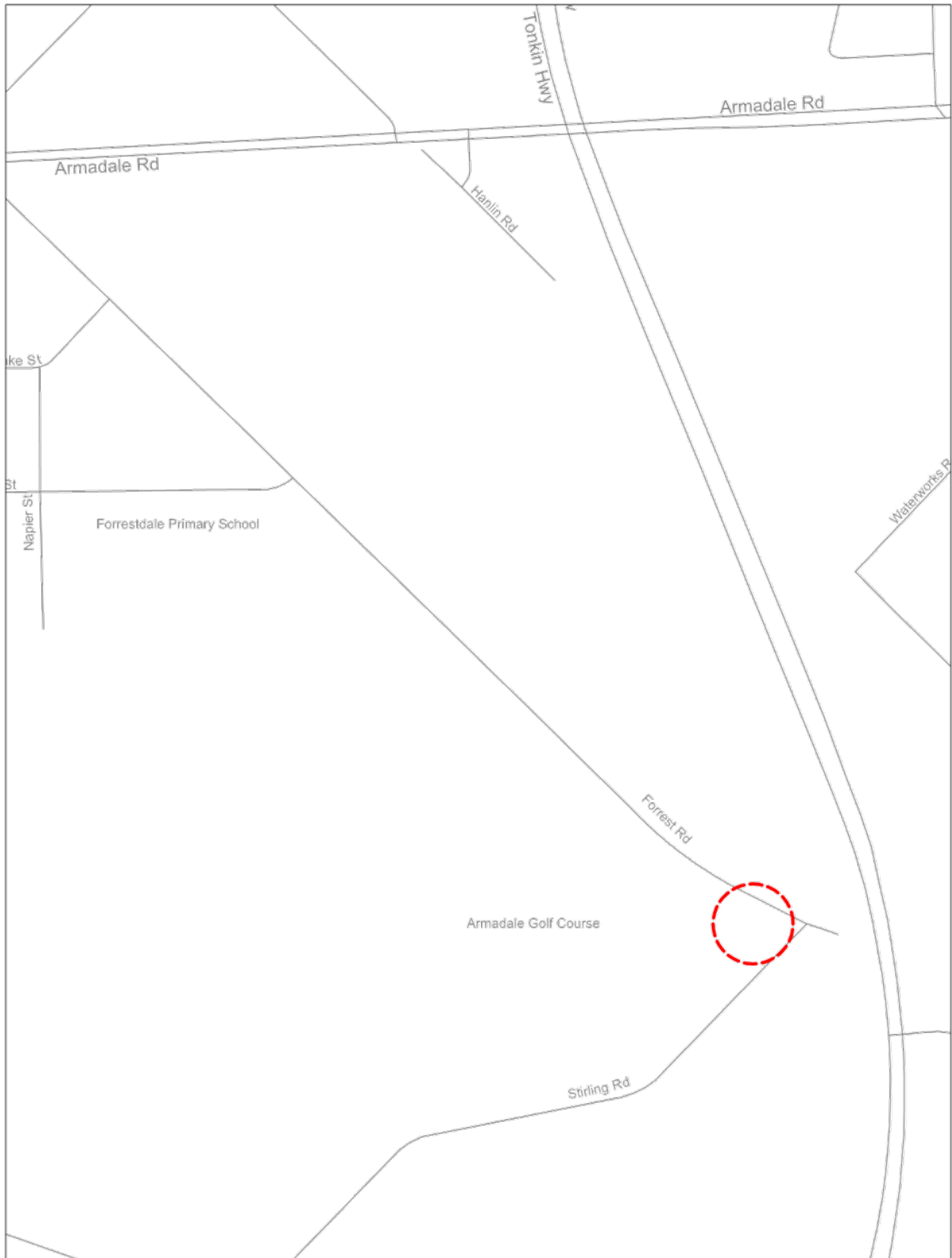
SEAL THE
CARPARK

We the undersigned respectfully request that the Council:

Surfaces the car parking area of Armadale Golf Course with a suitable bituminous material in line with all the other Council owned sporting establishments. The existing car park surface is extremely sub-standard in comparison to the car parks of other Perth Metropolitan Council owned golf courses.

Full Name	Address (Number, Street, Suburb)	Signature	Date
CORINNA MONROE	4 WATFORD RD LESMOUTH	[Signature]	26/5/23
PAUL BAKER	12 DORRILEY ESP CLIP WAKA	[Signature]	26/5/23
MIKE ROSE	7 SANTARA COURT ARMADALE	[Signature]	26/5/23
TODD WADDELL	129 MALABUK RD	[Signature]	27/5/23
R. EZZRINGER	420 ELVERLY ST	[Signature]	28.5.23
I Splinter	12 - Newell loop	[Signature]	28.5.23
R Tomlinson	15/19 BUNKERS DR BORA	[Signature]	30.5.23
TONT BOOMER	22 LAMIN CRT MEDINA	[Signature]	29.5.23
JOHN SMITH	19 TRON TC CAMKE	[Signature]	30.5-
Debra Brane	33 Clover Square Girrawheen	[Signature]	1/6/23
George Williams	Quinn cat c/Valc	[Signature]	1/6/23
Michael Gannon	27 WEBBING WAY, KILMESCOTT 6111	[Signature]	1.6.23
KATE PROPLES	16 TASMAN CRT TIFORNLIK	[Signature]	2/6/23
GRAEME SCOTT	49 JUNIPER WAY FORRESTFIELD	[Signature]	2/6/23
DALE McMICHAEL	18 SIMONS DRIVE KILGERSTAVE	[Signature]	2/6/23
Simon Emerson	41/6 Arch Ave Kardale	[Signature]	2/6/23
Folly Hanara	15 Baulich Road	[Signature]	3/6/23
Craig Dewar	23 Branderan Court Cingula	[Signature]	3 June 23
John Charsley	67A McDonald St, Como	[Signature]	24/06/23
Jill Waller	41 THE LAKES BLV JANDAKOT	[Signature]	01/25/2023
PAUL WALLER	41, THE LAKES BLVD, JANDAKOT	[Signature]	01/26/2023
JACK BRUNET	116 LYDON DRD ATWELL	[Signature]	04/05/2023
NASON DUNN	2 FREINTON ST JANDAKOT	[Signature]	04/3/2023
S. Rao	16 GERRARD RD C. VAK	[Signature]	04/5/2023
P. NOVAK & V. NOVAK	6 STENSTONE RD South River	[Signature]	04/28/2023
L. Smith	50 B Town Centre Rd Thornlie	[Signature]	9/6/23
DAVID TOMKINS	49 BARRINGTON AVE C/LAKES	[Signature]	9/6/23
GARRY BONE	28/14 CRAIG CRT, MEDINA 6112	[Signature]	9/6/23
maxx Fleming	42 willowmead way 6111	[Signature]	9/6/23
Mitchel Fleming	42 willowmead way 6111	[Signature]	9/6/23
RETCRIPPE	" "	[Signature]	11.6.23
Donna	96 ROBERTSON ROAD	[Signature]	11/6/23
ROMYNE BROWN	34 BOTTLEBRUSH DRIVE, THORNIE 6108	[Signature]	11/6/23
DAVE BROWN	" "	[Signature]	11/6/23
SHANE STOCKWELL	3 IRMA CLOSE, HUNTINGDALE 6110	[Signature]	11/6/23
TED COLEMAN	7 QUINN AVE BENTLEY	[Signature]	12/6/23

Note: The request must appear on every page of the petition



Armadale Golf Course Carpark
FORRESTDALE
Location Plan



Design Team - List of black spot monitoring sites

INTERSECTION_RANK	INTERSECTION_NO	INTERSECTION_NAME	TOTAL_CRASH_COUNT	CASUALTY_CRASH_COUNT	TOTAL_CRASH_COST	CRITERIA	State/Local	Notes
1	036171	NICHOLSON RD & WARTON RD	95	8	4824013	>= 5 total crashes	L/L	Currently a dual lane roundabout. Shared boundary with Gosnells/Cockburn/Canning. Cockburn is currently investigating for traffic signals.
2	137011	TONKIN HWY & RANFORD RD	95	14	3811726	>= 10 total crashes	S/L	MRWA future plans for grade separation by 2026
3	178523	RANFORD RD & SOUTHERN RIVER RD & BALANNUP RD	82	12	4766138	>= 5 total crashes	L/L	Previous upgrade/improvement - Balannup Rd (by Armadale in 2019), Southern River Rd (by Gosnells in 2018). Future 3-lane roundabout (DPLH Ranford Road Reservation Study (2016)).
4	043989	RANFORD RD & WARTON RD	79	14	3155341	>= 5 total crashes	L/L	Future 6-lane plus bus priority lane on Ranford Rd, double LT & RT from Warton Rd onto Ranford Rd (S) (DPLH Ranford Road Reservation Study (2016)).
5	147793	TONKIN HWY & FORREST RD (EAST)	57	21	2564199	>= 10 total crashes	S/L	Recently upgraded to traffic signals in August 2022
6	138649	TONKIN HWY & ROWLEY RD	56	6	2093235	>= 10 total crashes	S/L	MRWA future plans for grade separation by 2026
7	070820	WARTON RD & WARTON RD & JANDAKOT RD & MASON RD	55	10	2548177	>= 5 total crashes	L/L	Cockburn is currently investigating for traffic signals. They have approved black spot projects in 2017/18 and 2022/23 - additional LT lane on Jandakot Rd and pre-deflection on Warton Rd (not proceeded).
8	141661	TONKIN HWY & CHAMPION DR	50	11	2628057	>= 10 total crashes	S/L	MRWA future plans for grade separation by 2026
9	036346	ARMADALE RD & EIGHTH RD	45	11	2030888	>= 10 total crashes	S/L	MRWA future plans for upgrade to traffic signals 2025/26 Armadale Rd (west of Eighth Rd to west of Seville Dr) speed reduction to 70km/h from 80km/h (Jan 2024).
10	081408	RAILWAY AV & STREICH AV RAIL XING	38	5	1615618	>= 5 total crashes	L/L	Armadale 2022/23 black spot project (completed late 2023) - ULO treatment, extend LT pocket length and improve pedestrian facilities.
11	036922	RANFORD RD & WRIGHT RD & BRISTLE AV	36	9	1300355	>= 5 total crashes	L/L	Future 6-lane plus LT & RT pockets on Ranford Rd (DPLH Ranford Road Reservation Study (2016)).
12	036279	RANFORD RD & LAKE RD & REMISKO DR	33	2	1370790	>= 5 total crashes	L/L	Armadale 2022/23 black spot project (completed late 2023) - install pre-deflection on Ranford Rd approach and improve pedestrian facilities.
13	188271	ARMADALE RD & RAILWAY AV & ABBEY RD	26	2	1302809	>= 10 total crashes	S/L	MRWA is currently undertaking a study to improve intersection safety involving State road in the Metro region. There is currently no further updates.
14	036814	ARMADALE RD & SEVILLE DR	25	5	1647160	>= 10 total crashes	S/L	Armadale 2021/22 black spot project (completed) - additional pedestrian crossing on Armadale Rd east leg. MRWA is currently undertaking a study to improve intersection safety involving State road in the Metro region. There is currently no further updates.
15	036178	NICHOLSON RD - LG BDRY & ROWLEY RD WEST	24	3	1192219	>= 5 total crashes	L/L	Armadale 2022/23 approved black spot project - Roundabout treatment Shared boundary with SJ (granted one-year extension for complex design, construction in FY 2024/25).
16	036386	LAKE RD & CHAMPION DR	24	2	931770	>= 5 total crashes	L/L	Armadale 2020/21 black spot project (completed) - pre-deflection on Champion Dr NW leg SBL improvements.
17	036541	ARMADALE RD & ORCHARD AV	23	4	967293	>= 10 total crashes	S/L	Armadale future plans for Armadale Strategic Metropolitan Activity Centre Structure Plan (2018) - Commerce Ave connects with Streich Av? MRWA is currently undertaking a study to improve intersection safety involving State road in the Metro region. There is currently no further updates.
18	036784	ARMADALE RD & TAIT ST	21	5	1251184	>= 10 total crashes	S/L	MRWA is currently undertaking a study to improve intersection safety involving State road in the Metro region. There is currently no further updates. Armadale Rd (west of Gribble Rd to east of Tait St) speed reduction to 70km/h from 80km/h in Jan 2024.
19	014851	ALBANY HWY & FANCOTE ST & DAVIS RD	20	1	1372793	>= 10 total crashes	S/L	Upgraded to traffic signals as part of Denny Ave LCR project (completed Dec 2020/Jan 2022).
20	012323	ABBAY RD & FORREST RD & GREEN AV	20	3	1152913	}	L/L	Previous upgrade/improvement - Forrest Rd west leg with pre-deflection in early 2019 Future plans for a roundabout or signal (dual carriageway on Forrest Rd) (DPLH Forrest/Wungong/Eleventh Road Reservation Study (2016)).
21	036310	ARMADALE RD & STREICH AV	19	3	1511250	>= 10 total crashes	S/L	Armadale future plans for Armadale Strategic Metropolitan Activity Centre Structure Plan (2018) - Commerce Ave connects with Streich Av? MRWA is currently undertaking a study to improve intersection safety involving State road in the Metro region. There is currently no further updates.
22	014794	SEVENTH RD & FORREST RD	17	0	1097826	>= 5 total crashes	L/L	Future plans for a roundabout (dual carriageway on Forrest Rd) (DPLH Forrest/Wungong/Eleventh Road Reservation Study (2016)).
23	133395	RANFORD RD & BOARDWALK BVD	17	3	945526	>= 5 total crashes	L/L	Boardwalk Bvd on Gosnells side. Future plans to remove CHL for 3 lanes on Ranford Rd (DPLH Ranford Road Reservation Study (2016)).
24	014733	TWELFTH RD & FORREST RD	17	5	742490	>= 5 total crashes	L/L	Future Wungong plans for a roundabout (Development WA/Planning/DCS funding)
25	014873	ALBANY HWY & FOSTER RD	17	2	696429	>= 10 total crashes	S/L	MRWA is currently undertaking a study to improve intersection safety involving State road in the Metro region. There is currently no further updates.
26	014864	ALBANY HWY & CARAWATHA AV	16	4	746448	>= 10 total crashes	S/L	MRWA is currently undertaking a study to improve intersection safety involving State road in the Metro region. There is currently no further updates.
27	209311	H411 (Twelfth Rd Rty) & RANFORD RD	16	3	599216	>= 10 total crashes	L/L	Future Wungong plans to upgrade Twelfth Rd (Development WA/Planning/DCS funding).
28	076416	GILLAM DR & CHAMPION DR	14	3	898512	>= 5 total crashes	L/L	Pre-deflection on Champion Dr SE leg in late 2019
29	036770	ARMADALE RD & GRIBBLE AV	14	7	679838	>= 10 total crashes	S/L	MRWA is currently undertaking a study to improve intersection safety involving State road in the Metro region. There is currently no further updates. Armadale Rd (west of Gribble Rd to east of Tait St) speed reduction to 70km/h from 80km/h in Jan 2024.
30	224556	NICHOLSON RD & EASTHOPE LINK & BROADWAY BVD	14	1	643030	>= 5 total crashes	L/L	Armadale 2024/25 black spot project submitted for approval - Install pre-deflection on Nicholson Road approach to the roundabout including skid resistant improvement, and improve pedestrian/cyclist facilities.
31	172807	NICHOLSON RD & WRIGHT RD	13	1	1142388	>= 5 total crashes	L/L	Armadale 2022/23 black spot project (completed late 2023) - Install pre-deflection on Nicholson Rd approach and improve pedestrian facilities.
32	036342	ARMADALE RD & CHURCH AV	13	2	703406	>= 10 total crashes	S/L	MRWA is currently undertaking a study to improve intersection safety involving State road in the Metro region. There is currently no further updates.
33	014858	ALBANY HWY & CHURCH ST	13	3	584417	>= 10 total crashes	S/L	MRWA plans for 50/60km/h variable speed limit between Page Rd and Ottaway St by end of 2023. MRWA is currently undertaking a study to improve intersection safety involving State road in the Metro region. There is currently no further updates.
34	036426	RAILWAY AV & CHAMPION DR	13	1	574282	>= 5 total crashes	L/L	*Predominant RA crashes. Street lighting consideration. Monitor future crash data
34	137011	TONKIN HWY & RANFORD RD	95	14	3811726	>= 10 total crashes	S/L	MRWA future plans for grade separation by 2026

Design Team - List of black spot monitoring sites

35	036181	DENNY AV & STREICH AV	12	3	617136	>= 5 total crashes	L/L	Upgraded to T-intersection as part of Denny Ave LCR project (completed Dec 2020/Jan 2022).
36	014901	ALBANY HWY & CARRADINE RD	12	1	615048	>= 10 total crashes	S/L	MRWA is currently undertaking a study to improve intersection safety involving State road in the Metro region. There is currently no further updates.
37	004164	ELEVENTH RD & FORREST RD	12	4	541432	>= 5 total crashes	L/L	Future Wungong plans for a roundabout (Development WA/Planning/DCS funding).
38	014845	ALBANY HWY & DENNY AV	12	1	449486	>= 10 total crashes	S/L	Signal removal and LILORI treatment as part of Denny Ave LCR project (completed Dec 2021/Jan 2022).
39	081407	STREICH AV & STREICH AV RAIL XING	11	2	562958	>= 5 total crashes	L/L	Note: Armadale 2022/23 approved black spot project for Railway Av/Streich Av Rail Xing (completed late 2023) - LILOR treatment, extend LT pocket length and improve pedestrian facilities.
40	036339	CHURCH AV & WILLIAM ST	10	0	1007263	>= 5 total crashes	L/L	Armadale 2019/20 black spot project - Pre-deflection on William St north leg (completed May 2020).
40	137008	TONKIN HWY & ARMADALE RD	92	22	3224690	>= 10 total crashes	S/S	MRWA future plans for grade separation by 2026
41	139162	TONKIN HWY (5TH BND) OFF & CORFIELD ST & TONKIN HWY (5TH BND) ON	10	1	528891	>= 10 total crashes	S/L	MRWA is currently undertaking a study to improve intersection safety involving State road in the Metro region. There is currently no further updates.
42	068988	ALBANY HWY & PAGE RD	10	2	430803	>= 10 total crashes	S/L	MRWA plans for 50/60km/h variable speed limit between Page Rd and Ottaway St by end of 2023.
43	279072	ARMADALE RD & WARTON RD	10	1	328500	>= 10 total crashes	S/L	MRWA is currently undertaking a study to improve intersection safety involving State road in the Metro region. There is currently no further updates.
44	036358	ELEVENTH RD & LANNAM RD & ASTORIA BVD	9	2	925977	>= 5 total crashes	L/L	Future Wungong plans to upgrade Eleventh Rd (Development WA/Planning/DCS funding).
45	043990	RANFORD RD & BALFOUR ST	9	2	369340	>= 5 total crashes	L/L	Future plans for LILOR treatment (DPLH Ranford Road Reservation Study (2016))
45	014839	COMMERCE AV & THIRD RD (WEST)	9	1	369340	>= 5 total crashes	L/L	Armadale future plans for Armadale Strategic Metropolitan Activity Centre Structure Plan (2018) - Commerce Ave connects with Streich Av?
47	170913	CHURCH AV & GREEN AV & WUNGONG RD	8	0	574599	>= 5 total crashes	L/L	BRE project plans to remove level rail crossing on Church Av Future plans for a modified roundabout (DPLH Forrest/Wungong/Eleventh Road Reservation Study (2016)).
48	224558	NICHOLSON RD & YELLOWWOOD AV	8	2	373372	>= 5 total crashes	L/L	Monitor future crash data.
49	036325	STREICH AV & DAVIS RD & THIRD AV	8	2	335432	>= 5 total crashes	L/L	New traffic signals constructed as part of Denny Ave LCR project (completed Dec 2021/Jan 2022).
50	077413	CHURCH AV & HOBBS DR & COMMERCE AV	7	0	358926	>= 5 total crashes	L/L	Carry out review upon completion of METRONET BRE project
51	202489	MASON RD & WRIGHT RD	7	2	358778	>= 5 total crashes	L/L	*All RA crashes. Street lighting audit identified for an upgrade. Possibly high speed entry from Mason Rd W leg. Monitor future crash data.
52	139164	CORFIELD ST & KOORDEN CL & BUS DEPOT	6	0	834156	>= 5 total crashes	L/L	Monitor future crash data.
53	036323	STREICH AV & FOSTER RD	6	0	326150	>= 5 total crashes	L/L	Median treatment/footpath improvement on Foster Rd in mid-2018
54	209310	RANFORD RD & TESLA WY	6	0	307598	>= 5 total crashes	L/L	Monitor future crash data.
55	036237	WESTFIELD RD & CHAMPION DR	6	1	289194	>= 5 total crashes	L/L	Monitor future crash data.
56	036204	RAILWAY AV & DURLING PL	6	1	288284	>= 5 total crashes	L/L	All crash recorded 2018-2020. Intersection improved/road network changed by Denny Av LCR project in end 2021.
57	036421	RAILWAY AV & CAMMILLO RD	6	1	270790	>= 5 total crashes	L/L	Monitor future crash data.
58	178486	ALEX WOOD DR & RANFORD RD	5	3	664765	>= 5 total crashes	L/L	Monitor future crash data.
59	036172	NICHOLSON RD & HARRISDALE DR	5	1	604830	>= 5 total crashes	L/L	Monitor future crash data.
60	036326	THIRD RD & CHURCH AV	5	0	402507	>= 5 total crashes	L/L	3 crashes in 2018. Monitor future crash data.
61	166674	WRIGHT RD & REILLY RD	5	2	347221	>= 5 total crashes	L/L	3 crashes in 2018 and 2 crashes in 2019. Monitor future crash data
62	181732	WARTON RD & ERADE DR	5	1	237866	>= 5 total crashes	L/L	Future plans for LILOR treatment, proposed as part of Harrisdale Green development
63	036461	WILLIAMS RD & CHAMPION DR	5	0	219462	>= 5 total crashes	L/L	Monitor future crash data.
64	036348	EIGHTH RD & WOLLASTON AV	5	1	201058	>= 5 total crashes	L/L	Armadale plans for a roundabout (MRRG Eighth Rd Upgrade project - construction stage to be resubmitted in 2024 for construction commencing FY 2025/26).
65	036428	RAILWAY AV & GLADSTONE RD	5	0	182654	>= 5 total crashes	L/L	Monitor future crash data.
231	004062	ALBANY HWY & SOUTH WESTERN HWY & ARMADALE RD	40	5	2064699	>= 10 total crashes	S/S	MRWA future plans for minor intersection modification
260	004136	ALBANY HWY (START DUAL) & BROOKTON HWY	36	8	2247288	>= 10 total crashes	S/S	MRWA is currently undertaking a study to improve intersection safety involving State road in the Metro region. There is currently no further updates.
453	148911	H411 (Twelfth Rd Rty) & ARMADALE RD (LT)	20	2	656016	>= 10 total crashes	S/L	Future Wungong plans to upgrade Twelfth Rd (See H411 (Twelfth Rd Rty) & RANFORD RD above).
462	148910	H411 (Twelfth Rd Rty) & ARMADALE RD (RT)	19	2	844998	>= 10 total crashes	S/L	MRWA is currently undertaking a study to improve intersection safety involving State road in the Metro region. There is currently no further updates.
								Future Wungong plans to upgrade Twelfth Rd (See H411 (Twelfth Rd Rty) & RANFORD RD above).
								MRWA is currently undertaking a study to improve intersection safety involving State road in the Metro region. There is currently no further updates.

Legend	
ROAD	Involve State road(s)
ROAD	Wungong Urban Water area
ROAD	Upgraded/improved in the recent years
	2022/23 black spot project
	2024/25 black spot project
	Potential future black spot project