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TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

Suite 502, Level 5, 282 Victoria Avenue, Chatswood NSW 2067
P (02) 9411 5660 **F** (02) 9904 6622 **W** ttpa.com.au **E** bernard@ttpa.com.au

31 May 2019
Our Ref: 18044 Rev E

Mr Jordan Graham
Project Manager
EPM Projects Pty Ltd

E: jgraham@epmprojects.com.au

Dear Jordan

Re: Anglicare Bulli Village, Sandon Point

I respond to the traffic matters summarised in your correspondence dated 27 March 2019 (Appendix A).

BACKGROUND OF PROPOSAL DETAILS

Consent was previously granted for Anglicare to develop the site to provide:

- a RACF comprising 120 beds
- up to 250 ILU's in the village centre
- an access road system connecting to Wilkies Street and Geraghty Street

The proposal (S75 Modification) seeks consent to modify the approved layout and, importantly, the reduction of the scale of development as follows:

- reducing RACF beds from 120 beds to 80 beds
- reducing ILU's from 250 units to 140 units
- introducing 51 terraces/townhouse dwellings across Precincts 2 and 3

RMS SUBMISSION

North South Link Road

The development scheme includes the provision of the North-South Link Road (i.e. extension of Geraghty Street to the south). RMS in its assessment acknowledge this and provided the following comments in support of the proposal:

- The link will provide significant benefits for the residents of the precinct, in allowing local trips between the precinct and Thirroul/Bulli to occur without forcing residents to travel onto the Princes Highway/Lawrence Hargrave Drive and without attracting through trips (i.e. trips through the precinct without an origin or destination within the precinct);

- The link will not only provide benefits for the residents within the precinct, but it will also provide benefits to motorists on the Princes Highway/Lawrence Hargrave Drive (i.e. the local trips will not unnecessarily utilise the arterial roads); and

- Not providing the link would not only increase delays for all motorists on the arterial road network, but also increase delays for all residents within the precinct (as they both attempt to exit and enter the precinct, and move between Point Street and Wrexham Road on the arterial road network).

PUBLIC SUBMISSION

No. of Crossover

- It is inferred that this comment relates to the reduced 'scope' for on-street parking at Geraghty Street due to the presence of multiple driveway crossovers. To overcome this concern, the driveways for each of the dwellings are now relocated away from Geraghty Street to the rear lane thus leaving the primary street frontage for on-street parking if necessary.

  Another added benefit to this amendment is the significant improvement of safety and amenity for pedestrians and cyclists who will be using the 'Shared Paths' fronting the 2 streets, as there will now be no conflict with vehicle movements.

- The proposed garage widths will have regard for the AS2890.1 design requirements i.e. 3m minimum for a single vehicle garage and 6m for a double garage.

- Appropriate swept path assessment has been undertaken using 12.5m HRV at the entire estate's road network. Details of the assessment which demonstrate ability for the HRV (i.e. longer than Council's refuse vehicle of 10.2m) to negotiate the circulation roadways are provided in Appendix B. It is noted that the cul-de-sac is bounded by trafficable landscape features to accommodate the occasional truck manoeuvres.

- The parking requirements for visitors and residents for Seniors Living developments are subject to the SEPP criteria, not the DCP. As such, the SEPP requirement in this regard of 168 spaces will be accommodated for in the development. The proposed 51 residential dwellings will generate a parking

demand based on the DCP of some 100 spaces (based on larger townhouses) and 10 visitor spaces. It is envisaged that these parking requirements are accommodated onsite while the visitors' parking needs will be provided on-street.

- There are 80 beds proposed in the RACF in the south precinct. The SEPP parking criteria on this basis is 28 spaces and it is proposed to provide 28 spaces to satisfy the SEPP requirement.

Traffic

- The parking requirements for visitors and residents for Seniors Living developments are subject to the SEPP criteria while the residential dwellings will be subject to DCP criteria.

- The shared paths on Geraghty and Wilkies Streets will now benefit (in terms of safety and amenity) from the relocation of the fronting dwellings' driveways.

- As per previous response the relocation of driveways from the Wilkies Street and Geraghty Street frontages endeavour to minimise on-street parking loss/disruption to the Shared Paths.

- This has been undertaken to address concerns relating to driveways.

- There is now no longer any dead end roadway serving the Ocean View Precinct residences.

- The ILU cul-de-sac can accommodate the turning manoeuvre of a 12.5m HRV with no undue difficulty. Details of this provision are demonstrated on the swept path diagram in Appendix B.

- The project is currently at the conceptual stage and matters relating to road grades are the subject of detailed civil design, however, preliminary advice provided by the Civil Consultant indicates that the design provision will be capable of complying with the AS and Austroad's limitations.

- Vehicular access and pedestrian footpath connection have now been provided on the eastern part of the Ocean View area to Wilkies Street

- I refer to the comment relating to traffic surveys at Brickwork Avenue and the single lane tidal flow circumstance observed on this road during the sports and training days.

  It is noted that the scaled down development scheme will now result in somewhat reduced traffic generation outcome when compared to the approved scheme. Whilst it is acknowledged that Brickwork Avenue may be 'parked' during special

events as described, it is also pertinent that the most direct access route to/from the 'estate' is in fact provided via the Princes Highway – Point Road – Geraghty Road route which does not require residents/visitors to travel through the residential roads to the north in order to access the Princes Highway. On this basis, notwithstanding the scaled down developments, the circumstance of Brickwork Avenue is not considered critical in the context of this development.

- On balance, the reduced development yield will result in reduced traffic generation outcome, thus lower traffic impact on the road network

Landscape

- The entire estate is now complemented by a comprehensive network of footpath which provide convenience access for pedestrian in a safe manner.

- Conflict between driveways and shared paths has now been minimised by the relocation of driveway crossovers away from the primary road frontage.

- As required, car parking for all dwellings fronting Wilkies Street and Geraghty Street are now only accessible from the rear frontages.

- As previously discussed, the conflict between driveways and shared paths is now minimised by the relocation of driveways from the primary road frontage.

The stated changes are reflected on the amended plans reproduced in Appendix C.

I trust the above is sufficient for your requirements.

Yours faithfully

Bernardylo

Bernard Lo
Director
Transport and Traffic Planning Associates

Encl.

Appendix A Traffic Matters (Summary)
Appendix B Swept Path Assessment
Appendix C Amended Plans

APPENDIX A

TRAFFIC MATTERS (SUMMARY)

Annexure A – Summary of Submissions (Traffic Engineer)

Department Letter

Key Issue
Land Use
Should you wish to pursue a flexible approach to future uses, the Department considers the proposed building envelopes and road layouts should be removed or shown in less detail, to allow a thorough assessment of future buildings at the DA stage, depending on the proposed use.
Density
The Department considers the proposed number of lots along Wilkies and Geraghty Streets would result in: - Excessive driveway crossings, potentially resulting in adverse parking and pedestrian safety impacts - Narrow building envelopes resulting in garages dominating the streetscape - Poor solar access, privacy and lack of open space - Shallow lots resulting in private open space within the front setback - The diversion of Cooksons Creek - Reduce views towards the Turpentine Forest The number of lots and the extent of the development footprint along these streets should be reduced to address the above issues.
Layout
The Department considers the proposed layout of the Ocean View Precinct should be improved by: - Removing the proposed dual frontages for lots in the Ocean View Precinct Providing a perimeter road around the Ocean View Precinct
Urban Design
The future RACF building should be redesigned to remove the proposed above ground parking. If it is demonstrated that above ground parking cannot be avoided, please outline the measures that would be implemented to minimise the visual impacts of above ground parking.

Agency Submissions

Issue Raised
Roads and Maritime Services
The key state road are the Princes Highway and Lawrence Hargrave Drive
The revised Statements of Commitments include the provision of the North-South Road Link (commitment 27).
RMS believes the provision of the North-South road link is a vital part of the proposal. This link will connect Wrexham Road in the north to Point Street in south. RMS believes: • the link will provide significant benefits for the residents of the precinct, in allowing local trips between the precinct and Thirroul/Bulli to occur without forcing residents to travel onto the Princes Highway/Lawrence Hargrave Drive and without attracting through trips (i.e. trips through the precinct without an origin or destination within the precinct); • the link will not only provide benefits for the residents within the precinct, but it will also provide benefits to motorists on the Princes Highway/Lawrence Hargrave Drive (i.e. the local trips will not unnecessarily utilise the arterial roads); and

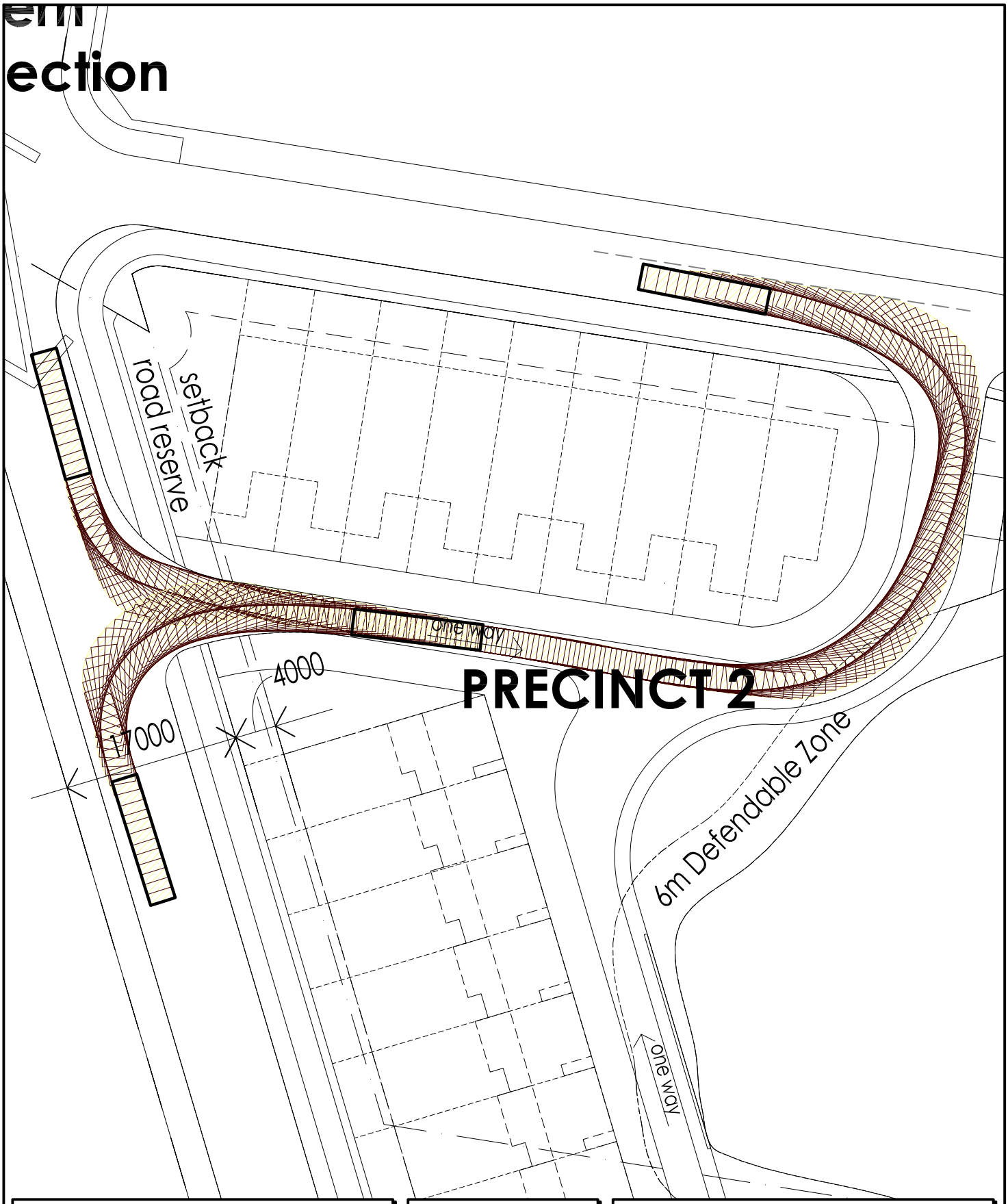
Issue Raised
• not providing the link would not only increase delays for all motorists on the arterial road network, but also increase delays for all residents within the precinct (as they both attempt to exit and enter the precinct, and move between Point Street and Wrexham Road on the arterial road network). RMS believes it is important to deliver this link as part of the subdivision. Given this, and the above comments, RMS will not object to the DA subject to the conditions outlined in Attachment 1 being included in the conditions of development consent.
Prior to the issuing of the Subdivision Works Certificate, the developer must obtain Section 138 consent under the Roads Act, 1993 from Council for the design of the North-South Road Link.
Prior to the issuing of the Subdivision Certificate (interim or final), the developer must construct the North South Road Link to Council standards and satisfaction.

Public Submissions

Issue Raised
Hilltop precinct 55 (number shared with Oceanview) residential dwellings up to 2 stories 2489m² (previously for RACF up to 12.6m 3-4 stories 2050m² and 120 beds)
Concerns are raised over the number of crossovers required to service the proposed housing in this precinct. This will significantly reduce the amount of on-street parking. More detailed information is required on the number and the width of crossovers.
Given proposed transfer of planning provisions, the housing in this precinct would need to comply with the requirements of Chapter B1 of Wollongong DCP 2009. The garage widths appear to not comply with Council's minimum requirements. Given the small size of the housing, there is no storage provided. More information is required as to whether the private open space for each of the dwellings would be able to achieve the required solar access requirements.
Ocean view precinct 55 (number shared with Hilltop) detached and semi-detached residential dwellings up to 2 stories plus basement/parking 3175m² (previously for ILU12.6m up to 3 stories 4231m² 250 units)
Concern is raised over the width of the proposed internal road network and the ability to carry out waste collection.
The subdivision pattern shows that a number of the proposed allotments will have a dual road frontage. A large number of the allotments will each have a road frontage to the front and the rear of the site. Consideration should be given to amending the subdivision layout to avoid high fencing to screen private open space located at the rear of the site. This will adversely impact upon the streetscape and will not be supported in any subsequent development application.
Given proposed transfer of planning provisions, the housing in this precinct would need to comply with the requirements of Chapter B1 of Wollongong DCP 2009.
South Precinct RACF up to 11.4m 3 stories and 80 beds and ILU up to 11.4m 3 stories and 140 units combined area 8349m² (previously known as central precinct, for ILU up to 11.4m 3 stories 11100m² and 240 units
This precinct has the highest density and the overall reduction in total floor area is noted. However, the proposal is not in keeping with the character of the locality. Concerns are raised over the height. The EAR description (up to 3 storeys) is at odds with the concept architectural plans which show above ground basement parking which is not supported and not in keeping with SEPP 65 quality design principles. There is a lack of information regarding the number of visitor parking for this precinct due the potential number of units to be built within the 12 buildings. Lack of adequate visitor and resident parking will put pressure on the local road

APPENDIX B

SWEPT PATH ASSESSMENT



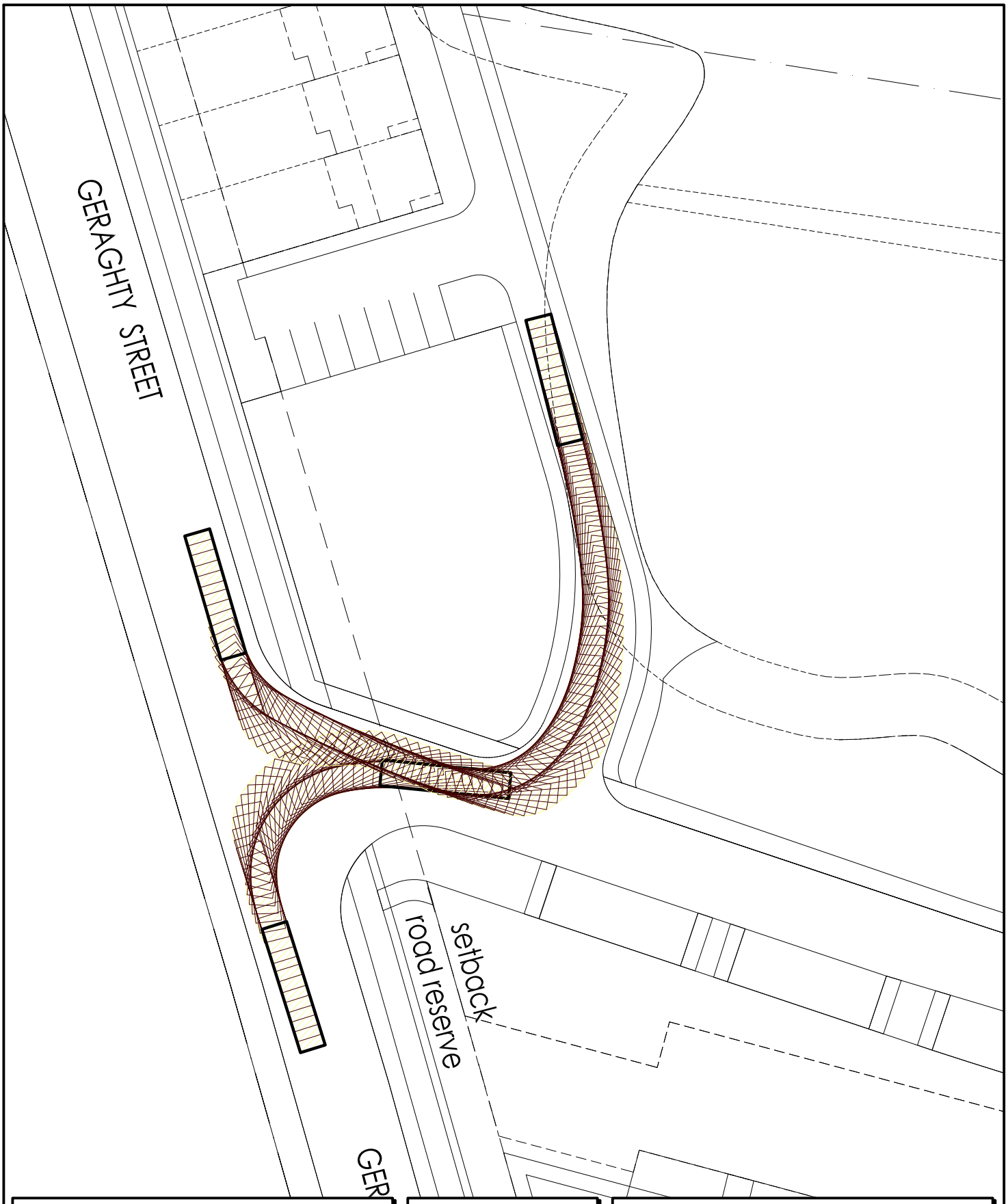
LEGEND

This drawing has been prepared using vehicle modelling computer software AutoTrack V5.00a in conjunction with AutoCAD 2013. The vehicle used is based upon vehicle data provided by Austroads and incorporates a reasonable degree of tolerance. However, it is not possible to account for all vehicle types/characteristics and/or driver ability.

N

SWEPT PATH ANALYSIS OF A 12.5m RIGID VEHICLE ENTERING AND EXITING THE SITE

SP 1



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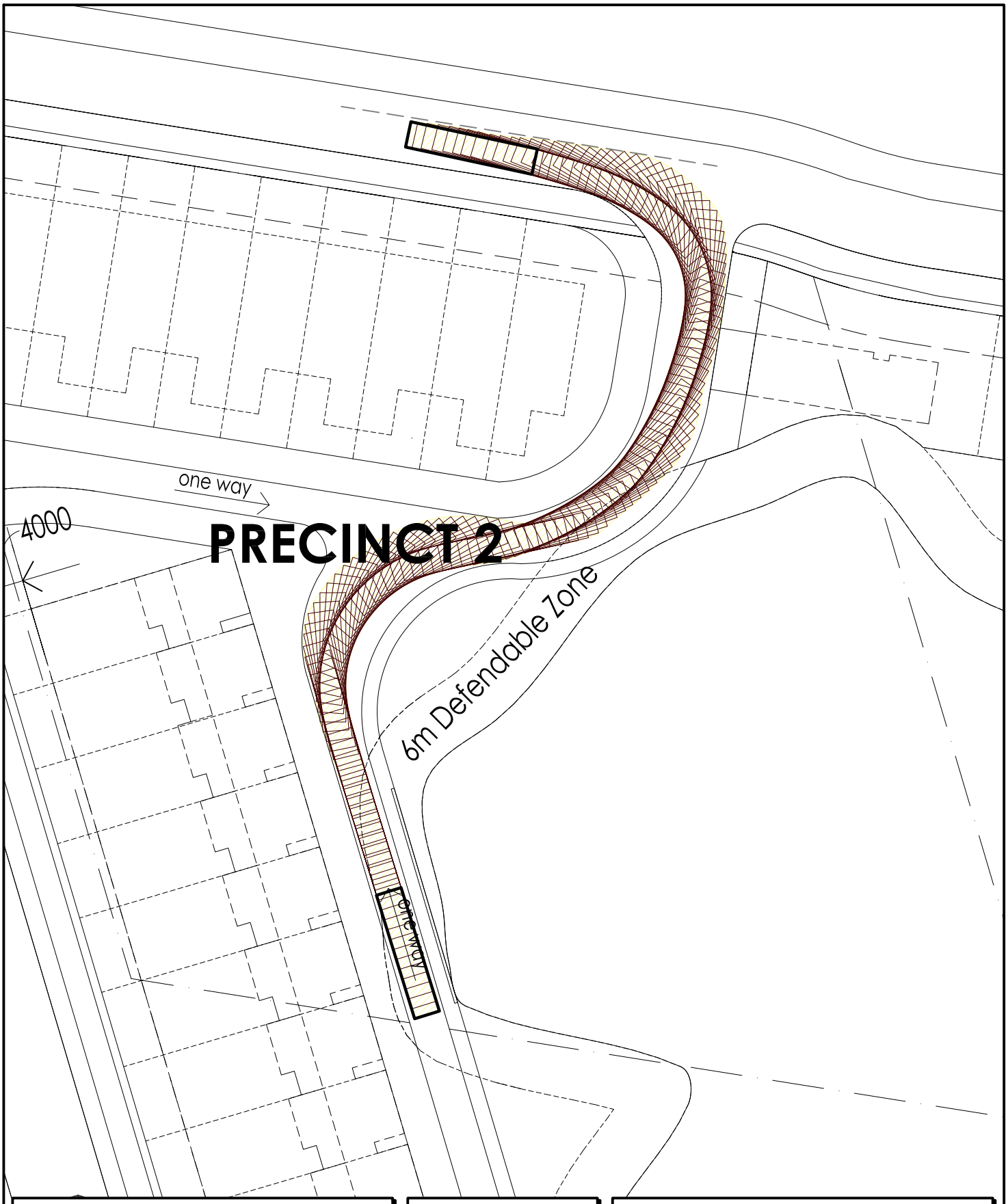
SP 2



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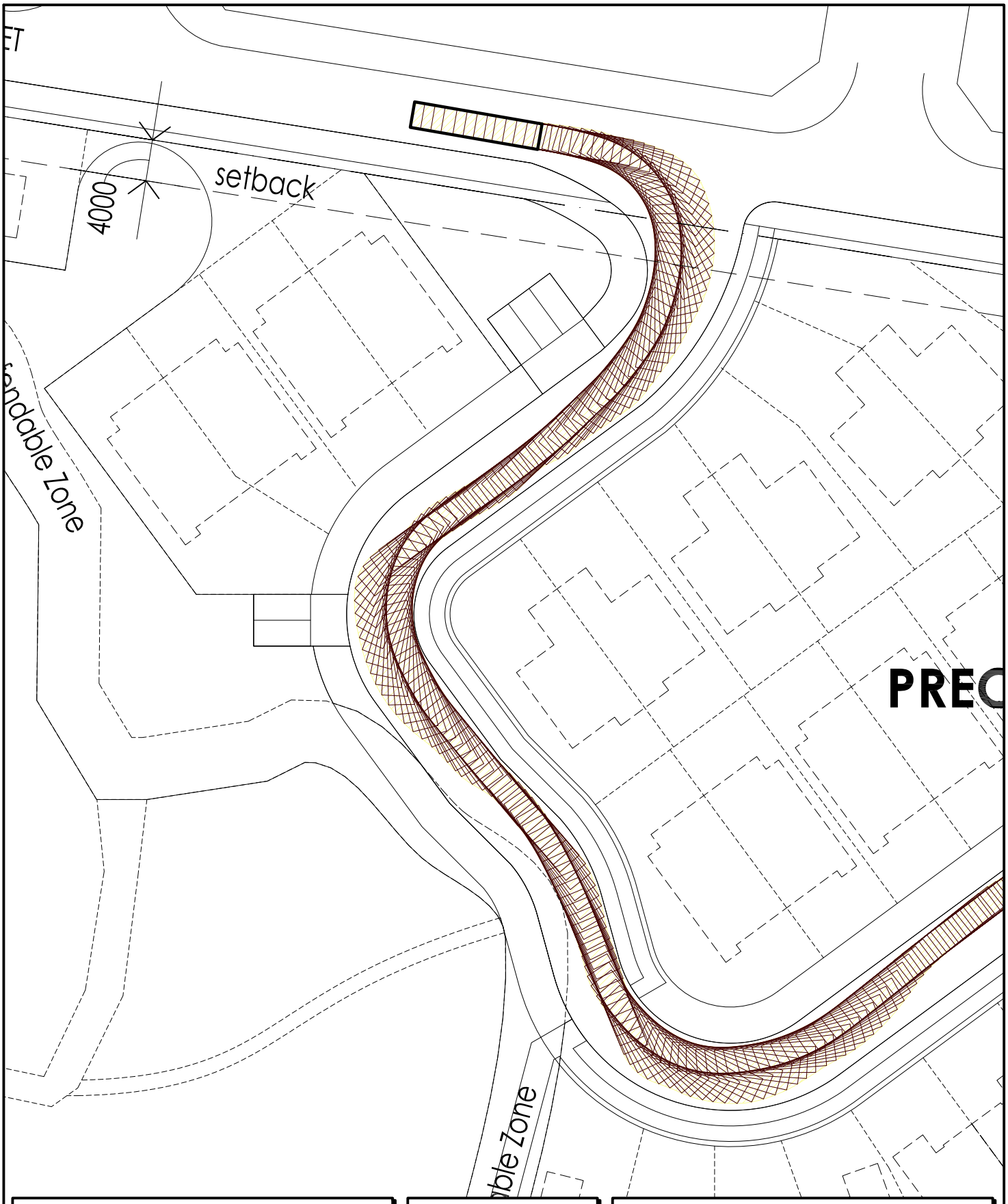
SP 3



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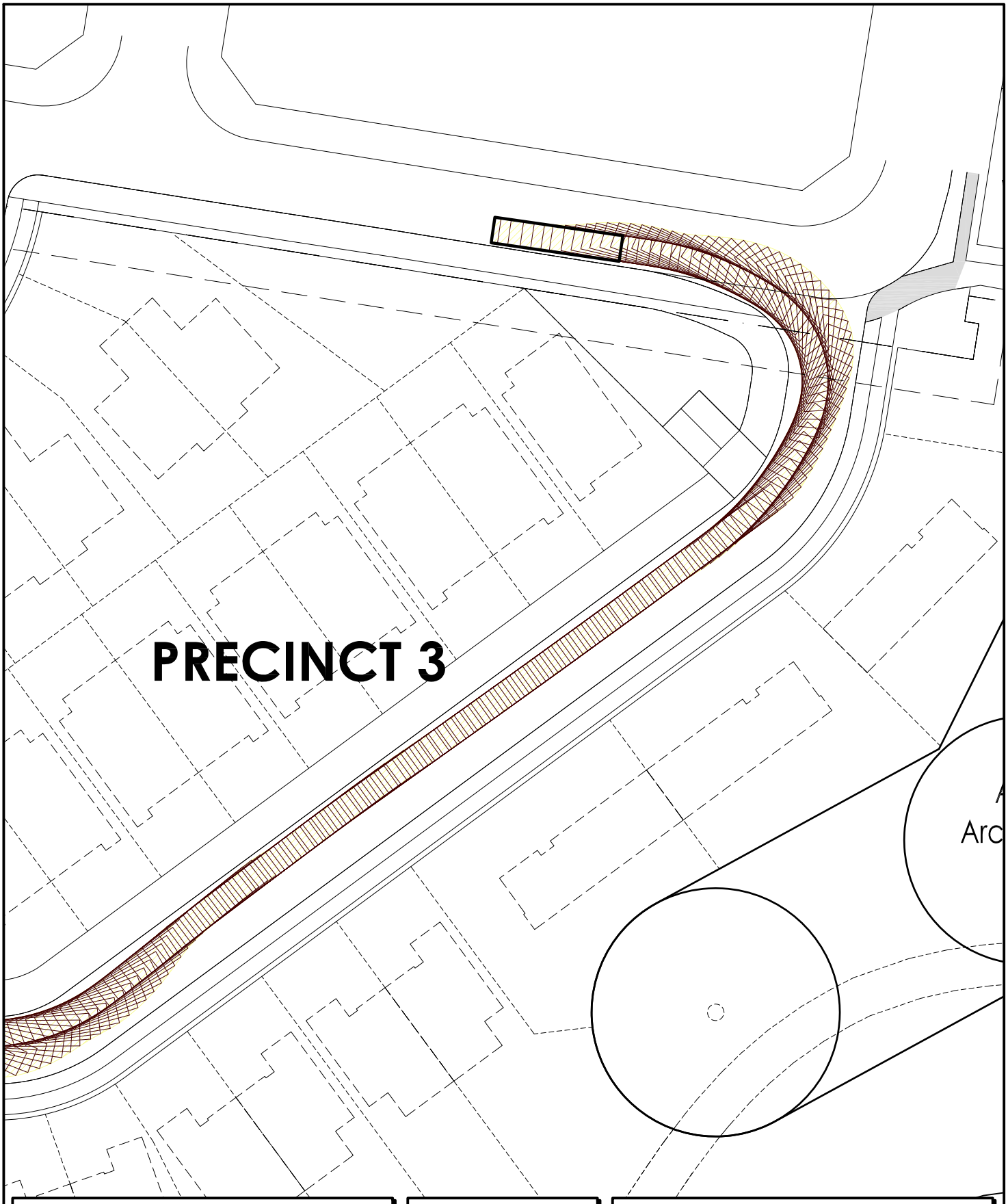
SP 4



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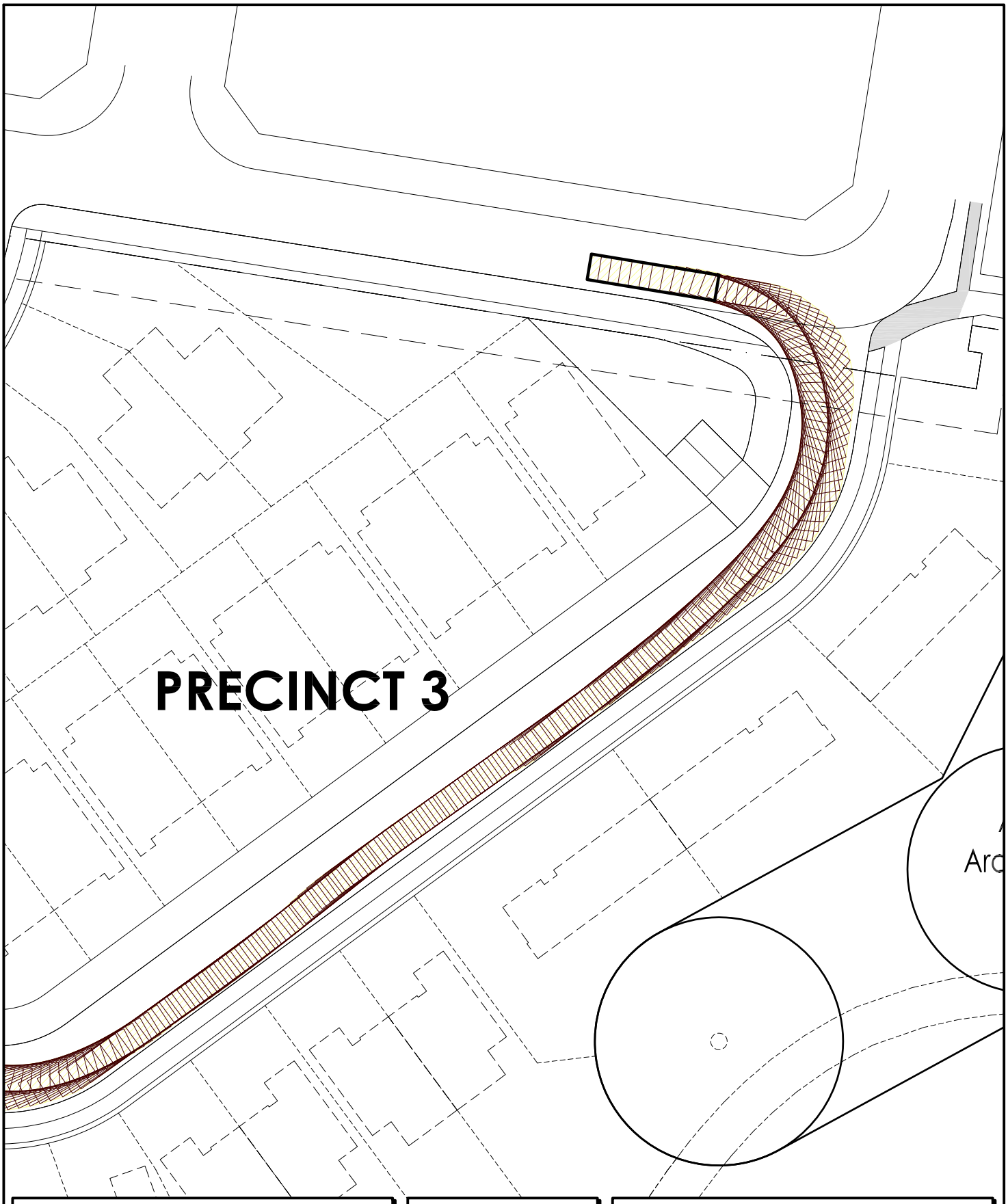
SWEPT PATH ANALYSIS OF A 12.5m RIGID VEHICLE EXITING THE SITE

SP 5



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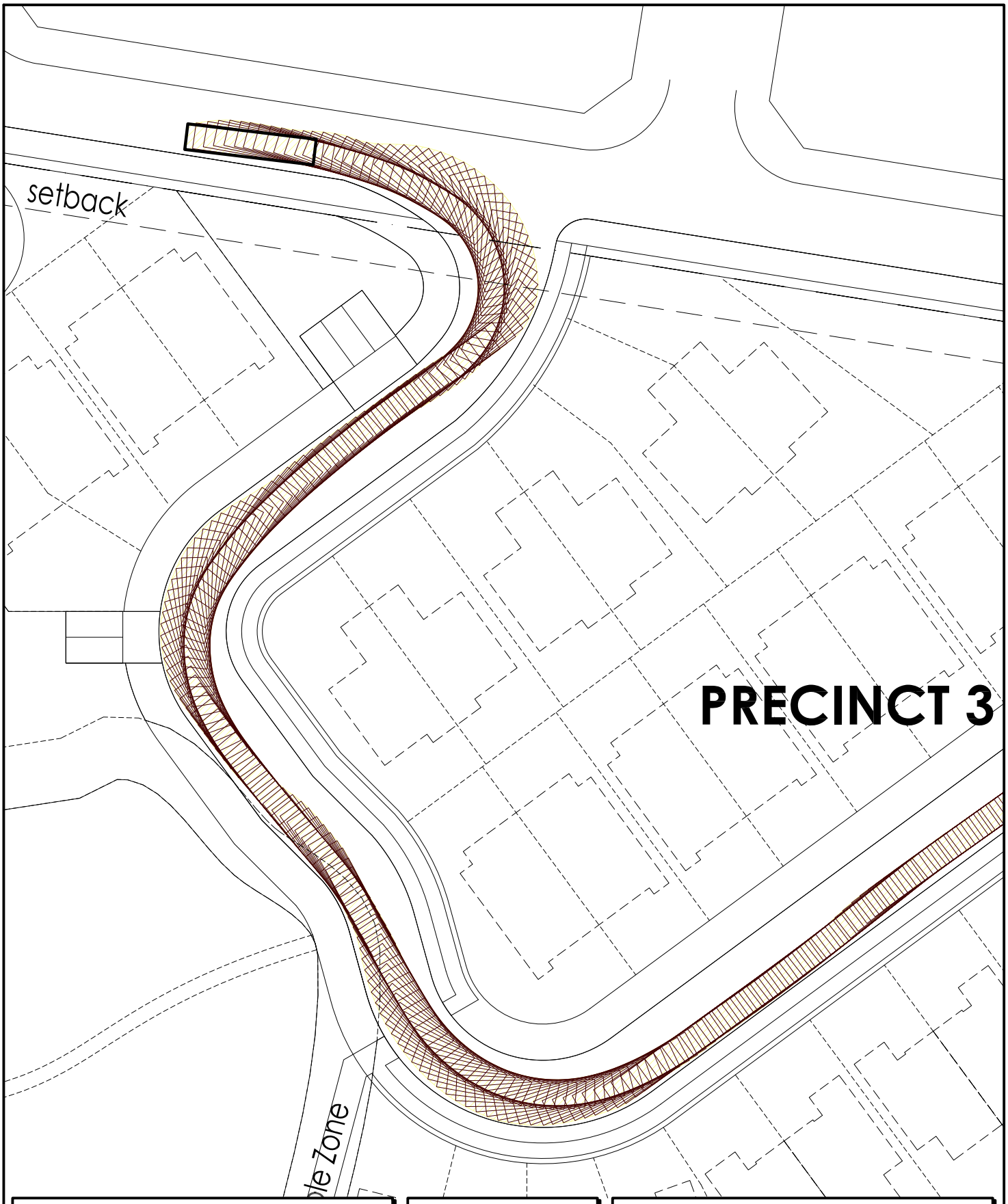
SP 6



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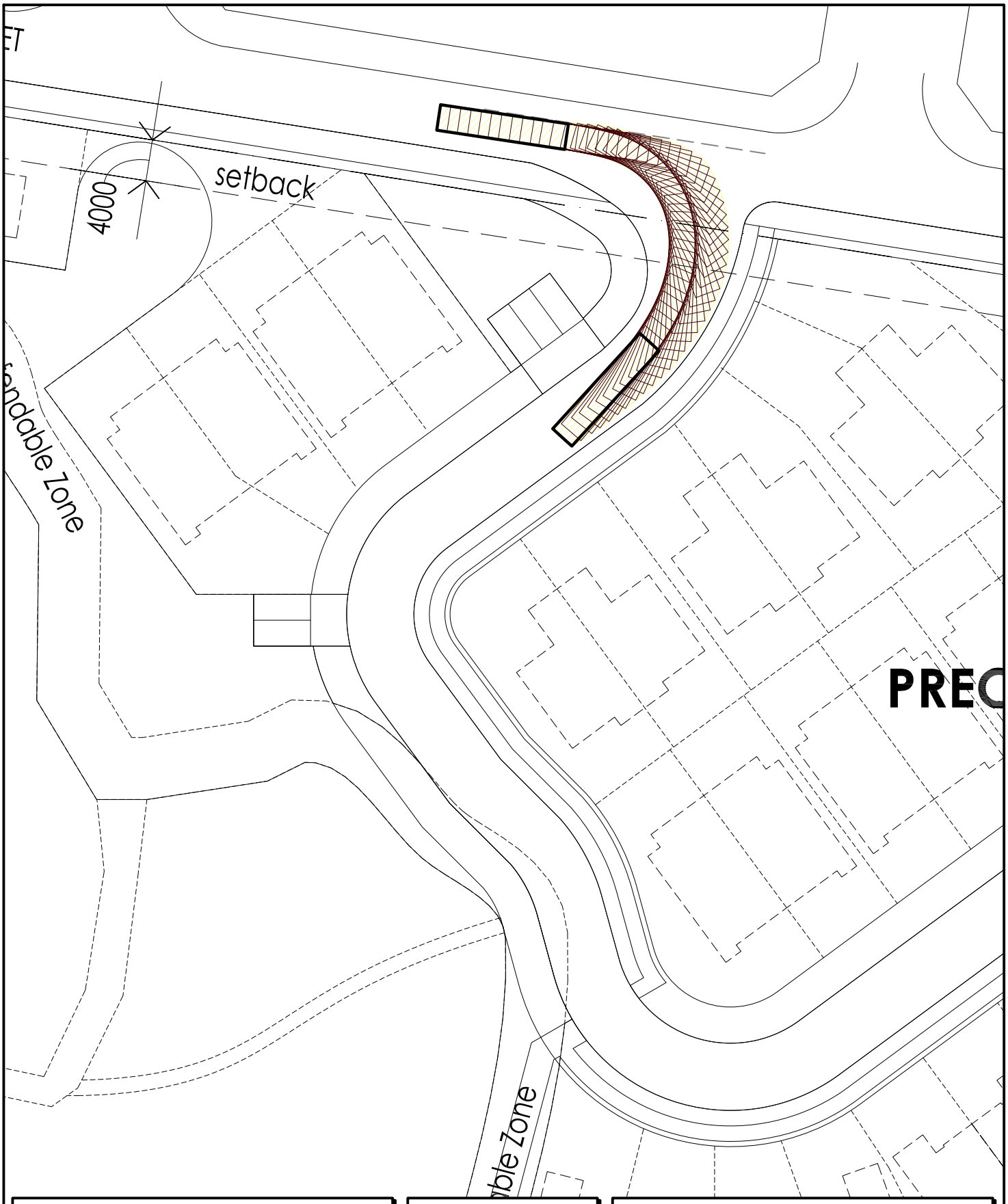
SWEPT PATH ANALYSIS OF A 12.5m RIGID VEHICLE EXITING THE SITE

SP 7



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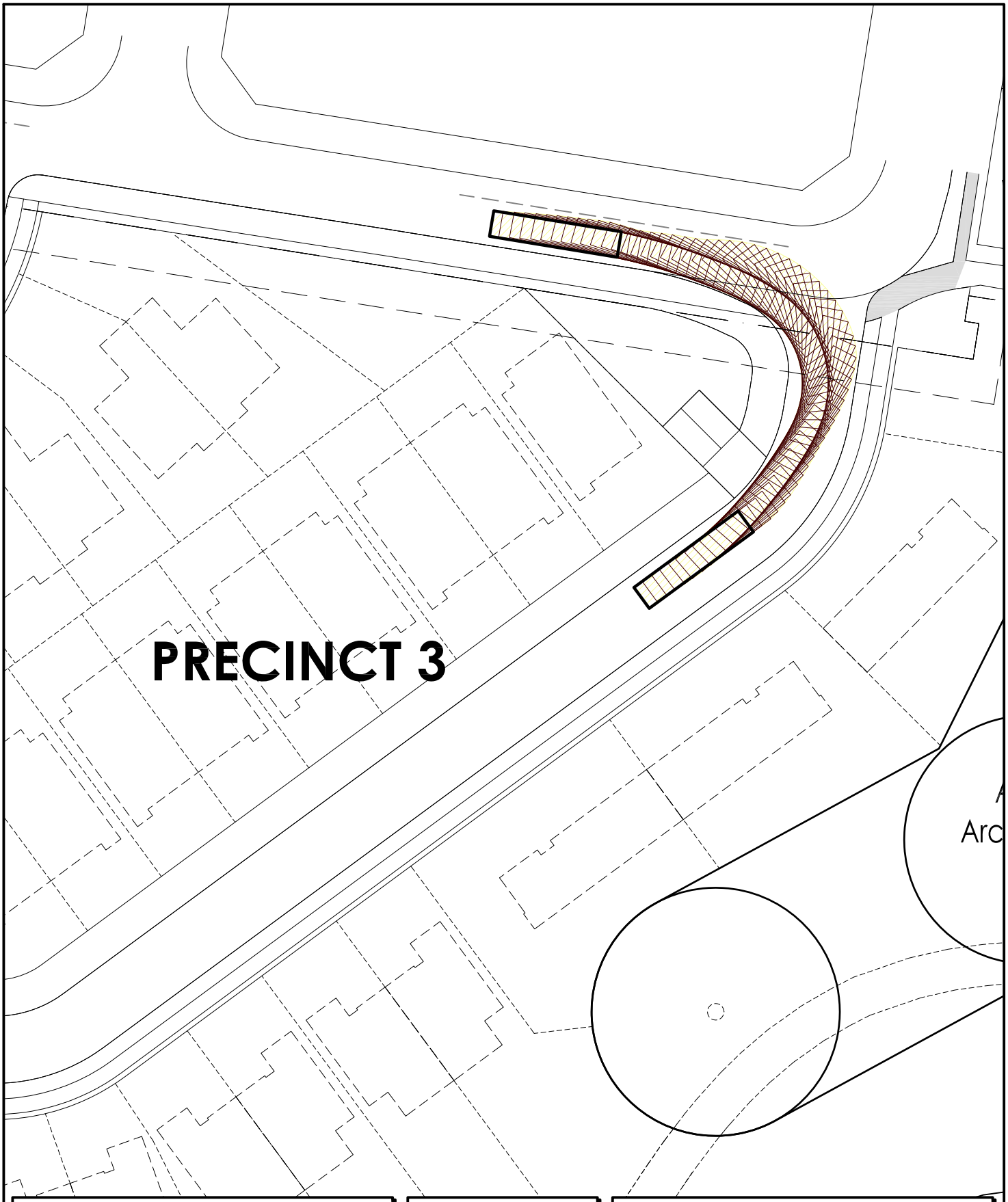
SWEPT PATH ANALYSIS OF A 12.5m RIGID VEHICLE ENTERING THE SITE

SP 8



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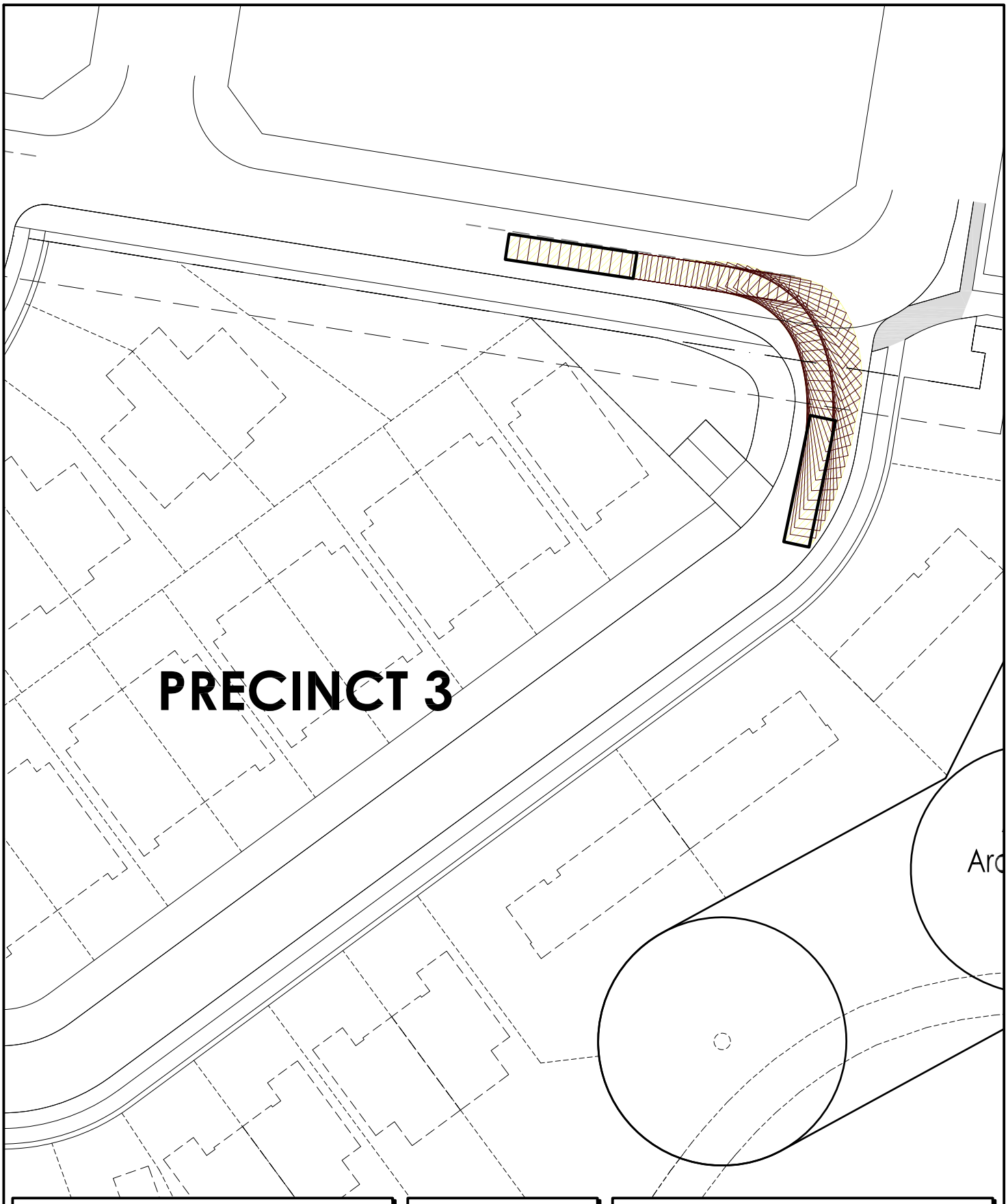
SWEPT PATH ANALYSIS OF A 12.5m RIGID VEHICLE EXITING THE SITE

SP 9



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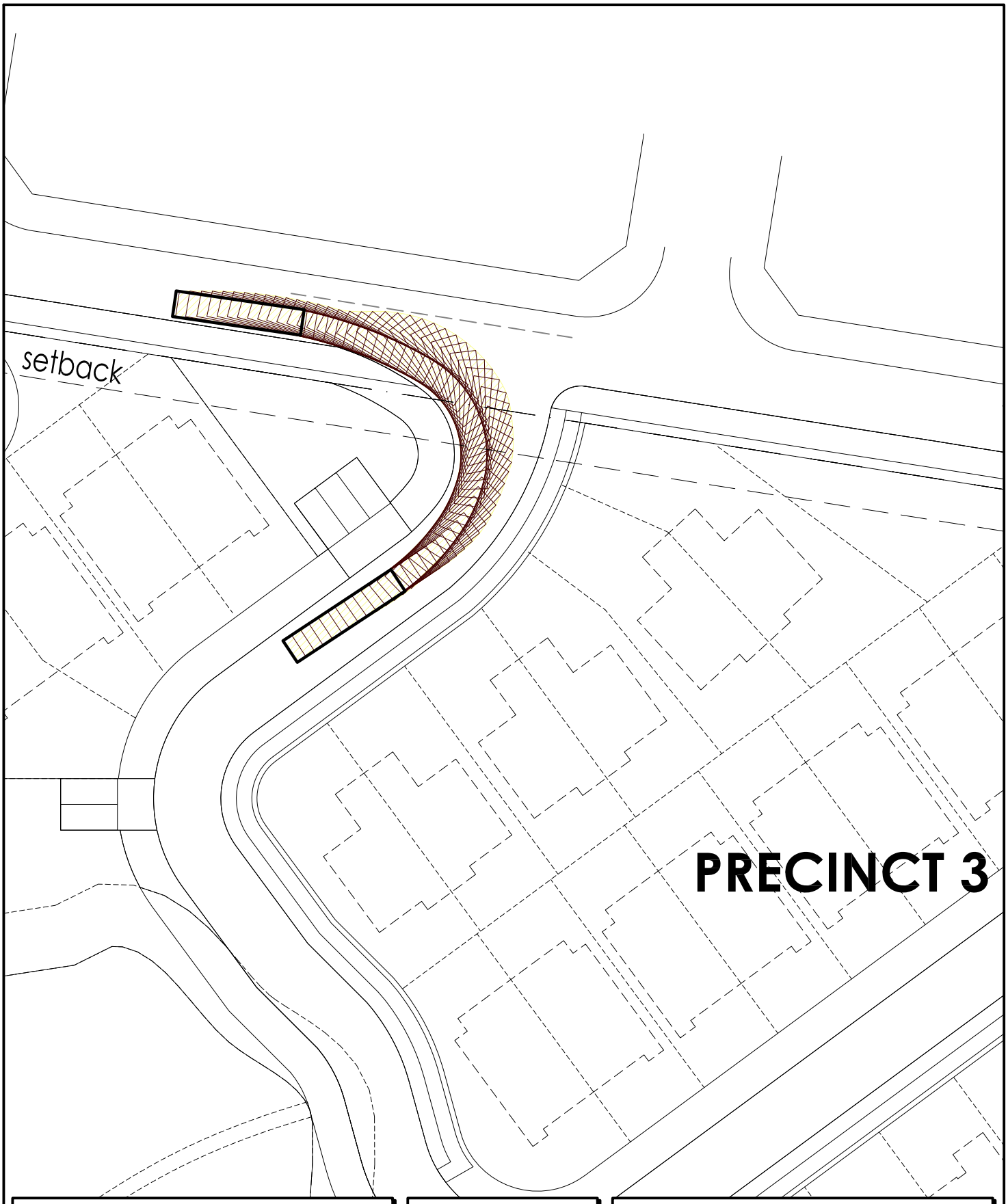
SWEPT PATH ANALYSIS OF A 12.5m RIGID VEHICLE ENTERING THE SITE

SP 10



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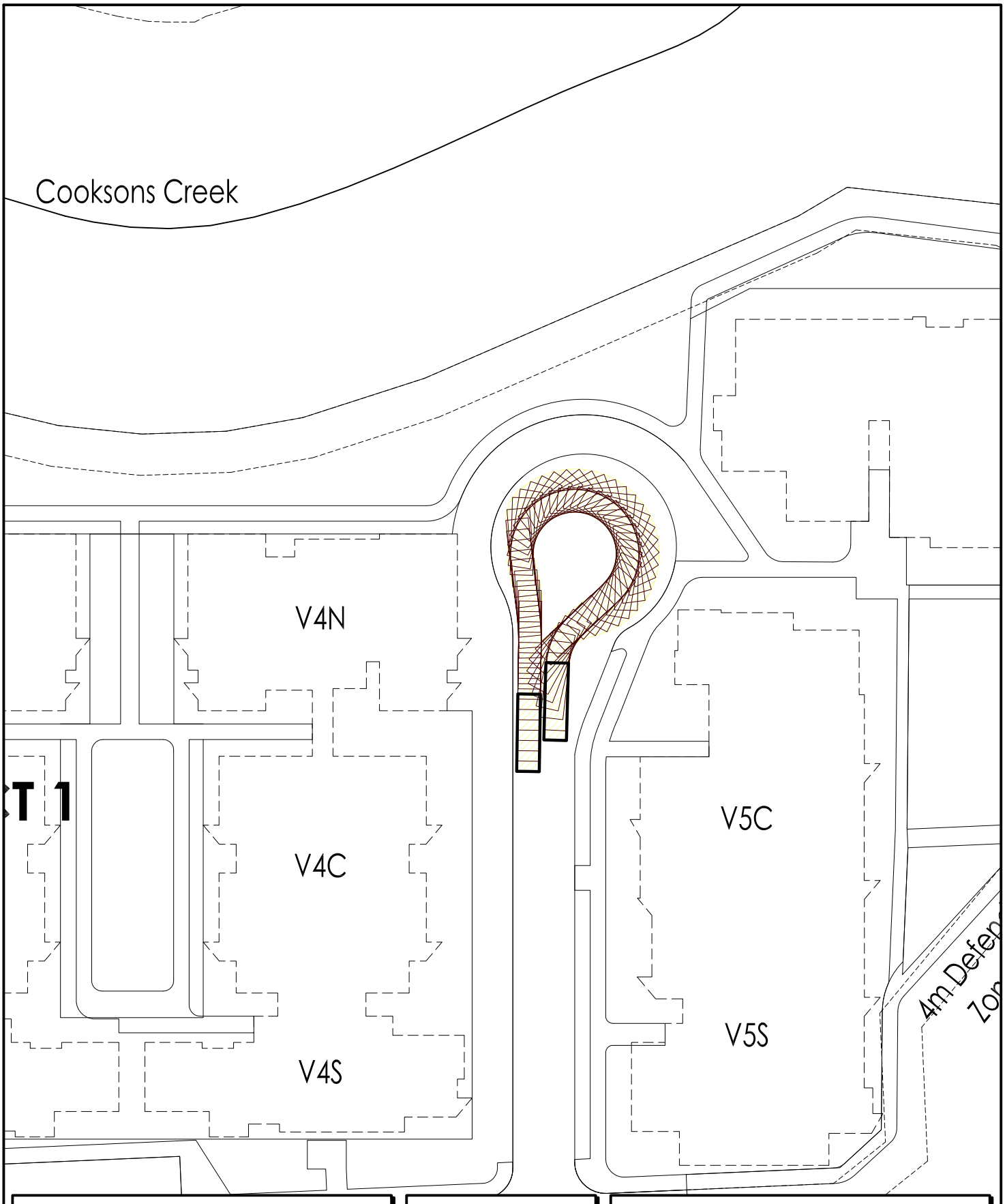
SWEPT PATH ANALYSIS OF A 12.5m RIGID VEHICLE EXITING THE SITE

SP 11



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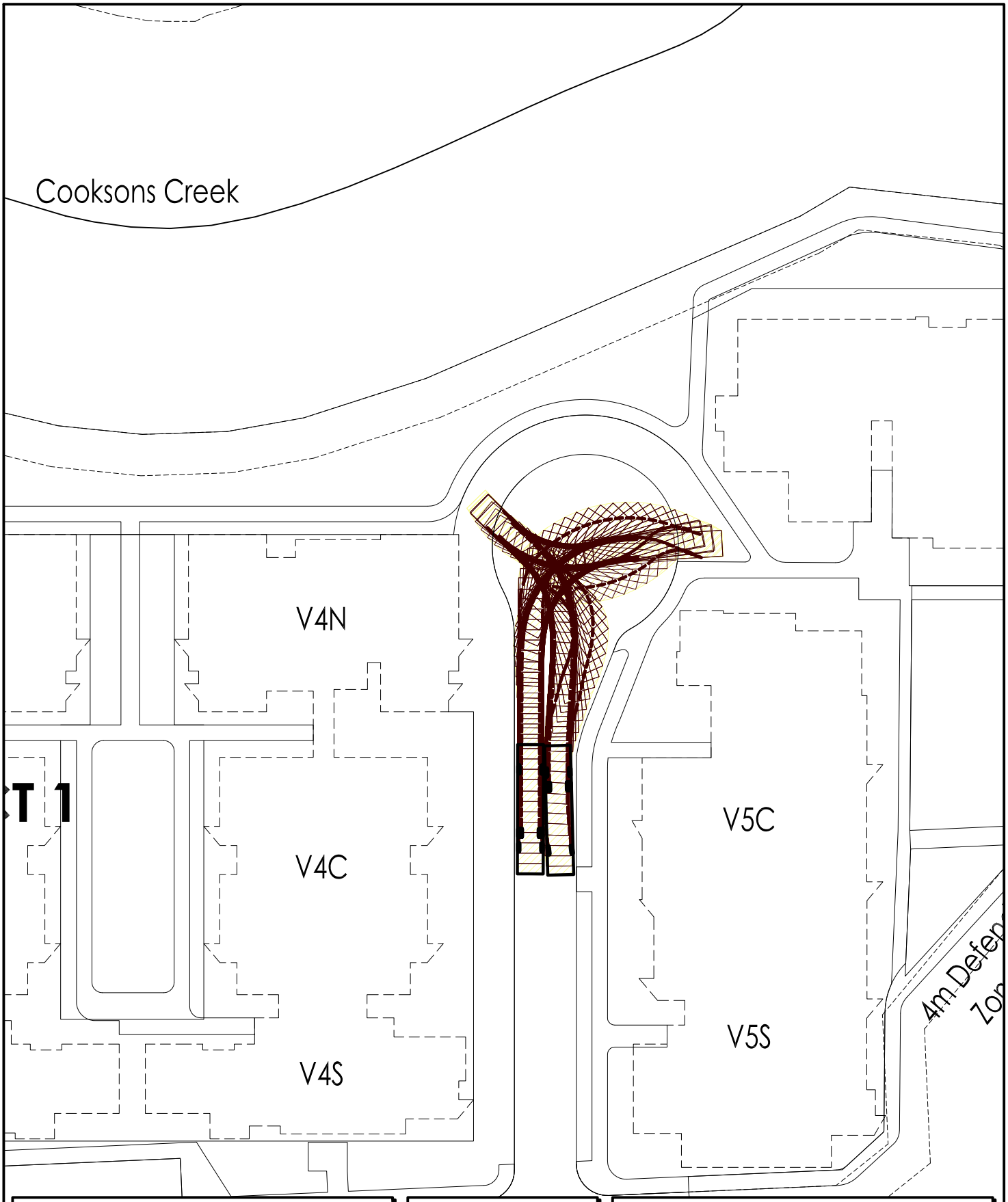
SWEPT PATH ANALYSIS OF A 7.2m RIGID VEHICLE

SP 12



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SWEPT PATH ANALYSIS OF A 12.5m RIGID VEHICLE

SP 13

APPENDIX C

AMENDED PLANS

Individual building footprints are provided here to illustrate a potential outcome on the site. Approval will be sought for the design of individual building forms in a future Project Application.

A description of the components for which approval is sought is outlined in the accompanying report by Ethos Urban.

PRELIMINARY

Indicative Building Footprint

Scale 1: 1500

0 7500 15000 37500 75000

Rev.	Revision Description	Chk.	Date
1	s75W Re-Submission		10.10.18
2	Draft - s75W Re-Submission		21.05.19
A	Issued for Information		10.05.19
B	Issued for Information		24.05.19
C	Issued for Information		24.05.19
3	s.75W Re-Submission		30.05.19

Project
Village Bulli
Sandon Point
For
ANGLICARE

JSA STUDIO
Suite 2 Level 1
505 Balmain Rd
Lilyfield NSW
PO Box 483
Rozelle NSW 2039
phone: 02 9555 7464
mail @ jsastudio.com.au
www.jsastudio.com.au
ARCHITECTS

Title
Indicative Subdivision Plan

Scales 1 : 1500 @ A3	Drawn JSA
Project No. 171101	Checked JH
	Approved KJ 6460
Drawing No. SK1.08	Revision 3

Plot Date: 30-05-19 4:05:05 PM