



MC LAREN TRAFFIC ENGINEERING

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Transport Planning, Traffic Impact Assessments, Road Safety Audits, Expert Witness

2 March 2021

Reference: 210043.01FC

W & J Lee Property Investments Pty Ltd
c/- EMM Consulting
Ground Floor
20 Chandos Street
St Leonards NSW 2065
Attention: Mr Allan Young

LETTER OF ADVICE FOR RESOURCE RECOVERY FACILITY AT 2F THE CRESCENT, KINGSGROVE

Dear Mr Allan,

Reference is made to your request to provide Letter of Advice for the Resource Recovery Facility at 2F The Crescent, Kingsgrove. This letter is supplementary to *McLaren Traffic Engineering's (MTE's) Traffic and Parking Impact Assessment* dated 3 June 2020 (ref: 190039.01FB) and provides compliance advice and revised swept path testing with respect to the updated site layout, as depicted in **Annexure A**.

1 Compliance Assessment

The updated car parking layout as depicted in **Annexure A**, has been assessed to achieve the relevant clauses and objectives of AS2890.1:2004, AS2890.2:2002 and AS2890.6:2009. Any variances from standards are addressed in the following subsections including required changes, if any. The proposed car parking and vehicular access design achieves the following:

- 7.5m width one-way access driveway shared between light and heavy vehicles, facilitating access from The Crescent;
- 7.5m width one-way egress driveway for light vehicles only, facilitating egress to The Crescent;
- 10.2m width two-way driveway for heavy vehicles only, facilitating access and egress to The Crescent;
- 7.5m to 9.0m width circulation roadway for heavy vehicles, with the ability to cater for up to three (3) queued trucks prior to the storage shed;
- Minimum 6.0m width parking aisles for light vehicles;
- Minimum 5.4m length, 2.6m width spaces for staff and visitors;

- Minimum 5.4m length, 2.4m width disabled spaces with adjacent associated 5.4m length, 2.4m width shared space;
- Motorcycle spaces with minimum dimensions of 1.2m by 2.5m.

Whilst the plans have been assessed to comply with the relevant standards, it is usual and expected that a design certificate be required at the Construction Certificate stage to account for any changes following the development application.

2 Swept Path Testing

The updated access arrangement proposes to service heavy vehicles accessing the proposed site from The Crescent. Swept path testing of the largest design vehicles, being an 18.7m length Truck and Dog and 17m length Articulated Vehicle, have been conducted and are reproduced in **Annexure B** for reference. Swept path testing is successful, noting that it has been advised that access to the warehouse is made via a large sliding door (akin to a hangar), with width able to accommodate the swept paths as shown.

Further, it is noted that the weighbridge is located such that an 18.7m Truck and Dog vehicle and a 12.5m Heavy Rigid Vehicle can enter and exit the site in a forward direction without requiring reverse manoeuvres in order to position onto the weighbridge.

With regard to access to the site for 17m Articulated Vehicles, it is proposed that entry be made from the eastern-most driveway and be controlled under a Plan of Management, if necessary. As these types of vehicles are expected to access the site only occasionally and with truck drivers in radio contact with onsite management, it is appropriate for this arrangement to occur.

Please contact Mr Matthew Elyard or the undersigned on 8355 2440 should you require further information or assistance.

Yours faithfully,

McLaren Traffic Engineering



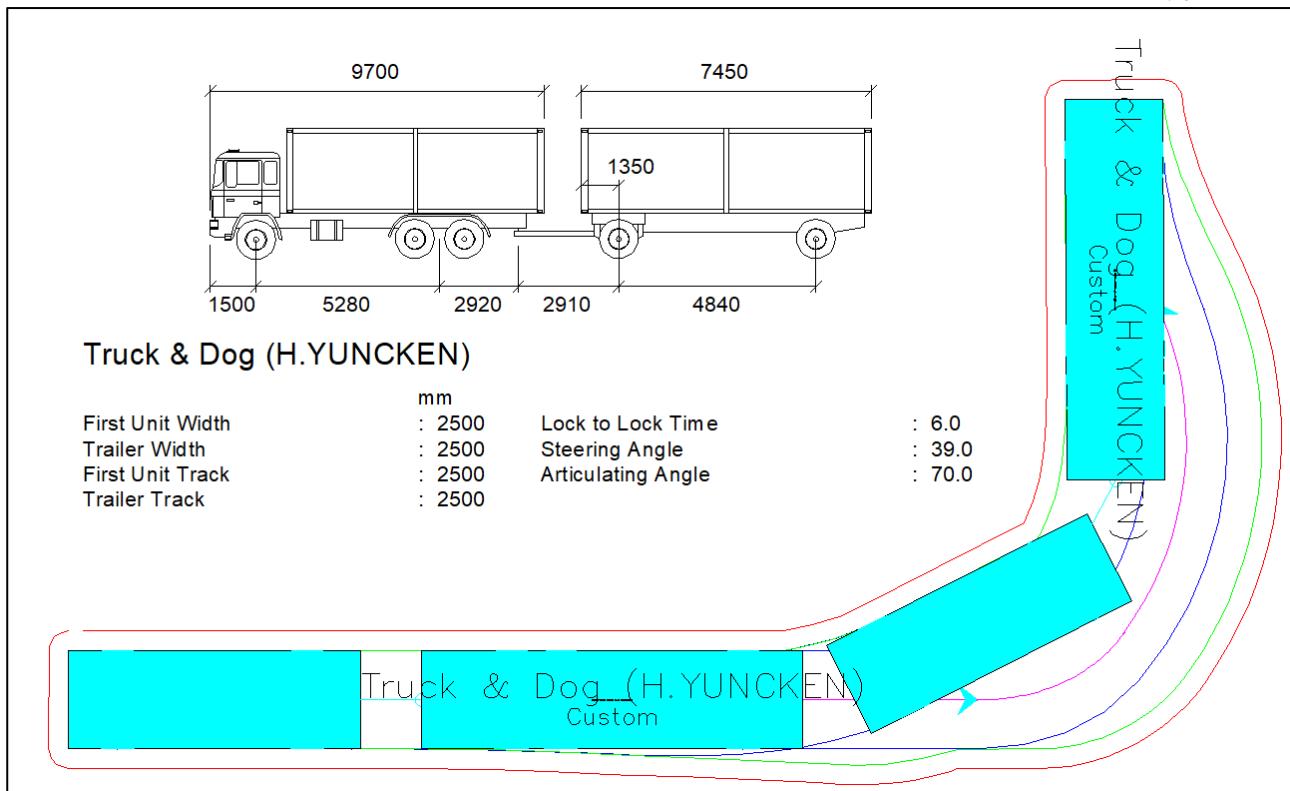
Matthew McCarthy
Senior Traffic Engineer
BE Civil Engineering
Masters of Engineering Science
RMS Accredited Level 1 Road Safety Auditor
RMS Accredited Work Zone Traffic Management Plan Designer and Inspector



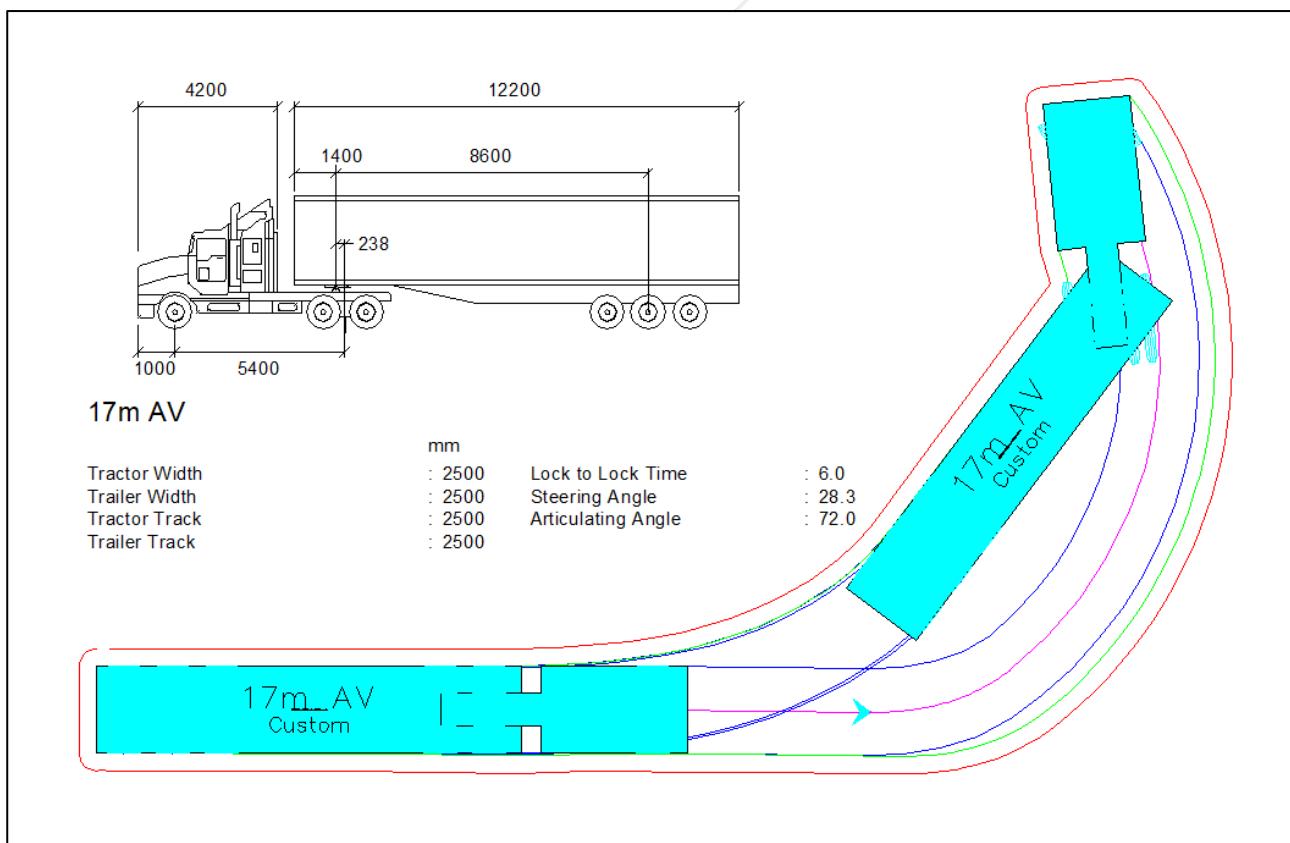
**ANNEXURE A: UPDATED PLANS
(1 SHEET)**



**ANNEXURE B: SWEPT PATH TESTING
(15 SHEETS)**



18.7M LENGTH TRUCK AND DOG VEHICLE

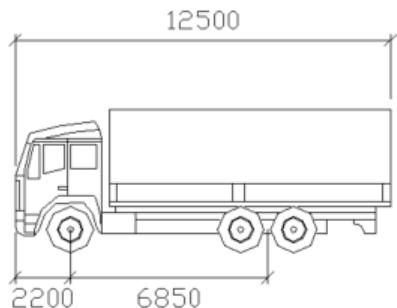


17M LENGTH ARTICULATED VEHICLE

Blue – Tyre Path

Green – Vehicle Body

Red – 500mm Clearance



HRV

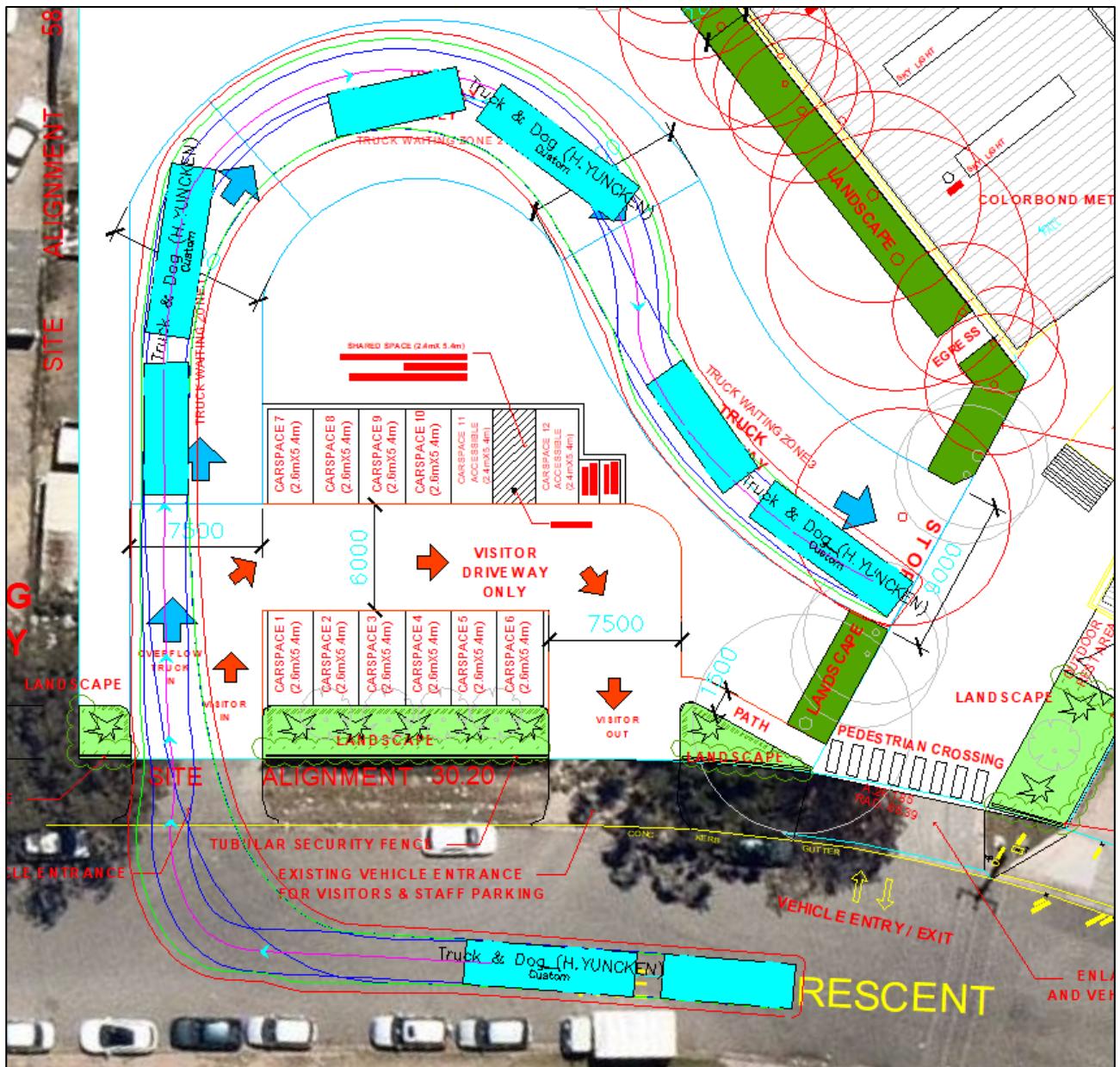
mm
Width : 2500
Track : 2500
Lock to Lock Time 6.0
Steering Angle : 36.7

HRV
STANDARDS 2018 (AU)

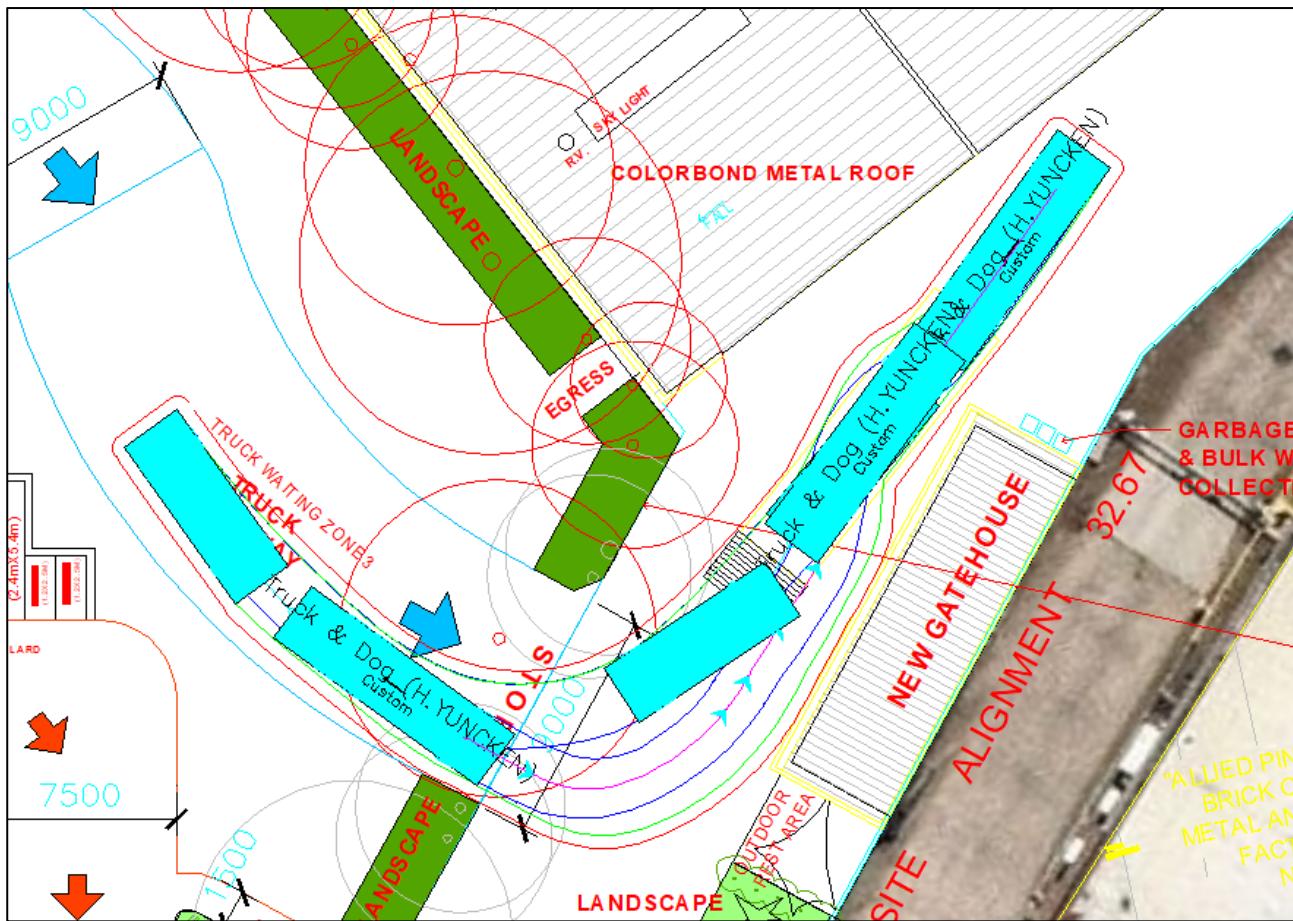
HRV
STANDARDS 2018 (AU)

AUSTRALIAN STANDARD HEAVY RIGID VEHICLE (HRV)

Blue – Tyre Path
Green – Vehicle Body
Red – 500mm Clearance

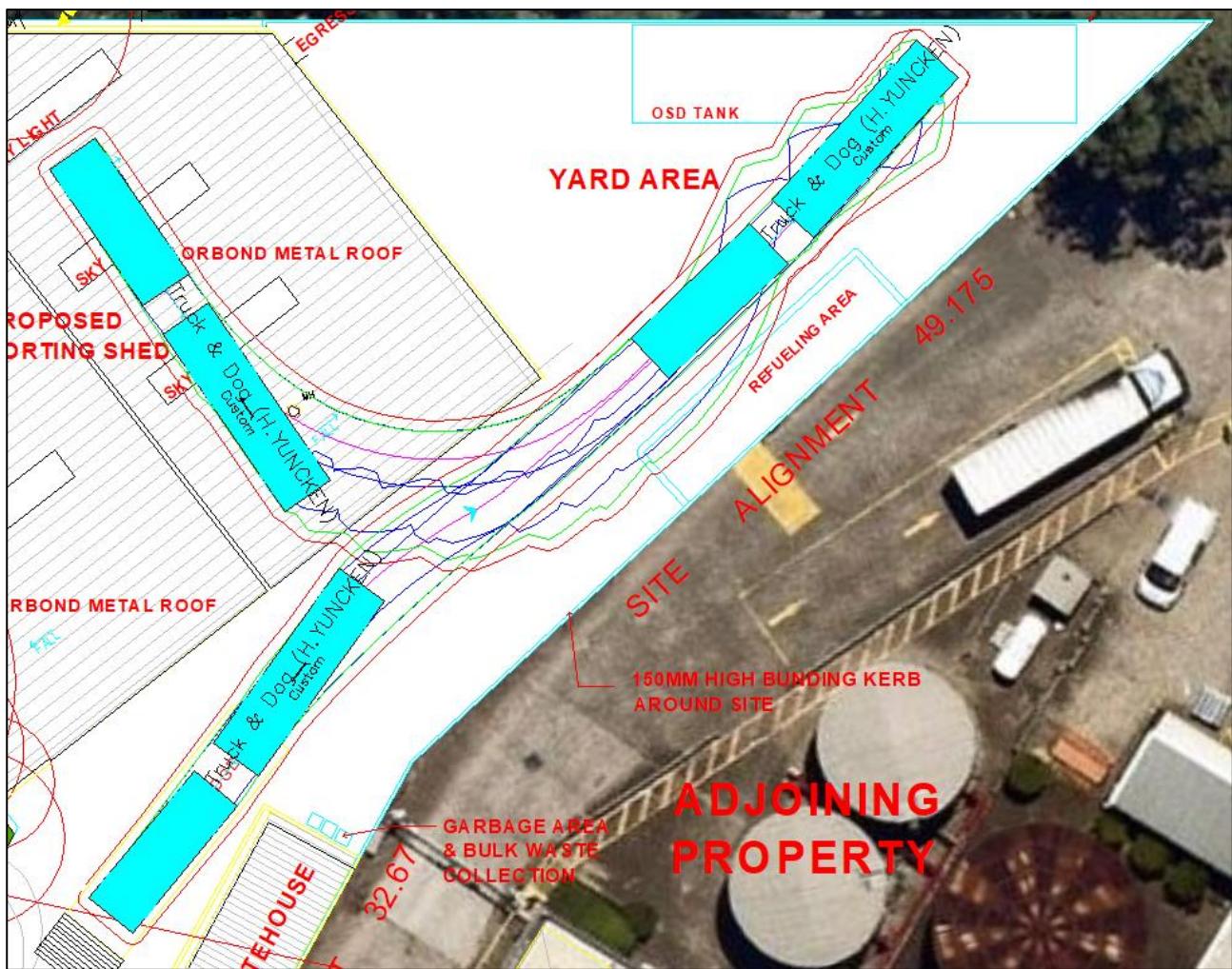


18.7M LENGTH TRUCK AND DOG ACCESS FROM THE CRESCENT AND CIRCULATION Successful



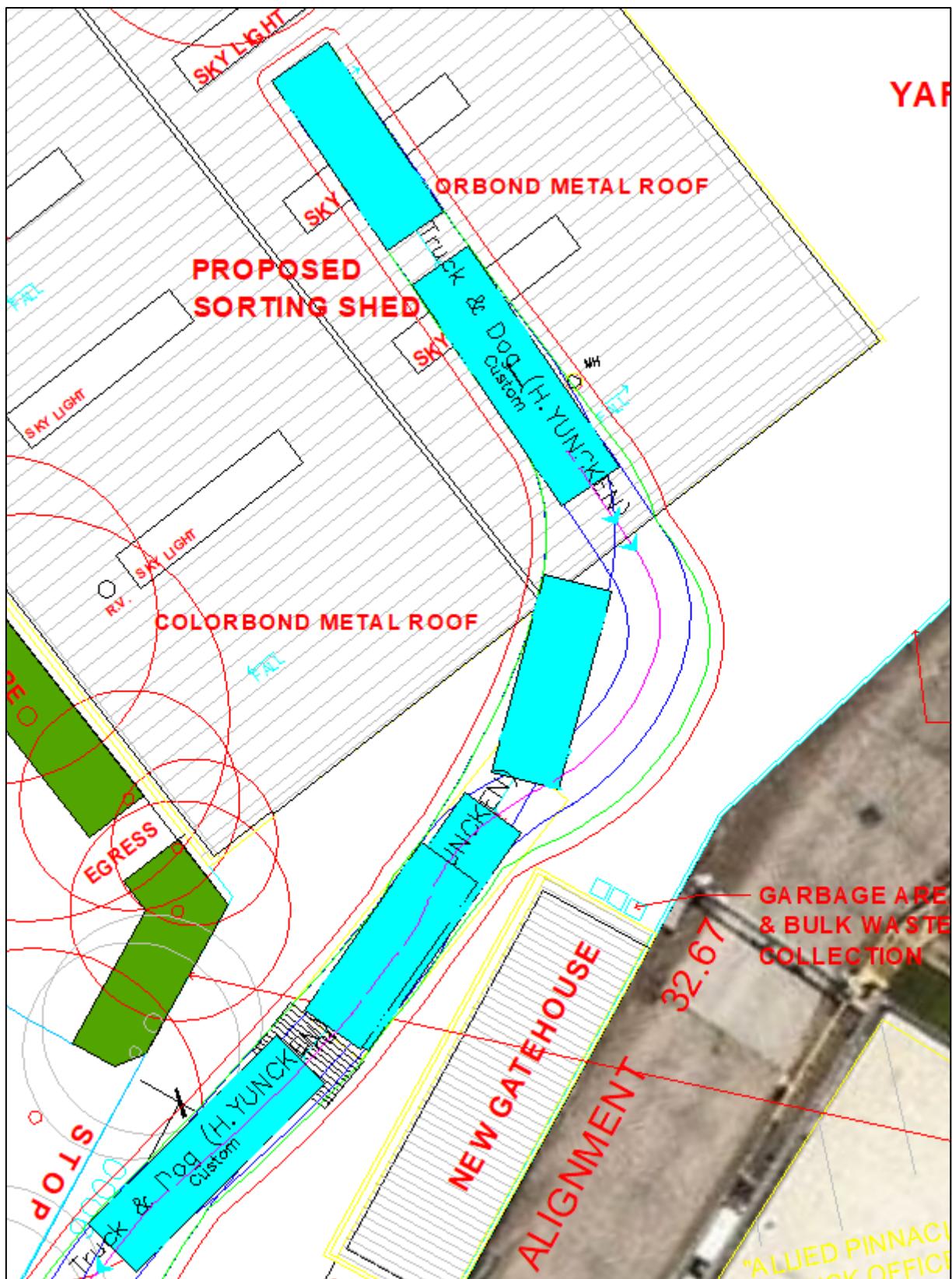
18.7M LENGTH TRUCK AND DOG ONTO WEIGHBRIDGE

Successful – Both truck and dog (trailer) can be fully accommodated on weighbridge from waiting area in a single forward movement.



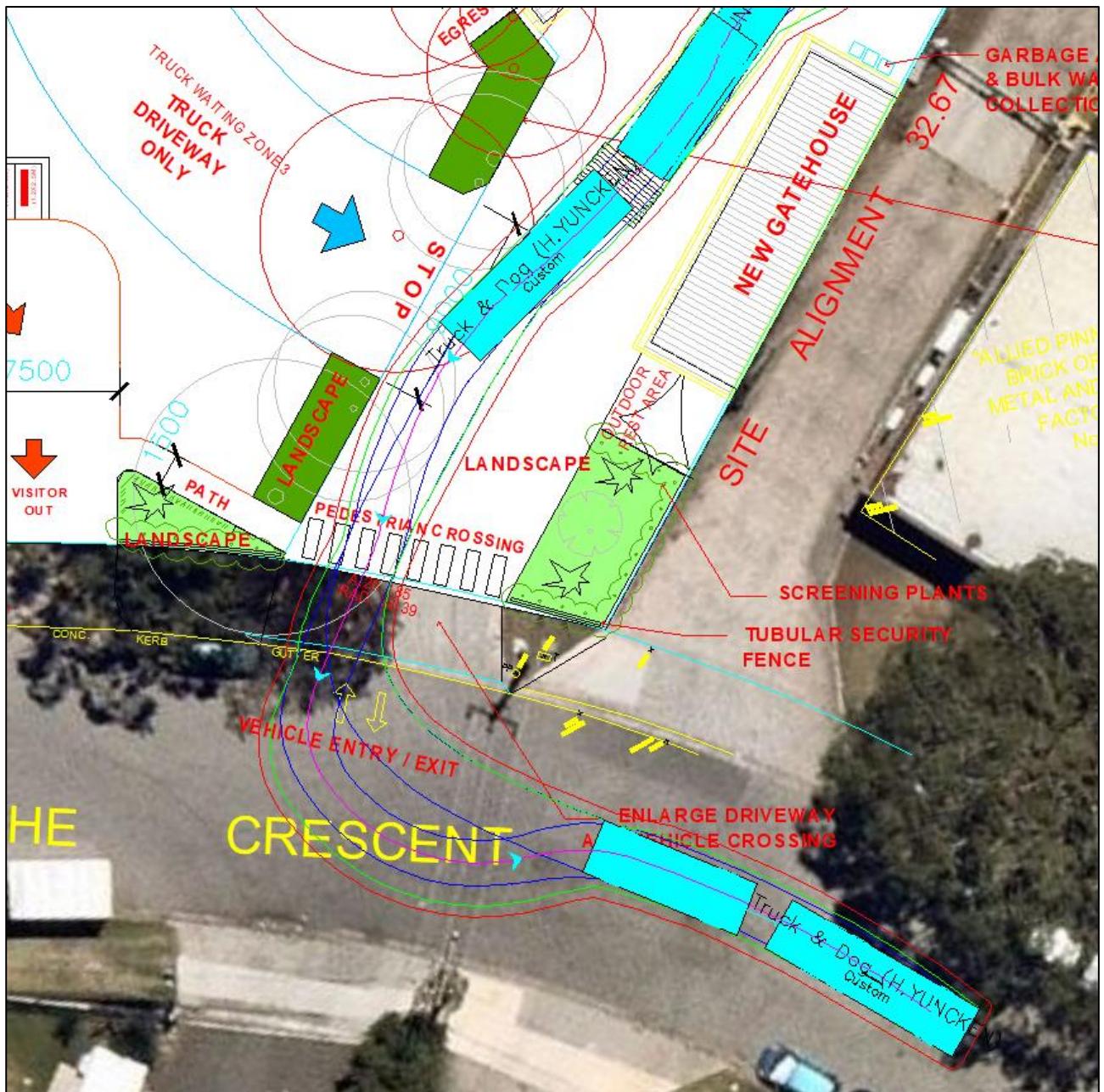
18.7M LENGTH TRUCK AND DOG ENTRY INTO WAREHOUSE FROM WEIGHBRIDGE

Successful – Reverse into warehouse achieved.

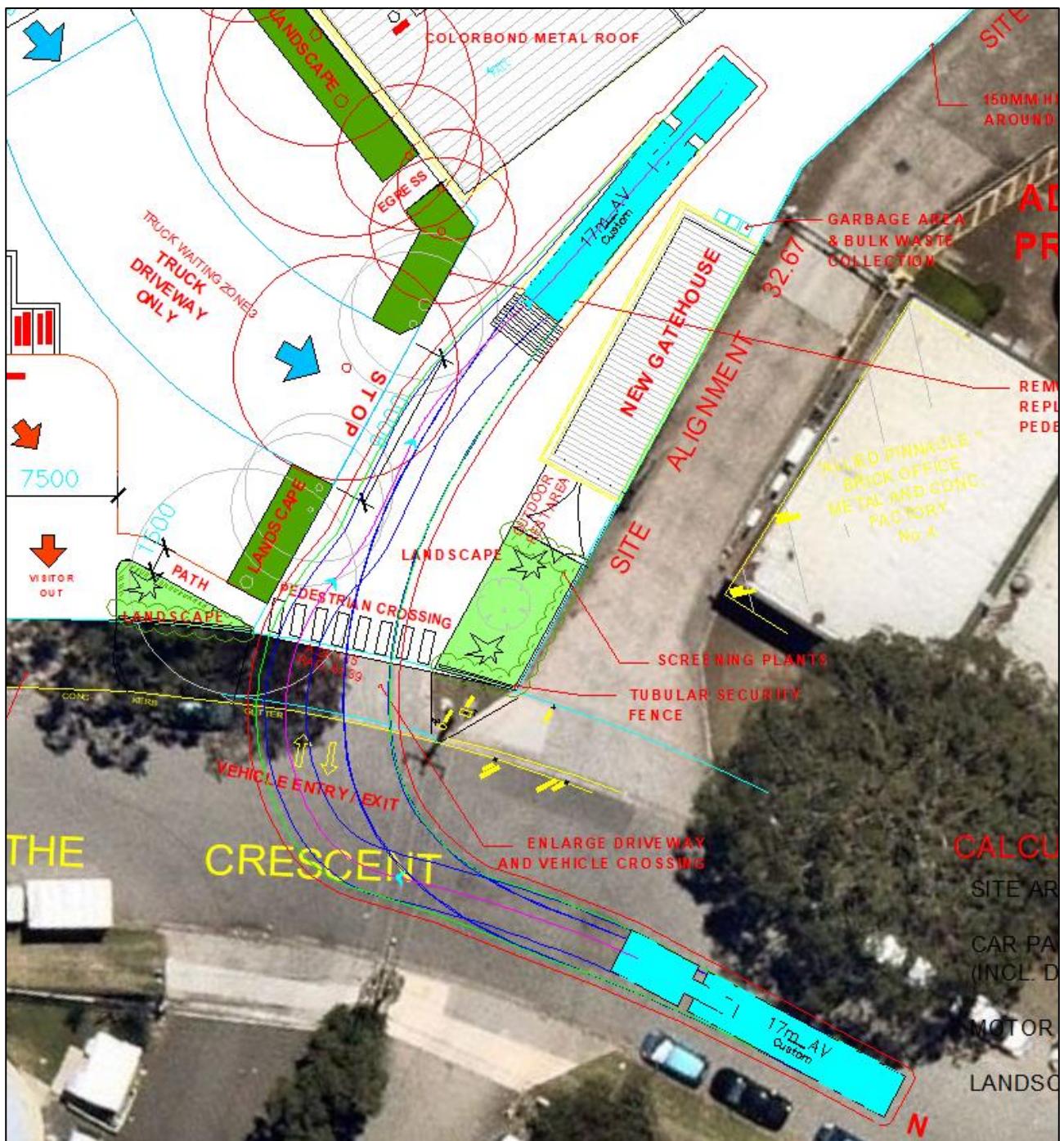


18.7M LENGTH TRUCK AND DOG EXIT FROM WAREHOUSE TO WEIGHBRIDGE

Successful – Forward egress achieved. Both truck and dog (trailer) can be fully accommodated on weighbridge from shed in a single forward movement.

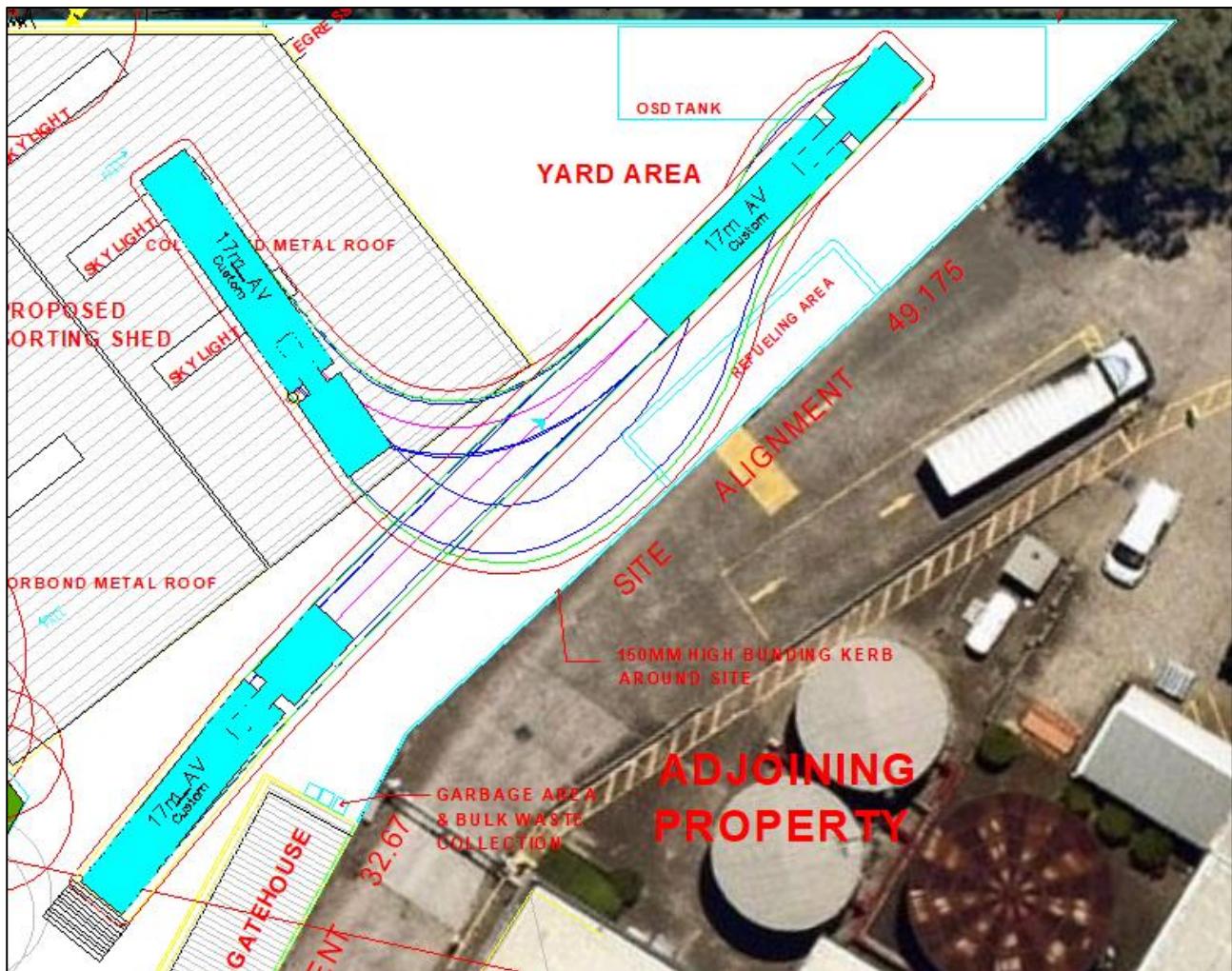


18.7M LENGTH TRUCK AND DOG EXIT FROM WEIGHBRIDGE ONTO THE CRESCENT
Successful – Forward egress achieved.



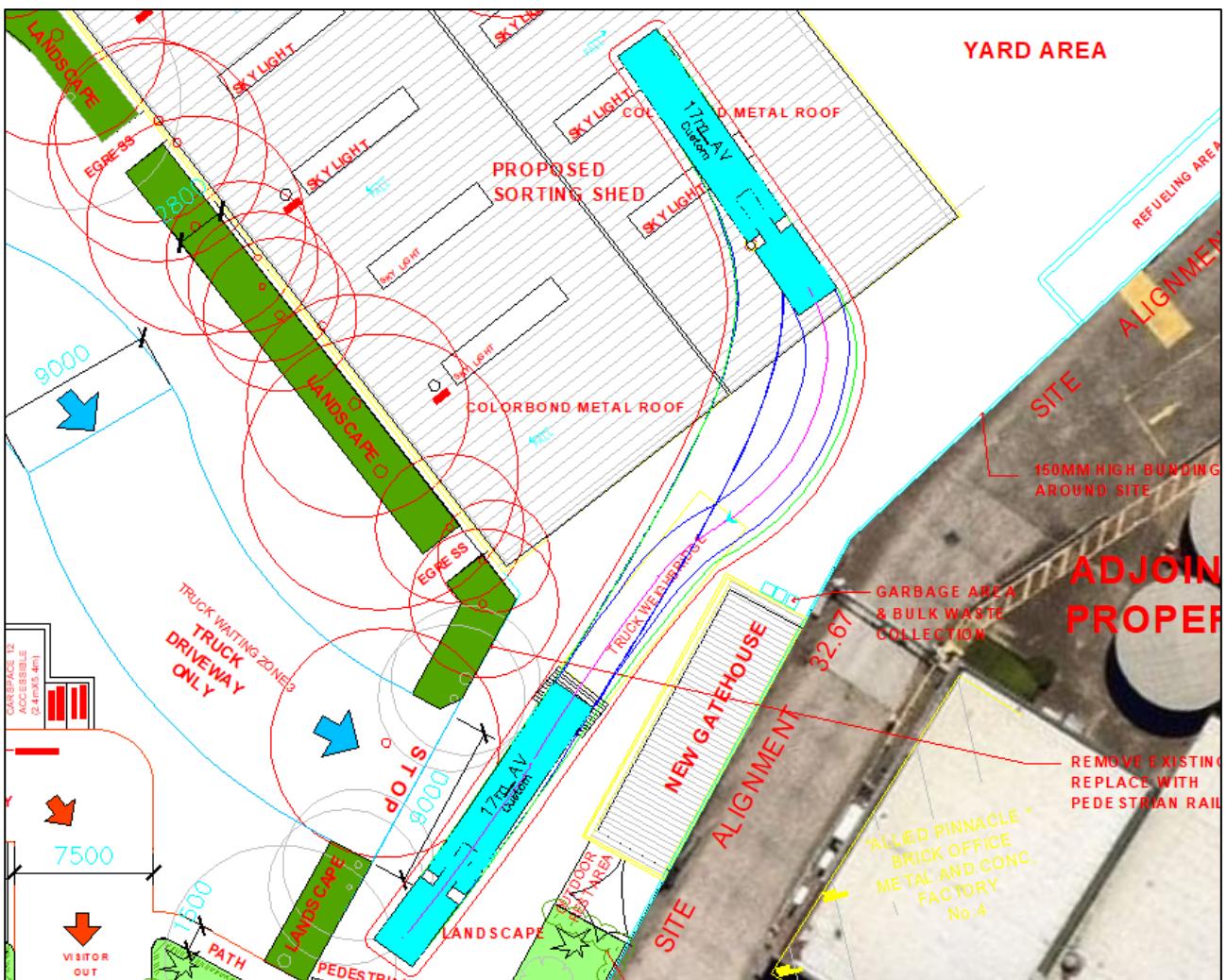
17M LENGTH ARTICULATED VEHICLE ACCESS FROM THE CRESCENT TO WEIGHBRIDGE

Successful – Trailer fully accommodated on weighbridge.



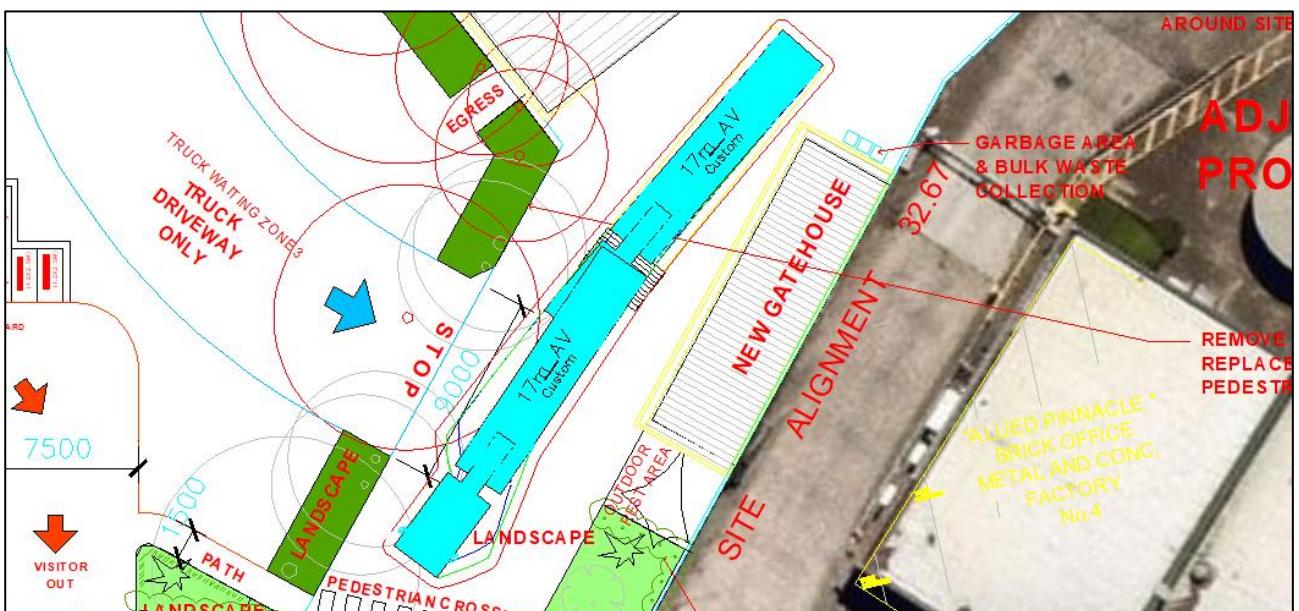
17M LENGTH ARTICULATED VEHICLE ENTRY INTO WAREHOUSE

Successful – Reverse into warehouse achieved.



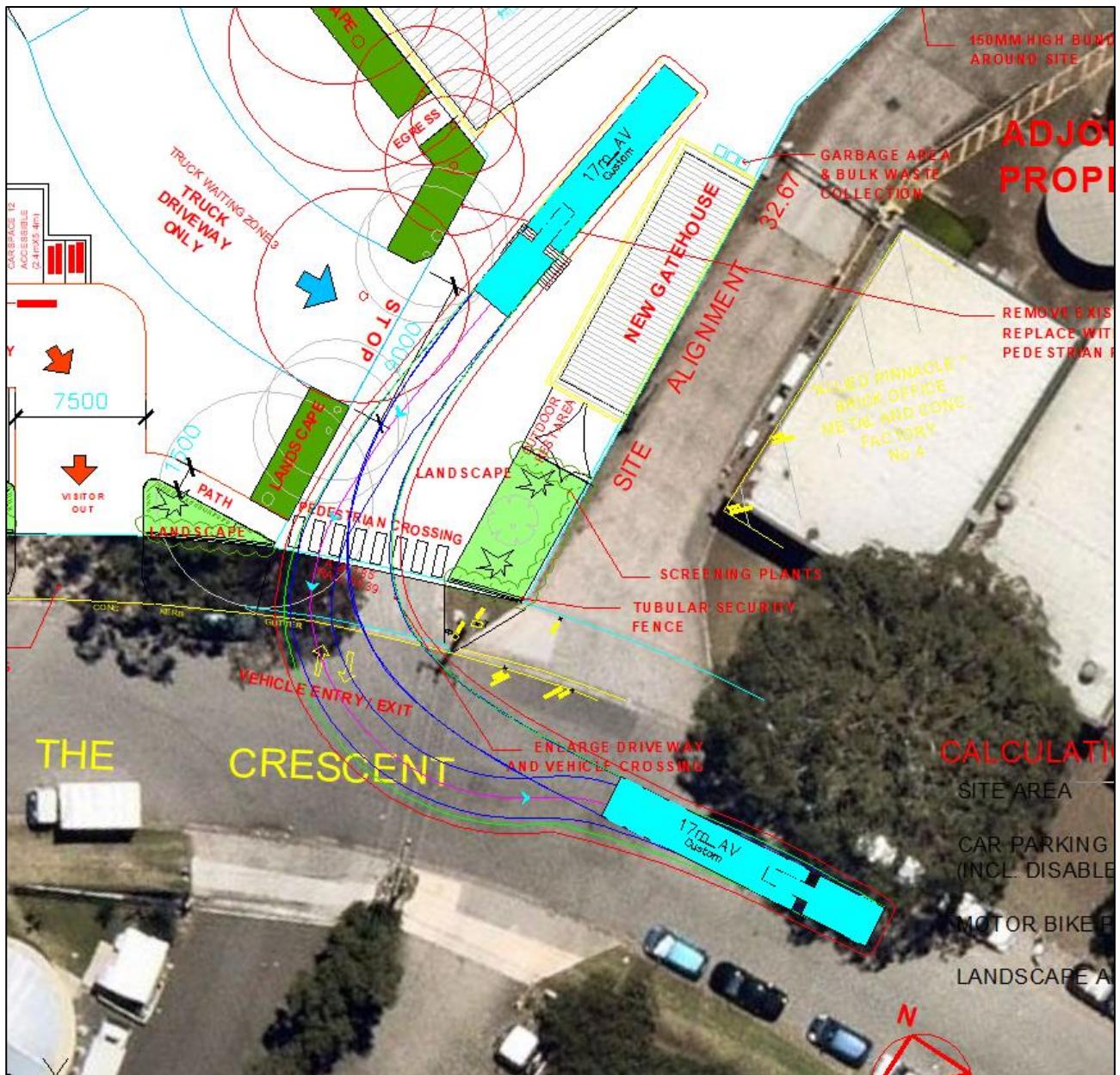
17M LENGTH ARTICULATED VEHICLE EXIT FROM WAREHOUSE

Successful – Forward egress achieved.



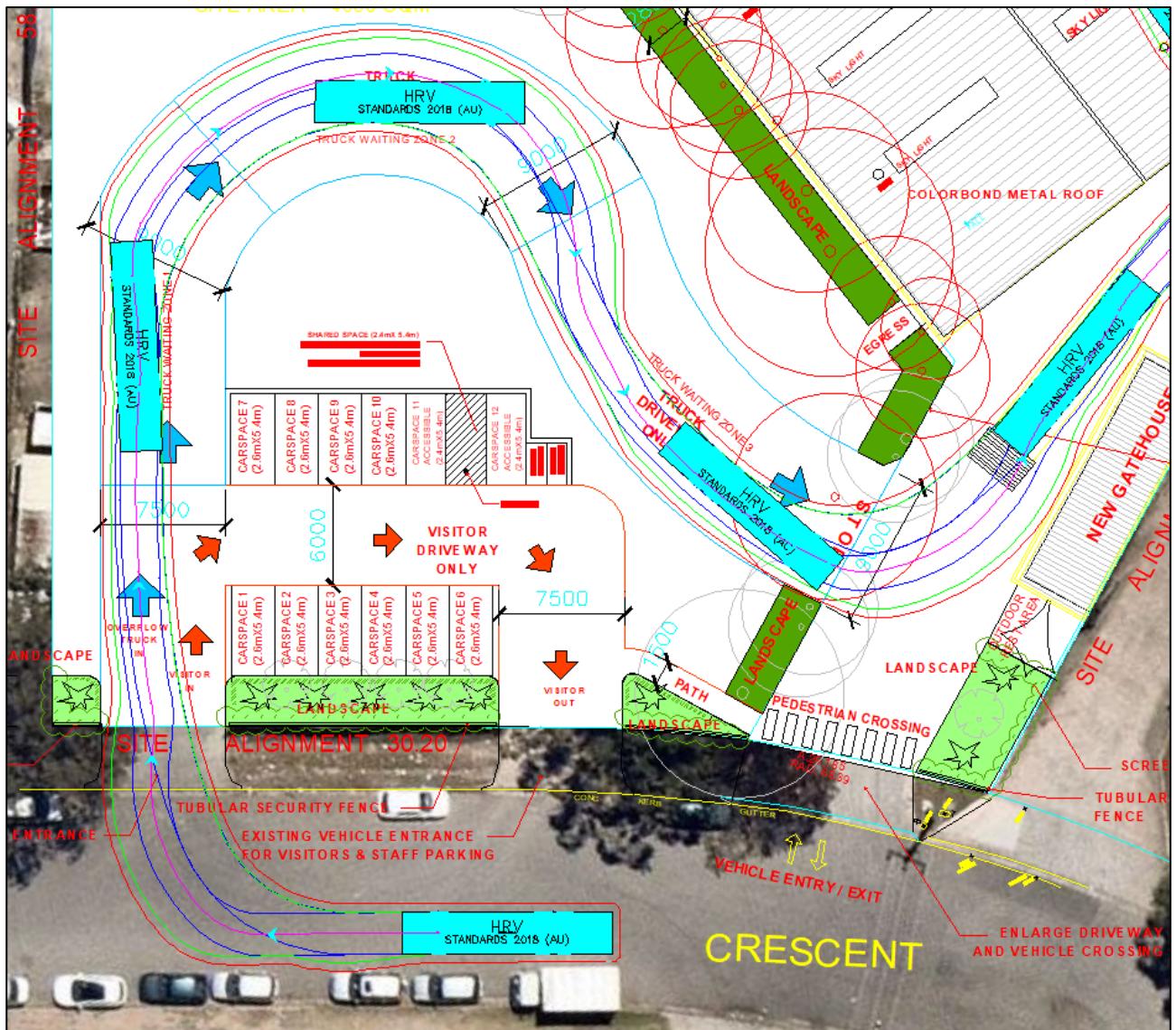
17M LENGTH ARTICULATED VEHICLE POSITIONING ONTO WEIGHBRIDGE

Successful – 1 reverse manoeuvre required. This is to be conducted under a plan of management if required, whereby any other truck onsite is within the waiting zones. This type of movement is expected to be minor and infrequent.



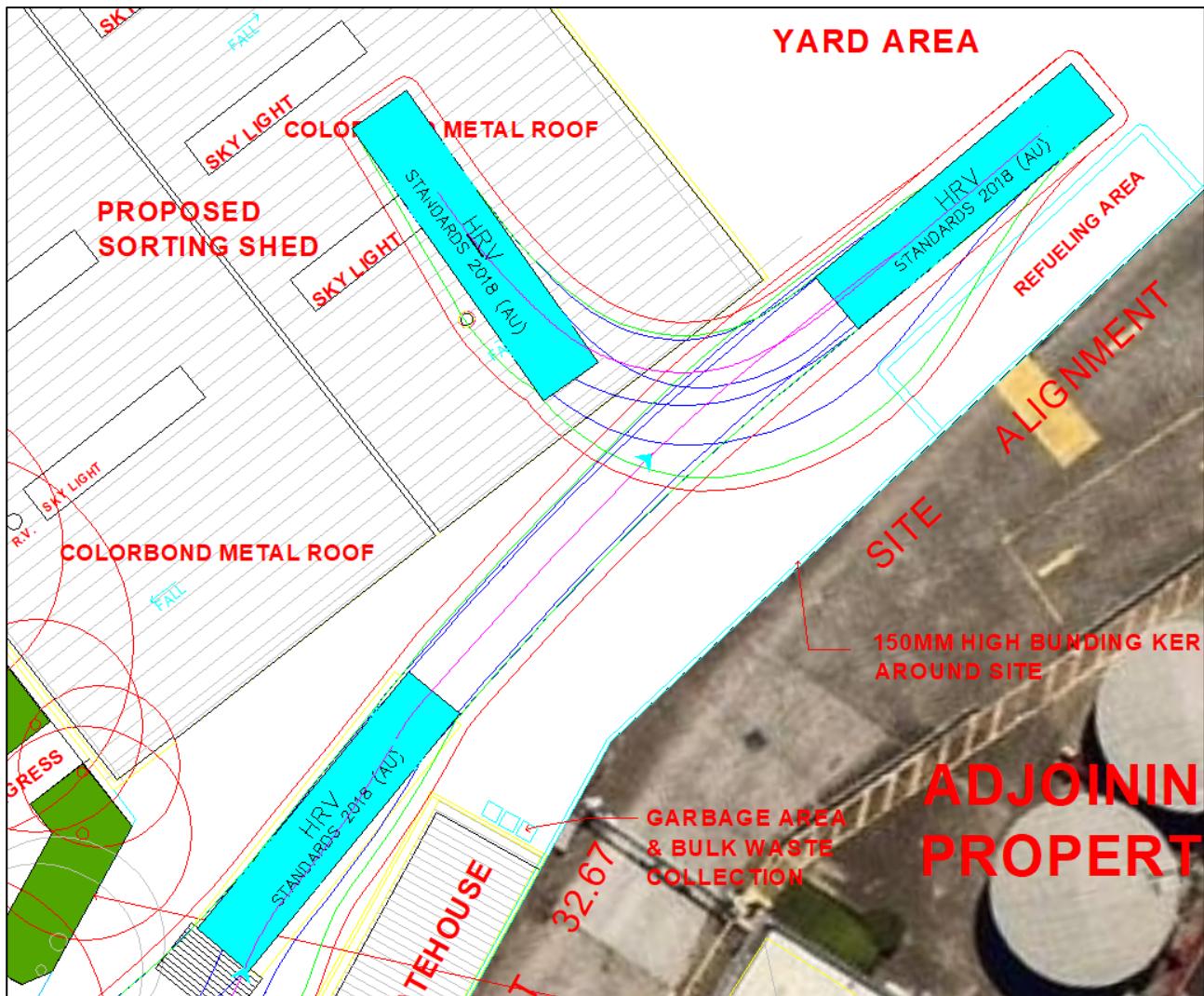
17M LENGTH ARTICULATED VEHICLE EXIT FROM SITE ONTO THE CRESCENT

Successful – Forward egress achieved.



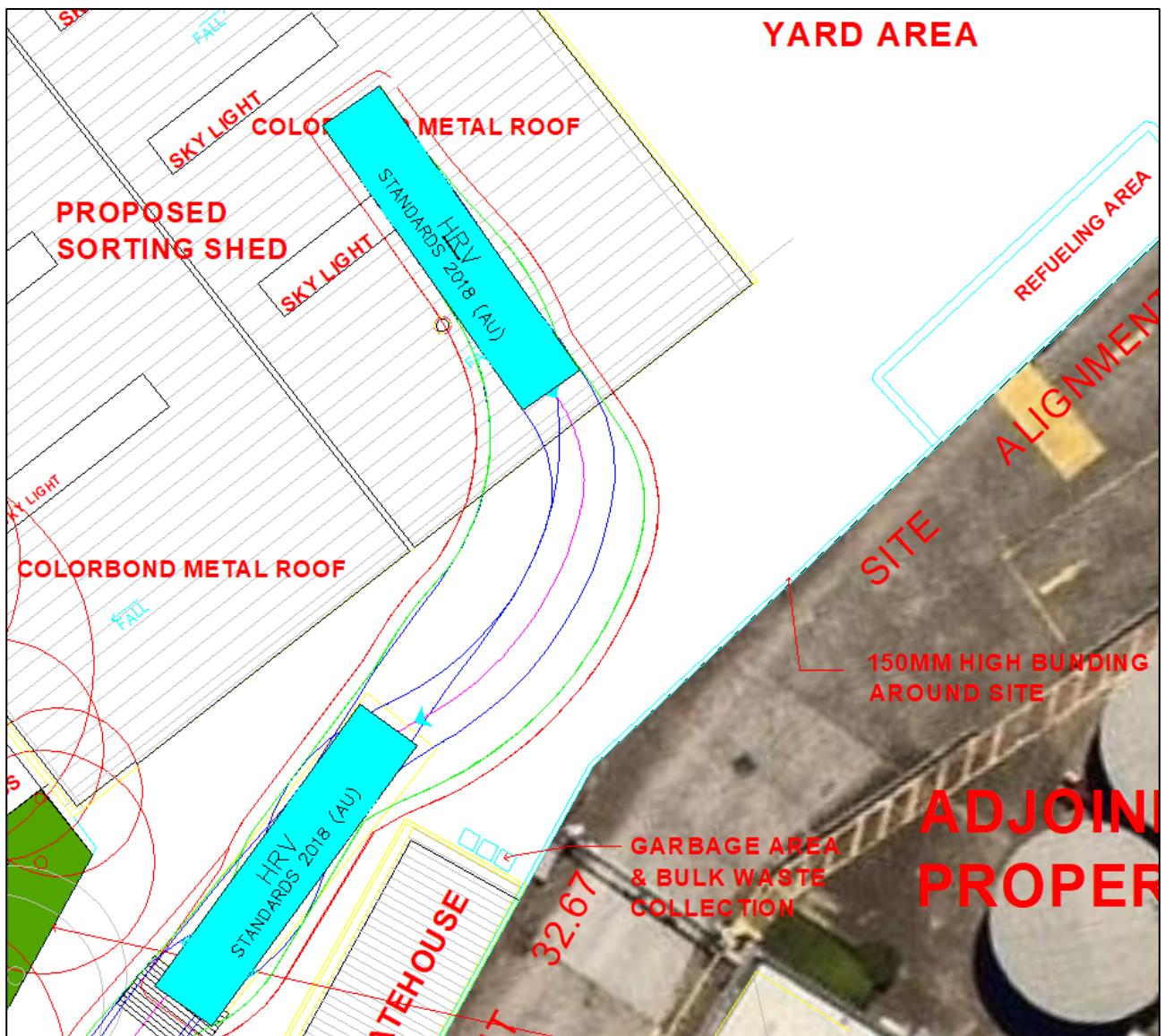
12.5M LENGTH HEAVY RIGID VEHICLE ACCESS FROM THE CRESCENT TO WEIGHBRIDGE

Successful – Forward access achieved, and wheelbase fully accommodated on weighbridge.



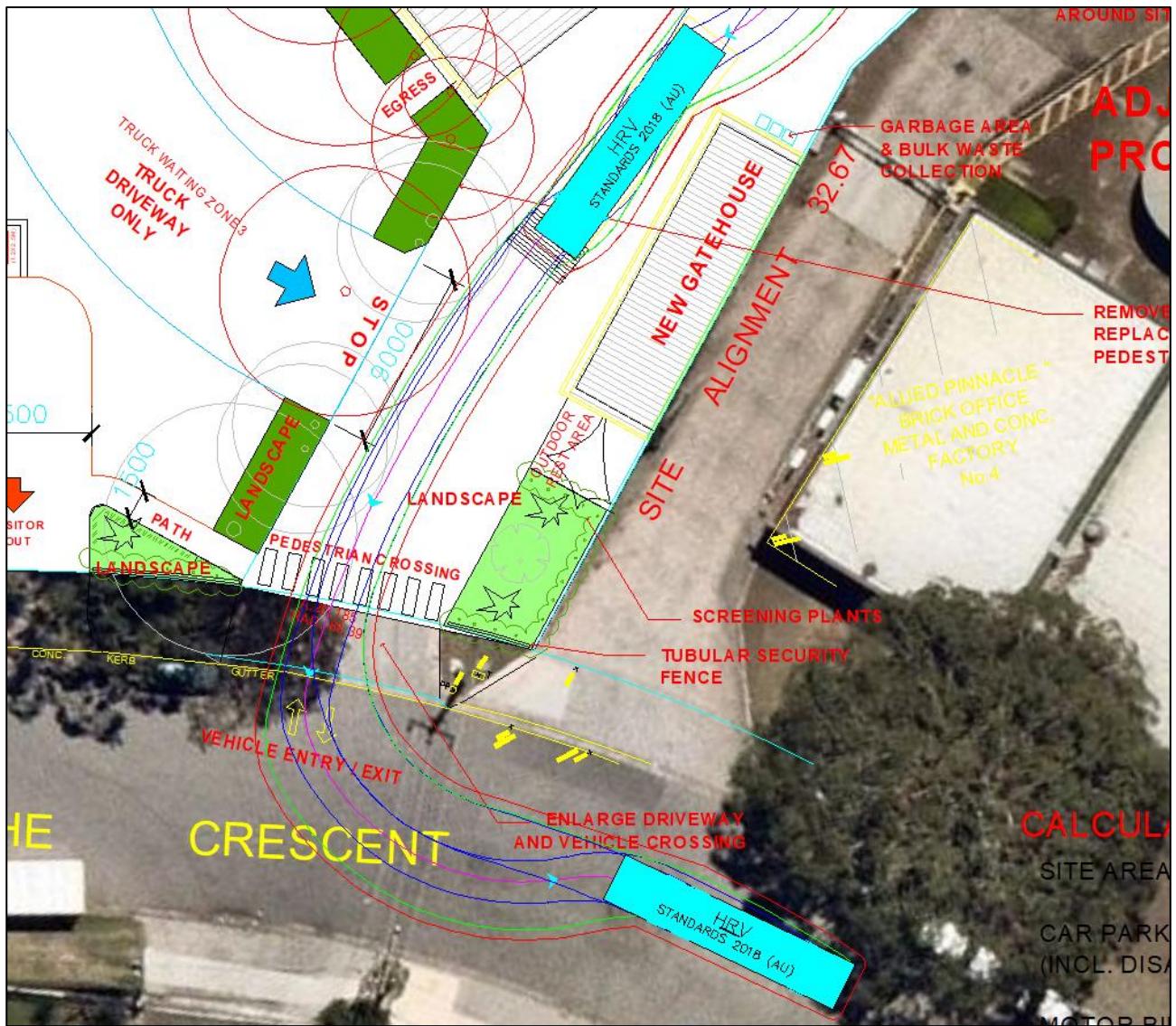
12.5M LENGTH HEAVY RIGID VEHICLE ENTRY INTO WAREHOUSE

Successful – Reverse into warehouse achieved.



12.5M LENGTH HEAVY RIGID VEHICLE EXIT FROM WAREHOUSE TO WEIGHBRIDGE

Successful – Forward egress achieved, and wheelbase fully accommodated on weighbridge.



12.5M LENGTH HEAVY RIGID VEHICLE EXIT TO THE CRESCENT FROM WEIGHBRIDGE

Successful – Forward egress achieved.