05 visual character of the development

The SIMTA proposal involves the redevelopment of the DNSDC site, with most of the existing structures being demolished or relocated. The existing site character is essentially industrial, consisting of a number of large buildings used for warehouse and distribution purposes. The existing site topography (Figure 4) is generally flat with a low hill located within the middle section of the eastern boundary of the site. The most prominent natural feature located near the site is Anzac Creek lying off the southern boundary. There is existing bushland on both the eastern and southern boundaries of the site.

The SIMTA development will include an extensive internal road network comprising an Estate Road, Internal Road 1 for heavy vehicles, and Internal Road 2 for light vehicles. The proposal assumes the inclusion of the following typical built-form and visible operating elements (Figure 3), which are described in detail in the Urban Design and Landscape report forming part of the Application:

Rail Link: Fundamental to the operation of the SIMTA Moorebank Intermodal Terminal Facility is a rail connection to the SSFL. The exact corridor dimensions and location of the rail spur will be determined in consultation with relevant stakeholders and through the detailed design process for the Stage 1 Project Application, however for the purpose of evaluation a notional rail line within the proposed rail corridor area has been included in this report to determine the likely visual impact.

Intermodal Terminal: The intermodal terminal will be located on the western part of the site, adjacent to Moorebank Avenue. The total terminal area is approximately 244,000m^2 including the following key elements:

- Four rail sidings of up to approximately 1,200 metres in length within the SIMTA site
- Container hardstand to be used for container sorting and storage (up to 5 containers high or 12.5m)
- Administration offices and ancillary operational facilities (probably of steel and cladding construction approximately 8m high)

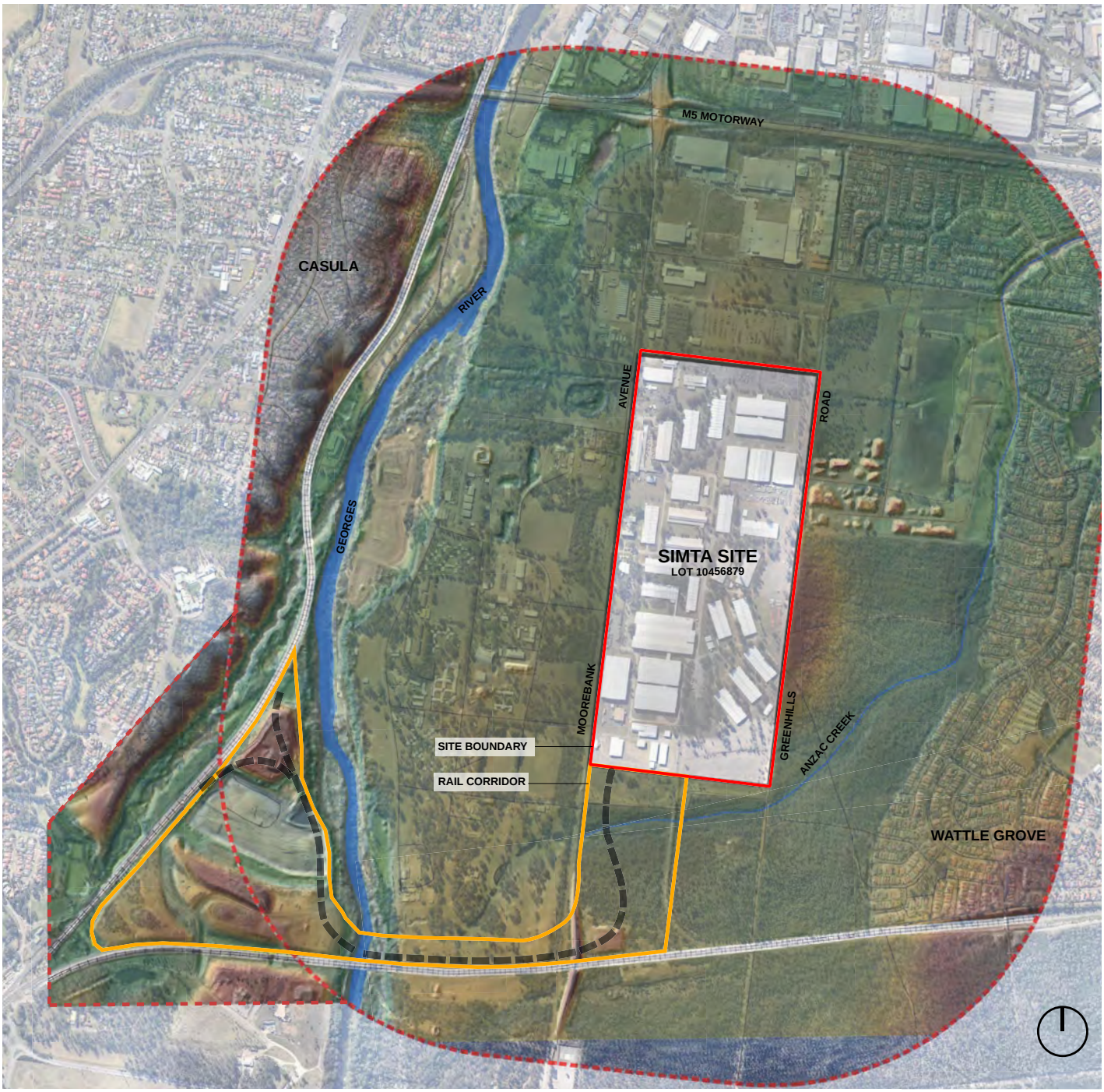
The intermodal terminal is anticipated to operate 24 hours a day, 7 days a week. The terminal will seek to use best practice intermodal facility equipment, wherever possible, which could include:

- Automated and remote operated gantry systems to move containers from rail cars
- Modern container and secondary freight handling equipment
- An operations and control centre, ancillary facilities and amenities
- Container washdown facilities (likely to be of steel construction)
- Diesel and LPG fuel storage tanks (steel construction)

Warehouse and Distribution Facilities: Warehouse and distribution facilities with ancillary offices are to be located on the balance of the SIMTA site to the east of the intermodal terminal. The SIMTA Site Precinct Plan at Figure 1 shows the area in which these warehouse are proposed to be located. The warehouses are likely to be of various sizes of steel (or similar) construction, with a maximum height of 21m. For the purposes of this assessment, it is assumed that warehouses will be of a neutral colour.

Freight Village: The Freight village development will provide amenities and support services within the SIMTA site to meet the needs of employees and visitors to the site.

Lighting: The visualisation carried out for this assessment assumes a light pole height of 40m. Poles would be galvanised steel.



LEGEND

- SIMTA SITE BOUNDARY
- RAIL CORRIDOR
- ANALYSIS EXTENT
- INDICATIVE RAIL LINK APPROX. 30 M WIDE

TOPOGRAPHY

- HIGH
- LOW

SCALE BAR

0 m 150 300 450 600

Figure 4 - Surrounding Topography

06 measures to reduce visual impact

Appropriate measures to reduce the visual impact of the SIMTA development were identified in parallel with the Urban Design and Landscape report. These measures would primarily comprise screen planting in key areas and visual buffers. Further detail can be found in the Urban Design and Landscape report and guidelines. An indicative SIMTA site precinct and landscape plan is shown at Figure 5 which demonstrates potential built form, facility and operations frontages in accordance with the Urban Design and Landscape Report. This Figure 5 is indicative only and provides a representation of potential maximum built-form impact for the purposes of conducting the Visual Assessment.

At the north-east corner of the site, it is anticipated that a 'Freight Village' of support services and conveniences will be constructed which will aid as an architectural screen to the intermodal operations from potentially sensitive views from Anzac Road and beyond.

To mitigate and minimse any visual impacts, a high quality landscape through reinforcement and extension of the surrounding natural context and ecological qualities is proposed. The landscape treatment will visually and physically connect with the existing landscape and vegetation adjacent to the site.

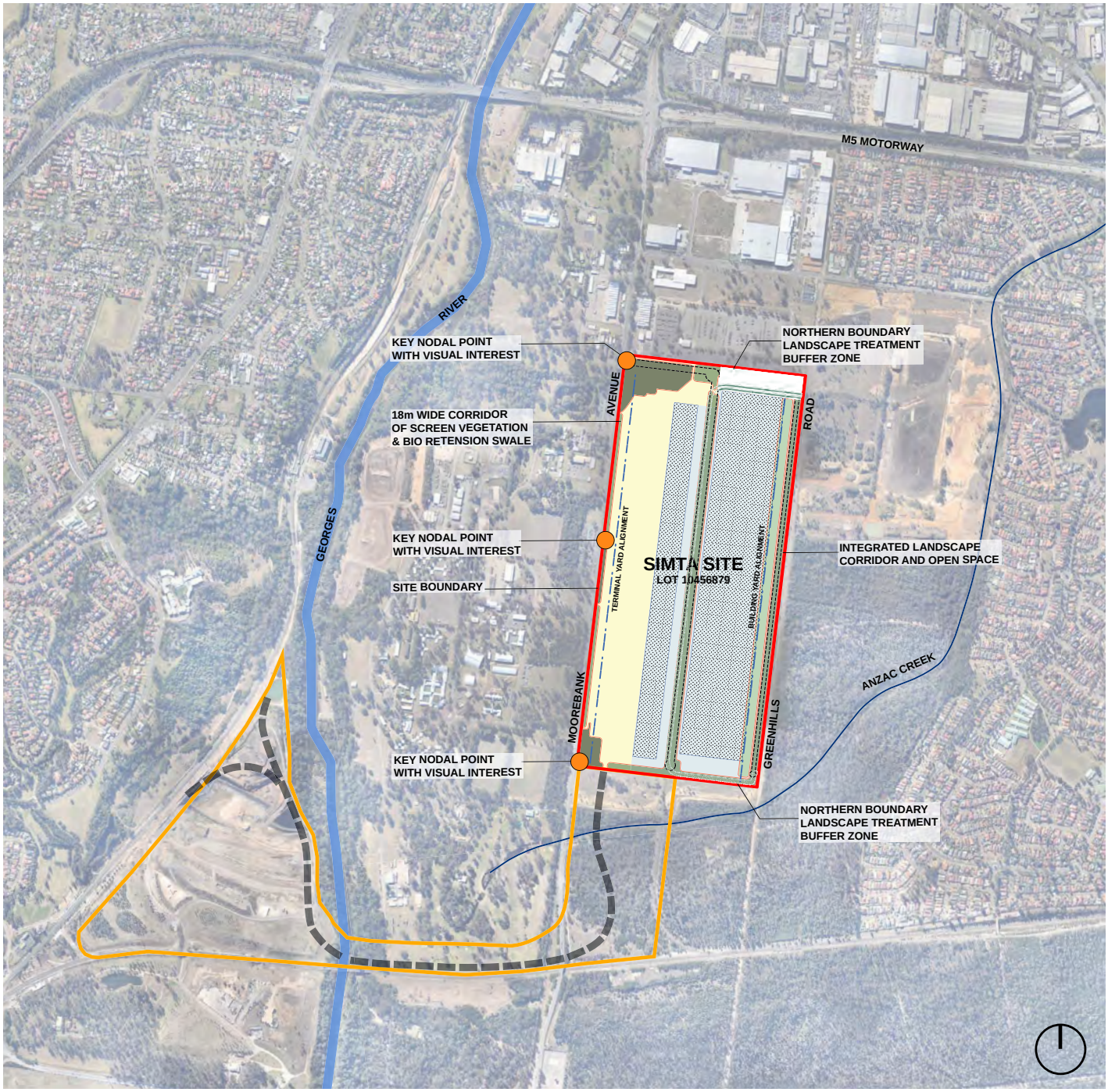
Along the Moorebank Avenue Frontage, an 18m wide corridor of screening vegetation and a bio-retention swale will provide an informal street character. This will be reinforced with randomly selected native tree species with dense tree canopy and lower screen planting.

The key nodal point along Moorebank Avenue is distinguished into 3 locations: an estate access road, middle access point to the intermodal terminal, and a south access point. These access points will include additional features to enhance the arrival experience through the use of a series of selected native plants and recycled materials in built-form to create visual interest.

Along the site boundaries, a "Boundary Treatment" and "Buffer Zone" will incorporate a landscape treatment consistent with existing local species in the area and provide an essential scale of planting to complement the developments built-forms.

At the southern site boundary, a combination of 10m and 20m wide landscape corridors and a bio-retention swale is to be located adjacent to the warehouse distribution facilities and intermodal terminal. At the eastern boundary of the site, a total buffer zone of 13.5m consisting of a 2.5m landscape corridor, a 6m internal light vehicle access road, and a 5m wide bio-retention will provide an adequate visual screen to the warehouse and distribution facility buildings.

Where landscaping is clear of railway lines, planting will consist of tall tree species capable of growing to a height of 20m inter-dispersed with medium height trees, which when mature will form a visually impenetrable barrier. This treatment will mitigate views from surrounding areas, and the existing tree planting along Moorebank Avenue in conjunction with proposed screening and feature walls, will screen a large proportion of potential views from the north-west. Overall, the proposed landscape treatments will result in an improvement in the visual amenity of the entire site and will increase the current level of screening of the site.



LEGEND

- SIMTA SITE BOUNDARY
- RAIL CORRIDOR
- PLANT MIX D
- INDICATIVE RAIL LINK APPROX. 30 M WIDE
- PLANT MIX A
- PLANT MIX B
- PLANT MIX C

SCALE BAR

0 m 150 300 450 600

Figure 5 - Indicative SIMTA Site Precinct and Landscape Master Plan

07 visual impact of the development

The visual impact of the development has been assessed by evaluating the views to the development from identified key viewpoints on the basis of the visual impact assessment criteria described in Section 3.

The extensive native bushland areas, Department of Defence facilities on neighbouring lands, and the general pattern of industrial type development surrounding the site screen the development from much of the greater sensitive surrounding areas - primarily residential.

Potential views do occur along viewing corridors created by streets bounding the site (Moorebank Avenue and Anzac Road), and where topography provides some elevation above potential obstructions to views.

The identified view points are all within 2km of the site. The digital viewshed analysis by Hyder Consulting Engineers does not suggest that any significant more distant views of the development exist.

This section of the report assesses the visual impact from individual key viewpoints identified through the digital viewshed analysis during daylight hours at which it is assumed would be consistent with peak operations.

Night time visual impacts are discussed in Section 8 as part of the light spill assessment undertaken by Hyder Consulting Engineers. There would also be potential visual impacts during the construction of the proposal. These are discussed at the end of this section.

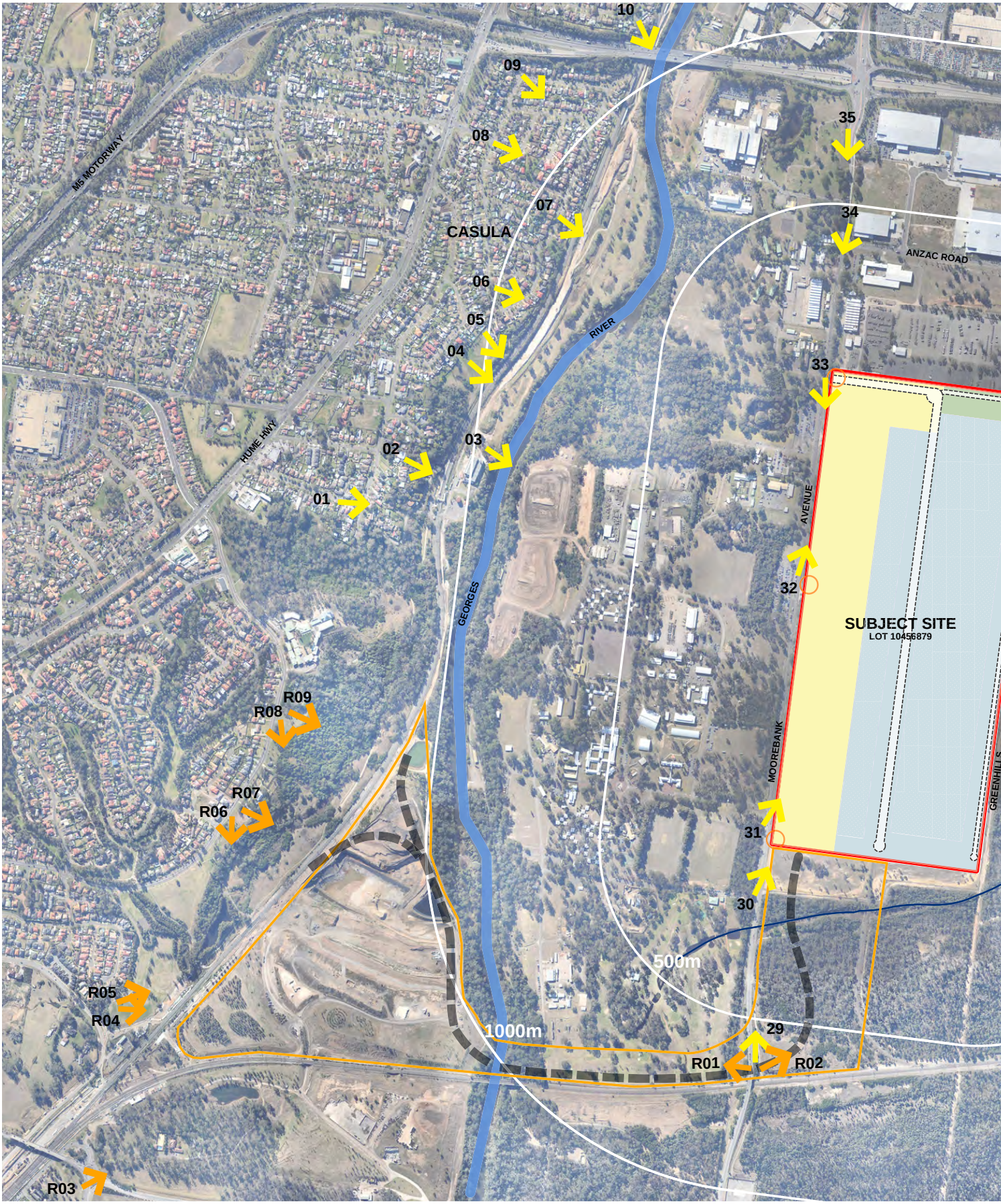


Figure 6 - View Locations