TALLAWONG STATION
PRECINCT SOUTH
SSD 10425

RESPONSE TO SUBMISSIONS

DEICORP PROJECTS (TALLAWONG STATION) PTY LTD

January 2021

Executive Summary

Purpose

This report presents responses to submissions received during the public exhibition of SSD10425 for Tallawong Station Precinct South and the request for additional information from the Department of Planning, Industry and Environment (DPIE).

The SSDA was publicly exhibited between 25 June 2020 and 22 July 2020 for 28 days. A total of 15 submissions were lodged with DPIE during the public exhibition period. Of these, 9 were received from public authorities, 5 from the public and 1 from an organisation.

Application SSD 10425

The SSDA sought consent for the construction of a staged mixed-use development of the site consistent with the approved site layout, massing and building envelopes approved under Concept Plan SSD 9063. The land is located in the Blacktown City Council LGA.

SSD 10425 sought approval for the general arrangement of the site as follows:

- 17 buildings of between 2 and 8 eight stories
- 93,393 m² of gross floor area
- 987 dwellings and 9,000 m² of commercial and retail uses
- basement car parking spaces for residential and non-residential uses
- 5% affordable housing
- land and stratum subdivision
- new public and private roads and pedestrian connection
- publicly accessible park
- landscaping of the public and private domain

Supporting documents

In response to submissions, a number of documents originally submitted with the SSDA have now been revised.

Table 1: Supporting Documentation

Document	Prepared by	Appendix
Supporting documents submitted with the SSD that have been revised		
Revised Architectural Drawings	Turner Group	**Appendix 1**
Addendum Urban Design Report	Turner Group	**Appendix 2**
Staging Diagram	Turner Group	**Appendix 3**
Landscape Plan	Turf	**Appendix 4**
Landscape Report	Turf	**Appendix 5**
Retail and Commercial Land Use Strategy	Atlas Urban Economics Pty Ltd	**Appendix 6**
Revised Acoustic Report	Koikas Acoustic	**Appendix 7**

Traffic Impact Assessment Report	Barker Ryan Stewart	**Appendix 8**
Development Schedule, Cross Ventilation & Sun Views	Turner Group	**Appendix 9**
Landscape Operational Management Plan	Turf	**Appendix 10**
Bush Fire Statement	Australian Bushfire Protection Planners	**Appendix 11**
Construction Management Plan	Barker Ryan Stewart	**Appendix 12**
Civil Package	AECOM	**Appendix 13**
Civil and Stormwater Report	AECOM	**Appendix 14**
Subdivision Plan	Daw and Walton	**Appendix 15**
Draft Stratum Plan	Daw and Walton	**Appendix 16**
DRAINS Model	AECOM	**Appendix 17**
MUSIC Model Private	AECOM	**Appendix 18**
MUSIC Model Public	AECOM	**Appendix 19**
Tree Management Plan	Raintree	**Appendix 20**
Ground Water Assessment Report	EI Australia	**Appendix 21**
Waste Management Report	Elephant Foot	**Appendix 22**
Planning Proposal Council Panel Meeting Report	Blacktown City Council	**Appendix 23**
Truck Travel Path in CAD	Barker Ryan Stewart	**Appendix 24**
Flood Impact Assessment Report	AECOM	**Appendix 25**
Addendum to EIS for Proposed Signage Strategy	Sutherland & Associate Planning	**Appendix 26**
Signage Strategy	Turner Group	**Appendix 27**
Extract from the Design Excellence Report	Turner Group	**Appendix 28**
RMS Correspondence	Deicorp	**Appendix 29**

Department of Planning Industry and Environment

DPIE provided comments and recommendations relating to land uses, built form, amenity, car parking, open space public domain & landscaping, and other matters.

Table 4 below provides detail of the comments and recommendations made by DPIE, the project response and the relevant supporting documentation.

Table 2:
Response to issues raised by the DPIE

Issue/recommendation	Project response	Appendix
1. Land Uses		
i. Provide further justification for the proposed retail and commercial uses (including the land use mix and tenancy sizes) considering the: a. objectives of the B4 zone and the strategic planning role of Tallawong Precinct South b. impacts on the future Tallawong Town Centre to the north of Tallawong Station and any other nearby local center c. requirements in Schedule 4 of Blacktown City Council Growth Centre Precincts Development Control Plan 2010, which limits retail premises in the B4 Mixed Use Zone to a maximum of 300m² for any single tenancy.	***Atlas Urban Economics Pty Ltd*** ***Urban Economic Consultants*** Refer to the attached Retail and commercial Land Use Strategy prepared by ATLAS addressing the objectives of B4 zone, impact on the future Tallawong Town Center and requirement in schedule 4 of BCC Growth Center Control Plan 2010. It is recommended that the existing 300sqm single retail tenancy restriction included in the Growth Centre Precincts Development Control Plan (2010) be waived given the extent of forecast demand in the Tallawong Precinct. Retention of the cap would significantly inhibit the capacity of the Site to meaningfully contribute to accommodating forecast retail demand over time, resulting in unmet localised demand. This aligns with the supporting evidence of the approved Cudgegong Road Station Precinct South SSD.	**Appendix 6**
ii. Submit a Retail and Commercial Land Use Strategy providing an analysis of: a. the socio-economic context of the site b. market competition and catchments for the proposed retail and commercial uses c. economic and community impacts of the proposal.	***Atlas Urban Economics Pty Ltd*** ***Urban Economic Consultants*** Refer to the attached Retail and commercial Land Use Strategy prepared by ATLAS addressing the socio-economic context of site, market competition in relation to the catchment and economic / community Impacts of the proposal. The Proposal is expected to generate a significant economic impact upon operation. The Proposal has the capacity to annually contributing $100.8 million in GRP to Blacktown LGA economy and supporting a total of 337 jobs on-site, including 277 jobs within the proposed	**Appendix 6**

	retail/commercial floorspace and 60 dispersed jobs	
Issue/recommendation	**Project response**	**Appendix Ref**
2. Built Form		
i. Illustrate how the proposal complies with Condition B3 (a) and (b) of SSD 9063 which requires consideration of:		
a. *design the built form and landscape of the blocks fronting Schofields Road, including setbacks to the top-most floor, to address the urban qualities of Schofields Road and the adjacent low-density residential suburb of The Ponds.*	***Sutherland & Associates*** ***Town Planner*** The Concept Plan approval has established a built form framework which achieves an optimised outcome in relation to the interface with Schofields Road. In particular, the most significant outcomes are that the Concept Plan replaced the DCP intended parallel road on the southern side of the site with a landscaped buffer zone, and also created a series of narrow buildings separated with deep landscape recesses to avoid a continuous wall to Schofields Road. The proposed development has embraced this framework and has improved this outcome by redesigning the bocks facing Schofields Road to further reduce the upper building widths. Whilst the proposal has removed the step for the topmost floor, this step is considered to be of negligible benefit for the dwellings to the south across Schofields Road which are located approximately 65 metres from the proposed development. Instead, the design is sensitive to the Schofields Road interface by designing all apartments which face south in Stage 2D with dual aspect to both the south and the east/west, as well as articulated the southern façade of each building with a central recess element. The landscape design along the southern boundary of the site comprises deep soil, where none was required by the Concept Plan, which accommodates generous and substantial vegetation. Finally, the buildings facing Schofields Road adopt a domestic architectural expression, particularly with the	

	utilisation of face brick, which achieves a materials palette which is acknowledges the character of the built form within The Ponds. The proposed built form and landscaping of the blocks fronting Schofields Road sufficiently address the urban qualities of Schofields Road and the adjacent low-density residential suburb of The Ponds ***Turner*** ***Architect*** Extraction from the Design Excellence Report describes the built form and landscape of the blocks fronting Schofields Road and demonstrates how they address the urban qualities of Schofields Road and the adjacent low-density residential suburb of The Ponds. The building envelope was refined during design development.	**Appendix 28**
b. *configure buildings to distribute density and building height of the precinct with consideration to improving solar access to apartments, communal open space and the public realm.*	**Sutherland & Associates** ***Town Planner*** The Concept Plan approval has established a built form framework which achieves an optimised outcome in relation solar access to apartments, communal open space and the public realm. The proposed modifications to the Concept Plan in fact improve upon this by reducing shadow impact to the nearest sensitive properties at The Ponds across Schofields Road. In relation to shadow impact to open space, whilst there is some increased shadow to the publicly accessible park, due to the location of the publicly accessible park at the northern end of the site it still enjoys extensive solar access and the majority of the park receives solar access from 10.30am to 3pm on 21 June. This submission is accompanied by sun-view diagrams and shadow diagrams which demonstrate the achievement of the solar Design Criteria of the Apartment Design Guide. ***Turner*** ***Architect*** The following attached document	**Appendix 9**

	demonstrates solar access to apartments, communal open space and the public realm: 'Views from Sun' (DA-715-001 – DA-715-007) The following attached documents demonstrate the ADG solar access compliance for apartments: '18095_Development Schedule' 'Solar and Cross-Ventilation Diagrams' (DA-720-010 – DA-720-110).	
ii. Demonstrate compliance with the Design Quality Guidelines approved with Concept Approval SSD 9063 and identify any required consequential amendments to the modification application.	***Sutherland & Associates*** ***Town Planner*** The EIS and Design Excellence Report which accompanied the Development Application both include a detailed analysis in relation to compliance with the Design Quality Guidelines approved with Concept Approval SSD 9063. In particular pages 154 to 171 of the Design Excellence Report contain detailed diagrammatic comparisons between the proposal and the Design Quality Guidelines. Pages 95 to 100 of the EIS also provide a written explanation. The areas of departure are comprehensively detailed in the S4.55 Modification application including the Addendum Urban Design Report. ***Turner*** ***Architect*** The following attached document demonstrates compliance with the Design Quality Guidelines approved with Concept Approval SSD 9063. Amendments to the modification application are identified in this document. Please refer to the updated Urban Design Report which addresses the Design Quality Guidelines: '18095_201008_Addendum Urban Design Report E.	**Appendix 2**
Issue/recommendation	**Project response**	**Appendix**
3. Amenity		
i. Provide further information and analysis to demonstrate the proposal's compliance with the Apartment Design Guide (ADG),	***Sutherland & Associates*** ***Town Planner*** The architectural package which was	

particularly how solar access and ventilation would be achieved for each of the proposed buildings. This must include (but not limited to): a. solar access diagrams to illustrate how solar access would be achieved for the proposed apartments	submitted with the Development Application included solar access diagrams which identifies every apartment of the 987 apartments which achieves complaint solar access. This submission is also accompanied by sun-view diagrams as well as a schedule of apartments which also identify which apartments achieve a compliant level of solar access.	
b. clarify how cross-ventilation and natural ventilation are achieved for apartments affected by rail and road noise.	In relation to ventilation for apartments affected by noise, it is noted that the Department has recently confirmed in the assessment report for SSD application 7749 at 11 Gibbons Street, Redfern that "the ability to provide natural cross ventilation and acoustic privacy is not mutually exclusive, as both are not required at all times. In noisy periods, windows and doors can be closed to obtain acoustic privacy and appropriate airflow can be supplemented….". An updated acoustic report prepared by Koikas Acoustics accompanies this submission which provides additional detail in relation to how ventilation is proposed to be supplemented for apartments affected by rail and road noise. In summary, a duct containing a fan will be installed into the external façade of noise affected apartments to supply outside air to the habitable spaces of the apartment.	**Appendix 7**
	Turner ***Architect*** The following attached documents demonstrate the proposal's compliance with the ADG: 'Solar and Cross-Ventilation Diagrams' (DA-720-010 – DA-720-110). 'Views from Sun' (DA-715-001 – DA-715-007) '18095_Development Schedule' listing solar access and cross ventilation compliance. To address noise issues for apartments facing Schofields Road, windows have been added to the niche in buildings Q, R and S. These windows provide alternative ventilation if the window facing Schofields Road is closed.	**Appendix 9**

	Please refer to the following architectural drawings: DA-110-010 – DA110-090 DA-113-009 – DA-113-080	**Appendix 1**
ii. Illustrate how a reasonable level of privacy can be achieved (including any mitigation measures) for: a. units with courtyards and windows facing common open space areas (e.g. Unit A.310, D, 205, E.208, E.506) b. large private courtyards on top of podiums (e.g. Unit Q.406, R.401, S.403) with overlooking units directly above c. units with an interface to the proposed non-residential floor space (with indicated potential for a childcare centre) in Building 1A.2	***Sutherland & Associates*** ***Town Planner*** A graphical response to this issue has been prepared by Turner architects and accompanies this submission. The response demonstrates that there is either a satisfactory design outcome in relation to privacy, or where additional mitigation measures such as privacy screens have been applied to address this issue. ***Turner*** ***Architect*** The following attached 3D views and notes illustrate how a reasonable level of privacy is provided for: Units with courtyards and windows facing common open space areas. Large private courtyards on top of podiums with overlooking units directly above. Units with an interface to the proposed non-residential floor space. Amenity_Privacy SK-200 – SK-206	**Appendix 28**
iii. Confirm ADG minimum dimensions and areas are met for: a. balconies/courtyards b. storage spaces c. deep soil zones.	***Sutherland & Associates*** ***Town Planner*** The plans have been updated to include balcony areas. In addition, the development schedule which accompanies this submission include details in relation to balcony size and storage spaces. Deep soil dimensions are also illustrated on drawing DA-750-010. ***Turner*** ***Architect*** The following attached documents show the ADG minimum dimensions and areas: Balconies/courtyards: '18095_Development Schedule' Storage spaces: '18095_Development Schedule' Deep soil zones: DA-750-010	**Appendix 1** **Appendix 9**

iv. Clarify if all units in Building 1B.2 will have direct access to a ground floor lobby and the purpose of the stairs from the courtyard of Unit N.106.	***Turner*** ***Architect*** With regards to Building 1B.2, the plans have been modified to provide direct access to ground floor lobbies. Please refer to the following drawings: DA-110-008 – DA-110-020 DA-112-008 DA-112-010 The stairs for Unit N.106 have been removed. Please refer to: DA-110-008 DA-114-009 ***Sutherland & Associates*** ***Town Planner*** Building E has been modified to provide direct access to a ground floor lobby, whilst the stairs from the courtyard of Unit No.106 have been deleted.	**Appendix 1**
Issue/recommendation	**Project response**	**Appendix**
4. Car Parking		
i. Review and revise the proposed car parking provision, considering the: Strategic location and transport orientated design objectives of the site and the concept approval	***Barker Ryan Stewart*** ***Traffic Engineer*** The Traffic Impact Assessment has included a thorough and comprehensive assessment of the parking provision providing a balance between sufficient parking for the particular needs of residents in the north-west growth area and achieving the objectives of transit-oriented design. In summary the assessment considered: - The location of the development to Tallawong Station and bus stops. - The acknowledge of the intent behind transit orientated design, however Tallawong Station is the end of the line station that caters for a large catchment area of the Hawkesbury, Blacktown and Hills LGAs. The existing commuter car park is already well under capacity. Any fewer parking spaces provided than that proposed based the functional use of the development would put further pressure on this car park and the surrounding streets. - The proposed residential parking provision of 1,139 spaces is less than the SSD approval of 1,144,	**Appendix 8**

	less than Council's DCP required minimum of 1,238 (therefore does not comply with their DCP), and slightly more than the minimum required by RMS of 1,037. It meets the SEPP 65 ADG requirements. - The proposed non-residential parking of 300 spaces is less than the minimum RMS Guide requirement of 345 and Council's DCP requirement of 348 and therefore does not comply with either the Guide or DCP. - We acknowledge that the SSD rate of 143 commercial and retail spaces is fewer than that proposed, however this rate was based on comparisons with Parramatta DCP and Epping town center rates which don't align with the travel demands of the Tallawong and the surrounding area. Also, the end use of the retail and commercial areas are better known now than at the time the SSD was assessed.	
Objectives of the zone to maximise public transport patronage and encourage walking and cycling	The location of the site adjacent to Tallawong Station and bus interchange provides incentives for residents to use public transport. It also includes a high level of pedestrian / cyclist infrastructure and good connectivity to the broader pedestrian / cyclist network. However, the public transport system has no or poor linkages to local indoor and outdoor sporting facilities, local golf courses, churches, beaches, etc where a car would be needed to pursue these activities.	
Council's DCP requirement which refers to RMS's car parking rates for development within 800m of a railway station	The proposal complies with the minimum RMS Guide to Traffic Generating Developments parking rates. It is proposed to provide 1,139 residential parking spaces which is 102 (10%) more spaces than the minimum requirement in the RMS Guide. It is 99 spaces less than the Council DCP requirement, providing a reasonable balance as stated above in item a.	
Potential modal split and behavioral changes supported by Sydney Metro's high-speed and high-frequency service above a traditional rail service	The Traffic Impact Assessment provides commentary regarding the need to provide additional parking for residents within the broader north-west growth area who will travel to Tallawong to catch public transport.	**Appendix 8**

	While the Metro service provides a higher frequency service than traditional rail services, the Tallawong location will attract commuters from a wider area than just the immediate areas surrounding Tallawong.	
Environmental and sustainability benefits of reducing private residential car spaces Council's and Sydney Metro's parking management strategy for the locality Practical and legal arrangements for residential visitors to access commuter car spaces and commercial car parking spaces from buildings across the site.	A Green Travel Plan has been submitted with the application for the development which includes strategies and actions to encourage sustainable travel options. However, due to the location of Tallawong in the north-west growth area there will continue to be a high demand for private vehicles to access facilities not accessible by public transport and therefore a high demand for parking. The development accommodates the increase in usage of electric vehicles with the provision of 10% of the residential parking spaces to be provided with EV parking points to be shared. This will have a substantial positive environmental and sustainability benefit and is a good balance for the need of cars in the locality as well as encourage the use of electric vehicle by the residents which supports the current global trend in these types of vehicles. There is also potential to provide four car sharing spaces on the new private access road that forms part of the development.	
ii. Submit a parking strategy to maximise the efficiency of car parking spaces including the consideration of sharing use of car spaces between land uses as required under Condition B12(a) of SSD 9063.	As outlined in Council's item 2a below, there is a DCP requirement to provide 99 visitor parking spaces. The Traffic Impact Assessment report has been amended to show that 99 visitor spaces have now been provided. The development is also proposing 300 non-residential parking spaces that could be used by visitors outside of business hours. There is also a potential reduction in parking demand due to the multi-use of the non-residential parking spaces as visitors / customers will generally utilise the site for various purposes.	**Appendix 8**
iii. Clarify allocation of car parking spaces for affordable housing, as identified in Condition A19 of SSD 9063.	SEPP (Affordable Rental Housing) 2009 states, A consent authority must not refuse consent to development to which this Division	

	applies if: at least 0.5 parking spaces are provided for each dwelling containing 1 bedroom. at least 1 parking space is provided for each dwelling containing 2 bedrooms; and at least 1.5 parking spaces are provided for each dwelling containing 3 or more bedrooms. The proposed parking provision of 1 space per 1- and 2-bedroom units and 2 spaces for 3-bedroom units satisfies the requirement of the SEPP.	
Issue/recommendation	**Project response**	**Appendix**
5. Open Space, Public Domain and Landscaping		
i. Illustrate compliance with the Public Domain and Landscaping Strategy and Condition B4 of the Concept Approval SSD 9063.	***Turf Landscape Architect*** A diverse range of species have been used primarily native and endemic species, refer L-DA -69 & 71 for species lists.	**Appendix 5**
ii. Review the landscaping plan and identify additional opportunities to achieve 40 percent tree canopy coverage on the site as recommended by the Greater Sydney Commission.	***Turf Landscape Architect*** 40% Canopy Cover has been achieved through the uses of larger spread trees i.e. Eucalyptus and Angophora species. Canopy Cover has been Increased on the Common Lawn, Playground, North /South Though Site link.	**Appendix 5**
iii. Prepare and submit a detailed plan of management for public domain areas proposed to be privately owned (including parks and roads), in consultation with Council.	***Landscape Architect*** This has been provided in this submission appendix.	**Appendix 10**

iv.	Consult with TfNSW (Sydney Metro and former RMS) and obtain owners' consent for structures (including paths and other infrastructure connections) and connections to and/or across public lands such as:	***Deicorp Projects (Tallawong Station) Pty Ltd*** ***Applicant*** We are in process of consulting with RMS and RMS correspondence spread sheet attached for your reference.	**Appendix 29**
a.	Structures, access, and paths over drainage reserves along Schofield Road	***Aecom*** ***Civil & Stormwater Engineer*** The development team had provided a response to TfNSWs concerns relating to infrastructure in a letter dated 18th May 2020 (attached as an appendix to this response). Further feedback has been sought from TfNSW Land Use Planning and Property sections since initial feedback on 10th June 2020 without a response (emails provided as reference). It is proposed that any comments of adjustments to the discharge conditions across Cudgegong Road be conditioned as part of this assessment	**Appendix 29**
b.	Landscaping at the corner of Schofield Road and Cudgegong Road and along the frontage of Schofield Road		
c.	Pedestrian connections to Sydney Metro railway station, commuter car parking and its surrounds'		
d.	Construction and other site management facilities.	***Barker Ryan Stewart*** ***Construction Management*** Location of Construction and other site management facilities has been relocated.	**Appendix 12**
v.	Provide additional details about the connection of internal pathways to the shared path along Schofields Road, including sections to show pathway gradient and heights of adjoining land on either side of the pathway and crossing over the drainage swale	***Aecom*** ***Civil & Stormwater Engineer*** Details of additional sections have been provided in the Civil Design Package	**Appendix 13**
vi.	Clarify the proposed landscape planting aligns with the respective deep soil zones, including the Jacaranda tree in the communal lobby between Buildings 2C.1 and 2C.2.	***Turf*** ***Landscape Architect*** The jacaranda is located in the deep soil zone approximately 1200mm away from any basement wall. Where there root zone spread out of the deep soil zone there is a minimum of 1m of soil depth on structure in all direction to allow for tree growth. Refer to section K on L-DA-51.	**Appendix 5**

vii.	Consult with Council and initiate required amendments to the Land Reservation Acquisition Map under the Growth Centres SEPP as per advisory note AN3 on Concept Approval SSD 9063.	***Deicorp Projects (Tallawong Station) Pty Ltd*** ***Applicant*** A planning proposal was lodged to the Blacktown City Council on 16 June 2020. Council assessment report was presented to BCC panel meeting and panel supported the recommendation to progress the Planning Proposal for Gateway Determination.	**Appendix 23**
Issue/recommendation		**Project response**	**Appendix**
6. Other Matters			
Submit a bushfire assessment report as required by the SEARs issued for the project and requested by the NSW Rural Fire Service.		***Deicorp Projects (Tallawong Station) Pty Ltd*** ***Applicant*** A letter prepared by Australian Bushfire Protection Planners, which establishes the context of the Bushfire Protection Assessment Report prepared for the proposed Cudgegong Road Station Precinct – South – Reference No. B173114 – 3, dated 10.05.2018 against the requirements of Planning for Bushfire Protection 2019.	**Appendix 11**

Blacktown City Council

Blacktown City Council made a number of comments and recommendations relating to planning and design, car parking, waste, engineering, drainage, open space and tree management.

Deicorp and council had five workshops to address all items raised by council and many email interactions to address all the issues in a very effective manner. Subsequently Deicorp submitted a revised package to council addressing all item on 27 November 2020.

Table **3** below provides detail on the comments and recommendations made by Council, the project response to these comments and recommendations, and the associated documentation provided to support the project response.

Table 3: Response to issues raised by Blacktown City Council

Issue/recommendation	Project response	Appendix / References
1. Planning and Design		
a. The redistribution of the building forms is an improvement on the original design as it creates a better pedestrian experience through the site, by removing the lengthy elevations that previously ran north/south and providing a reduction in scale of the buildings along the pedestrian link. An additional feature building at the	***Turner*** ***Architect*** Compliance with the solar access requirements of the ADG is demonstrated in the following documents: 'Solar and Cross-Ventilation Diagrams' (DA-720-010 – DA-720-110).	**Appendix 1**

	south-eastern corner and a retail/market pedestrian street and pocket park with improved solar access are a result of the changes. The applicant must however demonstrate compliance with solar access requirements of the ADG.	'Views from Sun' (DA-715-001 – DA-715-007) '18095_Development Schedule' featuring hours of solar access.	
b.	We reinstate our previous position that waste collection arrangements must be wholly contained withing the respective sites' basements and all trucks must enter and leave in a forward direction. The concept of reducing the number of loading zones and vehicular entries compared to the concept DA is supported, however there are significant operational efficiencies that will need to be overcome. Council would expect waste collection for sites of this size to be positioned wholly within the basement. There are a number of reasons for this, including managing acoustics, improved streetscape presentation (when designed well) and efficient operation/collection. The proposal indicates ground floor collections for Site 2 which are unsightly and undesirable, in particular for buildings located at the corners in dominant positions. The proposed waste storage and collection areas at the ground floor dominate the frontages to the public road, result in blank facades and remove the ability to provide an active street edge, which results in a poor public domain interface. Notwithstanding the visual adverse impact on the streetscape, the location of loading dock and waste collection rooms is not supported where they share a common wall with a residential unit, due to adverse amenity impacts on future residents.	***Sutherland & Associates*** ***Town Planner*** Council objects to the proposed waste collection at ground level on the grounds of managing acoustics, improved streetscape presentation and efficient operation/collection. However, when tested against these three criteria, the proposed waste collection arrangement has been demonstrated to achieve an acceptable and in fact superior outcome when compared to basement waste collection for the subject proposal. The proposed waste collection areas are not dominant and in fact are located in discreet locations which successfully mitigate their impact. The basement collection would result in several unsatisfactory design outcomes with respect of increasing heights of buildings, excessive ramping and therefore blank edges, and reduction of common open space and deep soil within the center of the respective site. The proposed waste collection arrangements result in an improved urban design outcome particularly for the streetscape. Acoustic impacts of the waste removal areas are addressed in Section 9 of the Acoustic Report submitted with the development application and subject to the implementation of the recommendations of the acoustic report it is confirmed that acceptable noise levels will be achieved for adjacent residential units. ***Turner*** ***Architect*** The following attached documents assist in demonstrating the merits of the proposed ground-level loading docks and the challenges of alternative within-basement loading docks and associated entries:	**Appendix 1**

	18095_201127_Loading Docks Site 2	
c. The proposal does not provide sufficient information for each stage of the development, including the road network movement, access and required car parking spaces necessary for each stage. Whilst we note that this is only a temporary arrangement, more information is required to demonstrate that sufficient car parking and an adequate road network is provided prior to the operation and occupation of each building independently until full completion and operation of the final stage of the development.	***Turner*** ***Architect*** Staging diagram have been provided to show the sequencing of the project and the extent of construction during each stage. Please refer to: DA-010-011 – DA-010-015. Each stage has its own basement parking allocated for each building including proportionate visitor parking. Vehicle access is available to each entry/exit of each stage's basement parking area independent of the other stages.	**Appendix 3**
d. No dead-end roads or areas of half road construction in the development are acceptable. In this regard, the subdivision plan for Site 2 should be amended to indicate full construction of the internal public road at the first stage of subdivision, to provide vehicle access to Lot 2932.	***Barker Ryan Stewart*** ***Traffic Engineer*** Details of suitable traffic management have been provided in the revised Construction Management Plan report.	**Appendix 8**
e. We note that a report has been submitted to Council on behalf of Deicorp to assist us in preparing the Planning Proposal to amend the Land Reservation Acquisition Map and remove our acquisition obligations in respect of the proposed local open space area as Deicorp proposed a private basement carpark under the local park. We had originally objected to this concept in discussions with Deicorp as it is unacceptable to have a private carpark under our public park and road. In this regard we require the applicant to enter into a Planning Agreement with Council to ensure that the applicant is not entitled to any compensation for land value and/or embellishment value for this site and this is to be registered on the title of the land. We request that this obligation be satisfied and the agreement be executed between the parties prior to any consent becoming active, i.e. it could be reflected as a deferred commencement condition. We object to the DA at this point as no letter of offer to effect this has been received by Council from Deicorp.	***Deicorp Projects (Tallawong Station) Pty Ltd*** ***Applicant*** A draft VPA has been submitted to council on 13 October 2020 and since then we are in process to finalise the VPA in consultation with Council.	

f. As previously advised, no basement parking is permitted under a public road and/or open space and as a result the park and public access for the park must be retained in private ownership, with a public easement for access as proposed. However, further details in relation to the maintenance of the park and access road still need to be submitted with this application and agreed with Council.	***Deicorp Projects (Tallawong Station) Pty Ltd*** ***Applicant*** A draft Landscape Operation Maintenance Plan has been submitted to council on 13 October 2020 and since then we are in process to finalise the report in consultation with council.	**Appendix 10**
g. A Due Diligence report under the National Parks and Wildlife Act 1974 is required for all new development in the Growth Area. This is to be prepared by a suitably qualified aboriginal heritage consultant and must be submitted for consideration by Government with this DA.	***Deicorp Projects (Tallawong Station) Pty Ltd*** ***Applicant*** A Due Diligence Report was submitted as part of Landcom's Concept SSD 9063 for the subject site which has been assessed by the Office of Environment and Heritage. Please find below the response by the authority in August 2019 : After reviewing the EIS for this proposal, OEH's Greater Sydney Planning Team has concluded there are no biodiversity, natural hazards or Aboriginal cultural heritage issues that require a formal response.	

Issue/recommendation	Project response	Appendix
2. Car parking		
a. Council does not support the proposed reduction in the visitor car parking rate (to 1 visitor per 35 units from 1 per 10 units). It is considered that the provision of a total of 28 visitor car parking spaces is totally insufficient to serve 987 apartments. For Site 2 there is no commercial car parking available for the use of residential visitors as justified in the Traffic Report. Based on this, we do not object to the proposal on this ground provide 99 visitor spaces are provided for the proposal in accordance with the Concept Approval.	***Turner*** ***Architect*** Visitor parking rate 1 space / 10 units applied to each site, totaling 99 spaces. Show in the attached plans: DA-110-006 – DA-110-008 DA-111-007 – DA-111-009 DA-112-006 – DA-112-009 DA-113-006 – DA-113-009 DA-114-007 – DA-114-009 ***Barker Ryan Stewart*** ***Traffic Engineer*** Traffic Assessment Report has been updated to include 99 visitor cap parking spaces to support	**Appendix 1** **Appendix 8**
b. The report acknowledges that the 1,000 existing commuter car parking spaces located at Tallawong Station are already at capacity, with a substantial overflow of all-day parking currently occurring onto the surrounding street network during every workday. By 8.30am, the		

existing carpark is full from commuters travelling on the Sydney Metro Northwest line. Once full, drivers of vehicles then proceed to park on the surrounding street network. The catchment area beyond the North West Growth Area is predominantly rural in nature with poor or no public transport options available to residents. This is another reason why we object to the proposed reduction in the visitor car parking rate.		
Issue/recommendation	**Project response**	**Appendix**
3. Waste		
Truck Access • Cater for residential and commercial waste collection within basements.	***Turner*** ***Architect*** The following attached documents assist in demonstrating the merits of the proposed ground-level loading docks and the challenges of alternative within-basement loading docks and associated entries: 18095_201127_Loading Docks Site 2	**Appendix 1**
• Demonstrate on amended plans that ramp grades and changes of rate of grade on ramps do not exceed 15.4% (as per AS2890.2 Tables 3.2 and 3.3). • Provide a vertical cross-section plan demonstrating a 4.5m headroom allowance clear of eaves, overhands, balconies, services and at the roller door entry point, for the entire travel path of trucks (as per AS2890.2).	***Turner*** ***Architect*** • Please refer to Ramp Sections: DA-350-010 – DA-350-050	**Appendix 1**
• Provide a vertical cross-section plan demonstrating a 6.5m headroom allowance in the area where the hook lift waste compactor is stored.	***Turner*** ***Architect*** • We are not anticipating front lift collection vehicle for this project. 5.85m headroom has been provided which considered to be sufficient for all large collection vehicle. Refer to Architectural Plans: DA-110-008 & DA-112-008.	**Appendix 1**
• Provide swept paths for an 8.8m long, medium rigid vehicle with a 22m turning circle for the entire travel path of trucks, showing forward entry and exit. This is PARTIALLY SATISFIED – swept paths must include street	***Barker Ryan Stewart*** ***Traffic Engineer*** • In this revised submission swept paths for an 8.8m long medium rigid vehicle with a 22m turning circle for the entire travel path of	**Appendix 8**

entrances and exits and include all on-site travel/ maneuvering.	trucks, showing forward entry and exit is shown in the Architectural drawings and Traffic report	
• Provide the AutoCAD file in DWG format and 1:1 scale for the entire travel path of trucks in addition to the proposed swept paths, for our detailed review.	• CAD swept paths in and 1:1 scale for the entire travel path of trucks will be provided in this submission	**Appendix 24**
Waste storage area • Provide waste collection points in the basement for each building. o This is PARTIALLY SATISFIED	***Turner*** ***Architect*** Waste collection points are provided in the basement for Site 1. Waste collection points for Site 2 are currently located in loading docks at ground level. Refer to item 1b for further information about loading docks.	**Appendix 1**
• Provide a dedicated and refrigerated storage room for food waste for commercial tenants producing more than 50kg of meat, seafood or poultry daily.	***Turner*** ***Architect*** Refrigerated storage room provided. Refer to GA Plans: DA-110-008 DA-112-008	**Appendix 1**
• Ensure bins will not be stacked as this leads to overflowing front bins, under utilised rear bins and dumping: o bins must be single file to allow for movement in between. o update the Waste Management Plan (WMP) to reflect this.	***Turner*** ***Architect*** Bins in Waste Holding Rooms (WHRs) adjacent to loading docks, are maximum double stacked.	**Appendix 1**
• Demonstrate on amended plans that resident access to the waste room is not via the loading bay where waste collection vehicles are moving and reversing. Waste collection contractors may need a second access to this space through the loading bay. • amend the WMP as it states that residents will access the waste room • amend the WMP to reflect use of interim waste rooms.	***Turner*** ***Architects*** A chute system is used. With this system residents do not access bin rooms. Please refer to Waste Consultant's response for further detail.	**Appendix 22**
• Ensure the maximum walking distance for residents to transport bagged waste or containerised recyclables does not exceed 45m and amend the WMP to reflect this.	***Turner*** ***Architect*** Chute system used. Chutes are less than 45m from unit entries. Refer to GA Plans: DA-110 series	**Appendix 1**

	DA-112 series DA-113 series DA-114 series	
• Ensure bins and bulky waste are stored on the same level they are collected from. Basement bin and bulky waste storage with ground level collections are not supported for WHS reasons and due to the heavy reliance on mechanical aides and/or equipment to move bins and bulky waste around the site. Basement collection and storage is required for this site.	***Turner*** ***Architect*** Bins rooms and Bulky waste storage rooms adjacent to Loading Docks at same level. Refer to waste consultant's response. Refer to: GA Plans: DA-110-008 DA-110-020 DA-111-008 DA-112-008 DA-113-010 DA-114-010	**Appendix 1** **Appendix 22**
Loading bay design • Demonstrate on plans that the designated loading bays can accommodate the entire length of the truck plus an additional 3m rear clearance for bin servicing and rotation. The truck must not overhang the loading bay hindering traffic flow on-site.	***Barker Ryan Stewart*** ***Traffic Engineer*** Amended swept paths have been prepared based on an 11m long vehicle plus an additional 3m rear clearance. ***Turner*** ***Architect*** Loading bays can accommodate entire length of truck and 3m clearance. 3m clearance zone shown hatched in loading docks. Refer to: GA Plans: DA-110-008 DA-110-020 DA-111-008 DA-112-008 DA-113-010 DA-114-010	**Appendix 1** **Appendix 8** **Appendix 8**
Bulky waste • Provide storage at a rate of 4m² for every 40 units and 1m² for every 20 units (or part thereof) and after that for bulky waste items such as lounges and fridges etc: o the area must be located adjacent to the waste loading bay, caged and signposted for this specific use o doors must be a minimum of 1.5m wide o the Waste Management Plan must be updated to this effect.	***Turner*** ***Architect*** Bins provided at required rate. Refer to Waste Management Plan. Refer to: GA Plans: DA-110-008 DA-110-020 DA-111-008 DA-112-008 DA-113-010 DA-114-010	**Appendix 1** **Appendix 22**

• Demonstrate on amended plans that resident access to the bulky waste storage room is not via the loading bay where waste collection vehicles are moving and reversing. Waste collection contractors may need a second access to this space through the loading bay	***Turner*** ***Architect*** Resident access provided to bulky waste storage room (BWRS) not via loading dock. Refer to: GA Plans: DA-110-008 DA-110-020 DA-111-008 DA-112-008 DA-113-010 DA-114-010	**Appendix 1**
Waste generation • Demonstrate on amended plans the correct number of waste and recycling bins needed for the site, considering the accurate waste and recycling generation rates now provided.	***Turner*** ***Architect*** Correct number of bins provided. Refer to: GA Plans: DA-110-008 DA-110-020 DA-111-008 DA-112-008 DA-113-010 DA-114-010	**Appendix 1**
• Allow for the following waste and recycling generation rates (RFB): o 240 L/unit/day for waste o 80 L/unit day for recycling 1. SATISFIED	***Turner*** ***Architect*** Refer to Waste Consultant's report for calculations.	**Appendix 22**
Bin movement • Demonstrate that bin transfer grades do not exceed 1:30 for 1100L bulk bins. If they do: o a bin movement aid is required for the site (e.g. bin tug with trolley) o provide the specification sheet for the proposed equipment o indicate on amended plans a suitable, secure storage area for this equipment. • Demonstrate that bin travel distances do not exceed 10m for 1100L bulk bins. • Clarify what the likely retail tenancies will be as this will influence waste and recycling generation rates, the number of bins for both, and the required size of the waste room. • Indicate the bin travel path from the interim bin storage rooms to the main collection point using the proposed bin movement aid.	***Turner*** ***Architect*** Movement aid / bin tug provided. Shown on plans. Refer to: GA Plans: DA-110-008 DA-110-007 DA-111-008 DA-112-008 DA-113-008 DA-114-008 Further details provided in Waste Management Report. Bin Travel path shown on DA-780-010 - DA-780-080	**Appendix 1** **Appendix 22** **Appendix 1**

Waste Management Plan • Amend/provide the Waste Management Plan to include the location of the waste collection point and loading bay.	***Turner*** ***Architect*** Refer to the amended Waste Management Report.	**Appendix 22**
Additional observations • The waste bins seem scattered and the method of collection is lost. • There are a lot of partial satisfactions.	***Turner*** ***Architect*** Bin collection method demonstrated DA-780-010 to DA-780-080	**Appendix 1**
• Swept paths are inconclusive as they do not include the complete route as required.	***Barker Ryan Stewart*** ***Traffic Engineer*** Swept paths have been updated to show the routes of vehicles between the sites and the adjacent streets.	**Appendix 8**
• Drawings have not been provided.	***Turner*** ***Architects*** Drawings regarding waste provided: - GA Plans: • DA-110-008 • DA-110-020 • DA-111-008 • DA-112-008 • DA-113-010 • DA-114-010	**Appendix 1** **Appendix 8** **Appendix 22**
Issue/recommendation	**Project response**	**Appendix**
4. Asset Design		

We note that the Stormwater Management Strategy proposes to enlarge an existing bio-retention system to service the roads dedicated to Council, located on the eastern side of Cudgegong Road. However, not enough detailed information has been provided to determine that the concept will work. This location is highly constrained, and this concept must be verified in terms of constructability and operational and maintenance requirements prior to the issue of any construction approval. On the basis that this bioretention system is handed over to Council, Council approval for the modification is required. In this regard Council requests a condition be imposed on the consent that, prior to the issue of a Construction Certificate, the detailed design and construction plans are to be reviewed and endorsed by Council. We also note that this application process to construct a new retaining wall along the Cudgegong road footway and therefore a Road Safety Audit must be undertaken to assess the risk to road users.	***Aecom*** ***Civil & Stormwater Engineer*** Please refer to responses below and the revised stormwater report. Based on revised calculations we are no longer proposing an upgrade or alteration to the bioretention basin.	**Appendix 14**
Issue/recommendation	**Project response**	**Appendix**
5. Engineering		
1. The Plan of subdivision should reflect the intent of the ownership plan.	***Daw & Walton Surveyor*** Refer to the attached revised Subdivision Plan.	**Appendix 15**
2. The proposed site must demonstrate there is a legal and contiguous stormwater connection, capable of appropriately and safely conveying stormwater from the site to the downstream regional facility/intended watercourse for all flows up to and including the 100-year ARI. The applicant should demonstrate that there is a negative impact on downstream private property due to the discharge from the subject site	***Aecom*** ***Civil & Stormwater Engineer*** The overland flow paths have been included in the drainage catchment plan. Based on revised calculations an additional pit has been added at the corner of MC02 and additional detention to ensure pre-development flows are not exceed up to a 100-year ARI.	**Appendix 13**
3. With regard to the proposed stormwater tail-out design beyond pit 36.8, more detail is required of the downstream receiving infrastructure to demonstrate that the appropriate invert levels are achieved, and the capacity of the existing system is adequate	***Aecom*** ***Civil & Stormwater Engineer*** Additional modelling has been included to better reflect the downstream receiving infrastructure and this is shown in the revised	**Appendix 13** **Appendix 17**

	Stormwater Report and associated DRAINS models.	
4. The proposed development roads do not appear consistent with the relative DCP road design in terms of road formation (note the typical cross-section detail of Local Road Medium-High Density within the BCC GC DCP). Council's Engineering Team may consider the proposed deviation of road formation from the DCP on the basis that the applicant can demonstrate that:	***Aecom*** ***Civil & Stormwater Engineer*** The proposed development roads are consistent with the relevant DCP's as noted in Section 2.4 and 2.5 of the Civil and Stormwater Report. These are also consistent with the previously approved concept design.	**Appendix 13**
o The minimum width of each travel lane is 3m. This applies to MC01, MC02 and the road to the west of the Park o A standard Council waste vehicle can manoeuvre around the proposed bends safely.	We note that we comply with the minimum width of each travel lane, additionally please refer to the BRS Vehicle Tracking accompanying the response to submissions to confirm that the council waste vehicle can maneuver around the bends	**Appendix 24**
5. Where the development seeks to alter the existing kerb alignment of Conferta Avenue in order to facilitate future traffic calming and/or pedestrian crossings, the applicant must seek approval from Council's Manager Traffic and Access.	***Aecom*** ***Civil & Stormwater Engineer*** This is noted and approval for any future traffic calming and/or crossings will be the subject of future applications	
6. We request that a condition be imposed on the consent requiring any proposed pedestrian/wombat crossings along existing public roads, including Conferta Avenue, be approved by Council's Manager Traffic and Access prior to the issue of the Construction Certificate. The pedestrian crossings, if approved, must generally reflect the requirements of Blacktown Council's Standard Drawing A(BS)131M, i.e. standard wombat crossing for all roads	***Aecom*** ***Civil & Stormwater Engineer*** Please refer to our response above, it is noted that approval for any future traffic calming and/or crossings will be the subject of future applications	
7. The proposed carriageway configuration of MC01 and MC02 should reflect the requirements of the DCP Local Road Medium Density – i.e. an 18m road reserve with a configuration 3.5m verge – 11m carriageway – 3.5m verge. Furthermore, the proposed configuration is not in line with the BCC GC DCP typical cross section, and this should be amended to reflect the DCP requirements. Note that a flush	***Aecom*** ***Civil & Stormwater Engineer*** Please refer to our response to item 4, the verge in particular has been the subject of numerous DRP meetings of which Blacktown City Council had a representative and were designed to maximise tree canopy cover. Flush transitions between the carriageway and verge are not	

	transition between carriageway and verge is not supported, and kerb and gutter is required between the carriageway and verge for all roads.	proposed for this design and the overall design is consistent with the previously approved concept scheme.	
8.	The applicant is to provide additional detail on the intended traffic circulation movements around MC01 and MC02. Is there an intent for two-way movement? If so, the applicant must demonstrate that the appropriate vehicles (including waste vehicles) can manoeuvre around the proposed road bends in a safe manner and in accordance with the relative AUSTROAD requirements.	***Aecom*** ***Civil & Stormwater Engineer*** Please refer to the BRS Vehicle Tracking accompanying the response to submissions to confirm that the council waste vehicle can manoeuvre around the bends. ***Barker Ryan Stewart*** ***Traffic Engineer*** The swept path plans demonstrate forward ingress and egress of an 11 metre Medium Rigid Vehicle (MRV) between the loading docks and Conferta Avenue and between the loading docks and the proposed public road. The plans also show that a Council waste collection vehicle and a passenger vehicle can safely travel along the proposed public road in both directions, thereby maintaining two-way traffic flow.	**Appendix 8** **Appendix 24**
9.	The private road is to include an easement in gross to the benefit of Council for the full extent of the road reserve. Also, the applicant is to clarify how the design intends to manage the safety of pedestrian movements in relation to traffic	***Daw & Walton*** ***Surveyor*** As shown on the Draft Stratum Plan for the site there is a “Public Right of Carriageway” proposed over the roadway & “Public Right of Accessway” over the footpaths adjoining the road which will be benefit the council and will give access to the public 24x7 on the road reserve.	**Appendix 16**
10.	The intersection of Cudgegong Road and Schofields Road is flagged to be a future signalised intersection as indicated within the BCC GC DCP. The applicant is to demonstrate that the proposed splay at the south-eastern corner of future Lot 2931 facilitates the future signalised intersection design.	***Barker Ryan Stewart*** ***Traffic Engineer*** The Schofields Road / Cudgegong Road intersection has been upgraded to provide a left turn slip lane for eastbound vehicles turning left into Cudgegong Road. The required amount of road widening has been acquired from the south-eastern corner of the subject site to provide for this left turn slip lane. No further land acquisition from the subject site is required for this intersection.	**Appendix 8**

	Aecom ***Civil & Stormwater Engineer*** The existing intersection at Cudgegong and Schofields Road is a signalised intersection with a left turn slip lane which allows vehicle movement onto and from Schofield Road. The development does not propose to adjust the road reserve boundaries for this intersection and as such vehicle movement should not be impacted.	
11. The proposed development is to ensure any flows received from the upstream communal carpark are captured and adequately conveyed to the downstream existing Council stormwater system. In this regard the engineering plans are to demonstrate compatible levels with the upstream neighbouring site.	***Aecom*** ***Civil & Stormwater Engineer*** The proposal captures these flows into a pipe and swale along Schofields Road as shown on plan 60618532-SHT-00-0000-CI-0300. The system ultimately flows into pit 36.5.	**Appendix 13**
12. There appears to be an intentional low point within the internal road MC01/MC02 at chainage approximate 185.00 MC01. The applicant is to demonstrate that the stormwater conveyance of the overland flow path along MC01/MC02 at this point is catered for. The overland flow path is to be reflected on the plan with an associated easement for OLFP.	***Aecom*** ***Civil & Stormwater Engineer*** Overland flow path has been included in the drainage catchment plan. An additional pit has been added at the corner of MC02 to ensure that this overland flow is catered for and is shown in the revised stormwater plan.	**Appendix 13**
13. The proposed 375mm diameter stormwater pipe to be constructed within Conferta Avenue, i.e. line P25/13 to P25/16, is to reconfigured to ensure the location is in line with the alignment of the kerb and gutter, as well as the allocation for stormwater as stipulated within the SOCC current Guide to Codes and Practices for Street Opening Document.	***Aecom*** ***Civil & Stormwater Engineer*** The updated stormwater design has been updated to be in the alignment of the kerb and gutter as per the SOCC current Guide to Codes and Practices for Street Opening Document. This will require the partial reconstruction of Conferta Avenue.	**Appendix 13**
14. The engineering plans are to include detail to demonstrate the overland flow path through the site	***Aecom*** ***Civil & Stormwater Engineer*** A drainage catchment plan has been included to show overland flow path.	**Appendix 13**
15. An external and internal catchment plan is to be shown within the engineering concept plan. All proposed stormwater pipes,	***Aecom*** ***Civil & Stormwater Engineer*** A drainage catchment plan has been	**Appendix 13**

easements and overland flow paths are to be adequately sized in this regard.	included to show overland flow path.	
16. The proposed staging plan must ensure that all engineering amenity (including stormwater treatment measures and conveyance) and traffic circulation is catered for within all stages of the development. The engineering plans should reflect the respective intended staging	***Aecom*** ***Civil & Stormwater Engineer*** As shown in section 2.10 of AECOMs Civil and Stormwater Report – staging has considered utilities, stormwater and traffic circulation for all stages of development.	**Appendix 13** **Appendix 14**
Issue/recommendation	**Project response**	**Appendix**
6. Drainage		
Amended plans and modelling are required to address the following: 17. There is generally insufficient information to provide a full assessment. More details are required generally. Provide sections through proprietary water quality chambers and show final details for the regional bioretention basin amendments.	***Aecom*** ***Civil & Stormwater Engineer*** The SEI calculations have been updated and checked against these comments. The BCC method has been followed and updated to only consider private lots SEI independently.	**Appendix 13**
18. Revised subdivision plans by Daw and Walton are required to address the following; o provide the eastern end of the public loop road within Lot 2931 o for residential lots only, provide a 5m x 5m splay corner o for commercial/ business/ mixed lots, provide an 8m x 8m splay corner.	***Daw & Walton*** ***Surveyor*** Revised Subdivision plan included in the documentation which show a 5m x 5m splay corner for the residential blocks.	**Appendix 15**
19. The proposed water quality and water conservation strategy to achieve the Stream Erosion Index (SEI) of 3.5 or lower is incorrect.	***Aecom*** ***Civil & Stormwater Engineer*** The SEI calculations have been updated and checked against these comments. The BCC method has been followed and updated to only consider private lots SEI independently.	**Appendix 18**
o The Council roads, regional bioretention basin and bioretention street pits (where used) are to be considered independently of the SEI requirements for the lots. There is no requirement for the public infrastructure to achieve the SEI as this is considered satisfied using the regional basin	***Aecom*** ***Civil & Stormwater Engineer*** This is noted, the model has been updated to separate public/private - SEI calculations are only for the private realm.	**Appendix 18** **Appendix 19**

o as a concession the SEI can be averaged out over all the lots (excluding public roads and regional bioretention as detailed above)	***Aecom*** ***Civil & Stormwater Engineer*** This is noted and has been incorporated into the revised SEI calculations.	**Appendix 13** **Appendix 14**
o to provide more temporary storage on each site, a water quality strategy using Stormfilters or SPEL Bayfilters is required instead of Jellyfish which has no storage	***Aecom*** ***Civil & Stormwater Engineer*** The SEI calculation indicates additional temporary storage not required. We have provided storm filters within one catchment but generally jellyfish filters were used to provide filtration treatment.	**Appendix 13** **Appendix 14**
20. any development with a commercial or business component is required to use rainwater for toilet flushing, supplied using roofwater and topped up with mains water or recycled water where available	***Aecom*** ***Civil & Stormwater Engineer*** This is noted and demand from commercial component has been included in rainwater tank demand and sizing in Section 5.4 of AECOMs Civil and Stormwater Report	**Appendix 14**
o where swales are used on site as a water quality device, they must be watered using rainwater and topped with mains water or recycled water where available.	***Aecom*** ***Civil & Stormwater Engineer*** While irrigation water has been provided for the swales, these are no longer required to be water quality swales and are only utilised as an overland flow path.	
o the proposed methodology used in assessing the SEI appears inappropriate. Use the methodology as per Council requirements for the lots only. Include the pre-model as detailed below.	***Aecom*** ***Civil & Stormwater Engineer*** Updated to only consider private lots. Council method has been followed	**Appendix 18**
o provide 2 separate and additional MUSIC models (pre and post) to demonstrate the Stream Erosion Index (SEI) for the lots only is less than 3.5 based on the technique in the Council's MUSIC Modelling Guide in part 4 of the Developer Handbook for Water Sensitive Urban Design, available on Council's website. The pre-development is to consider a vacant pervious block. Provide all calculations used to determine critical.	***Aecom*** ***Civil & Stormwater Engineer*** Updated to only consider private lots and the calculations are attached to this response using the BCC Method. Additionally, the MUSIC models have been updated to provide 2 separate models, these will be contained within the Response to Submissions	**Appendix 18** **Appendix 19**

21. An amended water quality strategy for public infrastructure, including roads is required to address the following: o This area covers the public roads and public park only.	***Aecom*** ***Civil & Stormwater Engineer*** This has been updated in the MUSIC models, the public model has assessed separately. Private lots included with generic nodes representing the required treatment percentages. Revised MUSIC models are attached.	**Appendix 18** **Appendix 19**
o provide a water quality catchment plan with areas and showing any bypass such as parts of Cudgegong Road	***Aecom*** ***Civil & Stormwater Engineer*** Catchment plan for water quality is included within the revised Civil and Stormwater Report	**Appendix 14**
o bioretention street trees are unable to be maintained by current Council staff resources. If these elements are provided, the filter area cannot be counted towards the regional water quality targets	***Aecom*** ***Civil & Stormwater Engineer*** Street trees are not included in the updated MUSIC model for the public domain.	**Appendix 19**
o a separate MUSIC model is required to assess the impact of the proposal on the off-site Council regional bioretention facility. In preparing the separate MUSIC model, consider representative land use nodes for the lots (roof, road, courtyard, pervious) and then a generic node representing the required removal rates. Ignore rainwater tanks, swales or proprietary devices on the lots	***Aecom*** ***Civil & Stormwater Engineer*** The MUSIC model has been updated, in particular the external catchments have been updated and some external road area removed as the drainage is not going to the bioretention basin (e.g. Tallawong Rd and Cudgegong bypass). Cudgegong Rd bypass has still included in model when assessing treatment targets. Tallawong Rd considered separated from model and not included in assessment.	**Appendix 19**
o Figure 18 of the Civil and Stormwater Report prepared by AECOM Project No 60618532, dated 07.05.2020 shows the regional bioretention basin with an existing filter area of 431m² and the additional filter area highlighted but no size shown. The current MUSIC model (to be revised) shows a total required filter area of 734m². This almost doubles the existing filter area, but the area shown on the plan appears out of scale or insufficient to achieve this.	***Aecom*** ***Civil & Stormwater Engineer*** N/A. Bioretention basin upgrade no longer required, refer responses above and revised Civil and Stormwater Report	**Appendix 14**

o the design appears to show the current basin expanding towards Cudgegong Road using retaining walls along the road boundary but given its proximity to the intersection with Schofields Road it is unclear how this area can be safely and effectively maintained.	***Aecom*** ***Civil & Stormwater Engineer*** N/A. Bioretention basin upgrade no longer required, refer responses above and revised Civil and Stormwater Report.	**Appendix 14**
• a more detailed investigation of the site for regional bioretention and in particular the services is required to demonstrate: 1. what area is reasonable available and maintainable to the west of the current basin 2. whether the existing basin can be expanded to the east using part of the old road (services may be an issue), or 3. whether the existing basin can be expanded to the south and reconstruct the current subsoil collection and overflow arrangements, or 4. can a splitter pit be provided downstream of the GPT and a portion of flow redirected around the existing basin to a new bioretention basin located downstream (possible perched up) to operate independently of the existing basin, or 5. a combination of two or more of the above.	***Aecom*** ***Civil & Stormwater Engineer*** N/A. Bioretention basin upgrade no longer required, refer responses above and revised Civil and Stormwater Report.	**Appendix 14**
6. Amended MUSIC modelling for the lots is required to address the following:		
o provide a water quality catchment plan with areas and showing any bypass. Show what areas flow to what devices	***Aecom*** ***Civil & Stormwater Engineer*** Catchment plan for water quality has been provided in the revised Civil and Stormwater Report.	**Appendix 13** **Appendix 14**
o consider the lots only and ignore the roads and public park (except for irrigation of the park using the RWT under the private road)	***Aecom*** ***Civil & Stormwater Engineer*** This has been incorporated.	**Appendix 18** **Appendix 19**
o consider representative land use nodes for the lots (roof, road, courtyard, pervious)	***Aecom*** ***Civil & Stormwater Engineers*** This has been incorporated.	**Appendix 18** **Appendix 19**
o provide a junction node downstream of each lot	***Aecom*** ***Civil & Stormwater Engineers*** This has been incorporated. Flow splitter results in lots having to be	**Appendix 18** **Appendix 19**

	determined overall rather than lot by lot.	
o the water usage proposed for landscape watering appears too high. Given that the bioretention street trees are self-watering, demand outside of the park appears low and usage within the park is generally low with native planting. Provide supporting details	***Aecom*** ***Civil & Stormwater Engineers*** Assumed landscaping/planting irrigation requirement is low, therefore irrigation only considered for green space/ lawn/larger landscaped areas. Council's recommendation of 0.4kl/yr/m2 has been adopted.	
o the bioretention street filter depth at 450mm is too low for a tree. A minimum 900 to 1000mm depth of filter media is required for a decent canopy tree. Area could also be increased	***Aecom*** ***Civil & Stormwater Engineers*** BCC Street Tree standard detail is recommended within the revised Civil and Stormwater report.	**Appendix 14**
o it is noted that the street trees are on a slope and, allowing for some sediment build-up, consider a 50mm EDD for the street trees within the private road	***Aecom*** ***Civil & Stormwater Engineers*** This has been considered but determined that EDD of 100mm used previously is suitable for private road.	**Appendix 18**
o where Stormfilters are used, size the Stormfilter chamber upstream of the weir up to a maximum of 20m³/Ha draining to the chamber	***Aecom*** ***Civil & Stormwater Engineers*** Stormwater 360 spreadsheet used to determine chamber/cartridges required and sizing of chamber. Included in MUSIC model	**Appendix 18** **Appendix 19**
o where SPEL Bayfilters are used, size the SPEL chamber upstream of the weir between 1 to 2m³/cartridge		
o include in the filter chamber a baffle extending from the tank soffit to below the weir and set 250mm upstream from the weir to retain floatables in accordance with Sheet 23 of Council's WSUD drawings A(BS)175M o the filter weir length is in accordance with Sheet 23 of Council's WSUD drawings A(BS)175M	***Aecom*** ***Civil & Stormwater Engineers*** SPEL Bayfilters not used	
o clearly identify the proprietary device being used and the model/size	***Aecom*** ***Civil & Stormwater Engineers*** Device/sizes to be noted on stormwater plan	**Appendix 13**
o provide a rainwater tank for each building with a commercial or business component or where swale is designed as part of the	***Aecom*** ***Civil & Stormwater Engineers*** Instead of individual rainwater tanks,	**Appendix 13**

treatment train	a centralised larger rainwater tank has been proposed for this purpose.	
o for industrial/ commercial development, a minimum of 80% of the non-potable water uses on site is to be met through rainwater. This is to be assessed using the node water balance in MUSIC. Allow for a 10% loss in rainwater tank size volume in MUSIC before overflow to that shown on the design plans below the overflow invert, to allow for anaerobic zones and mains water top up levels	***Aecom*** ***Civil & Stormwater Engineers*** This is noted and demand from commercial component has been included in rainwater tank demand and sizing. Notably, the rainwater tank does not achieve the target of providing reused water for 80% of the commercial non-potable and irrigation uses. The rainwater tank does however achieve an annual reuse rate of 80% of the total rainfall that falls onto the non-trafficable roof catchments, lowering the runoff volume to the drainage system and downstream waterways. This is discussed further within the revised Civil and Stormwater report.	**Appendix 14**
o for industrial/ commercial development, allow for internal rainwater reuse of 0.1KL/ day per toilet/ urinal. However, where the site is occupied say 5 days per week, the daily usage rate is to be reduced by 5/7	***Aecom*** ***Civil & Stormwater Engineers*** Please see response to comment above.	
o for watering landscaped areas only e.g. parks, common areas, allow 0.4 kL/year/m² as PET-Rain	***Aecom*** ***Civil & Stormwater Engineers*** This has been included in the revised MUSIC model.	**Appendix 18** **Appendix 19**
o natural treatment systems, such as swales and bioretention systems which rely on vegetation for effective pollutant removal, are required to be irrigated with non-potable water at the minimum rate of 0.4kL/year/m2	***Aecom*** ***Civil & Stormwater Engineers*** Swales irrigated with rainwater. However, these are no longer required as treatment systems.	
o the methodology for calculating the swale in MUSIC is incorrect. Either delete this node altogether or request the detailed swale sizing requirements from Council.	***Aecom*** ***Civil & Stormwater Engineers*** Swales irrigated with rainwater. However, these are no longer required as treatment systems.	
o Provide a Groundwater Assessment Report to ensure there is no adverse impact from the basement carpark on groundwater.	***Aecom*** ***Civil & Stormwater Engineers*** Please refer to the Ground Water Assessment Report completed by EI Australia.	**Appendix 21**
Issue/recommendation	**Project response**	**Appendix**

7. Open Space		
The following matters need to be addressed by the applicant:	***Turner Architect*** All items below addressed by the landscape architect are shown in Architectural GA Plans: - DA-110 series - DA-112 series - DA-113 series - DA-114 series	**Appendix 1**
7. Provide seating with backrest and armrests around the lawn area, use BCC HUB furniture.	***Turf Landscape Architect*** Seating has been provided to the north and south of the lawn with back and arm rest as noted in the legend of the landscape DA reports. The legend has now been updated to specify the BCC Hub Range.	**Appendix 5**
8. Provide inclusive play experience and improve accessibility to the play space, please refer to Council's local play guideline	***Turf Landscape Architect*** An integrated Inclusive play experience as identified in the everyone can play guidelines has been provided through the use of a flush carousel and basket swing as well as integrated interactive panels in the ground level of the Quad Cube Play tower.	**Appendix 5**
9. Remove playspace fencing along the south-east boundary	***Turf Landscape Architect*** Due to the proximity of the playground to Conferta avenue and the Private road the child safe playground fence is recommended around the entire playground to mitigate the risk to children wondering on the road.	**Appendix 4** **Appendix 5**
10. There are stairs connecting upper level and playspace. Applicant to confirm an accessible route from upper level to play space.	***Turner Architect*** Refer to the plan showing arrows of accessible route from upper level to the play space.	**Appendix 1**

11. Provide youth facilities, such as ping pong table, in public open space area	***Turf Landscape Architect*** The Lawn provide an informal youth recreation space providing the ability for ball sports such as kicking a football, throwing a Frisbee.	**Appendix 5**
12. Since this is the only public playspace in this precinct, maximise play area and reduce garden bed area. Provide a variety of play experience. Avoid duplication of play equipment. Take advantage of the level difference to create a climbing wall, embankment slide or climbing nets etc.	***Turf Landscape Architect*** The Design incorporates a combination of nature play through the planted areas using rocks logs & stepping-stones as well as structured play including a play tower, basket swing and Inclusive carousel. An additional rope climbing net has been added around the trees on the planted slope as a new play experience.	**Appendix 5**
13. Large trees to be provided in the playspace and all deep soil areas	***Turf Landscape Architect*** Large trees have been provided in the playground ie. Eucalyptus and Angophora species.	**Appendix 5**
14. Improve accessibility, remove unnecessary raised kerb. Provide flush kerb in some locations for equal access to the lawn area	***Turf Landscape Architect*** Raised Kerb has been provided to create accessible grades to the Lawn and manage the level transition in the park. 3 kerb ramps have been added around the lawn to provided equal access.	**Appendix 5**
15. Private road – create pedestrian dominant access	***Turf Landscape Architect*** The private road is flush with the pedestrian pavement of both side of the street with bollards and planting restricting vehicle movement. Breaks have been provided through the planting to increase pedestrian permeability.	**Appendix 5**
16. Street tree locations – provide staggered layout and flush kerbs to achieve WSUD.	***Aecom Civil & Stormwater Engineers*** Street trees are not included in the updated MUSIC model for the public domain.	**Appendix 19**

17. More large trees in lawn area.	***Turf Landscape Architect*** Large trees have been provided in the playground ie. Eucalyptus and Angophora species	**Appendix 5**
18. Lighting must not connect to Council's switchboard.	***Deicorp Projects (Tallawong Station) Pty Ltd Applicant*** This is noted and private lighting in publicly accessible areas will not be connected to Council's switchboard.	
19. Signage to be integrated in the park to advise the public of the land ownership and maintenance of the park.	***Turf Landscape Architect*** Draft Plan of Management for Public Domain has been developed in accordance with the requirements.	**Appendix 10**
Issue/recommendation	**Project response**	**Appendix**
8. Tree Management		
Council's Tree Management Section has reviewed the arborist report and agrees with the conclusions and recommendations therein, with the exception of the removal of trees 31 & 32. These 2 trees should have a detailed tree protection and management plan in accordance with the Australian Standard AS4970 Protection of Trees on Development Sites 2009 and be provided prior to works commencing.	***RainTree Arborist*** Please refer to the Tree Management Plan. Drainage alignment updated to avoid trees 31 & 32, this is incorporated in the revised Civil and Stormwater Report.	**Appendix 14** **Appendix 20**

Transport for NSW

Table 4: Key issues raised Transport for NSW

Issue/recommendation	Project response	Appendix
1.		
TfNSW has previously acquired a strip of land for road along the Schofields Road frontage of the subject property, as shown by blue colour on the attached Aerial – "X". All buildings and structures are to be wholly within the freehold property (unlimited in height or depth), along the Schofields Road boundary. It is noted that the submitted plans show pedestrian paths, erosion, and sediment control measures such as fencing, and site office and amenities on TfNSW owned land. The plans are to be amended accordingly to ensure the development and associated infrastructure is located entirely within the development site.	***Deicorp Projects (Tallawong Station) Pty Ltd*** ***Applicant*** Plans are revised to show pedestrian paths, erosion, and sediment control measures such as fencing, and site office and amenities within the development site.	**Appendix 13** **Appendix 12**
Issue/recommendation	**Project response**	**Appendix**
2.		
Any stormwater connections for this development to the existing stormwater pits located within TfNSW owned land will require the developer to contact TfNSW regarding land acquisition requirements.	***Aecom*** ***Civil & Stormwater Engineer*** RMS has been contacted regarding the stormwater connection and they requested that the stormwater from the development site is directed to the existing M1 pit via stormwater infrastructure instead of the new pit construction within existing pipes. The revised design to connect directly to the existing M1 pit rather than a new pit construction over the top of existing pipes.	**Appendix 13**
Issue/recommendation	**Project response**	**Appendix**
7.		
The swept path of the longest vehicle (including garbage trucks, building maintenance vehicles and removalists) entering and exiting the subject site, as well as maneuverability through the site, shall be in accordance with AUSTROADS.	***Deicorp Projects (Tallawong Station) Pty Ltd*** ***Applicant*** Swept path diagrams for BCC waste collection vehicle have been included in the Traffic Impact Assessment report prepared by Barker Ryan Stewart. (see attached).	**Appendix 8**

Issue/recommendation	Project response	Appendix
10.		
The developer to provide off-street bicycle parking spaces and end of trip facilities in accordance with Austroads Guide to Traffic Management Part 11: Parking, particularly Table C2.7 Bicycle Parking Provision Rates.	***Deicorp Projects (Tallawong Station) Pty Ltd*** ***Applicant*** Off-street bicycle parking spaces were provided with the SSD submission. End of trip facility have been added in within the retail amenities.	**Appendix 1**
Issue/recommendation	**Project response**	**Appendix**
11.		
The developer is to provide a Green Travel Plan for the approval of TfNSW to promote sustainable travel.	***Deicorp Projects (Tallawong Station) Pty Ltd*** ***Applicant*** Green Travel Plan was provided with the SSD submission.	
Issue/recommendation	**Project response**	**Appendix**
12.		
Car parking rates approved as part of the concept plan are lower than proposed and that the rates for this development application be modified in accordance with the concept plan.	***Deicorp Projects (Tallawong Station) Pty Ltd*** ***Applicant*** The proposal complies with the minimum RMS Guide to Traffic Generating Developments parking rates. It is proposed to provide 1,139 residential parking spaces which is 102 (10%) more spaces than the minimum requirement in the RMS Guide. It is 99 spaces less than the Council DCP requirement, providing a reasonable balance. Moreover, concept was approved with the minimum parking required for the development.	**Appendix 8**
Issue/recommendation	**Project response**	**Appendix**
NSW policy emphasises the importance of walking and cycling as effective means to integrate transport with land use. In order to complete the active transport network for this development site and encourage residents, visitors and staff to utilise sustainable transport modes the following actions are encouraged. The northern footpath on Conferta Avenue for the length of the development site frontage be designated as a shared path with a minimum width of 2.5m (wider if possible); and The southern footpath on Conferta Avenue for the length of the development site frontage be widened	***Deicorp Projects (Tallawong Station) Pty Ltd*** ***Applicant*** Footpaths are consistently provided on both sides of the roads in the Development.	**Appendix 1**

to 2.5m (wider if possible) and designated as a shared path		

DPIE Water NRAR

Table 5: Response to issues raised by the DPIE Water NRAR

Issue/recommendation	Project response	Appendix
I refer to your email of 18 June 2020 to the Department of Planning, Industry and Environment (DPIE) Water and the Natural Resources Access Regulator (NRAR) about the above matter. The following recommendations are provided by DPIE Water and NRAR. Please note Crown Lands, the Department of Primary Industries (DPI) – Fisheries and DPI - Agriculture all now provide a separate response directly to you. **Prior to Approval** • The proponent should identify the water source that is to be extracted from during construction (for activities such as dust suppression). • As the activity will intercept the groundwater table, an assessment of impact against the 'minimal impact considerations' of the NSW Aquifer Interference Policy (2012) is required. • The proponent should obtain a water access licence should the project be required to dewater greater than 3ML/year. An estimate of the groundwater take is required for consideration of licensing requirements. If less than 3 ML/yr is predicted, an exemption is available under cl. 7 of Schedule 4 of the Water Management (General) Regulation. To exercise this exemption certain requirements must be met to ensure that less than 3 ML of water is taken. To qualify for the exemption, refer to clause 21(6) of the Water Management (General) Regulation 2018 which includes: • record the water take within 24 hours in the approved form and manner;	***Deicorp Projects (Tallawong Station) Pty Ltd*** ***Applicant*** EI Australia have produced a Ground Water Assessment to accompany the submission to the Department of Planning.	**Appendix 21**

• provide the water take records to the Minister by no later than 28 July for the year ending 1 July during which the water was taken (e.g. included in the annual report); • keep the water take records for a period of five years. Any further referrals to DPIE – NRAR & Water can be sent by email to: landuse.enquiries@dpie.nsw.gov.au.		

NSW Rural Fire Service

Table 6: Key issues raised by NSW Fire Service

Issue/recommendation	Project response	Appendix
The New South Wales Rural Fire Service (NSW RFS) has reviewed the information provided and advises the following: A bush fire report that addresses the relevant requirements of Planning for Bush Fire Protection 2019 needs to be provided for further assessment as recommended in the Secretary's Environmental Assessment Requirements (SEARs) issued. It should be noted that the development is in proximity of both existing unmanaged vegetation and future revegetated corridors to the north, east and southeast. If additional information is not received within 21 days the application will be refused on the basis of Requested Information not provided. A formal request for re-assessment would be required after this time.	***Deicorp Projects (Tallawong Station) Pty Ltd*** ***Applicant*** A letter prepared by Australian Bushfire Protection Planners, establishes the context of the Bushfire Protection Assessment Report prepared for the proposed Cudgegong Road Station Precinct – South – Reference No. B173114 – 3, dated 10.05.2018 against the requirements of Planning for Bushfire Protection 2019.	**Appendix 11**

DPIE Environment, Energy and Science (EES)

Table 7: Key issues raised by DPIE EES

Issue/recommendation	Project response	Appendix
Flooding		
EES has reviewed the Flood Impact Assessment report (FIA) prepared by AECOM dated 16 April 2020 and considered that the report is inadequate due to the following reasons: 20. the report provides no information on existing flood behavior 21. the report lacks details on model results do not clear what is the extent of the model the limit of maps does not show the impacts of development outside of the site, the assessment should map the site and areas (i.e. to Second Ponds Creek to the west and at the inflow locations where the boundaries of the model were set up)	***Aecom*** ***Civil & Stormwater Engineer*** Summary of report updates below: • Section 3.2 has been added to report discussing existing flood conditions. Depth maps for existing conditions added in Figure B1 to B7. • AECOM have updated Section 3 discusses existing flood conditions. Additional comparative discussion added to flood planning levels has been included under Section 2.9; • Model extent has been made clearer on maps and with a legend added for clarity. • Extent of maps increased to show extent of assessment and impacts to development outside the site.	**Appendix 25**
It is acknowledged from the brief discussion in the report that the consultant has undertaken a rainfall on grid TUFLOW modelling. However, the purpose of a FIA is to outline the flood risk at the site and outline how this risk is to be managed. This would include addressing the following floodplain risk management aspects to assist and guide decision-making at this planning stage: existing flood behaviour for the full range of flooding impact of development on flood behaviour the full range of flooding impact of flooding on development the full range of flooding and assess the compatibility of the proposed development with flood risk emergency management consideration (if applicable).	***Aecom*** ***Civil & Stormwater Engineer*** Summary of report updates below: • Section 3.2 added to report discussing existing flood conditions. Depth maps for existing conditions added in Figure B1 to B7. • Additional models have been run to assess impacts across full range of events. Impact maps for the full range of events - 20% to 1% AEPs and PMF have been added to report in Appendix A. • Sections 3.4 to 3.6 in the report cover the flood impacts, Flood evacuation and flood hazard for the site. Additional figures	**Appendix 25**

	have been included in Appendix A, showing the assessment of flood depths, impacts and hazard for the full range of flooding. • Emergency management considerations are covered under Sections 3.5 and 3.6 of the report.	

Responses to organisation submissions

Endeavour Energy

Table 8: Key issues raised by Endeavour Energy

Issue/recommendation	Project response	Appendix
4.		
As an adjoining or nearby owners and occupiers, whilst Endeavour Energy is not necessarily opposed to the Development Application, it does have concerns over the traffic impact. The Traffic and Parking Impact Assessment Report provides the following summary of the proposed parking and assessment of the current commuter car parking. As the report indicates that the moment that the Tallawong Station car parks were completed and opened they were at capacity, even when considering the principles of transit-oriented development etc. it is difficult to imagine that the provision of an additional 81 proposed parking spaces will address	***Barker Ryan Stewart*** ***Traffic Engineer*** It is proposed to provide sufficient off-street parking in the development to cater for residents, visitors and retail / commercial customers. We agree, that as the existing commuter car park is already under capacity any fewer parking spaces provided than that proposed in the development would put further pressure on this car park and the surrounding streets. The commuter carpark is the responsibility of Sydney Metro.	**Appendix 8**

these issues and not detrimentally impact the on-street parking and the surrounding road network. Given the likely worsening of the car parking situation, the remaining original section of Cudgegong Road to which Endeavour Energy's Rouse Hill Switching Station retains a significant frontage could become subject to increased informal car parking and possibly impact on ready access required.

Table 3: Proposed parking

Land Use	Concept SSD 9063 Approval requirement	SSD 9063 rates	RMS Guide Requirement (based on proposal)	Council DCP Requirement (based on proposal)	Proposed Parking
Residential sub total	1,144	919	1,037	1,238	1,068
Non-Residential total	143	143	345	348	300
Total	1,287	1,062	1,382	1,586	1,368

4.3 Tallawong Station existing commuter car parks

In summary we undertook a car park survey on Thursday 12 March 2020 with the following results:

- Informal car parking on the opposite side of Cudgegong Road to the development site – 108 vehicles parked at 4:15pm
- On street parking in Cudgegong Road stretching from Sydney Metro to Rouse Road (400m) – 64 cars parked at 4:15pm.

The car parking survey reveals that the 1,000 existing car parking spaces located at the Tallawong Station are already at capacity (with the exception of the accessible spaces in P1 which remained vacant) with a substantial overflow of all-day parking currently occurring onto the surrounding street network and adjoining properties during the working week.

Note that this car park survey was also undertaken at a time when the coronavirus was already impacting the use of public transport.

Issue/recommendation	Project response	Appendix
5. Network Capacity / Connections		
From the Architectural Package it appears that provision has been made for 7 padmount substations in 5 locations ie. there are 2 locations with dual transformers. With the exception of the one proposed location fronting Cudgegong Road, to meet the requirements of the padmount substation fire restriction, fire rated construction will be required to the adjoining buildings. As shown in the following Figure A4.3 'Padmount easements and clearances', from Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights', padmount substations require: o Easement with a minimum size of 2.75 x 5.5 metres (single transformer) o Restriction for fire rating which usually extends 3 metres horizontally from the base of the substation footing and 6 metres vertically from the same point. o Restriction for swimming pools which extends 5 metres from the easement.	***DEP*** ***Level 3 Electrical Engineer*** The location of the proposed new Padmount Substations & the adjacent structures has been developed in consultation with the project team & complies with Endeavour Energy's network standards. The easements & restrictions zones for the proposed new Padmount Substations has been developed in consultation with the consultant team & complies with Endeavour Energy's network standards.	**Appendix 15**
Issue/recommendation	**Project response**	**Appendix**
Network Asset Design		

Endeavour Energy's Company Policy 9.2.5 'Network Asset Design', includes the following updated requirements for electricity connections to new urban subdivision / development: **Reticulation Policy** In order to improve the reliability performance of and to reduce the operating expenditure on the network over the long term the company has adopted the strategy of requiring new lines to be either underground cables or where overhead is permitted, to be predominantly of covered or insulated construction. Notwithstanding this strategy, bare wire overhead construction is appropriate and permitted in some situations as detailed below. In areas with the potential for significant overhanging foliage, CCT is used to provide increased reliability as it is less susceptible to outages from wind-blown branches and debris than bare conductors. CCT must only be used in treed2[2] areas as the probability of a direct lightning shire Is low. in open areas where the line is not shielded from a direct lightning strike, bare conductors must generally be used for 1 1W and nkv reticulation. Non-metallic Screened High Voltage Aerie) Bundled Gable (NMSHVABC) must be used in areas which are heavily treed and where it is not practicable to maintain a tree clearing envelope around the conductors. [2]A "treed" area is one with a substantial number of trees adjacent to the tine. in each span_ In these situations CCT is used to provide increased variability as it is less susceptible to outages from windblown. **Urban areas** Reticulation of new residential subdivisions will be underground. In areas-low bush fire consequence, new lines within existing overhead areas can be overhead, unless underground lines are cost justified or required by either environmental or local council requirements. Where underground reticulation is required on a feeder that supplies a mixture of industrial, commercial, and/or residential loads, the standard of underground construction will apply to all types of load within that development Where ducting is used, adequate spare ducts and easements must be provided at the outset to cover the final load requirements of the entire development plan. Extensions to the existing overhead 11kV/22kV network must generally be underground. Bare wire will be used for	***DEP*** ***Level 3 Electrical Engineer*** All new reticulation & cabling proposed for this project will be installed underground.	

conductor replacements and augmentations except in treed areas where CCT or NIASHVABC must be used. Extensions to the existing overhead LV network and augmentations must either be underground or ABC. Conductor replacements greater than 100m in route length must utilise aerial bundled cable.		
Issue/recommendation	**Project response**	**Appendix**
7. Flooding and Drainage		
Whilst the Flood Impact Assessment does address the likely flood impacts on 'Area 5 – Council Owned SP2 Lands' being the area east of Cudgegong Road, it does not appear to specifically address the Rouse Hill Switching Station site which is also located to the east of Cudgegong Road. The Assessment indicates there will be post development impacts which are deemed to be considered to be acceptable. However, it is imperative that as a result there is no worsening of the existing flood impacts on the nearby properties / existing development. Reducing the effectiveness of flood conveyance or flood storage areas increases the risk of property damage to other parties – which is of particular concern for the Rouse Hill Switching Station. This issue needs to be specifically addressed and Endeavour Energy should determine if any impacts are considered to be acceptable to the Rouse Hill Switching Station.	***Aecom*** ***Civil & Stormwater Engineer*** The flood model extent has been increased to include the Rouse Hill Switching Station. No impact from the proposed development is shown for the flood events up to the 1%AEP+15% climate change event. This is shown in the revised Flood Impact Assessment	**Appendix 25**
Issue/recommendation	**Project response**	**Appendix**
Prudent Avoidance		
Endeavour Energy has noted that in the Environmental Impact Statement Section 4.3 'Surrounding Development' mentions 'To the east of Cudgegong Road is an Endeavour Energy Substation and the Second Ponds Creek reserve'. Besides the following photograph there is no apparent further mention of Rouse Hill Switch Station or of the Feeder 9JA 132 kV high voltage overhead power lines. In addition, as mentioned in Endeavour Energy's submission made to the Department's regarding State Significant Development SSD-9063-Mod-1 for the Tallawong Station Precinct South, the increase of building heights to the western site of Cudgegong Road are not in keeping with the principles of prudent avoidance to electricity infrastructure .	***DEP*** ***Level 3 Electrical Engineer*** Endeavour Energy's Rouse Hill Switching Station is located on the Western side of Cudgegong Rd, approx. 70m West of the site. Endeavour Energy's 132kV overhead feeder 9JA located on the Western side of Cudgegong Rd, approx. 80m West of the site. It crosses the railway line & terminates into the Rouse Hill Switching Station.	

Issue/recommendation	Project response	Appendix
9.		
Endeavour Energy has noted that the Acoustical Report does not appear to refer to the existing electricity infrastructure in proximity of the site. Although the Rouse Hill Switching Station currently operates without transformers, overhead power lines can produce an audible sound or buzz as a side effect of carrying electricity. The sound can be louder if there is increased moisture (during rain, fog, frost etc.) or pollutants in the air. The sound usually occurs at the poles at the insulators supporting the power lines and increase at higher voltages. In this instance whilst the acoustical requirements related to the proximity of the site to the Tallawong Station and the Metro North West Line would also address any issues related to the electricity infrastructure, with increasing density and building heights Endeavour Energy believes it is still worth considering. Endeavour Energy has also noted that the Acoustic Report in regard to the Mechanical Plant and Building Use Noise Impacts includes the following advice and this should similarly apply to the distribution substations required to facilitate the proposed development.	***Koikas*** ***Acoustic & Vibration Engineer*** During our site visit (twice) there was no audible noise from the Endeavour Energy Sub Station. There was also no noticeable noise measured on our noise loggers left there for over 7 days.	**Appendix 7**

Responses to public submissions

Public submissions

Table 9: Concerns raised by the public

Issue/recommendation	Project response	Appendix
Oscar Huijsse, KELLYVILLE RIDGE | Objects		
The proposal will significantly increase road use regardless of the metro and the area is already struggling under excess road users trying to get around Rouse Hill, Windsor Rd areas towards Castle Hill. Add the fact of many other significant developments like Hills of Carmel, Schofield's and Riverstone through to Box Hill, is only going to add more traffic that will drive road use and associated slow down in traffic movements.	***Barker Ryan Stewart*** ***Traffic Engineer*** The BRS Traffic report included an analysis of the traffic generated by the development and the potential impact on the surrounding road network. It demonstrated that the road network has sufficient capacity to cater for the additional traffic generated by the development. The BRS findings and recommendations also agree with those presented in SCT Consulting's Traffic report analysis that was approved as	**Appendix 8**

	part of the Concept Approval. BRS's traffic report and SIDRA analysis have been submitted to TfNSW for review, and based on the items raised by TfNSW to date, there has been no concerns raised about our assessment of the traffic impacts ***Sutherland & Associates*** ***Town Planner*** The BRS Traffic report which accompanied the development application includes an analysis of the traffic generated by the development and the potential impact on the surrounding road network. It demonstrates that the road network has sufficient capacity to cater for the additional traffic generated by the development. The BRS findings and recommendations also agree with those presented in SCT Consulting's Traffic report analysis that was approved as part of the Concept Approval. BRS's traffic report and SIDRA analysis have been submitted to TfNSW for review and based on the items raised by TfNSW to date, there has been no concerns raised about our assessment of the traffic impacts.	
Issue/recommendation	**Project response**	**Appendix**
Name Withheld, THE PONDS | Objects		
I strongly object to the project as I am being the resident of The Ponds and this project will have greater negative impact on the current landscape of the suburb. Having around 1000 units just opposite to a residential suburb is not a good development. Please reject this development and build parking in the same place. Landcomm built a beautiful masterplanned suburb "The Ponds" and now they themselves building a high density development opposite to the "The PONDS"and spoilng the resedntail landscape of The Ponds.	***Sutherland & Associates*** ***Town Planner*** The proposed scale and density of the development is consistent with the desired future character of the site as established by the relevant planning controls. Furthermore, the proposal is generally consistent with the intensity, form and general arrangement of development for the site as established by the approved Concept Plan SSD 9063 and is within the identified environmental capacity of the site.	
Issue/recommendation	**Project response**	**Appendix**
Name Withheld, THE PONDS | Comments		
Hi, I built my family home on Amarco Circuit 7 years ago with the knowledge that Schofields Road would be widened. Since then, the station was approved and now 1000+ units will be built across the road	***Sutherland & Associates*** ***Town Planner*** The proposed acoustic barrier is in a location which is outside the subject site and on government	**Appendix 7**

from me. I am not opposed to the project and absolutely support the development however I am concerned that we are going to potentially have 2000+ more cars on the road accessing those units and the current road noise could potentially bounce off the apartments and penetrate towards our house. My proposal is to have a sound barrier wall constructed between Amarco Circuit and Schofields Road as shown in the attachment. This will reduce the amount of noise generated from the approval of these apartments and stop any noise bouncing off the 8 story units and penetrating back towards our house. I ask that you please seriously consider this as many people benefit from these developments such as the government, developers and the local community but can I ask that you also consider those of us who will be living opposite the development and will be faced with the long term effects such as increased road noise. I would be happy to work with you to discuss any options or ideas that could be proposed. I just feel that the residents of Amarco Circuit deserve a little in return for the major approval of these apartments. Thank you for reading my submission and I look forward to hearing from you soon.	land and therefore the installation of such a barrier is beyond the legal capacity of Deicorp. Notwithstanding this, an Acoustic Report prepared by Koikas Acoustics accompanied the subject development application and assesses the acoustic impacts of the proposal. The assessment does not reveal that there is any significant acoustic impact resulting from the additional traffic associated with the proposed development as to warrant the installation of an acoustic barrier. The proposal is generally consistent with the intensity, form and general arrangement of development for the site as established by the approved Concept Plan SSD 9063 and is within the identified environmental capacity of the site.	
Issue/recommendation	**Project response**	**Appendix**
Harpeeet Singh, THE PONDS | Objects		
The current Car park at Tallawong Metro Station is too small. the surrounding area residents already facing big problem as commuters park their cars in surrounding streets and blocking people's driveways. while young kids walking to the school there are big number of cars in streets looking place for parking. local council is well aware of it as they are issuing parking fines on regular basis. More dwellings will be a big disaster in the area. we are in desperate need of car park extension for metro commuters. There supposed to be a multistory car park at first place. Rouse hill shopping center is not far from the area. before we support any further development at Tallawong station precinct, the current car park should turn into multistory car parking. If the area is developed for residential buildings there will be no room for future parking for metro users as populations is increasing. Keep in mind only 10-20% travelers are using metro at the moment due to covid 19. The situation I explained is applicable	***Barker Ryan Stewart*** ***Traffic Engineer*** It is proposed to provide sufficient off-street parking in the development to cater for residents, visitors and retail / commercial customers. We agree, that as the existing commuter car park is already under capacity any fewer parking spaces provided than that proposed in the development would put further pressure on this car park and the surrounding streets. The commuter carpark is the responsibility of Sydney Metro. ***Sutherland & Associates*** ***Town Planner*** It is agreed that it is important for the proposed development to provide sufficient parking to avoid overflow parking within The Ponds and to ensure that there is no further demand on the existing commuter car park as a result of	

without the pandemic.	the proposal. The proposal provides sufficient off-street parking in the development to cater for residents, visitors and retail / commercial customers. The commuter carpark is the responsibility of Sydney Metro and it is not Deicorp's responsibility to increase the size of the car park.	
Issue/recommendation	**Project response**	**Appendix**
Nathan Richards, THE PONDS | Comments		
I would like to add to my previous submission having further considered the proposed development. I believe to better protect the privacy and amenity of the residents living on the opposite side of Schofields Road, in particular those in Amarco Circuit, that the 2 storey buildings be located close to Schofields Road and the 6 to 8 storey buildings be set back further on the site. I'm also concerned about the proposed height of the 8 storey building and believe a 6 storey maximum would be more appropriate. By setting back the higher storey buildings, this will reduce the impact of potential shading, loss of privacy and increased noise from the residential apartments.	***Sutherland & Associates*** ***Town Planner*** The Concept Plan SSD 9063 approval has already established a built form framework and arrangement of buildings and heights for the site, including 8 storeys facing Schofield Road. The proposed development is generally consistent with this established framework. Furthermore, the proposed development presents a scale of development Schofields Road as anticipated by the planning controls, which is also considered reasonable within the context of the site, particularly noting the very generous separation of approximately 65 metres between the proposed buildings and the existing dwellings within The Ponds to the south. This is an exceptionally large distance, such that there will be no privacy or noise impacts to dwellings within The Ponds as a result of the proposed development.	
I am also concerned with what appears to be an over development of the site will potentially impact carparking in Amarco Circuit. I believe the development must have sufficient car parking spaces for the residents and their visitors being so closely located to Tallawong Station, our street could potentially become an overflow car park for this new development. Having said that, my greatest concern, as highlighted in my initial submission, is the increased noise which I believe can be mitigated by a sound wall/barrier (designed appropriately to fit in with the surrounds) located on the green space between Amarco Circuit and Schofields Road.	***Sutherland & Associates*** ***Town Planner*** It is agreed that it is important for the proposed development to provide sufficient parking to avoid overflow parking within The Ponds. The proposed development provides appropriately for on-site parking to avoid this consequence.	

Conclusion

All submissions received during the SSD 9063 exhibition period have been carefully considered. Additional information has been provided and amendments made to the documents to address issues raised in submissions where required.

The revised submission will enable the vision and objectives for the Precinct of high-quality built form and landscape outcomes, as identified in the Tallawong Station Precinct South, to be realised as the Precinct transforms over time.

The SSDA aligns with the NSW Government's priorities relating to housing affordability, local infrastructure delivery and economic development. The proposal will facilitate further urban renewal along the Sydney Metro Northwest corridor and activate the Tallawong Station Precinct.