Meadowbank Education and Employment Precinct Schools Project
Social Impact Assessment

SSD 18_9343
Prepared by Urbis
For School Infrastructure NSW
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PURPOSE OF THIS REPORT

This Social Impact Assessment has been prepared by Urbis on behalf of the NSW Department of Education (the Applicant). It accompanies an Environmental Impact Statement (EIS) in support of State Significant Development Application (SSD 18_9343) for the new Meadowbank Education and Employment Precinct Schools Project (MEEPSP) at 2 Rhodes Street, Meadowbank (the site).

The SIA is required by the Secretary's Environmental Assessment Requirements (SEARs) for SSD 18_9343.

ASSESSING SOCIAL IMPACT

An SIA is a specialist study undertaken to identify and analyse potential positive and negative social impacts associated with a development proposal. It also identifies mitigation measures and provides recommendations in accordance with professional standards and statutory obligations.

Social impacts are those that impact on people's way of life, their culture, community, environment, health and wellbeing, personal and property rights, and their fears and aspirations. Social impacts are assessed by comparing the consequence (minimal – extreme) of the impact against the likelihood (rare – very likely) of the impact occurring, both prior to and after planned mitigations.

SUMMARY OF POTENTIAL IMPACTS

Positive impacts

Educational opportunities and environment

Summary of impact	
The proposal will provide a greater enrolment capacity than presently available at Meadowbank Public School and Marsden High School and provide a significantly improved educational environment than presently available at the existing schools. Overall this will provide access to education for more children and is likely support improved educational outcomes.	
Planned mitigation measures	**Recommendations**
• None identified	• None identified
Overall impact level (considering mitigation measures)	
Based on the assessment in this report, it is expected that the proposal will result in a very high positive impact.	

Community access to school facilities

Summary of impact	
The proposal will provide recreational and cultural facilities for student use and is unlikely to place any additional demand on Council facilities. The proposal may also provide shared-use of the community hall and gymnasium, which will increase the capacity of recreational and cultural facilities in the Ryde LGA which can support the development of social cohesion between the school community and local community.	
Planned mitigation measures	**Recommendations**

• None identified	• Formalise a shared use arrangement for community use of the community hall and gymnasiums. • Consider shared use of broader recreation facilities to help improved capacity in the Ryde LGA open space network. • Draft and implement a formal Plan of Management for the operation of both schools which should include measures to address shared-use operations, interaction of students and road and pedestrian safety.
Overall impact level (considering mitigation measures)	
Based on the assessment int this report, it is expected that the proposal will result in a high positive impact.	

Negative Impacts

Traffic congestion and parking

Summary of impact	
The proposal will increase local traffic and contribute to the surrounding intersections exceeding capacity and operating at lower levels of service than the current condition. For the local community this likely to increase travel time and congestion on the roads and may impact on health and wellbeing of residents. The proposal also contains a shortfall of car parking spaces and will displace some local parking during pickup and set down (note: that short-term 'kiss and drop' spaces will be provided as part of the proposal). This is likely to increase competition for parking for the local community surrounding the site and may impact on the social cohesion of the local area.	
Planned mitigation measures	**Recommendations**
• Implementation of the School Travel Plan	• Provision of secure bicycle parking and end of trip facilities to encourage active transport.
Overall impact level (considering mitigation measures)	
Based on the implementation of the planned mitigation measures, it is expected that the proposal will result in a moderate negative impact.	

Pedestrian and cyclist safety

Summary of impact	
The consequences of a conflict between a vehicle and pedestrian can be severe, including injury and death. The proposal is will introduce significant pedestrian volumes during the peak periods. This will increase the foot traffic on the existing pathways and may increase the potential for pedestrian conflict with cars and other vehicles.	
Planned mitigation measures	**Recommendations**

• Implementation of the School Travel Plan	• Implementation of footpath widening, and additional pedestrian crossings outlined in the Traffic Impact Assessment. • Implementation of an RMS trained School Crossing Supervisor for management of crossings recommended in the Traffic Impact Assessment. • Consultation with local businesses on Rhodes Street regarding the interaction between the proposal and access driveways on Rhodes Street and management of pick up and drop off periods.
Overall impact level (considering mitigation measures)	
Based on the implementation of the planned mitigation measures, it is expected that the proposal will result in a minor negative impact.	

Disruptions during construction

Summary of impact	
Construction methodology details are unknown at the time of this report. However, it is expected that due to the proximity of nearby residences and businesses there will be disruption to their current living environment. Students and teachers at TAFE NSW campus are also likely to experience a reduced learning during this construction. The impact will be limited to the period of the construction phase.	
Planned mitigation measures	**Recommendations**
• Implementation of a Construction Noise and Vibration Management Plan prior to commencement of works.	• Notification/communication nearby residents and businesses prior to commencement of construction works.
Overall impact level (considering mitigation measures)	
Based on the implementation of the planned mitigation measures and recommendations, it is expected that the proposal will have minor negative impact.	

CONCLUSION

This report addresses the SEARs requirement to assess the social consequence of the school's relative location, including the impact the proposal is likely to have on local recreation/community/cultural facilities and how it will interact with the existing community.

This assessment has found that the proposal will not generate a demand on existing Council community facilities. It is expected the proposal will contribute to an increase in recreational and community facility availability through the implementation of shared-use arrangements on site.

This assessment has found that the proposal will improve the enrolment capacity and learning environment in the Ryde LGA. Without the proposal, it is unlikely the current environment at Meadowbank Public School and Marsden High School can meet student demand. However, the proposal will generate risks in relation to

increased traffic congestion and reduced pedestrian safety which, if not addressed, will likely cause ongoing disturbance and safety impacts for the incoming school community and surrounding residences.

Overall it is considered that the proposal will generate a long-term positive social impact, subject to addressing the traffic and pedestrian safety concerns raised in this SIA.

1. INTRODUCTION

This Social Impact Assessment has been prepared by Urbis on behalf of the NSW Department of Education (the Applicant). It accompanies an Environmental Impact Statement (EIS) in support of State Significant Development Application (SSD 18_9343) for the new Meadowbank Education and Employment Precinct Schools Project (MEEPSP) at 2 Rhodes Street, Meadowbank (the site).

1.1. LEGISLATIVE REQUIREMENT

The SIA is required by the Secretary's Environmental Assessment Requirements (SEARs) for SSD 18_9343. This table identifies the SEARs and relevant reference within this report.

Table 1 – SEARs and Relevant Reference

SEARs Item	Report Reference
Include an assessment of the social consequences of the school's relative location.	Section 9

1.2. ASSESSING SOCIAL IMPACT

An SIA is a specialist study undertaken to identify and analyse potential positive and negative social impacts associated with a development proposal. It also identifies management measures to enhance positive impacts and reduce negative impacts.

Social impacts are those that impact on people's way of life, their culture, community, environment, health and wellbeing, personal and property rights, and their fears and aspirations. The extent to which potential social impacts and benefits will occur as a result of the proposal is assessed by comparing the consequence (minimal – extreme) of the impact against the likelihood (rare – very likely) of the impact occurring.

1.3. METHODOLOGY

The following process was undertaken to inform this SIA:

Table 2 – Methodology

Stage	Details
Stage 1: Scoping	• Review of relevant policy documents and architectural plans • Site visit and audit of surrounding context. • Review of other technical studies
Stage 2: Profiling	• Review of demographic characteristics and surrounding land uses
Stage 3: Consultation	• Stakeholder interviews and review of consultation outcomes
Stage 4: Social Impact Assessment	• An assessment of potential impacts and benefits, their significance and appropriate mitigation measures.
Stage 5: Reporting	• Recommendations and conclusion

2. SITE CONTEXT

The site is located at 2 Rhodes Street, within the Ryde Local Government Area (LGA). The site, which has been acquired from TAFE NSW by the NSW Department of Education, was previously part of the Meadowbank TAFE College's northern campus.

The site is bounded by Rhodes Street to the northeast, the Sydney Water site to the north, the remaining TAFE NSW campus to the east and south and the T1 Northern railway line to the west.

An industrial area is located adjacent to the site along Rhodes Street, which contains predominately motor vehicle and smash repair services. Low density residences are located in Bank Street, on the opposite side of the T1 Northern Rail Line embankment.

Figure 1 – Site context

Source: Urbis

3. THE PROPOSAL

3.1. PROPOSAL BACKGROUND

The development of the proposal reflects the significant need for additional public education infrastructure in the area. In 2017, the NSW Government announced a $6 billion investment for the development of new schools and major upgrades to existing schools across the next 4 years. It is anticipated that due to the projected population growth of NSW that there will be 21% growth in student numbers by 2031, resulting in an increase of approximately 200,000 additional enrolments in public schools across the state.

Ryde LGA is anticipated to accommodate the highest student growth in the North District. ABS Census data forecasts 26,150 students aged 5 – 19 years are expected in Ryde LGA by 2036, an increase of 8,160 students from 2016.

The siting of the new MEEPSP, on Department of Education land adjacent to Meadowbank TAFE campus, is a unique opportunity to create an 'Education Precinct'. The precinct combines primary, secondary and tertiary education facilities to form a learning environment that is future focussed, adaptable and empowering for the next generation of students.

The development of the site has been based on planning it as a precinct, rather than just a school. The intent of this is to create an integrated education precinct that is accessible for both students and the wider community. When complete, the MEEPSP is set to become a new community hub that will house students of all ages.

3.2. PROPOSAL OVERVIEW

The MEEPSP will cater for 1,000 primary school students and 1,620 high school students. The proposal seeks consent for:

- A multi-level, multi-purpose, integrated school building with a primary school wing and high school wing. The school building is connected by a centralised library that is embedded into the landscape. The school building contains:
    - Collaborative general and specialist learning hubs, with a combination of enclosed and open spaces;
    - Adaptable classroom home bases;
    - Four level central library, with primary school library located on ground floor and high school library on levels 1 to 3.
    - Laboratories and workshops;
    - Staff workplaces;
    - Canteens;
    - Indoor gymnasium;
    - Multipurpose communal hall;
    - Outdoor learning, play and recreational areas (both covered and uncovered).
- Associated site landscaping and public domain improvements;
- An on-site car park for 60 parking spaces; and
- Construction of ancillary infrastructure and utilities as required.

3.2.1. Vehicle and pedestrian access

Access to the site will be provided from separate Primary and Secondary arrival points via Rhodes Street.

Vehicular access will be via Rhodes Street to a dedicated loading area and onsite car park on the Lower Ground Level. Access in this location will also accommodate service and emergency vehicles.

- Car parking is provided for 60 vehicles in the car park at the LG level.
- A Drop Off and Pick Up zone is proposed along the Rhodes Street frontage.
- A 20m bus zone is proposed along the southern side of Rhodes Street and a 60m bus zone along the southern side of Macpherson Street.

3.3. SCHOOL OPERATIONS

The proposal is for a new school and full operational details are yet to be resolved. The school is generally proposed to operate:

- Between the hours of 9am to 3pm, Monday to Friday. It is likely that there will be staggered start times for each school (Primary – 9am to 3pm and Secondary 8.55am to 3.15pm).
- Out of School Hours (OOSH) for the primary school will operate between 7am to 9am and 3pm to 6pm.
- Staggered lunch break for use of recreation and open space areas.
- Scheduled use of specialist facilities.
- Two different timetabling approaches to ensure the school can accommodate changes in the learning needs and provide flexibility for teaching.

3.3.1. Community use of school facilities

The proposal has the potential to allow shared use of facilities with the community during hours outside of operating school hours.

- The Community Hall located along the Rhodes Street frontage, may be available for hire by local sporting groups, the Australian Electoral Commission and local community groups. The hall can cater for up to 300 persons. It is anticipated that the hall would be booked two nights a week and at least one weekend each month.
- The Gymnasium located at Ground Level as part of the High School can be used for afterhours basketball competitions. It is anticipated that these types of competitions could run for 30 weeks per year but not during exam periods, and will be used an average of two nights per week.
- OOSH will be leased to an outside provider and accommodate approximately 200 places. Students would be able to use the hall, library and ground floor classrooms during the morning period (7am to 9am) and the evening period (3pm to 6pm). OOSH would also be able to offer holiday care during the 12 weeks of holiday periods, between the hours of 9am to 3pm, Monday to Friday.

4. POLICY CONTEXT

Key state and local government policies were reviewed to understand the strategic context of the proposed development including:

- Greater Sydney Region Plan: Metropolis of Three Cities (2018).
- North District Plan (2018).
- City of Ryde Community Strategic Plan (2018).
- City of Ryde Sport and Recreation Strategy 2016 – 2026 (2017).
- Infrastructure NSW State Infrastructure Strategy 2018 – 2038 (2018).

The following table outlines the key policy findings. A detailed policy summary is contained in **Appendix B**.

Table 3 – Policy themes

Policy themes	Relevance to proposal
Population growth	• The North District Plan anticipates an additional 21,900 students will need to be accommodated in government and non-government schools in the District by 2036. • Ryde LGA is expected to accommodate the highest student growth in the North District, with the District Plan expecting an additional 8,160 students by 2036. • Over the next 10 years, the City of Ryde is anticipated to experience an increase in young families, higher density living and an ageing population which will impact on facility planning.
Access to education	• New education facilities should make more efficient use of the land, promote shared use opportunities and include safe walking and cycling links. • New education facilities are encouraged to adopt 'future learning spaces' which facilitate collaboration, technology-driven learning and reconfigurable teaching spaces.
Shared and joint use	• The NSW Department of Education encourages shared and joint use arrangements to facilitate public use of facilities outside of school hours. • The NSW State Infrastructure Plan outlines TAFE NSW should promote increased shared use arrangements with third parties (e.g. schools, universities and industry) to support flexible learning.
Open space and recreation	• Expected population growth and increasing density will create demand for open space and recreation facilities within the LGA. • Informal recreation activities (e.g. walking) have the highest leisure and participation rates in the LGA. • Sportsgrounds and indoor facility usage is high within the LGA, with indoor facilities particularly popular among culturally and linguistically diverse (CALD) communities.
Transport and accessibility	• The City of Ryde aims to plan for increased use of active and public transport options, and improved pedestrian access and mobility.

5. COMMUNITY PROFILE

The following community profile includes a demographic analysis of Meadowbank suburb, based on 2016 Australian Bureau of Statistics (ABS) and Department of Planning and Environment data. For comparison purposes, the suburb has been compared to Ryde LGA and Greater Sydney. The complete demographic data set is contained within **Appendix C**.

Population and age

- Meadowbank is characterised by a young adult population, with half (49.8%) of the population aged between 25 – 39 years. This is significantly higher compared to Ryde LGA (26.2%) and Greater Sydney (23.4%).
- There is also indication of a growing family population, with 7.6% of the Meadowbank population aged between 0-4 years, which is slightly higher than Ryde LGA (6.1%) and Greater Sydney (6.4%).

Cultural diversity

- Meadowbank is highly diverse, with only a third (34.2%) of the population born in Australia and only 26.2% speaking English only at home. In contrast, approximately half of the Ryde LGA population are born in Australia (48.5%) and speak only English at home (47.7%).

Education and employment

- Meadowbank is characterised by young, educated professionals. Over half (55.7%) of the population have attained a bachelor degree level or higher as their highest level of educational attainment. This is significantly higher than Ryde LGA (39.4%) and Greater Sydney (28.3%).
- The working population is dominated by white collar workers with Professionals (39.1%), Clerical and Administrative Workers (16.8%) and Managers (12.0%) representing the top three occupation types in Meadowbank.

Family composition

- The majority of Meadowbank live in family households (62.2%) and consist of couple families without children (55.6%). This is lower compared to Ryde LGA, where 71.2% of the population are in family households and only 36% are couple families without children.

Income and advantage

- Ryde LGA is the top 10% most advantaged LGAs in NSW, according to the SEIFA index of advantage and disadvantage.
- Meadowbank is relatively advantaged, with a higher median personal weekly income ($945) and family income ($2,026) compared to Greater Sydney ($719; $1,988).

Dwelling type and density

- Meadowbank characterised by high density living, with the majority of people living in flats or apartments (96.3%), which is significantly higher compared to Ryde LGA (35.6%) and Greater Sydney (28.1%).

Population projections

- Ryde LGA is expected to increase from 119,950 in 2016 to 171,650 in 2036, increase by 43%.
- The majority of the population (68%) will still reside in family households and be characterised by a family profile, with 28.4% of the population aged between 25 – 44 years, and over a fifth (21.1%) of the population aged as school aged children (0-19 years).
- There will be a slight increase in the number of people aged 70 years and over from 2016 (10.1%) to 2036 (12.1%), indicating the beginning of an ageing population.

5.1. IMPLICATIONS FOR THIS ASSESSMENT

The above community profile indicates there will be a demand for different types of social infrastructure based on the changing demographics of Meadowbank suburb and Ryde LGA. Demographic trends of particular relevance to this profile include:

- A high proportion of families in Ryde LGA and infants in Meadowbank suggesting an ongoing demand for education facilities.
- A highly educated Meadowbank community, with a continuance of learning through to tertiary education, indicating a demand for whole-of-life education facilities.
- Meadowbank is dominated by high density living, which may create a demand on the open space network as the occurrence of private backyard spaces decreases.
- Strong representation of families and children in Ryde LGA and Meadowbank, which may create ongoing pressure on active open space (e.g. sports fields) due to participation in organised sports.
- A highly diverse Meadowbank community which indicates the need to accommodate the needs of CALD communities in the planning of education and social infrastructure facilities.

6. STAKEHOLDER AND COMMUNITY CONSULTATION

Aurecon was engaged by Schools Infrastructure NSW to undertake community and stakeholder engagement for the proposal. Consultation began in 2018 and will be ongoing throughout planning and construction.

As part of the SIA process, Urbis also undertook stakeholder consultation to gain an understanding of the local context and the potential positive and negative impacts associated with the proposal. Marsden High School, Meadowbank Public School, TAFE NSW and City of Ryde Council were invited to participated in an interview with one entity accepting.

Table 4 summarises the feedback received to date through Urbis and Aurecon consultation activities.

Table 4 – Feedback summary

Theme	Feedback
Education demand	• General support for the proposal in meeting the increasing education demands of the community. • Some concern that the proposal may not be able to meet demand and desire for the existing school sites to also remain and operate as schools. • There is a demand for before/after school care places in Meadowbank. • There is an increasing need to cater for special need students, such as students diagnosed with a behavioural disorder or mental health illness. • Meadowbank is a culturally and linguistically diverse (CALD) community. There is a need to provide education services which accommodate families from non-English speaking backgrounds.
Traffic and parking	• Concern regarding a potential lack of parking availability and how traffic congestion will be managed with increased traffic volume. • Concern regarding the capacity of the local road network to cater for the requirements of the school and existing light industrial businesses opposite. • Questions as to the available parking provisions for staff and how parking will impact on local streets and residents.
Public transport	• There is support for a bus service to service the school. Students generally live in areas that are serviced by buses not trains. • Questions as to the public transport options available for students.
Pedestrian safety	• There is a need to enhance pedestrian safety (i.e. provision of pedestrian crossings) around the site and local road network to encourage students to walk to school.
Student safety	• There have been questions raised by parents regarding how the interaction of different ages on site will be managed, including safety management regarding the proximity of the train station and fire evacuation.
Proposal and masterplan	• Generally, families are supportive of the proposal and new educational facilities.

Theme	Feedback

	• Supportive of the potential to share facilities and implement integrated programs across primary, high school and TAFE students to enhance learning outcomes.
	• There are questions and concerns regarding:
	  ○ Play space and green space (in particular lack of oval space).
	  ○ Noise from trains.
	  ○ The management and availability of facilities which will be shared, and facilities which will be school-only.
	• Questions as to accessibility considerations in high rise buildings.

7. REVIEW OF TECHNICAL STUDIES

The following section provides a summary of the technical studies that were reviewed to inform this SIA.

Transport and Accessibility Impact Assessment – GTA Consultants

A Transport and Accessibility Impact Assessment has been prepared by GTA Consultants and provides an assessment of the anticipated transport implications of the proposed development.

Pedestrians and cyclists

The proposed schools are likely to generate pedestrian volumes of about 1,350 pedestrians per hour (including students, parents/ carers and staff). The main pedestrian movements will approach to/ from the south of the site, given the location of Meadowbank Railway Station, with an estimated total of about 990 pedestrian movements during the peak hour.

It is recommended that shared paths are constructed along the key pedestrian and cyclist desire lines to support the broader precinct.

Road network

SIDRA Intersection modelling was used to assess the current operation of the surrounding road network. These results indicate that under existing traffic volumes, the intersect ions of Victoria Road/ Bowden Street, Victoria Road/ Hermitage Road and Church Street/ Morrison Road are operating at or close to capacity during the AM and PM peak hours. The remaining intersections assessed operate at acceptable levels of service. Opening year (2021/ 22) results indicate that the network has some spare capacity to accommodate the background growth and the additional traffic generated by the proposal.

Forecast future 2031/32 traffic volumes (without the proposed school) would result in Victoria Road intersections exceeding capacity. With the addition of the proposed school traffic and TAFE traffic, the two key school access intersections from Victoria Road at Hermitage Road and Bowden Street, operate at or above capacity. It is noted that the minor roads intersecting with Victoria Road experience existing and future delays (and do not necessarily clear queues in a single signal cycle) due to limited green time as a result of significant traffic volumes and congestion on Victoria Road.

Car parking

The car parking provision requirements based on the City of Ryde Council Development Control Plan 2014, results in the off-street parking requirement of 135 car parking spaces for the proposed development. With the policies and initiatives that are in control of the new school, the development proposes a total of 60 car parking spaces for opening year (2022), with ongoing and additional travel initiatives (and broader anticipated infrastructure provided by others) to assist in maintaining this provision as staffing numbers increase.

Acoustic Report – Acoustic Logic Consultancy

An Acoustic Report has been prepared by Acoustic Logic Consultancy to assess the noise impacts associated with the proposal, with reference to relevant NSW EPA and City of Ryde Council acoustic guidelines.

Operational noise

An analysis of typical operational noise (classroom noise, vehicles and equipment) indicates that the site is capable of complying with relevant noise emission criteria.

An analysis of playground noise will exceed the ambient + 10dB(A) from time to time. Noise impacts from the playgrounds is keeping with typical school developments.

Detailed acoustic review of mechanical plant and principle-address systems should be undertaken once design is further progressed (plant selections finalised etc). In principle review indicates that noise emissions are capable of complying with EPA Industrial Noise Policy and Council requirements.

Construction noise

Construction noise and vibration impacts will be reviewed in detail after the approval stage. However, it is expected that construction noise will exceed the background noise goal at times given the proximity to the nearby residences.

It is common practice that a condition of consent be imposed requiring that a Construction Noise and Vibration Management Plan be prepared prior to commencement of works.

Contamination Report (Stage 2: Detailed Site Investigation) – Alliance Geotechnical

A Contamination Report (Stage 2: Detailed Site Investigation) was prepared by Alliance Geotechnical Pty Ltd. (AG) to assess the nature and likely extent of identified contaminants of potential concern (COPC) in the identified site area.

The Contamination Report states that the site can be made suitable for the proposed use, subject to further assessment, management and/or remediation of the potential unacceptable contamination risks and those areas unable to be assessed.

A Remedial Action Plan has been prepared by Alliance Geotechnical.

Arboricultural Impact Assessment Report – Earthscape Horticultural Services

An Arboricultural Impact Assessment Report was prepared by Earthscape Horticultural Services to assess the potential impacts of the proposal on the subject trees.

The Arboricultural Impact Assessment identified the proposal will necessitate the removal of 57 trees of low and very low retention value, 46 trees of moderate retention value and 22 trees of high retention value. These trees are generally identified as providing amenity to the site and surrounding properties.

The Arboricultural Impact Assessment determined that, based on existing site constraints and the extent of the proposal, there are no feasible recommendations that would permit the retention of the high value trees. In order to compensate for loss of amenity resulting from the removal of these trees to accommodate the proposed development, a minimum number of twenty-five(25) new trees capable of attaining a height of at least ten (10) metres at maturity shall be planted within the site in appropriate locations.

Crime Prevention Through Environmental Design Assessment – WSP– April 2019

A Crime Prevention Through Environmental Design Assessment (CPTED) was prepared by WSP. The assessment found that the design demonstrates many of the CPTED principles, including good opportunities for natural surveillance, well defined natural access control, and territoriality through a well-designed, low maintenance site, and clearly established private use space.

The anticipated opening up of sections of the site for community use will help foster and develop a sense of territoriality and ownership in the site and increase the schools' times of use.

8. ASSESSING SOCIAL IMPACT

SIA is the processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects)[1].

The significance of a potential impact, positive or negative, is assessed by comparing the consequence level of impact against the likelihood of the impact occurring.

Table 5 – Level of impact

			Consequence level				
			1	2	3	4	5
			Minimal	Minor	Moderate	Major	Extreme
Likelihood	A	Very likely	A1	A2	A3	A4	A5
	B	Likely	B1	B2	B3	B4	B5
	C	Possible	C1	C2	C3	C4	C5
	D	Unlikely	D1	D2	D3	D4	D5
	E	Rare	E1	E2	E3	E4	E5

Low		Moderate		High		Very high	

8.1.1. Consequence

The following criteria are used to assess the consequence level of a potential social impact:

- Duration – The timeframe over which the impact occurs or the frequency of potential impacts.
- Extent – The geographical area or the number of people affected.
- Severity – Scale or degree of change from the existing condition as a result of an impact.
- Sensitivity – The extent to which people or an environment can adapt to or mitigate the impact.

8.1.2. Likelihood

The following scale outlines the likelihood of a potential impact occurring throughout the project lifecycle:

- Rare – Extremely unlikely that the impact will occur, at any stage throughout the project lifecycle.
- Unlikely – Unlikely that the impact will occur, at any stage throughout the project lifecycle.
- Possible – Possible that the impact will occur, at any stage throughout the project lifecycle.
- Likely – Likely that the impact will occur, at any stage throughout the project lifecycle.
- Very likely – Very likely that the impact will occur, at any stage throughout the project lifecycle.

[1] International Association for Impact Assessment

9. ASSESSMENT OF POTENTIAL IMPACTS

The following section provides an assessment of the potential positive and negative social impacts of the proposal and any proposed management measures.

9.1. POSITIVE IMPACTS

9.1.1. Educational opportunities and environment

Description of impact	Impacted groups
• An increase in enrolment capacity. • Improved quality of educational facilities and learning environment than presently available.	• Existing school community of Meadowbank Public School and Marsden High School. • Students and families within the proposed MEEPSP catchment area.
Current context	
It is anticipated that due to the projected population growth of NSW that there will be 21% growth in student numbers by 2031, resulting in an increase of approximately 200,000 additional enrolments in public schools across the state. Ryde LGA is anticipated to accommodate the highest student growth in the Greater Sydney Commission's North District. Meadowbank Public School currently accommodates 380 Kindergarten to Year 6 students and Marsden High School accommodates approximately 620 Year 7 to Year 12 students. Consultation with Meadowbank Public School indicates the school is nearing their on-site capacity and there is a need for increased enrolment capacity and permanent teaching spaces. Marsden High School is also in need of improved infrastructure, with the NSW DOE identifying $2.01 million of maintenance works are required[2].	
Proposal	
The proposal will significantly increase the existing enrolment capacity of the Meadowbank Public School and Marsden High School. The proposed MEEPSP will cater for 1,000 primary school students and 1,620 high school students, including a 120 place Intensive English Centre. The proposed MEEPSP will contain permanent teaching spaces, encompassing future focussed classrooms, flexible learning spaces, modern teaching equipment and indoor and outdoor recreation facilities. The proposed MEEPSP will be co-located with the TAFE NSW Campus, forming the Meadowbank Education Precinct, which will provide a unique opportunity for lifelong learning students in one location. The proposal is accessible via public transport and road and is located in a reasonable distance and travel time from the existing schools.	
Summary of impact	
The proposal will provide a greater enrolment capacity than presently available at Meadowbank Public School and Marsden High School and provide a significantly improved educational environment than presently available at the existing schools. Overall this will provide access to education for more children and is likely to support improved educational outcomes.	

[2] The Daily Telegraph, February 2018 – School Maintenance Backlog

Planned mitigation measures	Recommendations
• None identified	• None identified
Overall impact level (considering mitigation measures)	
Based on the assessment in this report, it is expected that the proposal will result in a very high positive impact.	

9.1.2. Community access to school facilities

Description of impact	Impacted groups
• Community access to school facilities.	• Ryde LGA residents.
Current context	
The *City of Ryde Sport and Recreation Strategy* (2017) (the Strategy) identifies there is current pressure on the existing open space network in Ryde LGA. The Strategy anticipates that the expected population growth and increasing density within the LGA will create additional demand for active, passive and un-structured recreation and open space areas.	
Proposal	
The proposal includes cultural (community hall and library) and recreation facilities for both primary and secondary students. With the exception of special events, such as school athletic carnivals, it is not expected the proposed MEEPSP would require use of Council facilities. The proposal may also provide community use of the community hall and gymnasium outside of operating school hours. If the proposal is approved, the State Government anticipates the Meadowbank Public School site will become public open space and the Marsden High School site will become a public sporting facility, primarily for netball. This has not been considered as part of this assessment.	
Summary of impact	
The proposal will provide recreational and cultural facilities for student use and is unlikely to place any additional demand on Council facilities. The proposal may also provide shared-use of the community hall and gymnasium, which will increase the capacity of recreational and cultural facilities in the Ryde LGA, which can support the development of social cohesion between the school community and local community.	
Planned mitigation measures	**Recommendations**
None identified	• Formalise a shared use arrangement for community use of the community hall and gymnasiums. • Consider shared use of broader recreation facilities to help improved capacity in the Ryde LGA open space network. • Implement a Plan of Management for the operation of both schools which should include measures to address shared-use operations,

	interaction of students and road and pedestrian safety.
Overall impact level (considering mitigation measures)	
Based on the assessment in this report, it is expected the proposal will result in a high positive impact.	

9.2. NEGATIVE IMPACTS

9.2.1. Traffic congestion and competition for parking

Description of impact	**Impacted groups**
• Increased traffic congestion and travel time on the immediate road network. • Reduced availability of public on-street parking on the immediate road network.	• Surrounding residential properties and local business. • Future students, families and staff of MEEPSP
Current context	
GTA compiled an inventory of publicly available on-street and off-street car parking within approximately 400 metres of the subject site, east of the rail corridor. This indicates that existing on-street car parking demands in the nominated area are relatively high throughout the day, particularly along Rhodes Street and Hermitage Road. GTA also found that that under existing traffic volumes, the intersections of Victoria Road/ Bowden Street, Victoria Road/ Hermitage Road and Church Street/ Morrison Road are operating at or close to capacity during the AM and PM peak hours. The remaining intersections assessed operate at acceptable levels of service. Forecast future 2031 traffic volumes (without the proposed school) would result in Victoria Road intersections exceeding capacity.	
Proposal	
The proposal provides 60 on-site car parking spaces and a school bus bay, which will be accessed via Rhodes Street. The parking provision does not conform to Ryde Council's Development Control Plan. Parking on both sides of Macpherson Street would be restricted to 15-minute parking during school pick-up and set-down periods, which would allow parents to stop and walk their children into the school (predominantly primary school parents). This arrangement will displace public parking on Macpherson Street during school-pick up and set-down periods. Staff and student bicycle parking and end of trip change amenities are proposed. It is estimated that the proposal will add in the order of 270 – 340 vehicles per hour during the school peak hours. With the additional school traffic, the intersections of Victoria Road/ Bowden Street, Victoria Road/ Hermitage Road and Church Street/ Morrison Road would further exceed capacity and the intersection of Constitution Road/ Bowden Street would be approaching capacity on the north-western approach during the AM peak hour. The additional school traffic is anticipated to have an impact on the performance of Victoria Road with average delays and queues increasing. There is potential for broader regional road infrastructure upgrades, which will alleviate some of the traffic concerns. These have not been assessed as part of this proposal.	
Summary of impact	

The proposal will increase local traffic and contribute to the surrounding intersections exceeding capacity and operating at lower levels of service than the current condition. For the local community this is likely to increase travel time and congestion on the roads and may impact on health and wellbeing of residents. The proposal also contains a shortfall of car parking spaces and will displace some local parking during pickup and setdown. This is likely to increase competition for parking for the local community surrounding the site and may impact on the social cohesion of the local area.

Impact Level (without mitigation)

Without mitigation it is expected that the proposal will have a high negative impact.

Planned mitigation measures	**Recommendations**
• Implementation of the School Travel Plan. • Provision of secure bicycle parking and end of trip facilities to encourage active transport.	• None identified.

Overall impact level (considering mitigation measures)

Based on the implementation of the planned mitigation measures, it is expected that the proposal will result in a moderate negative impact.

9.2.2. Pedestrian and cyclist safety

Description of impact	**Impacted groups**
• Potential for conflict between vehicles and pedestrian traffic generated as part of the proposal	• Future students, families and staff of MEEPSP. • Road users

Current road and pedestrian environment

Pedestrian footpaths (minimum width) are available on the streets immediately surrounding the site, including Rhodes Street, Macpherson Street, See Street and Constitution Road. Pedestrians can move between the site and Meadowbank station, via public footpaths without the need to cross road. However, there are no existing pedestrian crossings on the surrounding streets connecting to the site.

Rhodes Street has multiple driveways servicing the light industrial operations and which accommodate larger vehicles (e.g. utilities and trucks) associated with these operations. There is also existing TAFE NSW driveway on Rhodes Street.

Proposal

The proposal is will introduce significant pedestrian (including students, parents/carers and staff) volumes of about 990 movements during the peak hour to/ from the south of the site, given the location of Meadowbank Railway Station. This will increase the foot traffic on the existing pathways and may increase the potential for pedestrian conflict with cars and other vehicles. There is no direct access provided as part of the proposal from Meadowbank station and students will be required to use public footpaths.

Summary of impact

The consequences of a conflict between a vehicle and pedestrian can be severe, including injury and death. The proposal is will introduce significant pedestrian volumes during the peak periods. This will

increase the foot traffic on the existing pathways and may increase the potential for pedestrian conflict with cars and other vehicles.
Impact level (without mitigation)
Without mitigation it is expected that the proposal will result in a moderate negative impact.

Planned mitigation measures	**Recommendations**
• Implementation of the School Travel Plan	• Implementation of footpath widening, and additional pedestrian crossings outlined in the Traffic Impact Assessment. • Develop and implement a kerbside management plan for school pick up and set-down periods as recommended in the Traffic Impact Assessment. • Consult with local businesses on Rhodes Street regarding the interaction between the proposal and access driveways on Rhodes Street and management of pick up and drop off periods.

Overall impact level (considering mitigation measures)
Based on the implementation of the planned mitigation measures and recommendations, it is expected that the proposal will result in a minor negative impact.

9.2.3. Disruptions during construction

For the purposes of this SIA, reduced amenity during construction includes:

Description of impact	**Impacted groups**
• Other construction impacts, including noise, vibration, dust and construction vehicle movements	• Nearby residences and businesses immediately surrounding the site. • TAFE NSW Meadowbank students and staff.

Current environment
There is currently no construction taking place on site. The background noise levels at the site are consistent with that of a suburban area. The average noise levels in the area are primarily a result of train movements from the rail corridor and car traffic.
Proposal
The proposal will involve the construction of the MEEPSP which will include demolition, excavation; and construction of structure (formwork, construction, concrete pumps, slab finishing works). Details of the expected construction noise and vibration emissions are not available at this stage of the planning processes and are likely to be reviewed in detail prior to commencement of works. The Acoustic Report notes that during construction the exceedance of the background noise goal (background + 10dB[A]) will be unavoidable at times given the proximity to nearby residences.

The Transport and Accessibility Impact Assessment anticipates up to 100 vehicles per hour during peak construction. This will be revised following further details of the construction methodology.	
Summary of impact	
Construction methodology details are unknown at the time of this report. However, it is expected that due to the proximity of nearby residences and businesses there will be disruption to their current living environment. Students and teachers at TAFE NSW campus are also likely to experience a reduced learning during this construction. The impact will be limited to the period of the construction phase.	
Impact level (without mitigation)	
Without mitigation it is expected that the proposal will result in a moderate negative impact.	
Planned mitigation measures	**Recommendations**
• Implementation of a Construction Noise and Vibration Management Plan prior to commencement of works.	• Notification/communication nearby residents and businesses prior to commencement of construction works.
Overall impact level (considering mitigation measures)	
Based on the implementation of the planned mitigation measures, it is expected that the proposal will have minor negative impact.	

10. CONCLUSION

This report addresses the SEARs requirement to assess the social consequence of the new MEEPSP relative location, including the impact the proposal is likely to have on local recreation/community/cultural facilities and how it will interact with the existing community.

This assessment has found that the proposal will not generate a demand on existing Council community facilities. It is expected the proposal will contribute to an increase in recreational and community facility availability through the implementation of shared-use arrangements on site.

This assessment has found that the proposal will greatly improve the enrolment capacity and learning environment in the Ryde LGA. Without the proposal, it is unlikely the current environment at Meadowbank Public School and Marsden High School can meet student demand. However, the proposal will generate risks in relation to increased traffic congestion and reduced pedestrian safety which, if not addressed, will likely cause ongoing disturbance and safety impacts for the incoming school community and surrounding residences.

Overall it is considered that the proposal will generate a long-term positive social impact, subject to addressing the traffic and pedestrian safety concerns raised in this SIA.

DISCLAIMER

This report is dated 14 October 2019 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of NSW Department of Education (**Instructing Party**) for the purpose of Social Impact Assessment (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

In preparing this report, Urbis may rely on or refer to documents in a language other than English, which Urbis may arrange to be translated. Urbis is not responsible for the accuracy or completeness of such translations and disclaims any liability for any statement or opinion made in this report being inaccurate or incomplete arising from such translations.

Whilst Urbis has made all reasonable inquiries it believes necessary in preparing this report, it is not responsible for determining the completeness or accuracy of information provided to it. Urbis (including its officers and personnel) is not liable for any errors or omissions, including in information provided by the Instructing Party or another person or upon which Urbis relies, provided that such errors or omissions are not made by Urbis recklessly or in bad faith.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A COUNCIL SEARS COMMENTS

City of Ryde

Lifestyle and opportunity @ your doorstep

Response to SEARs request for new Meadowbank K-12 School
2 Rhodes Street, Meadowbank (SSD 9343)

Table of concerns and additional environmental assessment requirements (shown in RED)

7. Transport and Accessibility
Include a transport and accessibility impact assessment, which details, but not limited to: • accurate details of the current daily and peak hour vehicle, existing and future public transport networks and pedestrian and cycle movement provided on the road network located adjacent to the proposed development; • details of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips based on surveys of the existing and similar schools within the local area; • **existing parking utilisation surveys on streets within 400m radius from the site on a typical weekday between 8AM-9:30AM and 2:30PM-4PM;** • the adequacy of existing public transport or any future public transport infrastructure within the vicinity of the site, pedestrian and bicycle networks and associated infrastructure to meet the likely future demand of the proposed development; • measures to integrate the development with the existing/future public transport network; • the impact of trips generated by the development on nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity, and the need/associated funding for, and details of, upgrades or road improvement works, if required (Traffic modelling is to be undertaken using SIDRA network modelling for current and future years); • the identification of infrastructure required to ameliorate any impacts on traffic efficiency and road safety impacts associated with the proposed development, including details on improvements required to affected intersections, additional school bus routes along bus capable roads (i.e. minimum 3.5 m wide travel lanes), additional bus stops or bus bays; • details of travel demand management measures to minimise the impact on general traffic and bus operations, including details of a location-specific sustainable travel plan (Green Travel Plan and specific Workplace travel plan) and the provision of facilities to increase the non-car mode share for travel to and from the site; • **the future pedestrian and cyclist desire lines**, the proposed walking and cycling access arrangements **consistent with City of Ryde Bicycle Strategy** and connections to public transport services; • **to minimise traffic and parking impacts on local residential streets, investigate one-way internal road option to provide on-site pickup/drop-off facilities;** • the proposed access arrangements, including car and bus pick-up/drop-off facilities, and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and bicycle networks, including pedestrian crossings and refuges and speed control devices and zones; • proposed bicycle parking provision, including end of trip facilities, in secure, convenient, accessible areas close to main entries incorporating lighting and

passive surveillance;
- proposed number of on-site car parking spaces for teaching staff and visitors and corresponding compliance with existing parking codes **(i.e. City of Ryde DCP 9.3 Parking Controls)** and justification for the level of car parking provided on-site;
- **reduction of existing car parking spaces for TAFE due to proposed school buildings and proposed location of re-allocated TAFE car parking spaces;**

- an assessment of the cumulative on-street parking impacts of cars and bus pick-up/drop-off, staff parking and any other parking demands associated with the development;
- an assessment of road and pedestrian safety adjacent to the proposed development and the details of required road safety measures and personal safety in line with CPTED;
- emergency vehicle access, service vehicle access, delivery and loading arrangements **including swept path diagrams of largest vehicle showing forward in and forward out movements** and estimated service vehicle movements (including vehicle type and the likely arrival and departure times);
- the preparation of a preliminary Construction Traffic and Pedestrian Management Plan to demonstrate the proposed management of the impact in relation to construction traffic addressing the following:
    - assessment of cumulative impacts associated with other construction activities (if any);
    - **how these impacts will be mitigated for any associated traffic, pedestrian, cyclists, parking and public transport;**
    - an assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity;
    - details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process;
    - details of anticipated peak hour and daily construction vehicle movements to and from the site;
    - details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle; and,
    - details of temporary cycling and pedestrian access during construction.

Relevant Policies and Guidelines:
- Guide to Traffic Generating Developments (Roads and Maritime Services)
- EIS Guidelines – Road and Related Facilities (DoPI)
- Cycling Aspects of Austroads Guides
- NSW Planning Guidelines for Walking and Cycling
- Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development
- **Standards Australia AS2890.1 (Off-street car parking)**
- Standards Australia AS2890.3 (Bicycle Parking Facilities)
- **Standards Australia AS2890.6 (Off-street parking for people with**

disabilities)
- **City of Ryde, Draft Traffic Impact Assessment Guidelines**
- **City of Ryde, Development Control Plan 2014, Part 9.3 Parking Controls**
- **City of Ryde, Bicycle Strategy**

10. Social impact

Include an assessment of the social consequences of the schools' relative location.

This assessment should also include the following:
- **Identify the key stakeholders affected by the proposal, and assess the likely positive and negative impacts of the development.**
- **Demonstrate what the impact of the school is likely to have on local recreation/community/cultural facilities:**
  - **Will an increase in demand for recreation/community/cultural facilities occur?**
  - **Will on-site recreation facilities be sufficient relative to the proposed number of students that the school will cater for?**
  - **Will the amount or quality of open space be affected?**
- **Identify how the new school will Interact with the existing community:**
  - **If shared facilities are proposed how would they be managed?**
  - **Can any concerns regarding proposed common spaces being shared between the development (Primary and secondary School) and general community be mitigated by design solutions?**
- **Demonstrate how the development considers Safer by Design Principles and their application?**
- **Demonstrate how connected pathways linkages and attractive gathering places within the development strengthen opportunities for social cohesion.**
- **Detail how the development maximises access to public transport, pedestrian and cycle networks, and provides convenient and continuous paths of travel including accessibility for people with a disability.**
- **Demonstrate how the development conforms to the requirements of the Building Code of Australia and the Commonwealth Disability Discrimination Act 1992 in terms of disabled access.**

12. Noise

- Identify and provide a quantitative assessment of the main noise and vibration generating sources during demolition, site preparation, bulk excavation, construction.
- Identify and assess operational noise, including consideration of any public-address system, school bell, mechanical services (e.g. air conditioning plant), use of any school hall for concerts etc. (both during and outside school hours) and any out of hours community use of school facilities.
- Outline measures to minimise and mitigate the potential noise impacts during construction and from operations on surrounding occupiers of land.

Relevant Policies and Guidelines:
- NSW Noise Policy for Industry 2017 (EPA)

- Interim Construction Noise Guideline (DECC)
- Assessing Vibration: A Technical Guideline 2006
- Development Near Rail Corridors and Busy Roads – Interim Guideline (Department of Planning 2008)

Include an assessment of the following matters:

- **Noise – The site is situated adjacent to the Great Northern Railway Line and the potential for rail noise and vibration to impact on the development needs to be considered. The potential for plant or activities on the premises to cause noise impacts on neighbouring premises also needs to be considered. Consequently, a noise impact assessment report should be prepared for the development by a suitably qualified and experienced acoustical consultant.**

13. Contamination

- Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55.
- Undertake a hazardous materials survey of all existing structures and infrastructure prior to any demolition or site preparation works.
- Include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

Relevant Policies and Guidelines:

- Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP)

Include an assessment of the following matters:

- **Land Contamination – A detailed site investigation should be carried out by a suitably qualified and experienced environmental consultant to determine the suitability of the site for the proposed use and whether any remediation work is required. If the site needs to be remediated a remedial action plan should be prepared for the work and site will need to be validated to confirm that it has been remediated to the extent necessary for the proposed use.**

17. Flooding

Identify flood risk on-site (detailing the most recent flood studies for the project area) and consideration of any relevant provisions of the NSW Floodplain Development Manual (2005), including the potential effects of climate change, sea level rise and an increase in rainfall intensity. If there is a material flood risk, include design solutions for mitigation.

The submission should also include a Flood Impact Assessment which shall address the following issues:

- **The impact of the Main Northern Railway embankment which is a significant obstruction to the overland flow through the development site during major and minor storm events, with backwater significantly effecting the subject site.**
- **The impact on the flood affectation of adjacent properties.**
- **The impact on the existing overland flow paths within the development site i.e. from the trapped low points on or near Rhodes Street and See Street.**
- **Avoid building across the existing overland flow path.**
- **Compatibility with the flood hazard of the land.**
- **Consistency with Council's floodplain risk management studies and plans.**
- **Recommendations made within the Parramatta River- Ryde Sub-catchments Flood Study and Floodplain Risk Management Plan (SKM, 2013).**
- **Emergency Planning and Evacuation considerations including an evacuation strategy for minors and elderly who may be entering and leaving the School.**

Drainage

- Detail measures to minimise operational water quality impacts on surface waters and groundwater.
- Stormwater plans detailing the proposed methods of drainage without impacting on the downstream properties.

Relevant Policies and Guidelines:

- Guidelines for development adjoining land and water managed by DECCW (OEH, 2013)
- Address the relevant provisions, goals and objectives in the following:
- **Parramatta River- Ryde Sub-catchments Flood Study and Floodplain Risk Management Plan (SKM, 2013)**
- **Floodplain Development Manual (NSW Government, 2005), Australian Rainfall and Runoff (Geoscience Australia, 2016), Australian Runoff Quality (Engineers Australia, 2006) & City of Ryde Stormwater and Floodplain Management Technical Manual.**

Stormwater Management Plan and report shall:

- **Investigate the condition and capacity of the stormwater network that traverses the site by means of hydrologic and hydraulic modelling and recommend modifications/solutions to meet current engineering standards in a detailed report. Any modifications that may be required to improve the stormwater system must be designed in accordance with Council's Stormwater and Floodplain Management DCP 2014 Part 8, Stormwater and Floodplain Management Technical Manual, NSW Floodplain Management Manual, Australian Rainfall and Runoff 2016**

and any other relevant Australian Guidelines.

- Identify appropriate water quality management measures focusing on the management of the impacts from the proposed works using Water Sensitive Urban Design principles. The applicant should explore the option of constructing a communal water quality feature in order to treat stormwater runoff from road surfaces instead of roadside small scale water quality treatment train, which has the possibility to become a maintenance burden upon completion of the project.
- Detail erosion, sediment and stormwater management controls during construction and management and mitigation measures for the prevention of potential water quality impacts during construction.
- Avoid the construction of any permanent structures over the existing drainage lines.

20. Waste

Identify, quantify and classify the likely waste streams to be generated during construction and operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.

Include an assessment of the following matters:

- **Waste Management – Adequate facilities should be provided for the storage and handling of waste. All waste storage areas should be constructed to facilitate easy cleaning and be graded and drained to the sewerage system. Safe easy access must also be provided for waste collection vehicles to service the waste containers or compaction equipment provided.**

Additional Environmental Health Matters

Include an assessment of the following matters:

- **Utility Services – Adequate services should be available for the proposed development. In particular, all sanitary fixtures should be connected to the sewerage system by gravity flow.**
- **Electrical Substation – Need for and location of any electrical substation must be detailed to avoid it being located within the public domain areas.**
- **Acid Sulfate Soils – The site is located within 500 metres of land containing acid sulfate soils (ASS). Consequently, if any activities are proposed that have the potential to alter groundwater levels an assessment should be carried out by a suitably qualified and experienced environmental consultant to determine the impact on nearby ASS.**

END OF SUBMISSION

APPENDIX B POLICY REVIEW

Greater Sydney Region Plan: A Metropolis of Three Cities (2018)

The *Greater Sydney Region Plan: A Metropolis of Three Cities (2018)* (the Region Plan) establishes a 40-year vision and a 20 plan to manage the growth and change for Greater Sydney in the context of social, economic and environmental matters. The Region Plan sets the planning framework for the five districts which make up the region including the:

- Central City;
- Eastern City;
- Western City;
- North District; and
- South District.

The Region Plan identifies ten directions for Greater Sydney which are supported by 40 objectives. Key objectives of relevance to this proposal include:

- Infrastructure aligns with forecast growth – growth infrastructure compact.
- Internationally competitive health, education, research and innovation precincts.
- Communities are healthy, resilient and socially connected.

The NSW Department of Education anticipates an additional 270,000 students will need to be accommodated in government and non-government schools across Greater Sydney by 2036. Planning for increased education infrastructure is therefore required across Greater Sydney to meet this demand. To support this demand, the Region Plan also advocates for the adoption of joint and shared use facilities to increase the accessibility of school infrastructure to the wider public.

North District Plan (2018)

The Greater Sydney Commission's District Plan divides Greater Sydney into five districts which represent their common locality and planning opportunities. Meadowbank is located within the North District, with this District covering City of Ryde, Hornsby, Hunters Hill, Ku-ring-gai, Lane Cove, Mosman, North Sydney, Northern Beaches and Willoughby.

The *North District Plan (2018)* (the District Plan) is a 20-year plan to manage the District's growth in the context of economic, social and environmental matters to achieve the vision for Greater Sydney. The District Plan is guided by 10 directions and 24 associated Planning Priorities to guide the planning across the District. Planning Priorities of relevance to this proposal include:

- Providing services and social infrastructure to meet people's changing needs.
- Fostering healthy, creative, culturally rich and socially connected communities.
- Growing and investing in health and education precincts.
- Better access to educational opportunities in each of the three cities.
- Increased access to open space.

The NSW Department of Education estimates an extra 21,900 students will need to be accommodated in both government and non-government schools within the District by 2036. Ryde LGA is expected to accommodate the largest growth, with an additional 8,160 expected by 2036. Planning for new schools should consider:

- More efficient use of land.
- Greater sharing of spaces and facilities.
- Safe walking and cycling links.
- Joint and shared use arrangements.

The District Plan also acknowledges there is high demand for active open space, particularly for sportsgrounds, with some Councils unable to provide necessary upkeep funds. Open space within school grounds are considered potential assets that could be utilised by the wider community through shared and joint use arrangements.

City of Ryde Community Strategic Plan (2018)

The City of Ryde *Community Strategic Plan (2018)* (the Community Strategic Plan) outlines the targets and objectives set for the City of Ryde, as well as the priorities identified by the community.

The Community Strategic Plan outlines the changing demographic profile of the LGA, with an increase of young families, higher density living and an ageing population. This profile will impact on the planning for schools, organised sports, youth services and Council facilities to ensure the needs of the community are met.

The Community Strategic Plan identifies key principles to guide the development of the LGA, in line with community priorities and strategic objectives. Key principles of relevance to this proposal include:

- Planning for expanded sport, recreation, leisure and library facilities to provide a range of choices for our community to achieve active and healthy lifestyles.
- Planning for increased use of active and public transport options, and improved pedestrian access and mobility.
- Continuing investment in the road network, footpaths, cycle ways and walkways.
- Planning for and enhancing cultural and community facilities to meet increased demand and ensure equitable access for all sections of our community.

City of Ryde Sport and Recreation Strategy 2016-2026 (2017)

The City of Ryde *Sport and Recreation Strategy 2016-2026 (2017)* (the Sport and Recreation Strategy) provides a framework for the ongoing effective provision, management and coordinated development of recreational facilities within the LGA. The Sport and Recreation Strategy highlights key trends within the LGA including:

- Informal activities (e.g. walking, play, picnics) have the highest leisure and participation rates.
- Over 35% of the population participate in a form of sport.
- Sportsgrounds have high usage levels.
- Indoor facility usage is high, particularly among Culturally and Linguistically Diverse (CALD) communities.

The expected population growth and increasing density within the LGA will create increased demand on the open space network, which is under existing pressure. Based on its future demographic profile, the City of Ryde expects there will be several implications on its open space and recreation facilities including:

- Increased demand for passive and un-structured recreation spaces.
- Increasing pressure on open space due to the rise of apartment living and a decrease in private backyards.
- Higher demand for non-traditional sport and recreation opportunities (e.g. indoor facilities).
- Likely ongoing pressure for playing fields due to the projected growth in families and young children.
- Higher participation in social sport, informal recreation (e.g. cycling).

City of Ryde Disability Inclusion Action Plan (2017)

The City of Ryde *Disability Inclusion Action Plan (2017)* (the DIAP) aims to support disability inclusion throughout the local community and broader NSW region. The DIAP acknowledges the City of Ryde has a highly diverse community which may create additional barriers for people with disabilities in seeking support and social connectivity.

Key Council actions outlined in the DIAP of relevance to this proposal include:

- Review whole-of-route accessibility along key active movement corridors including to and between town centres, major transport sites and to cultural/leisure facilities.
- Review the designs of parks and playgrounds to propose that they cater to a range of age groups and allow for multi-generational enjoyment.
- Work with the Department of Education to identify and address the gap in servicing the education needs for children with disability in the local area.

Infrastructure NSW State Infrastructure Strategy 2018 – 2038 (2018)

Infrastructure's NSW *State Infrastructure Strategy 2018 – 2038 (2018)* (the Infrastructure Strategy) outlines the infrastructure needs and priorities for the state over the next 20 years, and has been developed in response to NSW growing population and economy.

The Infrastructure Strategy estimates enrolment in government and non-government schools will increase by 25% over the next 20 years, with 80% of the growth concentrated in Sydney. In response, the Infrastructure Strategy outlines several recommendations to support this growth. Key considerations of relevance to this proposal include:

- Support for the use of joint and shared use opportunities to facilitate greater use of facilities.
- Adoption of 'future learning spaces' which facilitate collaboration, technology-driven learning and reconfigurable teaching spaces.
- Upgrading of TAFE facilities to keep up with market demand and support new service delivery models (e.g. online and blended learning).
- Support for the TAFE NSW Strategic Plan 2016-20122 to promote increased shared use arrangements with third parties (e.g. schools, universities and industry) to support flexible learning.

APPENDIX C DEMOGRAPHICS

Data item	Meadowbank (suburb)	Ryde (LGA)	Greater Sydney (GCCSA)
Population	4,408	116,302	4,823,991
Median age	32	36	36
Average people per household	2.1	2.7	2.8
Age distribution (%)			
Aged 0-4	7.6%	6.1%	6.4%
Aged 5-9	2.8%	5.5%	6.4%
Aged 10-14	1.7%	4.6%	5.8%
Aged 15-19	2.6%	5.3%	6.0%
Aged 20-24	7.7%	8.3%	7.1%
Aged 25-29	17.1%	9.1%	7.9%
Aged 30-34	20.4%	9.2%	8.1%
Aged 35-39	12.3%	7.9%	7.4%
Aged 40-44	6.1%	6.8%	7.1%
Aged 45-49	4.2%	6.3%	6.7%
Aged 50-54	4.0%	6.2%	6.3%
Aged 55-59	3.8%	5.6%	5.8%
Aged 60-64	3.5%	4.9%	5.0%
Aged 65-69	2.5%	4.2%	4.4%
Aged 70-74	1.7%	3.0%	3.3%
Aged 75-79	1.2%	2.5%	2.4%
Aged 80-84	0.6%	2.0%	1.8%
Aged 85+	0.4%	2.6%	2.0%
Country of birth and Indigenous identification (%)			
Australia	34.2%	48.5%	57.1%
Born overseas country #1	China: 14.2%	China: 12.5%	China: 4.7%
Born overseas country #2	India: 9.0%	Republic of South Korea: 3.9%	England: 3.1%

Data item	Meadowbank (suburb)	Ryde (LGA)	Greater Sydney (GCCSA)
Born overseas country #3	Republic of South Korea: 8.8%	India: 3.6%	India: 2.7%
Aboriginal or Torres Strait Islander	0.5%	0.4%	1.5%
Language spoken at home (%)			
English only	36.2%	47.7%	58.4%
Language other than English #1	Mandarin: 14.8%	Mandarin: 12.7%	Mandarin: 4.7%
Language other than English #2	Korean: 10.1%	Cantonese: 7.0%	Arabic: 4.0%
Language other than English #3	Cantonese: 6.8%	Korean: 4.7%	Cantonese: 2.9%
Family composition (%)			
Couple family without children	55.6%	36.0%	33.4%
Couple family with children	32.9%	49.1%	49.5%
One parent family	8.2%	12.5%	15.2%
Other family	3.3%	2.4%	1.8%
Household composition (%)			
Family households	62.2%	71.2%	73.6%
Lone person households	30.5%	23.2%	21.6%
Group households	7.3%	5.6%	4.7%
Dwelling structure (%)			
Separate house	3.0%	47.3%	56.9%
Semi-detached	0.5%	16.3%	14.0%
Flat or apartment	96.3%	35.6%	28.1%
Other dwelling	0.1%	0.3%	0.6%
Employment (%)			
Unemployed	6.7%	6.3%	6.0%

Data item	Meadowbank (suburb)	Ryde (LGA)	Greater Sydney (GCCSA)
Occupation (%)			
Professionals	39.1%	33.4%	26.3%
Technicians and Trades Workers	9.0%	10.0%	11.7%
Clerical and Administrative Workers	16.8%	15.2%	14.6%
Managers	12.0%	14.3%	13.7%
Sales Workers	7.8%	8.8%	9.0%
Labourers	4.1%	5.4%	7.5%
Community and Personal Service Workers	6.8%	8.3%	9.6%
Machinery Operators and Drivers	2.8%	2.8%	5.6%
Income ($)			
Median personal weekly income	$945	$738	$719
Median family weekly income	$2,026	$2,106	$1,988
Median household weekly income	$1,704	$1,786	$1,750
Household tenure (occupied private dwellings) (%)			
Owned outright	12.5%	29.3%	29.1%
Owned with a mortgage	25.7%	29.3%	33.2%
Rented	60.5%	38.2%	34.1%
Level of highest educational attainment (%)			
Year 9 or below	2.0%	5.2%	7.1%
Year 10	3.0%	6.1%	9.4%
Year 11	1.4%	2.2%	3.1%
Year 12	14.8%	18.0%	17.3%
Certificate level I-IV	7%	8.7%	12.2%

Data item	Meadowbank (suburb)	Ryde (LGA)	Greater Sydney (GCCSA)
Advanced Diploma and Diploma level	8.5%	9.5%	9.3%
Bachelor Degree level and above	55.7%	39.4%	28.3%
Currently attending an educational institution (%)			
Preschool	5.7%	5.2%	5.5%
Primary – Government	10%	15.3%	17.4%
Primary – Non-Government	2.7%	7.0%	8.2%
Total primary	12.7%	22.3%	25.6%
Secondary – Government	5.5%	8.9%	10.8%
Secondary – Non-Government	2.7%	7.9%	9.0%
Secondary – Total	8.2%	16.8%	19.8%
Technical or further education institution	14.4%	6.9%	6.1%
University of tertiary education	39.6%	30.8%	19.2%
Motor vehicles (%)			
None	16.7%	11.7%	11.1%
1 motor vehicle	58.3%	43.0%	37.1%
2 motor vehicle	20.3%	31.0%	32.8%
3 or more vehicles	2.7%	11.7%	15.7%

Source: Australian Bureau of Statistics (ABS) Census, 2016

SEIFA

The Socio-Economic Indexes for Areas (SEIFA) has been developed by the Australian Bureau of Statistics (ABS) to provide an overview of social and economic wellbeing and welfare of communities across a range of spatial scales. Four indices have been developed, as follows:

- Index of Relative Socio-Economic Disadvantage: focuses primarily on disadvantage, and is derived from Census variables like low income, low educational attainment, unemployment, and dwellings without motor vehicles.
- Index of Relative Socio-Economic Advantage and Disadvantage: is a continuum of advantage (high values) to disadvantage (low values) and is derived from Census variables related to both advantage and disadvantage.

- Index of Economic Resources: focuses on financial aspects of advantage and disadvantage, using Census variables relating to residents' incomes, housing expenditure and assets.
- Index of Education and Occupation: includes Census variables relating to the educational attainment, employment and vocational skills.

Scores: A lower score indicates that an area is relatively disadvantaged compared to an area with a higher score. The area with the lowest score is given a decile of 1, the area with the second lowest score is given a decile of 2 and so on, up to the area with the highest score is given the highest decile.

Table 6 – SEIFA Index, 2016

	Disadvantage		**Advantage and disadvantage**		**Economic resources**		**Education and occupation**	
	Score	Decile	Score	Decile	Score	Decile	Score	Decile
Ryde LGA	1058	10	1088	10	1011	8	1107	10
Meadowbank (suburb)	1078	9	1097	10	949	2	1133	10

APPENDIX D POPULATION PROJECTIONS

Table 7 – Ryde LGA Population projections

Ryde LGA	Year						
	2016	2021	2026	2031	2036	% of 2036 population	% change 2016 - 2036
Aged 0 to 4	6,650	7,550	8,750	9,650	10,050	5.9%	2.8%
Aged 5 to 9	5,700	6,750	7,800	8,700	9,450	5.5%	3.1%
Aged 10 to 14	5,300	5,700	6,750	7,650	8,450	4.9%	2.6%
Aged 15 to 19	5,950	5,950	6,500	7,450	8,250	4.8%	1.9%
Aged 20 to 24	9,950	9,400	10,000	10,550	11,350	6.6%	1.2%
Aged 25 to 29	9,550	10,850	11,150	11,450	11,850	6.9%	1.9%
Aged 30 to 34	8,850	10,700	12,200	12,200	12,350	7.2%	2.9%
Aged 35 to 39	8,300	9,450	11,500	12,500	12,400	7.2%	3.4%
Aged 40 to 44	7,550	8,500	9,800	11,500	12,250	7.1%	3.9%
Aged 45 to 49	7,400	7,650	8,700	9,800	11,350	6.6%	3.3%
Aged 50 to 54	6,900	7,350	7,750	8,700	9,650	5.6%	2.3%
Aged 55 to 59	6,000	6,800	7,350	7,750	8,600	5.0%	2.2%
Aged 60 to 64	5,350	5,750	6,600	7,100	7,450	4.3%	1.8%
Aged 65 to 69	3,900	5,100	5,600	6,350	6,850	4.0%	2.5%
Aged 70 to 74	3,350	3,800	4,950	5,450	6,250	3.6%	2.4%
Aged 75 to 79	2,900	3,150	3,650	4,800	5,300	3.1%	2.0%
Aged 80 to 84	2,550	2,500	2,800	3,350	4,400	2.6%	1.5%
Aged 85 +	2,500	3,050	3,350	3,800	4,550	2.7%	1.7%
Total persons	119,950	135,250	148,750	160,750	171,650	-	-
Change	-	15,300	13,500	12,000	10,900	-	-
Growth rate (%)	-	2.4%	1.9%	1.6%	1.3%	-	-

Source: 2016 ABS Census data, Department of Planning and Environment

Table 8 – Ryde LGA household projections

Household type	Year				
	2016	2021	2026	2031	2036
Family households	32,050	36,250	39,800	42,850	45,700
Non-family households	14,000	15,700	17,400	19,100	21,000
Group households	2,600	2,800	2,950	3,050	3,250
Lone person households	11,400	12,900	14,450	16,050	17,750
Average annual household growth (%)	2.2%	2.4%	2.0%	1.6%	1.5%

Source: 2016 ABS Census data, Department of Planning and Environment

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