



Mainsbridge School for Specific Purposes

95 Lawrence Hargrave Road, Warwick Farm

Operational Transport and Access Management Plan

Ref: 687/2020
Date: April 2021
Issue: Final E

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1.0 Introduction

The objectives of the Operational Transport and Access Management Plan (OTAMP) is to encourage active and sustainable travel behaviours for the new Mainsbridge School for Specific Purposes (School) at 95 Lawrence Hargrave Road, Warwick Farm. The NSW Department of Planning, Industry and Environment (DPIE) construction issue site layout plan prepared by Hayball is provided in Appendix A.

This report has also been prepared in satisfaction of Consent Conditions № D9, D10 and D11 for submission of an Operational Transport & Access Management Plan as part of the Occupation Certificate documentation for the approved development as follows:

D.9 Operational Transport and Access Management Plan (OTAMP)

D9. An OTAMP is to be prepared for the School by a suitably qualified person, in consultation with Council, Transport for NSW and RMS, to the satisfaction of the Secretary, and must address the following:

- (a) Detailed pedestrian analysis, including the identification of safe route options – to identify the need for management measures such as staggered school start and finish times to ensure students and staff are able to access and leave the Site in a safe and efficient manner during school start and finish;*
- (b) the location of all car parking spaces on the School campuses and their allocation (i.e., staff, visitor, accessible, emergency, etc.);*
- (c) the location and operational management procedures of the pick-up and drop-off parking located within the school, including staff management/traffic controller arrangements;*
- (d) delivery and services vehicle and bus access and management arrangements;*

(e) management of approved access arrangements, particularly in relation to the protrusion of the carparks on either side of the secondary pedestrian accessway, into the secondary pedestrian accessway;

(f) potential traffic impacts on surrounding road networks and mitigation measures to minimise impacts, including measures to mitigate queuing impacts associated with vehicles accessing pick-up and drop-off parking within the School accessed from Williamson Crescent;

(g) car parking arrangements and management associated with the proposed use of school facilities by community members; and

(h) a monitoring and review program.

D10. The OTAMP(s) must be submitted to the Secretary for approval prior to operation of the development.

D11. The OTAMP(s) (as revised from time to time) must be implemented by the Applicant for the life of the development.

2.0 Existing Site, Transport Provisions and Proposed School

2.1 Existing Site

The site is located at 95 Lawrence Hargrave Road, Warwick Farm and is legally described as Lot 22 in DP715287. The School is located within the northern portion and surplus land of WFPS site towards the rear. The site is bounded by a child care centre and Werriwa Dog Training facility to the north, Brickmakers Creek to the east, Lawrence Hargrave Road to the south, and Williamson Crescent to the west.

The surrounding land uses include:

- generally single-storey residential dwellings and some two-storey residential dwellings: north, east, south and west
- recreation: north, east and south
- industrial: west.

2.2 Existing Travel Mode and Transport Provision

Assisted Schools Travel Program (ASTP) Vehicles

The School utilises the Assisted School Travel Program (ASTP), a bus service administered by the NSW Department of Education.

This program provides specialised transport to and from schools for students with a disability who are unable to travel to and from school unassisted. The trip generation survey completed during the development application (DA) stage indicated that 85-90% of students at the existing School currently use the ASTP. The ASTP will continue to operate five minibuses to/from the School with the following vehicles:

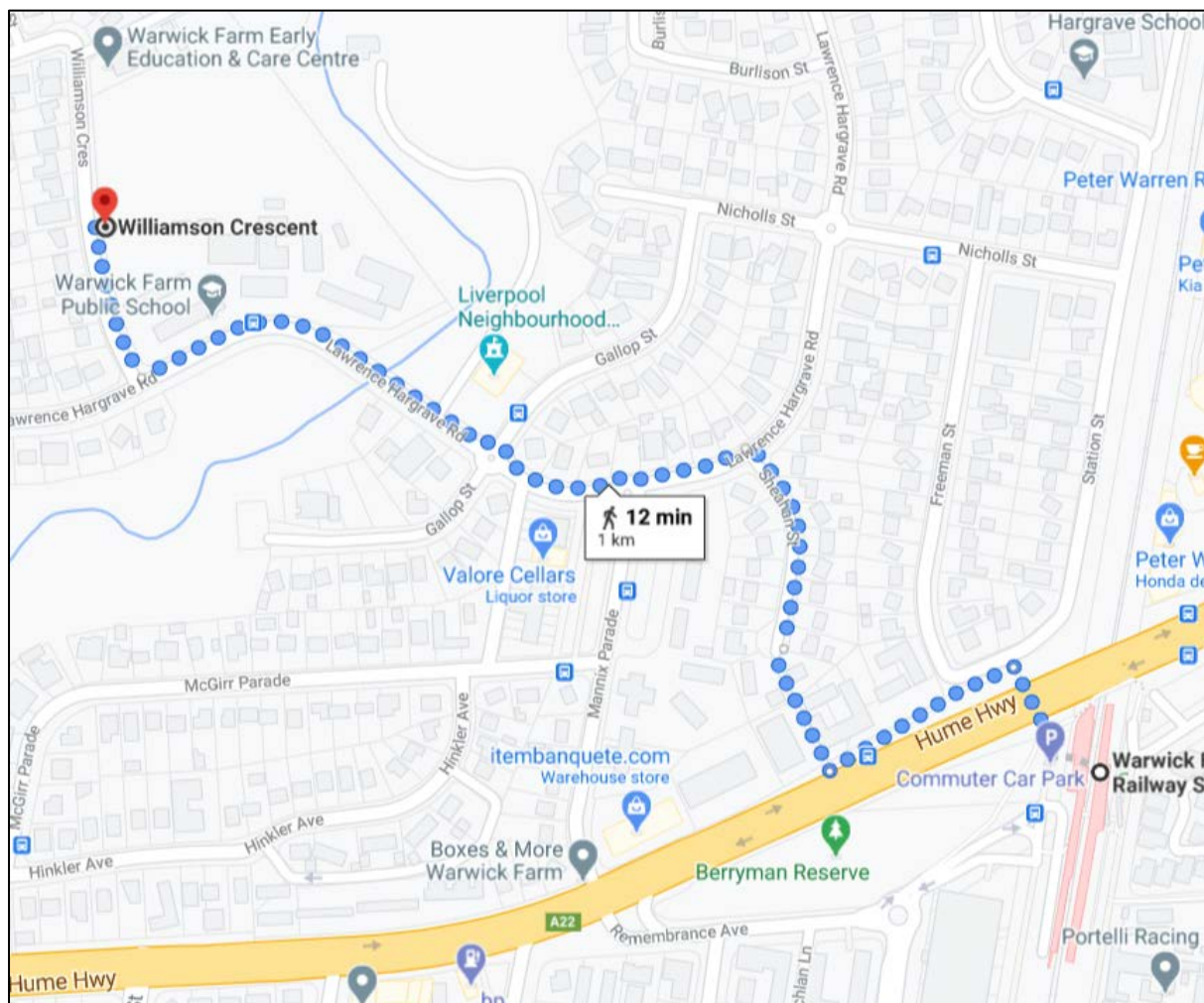
- 1 Toyota Cruiser minibus with a seating capacity of 23
- 4 Toyota Commuter minibuses, each with a seating capacity of 12

Rail and Buses

The development site is accessible to both bus and rail services.

The completed trip generation survey indicated no students take public transport and no more than 20% of the staff currently use public transport to/from the site. Due to the site's satisfactory level of accessibility to public transport, staff and students should be encouraged to make good use of the services provided.

Warwick Farm Railway Station some 1km (12-minute walk) to the south-east. See the following figure.



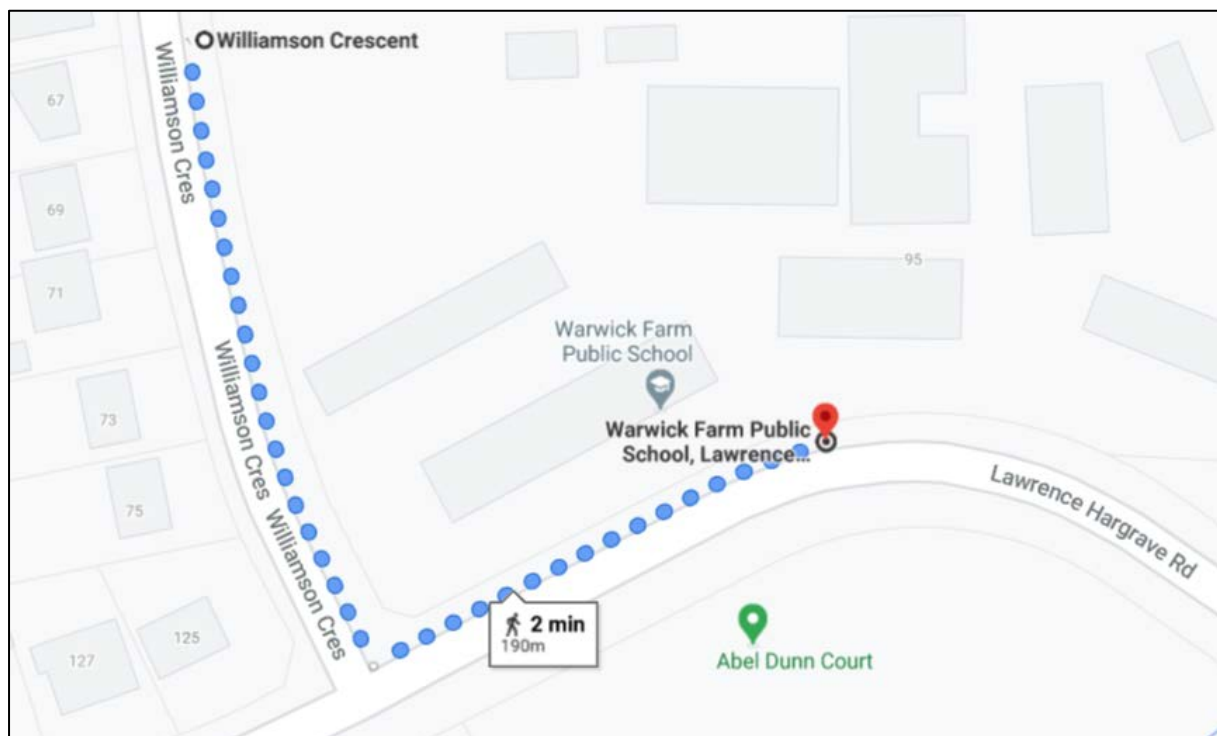
The Station provides a connection to the Metropolitan Transport Network via the T2 Inner West & Leppington Line, T3 Bankstown and T5 Cumberland Lines.

Line	Destinations	Frequency AM Peak	Frequency PM Peak
T2 Inner West & Leppington Line	City, Merrylands, Fairfield	5 - 15 minutes	
	Campbelltown, Liverpool	10 - 20 minutes	7 - 15 minutes
T3 Bankstown Line	Liverpool	10 - 15 minutes	30 minutes
	City, Bankstown	30 minutes	
T5 Cumberland Line	Leppington, Liverpool	30 minutes	
	Blacktown, Westmead, Parramatta		

These services typically operate at a frequency of less than 10 minutes and commuter wait times are expected to be minimal throughout the day. Details of the train services available at the nearest stations, including interconnecting services, are provided in Appendix B.

Bus

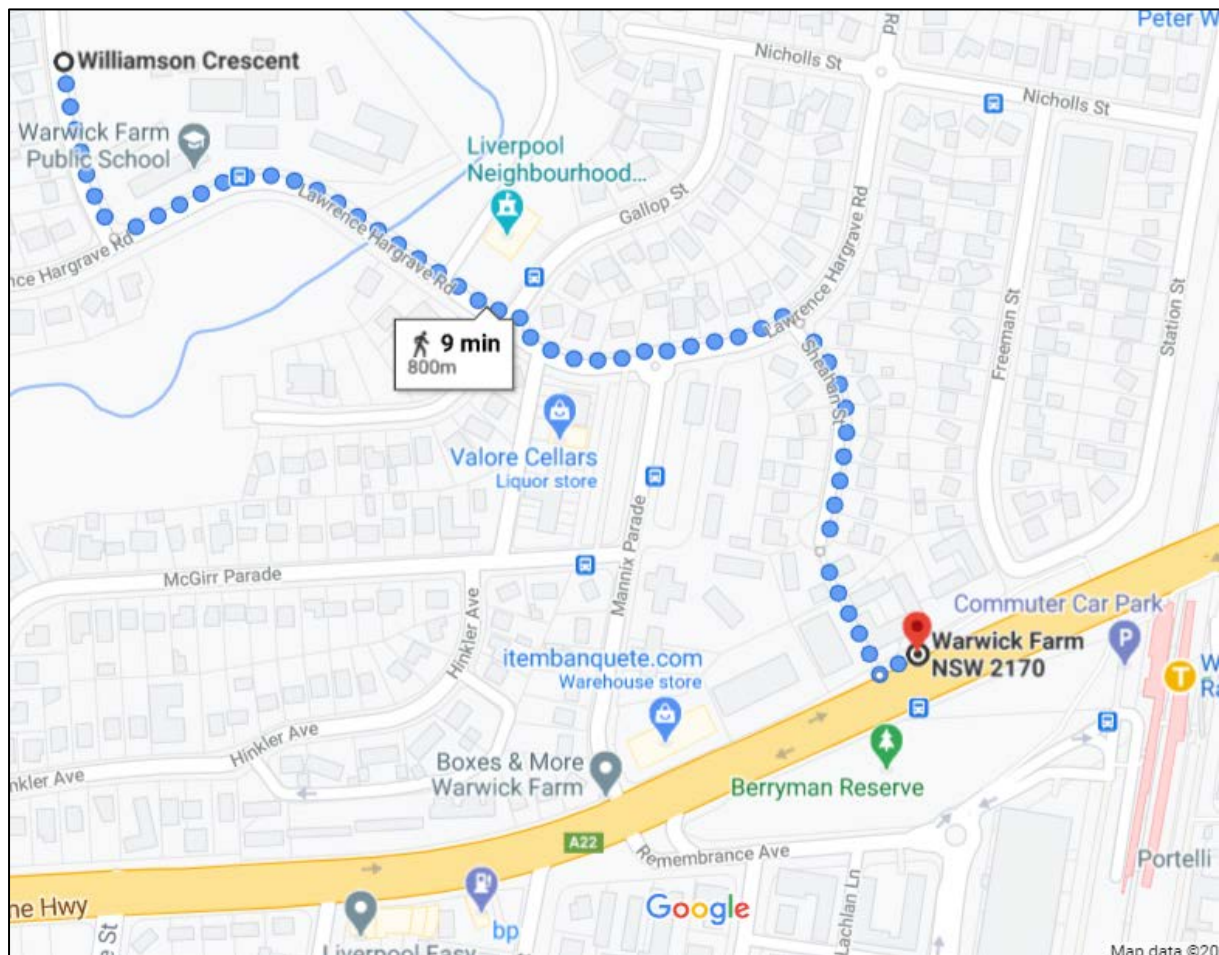
Local bus services operate along Lawrence Hargrave Drive south of the School and the Hume Highway. The nearest bus stops are within 190m (2-minute) walking distance from the site on the northern side of Lawrence Hargrave Road.



The stop is serviced by existing bus route 823 is a loop service between Warwick Farm and Liverpool Interchange.

The local Sydney Buses operated by Transit Systems has a peak frequency of 1 service every 27 minutes. Travel times between the Lawrence Hargrave Drive bus stops immediately south of the School and Liverpool Station (and vice versa) are approximately 15 minutes.

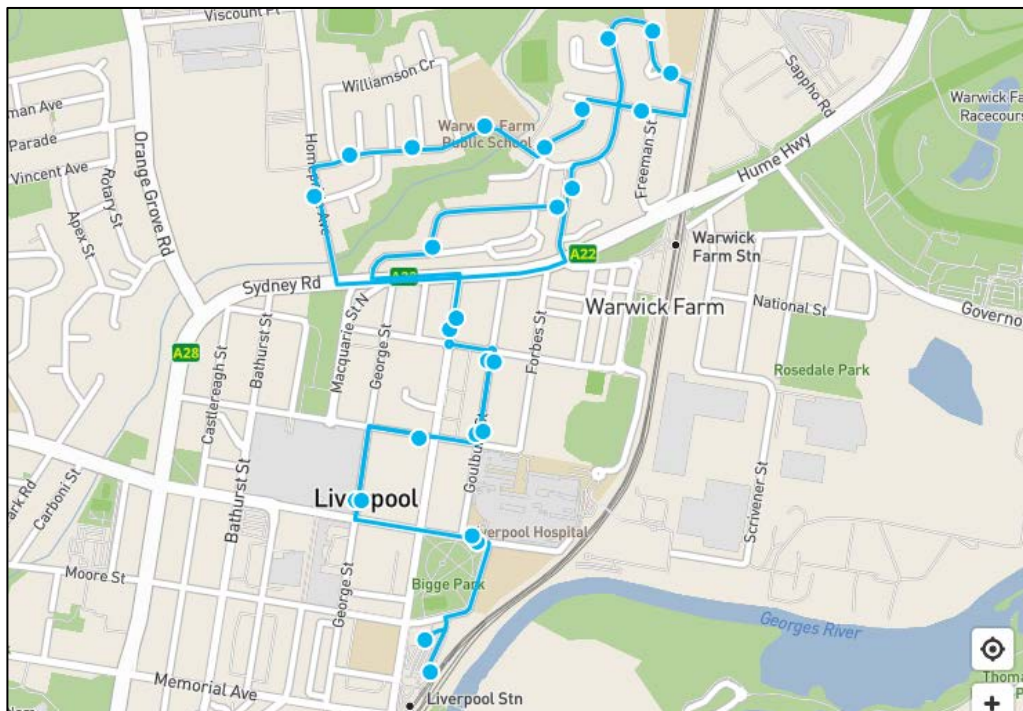
The bus stops Hume Highway are within 800m (9-minute) walking distance from the site on the northern side of Hume Highway. See the following figure.



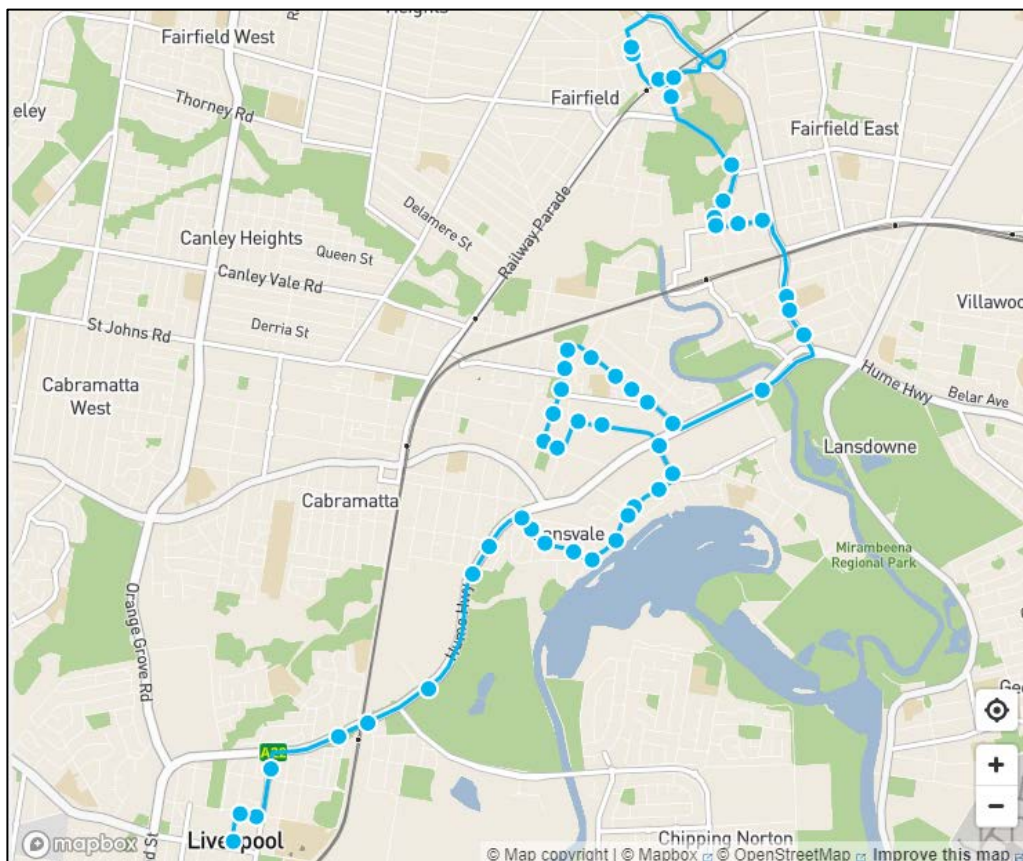
The stop is serviced by existing bus route 904 is a local service between Liverpool Station and Fairfield Station via Lansvale and Canley Vale. The local Sydney Buses operated by Transdev has a peak frequency of 1 service every 60 minutes. Travel times from the Hume Highway bus stops are approximately 7 minutes to/from Liverpool Station and approximately 30 minutes to/from Fairfield Station.

These routes are shown in the following figures.

Route 823



Route 904

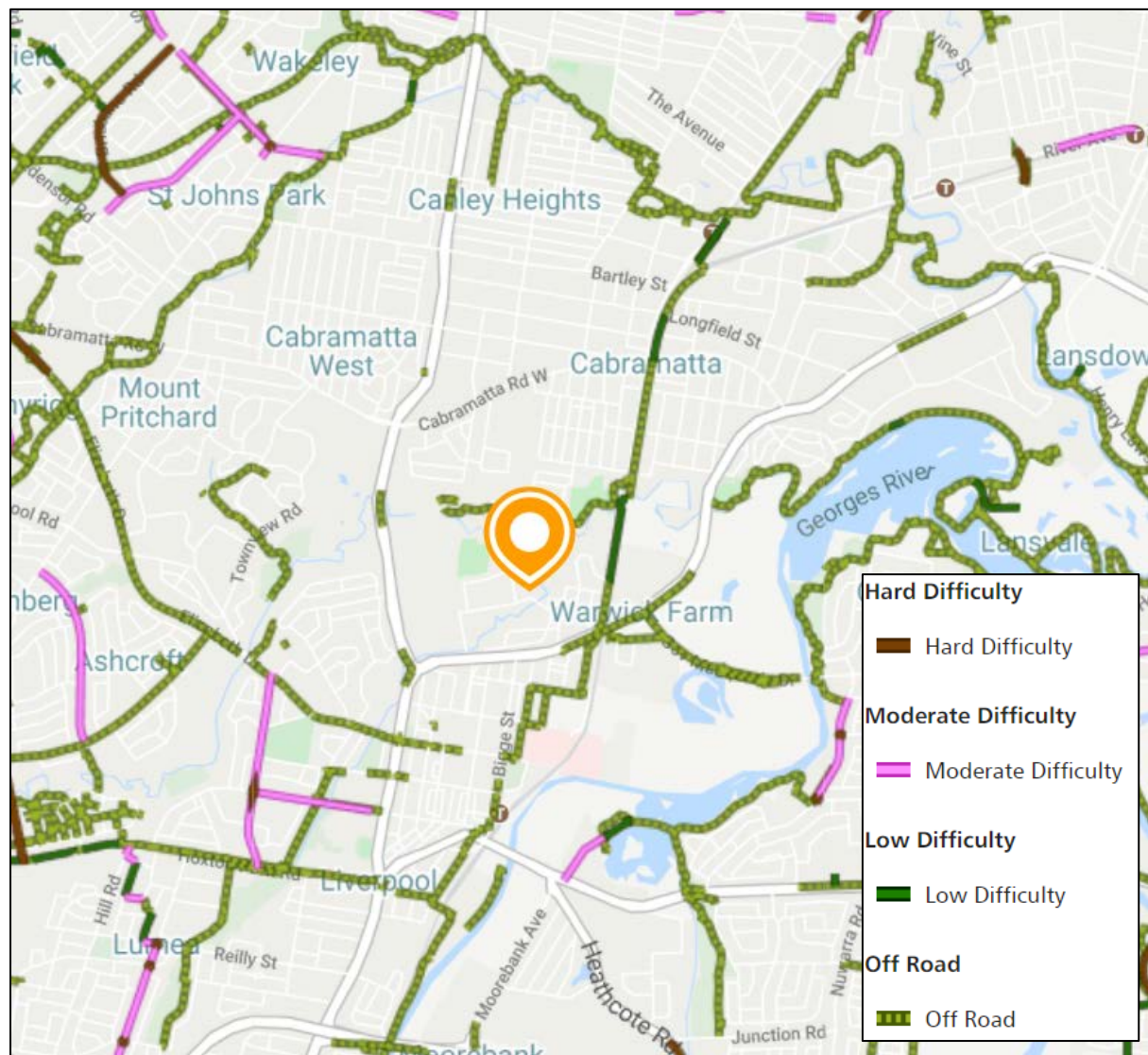


Details of the bus service are provided in Appendix B.

Cycling Infrastructure

The School is located approximately 500m east of the Fairfield/Liverpool Rail Trail, a dedicated off-road cycleway which connects between Merrylands Station and Liverpool Station; additional on and off-road sections then provide access north to Parramatta and east and west through the sub-region.

The Rail Trail, as well as other on and off-road cycle paths, provide cycle times of less than 10 minutes between the School and Liverpool Station; less than 10 minutes between the School and Cabramatta; approximately 20 minutes between the School and Fairfield; and approximately 45 minutes between the School and Parramatta. See the following figure.



2.3 Proposed School

MSSP includes:

- the construction of five (one and two-storey) new buildings comprising:
 - o two learning buildings
 - o an administration building
 - o a library and hall building; and
 - o canteen and amenities
 - o an indoor hydrotherapy pool with storage facilities
- a new substation
- outdoor learning areas
- sports field
- associated landscaping.
- landscaping, including open space improvements, tree removal, covered outdoor learning areas (COLAs), fencing and pathways
- new vehicular access, including car and bus parking, pedestrian access along Williamson Crescent.

It is proposed that the School hall and sports field would be shared with Warwick Farm Public School (WFPS).

The School will accommodate 52 full time and eight part-time staff (an additional eight staff from existing operations and ancillary staff, i.e., administration and support staff) and 120 students. It is noted that only 50% of the part-time staff will be present at any one time. This results in a maximum on-site staff of 56 staff.

The proposed hours of operation are as follows:

- School: 8:50 am until 2.45 pm
- Drop off: 8.30am - 9.15am
- Pick up: 2.20pm - 3.10pm

The existing hours of operation for the existing school are as follows, demonstrating a 10-minute earlier start and 15-minute latter finish:

Existing Warwick Farm Public School

- School: 9.00 am until 3.00 pm
- Drop off: 8:30am - 9:05am.
- Pick up: Staggered over 4 periods - 2:45pm, 2:50pm, 2:55pm and 3:00pm.

Two vehicular and two pedestrian accesses are located along Williamson Crescent.

On-site parking is provided for:

- 43 car spaces including two accessible spaces
- five spaces for small buses
- one loading space which can accommodate up to an 8.8m medium rigid vehicle (MRV)
- a Porte-cochere/Drop-Off and Pick-up zone (DO/PU Zone) which can accommodate up to 2 cars

3.0 OTAMP Conditions

This section responds to OTAMP conditions. As part of this assessment, TTPA has undertaken communications with the Liverpool City Council and TfNSW and emails detailing these communications are described in this report and are included in Appendix C.

3.1 Pedestrian Facilities

a) Detailed pedestrian analysis, including the identification of safe route options – to identify the need for management measures such as staggered school start and finish times to ensure students and staff are able to access and leave the Site in a safe and efficient manner during school start and finish

Internal

Pedestrians accessing the gates on Williamson Crescent will be protected by footpaths and zebra crossing across the internal drop-off/pick up queuing area within the School's compound.

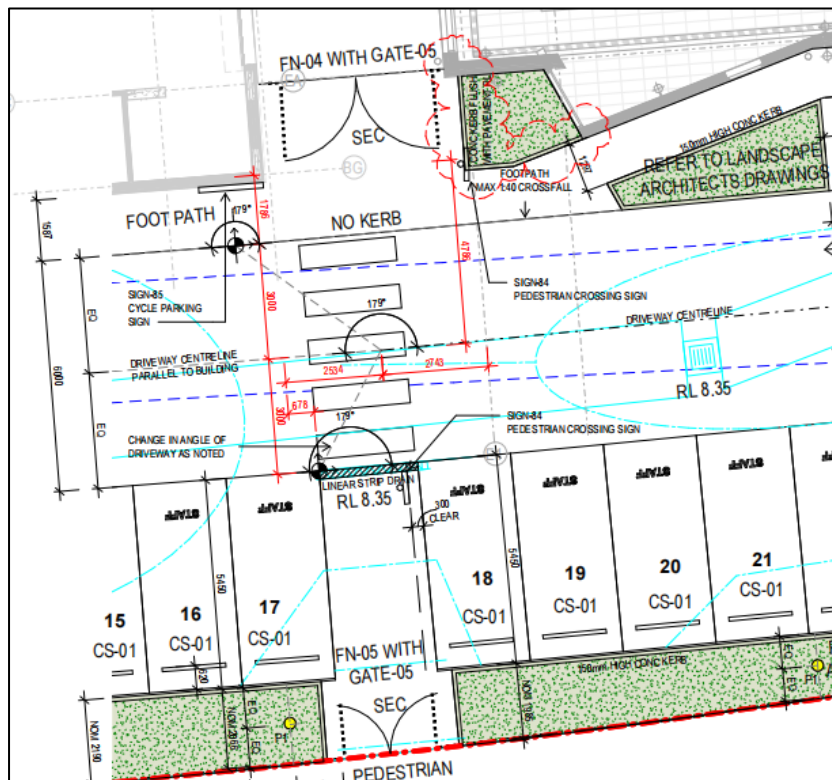
Condition 9(e) states the OTAMP will need to address the protrusion of the carparks on either side of the secondary pedestrian accessway, into the secondary pedestrian accessway.

The construction issue plan "Site Entry Plan – South, Drawing No. 01.A01.09 Rev P" as shown in Appendix A illustrates no protrusion of car spaces no. 17 and 18 on either side of the pedestrian pathway. It should also be noted that the pathway will not operate as a secondary pedestrian accessway, but a fire egress route. The occasional staff access via the gate will be controlled by swipe card operation, therefore preventing student entry via this gate.

Entry signage and an intercom are located on the main northern pedestrian entry, leading to Block A – Administration. This wayfinding redirects pedestrians north to the correct main entry.”

In addition, the provision of car spaces no. 17 and 18 adjacent to the pedestrian crossing (see the following figure) is considered appropriate based on the following reasons:

- these spaces have been designed in accordance with Figure 5.2 of AS2890.1, where the door opening areas are kept clear of columns, walls or other obstructions (no higher than 150mm).
- these spaces will be allocated for staff only who:
 - o will generally arrive and depart outside of the School's pick-up and drop-off hours
 - o will likely park all day or a good part of the day (very low turnover)
 - o are very familiar with the pedestrian movements within the school compound and therefore, will drive safely in and out of these spaces as well as look out for pedestrians prior to opening their car doors.



Shared zone signs with 10 kph posted speed limit will be installed within the site to ensure priorities are given to the pedestrians within the site.

It is also noted that the staff will monitor pedestrian movements within the School's compound during the pick-up and drop-off periods, ensuring the safety of pedestrians. It is noted that there be an internal dividing fence between the exiting and the new schools. As such, students from the Warwick Farm Public School will not walk through the Mainsbridge School carpark to get to their school. Students from respective schools will use the gates designated to their own schools.

External

The local area is well serviced by pedestrian facilities. All local roads generally provide concrete footpaths on at least one side of the road with footpaths on both sides of the roads near major land uses.

In the vicinity of the school, pedestrian footpaths are located on both sides of Lawrence Hargrave Road to the east of the western zebra crossing on Lawrence Hargrave Road. West of the zebra crossing, footpaths are provided on the northern side of Lawrence Hargrave Road which connects to the footpaths along the eastern side of Williamson Crescent. Two raised zebra pedestrian crossing facilities are located on Lawrence Hargrave Road between Williamson Crescent and Gallop Street. They are located some 80 metres apart. See the following figure.



The above crossings provide safe crossings to the residential developments on the southern side of Lawrence Hargrave Road. Signalised pedestrian crossing is provided at the intersection of Hume Highway/ Mannix Parade/Remembrance Avenue to access the further residential areas towards the south as well as the bus stop along the southern side of Hume Highway east of Mannix Parade/Remembrance Avenue. See the following figure.



There is no formal facility for pedestrians to cross on Williamson Crescent. However, pedestrian ramps are provided on the northern-western site's frontage. See the following figures.



Transport and Traffic Planning Associates

This is acceptable due to the narrow lane and low/slow-moving traffic on Williamson Crescent. The overall pedestrian facilities provide connectivity throughout the local area and ensure convenient links are available to key transport nodes and other local area facilities and destinations. The following figure illustrates the extent of pedestrian footpaths and facilities in the local area.



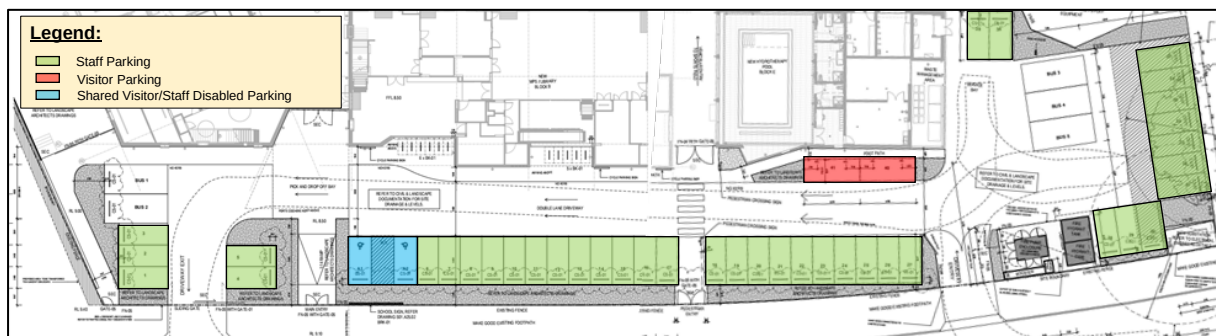
3.2 Off-Street Car Park Allocation

(b) the location of all car parking spaces on the School campuses and their allocation (i.e., staff, visitor, accessible, emergency, etc.);

A car park with 43 spaces (including two accessible spaces), five minibus spaces and one loading space is located at the western side of the site.

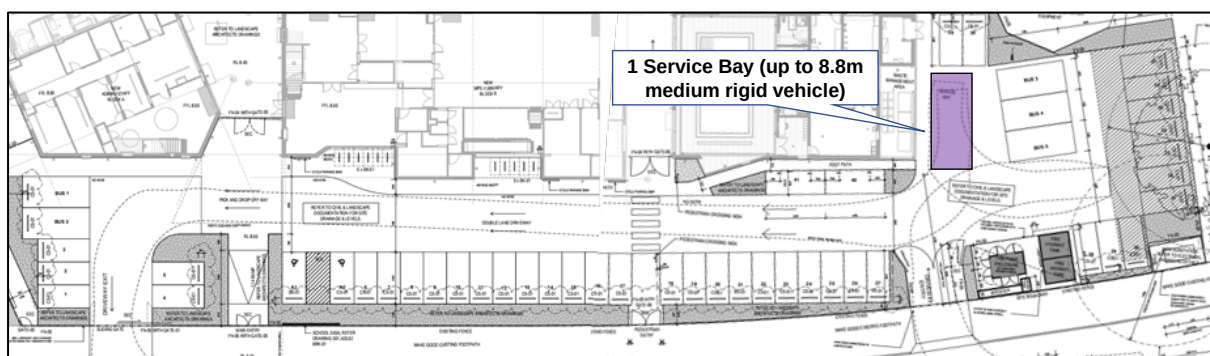
Staff and Visitors

The school proposes 39 spaces for staff and 4 spaces for visitors. There are 2 accessible spaces in the car park, located closest to the Main Entry. These spaces will be shared between the staff and visitors. See the following figure.



Service Vehicles

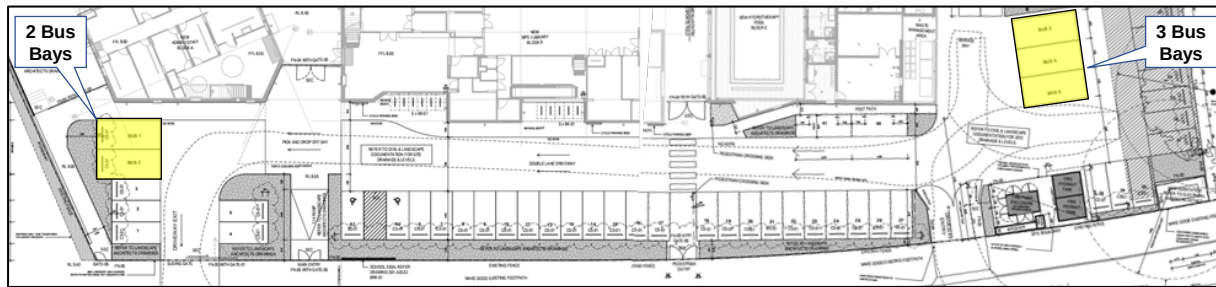
A waste collection/service vehicle space is located within the car park. See the following figure.



Deliveries by utes/vans can also utilise the service vehicle space or vacant visitor parking spaces where available.

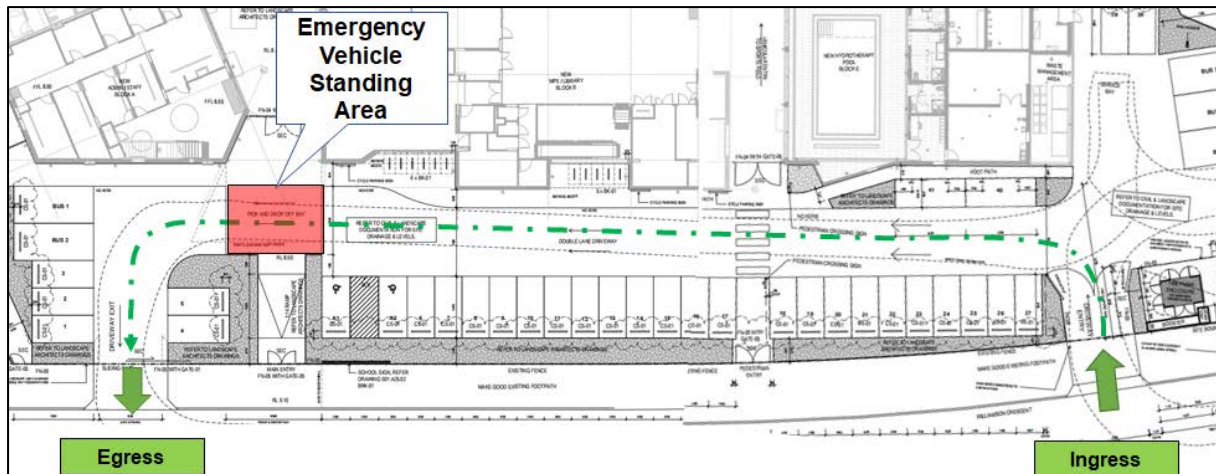
Minibus

5 spaces will be provided within the site for minibuses and the northern and southern sides of the carpark. See the following figure.



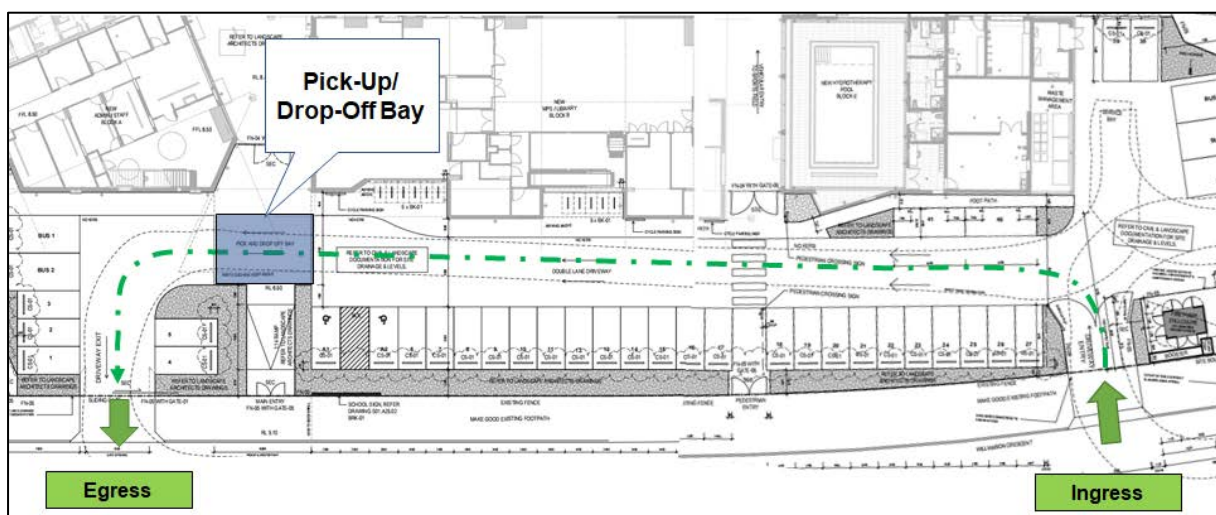
Emergency Vehicles

Emergency vehicles would enter via the southern driveway and stop within the porte-cochere area. This provides the most direct access to all parts of the School in emergency circumstances. See the following figure.



Pick-Up/Drop-Off Vehicles

The porte-cochere can accommodate up to two vehicles at any one time. It is noted that the minibuses drop-off and pick-up students on both sides of the vehicle. See the following figure.



3.3 Adequacy of Off-Street Car Park Allocation for Staff

The Green Travel Plan (GTP) prepared by PDC Consultants dated 11 January 2019 (See Appendix D) provides the following travel mode targets for the proposed MSSP.

MODE OF TRANSPORT	SURVEYED TRAVEL MODES OF EXISTING MSSP	ESTIMATED TRAVEL MODES AS A RESULT OF MSSP RELOCATION TO WARWICK FARM	TRAVEL MODE TARGETS FOR PROPOSED MSSP
Car Driver	84%	82%	70%
Car Passenger (Car Pooling)	11%	11%	15%
Train	0%	3%	8%
Bus	3%	2%	4%
Walking & Cycling	2%	2%	3%

Based on the above table and a maximum of 56 on-site staff, a 70% 'car driver' target will represent a parking demand of 39 spaces. As such, all parking demand can be accommodated within the site without any reliance on the on-street parking in the surrounding local road network.

The target is considered achievable through the effective implementation of the GTP with clear potential strategies and incentives (i.e., carpool, rail/bus services, walking, cycling, others), which can be adopted to influence staff travel behaviour and reduce reliance on private vehicle transport.

This plan and the associated GTP will be updated accordingly should the above staff number change in the future.

3.4 Pick-Up/Drop-Off Operational Management Procedures

(c) the location and operational management procedures of the pick-up and drop-off parking located within the school, including staff management/traffic controller arrangements;

All vehicles (including minibuses) dropping off or picking up students will enter via the southern driveway and queue on-site in two lanes leading to a covered Drop-Off/pick-up area (the porte-cochere). All vehicles would then depart via the northern driveway.

There will be a merge point before entering the porte-cochere so that a single line of vehicles is stopped school-side in the porte-cochere. The porte-cochere has been designed to allow students to safely enter or depart either side of the vehicle under

supervision. A 'through lane' within the porte-cochere is provided to ensure passing is available under emergency conditions (i.e., vehicle breakdown). The porte-cochere will have a distinctive surface (either paved or marked) to differentiate it from the queuing lanes.

General Traffic Management Plan (TMP) Requirements

The Principal will be responsible for the implementation of all aspects of this TMP. The Principal will also ensure that all Staff required for day-to-day traffic management (the TMP Staff) are educated in their roles and aware of their obligations, particularly with regard to the safety of students and others and are suitably clothed and equipped.

The Principal will also put in place measures which ensure student and parent/guardian compliance with the TMP. These should take the form of specific instructions issued at the start of the School year as part of a TMP package that explains to parents relevant procedures and their roles and obligations. The TMP package will include a Name Card for their child or children. Parents will be advised that the name card is to be displayed under the passenger sun visor (for maximum visibility) during the afternoon pick-up period.

All staff will wear appropriate clean high visibility reflective vests and communicate via walkie talkies (as required).

It is noted that all traffic management will be completed within the School's compound. Should the staff be required to manage traffic outside the School's compound, they would need to obtain proper certifications and tickets.

Morning Drop-Off (8.30 am to 9.15 am)

Staff tasks include:

- Monitoring students from vehicles in the on-site DO/PU Zone and assisting (as required) students from cars safely.
- Ensure parents do not leave their vehicles and bus drivers do not idle within the porte-cochere and depart promptly once children have exited the vehicles

The morning TMP will include the following:

- All students to access school-side from passenger cars. No crossing the road is permitted at all times for access to/from passenger cars.
- All students to access minibus (where possible) via school-side. Crossing the porte cochere to access the bus from the left-hand side is to be completed under the supervision of the School staff at all times.
- No student drop-off is to occur within the queue lane on approach to the porte cochere area. This is to be strictly controlled by the staff.
- Parents dropping-off students within the DO/PU Zone must stay in their vehicle
- All vehicles are to queue within the internal queuing area prior to the porte cochere

Afternoon Pick-Up Drop-Off (2.20 pm to 3.10 pm)

The staff tasks include:

- Observing Name Cards
- Monitoring students entering vehicles in the on-site DO/PU Zone and assisting (as required) students to cars safely.
- Ensure parents do not leave their vehicles and depart promptly once children are securely seated in the car.
- Ensure bus drivers do not idle within the porte-cochere and depart promptly once children are all seated the vehicles

The afternoon TMP will include the following:

- Students assemble near a designated location within the School under the supervision of staff prior to moving to the pick-up area following the completion of the School day
- All students to access passenger vehicles via the school-side. No crossing the road is permitted at all times for access to passenger cars.

- All students to access minibus (where possible) via the school-side. Crossing the porte cochere to access the bus from the left-hand side is to be completed under the supervision of the School staff at all times.
- No student pick-up is to occur within the queue lane on approach to the porte cochere area. This is to be strictly controlled by the staff.
- Parents picking up students within the DO/PU Zone must stay in their vehicle and display the Name Cards under the passenger sun visor. Supervising staff are to assist students in moving into the DO/PU Zone
- All vehicles are to queue within the internal queuing area prior to the porte cochere

3.5 Delivery, Services Vehicle and Bus Access and Management

Delivery and Services Vehicle

Service vehicles will enter via the southern driveway, turn left into the internal driveway, and then reverse into the service area. Once servicing is completed, they would depart via the northern driveway in a forward direction.

All service vehicle movements will be undertaken strictly outside of School peak periods. Entry will be through intercom security access.

Bus

These vehicles will be parked within the School grounds outside of the AM and PM peak pick-up/drop-off periods (or during excursions etc.).

These School minibuses would enter via the southern driveway, turn left into the internal driveway and then reverse into the dedicated minibus spaces on the southern side of the carpark.

Buses (including the larger Coaster minibus) accessing the carpark on the northern side of the carpark would enter via the southern driveway, turn left into the internal driveway and park forward in.

It is noted that the Toyota Commuter minibuses can accommodate up to 10 students while the Toyota Cruiser minibus us can accommodate up to 20 students.

With up to 22 runs pick-up/drop-off periods and a maximum capacity of 60 students per run via all 5 buses, the bus can theoretically accommodate up to 1,320 students. This capacity clearly exceeds the pick-up/drop-off demand of 120 students.

These buses will reverse from the dedicated spaces and depart forward out onto Williamson Crescent depart via the northern driveway.

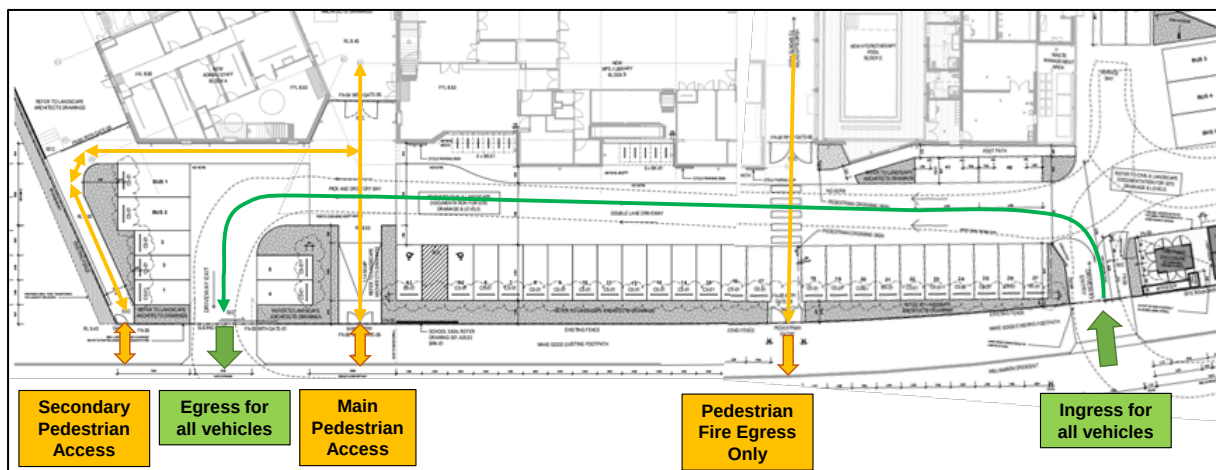
3.6 Management of Approved Access Arrangements

Accesses

Two vehicle accesses will be provided on Williamson Crescent to the internal parking area (see the following figure):

- an entry only driveway near the southern boundary
- a departure only driveway near the northern boundary

Three pedestrian accesses will be provided on Williamson Crescent. As discussed, the pedestrian gate leading to the pedestrian crossing will be primarily for fire egress only. The occasional staff access will be controlled by a swipe card operation.



Management of Vehicle Access

All vehicles including school minibuses, emergency vehicles and service vehicles will enter via the southern driveway and depart via the northern driveway on Williamson Crescent. The carpark will be gated and the gate will be opened between 8.00 am and 9.30 am and between 2.00 pm and 3.30 pm. Outside of these hours, the all vehicle entry shall be through intercom security access.

Vehicle Access Route

To minimise the impact on the surrounding residential amenities, it is proposed that all vehicles arrive and depart from Lawrence Hargrave Road South, and not use Williamson Crescent to the north of the egress driveway.

The proposed arrival and departure routes are illustrated in figure overleaf.

Management of Pedestrian Access

All pedestrian gates (except for the fire egress gate) will be open in the:

- mornings: 8:00 am to 9:30 am
- afternoons: 2:00 pm to 3:30 pm

Entry at other times will be only through intercom security access.

3.7 Potential Traffic Impacts and Mitigation Measures

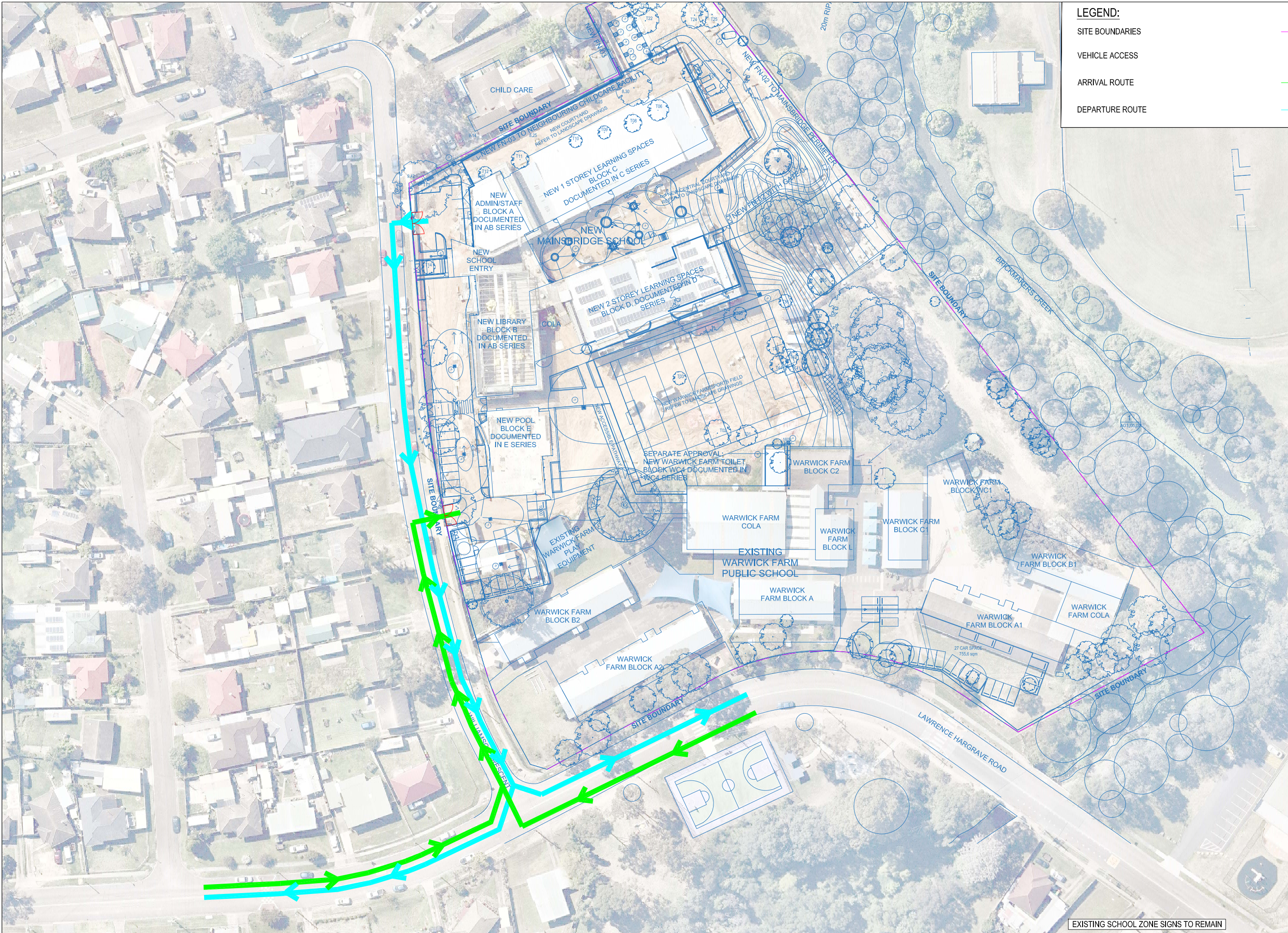
(f) potential traffic impacts on surrounding road networks and mitigation measures to minimise impacts, including measures to mitigate queuing impacts associated with vehicles accessing pick-up and drop-off parking within the School accessed from Williamson Crescent

The findings of the Traffic Impact Assessment indicate that the operation of the key intersections in the vicinity of the School will operate satisfactorily at Level of Service (LOS) B or better during the AM and PM peak hours. See the following figure.

	LoS		Average Delays (s)		Degree of Saturation	
	AM	PM	AM	PM	AM	PM
2017 Intersection Operations (Existing)						
Hume Hwy / Mannix Pde / Remembrance Ave	B	B	22.5	19.8	0.917	0.892
Hume Hwy / Homepride Ave	A	A	8.9	6.2	0.776	0.586
Lawrence Hargrave Rd / Mannix Pde	A	A	5.4	5.5	0.092	0.088
Lawrence Hargrave Rd / Williamson Cres	A	A	1.7	2.1	0.044	0.044
Lawrence Hargrave Rd / Homepride Ave	A	A	4.3	3.5	0.085	0.128
2027 Intersection Operations (with proposal)						
Hume Hwy / Mannix Pde / Remembrance Ave	B	B	21.8	19.3	0.917	0.892
Hume Hwy / Homepride Ave	B	A	16.8	6.3	0.930	0.606

Source: NSW Government

Ref. 687/2020



LEGEND:

SITE BOUNDARIES ---

VEHICLE ACCESS ↔

ARRIVAL ROUTE →

DEPARTURE ROUTE →

NEW MAINSBRIDGE SCHOOL
95 LAWRENCE HARGRAVE ROAD, WARWICK FARM
ARRIVAL AND DEPARTURE ROUTES
DRAWING REF NO. 687/2020-01-01 ISSUE A ISSUE DATE 8 FEBRUARY 2021

DESIGNED BY
L. ELLSON

REVIEWED BY
M. KONG

SCALE
A3

0 10 20
1:1



FINAL PLAN
ANY CHANGES TO THE PLAN SHALL BE DONE
WITHIN ALLOWANCE PROVIDED IN THE ROADS
AND MARITIME SERVICES TRAFFIC CONTROL AT
WORK SITES TECHNICAL MANUAL VERSION 5.0
DATED 27 JULY 2018

WARNING
THE LOCATION OF UNDERGROUND SERVICES
IS APPROXIMATE ONLY.
THE EXACT LOCATION SHALL BE PROVIDED BY
ALL SERVICES PROVIDERS ARE NOT GUARANTEED.

ttpa TRANSPORT AND TRAFFIC PLANNING ASSOCIATES
Established 1994
Address: Level 5, Suite 502 / 282 Victoria Ave, Chatswood NSW 2067
P: (02) 9411 5660 F: (02) 9904 6622 W: www.ttpa.com.au

EXISTING SCHOOL ZONE SIGNS TO REMAIN

The porte-cochere and internal queueing area allow for queueing within the School for some 100m (up to 24 cars) eliminating potential impact to traffic flow on Williamson Crescent.

Based on travel mode information provided by Mainsbridge School some 85% - 90% of students use the minibuses while the remaining 10% - 15% of students are driven to and from the School by parents/carers. This represents no more than 18 cars associated with pick-up and drop-off activities for the School. The 18 cars and 5 minibuses can be easily accommodated within the on-site queueing area without overflowing onto William Crescent noting that these vehicles will be spread out over the following periods:

- Drop off: 8.30am - 9.15am
- Pick up: 2.20pm - 3.10pm

The existing Williamson Crescent has a carriageway of some 7m wide. To allow for two-way movements on William Crescent along the frontage of the schools, it is proposed to:

- Amend the existing No Parking and No Stopping signs from 2.30 pm to 2 pm.
- Extend existing No Stopping zone (with 2 pm restriction) along the western side of Williamson Crescent towards Simpson Street
- Provide No Stopping zone (with 2 pm restriction) along the eastern side of Williamson Crescent towards Simpson Street

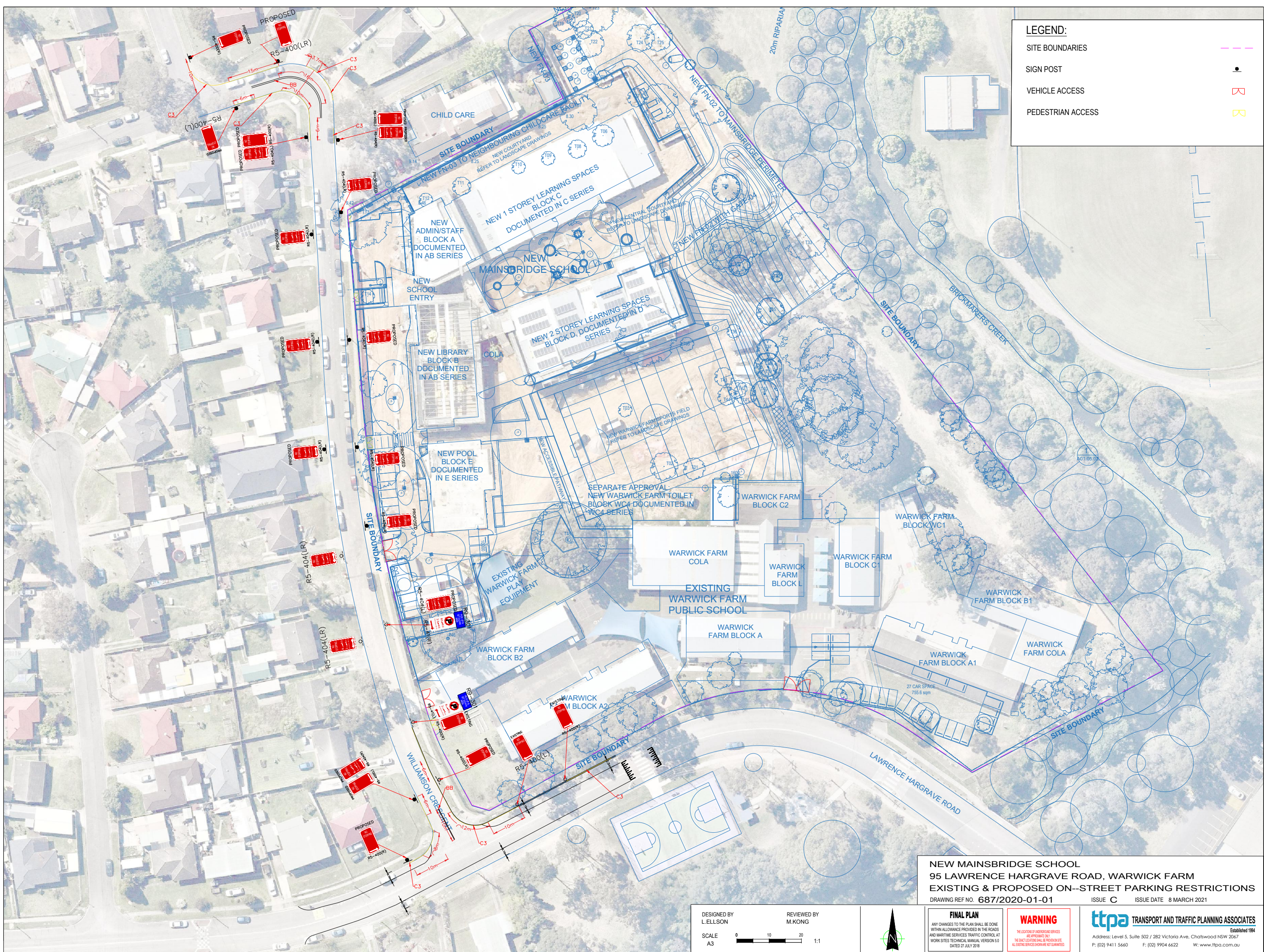
The revised signage plans included overleaf has been submitted to Council's Local Traffic Committee for approval. The proposed No Stopping zone will encourage all pick-up and drop-off to occur within the School's compound and not along the kerb on Williamson Crescent.

A school zone for a 40 km/h speed zone on Williamson Crescent has been installed by TfNSW. Emails detailing these communications are described in this report and are included in Appendix C.

3.7 Community Use

(g) car parking arrangements and management associated with the proposed use of school facilities by community members; and

No community use of the new facilities is proposed.



LEGEND:

SITE BOUNDARIES

SIGN POST

VEHICLE ACCESS

PEDESTRIAN ACCESS

NEW MAINSBRIDGE SCHOOL
95 LAWRENCE HARGRAVE ROAD, WARWICK FARM
EXISTING & PROPOSED ON-STREET PARKING RESTRICTIONS
DRAWING REF NO. 687/2020-01-01

ISSUE C ISSUE DATE 8 MARCH 2021

DESIGNED BY
L. ELLSON

REVIEWED BY
M. KONG

SCALE
A3

0 10 20
1:1



FINAL PLAN
ANY CHANGES TO THE PLAN SHALL BE DONE
WITHIN ALLOWANCE PROVIDED IN THE ROADS
AND MARITIME SERVICES TRAFFIC CONTROL AT
WORK SITES TECHNICAL MANUAL, VERSION 0.0
DATED 27 JULY 2018

WARNING
THE LOCATION OF UNDERGROUND SERVICES
IS APPROXIMATE ONLY
THE EXISTING CONDITIONS ON THE PRESENT SITE
ALERTING SERVICES SHOULD NOT BE GUARANTEED

ttpa TRANSPORT AND TRAFFIC PLANNING ASSOCIATES
Established 1994
Address: Level 5, Suite 502 / 282 Victoria Ave, Chatswood NSW 2067
P: (02) 9411 5660 F: (02) 9904 6622 W: www.ttpa.com.au

3.8 Monitoring and Review

(h) a monitoring and review program.

Ongoing monitoring and review are crucial to the success of the OTAMP. The assessment of whether the initiatives have been successful in terms of meeting the objectives and targets. See Section 4.1 for details on the proposed monitoring and review processes.

4.0 Monitoring and Measuring/Review

4.1 Frequency

The submitted OTAMP is to be reviewed regularly in consultation with Council's Road Safety Officer. The first review will be completed within a fortnight following the commencement of the School year (19 April 2021).

Post the first review, the OTAMP shall be subject to annual reviews to be conducted by the Principal and the objective of the review would be to ensure that the TMP measures continue to be implemented in accordance with sound traffic engineering and road safety practices.

Revisions to this OTAMP should occur after each review and updates should be issued prior to the start of the School year. Surveys should be undertaken at the start of Term 3 to ensure that appropriate changes and revisions can be made prior to the next school year (or later, for longer-term changes). For 2021, the drop-off and pick-up area are to be monitored weekly for the first month and monthly for the remainder of the first school term.

The OTAMP (as revised from time to time) will be implemented by the School for the life of the development.

4.2 Data Collection

Travel Mode Survey

The annual review will include an updated travel mode survey, consultation with staff and visitors, and adjustments to initiatives and targets. Data to be collected are as follows:

- Actual travel mode
- Preferred travel mode
- Issues / concerns / limitations
- Students per vehicle
- Address/distance to school

- Time of arrival/departure
- Route to site
- Pedestrian entry point

A sample travel mode survey is attached in Appendix E.

Drop-Off and Pick-Up Zone Survey

Data to assess the drop-off and pick-up zone will also need to be collected. These include:

- Number of students exiting/alighting vehicles
- Number of vehicles using the drop-off/pick-up zone
- Length of time each vehicle loads/unloads students
- Observational assessments (e.g., queuing, illegal stopping, safety concerns etc.)
- Pick-up location (in the event this requires further deterrent of usage)
- Any other relevant information as required

4.3 Actions

Once monitoring of the implementation and effectiveness of the transport strategies has taken place, actions may be required by various stakeholders.

Stakeholders		Items
School Management	Staff executive group/ P&C committee	All works
School Works	School grounds team staff executive group (for budgetary approval)	Physical works on the School site (i.e., additional bike rails or signage)
Public Works	Liverpool City Council	Public works (footpath, crossing, etc.)

5.0 Communication Plan

5.1 Strategies

Item	Action
Availability of Information	- Transport Access Guide (TAG) on the website. See Appendix D. - Induction Kit with TAG
Regular Communication	- Monthly newsletter with transport info on website - Annual transport summaries for new starter and open day kits
Community Engagement	- Use the Snap Send Solve application to report/notify issues that need addressing
Authority Consultation	- As-needed basis throughout the year. - Relevant outcomes should be incorporated into future revisions of the OTAMP. - The following local authorities should be provided with a draft copy of OTAMP prior to major updates, to ensure that any unknown or unforeseen changes by the most relevant authorities can be incorporated into the Plan if necessary: - Liverpool City Council - Transport for NSW An updated copy of the OTAMP should be provided to the above authorities.

5.2 Local Authorities

Authority	Contact
Liverpool City Council	Traffic and Transport 1300 36 2170 LCC@liverpool.nsw.gov.au
Transport for NSW	Land Use, Networks and Development - Greater Sydney 02 8849 2702 development.sydney@transport.nsw.gov.au
	Network Planning Transit Systems customerserviceNSW@transitsystems.com.au 02 8778 5889

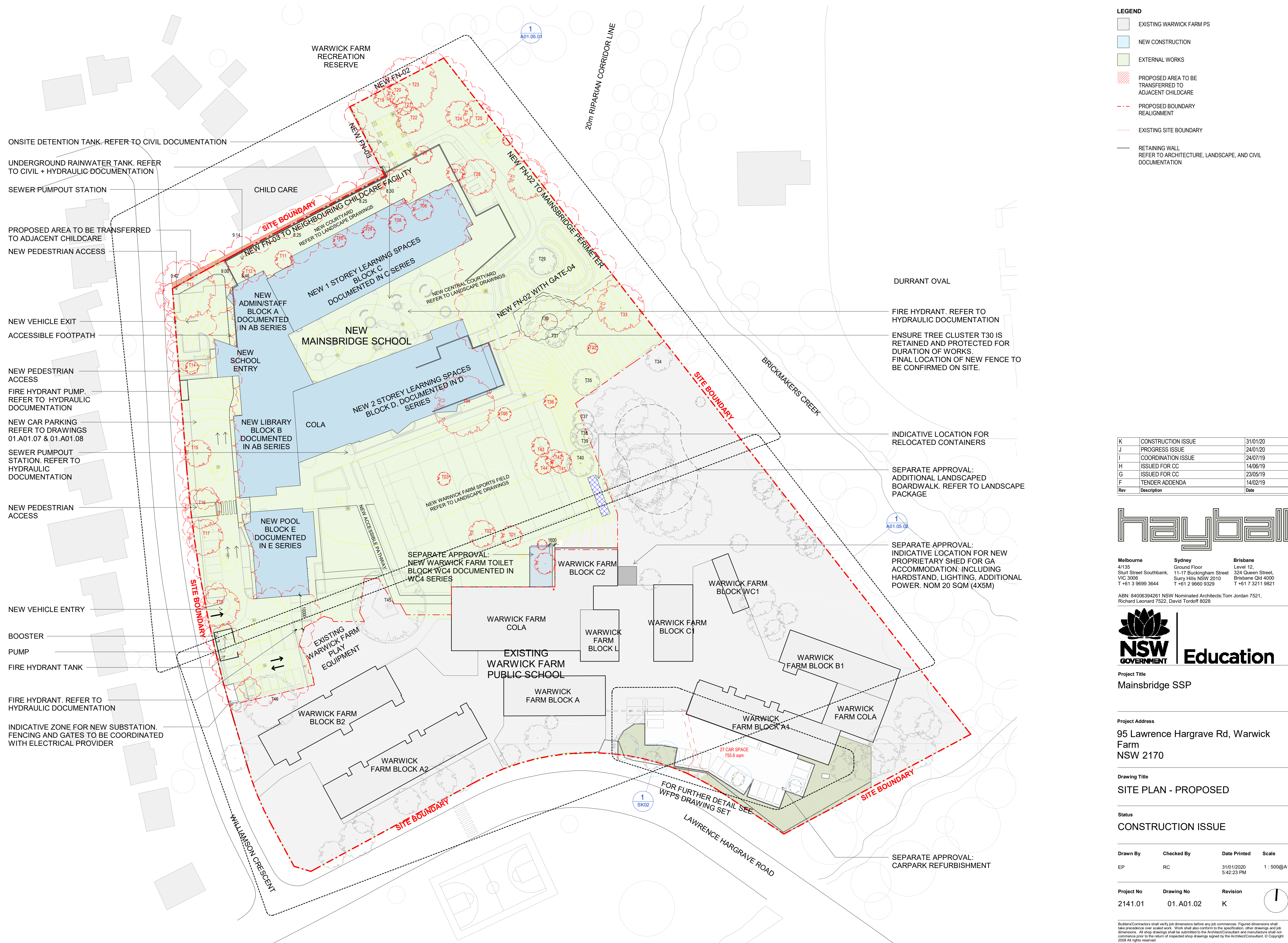
5.3 Consultation

This Plan has been developed in consultation with relevant local and state authorities as listed below. Ongoing consultation with these authorities will also occur in the future.

Authority	Consultation Status
Liverpool City Council	A draft copy of this plan has been provided to Council for feedback. This plan has been updated to address all Council's comments.
Transport for NSW	A draft copy of this plan has been provided to TfNSW for feedback. TfNSW has reviewed the plans and provided no further comments.
Department of Planning, Industry and Environment	A copy of this plan has been provided to the Secretary of the Department of Planning, Industry and Environment for approval

Appendix A

Site Plan



K	CONSTRUCTION ISSUE	31/01/20
J	PROGRESS ISSUE	24/01/20
I	COORDINATION ISSUE	24/07/19
H	ISSUED FOR CC	14/06/19
G	ISSUED FOR CC	23/05/19
F	TENDER ADDENDA	14/02/19
Rev	Description	Date

huyball

Melbourne	Sydney	Brisbane
4/135	Ground Floor	Level 12,
Sturt Street Southbank,	11-17 Buckingham Street	324 Queen Street,
VIC 3006	Surry Hills NSW 2010	Brisbane Qld 4000
T +61 3 9699 3644	T +61 2 9660 9329	T +61 7 3211 9821

ABN: 84006394261 NSW Nominated Architects: Tom Jordan 7521,
Richard Leonard 7522, David Tordoff 8028



Project Title
Mainsbridge SSP

Project Address
95 Lawrence Hargrave Rd, Warwick
Farm
NSW 2170

Drawing Title

SITE PLAN - PROPOSED

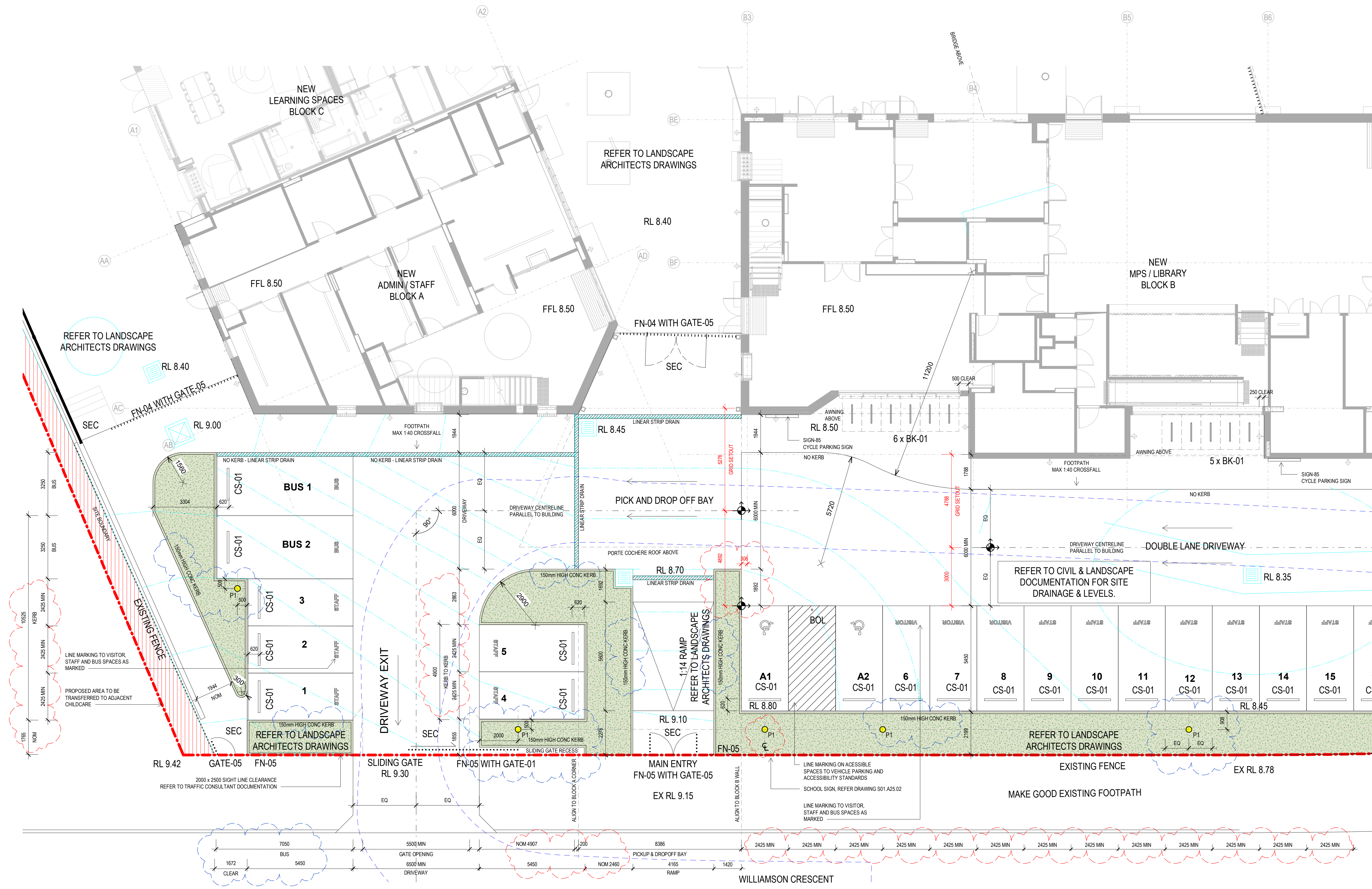
Status

CONSTRUCTION ISSUE

Drawn By	Checked By	Date Printed	Scale
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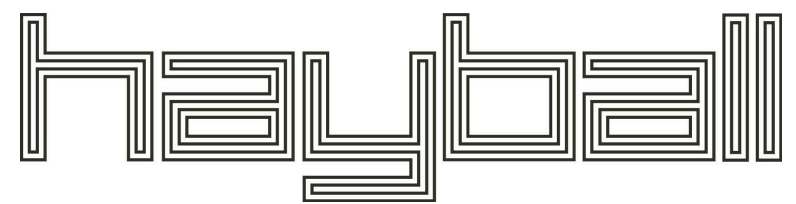
Project No	Drawing No	Revision
2141.01	01.A01.02	K

Builders/Contractors shall verify job dimensions before any job commences. Figured dimensions shall take precedence over scaled work. Work shall also conform to the specification, other drawings and job dimensions. All shop drawings shall be submitted to the Architect/Consultant and manufacture shall not commence prior to the return of inspected shop drawings signed by the Architect/Consultant. © Copyright 2008 All rights reserved



- CARPARK SETOUT NOTES**
SETOUT OF CARPARK TO BE CONDUCTED AS FOLLOWS:
- 1. ARCHITECTURAL - GRID SETOUT PLANS
 - CARPARK BOUNDARY
 - STORMWATER PITS
 - 2. ARCHITECTURAL - SITE ENTRY PLANS
 - DRIVEWAYS AND PAVEMENTS
 - CAR SPACES
 - BICYCLE SPACES
 - CARPARK FIXTURES (BOLLARDS, WHEEL STOPS, SIGNAGE)
 - SITE INFRASTRUCTURE
 - KERBS* AND GARDEN BED BOUNDARIES
 - LIGHT POLES (P1)
 - 3. LANDSCAPE - GENERAL ARRANGEMENT PLANS
 - PLANTING
 - EXTERNAL RAMPS AND STAIRS
 - LANDSCAPE FIXTURES (E.G. FLAGPOLES, HOSE COCKS)
 - 4. CIVIL - GENERAL ARRANGEMENT PLANS
 - PIT AND GROUND LEVELS
- CARPARK TO BE GENERALLY IN ACCORDANCE BCA & AUSTRALIAN STANDARDS, INCLUDING BUT NOT LIMITED TO:
- AS 1428.1 - 2009
- AS 2890.1 - 2004
- *KERB SETOUTS ARE DIMENSIONED FROM PAVEMENT SIDE OF KERB

Rev	Description	Date
N	CONSTRUCTION ISSUE	20/01/21
M	CONSTRUCTION ISSUE	13/01/21
L	CONSTRUCTION ISSUE	30/10/20
K	COORDINATION ISSUE	01/10/20
J	COORDINATION ISSUE	15/09/20
I	CONSTRUCTION ISSUE	31/01/20



Melbourne
4/135 Sturt Street Southbank, VIC 3006
T +61 3 9699 3644

Sydney
Ground Floor 11-17 Buckingham Street Surry Hills NSW 2010
T +61 2 9660 9329

Brisbane
Level 12, 324 Queen Street, Brisbane Qld 4000
T +61 7 3211 9821

ABN: 84006394261 NSW Nominated Architects: Tom Jordan 7521, Richard Leonard 7522, David Tordoff 8028



Project Title
Mainsbridge SSP

Project Address
95 Lawrence Hargrave Rd, Warwick Farm NSW 2170

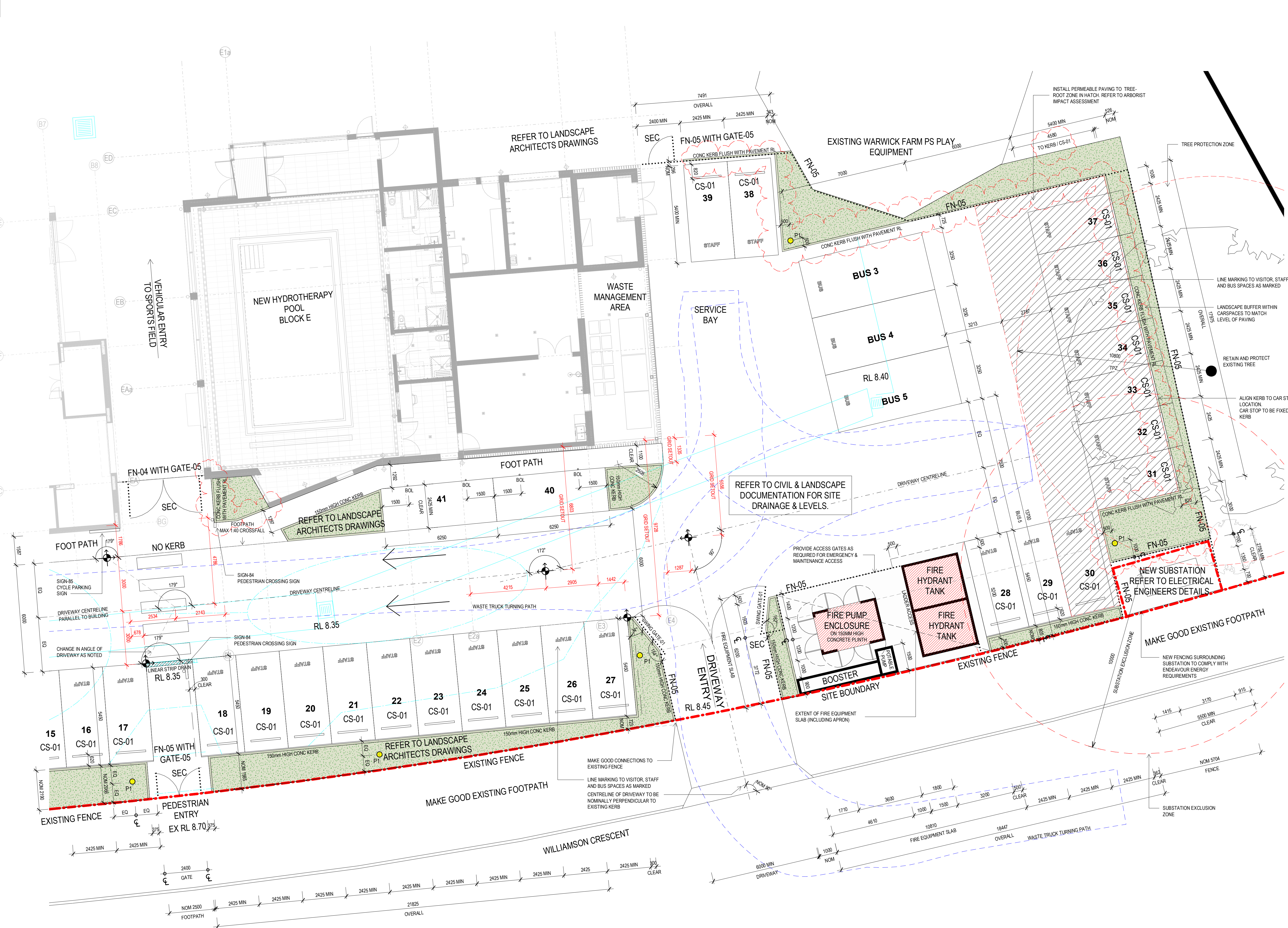
Drawing Title
SITE ENTRY PLAN - NORTH

Status
CONSTRUCTION ISSUE

Drawn By	Checked By	Date Printed	Scale
RC	RC	20/01/2021 6:28:13 PM	1 : 100@A1

Project No	Drawing No	Revision
2141.01	01.A01.08	N

Builders/Contractors shall verify job dimensions before any job commences. Figured dimensions shall take precedence over scaled work. Work shall also conform to the specification, other drawings and job dimensions. All shop drawings shall be submitted to the Architect/Consultant and manufacture shall not commence prior to the return of inspected shop drawings signed by the Architect/Consultant. © Copyright 2008 All rights reserved



CARPARK SETOUT NOTES

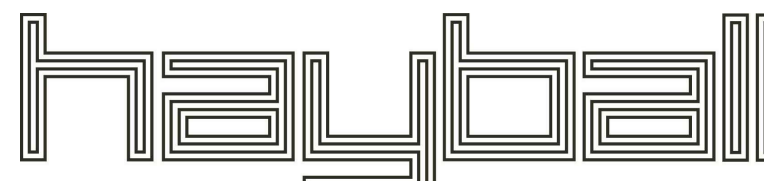
SETOUT OF CARPARK TO BE CONDUCTED AS FOLLOWS:

1. ARCHITECTURAL - GRID SETOUT PLANS
 - CARPARK BOUNDARY
 - STORMWATER PITS
2. ARCHITECTURAL - SITE ENTRY PLANS
 - DRIVEWAYS AND PAVEMENTS
 - CAR SPACES
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 - PIT AND GROUND LEVELS

CARPARK TO BE GENERALLY IN ACCORDANCE BCA & AUSTRALIAN STANDARDS, INCLUDING BUT NOT LIMITED TO:
- AS 1428.1 - 2009
- AS 2890.1 - 2004

*KERB SETOUTS ARE DIMENSIONED FROM PAVEMENT SIDE OF KERB

Rev	Description	Date
P	CONSTRUCTION ISSUE	12/02/21
O	CONSTRUCTION ISSUE	20/01/21
N	CONSTRUCTION ISSUE	13/01/21
M	CONSTRUCTION ISSUE	30/10/20
L	CONSTRUCTION ISSUE	19/10/20
K	COORDINATION ISSUE	01/10/20



Melbourne
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Sturt Street Southbank,
VIC 3006
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Sydney
Ground Floor
11-17 Buckingham Street
Surry Hills NSW 2010
T +61 2 9660 9329

Brisbane
Level 12,
324 Queen Street,
Brisbane Qld 4000
T +61 7 3211 9821

ABN: 84006394261 NSW Nominated Architects: Tom Jordan 7521,
Richard Leonard 7522, David Tordoff 8028



Project Title
Mainsbridge SSP

Project Address
**95 Lawrence Hargrave Rd, Warwick
Farm
NSW 2170**

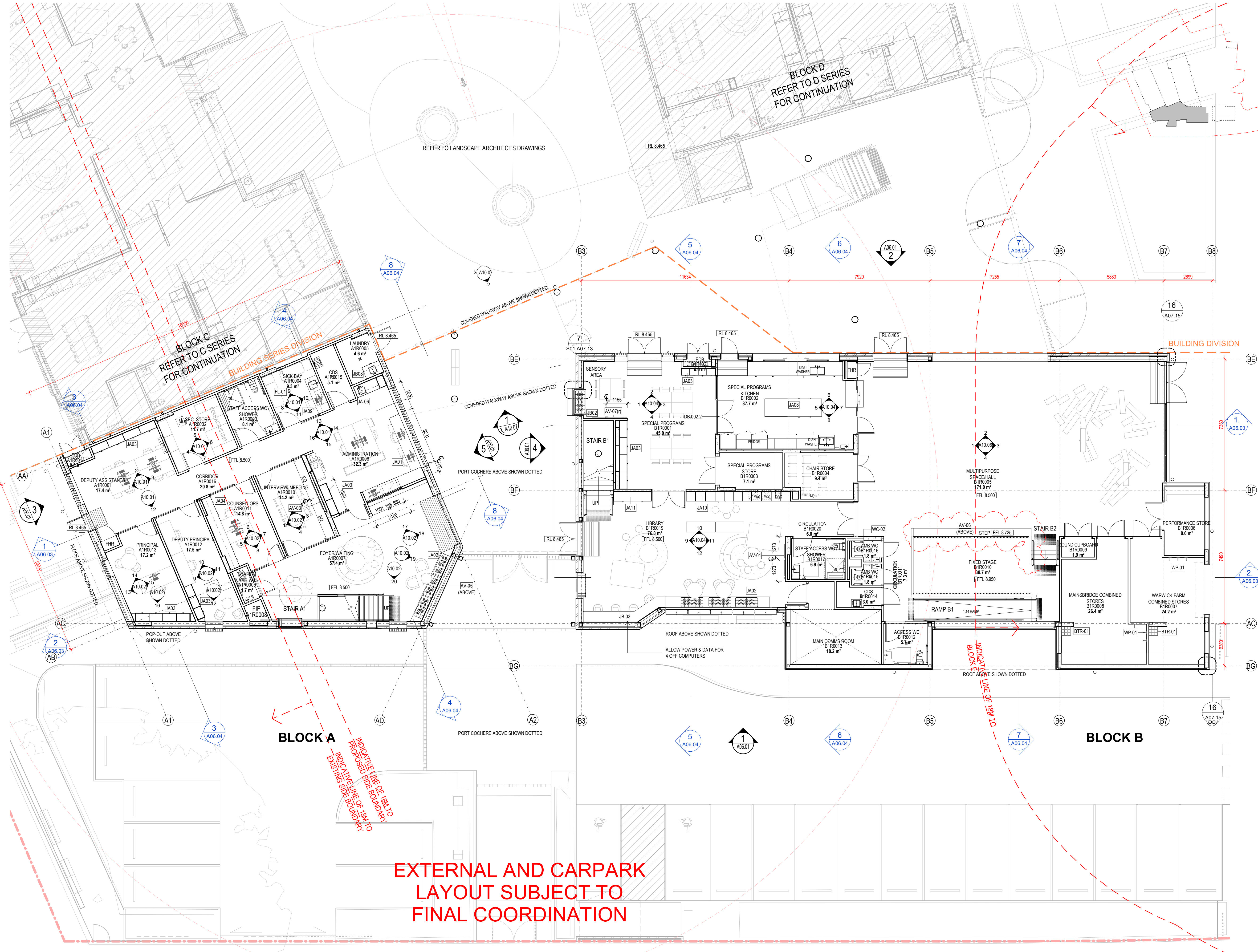
Drawing Title
SITE ENTRY PLAN - SOUTH

Status
CONSTRUCTION ISSUE

Drawn By	Checked By	Date Printed	Scale
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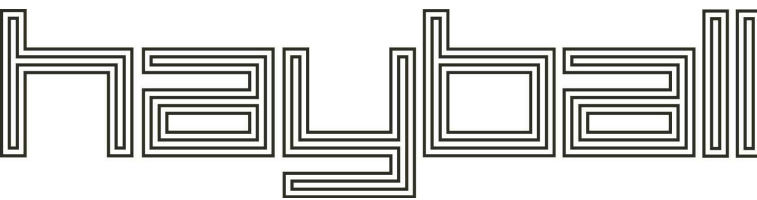
Project No	Drawing No	Revision
2141.01	01.A01.09	P

Builders/Contractors shall verify job dimensions before any job commences. Figured dimensions shall take precedence over scaled work. Work shall also conform to the specification, other drawings and job dimensions. All shop drawings shall be submitted to the Architect/Consultant and manufacture shall not commence prior to the return of inspected shop drawings signed by the Architect/Consultant. © Copyright 2008 All rights reserved



- GENERAL NOTES:**
- ALL WORKS SHALL COMPLY WITH NCC & RELEVANT AUSTRALIAN STANDARDS
 - READ IN CONJUNCTION WITH ALL OTHER ARCHITECTURAL DRAWINGS
 - READ IN CONJUNCTION WITH STRUCTURAL & SERVICES DRAWINGS
 - REFER TO ENGINEERING DRAWINGS TO CONFIRM SIZING OF ALL STRUCTURAL ELEMENTS AND TO IDENTIFY SLAB ON GROUND OR SUSPENDED SLAB CONDITIONS
 - ALL DIMENSIONS TO BE CONFIRMED BY CONTRACTOR ON SITE PRIOR TO ANY WORKS INCLUDING FABRICATION. VERIFY EXISTING DIMENSIONS ON SITE
 - PROVIDE FULL HEIGHT PINBOARD COVERING TO ALL WALL SURFACES NOTED ON INTERNAL ELEVATIONS. ALL PINBOARDS TO BE INSTALLED IN FRONT OF PLASTERBOARD. PINBOARDS TO BE INSTALLED FLUSH WITH SURROUNDING WALL FINISHES.
 - WALL MOUNTED JOINERY, FIXTURES AND EQUIPMENT TO BE PROVIDED WITH ADDITIONAL WALL STRENGTHENING TO SUPPORT FIXINGS.
 - FOR EXTERNAL WALLS: STEEL STUD NOGGINGS
 - FOR INTERNAL PARTITIONS: STRUCTURAL PLYWOOD BACKING
 - FOR MATERIAL CODES AND F&E SCHEDULES REFER TO 2141.01_01.A00.03 & 2141.01_01.A00.04
 - FOR WINDOW SCHEDULES REFER TO 2141.01_01.A22.01-A22.04
 - FOR DOOR SCHEDULES REFER TO 2141.01_01.A23.01-A23.03
 - FOR WALL TYPE SCHEDULE REFER TO 2141.01_01.A21.01

U	CONSTRUCTION ISSUE	11/01/21
T	CONSTRUCTION ISSUE	19/10/20
S	CONSTRUCTION ISSUE	17/09/20
R	REVISED FOR ICT SIGNOFF	14/09/20
Q	REVISED FOR ICT SIGNOFF	03/09/20
P	CONSTRUCTION ISSUE	02/07/20
Rev	Description	Date



Melbourne
Level 1,
250 Flinders Lane
Melbourne VIC 3000
T +61 3 9699 3644

Sydney
Ground Floor
11-17 Buckingham Street
Surry Hills NSW 2010
T +61 2 9660 9329

Brisbane
Level 12,
324 Queen Street,
Brisbane Qld 4000
T +61 7 3211 9821

ABN: 84006394261 NSW Nominated Architects: Tom Jordan 7521,
Richard Leonard 7522, David Tordoff 8028



Project Title
Mainsbridge SSP

Project Address
95 Lawrence Hargrave Rd, Warwick Farm, NSW 2170

Drawing Title
GENERAL ARRANGEMENT PLAN - GROUND

Status
CONSTRUCTION ISSUE

Drawn By
EP

Checked By
RC

Date Printed
11/01/2021
2:54:05 PM

Scale
As indicated@A1

Project No
2141.01

Drawing No
AB.A03.01

Revision
U

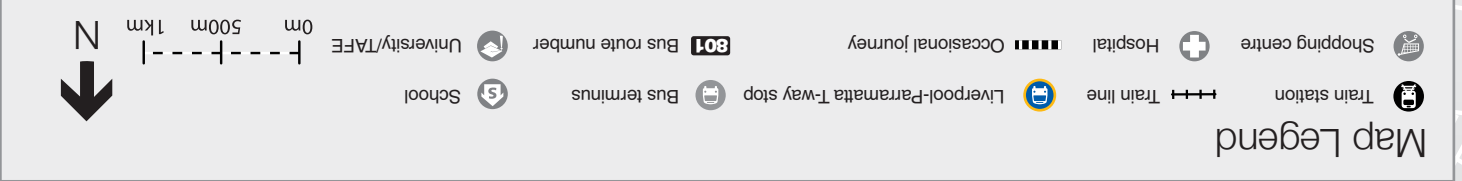
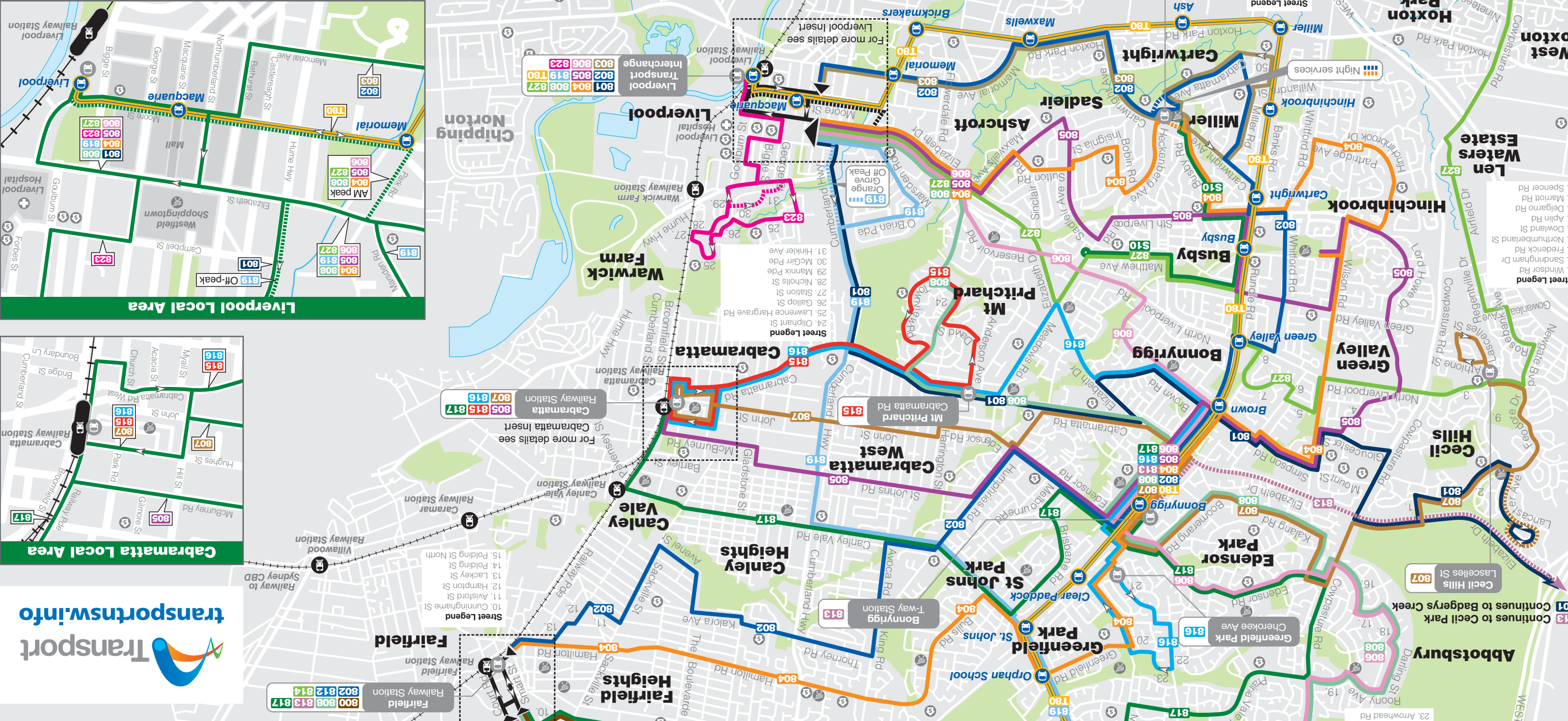
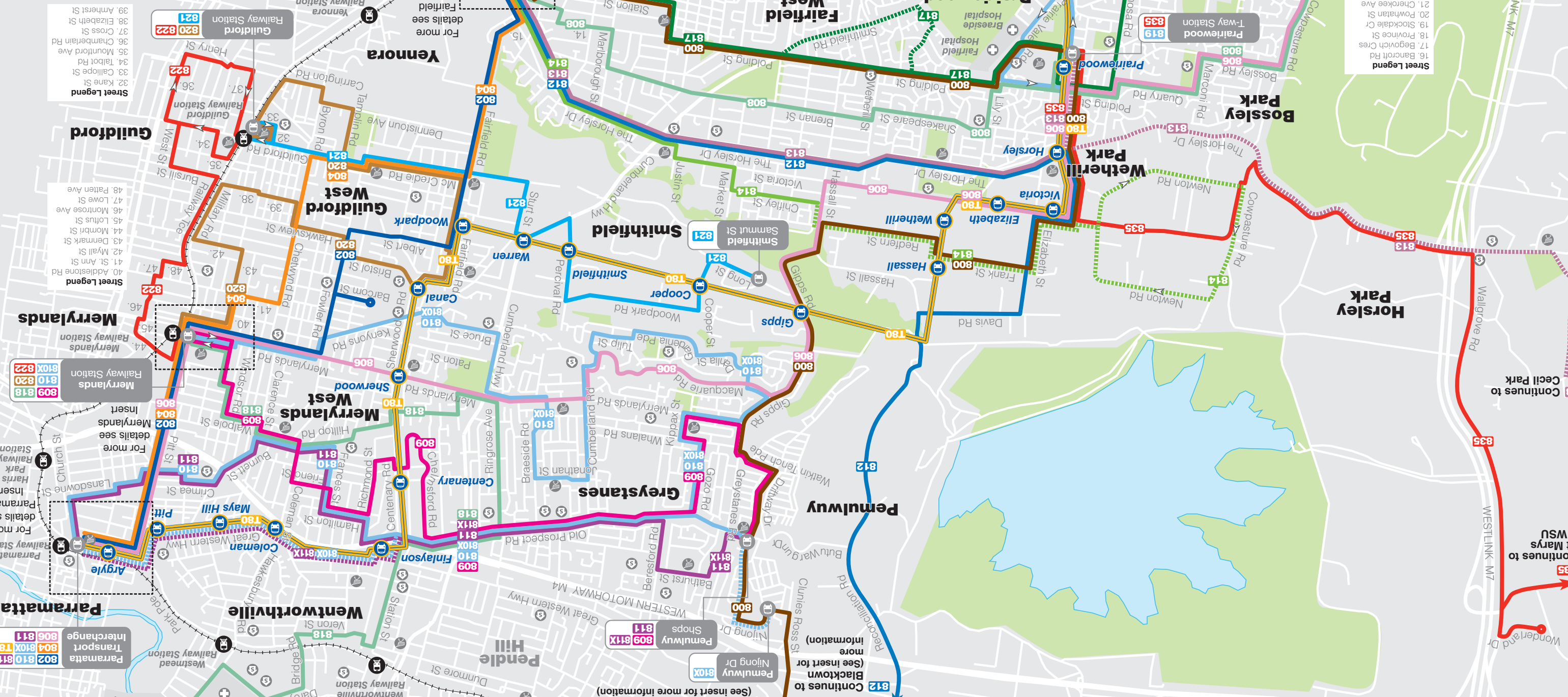
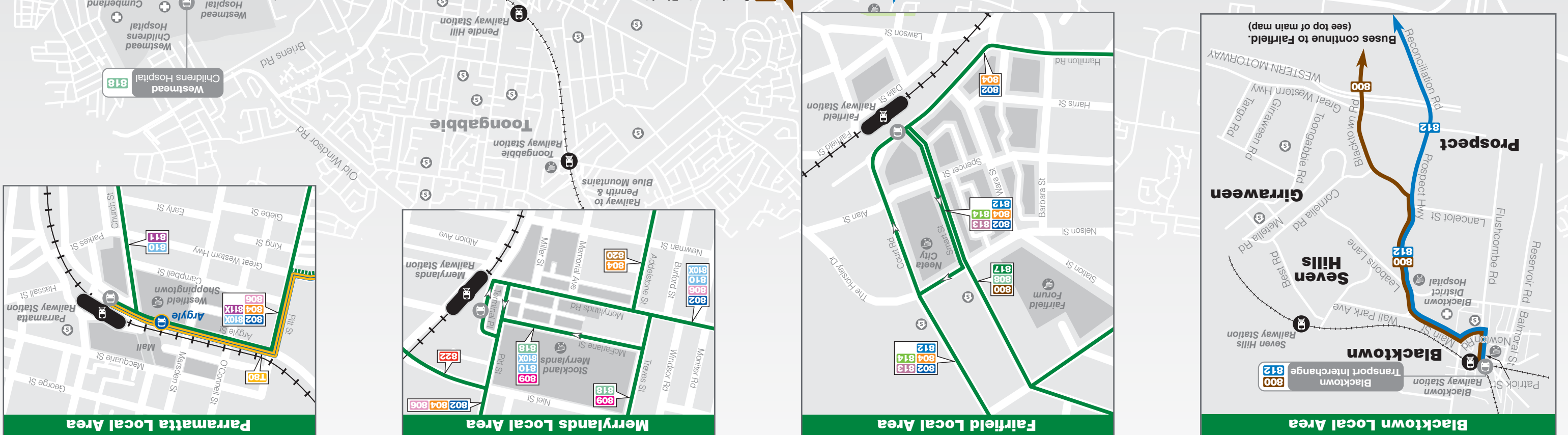
Builders/Contractors shall verify job dimensions before any job commences. Figured dimensions shall take precedence over scaled work. Work shall also conform to the specification, other drawings and job dimensions. All shop drawings shall be submitted to the Architect/Consultant and manufacture shall not commence prior to the return of inspected shop drawings signed by the Architect/Consultant. © Copyright 2008 All rights reserved

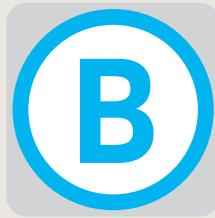
Appendix B

Public Transport Provisions



Effective from:
26 November 2017





Parramatta, Bankstown and Liverpool bus network map



NORTH

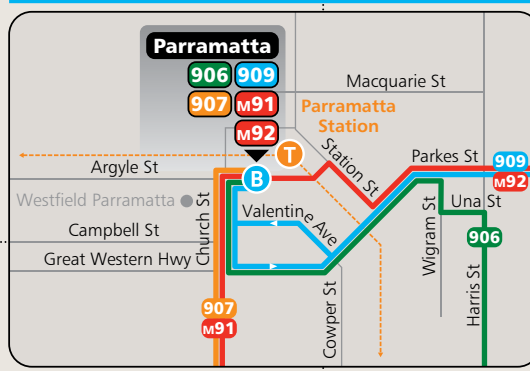


Diagrammatic Map
Not to Scale

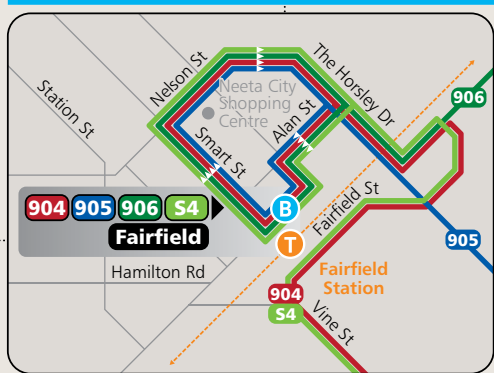
Proudly operated by
Transdev NSW



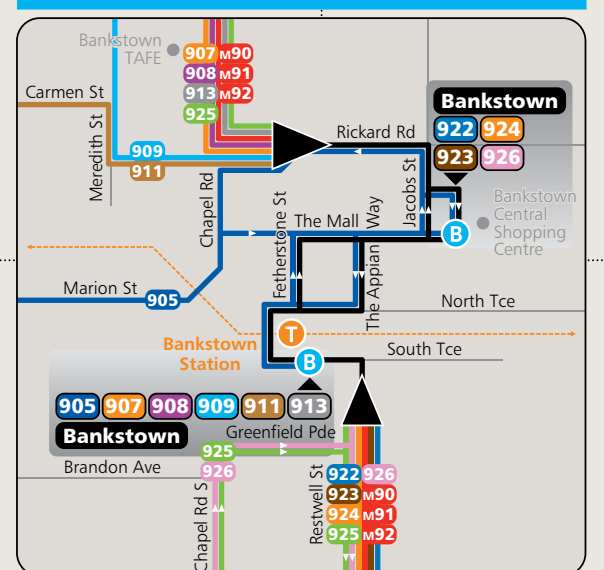
Parramatta Inset



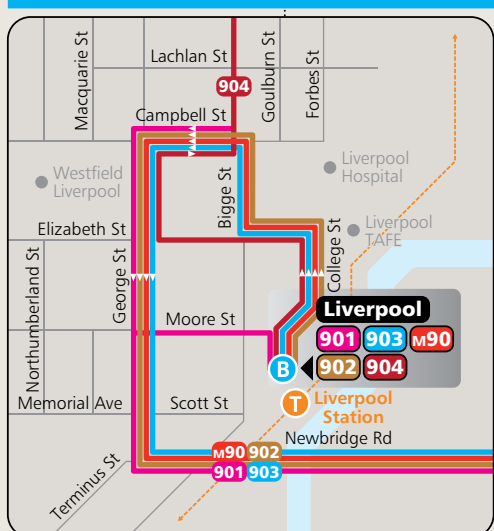
Fairfield Inset



Bankstown Inset



Liverpool Inset*



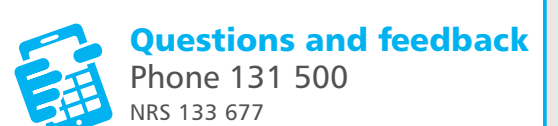
* The lines on the map show the routes of buses departing Liverpool. For buses arriving in Liverpool, please refer to individual timetables.

Key

- Bus route
- Occasional journey
- Train line/station
- Bus route number
- Bus terminus

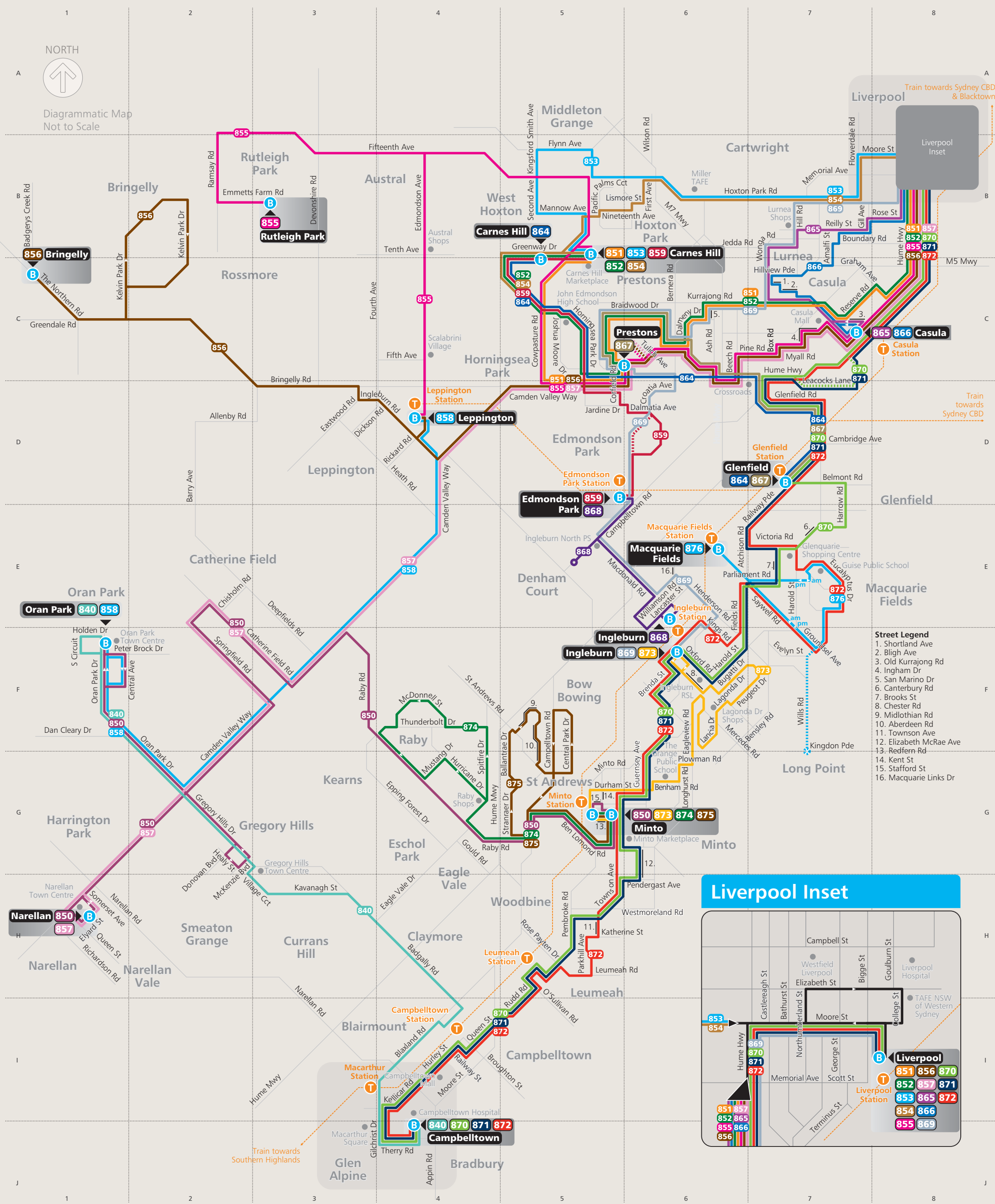
Effective from 2 December 2018

It's easy to plan your trip





Campbelltown, Liverpool, Bringelly and Oran Park bus network map



Key

- Bus route
- Occasional journey
- Train line/station
- Bus route number
- Bus terminus

It's easy to plan your trip

On the web
transportnsw.info

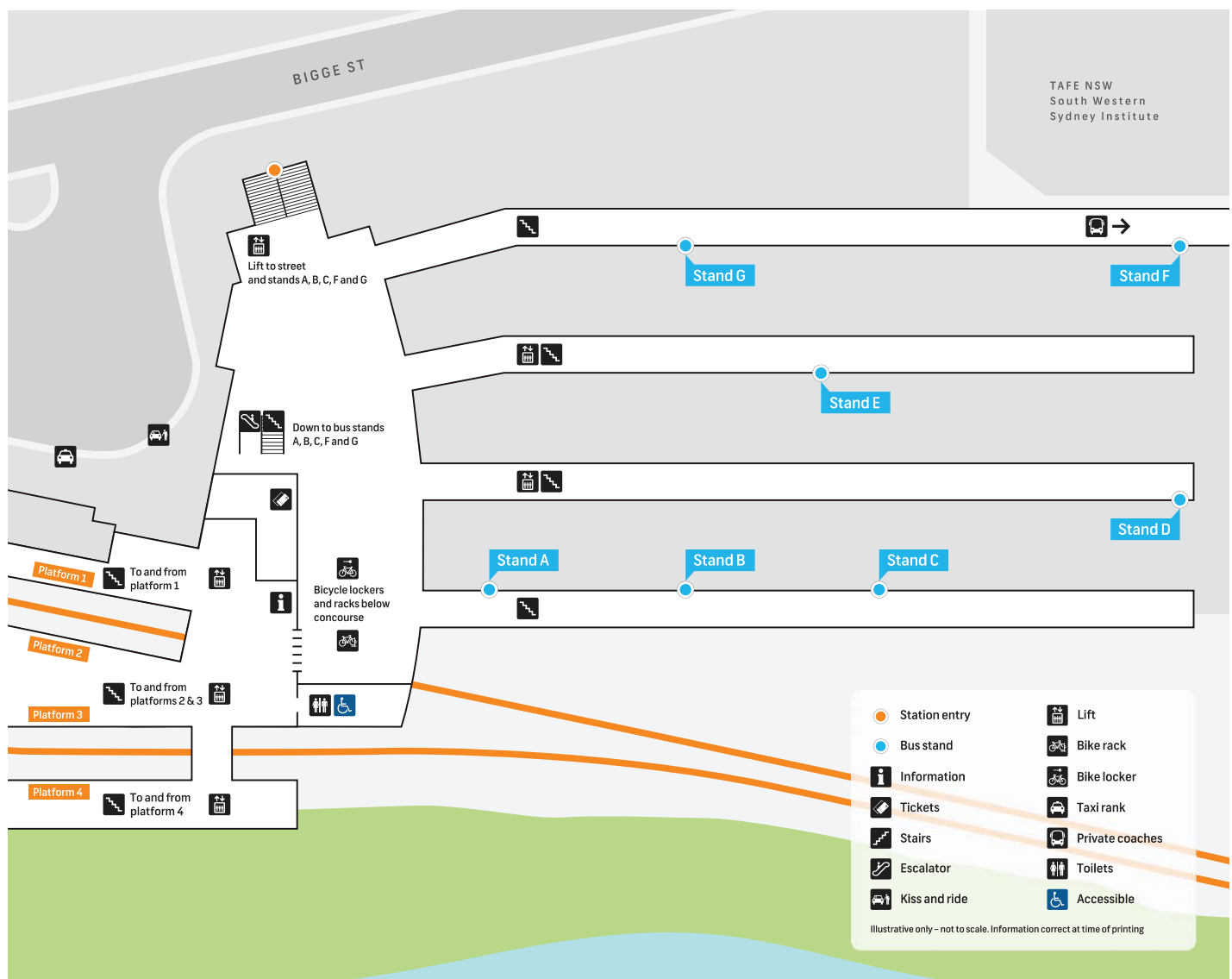
Questions and feedback
Phone 131 500
TTY 1800 637 500

Transport

Sydney metro and train lines



Liverpool Station Public Transport Map



- T** **T2** Inner West & Leppington Line
City Leppington
- T3** Bankstown Line
City
- T5** Cumberland Line
Leppington Richmond

Stand A
Stop no. 2170805
Arrivals only
Stand B
Stop no. 2170588
T80 Parramatta
Stand C
Stop no. 2170570
802 Parramatta
803 Miller
853 Carnes Hill
854 Carnes Hill
855 Rutleigh Park
856 Bringelly
869 Ingleburn

Stand D
Stop no. 2170296
851 Carnes Hill Marketplace
852 Carnes Hill Marketplace
857 Narellan
865 Casula
866 Casula
870 Campbelltown Hospital
871 Campbelltown Hospital
872 Campbelltown Hospital
Stand E
Stop no. 2170567
Arrivals only

Stand F
Stop no. 2170171
801 Badgerys Creek
804 Parramatta
805 Cabramatta
806 Parramatta
808 Fairfield
819 Prairiewood
823 Warwick Farm
827 Carnes Hill

Stand G
Stop no. 2170563
901 Holsworthy
902 Holsworthy
903 Chipping Norton
904 Fairfield
M90 Burwood
N30 City Town Hall
N30 Macarthur
N31 Leppington Station
N50 City Town Hall

For more information
transportnsw.info



Appendix C

Consultations

Meg Kong

From: Meg Kong
Sent: Monday, 8 March 2021 1:58 PM
To: Mahavir Arya
Cc: Jacob Baker; Brock Powell; Amir Maglajlic; John Koumoukelis; Parth Tiwari
Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP
Attachments: N6872020-01-P2NEW with 2pm 08032021-01 (3).pdf

Hi Mahavir

Thanks.

Please see attached revised signage and line-marking plans for committee approval.

Kind regards

Meg Kong | Associate

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

Established 1994

Suite 502, Level 5, 282 Victoria Avenue, Chatswood NSW 2067

P (02) 9411 5660 F (02) 9904 6622 W ttpa.com.au



From: Mahavir Arya <AryaM@liverpool.nsw.gov.au>
Sent: Friday, 5 March 2021 5:40 PM
To: Meg Kong <meg@ttpa.com.au>
Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell <Brock.Powell@hutchinsonbuilders.com.au>; Amir Maglajlic <Amir.Maglajlic@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>; Parth Tiwari <TiwariP@liverpool.nsw.gov.au>
Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Meg

Council proposal to the submitted signa and linemarking plan is attached. Please provide updated signs and linemarking considering Council proposal for traffic committee approval. Agenda for the March meeting will close on Tuesday, 9 March 2021.

Regards

Mahavir Arya

Traffic and Transport Engineer



02 8711 7592 | | AryaM@liverpool.nsw.gov.au

Customer Service: 1300 36 2170 | 33 Moore Street Liverpool, NSW 2170, Australia



www.liverpool.nsw.gov.au



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From: Meg Kong <meg@tpa.com.au>
Sent: Tuesday, 2 March 2021 5:17 PM
To: Mahavir Arya <AryaM@liverpool.nsw.gov.au>
Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell <Brock.Powell@hutchinsonbuilders.com.au>; Amir Maglajlic <Amir.Maglajlic@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>; Parth Tiwari <TiwariP@liverpool.nsw.gov.au>
Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Thanks, Mahavir.

Please see attached revised plans for your approval.

Kind regards

Meg Kong | Associate

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

Established 1994

Suite 502, Level 5, 282 Victoria Avenue, Chatswood NSW 2067

P (02) 9411 5660 F (02) 9904 6622 W tpa.com.au



From: Mahavir Arya <AryaM@liverpool.nsw.gov.au>
Sent: Tuesday, 2 March 2021 10:09 AM
To: Meg Kong <meg@tpa.com.au>
Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell <Brock.Powell@hutchinsonbuilders.com.au>; Amir Maglajlic <Amir.Maglajlic@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>; Parth Tiwari <TiwariP@liverpool.nsw.gov.au>
Subject: Re: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Meg

A copy of comments on the signs and linemarking scheme is attached with the following comments.

1. Provide BB linemarking at the bend and at the intersection with Lawrence Hargrave Road
2. Provide C3 yellow no stopping edgeline be provided at least 6m ahead on approaches to the BB line marking and 10m of the kerb returns. C3 edgelines would have fulltime No Stopping restrictions.

Please contact me should you be having any further questions.

Regards
Mahavir

Mahavir Arya
Traffic and Transport Engineer



02 8711 7592 | | AryaM@liverpool.nsw.gov.au

Customer Service: 1300 36 2170 | 33 Moore Street Liverpool, NSW 2170, Australia



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From: Meg Kong <meg@tpa.com.au>

Sent: Monday, 1 March 2021 7:10 PM

To: Mahavir Arya <AryaM@liverpool.nsw.gov.au>

Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell

<Brock.Powell@hutchinsonbuilders.com.au>; Amir Maglajlic <Amir.Maglajlic@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>

Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Mahavir

Hope you are well.

Will you please advise the status of Council's review on the signage and line-marking plans?

The school would like to move in at the end of March. As such the signage works will have to be completed as soon as possible.

Thank you in advance.

Kind regards

Meg Kong | Associate

From: Meg Kong
Sent: Thursday, 11 February 2021 12:59 PM
To: Mahavir Arya <AryaM@liverpool.nsw.gov.au>
Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell <Brock.Powell@hutchinsonbuilders.com.au>; Amir Maglajlic <Amir.Maglajlic@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>
Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Mahavir

As discussed, please see attached signage plans to address your comments. These plans were also included in the revised OTAMP.

<https://www.dropbox.com/s/0m3f8v2uui0mufs/95%20LAWRENCE%20HARGRAVE%20ROAD%2C%20WARWICK%20FARM%20SIGNAGE%20PLANS.pdf?dl=0>

Appreciate if you can review and seek approval from all stakeholders. I noted that you can provide the approval by early April after running through the traffic committee as the school will commence on the 19th April.

I also note that HB will be responsible to install these signs.

Kind regards

Meg Kong | Associate

From: Meg Kong

Sent: Monday, 8 February 2021 7:45 PM

To: Mahavir Arya <AryaM@liverpool.nsw.gov.au>

Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell

<Brock.Powell@hutchinsonbuilders.com.au>; Amir Maglajlic <Amir.Maglajlic@hutchinsonbuilders.com.au>; John

Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>; Charles Wiafe <WiafeC@liverpool.nsw.gov.au>;

Rachel Palermo <PalermoR@liverpool.nsw.gov.au>

Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Mahavir

For your convenience in reviewing the updated OTAMP, I have prepared the following table for your reference.

No.	Comments	Section	
1	On-site car parking spaces		
a	It is mentioned that there will be 43 on-site car parking spaces (39 for staff and 4 visitor, including 2 disabled spaces). It is also mentioned that there will be 52 full time staff and 8 part-time staff, it does not mention if this staff number includes ancillary staff such as admin or cleaners, which means the number of staff could in fact be higher. With already more staff than on-site parking spaces this means that staff members will be parking on street and this will take away spaces for parents who are parking or dropping off/picking up students, if not from Mainsbridge PS then from Warwick Farm PS. Should the school expand at all in the future, there will already be no room for extra staff vehicles on premise.	3.3	
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	Currently there is AM/PM peak no stopping restrictions installed on the residents side of Williamson Cres, up to #63. These restrictions may need to be extended further north to allow for free flow of traffic past the new Mainsbridge Public School. Parking restrictions along the school frontage of Williamson Cres may need to be considered, especially in between the two access driveway points.	3.6	
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b	Will there be some sort of vehicle/students identification process to make the PM pick up flow in the quickest possible time.	3.4	
c	The reference to a 'kerbside' drop off in the internal queue could be confusing to students as they will actually be disembarking the vehicle on what we would call the 'roadside' of the car usually, but in this instance it will be the school side. Asking them to exit a vehicle at any other time via the kerbside would mean using the opposite door. Maybe this reference can be changed to 'school side'?	3.4	
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b	Submit signs and linemarking scheme to Council for traffic committee assessment and approval.	3.6	
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		3.6	
b	Should the arrival and departure times of the MBPS is also deferred then it must be indicated in the report along with the expected student and vehicles numbers.	During the DA stage, ARC parking surveys (See Section report) which indicated the parking (and pick-up) demand existing school is met in Hargrave Drive with a moderate (pick-up) in Williamson Crescent. It is noted that all pick-up and drop-off at proposed school can occur without relying on on-street parking.	
10	Vehicle access route		
a	The OTAMP must include the proposed access route to the school without impacting on resident amenity.	3.6	
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11	Contact details		
	It is suggested that contact details of the identified authorities should be general and not to be specific to a person.	5.2	

Kind regards

Meg Kong | Associate

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

Established 1994

Suite 502, Level 5, 282 Victoria Avenue, Chatswood NSW 2067

P (02) 9411 5660 F (02) 9904 6622 W ttpa.com.au



From: Meg Kong

Sent: Monday, 8 February 2021 6:42 PM

To: Mahavir Arya <AryaM@liverpool.nsw.gov.au>

Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell

<Brock.Powell@hutchinsonbuilders.com.au>; Amir Maglajlic <Amir.Maglajlic@hutchinsonbuilders.com.au>; John

Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>; Charles Wiafe <WiafeC@liverpool.nsw.gov.au>;

Rachel Palermo <PalermoR@liverpool.nsw.gov.au>

Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Mahavir

Thank you for your comments. Please download the revised OTAMP from the link below and my response in red below.

<https://www.dropbox.com/s/da8qpy3gf3po1az/95%20LAWRENCE%20HARGRAVE%20ROAD%2C%20WARWICK%20FARM%20FEB%202021%20OPERATIONAL%20TRANSPORT%20%26%20ACCESS%20MANAGEMENT%20PLAN%20FINAL%20A.pdf?dl=0>

Feel free to contact me if you have any questions.

Kind regards

Meg Kong | Associate

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Established 1994

Suite 502, Level 5, 282 Victoria Avenue, Chatswood NSW 2067

P (02) 9411 5660 F (02) 9904 6622 W ttpa.com.au



From: Mahavir Arya <AryaM@liverpool.nsw.gov.au>

Sent: Monday, 25 January 2021 10:56 AM

To: Meg Kong <meg@ttpa.com.au>

Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell

<Brock.Powell@hutchinsonbuilders.com.au>; Amir Maglajlic <Amir.Maglajlic@hutchinsonbuilders.com.au>; John

Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>; Charles Wiafe <WiafeC@liverpool.nsw.gov.au>;

Rachel Palermo <PalermoR@liverpool.nsw.gov.au>

Subject: Re: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Meg

The following are Council response on the submitted OTAMP.

- On-site car parking spaces
 - It is mentioned that there will be 43 on-site car parking spaces (39 for staff and 4 visitor, including 2 disabled spaces). It is also mentioned that there will be 52 full time staff and 8 part-time staff, it does not mention if this staff number includes ancillary staff such as admin or cleaners, which means the number of staff could in fact be higher. With already more staff than on-site parking

spaces this means that staff members will be parking on street and this will take away spaces for parents who are parking or dropping off/picking up students, if not from Mainsbridge PS then from Warwick Farm PS. Should the school expand at all in the future, there will already be no room for extra staff vehicles on premise.

The School will accommodate 52 full time and eight part-time staff (an additional eight staff from existing operations and including ancillary staff, i.e., administration and support staff) and 120 students. It is noted that only 50% of the part-time staff will be present at any one time. This results in a maximum on-site staff of 56 staff. Based on the above table and a maximum of 56 on-site staff, a 70% 'car driver' target will represent a parking demand of 39 spaces. As such, all parking demand can be accommodated within the site without any reliance on the on-street parking in the surrounding local road network.

This plan and the associated approved GTP (see Appendix D of revised OTAMP) will be updated accordingly should the above staff number change in the future.

- How will they ensure that vehicles in the on-site drop off/pick up queue do not park on site instead of remaining in the queue

The staff will ensure that this does not occur on site. See details in Section 3.4.

- On Street Parking
 - Currently there is AM/PM peak no stopping restrictions installed on the residents side of Williamson Cres, up to #63. These restrictions may need to be extended further north to allow for free flow of traffic past the new Mainsbridge Public School. Parking restrictions along the school frontage of Williamson Cres may need to be considered, especially in between the two access driveway points. **See proposed on-street parking restrictions in Section 3.7.**
- Drop off/Pick up queue
 - The document mentions almost 100m of length to bank the queue on site, or equivalent to 28 vehicles. A quick look at measurements seems this may be exaggerated and even with the double lane queue we see that maybe only 24 cars may fit. **This has been amended to 24 car. See Section 3.7** Regardless, with 120 students expected we think this is not enough length to hold all of the vehicles that will be dropping off/picking up students. Even with 4 mini buses there would be upwards of at least 50 other vehicles that need to stop there. This means that the queue will flow out on to Williamson crescent and impede traffic flow. In the AM peak as Mainsbridge starts slightly earlier than Warwick Farm PS this might not be such as issue, but in the PM peak when both schools finish at the same time, this will undoubtedly lead to massive traffic congestions. It is also a problem as the queue for the Mainsbridge pick up line will have to turn right across the southbound travel lane in Williamson Cres.

Based on travel mode information provided by Mainsbridge School some 85% - 90% of students use the minibuses while the remaining 10% - 15% of students are driven to and from the School by parents/carers. This represents no more than 18 cars associated with pick-up and drop-off activities for the School. The 18 cars and 5 minibuses can be easily accommodated within the on-site queuing area without overflowing onto William Crescent noting that these vehicles will be spread out over the following periods:

Drop off: 8.30am - 9.15am

Pick up: 2.20pm - 3.10pm

- Will there be some sort of vehicle/students identification process to make the PM pick up flow in the quickest possible time.

Parents will be advised that the name card is to be displayed under the passenger sun visor (for maximum visibility) during the afternoon pick-up period.

- The reference to a 'kerbside' drop off in the internal queue could be confusing to students as they will actually be disembarking the vehicle on what we would call the 'roadside' of the car usually, but

in this instance it will be the school side. Asking them to exit a vehicle at any other time via the kerbside would mean using the opposite door. Maybe this reference can be changed to 'school side'?

Amended to school side.

- Pedestrian Access

- The pedestrian access gates from Williamson Cres mean that any pedestrian must walk across the internal drop off/pick up queue when inside the gates. How will this be managed to ensure safety of pedestrians?

Pedestrians accessing the gates on Williamson Crescent will be protected by footpaths and zebra crossing cross the internal drop-off/pick up queuing area within the School's compound. Shared zone signs with 10 kph posted speed limit will be installed within the site to ensure priorities are given to the pedestrians within the site.

It is also noted that the staff will monitor pedestrian movements within the School's compound during the pick-up and drop-off periods, ensuring the safety of pedestrians.

- School Fence

- Will there be a dividing internal fence between the two schools? Concerns are that students from Warwick Farm PS may walk through the Mainsbridge School car park to get to their own school if no fence is in place.

It is noted that there be an internal dividing fence between the exiting and the new schools. As such, students from the Warwick Farm Public School will not walk through the Mainsbridge School carpark to get to their school. Students from respective schools will use the gates designated to their own schools.

- Review

- The submitted OTAMP is to be reviewed regularly in consultation with Council's Road Safety Officer. The first review could be within a fortnight following commencement of school year.

Noted. The first review will be completed within a fortnight following the commencement of the school year (19 April 2021).

- Traffic Management

- School staff should not manage traffic management outside the school premises without proper certification and tickets.

It is noted that all traffic management will be completed within the School's compound. Should the staff be required to manage traffic outside the School's compound, they would need to obtain proper certifications and tickets.

- the proposal of extending the existing 40K School Zone is to be submitted to TfNSW for approval

Submitted and approved by TfNSW. Please see correspondence in Appendix C.

- Parking restrictions at the 90 degree bend may also be required to stop vehicles parking closer to the bend.

See proposed on-street parking restrictions in Section 3.7.

- All pick-up and drop-off should be within the school and not along kerb on Williamson Crescent.

Noted. See Section 3.7.

- Operating Hours

- It is suggested that school operating hours of both the schools should be included to demonstrate staggered arrival and departure time of both schools.

The proposed hours of operation for MSSP are as follows:

School: 8:50 am until 2.45 pm

Drop off: 8.30am - 9.15am

Pick up: 2.20pm - 3.10pm

The existing hours of operation for the existing school are as follows demonstrating a 10-minute earlier start and 15-minute latter finish:

School: 9.00 am until 3.00 pm

Drop off: 8:30am - 9:05am.

Pick up: Staggered over 4 periods - 2:45pm, 2:50pm, 2:55pm and 3:00pm.

- Should the arrival and departure times of the MBPS is also deferred then it must be indicated in the report along with the expected student and vehicles numbers.
During the DA stage, ARC conducted parking surveys which indicated the majority of parking (and pick-up) demand of the existing school is met in Lawrence Hargrave Drive with a moderate demand (pick-up) in Williamson Crescent. It is noted that all pick-up and drop-off of the proposed school can occur within the site, without relying on on-street space.
- Vehicle access route
The OTAMP must include the proposed access route to the school without impacting on resident amenity. **Noted. See Section 3.6.**
- It is suggested that the school traffic should not use Williamson Crescent section beyond the egress driveway of the school. The OTAMP must indicate in the report. **Noted. See Section 3.6.**
- Contact details
 - It is suggested that contact details of the identified authorities should be general and not to be specific to a person. **Noted. See Section 5.2.**

Please contact me should you be having any further questions.

Regards

Mahavir

Mahavir Arya

Traffic and Transport Engineer



02 8711 7592 | | AryaM@liverpool.nsw.gov.au

Customer Service: 1300 36 2170 | 33 Moore Street Liverpool, NSW 2170, Australia



www.liverpool.nsw.gov.au



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From: Meg Kong <meg@tpa.com.au>

Sent: Thursday, 21 January 2021 9:03 AM

To: Mahavir Arya <AryaM@liverpool.nsw.gov.au>

Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell

<Brock.Powell@hutchinsonbuilders.com.au>; Amir Maglajlic <Amir.Maglajlic@hutchinsonbuilders.com.au>; John

Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>; Charles Wiafe <WiafeC@liverpool.nsw.gov.au>; LCC

<LCC@liverpool.nsw.gov.au>

Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Good morning Mahavir

As discussed, appreciate if you can review and provide comments urgently on our OTAMP issued on 7 January. See email below.

Thanks in advance.

Kind regards

Meg Kong | Associate

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

Established 1994

Suite 502, Level 5, 282 Victoria Avenue, Chatswood NSW 2067

P (02) 9411 5660 F (02) 9904 6622 W ttpa.com.au



From: Meg Kong

Sent: Monday, 18 January 2021 8:38 AM

To: 'WiafeC@liverpool.nsw.gov.au' <WiafeC@liverpool.nsw.gov.au>; 'lcc@liverpool.nsw.gov.au' <lcc@liverpool.nsw.gov.au>

Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Good morning Charles,

Hope you had a good weekend.

Given that the school will need to open in March, we will appreciate Council's review and comments urgently.

Feel free to contact me if you have any questions.

Kind regards

Meg Kong | Associate

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

Established 1994

Suite 502, Level 5, 282 Victoria Avenue, Chatswood NSW 2067

P (02) 9411 5660 F (02) 9904 6622 W ttpa.com.au



From: Meg Kong

Sent: Wednesday, 13 January 2021 5:04 PM

To: WiafeC@liverpool.nsw.gov.au

Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell

<Brock.Powell@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>; lcc@liverpool.nsw.gov.au

Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Charles

Hope you are well.

Just following up if you have any comments so far on the OTAMP. Appreciate it if you can advise an indicative timing for Council's comments.

Thank you in advance.

Kind regards

Meg Kong | Associate

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

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Suite 502, Level 5, 282 Victoria Avenue, Chatswood NSW 2067

P (02) 9411 5660 F (02) 9904 6622 W ttpa.com.au



From: Meg Kong

Sent: Thursday, 7 January 2021 4:45 PM

To: WiafeC@liverpool.nsw.gov.au

Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell

<Brock.Powell@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>

Subject: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Charles

First of all, Happy New Year to you.

As part of Consent Conditions № D9, D10 and D11 (attached in this email), we are required to consult with Council in relation to the Operational Transport & Access Management Plan for the new Mainsbridge School for Specific Purposes (School) at 95 Lawrence Hargrave Road, Warwick Farm. Please download the plan from the link below:

<https://www.dropbox.com/s/7haxfrisrzq4gcq/95%20LAWRENCE%20HARGRAVE%20ROAD%2C%20WARWICK%20FARM%20DEC%202020%20OPERATIONAL%20TRANSPORT%20%26%20ACCESS%20MANAGEMENT%20PLAN%20DRAFT%20A.pdf?dl=0>

Appreciate Council's review and comments. Feel free to contact me if you have any questions.

Kind regards

Meg Kong | Associate

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Disclaimer

Meg Kong

From: Meg Kong
Sent: Thursday, 11 February 2021 12:59 PM
To: Mahavir Arya
Cc: Jacob Baker; Brock Powell; Amir Maglajlic; John Koumoukelis
Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

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Appreciate if you can review and seek approval from all stakeholders. I noted that you can provide the approval by early April after running through the traffic committee as the school will commence on the 19th April.

I also note that HB will be responsible to install these signs.

Kind regards

Meg Kong | Associate

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Meg Kong | Associate

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From: Meg Kong
Sent: Monday, 8 February 2021 6:42 PM
To: Mahavir Arya <AryaM@liverpool.nsw.gov.au>
Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell <Brock.Powell@hutchinsonbuilders.com.au>; Amir Maglajlic <Amir.Maglajlic@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>; Charles Wiafe <WiafeC@liverpool.nsw.gov.au>; Rachel Palermo <PalermoR@liverpool.nsw.gov.au>
Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Mahavir

Thank you for your comments. Please download the revised OTAMP from the link below and my response in red below.

<https://www.dropbox.com/s/da8qpy3gf3po1az/95%20LAWRENCE%20HARGRAVE%20ROAD%2C%20WARWICK%20FARM%20FEB%202021%20OPERATIONAL%20TRANSPORT%20%26%20ACCESS%20MANAGEMENT%20PLAN%20FINAL%20A.pdf?dl=0>

Feel free to contact me if you have any questions.

Kind regards

Meg Kong | Associate

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

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P (02) 9411 5660 F (02) 9904 6622 W ttpa.com.au



From: Mahavir Arya <AryaM@liverpool.nsw.gov.au>
Sent: Monday, 25 January 2021 10:56 AM
To: Meg Kong <meg@ttpa.com.au>
Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell <Brock.Powell@hutchinsonbuilders.com.au>; Amir Maglajlic <Amir.Maglajlic@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>; Charles Wiafe <WiafeC@liverpool.nsw.gov.au>; Rachel Palermo <PalermoR@liverpool.nsw.gov.au>
Subject: Re: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Meg

The following are Council response on the submitted OTAMP.

- On-site car parking spaces
 - It is mentioned that there will be 43 on-site car parking spaces (39 for staff and 4 visitor, including 2 disabled spaces). It is also mentioned that there will be 52 full time staff and 8 part-time staff, it does not mention if this staff number includes ancillary staff such as admin or cleaners, which means the number of staff could in fact be higher. With already more staff than on-site parking spaces this means that staff members will be parking on street and this will take away spaces for parents who are parking or dropping off/picking up students, if not from Mainsbridge PS then from

Warwick Farm PS. Should the school expand at all in the future, there will already be no room for extra staff vehicles on premise.

The School will accommodate 52 full time and eight part-time staff (an additional eight staff from existing operations and including ancillary staff, i.e., administration and support staff) and 120 students. It is noted that only 50% of the part-time staff will be present at any one time. This results in a maximum on-site staff of 56 staff. Based on the above table and a maximum of 56 on-site staff, a 70% 'car driver' target will represent a parking demand of 39 spaces. As such, all parking demand can be accommodated within the site without any reliance on the on-street parking in the surrounding local road network.

This plan and the associated approved GTP (see Appendix D of revised OTAMP) will be updated accordingly should the above staff number change in the future.

- How will they ensure that vehicles in the on-site drop off/pick up queue do not park on site instead of remaining in the queue

The staff will ensure that this does not occur on site. See details in Section 3.4.

- On Street Parking
 - Currently there is AM/PM peak no stopping restrictions installed on the residents side of Williamson Cres, up to #63. These restrictions may need to be extended further north to allow for free flow of traffic past the new Mainsbridge Public School. Parking restrictions along the school frontage of Williamson Cres may need to be considered, especially in between the two access driveway points. **See proposed on-street parking restrictions in Section 3.7.**
- Drop off/Pick up queue
 - The document mentions almost 100m of length to bank the queue on site, or equivalent to 28 vehicles. A quick look at measurements seems this may be exaggerated and even with the double lane queue we see that maybe only 24 cars may fit. **This has been amended to 24 car. See Section 3.7** Regardless, with 120 students expected we think this is not enough length to hold all of the vehicles that will be dropping off/picking up students. Even with 4 mini buses there would be upwards of at least 50 other vehicles that need to stop there. This means that the queue will flow out on to Williamson crescent and impede traffic flow. In the AM peak as Mainsbridge starts slightly earlier than Warwick Farm PS this might not be such as issue, but in the PM peak when both schools finish at the same time, this will undoubtedly lead to massive traffic congestions. It is also a problem as the queue for the Mainsbridge pick up line will have to turn right across the southbound travel lane in Williamson Cres.

Based on travel mode information provided by Mainsbridge School some 85% - 90% of students use the minibuses while the remaining 10% - 15% of students are driven to and from the School by parents/carers. This represents no more than 18 cars associated with pick-up and drop-off activities for the School. The 18 cars and 5 minibuses can be easily accommodated within the on-site queuing area without overflowing onto William Crescent noting that these vehicles will be spread out over the following periods:

Drop off: 8.30am - 9.15am

Pick up: 2.20pm - 3.10pm

- Will there be some sort of vehicle/students identification process to make the PM pick up flow in the quickest possible time.

Parents will be advised that the name card is to be displayed under the passenger sun visor (for maximum visibility) during the afternoon pick-up period.

- The reference to a 'kerbside' drop off in the internal queue could be confusing to students as they will actually be disembarking the vehicle on what we would call the 'roadside' of the car usually, but in this instance it will be the school side. Asking them to exit a vehicle at any other time via the

kerbside would mean using the opposite door. Maybe this reference can be changed to 'school side'?

Amended to school side.

- Pedestrian Access
 - The pedestrian access gates from Williamson Cres mean that any pedestrian must walk across the internal drop off/pick up queue when inside the gates. How will this be managed to ensure safety of pedestrians?

Pedestrians accessing the gates on Williamson Crescent will be protected by footpaths and zebra crossing cross the internal drop-off/pick up queuing area within the School's compound. Shared zone signs with 10 kph posted speed limit will be installed within the site to ensure priorities are given to the pedestrians within the site.

It is also noted that the staff will monitor pedestrian movements within the School's compound during the pick-up and drop-off periods, ensuring the safety of pedestrians.

- School Fence
 - Will there be a dividing internal fence between the two schools? Concerns are that students from Warwick Farm PS may walk through the Mainsbridge School car park to get to their own school if no fence is in place.

It is noted that there be an internal dividing fence between the exiting and the new schools. As such, students from the Warwick Farm Public School will not walk through the Mainsbridge School carpark to get to their school. Students from respective schools will use the gates designated to their own schools.

- Review
 - The submitted OTAMP is to be reviewed regularly in consultation with Council's Road Safety Officer. The first review could be within a fortnight following commencement of school year.

Noted. The first review will be completed within a fortnight following the commencement of the school year (19 April 2021).

- Traffic Management
 - School staff should not manage traffic management outside the school premises without proper certification and tickets.
 - It is noted that all traffic management will be completed within the School's compound. Should the staff be required to manage traffic outside the School's compound, they would need to obtain proper certifications and tickets.**
 - the proposal of extending the existing 40K School Zone is to be submitted to TfNSW for approval

Submitted and approved by TfNSW. Please see correspondence in Appendix C.

- Parking restrictions at the 90 degree bend may also be required to stop vehicles parking closer to the bend.

See proposed on-street parking restrictions in Section 3.7.

- All pick-up and drop-off should be within the school and not along kerb on Williamson Crescent.

Noted. See Section 3.7.

- Operating Hours
 - It is suggested that school operating hours of both the schools should be included to demonstrate staggered arrival and departure time of both schools.

The proposed hours of operation for MSSP are as follows:

School: 8:50 am until 2.45 pm
Drop off: 8.30am - 9.15am
Pick up: 2.20pm - 3.10pm

The existing hours of operation for the existing school are as follows demonstrating a 10-minute earlier start and 15-minute latter finish:

School: 9.00 am until 3.00 pm
Drop off: 8:30am - 9:05am.
Pick up: Staggered over 4 periods - 2:45pm, 2:50pm, 2:55pm and 3:00pm.

- Should the arrival and departure times of the MBPS is also deferred then it must be indicated in the report along with the expected student and vehicles numbers.
During the DA stage, ARC conducted parking surveys which indicated the majority of parking (and pick-up) demand of the existing school is met in Lawrence Hargrave Drive with a moderate demand (pick-up) in Williamson Crescent. It is noted that all pick-up and drop-off of the proposed school can occur within the site, without relying on on-street space.
- Vehicle access route
The OTAMP must include the proposed access route to the school without impacting on resident amenity. **Noted. See Section 3.6.**
- It is suggested that the school traffic should not use Williamson Crescent section beyond the egress driveway of the school. The OTAMP must indicate in the report. **Noted. See Section 3.6.**
- Contact details
 - It is suggested that contact details of the identified authorities should be general and not to be specific to a person. **Noted. See Section 5.2.**

Please contact me should you be having any further questions.

Regards
Mahavir
Mahavir Arya
Traffic and Transport Engineer



02 8711 7592 | | AryaM@liverpool.nsw.gov.au

Customer Service: 1300 36 2170 | 33 Moore Street Liverpool, NSW 2170, Australia



www.liverpool.nsw.gov.au



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From: Meg Kong <meg@ttpa.com.au>
Sent: Thursday, 21 January 2021 9:03 AM
To: Mahavir Arya <AryaM@liverpool.nsw.gov.au>
Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell <Brock.Powell@hutchinsonbuilders.com.au>; Amir Maglajlic <Amir.Maglajlic@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>; Charles Wiafe <WiafeC@liverpool.nsw.gov.au>; LCC <LCC@liverpool.nsw.gov.au>
Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Good morning Mahavir

As discussed, appreciate if you can review and provide comments urgently on our OTAMP issued on 7 January. See email below.

Thanks in advance.

Kind regards

Meg Kong | Associate

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

Established 1994

Suite 502, Level 5, 282 Victoria Avenue, Chatswood NSW 2067

P (02) 9411 5660 **F** (02) 9904 6622 **W** ttpa.com.au



From: Meg Kong

Sent: Monday, 18 January 2021 8:38 AM

To: 'WiafeC@liverpool.nsw.gov.au' <WiafeC@liverpool.nsw.gov.au>; 'lcc@liverpool.nsw.gov.au' <lcc@liverpool.nsw.gov.au>

Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Good morning Charles,

Hope you had a good weekend.

Given that the school will need to open in March, we will appreciate Council's review and comments urgently.

Feel free to contact me if you have any questions.

Kind regards

Meg Kong | Associate

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

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Suite 502, Level 5, 282 Victoria Avenue, Chatswood NSW 2067

P (02) 9411 5660 **F** (02) 9904 6622 **W** ttpa.com.au



From: Meg Kong

Sent: Wednesday, 13 January 2021 5:04 PM

To: WiafeC@liverpool.nsw.gov.au

Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell <Brock.Powell@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>; lcc@liverpool.nsw.gov.au

Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Charles

Hope you are well.

Just following up if you have any comments so far on the OTAMP. Appreciate it if you can advise an indicative timing for Council's comments.

Thank you in advance.

Kind regards

Meg Kong | Associate

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

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From: Meg Kong

Sent: Thursday, 7 January 2021 4:45 PM

To: WiafeC@liverpool.nsw.gov.au

Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell

<Brock.Powell@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>

Subject: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Charles

First of all, Happy New Year to you.

As part of Consent Conditions № D9, D10 and D11 (attached in this email), we are required to consult with Council in relation to the Operational Transport & Access Management Plan for the new Mainsbridge School for Specific Purposes (School) at 95 Lawrence Hargrave Road, Warwick Farm. Please download the plan from the link below:

<https://www.dropbox.com/s/7haxfrisrzq4gcq/95%20LAWRENCE%20HARGRAVE%20ROAD%2C%20WARWICK%20FARM%20DEC%202020%20OPERATIONAL%20TRANSPORT%20%26%20ACCESS%20MANAGEMENT%20PLAN%20DRAFT%20A.pdf?dl=0>

Appreciate Council's review and comments. Feel free to contact me if you have any questions.

Kind regards

Meg Kong | Associate

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Disclaimer

Meg Kong

From: Bikram Singh <bikram.singh2@transport.nsw.gov.au>
Sent: Thursday, 21 January 2021 3:16 PM
To: Meg Kong
Subject: RE: Consultation with TfNSW: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Meg,

Apologies for getting back to you on this one late.

Network & Safety Services within Transport for NSW have reviewed the OTAMP and have no further comments to provide.

I will touch base with you early next month to confirm our installation date with respect to the relocation of the school zone signs as requested.

Thank you

Bikram Singh
A/Network & Safety Officer
North West Precinct
Greater Sydney
Transport for NSW

T 02 8849 2311 | M (WFH) 0433 632 525
Level 5, 27 Argyle Street, Parramatta, NSW 2150

From: Meg Kong [mailto:meg@ttpa.com.au]
Sent: Thursday, 21 January 2021 9:20 AM
To: Bikram Singh <bikram.singh2@transport.nsw.gov.au>
Cc: Rachel Davis <Rachel.Davis@transport.nsw.gov.au>; Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell <Brock.Powell@hutchinsonbuilders.com.au>; Amir Maglajlic <Amir.Maglajlic@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>
Subject: RE: Consultation with TfNSW: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Bikram

Thanks for the chat earlier. As discussed, Egwin (STA) and Adrian (Transit Systems) have no comments on the OTAMP.

Looking forward to getting your comments tomorrow to conclude our liaison with TfNSW.

Thank you.

Kind regards

Meg Kong | Associate

From: Meg Kong

Sent: Thursday, 21 January 2021 9:09 AM

To: Rachel Davis <Rachel.Davis@transport.nsw.gov.au>; Bikram Singh <bikram.singh2@transport.nsw.gov.au>

Subject: RE: Consultation with TfNSW: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Rachel,

Can I please confirm that I will only need Bikram's review and comments on our OTAMP as part of our consultation with TfNSW?

Hi Bikram

Just following up if you are able to get us the comments by COB tomorrow.

Thank you in advance for your response.

Kind regards

Meg Kong | Associate

From: Rachel Davis <Rachel.Davis@transport.nsw.gov.au>

Sent: Friday, 15 January 2021 2:00 PM

To: Meg Kong <meg@ttpa.com.au>

Cc: Bikram Singh <bikram.singh2@transport.nsw.gov.au>

Subject: RE: Consultation with TfNSW: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Meg

Just confirming that our Network and Safety team has received this and is actioning this request. Please contact Bikram (copied) if you have any further enquiries in relation to this.

Thanks

Rachel

Rachel Davis (née Nicholson)

Senior Strategic Land Use Coordinator

Land Use, Networks and Development | Greater Sydney

T 02 8849 2702 | E development.sydney@transport.nsw.gov.au

From: Meg Kong [<mailto:meg@tpa.com.au>]
Sent: Friday, 15 January 2021 11:02 AM
To: Rachel Davis <Rachel.Davis@transport.nsw.gov.au>
Subject: Consultation with TfNSW: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Rachel

Apologies to bother you on another matter.

I have sent the OTAMP to several stakeholders within TfNSW including development.sydney@rms.nsw.gov.au

Just wondering with the recent restructuring in TfNSW, who would be the best contact person I should send the plan to for review, as I have not heard back from anyone.

The school will need to operate in March. As such, there is an urgency to get the plan approved by DPIE.

Thank you for your assistance.

Kind regards

Meg Kong | Associate

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From: Meg Kong
Sent: Thursday, 7 January 2021 4:43 PM
To: Mark.Ozinga@transport.nsw.gov.au; Merlinda.Hyde@transport.nsw.gov.au; David.Surplice@transport.nsw.gov.au; Bikram Singh <bikram.singh2@transport.nsw.gov.au>
Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell <Brock.Powell@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>
Subject: Consultation with TfNSW: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Mark, Egwin, Merlinda, David, Bikram

First of all, Happy New Year to you.

As part of Consent Conditions No D9, D10 and D11 (attached in this email), we are required to consult with TfNSW in relation to the Operational Transport & Access Management Plan for the new Mainsbridge

School for Specific Purposes (School) at 95 Lawrence Hargrave Road, Warwick Farm. Please download the plan from the link below:

<https://www.dropbox.com/s/7haxfriszq4gcq/95%20LAWRENCE%20HARGRAVE%20ROAD%2C%20WARWICK%20FARM%20DEC%202020%20OPERATIONAL%20TRANSPORT%20%26%20ACCESS%20MANAGEMENT%20PLAN%20DRAFT%20A.pdf?dl=0>

Appreciate TfNSW's review and comments. Feel free to contact me if you have any questions.

Kind regards

Meg Kong | Associate

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Meg Kong

From: Adrian Prichard <APrichard@transitsystems.com.au>
Sent: Thursday, 14 January 2021 7:36 AM
To: Meg Kong
Subject: Re: Consultation with TfNSW: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Meg

No comments on behalf of Transit Systems.

Regards

Adrian Prichard

Network Planner

T: (02) 8778 5889 M: 0490 121 539

E: APrichard@transitsystems.com.au

A: Lot 2 Airfield Drive, LEN WATERS ESTATE NSW 2171



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From: Meg Kong <meg@ttpa.com.au>
Sent: Wednesday, January 13, 2021 5:05 PM
To: Adrian Prichard <APrichard@transitsystems.com.au>
Subject: RE: Consultation with TfNSW: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Adrian

Hope you are well.

Just following up if you have any comments so far on the OTAMP. Appreciate it if you can advise an indicative timing for your comments.

Thank you in advance.

Kind regards

Meg Kong | Associate

From: Meg Kong

Sent: Monday, 11 January 2021 10:10 AM

To: Egwin Herbert <Egwin_Herbert@sta.nsw.gov.au>; Adrian Prichard <aprichard@transitsystems.com.au>

Subject: RE: Consultation with TfNSW: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Thanks, Egwin for forwarding it along.

Hi Adrian,

Happy new year to you. Do let me know if you have any questions in relation to the OTAMP.

Kind regards

Meg Kong | Associate

From: Egwin Herbert <Egwin_Herbert@sta.nsw.gov.au>

Sent: Thursday, 7 January 2021 7:43 PM

To: Adrian Prichard <aprichard@transitsystems.com.au>

Cc: Meg Kong <meg@tpa.com.au>

Subject: Consultation with TfNSW: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Adrian,

Is this your area?

Regards

Egwin Herbert

Traffic and Service Manager

Northern & Western Region

P: 9941 6885 I M: 0400 185 292

Email: egwin_herbert@sta.nsw.gov.au



From: Meg Kong [<mailto:meg@tpa.com.au>]

Sent: Thursday, 7 January 2021 4:43 PM

To: Mark Ozinga; Egwin Herbert; Merlinda Hyde; David Surplice; Bikram Singh

Cc: Jacob Baker; Brock Powell; John Koumoukelis

Subject: Consultation with TfNSW: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

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Meg Kong

From: Mahavir Arya <AryaM@liverpool.nsw.gov.au>
Sent: Monday, 25 January 2021 10:56 AM
To: Meg Kong
Cc: Jacob Baker; Brock Powell; Amir Maglajlic; John Koumoukelis; Charles Wiafe; Rachel Palermo
Subject: Re: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Meg

The following are Council response on the submitted OTAMP.

- On-site car parking spaces
 - It is mentioned that there will be 43 on-site car parking spaces (39 for staff and 4 visitor, including 2 disabled spaces). It is also mentioned that there will be 52 full time staff and 8 part-time staff, it does not mention if this staff number includes ancillary staff such as admin or cleaners, which means the number of staff could in fact be higher. With already more staff than on-site parking spaces this means that staff members will be parking on street and this will take away spaces for parents who are parking or dropping off/picking up students, if not from Mainsbridge PS then from Warwick Farm PS. Should the school expand at all in the future, there will already be no room for extra staff vehicles on premise.
 - How will they ensure that vehicles in the on-site drop off/pick up queue do not park on site instead of remaining in the queue
- On Street Parking
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 - The document mentions almost 100m of length to bank the queue on site, or equivalent to 28 vehicles. A quick look at measurements seems this may be exaggerated and even with the double lane queue we see that maybe only 24 cars may fit. Regardless, with 120 students expected we think this is not enough length to hold all of the vehicles that will be dropping off/picking up students. Even with 4 mini buses there would be upwards of at least 50 other vehicles that need to stop there. This means that the queue will flow out on to Williamson crescent and impede traffic flow. In the AM peak as Mainsbridge starts slightly earlier than Warwick Farm PS this might not be such as issue, but in the PM peak when both schools finish at the same time, this will undoubtedly lead to massive traffic congestions. It is also a problem as the queue for the Mainsbridge pick up line will have to turn right across the southbound travel lane in Williamson Cres.
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 - The pedestrian access gates from Williamson Cres mean that any pedestrian must walk across the internal drop off/pick up queue when inside the gates. How will this be managed to ensure safety of pedestrians?
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 - The submitted OTAMP is to be reviewed regularly in consultation with Council's Road Safety Officer. The first review could be within a fortnight following commencement of school year.
- Traffic Management
 - School staff should not manage traffic management outside the school premises without proper certification and tickets.
 - Submit signs and linemarking scheme to Council for traffic committee assessment and approval.
 - the proposal of extending the existing 40K School Zone is to be submitted to TfNSW for approval.
 - Parking restrictions at the 90 degree bend may also be required to stop vehicles parking closer to the bend.
 - All pick-up and drop-off should be within the school and not along kerb on Williamson Crescent.
- Operating Hours
 - It is suggested that school operating hours of both the schools should be included to demonstrate staggered arrival and departure time of both schools.
 - Should the arrival and departure times of the MBPS is also deferred then it must be indicated in the report along with the expected student and vehicles numbers.
- Vehicle access route
 - The OTAMP must include the proposed access route to the school without impacting on resident amenity.
 - It is suggested that the school traffic should not use Williamson Crescent section beyond the egress driveway of the school. The OTAMP must indicate in the report.
- Contact details
 - It is suggested that contact details of the identified authorities should be general and not to be specific to a person.

Please contact me should you be having any further questions.

Regards

Mahavir

Mahavir Arya

Traffic and Transport Engineer



02 8711 7592 | | AryaM@liverpool.nsw.gov.au

Customer Service: 1300 36 2170 | 33 Moore Street Liverpool, NSW 2170, Australia



www.liverpool.nsw.gov.au



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From: Meg Kong <meg@tppa.com.au>

Sent: Thursday, 21 January 2021 9:03 AM

To: Mahavir Arya <AryaM@liverpool.nsw.gov.au>

Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell

<Brock.Powell@hutchinsonbuilders.com.au>; Amir Maglajlic <Amir.Maglajlic@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>; Charles Wiafe <WiafeC@liverpool.nsw.gov.au>; LCC <LCC@liverpool.nsw.gov.au>

Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Good morning Mahavir

As discussed, appreciate if you can review and provide comments urgently on our OTAMP issued on 7 January. See email below.

Thanks in advance.

Kind regards

Meg Kong | Associate

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

Established 1994

Suite 502, Level 5, 282 Victoria Avenue, Chatswood NSW 2067

P (02) 9411 5660 F (02) 9904 6622 W ttpa.com.au



From: Meg Kong

Sent: Monday, 18 January 2021 8:38 AM

To: 'WiafeC@liverpool.nsw.gov.au' <WiafeC@liverpool.nsw.gov.au>; 'lcc@liverpool.nsw.gov.au' <lcc@liverpool.nsw.gov.au>

Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Good morning Charles,

Hope you had a good weekend.

Given that the school will need to open in March, we will appreciate Council's review and comments urgently.

Feel free to contact me if you have any questions.

Kind regards

Meg Kong | Associate

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

Established 1994

Suite 502, Level 5, 282 Victoria Avenue, Chatswood NSW 2067

P (02) 9411 5660 F (02) 9904 6622 W ttpa.com.au



From: Meg Kong

Sent: Wednesday, 13 January 2021 5:04 PM

To: WiafeC@liverpool.nsw.gov.au

Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell

<Brock.Powell@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>; lcc@liverpool.nsw.gov.au

Subject: RE: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Charles

Hope you are well.

Just following up if you have any comments so far on the OTAMP. Appreciate it if you can advise an indicative timing for Council's comments.

Thank you in advance.

Kind regards

Meg Kong | Associate

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

Established 1994

Suite 502, Level 5, 282 Victoria Avenue, Chatswood NSW 2067

P (02) 9411 5660 F (02) 9904 6622 W ttpa.com.au



From: Meg Kong

Sent: Thursday, 7 January 2021 4:45 PM

To: WiafeC@liverpool.nsw.gov.au

Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Brock Powell

<Brock.Powell@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>

Subject: Consultation with Liverpool City Council: SSD 8792 - School Zones Mainsbridge Public School - OTAMP

Hi Charles

First of all, Happy New Year to you.

As part of Consent Conditions № D9, D10 and D11 (attached in this email), we are required to consult with Council in relation to the Operational Transport & Access Management Plan for the new Mainsbridge School for Specific Purposes (School) at 95 Lawrence Hargrave Road, Warwick Farm. Please download the plan from the link below:

<https://www.dropbox.com/s/7haxfriszq4gcq/95%20LAWRENCE%20HARGRAVE%20ROAD%2C%20WARWICK%20FARM%20DEC%202020%20OPERATIONAL%20TRANSPORT%20%26%20ACCESS%20MANAGEMENT%20PLAN%20DRAFT%20A.pdf?dl=0>

Appreciate Council's review and comments. Feel free to contact me if you have any questions.

Kind regards

Meg Kong | Associate

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P (02) 9411 5660 F (02) 9904 6622 W ttpa.com.au



Disclaimer

Meg Kong

From: Bikram Singh <bikram.singh2@transport.nsw.gov.au>
Sent: Friday, 15 January 2021 1:25 PM
To: Meg Kong
Subject: RE: SSD 8792 - Condition D14 and D43 - School Zones and Speed Limit Authorisation - Mainsbridge Public School (95 Lawrence Hargrave Road, Warwick Farm)

Hi Meg,

We are aiming for a tentative date of 22/02/2021 for the extension of the school zone.

I should be able to provide further updates closer to the date however 22nd February is the date chosen for the extension.

Kind Regards,

Bikram Singh
A/Network & Safety Officer
North West Precinct
Greater Sydney
Transport for NSW

T 02 8849 2311 | M (WFH) 0433 632 525
Level 5, 27 Argyle Street, Parramatta, NSW 2150

From: Meg Kong [mailto:meg@ttpa.com.au]
Sent: Thursday, 14 January 2021 9:23 AM
To: Bikram Singh <bikram.singh2@transport.nsw.gov.au>
Subject: RE: SSD 8792 - Condition D14 and D43 - School Zones and Speed Limit Authorisation - Mainsbridge Public School (95 Lawrence Hargrave Road, Warwick Farm)

Hi Bikram

Apologies to bother you on this matter again.

Will you please provide an updated timing for the school zone extension later this week or early next week?

I just need to update the construction team.

Kind regards

Meg Kong | Associate

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

Established 1994

Suite 502, Level 5, 282 Victoria Avenue, Chatswood NSW 2067

P (02) 9411 5660 F (02) 9904 6622 W ttpa.com.au

ttpa

From: Meg Kong <meg@ttpa.com.au>
Sent: Tuesday, 22 December 2020 12:25 PM

To: Bikram Singh <bikram.singh2@transport.nsw.gov.au>

Subject: Re: SSD 8792 - Condition D14 and D43 - School Zones and Speed Limit Authorisation - Mainsbridge Public School (95 Lawrence Hargrave Road, Warwick Farm)

Thanks Bikram.

Have a good Christmas and happy new year.

Meg

From: Bikram Singh <bikram.singh2@transport.nsw.gov.au>

Sent: Tuesday, December 22, 2020 12:23:42 PM

To: Meg Kong <meg@ttpa.com.au>

Subject: RE: SSD 8792 - Condition D14 and D43 - School Zones and Speed Limit Authorisation - Mainsbridge Public School (95 Lawrence Hargrave Road, Warwick Farm)

Hi Meg,

As there were various school zones that were required to be implemented before the start of term 1 in 2021; those respective school zones had to be given priority.

However, in saying that, I should be able to provide you with a more precious timeline of the school zone extension in mid-January.

Kind Regards,

Bikram Singh
A/Network & Safety Officer
North West Precinct
Greater Sydney
Transport for NSW

T 02 8849 2311 | M (WFH) 0433 632 525
Level 5, 27 Argyle Street, Parramatta, NSW 2150

From: Meg Kong [<mailto:meg@ttpa.com.au>]

Sent: Tuesday, 22 December 2020 10:39 AM

To: Bikram Singh <bikram.singh2@transport.nsw.gov.au>

Subject: RE: SSD 8792 - Condition D14 and D43 - School Zones and Speed Limit Authorisation - Mainsbridge Public School (95 Lawrence Hargrave Road, Warwick Farm)

Hi Bikram

Just following up if you have a more definitive timing on the completion of the work so I can advise the PCA.

Thank you
Meg

From: Meg Kong <meg@ttpa.com.au>

Sent: Thursday, 26 November 2020 10:32 AM

To: Bikram Singh <bikram.singh2@transport.nsw.gov.au>

Subject: Re: SSD 8792 - Condition D14 and D43 - School Zones and Speed Limit Authorisation - Mainsbridge Public School (95 Lawrence Hargrave Road, Warwick Farm)

Thanks, Bikram.

You have been very helpful.

Kind regards
Meg

From: Bikram Singh <bikram.singh2@transport.nsw.gov.au>
Sent: Thursday, November 26, 2020 10:28:17 AM
To: Meg Kong <meg@tpa.com.au>
Subject: RE: SSD 8792 - Condition D14 and D43 - School Zones and Speed Limit Authorisation - Mainsbridge Public School (95 Lawrence Hargrave Road, Warwick Farm)

Hi Meg,

That is correct, as Transport will need to run through our internal school zone extension process which involves getting our contractors to relocate the existing static school zone signage and pavement markings.

Additionally, the provided information should be enough. If any further other information is required, I'll be in touch.

Thank you

Bikram Singh
A/Network & Safety Officer
North West Precinct
Greater Sydney
Transport for NSW

T 02 8849 2311 | M (WFH) 0433 632 525
Level 5, 27 Argyle Street, Parramatta, NSW 2150

From: Meg Kong [<mailto:meg@tpa.com.au>]
Sent: Wednesday, 25 November 2020 6:49 PM
To: Bikram Singh <bikram.singh2@transport.nsw.gov.au>
Subject: RE: SSD 8792 - Condition D14 and D43 - School Zones and Speed Limit Authorisation - Mainsbridge Public School (95 Lawrence Hargrave Road, Warwick Farm)

Hi Bikram

Does the email below indicate an approval from TfNSW? Is there anything else that you require from us?

Just confirming that the contractor does not need to appoint a subbie to complete the pavement marking and relocation of the signs.

Kind regards
Meg

From: Bikram Singh <bikram.singh2@transport.nsw.gov.au>
Sent: Wednesday, 25 November 2020 6:40 PM
To: Meg Kong <meg@tpa.com.au>
Subject: RE: SSD 8792 - Condition D14 and D43 - School Zones and Speed Limit Authorisation - Mainsbridge Public School (95 Lawrence Hargrave Road, Warwick Farm)

Hi Meg,

Thank you, I've received the relevant documents for the school zone extension.

Transport should be able to take over and complete the school zone extension in early 2021.

Due to our current workload and the upcoming Christmas break it would be difficult to provide an accurate timeframe for the completion of these works however the school zone will definitely be extended prior to the school opening in March 2021.

Kind Regards,

Bikram Singh
A/Network & Safety Officer
North West Precinct
Greater Sydney
Transport for NSW

T 02 8849 2311 | M (WFH) 0433 632 525
Level 5, 27 Argyle Street, Parramatta, NSW 2150

From: Meg Kong [<mailto:meg@tpa.com.au>]
Sent: Wednesday, 25 November 2020 3:39 PM
To: Bikram Singh <bikram.singh2@transport.nsw.gov.au>
Subject: RE: SSD 8792 - Condition D14 and D43 - School Zones and Speed Limit Authorisation - Mainsbridge Public School (95 Lawrence Hargrave Road, Warwick Farm)

Hi Bikram

Hope you had a good break.

Just want to confirm that you have received our application on Monday. Appreciate if you can advise the timing of review and approval.

Kind regards

Meg Kong | Associate

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

Established 1994

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



From: Meg Kong
Sent: Monday, 23 November 2020 3:49 PM
To: Bikram Singh <bikram.singh2@transport.nsw.gov.au>
Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Andy Smith <Andy.Smith@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>; Brock Powell <Brock.Powell@hutchinsonbuilders.com.au>
Subject: SSD 8792 - Condition D14 and D43 - School Zones and Speed Limit Authorisation - Mainsbridge Public School (95 Lawrence Hargrave Road, Warwick Farm)

Hi Bikram

Please see attached speed zone signage and line-marking plan to address the following conditions:

School Zones

D14. Installation or relocation of all required School Zone signage, speed management signage and associated pavement markings along Williamson Crescent is to be completed prior to commencement of occupation of the development.

Note: Any required approvals for altering public road speed limits, design and signage are required to be obtained from the relevant consent authority.

Speed Limit Authorisation

D43. The Applicant must submit the following details to RMS, at least eight weeks prior to occupation of the site, and obtain authorisation to install School Zone signs and associated pavement markings, and / or removal / relocation of any existing Speed Limit signs:

- (a) a copy of the Conditions of Consent; **see attached**
- (b) the proposed school commencement/opening date; **5th of March 2021**
- (c) two sets of detailed design plans showing the following: **attached. 2 hard copies of A3 size will be mailed to you tomorrow.**
 - (i) accurate Site boundaries;
 - (ii) details of all road reserves, adjacent to the Site boundaries;
 - (iii) all proposed access points from the Site to the public road network and any additional conditions imposed/proposed on their use;
 - (iv) all existing and proposed pedestrian crossing facilities on the adjacent road network
 - (v) all existing and proposed traffic control devices and pavement markings on the adjacent road network (including School Zone signs and pavement markings);
 - (vi) all existing and proposed street furniture and street trees.

Feel free to contact me if you have any questions.

Kind regards

Meg Kong | Associate

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Meg Kong

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Due to our current workload and the upcoming Christmas break it would be difficult to provide an accurate timeframe for the completion of these works however the school zone will definitely be extended prior to the school opening in March 2021.

Kind Regards,

Bikram Singh
A/Network & Safety Officer
North West Precinct
Greater Sydney
Transport for NSW

T 02 8849 2311 | M (WFH) 0433 632 525
Level 5, 27 Argyle Street, Parramatta, NSW 2150

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Hi Bikram

Hope you had a good break.

Just want to confirm that you have received our application on Monday. Appreciate if you can advise the timing of review and approval.

Kind regards

Meg Kong | Associate

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ttpa

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Sent: Monday, 23 November 2020 3:49 PM
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Cc: Jacob Baker <Jacob.Baker@hutchinsonbuilders.com.au>; Andy Smith <Andy.Smith@hutchinsonbuilders.com.au>; John Koumoukelis <John.Koumoukelis@hutchinsonbuilders.com.au>; Brock Powell <Brock.Powell@hutchinsonbuilders.com.au>
Subject: SSD 8792 - Condition D14 and D43 - School Zones and Speed Limit Authorisation - Mainsbridge Public School (95 Lawrence Hargrave Road, Warwick Farm)

Hi Bikram

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Note: Any required approvals for altering public road speed limits, design and signage are required to be obtained from the relevant consent authority.

Speed Limit Authorisation

D43. The Applicant must submit the following details to RMS, at least eight weeks prior to occupation of the site, and obtain authorisation to install School Zone signs and associated pavement markings, and / or removal / relocation of any existing Speed Limit signs:

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 - (ii) details of all road reserves, adjacent to the Site boundaries;
 - (iii) all proposed access points from the Site to the public road network and any additional conditions imposed/proposed on their use;
 - (iv) all existing and proposed pedestrian crossing facilities on the adjacent road network
 - (v) all existing and proposed traffic control devices and pavement markings on the adjacent road network (including School Zone signs and pavement markings);
 - (vi) all existing and proposed street furniture and street trees.

Feel free to contact me if you have any questions.

Kind regards

Meg Kong | Associate

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Development Consent

Section 4.38 of the Environmental Planning and Assessment Act 1979

As delegate of the Minister for Planning under delegation executed on 11 October 2017, I approve the Development Application referred to in Schedule 1, subject to the conditions specified in Schedule 2.

These conditions are required to:

- prevent, minimise, or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development

David Gainsford
Executive Director
Priority Projects

Sydney

2019

SCHEDULE 1

Application Number: SSD 8792
Applicant: Department of Education
Consent Authority: Minister for Planning and Open Spaces
Site: Lot 22, DP 715287
95 Lawrence Hargrave Road, Warwick Farm

Development: Development of the new Mainsbridge School for Specific Purposes to facilitate its relocation to Warwick Farm and includes:

- The construction of one and two-storey buildings comprising:
 - new learning spaces
 - administration;
 - library and shared hall; and
 - canteen, amenities and storage facilities.
- Landscaping, including open space improvements, tree removal, covered outdoor learning areas (COLAs), new sports field, fencing and pathways; and
- Vehicular and pedestrian access along Williamson Crescent.

Summary of Modifications

SSD 8792	Approved by the Executive Director, Priority Projects Assessments on 27 February 2019
SSD 8792 MOD 1	Approved by the Acting Director, Social and Infrastructure Assessments on 19 July 2019, for: • identification of the number of biodiversity credits required to offset vegetation clearing on site, and • amendment to the timing for the retirement of the credits.
SSD 8792 MOD 2	Approved by the Director, Social and Infrastructure Assessments on 22 May 2020 for amendment of condition B44(b) to alter the size and numbers of trees required to be planted on the site in order to facilitate compliance with conditions D42 and B44(i) which require the site to be managed as an Inner Protection Area.
SSD 8792 MOD 3	Approved by the Director, Social and Infrastructure Assessments on 24 February 2021 for insertion of new conditions and amendments to existing conditions of consent to allow staged remediation, staged construction and revisions to the Remediation Action Plan
SSD 8792 MOD 4	Approved by Director, State Significant Acceleration on 15 March 2021 for minor modifications and alterations following completion of the detailed design.

DEFINITIONS

Advisory Notes	Advisory information relating to the consent but do not form a part of this consent
Applicant	Department of Education, or any person carrying out any development to which this consent applies
Approved disturbance area	The area identified as such on the development layout
BCA	Building Code of Australia
BC Act	<i>Biodiversity Conservation Act 2016</i>
CEMP	Construction Environmental Management Plan
Certification of Crown building work	Certification under section 6.28(2) of the EP&A Act
Certifying Authority	Professionals that are accredited by the Building Professionals Board to issue construction, occupation, subdivision, strata, compliance and complying development certificates under the EP&A Act, <i>Strata Schemes (Freehold Development) Act 1973</i> and <i>Strata Schemes (Leasehold Development) Act 1986</i> or in the case of Crown development, a person qualified to conduct a Certification of Crown Building works.
Conditions of this consent	Conditions contained in Schedule 2 of this document
Construction	All physical works to enable operation, including but not limited to the carrying out of works for the purposes of the development, including bulk earthworks, and erection of buildings and other infrastructure permitted by this consent, but excluding the following: • building and road dilapidation surveys; • investigative drilling, investigative excavation or Archaeological Salvage; • establishing temporary site offices (in locations identified by the conditions of this consent); • installation of environmental impact mitigation measures, fencing, enabling works; and • minor adjustments to services or utilities.
Council	Liverpool City Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Demolition	The deconstruction and removal of buildings, sheds and other structures on the site
Department	NSW Department of Planning and Environment
Development	The development described in the EIS and Response to Submissions, including the works and activities comprising construction and landscaping, as modified by the conditions of this consent.
Earthworks	Bulk earthworks, site levelling, import and compaction of fill material, excavation for installation of drainage and services, to prepare the site for construction
EIS	The Environmental Impact Statement titled Mainsbridge School for Special Purposes, Warwick Farm, prepared by Urbis dated March 2018, submitted with the application for consent for the development, including any additional information provided by the Applicant in support of the application
ENM	Excavated Natural Material

Environment	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
Evening	The period from 6pm to 10pm.
Feasible	Means what is possible and practical in the circumstances
Heritage	Encompasses both Aboriginal and historic heritage including sites that predate European settlement, and a shared history since European settlement
Heritage Item	An item as defined under the <i>Heritage Act 1977</i> , and assessed as being of local, State and/ or National heritage significance, and/or an Aboriginal Object or Aboriginal Place as defined under the <i>National Parks and Wildlife Act 1974</i> , the World Heritage List, or the National Heritage List or Commonwealth Heritage List under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth), or anything identified as a heritage item under the conditions of this consent
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance <i>Note: "material harm" is defined in this consent</i>
Land	Has the same meaning as the definition of the term in section 1.4 of the EP&A Act
LTEMP	Long Term Environmental Management Plan
Material harm	Is harm that: a) involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial; or b) results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)
Minister	NSW Minister for Planning (or delegate)
Mitigation	Activities associated with reducing the impacts of the development prior to or during those impacts occurring
Monitoring	Any monitoring required under this consent must be undertaken in accordance with section 9.40 of the EP&A Act
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
Non-compliance	An occurrence, a set of circumstances or development that is a breach of this consent
NSW RFS	New South Wales Rural Fire Service
OEH	NSW Office of Environment and Heritage
OEMP	Operational Environmental Management Plan
Operation	The carrying out of the approved purpose of the development upon completion of construction.
PA	Means a planning agreement within the meaning of the term in section 7.4 of the EP&A Act.
Planning Secretary	Planning Secretary under the EP&A Act, or nominee
POEO Act	<i>Protection of the Environment Operations Act 1997</i>

Reasonable	Means applying judgement in arriving at a decision, taking into account: mitigation benefits, costs of mitigation versus benefits provided, community views, and the nature and extent of potential improvements.
Rehabilitation	The restoration of land disturbed by the development to a good condition, to ensure it is safe, stable and non-polluting.
Response to submissions	The Applicant's response to issues raised in submissions received in relation to the application for consent for the development under the EP&A Act.
RMS	NSW Roads and Maritime Services
Sensitive receivers	A location where people are likely to work, occupy or reside, including a dwelling, school, hospital, office or public recreational area.
Site	The land defined in Schedule 1 OR describe the site in detail.
Site Auditor	As defined in section 4 of the <i>Contaminated Land Management Act 1997</i>
Site Audit Report	As defined in section 4 of the <i>Contaminated Land Management Act 1997</i>
Site Audit Statement	As defined in section 4 of the <i>Contaminated Land Management Act 1997</i>
TfNSW	Transport for New South Wales
Upgrading	The carrying out of works (including replacing plant, equipment, or machinery or updating relevant technology) to improve the efficiency of the development or to enable or enhance its continued operation, and the carrying out of maintenance works.
VENM	Virgin Excavated Natural Material
Waste	Has the same meaning as the definition of the term in the Dictionary to the POEO Act
Year	A period of 12 consecutive months

SCHEDULE 2

PART A ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

- A1. In addition to meeting the specific performance measures and criteria in this consent, all reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development.

Terms of Consent

- A2. The development may only be carried out:
- (a) in compliance with the conditions of this consent;
 - (b) in accordance with all written directions of the Planning Secretary;
 - (c) generally in accordance with the EIS and Response to Submissions;
 - (d) in accordance with the approved plans in the table below:

Architectural Plans prepared by Hayball			
Dwg No.	Rev	Name of Plan	Date
01.DA01.02	4 5	Site Plan - Proposed	17/12/18 4/12/2020
01.DA04.00	2	Site Sections	31/08/18
A01.DA03.01	2 3	Admin and Hall Floor Plan - Ground	19/12/18 4/12/2020
A01.DA03.02	2	Admin and Hall Floor Plan -Level 1	19/12/18
A01.DA03.03	2	Admin and Hall Floor Plan - Roof	19/12/18
A01.DA06.01	2 3	Admin and Hall Floor Plan -Elevations 1	19/12/18 17/11/2020
A01.DA06.02	2	Admin and Hall Floor Plan - Elevations 2	19/12/18
A01.DA06.03	2	Admin and Hall Floor Plan - Sections	19/12/18
B01a.DA03.01	2	Floor Plan - Ground	19/12/18
B01a.DA03.02	2	Floor Plan - Roof	19/12/18
B01a.DA06.01	2	Elevations	19/12/18
B01a.DA06.03	2	Sections	19/12/18
B01b.DA03.01	2	Floor Plan - Ground	19/12/18
B01b.DA03.02	2	Floor Plan - Level 1	19/12/18
B01a.DA03.03	2	Floor Plan - Roof	19/12/18
B011b.DA06.01	2	Elevations	19/12/18
B011b.DA06.03	2	Sections	19/12/18
B011b.DA06.04	2	Sections	19/12/18
P01.DA03.01	2 3	Floor Plan – Ground	17/10/18 4/12/2020
P01.DA03.02	2	Floor Plan – Roof	17/10/18
P01.DA06.01	2	Elevations	17/10/18
P01.DA06.03	2	Sections	17/10/18
Landscape Plans prepared by Tract Landscape Architects			
Dwg No.	Rev	Name of Plan	Date
0216-0767-01 DD-300	4 C5 b	General Arrangement Plan Sheet 1 of 2	18/10/2018

			<u>08/02/2021</u>
0216-0767-01 DD-301	4-C5 <u>a</u>	General Arrangement Plan Sheet 2 of 2	18/10/2018 <u>08/02/2021</u>
Civil Plans prepared by WSP			
Dwg No.	Rev	Name of Plan	Date
4785-C010 <u>WSP-CV-0010</u>	P2 <u>C5</u>	Overall Site Plan	16/10/2018 <u>26/10/2020</u>
4785-C011 <u>WSP-CV-0011</u>	P2 <u>C11</u>	General Arrangement Plan Sheet 1 of 2	16/10/2018 <u>26/10/2020</u>
4785-C012 <u>WSP-CV-C0012</u>	P2 <u>C6</u>	General Arrangement Plan Sheet 2 of 2	16/10/2018 <u>26/10/2020</u>

- A3. Consistent with the requirements in this consent, the Planning Secretary may make written directions to the Applicant in relation to:
- the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Planning Secretary; and
 - the implementation of any actions or measures contained in any such document referred to in (a) above.
- A4. The conditions of this consent and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document listed in condition A2(c) or A2(d). In the event of an inconsistency, ambiguity or conflict between any of the documents listed in condition A2(c) and A2(d), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.

Limits of Consent

- A5. This consent lapses five years after the date of consent unless the works associated with the development have physically commenced.

Prescribed Conditions

- A6. The Applicant must comply with all relevant prescribed conditions of development consent under Part 6, Division 8A of the EP&A Regulation.

Planning Secretary as Moderator

- A7. In the event of a dispute between the Applicant and a public authority, in relation to an applicable requirement in this approval or relevant matter relating to the Development, either party may refer the matter to the Planning Secretary for resolution. The Planning Secretary's resolution of the matter must be binding on the parties.

Long Service Levy

- A8. For work costing \$25,000 or more, a Long Service Levy must be paid. For further information please contact the Long Service Payments Corporation Helpline on 131 441.

Legal Notices

- A9. Any advice or notice to the consent authority must be served on the Planning Secretary.

Evidence of Consultation

- A10. Where conditions of this consent require consultation with an identified party, the Applicant must:
- (a) consult with the relevant party prior to submitting the subject document for information; and
 - (b) provide details of the consultation undertaken including:
 - (i) the outcome of that consultation, matters resolved and unresolved; and
 - (ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.

Staging, Combining and Updating Strategies, Plans or Programs

- A11. With the approval of the Planning Secretary, the Applicant may:
- (a) prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);
 - (b) combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and
 - (c) update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development).
- A12. If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent.
- A13. If approved by the Planning Secretary, updated strategies, plans or programs supersede the previous versions of them and must be implemented in accordance with the condition that requires the strategy, plan or program.

Demolition

- A14. Demolition work must comply with *Australian Standard AS 2601-2001 The demolition of structures* (Standards Australia, 2001). The work plans required by AS 2601-2001 must be accompanied by a written statement from a suitably qualified person that the proposals contained in the work plan comply with the safety requirements of the Standard. The work plans, and the statement of compliance must be submitted to the Certifying Authority before the commencement of works.

Structural Adequacy

- A15. All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the development, must be constructed in accordance with the relevant requirements of the BCA.

Note: Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.

External Walls and Cladding

- A16. The external walls of all buildings including additions to existing buildings must comply with the relevant requirements of the BCA.

Applicability of Guidelines

- A17. References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this consent.

- A18. However, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Planning Secretary may, when issuing directions under this consent in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.

Monitoring and Environmental Audits

- A19. Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance reporting and independent auditing.

Note: For the purposes of this condition, as set out in the EP&A Act, "monitoring" is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an "environmental audit" is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.

Access to Information

- A20. At least 48 hours before the commencement of construction until the completion of all works under this consent, or such other time as agreed by the Planning Secretary, the Applicant must:
- (a) make the following information and documents (as they are obtained or approved) publicly available on its website:
 - (i) the documents referred to in condition A2 of this consent;
 - (ii) all current statutory approvals for the development;
 - (iii) all approved strategies, plans and programs required under the conditions of this consent;
 - (iv) regular reporting on the environmental performance of the development in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent;
 - (v) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
 - (vi) a summary of the current stage and progress of the development;
 - (vii) contact details to enquire about the development or to make a complaint;
 - (viii) a complaints register, updated monthly;
 - (ix) audit reports prepared as part of any independent environmental audit of the development and the Applicant's response to the recommendations in any audit report;
 - (x) any other matter required by the Planning Secretary; and
 - (b) keep such information up to date, to the satisfaction of the Planning Secretary.

Compliance

- A21. The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.

Staging

A22. The project may be constructed and operated in stages. Where compliance with conditions is required to be staged due to staged construction or operation, a Staging Report (for either or both construction and operation as the case may be) must be prepared and submitted to the satisfaction of the Planning Secretary. The Staging Report must be submitted to the Planning Secretary no later than one month before the commencement of construction of the first of the proposed stages of construction

unless another time is otherwise agreed in writing by the Planning Secretary (or if only staged operation is proposed, one month before the commencement of operation of the first of the proposed stages of operation).

A23. A Staging Report prepared in accordance with condition A22 must:

- (a) if staged construction is proposed, set out how the construction of the whole of the project will be staged, including details of work and other activities to be carried out in each stage and the general timing of when construction of each stage will commence and finish;**
- (b) if staged operation is proposed, set out how the operation of the whole of the project will be staged, including details of work and other activities to be carried out in each stage and the general timing of when operation of each stage will commence and finish (if relevant);**
- (c) specify how compliance with conditions will be achieved across and between each of the stages of the project; and**
- (d) set out mechanisms for managing any cumulative impacts or residual arising from the proposed staging.**

A24. Where a Staging Report is required, the project must be staged in accordance with the Staging Report, as approved by the Planning Secretary.

A25. Where construction or operation is being staged in accordance with an approved Staging Report, the terms of this consent that apply or are relevant to the works or activities to be carried out in a specific stage must be complied with at the relevant time for that stage as identified in the Staging Report.

ADVISORY NOTES

- AN1.** All licences, permits, approvals and consents as required by law must be obtained and maintained as required for the development. No condition of this consent removes any obligation to obtain, renew or comply with such licences, permits, approvals and consents.

PART B PRIOR TO COMMENCEMENT OF CONSTRUCTION

Notification of Commencement

- B1. The Department must be notified in writing of the dates of commencement of physical work and operation at least 48 hours before those dates.

If the construction or operation of the development is to be staged, the Department must be notified in writing at least 48 hours before the commencement of each stage, of the date of commencement and the development to be carried out in that stage.

Certified Drawings

- B2. Prior to the commencement of construction, the Applicant must submit to the satisfaction of the Certifying Authority structural drawings prepared and signed by a suitably qualified practising Structural Engineer that demonstrates compliance with:
- (a) the relevant clauses of the BCA; and
 - (b) this development consent.

External Walls and Cladding

- B3. Prior to the commencement of construction, the Applicant must provide the Certifying Authority with documented evidence that the products and systems proposed for use in the construction of external walls including finishes and claddings such as synthetic or aluminium composite panels comply with the requirements of the BCA.

The Applicant must provide a copy of the documentation given to the Certifying Authority to the Planning Secretary within seven days after the Certifying Authority accepts it.

Protection of Public Infrastructure

- B4. Before the commencement of construction, the Applicant must:
- (a) consult with the relevant owner and provider of services that are likely to be affected by the development to make suitable arrangements for access to, diversion, protection and support of the affected infrastructure;
 - (b) prepare a dilapidation report identifying the condition of all public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and
 - (c) submit a copy of the dilapidation report to the Planning Secretary, Certifying Authority and Council.

Site Contamination

- B5. Prior to the commencement of remediation, a data gap investigation (DGI) must be undertaken to better inform the extent of contamination of the site, including asbestos, lead and other contaminants. The Remedial Remediation Action Plan (RAP) and Validation Sampling and Analysis Quality Plan (VSAQP) must be updated to consider any new contamination finds. The updated VSAQP must be provided to the accredited site auditor for review and endorsed prior to remediation commencing.
- B6. The Applicant must ensure that an appropriate marker layer is installed above any emplaced contaminated fill material contained on the development site.
- B7. Upon completion of remedial works, the Applicant must submit a Site Audit Report and Section A Site Audit Statement for the relevant part of the site prepared by a NSW EPA accredited Site Auditor. The Site Audit Report and Section A Site Audit Statement must verify the relevant part of the site is suitable for the educational establishment land use and be provided to the satisfaction of the Certifying Authority.

Unexpected Contamination Procedure

- B8. Prior to the commencement of earthworks, the Applicant must prepare an unexpected contamination procedure to ensure that potentially contaminated material is appropriately

managed. The procedure must form part of the of the CEMP in accordance with condition B18 and must ensure any material identified as contaminated and remaining on-site be managed in accordance with the Long Term Environmental Management Plan (LTEMP) as required by Condition D36 and D37.

Utilities and Services

- B9. Before the construction of any utility works associated with the development, the Applicant must obtain relevant approvals from service providers.
- B10. Prior to the commencement of above ground works written advice must be obtained from the electricity supply authority, an approved telecommunications carrier and an approved gas carrier (where relevant) stating that satisfactory arrangements have been made to ensure provisions of adequate services.
- B11. Water, electricity and gas are to comply with sections 4.1.3 and 4.2.7 of *Planning for Bush Fire Protection 2006*.

Community Communication Strategy

- B12. A Community Communication Strategy must be prepared to provide mechanisms to facilitate communication between the Applicant, the relevant Council and the community (including adjoining affected landowners and businesses, and others directly impacted by the development), during the design and construction of the development and for a minimum of 12 months following the completion of construction.

The Community Communication Strategy must:

- (a) identify people to be consulted during the design and construction phases;
 - (b) set out procedures and mechanisms for the regular distribution of accessible information about or relevant to the development;
 - (c) provide for the formation of community-based forums, if required, that focus on key environmental management issues for the development;
 - (d) set out procedures and mechanisms:
 - (i) through which the community can discuss or provide feedback to the Applicant;
 - (ii) through which the Applicant will respond to enquiries or feedback from the community; and
 - (iii) to resolve any issues and mediate any disputes that may arise in relation to construction and operation of the development, including disputes regarding rectification or compensation.
- B13. The Community Communication Strategy must be submitted to the Planning Secretary for approval no later than two weeks before the commencement of any work.
- Work for the purposes of the development must not commence until the Community Communication Strategy has been approved by the Planning Secretary, or within another timeframe agreed with the Planning Secretary.

Ecologically Sustainable Development

- B14. Prior to the commencement of construction, the Applicant must register for a minimum 4-star Green Star rating with the Green Building Council Australia and submit evidence of registration to the Certifying Authority, unless otherwise agreed by the Planning Secretary.

Outdoor Lighting

- B15. Prior to commencement of construction, all outdoor lighting within the site must comply with AS 1158.3.1:2005 Lighting for roads and public spaces – Pedestrian area (Category P) lighting – Performance and design requirements and AS 4282-1997 Control of the obtrusive effects of outdoor lighting. Details demonstrating compliance with these requirements must be submitted to the satisfaction of the Certifying Authority.

Access for People with Disabilities

B16. The works that are the subject of this application must be designed and constructed to provide access and facilities for people with a disability in accordance with the BCA. Prior to the commencement of construction, the Certifying Authority must ensure that evidence of compliance with this condition from an appropriately qualified person is provided and that the requirements are referenced on any certified plans.

Environmental Management Plan Requirements

- B17. Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:
- (a) detailed baseline data;
 - (b) details of:
 - (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - (ii) any relevant limits or performance measures and criteria; and
 - (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
 - (c) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;
 - (d) a program to monitor and report on the:
 - (i) impacts and environmental performance of the development;
 - (ii) effectiveness of the management measures set out pursuant to paragraph (c) above;
 - (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
 - (f) a program to investigate and implement ways to improve the environmental performance of the development over time;
 - (g) a protocol for managing and reporting any:
 - (i) incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria);
 - (ii) complaint;
 - (iii) failure to comply with statutory requirements; and
 - (h) a protocol for periodic review of the plan.

Note: The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans

Construction Environmental Management Plan

B18. Prior to commencement of construction, the Applicant must prepare a Construction Environmental Management Plan (CEMP) and it must include, but not be limited to, the following:

- (a) Details of:
 - (i) hours of work;
 - (ii) 24-hour contact details of site manager;
 - (iii) management of dust and odour to protect the amenity of the neighbourhood;
 - (iv) stormwater control and discharge;
 - (v) measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site;

- (vi) groundwater management plan including measures to prevent groundwater contamination;
 - (vii) external lighting in compliance with AS 4282-1997 Control of the obtrusive effects of outdoor lighting;
 - (viii) community consultation and complaints handling;
 - (b) Construction Traffic and Pedestrian Management Sub-Plan (see condition B20);
 - (c) Construction Noise and Vibration Management Sub-Plan (see condition B21);
 - (d) Construction Waste Management Sub-Plan (see condition B22);
 - (e) Construction Soil and Water Management Sub-Plan (see condition B23);
 - (f) Biodiversity Management Sub-Plan (see condition B24);
 - (g) Bush Fire and Flood Emergency Response (see condition B25);
 - (h) an unexpected finds protocol for contamination and associated communications procedure;
 - (i) an unexpected finds protocol for Aboriginal and non-Aboriginal heritage and associated communications procedure;
 - (j) waste classification (for materials to be removed) and validation (for materials to remain) be undertaken to confirm the contamination status in these areas of the site; and
- B19. The Applicant must not commence construction of the development until the CEMP is approved by the Certifying Authority and a copy submitted to the Planning Secretary.
- B20. The Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) must address, but not be limited to, the following:
- (a) be prepared by a suitably qualified and experienced person(s);
 - (b) be prepared in consultation with Council and RMS;
 - (c) detail the measures that are to be implemented to ensure road safety and network efficiency during construction in consideration of potential impacts on general traffic, cyclists and pedestrians and bus services;
 - (d) detail heavy vehicle routes, access and parking arrangements;
 - (e) include a Driver Code of Conduct to:
 - (i) minimise the impacts of earthworks and construction on the local and regional road network;
 - (ii) minimise conflicts with other road users;
 - (iii) minimise road traffic noise; and
 - (iv) ensure truck drivers use specified routes;
 - (f) include a program to monitor the effectiveness of these measures; and
 - (g) if necessary, detail procedures for notifying residents and the community (including local schools), of any potential disruptions to routes.
- B21. The Construction Noise and Vibration Management Sub-Plan must address, but not be limited to, the following:
- (a) be prepared by a suitably qualified and experienced noise expert;
 - (b) describe procedures for achieving the noise management levels in EPA's *Interim Construction Noise Guideline* (DECC, 2009);
 - (c) describe the measures to be implemented to manage high noise generating works such as piling, in close proximity to sensitive receivers;
 - (d) include strategies that have been developed with the community for managing high noise generating works;

- (e) describe the community consultation undertaken to develop the strategies in condition B21(d); and
 - (f) include a complaints management system that would be implemented for the duration of the construction.
- B22. The Construction Waste Management Sub-Plan (CWMS) must address, but not be limited to, the following:
- (a) detail the quantities of each waste type generated during construction and the proposed reuse, recycling and disposal locations;
 - (b) removal of hazardous materials, particularly the method of containment and control of emission of fibres to the air, and disposal at an approved waste disposal facility in accordance with the requirements of the relevant legislation, codes, standards and guidelines, prior to the commencement of any building works.
- B23. The Applicant must prepare a Construction Soil and Water Management Plan (CSWMS) and the plan must address, but not be limited to the following:
- (a) be prepared by a suitably qualified expert, in consultation with Council;
 - (b) describe all erosion and sediment controls to be implemented during construction;
 - (c) provide a plan of how all construction works will be managed in a wet-weather events (i.e. storage of equipment, stabilisation of the Site);
 - (d) detail all off-Site flows from the Site; and
 - (e) describe the measures that must be implemented to manage stormwater and flood flows for small and large sized events, including, but not limited to 1 in 1-year ARI, 1 in 5-year ARI and 1 in 100-year ARI).
- B24. The Biodiversity Management Sub-Plan (BMS) must address, but not be limited to, the following:
- (a) provide information and maps that define the biodiversity values across the site;
 - (b) outline priority investment area on-site where biodiversity will benefit from active management and restoration;
 - (c) map potential areas for management of threatened and significant species;
 - (d) measures to minimise the loss of key fauna habitat, including tree hollows;
 - (e) measures to minimise the impacts on fauna on site, including conducting fauna pre-clearance surveys prior to vegetation clearing, building/structure demolition;
 - (f) engagement of an appropriately qualified ecologist with experience in capturing native wildlife to be on site for all vegetation removal activities;
 - (g) controlling weeds and feral pests;
 - (h) an Unexpected Finds Procedure detailing procedures and management measures to be implemented in the event that flora and fauna is uncovered in any area not identified in the updated Biodiversity Assessment (BAR);
 - (i) measures to ensure biodiversity values not intended to be impacted are protected, including barriers and mapping of protected/ 'no-go' areas; and
 - (j) a program to monitor the effectiveness of the measures in the BMS.
- B25. The Flood Emergency Response Sub-Plan (FERS) must address, but not be limited to, the following:
- (a) be prepared by a suitably qualified and experienced person(s);
 - (b) address the provisions of the *Floodplain Risk Management Guideline* (OE, 2007);
 - (c) include details of:

- (i) flood emergency responses for both construction and operation phases of the development;
- (ii) predicted flood levels;
- (iii) flood warning time and flood notification;
- (iv) assembly points and evacuation routes;
- (v) evacuation and refuge protocols; and
- (vi) awareness training for employees and contractors, and students.

Construction Parking

B26. Prior to the commencement of construction, the Applicant must provide sufficient parking facilities on-site, including for heavy vehicles and for site personnel, to ensure that construction traffic associated with the development does not utilise public and residential streets or public parking facilities.

Stormwater Management System

- B27. Prior to the commencement of construction, the Applicant must design a stormwater management system for the development and submit it to the satisfaction of the Certifying Authority. The system must:
- (a) be designed by a suitably qualified and experienced person(s);
 - (b) be generally in accordance with the conceptual design in the EIS;
 - (c) be in accordance with applicable Australian Standards;
 - (d) ensure that the system capacity has been designed in accordance with *Australian Rainfall and Runoff* (Engineers Australia, 2016) and *Managing Urban Stormwater: Council Handbook* (EPA, 1997) guidelines;
 - (e) divert existing clean surface water around operational areas of the site;
 - (f) prevent cross-contamination of clean and sediment laden water.

Flood Management

- B28. Prior to the commencement of construction, the Certifying Authority must be satisfied that all the floor levels of all habitable rooms must be no lower than the 1% Annual Exceedance Probability flood plus 500mm of freeboard.
- B29. Prior to the commencement of construction, the Certifying Authority must be satisfied that any structures below the 1% Annual Exceedance Probability plus 500mm of freeboard must be constructed from flood compatible building components.

Operational Noise – Design of Mechanical Plant and Equipment

- B30. Prior to commencement of construction, the Applicant must incorporate the noise mitigation recommendations in the Noise Impact Assessment prepared by Acoustic Logic, dated 29 August 2018, into the detailed design drawings. The Certifying Authority must verify that all reasonable and feasible noise mitigation measures have been incorporated into the design to ensure the development will not exceed the recommended operational noise levels identified in the Noise Impact Assessment.

Biodiversity

- B31. ~~Prior to any clearing or construction works, the Applicant must purchase and retire ecosystem and species credits to offset the removal of the Forest Red Gum ecosystem and Southern Myotis habitat on site. The Forest Red Gum and Southern Myotis credits must be determined in accordance with the OEH's Framework for Biodiversity Assessment (FBA) and the Biobanking Assessment Methodology 2014 (BBAM).~~

Note: If the Applicant seeks a variation to the offset rules, the Applicant must demonstrate that reasonable steps have been taken to find like-for-like offsets in accordance with Section 10.5.4.2 of the FBA and Appendix A of the OEH's NSW Biodiversity Offsets Policy for Major Projects 2014

Prior to any vegetation clearing or tree removal, the Applicant must purchase and retire Biodiversity credits specified in Table 1 below. The retirement of credits must be carried out in accordance with the offset rules of the *Biodiversity Conservation Act 2016 (BC Act)*. This can be achieved by:

- (a) under a Biodiversity Stewardship Agreement under the BC Act; or
- (b) making payments unto an offset fund that has been established by the NSW Government; or
- (c) providing suitable supplementary measures.

Table 1: Biodiversity Credits to be Retired

<u>Credit Type</u>	<u>Number of credits</u>
<u>Ecosystem Credits</u>	
<u>PCT 835 - Forest Red Gum – Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain, Sydney Basin Bioregion</u>	<u>5</u>
<u>Species Credits</u>	
<u><i>Myotis macropus</i> (Southern Myotis)</u>	<u>5</u>

Construction and Demolition Waste Management

- B32. The Applicant must notify the RMS Traffic Management Centre of the truck route(s) to be followed by trucks transporting waste material from the site, prior to the commencement of the removal of any waste material from the site.

Operational Waste Storage and Processing

- B33. Prior to the commencement of construction, the Applicant must obtain agreement from Council for the design of the operational waste storage area where waste removal is undertaken by Council.

Mechanical Ventilation

- B34. All mechanical ventilation systems must be designed in accordance with Part F4.5 of the BCA and must comply with the AS 1668.2-2012 *The use of air-conditioning in buildings – Mechanical ventilation in buildings* and AS/NZS 3666.1:2011 *Air handling and water systems of buildings– Microbial control* to ensure adequate levels of health and amenity to the occupants of the building and to ensure environment protection. Details must be submitted to the satisfaction of the Certifying Authority prior to the commencement of construction.

Rainwater Harvesting

- B35. Prior to the commencement of construction, the Applicant must ensure that a rainwater reuse/harvesting system for the development is developed for the site. A rainwater re-use plan must be prepared and certified by an experienced hydraulic engineer.

Roadworks and Access

- B36. Prior to the commencement of construction, the Applicant must submit design plans to the satisfaction of the relevant roads authority which demonstrate that the proposed accesses to the development are designed to accommodate the turning path of an 8.8m medium rigid vehicle.

Car Parking and Service Vehicle Layout

- B37. Compliance with the following requirements must be submitted to the satisfaction of the Certifying Authority prior to the commencement of construction:
- (a) all vehicles must enter and leave the Site in a forward direction;
 - (b) minimum of 43 on-site car, and five bus parking spaces for use during operation of the development and designed in accordance with the latest version of AS2890.1;

- (c) the swept path of the longest vehicle entering and exiting the Site in association with the new work, as well as manoeuvrability through the Site, must be in accordance with AUSTROADS; and
- (d) the safety of vehicles and pedestrians accessing adjoining properties, where shared vehicle and pedestrian access occurs, is to be addressed.

Bicycle Parking and End-of-Trip Facilities

- B38. Compliance with the following requirements for secure bicycle parking and end-of-trip facilities must be submitted to the satisfaction of the Certifying Authority prior to the commencement of construction:
- (a) the provision of a minimum 22 staff bicycle parking spaces;
 - (b) the layout, design and security of bicycle facilities must comply with the minimum requirements of AS 2890.3:2015 *Parking facilities - Bicycle parking*, and be located in easy to access, well-lit areas that incorporate passive surveillance;
 - (c) the provision of end-of-trip facilities for staff in accordance with the ESD Design & As Built rating tool;
 - (d) appropriate pedestrian and cyclist advisory signs are to be provided; and
 - (e) all works/regulatory signposting associated with the proposed developments must be at no cost to the relevant roads' authority.

Public Domain Works

- B39. Prior to the commencement of any footpath or public domain works, the Applicant must consult with Council and demonstrate to the Certifying Authority that the streetscape design and treatment meets the requirements of Council, including addressing pedestrian management. The Applicant must submit documentation of approval for each stage from Council to the Certifying Authority.

Compliance Reporting

- B40. No later than two weeks before the date notified for the commencement of construction, a Compliance Monitoring and Reporting Program prepared in accordance with the Compliance Reporting Post Approval Requirements (Department of Planning and Environment 2018) must be submitted to the Department and the Certifying Authority.
- B41. Compliance Reports of the project must be carried out in accordance with the Compliance Reporting Post Approval Requirements (Department of Planning and Environment 2018).
- B42. The Applicant must make each Compliance Report publicly available 60 days after submitting it to the Department and notify the Department and the Certifying Authority in writing at least seven days before this is done.
- B43. Notwithstanding the requirements of the Compliance Reporting Post Approval Requirements (Department of Planning and Environment 2018), the Planning Secretary may approve a request for ongoing annual operational compliance reports to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that an operational compliance report has demonstrated operational compliance.

Landscaping

- B44. Prior to occupation of the building, the Applicant must prepare a Landscape Plan to manage the revegetation and landscaping works on-site, to the satisfaction of the Certifying Authority. The plan must:
- (a) detail the species to be planted on-site;
 - (b) provide for the planting of 67 locally endemic trees including [27 36](#) trees of intermediate mature size up to 12m and [40 22](#) larger native trees with a minimum mature size of 15m and [9 trees with a](#) potential mature size of 25m;

- (c) native trees to be planted on site must consist of advanced and established local native tree species with a minimum tree height of 2-2.5m and/or plant container pot size of 100 litres;
- (d) native trees to be removed from the site shall be salvaged, including tree hollows and tree trunks (greater than 25-30cm in diameter and 3m in length) and used to enhance habitat at the site and the riparian corridor along Brickmakers Creek;
- (e) seed from endemic vegetation to be removed shall be collected and used in the site landscaping and along the riparian corridor;
- (f) landscaping of the site, including the rehabilitation of the riparian corridor where required, must use a diversity of local provenance species (trees, shrubs and groundcovers from the native vegetation community (or communities) that occur, or once occurred on the site (rather than use exotic plant species or non-endemic native species);
- (g) turf areas must be located outside the riparian corridor and less invasive grass (instead of kikuyu) must be used along the eastern boundary of the site in proximity to the riparian corridor;
- (h) be consistent with the Applicant's Management and Mitigation Measures at RtS; and
- (i) comply with the principles of Appendix 5 of *Planning for Bush Fire Protection 2006*.

PART C DURING CONSTRUCTION

Approved Plans to be On-site

- C1. A copy of the approved and certified plans, specifications and documents incorporating conditions of approval and certification must be kept on the Site at all times and must be readily available for perusal by any officer of the Department, Council or the Certifying Authority.

Site Notice

- C2. A site notice(s):
- (a) must be prominently displayed at the boundaries of the site for the purposes of informing the public of project details including, but not limited to the details of the Builder, Certifying Authority and Structural Engineer.
 - (b) is to satisfy all but not be limited to, the following requirements:
 - (i) minimum dimensions of the notice must measure 841 mm x 594 mm (A1) with any text on the notice to be a minimum of 30-point type size;
 - (ii) the notice is to be durable and weatherproof and is to be displayed throughout the works period;
 - (iii) the approved hours of work, the name of the site/ project manager, the responsible managing company (if any), its address and 24-hour contact phone number for any inquiries, including construction/ noise complaint must be displayed on the site notice; and
 - (iv) the notice(s) is to be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the site is not permitted.

Operation of Plant and Equipment

- C3. All plant and equipment used on site, or to monitor the performance of the development must be:
- (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

Demolition

- C4. Demolition work must comply with *Australian Standard AS 2601-2001* The demolition of structures (Standards Australia, 2001). The work plans required by AS 2601-2001 must be accompanied by a written statement from a suitably qualified person that the proposals contained in the work plan comply with the safety requirements of the Standard. The work plans, and the statement of compliance must be submitted to the Certifying Authority before the commencement of works.

Construction Hours

- C5. Construction, including the delivery of materials to and from the site, may only be carried out between the following hours:

- (a) between 7:00am and 6:00pm, Mondays to Fridays inclusive; and
- (b) between 8:00am and 1:00pm, Saturdays.

No work may be carried out on Sundays or public holidays.

- C6. Activities may be undertaken outside of the hours in condition C5 if required:

- (a) by the Police or a public authority for the delivery of vehicles, plant or materials; or
- (b) in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or
- (c) where the works are inaudible at the nearest sensitive receivers; or
- (d) where a variation is approved in advance in writing by the Planning Secretary or her nominee if appropriate justification is provided for the works.

- C7. Notification of such activities must be given to affected residents before undertaking the activities or as soon as is practical afterwards.
- C8. Rock breaking, rock hammering, sheet piling, pile driving, and similar activities may only be carried out between the following hours:
- (a) 9:00am to 12:00pm, Monday to Friday;
 - (b) 2:00pm to 5:00pm Monday to Friday; and
 - (c) 9:00am to 12:00pm, Saturday.

Implementation of Management Plans

- C9. The Applicant must carry out the construction of the development in accordance with the most recent version of the approved CEMP (including Sub-Plans).

Construction Traffic

- C10. All construction vehicles (excluding worker vehicles) are to be contained wholly within the site, except if located in an approved on-street work zone, and vehicles must enter the site before stopping.

Road Occupancy Licence

- C11. A Road Occupancy Licence must be obtained from the relevant road authority for any works that impact on traffic flows during construction activities.

SafeWork Requirements

- C12. To protect the safety of work personnel and the public, the work site must be adequately secured to prevent access by unauthorised personnel, and work must be conducted at all times in accordance with relevant SafeWork requirements.

Hoarding Requirements

- C13. The following hoarding requirements must be complied with:
- (a) no third-party advertising is permitted to be displayed on the subject hoarding/ fencing;
 - (b) the construction site manager must be responsible for the removal of all graffiti from any construction hoardings or the like within the construction area within 48 hours of its application; and
 - (c) the Applicant must submit a hoarding application to Council for the installation of any hoardings over Council footways or road reserve.

No Obstruction of Public Way

- C14. The public way (outside of any approved construction works zone) must not be obstructed by any materials, vehicles, refuse, skips or the like, under and circumstances. Non-compliance with this requirement will result in the issue of a notice by the relevant Authority to stop all works on site.

Construction Noise Limits

- C15. The development must be constructed to achieve the construction noise management levels detailed in the *Interim Construction Noise Guideline* (DECC, 2009). All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the management and mitigation measures identified in the approved Construction Noise and Vibration Management Plan.
- C16. The Applicant must ensure construction vehicles (including concrete agitator trucks) do not arrive at the site or surrounding residential precincts outside of the construction hours of work outlined under condition C5.

- C17. The Applicant must implement, where practicable and without compromising the safety of construction staff or members of the public, the use audible movement alarms of a type that would minimise noise impacts on surrounding noise sensitive receivers.
- C18. Any noise generated during construction of the development must not be offensive noise within the meaning of the *Protection of the Environment Operations Act 1997* or exceed approved noise limits for the site.

Vibration Criteria

- C19. Vibration caused by construction at any residence or structure outside the site must be limited to:
- (a) for structural damage, the latest version of *DIN 4150-3 (1992-02) Structural vibration - Effects of vibration on structures* (German Institute for Standardisation, 1999); and
 - (b) for human exposure, the acceptable vibration values set out in the *Environmental Noise Management Assessing Vibration: a technical guideline* (DEC, 2006) (as may be updated or replaced from time to time).
- C20. Vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance with the vibration criteria specified in condition C19.
- C21. The limits in conditions C19 and C20 apply unless otherwise outlined in a Construction Noise and Vibration Management Plan, approved as part of the CEMP required by condition B21 of this consent.

Tree Protection

- C22. For the duration of the construction works:
- (a) street trees must not be trimmed or removed unless it forms a part of this development consent or prior written approval from Council is obtained or is required in an emergency to avoid the loss of life or damage to property;
 - (b) all street trees must be protected at all times during construction. Any tree on the footpath, which is damaged or removed during construction due to an emergency, must be replaced, to the satisfaction of Council;
 - (c) all trees on the site that are not approved for removal must be suitably protected during construction as per recommendations of the *Aboricultural Impact Assessment Report* prepared by Paul Shearer Consulting dated 30 August 2018;
 - (d) native trees to be retained on the site, including Tree 30 must be clearly identified on the ground by protective fencing prior to any works commencing on the site and the fencing maintained for the duration of construction works; and
 - (e) if access to the area within any protective barrier is required during the works, it must be carried out under the supervision of a qualified arborist. Alternative tree protection measures must be installed, as required. The removal of tree protection measures, following completion of the works, must be carried out under the supervision of a qualified arborist and must avoid both direct mechanical injury to the structure of the tree and soil compaction within the canopy or the limit of the former protective fencing, whichever is the greater.

Dust Minimisation

- C23. The Applicant must take all reasonable steps to minimise dust generated during all works authorised by this consent.
- C24. During construction, the Applicant must ensure that:
- (a) exposed surfaces and stockpiles are suppressed by regular watering;
 - (b) all trucks entering or leaving the site with loads have their loads covered;
 - (c) trucks associated with the development do not track dirt onto the public road network;

- (d) public roads used by these trucks are kept clean; and
- (e) land stabilisation works are carried out progressively on site to minimise exposed surfaces.

Air Quality Discharges

C25. The Applicant must install and operate equipment in line with best practice to ensure that the development complies with all load limits, air quality criteria/air emission limits and air quality monitoring requirements as specified in the EPL applicable to the site.

Erosion and Sediment Control

C26. All erosion and sediment control measures must be effectively implemented and maintained at or above design capacity for the duration of the construction works and until such time as all ground disturbed by the works have been stabilised and rehabilitated so that it no longer acts as a source of sediment.

Imported Soil

C27. The Applicant must:

- (a) ensure that only VENM, ENM, or other material approved in writing by EPA is brought onto the site;
- (b) keep accurate records of the volume and type of fill to be used; and
- (c) make these records available to the Certifying Authority upon request.

Disposal of Seepage and Stormwater

C28. Any seepage or rainwater collected on-site during construction or groundwater must not be pumped to the street stormwater system unless separate prior approval is given in writing by the EPA in accordance with the *Protection of the Environment Operations Act 1997*.

Unexpected Finds Protocol – Aboriginal Heritage

C29. In the event that surface disturbance identifies a new Aboriginal object, all works must halt in the immediate area to prevent any further impacts to the object(s). A suitably qualified archaeologist and the registered Aboriginal representatives must be contacted to determine the significance of the objects. The site is to be registered in the Aboriginal Heritage Information Management System (AHIMS) which is managed by OEH and the management outcome for the site included in the information provided to AHIMS. The Applicant must consult with the Aboriginal community representatives, the archaeologists and OEH to develop and implement management strategies for all objects/sites. Works shall only recommence with the written approval of OEH.

Unexpected Finds Protocol – Historic Heritage

C30. If any unexpected archaeological relics are uncovered during the work, then all works must cease immediately in that area and the OEH Heritage Division contacted. Depending on the possible significance of the relics, an archaeological assessment and management strategy may be required before further works can continue in that area. Works may only recommence with the written approval of Heritage Division of the OEH.

Waste Storage and Processing

- C31. Waste must be secured and maintained within designated waste storage areas at all times and must not leave the site onto neighbouring public or private properties.
- C32. All waste generated during construction must be assess, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).
- C33. The body of any vehicle or trailer used to transport waste or excavation spoil must be covered before leaving the premises to prevent any spillage or escape of any dust, waste of spoil. Mud, splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorised plant leaving the site must be removed before leaving the premises.

- C34. The Applicant must ensure that concrete waste and rinse water are not disposed of on the site and are prevented from entering any natural or artificial watercourse.

Handling of Asbestos

- C35. The Applicant is to consult with SafeWork NSW concerning the handling of any asbestos waste that may be encountered during construction. The requirements of the Protection of the Environment Operations (Waste) Regulation 2014 with particular reference to Part 7 – 'Transportation and management of asbestos waste' must also be complied with.

Community Engagement

- C36. The Applicant must consult with the community regularly throughout construction, including consultation with the nearby sensitive receivers identified on Figure 1 in the Noise Impact Assessment prepared by Acoustic Logic dated 29 August 2018, relevant regulatory authorities, Registered Aboriginal Parties and other interested stakeholders.

Independent Environmental Audit

- C37. Proposed independent auditors must be agreed to in writing by the Planning Secretary prior to the preparation of an Independent Audit Program or commencement of an Independent Audit.
- C38. No later than four weeks before the date notified for the commencement of construction, an Independent Audit Program prepared in accordance with the Independent Audit Post Approval Requirements (Department of Planning and Environment 2018) and must be submitted to the Department and the Certifying Authority.
- C39. Table 1 of the Independent Audit Post Approval Requirements (Department of Planning and Environment 2018) is amended so that the frequency of audits required in the construction phase is:
- (a) An initial construction Independent Audit must be undertaken within eight weeks of the notified commencement date of construction; and
 - (b) A subsequent Independent Audit of construction must be undertaken no later than six months from the date of the initial construction Independent Audit.
- C40. In all other respects Table 1 remains the same. The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified above, upon giving at least 4 weeks' notice to the applicant of the date upon which the audit must be commenced.
- C41. Independent Audits of the development must be carried out in accordance with:
- (a) the Independent Audit Program submitted to the Department and the Certifying Authority under condition C37 of this consent; and
 - (b) the requirements for an Independent Audit Methodology and Independent Audit Report in the Independent Audit Post Approval Requirements (Department of Planning and Environment 2018).
- C42. In accordance with the specific requirements in the Independent Audit Post Approval Requirements (Department of Planning and Environment 2018), the Proponent must:
- (a) review and respond to each Independent Audit Report prepared under condition C37 of this consent;
 - (b) submit the response to the Department and the Certifying Authority; and
 - (c) make each Independent Audit Report and response to it publicly available within 60 days after submission to the Department and notify the Department and the Certifying Authority in writing at least seven days before this is done.
- C43. Notwithstanding the requirements of the Independent Audit Post Approval Requirements (Department of Planning and Environment 2018), the Planning Secretary may approve a

request for ongoing annual operational audits to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that an audit has demonstrated operational compliance.

Incident Notification, Reporting and Response

- C44. The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident.

Subsequent notification must be given, and reports submitted in accordance with the requirements set out in **Appendix 1**.

Non-Compliance Notification

- C45. The Department must be notified in writing to compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of any non-compliance. The Certifying Authority must also notify the Department in writing to compliance@planning.nsw.gov.au within seven days after they identify any non-compliance.

The notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

Revision of Strategies, Plans and Programs

- C46. Within three months of:

- (a) the submission of a compliance report under condition B40;
- (b) the submission of an incident report under condition C44;
- (c) the submission of an Independent Audit under condition C41;
- (d) the issue of a direction of the Planning Secretary under condition A2 which requires a review,

the strategies, plans and programs required under this consent must be reviewed, and the Department and the Certifying Authority must be notified in writing that a review is being carried out.

- C47. If necessary to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Planning Secretary and Certifying Authority. Where revisions are required, the revised document must be submitted to the Planning Secretary and Certifying Authority for information within six weeks of the review.

Note: This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.

C48. Remediation of the site must be carried out in accordance with the Remediation Action Plan prepared by Environmental Investigation Services dated October 2018 and any variations to the Remediation Action Plan approved by an NSW EPA-accredited Site Auditor.

C49. Where remediation is carried out / completed in stages, a NSW EPA-accredited Site Auditor must confirm satisfactory completion of each stage by the issuance of Interim Audit Advice(s) prior to the use / operation of the relevant remediated area(s). The Interim Audit Advice(s) must confirm that:

- (a) remediation and validation of the sub-portion of the site has been completed satisfactorily in accordance with:**

- i. the endorsed Remediation Action Plan including addenda; and
 - ii. guidelines made or approved under section 105 of the Contaminated Land Management Act 1997; and
- (b) an interim Environmental Management Plan which has been prepared for the remediated sub-portion of the site to the satisfaction of the Site Auditor.

C50. The interim Environment Management Plan required under condition C49 must be implemented until the Section A Site Audit Statement is issued by the NSW EPA-accredited Site Auditor.

Note: The Site Auditor must consider compatibility of land uses during the staged development to ensure that sections of the site that have been certified as remediated are not re-contaminated by ongoing works or adjacent contamination.

PART D PRIOR TO OCCUPATION OR COMMENCEMENT OF USE

Notification of Occupation

- D1. The date of commencement of the occupation of the development must be notified to the Department in writing, at least one month before occupation. If the operation of the development is to be staged, the Department must be notified in writing at least one month before the commencement of each stage, of the date of commencement and the development to be carried out in that stage.

External Walls and Cladding

- D2. Prior to the occupation of the building, the Applicant must provide the Certifier with documented evidence that the products and systems used in the construction of external walls including finishes and claddings such as synthetic or aluminium composite panels comply with the requirements of the BCA.
- D3. The Applicant must provide a copy of the documentation given to the Certifier to the Planning Secretary within seven days after the Certifier accepts it.

Post-construction Dilapidation Report

- D4. Prior to occupation of the building, the Applicant must engage a suitably qualified person to prepare a post-construction dilapidation report at the completion of construction. This report is:
- (a) to ascertain whether the construction created any structural damage to adjoining buildings or infrastructure.
 - (b) to be submitted to the Certifier. In ascertaining whether adverse structural damage has occurred to adjoining buildings or infrastructure, the Certifier must:
 - (i) compare the post-construction dilapidation report with the pre-construction dilapidation report required by these conditions; and
 - (ii) have written confirmation from the relevant authority that there is no adverse structural damage to their infrastructure and roads.
 - (c) to be forwarded to Council.

Protection of Public Infrastructure

- D5. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:
- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by carrying out the development; and
 - (b) relocate, or pay the full costs associated with relocating any infrastructure that needs to be relocated as a result of the development.

Note: This condition does not apply to any damage to roads caused as a result of general road usage or otherwise addressed by contributions required by A1 of this consent.

Utilities and Services

- D6. Prior to occupation of the building, the Applicant must obtain a Compliance Certificate for water and sewerage infrastructure servicing of the site under section 73 of the *Sydney Water Act 1994*.

Works as Executed Plans

- D7. Prior to occupation of the building, works-as-executed drawings signed by a registered surveyor demonstrating that the stormwater drainage and finished ground levels have been constructed as approved, must be submitted to the Certifying Authority.

Green Travel Plan

- D8. Prior to the commencement of operation, a Green Travel Plan (GTP), must be prepared and be submitted to the Secretary to promote the use of active and sustainable transport modes. The plan must:

- (a) be prepared by a suitably qualified traffic consultant in consultation with Liverpool Council and (Sydney Coordination Office) Transport for NSW];
- (b) include objectives and modes share targets (i.e. Site and land use specific, measurable and achievable and timeframes for implementation) to define the direction and purpose of the GTP;
- (c) include specific tools and actions to help achieve the objectives and mode share targets;
- (d) include measures to promote and support the implementation of the plan, including financial and human resource requirements, roles and responsibilities for relevant employees involved in the implementation of the GTP; and
- (e) include details regarding the methodology and monitoring/review program to measure the effectiveness of the objectives and mode share targets of the GTP, including the frequency of monitoring and the requirement for travel surveys to identify travel behaviours of students and staff to and from both schools at appropriate times throughout the academic year.

Operational Transport and Access Management Plan (OTAMP)

- D9. An OTAMP is to be prepared for the school by a suitably qualified person, in consultation with Council, Transport for NSW and RMS, to the satisfaction of the Secretary, and must address the following:
- (a) Detailed pedestrian analysis including the identification of safe route options – to identify the need for management measures such as staggered school start and finish times to ensure students and staff are able to access and leave the Site in a safe and efficient manner during school start and finish;
 - (b) the location of all car parking spaces on the school campuses and their allocation (i.e. staff, visitor, accessible, emergency, etc.);
 - (c) the location and operational management procedures of the pick-up and drop-off parking located within the school, including staff management/traffic controller arrangements;
 - (d) delivery and services vehicle and bus access and management arrangements;
 - (e) management of approved access arrangements, particularly in relation to the protrusion of the carparks on either side of the secondary pedestrian accessway, into the secondary pedestrian accessway;
 - (f) potential traffic impacts on surrounding road networks and mitigation measures to minimise impacts, including measures to mitigate queuing impacts associated with vehicles accessing pick-up and drop-off parking within the school accessed from Williamson Crescent;
 - (g) car parking arrangements and management associated with the proposed use of school facilities by community members; and
 - (h) a monitoring and review program.
- D10. The OTAMP(s) must be submitted to the Secretary for approval prior to operation of the development.
- D11. The OTAMP(s) (as revised from time to time) must be implemented by the Applicant for the life of the development.

Evacuation and Emergency Planning

- D12. No later than six weeks prior to the commencement of operation, an Operational Flood Evacuation and Emergency Management Plan (OFEMP) must be prepared by a suitably qualified person in consultation with the NSW SES and Council and in accordance with *Floodplain Risk Management Guideline* (OEH, 2007). The plan should detail specific flood emergency measures required to be incorporated into the detailed design to mitigate impacts of

a range of flood events up to and including the PMF and include measures to manage flood impacts outside the site to ensure accessibility is maintained. The plan must include details of:

- (a) predicted flood levels;
- (b) flood warning time and flood notification;
- (c) assembly points and evacuation routes;
- (d) evacuation and refuge protocols; and
- (e) awareness training for employees and contractors.

A copy of the Plan must be submitted to the NSW SES, Council and the Planning Secretary.

- D13. No later than six weeks prior to the commencement of operation, an Operational Bush Fire Evacuation and Emergency Management and Evacuation Plan must be prepared in consultation with RFS and in accordance with section 4.2.7 of *Planning for Bush Fire Protection 2006, Development Planning – A Guide to Developing a Bush Fire Emergency and Evacuation Management and Excavation Plan December 2014* (or equivalent) and Australian Standard AS 3745-2010 *Planning for Emergencies in Facilities*.

The Plan must address evacuation risk with regard to the multi-level configuration of the school, incorporate provisions to address access into the site, the level of available firefighting assistance, and the blockage of evacuation escape routes.

The plan must be updated on an annual basis following an audit of bush fire protection measures, including maintenance of APZs, water supplies and access roads on and off site.

A copy of the Plan must be submitted to the NSW RFS, Council and the Planning Secretary.

School Zones

- D14. Installation or relocation of all required School Zone signage, speed management signage and associated pavement markings along Williamson Crescent is to be completed prior to commencement of occupation of the development.

Note: Any required approvals for altering public road speed limits, design and signage are required to be obtained from the relevant consent authority.

- D15. Following installation or relocation of School Zone signage, speed management signage and associated pavement markings along Williamson Crescent, as required by condition D14, the Applicant must arrange an inspection with RMS for formal handover of assets. The handover of assets must occur prior to commencement of use of the development.
- D16. The Applicant must maintain records of all dates in relation to installing, altering and removing traffic control devices related to speed.

Mechanical Ventilation

- D17. Following completion, installation and testing of all mechanical ventilation systems, the Applicant must provide evidence to the satisfaction of the Certifying Authority, prior to the final occupation, that the installation and performance of the mechanical systems complies with:

- (a) the BCA;
- (b) AS 1668.2-2012 *The use of air-conditioning in buildings – Mechanical ventilation in buildings* and other relevant codes;
- (c) the development consent and any relevant modifications; and
- (d) any dispensation granted by the NSW Fire Brigade.

Car Parking Arrangements

- D18. Unless otherwise agreed by the Planning Secretary, occupation or commencement of use of the educational establishment must not occur until evidence to the satisfaction of the Certifying Authority is submitted demonstrating construction works associated with the proposed car park, as approved is operational.

Road Damage

- D19. The cost of repairing any damage caused to Council or other Public Authority's assets in the vicinity of the Subject Site as a result of construction works associated with the approved development is to be met in full by the Applicant prior to commencement of use of any stage of the development.

Fire Safety Certification

- D20. Prior to the final occupation, a Fire Safety Certificate must be obtained for all the Essential Fire or Other Safety Measures forming part of this consent. A copy of the Fire Safety Certificate must be submitted to the relevant authority and Council. The Fire Safety Certificate must be prominently displayed in the building.

Structural Inspection Certificate

- D21. A Structural Inspection Certificate or a Compliance Certificate must be submitted to the satisfaction of the Certifying Authority prior to the occupation of the relevant parts of any new or refurbished buildings. A copy of the Certificate with an electronic set of final drawings (contact approval authority for specific electronic format) must be submitted to the approval authority and the Council after:
- (a) the site has been periodically inspected and the Certifying Authority is satisfied that the structural works is deemed to comply with the final design drawings; and
 - (b) the drawings listed on the Inspection Certificate have been checked with those listed on the final Design Certificate/s.

Compliance with Food Code

- D22. The Applicant is to obtain a certificate from a suitably qualified tradesperson, certifying that the kitchen, food storage and food preparation areas have been fitted in accordance with the AS 4674 *Design, construction and fit-out of food premises*. The Applicant must provide evidence of receipt of the certificate to the satisfaction of the Certifying Authority prior to occupation.

Stormwater Quality Management Plan

- D23. Prior to occupation of the building, an Operation and Maintenance Plan (OMP) is to be prepared to ensure proposed stormwater quality measures remain effective. The OMP must contain the following:
- (a) maintenance schedule of all stormwater quality treatment devices;
 - (b) record and reporting details;
 - (c) relevant contact information; and
 - (d) Work Health and Safety requirements.
- D24. Details demonstrating compliance must be submitted to the Certifying Authority prior to occupation.

Rainwater Harvesting

- D25. A signed works-as-executed Rainwater Re-use Plan must be provided to the Certifying Authority prior to occupation of the building.

Warm Water Systems and Cooling Systems

- D26. The installation, operation and maintenance of warm water systems and water cooling systems (as defined under the *Public Health Act 2010*) must comply with the *Public Health Act 2010*, *Public Health Regulation 2012* and Parts 1 and 2 (or Part 3 if a Performance-based water cooling system) of *AS/NZS 3666.2:2011 Air handling and water systems of buildings – Microbial control – Operation and maintenance* and the NSW Health Code of Practice for the Control of Legionnaires' Disease.

Outdoor Lighting

- D27. The Applicant must ensure the installed lighting associated with the development achieves the objective of minimising light spillage to any adjoining or adjacent sensitive receivers. Outdoor lighting must:
- (a) comply with the latest version of AS 4282-1997 - *Control of the obtrusive effects of outdoor lighting* (Standards Australia, 1997); and
 - (b) be mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.
- D28. Upon installation of outdoor lighting, but before it is finally commissioned, the Applicant must submit to the Certifier evidence from a qualified practitioner demonstrating compliance in accordance with this condition.

Signage

- D29. Way-finding signage and signage identifying the location of staff car parking must be installed prior to occupation.
- D30. Bicycle way-finding signage must be installed within the site to direct cyclists from footpaths to designated bicycle parking areas prior to occupation.
- D31. 'Do not drink' signage on non-potable water used for toilet flushing and to new hose taps and irrigation systems for landscaped areas must be installed within the site prior to occupation.

Operational Waste Management Plan

- D32. Prior to the commencement of operation, the Applicant must prepare a Waste Management Plan for the development and submit it to the Certifying Authority. The Waste Management Plan must:
- (a) detail the type and quantity of waste to be generated during operation of the development;
 - (b) describe the handling, storage and disposal of all waste streams generated on site, consistent with the *Protection of the Environment Operations Act 1997*, *Protection of the Environment Operations (Waste) Regulation 2014* and the *Waste Classification Guideline* (Department of Environment, Climate Change and Water, 2009);
 - (c) detail the materials to be reused or recycled, either on or off site; and
 - (d) include the Management and Mitigation Measures included in the Appendix O of the EIS.

Validation Report

- D33. The Applicant must prepare a Validation Report for the development. The Validation Report must:
- (a) be prepared by an appropriately qualified environmental consultant and reviewed by an EPA accredited Site Auditor;
 - (b) be submitted to ~~EPA~~, the Planning Secretary and the Certifying Authority for information ~~one month~~ **three months** after the completion of remediation works;
 - (c) be prepared in accordance with the ~~RAP and the Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (OEH, 2011)~~ **Remediation Action Plan and in accordance with Consultants Reporting on Contaminated Land Guidelines (EPA, 2020) and other relevant guidelines made or approved under section 105 of the Contaminated Land Management Act 1997;**
 - (d) include, but not be limited to:
 - (i) comment on the extent and nature of the remediation undertaken;
 - (ii) describe the location, nature and extent of any remaining contamination on site;
 - (iii) sampling and analysis plan and sampling methodology;

- (iv) results of sampling of treated material, compared with the treatment criteria in the Remediation Action Plan prepared by Environmental Investigation Services dated 10 October 2018 and the Remediation Action Plan Addendum as approved by a NSW EPA-accredited Site Auditor;
- (v) details of the volume of treated material emplaced within the containment cell and its location;
- (vi) results of any validation sampling, compared to relevant guidelines/criteria;
- (vii) discussion of the suitability the remediated areas for the intended land use; and
- (viii) any other requirement relevant to the project.

Site Audit Report and Site Audit Statement

- D34. Prior to occupation of the building Warwick Farm Public School oval, the Applicant must obtain from an EPA accredited Site Auditor, a Site Audit Statement and a Site Audit Report which demonstrates that the entire development site is suitable for its intended use.
- D35. ~~Within three months of submission of the Validation Report required by condition D33~~ **Prior to occupation of the Warwick Farm Public School oval**, the Applicant must demonstrate to the satisfaction of the Certifying Authority that the Site Auditor has submitted a Site Audit Report and Site Audit Statement to EPA in accordance with the requirements of EPA's Guidelines for the NSW Site Auditor Scheme (DEC, 2006) to the Planning Secretary, a Section A1 Site Audit Statement, or a Section A2 Site Audit Statement accompanied by a LTEMP referenced in condition D36.

Long Term Environmental Management Plan

- D36. Upon completion of the remediation works, if it is determined that any contamination is to ~~be treated~~ **remain** on-site, ~~then~~ the Applicant must prepare a LTEMP, to the satisfaction of the Planning Secretary. The plan must:
- (a) be prepared by a suitably qualified and experienced person ~~whose appointment has been endorsed by the Planning Secretary in consultation with EPA~~;
 - (b) be submitted to a NSW EPA-accredited Site Auditor for review and **approval**;
 - (c) be submitted to ~~approved by~~ the Planning Secretary within ~~one month~~ **three months** of the completion of remediation works, unless otherwise agreed by the Planning Secretary; and
 - (d) include, but not be limited to:
 - (i) a description of the nature and location of any contamination remaining on site;
 - (ii) provisions to manage and monitor any remaining contamination, including details of any restrictions placed on the land to prevent development over the containment cell;
 - (iii) a description of the procedures for managing any leachate generated from the containment cell (if applicable), including any requirements for testing, pumping, treatment and/or disposal;
 - (iv) a description of the procedures for monitoring the integrity of the containment cell;
 - (v) a surface and groundwater monitoring program (if applicable);
 - (vi) mechanisms to report results to relevant agencies;
 - (vii) triggers that would indicate if further remediation is required; and
 - (viii) details of any contingency measures that the Applicant is to carry out to address any ongoing contamination.
- D37. Upon completion of the remediation works, if it is determined that any contamination is to remain on site, then the Applicant must manage the site in accordance with the LTEMP ~~and any on-going maintenance of remediation notice issued by EPA under the Contaminated Land Management Act 1997.~~

Landscaping

- D38. Prior to operation, a Landscape Management Plan is prepared for the rehabilitation and ongoing management and maintenance of all landscaping, including the riparian corridor of the site, and includes details on the riparian corridor width, the native vegetation community that occurs, or occurred along the creek at this location, native plant species to be planted, planting densities, weed control, watering and replacement of dead plants.
- D39. Following completion of all demolition work, the Applicant must undertake all landscape works detailed in the Landscape Plan required by condition B44 to the satisfaction of the Certifying Authority.
- D40. Prior to occupation of the building, the Applicant must prepare a Landscape Management Plan to manage the revegetation and landscaping works on-site, to the satisfaction of the Certifying Authority. The plan must describe the monitoring and maintenance measures to manage revegetation and landscaping works.
- D41. The Applicant must not commence operation until the Landscape Management Plan is submitted to the Certifying Authority.

Asset Protection Zones

- D42. Prior to the commencement of operation, the entire property must be managed as an inner protection zone (IPA) as outlined within section 4.1.3 and Appendix 5 of the *Planning for Bush Fire Protection 2006* and the NSW RFS document Standards for asset protection zones.

Speed Limit Authorisation

- D43. The Applicant must submit the following details to RMS, at least eight weeks prior to occupation of the site, and obtain authorisation to install School Zone signs and associated pavement markings, and / or removal / relocation of any existing Speed Limit signs:
- (a) a copy of the Conditions of Consent;
 - (b) the proposed school commencement/opening date;
 - (c) two sets of detailed design plans showing the following:
 - (i) accurate Site boundaries;
 - (ii) details of all road reserves, adjacent to the Site boundaries;
 - (iii) all proposed access points from the Site to the public road network and any additional conditions imposed/proposed on their use;
 - (iv) all existing and proposed pedestrian crossing facilities on the adjacent road network;
 - (v) all existing and proposed traffic control devices and pavement markings on the adjacent road network (including School Zone signs and pavement markings); and
 - (vi) all existing and proposed street furniture and street trees.

Ecologically Sustainable Development

- D44. Unless otherwise agreed by the Planning Secretary, within six months of commencement of operation, Green Star certification must be obtained demonstrating the development achieves a minimum 4-star Green Star As Built rating. If required to be obtained, evidence of the certification must be provided to the Certifying Authority and the Planning Secretary.

PART E POST OCCUPATION

Operation of Plant and Equipment

- E1. All plant and equipment used on site, or to monitor the performance of the development must be:
- (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

Community Communication Strategy

- E2. The Community Communication Strategy, as approved by the Planning Secretary, must be implemented for a minimum of 12 months following the completion of construction.

Operational Noise Limits

- E3. The Applicant must ensure that noise generated by operation of the development does not exceed the noise limits in the Noise Impact Assessment dated 29 August 2018 prepared by Acoustic Logic.
- E4. The Applicant must undertake short term noise monitoring in accordance with the *Noise Policy for Industry* where valid data is collected following the commencement the development. The monitoring program must be carried out by an appropriately qualified person and a monitoring report must be submitted to the Planning Secretary within two months of commencement use of the development to verify that operational noise levels do not exceed the recommended noise levels for mechanical plant identified in the Noise Impact Assessment prepared by Acoustic Logic and dated 29 August 2018. Should the noise monitoring program identify any exceedance of the recommended noise levels referred to above, the Applicant is required to implement appropriate noise attenuation measures so that operational noise levels do not exceed the recommended noise levels or provide attenuation measures at the affected noise sensitive receivers.

Hours of Operation

- E5. Use of the hall, sports field and hydrotherapy pool may only occur between 7:00am and 6:00pm Monday to Friday.
- E6. Maintenance work may only occur between 7:30am and 6:00pm Monday to Friday

Unobstructed Driveways and Parking Areas

- E7. All driveways, footways and parking areas must be unobstructed at all times. Driveways, footways and car spaces must not be used for the manufacture, storage or display of goods, materials, refuse, skips or any other equipment and must be used solely for vehicular and/or pedestrian access and for the parking of vehicles associated with the use of the premises.

Green Travel Plan

- E8. The Green Travel Plan required by condition D8 of this consent must be updated annually and implemented.

Outdoor Lighting

- E9. Notwithstanding Condition D27, should outdoor lighting result in any residual impacts on the amenity of surrounding sensitive receivers, the Applicant must provide mitigation measures in consultation with affected landowners to reduce the impacts to an acceptable level.

Fire Safety Certificate

- E10. The owner must submit to Council an Annual Fire Safety Statement, each 12 months after the final Safety Certificate is issued. The certificate must be on, or to the effect of, Council's Fire Safety Statement.

Landscaping

- E11. The Applicant must maintain the landscaping and vegetation on the site in accordance with the approved Landscape Management Plan required by condition D38 for the duration of occupation of the development.

Asset Protection Zones

- E12. The asset protection zones required by condition D42 shall be maintained for the duration of occupation of the development.

Hazards and Risk

- E13. The Applicant must store all chemicals, fuels and oils used on-site in accordance with:
- (a) the requirements of all relevant Australian Standards; and
 - (b) the NSW EPA's *Storing and Handling of Liquids: Environmental Protection – Participants Manual* if the chemicals are liquids.
- E14. In the event of an inconsistency between the requirements of condition E13(a) and E13(b), the most stringent requirement must prevail to the extent of the inconsistency.

Bunding

- E15. The Applicant must store all chemicals, fuels and oils used on-site in appropriately banded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's *Storing and Handling of Liquids: Environmental Protection – Participants Manual* (Department of Environment and Climate Change, 2007).

APPENDIX 1 WRITTEN INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS

Written Incident Notification Requirements

1. A written incident notification addressing the requirements set out below must be emailed to the Department at the following address: compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition C44 or, having given such notification, subsequently forms the view that an incident has not occurred.
2. Written notification of an incident must:
 - (a) identify the development and application number;
 - (b) provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
 - (c) identify how the incident was detected;
 - (d) identify when the applicant became aware of the incident;
 - (e) identify any actual or potential non-compliance with conditions of consent;
 - (f) describe what immediate steps were taken in relation to the incident;
 - (g) identify further action(s) that will be taken in relation to the incident; and
 - (h) identify a project contact for further communication regarding the incident.
3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
4. The Incident Report must include:
 - (a) a summary of the incident;
 - (b) outcomes of an incident investigation, including identification of the cause of the incident;
 - (c) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
 - (d) details of any communication with other stakeholders regarding the incident.

Appendix D

Green Travel Plan and TAG by PDC Consultants



GREEN TRAVEL PLAN

Mainsbridge School for Specific Purposes

95 Lawrence Hargrave Road, Warwick Farm

Prepared for: NSW Department of Education

Reference: 0035r04v03

Date: 11/01/2019

PDC Consultants

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Appendix A:	Transport Access Guide
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1. Introduction

1.1. Overview

PDC Consultants has been commissioned by the NSW Department of Education to prepare a Green Travel Plan (GTP) for a State Significant Development Application (SSDA) relating to the proposed Mainsbridge School for Specific Purposes (MSSP). Specifically, the SSDA seeks the relocation of the existing MSSP from 118 Flowerdale Road, Liverpool to 95 Lawrence Hargrave Road, Warwick Farm, with the proposed MSSP having the following characteristics:

- 20 home bases with up to 120 students;

- An average of 55 on-site staff;

- At-grade parking accommodating a total of:

 - 43 car parking spaces including 39 staff spaces and 4 visitor spaces.

 - 5 bus parking spaces for the MSSP bus fleet;

 - 6 bicycle parking spaces for use by staff and visitors.

- Separate entry-only and exit-only vehicle access driveways onto Williamson Crescent.

1.2. Objectives of a Green Travel Plan

A GTP is a travel demand management tool to promote the use of active and public transport to / from developments. The primary purpose of a GTP is to coordinate a site-wide approach to influence the travel behaviour of employees away from the use of private vehicles towards more efficient modes of transport including, but not limited to the following:

- Walking and cycling;

- Train and bus services;

- Carpooling.

The implementation of a GTP will ultimately result in personal and environmental benefits to staff, visitors and the wider community including:

- Healthier lifestyle and quality of life;

- Cost and time savings;

- Reduced traffic congestion.

2. Site Context & Travel Mode Characteristics

2.1. Location and Site

The proposed MSSP shall be located at 95 Lawrence Hargrave Road, Warwick Farm, which is currently occupied by the Warwick Farm Public School. In this regard, it is noted that the MSSP shall occupy the northern portion of the site, whilst the Warwick Farm Public School would occupy the southern portion of the site. For the purposes of this report, the 'site' is deemed to relate to the area of land that is occupied by the proposed MSSP only.

The site is irregular in configuration with a total area of approximately 10,500m². It has a single street frontage, being Williamson Crescent to the west and is situated between a childcare centre located to the immediate north and Warwick Farm Public School to the immediate south. Brickmaker's Creek is located to the east of the site.

Figures 1 and 2 overleaf provides an appreciation of the site's location in both a broad and local context respectively.

2.2. Road Network

The road hierarchy in the vicinity of the site is shown by **Figure 1** overleaf, with the following roads considered noteworthy:

Williamson Crescent – a local road that runs in both a north-south and east-west direction, in a loop configuration, intersecting with Lawrence Hargrave Road at both ends. It is subject to 50km/h speed zoning restrictions, with 40km/h School Zone restrictions applying between the hours of 8:00-9:30am and 2:30-4:00pm on school days. The section of Williamson Crescent fronting Warwick Farm Public School is subject to 'No Stopping' restrictions between the hours of 8:00-9:30am and 2:30-4:00pm on school days along the western kerbside, whilst 'Passenger Set Down or Pick Up Permitted' / 'No Parking' restrictions apply between 8:00-9:30am and 2:30-4:00pm on school days along the eastern kerbside. Aside from the above, Williamson Crescent permits unrestricted parallel parking along both kerbsides.

Hume Highway – an RMS Highway Road, HR 2, that generally runs in a north-east to south-west direction between Sydney and Albury, carrying approximately 63,000 vehicles per day near the site. It is subject to 70km/h speed zoning restrictions and carries three lanes of traffic in each direction.

Homepride Avenue – a local road that runs in a north-south direction, connecting to Viscount Place to the north and intersecting with Hume Highway to the south. It is subject to 50 km/h speed zoning restrictions and carries a single lane of traffic in each direction.

Lawrence Hargrave Road – a local road that generally runs in an east-west direction, between Station Street to the east and Homepride Avenue to the west. It is subject to 50 km/h speed zoning restrictions and carries a single lane of traffic in both directions.

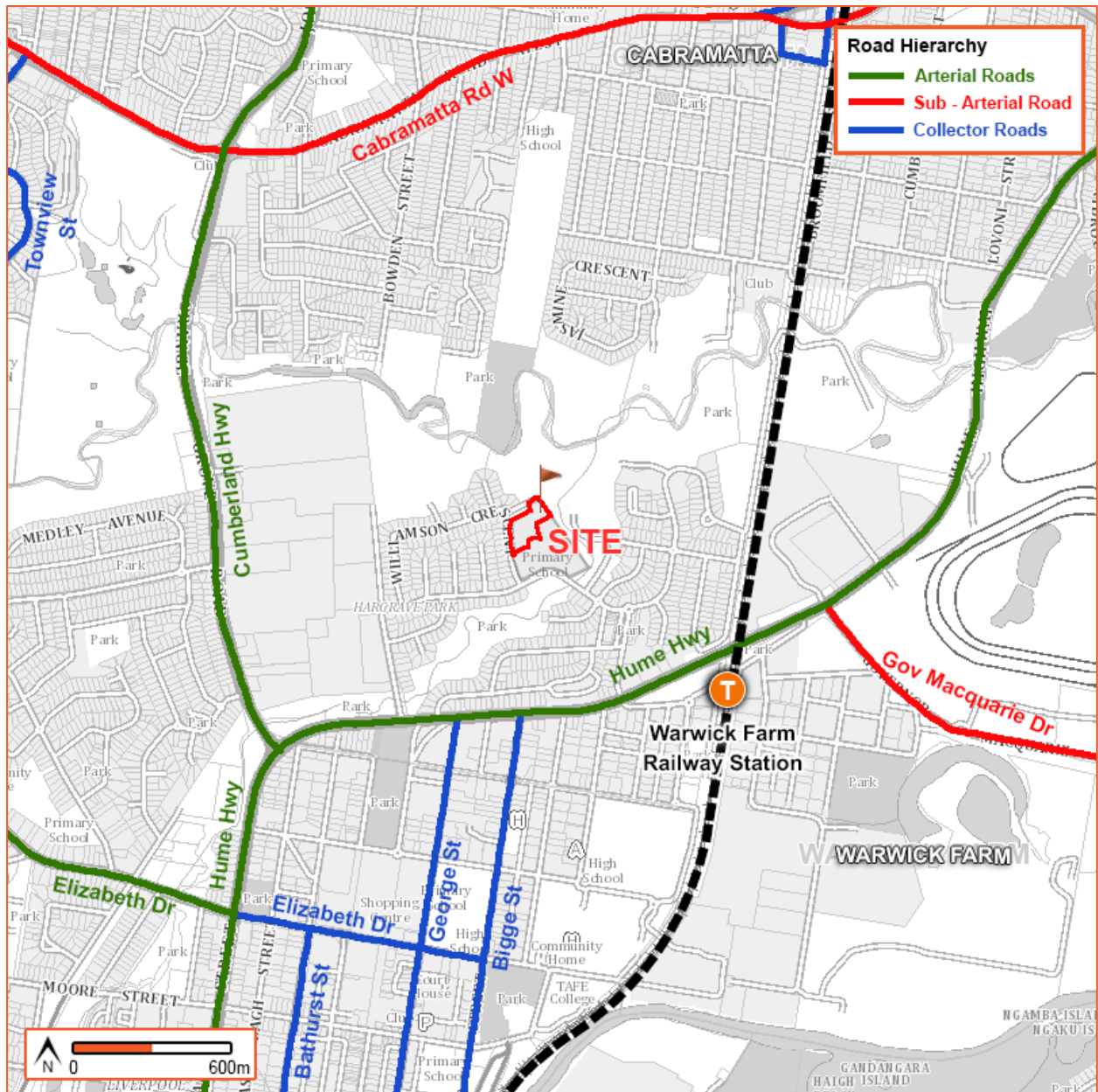


Figure 1: Location & Road Hierarchy Plan

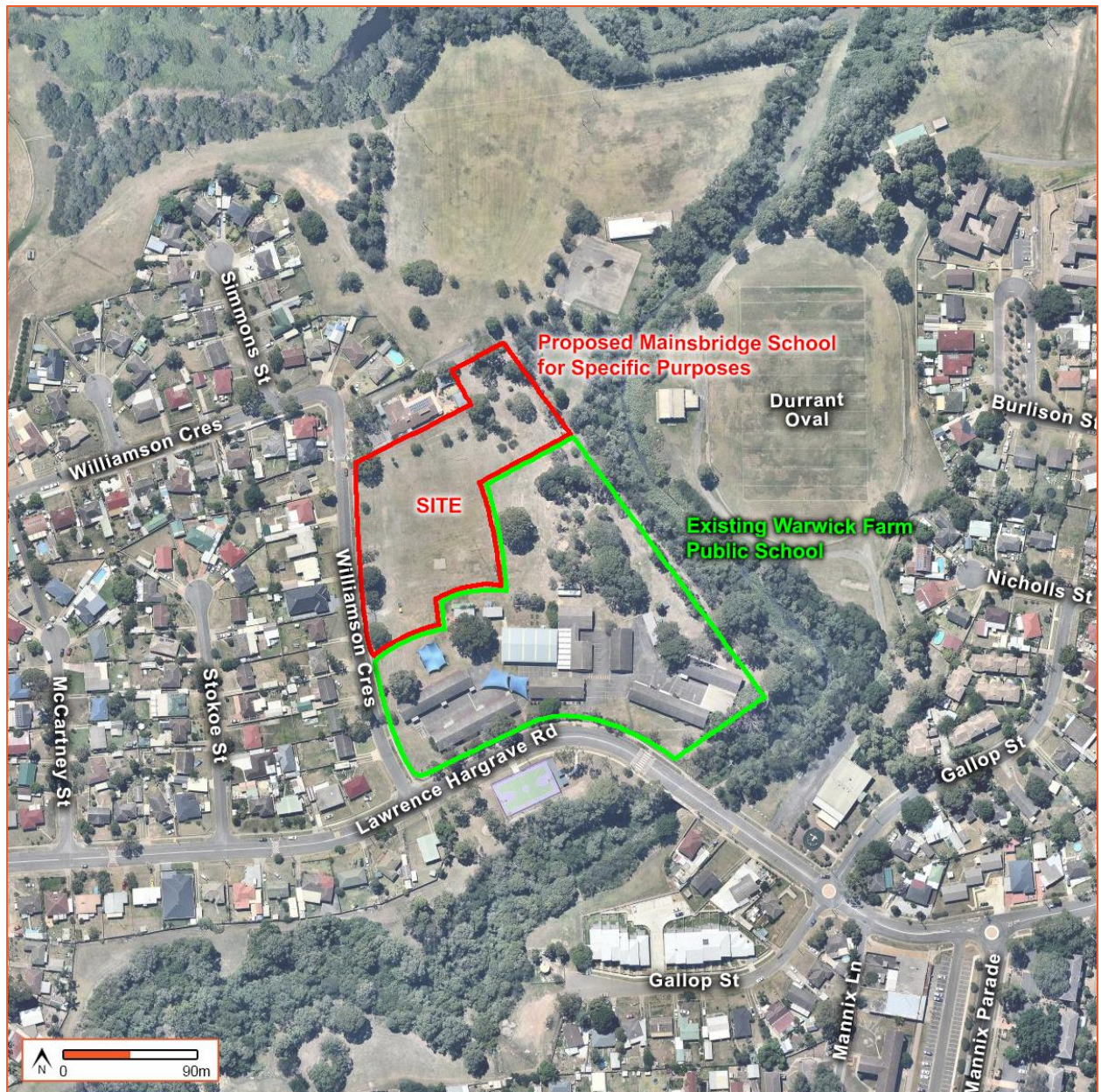


Figure 2: Site Plan

2.3. Existing Transport Mode Characteristics

2.3.1. ABS Census 2016 Data

As discussed above, the SSDA includes the relocation of the existing MSSP in Liverpool to the proposed site in Warwick Farm. Whilst the two sites are located in relatively close proximity to one another, in terms of the overall Greater Sydney Region, it was considered appropriate to review the existing travel modes of persons who work within both areas to determine if there would be a change in travel modes of staff and visitors as a result of the relocation. In this regard, the Australian Bureau of Statistics (ABS) 2016 Census data was used to assess the travel modes of persons who work in both areas.

Whilst the existing MSSP officially resides within the suburb of Liverpool, the majority of commercial space within Liverpool is located within the town centre and is within close proximity to Liverpool Railway Station. In contrast, the existing MSSP is located at the western extremity of the Liverpool suburb boundary being some two kilometres from the Liverpool Railway Station and as such, the existing MSSP has very limited access to rail services. On this basis, the travel mode characteristics of the Liverpool suburb is not considered to provide an accurate representation of the travel modes of the area near the existing MSSP. In this regard, it was considered more appropriate to adopt the ABS 2016 Census data of the suburbs to the immediate west being, Lurnea and Cartwright for the existing MSSP. These areas are located a similar distance away from the Liverpool Town Centre and Railway Station and hence, would be expected to have similar travel mode characteristics to the existing MSSP.

The proposed MSSP shall be located in the suburb of Warwick Farm and accordingly, the ABS 2016 Census data for this suburb was adopted for the proposed MSSP.

Table 1 below shows the travel modes used by persons who work within the suburbs of Lurnea – Cartwright (Existing MSSP) and Warwick Farm (Proposed MSSP), for all journeys to / from work, as extracted from the ABS 2016 Census data.

Table 1: ABS 2016 Census Data - Travel Mode Split for Persons Who Work Near the Existing & Proposed MSSP

AREA	EXISTING TRANSPORT MODES					
	CAR DRIVER	CAR PASSENGER	BUS	WALKING & CYCLING	TRAIN	OTHER
Lurnea – Cartwright (Existing MSSP)	86%	6%	1%	4%	2%	1%
Warwick Farm (Proposed MSSP)	84%	7%	1%	3%	5%	0%

It is evident from **Table 1** that the 92% of persons who work near the existing MSSP utilise private vehicle transport for journeys to / from the work, including 86% as ‘car driver’ and 6% as ‘car passenger’. The remaining 8% of persons who work near the existing MSSP use alternative transport modes for journeys to / from work including 1% by bus, 4% by walking and cycling, 2% by train and 1% by other.

Similarly, **Table 1** shows that there is a significant reliance on the use of private cars amongst persons who work near the proposed MSSP. **Table 1** shows that 91% of persons who work near the proposed MSSP utilise private cars for journeys to / from work, including 84% as 'car driver' and 7% as 'car passenger'. The remaining 9% of workers use alternative transport for journeys to / from work including 1% by bus, 3% by walking and cycling and 5% by train.

Importantly, by comparing the results of both areas, it is evident that the relocation of the MSSP to the subject site is expected to result in a 2% reduction in the number of 'car drivers' (86% down to 84%). Additionally, the relocation of the MSSP is also expected to result in a 3% increase in the number of persons who utilise rail services for journeys to / from work, as was expected given that the site is located in convenient walking distance of the Warwick Farm Railway Station.

2.3.2. Surveyed Travel Modes of Staff at Existing MSSP

Whilst the ABS Census 2016 data provides an appreciation of the travel modes of workers (i.e. MSSP staff), it was considered that a more accurate method of assessing the travel modes was to undertake a survey of staff at the existing MSSP. This was undertaken in the form of an online travel mode questionnaire survey which was undertaken over the period of 30/01/2018 to 16/02/2018. A total of 56 staff at the existing MSSP completed the survey with **Table 2** providing a summary of the results.

Table 2: Travel Modes of Staff at Existing MSSP

TRAVEL MODES				
CAR DRIVER	CAR PASSENGER	BUS	TRAIN	WALKING & CYCLING
84%	11%	3%	0%	2%

It is evident from **Table 2** above, that 95% of staff utilise private vehicles for journeys to / from the existing MSSP with 95% including 84% as 'car drivers' and 11% as 'car passenger'. Other transport mode characteristics 3% of staff travelled by bus and 2% by walking and cycling.

It is noteworthy to mention that none of the staff surveyed used rail services for journeys to / from the existing MSSP. This was to be expected given that the existing MSSP is located approximately two kilometres from Liverpool Railway Station.

Importantly, it is recognised that the ABS Census 2016 data shows that 86% of persons who work near the existing MSSP would be expected to travel as a 'car driver', whilst the above survey results show that only 84% of staff travelled as a 'car driver'. Accordingly, it is evident that the 'car driver' percentage for MSSP is 2% less than the average for the surrounding area / suburb, and this same discount would be expected to carry over to the Warwick Farm site.

3. Existing Active & Public Transport Infrastructure

3.1. Overview

There are a number of public transport services provided within close proximity of the site. An overview is provided below of the existing sustainable transport infrastructure available to staff and visitors of the proposed MSSP.

3.2. Bus Services

The Integrated Public Transport Service Planning Guidelines, Sydney Metropolitan Area, states that the walking catchment for metropolitan bus services includes all areas within a 400 metre radius of a bus stop. As can be seen from **Figure 3**, the site is situated within 400 metres of numerous bus stops which are serviced by a single bus route along Lawrence Hargrave Road. **Figure 3** also shows that an additional bus service can also be accessed within 800 metres of the site, along Hume Highway. It is therefore evident that staff and visitors of the proposed MSSP would have convenient access to public bus services for journeys to / from the site. **Table 3** below shows the notable town centres that are accessible via the abovementioned bus services and the average service headways during peak and off-peak periods.

Table 3: Bus Services

ROUTE NO.	ROUTE (TO / FROM)	ROUTE DESCRIPTION	AVERAGE HEADWAY
823	Liverpool to Warwick Farm (Loop Service)	Via Warwick Farm	Weekdays: 30 minutes peak / 1 hour off peak Weekends: 1 hour on Saturdays & Sundays
904	Liverpool to Fairfield	Via Warwick Farm, Lansvale, Cabramatta, Villawood & Carramar	Weekdays: 30 minutes peak / 1 hour off peak Weekends: 1 hour on Saturdays & 2 hours on Saturdays

3.3. Rail Services

The Integrated Public Transport Service Planning Guidelines, Sydney Metropolitan Area, states that the walking catchment for metropolitan railway stations includes all areas within an 800 metre radius of a station. It can be seen from **Figure 3** that Warwick Farm Railway Station is located approximately 700 metres (or 10 minute walk) from the site and hence, falls within the typical walking catchment area. Accordingly, staff and visitors of the proposed development would have convenient access the Sydney rail network, as shown by **Figure 4**.

Warwick Farm Railway Station is serviced by three (3) railway lines, being:

T2 Inner West & Leppington Line

T3 Bankstown Line

T5 Cumberland Line

Table 4 below shows the notable town centres that are accessible along the abovementioned railway lines and the average service headways during peak and off-peak periods.

Table 4: Rail Services

RAILWAY LINE	NOTABLE TOWN CENTRES ALONG LINE	AVERAGE HEADWAY
T2 Inner West & Leppington Line	Leppington, Liverpool, Cabramatta, Parramatta, Clyde, Homebush, Strathfield, Ashfield, Redfern & Sydney CBD	Weekdays: 8-10 minutes peak / 30 minutes off peak Weekends: 15 minutes all day
T3 Bankstown Line	Liverpool, Lidcombe, Birrong, Bankstown, Sydenham, Redfern & Sydney CBD	Weekdays: 7-13 minutes peak / 30 minutes off peak Weekends: 30 minutes all day
T5 Cumberland Line	Leppington, Liverpool, Cabramatta, Parramatta, Schofields & Richmond	Weekdays: 30 minutes all day Weekends: 30 minutes all day

3.4. Cycle Network

Figure 3 also shows that the site has relatively good access to the local cycle path network. Whilst Williamson Crescent does not accommodate a cycle path, there are a number of on-road and off-road paths provided to the east of the site including the Parramatta Cycleway Rail Trail (PCRT). The PCRT is a 16.8 kilometre long cycle path having a flat and straight alignment, that runs beside the railway line between Liverpool and Parramatta, and provides connections to the wider cycle network.

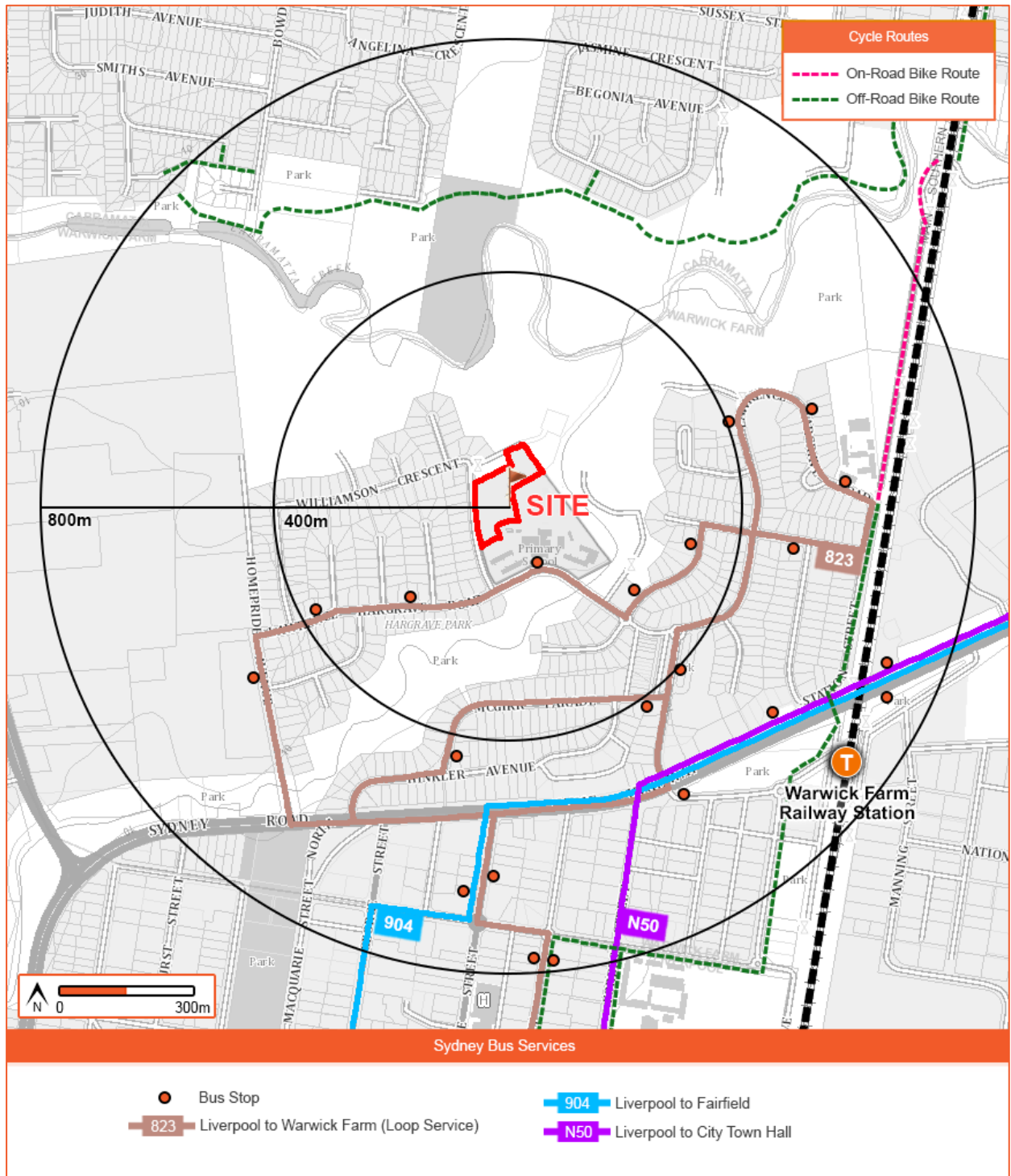


Figure 3: Active Transport Services



Figure 4: Sydney Trains Rail Network - Suburban

4. GTP Targets & Strategies

4.1. Targets

Travel mode targets have been determined for the proposed MSSP to further encourage active and public transport options for staff travelling to / from work. These targets have been developed based on the data included in Section 2.3 of this GTP including the travel modes of staff at the existing MSSP, reduction in car driver percentage as a result of the relocation of the school to Warwick Farm and a further reduction in car driver percentage as a result of the effective implementation of this GTP. **Table 5** provides the travel mode targets for the proposed MSSP, as well as provides a comparison to the surveyed travel modes from **Table 2** and the estimated travel modes as a result of the relocation of the school to Warwick Farm.

Table 5: Travel Mode Targets for Proposed MSSP

MODE OF TRANSPORT	SURVEYED TRAVEL MODES OF EXISTING MSSP	ESTIMATED TRAVEL MODES AS A RESULT OF MSSP RELOCATION TO WARWICK FARM	TRAVEL MODE TARGETS FOR PROPOSED MSSP
Car Driver	84%	82%	70%
Car Passenger (Car Pooling)	11%	11%	15%
Train	0%	3%	8%
Bus	3%	2%	4%
Walking & Cycling	2%	2%	3%

It can be seen from **Table 5** above that the GTP targets seek to encourage increased use of active transport such as walking and cycling, public transport such as rail and bus services, and carpooling. The close proximity of the site to Warwick Farm Railway Station, which is serviced by three (3) rail lines, is expected to have a substantial impact in terms of influencing staff to utilise rail services for journeys to / from the site, that this GTP seeks to target.

With regard for the above, a 70% 'car driver' and 15% 'car passenger' target has been set for the proposed MSSP which is considered achievable through the effective implementation of this GTP. Potential strategies to assist in the implementation of this GTP are discussed below.

4.2. Potential Strategies & Incentives

4.2.1. Carpooling & Managing Car Usage

To minimise the use of private cars and promote carpooling amongst staff, MSSP should consider implementing the following strategies and incentives:

Organise and manage a carpool registry for staff. This will involve encouraging staff to sign up to a carpooling registry providing information such as contact details, area of service, routes taken to / from work and availability. The information would be provided in the form of an information sheet and can be distributed either electronically (i.e. email) or physical copies available at the administration office / teacher's lounge.

Provide dedicated on-site parking spaces for staff who carpool to/from site.

4.2.2. Rail & Bus Services

To encourage the use of public transport service for journeys to / from the site, the MSSP should consider implementing the following strategies and incentives:

Offer monetary incentives for staff that utilise public transport for journeys to / from the site including subsidised tickets.

Provide a Transport Access Guide (TAG), as is discussed below, to all staff to ensure that they are aware of the alternative transport modes available for journeys to / from the site. The TAG shall be displayed in the administration office, teacher's lounge and on the MSSP website etc.

4.2.3. Walking

To encourage staff to walk to / from the site, the MSSP should consider implementing the following strategies and incentives:

Provide on-site End of Trip Facilities (EOTF) including showers, lockers and change rooms for staff use.

Establish walking events such as 'Walk to School Day' for staff engagement and participation.

Establish a 'Walk to Work' Group, where staff who commute on-foot can communicate to one another and exchange information such as, preferred walking routes, fastest route to / from work etc.

Provide a map showing the preferred walkways / footpaths to notable areas in the locality including Warwick Farm Railway Station, Liverpool Town Centre and Cabramatta Town Centre.

4.2.4. Cycling

To encourage staff to cycle to / from the site, the MSSP should consider implementing the following strategies and incentives:

Provide on-site End of Trip Facilities (EOTF) including showers, lockers and change rooms for staff use.

Establish cycling events such as 'Ride to School Day' for staff and engagement and participation.

Establish a 'Bike to Work' Group, where staff who commute by bicycle are able to communicate to one another and exchange information such as, preferred cycle paths, fastest route to / from work etc.

Provide a bicycle fleet available to staff to use for journeys to / from work.

4.2.5. Other

Other strategies and incentives that should be considered by MSSP to reduce the reliance of private cars for journeys to / from the site includes the following:

Introduction of flexible working hours which allows staff to commute outside peak periods to reduce overall congestion, travel time and take advantage of the reduced cost of travel.

4.2.6. Transport Access Guide

To assist in promoting the use of alternative transport modes, a TAG has been prepared for the site and is provided as **Appendix A**. As can be seen from **Appendix A**, the TAG is a map / brochure that illustrates the modes of transport available in the vicinity of the site including, but not limited to, the following:

Bus routes, stops and a table of services;

Rail stations and a table of services;

Bicycle network and the location of on-site bicycle parking facilities;

Relevant transport related mobile phone applications and websites such as TripView, Transit, Opal Travel, Transport for NSW and the MSSP website.



It is recommended that the TAG be distributed to all staff and visitors through various means including but not limited to, the following:

School website;

Staff email / school intranet;

Physical copies available / displayed at the front administration office.

The provision of this information will ensure that staff and visitors are aware of the transport infrastructure and services available and will therefore result in a reduction in the use of private vehicles for journeys to/from the site.

5. GTP Monitoring & Control

To ensure the effective implementation of the GTP and that the travel mode targets are met, close monitoring is necessary. Accordingly, it is recommended that MSSP appoint a Travel Plan Coordinator to monitor and review the GTP ensuring that it reflects any changes to the public and active transport network / infrastructure. Maintenance of the GTP includes the following:

An annual review of the GTP to determine whether the plan is achieving its objectives and whether additional measures are necessary.

As part of the above review, the Travel Plan Coordinator should conduct a travel survey to assess the travel behaviour of staff and visitors against the targets outlined in the GTP.

The Travel Plan Coordinator should provide the results of the review and travel survey to Council for comments.

These reviews should take place for a minimum of 5 years.

The above evaluation will provide a reliable overview of the areas in which the GTP is operating effectively and which areas require more attention. However, it is noted that the travel mode targets are primarily indicative and hence, the GTP and targets will require on-going evaluation and fine-tuning.

6. Conclusions

In conclusion, the implementation of this Green Travel Plan will ensure that staff and visitors are aware of sustainable transport options are available for journeys to / from the MSSP. Successful implementation of the Green Travel Plan will result in a reduction in vehicle trips, car parking demands, traffic congestion, all of which will lead to a healthier lifestyle.



Appendix A



By Train

Warwick Farm Railway Station is approximately 10 minutes walking distance from the site and is serviced by 3 railway lines including, the T2 Inner West & Leppington Line, T3 Bankstown Line and T5 Cumberland Line. The table below provides an overview of the abovementioned railway lines and average service headways during peak and off peak periods.



By Bus

Route No. 823 – a loop bus service that operates between Liverpool and Warwick Farm. The nearest bus stop for this service is 3 minutes walking distance from Mainsbridge School for Specific Purposes (MSSP).
Route No. 904 – a bus service that operates between Liverpool and Fairfield. The nearest bus stop for this service is 9 minutes walking distance from MSSP.
The table below provides an overview of the abovementioned bus services and average service headways during peak and off peak periods.



By Car

There are 43 car parking spaces provided within the school grounds including 39 staff spaces and 4 visitor spaces. Access to the car park is via Williamson Crescent.



By Foot

The recommended path of travel for pedestrians to and from the Warwick Farm Railway Station and bus stops are shown on the map overleaf.



By School Bus

There are 5 dedicated bus parking bays provided on-site to accommodate the MSSP bus fleet. Students may be able to utilise the Assisted Schools Travel Program (ASTP), an initiative by the Department of Education for journeys to and from MSSP and home. For further information, please contact MSSP.



By Bicycle

The School provides 6 bicycle parking spaces on-site. An extensive network of on / off road cycle paths is provided within the vicinity of MSSP including the Liverpool-Parramatta Rail Trail that runs along the railway line, to the east of the site. Other cycle paths run along Cabramatta creek and throughout the Liverpool region.



Useful Links and Apps

Links
MSSP- www.mainsbridgeschool.com.au/
TfNSW - www.transportnsw.info/
Opal - www.opal.com.au/

Mobile Phone Apps
Tripview – Available for iOS and Android
Transit – Available for iOS and Android

Bus Services

Route	Stop Location	Walking Distance	Destinations	Monday to Friday			Saturday		Sunday / Public Holidays	
				Between the Hours of	Headways		Between the Hours of	Headways	Between the Hours of	Headways
					Peak	Off-Peak				
823	Lawrence Hargrave Road	2 minute	Liverpool to Warwick Farm Return	6:20am to 6:30pm	30 minutes	60 minutes	8:15am to 5:30pm	60 minutes	9:15am to 4:15pm	60 minutes
904	Hume Highway	9 minutes	Liverpool to Fairfield via Lansvale	6:40am to 5:50pm	30minutes	60 minutes	8:40am to 4:50pm	60 minutes	No service	

Train Services

Train Services				Monday to Friday			Saturday		Sunday / Public Holidays	
Line	Station	Walking Distance	Destinations	Between the Hours of	Headways		Between the Hours of	Headways	Between the Hours of	Headways
					Peak	Off-Peak				
 Inner West	Warwick Farm	13 minutes	Leppington to City via Clyde	4:00am to 12:30am	5 to 10 minutes	15 to 20 minutes	4:00am to 12:30am	15 minutes	4:00am to 12:00am	15 minute
 Bankstown			Liverpool to City via Sydenham	4:00am to 12:30am	5 to 15 minutes	30 minutes	4:10am to 11:40pm	20 to 30 minutes	4:10am to 11:40pm	20 to 30 minutes
 Cumberland			Leppington to Richmond	6:40am to 12:40am	30 minutes	40 minutes	4:45am to 12:15am	30 minutes	4:45am to 11:45pm	30 minutes

Transport Access Guide

How to Get to

Mainsbridge School for Specific Purposes Warwick Farm



October 2018

Prepared by

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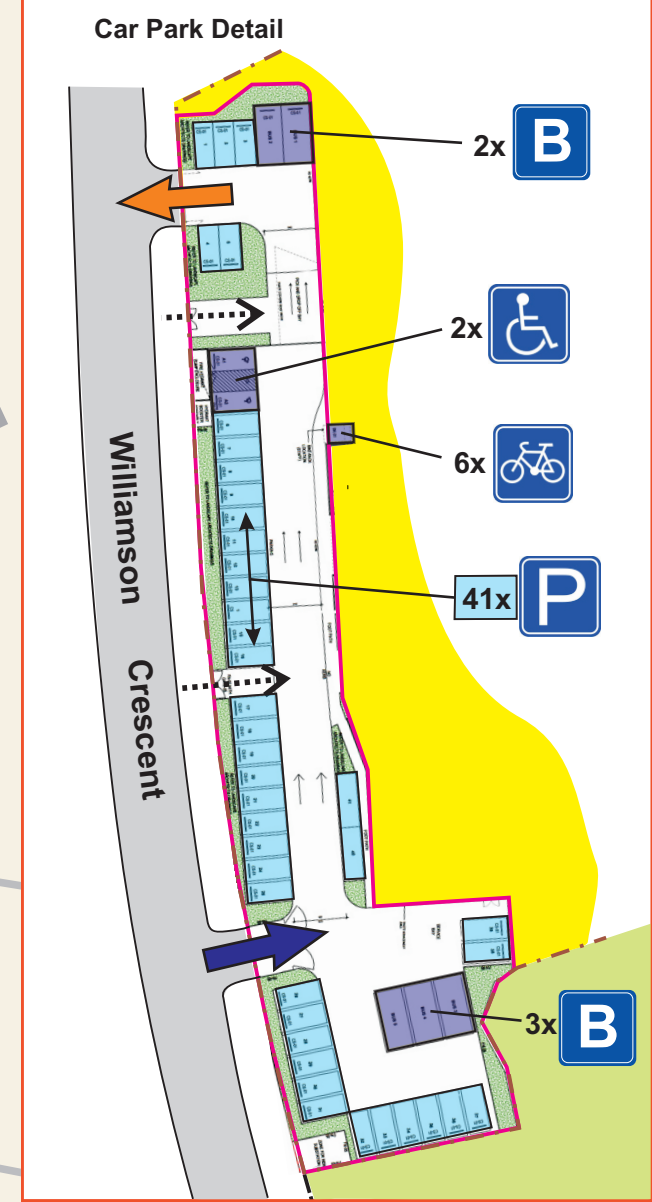


Legend

- Desired Pedestrian Pathway
- ↔ Signalled Crossing
- - - Off - Road Shared Cyclepath
- 904 Bus Route and Stop Location
- Warwick Farm Train Station

Car Park Detail Legend

- B Bus Parking Spaces
- P Car Parking Spaces
- Accessible Car Parking Spaces
- Bicycle Parking Spaces
- ➔ Vehicle Entry
- ➔ Vehicle Exit
- ... Pedestrian Entry / Exit



Appendix E

Survey Form

Mainsbridge School is conducting this questionnaire to understand how you travel to school. This should take about 3 minutes to complete. Please complete the survey by xx/xx/xx. If you have transport feedback for our team, please contact us at mainsbridg-s.school@det.nsw.edu.au

1. Are you staff, student or parent / carer of a student?
 - a) staff-(full time / part time)
 - b) student
 - c) parent / carer

2. Which suburb do you usually travel from? _____

3. How do you usually travel to school?
 - a) drove a car and parked on-site
 - b) drove a car and parked on-street
 - c) dropped off/picked-up
 - d) bus
 - e) train
 - f) walk
 - g) cycle
 - h) motorcycle / motorscooter

4. How do you usually travel from school?
 - a) drove a car and parked on-site
 - b) drove a car and parked on-street
 - c) dropped off/picked-up
 - d) bus
 - e) train
 - f) walk
 - g) cycle
 - h) motorcycle / motorscooter

5. What time do you usually arrive at school? _____

6. What time do you usually leave school? _____

7. Which measures would encourage you to walk or ride a bicycle more? If you already walk or ride a bicycle -- what measures would you like to see more?
- a) lower speed roads
 - b) personal lockers
 - c) safe bicycle parking
 - d) better lighting
 - e) more shade
 - f) shower / change rooms
 - g) information on safe routes
 - h) walking/bicycle group
 - i) loan / discount to buy a bicycle / helmet
 - j) other, please specify: _____
8. Which measures would encourage you to use public transport? If you already use public transport, what would you like to see more?
- a) cheaper public transport
 - b) more frequent public transport
 - c) bus route to my neighbourhood
 - d) improved waiting area at school (shade / weather protection)
 - e) improved waiting area at home (shade / weather protection)
 - f) better connections to other transport (train or bus)
 - g) public transport group so I can ride with others
 - h) information about public transport
 - i) other, please specify: _____
9. Which measures would encourage you to carpool?
- a) help finding someone to carpool with
 - b) reduced parking cost
 - c) know the driver personally
 - d) free parking
 - e) sharing driving responsibility
 - f) certainty in finding a car space (i.e. dedicated car space for carpoolers)
 - g) secure parking
 - h) a ride home if I needed to assist with a sick child / personal responsibility
 - i) other, please specify: _____
10. Additional transport feedback: _____