ETHOS URBAN

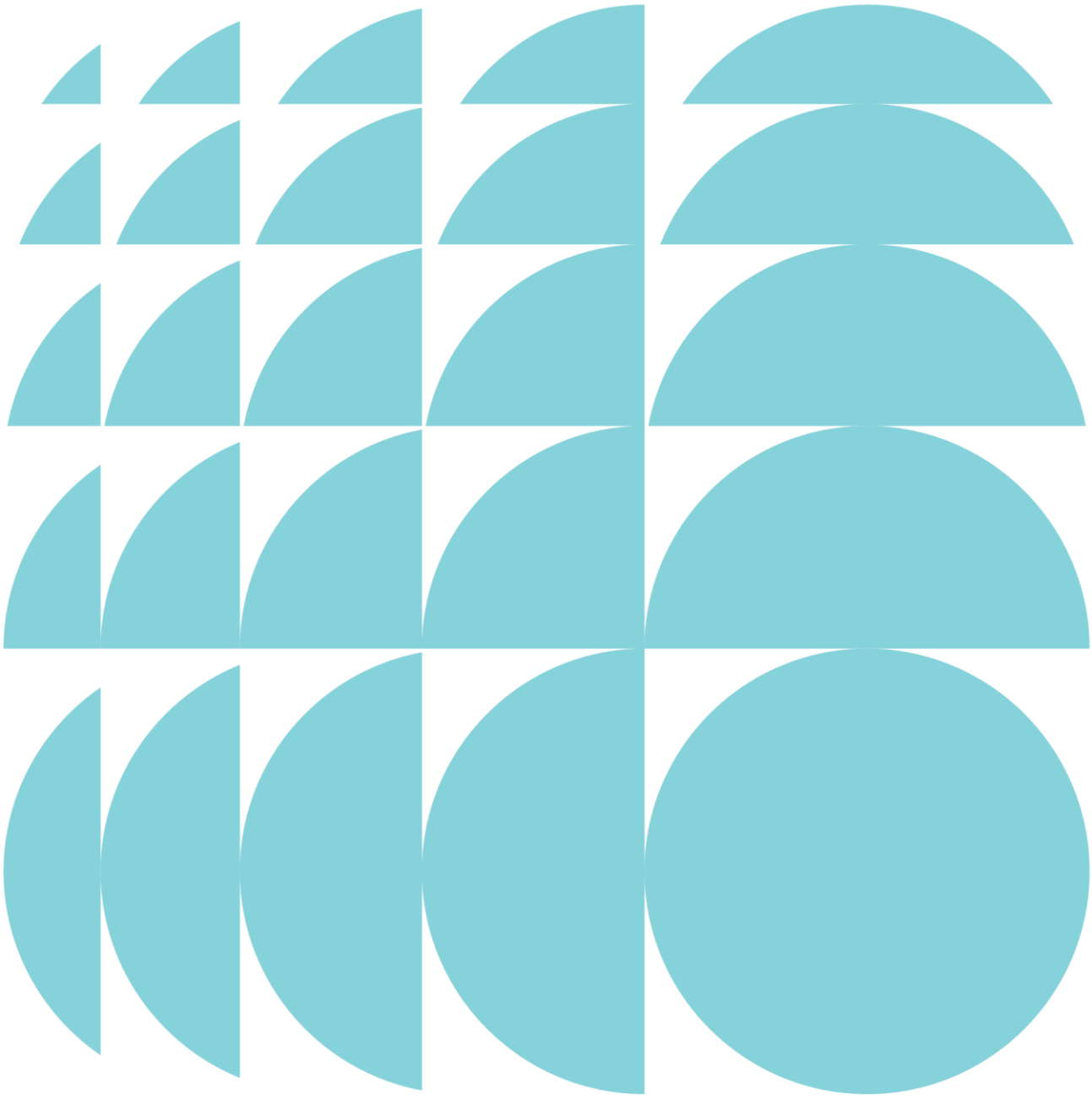
Response to Submissions

Westmead Catholic Community
State Significant Development Application

Submitted to Department of Planning, Industry and Environment

On behalf of Catholic Education Diocese Parramatta

September 2020 | 218316



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1.0 Introduction

An Environmental Impact Statement (EIS) for State Significant Development Application SSD-10383 for the redevelopment of the Westmead Catholic Community (WCC) was publicly exhibited for a period of 28 days, ending on 29 April 2020. The project seeks approval for:

- A primary school with capacity for approximately 1,680 students, to provide expanded facilities for the existing Mother Teresa Primary School on the site and to relocate the existing Sacred Heart Primary School at Ralph Street;
- A new Parish Church;
- A Catholic Early Learning Centre (fit-out within an existing building); and
- Landscaping.

In total, 16 submissions were received during the public exhibition period. This included submissions made by government agencies and authorities and the general public, as follows:

- Government agencies and authorities: 15 submissions received from:
  - Water NSW
  - Environmental Protection Authority
  - Cumberland Council
  - Department of Planning, Industry and Environment (Environment, Energy and Science Group)
  - Heritage Council of NSW
  - City of Parramatta Council
  - Transport for NSW
  - Civil Aviation Safety Authority
  - Southern NSW Ambulance Helicopters
  - Sydney Trains
  - Endeavour Energy
  - Department of Planning, Industry and Environment (Industry)
  - Air Services Australia
  - Department of Planning, Industry and Environment (Water and the Natural Resources Access Regulator)
  - Sydney Water
- Members of the public: 1.

The majority of the government agencies made comments on the application, however Parramatta City Council objected to the proposal, primarily on the grounds of traffic, connectivity and open space. As outlined in **Section 1.2**, additional consultation has been undertaken with Council since receipt of their submission in an effort to address their concerns.

The submission by the member of the public was in support of the proposal. Following the formal exhibition period, a further three public submissions were received, including one petition. These three submissions have raised objections to the proposal, which have been addressed in the Detailed Response to Submissions Table at **Appendix A**.

The Department of Planning, Industry and Environment (the Department) has also prepared a letter setting out matters to be addressed prior to the assessment of the project.

The proponent, Catholic Education Diocese Parramatta (CEDP), and its expert project team have considered all issues raised in the submissions made, pursuant to the requirements of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This report, prepared by Ethos Urban on behalf of the proponent, sets out the responses to the issues raised in accordance with Clause 85A of the *Environmental Planning and Assessment Regulation 2000* (the Regulation) and details the final project design and mitigation measures for which approval is now sought. The final project design includes minor amendments made by CEDP pursuant to Clause 55 of the Regulation.

The report provides a detailed response to key issues raised by the government agencies. The key issues raised in submissions are grouped into the following categories:

- Traffic, access and connectivity;
- Design and quantity of open space;
- Use of the Parish Church; and
- Tree removal.

Where individual issues are not discussed in this report, a detailed response can be found in the table at **Appendix A**.

1.1 Amendments to Supporting Documentation

In order to respond to the submissions and reflect the design changes that have been made following public exhibition, and for which approval is now sought, a number of updated plans and documents have been prepared.

Revised Architectural Drawings and Shadow Diagrams prepared by Alleanza Architecture are provided at **Appendix B**. Additional consultants reports and supporting information has also been provided, as outlined in the Table of Contents.

The revised supporting documentation enables the Department to undertake an informed assessment of the amended proposal. The findings of the revised supporting consultant documentation are summarised at **Section 2** and **Section 4** of this report, as relevant.

A final schedule of the mitigation measures proposed to mitigate the impacts associated with the development is provided at **Section 5**.

This report should be read in conjunction with the EIS prepared by Ethos Urban, dated March 2020, as relevant.

1.2 Ongoing Consultation with Council

A meeting was held with Council on 24 July 2020 to discuss Council's submission and the additional traffic modelling undertaken by TTPP since exhibition of the EIS. A copy of the minutes from this meeting are provided at **Appendix N**.

Council identified their concerns with the existing access arrangements, and the benefits that a new east-west road would offer. The project team explained the measures that will be implemented to assist in alleviating Council's traffic concerns and CEDP's willingness to deliver an east west road link as part of the Master Plan for the site (refer to **Section 2.1**).

Following the meeting, a site inspection was conducted on 28 July 2020 to observe the morning peak period. It was observed that the queues forming on Darcy Road appeared to be the result of vehicles queuing from within the site, and the capacity/inefficiency of the pick-up and drop-off zone. That is, queuing on Darcy Road is not due to the number of vehicles accessing the site, rather it is a result of the inefficiency of the pick-up/drop-off system. It is noted by Council that relocation of the high school pick-up and drop-off operation to the multi-storey car park (subject to a separate DA to Council) will reduce pressure on the current pick-up and drop-off area. In addition, the configuration of the primary school pick-up and drop-off area has been modified to improve the efficiency and safety of the space (refer to **Section 3.0**).

In addition to liaising with Council regarding the concerns raised in their submission, the project team will also continue to coordinate with Council to address the existing queuing conditions, which was raised as a key issue during recent discussions. CEDP, in coordination with Council, is investigating temporary measures to be implemented in the short term, which are intended to alleviate the internal queuing issue by increasing the operation of the pick-up/drop-off system.

2.0 Key Issues and Proponent's Response

2.1 Traffic, Access and Connectivity

2.1.1 Issue

The Department and Council have raised concerns regarding traffic, access and connectivity. These matters are of particular concern for Council, and form the basis of their objection to the application. Whilst Transport for NSW did not raise any significant concerns around traffic and access, they did request that a Green Travel Plan be prepared for the project.

Key issues include:

- Intersection performance;
- Pedestrian safety at the site's Darcy Road entry;
- The appropriateness of the site to accommodate additional students;
- The need to prepare and implement a Green Travel Plan; and
- A lack of connectivity to and through the site.

Several more detailed questions were also raised around issues such as pick-up and drop-off arrangements, use of the multi-storey car park outside of school hours, parking allocations and end of trip facilities. A response to each of these questions is provided at **Appendix A**.

Finally, since receipt of the submissions, CEDP and its consultant team have met with the Sydney Coordination Office (SCO) to discuss the proposed Framework Travel Plan. The SCO expressed support for the proposed Travel Plan and committed to working with CEDP to share information regarding future transport initiatives in the precinct, including work being undertaken at Westmead Hospital. The SCO's comments have been included in the submitted Travel Plan. CEDP will be meeting with the SCO again following lodgement of the Response to Submissions package.

2.1.2 Response

Traffic and Access

TTPP has considered each of the issues raised by the Department, Council and TfNSW (**Appendix C**). Key comments raised by the agencies are addressed below.

Intersection Performance

The submitted TIA did not account for the reduction in trips resulting from the operation of the Out of School Hours (OOSH) facility on the site. Given that the OOSH operates before and after standard school hours, this will result in a significant reduction in trips during school peak periods, as outlined below.

The OOSH facility will operate between 6am and 6pm Monday to Friday. The OOSH facility will be provided for parents who are required to drop-off and pick-up students earlier and later than the standard school periods. Therefore, the arrival time of students at the OOSH facility would be earlier than the morning school peak period (i.e. before 7am). Similarly, the departure time for OOSH students would be later than the afternoon school peak period (i.e. after 4pm).

The OOSH facility will have capacity for 800 students. This represents 48% of the proposed 1,680 primary student population. CEDP anticipates that the daily number of students at the OOSH facility will range between 40% and 48% of the primary school population.

Based on the above OOSH accommodation rates, there would be a significant reduction in the number of car trips during the school peak periods. This is the result of less parents transporting students to the primary school during the peak times as they will be attending the OOSH facility.

To assess the impact of the proposed development, TTPP has considered a number of scenarios (for both future years 2023 and 2033) which reflect varying trip generation volumes. The scenarios which have been modelled are as follows:

- **Scenario 0** – "Do Nothing" – Primary School growth with no changes (i.e. no new multistorey car park, high school pick-up and drop-off facility, and OOSH facility).
- **Scenario 1** – Primary school growth with new multi-storey car park and high school pick-up and drop-off facility, and existing OOSH facility (i.e. as per TAIA report).
- **Scenario 2** - Primary school growth with new multi-storey car park and high school pick-up and drop-off facility, with OOSH facility having 40% attendance of the primary school population.
- **Scenario 3** - Primary school growth with new multi-storey car park and high school pick-up and drop-off facility, with OOSH facility having 48% attendance of the primary school population.

A summary of the revised vehicle movements at the Darcy Road site access, and the reduction in movements at this entrance during the school peak periods, is provided in **Table 1**. It shows that Scenario 3 will result in a 77% reduction in the number of vehicle movements at the Darcy Road entry during the morning peak period, when compared to the 'Do Nothing' scenario. The reduction is shown graphically at **Figures 1** and **2**. The graphs show that in 2033 (Stabilisation Year), trip generation will be less than the existing trip generation during the AM peak period. In the PM peak period, the 2033 trip generation will be similar to the existing trip generation. As discussed below, the future trip generation modelled as part of the TIA present conservative scenarios, having consideration to transport initiatives such as the Parramatta Light Rail, Sydney Metro West, and improved bus services.

Table 1 Number of Vehicle Movements at Site Access

Scenario	Existing	Opening Year - 2023		Stabilisation Year - 2033	
	Vehicle Movements	Vehicle Movements	Reduction (%) [b]	Vehicle Movements	Reduction (%) [b]
AM Peak					
0	1,031	1,217	-	2,139	-
1	-	448	769 (63%)	1,026	1,113 (52%)
2	-	318	899 (74%)	728	1,411 (66%)
3	-	282	935 (77%)	646	1,493 (70%)
PM Peak					
0	713 [a]	1,217	-	2,139	-
1	-	480	737 (61%)	1,099	1,040 (49%)
2	-	341	876 (72%)	780	1,359 (64%)
3	-	302	915 (75%)	692	1,447 (64%)

Notes:
(a) Theoretical vehicle movements.
(b) Reduction in vehicle movements is a comparison with Scenario 0 - "Do Nothing"

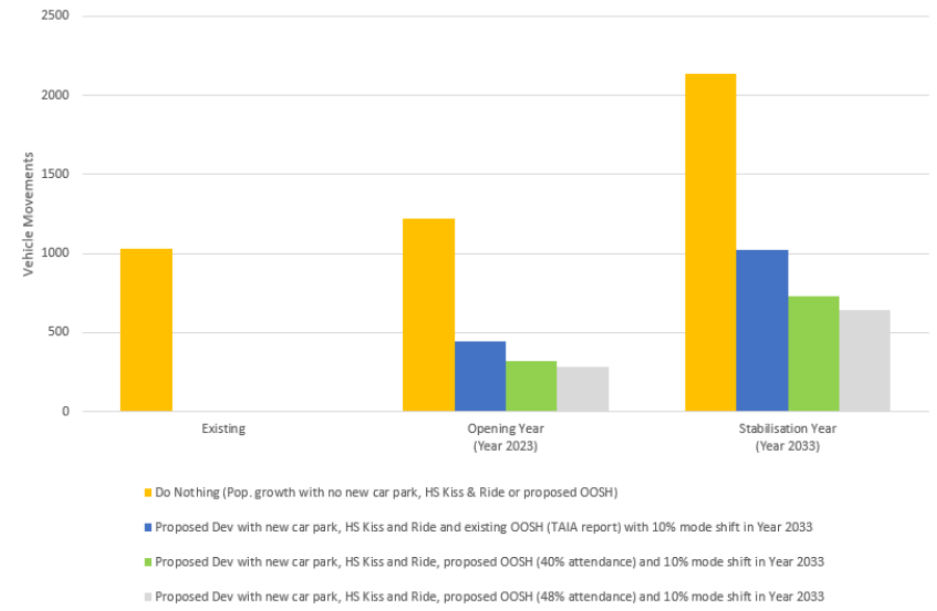

Figure 1 Site-generated trips at existing site access (AM peak hour)

Source: TTPP

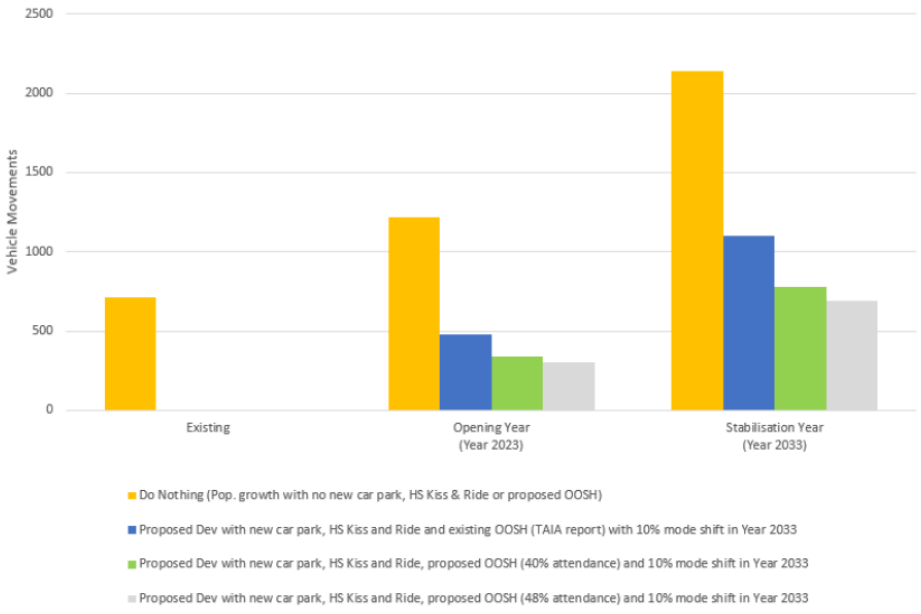

Figure 2 Site-generated trips at existing site access (PM peak hour)

Source: TTPP

Revised SIDRA modelling has been carried out to reflect the operation of the OOSH. When combined with the positive impact of the new high schools drop off/pick up, and Council's recommended changes to the primary schools drop off/pick up, the revised modelling shows that the OOSH will significantly improve the performance of the existing site access at Darcy Road. It will also result in further improvements at the nearby intersections of Darcy Road – Institute Road – Mons Road and Darcy Road – Bridge Road – Coles Car Park. At some intersections, including Darcy Rd – Site Access (Catherine McAuley) – Westmead Hospital and Hawkesbury Rd – Railway Parade, there would be an increase in average delay by a few seconds which is the result of the traffic modelling software optimising the signal phase timing across all movements at the junction.

Further to this, a Framework Travel Plan has been prepared by Frank Turquoise Group to set out CEDP's process to manage travel demand at the WCC (**Appendix D**). The measures outlined in the Plan will help reduce the number of car trips during the school peak periods. The submitted TIA assessed a 10% modal shift away from car

usage, which will have further benefits to the local road network operation and performance. Initiatives to be implemented by the school to support this modal shift are detailed within the Framework Travel Plan, and are summarised below.

Finally, it is noted that all future cases which were modelled as part of the TIA presented conservative scenarios, having consideration for background traffic growth within the local road network. It is not yet known what traffic rate reduction transport initiatives such as the Parramatta Light Rail, Sydney Metro West, and improved bus services will have on the Westmead locality. Furthermore, it will not be known until the first few years of these major infrastructure projects being operational.

Notwithstanding, these major transport infrastructure projects are predicted to remove tens of thousands of cars off Sydney roads every day. For example, the Sydney Metro West EIS forecasts that there will be 83,000 fewer car trips every weekday by 2036. It is be expected that the Westmead precinct would experience a reduction in traffic loads once these key transport infrastructure projects become operational. Such benefits would begin to become apparent in 2023 once Parramatta Light Rail opens, which is also the opening year of the proposed development. Furthermore, growth in the Westmead precinct is forecast to bring 4,400 new dwellings into the area which will also increase the number of walking, cycling and public transport trips within the Westmead precinct as well as to/from the Westmead precinct.

When these major transport projects are viewed together with the reduction in peak hour trips resulting from the operation of the OOSH and the implementation of the Framework Travel Plan, it is considered that the proposed development will have an acceptable level of impact on the local road network.

Pedestrian Safety at the site's Darcy Road Entry

Pedestrian access to and from the school will be provided via a new pathway along the western side of the entry road, and a children's crossing within the site. This will provide connectivity for pedestrians travelling to and from the site from the west, and will eliminate the need for children to cross at Darcy Road (see **Figure 3**). The children's crossing will be managed during school peak periods by a member of staff or a school crossing supervisor. Transport for NSW will be consulted to determine the appropriate personnel for managing the crossing.

The existing pedestrian refuge at the site's Darcy Road entry will remain in place, in order to facilitate pedestrians walking along the public footpath and crossing the site driveway on Darcy Road.

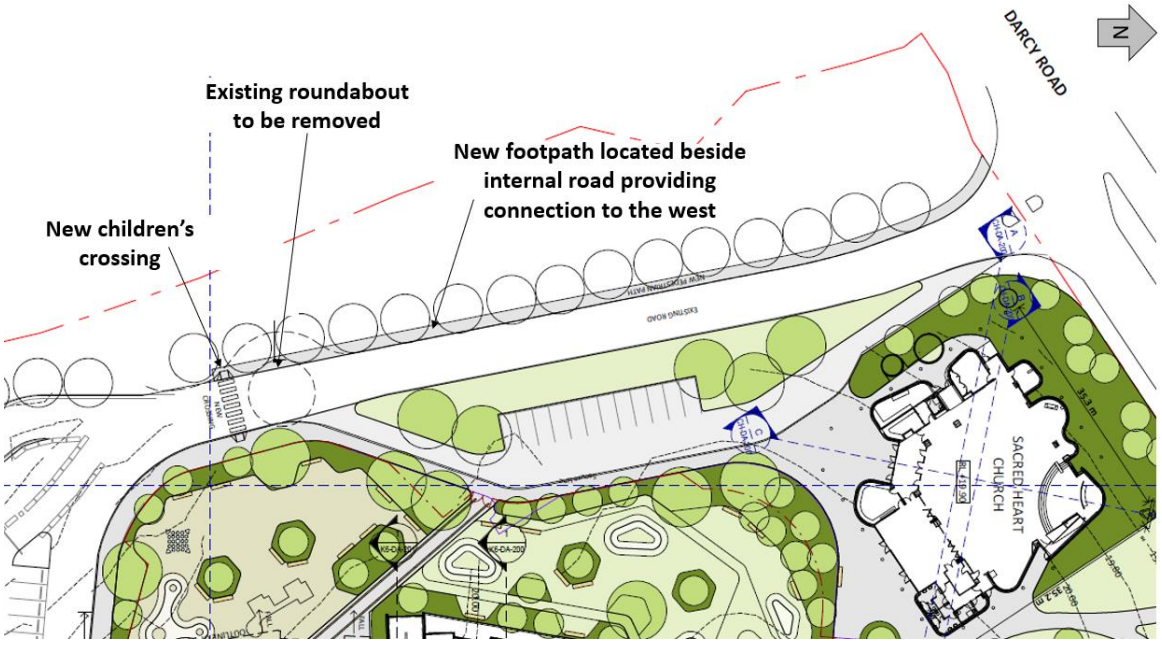

Figure 3 Pedestrian connectivity at existing site access

Source: TTPP

Appropriateness of the Site to Accommodate Additional Students

There is significant demand for school enrolments in the area.

As outlined at Section 1.2 of the submitted EIS, the site sits within the Westmead Health and Education Precinct, which is the largest health and education precinct in Greater Sydney. The Central City District Plan outlines that growth in the Westmead precinct is a priority. Council's Local Strategic Planning Statement (LSPS) states that growth in the area is forecast to bring 4,400 new dwellings to the Westmead precinct by 2036.
To support this predicted growth, additional infrastructure, such as improved schools, will be required to service the growing worker and resident population. Specifically, demographic modelling undertaken by DPIE shows that the number of school-aged children is projected to increase over the next 20 years. In the Central City District, an extra 89,360 students will need to be accommodated in both government and non-government schools by 2036. 32% of this predicted growth in school students is predicted to occur in Parramatta, whilst 34% of the anticipated growth of children four years and younger in the Central City District will also occur in Parramatta. Council's LSPS forecasts an additional 30,000 school students in the LGA by 2036.

The Central City District Plan identifies that this will require planning early education and school facilities, which should encourage innovative approaches to the use of land and floor-space, including co-locating with compatible uses such as primary schools and office buildings, and close to transport facilities.

The WCC project is ideally situated to assist in supporting this demand. and allied health services. The existing site benefits from a high level of accessibility, close to rail, bus and road connections, as well as the future Parramatta Light Rail and planned Sydney Metro West.

As outlined in this Response to Submissions, traffic impacts associated with the increased school population can be appropriately managed to minimise impacts on the surrounding road network.

Framework Green Travel Plan

A Framework Travel Plan has been prepared by Frank Turquoise to set out CEDP's process to manage travel demand at the WCC (**Appendix D**). The Framework will help the school principals commit to achievable transport mode share targets and communicate CEDP's transport programs within the school community.

CEDP has been actively engaging with the school community, conducting questionnaires in February and April 2020 to better understand transport habits and opportunities to improve school transport planning.

In the April 2020 survey, CEDP analysed depersonalised residential address data for students enrolled at the four WCC schools. The data revealed that there are existing transport modes which could meet some student travel demand, thereby reducing reliance on care-givers driving students to school.

Based on this data, Frank Turquoise has determined the following potential for walking as a transport mode:

- **160** (27%) of primary students live within the theoretical "crow flies" walking distance or "too close to school" to be eligible for the Subsidised School Transport Scheme (SSTS) (within 1.6km) however only half of these (80) are within an actual walking time of 15 minutes or less; and
- **340** (15%) of secondary students live within the theoretical "crow flies" walking distance or "too close to school" to be eligible for the SSTS (within 1.9km).

Frank Turquoise has also determined the following potential for public transport as a transport mode:

- The numbers of existing students who live within a five-minute walk of a reasonable, one-seat public transport trip to Westmead are **184** (31%) primary students and 504 (22%) secondary students. Of these:
    - **123** primary students and **218** secondary students are eligible for free public transport travel using the SSTS; and
    - **61** primary students and **286** secondary students are eligible for the $55 / term School Term Bus Pass.

These findings have been used to inform the initial Framework Green Travel Plan. The Framework Travel Plan initiatives will be implemented by the school to encourage a 10% modal shift away from car usage and more trips by active travel and public transport. The Travel Plan includes the following measures:

- Implementation of a Travel Access Guide (TAG), to promote modes which already serve the school and communicates transport expectations with students, parents and staff. The Travel Access Guide:
  - Consolidates all transport policies and transport access information;
  - Maps active and public transport access for the CEDP community;
  - Demonstrates site transport infrastructure, including footpaths to bus stops and stations, on-site scooter, bicycle and car parking;
  - Showcases transport offers and benefits negotiated by CEDP for staff and students;
  - Directs transport feedback to Send Snap Solve or cedp.transport@parra.catholic.edu.au and Council's Cycleways Advisory Committee have links provide bicycle feedback to Mark Crispin, the current council contact for this: mcrispin@cityofparramatta.nsw.gov.au; and
  - Links parents to Transport for NSW information and resources for gaining a free student public transport pass or discounted public transport pass.
- Implementation of a Travel Coordinator shared between the four schools at the site. The Travel Coordinator will use the communications plan to the Westmead Catholic Community transport programs, the TAG and the monitoring strategy to report to CEDP and the school principals regarding participation in the programs and progress on the Framework Travel Plan targets. The Travel Coordinator may also provide a central point of contact to coordinate travel-related initiatives with other Westmead Health and Education Precinct partners.
- A Communications Plan. With the TAG documenting transport options to site and a Travel Coordinator regularly communicating transport options, it is possible to shift transport behaviour. The Communications Plan sets out how to communicate the Travel Plan and transport options currently available for staff, students and parents. Communication channels will include the school website "how to get here" page, E-newsletter and school Facebook page and other media channels. The Plan would be communicated to the CEDP community at the start of Term 3 to induce change ahead of the following year, and again in Term 4 2020 and Term 1 2021, prior to construction and during the relocation of the Sacred Heart Primary School.
- Monitoring and Evaluation Plan, which will involve:
  - Travel Coordinator Trip Planning Sessions. This will provide personalised trip-planning assistance to staff, students and families who are not easily able to find a transport option that meets their requirements;
  - Launch of the TAG, and recording the number of document clicks from the E-newsletter or hits on the website;
  - Annual travel questionnaire, to understand the transport mode choices for the journey to school; and
  - Demonstrate interest and participation in school transport programs, to be monitored daily/ weekly by way of clicks/ hits on the TAG and website, and use of bicycle parking.

Connectivity

As a member of the Westmead Alliance, CEDP agrees that a fine grain network of connections would assist with accessibility and connectivity around the Westmead precinct. Future stages of the WCC Master Plan seek to address this and include new pedestrian and vehicular connections into and through the site. This includes an east-west connection within the WCC campus, as suggested by Council in the draft Westmead Innovation District Master Plan (refer to **Figure 4**). The future Master Plan is shown at **Figure 4**.

CEDP is willing to provide these connections within the boundaries of the WCC site, as part of the ongoing development of the campus. However, it is incumbent on Council and surrounding landowners to ensure that meaningful connections can be made beyond the site's boundaries. In CEDP's recent submission to the exhibition of the EIS for Sydney Metro West (SSI-10038) they encouraged Sydney Metro to ensure that there are adequate connections in and around the station precinct, both for WCC and broader users of the precinct.

In the interim, a Framework Travel Plan has been prepared to encourage and support walkability and active transport to the WCC (see Section 2.1 2 and **Appendix D**).

Figure 4 Desired future connections in and around the WCC

Source: Parramatta City Council

Figure 5 Future Master Plan, including new north-south and east-west connections

Source: Alleanza Architecture

2.2 Open Space Design, Use and Quantity

2.2.1 Issue

Both the Department and Council have raised concerns regarding the proposed open space, both in terms of the design and use of the space and the quantity of space provided. Their comments can be summarised as follows:

- The need for more open space at ground level, noting the unconstrained nature of the site;
- The quantity of open space provided within the building, as well as across the site;
- Inclusion of circulation areas in between classrooms in open space calculations;
- The reduction in the availability of open space and active recreation opportunities, including the loss of the junior sports field and the reduction of multi-use courts; and
- The identified lack of sporting fields and active recreation facilities in the surrounding area, with Council noting that they are unable to accommodate any increased demand created by the reduced open space and active recreational facilities within the campus as well as the additional student population.

Additional issues such as solar access to open space and acoustic attenuation between floors is addressed in detail at **Appendix A**.

2.2.2 Response

As outlined in the submitted EIS, the proposed design represents an innovative and modern approach to the provision of open space. Even though the site is reasonably unconstrained, and more ground level open space could feasibly be accommodated, the proposed design represents the best open space outcome for the school, as supported by independent research and CEDP's learning pedagogy.

The open space design is also consistent with the approach that was supported by the Department in its recent assessment of SSD-9772 for Santa Sophia Catholic College (SSD-9772), and which was subsequently approved by the Independent Planning Commission.

Design and Use of Open Space

The proposed open space design represents an innovative and modern approach to the provision of open space, which aligns with CEDP's learning pedagogy and is supported by independent research.

CEDP recognises that play space cannot be a one size fits all approach. Play space must be designed so that it engages all students and does not, by its nature, exclude any students. It should also encourage activity that has the added benefits of social and cognitive development. The landscape design for WCC ensures age appropriate outcomes and encourages inquiry, exploration and social interaction. The design also acknowledges the educational value of recreation, and has been designed so that it engages students, and encourages activity that has the added benefits of social and cognitive development. The immediate adjacency of play space to learning areas is part of CEDP's purposeful design outcome to promote multi-use of the space, allow better supervision and less time being spent walking from place to place, both vertically and horizontally.

To support the proposed design, CEDP has prepared a paper which summarises their Pre-School to Post School Learning Framework, as well as recent, independent research on the subject (refer to **Appendix E**).

The most recent research underpinning CEDP's school design approach is the study titled *Towards Effective Learning Environments in Catholic Schools (TELE): An Evidence-based Approach* undertaken by the Learning Environments Applied Research Network (LEaRN) and The University of Melbourne.

This research project represents one of the largest known studies to have evaluated the relationships between the built environment (learning environments/spaces) and the practices, activities and behaviours of school students and teachers. As such, it both informs and supports CEDP's school design approach, and the design of the WCC.

They key outcome of the TELE research is that the relationships between dedicated learning spaces and outdoor areas are crucial, as they directly impact:

- Supervision and safety;
- The variety of activity settings available;
- Opportunities for agile and flexible use, including connections to outdoor learning environments;
- The movement of teachers and students; and
- Students geographical engagement and affinity for their learning environments.

Overall, the findings of the project highlighted nine principles of designing and using learning environments to best pedagogical effect. Fundamentally, learning environments should offer the following:

1. A dynamic social and physical environment;
2. Variety and choice, with respect to both settings and activities;
3. The capacity to differentiate and personalise learning experiences, including across independent, small group, and whole class activities;
4. Ready access to multiple learning settings, commonly differentiated by furniture arrangements and/or glazed separations between spaces of different sizes;
5. Engaging and meaningful teaching and learning experiences, including opportunities for instruction, interaction and reflective retreat;
6. Options to socially organise students in varied ways, within the same class and/or across multiple classes;
7. Good acoustics, especially in more open spaces;
8. Good slight-lines, to enable the consistent observation and monitoring of students' activities; and
9. A design that recognises the physical, organisational, temporal and cultural histories of the school/school sector and allows for pedagogical development over time.

The proposed Primary School Building is built across six levels (including Ground Level). A detailed overview of the open space strategy and landscape design has been prepared by Ground Ink and is provided at **Appendix F**. Whilst open space is interspersed throughout the building, Levels 3 and 5 (roof level) are dedicated to open space. In total, there will be over 7,800m^2 of open space across Levels 1 – 5 (i.e. all ground level play space is in addition to this). The proposed open space responds directly to the nine principles in a way that traditional open space cannot. The proposed open space design:

- Comprises purposefully designed, age appropriate spaces that are inclusive, and cater for students of both genders and all ages. In this regard, whilst the ground level play space will be accessible by all students, it will primarily be used for play and outdoor learning by years K-2 to provide a separate space for younger, more vulnerable children.
- Provides open space areas adjacent to learning areas, which encourages use of the space, enhances supervision and encourages engagement between staff and students. It also takes pressure off vertical and horizontal movements during the day and reduces time spent walking from place to place so that there is more time for students to exercise, socialise, explore and learn.
- Provides open spaces, which in conjunction with neighbouring learning areas, will enable teachers to be flexible and agile in their grouping and organisation of students. The size of the rooms means that multiple classes can also be grouped together for different activities and the indoor/outdoor flow will enable varied activities.
- Is accessible in all weather conditions, so children never spend recess and lunch indoors on hot, wet or windy days.
- Provides activated spaces with a range of equipment and materials which encourage greater physical activity from a greater number of students when compared to traditional open play space, by providing spaces for unstructured and free play, to encourage creativity, chance encounter and exploration among the students.
- Comprises multi-use spaces which can be used for outdoor learning as well as play and circulation, offering better opportunities for supervision. The multi-use character of the outdoor space is shown at **Figure 6**.
- Provides an open play area at Level 5 which focuses on the importance of fitness and exercise, with multi-sport court facilities, open synthetic turf areas for play and amenity, and a running track for sporting and recreational uses to allow for a range of students and sports to utilise the rooftop space at any given time.

In summary, the proposed open space exemplifies CEDP's key design principle of 'Learning Drives Design'. CEDP not only proposes a transformational learning framework and approach to pedagogy, it ensures that this approach drives design and hence provides environments that will maximise the learning opportunities for students and teachers. CEDP recognises that play space cannot be a one size fits all approach, and that play space must be designed so that it engages all students and does not by its nature exclude any students.

In addition to the significant quantity of highly functional play space within the building, all students of the WCC will have access to the existing ovals in the south of the site, as outlined below. Together, it is considered that the type and quantity of open space provided for the proposed development is more than adequate to meet the education and recreation needs of students.

Figure 6 View of the internal amphitheatre

Source: Atelier Illume

Access, Movement and Circulation

Primary School Building

A key principle of the open space design is that day-to-day play space is in close proximity to the students' classrooms, limiting the need for movement up and down the building during the day. This minimises circulation times and maximises opportunities for outdoor play.

To demonstrate these spatial relationships, a series of diagrams have been prepared to show the distribution of the primary school population within the building and circulation/proximity to open space (refer to **Figures 7** – **9** and **Appendix B**). In summary:

- Kindergarten, Year 1 and Year 2 will use Ground Level and Level 1 for learning and play;
- Years 3 and 4 will use Levels 4 and 5 (Roof Level) for learning and play; and
- Years 5 and 6 will use Levels 2 and 3 for learning and play.

Whilst these play spaces represent the primary play areas for each year group, students will have access to all levels within the building, as required to suit the curriculum and to support learning and development opportunities. As shown on the diagrams, stairs provide access between each level, with lifts providing equitable access.

It is noted that the ovals are not considered part of the main play space for the primary school students, however they will have access to the ovals for delivery of the PDHPE curriculum as required.

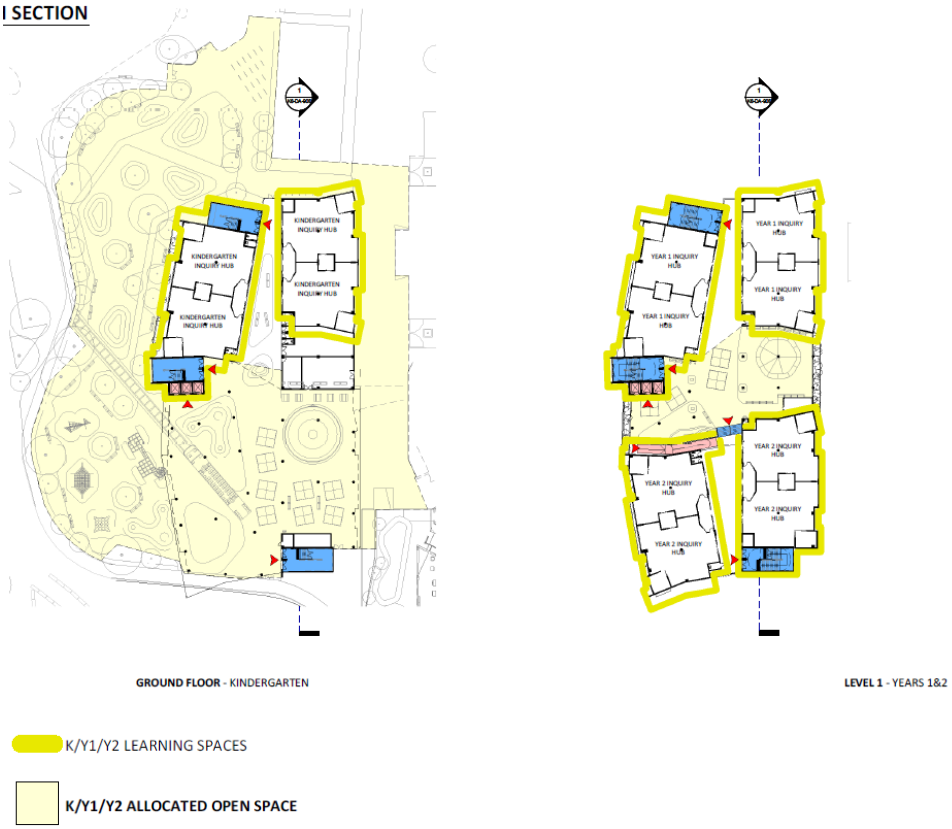

Figure 7 Kindergarten, Year 1 and Year 2 learning and play areas

Source: Alleanza Architecture

Figure 8 Year 3 and Year 4 learning and play areas

Source: Alleanza Architecture

Figure 9 Year 5 and Year 6 learning and play areas
Source: Alleanza Architecture

Ovals
The ovals currently service a student population of 2,630+ students. When Stage 1 enrolment reaches its full capacity, as anticipated for 2033, the ovals will service a student population of 3,900 (2,630 existing + 1,260 additional primary students).

As outlined above, whilst primary school students may use the ovals occasionally as part of the PDHPE curriculum, their main place spaces are within and adjacent to the Primary School Building. On this basis, the ovals will predominantly be used by the 2,630+ high school students on the campus for play and PDHPE.

Use of the ovals will be determined through timetabling, which will vary from term to term depending on the PDHE curriculum and the changing needs of each year group. On this basis, it is not possible to provide a schedule for the use of the ovals.

Quantity of Open Space

The revised Architectural Drawings (**Appendix B**) quantify the open space within the building. The diagrams show that there will be over 7,800m^2 of open space across Levels 1 – 5 (i.e. all ground level play space, including the ground level undercroft, is in addition to this). This equates to 4.6m^2 per student, within the building. It is noted that these figures exclude circulation areas where they solely provide access to classrooms, however includes multi-purpose circulation spaces.

On ground level, there is an additional 6,070m^2 of open space. This includes the undercroft and outdoor area adjacent to the new Primary School Building, but excludes the ovals. This additional area equates to 3.6m^2 of additional open space per student, taking the total open space provision to 8.2m^2 per student (i.e. 4.6m^2 + 3.6m^2).

More broadly, at the completion of the Master Plan, there will be more play space area per student than recommended by the Department of Education's EFSG. Preliminary figures indicate that the total area per student will be approximately 20% greater than EFSG at the completion of the Master Plan. This includes ground level play space directly to the west of the new building, where the current at-grade car park is located.

Both DPIE and Council have raised concerns around access to the existing sports ovals in the south of the site. It is noted that all students, including the primary school students, will continue to have access to ovals. This will include use of the ovals for parts of the PDHPE curriculum. To avoid safety concerns arising from primary and secondary students using the ovals at the same time, break times will be staggered to ensure the safety of younger students.

As shown in the Master Plan image at **Figure 3**, a significant area of open space will continue to be provided in the southern part of the site as part of the long-term Master Plan. The preliminary open space calculation above (i.e. approximately 20% greater than the EFSG) accounts for the removal of the second oval as part of the future Master Plan. CEDP successfully operates a number of schools with significantly less open space (some as low as $4m^2$ per student). The quantity of open space at the WCC is considered more than adequate.

Solar Access and Daylight

A Solar and Access Daylight Analysis has been prepared by Erbas Sustain (**Appendix O**). The design of the building seeks to achieve a balance between providing shade for comfort and sun protection in Summer, and solar access for warmth and light in Winter.

With respect to solar access, the analysis finds that:

- All outdoor play areas at Ground, Levels 1 - 5 received ≥ 3 hours of direct solar access on the Winter Solstice.
- On the Summer Solstice, all outdoor play areas at Ground and Levels 1 - 4 are generally well-shaded from direct solar access, with coverage ranging from 55% to 100%. While most of Level 5 is unshaded, parts of the Level 5 outdoor play area remain shaded on the Summer Solstice for sun protection.

With respect to daylight, the design has been benchmarked against various Councils' lighting policies and *AS1158.3.1:2005 Lighting for Roads & Public Spaces*. The National Construction Code on natural lighting and *AS1680.2* are intended for interior spaces rather than covered outdoor areas, and so have not been used as a benchmark in this instance.

The design aims to achieve at least 50 lux without lighting (as required under the Standards, and to be supplemented with artificial lighting) to most of the main outdoor play area at Ground Level, Level 3 and Level 5, and at least 21 lux to the passive/secondary play areas Level 1, Level 2 and Level 4. For reference, 50 lux is a desirable lux indicated in *AS2560.2.3-2007* for sports field recreation and physical training. 21 lux is considered a mid-range lux and the highest level of illuminance for public activity areas as indicated in *AS1158.3.1:2005*.

The analysis finds that, on average, 72% -89% of the outdoor play areas achieve an annual average of > 50 lux during the indicative operational hours (6:00am –6:00pm) throughout the year. Overall, daylighting to an average of at least 80% of the outdoor play areas is sufficient for the level of activities equivalent to a public playground. In addition, artificial lighting will be used to complement natural lighting for visual comfort.

Based on these findings, the proposal is considered suitable from a daylight and solar access perspective in terms of building performance, however it is noted that the performance will be improved with the addition of artificial lighting.

2.3 Tree Removal

2.3.1 Issue

Both the Department and Council have raised concerns regarding the extent of tree removal fronting Darcy Road, requesting further justification for the removal of the existing tree canopy.

2.3.2 Response

One of the key Master Plan principles is to have a welcoming entry to the site, where the Parish Church acts as a gateway into the site. To achieve this outcome, the Darcy Road frontage has been designed to accentuate the site entry and create a cohesive, welcoming street frontage that opens the Parish facilities up to the public realm.

The State Design Review Panel agreed with this approach, expressing support for *"the orientation of the parish church and the treatment along Darcy Road, which is now open and welcomes pedestrians onto the site."*

Creating this more open frontage necessitates the removal of the existing retaining wall which cuts visual permeability and presents a walled entry to the site (refer to **Figure 10**). The removal of the retaining wall also necessitates the removal of existing setback planting.

The trees to be removed have been assessed by both the Landscape Architect and Arborist (**Appendix M**), and none of the trees are of high or very high landscape significance. The trees range in good to poor health and structural condition and five trees (Trees 193, 195, 196, 199 and 208) along the frontage have a transient (<5 years) or short (5-15 years) Useful Life Expectancy. Of the locally indigenous species within the group, none of the trees are sufficiently large to be remnant species. Further, most of the trees have been planted recently, as shown in **Figure 11** which provides a comparison of the vegetation in 2009 and 2020. Three trees (Trees 214, 215 and 216) which are proposed for retention are some of the larger and better-quality trees along the frontage and will not be impacted by the battering works. In addition, the amended Landscape Plans include the retention of four additional trees to the west of the existing tennis courts, which were previously identified for removal.

To compensate for the loss of planting, the landscape design in this part of the site has been designed to recognise the importance of this area being a prominent space fronting Darcy Road and forming the gateway to the site. Two entry paths have been provided off Darcy Road with the inclusion of an accessible ramp. The surrounding landscape includes a combination of mass planted garden beds, including new native tree planting and mixed understorey planting. This includes approximately twenty-five (25) new trees in the area. The proposed tree species include both locally indigenous and Australian native species supplied as advanced sized (75-200L) specimens which will have immediate impact in offsetting the loss of canopy from the frontage.

The existing imposing retaining wall is proposed for removal and in its place will be a planted embankment which will grade up into the site. A Yarning Circle has also been included to further accentuate the site entry and spirit of inclusion and recognition. The use of earthy materials such as sandstone and bush-tucker planting are also proposed.

Overall, it is considered that the proposed design represents a better outcome for the community and the development, rather than a design which attempts to retain these trees. Further, the tree removal will be adequately off set through the provision of new native tree planting and understory planting.

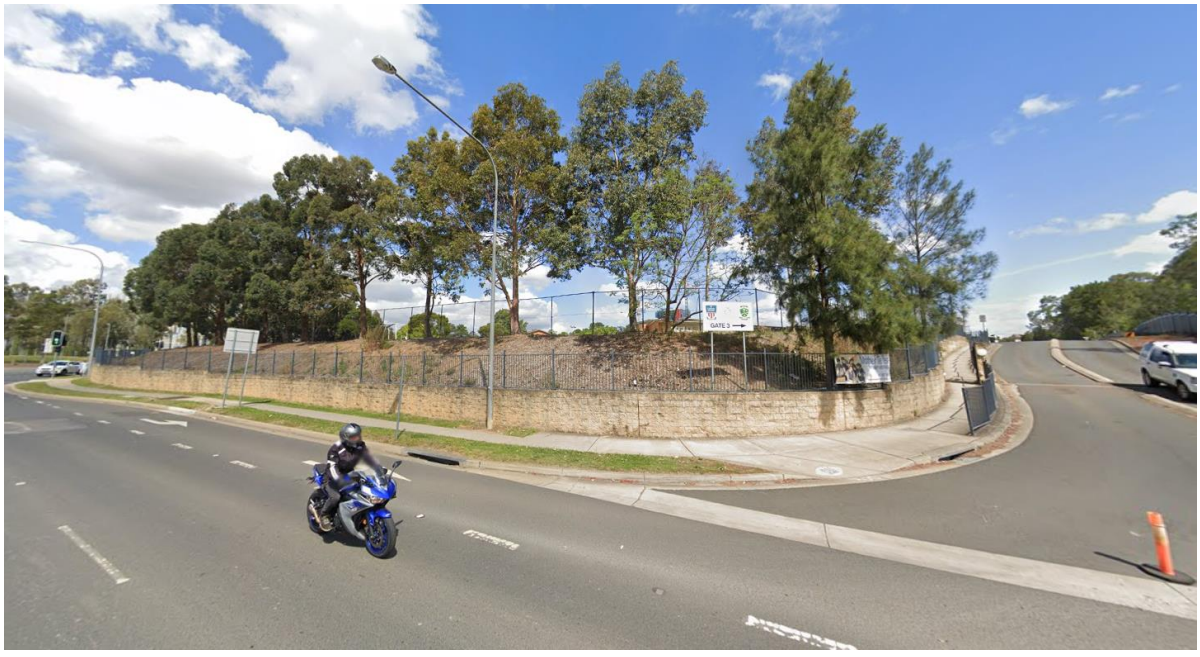

Figure 10 View from the site's Darcy Road entry

Source: Google Street View

Figure 11 Aerial photograph of the site in 2009 (top) and 2020 (bottom)

Source: Nearmap

2.4 Use of the Parish Church

2.4.1 Issue

The Department and Council have noted that the parish church is only permissible on the site as an ancillary facility to the school. However, the church is proposed to be used on the weekends. In this regard, the Department has requested additional information around the use of the church, including:

- Detailed information of patronage and details of use of the church on the weekends;
- Detailed justification for the weekend use of the church as an ancillary service of the school; and
- Additional traffic and noise impacts that may arise due to the weekend use of the church.

2.4.2 Response

In response to the Department's concerns, additional information has been provided regarding the use of the church by both the schools and the wider community.

As detailed below, for the majority of the time, the church will be used for the purposes of hosting church services, classes, events and meetings for children attending the adjoining Catholic schools, as well as school teachers and the families of children attending the school.

Use of the Sacred Heart Parish Church by the broader community, including on weekends, is secondary to the use of the church by the schools and the church use is therefore ancillary to the education use.

Notwithstanding, and as acknowledged by Council in their submission, in the event that the Department forms the view that the church is not considered 'development that is ordinarily incidental or ancillary to' the educational establishment, the SSD can reply on Section 4.38(2) of the EP&A Act to enable assessment and approval of the application.

Nature of Weekday Use

Most Catholic primary schools have a church physically attached to them and all Catholic schools are, in some way, associated with a local parish. Churches are an ordinary part of the operation of Catholic schools and during the week, the church will be a key component of the day-to-day function of the schools and delivery of the curriculum.

During the week, the church will often be used as a classroom to teach various aspects of the Religious Education (RE) curriculum across all year groups. Topics about church architecture and design will see students visiting the church with their teachers, and a Priest will often be on hand to help with questions students may have. Further, as students are learning about the faith life of the church and the various sacraments, they will often visit the church with their teachers, accompanied by the Priest, to experience how the ceremonies are conducted.

Most of the teaching will be undertaken by the students' RE teacher, or class teacher for primary students. Generally, the Priest will be present to give some instructional input and to answer questions. The church also provides students, staff and families a quiet place of refuge and contemplation - they are welcome to simply sit and pray in the church outside of the formal class structure.

In addition to being part of the RE curriculum, the church and chapels are used during the week by students and staff for Masses. On average, the high schools have a weekly Mass. Similarly, each of the primary schools also have one Mass per week for each individual year group. Whilst Mother Theresa and Sacred Heart Primary schools currently hold their Masses in a chapel or church, Mother Theresa currently celebrates Reconciliation in their classrooms. Moving forward, all liturgies will be celebrated in the new church where practicable.

As student numbers increase, it is envisaged that the number of Masses offered per week will also increase, and will be specially tailored to individual year groups.

Finally, at key points in the year there will be extra Masses, such as on Ash Wednesday, Feast of the Assumption, school feast days, as well as beginning and end of year celebrations (including separate Masses for staff).

As outlined in the Indicative Community Use Schedule at **Appendix R**, the Parish will be available for community use during the week, however it will only be available for community use when not required by the schools.

Nature of Weekend Use

As noted in the submitted EIS, the Sacred Heart Parish Church will be used on the weekend by students, staff and members of their families, as well as by the broader Parish community.

It is important to note that the primary schools are parish schools, and are a natural and essential aspect of the parish and its mission, and vice versa. It is not practical to see the schools as separate from the parish, as all parishioners have a connection to the schools. The schools are part of the parish's mission, which the parishioners support through their membership of the parish and their financial contributions towards supporting the clergy who minister in the schools. The parish, as an integral part of the WCC, not only provides for the liturgical needs of the students and their families, or the staff and their families, but also for their spiritual formation and pastoral needs (regardless of whether they are Catholic or not). It provides these services in conjunction with the schools.

With regards to weekend use, four regular services will be held in the church on weekends, with two on Saturday (9am and 6pm) and two on Sunday (8 and 9:30am). It is anticipated that up to 560 people will attend the church on the weekend, spread over these four Masses. These weekend Masses are a natural expression of the faith life of the schools and the local community. Whilst it is difficult to say how many of these attendees will be associated with the schools, all students, staff and their families will be encouraged to attend. There will also be times when a class or year group will be invited to 'run' a weekend Mass as a means of getting their families involved, and key events such as Confirmations and First Eucharists will be held in the church outside of school hours.

It is noted that most parishioners with school age children are enrolled in one or more of the schools. It is anticipated that at some point during the year, especially during the significant religious seasons of Lent, Easter and

Christmas, most students, staff and their families will attend Mass. It is also expected that they will attend for other significant life moments such as a death in the family, annual memorials, weddings and baptisms.

With respect to other services such as weddings and funerals, these will take place on an ad-hoc basis. Currently, the parish averages one wedding every two years, and approximately three funerals per year.

Other Community Groups

Currently, the Parish hall (which will be the large meeting room in the new church) is used by various community groups for activities such as Taekwondo, ballet, cultural groups (preparing and practicing for festival events) and social gatherings such as birthday parties. Most of these activities occur weekly or bi-weekly during school terms, outside of school hours.

As the Sacred Heart Parish Church forms part of the school, community use of the church in this manner is consistent with clause 35(6)(b) of the Education SEPP, and should not be considered as a factor when determining whether or not the church is ancillary to the school.

Traffic and Acoustic Impacts

The Traffic and Acoustic Reports have been updated to address weekend use of the church. These are provided at **Appendix C** and **G**, respectively.

3.0 Proposed Amendments to Development

Two minor amendments have been made to the proposed design, namely amendments to the pick-up and drop-off area to improve the efficiency of the space, and the removal of the Ground Level administration fit-out from the CELC scope of works. It has become apparent that the fit-out component of the project requires additional coordination and stakeholder consultation, and will be subject to a separate planning process in the future.

The proposed changes are shown in the Traffic and Transport Response to Submissions prepared by TTPP (**Appendix C**) and on the revised Architectural Drawings prepared by Alleanza Architecture at **Appendix B,** respectively.

Given the minor nature of the proposed changes, they do not alter the description of the development, as originally proposed.
The following section describes the proposed changes to the development. The proposed refinements are minor and will not alter the scale or appearance of the building, or the number of staff or students accommodated on the site. Accordingly, and as detailed at **Section 4**, the changes do not give rise to any material alteration to the environmental assessment of the potential impacts considered as part of the original development application.

3.1 Changes to Pick Up and Drop Off Arrangements

As noted at **Section 1.2**, further investigations in consultation with Council and subsequent recommendations have resulted in a proposed amendment to the drop-off and pick-up arrangement.

The exhibited scheme includes 31 drop-off/pick-up bays, however the layout was inefficient and utilised angled parking spaces which resulted in vehicles having to reverse into the drop-off/pick-up bays.

The revised configuration results in the provision of 5 fewer bays – i.e. 26 drop-off/pick-up bays are now proposed, comprising 8 existing bays and 18 new bays. However, the amended layout provides a refined design with greater traffic flow efficiency and improved safety for students as it eliminates vehicles reversing into the drop-off/pick-up bays, and enables students to exit and enter vehicles on the passenger side.

The amended layout is shown at **Figure 12**. As outlined in the submitted Traffic Impact Assessment, it has been estimated that in the busiest 15-minute period in the peak hours, there would be up to 91 cars accessing the site to pick-up students (under the worst case scenario i.e. 40% OOSH accommodation scenario as calculated in the response to Submission 14 of this RTS). Based on a rate of 1 minute per vehicle as observed on-site with Council,

each drop-off/pick-up bay can accommodate 15 vehicles in 15 minutes. Therefore, the 26 bays could turnover a total of 390 cars in 15 minutes, which is considerably greater than the 91 cars that will access the site.
The capacity of the amended proposal is more than sufficient to accommodate the demand generated by the future primary school (i.e. 91 cars). The drop-off and pick-up arrangement will also help maintain the short queue length for the right-turn movement on Darcy Road.

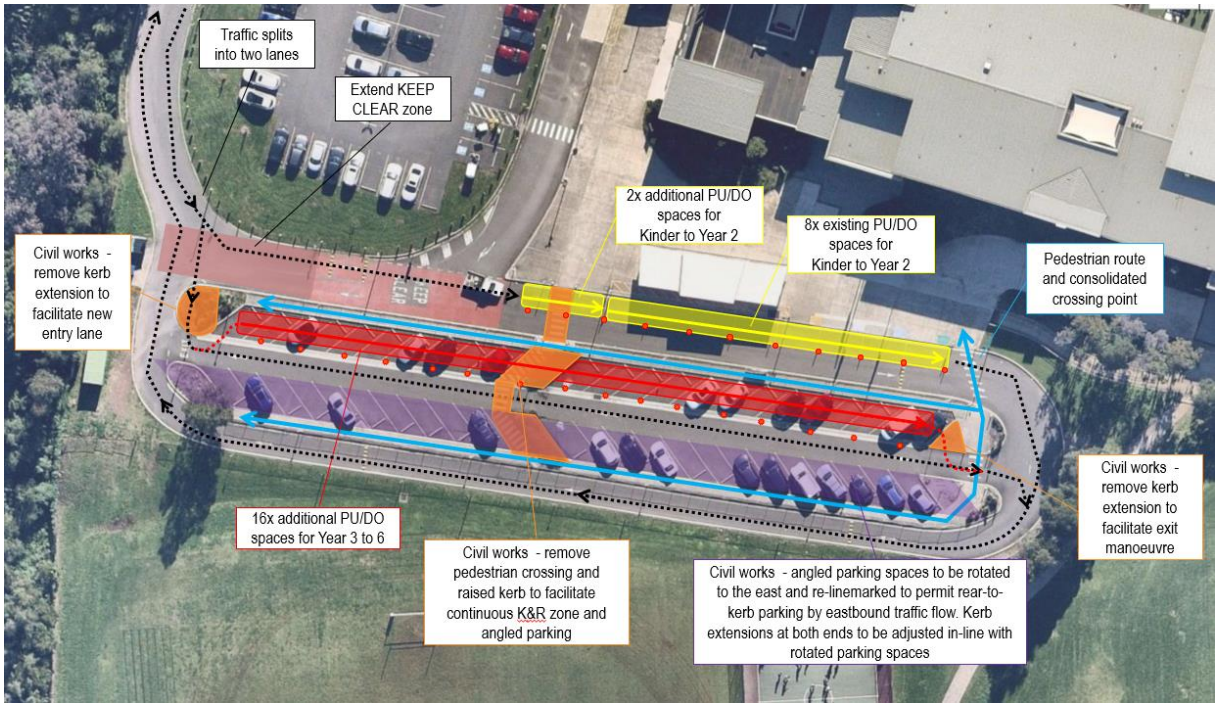

Figure 12 Revised pick-up and drop-off layout

Source: TTPP

As part of the revised pick-up and drop-off arrangements, there will be a minor reduction in the number of car parking spaces located within the existing at-grade car park. Currently, there are 46 parking spaces located within this portion of the car park. The number of spaces would be reduced by 6 spaces, to 40 spaces i.e. 16 parallel spaces and 24 angled spaces. However, this loss of parking spaces would be offset by the 6 supplementary parking spaces provided in the original SSDA submission (refer to Figure 6.1 of the submitted TAIA report).

The on-site parking provision that is associated with each of the site uses, as proposed in the submitted TAIA, will be retained. Therefore, there would be no negative impact on parking provision as a result of the amended proposal. A summary of the revised on-site car parking provision provided in the Traffic and Transport Response to Submissions prepared by TTPP (**Appendix C**).

3.2 Removal of Admin Fit-out

Following further review and consultation with user groups, it is proposed to remove the works associated with the fit-out of the administration area on the Ground Level of the CELC. These works will be subject to a separate planning process in the future.

The removal of these works from the project scope is reflected on the revised Architectural Drawings at **Appendix B**.

4.0 Additional Information and Assessment

4.1 Consistency with Original SSDA Scheme

All key elements of the proposed development remain unchanged from what was originally submitted. The scheme does not substantially differ from the development, as originally submitted.

Reconfiguration of the pick-up and drop-off area, removal of the CELC admin fit-out from the proposed scope of works and minor adjustments to the internal layout of the CELC does not require any additional assessment, with the exception of traffic and parking as addressed below.

4.2 Traffic and Parking

As detailed in **Section 3.1**, the proposed pick-up and drop-off arrangements have been refined to improve efficiency and safety.

The amendments will result in the loss of 6 parking spaces from the existing at-grade car park. The revised parking breakdown is outlined at Table 1 of the Traffic and Transport Response to Submissions (**Appendix C**). TTPP concludes that the on-site parking provision associated with each of the site uses, as proposed in the submitted TAIA, will be retained. Therefore, there would be no negative impact on parking provision as a result of the amended proposal.

With respect to traffic, TTPP concludes that the capacity of the amended proposal would sufficiently accommodate the demand generated by the future primary school. Further, by making traffic and pedestrian flows more efficient, the amended proposal would further help reduce internal traffic congestion, allowing the site to accommodate a greater volume of cars on-site in comparison with the original proposal. This will significantly minimise the number of cars queuing on Darcy Road. However, the greatest reduction in queuing on Darcy Road will be due to the flattening of peak curves through implementation of the new car park and separate high school drop-off and pick-up (subject to a separate DA to Council) and use of the OOSH facility, as discussed at **Section 2.1.2**.

5.0 Final Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed works are detailed in **Table 2** below and are generally unchanged from those submitted as part of the original application. New measures are **bold and underlined**.

Table 2 Mitigation Measures

Mitigation Measures
Noise • Conduct works in accordance with a Construction Noise and Vibration Management Plan prepared by a qualified acoustic consultant. • Undertake noise and vibration monitoring for the duration of the project. • Undertake noisy works at times that will minimise sleep disturbance. • Deliberately select plant and equipment that will minimise noise impacts. • Implement on-site noise management strategies. • Schedule work to minimise disturbance. • Implement a consultation notification and complaints handling system.
Contamination • Undertake an additional site inspection and sampling following removal of existing structures on the site. • If any unexpected finds are encountered during site works, undertake further assessment in accordance with an unexpected finds protocol. • Where any soil material is to be removed from site, a formal waste classification assessment shall be required in accordance with the NSW EPA Waste Classification Guidelines (2014).
Transport and Accessibility • The proposal will incorporate the recommended measures in the Traffic and Transport Assessment prepared by TTPP provided at **Appendix G**. • **The proposal will implement the recommended measures in the Framework Travel Plan prepared by Frank Turquoise Group and dated 19 June 2020.**
Ecologically Sustainable Development • The detailed design of the development is to incorporate the ESD principles and measures set out in the ESD Report prepared by Erbas at **Appendix P**.
Built, Aboriginal and Historical Archaeological Heritage • The proposed development will be undertaken in accordance with the recommendations of the Heritage Impact Statement prepared by Comber Consultants provided at **Appendix Q**. • The proposed development will be undertaken in accordance with the recommendations of the Aboriginal Cultural Heritage Report prepared by Comber Consultants provided at **Appendix N**.
Waste • Construction and demolition activities will be undertaken in accordance with the Preliminary Construction Management Plan prepared by Buildcorp and provided at **Appendix K**. • The operation of the proposed development will be carried out in accordance with the Operational Waste Management Plana prepared by Elephants Foot and provided at **Appendices X** and **Y**.
Construction Impacts • A preliminary Construction Management Plan prepared by Buildcorp is provided at **Appendix K**. A detailed Construction Environmental Management Plan (CEMP) will be provided by the contractor prior to commencement of works on site. The CEMP will incorporate the recommendations of the CMP and CTMP.
Hazardous Materials • Removal of hazardous materials will be undertaken in accordance with the relevant plans and policies as detailed in the Hazardous Management Plan prepared by Banksia EnviroServices provided at **Appendix EE**.
Tree Protection • Tree protection measures will be incorporated as per the recommendations of the Arboricultural Assessment provided by TreeIQ provided at **Appendix I**.

6.0 Conclusion

CEDP and its expert project team have considered all submissions made during the public exhibition of the proposal. A considered and detailed response to all submissions made in relation to the public exhibition of the proposal has been provided within this report and in the accompanying documents.

As outlined within this report, the assessment of the amended proposal confirms that all key elements of the originally exhibited development remain unchanged.

The proposal has significant planning merit:

- The assessment of this proposal has demonstrated that the development will not generate any environmental impacts that cannot be appropriately managed and is consistent with the relevant planning controls for the site.
- The development will provide a significant new piece of social and educational infrastructure, providing a new primary school with permanent teaching spaces to accommodate 1,680 students. The provision of a new teaching and education facility will support and strengthen the availability of education facilities in the region.
- The area and shape of the site allows for the provision of new teaching and education facilities that meet the special design requirements for the proposed uses, whilst not resulting in any significant adverse impacts on surrounding uses.
- The development will deliver a new parish church which can be used by both the school community and the local Westmead community more broadly.
- The proposal is consistent with the principles of ecological sustainable development as defined by Schedule 2(7)(4) of the EP&A Regulation 2000.
- The proposed development is anticipated to create a total of 67 full time positions at the school. This is anticipated to have additional social benefits for the region in terms of providing additional employment in a growing locality.
- The development will not have a significant impact on any threatened flora or fauna species.
- The proposed redevelopment is anticipated to have positive social outcomes in ensuring that local residents have access to high quality educational facilities.

Given the planning merits described above, it is requested that the Minister or his delegate approve the application.