REQUEST FOR SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

STEM SCHOOL - SYDNEY SCIENCE PARK

URBIS

APRIL 2018
PREPARED FOR CATHOLIC EDUCATION OFFICE DIOCESE OF PARRAMATTA

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1. INTRODUCTION

In accordance with Part 4 of the *Environmental Planning and Assessment Act 1979* (the Act), this report is a request for Secretary's Environmental Assessment Requirement (SEARs) to guide the future development of the STEM School within Sydney Science Park (SSP), located at 565-609 Luddenham Road, Luddenham. This report is prepared by Urbis Pty Ltd on behalf of Catholic Education Office Diocese of Parramatta (the applicant).

SSP is a unique vision to cluster leading science and research based businesses and educations institutions to foster innovation. The vision and accompanying masterplan for SSP also includes the integration of vibrant residential communities and supporting services. SSP has undergone a successful rezoning and is the subject of recent subdivision and early works development approvals, meaning that the site is deemed suitable and ready for development.

The STEM School site is located in the southern precinct of SSP known as the First Community. The First Community is a master planned precinct within SSP which will deliver a mix of research facilities, science based businesses, education establishments and residential accommodation.

The STEM School site will be developed for a K-12 school in two stages. This SEARS Request relates to Stage 1 for a secondary school (Years 7-12), accommodating approximately 1,140 students. This proposal will also include earth works for the entire STEM School Site and a temporary carpark and games courts. The earth works will facilitate both stages of the school development including the future K-6 stage and potential early learning and/or special needs schooling.

The second stage of the project will cater for kindergarten to Year 6, and will be subject to a separate application. Consolidated carparking arrangements for the entire site will be formalised within the future Stage 2 application.

The STEM School reflects the significant growth of Western Sydney and the need for additional education infrastructure. The school will support the investment and growth of SSP and the First Community by providing contemporary and flexible learning spaces for existing and planned communities.

The STEM School will deliver a new educational model within a unique campus setting. It will include approximately 12,000sqm of floor space across three/four storey buildings. The planning and design of the school will focus on a series of purpose designed hubs:

- Inquiry Hub - flexible and shared teaching spaces;
- Community Hub – large gather spaces and lecture theatres;
- Performance Hub – multipurpose hall and amphitheatre;
- Research Hub – science and fitness; and
- Creative Hub – art and applied science.

The purpose of this report is to provide information to support the request to the Secretary. To assist in identifying the SEARs for the preparation of an Environmental Impact Statement (EIS) for the proposed development, this report provides:

- An overview of the site and context;
- A summary of the relevant planning history of SSP;
- A description of the proposed development;
- An overview of the relevant planning framework and permissibility; and
- An overview of the likely environmental and planning impacts.

This request for SEARs report should be read in conjunction with the supporting Concept Plans prepared by BVN at **Appendix A**.

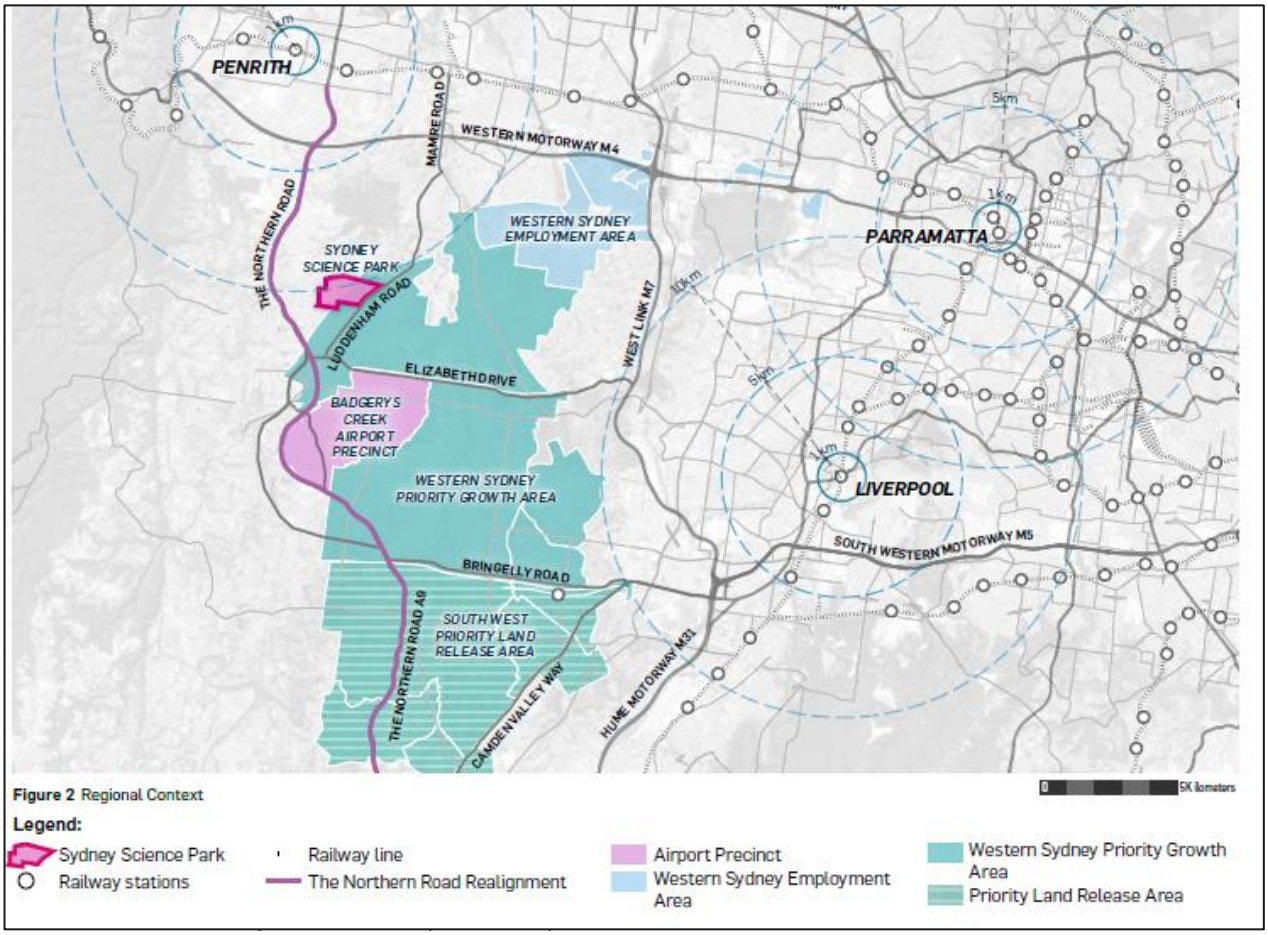
2. SITE AND LOCALITY

2.1. SITE LOCATION - SSP AND STEM SCHOOL SITE

The site is located in the southern precinct of SSP known as the First Community. SSP is located at 565-609 Luddenham Road, Luddenham and is approximately 10 kilometres south of Penrith and 4 kilometres north of the planned Badgerys Creek Airport Precinct, as indicated in **Figure 1** below.

When fully developed, SSP will be one of the largest centres for research development and innovation in Australia. SSP will provide a cluster of innovators in industry, education and business.

Figure 1 – Location of Sydney Science Park



2.2. SITE DESCRIPTION

At the time of writing, the SSP site is legally described as Lot 201 and part Lot 202 in DP 1152191. Adjacent land in the same ownership is described as Lot 203 in DP 1152191. The area of each lot is set out in **Table 1,** below, with a total area of approximately 413 hectares:

Table 1 – Existing Lots

Lot Number	Deposited Plan	Area
Lot 201	DP 1152191	86.06ha
Lot 202	DP 1152191	286.98ha
Lot 203	DP 1152191	40.03ha

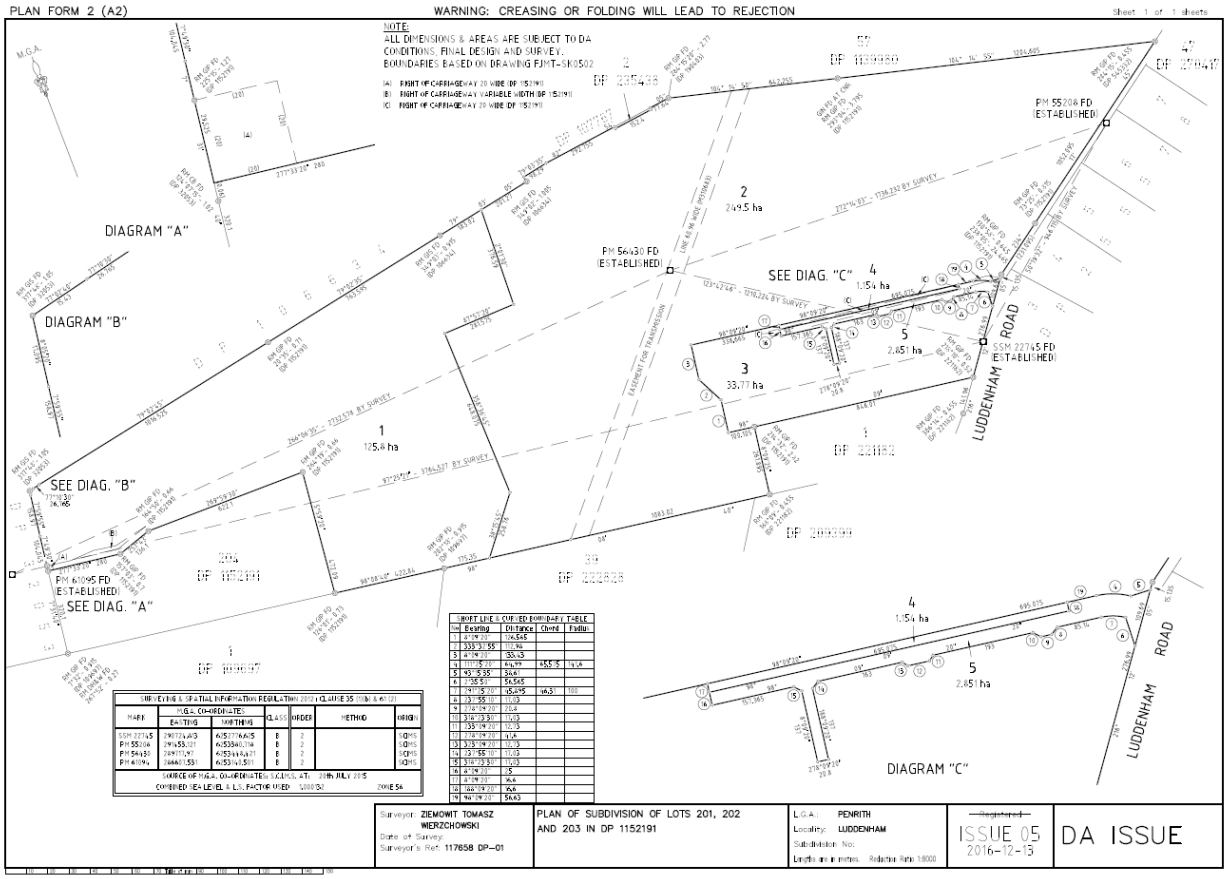
Approved Subdivision – DA16/0176

DA16/0176 was approved by Penrith Council on 20 February 2018. The approval consolidates the three lots currently comprising SSP to create five Torrens Title lots (refer to **Table 2** and **Figure 3**). This approval separates the SSP site from the residual land to the west and creates 5 super-lots within Sydney Science Park. The subdivision will be completed upon finalisation of the subdivision certificate and registration with Land Registry Services NSW. Lot 3 comprises the First Community Precinct.

Table 2 – DA1 (DA16/0176) Proposed Lots

Approved Lot (DA16/0176)	Area (ha)
Lot 1	125.8
Lot 2	249.5
Lot 3	33.77
Lot 4	1.154
Lot 5	2.851

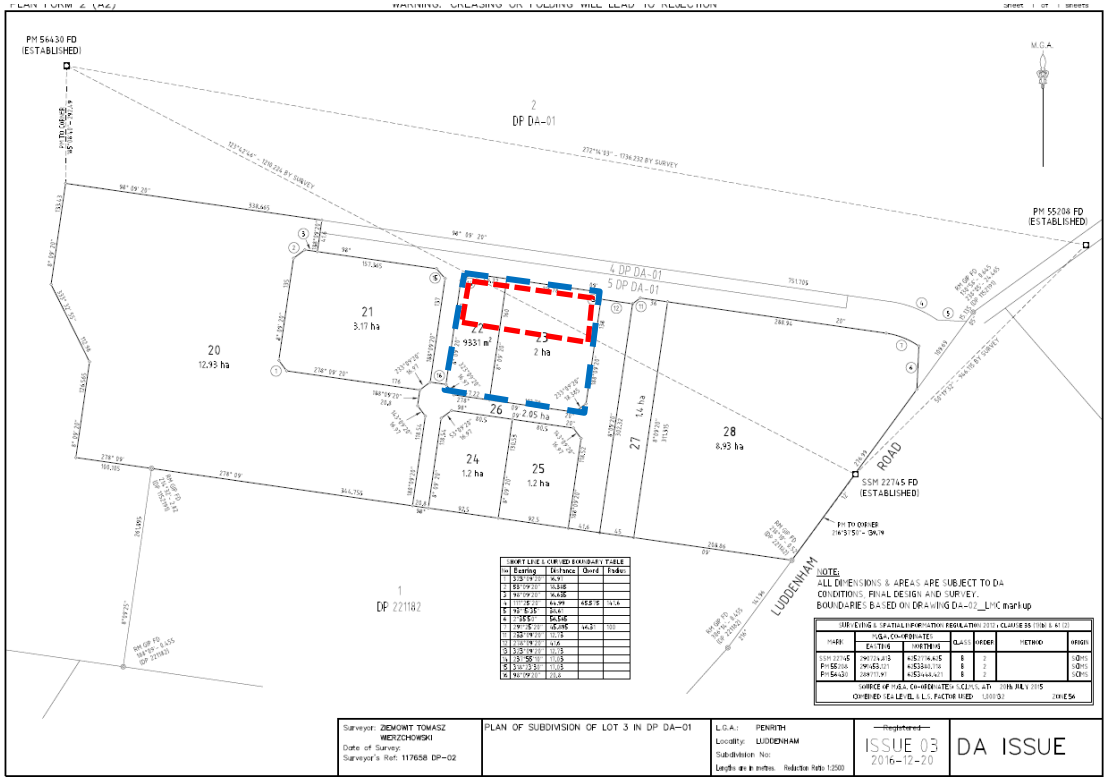
Figure 3 – Proposed subdivision Plan- DA16/0176



Subdivision of the First Community and STEM School Site

The re-subdivision of Lot 3 into nine Torrens Title lots creates the subdivision plan for the First Community. The subdivision is proposed under DA17/0497, which is currently under assessment with Penrith Council. Lots 22 and 23 relate to the STEM School site as indicated in **Figure 4** below.

Figure 4 – Location of the STEM School within the Fist Community Subdivision Plan



Entire STEM School Site Subject Site (Stage 1: 7-12 STEM School building)

2.3. EXISTING SITE (SSP SITE)

The broader SSP site, including the STEM School site, is currently used for low intensity farming. The SSP site contains two rural residences that are currently vacant, outbuildings and a number of dams. A 60.96 metre wide electricity transmission corridor bisects the SSP site north to south. Images of the SSP Site are contained at **Figure 5** below.

Figure 5 – Photographs of the Site from Luddenham Road

Picture 2 – View South West (Site on Right)

Picture 3 – Paddock, Fencing and Animal Shelters

The site characteristics of SSP have been studied extensively to support the rezoning and subsequent early works DAs (planning history provided below in **Section 3**). The site characteristics are summarised in **Table 3** below.

Table 3 – SSP Site Characteristics

Characteristic	Description
Topography	The SSP site is undulating with many hills and low lying areas. The regional topographical data (NDE 1975) indicates that the site lies between 55 metres and 90 metres in Australian Height Datum (AHD). The STEM School Site gently falls to the north east, with the highest point of the site in the south east corner.
Hydrology	A number of dams exist within the SSP site and two water courses traverse through it, the largest of which is within the central portion. There are no dams affecting the STEM School.
Riparian Corridors	As part of the NSW Office of Water guidelines, water courses are classified under the "Strahler" system using current 1:25,000 topographic maps. Water courses within the site have been classified as 1st to 4th order water courses. A detailed stream classification and ground truthing study of the site by Worley Parsons in 2011, confirmed that all of the existing riparian corridors within the site have little ecological significance and as such the removal and/or reclassification of all riparian corridors was recommended. The central watercourse is the only flow path which was recommended to be reconstructed as a fully vegetated riparian corridor. The central watercourse is located approximately 400m west of the subject site. A secondary riparian zone is located to the east.
Flooding	Areas of SSP are flood effected. The STEM School sites is not affected by the 1% AEP Flood Extent.
Contamination	A Phase 2 Detailed Site Investigation was undertaken for the SSP site, which finds that there are no indications of gross or widespread contamination issues at SSP. The Phase 2 Detailed Site Investigation and approved Remediation Action Plan will be reviewed and analysed in detail within the EIS.
Geology	The SSP site is underlain by Triassic Bringelly Shale which consists of shale, carbonaceous claystone, laminate, fine to medium grained lithic sandstone, and rare coal and tuff. Geology adjacent to tributaries running through the site are characterised by Quaternary fine grained sand, slit and clay.
Ecology	The SSP has been heavily grazed and managed for intensive agriculture for an extended period of time. Fauna Assessment Report prepared for the approved subdivision of SSP confirms that SSP is one of the most depauperate sites in Western Sydney and minimal remaining ecological values are limited to the farm dams and small copses of paddock trees that occur across the property. The Flora and Fauna Assessment Report will be reviewed and analysed in detail for the subject SSD application.

2.4. SURROUNDING THE SITE

Surrounding land uses with proximity to the SSP site are detailed below in **Table 4**.

Table 4 – Surrounding Land Uses

Aspect	Description
North	The Warragamba Prospect Water Supply Pipeline is located to the north. The area contains bunded soil against the south boundary of the pipeline corridor and has various creeks and gullies running underneath the pipeline and onto the site. Further north is rural/grazing land. A very small air strip is located on a property north east of the site.
East	The Twin Creeks Country Club and Residential Estate is directly opposite on the eastern side of Luddenham Road. It contains 200 detached dwelling lots. A poultry farm is located east of the site opposite the Twin Creeks Country Club and south of the air strip. This land is part of the Western Sydney Priority Growth Area.
South	To the south is rural and/or agricultural land. This land also forms part of the Western Sydney Priority Growth Area. Further to the south is the location of the future Western Sydney Airport. The South West Priority Growth Area is approximately 5km to the south.
West	Land to the west of the site is rural. Further west is a pocket of residential development fronting onto Gates Road and adjacent The Northern Road.

2.5. ACCESS AND TRANSPORT

Existing Road Network

The road network surrounding SSP is currently comprised of a number of arterial, sub-arterial and local roads, including:

- Luddenham Road, which provides direct access to the site and frontage to Lots 201 and 202;
- Gates Road, which provides access and frontage to Lot 203;
- Mamre Road approximately 7km to the north east of the site functions as a sub-arterial road linking Elizabeth Drive to the south with the Western Motorway (M4) and the Great Western Highway (A44) to the north; and
- Elizabeth Drive, running east-west approximately 3.6 kilometres to the south of the site and linking The Northern Road (A9) to the west with the Westlink M7 Motorway and further up to the Hume Highway (A28) in Liverpool to the east.

Other strategic road links in the surrounding areas include:

- Westlink M7 motorway;
- Western Motorway (M4);
- The Northern Road; and
- Erskine Park Link Road- Lenore Lane.

Key intersections comprise Luddenham Road/Mamre Road intersection, which enable access to the site via the north and east and Luddenham Road/Elizabeth Drive intersection which enable access from the south.

SSP Access Road

Formal access to the SSP from Luddenham Road was approved as part of DA16/0176 (Road 1). A temporary intersection with Luddenham Road was also approved under this DA.

Other roads adjacent to the STEM School lot are to be constructed as part of DA16/0176 and DA17/0497.

Public Transport

SSP is within Metropolitan Bus Contract Region 1. Apart from Bus Route 779 between St Marys and the Erskine Park Industrial Area running along Mamre Road past the Luddenham Road Intersection, only a daily school bus service runs along Luddenham Road. This is reflective of the current low travel demands of the locality. The North South Rail Link is a future rail link commitment to by the Government from St Marys to Badgerys Creek. The rail link alignment passes through SSP.

3. PLANNING HISTORY

3.1. VISION FOR SYDNEY SCIENCE PARK

Sydney Science Park will foster a culture of innovation, creativity and entrepreneurship that will deliver direct and indirect benefits to the Sydney Metropolitan Area and New South Wales. When fully developed, Sydney Science Park will create more than 12,000 knowledge based jobs, cater for over 10,000 students and provide housing for approximately 35,000 people.

The vision for Sydney Science Park, a $5BN project, is to create an internationally recognised epicentre for research and development in the heart of Western Sydney. The vision is modelled on the successful science parks of the UK, Asia and the US and its development concepts reflect international best practice.

Sydney Science Park will have an extensive range of users who will create a vibrant and unique research and development business environment. These will include start-ups, Universities, leading International research firms, world-class laboratories and multinational corporations. It will include high quality lifestyle, employment and residential opportunities and will include onsite amenities such as parks, sporting ovals, a town centre, restaurants and civic spaces. Transport connectivity to the proposed WSA via the Sydney Science Park will generate stronger employment outcomes in the region and foster the sustainable development of Western Sydney.

3.2. SYDNEY SCIENCE PARK REZONING

Amendment 8 to the *Penrith Local Environmental Plan 2010* (PLEP 2010) was published on the NSW Legislation website on 28 October 2016. The amendment applies solely to SSP and made the following amendments to the PLEP 2010:

- Rezoned the site from RU2 Rural Landscape to B7 Business Park, B4 Mixed use and RE1 Public Recreation zones to provide science based businesses, high technology industries, educational establishments, and research and development and ancillary residential uses.
- Established a site-specific clause that sets out several requirements such as: lot sizes for dwelling houses, non-residential development that must proceed residential development, the maximum number of residential dwellings/lots for the precinct, gross floor area requirements for retail premises and the maximum gross floor area for warehouse uses.
- Established a maximum height of buildings for the land.
- Provided a new minimum lot size for subdivision on the land.
- Enabled a range of additional permitted uses on the land.

3.3. DEVELOPMENT APPLICATIONS

Approved development applications (DA) and DAs currently under assessment with council are detail in **Table 5** below.

Table 5 – Releveant DAs

DA	Description
DA16/0176 – subdivision of SPP	Consolidation and re-subdivision of Lot 201, Lot 202 and Lot 2013 in DP 1152191 (whole of SSP) to create five Torrens Title lots, design and construction of primary access roads, grading and earthworks, and temporary construction access from Luddenham Road. The DA was approved on 20 February 2018.
DA17/0497 – First Community Subdivision	Re-subdivision of Lot 3 (created as part of DA16/0176) into 9 Torrens Title lots, design and construction of various roads, grading and earthworks, and dewatering of dam/s. DA2 is currently under assessment.

DA	Description
DA17/0495 – Baiada Building	Building DA for Baiada Building. DA3 was approved on 1 March 2018. The Baiada Building will be located on the lot directly west of the of the STEM School Site. The Baiada building will be a seven-story office building designed to provide flexible high technology commercial space.
DA17/0100 – Remediation	Remediation in accordance with the Remedial Action Plan prepared by JBS&G. The DA was approved on 23 May 2017.
DA18/0241 – Water main	Construction of a potable water main. The DA is currently under assessment.
DA17/0784 – Dewatering of existing dams	De-Watering of Existing Dams, Associated Earthworks & Vegetation Removal. The DA is currently under assessment.

4. PROPOSED DEVELOPMENT

The STEM School site will be developed for a K-12 school in two stages. This SEARS Request relates to Stage 1 for a secondary school (Years 7-12) which will accommodate approximately 1,140 students. Stage 2 will cater for kindergarten to year 6, and will be subject to a separate application.

The proposal provides an opportunity to deliver a new educational model within a unique campus setting. It will include approximately 12,000sqm of floor space across three/four storey buildings. The School will present as three buildings connected by courtyards and garden spaces. Indicative floor plan and elevation massing diagram are provided at **Figure 6** below. The preliminary concept is outlined in full in the Concept Plans prepared by BVN at **Appendix B**.

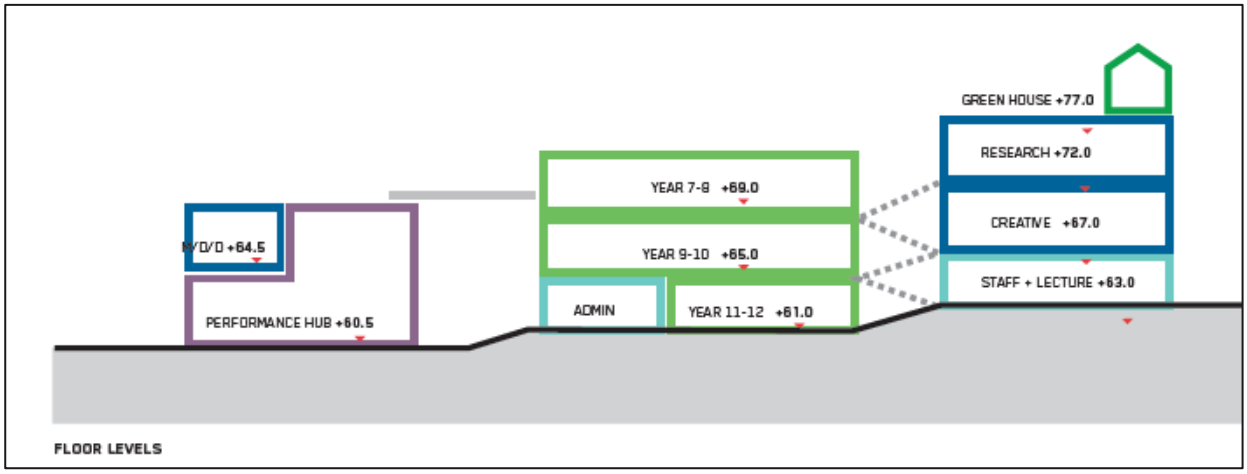
The planning and design of the school will focus on a series of purpose designed hubs:

- Inquiry Hub - flexible and shared teaching spaces;
- Community Hub – large gather spaces and lecture theatres;
- Performance Hub – multipurpose hall and amphitheatre;
- Research Hub – science and fitness; and
- Creative Hub – art and applied science.

This proposal will also include earth works for the entire STEM School Site as identified in **Figure 4**. The works under this SSDA will also include a temporary carpark and games courts as identified in **Figure 6** below. The earth works will facilitate both stages of the school development including the future K-6 stage. Consolidated carparking arrangements for the entire site will be formalised within the future Stage 2 application. This application does not seek a staged developed, with consent sought for the detailed design and developed of the 7-12 STEM School. The future K-6 School will be subject to a separate detailed application, which may also include early learning and/or special needs schooling.

Figure 6 – Indicative Concept

Picture 4 – Indicative Site Plan



Picture 5 – Indicative Massing Diagram

5. PLANNING FRAMEWORK

The relevant environmental planning instruments and local planning policies that apply to the proposed development are as follows:

- *State Environmental Planning Policy (State and Regional Development) 2011;*
- *State Environmental Planning Policy (Infrastructure) 2007;*
- *State Environmental Planning Policy No.55 – Remediation of Land;*
- *State Environmental Planning Policy (Western Sydney Employment Area) 2009*
- *Sydney Regional Environmental Plan No 20—Hawkesbury-Nepean River (No 2—1997);*
- *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017.*
- *Penrith Local Environmental Plan 2010; and*
- *Penrith Development Control Plan 2014;*

5.1. STATE ENVIRONMENTAL PLANNING POLICY (STATE AND REGIONAL DEVELOPMENT) 2011

Pursuant to Schedule 1 Clause 15 of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP), development for the purposes of a new school is declared state significant development.

5.2. STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007

State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) provides the legislative planning framework for infrastructure and the provision of services across NSW. Schedule 3 stipulates that development for the purposes of an 'educational establishment' with 50 of more students and with access to any road must be referred to the RTA. Accordingly, Roads and Maritime Services (RMS) will be consulted during the preparation of the EIS.

5.3. STATE ENVIRONMENTAL PLANNING POLICY NO.55 – REMEDIATION OF LAND

The objectives of *State Environmental Planning Policy 55 – Remediation of Land* (SEPP 55) include the promotion of remediation of contaminated land for the purpose of reducing the risk to human health or another aspect of the environment. SEPP 55 requires the consent authority to consider whether the subject land of any rezoning or development application is contaminated. A Phase 2 Detailed Site Investigation (DSI) has been undertaken for the SSP site, including the STEM School site. The DSI which finds that there are no indications of gross or widespread contamination issues at SSP.

The DSI and approved Remediation Action Plan (RAP) will be reviewed and analysed in detail for the subject SSD application. Remediation will occur in accordance with the approved RAP prepared by JBS&G.

5.4. STATE ENVIRONMENTAL PLANNING POLICY (WESTERN SYDNEY EMPLOYMENT AREA) 2009

State Environmental Planning Policy (Western Sydney Employment Area) 2009 (WSEA SEPP) aims to protect and enhance the land to which the SEPP applies for employment purposes. The site is situated within Precinct 11 – Broader Western Sydney Employment Area. A detailed assessment of the proposal against the WSEA SEPP will be undertaken within the EIS.

5.5. SYDNEY REGIONAL ENVIRONMENTAL PLAN NO 20—HAWKESBURY-NEPEAN RIVER (NO 2—1997)

Sydney Regional Environmental Plan No.20 – Hawkesbury – Nepean River (SREP 20) applies to the site. SREP 20 aims to *"protect the environment of the Hawkesbury-Nepean river system by ensuring the impacts of future land uses are considered in a regional context."* SREP 20 identifies that the site is located in the South Creek catchment. The site does not fall within any other areas of significance (e.g. wetlands, cultural heritage sites, or national parks and nature reserves).

A detailed assessment of the proposal against the relevant SREP 20 planning consideration will be undertaken within the EIS.

5.6. STATE ENVIRONMENTAL PLANNING POLICY (EDUCATIONAL ESTABLISHMENTS AND CHILD CARE FACILITIES) 2017

The NSW Department of Planning and Environment (DPE) released *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* (Education SEPP) in September 2017. The Education SEPP aims (amongst other things) to streamline the planning system for education and child care facilities.

Schedule 4 of the Education SEPP outlines the design quality principles that are to be considered in the design of a facility. The proposal will respond to the design quality principles as follows:

- **Principle 1 – context, built form and landscape:** The SSD DA will include both conceptual building envelopes and new built form elements. The new built form elements will consider the relationship between existing buildings on the site and the surrounding context. A Landscaping Concept Plan will accompany the EIS.
- **Principle 2 – sustainable, efficient and durable:** The proposal will adopt a range of ESD initiatives, and an ESD Report will accompany the EIS. The proposal will also provide positive social and economic benefits for the local community by ensuring that teaching facilities are meeting contemporary educational needs, and new residential communities are adequately serviced by infrastructure.
- **Principle 3 – accessible and inclusive:** The proposal is capable of complying with relevant provisions for accessibility, and an Accessibility Report will accompany the EIS.
- **Principle 4 – health and safely:** Crime Prevention Through Environmental Design (CPTED) measures will be incorporated into the design, operation and management of the site to ensure a high level of safety and security for students and staff. A CPTED Report will accompany the EIS.
- **Principle 5 – amenity:** The proposal will contain high quality facilities, spaces and equipment for use by students and staff. These will provide students with an enhanced learning environment.
- **Principle 6 – whole of life, flexible and adaptive:** The proposal involves construction of new classrooms and associated facilities, which will be designed to ensure flexibility and longevity.
- **Principle 7 – aesthetics:** When constructed the proposal will have high quality external finishes. The proposal is of an appropriate scale and form for the future SSP.

A further detailed assessment of the proposal against the Education SEPP will be undertaken within EIS.

5.7. PENRITH LOCAL ENVIRONMENTAL PLAN 2010

The *Penrith Local Environmental Plan 2010* (PLEP) is the primary environmental planning instrument that applies to the site. The relevant provisions are extracted and presented in Table 6 below.

Table 6 – Relevant PLEP 2010 Provisions

Provision	Comment
Zoning and permissibility	The STEM school site is zoned B7 Business Park under the PLEP 2010. "*Educational establishment"* is permitted with consent on the site.
Clause 4.3 Building Height	The site is subject to a maximum building height of 24m. As illustrated in the Concept Plans, the proposal will comply with the maximum building height.
Clause 6.1 Arrangement for Designated State Public Infrastructure	Under clause 6.1 of the PLEP 2010, satisfactory arrangements to be made for the provision of designated State public infrastructure are to be made for land in an urban release area to satisfy needs that arise from development on the land. A State VPA between Celestino and the Minister for Planning was executed on 7 December 2016. This provides for a monetary contribution towards designated public infrastructure. Accordingly, satisfactory arrangements will be in place prior for the contribution to designated State public infrastructure.
Clause 6.2 Urban Release Areas	SSP is classified as an Urban Release Area. Under Clause 6.2 of the PLEP 2010, Development consent must not be granted for development on land in an urban release area unless the consent authority is satisfied that any public utility infrastructure that is essential for the proposed development is available or that adequate arrangements have been made to make that infrastructure available when it is required. The timing and delivery of essential infrastructure will be addressed in the EIS.
Clause 7.24 Sydney Science Park	Clause 7.24 applies to land identified as "Sydney Science Park" on the map. The consent authority must be satisfied that the development is consistent with the objectives of this clause prior to granting development consent. The objectives are: *(a) to provide for a specialised centre on land at Sydney Science Park that includes development for the purposes of commercial premises, educational establishments, high technology industry and residential accommodation,* *(b) to facilitate and encourage the efficient use of land at Sydney Science Park for the purpose of a range of residential accommodation (including dwelling houses on small lots),* *(c) to retain the existing hierarchy of Penrith's local commercial centres by limiting the total gross floor area used for the purpose of retail premises on land at Sydney Science Park,* *(d) to limit the number of dwellings and lots used for the purpose of residential accommodation on land at Sydney Science Park to 3,400.*

Provision	Comment
	The proposal achieves the objectives because it delivers an educational establishment within SSP. The EIS will detail the proposal's consistency with the clause 7.24 objective.

5.8. PENRITH DEVELOPMENT CONTROL PLAN 2014

The Penrith Development Control Plan 2014 (PDCP 2014) provides detailed controls for specific development types and locations. The EIS will assess the proposal against all relevant controls within the DCP, including the First Community Precinct Plan, which includes general site planning considerations and built form controls for precinct.

5.9. STRATEGIC PLANNING FRAMEWORK

The relevant strategic planning policies which apply to the proposed development include:

- NSW State Priorities;
- A Metropolis of Three Cities;
- Western City District Plan;
- NSW Long Term Transport Master Plan 2012;
- Sydney's Cycling Future 2013;
- Sydney's Walking Future 2013; and
- Healthy Urban Development Checklist, NSW Health.

The EIS will assess the proposal against these relevant strategic planning policies.

6. LIKELY IMPACTS

The following key planning impacts resulting from the proposal will be addressed within the EIS.

6.1. ARCHITECTURAL QUALITY AND URBAN DESIGN

An Urban Design Report will be prepared as part of the EIS. The assessment of the architectural quality and built form will focus on the height, scale, setbacks and building materials of any potential new development and the introduction new open space and play areas.

The report will explain the design principles of the proposed development and how it addresses the surrounding locality. An external finishes and colours schedule will also be provided as part of the Architectural Plans.

6.2. ENVIRONMENTAL AMENITY

The impact of the proposal on surrounding development is anticipated to be minimal. The following impacts will be assessed:

- Solar access and overshadowing impacts on adjacent park;
- Acoustic impacts on school from surrounding uses and future Western Sydney Airport; and
- Visual impact of school.

Shadow diagrams, perspectives and an Acoustic Assessment will be provided with the EIS. The proposed scale and siting of the development will minimise impacts on neighbouring properties and open space areas.

6.3. ECOLOGICAL SUSTAINABLE DEVELOPMENT (ESD)

The EIS will detail how ESD principles will be incorporated into the design and ongoing operation phases of the development. The EIS will also detail how measures will be implemented to minimise consumption of resources, water and energy.

6.4. FLORA AND FAUNA

A Biodiversity Impact Assessment has been undertaken for the site and assessed under the approved subdivision DA (DA16/0176). The EIS will analyse and detail the findings of this report.

6.5. CONTAMINATION AND GEOTECHNICAL

As previously discussed, the Phase 2 Detailed Site Investigation undertaken for the SSP site finds that there are no indications of gross or widespread contamination issues at SSP. The Phase 2 Detailed Site Investigation and approved Remediation Action Plan will be reviewed and analysed in detail within the EIS.

6.6. TRANSPORT AND ACCESSIBILITY

A Transport and Accessibility Impact Assessment report will be provided as part of the EIS. The report will analyse parking requirements, existing and expected traffic impacts and the design of proposed vehicular access points.

The report will also outline a Sustainable Travel Plan for the proposed development. This will aim to encourage staff, students and parents to access the site by walking, cycling or public transport where possible.

6.7. NOISE AND VIBRATION

A Construction and Operational Noise Report will be provided as part of the EIS. The report will provide a detailed assessment of potential noise and vibration impacts caused by the construction and operation of the School, and recommendations to mitigate these impacts.

6.8. STORMWATER MANAGEMENT AND FLOODING

A Stormwater Management Plan and Erosion and Sediment Control Plan will accompany the EIS detailing a comprehensive management process.

A Flood Assessment has been undertaken for the site and assessed under the approved subdivision DA (DA16/0176). The EIS will analyse and detail the findings of this report.

6.9. BUILDING CODE OF AUSTRALIA AND ACCESS

The proposed school will be designed in accordance with the requirements of the Building Code of Australia and will provide legible, safe and inclusive access for all. This will be addressed within a Building Code of Australia and Accessibility Report to be provided as part of the EIS.

6.10. WASTE

A Construction and Demolition Waste Management Plan will be prepared and accompany the EIS. The Plan will detail all likely waste streams to be generated during demolition and construction, and outline proposed measures to dispose of the waste offsite.

An Operational Waste Management Plan will also be submitted as part of the EIS and detail proposed waste servicing arrangements, loading zones and ongoing waste management practices to be employed at the site. All demolition, construction and operational waste will be reused or recycled where possible.

6.11. CONSTRUCTION MANAGEMENT

A Preliminary Construction and Environmental Management Plan will be prepared and provided as part of the EIS. The plan will detail:

- Timing of construction works to be undertaken;
- Construction hours of operation and programme;
- Materials handling strategy;
- Construction traffic, noise, soil erosion, dust control and stormwater management;
- Environmental management strategies during construction; and
- Waste management.

A Construction Traffic Management Plan will also be prepared to outline proposed traffic control plans and truck routes.

6.12. STORMWATER MANAGEMENT

A Stormwater Management Plan and Erosion and Sediment Control Plan will accompany the EIS detailing a comprehensive management process.

6.13. CIVIL ENGINEERING DETAIL

Civil engineering matters will be addressed in relevant Civil Engineering Plans.

6.14. SOCIAL AND ECONOMIC IMPACTS

The social and economic impacts resulting from the proposal will be detailed in the EIS. Anticipated social and economic impacts include:

- Significant new direct and indirect jobs will be created during both construction and operational phases;

- The school will alleviate pressure on existing school facilities in western sydney and cater for future population growth;
- The school will have sufficient areas for indoor and outdoor recreation to improve the health and wellbeing of future students; and
- The design will create a series of teaching spaces which are flexible and promote increased social interaction among students and teachers.

6.15. SAFETY AND SECURITY

The EIS will outline how specific Crime Prevention Through Environmental Design (CPTED) principles (surveillance, access control, territorial re-enforcement and space/activity management) have been integrated into the design of the School to deter crime, manage space and create a safe environment.

6.16. CONSULTATION

Preliminary community consultation has been undertaken, including information booths and discussions with Council. Further consultation will be undertaken in preparing the EIS. It is anticipated that the following parties will have an interest in the proposal and will be consulted with:

- Department of Planning and Environment (DPE);
- Celestino (owner/developer of SSP);
- Penrith Council;
- Roads and Maritime Services (RMS);
- Transport for NSW (TfNSW);
- Utilities / service providers; and
- Community stakeholders.

7. CONCLUSION

This report provides support to the Request for SEARs for the STEM School proposal at Sydney Science Park. It has been prepared by Urbis Pty Ltd on behalf of Catholic Education Office Diocese of Parramatta (the applicant).

The STEM School site will be developed for a K-12 school in two stages. This SEARS Request relates to a secondary school (years 7-12) on the STEM School Site.

The STEM School will support the investment and growth of SSP and the First Community by providing contemporary and flexible learning spaces that facilitate innovation and learning. The school will support the growing Western Sydney region and is entirely consistent with the future character of SSP and the need to provide essential infrastructure for new communities.

All relevant impacts will be assessed in the EIS, as guided by the SEARs.

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