

Attachment C2

Operational Management Plan

242-258 Young Street Planning Proposal

- **Project Name:** 242-258 Young Street, Waterloo
- **Project Description:** Amendments to the *Sydney Local Environmental Plan 2012* and the Sydney Development Control Plan 2012

Operational management plan for proposed School redevelopment at 242-258 Young Street, Waterloo

Introduction

This operational management plan is submitted to the Council of the City of Sydney (Council) to support a request for a Planning Proposal relating to land at 242-258 Young Street, Waterloo. The Planning Justification Report prepared by Ethos Urban outlines the proposed amendments to the Sydney Local Environmental Plan (Sydney LEP) 2012.

The proposed amendments are seeking principally to facilitate the delivery of a new independent K-12 vertical school, catering for approximately 800 students. The amendments sought to the Sydney LEP 2012 will encourage and facilitate the redevelopment of the site by allowing for:

- an increased maximum Floor Space Ratio (FSR)
- an increased maximum Building Height.

Supporting the amendments to the Sydney LEP 2012 is an amendment to the Sydney DCP 2012 which includes site-specific controls. For assessment purposes, the Planning Proposal is supported by a concept scheme prepared by Plus Architecture that facilitates the following:

- A new 6 storey vertical school consisting of:
 - 46 GLS, 13 specialist/classrooms
 - A multi-purpose hall/auditorium
 - A library
 - A canteen
 - Administration, lobby and circulation spaces
 - An active green roof
 - A basement including 60 car parking spaces and end-of-trip facilities
- The incorporation of the existing film school within the new vertical school building
- A total of approximately 13,543m² of gross floor area which equates to a floor space ratio of 2.94:1. The gross floor area comprises approximately:
 - 10,608m² education floor area
 - 2,935m² commercial (film school) floor area
- Outdoor spaces totalling approximately 4,978m².

Site location and context

The site is situated on the traditional land of the Gadigal people of the Eora nation, located at 242-258 Young Street, Waterloo within the City of Sydney Local Government Area (LGA). The site is prominently positioned at the junction of Hunter Street, Young Street and Powell Street. It is located 4km south of the Sydney CBD within the Green Square Urban Renewal Area.

The site comprises three lots which are legally described as Lot 1 in DP84655 and Lots A and B in DP 161650. The site's area is 4,611m² and is triangular in shape and is bounded by Hunter Street to the west, Young Street to the east and Powell Street to the south. The site has street frontage dimensions of 118m along Hunter Street, 137m along Young Street and 4.3m along Powell Street. The topography of the site generally falls in an east to west direction.

The site and is currently occupied by 2 storey office building and film school. The southern tip of the site is a grass lawn area.

An aerial photo of the site is shown at Figure 1

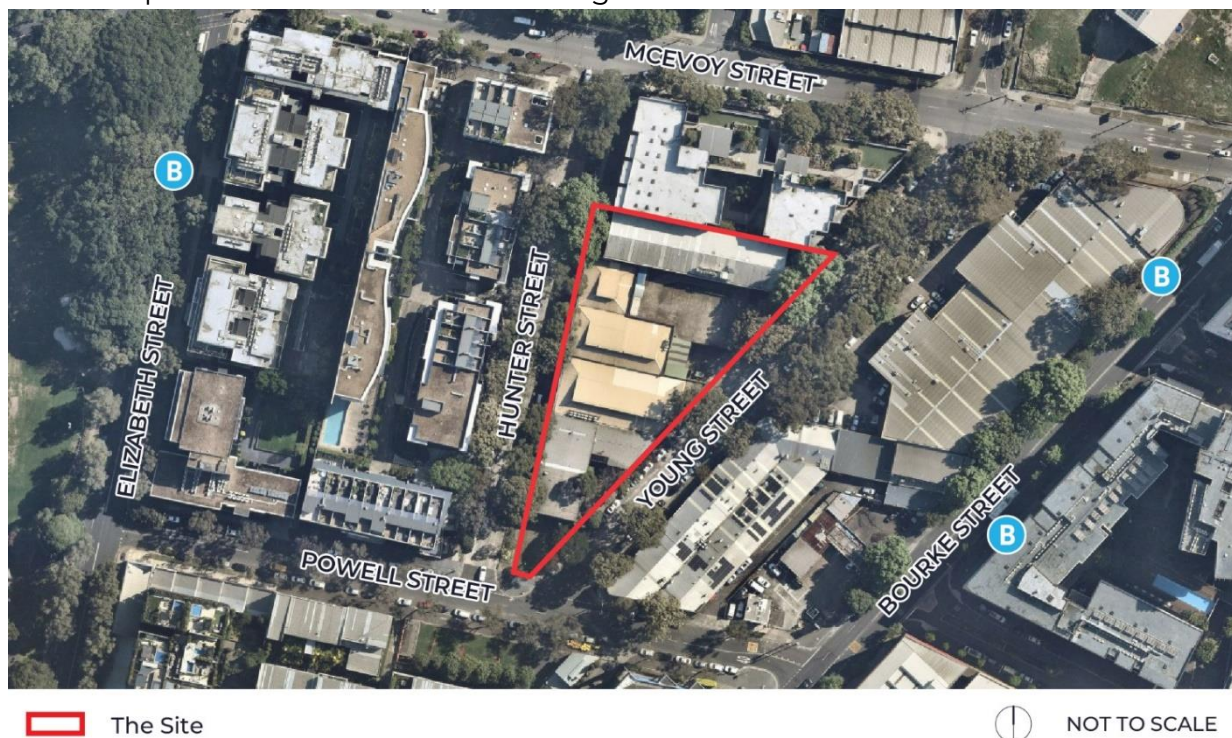


Figure 1 Aerial Map

Source: Nearmap + Ethos Urban

OPERATIONAL MANAGEMENT PLAN

Table of Contents for Operational Management Plan

Background

- 1 Management of open space areas within the school
- 2 Measures to compensate for the shortage of on-site open space
- 3 Logistics of safely transporting students to and from the school
- 4 Clarification of usage of the undercroft area at the ground level
- 5 Operational transport management including details of pick up and drop off
- 6 Preliminary details of evacuation plan
- 7 Flood emergency response plan

Background

This paper addresses the operational management plan section of the Planning Proposal Lodgement Checklist provided by the City of Sydney.

Operational management plan

To ensure a comprehensive evaluation of the proposed development, an operational management plan for the new school is to be prepared. It is to include, but is not limited to:

- Management of open space areas within the school including monitoring mechanisms.
- Measures to compensate for the shortage of on-site open space including details of off-site playing fields and park facilities that are likely to be utilised.
- Logistics of safely transporting students to and from the off-site open space locations.
- Clarification of usage of the undercroft area at the ground level and how it would be separated from the movements during school start and finish times.
- Operational transport management including details of pick up and drop off management measures.
- Preliminary details of evacuation in case of an emergency considering the pedestrian flows around the site.
- A flood emergency response plan detailing shelter-in-place.

School

Our proposed school is guided by three core values: collaboration, innovation and compassion. Our mission is to provide a caring environment where we nurture every child's academic, physical, emotional, social, and spiritual development. We complement our strong well-being programs with academic rigour to equip all students with the necessary skills, learning dispositions, and intellectual character traits to navigate their school years confidently, the workforce, and life in general.

The school is capable of complying with the Education and Care Services National Law Act 2010, Education and Care Services National Regulations and the National Quality Framework standards and that assessment of compliance will be undertaken at the SSDA stage.

ENROLMENTS	Primary 280 and Secondary 520 = 800 Students
STAFF	105
TOTAL STAFF AND STUDENTS	905
OPERATIONAL HOURS	7.30 am to 5.30 pm.



Sketch of School from Plus Architecture

1 Management of open space areas within the school, including monitoring mechanisms.

The management and monitoring of the school's school infrastructure can be provided by active and passive supervision within the campus of enclosed and open spaces. The floor plans show 4976 sq meters of open space, which is 6.2 sq meters of Outdoor/Open Space per student.

The proposed school aims to introduce innovative outdoor and open space designs and efficient management strategies.

Optimal management is achieved by delineating the infrastructure and students into Primary (Years K to 6), Middle (Years 7 to 10), and Senior (Years 11 to 12).

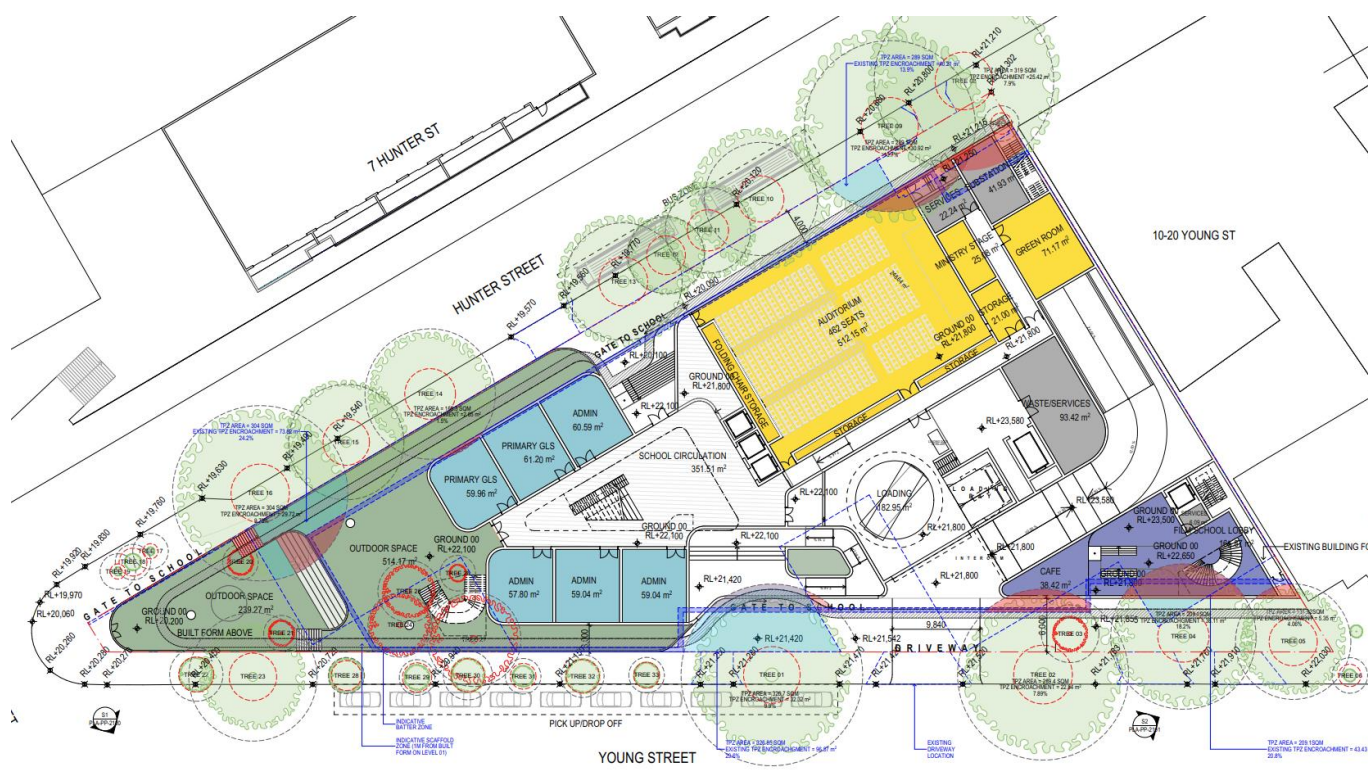
For this school, passive and active play spaces are designated for Primary, Middle, and Senior students to meet their relaxation, social, and movement needs. This facilitates staff supervision of these areas during the school day.

Adjacent student amenities and passive open space are located to be within the line of sight of administration offices and staff areas for passive supervision.

Surveillance throughout the school will be provided by a swipe card and CCTV camera monitoring system, which will control access for students, staff, contractors, and visitors.

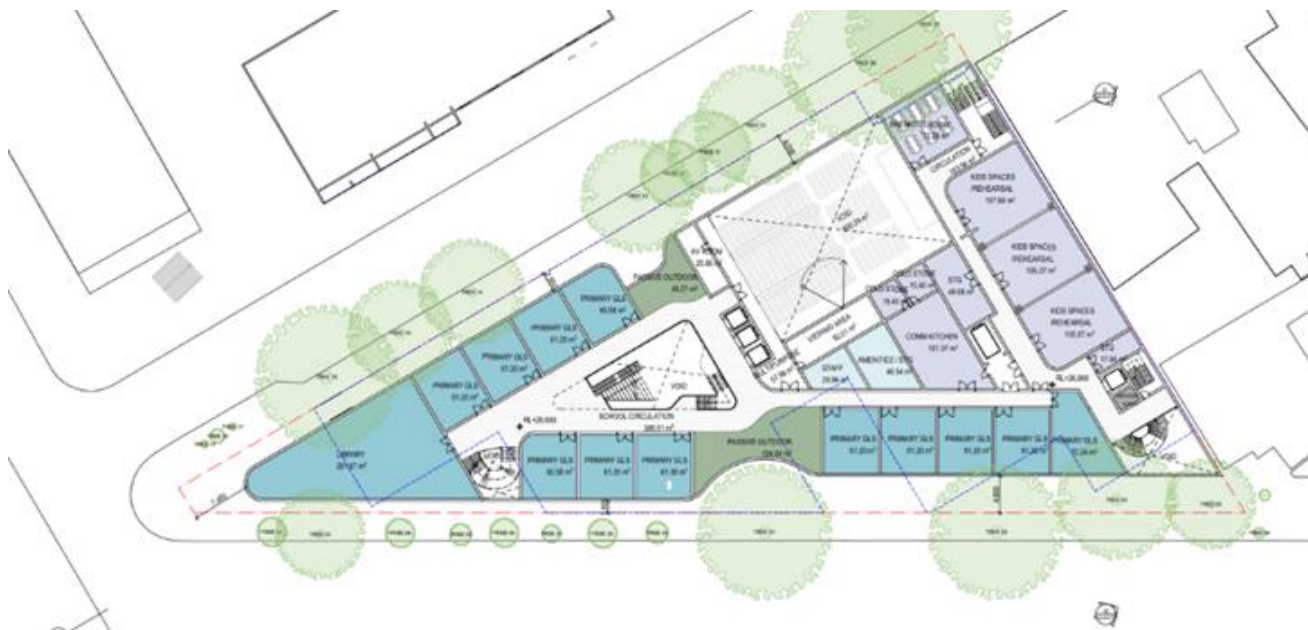
Site Map

Ground floor has 754 sqm of Open Space for all School to be used as a student-holding area and gathering space **Figure 2.**



Floor plan from Plus Architecture

First Floor has 154 sqm of Passive Open Space for Primary School use **Figure 3.**



Floor plan from Plus Architecture

Second Floor has 154 sqm of Passive Open Space for Middle School use **Figure 4.**



Floor plan from Plus Architecture

Third Floor has 154 sqm of Passive Open Space for Senior School use **Figure 5.**



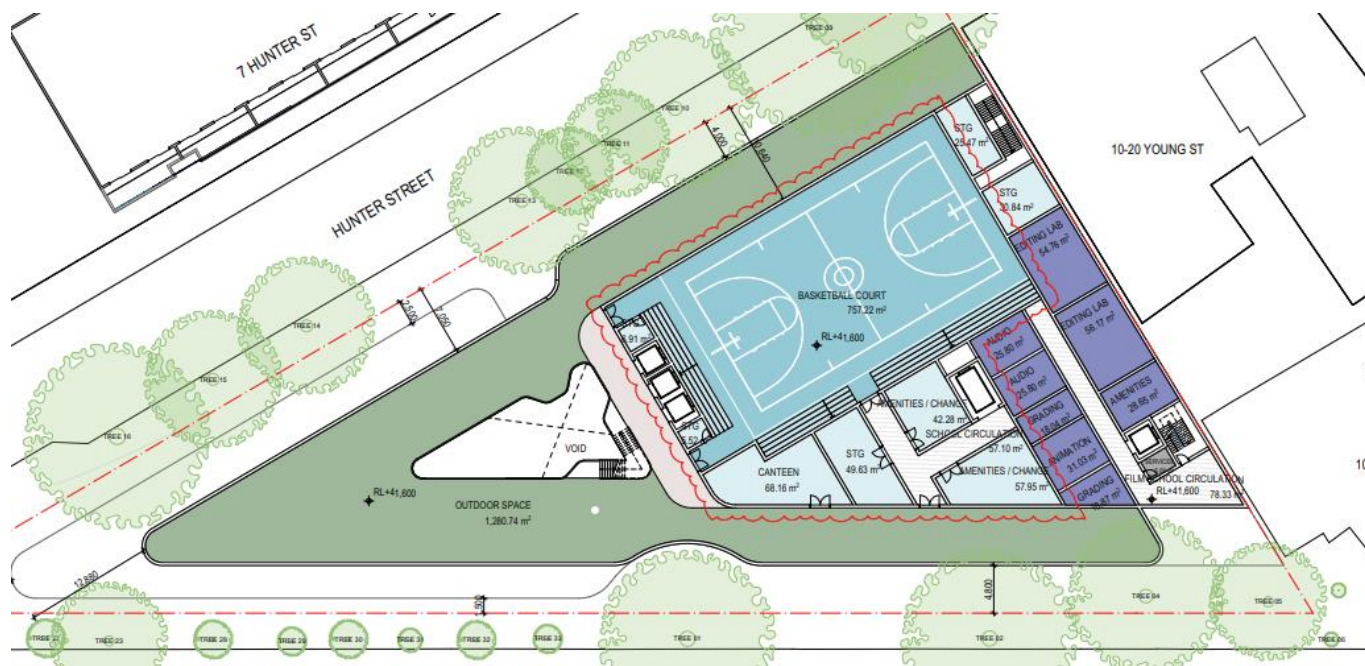
Floor plan from Plus Architecture

Fourth Floor has 1259 sqm of Active Open Space for Primary School use **Figure 6.**



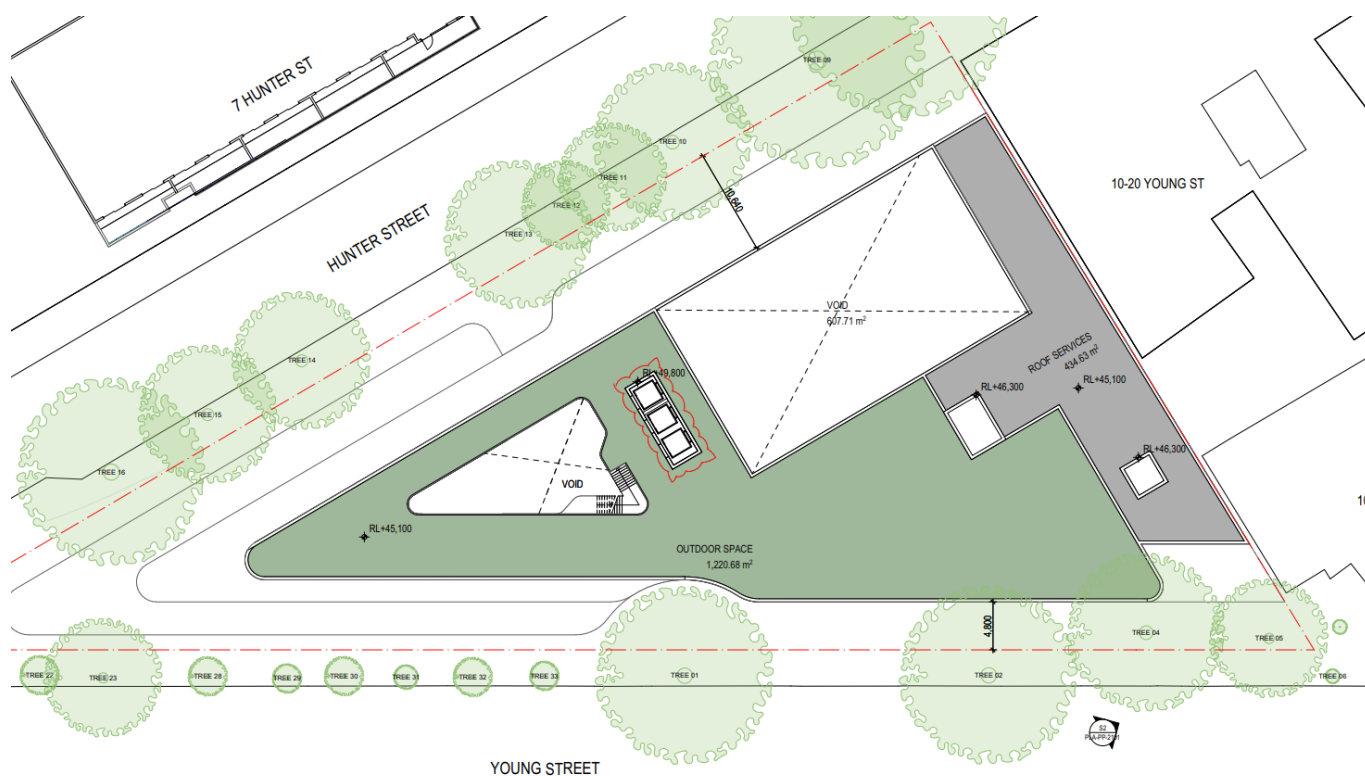
Floor plan from Plus Architecture

Fifth Floor has 1281 sqm of Active Open Space for middle school. The Basketball Court is a timetable space for Primary, Middle and Senior School use **Figure 7.**



Floor plan from Plus Architecture

Sixth floor has 1221 sqm of Active Open Space for secondary School use **Figure 8.**



Floor plan from Plus Architecture

The following table sets out the school infrastructure by type of space and supervision

Table 1.

Space	General Learning Areas	Specialties Learning Areas	Internal Travel Space	Passage Lifts	Student Amenities	Staff & Admin Areas
Basement 01				Passive supervision, CCTV and swipe card		
Ground Floor 00	Primary Timetable space with swipe card		Primary Passive supervision, CCTV and swipe card	Passive supervision, CCTV and swipe card	Passive supervision, CCTV and swipe card	Passive supervision with swipe card
Level 01	Primary Timetable space with swipe card		Primary Passive supervision, CCTV and swipe card	Passive supervision, CCTV and swipe card	Passive supervision, CCTV and swipe card	Passive supervision with swipe card
Level 02	Middle Timetable space with swipe card	Middle Timetable space with swipe card	Middle Passive supervision, CCTV and swipe card	Passive supervision, CCTV and swipe card	Passive supervision, CCTV and swipe card	Passive supervision with swipe card
Level 03	Middle/Senior Timetable space with swipe card	Middle/Senior Timetable space with swipe card	Middle/Senior Passive supervision, CCTV and swipe card	Passive supervision, CCTV and swipe card	Passive supervision, CCTV and swipe card	Passive supervision with swipe card
Level 04	Senior Timetable space with swipe card	Senior Timetable space with swipe card	Middle / Senior Passive supervision, CCTV and swipe card	Passive supervision, CCTV and swipe card	Passive supervision, CCTV and swipe card	Passive supervision with swipe card
Level 05			Middle / Senior Passive supervision, CCTV and swipe card	Passive supervision, CCTV and swipe card		
Level 06			Senior Passive supervision, CCTV and swipe card	Passive supervision, CCTV and swipe card		
Notes	Primary School years k to 6					
	Middle School years 7 to 10					
	Senior School years 11 to 12					
1	Outdoor space/ open space will have designated usage times for Junior, Middle and Senior Schools.					
2	CCTV monitoring in all student areas with swipe card access control on all doors					
3	Outdoor space / open spaces will always be actively supervision by teaching staff					
4	Passive outdoor space will always be actively supervision by teaching staff					
5	Timetable space will always be actively supervision by teaching staff					

The following table sets out the school infrastructure by type of space and supervision.

Table 2

Space	Multi-Purpose Hall	Basketball Court	Outdoor Space/ Open Space	Passive Outdoor Space/ Open Space	External Travel	Carpark and store rooms
Basement 01					CCTV and swipe card	CCTV and swipe card
Ground Floor 00	Timetable space, CCTV and swipe card		Active supervision, CCTV and swipe card		Passive supervision, CCTV and swipe card	
Level 01				Primary Passive will have active supervision and CCTV		
Level 02				Middle Passive will have active supervision and CCTV		
Level 03				Middle/Senior Passive will have active supervision and CCTV		
Level 04			Junior Active supervision, CCTV and swipe card		CCTV and swipe card	
Level 05		Timetable Space Active supervision, CCTV and swipe card	Middle Active supervision, CCTV and swipe card		CCTV and swipe card	
Level 06			Senior Active supervision, CCTV and swipe card		CCTV and swipe card	
Notes	Primary School years K to 6					
	Middle School years 7 to 10					
	Senior School years 11 to 12					
1	Outdoor space/ open space will have designated usage times for Junior, Middle and Senior Schools.					
2	CCTV monitoring in all student areas with swipe card access control on all doors					
3	Outdoor space / open spaces will always be actively supervision by teaching staff					
4	Passive outdoor space will always be actively supervision by teaching staff					
5	Timetable space will always be actively supervision by teaching staff					

Education Facilities Standards and Guidelines (EFSG)

It is not possible for a vertical school located in a dense urban area to meet the minimum requirement of 10 square metres of open space per student. However, under the NSW School Infrastructure Education Facilities Standards and Guidelines (EFSG), open space may be delivered innovatively in such schools. The proposed school will innovate in relation to design and multi-purpose management of student open spaces.

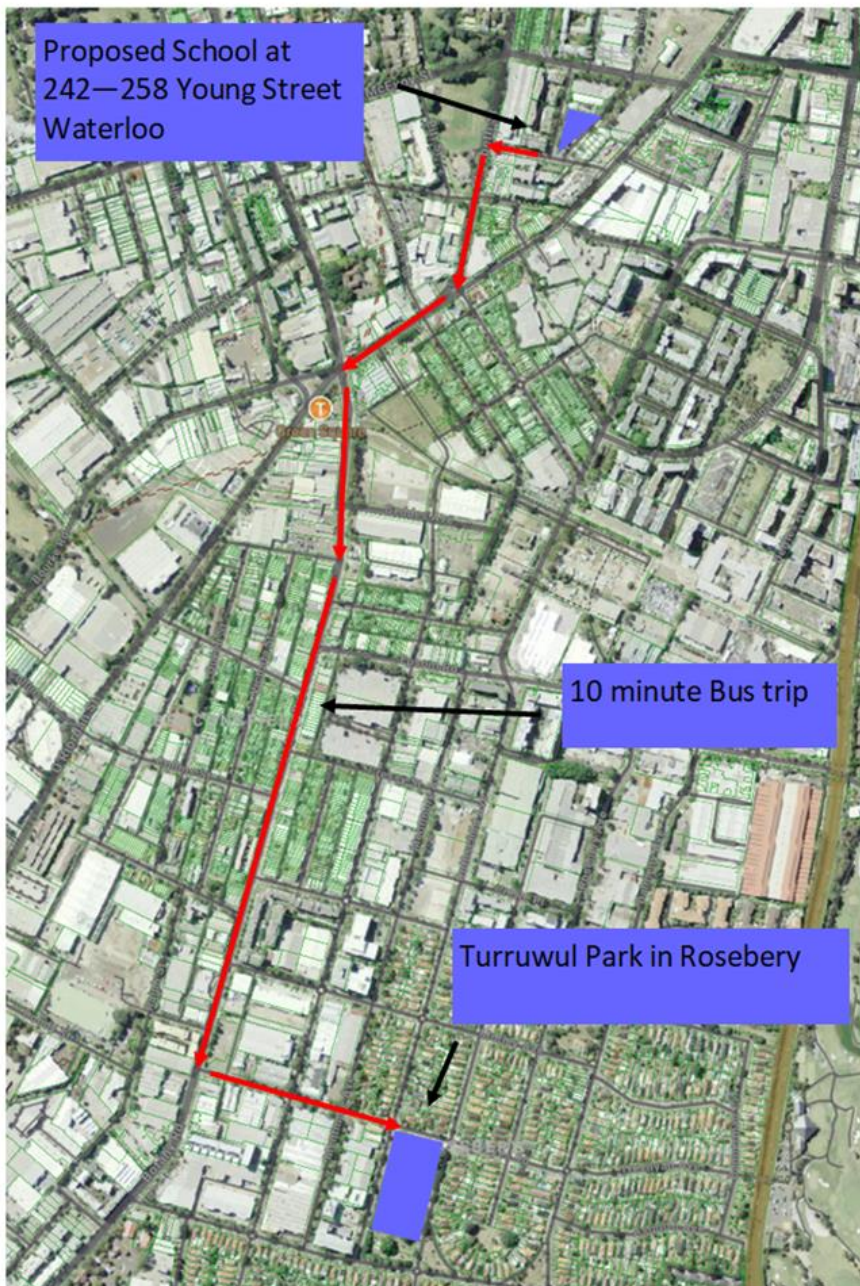
2 Measures to compensate for the shortage of on-site open space, including details of off-site playing fields and park facilities that are likely to be utilised.

The proposal is to use Turruwul Park at 115 Rothschild Ave, Rosebery for a 3.2 kilometre 10-minute bus trip for the school's playing fields.

The SDG has been in talks with the City of Sydney regarding the use of Turruwul Park's playing fields during school hours and terms. The proposed plan is to transport students to and from the playing fields by bus. The students will be divided into three schools: Primary (Years K-6), Middle (Years 7-10), and Senior (Years 11-12), based on the availability of the fields.

Area Map

Turruwul Park Roseberry **Figure 9.**



Source: Nearmap

Site Map

Turruwul Park Roseberry **Figure 10.**



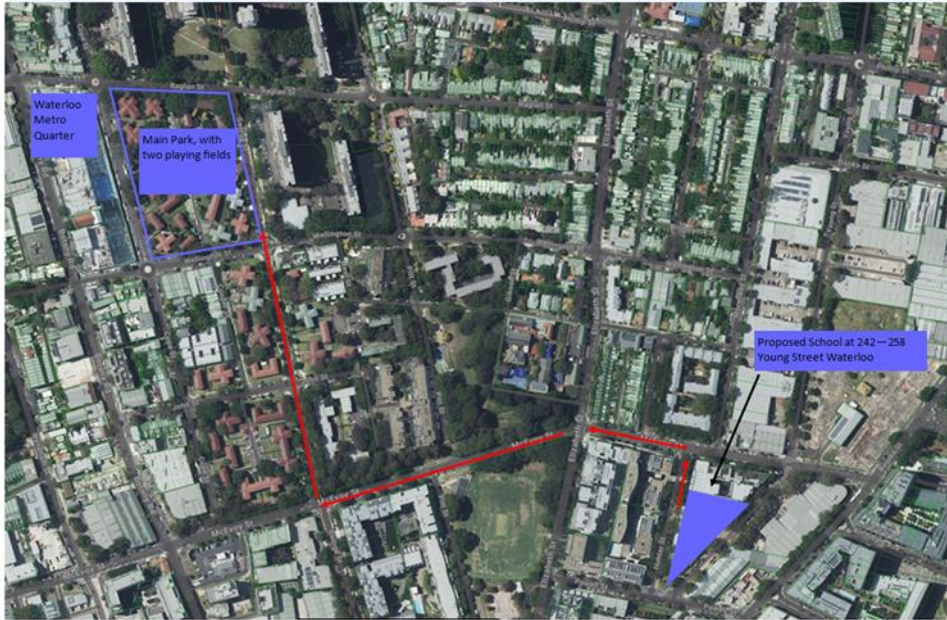
Source: Nearmap

Alternative

As an alternative, two hectares of open space will be developed into two playing fields as part of the Waterloo metro station in the proposed Main Park, which is a 10-minute walk from the school.

Area Map

Main Park at Waterloo Metro Station **Figure 11.**



Source: Nearmap

Site Map

Main Park at Waterloo Metro Station **Figure 12.**



Source: Department of Planning and Environment

3 Logistics of safely transporting students to and from the off-site open space locations

Students' movements to and from the school will be arranged as excursions, and the majority will be by bus. Walking and public transport will be used for excursions by different year groups.

Students will be divided into three schools: Primary (Years K-6), Middle (Years 7-10), and Senior (Years 11-12), organised by year groups. *Following Kid Safe Australia's excursion guidelines and the NSW Government Road Safety Education Program, the school will move students to off-site locations.*

Excursions

The school is required to always adhere to its Excursions Policy which will developed to follow the NSW Government Road Safety Education Program. The school recognises It is crucial that students are not transported in staff members' personal vehicles. It will prohibit using staff personal vehicles to transport students during excursions.

When transporting students using public transportation, staff will be responsible for ensuring their safety and well-being throughout the journey. Staff supervising excursions will have a list of student names and parent/carer contact details for all students travelling. Staff will have hard copies of this document during excursions. Students always remain under staff supervision.

Walking

Walking movements outside the school campus will always adhere to the school's Excursions Policy.

The school will follow NSW Government Road Safety Education Program guidelines for walking primary students to and from school. This will:

- Ensure that the safest route is taken.
- Keep students together as a group and walk in line on footpaths.
- Ensure staff remain vigilant so that no student runs ahead or lags too far behind the group.
- Ensure students cross roads at crossings or lights where available and obey road rules.
- Ensure students undertake extreme care crossing all roads.
- Require that If the students are under 10 years of age they hold hands.
- Require a "head count" to be conducted on a regular basis.
- Require that students are assisted in getting on and off the mode of transport.
- Require that the ground floor has an assembly space with a capacity for 120 students in one area.
- Require that a risk assessment is done for all travel plans.

Area Map

The two maps below show the pedestrian Access to the proposed school **Figure 13.**



Source JMT Consulting

Bus

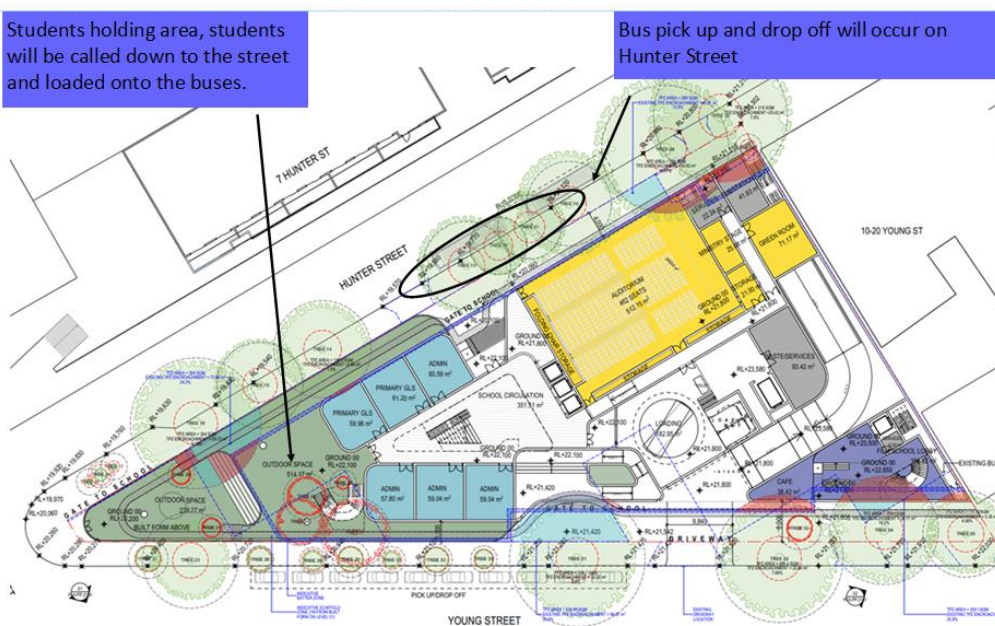
Buses will be loaded and unloaded on Hunter Street following the school's excursions policy.

According to the Passenger Transport Act of 1990, every bus that provides transportation for students must comply with its regulations.

All buses must comply with child restraint laws and ensure passengers under 7 are properly restrained in an approved seat.

Site map

This site map shows the location of the bus drop-off and pick-up points **Figure 14.**



Floor plan from Plus Architecture

Train and metro

Train and metro transport will always adhere to the school's Excursions Policy.

The nearest train station is 800 meters or a 10-minute walk to Green Square Station at O’Riordan Street and Botany Road.

The nearest Metro station is 800 meters or a 10-minute walk to Waterloo Station at Cope Street and Botany Road.

Area Map

This map shows the locations of the Train and Proposed Metro Stations. **Figure 15.**



Source JMT Consulting

4 Clarification of usage of the undercroft area at the ground level and how it would be separated from the movements during school start and finish times.

This area will serve multiple purposes throughout the school day. Its primary function will be as a passive outdoor/open space, while during drop-off and pick-up times the space will also serve as a student-holding area. At other times, it will become a common gathering space for staff and students.

Primary and secondary schools will have staggered start and end times to ease drop-off and pickup volume.

Drop off

The primary school drop-off session will start at 8.30 am

The secondary school drop-off session will start at 8.00 am

Pickup

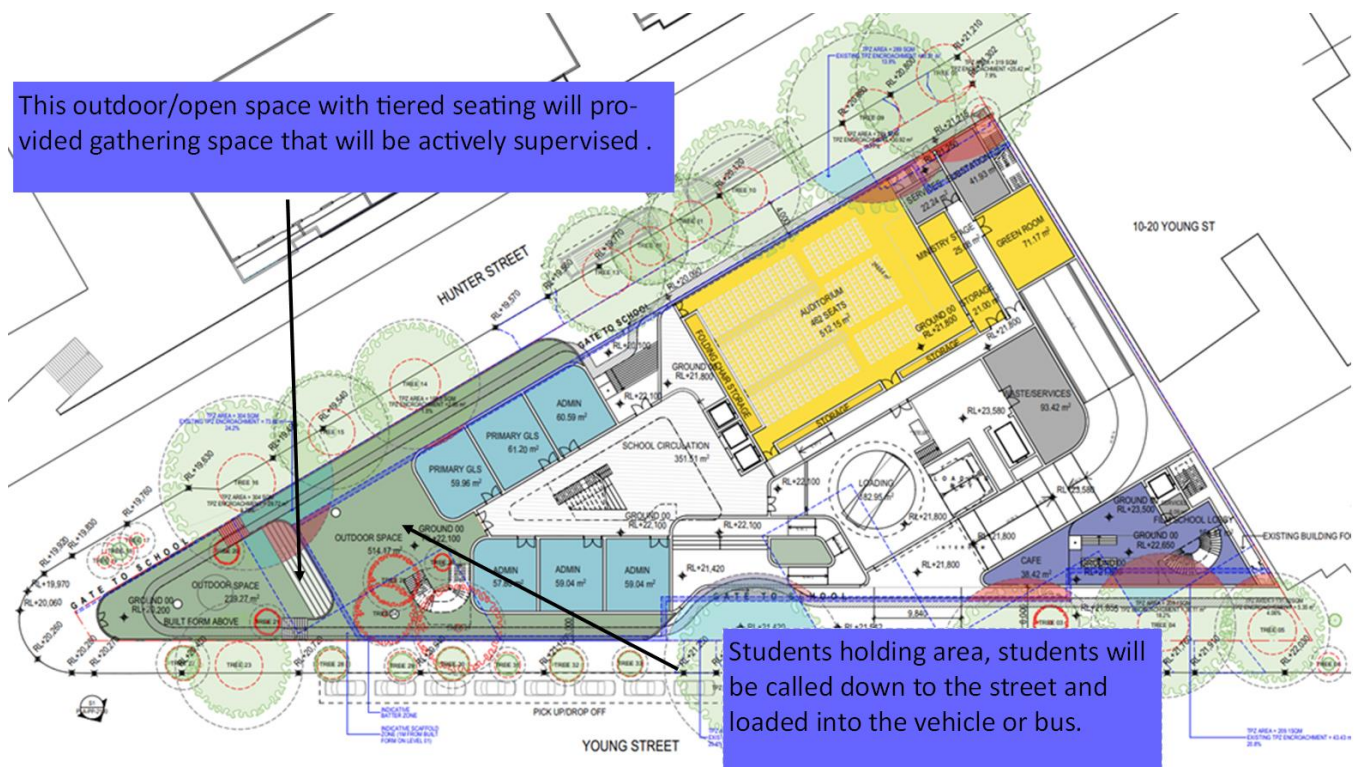
Primary Students will be picked up at 3:00 pm

Secondary Students will be picked up at 3.30 pm

As a gathering space, it must be actively supervised and monitored.

Site plan

Open space on the ground floor **Figure 16.**

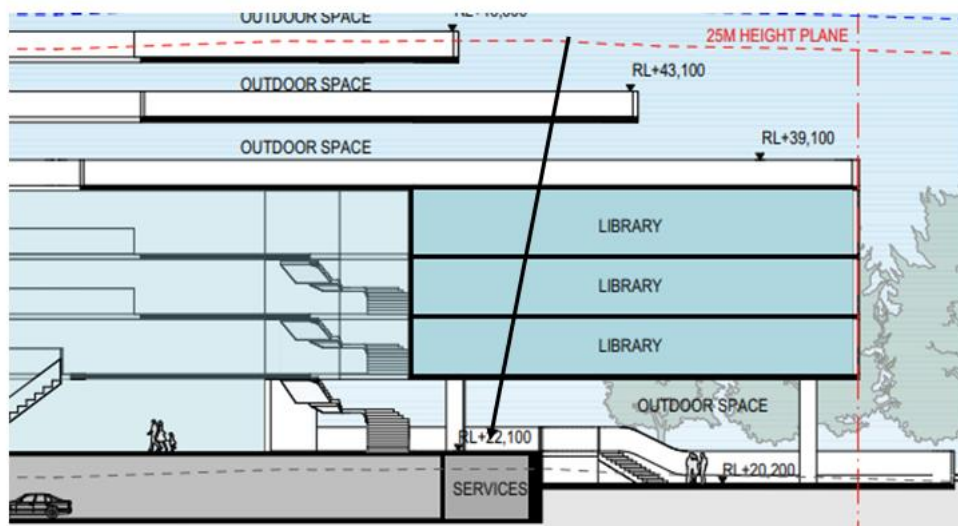


Floor plan from Plus Architecture

Site Section

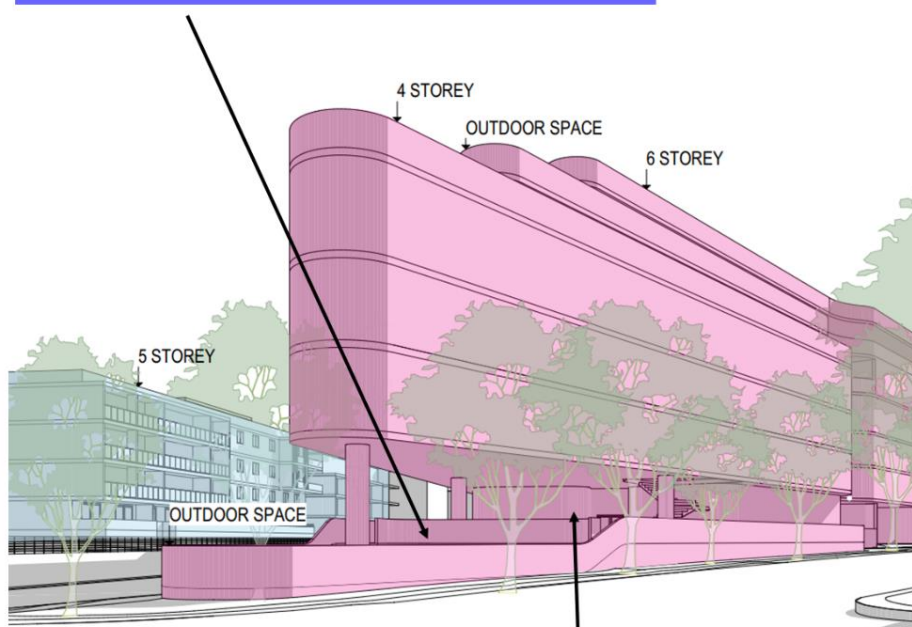
Open space in the basement and ground floor **Figure 17.**

Students holding area, students will be called down to the street and loaded onto the buses.



Section from Plus Architecture

This outdoor/open space with tiered seating will provided gathering space that will be actively supervised .



Students holding area, students will be called down to the street and loaded into the vehicle or bus.

Sketch from Plus Architecture

5 Operational transport management, including details of pick-up and drop-off management measures

The school recognises the importance of sound arrangements for student, staff, parent and visitor movements and has identified appropriate measures to manage:

- Bus and vehicle pick up and drop off
- Safe pedestrian movements of students, staff, parents and visitors from the community and train and Metro stations
- Delivery of school supplies and materials between 9.30 am and 2.30 pm on school days

It will minimise the volume of vehicle movements in and around the school by setting the following conditions:

- Only executive staff members will be permitted to park their vehicles in the basement car park.
- Staff will not be permitted to park their vehicles in the basement car park. Staff will be provided with Opal cards for transportation to and from school to encourage the use of public transport.
- Year 11 and 12 Students will not be permitted to drive vehicles to and from school.

Area map.

The area map below shows the potential transport arrangements for the school **Figure 18.**

Potential Access Arrangements

- ↔ Site driveway access point
- Student drop off / pick up (~8 spaces)
- Bus drop off / pick up (~2 spaces)



Students drop off and pick up – buses and vehicles.

The school principal, deputy principal and senior staff will be rostered for traffic duty each school day. Bus drop-off and pick up will occur on Hunter Street, while the vehicle drop off will occur on Young Street. During set drop off and pick up times the basement car park will be closed to vehicle movements.

Drop off

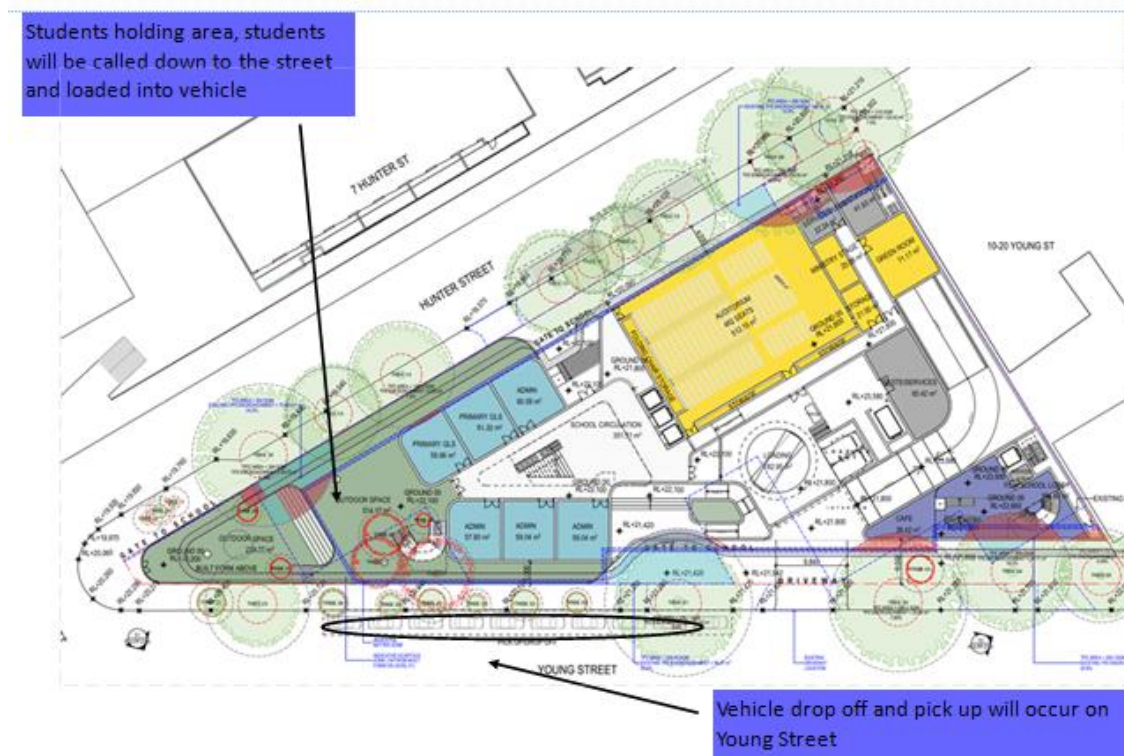
- All secondary and primary students will be admitted through the main entrance on Young Street, including families with older siblings. Staff will supervise the unloading of students from cars.
- Similarly, secondary and primary students be collected from the main entrance on Young Street. Staff will always supervise the loading of students into cars.
- Primary Students with older siblings may arrive at 8.00 am (not before)
- Secondary Students may arrive at 7.30 am (not before)
- The primary school drop-off session starts at 8.30 am
- The secondary school drop-off session will start at 8.00 am.

Pick up

- All secondary and primary students will be collected from the main entrance on Young Street. Staff will always supervise the loading of students into cars. Students will load into vehicles by year group and be held within the ground floor of the school until the designated loading time.
- Primary Students will be picked up at 3:00 pm (not before)
- Secondary Students will be picked up at 3.30 pm (not before)
- On approaching the Kiss and Drop area in Young Street each vehicle will display the student name/s and year group/s, staff members will call out the students' name/s, then the student/s will travel down from the holding area on the ground floor of the school and be loaded into the vehicle. The location of the student holding area depends on the number of students being picked up by vehicles.

Site Plan

This site map shows vehicle pickup and drop-off on Young Street **Figure 19.**



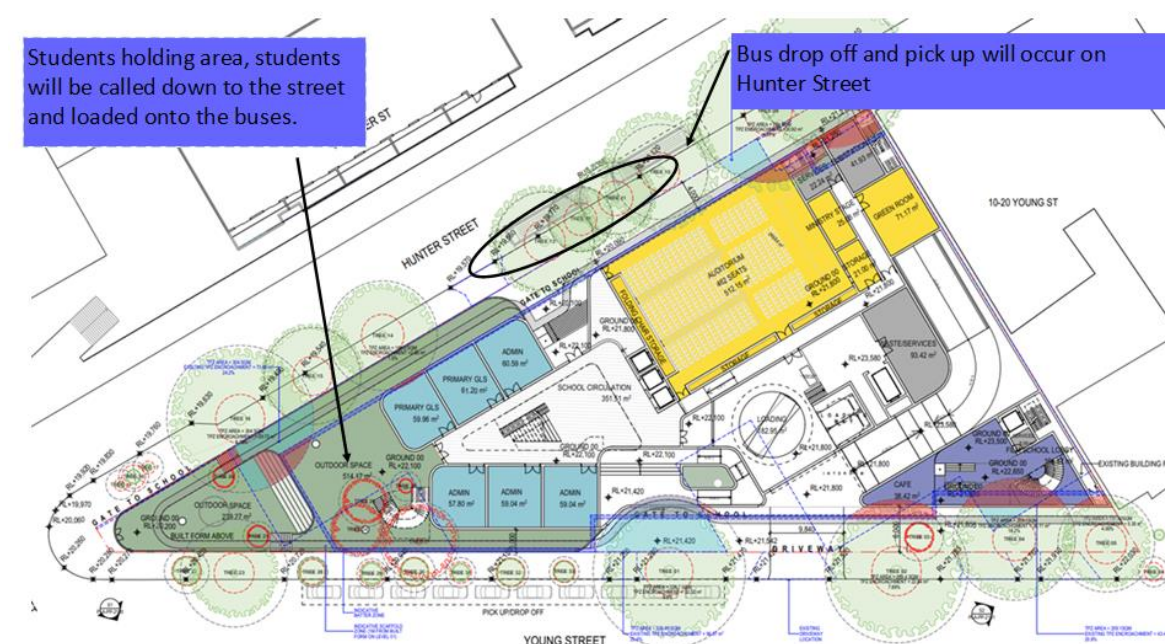
Floor plan from Plus Architecture

Bus drop off and pick up

The school Bus Zone will be established on Hunter Street for pick-up and drop-off times from 8:00 am to 9:00 am and from 3:00 pm to 4:00 pm.

Site plan

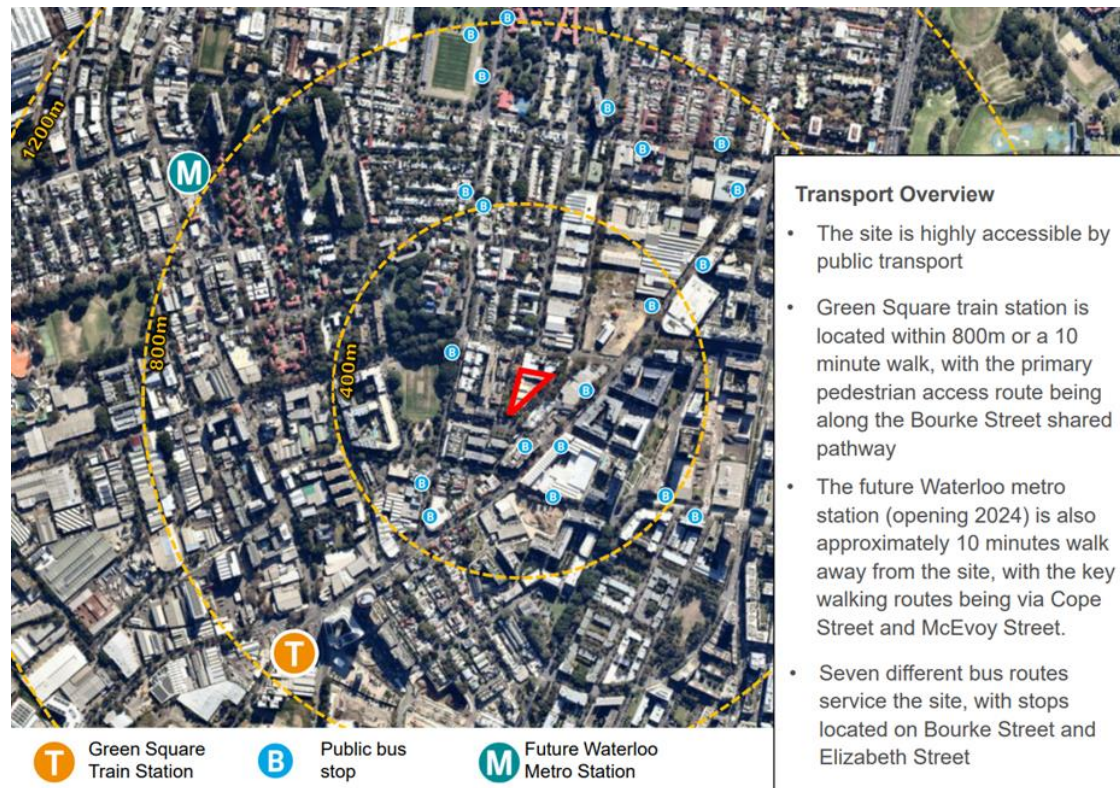
This site map shows the bus pick up and drop off in Hunter Street **Figure 20.**



Floor plan from Plus Architecture

Area transport overview map

The transport overview map displays train, bus, and metro options for reaching the school
Figure 21.



Source JMT Consulting

Area travel map

The pedestrian access map displays staff, student, and visitor routes to and from the school
Figure 22.



The forecast arrival and departure directions for cars accessing the site are shown below (arrival directions figure 23) and below (departure directions Figure 24). This traffic distribution is generally consistent with the assumptions adopted for the neighbouring Woolworths site. However, takes into consideration the likely direction of travel to access or leave the drop off / pick up zone on the western kerb of Young Street.

Arrival directions by forecast JMT Consulting **Figure 23.**



Departing directions by forecast JMT Consulting **Figure 24.**



Source JMT Consulting

6 Preliminary details of evacuation in case of an emergency, considering the pedestrian flows around the site.

PRELIMINARY EVACUATION – EMERGENCY MANAGEMENT PLAN (EMP)

Schools are required to provide a safe environment for staff, students and visitors. This includes identifying and managing risks and planning for emergencies. Under Regulation 43 of the Work Health and Safety Regulation 2017, a workplace must have an Emergency Management Plan (EMP).

The school EMP will include:

- Preparedness, prevention, response and recovery strategies
- Agreed staff emergency management roles and responsibilities
- A site-specific risk assessment.

In compliance with Australian Standard 3745-2010, the school's EMP should be developed collaboratively. Therefore the EMP will be developed in consultation with school educators and staff to respond to the following events (Response Events):

- Building fire
- Asbestos
- Flood
- Heat (extreme)
- Industrial /Factory fire
- Mental Stress
- Missing Student and or Staff
- Intruder
- Bomb/substance threat
- Severe weather event
- Smoke
- Snakes
- Earthquake

EMERGENCY RESPONSE PROCEDURES

During an emergency, the school will activate one or a combination of the following five core emergency procedures:

- on-site evacuation (relocation)
- off-site evacuation
- lock-down
- lock-out
- shelter-in-place

On-Site Evacuation may be necessary if it is unsafe to stay inside the building due to a fire, gas leak, or other threats. Lockout procedure is often combined with this to prevent access to high-risk areas.

Off-Site Evacuation may be necessary If it is unsafe to remain on site and involves evacuation to a designated off-site point. This includes emergencies like bomb threats, fires, spills, and floods. It may also be necessary in response events outside the school premises.

Lockdown may be used if it is safest for everyone to remain indoors. Emergency situations may include hazardous smoke emissions, severe weather events or sensitive police operations.

Lockout may be necessary for immediate danger, for example in the event of a gas leak. Off-site evacuation procedures may also be used for these circumstances.

Shelter-in-place may be used as a protective action for external hazards like severe weather events or intruder threats. It may be a central assembly point before evacuation or a last resort. The location may vary depending on the hazard. If it poses a threat to children, immediate evacuation is necessary.

COMMUNICATION AND CONSULTATION

Communication and consultation with all relevant internal and external authorities (namely, police, fire brigade, State Emergency Service, Rural Fire Service, ambulance) will take place during all stages of the risk management process. Similarly there will be communication and consultation between the principal and other executive staff, staff, parents, care givers and families in relation to risk management.

EMERGENCY RESPONSE DRILLS SCHEDULE

Emergency response drills once every term will ensure the procedures are practical and that staff with responsibilities during an emergency have the knowledge to carry out their role.

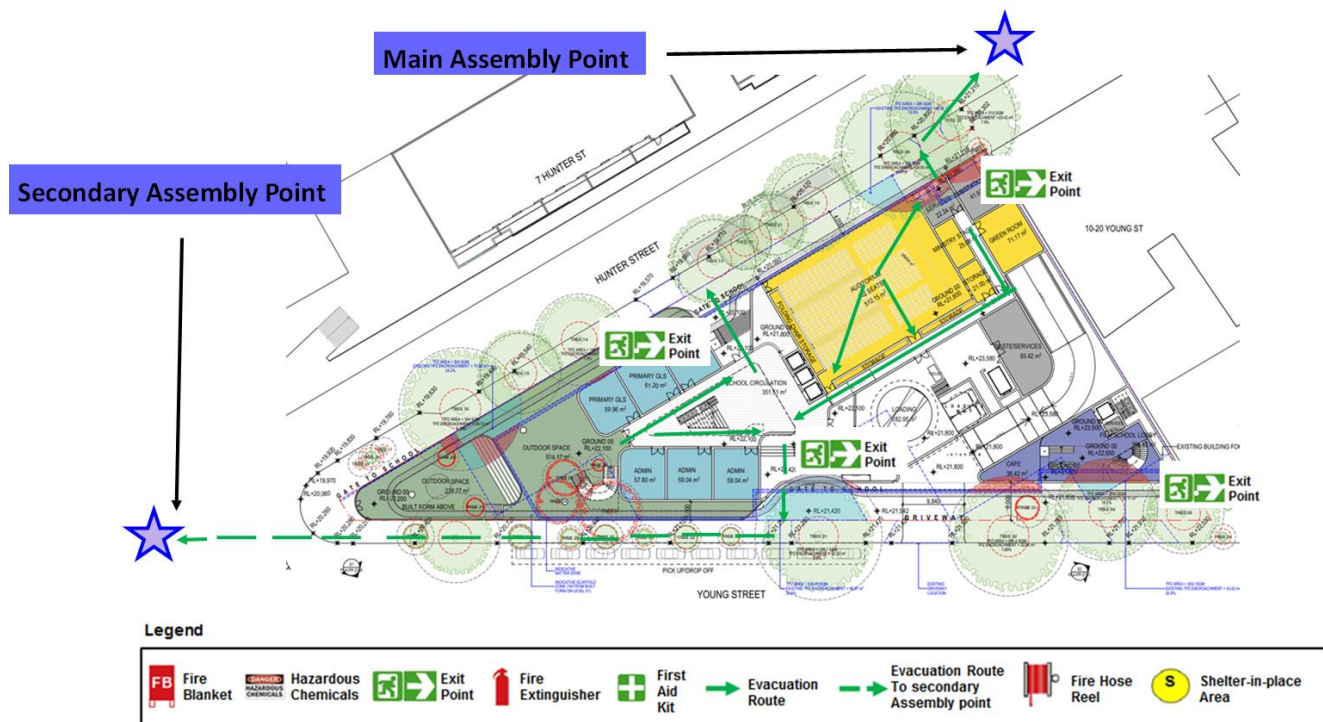
EMERGENCY KIT

A kit will kept in a designated, easily accessible place.

SITE MAP

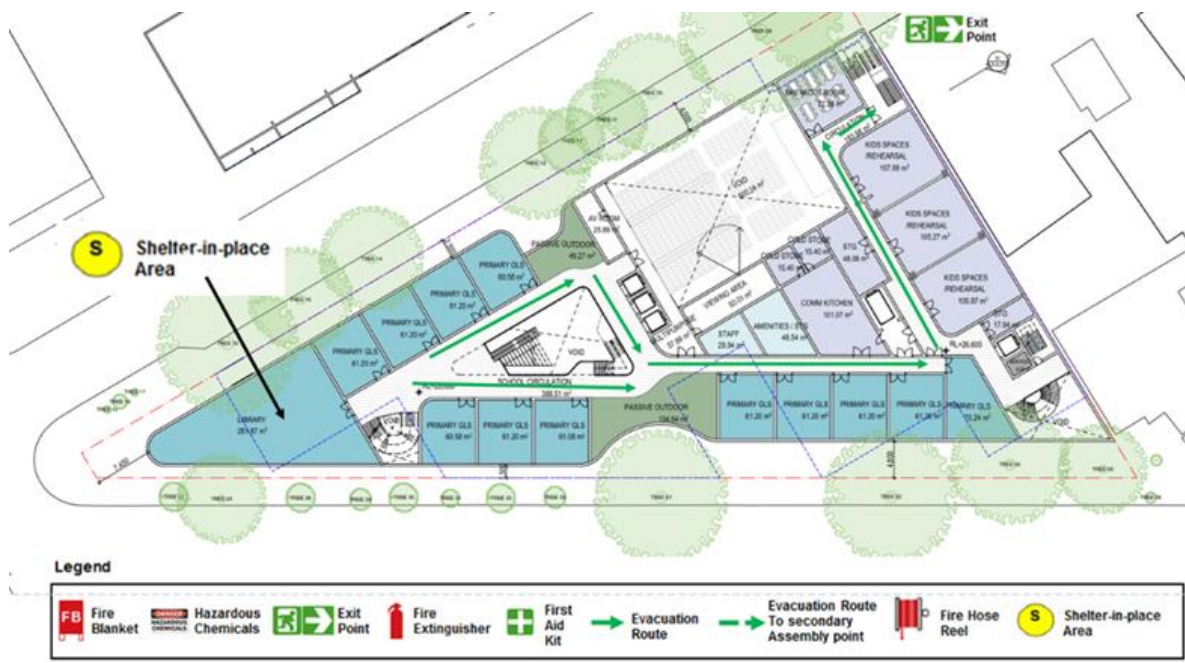
The floor plans below display the primary and secondary refuge/emergency assembly points, as well as the shelter-in-place location on the school campus.

Ground Floor **Figure 25.**

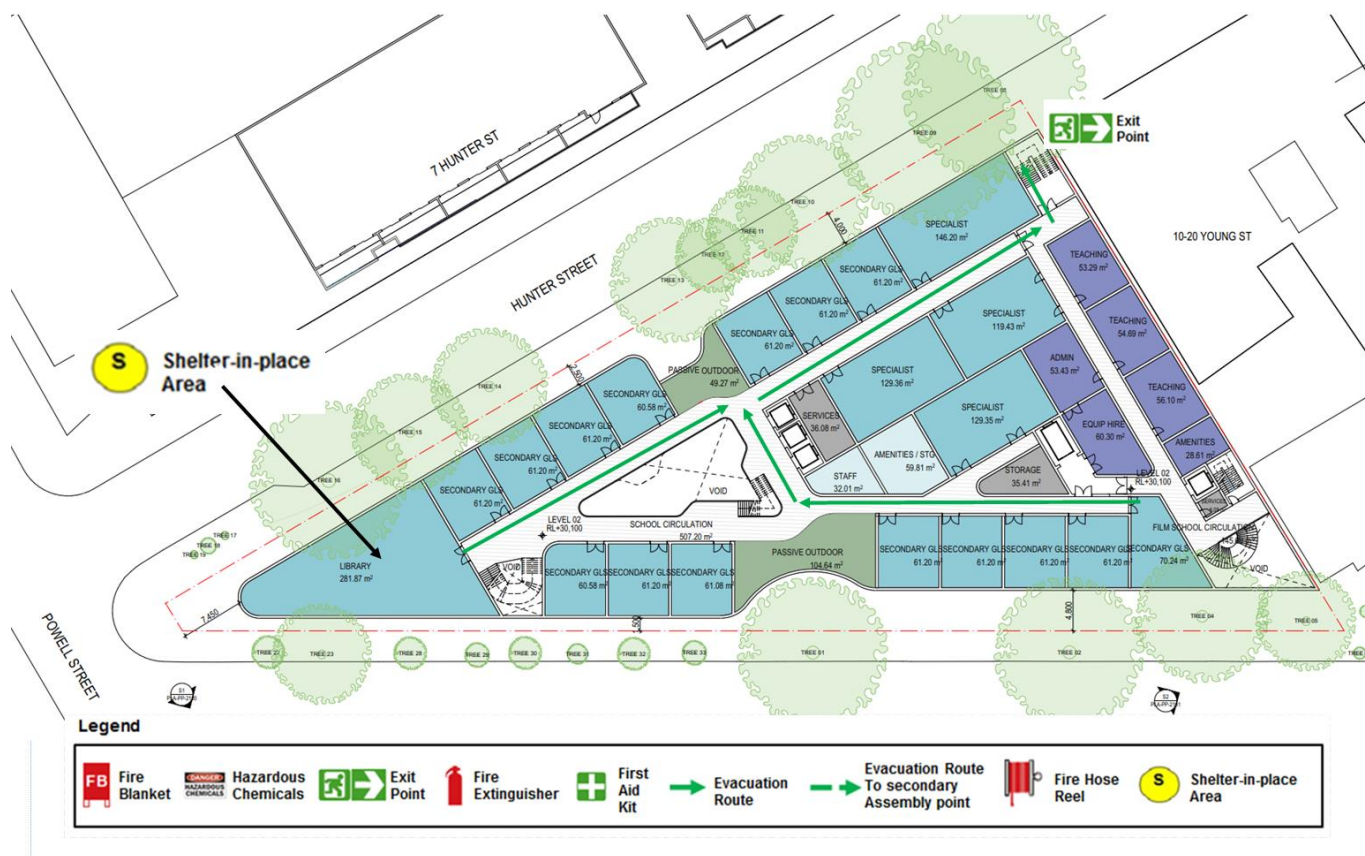


Floor plan from Plus Architecture

First Floor **Figure 26.**

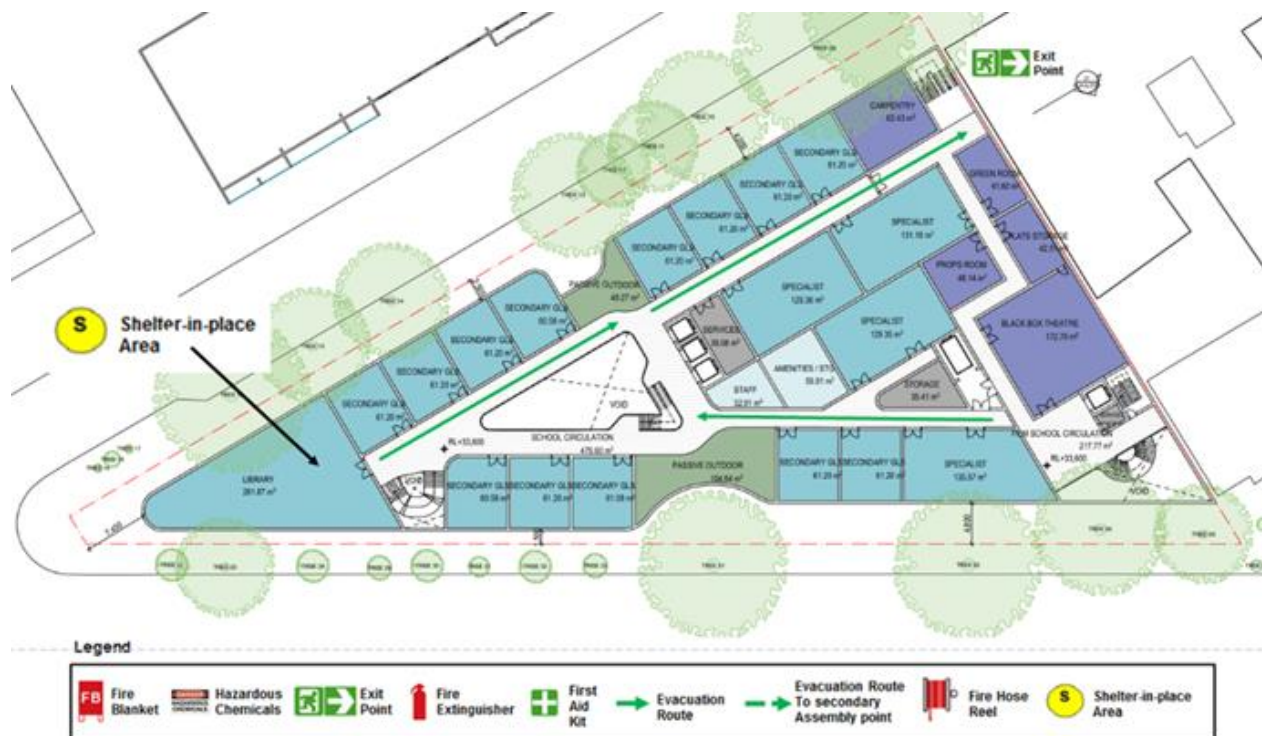


Floor plan from Plus Architecture



Floor plan from Plus Architecture

Third Floor **Figure 28.**

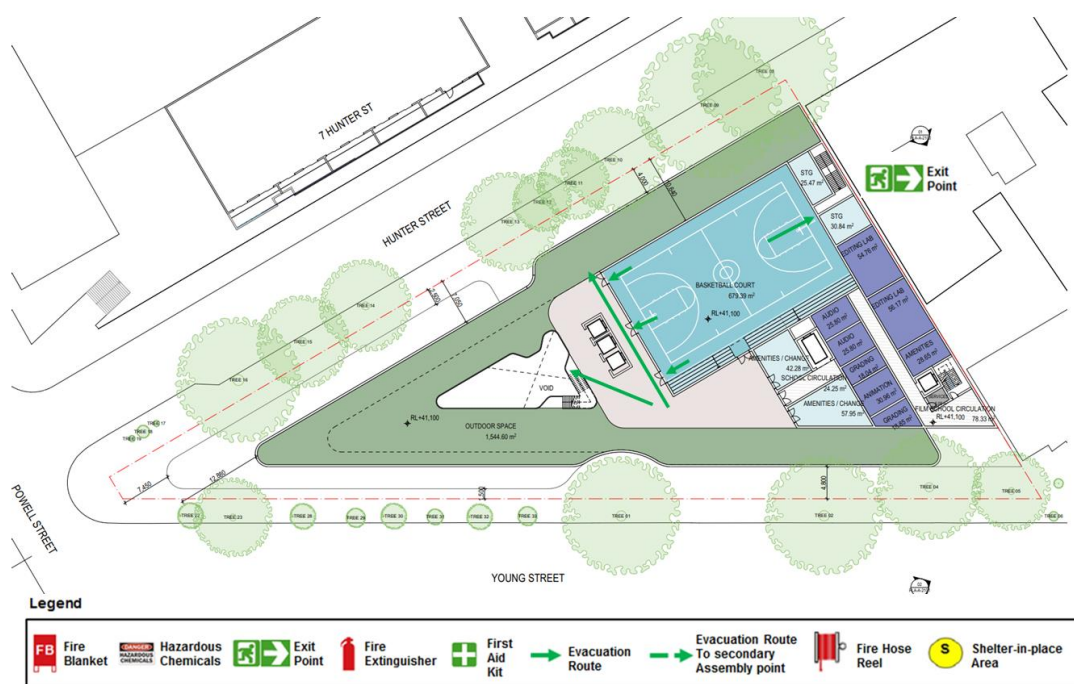


Floor plan from Plus Architecture

Legend:

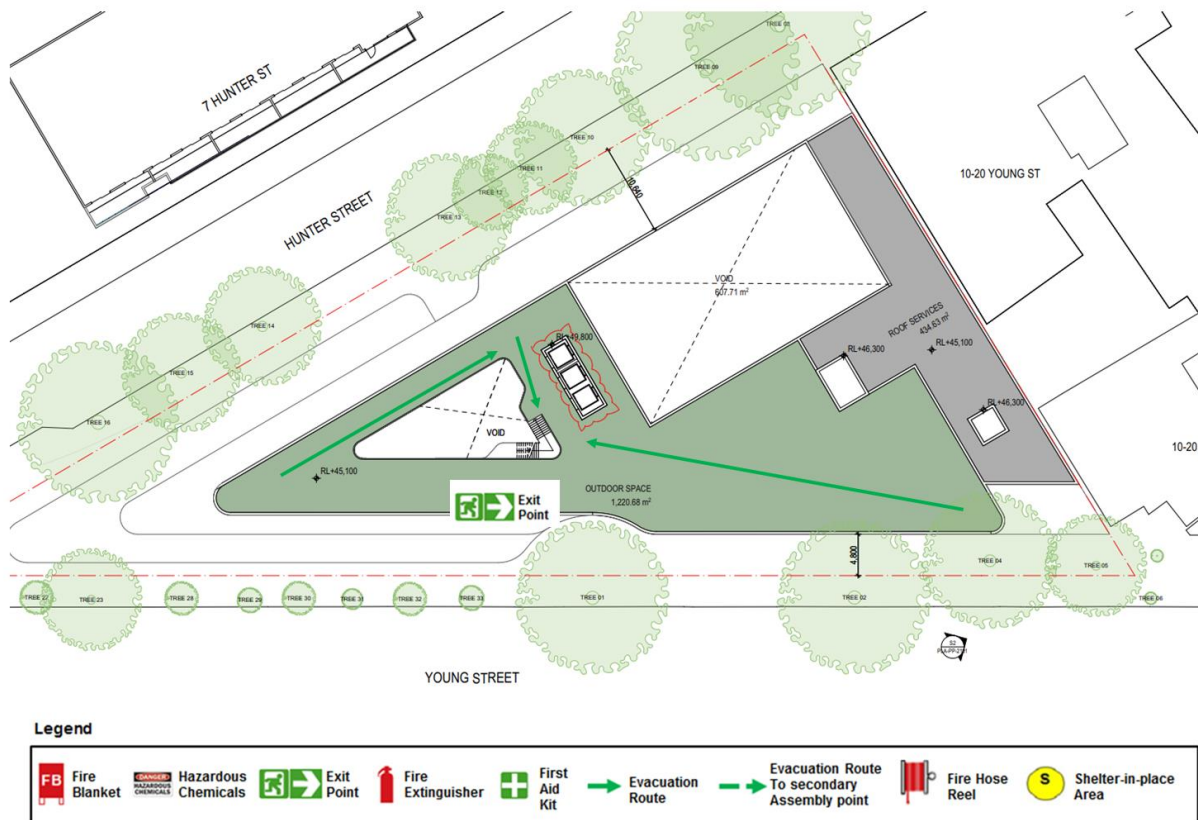
- Fire Blanket
- Hazardous Chemicals
- Exit Point
- Fire Extinguisher
- First Aid Kit
- Evacuation Route
- Evacuation Route To secondary Assembly point
- Fire Hose Reel
- Shelter-in-place Area

Fifth Floor **Figure 30.**



28

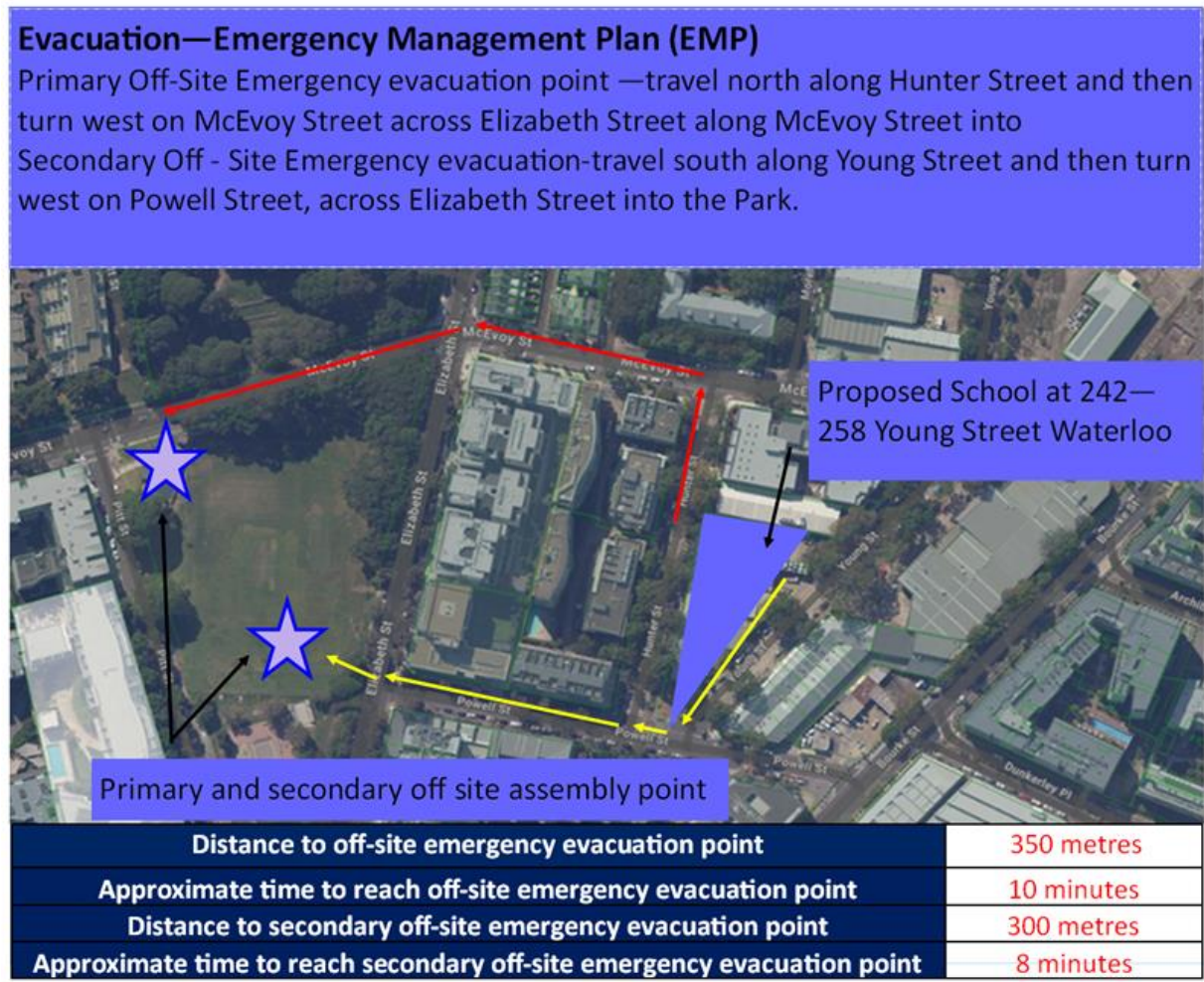
Sixth Floor **Figure 31.**



Floor plan from Plus Architecture

AREA MAP

The below area map shows the location of the school and its off-site evacuation points
Figure 32.



Flood events evacuation routes are different to all other events (see page 37 / figure 41)

7 Flood Emergency Response Plan - detailing shelter-in-place procedures is required.

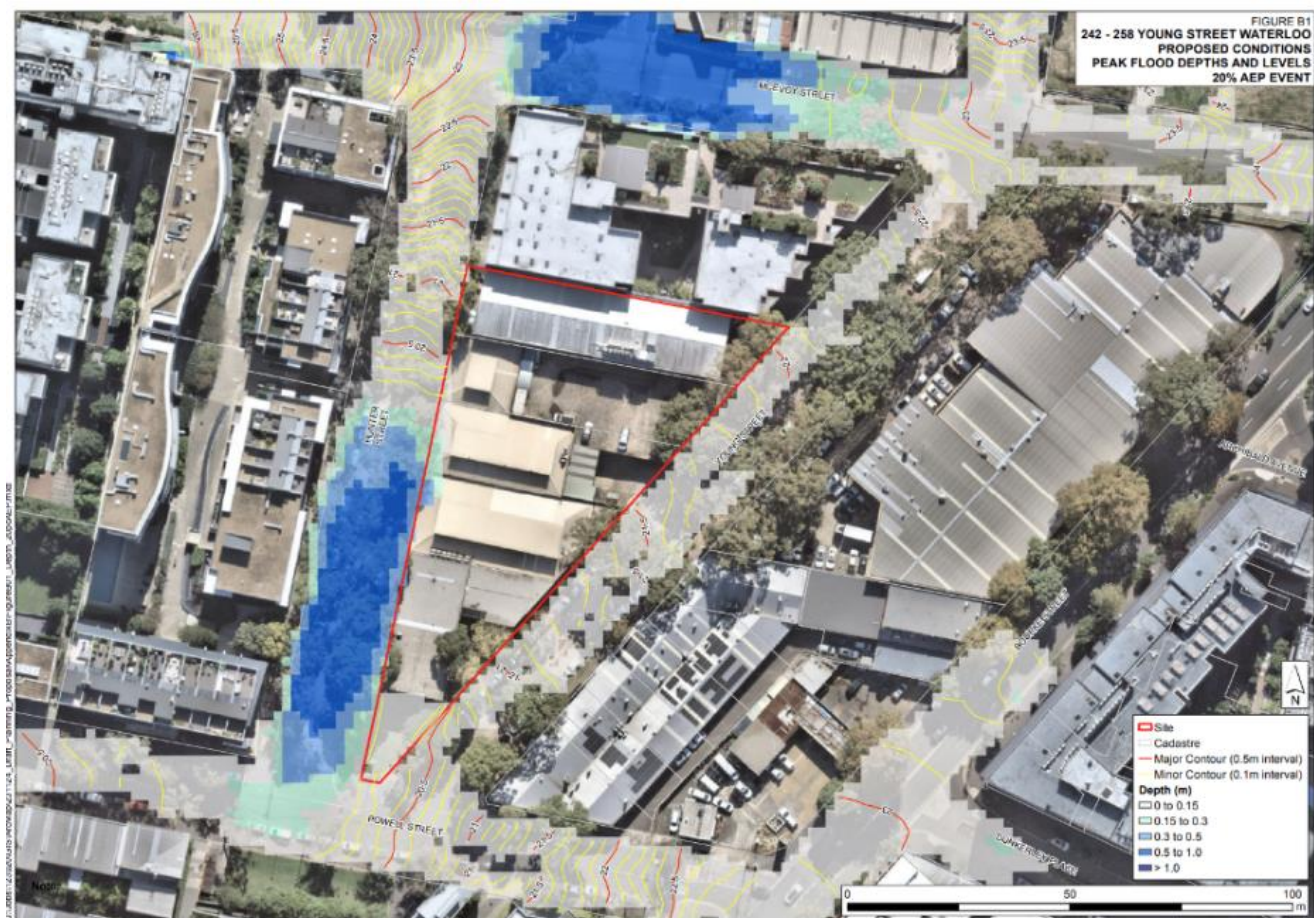
FLOOD EMERGENCY PLAN

The school's flood emergency response plan outlines its procedures for responding to floods that may occur in this location within two hours.

20% AEP Event

Flood likelihood is measured by Annual Exceedance Probability (AEP). A 20% AEP flood has a 20 in 100 chance of occurring in any given year. The school can be evacuated to an off-site emergency evacuation point during a 20% AEP flood event as the considered risk is acceptable.

20% AEP flood Figure 33.

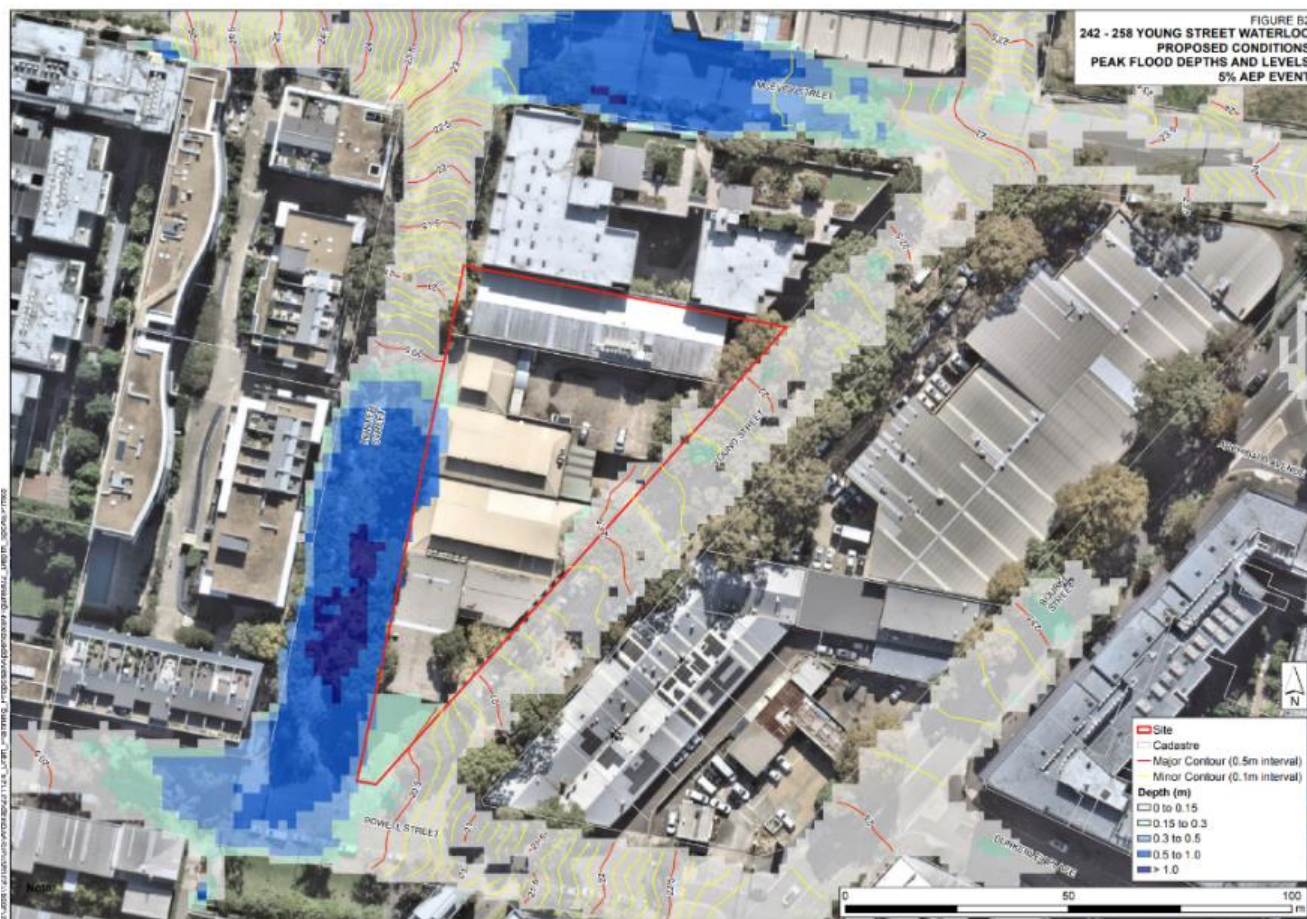


Source from WMA Water

5% AEP Event

Flood likelihood is measured by Annual Exceedance Probability (AEP). A 5% AEP flood has a 5 in 100 chance of occurring in any given year. The school can be evacuated to an off-site emergency evacuation point during a 5% AEP flood event as the considered risk is acceptable.

5% AEP flood **Figure 34.**

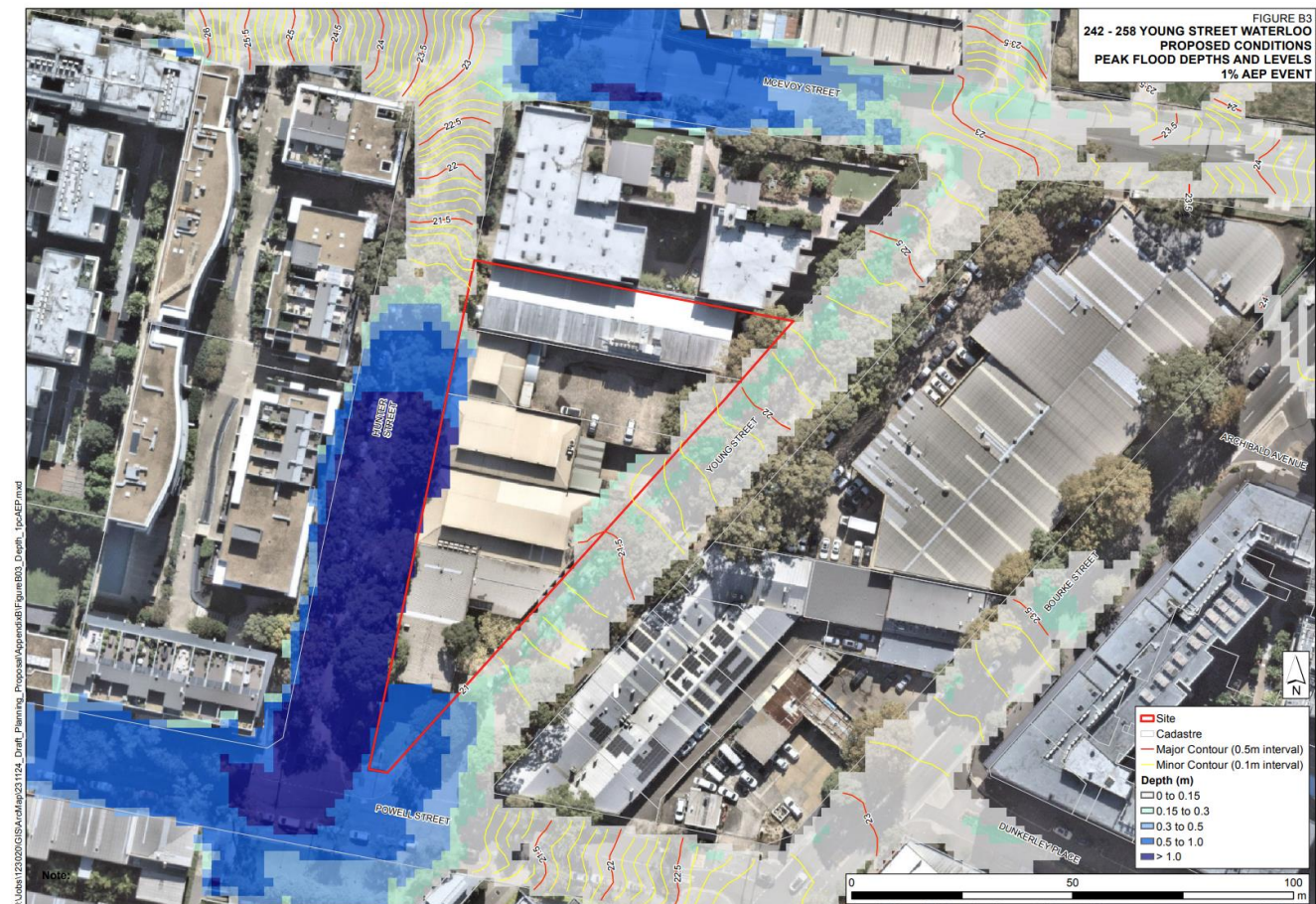


Source from WMA Water

1% AEP Event

Flood likelihood is measured by Annual Exceedance Probability (AEP). A 1% AEP flood has a 1 in 100 chance of occurring in any given year. It is imperative that everyone 'Shelters-In-Place' inside the school until the floodwaters have subsided and it is safe to evacuate. The school can be evacuated to an off-site emergency evacuation point during a 1% AEP flood event as the considered risk is acceptable.

1% AEP flood **Figure 35.**

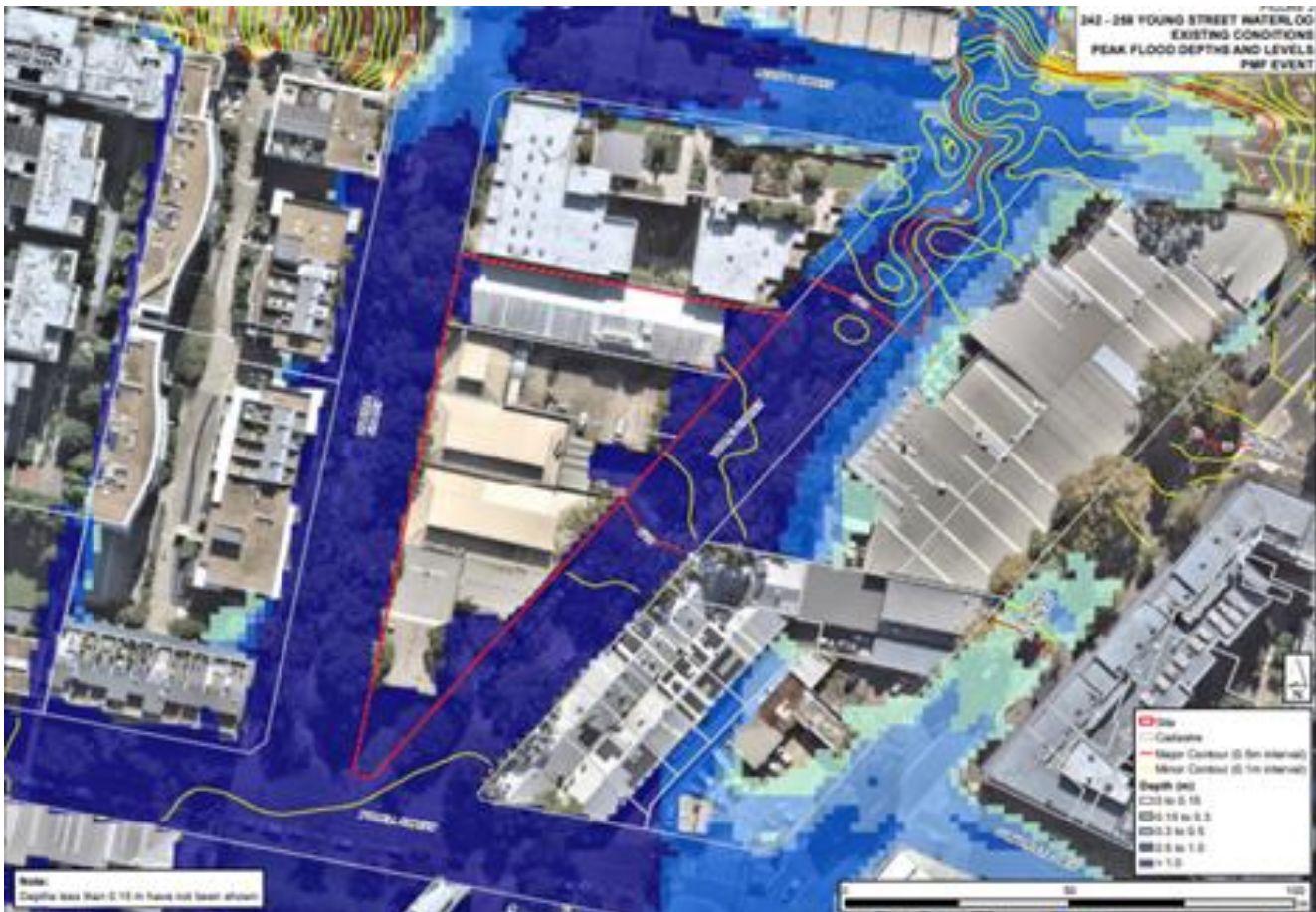


Source from WMA Water

PMF EVENT

If a Possible Maximum Flood (PMF) occurs, the school will be isolated for approximately two to four hours as McEvoy Street, Hunter Street, Powell Street, and Young Street surrounding the school will be flooded. This presents a level five hazard, making it unsafe for people and vehicles to evacuate from the school as there will be no safe way to do so. Additionally, there will be no effective flood access. It is imperative that everyone 'Shelters-In-Place' inside the school until the floodwaters have subsided and it is safe to evacuate to an off-site emergency evacuation.

PMF flood **Figure 36.**



Source from WMA Water

FLOOD EMERGENCY RESPONSE PLAN

This emergency response plan outlines a 'shelter-in-place' strategy that will be put into action until it is considered safe for the school to be evacuated. The school principal will initiate the flood management plan in response to flood warnings received from the Bureau of Meteorology (BOM) and other local sources of information.

FLOOD PRIMARY REFUGE/ EMERGENCY ASSEMBLY POINT

In a flood emergency, the first, second and third floors' libraries are the primary refuge/ shelter in place. Once everyone is accounted for, students, staff, visitors and contractors will remain in these locations as part of the 'shelter-in-place' strategy until it is safe to leave via the main assembly point on Hunter Street.

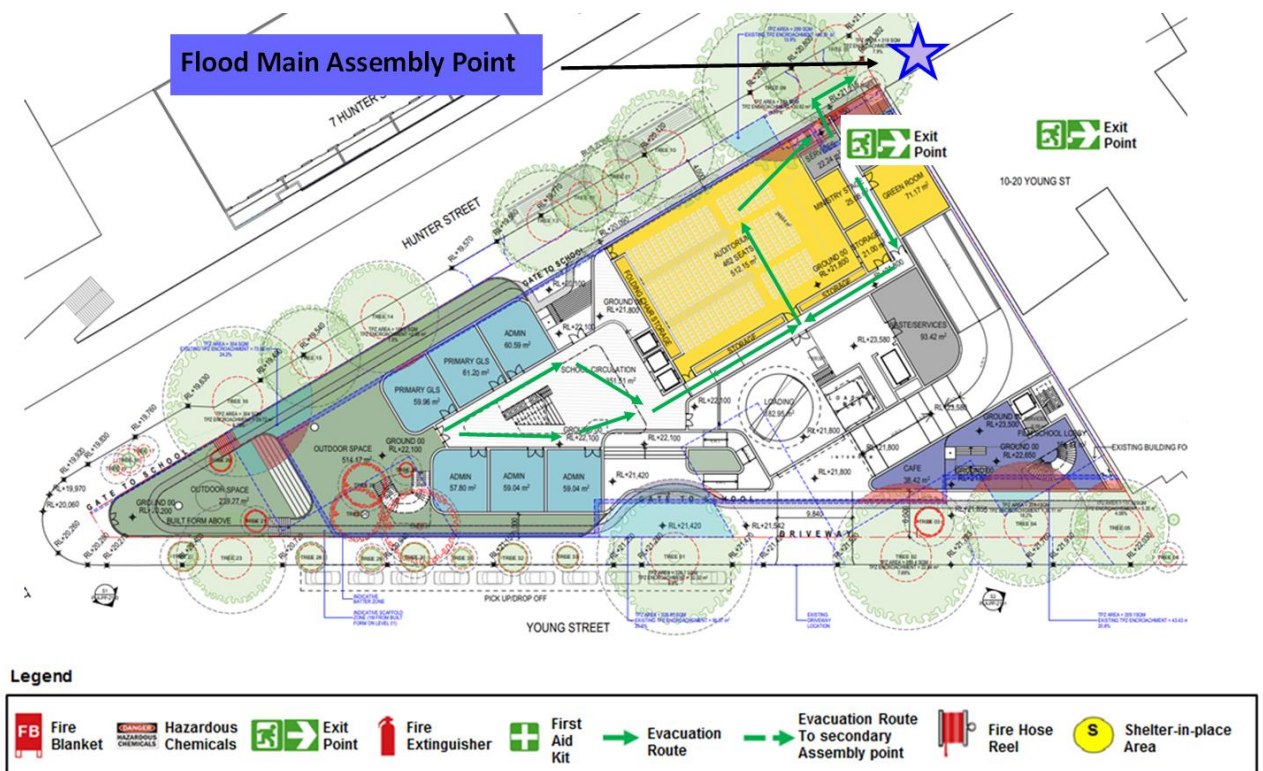
EMERGENCY EVACUATION POINT

For a safe evacuation of the school premises, everyone, including students, staff, visitors and contractors, must head north along Hunter Street and then turn west on McEvoy Street. The park on the corner of Elizabeth Street and McEvoy Street is designated as the off-site emergency evacuation point for flooding events. This is where the school will coordinate with first responders and student pick-up points.

SITE MAP

The floor plans below display the primary refuge/emergency assembly points for flood events only, as well as the shelter-in-place location on the school campus.

Ground Floor **Figure 37.**



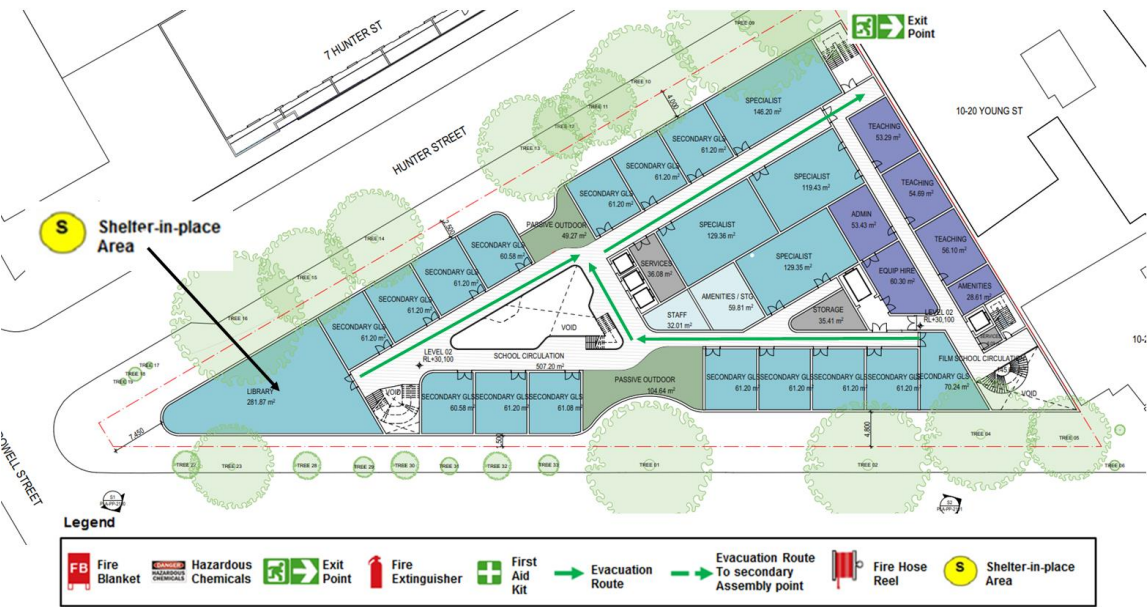
Floor plan from Plus Architecture

First Floor **Figure 38.**



Floor plan from Plus Architecture

Second Floor **Figure 39.**



Floor plan from Plus Architecture

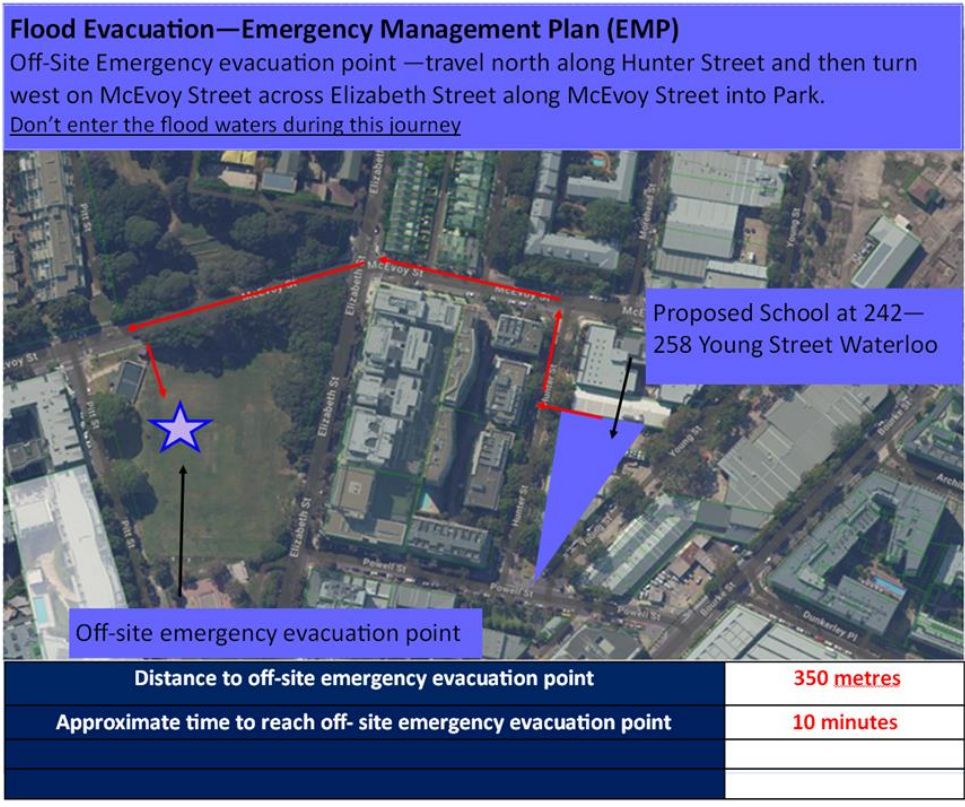
Third Floor **Figure 40.**



Floor plan from Plus Architecture

AREA MAP

The area map below shows the location of the school and its flood off-site emergency evacuation point **Figure 41.**



Source: Nearmap

FLOOD EMERGENCY RESPONSE PLAN SCHOOL PERSONNEL

The table below outlines the responsibilities of school personnel during a flood emergency event **Table 3**

Staff	Location	Responsibilities
Chief Flood Warden – Principal	At School	On-Site Organise flood management drills for school and staff not less than yearly. Register duty phone for Early Warning Network and Dipstick (if recommended to be installed). Decide if evacuation is required (only in an emergency). Decide when it is safe for on-site persons to leave after a flood event. Liaise with emergency services when they attend the site.
First Aid Officer Deputy Principals Teachers	At School	Prepare and maintain a Flood Emergency Kit. Assist in coordinating the movement of limited mobility persons to the assembly points during such times. Manage Individual Health Care Plans for students.
Deputy Chief Flood Warden Deputy Principals	At School	On-Site assist the First Aid Officer where required or fill those responsibilities if that appointee is unavailable. Receive text notifications from the Early Warning Network and Dipstick (if recommended to be installed).
Flood Warden Teachers	At School	Assist the Deputy Chief Flood Warden where required or fill those responsibilities if that appointee is not available. Receive text notifications from the Early Warning Network and Dipstick (if recommended to be installed)
Flood Warden Teachers	At School	Maintain calm in students, other staff, visitors, and contractors. Know who the flood-relevant appointees are for advice.
Flood Warden Teachers	At School shelter-in-place points on the First, Second and Third-floor libraries.	Assemble students, other staff, visitors, and contractors at the Primary refuge/shelter-in-place points
Flood Warden Teachers	Flood main assembly point on Hunter Street	Move the students, other staff, visitors and contractors by travelling north along Hunter Street to McEvoy Street, along Mc Evoy Street across Elizabeth Street and then along McEvoy Street to the off- site emergency evacuation point /pick-up point.

FLOOD EVACUATION WARNINGS

Below is a list of flood evacuation warnings that may occur during weather events that have the potential to cause flooding near the school. The Bureau of Meteorology (BOM) maintains rainfall gauge stations in Sydney. They provide information to assist in flood warning systems.

The BOM issues five warnings through various methods.

- Television
- Radio
- Websites
 - o <http://www.bom.gov.au/>
 - o <http://www.bom.gov.au/nsw/warnings/>
- In addition to this, the SES may issue warnings in the form of:
 - Bulletins
 - Evacuation Warnings or Evacuation Order
 - Hazzard near me mobile phone app

WARNING TYPES

Severe Weather Warning

The BOM issues warnings for severe or dangerous weather that is not limited to severe thunderstorms, tropical cyclones, or bushfires. These warnings are given when there is severe weather in an area, or it is expected to develop or move into an area.

Severe Thunderstorm Warning

The Bureau of Meteorology issues warnings to alert communities of the potential threat of severe thunderstorms.

Flood Alert/Watch/Advice

If there is an expected flood-producing rainfall, a flood alert, watch, or advice will be issued to provide an early warning of possible flooding.

Generalised Flood Warning

A generalised flood warning will be issued if expected flooding occurs in a particular area. As per the "Service Level Specification for Flood Forecasting and Warning Services for New South Wales - Version 2.0" (Bureau of Meteorology, 2013), there will be a three-hour warning time from the issuance of the warning to the peak flood level. This is the most probable warning type that will be used for the subject site in the event of an evacuation.

Minor/Moderate Flood Warning

Additional information may be considered to issue a more specific flood warning. It is expected that three hours of warning time will be given from the moment the warning is issued until the flood reaches its highest level. Monitoring of the real-time water level data of rivers and harbours is available on the Bureau of Meteorology website. This information is available at <http://www.bom.gov.au/nsw/flood/>.

All warnings will be issued through the website, radio and television.

Radio frequencies

ABC Sydney (702AM, 92.9FM, 206.352MHz digital), Triple J (105.7FM), 2DayFM (104.1FM), Triple M (104.9FM), Nova (96.9FM), KIIS (106.5FM), 2GB (873AM), 2UE (954AM).

All public and commercial television stations should broadcast warnings.

SES Flood Bulletins

The SES may issue a bulletin with flood information and recommended actions.

Evacuation Warning

The SES or Police may issue an evacuation warning, which provides advance notice to prepare for evacuation.

Evacuation Order

The SES will issue an evacuation order if evacuation is necessary. If an evacuation is ordered, it must be carried out. The evacuation order will be broadcasted through various channels such as radio/TV, door knock, automated telephone message or SMS.

Equipment.

Early Warning Network Automated Text and Email Service

The property can sign up for automatic alerts through the Early Warning Network (www.ewn.com.au). These alerts will filter the BOM warnings mentioned above and send notifications via text or email to the Chief Flood Warden or property owners.

On-Site Emergency Tone

The PA system will have an uninterrupted power supply and will be configured to sound an emergency tone, which means that all visitors, staff, and students should gather in the designated assembly points, namely the Ground Floor Multi-Purpose Hall and the First Floor Library, under the guidance of the staff and flood wardens. The emergency tone will be tested during every drill or once a term. In the event of an emergency, if the tone is not operational, an air horn and a handheld loudspeaker are available in the Flood Emergency Kit.

Dipstick Flood Alert System

The Dipstick Flood Alert System by Tuftec (<http://tuftec.com.au>) acts as a failsafe to notify stakeholders on-site, should no flood warnings be issued by the Bureau or SES. This device is designed to sense when water reaches a predetermined level and send a text alert, along with the rate of rise, to nominated parties, including the Council and all Flood Wardens.



Dipstick Flood Alert System **Figure 42.**

Flood Depth Gauge

This is a manual system where the flood depth is shown on a depth gauge and markings can be made to determine flood severity, such as a 100-year or 50-year event.

Rain Gauge

Both electronic and manual systems will be installed in open spaces to record rainfall at the school.

For any questions or comments, please contact Bruce Litchfield on 0448 820 587.