MELROSE PARK HIGH SCHOOL

FLOOD EMERGENCY MANAGEMENT PLAN

Prepared for: Schools Infrastructure NSW (SINSW)

By: **en**struct group pty ltd

Revision: B

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ISSUE AUTHORISATION

PROJECT: MELROSE PARK HIGH SCHOOL

Project No: 140232

Rev	Date	Purpose of Issue / Nature of Revision	Prepared by	Reviewed by	Issue Authorise by
A	15/11/24	Issue for Schematic Design	ASE	TAH	JAF
B	22/01/25	Issue for REF	ASE	JAF	JAF

Executive Summary

enstruct Group have been engaged by Schools Infrastructure NSW (SINSW) to provide a Flood Emergency Management Plan (FEMP) for the development of Melrose Park High School at 37 Hope Street, Melrose Park.

The aim of the FEMP is to assess the impact of a 1% Annual Exceedance Probability (AEP) storm and larger events up to and including the Probable Maximum Flood (PMF) on the development and on-site personnel. Through this assessment, the FEMP aims to appropriately recommend procedures and actions for on-site personnel to maximise their safety and reduce the risk of death and injury due to flooding and flood water. The FEMP aims to raise awareness of the risk of flooding by outlining flood warnings, safe evacuation routes, designated safe assembly areas, and evacuation management plans. The FEMP is based upon the based on the key principles of emergency management as set out in the Support for Emergency Management Planning (NSW Government, 2023).

Furthermore, the FEMP discusses the flooding conditions in the vicinity of the site, proposed methods of detecting flooding, proposed routes for refuge, and details of management of all personnel on site during a flooding event. Flood threat levels are to be informed through flood bulletins and weather warnings. This communication is to be further broadcasted to students, parents and the wider school community through social media and other communication channels.

Based on a flood study undertaken by ‘Lyall & Associates’ for Melrose Park North Precinct (Job No. FG486.006, dated 06/10/23), it is understood that the site’s neighbouring park is subject to flooding in the 1% AEP storm event, while the high school site is clear of flood risks, with safe H1 routes to exit the site, given that the depth and/or velocity permits to do so. However, based on this flood study and additional flood modelling, undertaken by Enstruct, it is noted that the proposed west road adjacent to the site will be subject to flood risk in the PMF event. Consequently, this flood emergency management plan is recommended to be reviewed, updated and implemented in perpetuity to provide adequate access to emergency services and allow for safe evacuation of the site in the PMF event.

REF Checklist

Flooding	Y	N	N/A	Comments
FERP • If the site or key access routes are impacted by flood waters, does the REF include a preliminary Flood Emergency Response Plan (FERP) that has been prepared in consultation with NSW SES?	☒	☐	☐	The REF includes a Flood Emergency Management Plan. NSW SES have been contacted for comment on this Plan.
Does the plan clearly and simply detail: • the flood potential of the site?	☒	☐	☐	Refer to Section 1.6.2 for key flood behaviour and flood potential analysis.
○ detail roles and responsibilities across the department and relevant emergency response agencies?	☒	☐	☐	Refer to Section 5 for flood response personnel responsibilities.
○ flood monitoring and warning systems consistent with advice received to date from NSW SES?	☒	☐	☐	Refer to Section 3 for information on flood and evacuation warnings which refers to NSW SES' latest flood warning system.
○ flood warning times and notifications?	☒	☐	☐	Refer to Section 3 for information on flood and evacuation warnings.
• emergency management triggers, including rainfall and water levels?	☒	☐	☐	Refer to Section 8 for flood response actions and triggers.
• the emergency response to a flood event or events where different flood mechanisms impact a site?	☒	☐	☐	Refer to Section 8 for emergency flood response.
○ messaging and communication protocols?	☒	☐	☐	Refer to Section 3 for communication protocols.
○ assembly points and flood free routes (where required)?	☒	☐	☐	Refer to Appendix A for Evacuation and Assembly Point Map.
○ shelter in place locations (where required as last resort) that are able to withstand flood and debris forces of the PMF?	☒	☐	☐	Refer to Section 7.1 and Appendix A for shelter in place locations and information.
○ mechanisms and requirements for regular review?	☒	☐	☐	Refer to Section 9 for mechanisms and requirements for regular review.
○ awareness training for employees, contractors, visitors, students and caregivers and induction of new staff members?	☒	☐	☐	Refer to Section 4 – Flood Response Preparation.
Conclusion Does the FIRA: ○ conclude that the proposal would not be likely to result in significant environmental effects?	☒	☐	☐	Refer to Sections 1.3 and 10 for conclusion.
• list any mitigation measures identified in the assessment?	☐	☐	☒	Refer to Flood Impact Assessment Report for mitigation measures.
• Does the REF list any mitigation measures identified in the assessment and incorporate them into the design where applicable (i.e. flood resistant structures and materials)?	☐	☐	☒	Refer to Flood Impact Assessment Report for mitigation measures.

Contents

I. Definitions

For the purpose of this Plan, the definitions below apply:

Assembly area(s)

The designated place or places where people assemble during the course of an evacuation.

Emergency

An event that arises internally, or from external sources, which may adversely affect the occupants or visitors in a facility, and which requires an immediate response.

Emergency plan

The written documentation of the emergency arrangements for a facility, generally made during the planning process. It consists of the preparedness, prevention and response activities and includes the agreed emergency roles, responsibilities, strategies, systems and arrangements.

Emergency Planning Committee (EPC)

Elected persons from the school community who are responsible for the documentation and maintenance of the flood emergency management plan and strategy at Melrose Park High School.

Emergency Control Organiser (ECO)

A person or persons appointed by the emergency planning committee to direct and control the implementation of the facility's emergency response procedures.

Evacuation

The orderly movement of people from a place of danger.

Refuge

An area that is specifically designed to protect people from flood and provides direct access to an exit.

Notes:

1. An area of refuge is intended to facilitate a safe delay in egress from the floor or area, thus constituting a space for people to await assistance for their evacuation.
2. Refuges are normally nominated by the relevant warden.

Warden intercommunication point (WIP)

The location on a floor or evacuation zone that includes a handset provided through which instructions can be received from the intercommunication panel via the emergency intercom system.

II. Abbreviations

The following abbreviations are used in this Emergency Plan document:

AHD	Australian Height Datum
AEP	Annual Exceedance Probability
AP	Assembly Point
ARI	Average Recurrence Interval
DDA	Disability Discrimination Act
ECO	Emergency Control Organization
EPC	Emergency Planning Committee
FERP	Flood Emergency Response Plan
FEMP	Flood Emergency Management Plan
FFL	Finished Floor Level
PMF	Probable Maximum Flood
SES	State Emergency Service
WIP	Warden Intercommunication Point

1 Introduction

This Flood Emergency Management Plan has been prepared by enstruct on behalf of the Department of Education (DoE) to assess the potential environmental impacts that could arise from the construction and use of the new Melrose Park High School project (the Activity) at 37 Hope Street, Melrose Park. This report supports the assessment of the proposed Activity under Part 5 of the Environmental Planning and Assessment Act 1979. The Activity is proposed by the DoE to meet the growth in educational demand in the Melrose Park precinct.

This report has been prepared to assess the impact of a 1% Annual Exceedance Probability (AEP) storm and larger events up to and including the Probable Maximum Flood (PMF) on the development and on-site personnel.

1.1 Summary of the Activity

The proposed activity involves the construction and use of a new high school in two stages for approximately 1,000 students.

Stage 1 of the proposed activity includes the following:

- Site preparation works.
- Construction of Block A – a six-storey (with additional roof/plant level) school building in the south-western portion of the site containing staff rooms and General Learning Spaces (GLS).
- Construction of Block B – a one storey (double height) hall, gymnasium, canteen and covered outdoor learning area (COLA) building in the south-eastern portion of the site.
- Construction of Block C – a single storey plant and storage building at the north-eastern portion of the site.
- Associated landscaping.
- Construction of on-site car parking.
- Provision and augmentation of services infrastructure.
- Associated public domain infrastructure works to support the school, including (but not limited to):
    - Provision of kiss and drop facilities along Wharf Road and widening of the Wharf Road footpath.
    - Raised pedestrian crossings on Wharf Road and Hope Street.

Stage 2 of the proposed activity includes the following:

- Construction of Block D – a five-storey (with additional roof/plant level) school building in the north-western portion of the site containing staff rooms and GLS:
- Additional open play spaces within the terrace areas of Building D.
- Minor layout amendments to Block A.

The Review of Environmental Factors prepared by Ethos Urban provides a full description of the proposed works.

1.2 Site Description

The site is located at 37 Hope Street, Melrose Park within the Parramatta LGA. The school covers an approximate area of 9,500m^2 and is generally rectangular in shape. The site is currently cleared and vacant. The site is located approximately 8km east of the Parramatta CBD.

1.3 Significance of Environmental Impacts

Based on the identification of potential issues, and an assessment of the nature and extent of the impacts of the proposed development, it is determined that:

- The extent and nature of potential impacts are low and will not have significant impact on the locality, community and/or the environment.
- Potential impacts can be appropriately mitigated or managed to ensure that there is no significant impact on the environment.

1.4 Key Principles of Emergency Management (EM)

It is NSW SES's primary strategy to evacuate out of a floodplain to remove the community from the hazard to an area of safety with available resources. When this cannot be achieved, a set of principles have been developed to assist in EM. These principles are aimed at assisting councils when setting strategic directions for communities through recommendations under the Flood Risk Management (FRM) with technical assistance from NSW SES and strategically considering redevelopment in existing evacuation constrained areas. The key principles of EM are noted below alongside how they are used in the FEMP:

- ***Principal 1 - Any proposed EM strategy should be compatible with any existing community EM Strategy***

  The FEMP should be read in conjunction with the City of Parramatta Council (COPC) requirements including the Parramatta Local Emergency Management Plan (2022), Parramatta River Flood Study (2024), alongside the comprehensive Floodplain Risk Management Plan for the study area, proposed to be developed by COPC, following this flood study. It is noted that this comprehensive Floodplain Risk Management Plan is still in its draft review process

  This is to ensure that plans, maps and the FEMP strategy proposed for the school is compatible with the evacuation strategies identified in existing COPC floodplain management plans or by NSW SES.

- ***Principle 2 - Decisions should be informed by understanding the full range of flood EM risks to the community***

  This FEMP is based on the Flood study stated in Northrop's Civil Engineering Report: Stormwater Management dated 17/07/24 where it is noted that the masterplan development at Melrose Park – which includes this high school's development will present a reduction in the flood risk up to the PMF to the community.

- ***Principle 3 - Development of the floodplain does not impact on the ability of the existing community to safely and effectively respond to a flood***

  This FEMP is based on Northrop's Civil Engineering Report: Stormwater Management dated 17/07/24 where this development demonstrates there is a reduction in the flood risk up to the PMF to the community and therefore the existing community is not impacting by the cumulative impact of the new school development.

- ***Principle 4 - Decisions on redevelopment within the floodplain are supported by an EM strategy that does not increase risk to life from flooding***

  Section 7 of the FEMP demonstrates that in the event of flooding there are alternative access points where the students and staff can evacuate the site to where there are adequate services to sustain the school community.

- ***Principle 5 - Risks faced by the itinerant population need to be managed***

  As the school has a variety of people visiting the school daily, the FEMP is written with these types of people in mind so that in the event of flooding, they can move to an assembly point and evacuate if needed in an orderly fashion.

- ***Principle 6 - Recognise the need for effective flood warning and associated limitations***

  The steps and procedures set out in this FEMP provides an effective flood warning strategy so as to give the school community the opportunity to respond to a flood threat in an appropriate and timely manner.

- ***Principle 7 - Ongoing community awareness of flooding is critical to assist effective emergency response***

  Section 9 explains that the FEMP should be reviewed regularly and updated as required. The FEMP should be prepared in conjunction with the surrounding stakeholders and Council, so that any changes to the local flood strategy is included in the FEMP.

1.5 Site Specific Information

1.5.1 Site Location

Melrose Park High School falls within the Local Government Area of the City of Parramatta Council (COPC). The site is bounded by a combination of low-height residential developments and future high rise residential developments. The total size of the site is approximately 1 hectare, located on the corner of Hope Street and Wharf Road in Melrose Park.

On the western side, along Hope Street, high-rise developments are planned for the future. To the east, the site borders Wharf Road Reserve, with existing low-rise residential buildings located on the eastern side of Wharf Road. To the south, across Hope Street, there are existing industrial buildings, while to the north, the site adjoins a future communal sports field.

The site's topography generally slopes down to the north of the site at a relative constant slope of 0.5-1%. The maximum level is approximately RL 16.55 (m AHD) in the north-east corner and the minimum level is approximately RL15.25 (m AHD) in the north-west corner.

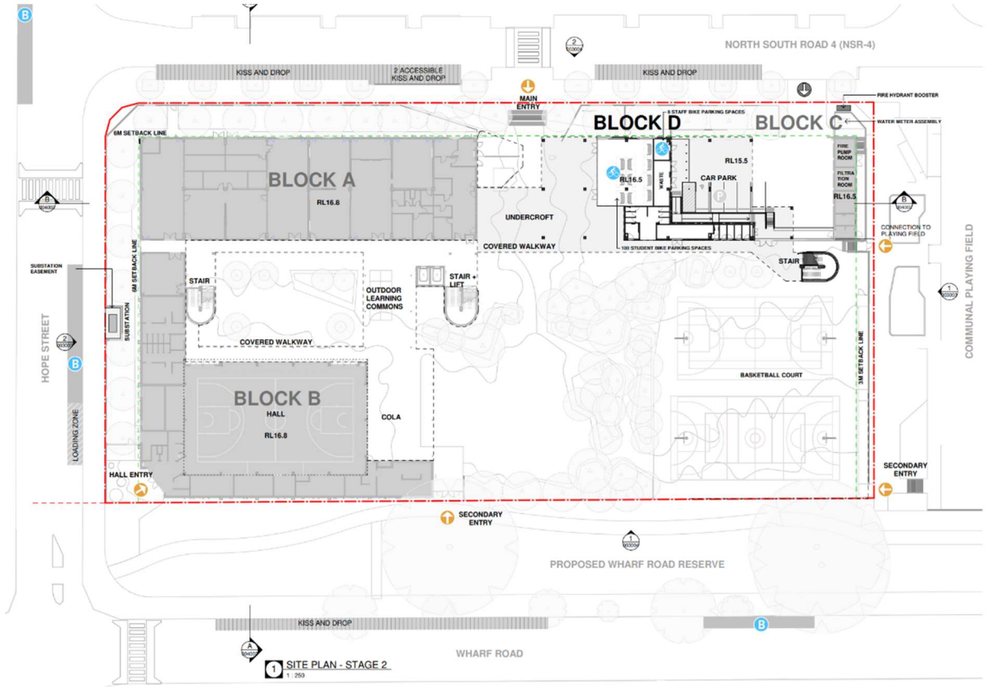

Figure 1: Site Location (Source: NBRS)

1.5.2 Key Access points

The key access points to the site are from the new road 4 (NSR-4/MC04) along the western boundary, and Hope Street to the south. Access point for vehicles is noted as the new road 4 (NSR-4/MC04) only. Refer to **Appendix A**

1.6 Key Flood Behaviour

1.6.1 Existing Flood Behaviour

The current flood behaviour on the school site and surrounding area is based on a Stormwater Quantity and Quality Assessment for the masterplan of the Melrose Park North Precinct, undertaken by Lyall & Associates Consulting Water Engineers (Ref: FG486.006 – Dated 26 July 2024). Alongside this, COPC flood hazard maps reflect key flood behaviour of the wider Melrose Park area, modelling conditions prior to the Melrose Park North Precinct Development. Key flood behaviour noted from these hazard maps include:

- Temporary ponding of stormwater at the southern end of the playing field is observed north of the high school site, to a maximum depth of 0.6m, reaching a peak flood level of RL 14.46 (m AHD) during the 1% AEP storm event. Stormwater overland flow from the site travels in a north-westerly direction, towards the southern end of the playing field, where ponding occurs in a low-point valley.
- Overland flow from the Western Parklands Stormwater Detention Basin and Biofiltration Area travels down the playing field to the south during storms greater than 5% AEP in intensity. This overland flow is observed to travel in an easterly direction towards Ryde Parramatta Golf Club.
- The western boundary of the school site is subject to flooding in the PMF event, reaching a maximum inundation depth of 0.6m at the lowest point in the northwestern corner. This flood water is understood to accumulate at this location, from inundation at higher points upstream along the proposed road NSR-4. Lower levels of inundation, reaching a depth of 0.3m is observed along the western boundary of the site, prior to reaching the northwestern boundary. This is reflected in Figure 2 below.
- The aforementioned flood inundation along the site's western and northern boundaries, before travelling towards the existing Ryde Parramatta Golf Course, is supported by COPC's flood hazard map for the PMF event, as seen in Figure 4 below.

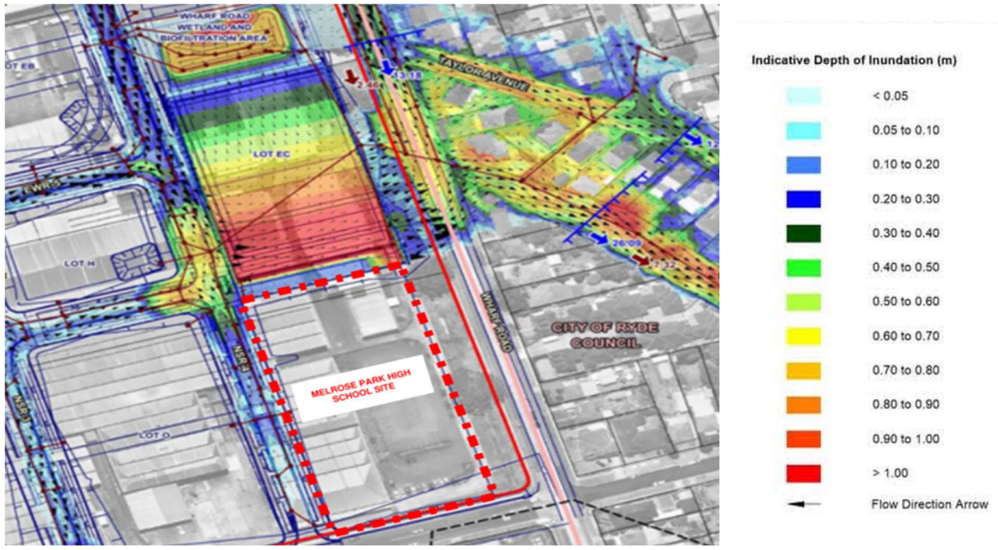

Figure 2: Existing Conditions PMF Flood Map (Source: Quantity and Quality Assessment for the masterplan of the Melrose Park North Precinct, undertaken by Lyall & Associates Consulting Water Engineers (Ref: FG486.006 – Dated 26 July 2024))

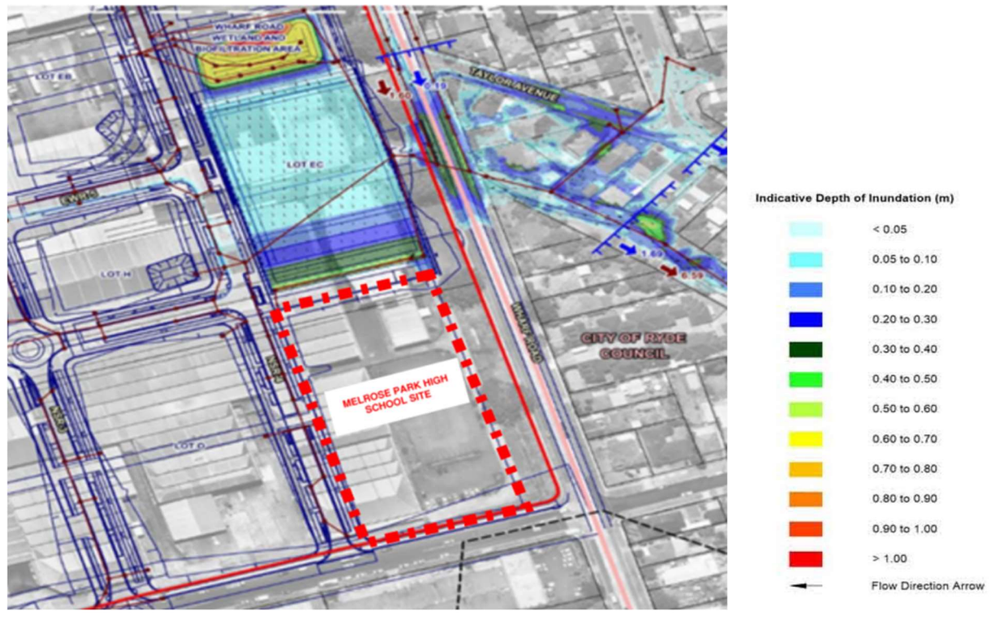

Figure 3: Existing Conditions 1% AEP Flood Map (Source: Quantity and Quality Assessment for the masterplan of the Melrose Park North Precinct, undertaken by Lyall & Associates Consulting Water Engineers (Ref: FG486.006 – Dated 26 July 2024))

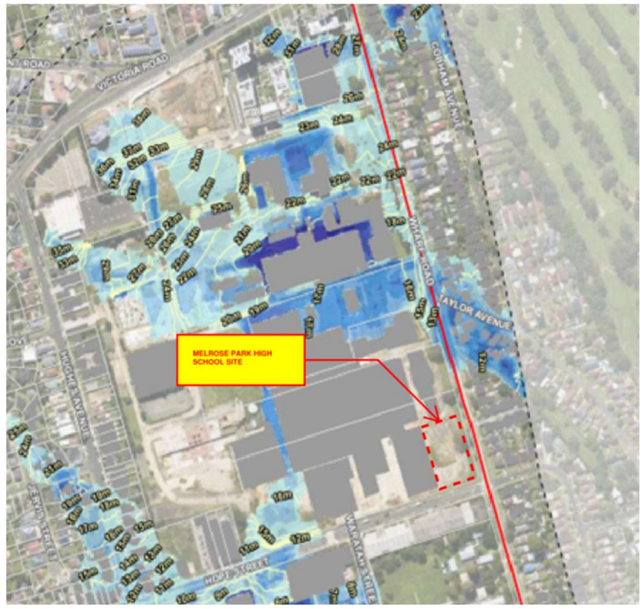

Figure 4: Parramatta River Flood Study (Source: City of Parramatta Council (Ref: 59916074 – Dated 30/05/2023)

1.6.2 Proposed Flood Behaviour

As a result of the flood mitigation measures associated with the development, the proposed flood behaviour on the school site and surrounding area is:

- Temporary ponding of stormwater at the southern end of the playing field is observed north of the high school site, to a maximum depth of 0.5-0.75m, during the 1% AEP storm event. Stormwater overland flow from the site travels in a north-westerly direction, towards the southern end of the playing field, where ponding occurs in a low-point valley.

- Overland flow from the Western Parklands Stormwater Detention Basin and Biofiltration Area travels down the playing field to the south during storms greater than 5% AEP in intensity. This overland flow is observed to travel in an easterly direction towards Ryde Parramatta Golf Club.

- The western boundary of the school site is subject to flooding in the PMF event, reaching a maximum inundation depth of 0.6m at the low point in the northwestern corner. This flood water is understood to accumulate at this location, from inundation at higher points upstream along the proposed road, NSR-4. Lower levels of inundation, reaching a depth of 0.3m is observed along the western boundary of the site, prior to travelling towards the northwestern boundary. This is reflected in Figure 6 below.

Regarding Hazard Classification, evacuation routes from the site are noted as **H1**, generally safe for people, vehicles and buildings for storms up to the 1 in 200-year storm event. However, as reflected in Figure 6

below, the site's exit route via the western boundary (New Road NSR-4/ MC04), at the location of the proposed driveway entry is noted as **H2** in the PMF event, where it is classified as unsafe for small vehicles. Evacuation management strategies are proposed in consideration of this hazard classification. Figure 6 below provides a visual representation of the hazard classification for evacuation routes out of the school site in the PMF event. Based on flood modelling undertaken by Enstruct, Figures 8 and 9 reflect the flood inundation depths around the school's boundaries in the 1 in 100-year (1% AEP) and 1 in 200-year storm event respectively. Similarly, Figure 2 in Section 1.3.1 presents the flood inundation depths, anticipated in the PMF event, based on flood modelling undertaken by Lyall & Associates Consulting Water Engineers (Ref: FG486.006 – Dated 26 July 2024) for the Melrose Park North Precinct Development.

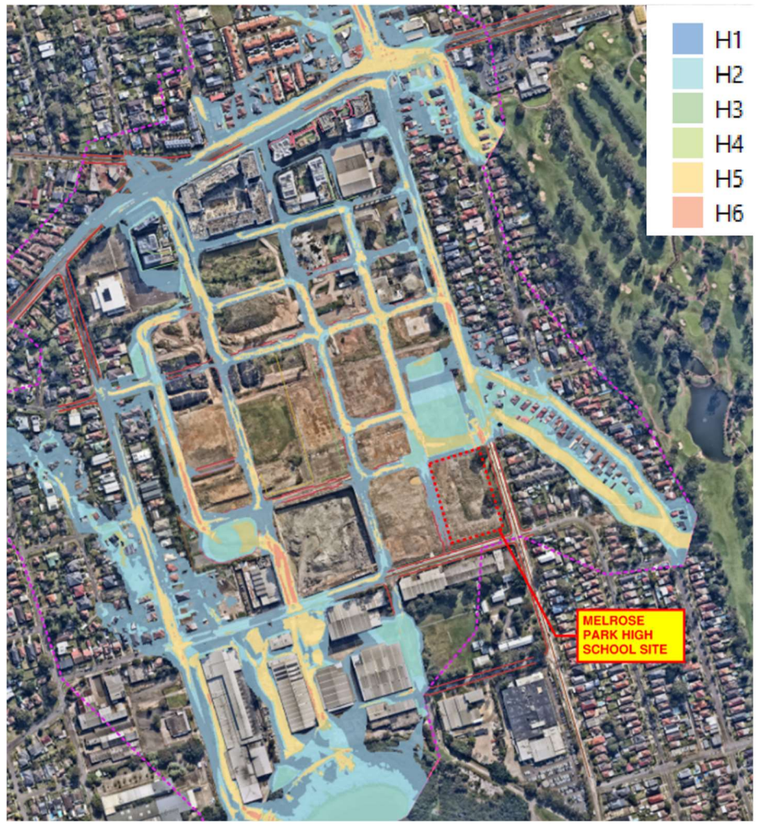

Figure 5: Proposed Conditions PMF Hazard Map

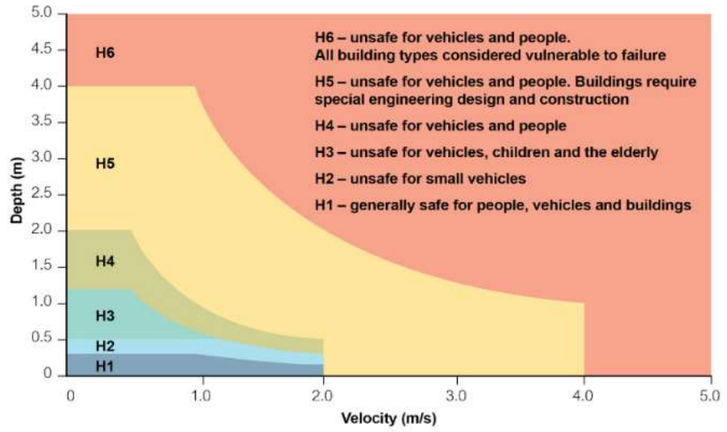

Figure 6: General flood hazard vulnerability curve (Source: AIDR 2017)

Figure 7: Proposed Conditions 1% AEP – Flood Inundation Depths

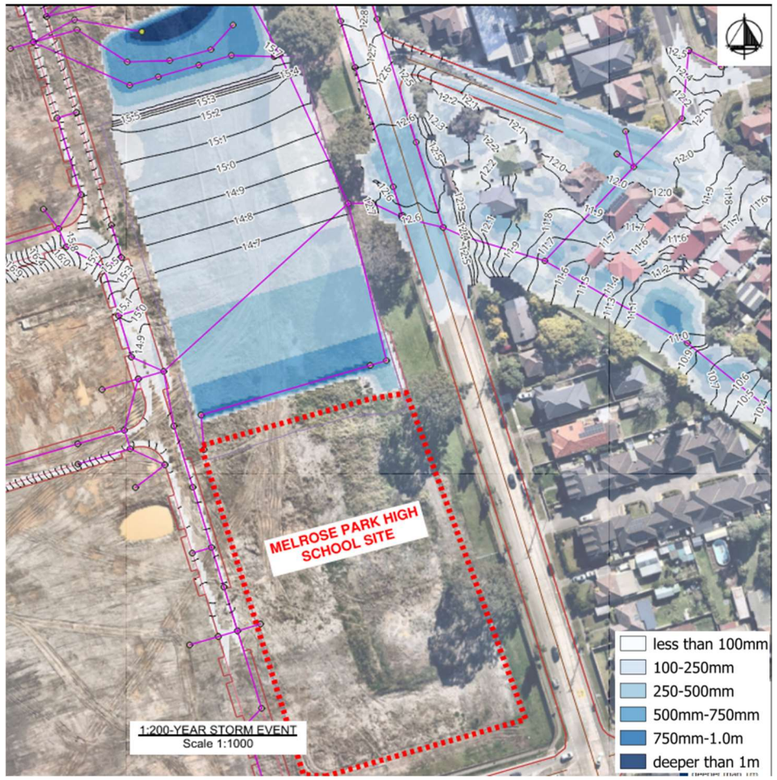

Figure 8: Proposed Conditions 1 in 200-year storm event – Flood Inundation Depths

2 Flood Planning Requirements

The COPC Development Control Plan (DCP) requires any new development to provide suitable freeboard to habitable floor levels. The flood planning level under normal circumstances shall be the higher of the 1% AEP riverine flood level or the 1% AEP overland flow flood level, plus a minimum of 500mm freeboard safety factor.

Based on Council's DCP Section 5.1, Table 5.1.1.1, the development is classed in the sensitive uses and facilities land use category. As per Council's DCP, it is understood that sensitive uses and facilities are typically not permitted on land subject to flooding in a PMF event. Although, land which the school site sits on is not flood affected in the event of the PMF event, occupants might still need to find routes leading to the nearest hospital in case of an emergency. Consequently, this flood emergency management plan is recommended to be prepared, designed and implemented in perpetuity to provide guidance regarding a safe strategy and the provision of refuge with sufficient area to shelter all occupants at the PMF level.

The closest ponding point in the 1% AEP storm event is noted to be at least 27m away from the site boundary, as reflected in Figure 10 below, thus it is understood that the site is not flood affected in this storm event.

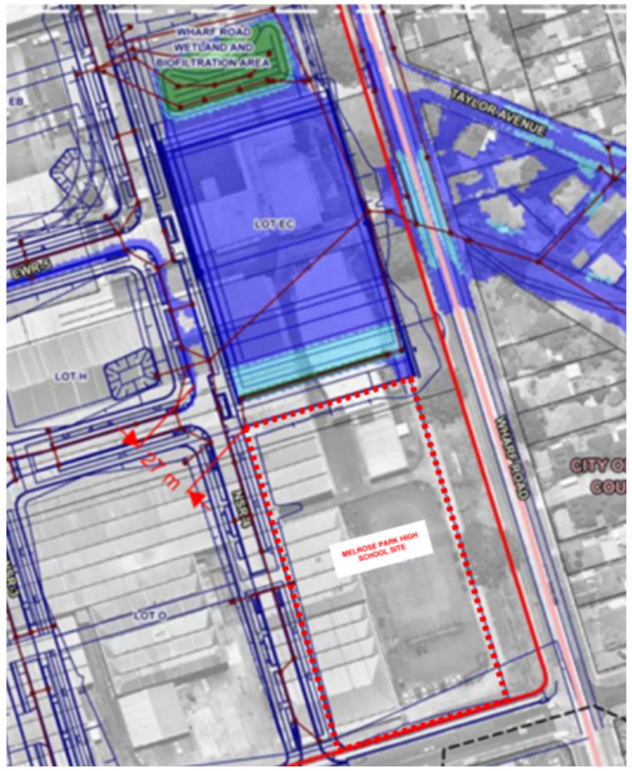

Figure 9: 1% AEP Flood Map (Source: Quantity and Quality Assessment for the masterplan of the Melrose Park North Precinct, undertaken by Lyall & Associates Consulting Water Engineers (Ref: FG486.006 – Dated 26 July 2024))

3 Flood and Evacuation Warnings

There are a number of official flood warnings issued by the Bureau of Meteorology, State Emergency Service (SES) and NSW Police which can assist in the preparation of a potential flood. The warning types are:

Severe Weather Warnings (Bureau of Meteorology):

Severe Weather Warnings are provided for potentially hazardous or dangerous weather that is not directly related to severe thunderstorms, tropical cyclones or bushfires. They are issued for sustained winds of gale force; wind gusts of 90km/h or more; very heavy rain that may lead to flash flooding and abnormally high tides.

Severe Thunderstorm Warnings (Bureau of Meteorology):

A Severe Thunderstorm Warning is issued if the severe phenomena are directly caused by the thunderstorm and include wind gusts of 90km/h or more; gale force winds; tornados; blizzards\ heavy rainfall that is conducive to flash flooding; hail with a diameter of at least 2cm; abnormally high tides and unusually large surf waves expected to cause dangerous conditions on the coast.

Flood Watch (Bureau of Meteorology):

A Flood Watch is issued by the Bureau of Meteorology if flood producing rain is expected to happen in the near future and flooding is expected to be above Minor level. A Flood Watch covers a river basin or catchment. The general weather forecasts can also refer to flood producing rain. You should be prepared to act should flooding occur.

Flood Warning (Bureau of Meteorology):

A Flood Warning is issued by the Bureau of Meteorology when flooding is expected to occur or is happening. Flood Warnings provide a predicted flood level and time at which a river will reach that level. Flood Warnings are issued in relation to flood gauges which are situated at a certain point on a river. Flood Warnings may contain observed, peak or predicted river heights.

NSW SES Flood Warnings (SES): Flood warnings are issued via the NSW SES website, NSW SES social media channels and by listening to local ABC radio stations. These warnings include likely consequences, and what actions are required to protect yourself and your property.

Alongside this, NSW SES has also developed an all-hazards warning platform, Hazard Watch, to provide an additional channel for communities to access important warning information.

Evacuation Warning (SES):

When flooding is likely to cut evacuation routes or inundate property, the NSW SES issues an Evacuation Warning to indicate that you should get prepared to evacuate. Being prepared will allow you to respond quickly if an Evacuation Order is issued.

Monitor the flood situation:

In addition to receiving an official warning, monitoring the situation before flooding begins to impact the site is important. Monitoring the situation can be undertaken by personally witnessing the height and rate at which floodwaters are rising; maintaining contact with other people in the building and local and government radio stations to receive and share updates on the flood situation.

The likelihood of flash flooding:

Severe Weather Warnings and Severe Thunderstorm Warnings issued by the Bureau of Meteorology warn of the possibility of flash flooding.

When flash flooding is likely, leaving low-lying businesses (evacuation) well before flash flooding begins is the best action to take, but only if it is safe to do so. If you are trapped by rising floodwater, seek refuge in the nearest building within the school site. Stay there and call '000' (triple zero) if you need rescue.

All warnings will be issued through the Bureau of Meteorology website, television and local radio stations for weather warnings such as 702 ABC SYDNEY 702 AM, 2CH 1170 AM, 2DAY FM 104.1 FM, 2GB 873 AM, 2ME 1638 AM, 2SM/GORILLA 1269 AM, 2UE 954 AM, C91.3 FM 91.3 FM, MIX 106.5 106.5 FM, NOVA 96.9 FM, RADIO 2MORO 1620 AM, RADIO 2RDJ 88.1 FM, SBS RADIO 97.7 FM, SYDNEY'S 95.3 95.3 FM, TRIPLE M 104.9 FM and WFSM 101.7 FM.

4 Flood Response Preparation

It is the responsibility of the Emergency Planning Committee as part of the site Emergency Management Plan that they prepare the school for a flood event. This will be achieved through induction training, nomination of flood wardens reporting to the Chief Warden during emergency events, education of flood risks and behaviour, and the preparation and maintenance of a Floodsafe Emergency Kit.

The Emergency Planning Committee is also to organise evacuation drills and flood emergency kits to prepare all site personnel for flood risks.

4.1 Flood Inundation Time

Peak flood levels were observed during the 30-minute storm event to several hours for the 1% AEP and the PMF storm event. The high intensity short duration flood behaviour is considered flash flooding and there would be insufficient or no warning following the start of the storm event. This is considered short duration ‘flash flooding’ and the warning provided would be for immediate safety precautions such as evacuation off the open playing fields, emergency evacuation out of areas where significant water will be stored, temporary refuge (if available nearby or onsite), and accounting for people on site.

4.2 Evacuation Drills

Evacuation drills run through the flood management procedure onsite and are designed to increase flood awareness for all students, staff, and visitors of the campus. These drills are to be undertaken annually to familiarise all personnel of the procedures when responding to a flood event.

4.3 Flood Emergency Kit

Potential items for a flood emergency kit are outlined at *www.floodsafe.com.au* and reproduced below:

- A copy of the school Emergency Management Plan;

- A torch with spare batteries;
- A first aid kit;
- Waterproof bag for valuables;
- A copy of emergency numbers; and
- Battery operated radio with AM and FM frequency access (with spare batteries).

The kit should be kept in each building throughout the school for efficient deployment in the event of an emergency. The contents of the kit and management during a flood event will be the responsibility of the Chief Warden. This storage area should also be used for protecting hazardous materials and valuable goods from flood water.

5 Flood Response Personnel

Summarised below are the personnel involved in the management of the flood response at the site, and corresponding responsibilities. Personnel information to be provided by SINSW.

Table 2: Personnel and Responsibilities

Emergency Response Role	Responsibility	Responsible Person's name	Phone Number	Responsibility
Emergency Control Organisation	WHS Team			• Coordinate flood evacuation drills
Chief Warden	Principal			• Monitor weather daily for upcoming extreme rainfall events. • Decide when evacuation is required. • Liaise and communicate with SES or Emergency Services personnel if they attend site; and • Manage the evacuation process in consultation with SES or Emergency Services.
Deputy Chief Warden	Supports Chief Warden			

5.1 People with Disability and Sensory Considerations

Flood evacuation procedures/protocols are to consider the requirements of those with disability and sensory considerations. A disability and sensory conditions register is to be maintained by the high school for these purposes.

6 Emergency Contact

The Chief Warden is to be contactable via the WIP phone at all times to ensure they are ready to assist any students or staff.

- For emergency assistance during flood events, please call the SES on 132 500.
- If you are in a life-threatening situation please call Police, Fire or Ambulance on "000" (triple zero).
- Local Ryde Police Station on 02 9808 7401.

7 Assembly Point (AP) and Evacuation Routes

If the SES flood warnings are issued with sufficient time prior to the flood emergency overnight, it is recommended that the school driveway at NSR-4 remains closed to prevent staff, students, deliveries, and visitors from entering the carpark. If the flood warning is issued during school operation hours, the driveway is to be closed to prevent vehicles leaving the site, students are to assemble with a teacher to register that they are present prior to organising to leave the site into suitable care, or to travel home. Students are to be advised that the driveway is not to be used. This warning buffer allows sufficient time for site occupants to leave the site through provided evacuation routes before they are obstructed as the water level rises in large storm events. If occupants delay leaving the site, they may become isolated by the flood water at the western boundary which may prevent safe exit from the site until the storm event subsides.

If there is no warning due to flash flooding, during school hours, then the driveway is to be closed to prevent vehicles leaving the site, students are to assemble with a teacher to register that they are present and are to remain in the classroom until the storm event subsides. Teachers should inform the Chief Warden all are present and accounted for or otherwise.

For events outside of school hours, where the school premises are used by external parties including local community, election polling centres, recreational activities etc., all parties must be familiar with this FEMP and be provided with necessary access to evacuation assembly points and routes. See **Appendix A** for a detailed evacuation plan.

7.1 PMF Event

In the event of the PMF, the recommended management strategy is to **shelter in place** until the storm subsides. All the site's building finish floor levels have been designed above the PMF level, thereby Blocks A and B are nominated as safe locations for sheltering in place.

As the site evacuation route is flood affected during the peak of a PMF event, as seen in Section 1.6.2, these routes are unsafe for occupants and emergency vehicles. Therefore, site occupants are to shelter in place for a short period of time until flood waters recede to a safe level.

The Chief Flood Warden is to maintain regular communication with students, staff and visitors to alert site occupants to shelter in place while providing updates on the changing flood levels. The Chief Flood Warden is to monitor all flood warning systems, outlined in Section 3 of this report to best determine the flood situation and advise occupants of when flood waters are safe for site evacuation.

It is the responsibility of the Emergency Planning Committee as part of the site Emergency Management Plan that they prepare the building for a flood event, where sheltering in place will be required. This will be achieved through induction training, nomination of flood wardens reporting to the Chief Warden, education of flood risks and behaviour, and the preparation and maintenance of a Floodsafe Emergency Kit for these circumstances.

8 Flood Response Actions

8.1 Evacuation during School Hours and After hours

Once a Flood Warning or Flood Bulletin for the Melrose Park area or City of Parramatta Council LGA has been issued:

- Sound evacuation tone
- Chief Flood Warden to be on hand if staff call or require guidance
- Chief Flood Warden to make contact with Emergency Services to request assistance
- Leave signage at site entrance that evacuation has occurred
- Update the Melrose Park High School Facebook/Social Media pages and send an email/text message to all parents to outline campus closure and that evacuation has been required
- Instruct parents to follow announcements released on the NSW Government School Updates app (available to download here: https://apps.apple.com/au/app/nsw-school-updates/id1494658146)
- Staff to supervise all students in their care and take a roll of attendance before allowing them to leave the school campus for storms up to the 1 in 200-year storm event.
- Staff to assist students in their care to organise a suitable relocation to a safe refuge for the PMF event.
- Students to move towards the site entrance in an orderly fashion under the supervision of a teacher when transport arrives
- Chief Flood Warden to maintain regular communication with students, staff and visitors, providing updates on the situation
- Site to be shut down, where possible of all, but essential power.
- Staff to leave the site following student evacuation.

9 Revision of Flood Emergency Response Plan

The Emergency Planning Committee shall be responsible for ensuring the Flood Emergency Management Plan is reviewed annually and updated as required. As part of the review, the Emergency Planning Committee shall contact Council annually to confirm if any new street drainage upgrades are planned or have been constructed.

Additionally, this plan should be reviewed if the City of Parramatta Council requirements or Parramatta River Flood Study, Plans and Maps are revised.

10 Conclusion

It is important to monitor all flood warning websites such as Bureau of Meteorology and SES for campus occupants to have sufficient time to leave the site in a safe manner through the provided evacuation routes before they are obstructed as the water level rises in large storm events. If the site were occupied in a PMF storm event, the management strategy is to **shelter in place** until the storm subsides, with all the buildings located above the PMF level. If the site were occupied up to a 1% AEP storm event, evacuation routes from the site are generally safe for people and vehicles, following evacuation procedures outlined in this FEMP.

It is the responsibility of the Emergency Planning Committee as part of the site Emergency Management Plan that they prepare the building for a flood event. This will be achieved through induction training, nomination of flood wardens reporting to the Chief Warden, education of flood risks and behaviour, and the preparation and maintenance of a Floodsafe Emergency Kit.

This FEMP is to be reviewed if COPC revises flood planning requirements and flood studies, and if the street drainage surrounding the site is upgraded.

Further, this FEMP is reviewed regularly (on a yearly basis) and updated if the school communication and parent contact methods change.

APPENDIX A

EVACUATION AND ASSEMBLY POINT MAP

EVACUATION AND ASSEMBLY POINT MAP

LEGEND

- A — ASSEMBLY POINTS
- P — PEDESTRIAN EVACUATION POINT
- V — VEHICULAR EVACUATION POINT
- PEDESTRIAN EVACUATION PATH
- VEHICULAR EVACUATION PATH

EVACUATION PATHS FOR FLOODING EVENTS UPTO THE 1%AEP STORM ONLY. PERSONNEL TO SHELTER IN PLACE IN THE EVENT OF A PMF EVENT.

EXIT ROUTE IS H2 HAZARD CLASSIFIED IN THE PMF STORM EVENT, THEREFORE ALL PEDESTRIAN AND VEHICLES NOT TO BE USED.

PERSONNEL TO REMAIN AND ASSEMBLE WITHIN THE BUILDING DURING A PMF EVENT UNTILL THE STORM SUBSIDES.

BUILDING BLOCKS A & B ARE ABOVE THE PMF FLOOD LEVEL, PROVIDING REFUGE FOR PERSONNEL

HOPE STREET

WHARF ROAD

BLOCK A

BLOCK B

BLOCK C

BLOCK D

16175 1:28 15800 16650 15456 15300 16510 16510 16500 1:15 1:14 1:14 15500 16500 16500 16800 16800 EDB 15020 16440 16380 16630 16800 16800 16430 1:32 15915 1:32 16800 EDB 16210 16210 15450

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CONTINUES NEXT PAGE

RYDE LGA

PARRAMATTA LGA

POTENTIAL VEHICLE ONLY ROUTE

PEDESTRIANS ONLY ALTERNATIVE ROUTE

REFER TO PREVIOUS DRAWING FOR FLOOD EVACUATION ROUTES ON THIS MASTERPLAN PRECINCT

Melrose Park High School Site

WHARF RD

CEDAR PLACE
CHESTER PLACE
DELAWARE ROAD
FLINDERS STREET
BASS STREET
FLINDERS CRES
HUME AVENUE
MITCHELL STREET
STEVENS STREET
PARKES STREET
WENTWORTH STREET
FITZGERALD ROAD
COWELLS LANE
WILLIAM STREET
DEAN CRESCENT
BLAKEFORD AVENUE
KISSING POINT ROAD
VICTORIA ROAD
LINDEN GROVE
HUGHES AVENUE
FERRIS STREET
TRUMPER STREET
ATKINS ROAD
JERVIS STREET
TURNER STREET
HOPE STREET
WARATAH STREET
COBHAM LANE
COBHAM AVENUE
WHARF ROAD

48m
49m
22m
33m
34m
35m
37m
38m
39m
40m
41m
42m
43m

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SCHEMATIC
DESIGN
NOVEMBER 2024

Flood Depth (FFA 1% AEP)

Parramatta River Flood Study

Project Code: 59916074 / 304600102
Drawn By: AS
Map: 59916074-GS-006-100yDepth5k.mxd
Rev: 09
Date: 2024-06-20

Legend

- Study Area
- Watercourse
- Cadastre
- Building Footprint
- Tuflow Model Extent

Local upstream overland flow - obtained from preliminary ARR87 ROG

- 0-50mm
- 50-100mm
- 100-150mm
- >150mm

Max Max FFA 1% AEP Flood Depth (m)

- 0.00 - 0.15
- 0.15 - 0.30
- 0.30 - 0.50
- 0.50 - 0.70
- 0.70 - 1.00
- 1.00 - 1.50
- >1.50

Figure F5.27

Notes:
1. Coordinate System: GDA 1994 MGA Zone 56

References:
1. Base data supplied by NSW SS and Esri
2. Aerial imagery supplied by MetroMap
3. Cadastre (2015) supplied by PCC

Stantec

0 50 100 150 200
Metres

Scale at A3 1:5,000

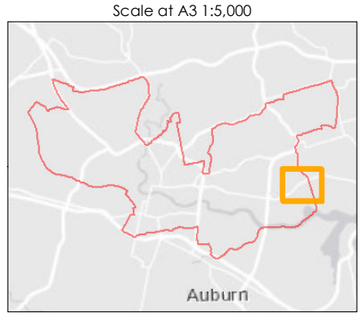
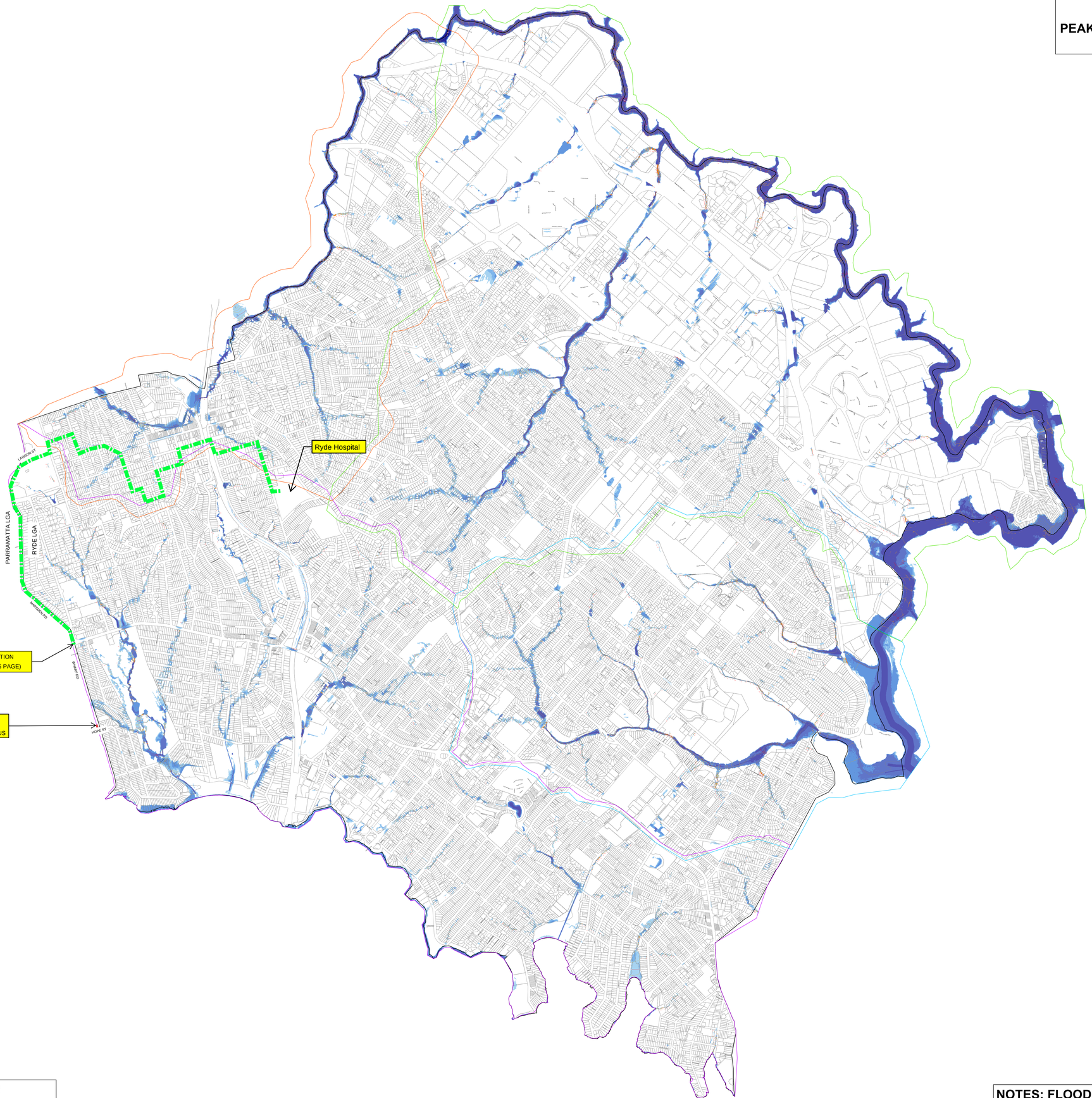


FIGURE F6

RYDE FLOOD HARMONISATION STUDY

PEAK FLOOD DEPTHS AND LEVEL CONTOURS

1% AEP EVENT



NOTES: FLOOD DEPTHS LESS THAN 100mm AND AREAS OF FLOODING LESS THAN 100m^2 HAVE BEEN REMOVED